

PLANNING BOARD

Tuesday, May 9, 2023 at 4:30 PM
This meeting will be held remotely via
Zoom



MEMBERS

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

REMOTE ACCESS INFORMATION:

The Planning Board will conduct this meeting remotely via Zoom pursuant to the Remote Meeting Policy adopted by the Planning Board. Allow your computer to install the free Zoom app to get the best meeting experience. If you are not able to attend live either in person or via Zoom, a recording will be available in the [Agenda Center](#) following the meeting.

For public comment via Zoom, you will need to use the "raise your hand" feature. To raise your hand via the telephone, please hit *9. You will be unmuted by the host when it is time for public comment.

You are invited to a Zoom webinar.

When: May 9, 2023 04:30 PM Eastern Time (US and Canada)

Topic: Planning Board Workshop and Public Hearing 5/9/2023

Please click the link below to join the webinar:

<https://portlandmaine-gov.zoom.us/j/81627710063>

Or One tap mobile :

+13052241968,,81627710063# US, +13092053325,,81627710063# US

Or Telephone:

Dial(for higher quality, dial a number based on your current location): +1 305 224 1968 US, +1 309 205 3325 US, +1 312 626 6799 US (Chicago), +1 646 931 3860 US, +1 929 205 6099 US (New York)

+1 301 715 8592 US (Washington DC), +1 346 248 7799 US (Houston), +1 360 209 5623 US, +1 386 347 5053 US, +1 507 473 4847 US, +1 564 217 2000 US, +1 669 444 9171 US

+1 669 900 6833 US (San Jose), +1 689 278 1000 US, +1 719 359 4580 US, +1 253 205 0468 US, +1 253 215 8782 US (Tacoma)

Webinar ID: 816 2771 0063

International numbers available: <https://portlandmaine-gov.zoom.us/j/81627710063>

For more information on how to use Zoom, please visit [Zoom.us](https://zoom.us)

PUBLIC COMMENT INFORMATION:

To submit written public comment on an agenda item, email planningboard@portlandmaine.gov. Submissions must be received by 12:00 pm the day before the Planning Board meeting to guarantee their inclusion in the agenda packet. All submissions must include the commenter's name and legal address. To help ensure your comment is submitted for the correct item, please include the name of the agenda item (see below).

Please note that the placement of items on this agenda are subject to change – please check the [Agenda Center](#) prior to the meeting for the item start time.

AGENDA:

1. REMOTE PARTICIPATION

- i. Please click on the link below to join the webinar.
<https://portlandmaine-gov.zoom.us/j/81627710063>

2. **WORKSHOP - 4:30 PM**

- i. Zoning Text Amendment; Eastern Waterfront Port Zone (EWPZ); Portland Foreside Development Company, Applicant. The Planning Board will hold a remote workshop to consider a zoning text amendment Article 10 of the Land Use Code to allow the siting of restaurants and food service establishments associated with marina facilities in the Eastern Waterfront Port Zone. The Department of Planning & Urban Development has prepared an alternative amendment for consideration which would permit restaurants and food service establishments as a conditional use within the EWPZ. A summary of this proposed zoning text amendment is available for viewing on the city's CSS Portal (<https://css.portlandmaine.gov/>) by referencing Plan Number ZN-002407-2023.
- ii. Major Site Plan; 172 Bishop Street; University of New England, Applicant. The Planning Board will hold a remote workshop to consider a proposal to redevelop an existing surface parking area located at 172 Bishop Street as an intermodal transportation facility with 344 parking spaces, 72 electric vehicle charging stations, and defined pick-up/drop-off area for the UNE shuttle. The subject property totals 19.2 acres and is zoned R-3 Residential, I-M Moderate Impact Industrial, and I-H High Impact Industrial. A project and plan summary are available for viewing on the city's CSS Portal (<https://css.portlandmaine.gov/>) by referencing Plan Number PL-002343-2023.

3. **PUBLIC HEARING - 6:30 PM**

4. **ROLL CALL AND DECLARATION OF QUORUM**

5. **COMMUNICATION AND REPORTS**

6. **REPORT OF ATTENDANCE AT THE MEETING HELD ON APRIL 25, 2023**

Site Walk

Bayside MDP: Barker, Mazer, Murphy, Smith, and Stanley present. Chann and Silk absent.

Afternoon Workshop

Bayside MDP: Barker, Chann, Mazer, Murphy, Silk, and Smith present. Stanley absent.

Public Hearing

Remote Participation Policy: Barker, Chann, Mazer, Silk, and Smith present. Murphy and Stanley absent.

57 Douglass Amendment: Barker, Chann, Mazer, Silk, and Smith present. Murphy and Stanley absent.

7. **REPORTS OF DECISIONS AT THE MEETING HELD ON APRIL 25, 2023**

- i. Remote Participation Policy
Barker moved, and Smith seconded a motion to adopt the revised Planning Board Remote Participation Policy. Vote 5-0, Murphy and Stanley absent.
- ii. Major Site Plan
Amendment; 57 Douglass Street; Maine Cooperative Development Partners, Applicant. Barker moved, and Silk seconded a motion to approve the conditional use application for inclusionary zoning. Vote 5-0, Murphy and Stanley absent. Barker moved, and Silk seconded a motion to approve the site plan. Vote 5-0, Murphy and Stanley absent.

8. NEW BUSINESS

- i. Major Site Plan and Traffic Movement Permit Amendment; 76 Congress Street; Friends of the St. Lawrence Church, Applicant. The Planning Board will hold a remote public hearing to consider a proposal to develop a 401-seat Performance Arts Hall and renovate the existing Parish Hall Theater located at 76 Congress Street. The subject property is 10,061 square feet in size, is zoned C-58 Contract Zone, and is located within the Munjoy Hill Historic District. This application, along with the associated Traffic Movement Permit, was previously approved by the Planning Board on January 23, 2018, though this approval has since expired and requires re-approval. A project and plan summary are available for viewing on the city's CSS Portal (<https://css.portlandmaine.gov/>) by referencing Plan Number PL-002341-2023.
- ii. Zoning Map Amendment; 900 Ocean Avenue; Ocean Avenue Residential, LLC, Applicant. The Planning Board will hold a remote public hearing to consider rezoning the property at 852 and 900 Ocean Avenue (416A A001, 416A A002 and 417 A004), along with the Ocean Ridge Residential Development (416A A003) from R-3 Residential to R-5A Residential to facilitate the development of a Planned Residential Unit Development (PRUD) at 900 Ocean Avenue. These properties together total 26.6 acres. A summary of this proposed zoning map amendment is available for viewing on the city's CSS Portal (<https://css.portlandmaine.gov/>) by referencing Plan Number ZN-002346-2023.

To: Chair Mazer & Members of the Planning Board
From: Charles Tetelman
Date: May 5, 2023
Re: Eastern Waterfront Port Zone Text Amendment
Project ID: ZN-002407-2023
Meeting Date: May 9, 2023

I. INTRODUCTION

Portland Foreside Development Company has submitted a zoning text amendment to amend Chapter 14, Article 10 of the City's Land Use Code to allow restaurants and food service establishments if affiliated with a marina and open to the public as a permitted use within the Eastern Waterfront Port Zone (EWPZ) and to allow such use to occur within 25 feet of the pier edge, an area currently reserved for water dependent uses and public uses and activities. This application is being referred to the Planning Board for compliance with the City of Portland's Comprehensive Plan, *Portland's Plan 2030*, and adopted waterfront and zoning policies stated in the EWPZ Purpose Statement.

A legal advertisement ran in the April 29, 2023 and May 2, 2023 editions of the *Portland Press Herald*.

Applicant: Portland Foreside Development Company

II. BACKGROUND

In 2016, the Planning Board approved the Portland Foreside Master Development Plan (MDP) which included a proposal to comprehensively redevelop the former Portland Company industrial site. This approval would facilitate the development of a new mixed-use neighborhood along Portland's eastern waterfront with nearly 1,000,000 sq. ft. of new residential and commercial space as well as vehicle parking, marina access, public open space, and a new walking path along the water's edge.

The approved MDP proposed expanding the existing marina and constructing a marina building on the waterfront in between the water and the Eastern Promenade Trail. In 2019, the Planning Authority approved a Level II Site Plan application (PL-000330-2018) for the Fore Points Marina; a proposal to expand the existing marina from 69 slips to 141 slips, with 1,776 sq. ft. of boat wake.

Portland Foreside Development Company previously submitted a similar text amendment to allow marinas within the EWPZ to include food service (ZN-001698-2021). On November 23, 2021, the Planning Board voted 5-0 (Smith recused, Chann absent) to recommend to the City Council adoption of that zoning text amendment. On January 19, 2022 the City Council voted not to support the proposed text amendment and voted against adopting the amendment language.

Whenever any application pursuant to the City of Portland Land Use Code has been denied on its merits, a second application, seeking essentially the same relief, whether or not in the same form or on the same theory, shall not be brought within one year of such denial, *Article 1.9 Successive Applications*. Over one year has passed since the City Council denied the applicant's first text amendment on January 19, 2022.

III. PROPOSED TEXT AMENDMENT

The applicant's proposed text amendments are listed below. In addition to the applicant's proposed text amendments staff has proposed an alternative text amendment for the Board to consider.

Option 1, is the proposed text amendments being requested by the applicant. The applicant's proposal, would allow restaurants and food service establishments affiliated with a marina and open to the general public to be a permitted use in the EWPZ and to allow that use within the 25 ft. pier setback area. **Option 2**, the alternative proposed by City Staff, would allow restaurants and food service establishments associated with a marina as a conditional use in the EWPZ and would not permit such use to be located within the 25 ft. setback from pier line area.

Option 1 – Applicant Proposed Text Amendment (Attachment 4)

The applicant is proposing to add a subsection under Chapter 14 Section 10.2.2.B.11, which would allow restaurants and food service establishments as a permitted use in the EWPZ:

“a. Restaurants and food service establishments shall be permitted if affiliated with a marina and if such uses are open to the general public.”

The applicant is also proposing to amend Chapter 14 Section 10.2.7.C.4 to read:

“Setback from pier line: Notwithstanding the above requirements, a minimum setback of 25 feet from the edge of any pier, wharf or working edge of the hardened shoreline shall be required for any structure, provided that marine offices, as defined in Section 10.2.3(B)(12), may be located up to five feet from the edge of any pier, wharf, or working edge of the hardened shoreline. The setback area may be utilized for water-dependent uses and public uses and activities, including restaurants and food service establishments affiliated with marinas that are open to the public, subject to the provisions of Subsections 10.2.2 and 10.2.4, and shall not be utilized for ~~restaurant, drinking, or~~ other non water-dependent uses or for off-street parking. The edge of any pier, wharf or bulkhead shall include any attached apron(s).”

Option 2 – City Staff Alternative Text Amendment (Attachment A)

City Staff are proposing to add an additional subsection after Chapter 14 Section 10.2.4.C.2(c), which would establish restaurants or food service establishments associated with marinas as a Conditional Use in the EPWZ:

“d. Restaurants or food service establishments associated with marinas under the following conditions:

- i. Restaurants or food service establishments shall be accessible to the public during business hours.*
- ii. Restaurant or food service establishment floor area shall not exceed a combined total of 2,000 square feet or 25% of the total floor area of the principal marina building, whichever is less.*
- iii. Any restaurant or food service establishment use not within a building shall not occupy more than a combined total of 25% of unbuilt lot area. Lot area calculations do not include submerged lands.*
- iv. Exterior portions of restaurants or food service establishments shall be open to the sky except that it may have umbrellas associated with tables.*

- v. Activities associated with restaurants or food service establishments including but not limited to access, circulation, dumpsters, exterior storage or loading, deliveries, signage, and other structures shall not adversely interfere or impede areas accessible to the public or public ways.
- vi. Exterior portions of restaurants or food service establishments shall preserve views to the water and allow passersby to see directly into the space from areas accessible to the public and public ways.
- vii. Restaurants and food service establishments shall not impede on or otherwise operate within public ways.”

Moreover, any uses permitted as conditional in the EWPZ are required to meet the Conditional Use Standards in Subsection 10.2.4.B. These additional standards include:

“1. Marine Compatibility. *The proposed use shall be compatible with existing and potential marine uses in the vicinity, as required by Subsection 10.2.8(M) and (N).*

2. Parking and traffic circulation. *All applications for conditional use in the EWPZ shall submit a parking circulation plan for review and approval by the Planning Board. The parking and circulation plan shall show the location of all existing and proposed structures, travel ways, and parking under common ownership and/or control of the subject pier or property. The plan shall demonstrate that the parking and circulation of the conditional use does not interfere with the functional marine utility of the property and otherwise meets the standards and conditions of the EWPZ.”*

As a conditional use proposed under Option 2, restaurants and food service establishments in the EWPZ would also be subject to the general conditional use standards in Section 6.5.2. These standards ensure proposed land uses and associated developments are compatible with the surrounding area. The conditional use standards include vehicle traffic generation and impact, unsanitary or harmful conditions (noise, glare, sewage, etc.), landscaping, and site design.

Furthermore, EWPZ Section 10.2.2 adds additional regulatory measures by stating that:

“No use shall be permitted, approved or established in this zone if it will have an impermissible adverse impact on future marine development opportunities. A proposed non-water dependent component of a development will have an impermissible adverse impact if it will result in any one or more of the following:

- A. *The proposed use will displace an existing water-dependent use.*
- B. *The proposed use will reduce existing commercial vessel berthing space.*
- C. *The proposed use, structure or activities, including but not limited to access, circulation, parking, dumpsters, exterior storage or loading facilities, and other structures, will unreasonably interfere with the activities and operation of existing water-dependent uses or significantly impede access to vessel berthing or other access to the water by water dependent uses.*
- D. *The siting of a proposed use will substantially reduce or inhibit existing public access to marine or tidal waters.”*

IV. ZONING ANALYSIS



Figure 1: Zoning Context

While reviewing the applicant's proposed text amendment and crafting an alternative text amendment, Planning Staff looked to the policy priorities and current regulations along the waterfront. Currently, restaurants and food service establishments are permitted in all three waterfront zones with different restrictions as noted below:

Waterfront Port Development Zone (WPDZ):

the purpose of the WPDZ is to ensure the continued viability of the Port of Portland. Permitted uses are primarily limited to those uses which are dependent upon deep-water and which contribute to port activity. Non-marine activity may be allowed to the extent that it will not have any adverse impact on marine uses. Much like the EWPZ, restaurants and drinking establishments are expressly prohibited, however, as specified in Table 10-A, footnote 2, food service establishments, including food trucks and other similar retail and service support uses are permitted as accessory uses if all such uses do not exceed 2,000 SF in total floor area of the building and each individual use does not exceed 1,000 SF in total floor area of the building; and further provided that such accessory uses provide goods or services that are supportive of the principal use and its clientele.

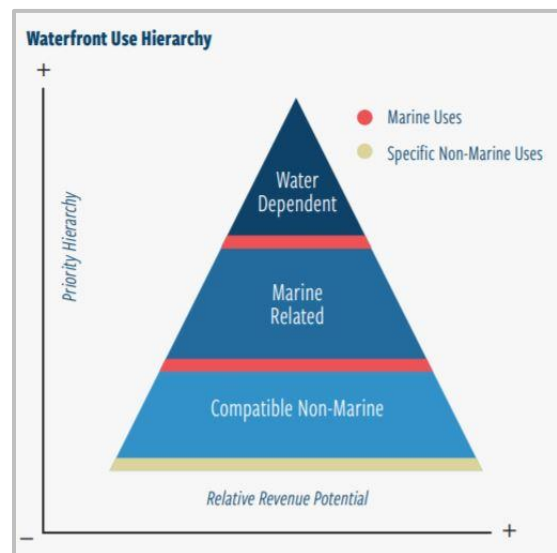


Figure 2: Waterfront Hierarchy

Waterfront Central Zone (WCZ): the purpose of the WCZ is to protect and nurture water-dependent and marine-related support uses so that they may grow and prosper in the present and into the future in an environment and area dedicated to this purpose. Non-marine uses are encouraged provided they do not interfere with and are not incompatible with the first and second priority uses, specifically interior accessory uses including food service establishments shall be permitted as accessory uses if they are part of and located within the lot lines of a use set forth in Subsections 10.3.3(A)(1), (7), (11), or (12); such uses do not exceed 2,000 SF in total floor area of the building, or 25 percent of the total floor area of the building, whichever is less, and each individual accessory use does not exceed 1,000 square feet in total floor area of the building; and further provided that such accessory uses provide goods or services that are supportive of the principal use and its clientele. In addition, marine-compatible uses, including restaurants, are encouraged to locate and grow along Commercial Street within the Commercial Street Overlay Zone, while higher priority marine uses are protected on the waterfront.

Eastern Waterfront Port Zone (EWPZ): is intended to nurture a wide range of deepwater-dependent industry and commerce as well as the encouragement of non-marine uses that support deepwater activities. Currently, the EWPZ allows restaurants/food services as a conditional use in association with marine passenger use facilities, including, Intermodal marine passenger facilities; cruise ship home port and port-of-call berthing and support, and international and domestic ferries. The use is further restricted to equal or less than 35 percent of the gross floor area of the principal associated marine passenger use and no more than 35,000 gross square feet (cumulatively) in the EWPZ. Currently, restaurants and drinking uses are not permitted within the minimum 25-foot setback from the edge of any pier, wharf, or working edge of the hardened shoreline.

Each waterfront zone allows restaurants and food service establishments in some capacity. The restrictions range from limiting total floor area, utilizing setback restrictions from the pier line, and permitting the use as an accessory use. The primary function of all three waterfront zones is to prioritize water dependent uses and maintain public access. Restaurants and food service establishments are inherently subsidiary to water dependent uses. In the waterfront zones, restrictions on non-water-dependent uses are critical to bolster the growth and success of water-dependent uses; auxiliary services, including restaurants and food service establishments, are important to service and support water-dependent uses but should continue to be restricted.

The applicant's proposal, Option 1, seeks to allow restaurants and food service establishments as a permitted use if affiliated with the marina and open to the general public in the EWPZ. Within the EWPZ, the applicant's future marina will likely be the only marina built in the zone. Limited capacity along the EWPZ waterfront should be an important factor in terms of preserving water dependent uses. The applicant is also proposing to allow restaurants and food service establishments within the 25 ft. setback from pier line. This setback serves as a restriction on non-water-dependent uses. The applicant is not proposing any substantial restriction to restaurants and food service establishments. As proposed, the applicant's text amendment only requires such uses to be affiliated with a marina and open to the general public.

City Staff looked to preserve water-dependent uses as the primary purpose of the EWPZ. The alternative text amendment, Option 2, seeks to allow restaurants and food service establishments as a conditional use with seven supplementary conditions required to be met. Similar to the applicant's proposal, the marina must be associated with a marina and open to the public during business hours. Conditions ii and iii restrict the restaurant's or food service establishment's floor area related to the principal marina building and

exterior portions of the restaurant or food service establishment to 25% of the unbuilt lot area, and not allowing submerged lands to be used towards that calculation. These restrictions are similar to other waterfront conditional use restrictions and maintain water-dependent uses as the primary function in the EWPZ, while at the same time allowing a restaurant or food service establishment to be a component of an overall marina. Conditions iv through vii seek to limit the impact of a restaurant or food service establishment on pedestrian circulation, access, and views to the water along public ways.

In addition, Section 10.2.8 Performance Standards provides that further standards be met to ensure compatibility with marine uses and that there is functional utility of piers and access to water's edge. Both proposed text amendments would require review under both site plan and zoning performance standards, which include specific requirements around maintaining adequate waterfront access for other users and ensuring compatibility of non-marine uses with water dependent activities. Any proposal would have to be reviewed for consistency with the 2016 MDP approval, which established broad project parameters around programming, publicly accessible open space, and circulation, all of which a future site plan would need to comply with.

V. COMPREHENSIVE PLAN CONSISTENCY

Portland's Plan maintains a long-standing City policy to prioritize and promote our city's unique mixture of water-dependent, marine-related and compatible non-marine uses along our waterfronts. Portland's waterfront policies prioritize preserving marine uses, but also provide for a balance of non-marine uses which allow the waterfront to adapt to changing economic trends. Looking at regional and national examples, restaurants are often co-located within or alongside marinas, as a restaurant does not inhibit a marina's operation and serves to attract other users to the site that may not have access to the boating functions that occur at a marina. The key to finding the introduction of restaurants in the EWPZ consistent with the comprehensive plan is balancing that use with the waterfront priorities of the zone.



Figure 3: Comprehensive Plan

The proposed text amendments strike different balances within the EWPZ; Option 1 proposes a restaurant or food and beverage use associated with marinas and open to the public as a permitted use with limited restrictions on size and location. A restaurant use with limited restrictions in the EWPZ may be generally consistent with economic development goals for the city as a whole, but more importantly for the purposes of this review, fall short of supporting the identified waterfront local and state goals and priorities. Option 2, proposed by City Staff, limits restaurants and food service establishments to a portion of a principal marina building. This version of the EWPZ text amendment focuses on preserving water-dependent uses in the waterfront and protects public ways and views to the water. Although restaurants and food service establishments are limited in Option 2, Option 2 still supports economic development goals of the city and introduces a compatible non-marine use along the waterfront in a limited manner. This approach reinforces the water-dependent and marine-related uses associated with the waterfront while responding to the changes of Portland's economy.

The addition of a restaurant or food service establishment, if tailored in its application, reinforces the waterfront as a key component of Portland's economic health, this interwoven approach provides a unique connection between the city's traditional maritime activity and the commercial, tourist, and recreational city. This is further supported by the fact that the restaurant or food service establishment would only be permitted as a conditional use associated with a marina, and would be subject to additional conditional use standards in Sections 10.2.2 and 6.5.2 as well as waterfront performance standards in 10.2.8.

Some relevant goals from *Portland's Plan 2030* include:

Waterfront State Goals:

- *To protect the State's marine resources industry, ports and harbors from incompatible development and to promote access to the shore for commercial fishermen and the public.*
- To expand the opportunities for outdoor recreation and to encourage appropriate coastal tourist activities and development.
- To restore and maintain coastal air quality to protect the health of citizens and visitors and to protect enjoyment of the natural beauty and maritime characteristics of the Maine coast.

Waterfront Local Goals:

- *Prioritize and promote Portland's unique mix of water-dependent, marine-related uses and compatible non-marine uses.*
- Recognize and reinforce the respective roles of the Eastern, Central, and Western Waterfronts.
- Promote passive and active recreational access to the waterfront.

VI. PUBLIC COMMENT

Two public comment have been submitted to the Planning & Urban Development Department both in favor of the proposed text amendment (PC 1 + 2).

VII. NEXT STEPS

- Planning Board Workshop
- Review and revise proposed text amendments based off Planning Board feedback
- Planning Board Hearing and Planning Board Recommendation to City Council
- City Council Review and Approval

VIII. ATTACHMENTS

APPLICANT SUBMITTAL

1. Cover Letter
2. Vicinity Map and Site Plan
3. Right, Title, and Interest
4. Option 1 – Applicant Proposed Text Amendment
5. Environmental Impact Narrative
6. Consistency with Comprehensive Plan

STAFF ATTACHMENTS

- A. Option 2 – Proposed City Staff EWPZ Text Amendment

PUBLIC COMMENTS

PC 1. Curt Dugal 5/3/23
PC 2. Ross Maniaci 5/2/23

March 14, 2023

Ms. Christine Grimando, AICP
Director of Planning & Urban Development
City of Portland
Portland City Hall
389 Congress Street
Portland, ME 04101

**Re: Eastern Waterfront Port Zone
Zoning Text Amendment Application
Fore Points Marina, 1 Marina Way, Portland, ME**

Dear Ms. Grimando,

Portland Foreside Development Company is pleased to submit this package of materials for a proposed Zoning Text Amendment related to the property located at 1 Marina Way, Portland, ME, which is also known as Fore Points Marina (FPM).

Fore Points Marina

Located in the Eastern Waterfront Port Zone (EWPZ), FPM opened for business for its first partial season in 2019. The 2020 season was the first full season which included welcoming seasonal slip holders, transient boaters from the Casco Bay area and beyond, and larger sailboats and yachts. During this time, the COVID-19 pandemic forced most businesses in Portland to be creative, including FPM. In partnership with another local business, EVO Kitchen + Bar (located at 443 Fore Street, Portland, ME), our team followed local and state requirements and worked with City and State Officials to allow for food and bar service offerings at FPM under the name of Marina Bar. Marina Bar operated under temporary event permits during 2020 and 2021 (City of Portland Land Use Code, Section 10.2.3(C)(2)).

Zoning Text Amendment Request

Presently, the EWPZ contains property from only two landowners, the City of Portland and FPM. The EWPZ allows for restaurant/food service; however, this allowance is limited to the City's property because it is specifically tied to marine passenger use facilities, including:

1. Intermodal marine passenger facilities.
2. Cruise ship home port and port-of-call berthing and support.
3. International and domestic ferries.

We seek a Text Amendment to Section 10.2.3(B)(11) to allow for a restaurant/food service use, so long as it is directly associated with a marina facility and is open to the public, in lieu of using temporary event permits.

This requested Zoning Text Amendment is consistent with the City of Portland's Comprehensive Plan, Portland's Plan 2030 (further detail is provided in Attachment E). We have also included an Environmental Impact Statement (Attachment F). The proposed amendment allows for uses already conditionally allowed in the EWPZ

and experienced in 2020 and 2021 under temporary event licenses. The limited extent of EWPZ land area and the makeup of land ownership in the zone, solely consisting of the City and FPM, affords a strong level of predictability for the outcome of this amendment.

Zoning Text Amendment Request Background

Fore Points Marina had applied for a similar Zoning Text Amendment in 2021. This request was approved by the Portland Planning Board but it missed being approved by the Portland City Council by one vote on January 19, 2022. Since September 2022, we have been conducting weekly public tours of the Portland Foreside property and Fore Points Marina. On these tours, our team is asked regularly by the attendees when we are bringing food and beverage back to the waterfront. In addition, the City's recent plans for Portland Harbor Common include food trucks and food kiosks for the public property, adjacent to ours, and other locations in the EWPZ. We also received numerous inquiries from members of the public during the 2022 summer season who were looking to return to the Marina Bar and found that it was no longer open. With the public support we have received over the past year for this type of use at the marina along with the City's plans to include various food options in the Eastern Waterfront Port Zone, we feel that revisiting this Zoning Text Amendment is appropriate.

Portland Land Use Code Context

The City of Portland Land Use Code acknowledges that the growth of Portland's marine passenger industry requires supporting services and activities to provide an enjoyable travel experience. It states that *"non-marine uses that complement the marine passenger industry, are compatible with existing and future-water dependent uses, and provide opportunities for residents and visitors alike to enjoy the Eastern Waterfront throughout the year, are encouraged."*

In the EWPZ, there is a hierarchy of uses that focus on deep water-dependent uses and shallow water-dependent uses, followed by other uses only if they do not interfere with and are not incompatible with higher priority uses.

Allowing food service at a marina does not interfere with any deep water or shallow water dependent uses and, in fact complements and supports higher priority uses by further attracting transient and seasonal boat activity to the site, intermixed with the public. Numerous marinas throughout the State of Maine provide food and beverage service for their guests and to the public. This mix of use (marina and food/beverage) is a success in these communities as it opens up a private marina facility, traditionally solely focused on boating guests, to the public. Food/beverage use in this space that is open to public allows for the public to enjoy this waterfront location which would otherwise be reserved solely for marina guests.

For reference, in the Waterfront Central Zone (WCZ), water-dependent and marine uses are prioritized, but limited non-marine development is allowed to provide needed revenues to pier owners. Portland's Plan 2030 promotes this balance between these uses where the marine use is given space and protection, while the pier owner is given opportunity to generate revenue for maintenance and a return on investment. This same model is welcome and necessary in the EWPZ where there is an opportunity for FPM, the marine use, to also generate revenue for maintenance of the asset, including the land area and sea wall, including the publicly-accessible waterfront space adjacent to the marina.

Our package is intended to meet the City's submission requirements for a Zoning Text Amendment application and includes the following:

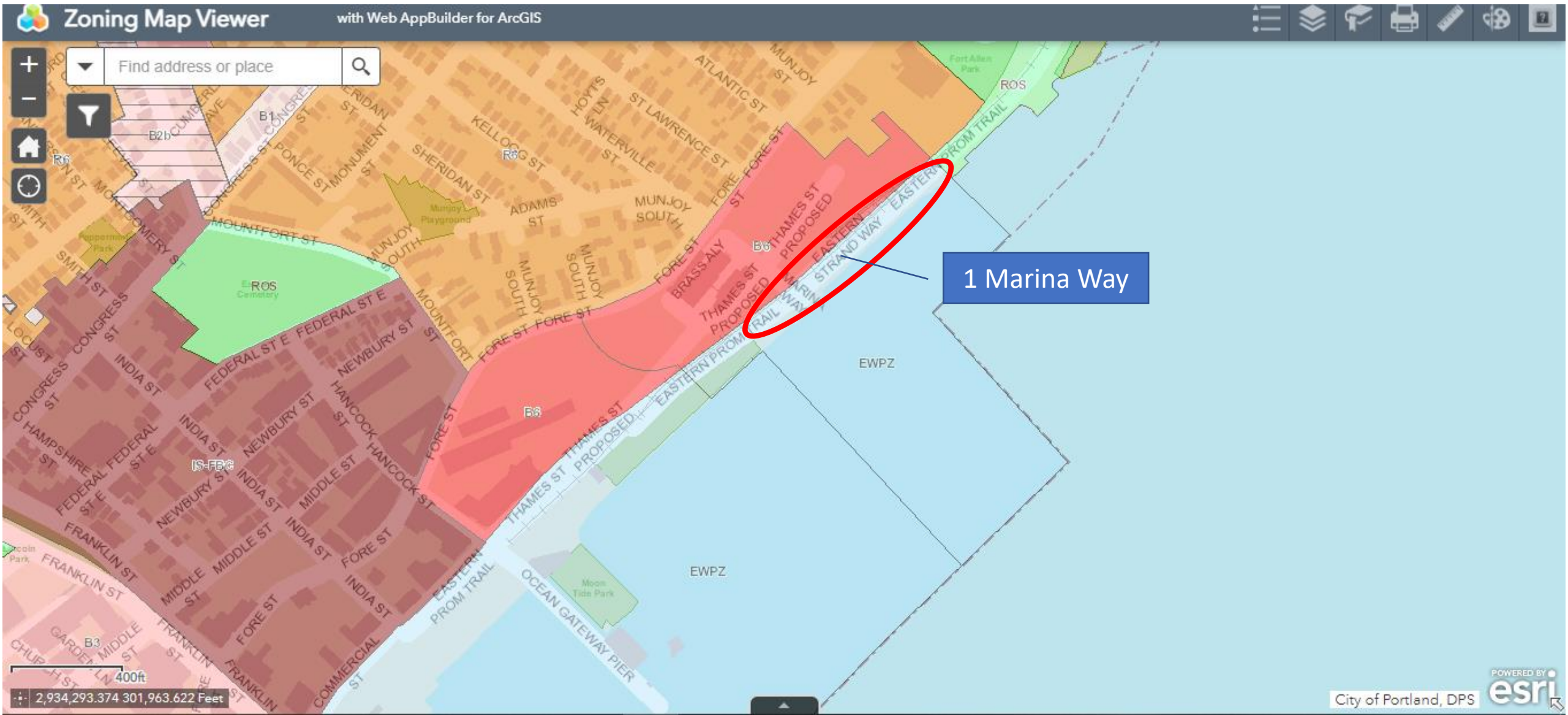
- Attachment A – Application Form
- Attachment B – Right, Title & Interest
- Attachment C – Vicinity Map & Site Plan
- Attachment D – Proposed Zoning Text Amendment
- Attachment E – Consistency with City Comprehensive Plan Narrative
- Attachment F – Environmental Impact Statement

Thank you for your consideration and we look forward to speaking with you about this Zoning Text Amendment request.

Sincerely,

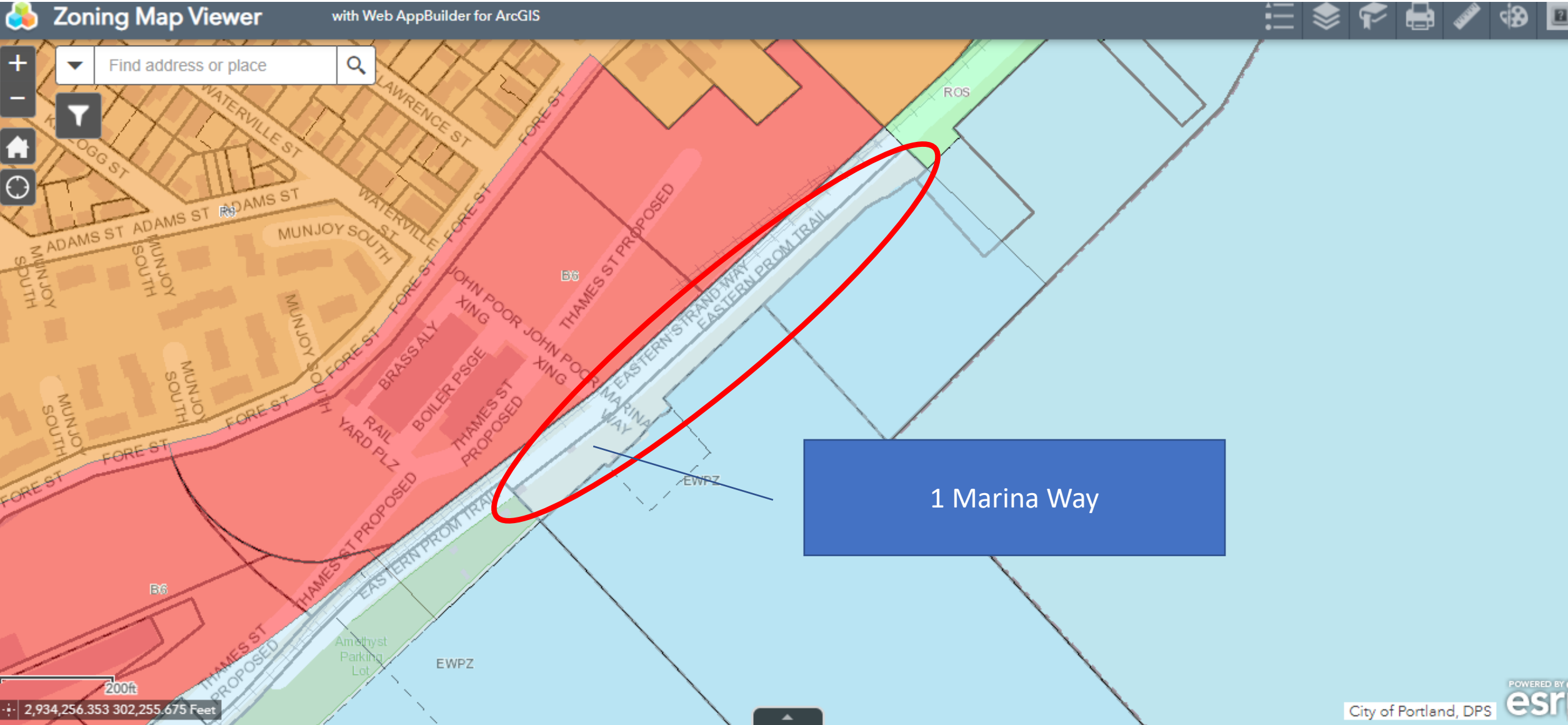
Mary C. McCrann, AICP
Planner

Vicinity Map of 1 Marina Way
Showing Eastern Waterfront, Including Ocean Gateway



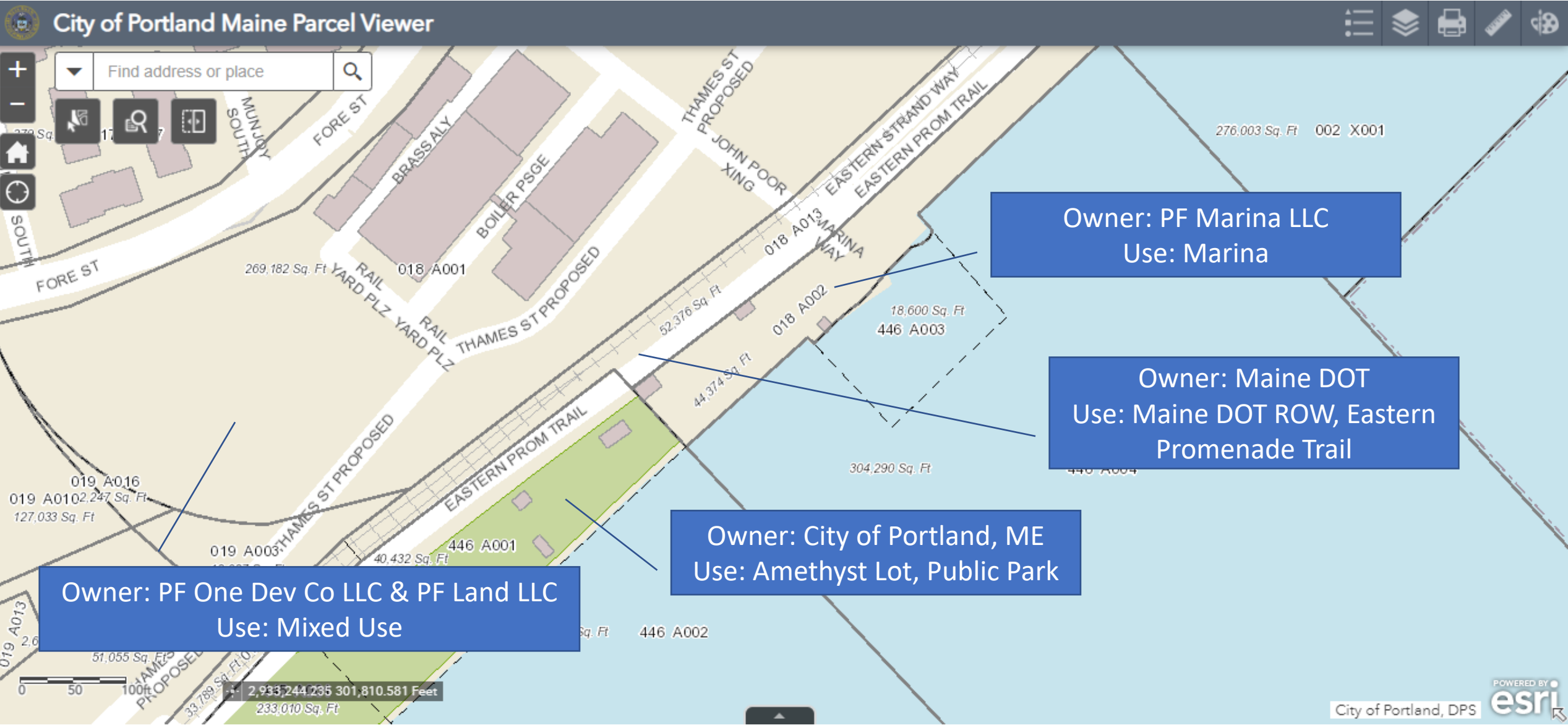
Vicinity Map of 1 Marina Way
Showing Eastern Waterfront

March 2023



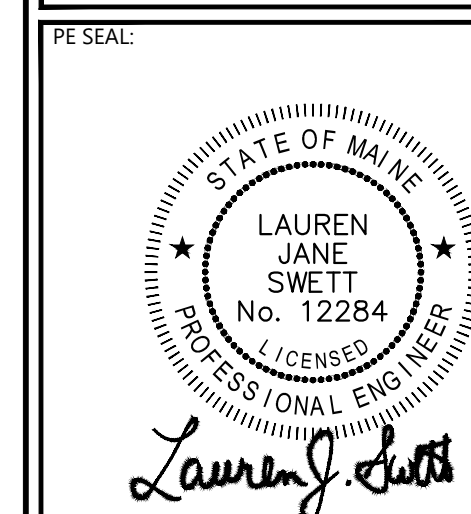
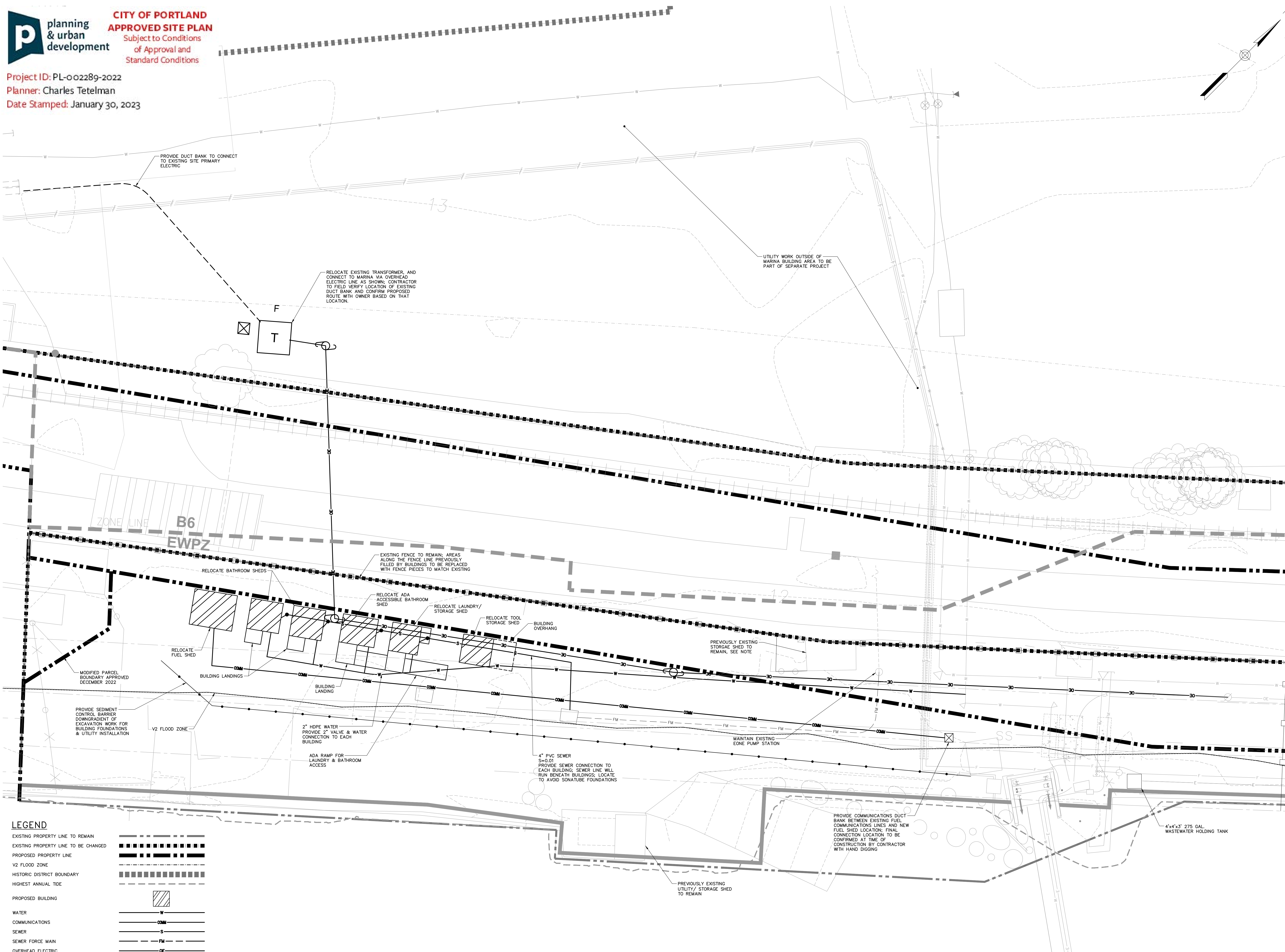
Vicinity Map of 1 Marina Way
Showing Ownership and Use of Abutting Parcels

March 2023



Project ID: PL-002289-2022
Planner: Charles Tetelman
Date Stamped: January 30, 2023

THIS DOCUMENT IS THE PROPERTY OF
WOODARD & CURRAN AND ITS CLIENT.
REPRODUCTION OR MODIFICATION WITHOUT
WRITTEN PERMISSION IS PROHIBITED.



NOT FOR CONSTRUCTION

CLIENT INFO:
PF MARINA LLC
PORTLAND, ME 04101
MARINA INTERIM
CONDITIONS

REV	DATE	DESCRIPTION
1	1/26/23	REV. PER SITE PLAN COMMENTS
2	11/26/23	REV. PER SITE PLAN COMMENTS

DRAWING TITLE:
**CIVIL
AMENDED MARINA
SITE PLAN - 1**

DRAWING NO:
C-100
SHEET: 1 OF 4



**CITY OF PORTLAND
APPROVED SITE PLAN**
Subject to Conditions
of Approval and
Standard Conditions

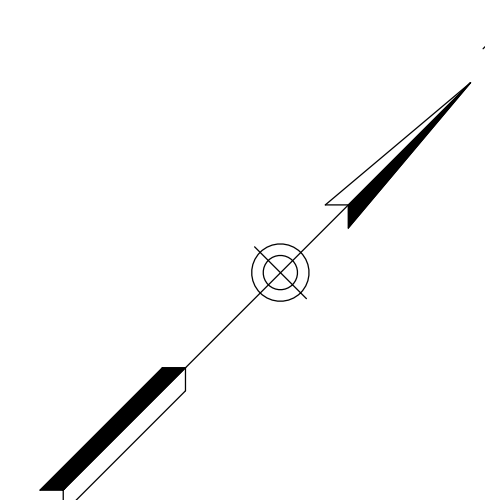
Project ID: PL-002289-2022
Planner: Charles Tetelman
Date Stamped: January 30, 2023



**Woodard
& Curran**

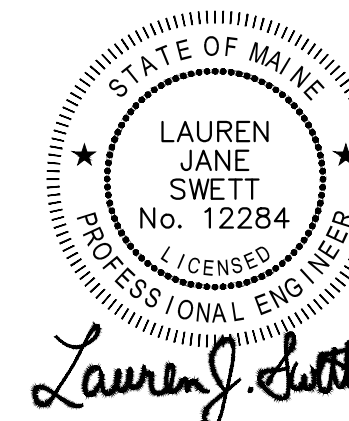
41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com

THIS DOCUMENT IS THE PROPERTY OF
WOODARD & CURRAN AND ITS CLIENT.
REPRODUCTION OR MODIFICATION WITHOUT
WRITTEN PERMISSION IS PROHIBITED.



TRANSFORMER TO BE RELOCATED BY
CMP

PE SFAI



NOT FOR CONSTRUCTION

CLIENT INFO:

PF MARINA LLC
PORTLAND, ME 04101

MARINA INTERIM
CONDITIONS

A	1/26/23	REV. PER SITE PLAN COMMENT
REV	MM/DD/YY	DESCRIPTION

JOB NO:	227007
DATE:	NOVEMBER 2022
SCALE:	AS NOTED
DESIGNED BY:	LJS/BCM
DRAWN BY:	BCM
CHECKED BY:	DBS
FILENAME:	INTERIM MARINA BUILDING*.d

DRAWING TITLE

CIVIL
AMENDED MARINA
SITE PLAN - 2

DRAWING NO:

C-101

SHEET: 2 OF 2

NOTES:

1. INTERIM CONDITION PLAN FOR MARINA BUILDINGS EXPIRES 11/24/2024.
2. SIXTH AMENDMENT TO LAND EXCHANGE AGREEMENT APPROVED BY CITY OF PORTLAND ON DECEMBER 19, 2022.
3. POST CLOSURE AGREEMENT ASSOCIATED WITH LAND EXCHANGE ALLOWS FOR USE OF PROPOSED DOT LAND BY MARINA PRIOR TO AND DURING CONSTRUCTION OF THE IMPROVEMENTS TO THE PROPOSED DOT SPACE (I.E. RAIL AND TRAIL RELOCATION). EXISTING ITEMS ASSOCIATED WITH THE MARINA WILL BE REMOVED AT THE TIME OF THAT CONSTRUCTION. SEE SEPARATE SITE PLAN APPLICATION FOR THAT PROJECT.

10' 0 10'

BAR SCALE
1" = 10'

CHECK GRAPHIC SCALE BEFORE USING

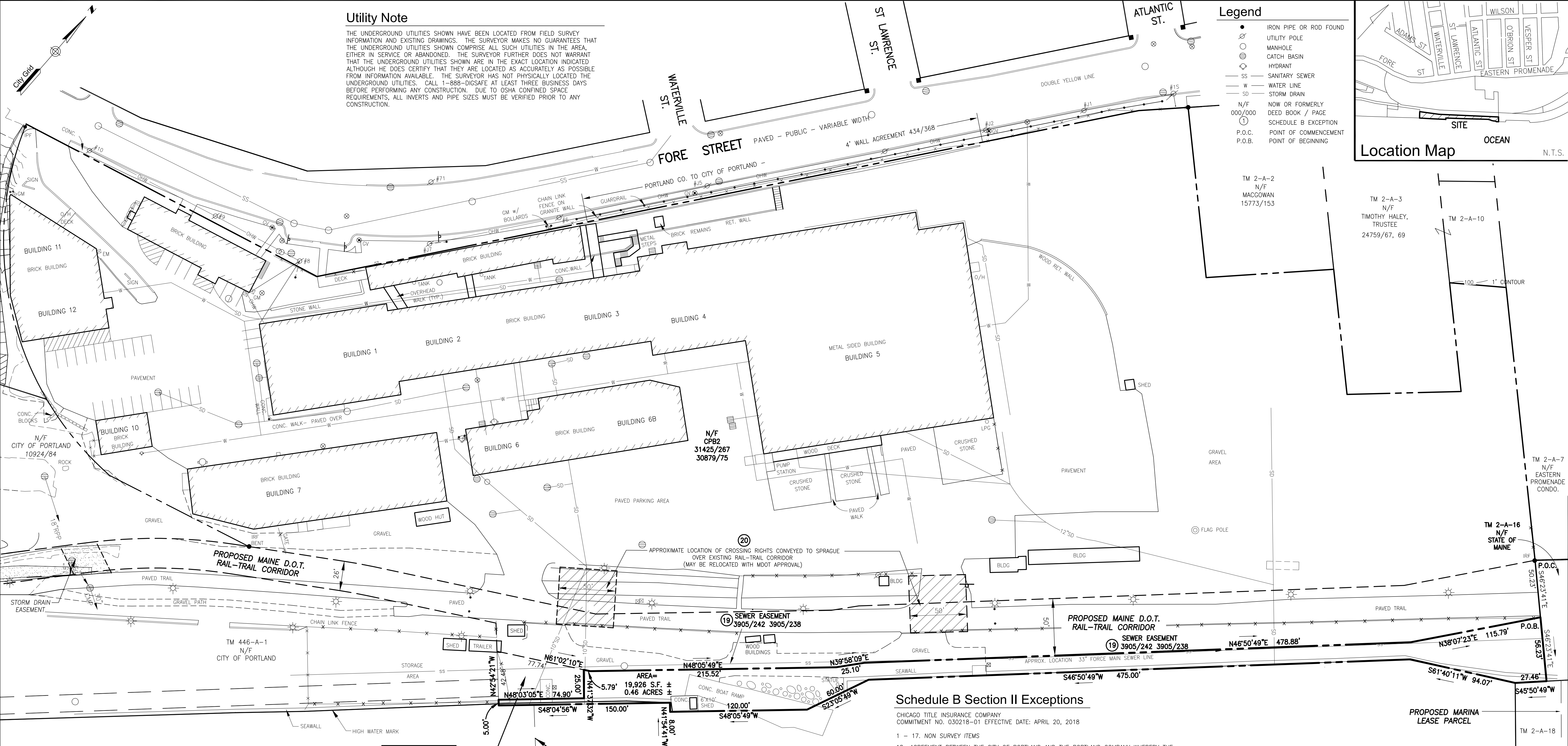
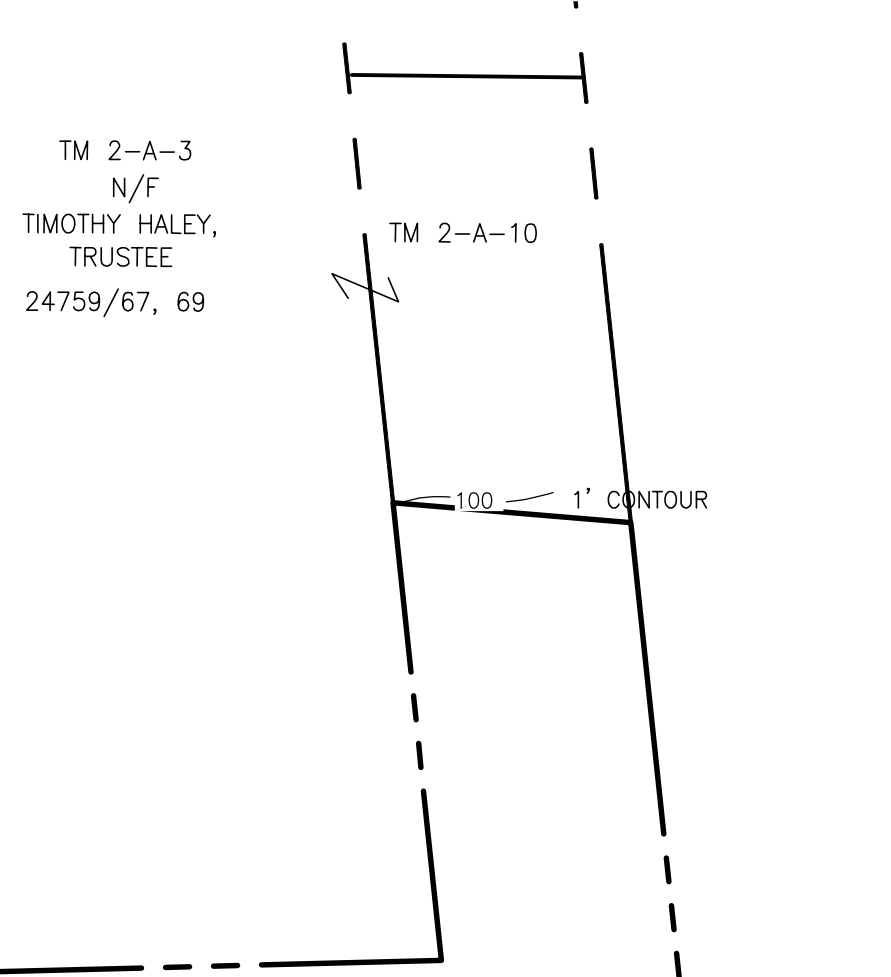
Utility Note

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DISSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

Legend

- IRON PIPE OR ROD FOUND
- UTILITY POLE
- MANHOLE
- CATCH BASIN
- HYDRANT
- SANITARY SEWER
- WATER LINE
- STORM DRAIN
- NOW OR FORMERLY DEED BOOK / PAGE
- SCHEDULE B EXCEPTION
- POINT OF COMMENCEMENT
- POINT OF BEGINNING

Location Map



Legal Description

A CERTAIN LOT OR PARCEL OF LAND SITUATED SOUTHERLY OF BUT NOT ADJACENT TO FORE STREET IN THE CITY OF PORTLAND, COUNTY OF CUMBERLAND AND STATE OF MAINE BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT A POINT ON THE NORTHERLY LINE OF LAND OF THE STATE OF MAINE AT THE MOST EASTERLY CORNER OF LAND OF CPB2 AS DESCRIBED IN DEED BOOK 30879, PAGE 75; THENCE, S 46°23'41" E ALONG LAND OF THE STATE OF MAINE 50.23 FEET TO THE POINT OF BEGINNING; THENCE, THE FOLLOWING COURSES AND DISTANCES ALONG LAND OF THE STATE OF MAINE:

S 46°23'41" E	56.23 FEET;
S 45°50'49" W	27.46 FEET;
S 61°40'11" W	94.07 FEET;
S 46°50'49" W	475.00 FEET;
S 23°05'49" W	60.00 FEET;
S 48°05'49" W	120.00 FEET;
N 41°54'41" W	8.00 FEET;
S 48°04'56" W	150.00 FEET TO LAND OF SAID CITY OF PORTLAND;
THENCE, N 42°54'21" W	ALONG LAND OF SAID CITY OF PORTLAND 5.00 FEET;
THENCE, N 48°03'05" E	A DISTANCE OF 74.90 FEET;
THENCE, N 41°37'32" W	A DISTANCE OF 25.00 FEET;
THENCE, N 61°02'10" E	A DISTANCE OF 5.79 FEET;
THENCE, N 48°05'49" E	A DISTANCE OF 215.52 FEET;
THENCE, N 39°58'09" E	A DISTANCE OF 25.10 FEET;
THENCE, N 46°50'49" E	A DISTANCE OF 478.88 FEET;
THENCE, N 38°07'23" E	A DISTANCE OF 115.79 FEET TO THE POINT OF BEGINNING, CONTAINING 19,926 SQUARE FEET, MORE OR LESS, BEING A PORTION OF THE PROPERTY DESCRIBED IN DEED BOOK 31425, PAGE 267. BEARINGS ARE BASED ON MAINE STATE PLANE COORDINATE SYSTEM.

Zoning Information

NONE PROVIDED

Possible Encroachments

NONE OBSERVED

Flood Zone Note

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE C, AREAS OF MINIMUM FLOODING, AND FLOOD ZONE A2 ELEV. 10, ON THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 230051-00148, WHICH BEARS AN EFFECTIVE DATE OF JULY 17, 1986.

Plan References

"BOUNDARY & TOPOGRAPHY SURVEY AT 58 FORE STREET, PORTLAND, MAINE MADE FOR WOODARD & CURRAN" AUGUST 29, 2016, REVISED OCT. 3, 2016 BY OWEN HASKELL, INC.

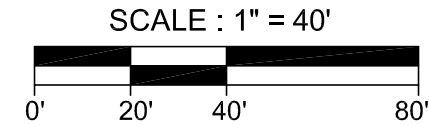
General Notes

- OWNER OF RECORD: CPB2 LLC, C.C.R.D. BOOK 31425 PAGE 267.
- PARCEL IS A PORTION OF LOT 2 BLOCK A ON THE CITY OF PORTLAND'S ASSESSORS MAP 18.
- BEARINGS ARE BASED ON MAINE STATE PLANE COORDINATES WEST ZONE NAD83. CITY POINTS: T-113-80-206 N:302687.77 E:2932345.31 T-113-12-111 N:302722.13 E:2933029.45
- UTILITIES SHOWN HEREON ARE BASED ON OBSERVED EVIDENCE ONLY OF SURFACE FEATURES.
- THE SURVEYED PROPERTY DEPICTED HEREON IS THE SAME PROPERTY DESCRIBED ON EXHIBIT A OF THE CHICAGO TITLE INSURANCE COMMITMENT NO. 030218-01 AND CONTAIN NO GAPS OR GORES BETWEEN THE COMMON BOUNDARY LINE OF EACH PARCEL.

Schedule B Section II Exceptions

CHICAGO TITLE INSURANCE COMPANY
COMMITMENT NO. 030218-01 EFFECTIVE DATE: APRIL 20, 2018

17. NON SURVEY ITEMS
18. AGREEMENT BETWEEN THE CITY OF PORTLAND AND THE PORTLAND COMPANY WHEREBY THE CITY HAS THE RIGHT TO ERECT AND MAINTAIN A FOUR FOOT WIDE WALL LOCATED ON THE SOUTHERLY SIDE OF FORE STREET, SAID AGREEMENT DATED NOVEMBER 9, 1876, AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 434, PAGE 368. -NON-LOCUS, DOES NOT AFFECT SURVEYED PARCEL.
19. RIGHTS AND EASEMENTS GRANTED BY CANADIAN NATIONAL RAILWAY COMPANY TO PORTLAND WATER DISTRICT BY INSTRUMENTS DATED SEPTEMBER 2, 1976 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 3905, PAGE 238 AND IN BOOK 3905, PAGE 242. -AS SHOWN ON SURVEY.
20. TERMS, PROVISIONS, OBLIGATIONS, EXCEPTIONS, COVENANTS RESERVATIONS, AND AGREEMENTS DESCRIBED IN INDENTURE BY AND BETWEEN MAINE DEPARTMENT OF TRANSPORTATION AND PHINEAS SPRAGUE, JR. DATED AUGUST 30, 1993 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 10924, PAGE 97. -AS SHOWN ON SURVEY.
21. NOTICE OF ABANDONED UNDERGROUND OIL STORAGE FACILITY OR TANK DATED DECEMBER 18, 2007 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 25699, PAGE 18. -NON-LOCUS, DOES NOT AFFECT SURVEYED PARCEL.
22. RIGHTS AND EASEMENTS GRANTED TO ELIZABETH M. SPRAGUE, ERIC THOMAS SPRAGUE AND PHINEAS M. SPRAGUE, AS TRUSTEES OF THE BUENA VISTA TRUST, BY INSTRUMENT DATED DECEMBER 30, 2012 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 30265, PAGE 32. -NON-LOCUS, DOES NOT AFFECT SURVEYED PARCEL.
23. RIGHTS AND EASEMENTS DESCRIBED IN EASEMENT DEED BY AND BETWEEN THE PORTLAND COMPANY AND CPB2 LLC DATED JULY 29, 2013 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 30879, PAGE 80, THE TERMS AND CONDITIONS RELATED THERETO. -BLANKET IN NATURE.
24. PUBLIC ACCESS EASEMENT OPTION BY AND BETWEEN CPB2 LLC AND THE CITY OF PORTLAND DATED AS OF MARCH 11, 2016 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 32990, PAGE 333. -NON-LOCUS, DOES NOT AFFECT SURVEYED PARCEL.
25. SUCH STATE OF FACTS INCLUDING NOTES DISCLOSED ON ALTA/ACSM LAND TITLE SURVEY, 58 FORE STREET, PORTLAND, MAINE MADE FOR CPB2 LLC BY OWEN HASKELL, INC. DATED MAY 22, 2013. -ALL PERTINENT ITEMS ARE SHOWN ON THIS SURVEY.
26. TITLE TO AND RIGHTS OF OTHERS IN THE RAILROAD TRACKS, SWITCH TRACKS, SPUR TRACKS, AND OTHER RAILWAY FACILITIES, LOCATED ON THE LAND AS SHOWN ON ALTA/ACSM LAND TITLE SURVEY, 58 FORE STREET, PORTLAND, MAINE MADE FOR CPB2 LLC BY OWEN HASKELL, INC. DATED MAY 22, 2013. -NON-LOCUS, DOES NOT AFFECT SURVEYED PARCEL.
- 27-30. NON SURVEY ITEMS



SHORT FORM QUITCLAIM DEED WITH COVENANT

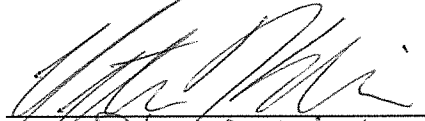
DLN: **1001840028303**

CPB2 I LLC (formerly known as **CPB2 LLC**), a Delaware limited liability company, with a mailing address of 254 Commercial Street, Suite 118, Portland, Maine 04101 (the "Grantor"), FOR CONSIDERATION PAID, grants to **PF MARINA LLC**, a Maine limited liability company, with a mailing address of 254 Commercial Street, Suite 118, Portland, Maine 04101 (the "Grantee"), with QUITCLAIM COVENANT, certain real property, together with any improvements thereon, situated southerly of but not adjacent to Fore Street, in the City of Portland, County of Cumberland and State of Maine, more particularly described on **Exhibit A** attached hereto and made a part hereof.

IN WITNESS WHEREOF, CPB2 I LLC has caused this instrument to be executed by Casey W. Prentice, Manager of CPB2 Management LLC, Manager of CPB2 I LLC, thereunto duly authorized, this 29 day of May, 2018.

Casey W.

WITNESS:



Name: Peter D. Klein

State of Maine
County of Cumberland, ss.

CPB2 I LLC

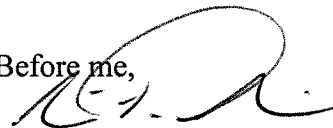
By: CPB2 Management LLC, Manager

By: 
Casey W. Prentice, Manager

May 24, 2018

PERSONALLY APPEARED the above-named Casey W. Prentice, Manager of CPB2 Management LLC, Manager of CPB2 I LLC, as aforesaid, 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 companies.

Before me,



Notary Public/Attorney at Law

Print Name: Christopher Devlin

Commission Expires:

WORKSITE_ACTIVE:10166625.4

EXHIBIT A

A certain lot or parcel of land situated southerly of but not adjacent to Fore Street in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Commencing at a point on the northerly line of land of the State of Maine at the most easterly corner of land of CPB2 as described in deed book 30879, page 75;

Thence, S 46°23'41" E along land of the State of Maine 50.23 feet to the point of beginning;

Thence, the following courses and distances along land of the State of Maine:

S 46°23'41" E 56.23 feet;

S 45°50'49" W 27.46 feet;

S 61°40'11" W 94.07 feet;

S 46°50'49" W 475.00 feet;

S 23°05'49" W 60.00 feet;

S 48°05'49" W 120.00 feet;

N 41°54'41" W 8.00 feet;

S 48°04'56" W 150.00 feet to land of said City of Portland;

Thence, N 42°54'21" W along land of said City of Portland 5.00 feet;

Thence, N 48°03'05" E a distance of 74.90 feet;

Thence, N 41°37'32" W a distance of 25.00 feet;

Thence, N 61°02'10" E a distance of 5.79 feet;

Thence, N 48°05'49" E a distance of 215.52 feet;

Thence, N 39°58'09" E a distance of 25.10 feet;

Thence, N 46°50'49" E a distance of 478.88 feet;

Thence, N 38°07'23" E a distance of 115.79 feet to the point of beginning.

The Grantor also conveys to the Grantee, its successors and assigns, (a) the perpetual, nonexclusive right and easement on, over and across the streets, driveways and other travel ways now existing or hereafter constructed on the remaining land of the Grantors' property, as described in deed from The Portland Company to CPB2 LLC dated April 1, 2014 and recorded at Cumberland County Registry of Deeds in Book 31425, Page 267 and in Trustee's Deed from Elizabeth M. Sprague, Eric Thomas Sprague and Phineas M. Sprague, Trustees of the Buena Vista Trust, dated April 19, 2013 and recorded at Cumberland County Registry of Deeds in Book 30879, Page 75 (collectively, the "Grantor's Land"), for ingress and egress between (i) the Grantee's Land (as defined below) and (ii) the public streets currently known as Fore Street and Thames Street (as the same may be extended, modified and/or altered from time to time), for

WORKSITE_ACTIVE:10166625.4

pedestrians and all types of vehicles, (b) the perpetual, nonexclusive right and easement under, on, over and across Grantor's Land to install, lay, construct, operate, maintain, repair, replace and remove the utility lines, conduits, pipes and related facilities that now or hereafter serve the Grantee's Land, including, without limitation, those related to gas, electricity, cable, fiber optics, telephone, telecommunications, sewer, water, storm, and drainage, and (c) the perpetual, nonexclusive right to use, in common with others, the Grantee's allocable share of the parking spaces now existing or hereafter constructed on Grantor's Land, subject to the terms and conditions adopted by the Grantor from time to time (the easements described in clauses (a) and (b) and the parking rights described in clause (c) being hereinafter collectively referred to as "Rights"), provided that any such acts shall be performed at the Grantee's sole cost and expense in such a manner as to reasonably minimize the interference with the Grantor's use and enjoyment of the Grantor's Land, and that the location of such future utility lines, conduits, pipes and related facilities under, on, over and across the Grantor's Land is subject to the prior written approval of the Grantor, which approval shall not be unreasonably withheld, delayed or conditioned. The Rights, all rights incidental thereto, are for the benefit of and are intended to be appurtenant to the property herein conveyed (the "Grantee's Land").

Together with the appurtenant rights and easements to cross the "Rail-Trail Corridor" described in Indenture Deed by and between Maine Department of Transportation and Phineas Sprague dated August 30, 1993 and recorded at Cumberland County Registry of Deeds in Book 10924, Page 97.

The Grantee's Land is being conveyed subject to the terms and conditions of the Boating Infrastructure Grant Program Agreement between the Maine Department of Transportation and CPB2 LLC dated December 30, 2016 (the "BIG Agreement") and assigned by CPB2 I LLC (formerly known as CPB2 LLC) to PF Marina LLC through the execution of an Assignment and Assumption Agreement of even date herewith, for a period of twenty (20) years from the date of completion of the Fore Street Marina described in the BIG Agreement, as further evidenced in a Notice of Grant Agreement executed by PF Marina LLC of even date herewith to be recorded at the Cumberland County Registry of Deeds.

For Grantor's source of title see deed from The Portland Company to CPB2 LLC dated April 1, 2014 and recorded at Cumberland County Registry of Deeds in Book 31425, Page 267. Reference is made to Affidavit dated March 21, 2018 and recorded at Cumberland County Registry of Deeds in Book 34737, Page 327.

WORKSITE_ACTIVE:10166625.4

Received
Recorded Register of Deeds
May 29, 2018 03:37:53P
Cumberland County
Nancy A. Lane



10 WATERFRONT ZONES

10.1 IN GENERAL

Portland's waterfront zones were developed to support a wide range of industries unique to the city's maritime environment that rely upon access to the working waterfront. Competing demands for limited access require a more exhaustive use list, specialized performance standards, and a unique set of dimensional restrictions that are unlike those of other zones. Given this high degree of specialization, Article 10 should generally be viewed in isolation from other articles within the Land Use Code, with the exception of waterfront-specific definitions, listed within Article 3. Uses specific to Article 10 may feature some degree of overlap with other defined uses allowed elsewhere within the city. However, in such instances, the use as referenced within this article shall control.

10.2 EASTERN WATERFRONT PORT ZONE (EWPZ)

10.2.1 Purpose

- A. The Eastern Waterfront Port Zone is created to nurture deepwater-dependent activity within the context of the established waterfront. The transport of goods and passengers by water is an important component of both the local and regional economies and this transport and other forms of marine industry are dependent upon land and piers with direct access to Portland Harbor. Given the existing pier infrastructure, proximity to deep water, and urban context, Portland's Eastern Waterfront is uniquely situated to support a wide range of water-dependent industry and commerce through a variety of marine activities.
- B. The support and expansion of Portland's marine industry requires piers, uplands, and circulation consistent with the transportation purpose and use of marine facilities. The growth of Portland's marine passenger industry also requires supporting services and activities to provide a safe, convenient, and enjoyable travel experience for users of marine passenger facilities. Non-marine uses that complement the marine passenger industry, are compatible with existing and future water-dependent uses, and provide opportunities for residents and visitors alike to enjoy the Eastern Waterfront throughout the year, are encouraged.
- C. The primary use of the deep-water resources must be for the berthing and support of large vessels. Non-marine uses that complement and support the deepwater infrastructure and do not conflict or compete for limited space with existing or anticipated deepwater-dependent uses are encouraged. Existing and future pier infrastructure and upland support areas should be designed and maintained to support a variety of marine uses and be responsive to future technologies and trends in the marine industry.
- D. Given the need to nurture and support deepwater-dependent uses and the need for non-deepwater-dependent uses to complement the marine passenger industry and to support the maintenance and repair of pier infrastructure, the Eastern Waterfront Port Zone recognizes the following hierarchy of uses:
1. The first priority of this zone is to protect and nurture existing and potential deepwater-dependent uses (those uses

requiring a minimum of 15 feet of water depth).

2. The second priority is to allow shallow water-dependent and other permitted marine uses, so long as they do not interfere with deepwater-dependent uses, either directly by displacement or indirectly by placing incompatible demands on the zone's infrastructure.
3. Other uses specified herein are allowed only if they do not interfere with and are not incompatible with higher priority uses.

10.2.2 No adverse impact on marine uses

No use shall be permitted, approved or established in this zone if it will have an impermissible adverse impact on future marine development opportunities. A proposed non-water-dependent component of a development will have an impermissible adverse impact if it will result in any one or more of the following:

- A. The proposed use will displace an existing water-dependent use.
- B. The proposed use will reduce existing commercial vessel berthing space.
- C. The proposed use, structure or activities, including but not limited to access, circulation, parking, dumpsters, exterior storage or loading facilities, and other structures, will unreasonably interfere with the activities and operation of existing water-dependent uses or significantly impede access to vessel berthing or other access to the water by water-dependent uses.
- D. The siting of a proposed use will substantially reduce or inhibit existing public access to marine or tidal waters.

10.2.3 Permitted uses

Subject to a determination that the proposed use meets the standards of Subsection 10.2.2, the following uses are permitted in the Eastern Waterfront Port Zone:

A. Marine passenger

1. Intermodal marine passenger facilities.
2. Cruise ship home port and port-of-call berthing and support.
3. International and domestic ferries.

B. Marine commercial

1. Transient and long-term commercial berthing.
2. Marine-related warehousing.
3. Marine-related construction, manufacturing, fabrication, salvage, and repair.
4. Storage and repair of fishing equipment.
5. Ship and other marine vessel construction, building, servicing, and repair.
6. Boat and marine equipment storage.
7. Harbor and marine supplies and services, chandlery, and ship supply such as fueling and bunkering of vessels.
8. Public, non-profit, or commercial marine transportation and excursion services, including captained charter services, sport fishing and water taxis.
9. Ship and off-shore support services, including but not limited to tug boats, pilot boats, and chandlery.
10. Facilities for marine pollution control, oil spill cleanup, and servicing of marine sanitation devices.
11. Marinas located east of the eastern boundary of the parcel of land owned by the City of Portland pursuant to a deed from the State of Maine dated February



1982 and recorded in the Cumberland County Registry of Deeds at Book 4916, Page 26.

- a. Restaurants and food service establishments shall be permitted if affiliated with a marina and if such uses are open to the general public.

12. Marine office, including but not limited to offices of owners of marinas, wharves or their agents, and naval architects, and seafood brokers.

C. Commercial

1. Professional, business, government, and general office located in upper floors of structures existing as of September 18, 2006.

**Editor's Note - On-site parking for non-marine commercial uses are permitted as conditional uses subject to the provisions of Subsection 10.2.4*

2. Temporary events, except festivals as otherwise governed under paragraph (3) listed below. Buildings, piers and lands within the EWPZ may be used for temporary public and private events including but not limited to exhibitions, conferences, meetings, and trade shows under the following conditions:
 - a. Temporary events occupying more than 10,000 square feet of building or outdoor space shall not exceed a combined total of 60 days between May 1st to October 31st.
 - b. No temporary event may continue for more than 14 days of continuous operation.
 - c. Any temporary event that anticipates more than 5,000 people in attendance

on any single day must provide and be subject to a parking management plan. The parking management plan must be submitted for the review and approval of the public works authority at least 60 days prior to the first day of the event.

3. Festivals subject to City license.
4. Street vendors licensed pursuant to Chapter 19 of the City of Portland Code of Ordinances.

D. Public

1. Fire, police, and emergency services.
2. Governmental agency emergency operations/crisis centers.
3. Research, military and visiting attraction vessel berthing.
4. Landscaped pedestrian parks, plazas and other similar outdoor pedestrian spaces, including without limitation pedestrian and/or bicycle trails.

E. Other

1. A facility for non-profit organizations whose facility may include offices, classrooms, equipment, equipment rentals, storage, and bathrooms for the public.

10.2.4 Conditional uses

- A. The following uses shall be permitted as conditional uses in the Eastern Waterfront Port Zone, provided that, notwithstanding Subsection 6.5.1, or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the review authority, and provided further that in addition to the provisions of Subsection 6.5.2, such uses will not impede or preclude existing or potential water-dependent development within

the zone, will allow for adequate right-of-way access to the water, are compatible with marine uses, and meet all additional standards set forth below.

B. Conditional use standards

1. *Marine compatibility.* The proposed use shall be compatible with existing and potential marine uses in the vicinity, as required by Subsection 10.2.8(M) and (N).
2. *Parking and traffic circulation.* All applications for conditional use in the EWPZ shall submit a parking and circulation plan for review and approval by the Planning Board. The parking and circulation plan shall show the location of all existing and proposed structures, travel ways, and parking under the common ownership and/or control of the subject pier or property. The plan shall demonstrate that the parking and circulation of the conditional use does not interfere with the functional marine utility of the property and otherwise meets the standards and conditions of the EWPZ.

C. Conditional uses

1. *Marine*
 - a. Marine products, wholesaling, and retailing.
 - b. Ice-making services.
 - c. Marine freight facilities providing service for, and/or intermodal transfer of, container and breakbulk freight.
 - d. Marine educational facilities.
 - e. Seafood retailing, wholesaling, packaging, and shipping.
 - f. Seafood processing for human consumption, subject to the

performance standards applicable to the I-L zone as listed in Section 6.8.

- g. Commercial marinas serving commercial and recreation boats located west of the eastern boundary of the parcel of land owned by the City of Portland pursuant to a deed from the State of Maine dated February 1982 and recorded in the Cumberland County Registry of Deeds at Book 4916, Page 26, provided that such facilities are located in areas that do not conflict with the navigation and handling of deepwater-dependent vessels accessing existing or potential deepwater berthing.
- h. Fish byproducts processing, provided that:
 - i. Any fish byproducts processing facility has a valid rendering facility license under Chapter 12 of the Portland City Code of Ordinances.
 - ii. Any fish byproducts facility shall employ current and appropriate odor control technology to eliminate or minimize detectable odors from such a process, and in no case shall odors exceed the odor limitation performance standards of the IM zone in Subsection 6.8.10.
 - iii. The processing other material wastes or byproducts shall not be deemed a lawful accessory use permitted herein.

2. *Commercial*



WATERFRONT ZONES

- a. Structured parking available to the general public.
 - b. Professional, business, government and general offices uses in upper floors of structures constructed after September 18, 2006.
 - c. Passenger support services supporting a marine passenger use listed under Subsection 10.2.3(A). The total ground floor area occupied by any combination of the following uses (regardless of ownership) shall not exceed 35% of the gross floor area of the principal associated marine passenger use and no more than 35,000 square feet cumulative within the EWPZ:
 - i. Retail.
 - ii. Restaurants/food service other than street vendors.
 - iii. Retail service.
 - iv. Passenger information services.
3. **Industrial.** The following industrial uses are permitted provided that such uses shall conform to the IM zone performance standards set forth in Section 6.8 in addition to the performance standards of Subsection 10.2.8. Where redundant or contradictory performance standards exist, the more restrictive standard applies.
 - a. Non-marine-related warehousing in structures existing as of September 18, 2006.
 - b. Facilities for combined marine and general construction.
 - c. Low impact industrial uses as permitted in the IL zone in structures existing as of September 18, 2006, excluding all auto repair service facilities.
 4. **Public**
 - a. Utility substations. Public utility substations, including but not limited to electrical transformers, sewage and stormwater pumps and telecommunication switching stations, are permitted under the following conditions:
 - i. The facility is located more than 100 feet from the water's edge.
 - ii. The facility occupies no more than 50 square feet of structure above ground.
 - iii. The facility provides no dedicated on-site parking and all subsurface elements of the facility are installed and operated such that land occupied by the facility is otherwise useable and made available for marine-related uses, including but not limited to parking, travel ways, and/or storage.
 - iv. The facility shall be sized, sited and screened to minimize visual impact and prominence from public ways.
 - b. Maritime museums, limited to 5,000 square feet of ground floor footprint.
- *Editor's Note - On-site parking for non-marine commercial and industrial uses are permitted as conditional uses subject to the following provisions.*
5. **Parking for non-marine uses.** Notwithstanding Subsection 19.1.6 and Article 14 of this Land Use Code, no

parking shall be allowed in this zone for non-marine uses unless the applicant can demonstrate that the number of parking spaces on-site exceeds the number of parking spaces needed to accommodate the demand for marine and water-dependent uses that are permitted by Subsections 10.2.3 and 10.2.4 which are or may be located on the subject property. (See editor's note below.) The remainder of parking required, if any, for such non-marine uses shall be provided off-site.

**Editor's Note - Vacant ground floor space should be considered to have a parking demand similar to other space housing an existing water-dependent use elsewhere on the subject property or on a comparable property.*

- D. The following use shall be permitted only upon the issuance of a conditional use permit subject to the provisions of Section 6.5, and any special provisions, standards, or requirements specified below:
1. Wind energy systems.
 2. Solar energy systems.

10.2.5 Prohibited uses

Uses, whether floating or fixed to land, which are not enumerated in Subsections 10.2.3 or 10.2.4 as permitted or conditional uses are prohibited. Those uses that are specifically prohibited shall include, without limitation:

- A. Residential uses.
- B. Amusement/theme parks.
- C. Bulk freight facilities.
- D. On-site gambling casinos not accessory to and located aboard either a ferry or inter-port cruise ship.

10.2.6 Contract or conditional rezoning

In addition to those marine and non-marine uses authorized in Subsections 10.2.3 and 10.2.4, an applicant may apply to locate a non-marine use not otherwise permitted, if the reviewing body finds the applicant has met the standards of Subsection 10.2.2, the performance standards of Subsection 10.2.8, the applicable standards of contract/conditional rezoning contained in Section 5.3, and conforms to the following requirements:

- A. Standards for contract or conditional rezoning:
1. All non-marine uses are either permitted or conditionally permitted in the B-5 zone, and are not specifically prohibited in Subsection 10.2.5 above. Any hotel, inn, or other similar transient lodging establishment proposed must be located landward of the spring tide line and westerly of the extension of the India Street right-of-way.
 2. The aggregate ground floor area of any development permitted hereunder located within 100 feet of the pier edge or working edge of the hardened shoreline shall be occupied by at least 50% of one or more marine uses set forth in Subsections 10.2.3 and 10.2.4. Note: the circulation areas and areas occupied for accessory parking serving marine uses shall not be used as the basis for calculating the 50% provision above.
 3. The development is consistent with the Comprehensive Plan and without the non-marine use component authorized herein, the site could not otherwise support an economically viable water-dependent use.
 4. The project's public benefits outweigh its potential negative impacts, provided that



- such public benefits include one or more of the following: protection of existing water-dependent uses, preservation of future water-dependent use development opportunities, contribution to the development of and/or on-going maintenance of the marine infrastructure for commercial vessels, and visual and physical access to the waterfront for the general public.
5. The non-marine portion of the development will not significantly restrict air or light for marine uses located in the immediate vicinity; will not create significant adverse local climatic effects on marine uses such as an undue increase of winds or shadowing; and will not adversely affect the efficient operation of marine uses, such as by producing less efficient traffic, parking or circulation patterns.
 6. The rezoning contains adequate provisions and/or conditions to ensure that on-site water-dependent infrastructure remains occupied by commercial marine use(s) listed in Subsections 10.2.3 and 10.2.4 and that said use is not abandoned after the project is developed.
- B.** Notwithstanding Subsection 10.2.8(H) and off-street parking standards of Article 14, all on-site parking constructed or used for non-marine uses allowed only by contract or conditional rezoning shall be subject to the conditional use provisions Subsection 10.2.4(C)(5). Additionally, the total amount of parking shall be established by the City Council in the conditional or contract rezoning agreement after consideration of the Planning Board's recommendation on the same.

10.2.7 Dimensional requirements.

In addition to the generally applicable provisions of Section 7.5 of this Land Use Code, lots in the EWPZ shall be subject to the following requirements:

- A. Minimum lot size:** None
- B. Minimum frontage:** None
- C. Minimum yard dimensions:**
 1. *Front setback:* None
 2. *Side setback:* None
 3. *Rear setback:* None
 4. *Setback from pier line:* Notwithstanding the above requirements, a minimum setback of 25 feet from the edge of any pier, wharf or working edge of the hardened shoreline shall be required for any structure, provided that marine offices, as defined in Section 10.2.3(B)(12), may be located up to five feet from the edge of any pier, wharf, or working edge of the hardened shoreline. The setback area may be utilized for water-dependent uses and public uses and activities, including restaurants and food service establishments affiliated with marinas that are open to the public, subject to the provisions of Subsections 10.2.2 and 10.2.4, and shall not be utilized for ~~restaurant, drinking or~~ other non water-dependent uses or for off-street parking. The edge of any pier, wharf or bulkhead shall include any attached apron(s).
- D. Maximum impervious surface:** 100%
- E. Maximum building height:** 45 feet, except as follows:
 1. For purposes of this subsection only, moveable elements such as cranes and

gantries, connection devices such as conveyors or bridges, and floating vessels shall not be subject to the space and bulk requirements, but shall be subject to a determination by the Federal Aviation Administration that the location of such equipment will not create a hazard to air traffic.

2. Rooftop appurtenances may exceed the maximum height limits of 45 feet providing that their design and placement is either fully screened or integrated into the architecture of the structure on which they sit.
3. The applicant must provide a determination from the Federal Aviation Administration that structures and equipment in excess of 45 feet will not exceed the applicable height guidelines for the runway approach and will not create a conclusive evidence that the proposed development will not create a hazard.

10.2.8 Performance standards

Development in the Eastern Waterfront Port Zone shall comply with the following standards:

A. Outdoor storage of materials. Outdoor storage of commodities and materials accessory to normal conduct of business shall be entirely contained, including runoff contaminants and residual material, within a designated area.

B. Noise

1. The level of sound, measured by a sound level meter with frequency weighting network (manufactured according to standards prescribed by the American National Standards Institute, Inc.),

inherently and recurrently generated within the EWPZ between the hours of 7:00 p.m. and 7:00 a.m. from facilities or operations commenced on or after July 1, 1988, shall not exceed 55 decibels on the A scale at or within the boundaries of any residential zone, except for sound from construction activities, sound from traffic on public streets, sound from temporary activities such as festivals, sound created as a result of, or relating to, an emergency, including sound from emergency warning signal devices, and maritime navigation signals.

2. In measuring sound levels under this subsection, sounds with a continuous duration of less than 60 seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of 60 seconds or more shall be measured on the basis of the energy average sound level over a period of 60 seconds (LEQ1).
3. In addition to the sound level standards otherwise established, facilities or operations established or built in the EWPZ on or after July 1, 1988, shall employ best practicable sound abatement techniques to prevent tonal sounds and impulse sounds or, if such tonal and impulse sounds cannot be prevented, to minimize the impact of such sounds in residential zones. Tonal sound is defined as a sound wave usually perceived as a hum or which because its instantaneous sound pressure varies essentially as a



WATERFRONT ZONES

- simple sinusoidal function of time. Impulse sounds are defined as sound events characterized by brief excursions of sound pressure, each with a duration of less than one second.
- C. **Vibration.** Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. This shall not apply to vibration resulting from activities aboard a vessel or from railroad vehicle activities, or from activities on a pile-supported pier.
- D. **Federal and state environmental regulations.** All uses shall comply with federal and state environmental statutes and regulations regarding emissions into the air, except where provisions of this code are more stringent.
- E. **Discharges into harbor areas.** No discharge into harbor water areas shall be permitted, unless permitted by the Maine Department of Environmental Protection under a waste discharge license and as approved by the Department of Public Works in accordance with Chapter 24, Article III of the City of Portland Code of Ordinances. All private sewage disposal or private wastewater treatment facilities shall comply with the provisions of Chapter 24, Article II of the City of Portland Code of Ordinances and federal and state environmental statutes and regulations regarding wastewater discharges.
- F. **Storage of vehicles.** Storage of any unregistered automotive vehicle on the premises for more than 10 days shall not be permitted.
- G. **Landfill of docking and berthing areas.** Landfill of docking and berthing areas shall be governed by 38 M.R.S. § 471-478, and permitted only if the landfill does not reduce the amount of linear berthing areas or space, or berthing capacity. If approved, construction shall be undertaken using methods approved by the Department of Public Works and shall be accomplished in a manner so as to ensure that a stable and impermeable wall of acceptable materials will completely contain the fill material and will not permit any fill material to leach into docking areas or navigable waters.
- H. **Off-street parking and loading.** Off-street parking and loading is subject to provisions as provided in Article 19.
- I. **Shoreland and Flood Plain Management regulations.** Any lot or a portion of a lot located in a Shoreland Zone as identified on the City zoning map or in a flood hazard area shall be subject to the requirements of Articles 11 and 12.
- J. **Lighting.** All lighting on the site shall be shielded such that direct light sources shall not interfere with vessels transiting the harbor, nor have an unreasonable adverse impact on adjacent residential zones, and shall be compliant with the site lighting standards of the City of Portland *Technical Manual*.
- K. **Signs.** Signs shall be permitted as set forth in Article 20.
- L. **Storage of pollutants and oily wastes.** On-premises storage of pollutants and oily wastes shall not be permitted for more than 45 days.
- M. **Compatibility of non-marine uses with marine uses.** Non-marine uses, structures, and activities, including but not limited to access, circulation, parking, dumpsters, exterior storage, and loading facilities or other structures shall neither unreasonably interfere with the existence or operation of marine uses

nor significantly impede access to vessel berthing or other access to the water by existing or potential marine uses.

- N. Functional utility of piers and access to the water's edge.** All development, whether for marine or non-marine uses, must anticipate current and future needs of water-dependent uses to functionally access the water's edge for the transfer of goods, materials, and passengers between berthed vessels and land bound vehicles. Provisions for the storage and movement of goods, materials, and passengers must be designed into all waterside development and internal circulation routes must be maintained or otherwise provided as an element of any development.

10.3 WATERFRONT CENTRAL ZONE (WCZ)

10.3.1 Purpose

- A.** The Waterfront Central Zone was created to protect and nurture water-dependent and marine-related support uses so that they may grow and prosper in the present and into the future in an environment and area dedicated to this purpose. The following priority of uses is recognized:
1. The first priority of this zone is to protect and nurture existing and potential water-dependent uses in a setting that enforces their continued economic viability.
 2. The second priority is to encourage other marine and marine-related support uses so long as they do not interfere with water-dependent uses, either directly by displacement or indirectly by placing incompatible demands on the zone's infrastructure.
 3. Non-marine uses are encouraged provided that they do not interfere with and are not incompatible with first and second priority uses. Non-marine uses are beneficial to the waterfront economy because they provide the financial return to property owners necessary for the maintenance and improvement of the marine infrastructure.
- B.** Water-dependent and marine-related support uses by their nature have activities and operational needs that are unique to this area and are not shared by other commercial and industrial uses in the city. These first and second priority uses and related activities may result in noise, odor, dust, hours of operation, parking, and traffic patterns and traffic control needs that are necessary for the convenient and successful conduct of such uses. Other uses may not be compatible with these types of effects. Other specified uses are permitted in the Waterfront Central Zone, provided that they do not significantly interfere with the activities and operation of water-dependent and marine-related support uses. Such uses must be, and are assumed to be, aware of the impacts associated with marine uses and therefore must accept and be tolerant of them. Other specified uses in the zone shall accommodate to those patterns and needs of the higher priority uses so long as those higher priority uses are not detrimental to public health and safety and the higher priority activities are conducted in accordance with sound practices or practices customary in the trade.
- C.** Commercial Street is recognized as an important economic center for the city and region. Marine-compatible uses are



WATERFRONT ZONES

encouraged to locate and grow along Commercial Street while higher priority marine uses are protected on the waterfront.

10.3.2 Definitions

For the purposes of the Waterfront Central Zone only, the following terms shall have the following definitions:

Common circulation drives. Private driveways, roadways and circulation areas accessible to all on-site tenants and/or occupants of a lot within the Waterfront Central Zone providing access from/to the public street network.

Lot. Any abutting property under common ownership.

Commercial Street Overlay Zone (CSOZ). The Commercial Street Overlay Zone (CSOZ) is a portion of the Waterfront Central Zone, as described below, where new and existing development may be occupied with 100% non-marine use tenants listed under Subsection 10.3.3(B), subject to the standards and use limitations provided in Subsection 10.3.7(B). The geographic limits of the CSOZ are defined by parcels of land and piers within the Waterfront Central Zone located on the landward side of a line established 125 feet south of the southerly sideline of Commercial Street and modified as follows: the seaward limit of the CSOZ extends to a line 300 feet south of the southerly sideline of Commercial Street in the area between the easterly and westerly sideline of Long Wharf. Additionally, all areas subject to this provision are set back landward at least 25 feet from the average high tide line of Portland Harbor and associated coastal wetlands. Where the 125 foot offset intersects with the

footprint of a building existing as of May 2019 and such intersection leaves 75% or more of the building within the CSOZ, the entire building shall be considered included in the CSOZ. All offset distances are measured horizontally. All applicants for development within the CSOZ are responsible for demonstrating their location within CSOZ according to the findings of a site specific land survey conducted by a professional land surveyor licensed by the State of Maine. The limits of the CSOZ shall be shown on all site plans and subdivision plats for proposed development within the CSOZ.

On-site. That portion of any lot included within or directly impacted by a proposed development.

10.3.3 Permitted uses

Subject to a determination that the proposed use meets the standards of Subsection 10.3.7, as applicable, the following uses listed under Subsection 10.3.3(A), (B), (C), and (D) are permitted anywhere in the Waterfront Central Zone. Uses listed under Subsection 10.3.3(E) are only permitted in the CSOZ.

A. Marine

1. Marine products wholesaling, distribution and retailing.
2. Marine repair services and machine shops.
3. Tugboat, fireboat, pilot boat and similar services.
4. Harbor and marine supplies and services, chandleries, and ship supply such as fueling and bunkering of vessels.
5. Marine industrial welding and fabricating.
6. Shipbuilding and facilities for construction, maintenance, and repair of vessels.

7. Commercial marine transport and excursion services, including ferries, captained charter services, sport fishing and water taxis.
8. Cargo handling facilities, including docking, loading, and related storage.
9. Boat repair yards.
10. Boat storage facilities, excluding rack storage facilities (Boat rack storage facilities are included as a conditional use).
11. Seafood processing and retailing.
12. Seafood packing and packaging.
13. Seafood loading and seafood distribution.
14. Fabrication, storage, and repair of fishing equipment.
15. Ice-making services.
16. Facilities for marine construction and salvage.
17. Facilities for marine pollution control, oil spill cleanup, and servicing of marine sanitation devices.
18. Fabrication of marine-related goods.
19. Fishing and commercial vessel berthing.
20. Non-commercial berthing of a maximum of 50 linear feet per pier. A non-commercial berth may not displace a commercial berth. Parking for any non-commercial berthing is subject to the provisions of Subsection 10.3.9(G).
21. Marine office, including but not limited to offices of owners of wharves or their agents, and naval architects, and seafood brokers.
22. Public landings.
23. Marine research, education, and laboratory facilities.
24. Bait sales and processing.

25. Harbor security and emergency response services including but not limited to Harbor Master, Marine Patrol and Coast Guard.
26. Commercial parking for water-dependent use business owners and employees.

B. Non-marine commercial and industrial uses.

Non-marine uses permitted by this subsection are subject to the standards listed in Subsection 10.3.7.

1. Professional, business, government, and general offices, except for offices for health care practitioners or health clinics which are only permitted in the CSOZ.
2. Cabinet and carpentry shops, studios for artists and crafts people.
3. Intermodal transportation facilities.
4. Cold storage facilities.
5. Commercial kitchens.
6. Outside accessory activities.

C. Public

1. Landscaped pedestrian parks, plazas, and other similar outdoor pedestrian spaces, including without limitation pedestrian and/or bicycle trails.

D. Other

1. Interior accessory uses customarily incidental and subordinate to the location, function, and operation of permitted uses. Food service establishments, newsstands, and other similar retail and service support uses shall only be permitted as accessory uses if they are part of and located within the lot lines of a use set forth in Subsections 10.3.3(A)(1), (7), (11) or (22); such uses do not exceed 2,000 square feet in total floor area of the building, or 25% of



WATERFRONT ZONES

- the total floor area of the building, whichever is less, and each individual accessory use does not exceed 1,000 square feet in total floor area of the building; and further provided that such accessory uses provide goods or services that are supportive of the principal use and its clientele. Exterior accessory uses shall be otherwise subject to the provision of Subsection 10.3.7(A).
2. Interior meeting or classroom space accessory to uses permitted in Subsection 10.3.3(A)(23) may be rented out for meeting use by marine-related or non-marine-related groups or organizations, or the general public, and such accessory uses shall not be subject to the limitations contained in (B) above, but shall only be permitted as accessory uses if the total of all support uses, including interior meeting or classroom space, does not exceed 3,000 square feet in total floor area per building, or 15% of the total floor area per building, whichever is less.
- E. Uses permitted only within the Commercial Street Overlay Zone (CSOZ).** Uses permitted by this subsection are subject to the standards listed in Subsection 10.3.7(B).
1. Retail and service establishments, including craft and specialty shops.
 2. Restaurants provided that full course meal food service and consumption shall be the primary function of the restaurant, and full course meal service shall be continued up until the hours of closing.
 3. Banking services without drive-up services.
 4. Museums and art galleries.
 5. Street vendors licensed pursuant to Chapter 19.
 6. Offices of health care practitioners or health care clinics.
 7. Personal service establishments.
- ### 10.3.4 Conditional use
- The uses listed herein shall be permitted as conditional uses in the Waterfront Central Zone, provided that, notwithstanding Section 6.5, or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the review authority, and further provided that in addition to the provisions of Subsection 6.5.2, they shall also meet the applicable Waterfront Central Zone development standards in Subsection 10.3.7:
- A. Commercial marine conditional uses**
1. Fish by-products processing, provided that:
 - a. Any fish by-products processing facility has a valid rendering facility license under Chapter 12 of the City of Portland Code of Ordinances.
 - b. Any existing fish by-products facility shall employ current and appropriate odor control technology (and any new fish by-product use shall employ current, available odor control technology) to eliminate or minimize detectable odors from such a process, and in no case shall odors exceed the odor limitation performance standards of the I-M zone.
 - c. The processing of other material wastes or by-products shall not be deemed a lawful accessory use under any other provision of this article.

2. Boat rack storage facilities, provided that:
 - a. Parking shall be provided for 100% of the demand generated by the use (notwithstanding Subsection 10.3.9(G)), and such parking shall be provided off-site, in another zone permitting such use.
 - b. Boat rack structures shall not exceed 10,000 square feet of building footprint.

B. Utility substations. Public utility substations, including but not limited to electrical transformers, sewage, and stormwater pumps, and telecommunication switching stations, are permitted under the following conditions:

1. The facility is located more than 100 feet from the water's edge.
2. The facility occupies no more than 50 square feet of structure above ground.
3. The facility provides no dedicated on-site parking and all subsurface elements of the facility are installed and operated such that land occupied by the facility is otherwise usable and made available for marine uses, including but not limited to parking, travel ways, and/or storage.
4. The facility shall be sized, sited and screened to minimize visual impact and prominence from public ways.

C. Wind energy systems.

10.3.5 Prohibited uses

Uses which are not enumerated in either Subsections 10.3.3 or 10.3.4 as permitted or conditional uses are prohibited. Uses enumerated in Subsection 10.3.3(E) shall be considered prohibited uses outside of the CSOZ. Those uses that are prohibited shall include, without limitation:

- A. Residential uses.
- B. Hotels, motels, hostels, bed and breakfasts, inns, lodging houses, tourist homes, short-term rentals, or boatels.
- C. Auditoriums, civic centers, convention centers, or other meeting facilities not accessory to an otherwise permitted use.
- D. Drinking establishments, private clubs, or non-profit social and recreational clubs.
- E. Ground mounted telecommunication towers, antennas, and/or disks.
- F. Drive-up services for any use other than a permitted use listed under Subsections 10.3.3(A) or 10.3.4(A)(1).
- G. Auto service stations.
- H. Laundry and dry-cleaning services.
- I. Convenience stores with gas pumps.
- J. Commercial parking for non-marine uses.

10.3.6 Dimensional requirements

In addition to the generally applicable provisions of Section 7.5 of this Land Use Code, lots in the Waterfront Central Zone shall be subject to the following requirements:

- A. **Minimum lot size:** None
- B. **Minimum frontage along Commercial Street:** 75 feet
- C. **Minimum lot width within the CSOZ:** 50 feet measured parallel with Commercial Street and such lot width shall be continuous for the full depth of the lot located within the CSOZ.
- D. **Minimum yard dimensions:**
 1. *Front setback:* None
 2. *Side setback:* None
 3. *Rear setback:* None
 4. *Setback from pier edge:* Notwithstanding the above requirements, a minimum first-floor setback of 10 feet from the edge of



- any pier, wharf, or bulkhead shall be required for any structure, exclusive of structurally necessary posts supporting upper floors, and deck-mounted equipment for loading and unloading vessels. The edge of any pier, wharf, or bulkhead shall include any attached apron(s). Floats, rafts, and/or barges not structurally integral to the pier, wharf, or bulkhead may not be used to satisfy this requirement. Parking for non-marine uses shall not occupy the 10-foot setback.
- E. **Maximum lot coverage:** 100%
- F. **Maximum building height:** 50 feet. Except as provided in (H) below, a structure in the Waterfront Central Zone shall provide no more than three habitable floors, however, typical rooftop appurtenances and/or enclosed or open mechanical installations shall be allowed over the third floor.
- G. **Minimum ground floor clearance:** Any new building proposed to be larger than 300 square feet and located more than 35 feet from the southerly sideline of Commercial Street shall provide no less than 15 feet of first floor to ceiling vertical clearance to promote marine industrial use potential. New buildings less than 300 square feet or additions to existing multistory buildings are exempt from this provision but shall provide the maximum ground floor clearance practicable.
- H. **New non-marine use building exception for usable floors and minimum ground floor clearance:** Notwithstanding provisions (F) and (G) above, for new non-marine use buildings permitted within the CSOZ, four usable floors are allowed and ground floor clearance minimums do not apply.
- 10.3.7 Development standards**
- A. **Standards for non-marine uses located outside of the CSOZ.** Non-marine uses listed above in Subsection 10.3.3(B) and 10.3.4(B) that are located outside of the CSOZ shall be subject to the performance standards listed in Subsection 10.3.9 as well as the following standards:
1. *55% marine use required on ground floors.* At least 55% of the leasable ground floor area of all buildings on a lot (defined in Subsection 10.3.2 above), shall be occupied by marine uses, as listed under Subsection 10.3.3(A) or 10.3.4(A)(1).
 2. *55% marine use required for all open areas.* After subtracting areas used for common circulation drives (defined in Subsection 10.3.2 above), at least 55% of unbuilt area (meaning area not occupied by a building) on the lot, when calculated using the aggregate of all such unbuilt areas, shall be occupied by marine uses as listed under Subsection 10.3.3(A) or 10.3.4(A)1.
 3. *Ground floor vacancies and change of occupancy offered to water-dependent/marine uses.* Ground floor vacant space and areas proposed for a change of occupant outside of the CSOZ shall not be filled with any non-marine use without adequate opportunity for marine uses to occupy the space.
 - a. Ground floor vacancy and change of occupant outside of the CSOZ advertised to marine users: In any lot or portion of lot outside of the CSOZ, each time a ground floor occupant departs or gives notice to depart from

the lot, the space, along with any associated parking spaces to be vacated, must be made available to new marine occupants. Prior to renting to a non-marine user the property owner shall advertise for a new marine occupant for not less than a 180-day period in targeted media and by other means reasonably calculated to reach marine users (e.g. local marine trade publications, marine trade websites, waterfront bulletins.) Should one or more marine users apply, the property owner shall make the space available to a marine occupant, in accordance with terms and rates generally consistent with comparable space in the 55% marine use portion of the zone (outside of the CSOZ.) The property owner may stop advertising sooner than the end of the 180-day period if a lease is signed with a marine user. Should no marine user apply by the end of the 180-day period, the owner may fill the space with a non-marine user provided that the new non-marine occupant will not cause the lot to exceed the non-marine use occupancy maximum of 45% of the ground floor area or open area.

- b. Uses inventoried: To demonstrate adherence to the 55% marine use requirement, the applicant shall submit to the Planning Authority, upon request, an inventory which lists each occupant (tenant or otherwise), as well as a map which depicts the

location of each occupant. The map shall show all ground level space, including buildings, parking, open areas and submerged lands associated with the subject lot. For each occupant, the property owner must indicate the square footage of area occupied and whether the occupant is a marine use as defined herein. For vacant space, the last previous occupant shall be listed, along with the date of departure.

- c. Prior to changes of occupancy and/or as part of applications for new development outside of the CSOZ, the property owner or applicant shall provide proof of compliance with the requirements of this section as a condition of approval.
4. *Pier or bulkhead edge reserved for marine uses.* Notwithstanding any provision of this ordinance to the contrary, excepting only the portion of any pier which might be used for non-commercial berthing pursuant to Subsection 10.3.3(A)(20), all berthing and/or dockage space and associated floats plus the entire linear edge of that portion of every pier or bulkhead which is adjacent to greater than zero feet of water depth at mean low water, to a minimum setback line of at least 10 feet from the edge of the pier, bulkhead, or engineered shoreline may only be used or occupied by one or more marine uses as defined in Subsection 10.3.3(A) or 10.3.4(A). Said edge shall be the seaward extent of any engineered shoreline or working deck of any pier or wharf.



WATERFRONT ZONES

- B. CSOZ standards.** Non-marine uses listed under Subsections 10.3.3(B), 10.3.3(E) and 10.3.4 located within the CSOZ, as defined in Subsection 10.3.2, shall be subject to the performance standards listed in Subsection 10.3.9 as well as the following standards:
1. *Vessel access.* Non-marine uses allowed under this provision shall not disrupt or block access to vessel berthing and shall otherwise adhere to the performance standards of this zone described in Subsection 10.3.9.
 2. *Maximum setback for new development on lots with 75 or more feet of Commercial Street frontage.* Any new non-marine development constructed subject to this provision which is located on a lot with 75 or more feet of frontage along the Commercial Street right-of-way shall be located with its front façade no further than 35 from the southerly sideline of the Commercial Street right-of-way. Furthermore, any such development shall orient its front façade and its primary pedestrian entrance toward Commercial Street and no vehicular circulation or parking may occupy the land or pier area between the front façade of the building and Commercial Street. Non-marine development subject to this provision on lots with fewer than 75 feet of frontage along the Commercial Street right-of-way, changes of use within existing buildings, and/or building additions of less than 5,000 square feet of new development to existing buildings are exempt from the maximum setback provisions established herein.
 3. *Investment in marine infrastructure.* All applicants for site plan review or a change of use permit for non-marine development in the CSOZ are required to invest in marine infrastructure as a condition of development, provided that the total project costs exceed \$250,000. The value of the investment shall be not less than 5% of total project costs over \$250,000 for constructing non-marine space and associated site improvements in the CSOZ. Required investment may occur by one or both the following methods:
 - a. *Direct investment in marine infrastructure located on the same lot:* Investment shall be for the benefit of marine uses listed in Subsection 10.3.3(A) within the same lot as the proposed non-marine development. Investment may include dredging, pile replacement, new or replaced structural decking (but not pavement resurfacing), new or replaced fendering systems, new or replaced floats, pier expansions, permanent conversions of recreational berthing to commercial berthing, bulkhead or seawall repair or improvements, or any combination of similar improvements. Plans for the marine infrastructure investment shall be submitted to the Planning Authority with the application for site plan review or change of use permit and shall include details and a commitment as to how the marine infrastructure will be utilized by marine users. The marine

infrastructure improvements shall be completed prior to the issuance of a certificate of occupancy for the non-marine development project.

- b. Financial contribution: If direct investment in marine infrastructure is not made, the developer shall make a financial contribution to the City's Waterfront Loan and Investment Fund.

10.3.8 No contract or conditional rezoning permitted

- A. This section is intended to accomplish goals from *Portland's Plan 2030*. Specifically, these changes will:
 - 1. Prioritize and promote Portland's unique mix of water-dependent, marine-related and compatible non-marine uses.
 - 2. Recognize and reinforce the respective roles of the Eastern, Central, and Western Waterfronts.
 - 3. Celebrate, promote, and protect Portland's lobster and fishing industry as a foundation of the region's economy and a feature of civic pride.
- B. In light of these goals and the significance of the Central Waterfront to the City's future, no contract or conditional rezoning applications may be approved in the Waterfront Central Zone.

10.3.9 Performance standards

All uses in the Waterfront Central Zone shall comply with the following standards:

- A. **Outdoor storage of materials.** Outdoor storage of commodities and materials accessory to normal conduct of business,

except pilings and/or cranes, shall be permitted to a maximum height of 45 feet, and such materials shall be entirely contained, including runoff contaminants and residual material, within a designated area within the lot boundaries.

- B. **Noise.** The level of sound, measured by a sound level meter with frequency weighting network (manufactured according to standards prescribed by the American National Standards Institute, Inc.), inherently and recurrently generated within the Waterfront Central Zone shall not exceed 75 decibels on the A scale at the boundaries of any lot, except for sound from construction activities, sound from traffic on public streets, sound from temporary activities such as festivals, and sound created as a result of, or relating to, an emergency, including sound from emergency warning signal devices. In measuring sound levels under this subsection, sounds with a continuous duration of less than 60 seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of 60 seconds or more shall be measured on the basis of the energy average sound level over a period of 60 seconds (LEQ1).
- C. **Vibration.** Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. This shall not apply to vibration resulting from activities aboard a vessel or from railroad vehicle activities, or from activities on a pile supported pier.



- D. **Discharges into harbor areas.** No discharge into harbor water areas shall be permitted, unless permitted by the Maine Department of Environmental Protection under a waste discharge license and as approved by the

Department of Public Works in accordance with Chapter 24, Article III of the City of Portland Code of Ordinances. All private sewage disposal or private wastewater treatment facilities shall comply with the provisions of Chapter 24, Article II of the City of Portland Code of Ordinances and federal and state environmental statutes and regulations regarding wastewater discharges.

- E. **Storage of vehicles.** Storage of any unregistered automotive vehicle on the premises for more than 60 days shall not be permitted.
- F. **Landfill of docking and berthing areas.** Landfill of docking and berthing areas shall be governed by 38 M.R.S. § 480-A through 480-HH, and permitted only if the landfill does not reduce the amount of linear berthing areas or space, or berthing capacity. If approved, construction shall be undertaken using methods approved by the Department of Public Works and shall be accomplished in a manner so as to ensure that a stable and impermeable wall of acceptable materials will completely contain the fill material and will not permit any fill material to leach into docking areas or navigable waters.
- G. **Off-street parking and loading.** No off-street parking or loading shall be required under Article 19.

- H. **Lighting.** All lighting on the site shall be shielded such that direct light sources shall not unreasonably interfere with vessels transiting the harbor nor have an unreasonable adverse impact on adjacent residential zones.

- I. **Storage of pollutants and oily wastes.**

On-premises storage of pollutants and oily wastes shall not be permitted for more than 45 days.

- J. **Urban design.** Construction of new structures located within 35 feet of the southerly edge of Commercial Street between Maine Wharf and the easterly property line of the City fish pier shall conform to the guidelines set forth in the Downtown Urban Design Guidelines, unless such structures are also located within 100 feet of the water. Such structures that are also located within 100 feet of the water shall conform to the extent practicable to the Downtown Urban Design Guidelines.

- K. **Pier and wharf expansions.** In addition to meeting Harbor Commission and Coast Guard requirements for navigation, any expansion or extension of a pier and or wharf in the Waterfront Central Zone shall demonstrate its compatibility with fixed route ferry service and emergency vessel operations.

- L. **Public view protection**

1. Any new development in the Waterfront Central Zone shall perform a public view impact analysis for review and approval by the Planning Board or Planning Authority as a condition of site plan approval. The analysis shall:
 - a. Demonstrate the project's adherence to the Portland View Corridor Protection Plan (City of Portland

Comprehensive Plan, 2002) to the extent practicable.

- b. Promote the public's visual access to the water through sensitive building placement.

- 2. The Planning Board or Planning Authority shall find at a minimum that the proposed development:
 - a. Retains street corridor views as extended across Commercial Street from the Portland peninsula.
 - b. Retains panoramic views of the water from Commercial Street to the extent practicable.
 - c. Where loss of existing public views to the water is shown to be necessary for the reasonable development of the site, the developer provides alternative public views to the water through newly established view corridors or publicly accessible pedestrian ways. Such pedestrian ways shall not interfere with existing or potential water-dependent uses, nor shall they endanger the public through uncontrolled proximity to industrial activity.

M. Operations and access management plan

- 1. Any new development, including changes of use or expansion of uses in the Waterfront Central Zone, shall submit a scaled plan and accompanying narrative that demonstrates waterfront access and functional accommodation for water-dependent uses. In accordance with *Portland's Plan 2030*, the plan shall

demonstrate consistency with the hierarchy of waterfront uses, as further detailed in Subsection 10.3.1, with non-marine and marine-related uses being subordinate in placement and disposition to water-dependent uses, and designed so as not to impede access to the pier edge and vessel berthing nor interfere with marine operations.

- 2. The plan shall, at a minimum, illustrate the following information:
 - a. Location of all existing and proposed structures, rights-of-way, common circulation drives as defined in Subsection 10.3.2, access-ways, sidewalks, pier edges, floats, and docks, showing the entire lot in the context of its respective pier.
 - b. Existing and proposed off-street parking, labeled with associated uses.
 - c. Facilities for the loading and unloading of goods and materials.
 - d. Regularly occurring exterior activities including but not limited to the storage of material, equipment and vehicles, yard area, outdoor seating, and on-site waste management.
 - e. Signage showing parking use, wayfinding, and posted operational restrictions.
 - f. Plan narrative detailing how the standards listed below are achieved, tenant/landlord communication protocols, private enforcement actions to be employed to ensure plan compliance, and the responsible parties representing the property owner.



WATERFRONT ZONES

3. The operations and access management plan shall be reviewed by the Planning Authority.
4. In addition to the information above, the plan shall demonstrate compliance with the following standards:
 - a. Off-street parking is subject to the limitations described in Subsection 10.3.7 (A) (“55% Rule”). Off-street parking spaces intended for use by water-dependent uses shall be sited as close as reasonably possible to associated vessels and/or ground-floor lease area.
 - b. Proposals for new non-marine parking accessory to an otherwise permitted use in the WCZ, shall submit a parking analysis for all uses on the subject lot, justifying the number of non-marine spaces based upon the proposed use and demonstrating sufficient parking supply for marine uses. If sufficient parking is not available to marine uses, off-street parking for non-marine uses shall not be permitted.
 - c. Off-street parking, loading facilities, and access ways designated for water-dependent uses shall be exclusive to such uses, except that, if not being occupied by water-dependent tenants, such parking may be made available to non-marine uses between the hours of 5:00 p.m. and 2:00 a.m. Any such shared parking arrangements shall be documented in the operations and access management narrative described above, and clearly signed on-site.
 - d. All properties providing commercial berthing shall demonstrate reasonable opportunities to load and unload vessels from the subject lot.
 - e. Facilities for the loading and unloading of goods shall account for the frequency of use and vehicle type and, to the extent possible, minimize impacts to pedestrian and vehicle circulation patterns.
 - f. Provisions for the storage and movement of goods and materials shall be designed into all pier edge development. Circulation routes must be maintained or otherwise provided as an element of all development. The siting, design, and circulation of non-marine uses, particularly those allowed on first floors, shall accommodate reasonable access for pedestrians, vehicles, and freight transfer to and from berthed vessels.
 - g. Non-marine uses shall provide a dedicated pedestrian route between the proposed use and Commercial Street, and shall seek to minimize conflict with vehicle traffic.

10.4 WATERFRONT PORT DEVELOPMENT ZONE (WPDZ)

10.4.1 Purpose

Transport of goods by water to and from Portland is an important component of both the local and regional economy. This commerce is dependent upon land with direct access to the dredged deep-water channel of the Fore River and Portland

Harbor. The Port of Portland is integral to the City's economic, cultural and fiscal health. This zone exists to ensure the continued viability of the Port of Portland. Uses in the Waterfront Port Development Zone, while governed by the similar performance standards as other industrial zones, are primarily limited to those uses which are dependent upon deep water and which contribute to port activity. Non-marine activity may be allowed to the extent it will not have any adverse impact on marine uses.

10.4.2 No adverse impact on marine uses

No use shall be permitted, approved or established in this zone if it will have an impermissible adverse impact on future marine development. A proposed development will have an impermissible adverse impact if it will result in any one or more of the following:

- A. The proposed non water-dependent use will displace an existing water-dependent use.
- B. The proposed use will reduce existing commercial vessel berthing space.
- C. The proposed nonwater-dependent use, structure, or activities, including but not limited to access, circulation, parking, dumpsters, exterior storage, or loading facilities, and other structures, will unreasonably interfere with the activities and operation of existing water-dependent uses or significantly impede access to vessel berthing or other access to the water by water-dependent uses.
- D. The siting of a proposed nonwater-dependent use will substantially reduce or inhibit existing public access to marine or tidal waters.

10.4.3 Permitted uses

Subject to a determination that the proposed use meets the standards of Subsection 10.4.2, the uses

in Table 10-A are permitted (●) or conditional (◐) in the Waterfront Port Development Zone.

10.4.4 Conditional use standards

Conditional uses shall be permitted in the Waterfront Port Development Zone, provided that, notwithstanding Section 6.5 or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the review authority. In addition to the provisions of Section 6.5, such uses will:

- A. Not impede or preclude existing or potential water-dependent development on other lots.
- B. Allow for adequate access to the water.
- C. Be compatible with water-dependent and marine uses.
- D. Operationally support one or more water-dependent use(s), or be located in a building or structure that is physically adaptable or relocatable to make way for future development of water-dependent uses.
- E. Meet any additional performance and dimensional standards set forth below.

10.4.5 Prohibited uses

Uses which are not enumerated in Table 10-A as permitted or conditional uses are prohibited. Those uses that are prohibited shall include, without limitation:

- A. Residential uses.
- B. Hotels, motels, or boatels.
- C. Auditoriums, civic centers, convention centers, or other meeting facilities.
- D. Restaurants and drinking establishments.

- E. Marinas, including marina associated boat storage facilities.
- F. Truck terminals.

TABLE 10-A: WPDZ PERMITTED AND CONDITIONAL USES

Marine	Marine repair services and machine shops	●
	Tugboat, fireboat, pilot boat, and similar services	●
	Harbor and marine supplies and services and ship supply, such as fueling and bunkering of vessels	●
	Shipbuilding and facilities for construction, maintenance, and repair of vessels	●/○ ¹
	Marine cargo handling facilities, including docking, loading and related storage	●/○ ¹
	Boat repair yards	●/○ ¹
	Facilities for marine construction and salvage	●/○ ¹
	Facilities for marine pollution control, oil spill cleanup, and servicing of marine sanitation devices	●
	Marine retail and wholesale sales, including yacht brokerage	○
	Boat storage facilities	●/○ ¹
	Seafood processing	○
	Seafood packing and packaging	○
	Fabrication, storage, and repair of fishing equipment	○
	Ice-making services	○
	Fabrication of marine-related goods	○
	Fish by-products processing, provided that any fish by-product processing facility has a valid rendering facility license under Chapter 12 and the processing of other material wastes or by-products shall not be deemed a lawful accessory use under any other provision of this article.	○
	Commercial berthing	●
	Intermodal transportation facilities principally for vessels with regularly scheduled destination service or for railroad transportation service	●/○ ¹
	Marine cargo container and chassis maintenance and repair	●
	Facilities for combined marine and general construction	○ ¹
Industrial	Cold storage facility, warehousing, and storage of goods which are awaiting shipment via cargo carriers	○ ¹
	Low impact industrial uses, including but not limited to bakeries, breweries, bottling, printing and publishing, pharmaceuticals, machine shops, manufacture of products, assembly of electrical components, tool and die shops, and the packaging of food, provided that such uses shall be subject to the performance standards of the I-M zone	○
Public	Public uses including pedestrian and bicycle trails	●
	Utility substations, including sewage collection and pumping stations, water pumping stations, transfer stations, telephone electronic equipment enclosures and other similar structures, provided that such structures are located more than 100 feet from the water.	○
Other	Off-street parking lots, excluding parking structures	○
	Accessory uses customarily incidental and subordinate to the location, function, and operation of permitted uses ²	●
	Minor solar energy systems	●
	Minor wind energy systems	○

¹ Uses that may be located in buildings that exceed the maximum permitted height. Uses marked ●/○ will be considered permitted uses when occupying buildings with a maximum height equal to or less than the maximum applicable height allowable under the permitted use dimensional standards, and conditional Uses when above that height.

² Food service establishments, including food trucks and other similar retail and service support uses shall only be permitted as accessory uses if all such uses do not exceed 2,000 SF in total floor area of the building and each individual use does not exceed 1,000 SF in total floor area of the building; and further provided that such accessory uses provide goods or services that are supportive of the principal use and its clientele.

TABLE 10-B: WPDZ DIMENSIONAL REQUIREMENTS

	Permitted Use Dimensional Standards	Conditional Use Dimensional Standards
Setbacks (min.)	N/A	N/A
Lot size (min.)	N/A	5 acres, limited to 1 building greater than the maximum applicable height allowed under the permitted use dimensional standards.
Setback from pier line, wharf, or bulkhead (including any attached aprons)(min.)¹	5 ft.	5 ft.
Lot coverage (max.)	50% east of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive.	50% east of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive.
	100% west of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive.	100% west of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive.
Building height (inclusive of roof forms and rooftop appurtenances)(max.)²	55 ft. east of a line projected due south from the centerline intersections of West Commercial Street and the easterly most Cassidy Point Drive and west of Casco Bay Bridge.	60 ft. west of the Casco Bay Bridge ⁷ , except as follows: 75 ft. in the area east of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive and west of Casco Bay Bridge, on lots 5 contiguous acres or larger. ⁴ 130 ft. for bulk storage ³ facilities west of the projection of the westerly most Cassidy Point Drive segment.
	60 ft. west of a line projected due south from the centerline intersections of West Commercial Street and the easterly most Cassidy Point Drive.	
	In no case may any permitted heights exceed 50ft within 100ft of W.Commercial Street and all area of the WPDZ east of the Casco Bay Bridge. ⁵	In no case may any conditionally permitted heights exceed 50ft within 100ft of W. Commercial Street and all area of the WPDZ east of the Casco Bay Bridge. ⁵
	450 ft.	450 ft.
Building length (max.)⁶		300 ft. within 100ft of W. Commercial Street and all area of the WPDZ east of the Casco Bay Bridge.
	300 ft. within 100 ft. of W. Commercial Street and all area of the WPDZ east of the Casco Bay Bridge.	300 ft. for buildings or portions of buildings exceeding the maximum applicable height allowed under the permitted use dimensional standards.

¹ The setback area may be used for activities related to the principal uses in the structure, but shall not be used for off-street parking.



² Buildings and/or structures shall be limited to an absolute height measured from average grade with no portion of the structural roof system or roof top appurtenances exceeding the limits set forth under Table 10-B with the exception of moveable elements or connection devices as listed under Subsection 10.4.7

³ Bulk storage dedicated to materials delivered or awaiting transportation to a site by waterborne transportation.

⁴ A projection of the street centerline shall consist of an extension of the centerline to the water side boundary of the WPDZ.

⁵ Height limitations east of the Casco Bay Bridge are intended to protect vistas of the harbor from public open space.

⁶ As measured by a line parallel with the southern edge of the West Commercial Street right-of-way.

⁷ Only those conditional uses so designated in Note 1 of the Waterfront Port Development Zone Use Table 10-A may be located in buildings taller than 60 ft.

10.4.6 Dimensional requirements

In addition to the generally applicable provisions of Section 7.5 of this Land Use Code, lots in the Waterfront Port Development Zone shall be subject to the requirements of Table 10-B.

10.4.7 Additional bulk, height, and location standards.

- A.** For structures exceeding the maximum applicable height allowed under the permitted use dimensional standards:
1. Moveable elements such as cranes and gantries, and connection devices such as conveyors or bridges shall not be subject to the space and bulk requirements, but shall be subject to a determination by the Federal Aviation Administration that the location of such equipment will not create a hazard to navigation.
 2. The applicant must provide a determination from the Federal Aviation Administration that structures and equipment will not exceed the applicable height guidelines for the runway approach and will not create a hazard to navigable airspace. Such a determination shall be accepted as conclusive evidence that the proposed development will not create a hazard.
 3. For each lot, at least one view corridor of at least 90 feet in width shall be left unbuilt to preserve a clear line of sight between West Commercial Street and the water.

10.4.8 Performance standards

Proposals in the Waterfront Port Development Zone that qualify for site plan review shall submit, in addition to site plan submission requirements (if applicable), an impact mitigation narrative summarizing how the project meets the applicable performance standards. All uses in the Waterfront Port Development Zone shall comply with the following standards:

- A. Outdoor storage of materials.** Outdoor storage of commodities and materials accessory to normal conduct of business, except pilings and/or cranes, shall be permitted to a maximum height of 45 feet, and such materials shall be entirely contained, including runoff contaminants and residual material, within a designated area within the lot boundaries.
- B. Noise.**
1. The level of sound, measured by a sound level meter with frequency weighting network (manufactured according to standards prescribed by the American National Standards Institute, Inc.), inherently and recurrently generated within the Waterfront Port Development Zone between the hours of 7:00 p.m. and 7:00 a.m. from industrial facilities or operation commenced on or after July 1, 1988, shall not exceed 55 decibels on the A scale at or within the boundaries of any residential zone, except for sound from construction activities, sound from traffic on public streets, sound from temporary

activities such as festivals, and sound created as a result of, or relating to, an emergency, including sound from emergency warning signal devices.

2. In measuring sound levels under this subsection, sounds with a continuous duration of less than 60 seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of 60 seconds or more shall be measured on the basis of the energy average sound level over a period of 60 seconds (LEQ1).
 3. In addition to the sound level standards otherwise established, facilities or operations established or built in the Waterfront Port Development Zone on or after July 1, 1988, shall employ best practicable sound abatement techniques to prevent tonal sounds and impulse sounds or, if such tonal and impulse sounds cannot be prevented, to minimize the impact of such sounds in residential zones. Tonal sound is defined as a sound wave usually perceived as a hum or which because its instantaneous sound pressure varies essentially as a simple sinusoidal function of time. Impulse sounds are defined as sound events characterized by brief excursions of sound pressure, each with a duration of less than one second.
- C. Vibration.** Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. This shall not apply to vibration resulting from activities aboard a vessel or from railroad vehicle

activities, or from activities on a pile supported pier.

D. Federal and state environmental regulations.

All uses shall comply with federal and state environmental statutes and regulations regarding emissions into the air, except where provisions of this Land Use Code are more stringent.

- E. Discharges into harbor areas.** No discharge into harbor water areas shall be permitted, unless permitted by the Maine Department of Environmental Protection under a waste discharge license and as approved by the Department of Public Works in accordance with Chapter 24, Article III of the City of Portland Code of Ordinances. All private sewage disposal or private wastewater treatment facilities shall comply with the provisions of Chapter 24, Article II of the City of Portland Code of Ordinances and federal and state environmental statutes and regulations regarding wastewater discharges.

- F. Storage of vehicles.** Storage of any unregistered automotive vehicle on the premises for more than 60 days shall not be permitted.

G. Landfill of docking and berthing areas.

Landfill of docking and berthing areas shall be governed by 38 M.R.S. § 471 through 478, and permitted only if the landfill does not reduce the amount of linear berthing areas or space, or berthing capacity. If approved, construction shall be undertaken using methods approved by the Department of Public Works and shall be accomplished in accordance with the provisions of this Land Use Code and in a manner so as to ensure that a stable and impermeable wall of acceptable materials will



WATERFRONT ZONES

completely contain the fill material and will not permit any fill material to leach into docking areas or navigable waters.

- H. **Off-street parking.** Off-street parking is required as provided in Article 19.
- I. **Shoreland and Flood Plain Management regulations.** Any lot or portion of a lot located in a Shoreland Zone as identified on the City zoning map or in a flood hazard area shall be subject to the requirements of Articles 11 and 12.
- J. **Lighting.** All lighting on the site shall be shielded such that direct light sources shall not unreasonably interfere with vessels transiting the harbor nor have an unreasonable adverse impact on adjacent residential zones.
- K. **Signs.** Signs shall be permitted as set forth in Article 20.
- L. **Storage of pollutants and oily wastes.** On-premises storage of pollutants and oily wastes shall not be permitted for more than 45 days.
- M. **Compatibility of non-marine uses with marine uses.** Non-marine uses, structures and activities, including but not limited to access, circulation, parking, dumpsters, exterior storage and loading facilities or other structures shall neither unreasonably interfere with the existence or operation of marine uses nor significantly impede access to vessel berthing or other access to the water by existing or potential marine uses.
- N. **Design.** Design and visual character shall:
 - 1. In building design, including placement and screening of mechanical equipment, take into consideration long views to minimize negative visual impact and provide visual interest, and architecturally integrate

exposed industrial systems and equipment where practical.

- 2. Organize massing to emphasize certain parts of the building such as entries, corners, or different uses.
- 3. Treat all facades, including the roof, with equal level of detail and articulation.
- 4. Vary and articulate building facades to add scale and avoid large monotonous walls. Treatments such as texture, color, material changes, or shadow lines or murals must be used to add visual interest and avoid dull, flat, repetitive facades.
- 5. Use a scaling or articulation element such as stepback, canopy, or fenestration as required for any street-facing façade within 50 feet of West Commercial Street.

Attachment F. Environmental Impact Statement

Modifying the City of Portland Zoning Land Use Code allow food and beverage/restaurant use in the Eastern Waterfront Port Zone if accessory to a marina and open to the public does not have any detrimental environmental effects. In fact, there are some benefits to the use. The information below details these benefits and considerations that have been made in bringing this Zoning Text Amendment request forward.

- **Excellent Walkable, Bikable Location** - Fore Points Marina is located on the peninsula in Portland at 1 Marina Way. The property is adjacent to the Eastern Promenade Trail and in close proximity to the Old Port and Munjoy Hill. With a location in this densely developed area of Portland, walking and biking to the marina is a common mode of movement/transportation. In previous summers when Marina Bar was in operation, thousands of patrons enjoyed the space and food/beverages offered after walking or biking to the property.
- **Minimal Area Impact** – Fore Points Marina is in the process of evaluating and designing a permanent marina building for the property located at 1 Marina Way. The building was anticipated as part of the Master Development Plan for the site and is still in the design stages. The footprint of this building will not be large and any permanent food/beverage associated with the marina will need to be included in this structure. We anticipate minimal additional impact to the property as a result of the added food/beverage use.
- **Water Quality, Stormwater Management** - The strategy for stormwater quality management has not changed from the Master Plan for Portland Foreside. There are massive stormwater quality benefits that are the results of the redevelopment of the marina property and adjacent upland site. The permanent buildings and site modifications will need to comply with the overall water quality treatment parameters for the project upon construction of those improvements. Under the current, interim building & site modification site conditions, the trailer and shed structures reside over existing compacted gravel. Rainfall runoff from these structures flows onto a newly placed crushed shell surface, which covers the existing compacted gravel. Crushed shells slow runoff, reduce erosion and have been proven to provide limited water quality enhancement in past studies based on use of crushed shells in water quality media filters.
- **Environmental Operations** – With a location on the waterfront, any food/beverage use associated with Fore Points Marina would be operated with the environment in mind. Considerations include recycling, composting, locally sourced food, biofriendly to go containers, skip the straw offering and use of other biodegradable materials as much as possible.
- **Environmental Construction** – To date, Fore Points Marina has been very conscientious of marine friendly, native landscaping installations. Any permanent building and temporary or permanent food/beverage operation would also have the same considerations. Fore Points Marina has also received approvals and/or oversight from the City, Board of Harbor Commissioners and State and Federal environmental agencies including Maine DEP, Maine Inland Fisheries & Wildlife and the Army Corps of Engineers to operate the marina in its current condition. We work closely with these agencies and comply with their rules, regulations and standards.

- **Preservation of Significant Natural Features** – During the Site Plan phase for the marina operations to date, preserving significant natural features was considered by the project team and City Staff. There was no change to anything as a result of the proposed and now approved current Site Plan. Any future marina building would also need to comply with the same Site Plan process and considerations.

The Smart Growth for Coastal and Waterfront Communities Guide developed by EPA also points to a number of elements that can be key for success when considering waterfront uses.

- “By ensuring that water-based activities and compatible non-water-dependent uses are close together, where appropriate, and by protecting and ensuring access to the water for water-dependent uses, coastal and waterfront communities can provide the basis for more sustainable growth that allows residents and businesses to thrive.”
- “The pedestrian connection to the water can be improved physically, with better street, path, and trail connections, and with access points to the water that are open to the public.”

Attachment E Consistency with City of Portland Comprehensive Plan Portland's Plan 2030

This proposed amendment to the Land Use Code to allow for restaurants/food service associated with a marina in Eastern Waterfront Port Zone helps advance several specific goals and strategies of the City of Portland Comprehensive Plan, Portland's Plan 2030, and is consistent with the vision statement of the City's Plan.

SECTION 1. GOALS & STRATEGIES

Waterfront Policy Guide

The Waterfront Policy Guide specifically includes the following **goals** which align with this request for a Zoning Text Amendment:

- Prioritize and promote Portland's unique mix of water-dependent, marine-related uses and compatible non-marine uses.
- Promote passive and active recreational access to the waterfront.

Food and beverage service is a compatible non-marine use that supports existing water-dependent, marine related uses in Portland. Providing the opportunity for residents and visitors to eat, drink and gather near the waterfront promotes more passive access to the waterfront as well.

Specific **strategies and actions** in the Waterfront Policy Guide which also support this Zoning Text Amendment include:

- Expand waterfront access
 - Expand waterfront access for the public where possible and where appropriate, and
 - Protect and promote access to the waterfront and Portland islands for commercial and marine activity, including berthing.
- Support traditional and emerging marine industries
 - Collaborate with private pier and waterfront property owners to implement waterfront policies that promote and protect the marine economy.

The restaurant/food service use provides residents and visitors with waterfront access in a location that has traditionally been either private, restricted marina access or private industry. In addition, introducing a restaurant/food service linked with the marina encourages additional visitors to Portland from the boating community, whether Maine residents that sail in Casco Bay out of nearby towns and cities, or national or international transient boaters arriving in Portland from across the globe.

Although the menu offerings of a restaurant/food service business are not dictated in zoning language, the expectation is that any food service at this location will have a strong focus on local seafood offerings purchased from Portland fish markets and fishermen.

Economy Policy Guide

In addition to consistency with the Waterfront Policy Guide, this Zoning Text Amendment is also consistent with a number of **goals** from the Economy Policy Guide, they include:

- Create economic prosperity by growing Portland's tax and employment base.
- Value innovation and creativity as cornerstones of the local economy and as central to Portland's uniqueness and diversity.
- Reinforce the waterfront as a key component of Portland's economic health, balancing traditional and emerging industries with tourism and recreation.
- Respect that our unique quality of place is key to our current and future economic success.
- Value and nurture Portland-based businesses.

Particularly now and emerging from the COVID-19 pandemic, supporting businesses who intend to foster and grow Portland's tax and employment base is critical. The start of food and beverage offerings at Fore Points Marina was innovative and creative and something truly unique to Portland's waterfront. There is no other space that offers the waterfront access and trail access to food and beverage service like Fore Points Marina. In addition, allowing for these non-marine uses by right does help reinforce a balance between the traditional marine use of the marina and tourism and passive recreation opportunities. The quality of place of this location is unique and should be shared with the general public in addition to the marina guests.

Future Land Use Policy Guide

The Future Land Use Policy Guide of the Comprehensive Plan acknowledges that change will occur along the waterfront over the next decade. The change will be consistent with existing waterfront land use policies, including offering public and recreational access to the water where possible.

This Zoning Text Amendment is directly supportive of this guidance, as it offers improved public access to a unique location of the waterfront where public access had not previously existed.

SECTION 2. VISION STATEMENT

The Vision Statement in Portland's Plan 2030 offers support for Zoning Text Amendment associated with Fore Points Marina. While this text amendment is modest in nature, it is supportive of the following 6 points from the Vision Statement:

- Portland will grow in order to sustain our community, infrastructure, and economy,
- Vibrant arts and cultural life will be central to our identity,
- We will embrace innovation in order for our community to thrive,
- We will strive to create a resilient economy through innovation, investment, and commitment to diversity,
- We will support our working waterfront as a commitment to maintaining a vibrant maritime economy in the 21st century, and
- We will invest in and support our local economy.

In many ways, allowing for restaurant/food service at Fore Points Marina is providing support to the City of Portland's economy and ability to grow. These services in this waterfront location also complement the culture that has been created by FPM which welcomes boaters, residents, and visitors to enjoy the waterfront. These services are supportive to this marine use along the working waterfront as well as the local economy.

SECTION 3. ZONING

Eastern Waterfront Port Zone

Waterfront Zoning in the City of Portland has a long history. The EWPZ was created to nurture deepwater-dependent activity within the context of the established waterfront. Fore Points Marina meets this intent by providing marina services to vessels of all sizes. As noted in the City's Zoning Code, the Eastern Waterfront is *"uniquely situated to support a wide range of water-dependent industry and commerce through a variety of marine activities."*

The Zoning Code also acknowledges that the growth of Portland's marine passenger industry requires supporting services and activities to provide an enjoyable travel experience. It further states that *"non-marine uses that complement the marine passenger industry, are compatible with existing and future-water dependent uses, and provide opportunities for residents and visitors alike to enjoy the Eastern Waterfront throughout the year, are encouraged."*

In the EWPZ, there is a hierarchy of uses that focus on deepwater-dependent uses, and shallow water-dependent uses, followed and then by other uses only if they do not interfere with and are not incompatible with higher priority uses. The proposed Zoning Text Amendment does not interfere with any deepwater or shallow water dependent uses and, in fact complements and supports higher priority uses by further attracting transient and seasonal boat activity to the site, intermixed with the public.

In the Waterfront Central Zone (WCZ), water-dependent and marine uses are prioritized, but limited non-marine development is allowed to provide needed revenues to pier owners. Portland's Plan 2030 promotes this balance between these uses where the marine use is given space and protection, while the pier owner is given opportunity to generate revenue for maintenance and a return on investment. This same model is welcome and necessary in the EWPZ where there is an opportunity for FPM, the marine use, to also generate revenue for maintenance of the asset, including the land area and sea wall, including the publicly-accessible waterfront space adjacent to the marina.

Portland Foreside Development Co. Zoning Text Amendment Eastern Waterfront Port Zone

Subscribe ☐

0 views

**Curt Dugal** <cdugal@dpind.com>

10:39 AM (9 hours ago)

to planningboard@portlandmaine.gov

Hello planning board members,

I am writing in support of the zoning text amendment put forth by Portland Foreside Development Co. Portland is a wonderful city, and few locations showcase this better than the space once occupied by the former Marina Bar at Forepoints. Despite our geography (peninsula) we have exceptionally few locations which offer locals and visitors direct views of Casco Bay. One can look to Portsmouth and Newburyport as waterfront destinations without the magnitude of natural beauty, yet with much more visual access to the water. Please consider this opportunity for our city and support the requested amendment. Thank you.

Curt Dugal
202 Chandlers Wharf | Portland, ME 04101
Mobile [207.314.1930](tel:207.314.1930)



Charles Tetelman <ctetelman@portlandmaine.gov>

Fwd: Food & Beverage - Eastern Waterfront Port Zone (Fore Points Marina)

1 message

Kevin Kraft <kkraft@portlandmaine.gov>
To: Charles Tetelman <ctetelman@portlandmaine.gov>

Thu, May 4, 2023 at 12:31 PM

----- Forwarded message -----

From: **Ross Maniaci** <rossmaniaci@gmail.com>
Date: Tue, May 2, 2023 at 4:05 PM
Subject: Food & Beverage - Eastern Waterfront Port Zone (Fore Points Marina)
To: <planningboard@portlandmaine.gov>

To the Planning Board & City Council -

I live & work in the Old Port area and believe that we need more public access to the waterfront - especially in the way of food & beverage.

Don't get me wrong - I'm still all for the working waterfront and keeping things "Portland special". That being said - I have many friends that have boats at Chandlers Wharf. I'd love to be able to go out on the boat with them and then dock over at the Fore Points Marina and grab a bite to eat. Currently - all of our money is going out of town to go to places like:

- * The Dolphin (Harpwell)
- * The Diamonds Edge (Great Diamond Island)
- * Royal River Grill (Yarmouth)
- * The Dockside Grill (Falmouth)

I'd rather keep my food & beverage money in the community that I live in. The Covid year of 2020 was a special place at the Marina Bar. It brought together many people by having a fantastic outdoor space to eat & drink & socialize. I personally brought no less than 15 different out of state guests to it. The outdoor space - the sun - the water - are a great combination to show off what Portland has to offer on the waterfront.

Please vote to bring back the Marina Bar..... So the residents of Portland can enjoy our natural resources! Please feel free to contact me with any questions.

Thanks - Ross

Ross Maniaci
412 Chandlers Wharf
Portland, ME 04101
rossmaniaci@gmail.com
Cell: 315-415-0285

--
Kevin Kraft, AICP
Deputy Director Planning & Urban Development Department
389 Congress Street
Portland, Maine 04101
Phone: 207.874.8430
kkraft@portlandmaine.gov





10 WATERFRONT ZONES

10.1 IN GENERAL

Portland's waterfront zones were developed to support a wide range of industries unique to the city's maritime environment that rely upon access to the working waterfront. Competing demands for limited access require a more exhaustive use list, specialized performance standards, and a unique set of dimensional restrictions that are unlike those of other zones. Given this high degree of specialization, Article 10 should generally be viewed in isolation from other articles within the Land Use Code, with the exception of waterfront-specific definitions, listed within Article 3. Uses specific to Article 10 may feature some degree of overlap with other defined uses allowed elsewhere within the city. However, in such instances, the use as referenced within this article shall control.

10.2 EASTERN WATERFRONT PORT ZONE (EWPZ)

10.2.1 Purpose

- A. The Eastern Waterfront Port Zone is created to nurture deepwater-dependent activity within the context of the established waterfront. The transport of goods and passengers by water is an important component of both the local and regional economies and this transport and other forms of marine industry are dependent upon land and piers with direct access to Portland Harbor. Given the existing pier infrastructure, proximity to deep water, and urban context, Portland's Eastern Waterfront is uniquely situated to support a wide range of water-dependent industry and commerce through a variety of marine activities.
- B. The support and expansion of Portland's marine industry requires piers, uplands, and circulation consistent with the transportation purpose and use of marine facilities. The growth of Portland's marine passenger industry also requires supporting services and activities to provide a safe, convenient, and enjoyable travel experience for users of marine passenger facilities. Non-marine uses that complement the marine passenger industry, are compatible with existing and future water-dependent uses, and provide opportunities for residents and visitors alike to enjoy the Eastern Waterfront throughout the year, are encouraged.
- C. The primary use of the deep-water resources must be for the berthing and support of large vessels. Non-marine uses that complement and support the deepwater infrastructure and do not conflict or compete for limited space with existing or anticipated deepwater-dependent uses are encouraged. Existing and future pier infrastructure and upland support areas should be designed and maintained to support a variety of marine uses and be responsive to future technologies and trends in the marine industry.
- D. Given the need to nurture and support deepwater-dependent uses and the need for non-deepwater-dependent uses to complement the marine passenger industry and to support the maintenance and repair of pier infrastructure, the Eastern Waterfront Port Zone recognizes the following hierarchy of uses:
 1. The first priority of this zone is to protect and nurture existing and potential deepwater-dependent uses (those uses

requiring a minimum of 15 feet of water depth).

2. The second priority is to allow shallow water-dependent and other permitted marine uses, so long as they do not interfere with deepwater-dependent uses, either directly by displacement or indirectly by placing incompatible demands on the zone's infrastructure.
3. Other uses specified herein are allowed only if they do not interfere with and are not incompatible with higher priority uses.

10.2.2 No adverse impact on marine uses

No use shall be permitted, approved or established in this zone if it will have an impermissible adverse impact on future marine development opportunities. A proposed non-water-dependent component of a development will have an impermissible adverse impact if it will result in any one or more of the following:

- A. The proposed use will displace an existing water-dependent use.
- B. The proposed use will reduce existing commercial vessel berthing space.
- C. The proposed use, structure or activities, including but not limited to access, circulation, parking, dumpsters, exterior storage or loading facilities, and other structures, will unreasonably interfere with the activities and operation of existing water-dependent uses or significantly impede access to vessel berthing or other access to the water by water-dependent uses.
- D. The siting of a proposed use will substantially reduce or inhibit existing public access to marine or tidal waters.

10.2.3 Permitted uses

Subject to a determination that the proposed use meets the standards of Subsection 10.2.2, the following uses are permitted in the Eastern Waterfront Port Zone:

A. Marine passenger

1. Intermodal marine passenger facilities.
2. Cruise ship home port and port-of-call berthing and support.
3. International and domestic ferries.

B. Marine commercial

1. Transient and long-term commercial berthing.
2. Marine-related warehousing.
3. Marine-related construction, manufacturing, fabrication, salvage, and repair.
4. Storage and repair of fishing equipment.
5. Ship and other marine vessel construction, building, servicing, and repair.
6. Boat and marine equipment storage.
7. Harbor and marine supplies and services, chandlery, and ship supply such as fueling and bunkering of vessels.
8. Public, non-profit, or commercial marine transportation and excursion services, including captained charter services, sport fishing and water taxis.
9. Ship and off-shore support services, including but not limited to tug boats, pilot boats, and chandlery.
10. Facilities for marine pollution control, oil spill cleanup, and servicing of marine sanitation devices.
11. Marinas located east of the eastern boundary of the parcel of land owned by the City of Portland pursuant to a deed from the State of Maine dated February



- 1982 and recorded in the Cumberland County Registry of Deeds at Book 4916, Page 26.
12. Marine office, including but not limited to offices of owners of marinas, wharves or their agents, and naval architects, and seafood brokers.

C. Commercial

1. Professional, business, government, and general office located in upper floors of structures existing as of September 18, 2006.

**Editor's Note - On-site parking for non-marine commercial uses are permitted as conditional uses subject to the provisions of Subsection 10.2.4.*

2. Temporary events, except festivals as otherwise governed under paragraph (3) listed below. Buildings, piers and lands within the EWPZ may be used for temporary public and private events including but not limited to exhibitions, conferences, meetings, and trade shows under the following conditions:
 - a. Temporary events occupying more than 10,000 square feet of building or outdoor space shall not exceed a combined total of 60 days between May 1st to October 31st.
 - b. No temporary event may continue for more than 14 days of continuous operation.
 - c. Any temporary event that anticipates more than 5,000 people in attendance on any single day must provide and be subject to a parking management plan. The parking management plan must be submitted for the review and

approval of the public works authority at least 60 days prior to the first day of the event.

3. Festivals subject to City license.
4. Street vendors licensed pursuant to Chapter 19 of the City of Portland Code of Ordinances.

D. Public

1. Fire, police, and emergency services.
2. Governmental agency emergency operations/crisis centers.
3. Research, military and visiting attraction vessel berthing.
4. Landscaped pedestrian parks, plazas and other similar outdoor pedestrian spaces, including without limitation pedestrian and/or bicycle trails.

E. Other

1. A facility for non-profit organizations whose facility may include offices, classrooms, equipment, equipment rentals, storage, and bathrooms for the public.

10.2.4 Conditional uses

- A.** The following uses shall be permitted as conditional uses in the Eastern Waterfront Port Zone, provided that, notwithstanding Subsection 6.5.1, or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the review authority, and provided further that in addition to the provisions of Subsection 6.5.2, such uses will not impede or preclude existing or potential water-dependent development within the zone, will allow for adequate right-of-way access to the water, are compatible with marine uses, and meet all additional standards set forth below.

B. Conditional use standards

1. *Marine compatibility.* The proposed use shall be compatible with existing and potential marine uses in the vicinity, as required by Subsection 10.2.8(M) and (N).
2. *Parking and traffic circulation.* All applications for conditional use in the EWPZ shall submit a parking and circulation plan for review and approval by the Planning Board. The parking and circulation plan shall show the location of all existing and proposed structures, travel ways, and parking under the common ownership and/or control of the subject pier or property. The plan shall demonstrate that the parking and circulation of the conditional use does not interfere with the functional marine utility of the property and otherwise meets the standards and conditions of the EWPZ.

C. Conditional uses

1. *Marine*
 - a. Marine products, wholesaling, and retailing.
 - b. Ice-making services.
 - c. Marine freight facilities providing service for, and/or intermodal transfer of, container and breakbulk freight.
 - d. Marine educational facilities.
 - e. Seafood retailing, wholesaling, packaging, and shipping.
 - f. Seafood processing for human consumption, subject to the performance standards applicable to the I-L zone as listed in Section 6.8.
 - g. Commercial marinas serving commercial and recreation boats located west of the eastern boundary

of the parcel of land owned by the City of Portland pursuant to a deed from the State of Maine dated February 1982 and recorded in the Cumberland County Registry of Deeds at Book 4916, Page 26, provided that such facilities are located in areas that do not conflict with the navigation and handling of deepwater-dependent vessels accessing existing or potential deepwater berthing.

- h. Fish byproducts processing, provided that:
 - i. Any fish byproducts processing facility has a valid rendering facility license under Chapter 12 of the Portland City Code of Ordinances.
 - ii. Any fish byproducts facility shall employ current and appropriate odor control technology to eliminate or minimize detectable odors from such a process, and in no case shall odors exceed the odor limitation performance standards of the IM zone in Subsection 6.8.10.
 - iii. The processing other material wastes or byproducts shall not be deemed a lawful accessory use permitted herein.

2. *Commercial*

- a. Structured parking available to the general public.
- b. Professional, business, government and general offices uses in upper floors of structures constructed after September 18, 2006.



WATERFRONT ZONES

- c. Passenger support services supporting a marine passenger use listed under Subsection 10.2.3(A). The total ground floor area occupied by any combination of the following uses (regardless of ownership) shall not exceed 35% of the gross floor area of the principal associated marine passenger use and no more than 35,000 square feet cumulative within the EWPZ:
 - i. Retail.
 - ii. Restaurants/food service other than street vendors.
 - iii. Retail service.
 - iv. Passenger information services.
 - d. Restaurants or food service establishments associated with marinas under the following conditions:
 - i. Restaurants or food service establishments shall be accessible to the public during business hours.
 - ii. Restaurant or food service establishment floor area shall not exceed a total of 2,000 square feet or 25% of the total floor area of the principal marina building, whichever is less.
 - iii. Any restaurant or food service establishment use not within a building shall not occupy more than a combined total of 25% of unbuilt lot area. Lot area calculations do not include submerged lands.
 - iv. Exterior portions of restaurants or food service establishments shall be open to the sky except that it may have umbrellas associated with tables.
 - v. Activities associated with restaurants or food service establishments including but not limited to access, circulation, dumpsters, exterior storage or loading, deliveries, signage, and other structures shall not adversely interfere or impede areas accessible to the public or public ways.
 - vi. Exterior portions of restaurants or food service establishments shall preserve views to the water and allow passersby to see directly into the space from areas accessible to the public and public ways.
 - vii. Restaurants and food service establishments shall not impede on or otherwise operate within public ways.
3. *Industrial.* The following industrial uses are permitted provided that such uses shall conform to the IM zone performance standards set forth in Section 6.8 in addition to the performance standards of Subsection 10.2.8. Where redundant or contradictory performance standards exist, the more restrictive standard applies.
- a. Non-marine-related warehousing in structures existing as of September 18, 2006.

- b. Facilities for combined marine and general construction.
 - c. Low impact industrial uses as permitted in the IL zone in structures existing as of September 18, 2006, excluding all auto repair service facilities.
4. *Public*
- a. Utility substations. Public utility substations, including but not limited to electrical transformers, sewage and stormwater pumps and telecommunication switching stations, are permitted under the following conditions:
 - i. The facility is located more than 100 feet from the water's edge.
 - ii. The facility occupies no more than 50 square feet of structure above ground.
 - iii. The facility provides no dedicated on-site parking and all subsurface elements of the facility are installed and operated such that land occupied by the facility is otherwise useable and made available for marine-related uses, including but not limited to parking, travel ways, and/or storage.
 - iv. The facility shall be sized, sited and screened to minimize visual impact and prominence from public ways.
 - b. Maritime museums, limited to 5,000 square feet of ground floor footprint.

**Editor's Note - On-site parking for non-marine commercial and industrial uses are permitted*

as conditional uses subject to the following provisions.

5. *Parking for non-marine uses.*
- Notwithstanding Subsection 19.1.6 and Article 14 of this Land Use Code, no parking shall be allowed in this zone for non-marine uses unless the applicant can demonstrate that the number of parking spaces on-site exceeds the number of parking spaces needed to accommodate the demand for marine and water-dependent uses that are permitted by Subsections 10.2.3 and 10.2.4 which are or may be located on the subject property. (See editor's note below.) The remainder of parking required, if any, for such non-marine uses shall be provided off-site.

**Editor's Note - Vacant ground floor space should be considered to have a parking demand similar to other space housing an existing water-dependent use elsewhere on the subject property or on a comparable property.*

- D. The following use shall be permitted only upon the issuance of a conditional use permit subject to the provisions of Section 6.5, and any special provisions, standards, or requirements specified below:
- 1. Wind energy systems.
 - 2. Solar energy systems.

10.2.5 Prohibited uses

Uses, whether floating or fixed to land, which are not enumerated in Subsections 10.2.3 or 10.2.4 as permitted or conditional uses are prohibited. Those uses that are specifically prohibited shall include, without limitation:

- A. Residential uses.
- B. Amusement/theme parks.



WATERFRONT ZONES

- C. Bulk freight facilities.
- D. On-site gambling casinos not accessory to and located aboard either a ferry or inter-port cruise ship.

10.2.6 Contract or conditional rezoning

In addition to those marine and non-marine uses authorized in Subsections 10.2.3 and 10.2.4, an applicant may apply to locate a non-marine use not otherwise permitted, if the reviewing body finds the applicant has met the standards of Subsection 10.2.2, the performance standards of Subsection 10.2.8, the applicable standards of contract/conditional rezoning contained in Section 5.3, and conforms to the following requirements:

A. Standards for contract or conditional rezoning:

1. All non-marine uses are either permitted or conditionally permitted in the B-5 zone, and are not specifically prohibited in Subsection 10.2.5 above. Any hotel, inn, or other similar transient lodging establishment proposed must be located landward of the spring tide line and westerly of the extension of the India Street right-of-way.
2. The aggregate ground floor area of any development permitted hereunder located within 100 feet of the pier edge or working edge of the hardened shoreline shall be occupied by at least 50% of one or more marine uses set forth in Subsections 10.2.3 and 10.2.4. Note: the circulation areas and areas occupied for accessory parking serving marine uses shall not be used as the basis for calculating the 50% provision above.
3. The development is consistent with the Comprehensive Plan and without the non-

marine use component authorized herein, the site could not otherwise support an economically viable water-dependent use.

4. The project's public benefits outweigh its potential negative impacts, provided that such public benefits include one or more of the following: protection of existing water-dependent uses, preservation of future water-dependent use development opportunities, contribution to the development of and/or on-going maintenance of the marine infrastructure for commercial vessels, and visual and physical access to the waterfront for the general public.
 5. The non-marine portion of the development will not significantly restrict air or light for marine uses located in the immediate vicinity; will not create significant adverse local climatic effects on marine uses such as an undue increase of winds or shadowing; and will not adversely affect the efficient operation of marine uses, such as by producing less efficient traffic, parking or circulation patterns.
 6. The rezoning contains adequate provisions and/or conditions to ensure that on-site water-dependent infrastructure remains occupied by commercial marine use(s) listed in Subsections 10.2.3 and 10.2.4 and that said use is not abandoned after the project is developed.
- #### B. Notwithstanding Subsection 10.2.8(H) and off-street parking standards of Article 14, all on-site parking constructed or used for non-marine uses allowed only by contract or conditional rezoning shall be subject to the conditional use provisions Subsection 10.2.4(C)(5).

Additionally, the total amount of parking shall be established by the City Council in the conditional or contract rezoning agreement after consideration of the Planning Board's recommendation on the same.

10.2.7 Dimensional requirements.

In addition to the generally applicable provisions of Section 7.5 of this Land Use Code, lots in the EWPZ shall be subject to the following requirements:

- A. **Minimum lot size:** None
- B. **Minimum frontage:** None
- C. **Minimum yard dimensions:**
 - 1. *Front setback:* None
 - 2. *Side setback:* None
 - 3. *Rear setback:* None
 - 4. *Setback from pier line:* Notwithstanding the above requirements, a minimum setback of 25 feet from the edge of any pier, wharf or working edge of the hardened shoreline shall be required for any structure, provided that marine offices, as defined in Section 10.2.3(B)(12), may be located up to five feet from the edge of any pier, wharf, or working edge of the hardened shoreline. The setback area may be utilized for water-dependent uses and public uses and activities, subject to the provisions of Subsections 10.2.2 and 10.2.4, and shall not be utilized for restaurant, drinking, or other non water-dependent uses or for off-street parking. The edge of any pier, wharf or bulkhead shall include any attached apron(s).
- D. **Maximum impervious surface:** 100%
- E. **Maximum building height:** 45 feet, except as follows:

- 1. For purposes of this subsection only, moveable elements such as cranes and gantries, connection devices such as conveyors or bridges, and floating vessels shall not be subject to the space and bulk requirements, but shall be subject to a determination by the Federal Aviation Administration that the location of such equipment will not create a hazard to air traffic.
- 2. Rooftop appurtenances may exceed the maximum height limits of 45 feet providing that their design and placement is either fully screened or integrated into the architecture of the structure on which they sit.
- 3. The applicant must provide a determination from the Federal Aviation Administration that structures and equipment in excess of 45 feet will not exceed the applicable height guidelines for the runway approach and will not create a conclusive evidence that the proposed development will not create a hazard.

10.2.8 Performance standards

Development in the Eastern Waterfront Port Zone shall comply with the following standards:

- A. **Outdoor storage of materials.** Outdoor storage of commodities and materials accessory to normal conduct of business shall be entirely contained, including runoff contaminants and residual material, within a designated area.
- B. **Noise**
 - 1. The level of sound, measured by a sound level meter with frequency weighting network (manufactured according to



WATERFRONT ZONES

- standards prescribed by the American National Standards Institute, Inc.), inherently and recurrently generated within the EWPZ between the hours of 7:00 p.m. and 7:00 a.m. from facilities or operations commenced on or after July 1, 1988, shall not exceed 55 decibels on the A scale at or within the boundaries of any residential zone, except for sound from construction activities, sound from traffic on public streets, sound from temporary activities such as festivals, sound created as a result of, or relating to, an emergency, including sound from emergency warning signal devices, and maritime navigation signals.
2. In measuring sound levels under this subsection, sounds with a continuous duration of less than 60 seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of 60 seconds or more shall be measured on the basis of the energy average sound level over a period of 60 seconds (LEQ1).
 3. In addition to the sound level standards otherwise established, facilities or operations established or built in the EWPZ on or after July 1, 1988, shall employ best practicable sound abatement techniques to prevent tonal sounds and impulse sounds or, if such tonal and impulse sounds cannot be prevented, to minimize the impact of such sounds in residential zones. Tonal sound is defined as a sound wave usually perceived as a hum or which because its instantaneous sound pressure varies essentially as a simple sinusoidal function of time. Impulse sounds are defined as sound events characterized by brief excursions of sound pressure, each with a duration of less than one second.
- C. **Vibration.** Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. This shall not apply to vibration resulting from activities aboard a vessel or from railroad vehicle activities, or from activities on a pile-supported pier.
 - D. **Federal and state environmental regulations.** All uses shall comply with federal and state environmental statutes and regulations regarding emissions into the air, except where provisions of this code are more stringent.
 - E. **Discharges into harbor areas.** No discharge into harbor water areas shall be permitted, unless permitted by the Maine Department of Environmental Protection under a waste discharge license and as approved by the Department of Public Works in accordance with Chapter 24, Article III of the City of Portland Code of Ordinances. All private sewage disposal or private wastewater treatment facilities shall comply with the provisions of Chapter 24, Article II of the City of Portland Code of Ordinances and federal and state environmental statutes and regulations regarding wastewater discharges.
 - F. **Storage of vehicles.** Storage of any unregistered automotive vehicle on the premises for more than 10 days shall not be permitted.

G. Landfill of docking and berthing areas.

Landfill of docking and berthing areas shall be governed by 38 M.R.S. § 471-478, and permitted only if the landfill does not reduce the amount of linear berthing areas or space, or berthing capacity. If approved, construction shall be undertaken using methods approved by the Department of Public Works and shall be accomplished in a manner so as to ensure that a stable and impermeable wall of acceptable materials will completely contain the fill material and will not permit any fill material to leach into docking areas or navigable waters.

H. Off-street parking and loading. Off-street parking and loading is subject to provisions as provided in Article 19.

I. Shoreland and Flood Plain Management regulations. Any lot or a portion of a lot located in a Shoreland Zone as identified on the City zoning map or in a flood hazard area shall be subject to the requirements of Articles 11 and 12.

J. Lighting. All lighting on the site shall be shielded such that direct light sources shall not interfere with vessels transiting the harbor, nor have an unreasonable adverse impact on adjacent residential zones, and shall be compliant with the site lighting standards of the City of Portland *Technical Manual*.

K. Signs. Signs shall be permitted as set forth in Article 20.

L. Storage of pollutants and oily wastes. On-premises storage of pollutants and oily wastes shall not be permitted for more than 45 days.

M. Compatibility of non-marine uses with marine uses. Non-marine uses, structures, and activities, including but not limited to access, circulation, parking, dumpsters, exterior

storage, and loading facilities or other structures shall neither unreasonably interfere with the existence or operation of marine uses nor significantly impede access to vessel berthing or other access to the water by existing or potential marine uses.

N. Functional utility of piers and access to the water's edge. All development, whether for marine or non-marine uses, must anticipate current and future needs of water-dependent uses to functionally access the water's edge for the transfer of goods, materials, and passengers between berthed vessels and land bound vehicles. Provisions for the storage and movement of goods, materials, and passengers must be designed into all waterside development and internal circulation routes must be maintained or otherwise provided as an element of any development.

10.3 WATERFRONT CENTRAL ZONE (WCZ)

10.3.1 Purpose

A. The Waterfront Central Zone was created to protect and nurture water-dependent and marine-related support uses so that they may grow and prosper in the present and into the future in an environment and area dedicated to this purpose. The following priority of uses is recognized:

1. The first priority of this zone is to protect and nurture existing and potential water-dependent uses in a setting that enforces their continued economic viability.
2. The second priority is to encourage other marine and marine-related support uses so long as they do not interfere with water-dependent uses, either directly by



- displacement or indirectly by placing incompatible demands on the zone's infrastructure.
3. Non-marine uses are encouraged provided that they do not interfere with and are not incompatible with first and second priority uses. Non-marine uses are beneficial to the waterfront economy because they provide the financial return to property owners necessary for the maintenance and improvement of the marine infrastructure.
- B. Water-dependent and marine-related support uses by their nature have activities and operational needs that are unique to this area and are not shared by other commercial and industrial uses in the city. These first and second priority uses and related activities may result in noise, odor, dust, hours of operation, parking, and traffic patterns and traffic control needs that are necessary for the convenient and successful conduct of such uses. Other uses may not be compatible with these types of effects. Other specified uses are permitted in the Waterfront Central Zone, provided that they do not significantly interfere with the activities and operation of water-dependent and marine-related support uses. Such uses must be, and are assumed to be, aware of the impacts associated with marine uses and therefore must accept and be tolerant of them. Other specified uses in the zone shall accommodate to those patterns and needs of the higher priority uses so long as those higher priority uses are not detrimental to public health and safety and the higher priority activities are conducted in accordance with sound practices or practices customary in the trade.
- C. Commercial Street is recognized as an important economic center for the city and region. Marine-compatible uses are encouraged to locate and grow along Commercial Street while higher priority marine uses are protected on the waterfront.
- ### 10.3.2 Definitions
- For the purposes of the Waterfront Central Zone only, the following terms shall have the following definitions:
- Common circulation drives.** Private driveways, roadways and circulation areas accessible to all on-site tenants and/or occupants of a lot within the Waterfront Central Zone providing access from/to the public street network.
- Lot.** Any abutting property under common ownership.
- Commercial Street Overlay Zone (CSOZ).** The Commercial Street Overlay Zone (CSOZ) is a portion of the Waterfront Central Zone, as described below, where new and existing development may be occupied with 100% non-marine use tenants listed under Subsection 10.3.3(B), subject to the standards and use limitations provided in Subsection 10.3.7(B). The geographic limits of the CSOZ are defined by parcels of land and piers within the Waterfront Central Zone located on the landward side of a line established 125 feet south of the southerly sideline of Commercial Street and modified as follows: the seaward limit of the CSOZ extends to a line 300 feet south of the southerly sideline of Commercial Street in the area between the easterly and westerly sideline of Long Wharf. Additionally, all areas subject to this provision are set back landward at

least 25 feet from the average high tide line of Portland Harbor and associated coastal wetlands. Where the 125 foot offset intersects with the footprint of a building existing as of May 2019 and such intersection leaves 75% or more of the building within the CSOZ, the entire building shall be considered included in the CSOZ. All offset distances are measured horizontally. All applicants for development within the CSOZ are responsible for demonstrating their location within CSOZ according to the findings of a site specific land survey conducted by a professional land surveyor licensed by the State of Maine. The limits of the CSOZ shall be shown on all site plans and subdivision plats for proposed development within the CSOZ.

On-site. That portion of any lot included within or directly impacted by a proposed development.

10.3.3 Permitted uses

Subject to a determination that the proposed use meets the standards of Subsection 10.3.7, as applicable, the following uses listed under Subsection 10.3.3(A), (B), (C), and (D) are permitted anywhere in the Waterfront Central Zone. Uses listed under Subsection 10.3.3(E) are only permitted in the CSOZ.

A. Marine

1. Marine products wholesaling, distribution and retailing.
2. Marine repair services and machine shops.
3. Tugboat, fireboat, pilot boat and similar services.
4. Harbor and marine supplies and services, chandleries, and ship supply such as fueling and bunkering of vessels.
5. Marine industrial welding and fabricating.
6. Shipbuilding and facilities for construction, maintenance, and repair of vessels.
7. Commercial marine transport and excursion services, including ferries, captained charter services, sport fishing, and water taxis.
8. Cargo handling facilities, including docking, loading, and related storage.
9. Boat repair yards.
10. Boat storage facilities, excluding rack storage facilities (Boat rack storage facilities are included as a conditional use).
11. Seafood processing and retailing.
12. Seafood packing and packaging.
13. Seafood loading and seafood distribution.
14. Fabrication, storage, and repair of fishing equipment.
15. Ice-making services.
16. Facilities for marine construction and salvage.
17. Facilities for marine pollution control, oil spill cleanup, and servicing of marine sanitation devices.
18. Fabrication of marine-related goods.
19. Fishing and commercial vessel berthing.
20. Non-commercial berthing of a maximum of 50 linear feet per pier. A non-commercial berth may not displace a commercial berth. Parking for any non-commercial berthing is subject to the provisions of Subsection 10.3.9(G).
21. Marine office, including but not limited to offices of owners of wharves or their agents, and naval architects, and seafood brokers.
22. Public landings.
23. Marine research, education, and laboratory facilities.



WATERFRONT ZONES

24. Bait sales and processing.
25. Harbor security and emergency response services including but not limited to Harbor Master, Marine Patrol and Coast Guard.
26. Commercial parking for water-dependent use business owners and employees.

B. Non-marine commercial and industrial uses.

Non-marine uses permitted by this subsection are subject to the standards listed in Subsection 10.3.7.

1. Professional, business, government, and general offices, except for offices for health care practitioners or health clinics which are only permitted in the CSOZ.
2. Cabinet and carpentry shops, studios for artists and crafts people.
3. Intermodal transportation facilities.
4. Cold storage facilities.
5. Commercial kitchens.
6. Outside accessory activities.

C. Public

1. Landscaped pedestrian parks, plazas, and other similar outdoor pedestrian spaces, including without limitation pedestrian and/or bicycle trails.

D. Other

1. Interior accessory uses customarily incidental and subordinate to the location, function, and operation of permitted uses. Food service establishments, newsstands, and other similar retail and service support uses shall only be permitted as accessory uses if they are part of and located within the lot lines of a use set forth in Subsections 10.3.3(A)(1), (7), (11) or (22); such uses do not exceed 2,000 square feet

in total floor area of the building, or 25% of the total floor area of the building, whichever is less, and each individual accessory use does not exceed 1,000 square feet in total floor area of the building; and further provided that such accessory uses provide goods or services that are supportive of the principal use and its clientele. Exterior accessory uses shall be otherwise subject to the provision of Subsection 10.3.7(A).

2. Interior meeting or classroom space accessory to uses permitted in Subsection 10.3.3(A)(23) may be rented out for meeting use by marine-related or non-marine-related groups or organizations, or the general public, and such accessory uses shall not be subject to the limitations contained in (B) above, but shall only be permitted as accessory uses if the total of all support uses, including interior meeting or classroom space, does not exceed 3,000 square feet in total floor area per building, or 15% of the total floor area per building, whichever is less.

E. Uses permitted only within the Commercial Street Overlay Zone (CSOZ). Uses permitted by this subsection are subject to the standards listed in Subsection 10.3.7(B).

1. Retail and service establishments, including craft and specialty shops.
2. Restaurants provided that full course meal food service and consumption shall be the primary function of the restaurant, and full course meal service shall be continued up until the hours of closing.
3. Banking services without drive-up services.
4. Museums and art galleries.

5. Street vendors licensed pursuant to Chapter 19.
6. Offices of health care practitioners or health care clinics.
7. Personal service establishments.

10.3.4 Conditional use

The uses listed herein shall be permitted as conditional uses in the Waterfront Central Zone, provided that, notwithstanding Section 6.5, or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the review authority, and further provided that in addition to the provisions of Subsection 6.5.2, they shall also meet the applicable Waterfront Central Zone development standards in Subsection 10.3.7:

A. Commercial marine conditional uses

1. Fish by-products processing, provided that:
 - a. Any fish by-products processing facility has a valid rendering facility license under Chapter 12 of the City of Portland Code of Ordinances.
 - b. Any existing fish by-products facility shall employ current and appropriate odor control technology (and any new fish by-product use shall employ current, available odor control technology) to eliminate or minimize detectable odors from such a process, and in no case shall odors exceed the odor limitation performance standards of the I-M zone.
 - c. The processing of other material wastes or by-products shall not be deemed a lawful accessory use under any other provision of this article.

2. Boat rack storage facilities, provided that:
 - a. Parking shall be provided for 100% of the demand generated by the use (notwithstanding Subsection 10.3.9(G)), and such parking shall be provided off-site, in another zone permitting such use.
 - b. Boat rack structures shall not exceed 10,000 square feet of building footprint.

B. Utility substations. Public utility substations, including but not limited to electrical transformers, sewage, and stormwater pumps, and telecommunication switching stations, are permitted under the following conditions:

1. The facility is located more than 100 feet from the water's edge.
2. The facility occupies no more than 50 square feet of structure above ground.
3. The facility provides no dedicated on-site parking and all subsurface elements of the facility are installed and operated such that land occupied by the facility is otherwise usable and made available for marine uses, including but not limited to parking, travel ways, and/or storage.
4. The facility shall be sized, sited and screened to minimize visual impact and prominence from public ways.

C. Wind energy systems.

10.3.5 Prohibited uses

Uses which are not enumerated in either Subsections 10.3.3 or 10.3.4 as permitted or conditional uses are prohibited. Uses enumerated in Subsection 10.3.3(E) shall be considered prohibited uses outside of the CSOZ. Those uses that are prohibited shall include, without limitation:



- A. Residential uses.
- B. Hotels, motels, hostels, bed and breakfasts, inns, lodging houses, tourist homes, short-term rentals, or boatels.
- C. Auditoriums, civic centers, convention centers, or other meeting facilities not accessory to an otherwise permitted use.
- D. Drinking establishments, private clubs, or non-profit social and recreational clubs.
- E. Ground mounted telecommunication towers, antennas, and/or disks.
- F. Drive-up services for any use other than a permitted use listed under Subsections 10.3.3(A) or 10.3.4(A)(1).
- G. Auto service stations.
- H. Laundry and dry-cleaning services.
- I. Convenience stores with gas pumps.
- J. Commercial parking for non-marine uses.

10.3.6 Dimensional requirements

In addition to the generally applicable provisions of Section 7.5 of this Land Use Code, lots in the Waterfront Central Zone shall be subject to the following requirements:

- A. **Minimum lot size:** None
- B. **Minimum frontage along Commercial Street:** 75 feet
- C. **Minimum lot width within the CSOZ:** 50 feet measured parallel with Commercial Street and such lot width shall be continuous for the full depth of the lot located within the CSOZ.
- D. **Minimum yard dimensions:**
 - 1. *Front setback:* None
 - 2. *Side setback:* None
 - 3. *Rear setback:* None
 - 4. *Setback from pier edge:* Notwithstanding the above requirements, a minimum first-floor setback of 10 feet from the edge of

any pier, wharf, or bulkhead shall be required for any structure, exclusive of structurally necessary posts supporting upper floors, and deck-mounted equipment for loading and unloading vessels. The edge of any pier, wharf, or bulkhead shall include any attached apron(s). Floats, rafts, and/or barges not structurally integral to the pier, wharf, or bulkhead may not be used to satisfy this requirement. Parking for non-marine uses shall not occupy the 10-foot setback.

- E. **Maximum lot coverage:** 100%
- F. **Maximum building height:** 50 feet. Except as provided in (H) below, a structure in the Waterfront Central Zone shall provide no more than three habitable floors, however, typical rooftop appurtenances and/or enclosed or open mechanical installations shall be allowed over the third floor.
- G. **Minimum ground floor clearance:** Any new building proposed to be larger than 300 square feet and located more than 35 feet from the southerly sideline of Commercial Street shall provide no less than 15 feet of first floor to ceiling vertical clearance to promote marine industrial use potential. New buildings less than 300 square feet or additions to existing multistory buildings are exempt from this provision but shall provide the maximum ground floor clearance practicable.
- H. **New non-marine use building exception for usable floors and minimum ground floor clearance:** Notwithstanding provisions (F) and (G) above, for new non-marine use buildings permitted within the CSOZ, four usable floors are allowed and ground floor clearance minimums do not apply.

10.3.7 Development standards

A. Standards for non-marine uses located outside of the CSOZ. Non-marine uses listed above in Subsection 10.3.3(B) and 10.3.4(B) that are located outside of the CSOZ shall be subject to the performance standards listed in Subsection 10.3.9 as well as the following standards:

1. *55% marine use required on ground floors.* At least 55% of the leasable ground floor area of all buildings on a lot (defined in Subsection 10.3.2 above), shall be occupied by marine uses, as listed under Subsection 10.3.3(A) or 10.3.4(A)(1).
2. *55% marine use required for all open areas.* After subtracting areas used for common circulation drives (defined in Subsection 10.3.2 above), at least 55% of unbuilt area (meaning area not occupied by a building) on the lot, when calculated using the aggregate of all such unbuilt areas, shall be occupied by marine uses as listed under Subsection 10.3.3(A) or 10.3.4(A)1.
3. *Ground floor vacancies and change of occupancy offered to water-dependent/marine uses.* Ground floor vacant space and areas proposed for a change of occupant outside of the CSOZ shall not be filled with any non-marine use without adequate opportunity for marine uses to occupy the space.
 - a. Ground floor vacancy and change of occupant outside of the CSOZ advertised to marine users: In any lot or portion of lot outside of the CSOZ, each time a ground floor occupant departs or gives notice to depart from

the lot, the space, along with any associated parking spaces to be vacated, must be made available to new marine occupants. Prior to renting to a non-marine user the property owner shall advertise for a new marine occupant for not less than a 180-day period in targeted media and by other means reasonably calculated to reach marine users (e.g. local marine trade publications, marine trade websites, waterfront bulletins.) Should one or more marine users apply, the property owner shall make the space available to a marine occupant, in accordance with terms and rates generally consistent with comparable space in the 55% marine use portion of the zone (outside of the CSOZ.) The property owner may stop advertising sooner than the end of the 180-day period if a lease is signed with a marine user. Should no marine user apply by the end of the 180-day period, the owner may fill the space with a non-marine user provided that the new non-marine occupant will not cause the lot to exceed the non-marine use occupancy maximum of 45% of the ground floor area or open area.

- b. *Uses inventoried:* To demonstrate adherence to the 55% marine use requirement, the applicant shall submit to the Planning Authority, upon request, an inventory which lists each occupant (tenant or otherwise), as well as a map which depicts the



- location of each occupant. The map shall show all ground level space, including buildings, parking, open areas and submerged lands associated with the subject lot. For each occupant, the property owner must indicate the square footage of area occupied and whether the occupant is a marine use as defined herein. For vacant space, the last previous occupant shall be listed, along with the date of departure.
- c. Prior to changes of occupancy and/or as part of applications for new development outside of the CSOZ, the property owner or applicant shall provide proof of compliance with the requirements of this section as a condition of approval.
 4. *Pier or bulkhead edge reserved for marine uses.* Notwithstanding any provision of this ordinance to the contrary, excepting only the portion of any pier which might be used for non-commercial berthing pursuant to Subsection 10.3.3(A)(20), all berthing and/or dockage space and associated floats plus the entire linear edge of that portion of every pier or bulkhead which is adjacent to greater than zero feet of water depth at mean low water, to a minimum setback line of at least 10 feet from the edge of the pier, bulkhead, or engineered shoreline may only be used or occupied by one or more marine uses as defined in Subsection 10.3.3(A) or 10.3.4(A). Said edge shall be the seaward extent of any engineered shoreline or working deck of any pier or wharf.
- B. **CSOZ standards.** Non-marine uses listed under Subsections 10.3.3(B), 10.3.3(E) and 10.3.4 located within the CSOZ, as defined in Subsection 10.3.2, shall be subject to the performance standards listed in Subsection 10.3.9 as well as the following standards:
1. *Vessel access.* Non-marine uses allowed under this provision shall not disrupt or block access to vessel berthing and shall otherwise adhere to the performance standards of this zone described in Subsection 10.3.9.
 2. *Maximum setback for new development on lots with 75 or more feet of Commercial Street frontage.* Any new non-marine development constructed subject to this provision which is located on a lot with 75 or more feet of frontage along the Commercial Street right-of-way shall be located with its front façade no further than 35 from the southerly sideline of the Commercial Street right-of-way. Furthermore, any such development shall orient its front façade and its primary pedestrian entrance toward Commercial Street and no vehicular circulation or parking may occupy the land or pier area between the front façade of the building and Commercial Street. Non-marine development subject to this provision on lots with fewer than 75 feet of frontage along the Commercial Street right-of-way, changes of use within existing buildings, and/or building additions of less than 5,000 square feet of new development to existing buildings are exempt from the maximum setback provisions established herein.

3. *Investment in marine infrastructure.* All applicants for site plan review or a change of use permit for non-marine development in the CSOZ are required to invest in marine infrastructure as a condition of development, provided that the total project costs exceed \$250,000. The value of the investment shall be not less than 5% of total project costs over \$250,000 for constructing non-marine space and associated site improvements in the CSOZ. Required investment may occur by one or both the following methods:

- a. Direct investment in marine infrastructure located on the same lot: Investment shall be for the benefit of marine uses listed in Subsection 10.3.3(A) within the same lot as the proposed non-marine development. Investment may include dredging, pile replacement, new or replaced structural decking (but not pavement resurfacing), new or replaced fendering systems, new or replaced floats, pier expansions, permanent conversions of recreational berthing to commercial berthing, bulkhead or seawall repair or improvements, or any combination of similar improvements. Plans for the marine infrastructure investment shall be submitted to the Planning Authority with the application for site plan review or change of use permit and shall include details and a commitment as to how the marine infrastructure will be utilized by marine users. The marine

infrastructure improvements shall be completed prior to the issuance of a certificate of occupancy for the non-marine development project.

- b. Financial contribution: If direct investment in marine infrastructure is not made, the developer shall make a financial contribution to the City's Waterfront Loan and Investment Fund.

10.3.8 No contract or conditional rezoning permitted

- A. This section is intended to accomplish goals from *Portland's Plan 2030*. Specifically, these changes will:
 1. Prioritize and promote Portland's unique mix of water-dependent, marine-related and compatible non-marine uses.
 2. Recognize and reinforce the respective roles of the Eastern, Central, and Western Waterfronts.
 3. Celebrate, promote, and protect Portland's lobster and fishing industry as a foundation of the region's economy and a feature of civic pride.
- B. In light of these goals and the significance of the Central Waterfront to the City's future, no contract or conditional rezoning applications may be approved in the Waterfront Central Zone.

10.3.9 Performance standards

All uses in the Waterfront Central Zone shall comply with the following standards:

- A. **Outdoor storage of materials.** Outdoor storage of commodities and materials accessory to normal conduct of business,



except pilings and/or cranes, shall be permitted to a maximum height of 45 feet, and such materials shall be entirely contained, including runoff contaminants and residual material, within a designated area within the lot boundaries.

- B. Noise.** The level of sound, measured by a sound level meter with frequency weighting network (manufactured according to standards prescribed by the American National Standards Institute, Inc.), inherently and recurrently generated within the Waterfront Central Zone shall not exceed 75 decibels on the A scale at the boundaries of any lot, except for sound from construction activities, sound from traffic on public streets, sound from temporary activities such as festivals, and sound created as a result of, or relating to, an emergency, including sound from emergency warning signal devices. In measuring sound levels under this subsection, sounds with a continuous duration of less than 60 seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of 60 seconds or more shall be measured on the basis of the energy average sound level over a period of 60 seconds (LEQ₁).
- C. Vibration.** Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. This shall not apply to vibration resulting from activities aboard a vessel or from railroad vehicle activities, or from activities on a pile supported pier.

- D. Discharges into harbor areas.** No discharge into harbor water areas shall be permitted, unless permitted by the Maine Department of Environmental Protection under a waste discharge license and as approved by the

Department of Public Works in accordance with Chapter 24, Article III of the City of Portland Code of Ordinances. All private sewage disposal or private wastewater treatment facilities shall comply with the provisions of Chapter 24, Article II of the City of Portland Code of Ordinances and federal and state environmental statutes and regulations regarding wastewater discharges.

- E. Storage of vehicles.** Storage of any unregistered automotive vehicle on the premises for more than 60 days shall not be permitted.
- F. Landfill of docking and berthing areas.** Landfill of docking and berthing areas shall be governed by 38 M.R.S. § 480-A through 480-HH, and permitted only if the landfill does not reduce the amount of linear berthing areas or space, or berthing capacity. If approved, construction shall be undertaken using methods approved by the Department of Public Works and shall be accomplished in a manner so as to ensure that a stable and impermeable wall of acceptable materials will completely contain the fill material and will not permit any fill material to leach into docking areas or navigable waters.
- G. Off-street parking and loading.** No off-street parking or loading shall be required under Article 19.

- H. **Lighting.** All lighting on the site shall be shielded such that direct light sources shall not unreasonably interfere with vessels transiting the harbor nor have an unreasonable adverse impact on adjacent residential zones.
- I. **Storage of pollutants and oily wastes.** On-premises storage of pollutants and oily wastes shall not be permitted for more than 45 days.
- J. **Urban design.** Construction of new structures located within 35 feet of the southerly edge of Commercial Street between Maine Wharf and the easterly property line of the City fish pier shall conform to the guidelines set forth in the Downtown Urban Design Guidelines, unless such structures are also located within 100 feet of the water. Such structures that are also located within 100 feet of the water shall conform to the extent practicable to the Downtown Urban Design Guidelines.
- K. **Pier and wharf expansions.** In addition to meeting Harbor Commission and Coast Guard requirements for navigation, any expansion or extension of a pier and or wharf in the Waterfront Central Zone shall demonstrate its compatibility with fixed route ferry service and emergency vessel operations.
- L. **Public view protection**
 - 1. Any new development in the Waterfront Central Zone shall perform a public view impact analysis for review and approval by the Planning Board or Planning Authority as a condition of site plan approval. The analysis shall:
 - a. Demonstrate the project's adherence to the Portland View Corridor Protection Plan (City of Portland Comprehensive Plan, 2002) to the extent practicable.
 - b. Promote the public's visual access to the water through sensitive building placement.
 - 2. The Planning Board or Planning Authority shall find at a minimum that the proposed development:
 - a. Retains street corridor views as extended across Commercial Street from the Portland peninsula.
 - b. Retains panoramic views of the water from Commercial Street to the extent practicable.
 - c. Where loss of existing public views to the water is shown to be necessary for the reasonable development of the site, the developer provides alternative public views to the water through newly established view corridors or publicly accessible pedestrian ways. Such pedestrian ways shall not interfere with existing or potential water-dependent uses, nor shall they endanger the public through uncontrolled proximity to industrial activity.
- M. **Operations and access management plan**
 - 1. Any new development, including changes of use or expansion of uses in the Waterfront Central Zone, shall submit a scaled plan and accompanying narrative that demonstrates waterfront access and functional accommodation for water-dependent uses. In accordance with *Portland's Plan 2030*, the plan shall



WATERFRONT ZONES

- demonstrate consistency with the hierarchy of waterfront uses, as further detailed in Subsection 10.3.1, with non-marine and marine-related uses being subordinate in placement and disposition to water-dependent uses, and designed so as not to impede access to the pier edge and vessel berthing nor interfere with marine operations.
2. The plan shall, at a minimum, illustrate the following information:
 - a. Location of all existing and proposed structures, rights-of-way, common circulation drives as defined in Subsection 10.3.2, access-ways, sidewalks, pier edges, floats, and docks, showing the entire lot in the context of its respective pier.
 - b. Existing and proposed off-street parking, labeled with associated uses.
 - c. Facilities for the loading and unloading of goods and materials.
 - d. Regularly occurring exterior activities including but not limited to the storage of material, equipment and vehicles, yard area, outdoor seating, and on-site waste management.
 - e. Signage showing parking use, wayfinding, and posted operational restrictions.
 - f. Plan narrative detailing how the standards listed below are achieved, tenant/landlord communication protocols, private enforcement actions to be employed to ensure plan compliance, and the responsible parties representing the property owner.
 3. The operations and access management plan shall be reviewed by the Planning Authority.
 4. In addition to the information above, the plan shall demonstrate compliance with the following standards:
 - a. Off-street parking is subject to the limitations described in Subsection 10.3.7 (A) (“55% Rule”). Off-street parking spaces intended for use by water-dependent uses shall be sited as close as reasonably possible to associated vessels and/or ground-floor lease area.
 - b. Proposals for new non-marine parking, accessory to an otherwise permitted use in the WCZ, shall submit a parking analysis for all uses on the subject lot, justifying the number of non-marine spaces based upon the proposed use and demonstrating sufficient parking supply for marine uses. If sufficient parking is not available to marine uses, off-street parking for non-marine uses shall not be permitted.
 - c. Off-street parking, loading facilities, and access ways designated for water-dependent uses shall be exclusive to such uses, except that, if not being occupied by water-dependent tenants, such parking may be made available to non-marine uses between the hours of 5:00 p.m. and 2:00 a.m. Any such shared parking arrangements shall be documented in the operations and access management narrative

- described above, and clearly signed on-site.
- d. All properties providing commercial berthing shall demonstrate reasonable opportunities to load and unload vessels from the subject lot.
- e. Facilities for the loading and unloading of goods shall account for the frequency of use and vehicle type and, to the extent possible, minimize impacts to pedestrian and vehicle circulation patterns.
- f. Provisions for the storage and movement of goods and materials shall be designed into all pier edge development. Circulation routes must be maintained or otherwise provided as an element of all development. The siting, design, and circulation of non-marine uses, particularly those allowed on first floors, shall accommodate reasonable access for pedestrians, vehicles, and freight transfer to and from berthed vessels.
- g. Non-marine uses shall provide a dedicated pedestrian route between the proposed use and Commercial Street, and shall seek to minimize conflict with vehicle traffic.

10.4 WATERFRONT PORT DEVELOPMENT ZONE (WPDZ)

10.4.1 Purpose

Transport of goods by water to and from Portland is an important component of both the local and regional economy. This commerce is dependent upon land with direct access to the dredged deep-water channel of the Fore River and Portland

Harbor. The Port of Portland is integral to the City's economic, cultural and fiscal health. This zone exists to ensure the continued viability of the Port of Portland. Uses in the Waterfront Port Development Zone, while governed by the similar performance standards as other industrial zones, are primarily limited to those uses which are dependent upon deep water and which contribute to port activity. Non-marine activity may be allowed to the extent it will not have any adverse impact on marine uses.

10.4.2 No adverse impact on marine uses

No use shall be permitted, approved or established in this zone if it will have an impermissible adverse impact on future marine development. A proposed development will have an impermissible adverse impact if it will result in any one or more of the following:

- A. The proposed non water-dependent use will displace an existing water-dependent use.
- B. The proposed use will reduce existing commercial vessel berthing space.
- C. The proposed nonwater-dependent use, structure, or activities, including but not limited to access, circulation, parking, dumpsters, exterior storage, or loading facilities, and other structures, will unreasonably interfere with the activities and operation of existing water-dependent uses or significantly impede access to vessel berthing or other access to the water by water-dependent uses.
- D. The siting of a proposed nonwater-dependent use will substantially reduce or inhibit existing public access to marine or tidal waters.

10.4.3 Permitted uses

Subject to a determination that the proposed use meets the standards of Subsection 10.4.2, the uses



WATERFRONT ZONES

in Table 10-A are permitted (●) or conditional (◐) in the Waterfront Port Development Zone.

10.4.4 Conditional use standards

Conditional uses shall be permitted in the Waterfront Port Development Zone, provided that, notwithstanding Section 6.5 or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the review authority. In addition to the provisions of Section 6.5, such uses will:

- A. Not impede or preclude existing or potential water-dependent development on other lots.
- B. Allow for adequate access to the water.
- C. Be compatible with water-dependent and marine uses.
- D. Operationally support one or more water-dependent use(s), or be located in a building or structure that is physically adaptable or

relocatable to make way for future development of water-dependent uses.

- E. Meet any additional performance and dimensional standards set forth below.

10.4.5 Prohibited uses

Uses which are not enumerated in Table 10-A as permitted or conditional uses are prohibited. Those uses that are prohibited shall include, without limitation:

- A. Residential uses.
- B. Hotels, motels, or boatels.
- C. Auditoriums, civic centers, convention centers, or other meeting facilities.
- D. Restaurants and drinking establishments.
- E. Marinas, including marina associated boat storage facilities.
- F. Truck terminals.

TABLE 10-A: WPDZ PERMITTED AND CONDITIONAL USES

Marine	Marine repair services and machine shops	●
	Tugboat, fireboat, pilot boat, and similar services	●
	Harbor and marine supplies and services and ship supply, such as fueling and bunkering of vessels	●
	Shipbuilding and facilities for construction, maintenance, and repair of vessels	●/◐ ¹
	Marine cargo handling facilities, including docking, loading and related storage	●/◐ ¹
	Boat repair yards	●/◐ ¹
	Facilities for marine construction and salvage	●/◐ ¹
	Facilities for marine pollution control, oil spill cleanup, and servicing of marine sanitation devices	●
	Marine retail and wholesale sales, including yacht brokerage	◐
	Boat storage facilities	●/◐ ¹
	Seafood processing	◐
	Seafood packing and packaging	◐
	Fabrication, storage, and repair of fishing equipment	◐
	Ice-making services	◐
	Fabrication of marine-related goods	◐

TABLE 10-A: WPDZ PERMITTED AND CONDITIONAL USES

Industrial	Fish by-products processing, provided that any fish by-product processing facility has a valid rendering facility license under Chapter 12 and the processing of other material wastes or by-products shall not be deemed a lawful accessory use under any other provision of this article.	●/○ ¹
	Commercial berthing	●
	Intermodal transportation facilities principally for vessels with regularly scheduled destination service or for railroad transportation service	●/○ ¹
	Marine cargo container and chassis maintenance and repair	●
	Facilities for combined marine and general construction	○ ¹
	Cold storage facility, warehousing, and storage of goods which are awaiting shipment via cargo carriers	○ ¹
	Low impact industrial uses, including but not limited to bakeries, breweries, bottling, printing and publishing, pharmaceuticals, machine shops, manufacture of products, assembly of electrical components, tool and die shops, and the packaging of food, provided that such uses shall be subject to the performance standards of the I-M zone	○
	Public uses including pedestrian and bicycle trails	●
	Utility substations, including sewage collection and pumping stations, water pumping stations, transfer stations, telephone electronic equipment enclosures and other similar structures, provided that such structures are located more than 100 feet from the water.	○
	Off-street parking lots, excluding parking structures	○
Other	Accessory uses customarily incidental and subordinate to the location, function, and operation of permitted uses ²	●
	Minor solar energy systems	●
	Minor wind energy systems	○

¹ Uses that may be located in buildings that exceed the maximum permitted height. Uses marked ●/○ will be considered permitted uses when occupying buildings with a maximum height equal to or less than the maximum applicable height allowable under the permitted use dimensional standards, and conditional Uses when above that height.

² Food service establishments, including food trucks and other similar retail and service support uses shall only be permitted as accessory uses if all such uses do not exceed 2,000 SF in total floor area of the building and each individual use does not exceed 1,000 SF in total floor area of the building; and further provided that such accessory uses provide goods or services that are supportive of the principal use and its clientele.

TABLE 10-B: WPDZ DIMENSIONAL REQUIREMENTS

	Permitted Use Dimensional Standards	Conditional Use Dimensional Standards
Setbacks (min.)	N/A	N/A
Lot size (min.)	N/A	5 acres, limited to 1 building greater than the maximum applicable height allowed under the permitted use dimensional standards.
Setback from pier line, wharf, or bulkhead (including any attached aprons)(min.)¹	5 ft.	5 ft.
Lot coverage (max.)	50% east of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive.	50% east of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive.



WATERFRONT ZONES

TABLE 10-B: WPDZ DIMENSIONAL REQUIREMENTS

	Permitted Use Dimensional Standards	Conditional Use Dimensional Standards
	100% west of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive.	100% west of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive.
	55 ft. east of a line projected due south from the centerline intersections of West Commercial Street and the easterly most Cassidy Point Drive and west of Casco Bay Bridge.	60 ft. west of the Casco Bay Bridge ⁷ , except as follows: 75 ft. in the area east of a line projected due south from the centerline intersections of W. Commercial Street and the easterly most Cassidy Point Drive and west of Casco Bay Bridge, on lots 5 contiguous acres or larger. ⁴ 130 ft. for bulk storage ³ facilities west of the projection of the westerly most Cassidy Point Drive segment.
Building height (inclusive of roof forms and rooftop appurtenances)(max.) ²	60 ft. west of a line projected due south from the centerline intersections of West Commercial Street and the easterly most Cassidy Point Drive.	In no case may any conditionally permitted heights exceed 50ft within 100ft of W. Commercial Street and all area of the WPDZ east of the Casco Bay Bridge. ⁵
	In no case may any permitted heights exceed 50ft within 100ft of W. Commercial Street and all area of the WPDZ east of the Casco Bay Bridge. ⁵	
	450 ft.	450 ft.
Building length (max.)⁶	300 ft. within 100 ft. of W. Commercial Street and all area of the WPDZ east of the Casco Bay Bridge.	300 ft. within 100ft of W. Commercial Street and all area of the WPDZ east of the Casco Bay Bridge. 300 ft. for buildings or portions of buildings exceeding the maximum applicable height allowed under the permitted use dimensional standards.

¹ The setback area may be used for activities related to the principal uses in the structure, but shall not be used for off-street parking.

² Buildings and/or structures shall be limited to an absolute height measured from average grade with no portion of the structural roof system or roof top appurtenances exceeding the limits set forth under Table 10-B with the exception of moveable elements or connection devices as listed under Subsection 10.4.7

³ Bulk storage dedicated to materials delivered or awaiting transportation to a site by waterborne transportation.

⁴ A projection of the street centerline shall consist of an extension of the centerline to the water side boundary of the WPDZ.

⁵ Height limitations east of the Casco Bay Bridge are intended to protect vistas of the harbor from public open space.

⁶ As measured by a line parallel with the southern edge of the West Commercial Street right-of-way.

⁷ Only those conditional uses so designated in Note 1 of the Waterfront Port Development Zone Use Table 10-A may be located in buildings taller than 60 ft.

10.4.6 Dimensional requirements

In addition to the generally applicable provisions of Section 7.5 of this Land Use Code, lots in the Waterfront Port Development Zone shall be subject to the requirements of Table 10-B.

10.4.7 Additional bulk, height, and location standards.

A. For structures exceeding the maximum applicable height allowed under the permitted use dimensional standards:

1. Moveable elements such as cranes and gantries, and connection devices such as conveyors or bridges shall not be subject to the space and bulk requirements, but shall be subject to a determination by the Federal Aviation Administration that the

location of such equipment will not create a hazard to navigation.

2. The applicant must provide a determination from the Federal Aviation Administration that structures and equipment will not exceed the applicable height guidelines for the runway approach and will not create a hazard to navigable airspace. Such a determination shall be accepted as conclusive evidence that the proposed development will not create a hazard.
3. For each lot, at least one view corridor of at least 90 feet in width shall be left unbuilt to preserve a clear line of sight between West Commercial Street and the water.

10.4.8 Performance standards

Proposals in the Waterfront Port Development Zone that qualify for site plan review shall submit, in addition to site plan submission requirements (if applicable), an impact mitigation narrative summarizing how the project meets the applicable performance standards. All uses in the Waterfront Port Development Zone shall comply with the following standards:

A. Outdoor storage of materials. Outdoor storage of commodities and materials accessory to normal conduct of business, except pilings and/or cranes, shall be permitted to a maximum height of 45 feet, and such materials shall be entirely contained, including runoff contaminants and residual material, within a designated area within the lot boundaries.

B. Noise.

1. The level of sound, measured by a sound level meter with frequency weighting

network (manufactured according to standards prescribed by the American National Standards Institute, Inc.), inherently and recurrently generated within the Waterfront Port Development Zone between the hours of 7:00 p.m. and 7:00 a.m. from industrial facilities or operation commenced on or after July 1, 1988, shall not exceed 55 decibels on the A scale at or within the boundaries of any residential zone, except for sound from construction activities, sound from traffic on public streets, sound from temporary activities such as festivals, and sound created as a result of, or relating to, an emergency, including sound from emergency warning signal devices.

2. In measuring sound levels under this subsection, sounds with a continuous duration of less than 60 seconds shall be measured by the maximum reading on a sound level meter set to the A weighted scale and the fast meter response (L maxfast). Sounds with a continuous duration of 60 seconds or more shall be measured on the basis of the energy average sound level over a period of 60 seconds (LEQ1).
3. In addition to the sound level standards otherwise established, facilities or operations established or built in the Waterfront Port Development Zone on or after July 1, 1988, shall employ best practicable sound abatement techniques to prevent tonal sounds and impulse sounds or, if such tonal and impulse sounds cannot be prevented, to minimize the impact of such sounds in residential



- zones. Tonal sound is defined as a sound wave usually perceived as a hum or which because its instantaneous sound pressure varies essentially as a simple sinusoidal function of time. Impulse sounds are defined as sound events characterized by brief excursions of sound pressure, each with a duration of less than one second.
- C. **Vibration.** Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. This shall not apply to vibration resulting from activities aboard a vessel or from railroad vehicle activities, or from activities on a pile supported pier.
- D. **Federal and state environmental regulations.** All uses shall comply with federal and state environmental statutes and regulations regarding emissions into the air, except where provisions of this Land Use Code are more stringent.
- E. **Discharges into harbor areas.** No discharge into harbor water areas shall be permitted, unless permitted by the Maine Department of Environmental Protection under a waste discharge license and as approved by the Department of Public Works in accordance with Chapter 24, Article III of the City of Portland Code of Ordinances. All private sewage disposal or private wastewater treatment facilities shall comply with the provisions of Chapter 24, Article II of the City of Portland Code of Ordinances and federal and state environmental statutes and regulations regarding wastewater discharges.
- F. **Storage of vehicles.** Storage of any unregistered automotive vehicle on the premises for more than 60 days shall not be permitted.
- G. **Landfill of docking and berthing areas.** Landfill of docking and berthing areas shall be governed by 38 M.R.S. § 471 through 478, and permitted only if the landfill does not reduce the amount of linear berthing areas or space, or berthing capacity. If approved, construction shall be undertaken using methods approved by the Department of Public Works and shall be accomplished in accordance with the provisions of this Land Use Code and in a manner so as to ensure that a stable and impermeable wall of acceptable materials will completely contain the fill material and will not permit any fill material to leach into docking areas or navigable waters.
- H. **Off-street parking.** Off-street parking is required as provided in Article 19.
- I. **Shoreland and Flood Plain Management regulations.** Any lot or portion of a lot located in a Shoreland Zone as identified on the City zoning map or in a flood hazard area shall be subject to the requirements of Articles 11 and 12.
- J. **Lighting.** All lighting on the site shall be shielded such that direct light sources shall not unreasonably interfere with vessels transiting the harbor nor have an unreasonable adverse impact on adjacent residential zones.
- K. **Signs.** Signs shall be permitted as set forth in Article 20.
- L. **Storage of pollutants and oily wastes.** On-premises storage of pollutants and oily wastes shall not be permitted for more than 45 days.
- M. **Compatibility of non-marine uses with marine uses.** Non-marine uses, structures and

activities, including but not limited to access, circulation, parking, dumpsters, exterior storage and loading facilities or other structures shall neither unreasonably interfere with the existence or operation of marine uses nor significantly impede access to vessel berthing or other access to the water by existing or potential marine uses.

N. Design. Design and visual character shall:

1. In building design, including placement and screening of mechanical equipment, take into consideration long views to minimize negative visual impact and provide visual interest, and architecturally integrate exposed industrial systems and equipment where practical.
2. Organize massing to emphasize certain parts of the building such as entries, corners, or different uses.
3. Treat all facades, including the roof, with equal level of detail and articulation.
4. Vary and articulate building facades to add scale and avoid large monotonous walls. Treatments such as texture, color, material changes, or shadow lines or murals must be used to add visual interest and avoid dull, flat, repetitive facades.
5. Use a scaling or articulation element such as stepback, canopy, or fenestration as required for any street-facing façade within 50 feet of West Commercial Street.

Memorandum
Planning and Urban Development Department



To: Chair Mazer & Members of the Planning Board
From: Maya Balassa
Date: May 5, 2023
Re: 172 Bishop Street
Project ID: PL-002343-2023
CBL: 281 A003001
Meeting Date: May 9, 2023

INTRODUCTION

The University of New England (UNE) has submitted a major site plan and application to develop a new intermodal transportation facility for the University of New England at 172 Bishop Street; and existing gravel parking area with bus shelter. The project would involve reconfiguration and paving of a portion of the existing parking lot and formalization of a campus shuttle route, revegetation of a portion of the site, and stormwater management improvements. The area of disturbance is approximately 6.9 acres.

The Planning and Urban Development Department mailed 60 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the April 29th and May 2nd, 2023 editions of the *Portland Press Herald*.

Applicant: The University of New England – Portland Campus
Applicant Tom Saucier, P.E., Site Design Associates
Representatives:

REQUIRED REVIEWS

<i>Review</i>	<i>Applicable Standards</i>
Major Site Plan	Site Plan Ordinance

<i>Waiver Requests</i>	<i>Applicable Standards</i>
The applicant is requesting to use lighting that emits a color temperature of 4000K to increase the color distinction. Staff Recommendation: At this time staff supports this waiver as it is consistent with the campus lighting approach.	Technical Manual Section 12.3.5 requires all fixtures must be LED and shall not exceed 3000K Correlated Color Temperature.
The applicant is requesting a maximum foot candle of 10. Staff Recommendation: At this time staff do not support this waiver as the lighting standards provide adequate lighting for safety while encouraging the natural nighttime outdoor environment.	Technical Manual Section 12.3.2 requires that surface parking lots have a maximum foot candle value of 4.

The applicant is requesting to keep the lights at full brightness 24/7. Staff Recommendation: At this time staff do not support this waiver as the lighting standards provide adequate lighting for safety while encouraging the natural nighttime outdoor environment.	Technical Manual Section 12.3.9 requires that structured and surface parking lots with 20 or more spaces reduce to 50% permitted levels from one hour after business close to one hour before business open.
---	---

PROJECT DATA

Existing Zoning	IM Industrial- Moderate Impact, R3 Residential, IH Industrial- High Impact
Property Size	836,442 square feet
Existing Use	Parking lot
Proposed Use	Parking lot

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	1,107 square feet	306 square feet	-801 square feet
Impervious Surface Area	253,912 square feet	156,970 square feet	-96,942 square feet
Parking Spaces	600	344	-256
Bicycle Parking Spaces	0	0	0
EV Charging Stations	0	72	+72

BACKGROUND AND EXISTING CONDITONS



Figure 1 GoogleEarth view of 172 Bishop Street in the existing condition

The University of New England acquired the property at 172 Bishop Street in 2012. This parking area is currently utilized by students, faculty and guests, who access the main Portland campus by shuttle, which circulates between the campus and parking area via an existing carriage road. Aside from surface parking, this property also contains an existing 801 square foot one-story storage building and a 306 square foot bus shelter. The main function of this parking area is to reroute traffic away from Stevens Avenue and Morrill's Corner and to reduce parking demand along Stevens Avenue.

In 2022, the city approved a minor site plan for UNE at 180 Bishop Street, within the same parcel as 172 Bishop. This application involved the construction of a new 15,000 square foot field maintenance shop to house the Maine Army National Guard. A 10-foot fence was subsequently permitted around the parking area.

PROPOSED DEVELOPMENT

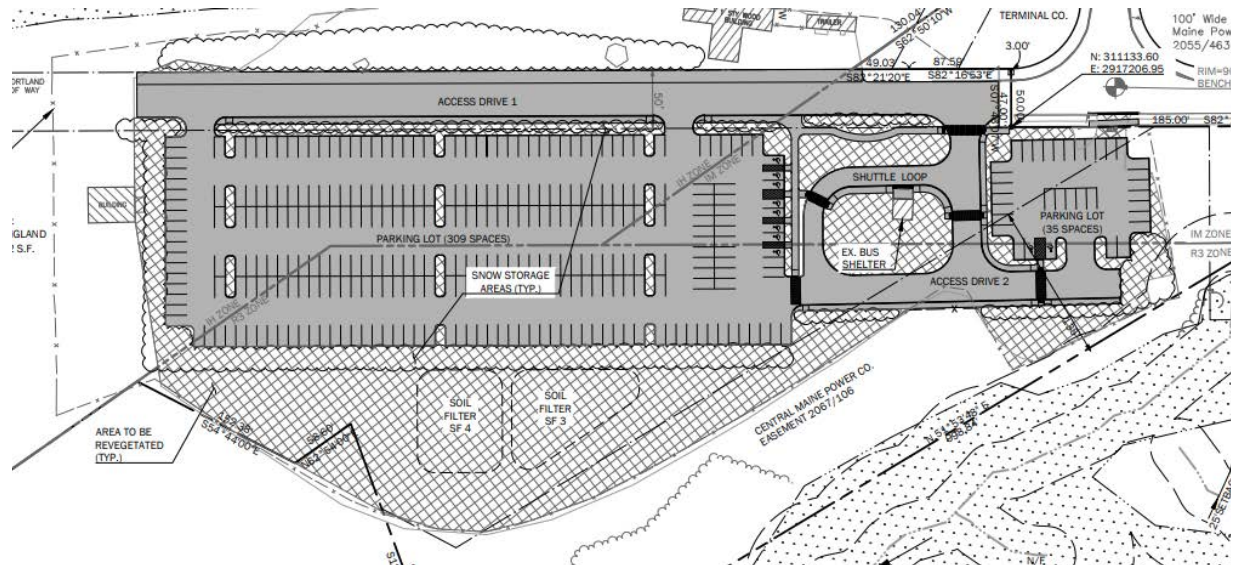


Figure 2 172 Bishop Street Proposed Site Plan

The proposed development retains the property's function as a multimodal transportation facility but reduces the total parking count from 600 spaces to 344 spaces and removes 2.23 acres of impervious surface. The plan depicts two parking areas separated by a defined circulation area with a transit shelter for the UNE Shuttle. The primary parking area features 309 spaces and is located to the west of the shuttle circulation area, while a second smaller parking area with 35 spaces is located to the east of the shuttle circulation area. Other improvements include the addition of stormwater management infrastructure, revegetation of former impervious areas and the planting of site landscaping throughout the facility.

RIGHT, TITLE, & INTEREST

The applicant has demonstrated right, title, and interest through the property deed.

FINANCIAL & TECHNICAL CAPACITY

The University of New England Financial and Administration Vice President submitted a letter demonstrating sufficient financial capacity to construct, equip, and operate the proposed Bishop Street Intermodal Transportation Facility. The engineering team, Site Design Associates, and construction manager, Ledgewood, have the technical capacity for the proposed project.

ZONING ANALYSIS

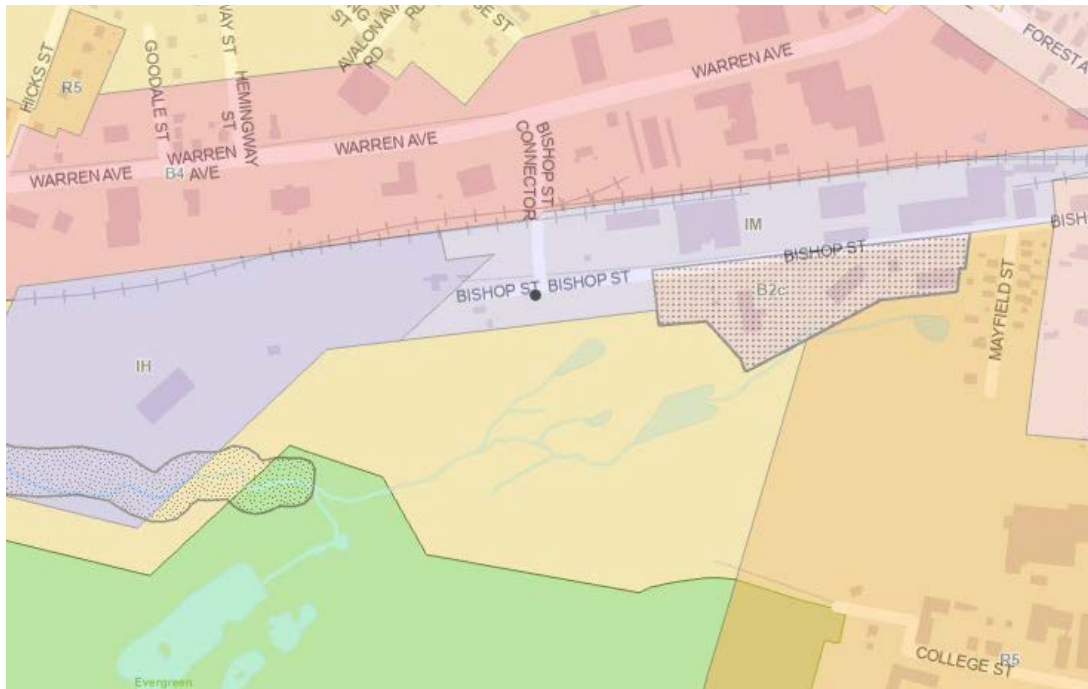


Figure 3 Zoning map context from Portland's Map Viewer

The subject parcel is located within three different zones; the I-H High Impact Industrial, I-M Moderate Impact Industrial, and R-3 Residential. The proposed off-street parking lot is not permitted in the I-H and I-M zones, while off-street parking is identified as a conditional use in the R-3 zone. As the project proposes a reduction of a legally non-conforming use, the plans meet zoning standards.

SITE PLAN REVIEW STANDARDS (Section 14.6)

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

1. Transportation Standards (Section 14.6.1)

A. Impact on surrounding street systems

As part of the College of Osteopathic Medicine (COM) project, the City evaluated campus-wide traffic impacts and parking demand. That application anticipated the Bishop Street lot (in its proposed configuration) being utilized to meet campus-wide parking demand. Since no other program changes are being implemented, and the development of this facility aligns with the documentation provided for the COM project, this standard is considered met.

B. Access and circulation

There are three vehicle access points to the intermodal transportation facility off Bishop Street. The larger parking lot has two 24-foot wide driveways with a radius of 10 feet. The farthest west driveway is 24 feet wide with a radius of 25 feet and is solely for the shuttle bus to access the shuttle loop. The smaller parking lot east of the shuttle loop is accessed via an access drive along the southern edge.

Aside from vehicular access, there are several pedestrian sidewalks around the perimeter of the parking lot. The city has asked that internal sidewalks be added through the larger parking lot to

offer a safe pedestrian route between parking areas and the shuttle stop, citing site plan standard 14.6.1.B.1.A which states, “All developments subject to this article shall provide safe and reasonable access and internal circulation for all users of the site...” In order to facilitate this improvement, the City would be supportive of a reduction of the drive isle widths (from 24 feet to 22 feet) to accommodate internal sidewalks.

The city, Portland Trails, and UNE are in communication about a future trail connection through the site via the existing carriage road when it is developed at a later date. The city is recommending that the applicant provide publicly accessible bike parking spaces along the Bishop Street right-of-way, north of the 35-space parking lot, intended to be utilized by members of the public utilizing future trails. In addition, the City is recommending that UNE explore opportunities to provide publicly accessible parking spaces for future trail access and use.

C. Public transit access

This project does not trigger the public transit access requirement as it is not proposing over 20,000 square feet of gross floor area and is not located along an existing public transit route.

D. Parking

This site is an existing parking lot with 600 spaces and is being reduced to 344 spaces. The proposed parking lot is separated into two connected parking lots, one with 309 spaces and one with 35 spaces.

Table 19-A of the City’s land use code requires that Institutional uses provide two bicycle parking spaces for every 10 vehicle parking spaces for the first 100 vehicles spaces required, and then one additional bicycle parking space for every 20 vehicle parking spaces required thereafter. Based upon the proposed off-street parking count of 344 spaces, the applicant is required to provide a minimum of 32 bicycle parking spaces. The applicant has indicated that there are 135 bicycle spaces campus-wide, well in excess of the University’s total requirement based upon their total off-street parking count, which is projected to 1,051 in 2024- after the construction of the College of Osteopathic Medicine and the renovations at the Bishop Street parking lot. These existing bicycle parking spaces satisfy the City’s bicycle parking site plan requirement.

The site is meeting EV charging requirements by providing 8 dual-port Level 2 EV chargers and 64 duplex receptacles of Level 1 EV car chargers, mounted to light fixtures. The city waiting on conformation that at least 50% of the parking spots are EV ready.

E. Transportation demand management (TDM)

The University of New England Portland Campus has a Transportation Demand Management Plan, last updated in April 2022. As part of the university’s strategies to reduce parking demand, free GP Metro, South Portland City Bus Services, and Biddeford, Saco Old Orchard Beach Bus Transit passes are free for all students, faculty, and staff. The applicant will need to update their TDM to reflect the new Bishop Street Intermodal Transportation Facility parking capacity.

2. Environmental Quality Standards (Section 14.6.2)

A. Preservation of significant natural features

There are no significant natural features identified in the area of disturbance.

B. Landscape preservation

There are no trees proposed to be removed as part of this application.

C. Site landscaping and buffers

New landscaping is being proposed along Bishop street, around the perimeter of the intermodal transportation facility, and within internal landscaped islands.

The landscaping plan proposes 7 street trees along Bishop Street, which does not satisfy the City's street tree requirement. Based on the frontage, 11 street trees are required.

The Land Use Code requires parking lot developments include at least two trees (or one tree and three shrubs) per five parking spaces, planted in landscaped islands to screen, shade, and break up parking. Based upon a total proposed off-street parking count of 344 parking spaces, a total of 138 shade trees are required (or 69 trees and 207 shrubs) in landscaped islands. The landscaping plan has proposed 42 trees and 45 shrubs for parking lot landscaping. The City has requested that the applicant update their landscaping plan to provide additional plantings across the site in accordance with this standard.

The city has requested more planting information on the revegetated areas of the site, specifically the understory.

The landscaping plan proposes 67 native plants and 317 nonnative plants (trees, shrubs, grasses). Per Landscaping Standards in the Technical Manual, as least 50% of the plantings should be native. The applicant has been informed and been offered native alternatives by the Parks Department in order to meet the standard.

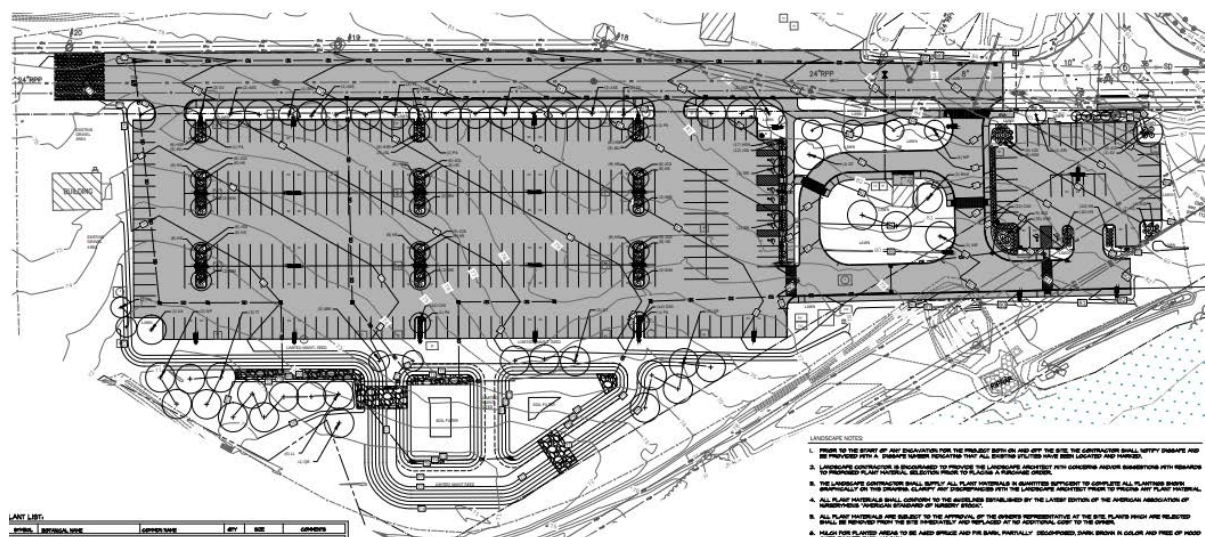


Figure 4 172 Bishop Street Landscaping Site Plan

D. Water quality/storm water management/erosion control

Two stormwater basins with sand filters are proposed at the southern edge of the parking lot to collect runoff. An erosion and sedimentation control plan has been submitted. The stormwater management plan is still in review by the city's third-party stormwater engineer.

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

A. Consistency with City Master Plans

The proposed revegetation and stormwater management supports environmental goals of Portland's Plan 2030. One of the future strategies to improve water quality for the city is to "minimize impacts to the city's waterways by reducing combined sewer overflows and implementing stormwater management best practices".

B. Public safety and fire prevention

The applicant has spoken to utilizing safety measures integrated across UNE campus such as lighting, blue light call boxes, well maintained landscaping, and CCTV monitors. The parking lot will also be access controlled from Bishop Street.

C. Availability and capacity of public utilities

The applicant will need to submit a letter from CMP demonstrating sufficient capacity for the development.

4. Site Design Standards (Section 14.6.4)

A. Massing, ventilation, and wind impact

Not applicable. A building is not proposed as part of this application.

B. Shadows

Not applicable. A building is not proposed as part of this application.

C. Snow and ice loading

The snow storage areas have been identified on landscaped areas that would be detrimental to the survival of the plantings. The applicant has uploaded revised site plans (4.27.23) to address this concern which is currently under review.

D. View corridors

Not applicable. This site is not in a view corridor.

E. Historic resources

Not applicable. The site is not is designated as historic.

F. Exterior lighting

A photometric plan was submitted for this project. The applicant has been asked to adjust the lighting plan in several ways to meet Technical Manual Lighting Standards, and they have subsequently requested waivers for the following standards. The lighting is confirmed to be full cutoff.

Waiver 1:

A waiver is being requested to install lights with a color temperature of 4000K; the maximum allowed via the Land Use Code is 3000K. The city is in support of this waiver. The College of Osteopathic Medicine application sought and was granted the same waiver in 2022 (PL-002017-2022).

Waiver 2

The plans show a maximum foot candle that is significantly higher than is allowable for parking lots. The site plan shows a foot candle maximum of 10 while the allowable maximum via the Tech Manual is 4. The lighting standards are intended to “encourage the preservation of the natural nighttime outdoor environment.” At this time the city is not in support of waiving this requirement.

Waiver 3

The applicant has requested a waiver to leave the lights at the highest suggested foot candle 24/7. The lighting curfew standard requires that “for surface and structured parking, lighting in vehicle parking areas containing twenty or more spaces shall be reduced to 50% of permitted levels from one hour after business closing to one hour before business opening”. At this time the city is not in support of waiving this requirement. The standard allows for motion sensor activated lighting during these hours that should address the applicants concerns. The city supports the operating hours be derived by the shuttle hours, which have historically run from 7 am to 7 pm.

G. Noise and vibration

This project is not anticipated to create noise or vibration impacts.

H. Signage and wayfinding

Traffic movement signage has been proposed to regulate safe car and shuttle movements.

I. Zoning-related design standards

Not applicable. This site plan does not trigger zoning related design standards.

NEIGHBORHOOD MEETING & PUBLIC COMMENT

The applicant held a neighborhood meeting on Thursday, April 13, 2023 via Zoom and in person at 6:00 pm. There were no attendees. No public comments have been submitted on this application.

NEXT STEPS

The applicant should address any outstanding staff or Planning Board review comments and resubmit plans, materials, and a written response to comments prior to the application being scheduled for a Planning Board Public Hearing.

ATTACHMENTS

1. Applicant Submittal
 - A. Cover Letter
 - B. Major Site Plan Checklist
 - C. Letter of Agent Authorization
 - D. Evidence of Right, Title, and Interest
 - E. Zoning Assessment
 - F. Letter of Financial Capacity
 - G. Site Plan Standards Assessment
 - H. Lighting Waiver Request
 - I. Stormwater Management Plan
 - J. Stormwater Management Plan
 - K. Lighting Letter 04-27-23
 - L. Lighting Catalogue Cuts

2. Plans
 1. Existing Conditions and Removals
 2. Site Plan
 3. Site Layout and Utility Plan
 4. Overall Grading and Drainage Plan
 5. Access Drive 1
 6. Access Drive 2
 7. Erosion and Sediment Control Specs
 8. Site Details 1
 9. Site Details 2
 10. Site Details 3
 11. Site Details 4
 12. Landscape Plan 04-27-23
 13. Photometry
 14. UNE Boundary Survey
3. Report Attachments
 1. Staff Review Comment Letter
 2. Applicant Response Letter to Staff Comments
 3. University of New England TDM

Site Design Associates

Consulting Engineering and Land Planning

January 19, 2023

Mr. Matthew Grooms
Development Review Services Manager
Planning Division
389 Congress St., Fourth Floor
Portland, ME 04101

**RE: University of New England - Portland Campus
Major Site Plan Application for:
Intermodal Transportation Facility Reconstruction
Parcel ID 291 A001, 281 A003
160-172 Bishop Street**

Dear Matt:

On behalf of University of New England (UNE), Site Design Associates (SDA) is pleased to submit a major Site Plan Application for the referenced project. We understand the site plan application fee for a project of this size will be invoiced.

The project is located at the end of Bishop Street and was reviewed with staff at a pre-application meeting on December 21, 2022. Based on feedback from staff, the concept remains as discussed at those meetings.

This submission contains the following information:

- Major Site Plan Checklist
- Letter of Agent Authorization
- Evidence of Right, Title, and Interest
- Zoning Assessment
- Letter of Financial Capacity
- Evidence of Technical Capability
- Site Plan Standards Assessment
- Waiver Request
- Stormwater Management Plan
- Construction Management Plan

- The following project drawings:
 - C-101 Site Demolition Plan
 - C-200 Site Erosion & Sediment Control Notes
 - C-201 Erosion & Sediment Control Plan
 - C-300 Erosion & Sediment Control Details
 - C-401 Site Grading & Drainage Plan
 - C-402 Grading & Drainage Schedule
 - C-500 Connector Road Plan & Profile Sta 02+50 To 26+50 (1 Of 2)
 - C-501 Connector Road Plan & Profile Sta 26+50 To 33+00 (2 Of 2)
 - C-502 Grading & Drainage Details
 - C-503 Grading & Drainage Details
 - C-504 Layout & Materials Plan
 - L-100 Landscape Plan
 - Boundary Survey

The project involves the reconstruction of the existing Intermodal Transportation Facility, including better formalizing the access and parking, resulting in a total of 344 parking spaces, including 72 EV charging stations. Improvements include:

- 1) Safety enhancements including emergency call boxes and camera upgrades;
- 2) New lighting;
- 3) Removal of 96,940 sf of impervious surface;
- 4) Enhanced vehicular circulation, including for the UNE shuttle between the facility and the main campus;
- 5) Elimination of trip hazards;
- 6) The addition of significant landscaping and trees;
- 7) Construction of stormwater quality enhancement facilities, and;
- 8) The installation of new EV charging stations;

The Intermodal Facility was originally approved by the city in 2012. Access to the site will be through an existing gate at the end of Bishop Street over a new formalized 24 ft wide access drive, which will also provide access to the Maine Army National Guard (MEARNG) facility on the west end of the site. An existing curb cut onto Bishop Street will be closed. We believe the reconstruction of the facility will result in compliance with applicable city land use codes. One waiver is necessary for the proposed lighting, consistent with the waiver granted for both the MEARNG and College of Osteopathic Medicine projects.

We look forward to working with staff and the planning board toward approval of this project. Please contact me with any questions or comments concerning this conditional use application.

Sincerely,

Site Design Associates

A handwritten signature in black ink, appearing to read 'Tom Saucier', with a stylized flourish at the end.

Tom Saucier, P.E.
President

cc: Alan Thibeault, UNE, Vice President for Campus Operations

CITY OF PORTLAND
Planning & Urban Development Department

MAJOR SITE PLAN GENERAL DOCUMENT AND DRAWINGS CHECKLIST Please submit each document as a separate PDF file. Please confirm by electronically checking the boxes in the left-hand column. ** PLEASE FILL OUT AND UPLOAD THE ZONING ASSESSMENT TABLE AND WAIVER TABLE SEPARATELY AS NOTED BELOW ** At the time of application submission, please contact the Department of Public Works regarding E-911 addressing for your project.		
GENERAL APPLICATION DOCUMENTS		
☒ Yes	NA	Project Description Cover letter with detailed project description
☒ Yes	NA	Completed Checklist (this document)
☒ Yes	NA	Evidence of Right, Title, and Interest Deeds, leases, or purchase and sales agreements
Yes	☒ NA	Evidence of State or Federal Approvals Permits or letters of non-jurisdiction, if applicable
☒ Yes	NA	Zoning Assessment (see <u>Zoning Assessment Table</u>) Summary of compliance with use and dimensional standards of the land use code
☒ Yes	NA	Site Plan Standards Assessment (see Section 14.6 of the land use code) Summary of project compliance with site plan standards of the land use code
☒ Yes	NA	Summary of Existing and/or Proposed Easements or Covenants, applicable. Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way
☒ Yes	NA	Waiver Requests (see <u>Waiver Table</u>) Written request for waiver describing request and compliance with applicable waiver standards
☒ Yes	NA	Financial Capability Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
☒ Yes	NA	Technical Capability Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

MAJOR SITE PLAN STANDARDS AND SUBMISSION CHECKLIST

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

TRANSPORTATION

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

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

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

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

Site Design Associates

Consulting Engineering and Land Planning

April 27, 2023

Maya Balassa, Planner
City of Portland
Via email

**RE: University of New England - Portland Campus
Major Site Plan Application for:
Intermodal Transportation Facility Reconstruction
Parcel ID 291 A001, 281 A003
160-172 Bishop Street
Responses to Staff Comments**

Dear Maya;

On behalf of University of New England (UNE), Site Design Associates (SDA) is pleased to provide this response to review comments provided by the city in your April 4, 2023 review memorandum. We have listed each of your comments in the order they were presented in your memorandum followed by our responses.

1. General comments:

Comment *The maximum foot candle allowable for surface parking lot is 4, per Tech Manual standards. The value shown is 10.2. The average foot candle shall not be above .5 FC. Please adjust the photometric plan per Tech Manual Standards.*

Response: Please see the attached memorandum from our lighting engineer. They have expressed concern that the city is requiring what is generally considered an outdated standard, that would actually result in a less safe environment and significantly reduces the quality of CCTV monitoring. The city standard does not provide the safety and security UNE requires. This is a remote facility, with known transient/homeless persons residing in the abutting woods. There will be no off-site light trespass. The nature of the abutting properties is industrial, commercial, and university uses, with no residential uses. We prefer to keep the lighting as designed in the interest of the user safety and facility security, particularly given the somewhat remote location of this facility. Therefore, we request a waiver of these technical manual standards.

Comment: *Please confirm the lighting is full cut-off.*

Response: The fixtures are full cut-off luminaires that are Dark Skies compliant, DLC Premium listed and night-time friendly.

23 Whitney Way Topsham, Maine 04086
Phone: (207) 449-4275 email: info@sitedesignassociates.biz

Comment: *Please confirm that the lighting is conforming to the lighting curfew standard, “For surface and structured parking, lighting in vehicle parking areas containing twenty or more spaces shall be reduced to 50% of permitted levels from one hour after the business (school) closing to one hour before business (school) opening.*

Response: Given the graduate student population of the campus, the intermodal facility will be open and active 24 hours a day, seven days per week. Therefore, it appears this standard is not applicable.

2. Transportation:

Comment: *In the 35-space parking lot the aisle width exceeds the 24-foot dimensional city standard. A waiver request is required. I would note that one additional parking space could be added to the middle row (from 5 to 6 spaces), and a waiver could be requested for a reduced aisle width (22.75-foot aisle width). Given low parking space turnover, I would support a reduced aisle width in this area. Wide aisle widths also exist where Access Drive 2 intersects with the main parking lot., where 30 feet and 40 feet of pavement is provided. A waiver from the city’s technical standards shall be provided.*

Response: If a waiver is required for aisle widths that are wider than the city minimum, please consider this a request for the waiver.

Comment: *Additional information should be provided on the sidewalk connection between the new and existing sidewalk on the main access road near Station 0+50.*

Response: The new sidewalk will tie into the existing sidewalk on the Bishop Street side of the existing pedestrian gate. Additional notes and spot grades have been provided on drawing C-300. We have also attached a photo sketch of the area.

Comment: *Regulatory signage should be provided for the Shuttle Loop given that it is restricted to one-way flow.*

Response: “Bus only” and “Do not enter” signage has been added to drawing C-201.

Comment: *Access Drive 2 dead ends near the entrance to the 35-space parking lot. The design appears to consider extension of the roadway and sidewalk. The applicant should provide information that document future conditions.*

Response: The design provides for a future internal connection to the campus. This would eliminate the need for the shuttle, Campus Service vehicles, and graduate students to travel on Bishop Street. This will also provide for travel from the campus and the new College of Osteopathic Medicine parking to the intermodal facility and the Campus Services structures on the site, without travel through Morrill's Corner. The access would be controlled through the use of gates at each end to prevent unauthorized users from utilizing the access to avoid Morrill's Corner. General public bicycle and pedestrian traffic would be permitted.

Comment: *Access Drive 1 has a typical section with 28-feet of travel width and a 11-foot paved shoulder. The applicant should note the functional purpose of the paved 11-foot shoulder.*

Response: There is a grade transition between the proposed edge of road and the existing grade. This entire area is currently paved. The paved swale is an integral part of the stormwater management plan, collecting and diverting upgradient runoff. The paved area also provides vehicular access to the existing adjacent paved area and Campus Services structures.

Comment: *The applicant shall provide internal pedestrian circulation (walkways for the users) throughout the entire parking lot.*

Comment: *Provide a raised pedestrian walkway for each parking aisle. The overall width shall account for vehicle overhang resulting in a 5 ft min clearance at all times.*

Response: UNE respectfully declines to implement these suggestions. We are unaware of any requirement in the code or technical manual which would be the basis for these requests. The technical manual transportation standard section 1.10.2. is "all spaces provided shall be safely accessible". We do not interpret this to mean all users need a sidewalk. All spaces are safely accessible and the layout of the spaces are typical for any parking lot of this nature throughout the city. The users of this lot will be graduate students and faculty, who generally will be in attendance for a much longer period of time during the day than the typical college student would be. The turnover on the spaces will be low. There is no history of vehicle/pedestrian conflicts in any UNE campus parking lot in Portland or Biddeford. Adding the walkways as suggested would result in a significant increase in impervious area in the Capisic Brook watershed, which directly contradicts the city goals for this area. Additionally, the walkways would be a hindrance to snow removal. Lastly, the additional cost of \$200-250,000 associated with these requests will jeopardize some of the associated benefits that come with the improvements, including:

- 1) Safety enhancements including emergency call boxes and camera upgrades;
- 2) New lighting;

- 3) Removal of 96,940 sf of impervious surface;
- 4) Enhanced vehicular circulation, including for the UNE shuttle between the facility and the main campus;
- 5) Elimination of trip hazards;
- 6) The addition of significant landscaping and trees;
- 7) Construction of stormwater quality enhancement facilities, and;
- 8) The installation of new EV charging stations;

It is our opinion that the sidewalk along Access Drive 1 and along the easterly edge of the parking lot (adjacent to the ADA spaces) provide adequate internal pedestrian circulation within the site from the parking lot to the bus stop.

Further, recall we had a very productive meeting with city staff and Portland Trails on April 26 to discuss the vision for a 30-mile bike path system and walking path connectivity in the city. It was apparent to all that a component crucial to both will require access through and improvements on UNE's property. In the spirit of cooperation UNE committed to working with all parties to facilitate this vision. We are in hopes that this spirit of cooperation and need for compromise will extend to this project.

3. Water Quality, Stormwater, & Infrastructure

Comment: *There are several sanitary sewer manholes that are currently inaccessible. These manholes need to be raised to grade prior to paving.*

Response: This was previously addressed on drawing C-401.

Comment: *The areas to be revegetated need to be tilled 9" before loam and seed; prefer a mix of woody vegetation and conservation seed mix.*

Response: A note has been added to sheet C-201 indicating the tilling requirement. See the landscape plan for revegetation information.

Comment: *Design information for the level spreaders should be provided to ensure they are designed per DEP manual*

Response: There is only one level spreader proposed for this project. A detail for the level spreader was provided on sheet C-503. The 10-year flow to level spreader is 21.6 CFS. DEP requires a length of 1 foot per 0.25 CFS, which would require a length of 87' feet for this level spreader. The proposed level spreader is 96 feet long.

4. Landscaping and Environmental Quality

Comment: This project is located along the proposed Riverton Neighborhood Byway and is well positioned to promote multi-modal connectivity to neighboring trail systems at Evergreen Cemetery. A meeting between Portland Trails, Bruce Hyman and a representative of Parks, Recreation and Facilities would be very helpful for exploring opportunities to promote pedestrian connectivity between the proposed facility and the UNE campus as well as surrounding trails (both existing and proposed).

Response: A meeting has been scheduled for April 25.

Comment: *On sheet C-200 a long stretch of parking-lot adjacent land is designated "Snow Storage Area". On Sheet L-100, this area is also identified to host dozens of new trees. There is a conflict of use with this zone- trees will not survive if the area is being used for snow storage. In order to maintain some shading of the parking lot and the desired amount of tree canopy, the City's recommendation is to cluster the trees in focused areas along the southern edge of the parking lot, leaving some continuous gaps between plantings to serve as snow-storage areas. Some proposed trees may be shifted downslope of the parking lot. Larches and Black Gum may thrive in the wetter conditions in these lower-lying areas. See notes on L-100.*

Response: The landscape plan has been revised to show the trees along the south side of the parking area clustered and pulled back off the edge of pavement to allow for snow storage with minimal conflict with trees. American Larch trees have been used in the area just below the level spreader.

Comment: *Maples make up a disproportionately large proportion of the City's tree canopy currently, so alternative species would be preferred where they are appropriate. Greater species diversity allows Portland's urban canopy to be more resilient to new pests and diseases.*

Response: We have revised the plant list to reduce the percentage of proposed Maple trees.

Comment: *City arborists advise against clumping form birches because of its proclivity for splitting after several years of growth. This tendency makes these trees short-lived, irregular in appearance (due to cut/broken limbs) and costly to maintain as they mature. Single leader form of this tree is recommended.*

Response: The clump birch trees have been changed to single leader trees.

Comment: *Suggest replacing Tilia tomentosa with Tilia americana. See notes on L-100.*

Response: We have not changed the Sterling Linden to the American Linden due to what we believe is the American Linden's greater susceptibility to the Japanese Beetle.

Comment: *'Princeton' and 'Liberty' cultivars of American Elm have proven more resilient to disease and are better cultivar alternatives to 'Valley Forge' which has poor structure.*

Response: We were unaware of the issues with the structure of the 'Valley Forge' Elm. We have changed the Valley Forge Elm to the 'Princeton' American Elm.

Comment: *Hostas will not survive in the parking lot, especially the large-leaved variety specified. The variety specified requires sheltered, part sun conditions. Suggest replacing this plant selection with a more tolerant native shrub or perennial.*

Response: We have changed the 18 Hosta plants to daylilies to match the other islands.

Comment: *Thuja occidentalis 'Mr. Bowling Ball' does not tolerate road salt and will exhibit significant foliage die-back in the proposed location.*

Response: We have replaced the 9 'Mr. Bowling Ball' shrubs with the 'Gold Lace' Juniper.

Comment: *Native species are preferred.*

Response: We try to use native species where possible, but sometimes the site challenges, design and maintenance considerations require the use of non-natives to give us the best overall outcome.

Comment: *Several native plants that have proven themselves resilient in parking lot islands include Prunus pumila var. Depressa, Diervilla lonicera, Comptonia peregrina, Myrica gale, Eubotrys racemosa.*

Response: We will investigate these plants for possible use in the future.

Comment: *Others that could be good candidates for plantbeds not surrounded by parking: Ilex verticillata, Viburnum dentatum, Juniperus horizontalis cultivars, Arctostaphylos uva-ursi (straight species).*

Response: We will investigate these plants for possible use in the future.

Comment: *Low-lying areas such as the stormwater filtration facilities could benefit from groundcover/shrub planting: Aronia melanocrpa, Azalea viscosum, Cephalanthus occidentalis, Cornus sericea, Clethra alnifolia, Ilex verticillata, Viburnum cassinoides, Panicum virgatum, Deschampsia cespitosa, Monarda fistulosa.*

Response: We agree the addition of the above groundcover and shrubs may be of benefit. However, we have had success with the meadow mix we have specified and it allows the stormwater areas to be mowed once a year which helps keep the invasives out.

Comment: *Please add detail to landscaping plan to show plant selection, planting placement, grade changes, etc for further review.*

Response: The layers showing the proposed and existing contours have been turned on.

A revised landscape plan is attached.

If you have any questions, or require additional information, please do not hesitate to contact me.

Sincerely,
Site Design Associates



Tom Saucier, P.E.
President

c: Alan Thibeault, Vice President for Campus Operations



UNIVERSITY OF
NEW ENGLAND

Biddeford Campus
11 Hills Beach Road
Biddeford, ME 04005
(207) 283-0171 T

Portland Campus
716 Stevens Avenue
Portland, ME 04103
(207) 797-7261 T

January 13, 2023

Mr. Tom Saucier
SYTDesign Consultants
P.O. Box 86A
160 Longwoods Road
Cumberland, ME 04021

TO WHOM IT MAY CONCERN:

This letter authorizes Tom Saucier to serve as an Agent and Owner's Representative for University of New England for the purpose of permitting the reconstruction of the University's Intermodal Transportation Facility, located on the University of New England's Portland campus, just off Bishop Street

Sincerely,

A handwritten signature in black ink, reading "alan thibeault", is displayed within a rectangular box. The signature is written in a cursive, lowercase style.

Alan Thibeault
Vice President for University Operations

WARRANTY DEED
(Maine Statutory Short Form)

KNOW ALL MEN BY THESE PRESENTS, that **PIKE INDUSTRIES, INC.**, a Delaware corporation with a place of business and mailing address at 58 Main Street, Westbrook, Maine 04092 ("Grantor"), for consideration paid, hereby grants to **UNIVERSITY OF NEW ENGLAND**, a Maine non-profit corporation with a mailing address of 11 Hills Beach Road, Biddeford, Maine 04005 ("Grantee"), with **WARRANTY COVENANTS**, those certain lots or parcels of land, together with any buildings and improvements thereon, situated in Portland, Cumberland County, Maine, being more particularly described on **Exhibit A** attached hereto and incorporated herein by reference (the "Premises").

The following restrictions shall run with the land, shall inure to the benefit of the Grantor, and its successors and assigns, and shall be binding upon the Grantee, and its successors and assigns:

1. The Grantee covenants and agrees that the Premises shall not be used for excavation of earth materials, crushing of rock and other materials, production of hot-mix asphalt or other similar products (e.g., cement, ready mix concrete, etc.), storage of earth materials and/or hot-mix, cement or ready-mix products or the sale (retail or wholesale) and distribution of such materials from the Premises or the use of such material or existing processed material unless such excavation and/or use of such materials is for the benefit of the Grantee on the Premises or on contiguous land in common ownership of the Grantee.
2. In the event of a violation of any or all of this restrictive covenant, the Grantor, in addition to all other remedies available to it, may obtain an injunction against the Grantee issued by a court of competent jurisdiction enjoining such breach and shall be entitled to recover its costs and expenses, including, but not limited to, reasonable attorney's fees in the enforcement or defense of the restrictions or any of them.

Being parcels 2 and 3 in the deed of Oldcastle Materials, Inc. to Pike Industries, Inc. dated March 20, 2002, and recorded in the Cumberland County Registry of Deeds in Book 17835, Page 301.

IN WITNESS WHEREOF, the Grantor has caused this instrument to be signed and sealed this 28th day of February, 2012.

WITNESS:

PIKE INDUSTRIES, INC.

By: Brian J. Donovan
Print/type name: Brian J. Donovan
Its: Authorized Agent

MAINE REAL ESTATE TAX PAID

STATE OF MAINE
CUMBERLAND, ss.

February 28, 2012

Then personally appeared the above named Brian J. Donovan, its Authorized Agent, of Pike Industries, Inc. who acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said Pike Industries, Inc.

Before me,

Peter J. Van Hemel
~~Notary Public~~ / Maine Attorney-at-Law
Name Printed: Peter J. Van Hemel
My Commission Expires: _____

H:\DOCS\RATTEY\PIKE\UNE 39662\MSFWDEED3.DOC

EXHIBIT A

TRACT 1

A certain lot or parcel of land in the Morrill's Corner region of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Commencing at a point or stake standing on the old southerly line of the Portland & Rochester Railroad, now the Portland Terminal Company, and at a point where the same intersects with land formerly of Franklin M. Purington,

THENCE South $65 \frac{3}{4}^{\circ}$ West 108 Rods 15 Links, more or less, to land now owned by the City of Portland;

THENCE North $24 \frac{1}{4}^{\circ}$ West 5 Rods 16 Links, more or less, to a stake;

THENCE South $65 \frac{3}{4}^{\circ}$ West 34 Rods 9 Links, more or less, to a stake standing on land owned by said City;

THENCE North 11° West 11 Rods 7 Links, more or less, to a stake, standing on land formerly owned by Hiram Sawyer;

THENCE North $61 \frac{1}{2}^{\circ}$ East 107 Rods, more or less, to line of said location of Portland & Rochester Railroad;

THENCE by the line of said Railroad on its southerly side as aforesaid $83 \frac{1}{4}^{\circ}$ East 38 $\frac{1}{2}$ Rods, more or less, to the place of beginning.

EXCEPTING from the above described premises, the premises conveyed by Adam W. Wilson to City of Portland by deed dated March 25, 1889, and recorded in the Cumberland County Registry of Deeds in Book 556, Page 132; and the premises conveyed by Adam W. Wilson to Boston & Maine Railroad by deed dated April 4, 1907, and recorded in said Registry in Book 803, Page 232, and by deed dated August 5, 1910, and recorded in said Registry in Book 863, Page 137.

TRACT II

Another certain lot or parcel of land situated near Morrill's Corner in that part of Portland that was formerly Deering, in the County of Cumberland and State of Maine, lying adjacent to and lying northwesterly of the above described premises, being bounded and described as follows:

Beginning at the northwesterly corner of land formerly of one Smith, on the southerly side of land formerly of Portland & Rochester Railroad, now the Portland Terminal Company, and running South 62° West 106 Rods to land of Portland Cemetery;

THENCE northwesterly by said Cemetery lot 30 Rods to the Old Kenney lot;

THENCE North 52 1/2° East by said Kenney's lot 49 Rods 2 Links to the Portland Terminal Company railroad land, formerly of the Portland & Rochester Railroad;

THENCE southeasterly by said Portland Terminal Company location 70 Rods to the first mentioned bounds or place of beginning.

EXCEPTING, however, from the above described premises two certain pieces or parcels of land, that first being 200 feet in length by 28 feet in width and lying parallel with the above-mentioned railroad, said parcel being conveyed by F.O.J. Bodge to Boston & Maine Railroad by warranty deed November 20, 1907, and recorded in the Cumberland County Registry of Deeds in Book 817, Page 29; and the second being a strip along a portion of the southeasterly and southwesterly side thereof, being conveyed by Lewis Lumber Co. to Central Maine Power Company by deed dated November 23, 1951, and recorded in said Registry in Book 2067, Page 107.

Both tracts are conveyed subject to the rights acquired for a sewer by the City of Portland by taking dated May 26, 1944, and recorded in the office of the City Clerk of the City of Portland, Maine, in Vol. 66, Page 263.

Also excepting the land described in the deed from Tilcon Minerals, Inc. to the City of Portland dated November 22, 1996, recorded in the Cumberland County Registry of Deeds in Book 12886, Page 212.

The premises are conveyed subject to the following rights and easements:

1. Rights and easements granted by Warren Bros. Roads Co. to Central Maine Power Company by instrument dated June 19, 1952, and recorded in the Cumberland County Registry of Deeds in Book 2097, Page 221.
2. Rights and easements granted by Warren Brothers Roads Company to Central Maine Power Company and New England Telephone and Telegraph Company by instrument dated January 27, 1967, and recorded in the Cumberland County Registry of Deeds in Book 2996, Page 102.
3. Rights and easements granted by Warren Brothers Co. to Portland Water District by instrument dated December 15, 1977, and recorded in the Cumberland County Registry of Deeds in Book 4150, Page 72.
4. Rights and easements granted by Warren Bros., a Div. of Ashland-Warren Inc. to Central Maine Power Company and New England Telephone and Telegraph Company by instrument dated January 31, 1978, and recorded in the Cumberland County Registry of Deeds in Book 4239, Page 326.
5. Rights and easements granted by Tilcon Minerals, Inc. to the City of Portland by deed dated November 22, 1996, and recorded in the Cumberland County Registry of Deeds in Book 12886, Page 214.

6. Rights and easements granted by Lewis Lumber Company to Central Maine Power Company by instrument dated November 23, 1951, and recorded in the Cumberland County Registry of Deeds in Book 2067, Page 106.
7. Rights, easements, and exceptions set forth in deed from Rosa Lewis to Warren Brothers Roads Company dated May 26, 1962, recorded in said Registry of Deeds in Book 2676, Page 74.

H:\DOCS\RATTEY\Pike\UNE 39662\EXHIBIT A.docx

Received
Recorded Register of Deeds
Mar 02, 2012 11:36:47A
Cumberland County
Pamela E. Lovley



ZONING ANALYSIS Relevant Zone(s) IH, IM, R3

All Projects:

	Required	Proposed
Lot Size	6500 SF	836,442 SF
Area Per Dwelling Unit	NA	NA
Minimum Street Frontage	60	433
Front Yard Minimum	NA	NA
Front Yard Maximum	NA	NA
Rear Yard	NA	NA
Yard Right	NA	NA
Yard Left	NA	NA
Side Street Setback	NA	NA
Step Back	NA	NA
Maximum Lot Coverage	NA	NA
Minimum Lot Coverage	NA	NA
Maximum Height	75 FT	20 FT
Open Space	NA	NA
Maximum Impervious Area	75%	46%
Pavement Setback	10 FT	10 FT
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):			



Office of Finance and Administration

Biddeford Campus
11 Hills Beach Road
Biddeford, ME 04005
U.S.A.
(207) 283-0171

Portland Campus
716 Stevens Avenue
Portland, ME 04103
U.S.A.
(207) 797-7261

www.une.edu

January 17, 2023

City of Portland
Planning Board
389 Congress St.
Portland, ME 04101

Dear Planning Board Members,

Please accept this letter as assurance that the University of New England (UNE) has the financial capacity to construct, equip, and operate the proposed Harold and Bibby Alfond Center for Health Sciences and the Bishop Street Intermodal Transportation Facility.

From 2017 to 2022, UNE has experienced a total positive change in net assets of \$197 million. These surpluses have improved upon the University's liquidity position and overall financial capacity. Total net assets during the same period increased from \$280 million to over \$477 million. This demonstrates UNE's continued commitment to sound management practices and financial sustainability.

To date, UNE has raised over \$39 million to construct and equip the proposed Harold and Bibby Alfond Center for Health Sciences. These fundraising efforts are continuing. Additionally, UNE holds A-level credit ratings from Moody's Investor Services and Fitch Ratings which has provided access to capital markets for project financing. The University issued the UNE Series 2021AB Revenue Bonds in December 2021 which included \$50 million dedicated to the design and construction of the Harold and Bibby Alfond Center for Health Sciences. Long range financial planning and cash flow ~~pro~~jections provide further confirmation that the University can readily afford the construction and future direct and indirect operating costs of the proposed project.

Taking into consideration the funds raised, \$50 million of debt financing secured, and financial strength of the University, management is confident it has sufficient resources to complete the project.

Respectfully submitted,

Philip Shapiro
Interim Senior Vice President for Finance and Administration
University of New England

Technical Ability

UNE has completed numerous projects on the campus in recent years, including:

- College of Pharmacy
- Innovation Hall
- Oral Health Center

UNE has retained a qualified team to permit, design, and construct the project, including:

Civil Engineer, Permitting & Survey

Site Design Associates
23 Whitney Way
Topsham, Maine 04086

Construction Manager

Ledgewood
27 Main St
South Portland, ME 04106

Applicable Site Plan Standards

University of New England (UNE) is planning on the reconstruction of the existing Intermodal Transportation Facility and parking 160-172 Bishop Street. The existing facility provides parking for students, faculty, and guests, with a regular shuttle service to the main campus, and it will continue to serve the same purpose subsequent to the reconstruction. The goals of the reconstruction project include increase safety through the installation of call boxes and cameras, enhanced circulation, installation of modern and ordinance compliant lighting, and elimination of trip hazards.

Sustainability and environmental stewardship are highly valued by UNE. The reconstruction will result in the removal of 96,940 sf (2.23 acres) of impervious surface, the construction of stormwater quality enhancement facilities meeting current standards, the installation of EV charging stations, and installation of a significant amount of landscaping and green space.

Section 14.6 of the Land Use Ordinance outlines the standards for Site Plan Approval. The following discussion documents compliance with the applicable standards.

14.6.1.A. Impact on Surrounding Street Systems. – No impact anticipated since there is no increase in enrollment associated with this project.

14.6.1.B. Access and Circulation. As presented at the pre-application meeting, the site will continue to be accessed via Bishop Street. A defined access drive will be constructed from Bishop Street into the facility. Access aisles will be defined with landscaped islands. An existing curb cut onto Bishop Street will be closed and a sidewalk constructed.

The new parking lot will have a total of 344 spaces, with 72 EV charging stations, and 10 accessible spaces. Details and cross sections for this work are included in the drawings.

14.6.1.C. Public Transit Access – By its very nature, the Intermodal facility is a parking and transit facility to be utilized by UNE students, faculty, and guests. There are currently public transit facilities on the main campus.

14.6.1.D. Parking – Parking spaces and aisles will be reconstructed to align with the applicable dimensional standards of the city. Bicycle parking is not provided, because it is available on the main campus.

The facility design provides eight dual-port, Level 2 (208V, 40A-60A) and 64 dedicated duplex receptacles for connection of Level 1 (120V, 12A) EV car charges. Duplex receptacles will be mounted to lighting fixtures throughout the parking lot to allow for distributed charging. Between Level 1 and Level 2 charging stations, a total of seventy-two parking spaces have EV charging capabilities.

Snow storage will be as noted on the drawings, and will be removed from the site if necessary.

14.6.1.E. Transportation Demand Management – This was addressed in the previous application for the College of Osteopathic Medicine and the conclusions will not be impacted by the proposed reconstruction of the Intermodal Transportation Facility.

14.6.2.A. Preservation of Significant Natural Features – The project is generally located in a currently developed area. There will be no freshwater wetlands impacted by the project.

14.6.2.B. Landscape Preservation – No significant trees will be removed to construct the project. The project when complete will result in significant reestablishment of vegetated areas which are currently compacted gravel and impervious surfaces. The impervious area on the site will be reduced by over 96,000 sf.

An erosion and sedimentation control plan has been developed which will minimize both sedimentation and runoff.

14.6.2.C. Site Landscaping and Buffers – Street trees were previously planted along Bishop Street as a result of the original approval of the Intermodal Transportation Facility in 2012. Significant landscaping of currently impervious areas is proposed. There are no loading and service areas. The project provides landscaping in excess of the code requirements. See the Landscape Plan.

14.6.2.D. Water Quality, Stormwater Management, and Erosion Control – See the Stormwater Management Plan.

14.6.3.A. Consistency with City Master Plans – We are unaware of any conflicts with city council approved master plans.

This project is in basic harmony with the City's Comprehensive Plan and the City's goals and policies expressed in that plan. UNE has been able to incorporate the City's Comprehensive Plan goals and policies while at the same time supporting the University's priorities for growth and for improving the quality of the education it provides to Portland's residents and the local region. The City's Comprehensive Plan for institutional growth has been put in place to "ensure that the growth of Portland's educational, medical and cultural institutions is integrated into Portland's urban fabric through the use of high-quality design, management of impacts, community partnerships, and innovative planning" (Comprehensive Plan, p.45). UNE has fully embraced this statement and has assimilated this vision into its development plans.

UNE has discussed its key institutional needs -- to upgrade and grow its programs on the Portland campus to support the continued requirements of the University to provide state of the art post-secondary and graduate studies in fields such as healthcare, dentistry and pharmacy to name a few. All of these programs have and will continue to support the growing need to deliver public services to the people of northern New England and in particular the City of Portland along with providing highly trained professionals to the local workforce. The City of Portland's 2030 Comprehensive Plan "promotes the orderly expansion of institutional uses, such as educational and hospital campuses, which are central to workforce development, employment, and the health of the local and regional economies" (City of Portland's Comprehensive Plan, p.45)

14.6.3.B. Public Safety and Fire Prevention – In regards to Crime Prevention Through Environmental Design (CPTED), UNE aims to create a safe environment for all in and around its campus. UNE's Campus Safety and Security Department monitors UNE's campuses through in-person patrols and CCTV cameras and provides response to any situations that may arise, 24 hours a day/7 days a week.

UNE has currently incorporated some or all of the following design strategies on its Portland campus that have been demonstrated to deter criminal activity. It is the intent to continue to integrate these strategies on future developments on the campus:

- Providing a clean and aesthetically pleasing campus environment that is designed with vandal-resistant materials
- Providing clear and properly-sized signs in safe locations to ensure safe wayfinding
- Ensuring that paths from transit stops, bike storage areas, and parking areas to main pedestrian entrances are well-lit, with clear sight lines
- Designing street-level elevations and landscaping areas to minimize potential hideouts
- Call boxes with blue lights for easy identification
- Installation of CCTV to monitor remote areas
- Insure adequate lighting levels on walkways, parking lots and roadways.

UNE's Campus Safety and Security Department provides a yearly Clery Report that reports the past year's offense/crime statistics on each of its campuses. Over the past 3 years there have been no events reported related to issues stemming from CPTED deficiencies on the Portland campus. The University feels that active CPTED during the planning of projects has contributed to this.

14.6.3.C. Public Utilities – There will be no public utilities impacted by the reconstruction of the Intermodal Transportation Facility.

14.6.4.A. Massing, Ventilation and Wind Impact – Not applicable.

14.6.4.B. Shadow – Not applicable.

14.6.4.C. Snow and Ice Loading – Not applicable.

14.6.4.D. View Corridors – Not applicable.

14.6.4.E. Historic Resources – Not applicable. Proposed work is not within 100 feet of a City of Portland identified Historic District.

No known archaeological resources have been identified within the limit work. If any such resource is discovered during construction, it will be documented and protected according to the City of Portland's Land Use Ordinance. The City of Portland's Historic Preservation Program and Maine Historic Preservation Commission will be notified if any discovery of such a resource is uncovered.

14.6.4.F. Exterior Lighting – The photometric plan is attached.

Exterior Lighting and Controls:

All new fixtures will utilize LED technology with a color temperature of 4000K and will be full-cutoff type as defined by Illuminating Engineering Society of North America (IESNA), in order to minimize light pollution into the night sky.

While it is understood that the City of Portland requires the use of 3000K color temperature in all exterior fixtures, outdoor lighting, specifically in locations such as college campus parking lots where both vehicular-pedestrian traffic and security are of the utmost concern, is traditionally designed with a color temperature of 4000K-5000K. The higher CCT produces an increased amount of lighting in the blue wavelength range as opposed to the yellow light emitted from a 3000K light source; this leads to an increase in the alertness and visual acuity of the area's occupants, enhancing both the safety and security of the space. IESNA's RP-20 *Lighting for Parking Facilities* agree with the recommendation of using higher CCT, cooler lighting sources for alertness, safer vehicular traffic, and security in parking environments. A waiver from the city standard is requested, and was granted by staff for two recent UNE projects.

14.6.4.G. Noise and Vibration – Not applicable.

14.6.4.H. Signage and Wayfinding – All proposed signage will be provided by the Owner and will be consistent with previously approved University of New England and City of Portland design standards and guidelines.

14.6.4.I. Design Standards – Not applicable.

Waiver Request**Standard to be waived:**

Technical Manual Section 12.3.5, General Standards – Luminaire Types

All fixtures must be LED and shall not exceed 3000K Correlated Color Temperature (CCT). Screw in light fixtures must have LED lamps specified to be maximum of 3000K CCT.

Waiver sought and justification:

The 3000 CCT that is currently the Portland standard, will provide a very warm color with a large amount of yellow light emitted from the light fixtures. This CCT is generally used in homes, guest rooms of hotels, hotel lobbies dining areas, etc. where you want to create a warm and calming atmosphere. This CCT will also not provide accurate viewing of any of the primary colors. For example; a red car being lit with 3000 CCT will appear gray, and a blue shirt being viewed under 3000 CCT will appear black. Color distinction is very difficult.

Outdoor lighting, specifically in locations such as college campus parking lots where both vehicular-pedestrian traffic and security are of the utmost concern, is traditionally designed with a color temperature of 4000K-5000K. The higher CCT produces an increased amount of lighting in the blue wavelength range as opposed to the yellow light emitted from a 3000K light source. This leads to an increase in the alertness and visual acuity of the area's occupants, enhancing both the safety and security of the space. IESNA's RP-20 *Lighting for Parking Facilities* agree with the recommendation of using higher CCT, cooler lighting sources for alertness, safer vehicular traffic, and security in parking environments. A waiver from the city standard is requested, and was granted by staff for two recent UNE projects.

STORMWATER MANAGEMENT REPORT

RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING

160-172 Bishop Street, Portland, Maine

January 20, 2023

Introduction

Site Design Associates (SDA) was retained to assist the University of New England (UNE) (Applicant) in the design and permitting for the reconstruction of the intermodal transportation facility and parking at 160-172 Bishop Street in Portland, Maine. The proposed project includes the redevelopment of approximately $6.1\pm$ acres of the existing parking lot and shuttle stop at the UNE Intermodal Transportation Facility, and the associated access drive, landscaping, and stormwater amenities.

This Stormwater Management Report assesses both pre-development and post-development peak runoff rates and stormwater treatment practices for the redevelopment area in accordance with the City of Portland land use code.

Methodology

The stormwater runoff analysis has been undertaken utilizing the HydroCAD Stormwater Modeling System software (Version 10.0) developed by the Applied Microcomputer Systems of Chocorua, New Hampshire. The program is based upon the TR-20 computer program and the TR-55 tabular method, both of which are based upon techniques developed by the USDA Soil Conservation Service. The analysis was undertaken for the 2, 10, and 25-year frequencies (3.1, 4.6, and 5.8 inches, respectively). Twenty-four hour storms with a Type III distribution were the basis for the analysis.

All storm drainage piping and stormwater treatment BMPs have been sized for the 25-year, 24-hour storm utilizing the HydroCAD program. Copies of the pre and post development HydroCAD output are included in the Appendix A and Appendix B of this report, respectively.

Pre-Development Conditions

The site of the proposed project is located on $6.1\pm$ acres of the existing parking lot and shuttle stop at the Intermodal Facility accessed from Bishop Street. The area is entirely developed with an access drive, parking lot, shuttle bus stop, and two existing buildings. As taken from the website of the “*Natural Resources Conservation Service, United States Department of Agriculture, Web Soil Survey*,” the predominant soil types in the redevelopment area are Scantic silt loam (Sn) (HSG D), Buxton silt loam (Bu) (HSG C/D), and Lyman-Tunbridge complex (Hr) (HSG D). The USDA soil map is included in Appendix D of this report. The soil boundaries are shown on drawings D1.0 Pre-development Drainage Plan and D2.0 Post-development Drainage Plan in Appendix F of this report.

Most of the existing parking lot (SC8.0) drains overland to the offsite wetland to the southwest (Analysis Point AP8). A small section of the eastern portion of the parking lot (SC7.1) drains into the abutting wetland (SC7.0) on the abutting UNE property. Runoff from SC7.0 and SC7.1 flow through a stream (Reach R7.1) to AP8.

Stormwater peak runoff flow rates from the site for the 2, 10, and 25-year storm events were analyzed at analysis point AP8 and are summarized in Table 1 in the Stormwater Quantity section of this report. Pre-development HydroCAD calculations are included in Appendix A. Sheet D1.0 – Pre Development Drainage Plan is included in Appendix F.

Post-Development Conditions

The proposed project includes the redevelopment of approximately 6.9± acres of the existing Intermodal Transportation Facility for the reconstruction of 344 parking spaces, a new shuttle loop, and associated utilities, stormwater and landscaping amenities. The redevelopment will result in a 96,942 square foot (2.23 acre) net reduction in impervious area from the existing condition.

Stormwater will generally be collected in multiple catch basin and storm drain systems throughout the site. Runoff from the easterly 2/3 of the redeveloped site will be directed to two grassed underdrained soil filters to provide stormwater treatment and detention prior to outletting.

Post-development stormwater peak runoff flow rates for the 2, 10, and 25-year storm events at each of the analysis points are summarized in Table 1 in the Stormwater Quantity section of this report

Stormwater Quantity

The overall stormwater runoff volume from the redevelopment site is significantly reduced due to the reduction of 96,942 square feet of impervious area. Additional stormwater detention is provided within the two grassed underdrained soil filters that will treat stormwater runoff from approximately 2/3 of the redeveloped area.

Stormwater runoff peak flow rates for the 2, 10, and 25-year storm events were analyzed at the analysis point for both the pre and post development conditions to verify that the peak flow rates are maintained or reduced in the post development condition. Table 1 below summarizes the peak flow rates at the analysis point.

Table 1			
Pre and Post Development Peak Runoff Rates (cfs)			
Storm Frequency	2-Year	10-Year	25-Year
AP8			
Pre-Development	22.6	36.2	47.3
Post-Development	11.4	29.6	41.8

As shown in the Table 1, the peak runoff rate at the analysis point under the post-development conditions are below the peak pre-development runoff rates for the 2, 10, and 25-year storm events. Based on this analysis, we do not anticipate any adverse impact on downgradient drainage systems due to the proposed development.

Redevelopment and Stormwater Quality

This project consists of the redevelopment of 6.1 acres of the existing developed Intermodal Transportation Facility. Therefore, the City of Portland Redevelopment Standard is applicable to this project.

The existing impervious area within the redevelopment window is 253,912 square feet. The proposed impervious area within the redevelopment window is 156,970 square feet, which results in a reduction of 96,942 square feet of impervious area in the redeveloped condition. See Sheets I1.0 – Pre Development Impervious Area Plan and I2.0 – Post Development Impervious Area Plan in Appendix F for the redevelopment impervious area calculations.

Pollutant loading calculations have been performed for the pre and post development conditions within the redevelopment window in accordance with Maine DEP Chapter 500 methodology for redevelopment projects. The total impervious area will be significantly reduced, therefore, the Ranked Impact Change (RIC) from the pre to post development condition is -1.22, which would typically mean that stormwater treatment is not required because the RIC is less than 0.0. However, since more than 5,000 square feet of non-roof impervious area will be reconstructed, the City of Portland requires that stormwater treatment is provided for a minimum of 50% of the total redeveloped impervious area. See Sheets R1.0 – Pre Development Pollutant Loading Plan and R2.0 – Post Development Pollutant Loading Plan in Appendix F for the redevelopment pollutant loading calculations.

Two grassed underdrained soil filters will be constructed to provide stormwater treatment at the site. The BMPs have been designed in accordance with the City of Portland and Maine DEP Chapter 500 rules. The soil filters will collect stormwater runoff from the eastern portion of the redeveloped area, which is the area of the site that will have the highest pollutant loading due to it having the most activity. The soil filters are sized to treat 1-inch over the contributing impervious area and 0.4 inches over the contributing landscaped area in accordance with the City of Portland and Maine DEP BMP regulations. The contributing areas to the stormwater filters are shown on Sheet D3.0 – Stormwater Treatment Plan in Appendix F.

The proposed stormwater management plan will collect and treat stormwater runoff from 101,665 square feet of impervious area, which results in treatment of 64.8% of the redeveloped impervious area. Stormwater treatment calculations are summarized below in Table 2.

Table 2 Water Quality Calculations										
Subcatchment Area	Impervious Area (SF)	Landscaped Area (SF)	Developed Area (SF)	Filter Area Required ¹ (SF)	Filter Area Provided (SF)	Water Quality Volume Required ² (CF)	Water Quality Volume Provided (CF)	Sediment Forebay Volume required ³ (CF)	Sediment Forebay Volume Provided (CF)	BMP
TREATED AREAS										
8.1	17,932	4,661	22,593	2953	2,993	4896	5,393	61	81	Soil Filter (SF3)
8.2	15,948	12,948	28,896							
8.3	13,690	1,133	14,823							
8.4	0	9,967	9,967							
8.5	27,395	2,137	29,532	2975	3,128	4936	5,486	69	203	Soil Filter (SF4)
8.6	16,962	1,722	18,684							
8.7	9,738	0	9,738							
8.8	0	9,646	9,646							
TOTAL TREATED	101,665	42,214	143,879							
TOTAL REDEVELOPED IMPERVIOUS AREA	156,970									
PERCENT REDEVELOPED IMPERVIOUS AREA TREATED	64.8%									
Notes:										
1. Filter area required is calculated at 5% of contributing impervious area and 2% of contributing landscaped area.										
2. Water quality volume required is calculated as 1" over the contributing impervious area plus 0.4" over the contributing landscaped area										
3. Sediment Volume Required is calculated as Sanded Area (acres) x 500lbs/acre x 90 lbs/CF x 10 storms/year.										
4. See Sheet I2.0 for Total Redeveloped Impervious Area.										

Urban Impaired Stream Standard

The project is located within the Capisic Brook Urban Impaired Stream (UIS) watershed, as identified by the Maine DEP. Since the project results in a net reduction of 96,942 square feet of impervious area from the existing condition, the UIS Standard is not applicable to this project. However, the proposed design achieves significant UIS mitigation credits due to the reduction of impervious area and treatment of redeveloped impervious and landscaped areas. Since there may be future redevelopment and/or expansions on the UNE campus, it is important to track these mitigation credits and bank them for use on future development within the UIS watershed.

Table 3 below summarizes the UIS mitigation credits achieved for this project based on treatment and elimination of source areas per Maine DEP Chapter 501 standards.

Table 3 Urban Impaired Stream Mitigation Credits Achieved					
Mitigation Activity	Development Type	Area (SF)	Area (AC)	Credit Per Acre	Credit Earned
Retrofit with General Standards at Required Size*	Medium Use Parking Lot	92,698	2.13	1.2	2.55
	Roof or Other Impervious Areas	8,967	0.21	0.6	0.12
	Landscaped Areas	42,215	0.97	0.3	0.29
Eliminate Impervious Source Area, Replace with Landscaped Area	Medium Use Parking Lot	96,142	2.21	0.7	1.54
	Roof or Other Impervious Areas	800	0.02	0.2	0.00
Cumulative UIS Mitigation Credits Achieved for Parking Improvements Project and Banked for Future Development					4.52
Previous UIS Mitigation Credits Achieved from CFHS Project and Banked for Future Development					2.78
Total Campus UIS Mitigation Credit Achieved and Banked for Future Development					7.30

*Areas treated in grassed underdrained soil filters SF3 and SF4.

As indicated in Table 3 above, the project has achieved 4.52 UIS mitigation credits. The table also shows the 2.78 previously achieved UIS credits from the recently permitted Center for Health Sciences Project. From both projects, there is a total campus credit of 7.30 that will be banked for potential future development projects onsite.

Erosion Control

BMPs such as a stabilized construction entrance, silt fence and/or filter berms of erosion control mix, riprap pipe inlet and outlet protection, turf reinforcement matting, mulch, and permanent seeding will be used to prevent erosion and downstream migration of sediment during construction. The locations of temporary and permanent erosion control measures and erosion and sedimentation control notes and details are shown on the design drawing set.

Inspection & Maintenance

The University of New England will be responsible for maintaining the stormwater facilities for the project. An Inspection and Maintenance Plan is included as Appendix D. The plan includes a draft of a Stormwater Drainage System Maintenance Agreement, to be finalized and recorded as a condition of approval.

Conclusions

The stormwater management for this project includes a variety of BMPs to control both the quantity and quality of stormwater runoff. The HydroCAD calculations show that the peak runoff rates at the analysis points under post-development conditions are estimated to be equal to or less than the peak pre-development runoff rates for the 2, 10, and 25-year storm events. This meets the stormwater quantity requirements of the City of Portland ordinance. Stormwater treatment BMPs have been designed to treat stormwater runoff from more than 50% of the redeveloped impervious area in compliance with the City of Portland ordinance. Based on the information provided, no adverse impacts to downstream receiving bodies are anticipated.



SUPPORTING DATA AND CALCULATIONS

The following material presents calculations and copies of source material used during the analysis for this study.

Appendix A: Pre-Development HydroCAD Calculations

Appendix B: Post-Development HydroCAD Calculations

Appendix C: Stormwater BMP Spillway Calculations

Appendix D: Inspection & Maintenance Plan & City of Portland Maintenance Agreement

Appendix E: USDA NRCS Soil Map

Appendix F: Drainage Plans

I1.0 – Pre Development Impervious Area Plan

I2.0 – Post Development Impervious Area Plan

R1.0 – Pre Development Pollutant Loading Plan

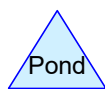
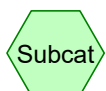
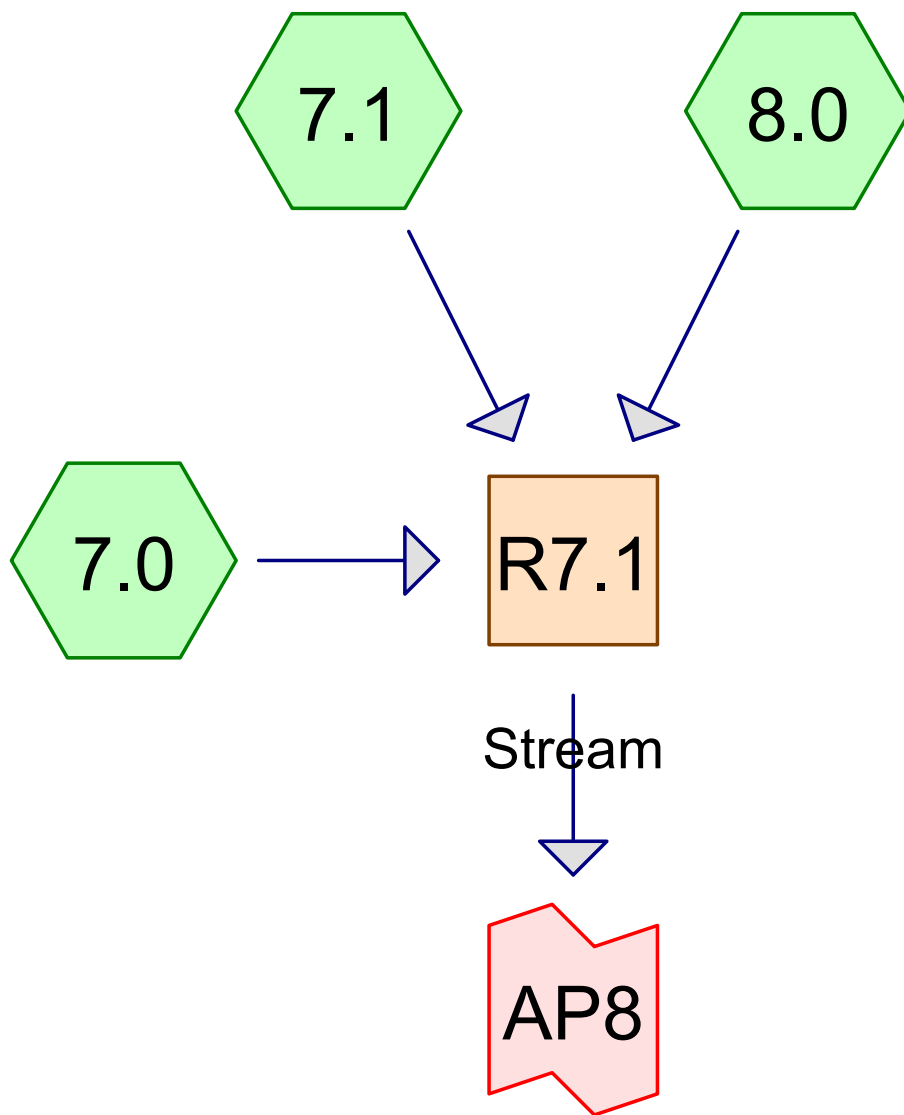
R2.0 – Post Development Pollutant Loading Plan

D1.0 – Pre Development Drainage Plan

D2.0 – Post Development Drainage Plan

D3.0 – Stormwater Treatment Plan

Appendix A:
Pre-Development HydroCAD Calculations



Routing Diagram for Pre-Development_PARK
Prepared by Site Design Associates, Printed 12/15/2022
HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Pre-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 2

Time span=0.00-24.00 hrs, dt=0.02 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

Subcatchment 7.0:Runoff Area=332,135 sf 2.58% Impervious Runoff Depth>1.07"
Flow Length=270' Tc=49.4 min CN=76 Runoff=4.07 cfs 0.679 af**Subcatchment 7.1:**Runoff Area=23,135 sf 59.74% Impervious Runoff Depth>1.99"
Tc=5.0 min CN=89 Runoff=1.27 cfs 0.088 af**Subcatchment 8.0:**Runoff Area=336,062 sf 87.02% Impervious Runoff Depth>2.55"
Tc=5.0 min CN=95 Runoff=22.54 cfs 1.636 af**Reach R7.1: Stream**Avg. Flow Depth=1.14' Max Vel=4.77 fps Inflow=24.44 cfs 2.403 af
n=0.025 L=860.0' S=0.0093 ' Capacity=63.12 cfs Outflow=22.58 cfs 2.397 af**Link AP8:**Inflow=22.58 cfs 2.397 af
Primary=22.58 cfs 2.397 af**Total Runoff Area = 15.871 ac Runoff Volume = 2.403 af Average Runoff Depth = 1.82"**
54.46% Pervious = 8.643 ac 45.54% Impervious = 7.228 ac

Pre-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 3

Summary for Subcatchment 7.0:

Runoff = 4.07 cfs @ 12.72 hrs, Volume= 0.679 af, Depth> 1.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

Area (sf)	CN	Description
* 8,574	98	Impervious
1,029	74	>75% Grass cover, Good, HSG C
19,605	65	Brush, Good, HSG C
48,667	73	Brush, Good, HSG D
1,406	70	Woods, Good, HSG C
252,854	77	Woods, Good, HSG D
332,135	76	Weighted Average
323,561		97.42% Pervious Area
8,574		2.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
46.6	150	0.0270	0.05		Sheet Flow, AB
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.8	120	0.0800	0.71		Shallow Concentrated Flow, BC
					Forest w/Heavy Litter Kv= 2.5 fps
49.4	270	Total			

Summary for Subcatchment 7.1:

Runoff = 1.27 cfs @ 12.07 hrs, Volume= 0.088 af, Depth> 1.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

Area (sf)	CN	Description
* 13,822	98	Impervious
5,192	74	>75% Grass cover, Good, HSG C
4,121	80	>75% Grass cover, Good, HSG D
23,135	89	Weighted Average
9,313		40.26% Pervious Area
13,822		59.74% Impervious Area

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

Summary for Subcatchment 8.0:

Runoff = 22.54 cfs @ 12.07 hrs, Volume= 1.636 af, Depth> 2.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

Pre-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 4

	Area (sf)	CN	Description
*	292,441	98	Impervious
	8,405	74	>75% Grass cover, Good, HSG C
	8,516	80	>75% Grass cover, Good, HSG D
	26,700	70	Woods, Good, HSG C
	336,062	95	Weighted Average
	43,621		12.98% Pervious Area
	292,441		87.02% Impervious Area

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

Summary for Reach R7.1: Stream

Inflow Area = 15.871 ac, 45.54% Impervious, Inflow Depth > 1.82" for 2-Yr Storm event
 Inflow = 24.44 cfs @ 12.07 hrs, Volume= 2.403 af
 Outflow = 22.58 cfs @ 12.11 hrs, Volume= 2.397 af, Atten= 8%, Lag= 2.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Max. Velocity= 4.77 fps, Min. Travel Time= 3.0 min

Avg. Velocity= 1.57 fps, Avg. Travel Time= 9.1 min

Peak Storage= 4,069 cf @ 12.11 hrs

Average Depth at Peak Storage= 1.14'

Bank-Full Depth= 2.00' Flow Area= 10.0 sf, Capacity= 63.12 cfs

3.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding

Side Slope Z-value= 1.0 '/' Top Width= 7.00'

Length= 860.0' Slope= 0.0093 '/'

Inlet Invert= 76.00', Outlet Invert= 68.00'

**Summary for Link AP8:**

Inflow Area = 15.871 ac, 45.54% Impervious, Inflow Depth > 1.81" for 2-Yr Storm event
 Inflow = 22.58 cfs @ 12.11 hrs, Volume= 2.397 af
 Primary = 22.58 cfs @ 12.11 hrs, Volume= 2.397 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Pre-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 5

Time span=0.00-24.00 hrs, dt=0.02 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

Subcatchment 7.0:Runoff Area=332,135 sf 2.58% Impervious Runoff Depth>2.18"
Flow Length=270' Tc=49.4 min CN=76 Runoff=8.66 cfs 1.388 af**Subcatchment 7.1:**Runoff Area=23,135 sf 59.74% Impervious Runoff Depth>3.39"
Tc=5.0 min CN=89 Runoff=2.13 cfs 0.150 af**Subcatchment 8.0:**Runoff Area=336,062 sf 87.02% Impervious Runoff Depth>4.02"
Tc=5.0 min CN=95 Runoff=34.69 cfs 2.585 af**Reach R7.1: Stream**Avg. Flow Depth=1.48' Max Vel=5.44 fps Inflow=38.67 cfs 4.123 af
n=0.025 L=860.0' S=0.0093 ' ' Capacity=63.12 cfs Outflow=36.24 cfs 4.115 af**Link AP8:**Inflow=36.24 cfs 4.115 af
Primary=36.24 cfs 4.115 af**Total Runoff Area = 15.871 ac Runoff Volume = 4.123 af Average Runoff Depth = 3.12"**
54.46% Pervious = 8.643 ac 45.54% Impervious = 7.228 ac

Pre-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 6

Summary for Subcatchment 7.0:

Runoff = 8.66 cfs @ 12.68 hrs, Volume= 1.388 af, Depth> 2.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	8,574	98	Impervious
	1,029	74	>75% Grass cover, Good, HSG C
	19,605	65	Brush, Good, HSG C
	48,667	73	Brush, Good, HSG D
	1,406	70	Woods, Good, HSG C
	252,854	77	Woods, Good, HSG D
	332,135	76	Weighted Average
	323,561		97.42% Pervious Area
	8,574		2.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
46.6	150	0.0270	0.05		Sheet Flow, AB
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.8	120	0.0800	0.71		Shallow Concentrated Flow, BC
					Forest w/Heavy Litter Kv= 2.5 fps
49.4	270	Total			

Summary for Subcatchment 7.1:

Runoff = 2.13 cfs @ 12.07 hrs, Volume= 0.150 af, Depth> 3.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	13,822	98	Impervious
	5,192	74	>75% Grass cover, Good, HSG C
	4,121	80	>75% Grass cover, Good, HSG D
	23,135	89	Weighted Average
	9,313		40.26% Pervious Area
	13,822		59.74% Impervious Area

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

Summary for Subcatchment 8.0:

Runoff = 34.69 cfs @ 12.07 hrs, Volume= 2.585 af, Depth> 4.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

Pre-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 7

	Area (sf)	CN	Description
*	292,441	98	Impervious
	8,405	74	>75% Grass cover, Good, HSG C
	8,516	80	>75% Grass cover, Good, HSG D
	26,700	70	Woods, Good, HSG C
	336,062	95	Weighted Average
	43,621		12.98% Pervious Area
	292,441		87.02% Impervious Area

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

Summary for Reach R7.1: Stream

Inflow Area = 15.871 ac, 45.54% Impervious, Inflow Depth > 3.12" for 10-Yr Storm event
 Inflow = 38.67 cfs @ 12.07 hrs, Volume= 4.123 af
 Outflow = 36.24 cfs @ 12.10 hrs, Volume= 4.115 af, Atten= 6%, Lag= 1.8 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Max. Velocity= 5.44 fps, Min. Travel Time= 2.6 min
 Avg. Velocity= 1.86 fps, Avg. Travel Time= 7.7 min

Peak Storage= 5,727 cf @ 12.10 hrs
 Average Depth at Peak Storage= 1.48'
 Bank-Full Depth= 2.00' Flow Area= 10.0 sf, Capacity= 63.12 cfs

3.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding
 Side Slope Z-value= 1.0 ' ' Top Width= 7.00'
 Length= 860.0' Slope= 0.0093 ' '
 Inlet Invert= 76.00', Outlet Invert= 68.00'

**Summary for Link AP8:**

Inflow Area = 15.871 ac, 45.54% Impervious, Inflow Depth > 3.11" for 10-Yr Storm event
 Inflow = 36.24 cfs @ 12.10 hrs, Volume= 4.115 af
 Primary = 36.24 cfs @ 12.10 hrs, Volume= 4.115 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Pre-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 8

Time span=0.00-24.00 hrs, dt=0.02 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

Subcatchment 7.0:

Runoff Area=332,135 sf 2.58% Impervious Runoff Depth>3.17"
Flow Length=270' Tc=49.4 min CN=76 Runoff=12.65 cfs 2.017 af

Subcatchment 7.1:

Runoff Area=23,135 sf 59.74% Impervious Runoff Depth>4.54"
Tc=5.0 min CN=89 Runoff=2.81 cfs 0.201 af

Subcatchment 8.0:

Runoff Area=336,062 sf 87.02% Impervious Runoff Depth>5.21"
Tc=5.0 min CN=95 Runoff=44.30 cfs 3.349 af

Reach R7.1: Stream

Avg. Flow Depth=1.72' Max Vel=5.85 fps Inflow=50.13 cfs 5.567 af
n=0.025 L=860.0' S=0.0093 '/' Capacity=63.12 cfs Outflow=47.31 cfs 5.558 af

Link AP8:

Inflow=47.31 cfs 5.558 af
Primary=47.31 cfs 5.558 af

Total Runoff Area = 15.871 ac Runoff Volume = 5.567 af Average Runoff Depth = 4.21"
54.46% Pervious = 8.643 ac 45.54% Impervious = 7.228 ac

Pre-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 9

Summary for Subcatchment 7.0:

Runoff = 12.65 cfs @ 12.68 hrs, Volume= 2.017 af, Depth> 3.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

Area (sf)	CN	Description
* 8,574	98	Impervious
1,029	74	>75% Grass cover, Good, HSG C
19,605	65	Brush, Good, HSG C
48,667	73	Brush, Good, HSG D
1,406	70	Woods, Good, HSG C
252,854	77	Woods, Good, HSG D
332,135	76	Weighted Average
323,561		97.42% Pervious Area
8,574		2.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
46.6	150	0.0270	0.05		Sheet Flow, AB
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.8	120	0.0800	0.71		Shallow Concentrated Flow, BC
					Forest w/Heavy Litter Kv= 2.5 fps
49.4	270	Total			

Summary for Subcatchment 7.1:

Runoff = 2.81 cfs @ 12.07 hrs, Volume= 0.201 af, Depth> 4.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

Area (sf)	CN	Description
* 13,822	98	Impervious
5,192	74	>75% Grass cover, Good, HSG C
4,121	80	>75% Grass cover, Good, HSG D
23,135	89	Weighted Average
9,313		40.26% Pervious Area
13,822		59.74% Impervious Area

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

Summary for Subcatchment 8.0:

Runoff = 44.30 cfs @ 12.07 hrs, Volume= 3.349 af, Depth> 5.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

Pre-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 10

	Area (sf)	CN	Description
*	292,441	98	Impervious
	8,405	74	>75% Grass cover, Good, HSG C
	8,516	80	>75% Grass cover, Good, HSG D
	26,700	70	Woods, Good, HSG C
	336,062	95	Weighted Average
	43,621		12.98% Pervious Area
	292,441		87.02% Impervious Area

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

Summary for Reach R7.1: Stream

Inflow Area = 15.871 ac, 45.54% Impervious, Inflow Depth > 4.21" for 25-Yr Storm event
 Inflow = 50.13 cfs @ 12.07 hrs, Volume= 5.567 af
 Outflow = 47.31 cfs @ 12.10 hrs, Volume= 5.558 af, Atten= 6%, Lag= 1.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Max. Velocity= 5.85 fps, Min. Travel Time= 2.5 min
 Avg. Velocity= 2.04 fps, Avg. Travel Time= 7.0 min

Peak Storage= 6,958 cf @ 12.10 hrs
 Average Depth at Peak Storage= 1.72'
 Bank-Full Depth= 2.00' Flow Area= 10.0 sf, Capacity= 63.12 cfs

3.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding
 Side Slope Z-value= 1.0 ' ' Top Width= 7.00'
 Length= 860.0' Slope= 0.0093 ' '
 Inlet Invert= 76.00', Outlet Invert= 68.00'

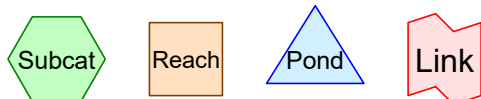
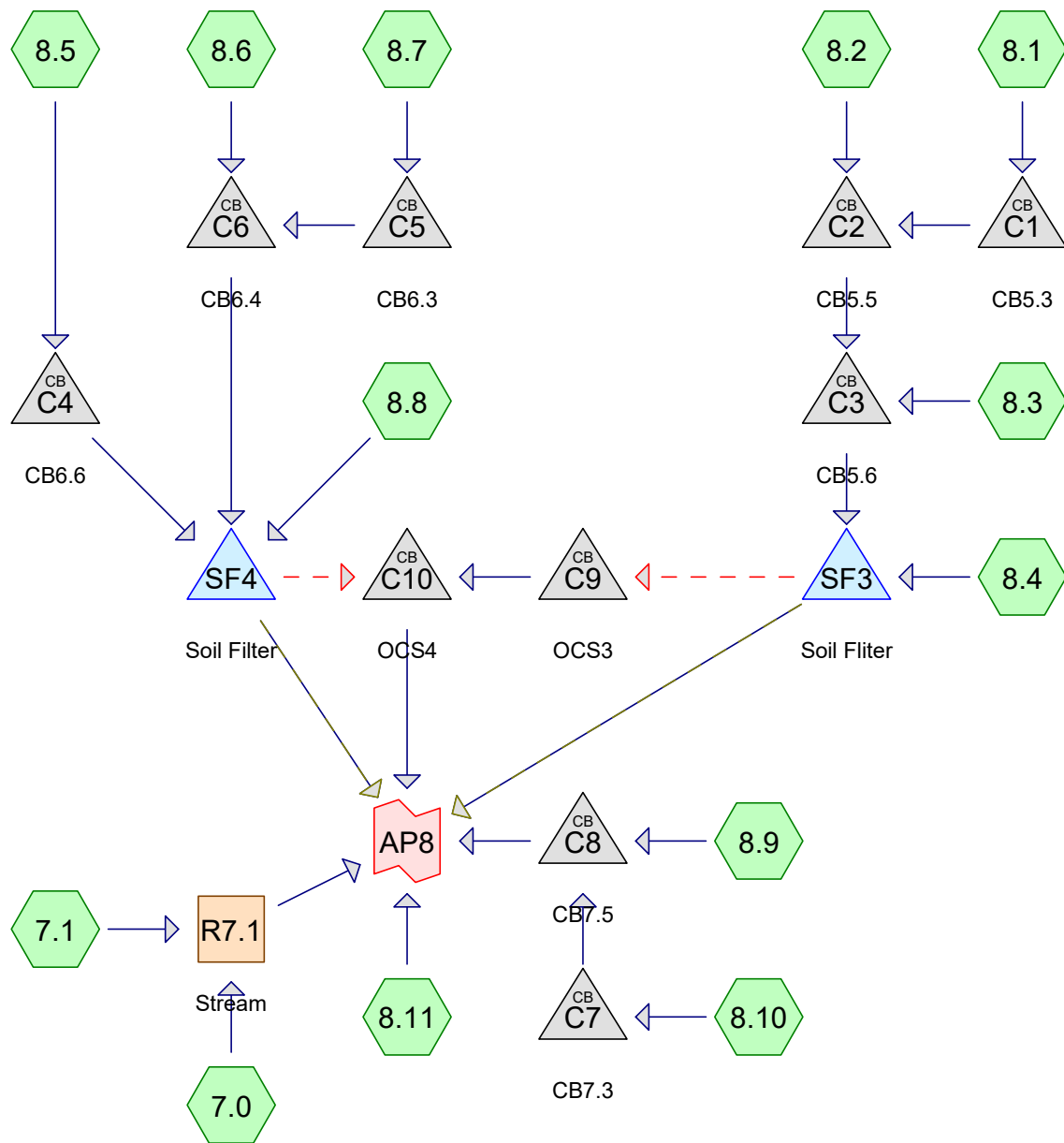
**Summary for Link AP8:**

Inflow Area = 15.871 ac, 45.54% Impervious, Inflow Depth > 4.20" for 25-Yr Storm event
 Inflow = 47.31 cfs @ 12.10 hrs, Volume= 5.558 af
 Primary = 47.31 cfs @ 12.10 hrs, Volume= 5.558 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Appendix B:

Post-Development HydroCAD Calculations



Routing Diagram for Post-Development_PARK
 Prepared by Site Design Associates, Printed 12/15/2022
 HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 2

Time span=0.00-24.00 hrs, dt=0.02 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

Subcatchment 7.0:	Runoff Area=332,135 sf 2.58% Impervious Runoff Depth>1.07" Flow Length=270' Tc=49.4 min CN=76 Runoff=4.07 cfs 0.679 af
Subcatchment 7.1:	Runoff Area=14,953 sf 2.15% Impervious Runoff Depth>1.26" Tc=5.0 min CN=79 Runoff=0.52 cfs 0.036 af
Subcatchment 8.1:	Runoff Area=22,593 sf 79.37% Impervious Runoff Depth>2.35" Tc=5.0 min CN=93 Runoff=1.43 cfs 0.101 af
Subcatchment 8.10:	Runoff Area=82,702 sf 61.99% Impervious Runoff Depth>1.91" Tc=5.0 min CN=88 Runoff=4.38 cfs 0.302 af
Subcatchment 8.11:	Runoff Area=73,887 sf 20.41% Impervious Runoff Depth>1.53" Tc=5.0 min CN=83 Runoff=3.13 cfs 0.216 af
Subcatchment 8.2:	Runoff Area=28,897 sf 55.19% Impervious Runoff Depth>1.99" Tc=5.0 min CN=89 Runoff=1.59 cfs 0.110 af
Subcatchment 8.3:	Runoff Area=14,823 sf 92.36% Impervious Runoff Depth>2.65" Tc=5.0 min CN=96 Runoff=1.02 cfs 0.075 af
Subcatchment 8.4:	Runoff Area=9,967 sf 0.00% Impervious Runoff Depth>1.32" Tc=5.0 min CN=80 Runoff=0.36 cfs 0.025 af
Subcatchment 8.5:	Runoff Area=29,532 sf 92.76% Impervious Runoff Depth>2.65" Tc=5.0 min CN=96 Runoff=2.03 cfs 0.150 af
Subcatchment 8.6:	Runoff Area=18,684 sf 90.78% Impervious Runoff Depth>2.65" Tc=5.0 min CN=96 Runoff=1.28 cfs 0.095 af
Subcatchment 8.7:	Runoff Area=9,738 sf 100.00% Impervious Runoff Depth>2.87" Tc=5.0 min CN=98 Runoff=0.69 cfs 0.053 af
Subcatchment 8.8:	Runoff Area=9,646 sf 0.00% Impervious Runoff Depth>1.32" Tc=5.0 min CN=80 Runoff=0.35 cfs 0.024 af
Subcatchment 8.9:	Runoff Area=43,780 sf 92.94% Impervious Runoff Depth>2.65" Tc=5.0 min CN=96 Runoff=3.01 cfs 0.222 af
Reach R7.1: Stream	Avg. Flow Depth=0.42' Max Vel=2.82 fps Inflow=4.14 cfs 0.715 af n=0.025 L=860.0' S=0.0093 '/' Capacity=63.12 cfs Outflow=4.10 cfs 0.711 af
Pond C1: CB5.3	Peak Elev=76.55' Inflow=1.43 cfs 0.101 af 12.0" Round Culvert n=0.013 L=80.0' S=0.0053 '/' Outflow=1.43 cfs 0.101 af
Pond C10: OCS4	Peak Elev=71.36' Inflow=2.59 cfs 0.201 af 24.0" Round Culvert n=0.013 L=63.0' S=0.0052 '/' Outflow=2.59 cfs 0.201 af
Pond C2: CB5.5	Peak Elev=75.99' Inflow=3.02 cfs 0.211 af 15.0" Round Culvert n=0.013 L=209.0' S=0.0051 '/' Outflow=3.02 cfs 0.211 af

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 3

Pond C3: CB5.6Peak Elev=74.95' Inflow=4.04 cfs 0.287 af
18.0" Round Culvert n=0.013 L=62.0' S=0.0052 '/ Outflow=4.04 cfs 0.287 af**Pond C4: CB6.6**Peak Elev=74.82' Inflow=2.03 cfs 0.150 af
12.0" Round Culvert n=0.013 L=74.0' S=0.0050 '/ Outflow=2.03 cfs 0.150 af**Pond C5: CB6.3**Peak Elev=75.60' Inflow=0.69 cfs 0.053 af
12.0" Round Culvert n=0.013 L=168.0' S=0.0083 '/ Outflow=0.69 cfs 0.053 af**Pond C6: CB6.4**Peak Elev=74.75' Inflow=1.98 cfs 0.148 af
12.0" Round Culvert n=0.013 L=78.0' S=0.0026 '/ Outflow=1.98 cfs 0.148 af**Pond C7: CB7.3**Peak Elev=74.87' Inflow=4.38 cfs 0.302 af
18.0" Round Culvert n=0.013 L=196.0' S=0.0130 '/ Outflow=4.38 cfs 0.302 af**Pond C8: CB7.5**Peak Elev=72.55' Inflow=7.38 cfs 0.523 af
24.0" Round Culvert n=0.013 L=96.0' S=0.0083 '/ Outflow=7.38 cfs 0.523 af**Pond C9: OCS3**Peak Elev=71.67' Inflow=1.23 cfs 0.100 af
18.0" Round Culvert n=0.013 L=77.0' S=0.0053 '/ Outflow=1.23 cfs 0.100 af**Pond SF3: Soil Fliter**Peak Elev=74.65' Storage=6,046 cf Inflow=4.40 cfs 0.312 af
Primary=0.08 cfs 0.095 af Secondary=1.23 cfs 0.100 af Tertiary=0.00 cfs 0.000 af Outflow=1.31 cfs 0.194 af**Pond SF4: Soil Filter**Peak Elev=74.67' Storage=6,190 cf Inflow=4.36 cfs 0.322 af
Primary=0.07 cfs 0.103 af Secondary=1.39 cfs 0.101 af Tertiary=0.00 cfs 0.000 af Outflow=1.46 cfs 0.204 af**Link AP8:**Inflow=11.40 cfs 1.849 af
Primary=11.40 cfs 1.849 af**Total Runoff Area = 15.871 ac Runoff Volume = 2.088 af Average Runoff Depth = 1.58"**
68.52% Pervious = 10.876 ac 31.48% Impervious = 4.995 ac

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 4

Summary for Subcatchment 7.0:

Runoff = 4.07 cfs @ 12.72 hrs, Volume= 0.679 af, Depth> 1.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

Area (sf)	CN	Description
* 8,574	98	Impervious
1,029	74	>75% Grass cover, Good, HSG C
19,605	65	Brush, Good, HSG C
48,667	73	Brush, Good, HSG D
1,406	70	Woods, Good, HSG C
252,854	77	Woods, Good, HSG D
332,135	76	Weighted Average
323,561		97.42% Pervious Area
8,574		2.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
46.6	150	0.0270	0.05		Sheet Flow, AB
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.8	120	0.0800	0.71		Shallow Concentrated Flow, BC
					Forest w/Heavy Litter Kv= 2.5 fps
49.4	270	Total			

Summary for Subcatchment 7.1:

Runoff = 0.52 cfs @ 12.08 hrs, Volume= 0.036 af, Depth> 1.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

Area (sf)	CN	Description
* 321	98	Impervious
4,645	74	>75% Grass cover, Good, HSG C
9,987	80	>75% Grass cover, Good, HSG D
14,953	79	Weighted Average
14,632		97.85% Pervious Area
321		2.15% Impervious Area

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

Summary for Subcatchment 8.1:

Runoff = 1.43 cfs @ 12.07 hrs, Volume= 0.101 af, Depth> 2.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 5

	Area (sf)	CN	Description
*	17,932	98	Impervious
	3,258	74	>75% Grass cover, Good, HSG C
	1,403	80	>75% Grass cover, Good, HSG D
	22,593	93	Weighted Average
	4,661		20.63% Pervious Area
	17,932		79.37% Impervious Area

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

Summary for Subcatchment 8.10:

Runoff = 4.38 cfs @ 12.07 hrs, Volume= 0.302 af, Depth> 1.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	51,270	98	Impervious
	4,732	74	>75% Grass cover, Good, HSG C
	26,700	70	Woods, Good, HSG C
	82,702	88	Weighted Average
	31,432		38.01% Pervious Area
	51,270		61.99% Impervious Area

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

Summary for Subcatchment 8.11:

Runoff = 3.13 cfs @ 12.08 hrs, Volume= 0.216 af, Depth> 1.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	15,081	98	Impervious
	2,598	74	>75% Grass cover, Good, HSG C
	56,208	80	>75% Grass cover, Good, HSG D
	73,887	83	Weighted Average
	58,806		79.59% Pervious Area
	15,081		20.41% Impervious Area

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

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 6

Summary for Subcatchment 8.2:

Runoff = 1.59 cfs @ 12.07 hrs, Volume= 0.110 af, Depth> 1.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	15,948	98	Impervious
	6,561	74	>75% Grass cover, Good, HSG C
	6,388	80	>75% Grass cover, Good, HSG D
	28,897	89	Weighted Average
	12,949		44.81% Pervious Area
	15,948		55.19% Impervious Area

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

Summary for Subcatchment 8.3:

Runoff = 1.02 cfs @ 12.07 hrs, Volume= 0.075 af, Depth> 2.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	13,690	98	Impervious
	895	74	>75% Grass cover, Good, HSG C
	238	80	>75% Grass cover, Good, HSG D
	14,823	96	Weighted Average
	1,133		7.64% Pervious Area
	13,690		92.36% Impervious Area

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

Summary for Subcatchment 8.4:

Runoff = 0.36 cfs @ 12.08 hrs, Volume= 0.025 af, Depth> 1.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

	Area (sf)	CN	Description
	9,967	80	>75% Grass cover, Good, HSG D
	9,967		100.00% Pervious Area

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

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 7

Summary for Subcatchment 8.5:

Runoff = 2.03 cfs @ 12.07 hrs, Volume= 0.150 af, Depth> 2.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	27,395	98	Impervious
	1,533	74	>75% Grass cover, Good, HSG C
	604	80	>75% Grass cover, Good, HSG D
	29,532	96	Weighted Average
	2,137		7.24% Pervious Area
	27,395		92.76% Impervious Area

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

Summary for Subcatchment 8.6:

Runoff = 1.28 cfs @ 12.07 hrs, Volume= 0.095 af, Depth> 2.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	16,962	98	Impervious
	1,216	74	>75% Grass cover, Good, HSG C
	506	80	>75% Grass cover, Good, HSG D
	18,684	96	Weighted Average
	1,722		9.22% Pervious Area
	16,962		90.78% Impervious Area

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

Summary for Subcatchment 8.7:

Runoff = 0.69 cfs @ 12.07 hrs, Volume= 0.053 af, Depth> 2.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

	Area (sf)	CN	Description
*	9,738	98	Impervious
	9,738		100.00% Impervious Area

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

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 8

Summary for Subcatchment 8.8:

Runoff = 0.35 cfs @ 12.08 hrs, Volume= 0.024 af, Depth> 1.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

Area (sf)	CN	Description
9,646	80	>75% Grass cover, Good, HSG D
9,646		100.00% Pervious Area

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

Summary for Subcatchment 8.9:

Runoff = 3.01 cfs @ 12.07 hrs, Volume= 0.222 af, Depth> 2.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 2-Yr Storm Rainfall=3.10"

Area (sf)	CN	Description
* 40,689	98	Impervious
2,672	74	>75% Grass cover, Good, HSG C
419	80	>75% Grass cover, Good, HSG D
43,780	96	Weighted Average
3,091		7.06% Pervious Area
40,689		92.94% Impervious Area

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

Summary for Reach R7.1: Stream

Inflow Area = 7.968 ac, 2.56% Impervious, Inflow Depth > 1.08" for 2-Yr Storm event

Inflow = 4.14 cfs @ 12.71 hrs, Volume= 0.715 af

Outflow = 4.10 cfs @ 12.78 hrs, Volume= 0.711 af, Atten= 1%, Lag= 3.9 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Max. Velocity= 2.82 fps, Min. Travel Time= 5.1 min

Avg. Velocity = 1.22 fps, Avg. Travel Time= 11.8 min

Peak Storage= 1,248 cf @ 12.78 hrs

Average Depth at Peak Storage= 0.42'

Bank-Full Depth= 2.00' Flow Area= 10.0 sf, Capacity= 63.12 cfs

3.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding

Side Slope Z-value= 1.0 '/' Top Width= 7.00'

Length= 860.0' Slope= 0.0093 '/'

Inlet Invert= 76.00', Outlet Invert= 68.00'

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 9

**Summary for Pond C1: CB5.3**

Inflow Area = 0.519 ac, 79.37% Impervious, Inflow Depth > 2.35" for 2-Yr Storm event
 Inflow = 1.43 cfs @ 12.07 hrs, Volume= 0.101 af
 Outflow = 1.43 cfs @ 12.07 hrs, Volume= 0.101 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.43 cfs @ 12.07 hrs, Volume= 0.101 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 76.55' @ 12.08 hrs
 Flood Elev= 80.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	75.80'	12.0" Round Culvert L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 75.80' / 75.38' S= 0.0053 ' ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.39 cfs @ 12.07 hrs HW=76.54' TW=75.98' (Dynamic Tailwater)
 ↑1=Culvert (Outlet Controls 1.39 cfs @ 3.08 fps)

Summary for Pond C10: OCS4

Inflow = 2.59 cfs @ 12.37 hrs, Volume= 0.201 af
 Outflow = 2.59 cfs @ 12.37 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.59 cfs @ 12.37 hrs, Volume= 0.201 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 71.36' @ 12.37 hrs
 Flood Elev= 74.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	70.59'	24.0" Round Culvert L= 63.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 70.59' / 70.26' S= 0.0052 ' ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=2.58 cfs @ 12.37 hrs HW=71.36' TW=0.00' (Dynamic Tailwater)
 ↑1=Culvert (Barrel Controls 2.58 cfs @ 3.43 fps)

Summary for Pond C2: CB5.5

Inflow Area = 1.182 ac, 65.80% Impervious, Inflow Depth > 2.15" for 2-Yr Storm event
 Inflow = 3.02 cfs @ 12.07 hrs, Volume= 0.211 af
 Outflow = 3.02 cfs @ 12.07 hrs, Volume= 0.211 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.02 cfs @ 12.07 hrs, Volume= 0.211 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 10

Peak Elev= 75.99' @ 12.08 hrs

Flood Elev= 79.23'

Device	Routing	Invert	Outlet Devices
#1	Primary	74.89'	15.0" Round Culvert L= 209.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 74.89' / 73.82' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.97 cfs @ 12.07 hrs HW=75.98' TW=74.95' (Dynamic Tailwater)↑**1=Culvert** (Outlet Controls 2.97 cfs @ 3.48 fps)**Summary for Pond C3: CB5.6**

Inflow Area = 1.522 ac, 71.74% Impervious, Inflow Depth > 2.26" for 2-Yr Storm event
Inflow = 4.04 cfs @ 12.07 hrs, Volume= 0.287 af
Outflow = 4.04 cfs @ 12.07 hrs, Volume= 0.287 af, Atten= 0%, Lag= 0.0 min
Primary = 4.04 cfs @ 12.07 hrs, Volume= 0.287 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 74.95' @ 12.07 hrs

Flood Elev= 78.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.82'	18.0" Round Culvert L= 62.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.82' / 73.50' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.01 cfs @ 12.07 hrs HW=74.95' TW=74.15' (Dynamic Tailwater)↑**1=Culvert** (Barrel Controls 4.01 cfs @ 3.91 fps)**Summary for Pond C4: CB6.6**

Inflow Area = 0.678 ac, 92.76% Impervious, Inflow Depth > 2.65" for 2-Yr Storm event
Inflow = 2.03 cfs @ 12.07 hrs, Volume= 0.150 af
Outflow = 2.03 cfs @ 12.07 hrs, Volume= 0.150 af, Atten= 0%, Lag= 0.0 min
Primary = 2.03 cfs @ 12.07 hrs, Volume= 0.150 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 74.82' @ 12.09 hrs

Flood Elev= 77.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.87'	12.0" Round Culvert L= 74.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.87' / 73.50' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.93 cfs @ 12.07 hrs HW=74.81' TW=74.26' (Dynamic Tailwater)↑**1=Culvert** (Outlet Controls 1.93 cfs @ 3.26 fps)

Summary for Pond C5: CB6.3

Inflow Area = 0.224 ac, 100.00% Impervious, Inflow Depth > 2.87" for 2-Yr Storm event
 Inflow = 0.69 cfs @ 12.07 hrs, Volume= 0.053 af
 Outflow = 0.69 cfs @ 12.07 hrs, Volume= 0.053 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.69 cfs @ 12.07 hrs, Volume= 0.053 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 75.60' @ 12.08 hrs
 Flood Elev= 79.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	75.10'	12.0" Round Culvert L= 168.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 75.10' / 73.70' S= 0.0083 ' ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.68 cfs @ 12.07 hrs HW=75.60' TW=74.75' (Dynamic Tailwater)
 ↑1=Culvert (Outlet Controls 0.68 cfs @ 2.54 fps)

Summary for Pond C6: CB6.4

Inflow Area = 0.652 ac, 93.94% Impervious, Inflow Depth > 2.72" for 2-Yr Storm event
 Inflow = 1.98 cfs @ 12.07 hrs, Volume= 0.148 af
 Outflow = 1.98 cfs @ 12.07 hrs, Volume= 0.148 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.98 cfs @ 12.07 hrs, Volume= 0.148 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 74.75' @ 12.07 hrs
 Flood Elev= 76.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.70'	12.0" Round Culvert L= 78.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.70' / 73.50' S= 0.0026 ' ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.96 cfs @ 12.07 hrs HW=74.75' TW=74.26' (Dynamic Tailwater)
 ↑1=Culvert (Barrel Controls 1.96 cfs @ 2.96 fps)

Summary for Pond C7: CB7.3

Inflow Area = 1.899 ac, 61.99% Impervious, Inflow Depth > 1.91" for 2-Yr Storm event
 Inflow = 4.38 cfs @ 12.07 hrs, Volume= 0.302 af
 Outflow = 4.38 cfs @ 12.07 hrs, Volume= 0.302 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.38 cfs @ 12.07 hrs, Volume= 0.302 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 74.87' @ 12.07 hrs
 Flood Elev= 76.85'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.85'	18.0" Round Culvert L= 196.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.85' / 71.30' S= 0.0130 ' ' Cc= 0.900

n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.35 cfs @ 12.07 hrs HW=74.86' TW=72.55' (Dynamic Tailwater)

↑1=Culvert (Inlet Controls 4.35 cfs @ 3.43 fps)

Summary for Pond C8: CB7.5

Inflow Area = 2.904 ac, 72.71% Impervious, Inflow Depth > 2.16" for 2-Yr Storm event
 Inflow = 7.38 cfs @ 12.07 hrs, Volume= 0.523 af
 Outflow = 7.38 cfs @ 12.07 hrs, Volume= 0.523 af, Atten= 0%, Lag= 0.0 min
 Primary = 7.38 cfs @ 12.07 hrs, Volume= 0.523 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 72.55' @ 12.07 hrs

Flood Elev= 75.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	71.30'	24.0" Round Culvert L= 96.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 71.30' / 70.50' S= 0.0083 ' S= 0.0083 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=7.33 cfs @ 12.07 hrs HW=72.55' TW=0.00' (Dynamic Tailwater)

↑1=Culvert (Barrel Controls 7.33 cfs @ 5.09 fps)

Summary for Pond C9: OCS3

Inflow = 1.23 cfs @ 12.40 hrs, Volume= 0.100 af
 Outflow = 1.23 cfs @ 12.40 hrs, Volume= 0.100 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.23 cfs @ 12.40 hrs, Volume= 0.100 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 71.67' @ 12.40 hrs

Flood Elev= 74.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	71.00'	18.0" Round Culvert L= 77.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 71.00' / 70.59' S= 0.0053 ' S= 0.0053 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.24 cfs @ 12.40 hrs HW=71.67' TW=71.36' (Dynamic Tailwater)

↑1=Culvert (Outlet Controls 1.24 cfs @ 2.38 fps)

Summary for Pond SF3: Soil Fliter

Inflow Area = 1.751 ac, 62.36% Impervious, Inflow Depth > 2.14" for 2-Yr Storm event
 Inflow = 4.40 cfs @ 12.07 hrs, Volume= 0.312 af
 Outflow = 1.31 cfs @ 12.40 hrs, Volume= 0.194 af, Atten= 70%, Lag= 19.5 min
 Primary = 0.08 cfs @ 12.40 hrs, Volume= 0.095 af
 Secondary = 1.23 cfs @ 12.40 hrs, Volume= 0.100 af
 Tertiary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 13

Peak Elev= 74.65' @ 12.40 hrs Surf.Area= 4,328 sf Storage= 6,046 cf

Plug-Flow detention time= 189.3 min calculated for 0.194 af (62% of inflow)

Center-of-Mass det. time= 86.4 min (884.9 - 798.5)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,675 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	2,993	0	0
74.50	4,198	5,393	5,393
75.00	4,624	2,206	7,599
76.00	5,524	5,074	12,673
77.00	6,481	6,003	18,675

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.08 cfs @ 12.40 hrs HW=74.65' TW=0.00' (Dynamic Tailwater)↑**1=Exfiltration** (Exfiltration Controls 0.08 cfs)**Secondary OutFlow** Max=1.23 cfs @ 12.40 hrs HW=74.65' TW=71.67' (Dynamic Tailwater)↑**2=Orifice/Grate** (Weir Controls 1.23 cfs @ 1.28 fps)**Tertiary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)↑**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)**Summary for Pond SF4: Soil Filter**

Inflow Area = 1.552 ac, 80.02% Impervious, Inflow Depth > 2.49" for 2-Yr Storm event
 Inflow = 4.36 cfs @ 12.07 hrs, Volume= 0.322 af
 Outflow = 1.46 cfs @ 12.34 hrs, Volume= 0.204 af, Atten= 66%, Lag= 16.2 min
 Primary = 0.07 cfs @ 12.34 hrs, Volume= 0.103 af
 Secondary = 1.39 cfs @ 12.34 hrs, Volume= 0.101 af
 Tertiary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 74.67' @ 12.34 hrs Surf.Area= 4,312 sf Storage= 6,190 cf

Plug-Flow detention time= 183.5 min calculated for 0.204 af (63% of inflow)

Center-of-Mass det. time= 81.9 min (857.8 - 775.9)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,442 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Post-Development_PARK

Type III 24-hr 2-Yr Storm Rainfall=3.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 14

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	3,128	0	0
74.50	4,186	5,486	5,486
75.00	4,566	2,188	7,674
76.00	5,370	4,968	12,642
77.00	6,231	5,801	18,442

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.07 cfs @ 12.34 hrs HW=74.67' TW=0.00' (Dynamic Tailwater)↑ **1=Exfiltration** (Exfiltration Controls 0.07 cfs)**Secondary OutFlow** Max=1.39 cfs @ 12.34 hrs HW=74.67' TW=71.35' (Dynamic Tailwater)↑ **2=Orifice/Grate** (Weir Controls 1.39 cfs @ 1.33 fps)**Tertiary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)↑ **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)**Summary for Link AP8:**

Inflow Area = 15.871 ac, 31.48% Impervious, Inflow Depth > 1.40" for 2-Yr Storm event
 Inflow = 11.40 cfs @ 12.08 hrs, Volume= 1.849 af
 Primary = 11.40 cfs @ 12.08 hrs, Volume= 1.849 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 15

Time span=0.00-24.00 hrs, dt=0.02 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

Subcatchment 7.0:	Runoff Area=332,135 sf 2.58% Impervious Runoff Depth>2.18" Flow Length=270' Tc=49.4 min CN=76 Runoff=8.66 cfs 1.388 af
Subcatchment 7.1:	Runoff Area=14,953 sf 2.15% Impervious Runoff Depth>2.46" Tc=5.0 min CN=79 Runoff=1.02 cfs 0.070 af
Subcatchment 8.1:	Runoff Area=22,593 sf 79.37% Impervious Runoff Depth>3.80" Tc=5.0 min CN=93 Runoff=2.26 cfs 0.164 af
Subcatchment 8.10:	Runoff Area=82,702 sf 61.99% Impervious Runoff Depth>3.29" Tc=5.0 min CN=88 Runoff=7.43 cfs 0.520 af
Subcatchment 8.11:	Runoff Area=73,887 sf 20.41% Impervious Runoff Depth>2.81" Tc=5.0 min CN=83 Runoff=5.77 cfs 0.398 af
Subcatchment 8.2:	Runoff Area=28,897 sf 55.19% Impervious Runoff Depth>3.39" Tc=5.0 min CN=89 Runoff=2.66 cfs 0.187 af
Subcatchment 8.3:	Runoff Area=14,823 sf 92.36% Impervious Runoff Depth>4.13" Tc=5.0 min CN=96 Runoff=1.55 cfs 0.117 af
Subcatchment 8.4:	Runoff Area=9,967 sf 0.00% Impervious Runoff Depth>2.54" Tc=5.0 min CN=80 Runoff=0.71 cfs 0.049 af
Subcatchment 8.5:	Runoff Area=29,532 sf 92.76% Impervious Runoff Depth>4.13" Tc=5.0 min CN=96 Runoff=3.09 cfs 0.233 af
Subcatchment 8.6:	Runoff Area=18,684 sf 90.78% Impervious Runoff Depth>4.13" Tc=5.0 min CN=96 Runoff=1.95 cfs 0.148 af
Subcatchment 8.7:	Runoff Area=9,738 sf 100.00% Impervious Runoff Depth>4.36" Tc=5.0 min CN=98 Runoff=1.04 cfs 0.081 af
Subcatchment 8.8:	Runoff Area=9,646 sf 0.00% Impervious Runoff Depth>2.54" Tc=5.0 min CN=80 Runoff=0.68 cfs 0.047 af
Subcatchment 8.9:	Runoff Area=43,780 sf 92.94% Impervious Runoff Depth>4.13" Tc=5.0 min CN=96 Runoff=4.58 cfs 0.346 af
Reach R7.1: Stream	Avg. Flow Depth=0.66' Max Vel=3.60 fps Inflow=8.79 cfs 1.459 af n=0.025 L=860.0' S=0.0093 '/' Capacity=63.12 cfs Outflow=8.71 cfs 1.453 af
Pond C1: CB5.3	Peak Elev=77.45' Inflow=2.26 cfs 0.164 af 12.0" Round Culvert n=0.013 L=80.0' S=0.0053 '/' Outflow=2.26 cfs 0.164 af
Pond C10: OCS4	Peak Elev=72.37' Inflow=10.76 cfs 0.562 af 24.0" Round Culvert n=0.013 L=63.0' S=0.0052 '/' Outflow=10.76 cfs 0.562 af
Pond C2: CB5.5	Peak Elev=76.99' Inflow=4.92 cfs 0.352 af 15.0" Round Culvert n=0.013 L=209.0' S=0.0051 '/' Outflow=4.92 cfs 0.352 af

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 16

Pond C3: CB5.6Peak Elev=75.45' Inflow=6.47 cfs 0.469 af
18.0" Round Culvert n=0.013 L=62.0' S=0.0052 '/ Outflow=6.47 cfs 0.469 af**Pond C4: CB6.6**Peak Elev=75.73' Inflow=3.09 cfs 0.233 af
12.0" Round Culvert n=0.013 L=74.0' S=0.0050 '/ Outflow=3.09 cfs 0.233 af**Pond C5: CB6.3**Peak Elev=75.99' Inflow=1.04 cfs 0.081 af
12.0" Round Culvert n=0.013 L=168.0' S=0.0083 '/ Outflow=1.04 cfs 0.081 af**Pond C6: CB6.4**Peak Elev=75.71' Inflow=2.99 cfs 0.229 af
12.0" Round Culvert n=0.013 L=78.0' S=0.0026 '/ Outflow=2.99 cfs 0.229 af**Pond C7: CB7.3**Peak Elev=75.36' Inflow=7.43 cfs 0.520 af
18.0" Round Culvert n=0.013 L=196.0' S=0.0130 '/ Outflow=7.43 cfs 0.520 af**Pond C8: CB7.5**Peak Elev=73.01' Inflow=12.00 cfs 0.866 af
24.0" Round Culvert n=0.013 L=96.0' S=0.0083 '/ Outflow=12.00 cfs 0.866 af**Pond C9: OCS3**Peak Elev=72.80' Inflow=5.46 cfs 0.290 af
18.0" Round Culvert n=0.013 L=77.0' S=0.0053 '/ Outflow=5.46 cfs 0.290 af**Pond SF3: Soil Fliter**Peak Elev=74.91' Storage=7,201 cf Inflow=7.17 cfs 0.517 af
Primary=0.08 cfs 0.103 af Secondary=5.46 cfs 0.290 af Tertiary=0.00 cfs 0.000 af Outflow=5.54 cfs 0.394 af**Pond SF4: Soil Filter**Peak Elev=74.91' Storage=7,248 cf Inflow=6.76 cfs 0.509 af
Primary=0.08 cfs 0.112 af Secondary=5.32 cfs 0.272 af Tertiary=0.00 cfs 0.000 af Outflow=5.40 cfs 0.384 af**Link AP8:**Inflow=29.56 cfs 3.495 af
Primary=29.56 cfs 3.495 af**Total Runoff Area = 15.871 ac Runoff Volume = 3.749 af Average Runoff Depth = 2.83"**
68.52% Pervious = 10.876 ac 31.48% Impervious = 4.995 ac

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 17

Summary for Subcatchment 7.0:

Runoff = 8.66 cfs @ 12.68 hrs, Volume= 1.388 af, Depth> 2.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

Area (sf)	CN	Description
* 8,574	98	Impervious
1,029	74	>75% Grass cover, Good, HSG C
19,605	65	Brush, Good, HSG C
48,667	73	Brush, Good, HSG D
1,406	70	Woods, Good, HSG C
252,854	77	Woods, Good, HSG D
332,135	76	Weighted Average
323,561		97.42% Pervious Area
8,574		2.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
46.6	150	0.0270	0.05		Sheet Flow, AB
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.8	120	0.0800	0.71		Shallow Concentrated Flow, BC
					Forest w/Heavy Litter Kv= 2.5 fps
49.4	270	Total			

Summary for Subcatchment 7.1:

Runoff = 1.02 cfs @ 12.08 hrs, Volume= 0.070 af, Depth> 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

Area (sf)	CN	Description
* 321	98	Impervious
4,645	74	>75% Grass cover, Good, HSG C
9,987	80	>75% Grass cover, Good, HSG D
14,953	79	Weighted Average
14,632		97.85% Pervious Area
321		2.15% Impervious Area

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

Summary for Subcatchment 8.1:

Runoff = 2.26 cfs @ 12.07 hrs, Volume= 0.164 af, Depth> 3.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 18

	Area (sf)	CN	Description
*	17,932	98	Impervious
	3,258	74	>75% Grass cover, Good, HSG C
	1,403	80	>75% Grass cover, Good, HSG D
	22,593	93	Weighted Average
	4,661		20.63% Pervious Area
	17,932		79.37% Impervious Area

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

Summary for Subcatchment 8.10:

Runoff = 7.43 cfs @ 12.07 hrs, Volume= 0.520 af, Depth> 3.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	51,270	98	Impervious
	4,732	74	>75% Grass cover, Good, HSG C
	26,700	70	Woods, Good, HSG C
	82,702	88	Weighted Average
	31,432		38.01% Pervious Area
	51,270		61.99% Impervious Area

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

Summary for Subcatchment 8.11:

Runoff = 5.77 cfs @ 12.07 hrs, Volume= 0.398 af, Depth> 2.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	15,081	98	Impervious
	2,598	74	>75% Grass cover, Good, HSG C
	56,208	80	>75% Grass cover, Good, HSG D
	73,887	83	Weighted Average
	58,806		79.59% Pervious Area
	15,081		20.41% Impervious Area

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

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 19

Summary for Subcatchment 8.2:

Runoff = 2.66 cfs @ 12.07 hrs, Volume= 0.187 af, Depth> 3.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	15,948	98	Impervious
	6,561	74	>75% Grass cover, Good, HSG C
	6,388	80	>75% Grass cover, Good, HSG D
	28,897	89	Weighted Average
	12,949		44.81% Pervious Area
	15,948		55.19% Impervious Area

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

Summary for Subcatchment 8.3:

Runoff = 1.55 cfs @ 12.07 hrs, Volume= 0.117 af, Depth> 4.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	13,690	98	Impervious
	895	74	>75% Grass cover, Good, HSG C
	238	80	>75% Grass cover, Good, HSG D
	14,823	96	Weighted Average
	1,133		7.64% Pervious Area
	13,690		92.36% Impervious Area

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

Summary for Subcatchment 8.4:

Runoff = 0.71 cfs @ 12.08 hrs, Volume= 0.049 af, Depth> 2.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
	9,967	80	>75% Grass cover, Good, HSG D
	9,967		100.00% Pervious Area

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

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 20

Summary for Subcatchment 8.5:

Runoff = 3.09 cfs @ 12.07 hrs, Volume= 0.233 af, Depth> 4.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	27,395	98	Impervious
	1,533	74	>75% Grass cover, Good, HSG C
	604	80	>75% Grass cover, Good, HSG D
	29,532	96	Weighted Average
	2,137		7.24% Pervious Area
	27,395		92.76% Impervious Area

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

Summary for Subcatchment 8.6:

Runoff = 1.95 cfs @ 12.07 hrs, Volume= 0.148 af, Depth> 4.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	16,962	98	Impervious
	1,216	74	>75% Grass cover, Good, HSG C
	506	80	>75% Grass cover, Good, HSG D
	18,684	96	Weighted Average
	1,722		9.22% Pervious Area
	16,962		90.78% Impervious Area

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

Summary for Subcatchment 8.7:

Runoff = 1.04 cfs @ 12.07 hrs, Volume= 0.081 af, Depth> 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

	Area (sf)	CN	Description
*	9,738	98	Impervious
	9,738		100.00% Impervious Area

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

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 21

Summary for Subcatchment 8.8:

Runoff = 0.68 cfs @ 12.08 hrs, Volume= 0.047 af, Depth> 2.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

Area (sf)	CN	Description
9,646	80	>75% Grass cover, Good, HSG D
9,646		100.00% Pervious Area

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

Summary for Subcatchment 8.9:

Runoff = 4.58 cfs @ 12.07 hrs, Volume= 0.346 af, Depth> 4.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 10-Yr Storm Rainfall=4.60"

Area (sf)	CN	Description
* 40,689	98	Impervious
2,672	74	>75% Grass cover, Good, HSG C
419	80	>75% Grass cover, Good, HSG D
43,780	96	Weighted Average
3,091		7.06% Pervious Area
40,689		92.94% Impervious Area

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

Summary for Reach R7.1: Stream

Inflow Area = 7.968 ac, 2.56% Impervious, Inflow Depth > 2.20" for 10-Yr Storm event

Inflow = 8.79 cfs @ 12.68 hrs, Volume= 1.459 af

Outflow = 8.71 cfs @ 12.73 hrs, Volume= 1.453 af, Atten= 1%, Lag= 3.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Max. Velocity= 3.60 fps, Min. Travel Time= 4.0 min

Avg. Velocity= 1.47 fps, Avg. Travel Time= 9.7 min

Peak Storage= 2,082 cf @ 12.73 hrs

Average Depth at Peak Storage= 0.66'

Bank-Full Depth= 2.00' Flow Area= 10.0 sf, Capacity= 63.12 cfs

3.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding

Side Slope Z-value= 1.0 '/' Top Width= 7.00'

Length= 860.0' Slope= 0.0093 '/'

Inlet Invert= 76.00', Outlet Invert= 68.00'

Post-Development_PARK

Prepared by Site Design Associates

Type III 24-hr 10-Yr Storm Rainfall=4.60"

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Printed 12/15/2022

Page 22

**Summary for Pond C1: CB5.3**

Inflow Area = 0.519 ac, 79.37% Impervious, Inflow Depth > 3.80" for 10-Yr Storm event
 Inflow = 2.26 cfs @ 12.07 hrs, Volume= 0.164 af
 Outflow = 2.26 cfs @ 12.07 hrs, Volume= 0.164 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.26 cfs @ 12.07 hrs, Volume= 0.164 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 77.45' @ 12.09 hrs

Flood Elev= 80.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	75.80'	12.0" Round Culvert L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 75.80' / 75.38' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.58 cfs @ 12.07 hrs HW=77.19' TW=76.94' (Dynamic Tailwater)↑**1=Culvert** (Outlet Controls 1.58 cfs @ 2.02 fps)**Summary for Pond C10: OCS4**

Inflow = 10.76 cfs @ 12.13 hrs, Volume= 0.562 af
 Outflow = 10.76 cfs @ 12.13 hrs, Volume= 0.562 af, Atten= 0%, Lag= 0.0 min
 Primary = 10.76 cfs @ 12.13 hrs, Volume= 0.562 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 72.37' @ 12.13 hrs

Flood Elev= 74.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	70.59'	24.0" Round Culvert L= 63.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 70.59' / 70.26' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=10.71 cfs @ 12.13 hrs HW=72.36' TW=0.00' (Dynamic Tailwater)↑**1=Culvert** (Barrel Controls 10.71 cfs @ 4.82 fps)**Summary for Pond C2: CB5.5**

Inflow Area = 1.182 ac, 65.80% Impervious, Inflow Depth > 3.57" for 10-Yr Storm event
 Inflow = 4.92 cfs @ 12.07 hrs, Volume= 0.352 af
 Outflow = 4.92 cfs @ 12.07 hrs, Volume= 0.352 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.92 cfs @ 12.07 hrs, Volume= 0.352 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 23

Peak Elev= 76.99' @ 12.08 hrs

Flood Elev= 79.23'

Device	Routing	Invert	Outlet Devices
#1	Primary	74.89'	15.0" Round Culvert L= 209.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 74.89' / 73.82' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.79 cfs @ 12.07 hrs HW=76.94' TW=75.44' (Dynamic Tailwater)↑**1=Culvert** (Outlet Controls 4.79 cfs @ 3.90 fps)**Summary for Pond C3: CB5.6**

Inflow Area = 1.522 ac, 71.74% Impervious, Inflow Depth > 3.70" for 10-Yr Storm event
Inflow = 6.47 cfs @ 12.07 hrs, Volume= 0.469 af
Outflow = 6.47 cfs @ 12.07 hrs, Volume= 0.469 af, Atten= 0%, Lag= 0.0 min
Primary = 6.47 cfs @ 12.07 hrs, Volume= 0.469 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 75.45' @ 12.08 hrs

Flood Elev= 78.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.82'	18.0" Round Culvert L= 62.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.82' / 73.50' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.15 cfs @ 12.07 hrs HW=75.44' TW=74.84' (Dynamic Tailwater)↑**1=Culvert** (Outlet Controls 6.15 cfs @ 4.02 fps)**Summary for Pond C4: CB6.6**

Inflow Area = 0.678 ac, 92.76% Impervious, Inflow Depth > 4.13" for 10-Yr Storm event
Inflow = 3.09 cfs @ 12.07 hrs, Volume= 0.233 af
Outflow = 3.09 cfs @ 12.07 hrs, Volume= 0.233 af, Atten= 0%, Lag= 0.0 min
Primary = 3.09 cfs @ 12.07 hrs, Volume= 0.233 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 75.73' @ 12.08 hrs

Flood Elev= 77.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.87'	12.0" Round Culvert L= 74.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.87' / 73.50' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.99 cfs @ 12.07 hrs HW=75.71' TW=74.85' (Dynamic Tailwater)↑**1=Culvert** (Outlet Controls 2.99 cfs @ 3.81 fps)

Summary for Pond C5: CB6.3

Inflow Area = 0.224 ac, 100.00% Impervious, Inflow Depth > 4.36" for 10-Yr Storm event
 Inflow = 1.04 cfs @ 12.07 hrs, Volume= 0.081 af
 Outflow = 1.04 cfs @ 12.07 hrs, Volume= 0.081 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.04 cfs @ 12.07 hrs, Volume= 0.081 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 75.99' @ 12.09 hrs
 Flood Elev= 79.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	75.10'	12.0" Round Culvert L= 168.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 75.10' / 73.70' S= 0.0083 ' ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.87 cfs @ 12.07 hrs HW=75.94' TW=75.68' (Dynamic Tailwater)
 ↑1=Culvert (Outlet Controls 0.87 cfs @ 1.67 fps)

Summary for Pond C6: CB6.4

Inflow Area = 0.652 ac, 93.94% Impervious, Inflow Depth > 4.21" for 10-Yr Storm event
 Inflow = 2.99 cfs @ 12.07 hrs, Volume= 0.229 af
 Outflow = 2.99 cfs @ 12.07 hrs, Volume= 0.229 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.99 cfs @ 12.07 hrs, Volume= 0.229 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 75.71' @ 12.08 hrs
 Flood Elev= 76.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.70'	12.0" Round Culvert L= 78.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.70' / 73.50' S= 0.0026 ' ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.89 cfs @ 12.07 hrs HW=75.68' TW=74.85' (Dynamic Tailwater)
 ↑1=Culvert (Outlet Controls 2.89 cfs @ 3.68 fps)

Summary for Pond C7: CB7.3

Inflow Area = 1.899 ac, 61.99% Impervious, Inflow Depth > 3.29" for 10-Yr Storm event
 Inflow = 7.43 cfs @ 12.07 hrs, Volume= 0.520 af
 Outflow = 7.43 cfs @ 12.07 hrs, Volume= 0.520 af, Atten= 0%, Lag= 0.0 min
 Primary = 7.43 cfs @ 12.07 hrs, Volume= 0.520 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 75.36' @ 12.07 hrs
 Flood Elev= 76.85'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.85'	18.0" Round Culvert L= 196.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.85' / 71.30' S= 0.0130 ' ' Cc= 0.900

n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=7.37 cfs @ 12.07 hrs HW=75.35' TW=73.00' (Dynamic Tailwater)

↑1=Culvert (Inlet Controls 7.37 cfs @ 4.17 fps)

Summary for Pond C8: CB7.5

Inflow Area = 2.904 ac, 72.71% Impervious, Inflow Depth > 3.58" for 10-Yr Storm event
 Inflow = 12.00 cfs @ 12.07 hrs, Volume= 0.866 af
 Outflow = 12.00 cfs @ 12.07 hrs, Volume= 0.866 af, Atten= 0%, Lag= 0.0 min
 Primary = 12.00 cfs @ 12.07 hrs, Volume= 0.866 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 73.01' @ 12.07 hrs

Flood Elev= 75.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	71.30'	24.0" Round Culvert L= 96.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 71.30' / 70.50' S= 0.0083 ' S= 0.0083 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=11.91 cfs @ 12.07 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)

↑1=Culvert (Barrel Controls 11.91 cfs @ 5.62 fps)

Summary for Pond C9: OCS3

Inflow = 5.46 cfs @ 12.13 hrs, Volume= 0.290 af
 Outflow = 5.46 cfs @ 12.13 hrs, Volume= 0.290 af, Atten= 0%, Lag= 0.0 min
 Primary = 5.46 cfs @ 12.13 hrs, Volume= 0.290 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 72.80' @ 12.14 hrs

Flood Elev= 74.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	71.00'	18.0" Round Culvert L= 77.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 71.00' / 70.59' S= 0.0053 ' S= 0.0053 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=5.31 cfs @ 12.13 hrs HW=72.78' TW=72.37' (Dynamic Tailwater)

↑1=Culvert (Outlet Controls 5.31 cfs @ 3.20 fps)

Summary for Pond SF3: Soil Fliter

Inflow Area = 1.751 ac, 62.36% Impervious, Inflow Depth > 3.55" for 10-Yr Storm event
 Inflow = 7.17 cfs @ 12.07 hrs, Volume= 0.517 af
 Outflow = 5.54 cfs @ 12.13 hrs, Volume= 0.394 af, Atten= 23%, Lag= 3.7 min
 Primary = 0.08 cfs @ 12.13 hrs, Volume= 0.103 af
 Secondary = 5.46 cfs @ 12.13 hrs, Volume= 0.290 af
 Tertiary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 26

Peak Elev= 74.91' @ 12.13 hrs Surf.Area= 4,550 sf Storage= 7,201 cf

Plug-Flow detention time= 129.7 min calculated for 0.393 af (76% of inflow)

Center-of-Mass det. time= 46.7 min (832.6 - 785.9)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,675 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	2,993	0	0
74.50	4,198	5,393	5,393
75.00	4,624	2,206	7,599
76.00	5,524	5,074	12,673
77.00	6,481	6,003	18,675

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.08 cfs @ 12.13 hrs HW=74.91' TW=0.00' (Dynamic Tailwater)↑**1=Exfiltration** (Exfiltration Controls 0.08 cfs)**Secondary OutFlow** Max=5.43 cfs @ 12.13 hrs HW=74.91' TW=72.78' (Dynamic Tailwater)↑**2=Orifice/Grate** (Weir Controls 5.43 cfs @ 2.10 fps)**Tertiary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)↑**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)**Summary for Pond SF4: Soil Filter**

Inflow Area = 1.552 ac, 80.02% Impervious, Inflow Depth > 3.94" for 10-Yr Storm event
 Inflow = 6.76 cfs @ 12.07 hrs, Volume= 0.509 af
 Outflow = 5.40 cfs @ 12.13 hrs, Volume= 0.384 af, Atten= 20%, Lag= 3.4 min
 Primary = 0.08 cfs @ 12.13 hrs, Volume= 0.112 af
 Secondary = 5.32 cfs @ 12.13 hrs, Volume= 0.272 af
 Tertiary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 74.91' @ 12.13 hrs Surf.Area= 4,495 sf Storage= 7,248 cf

Plug-Flow detention time= 133.6 min calculated for 0.384 af (75% of inflow)

Center-of-Mass det. time= 48.9 min (815.2 - 766.3)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,442 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Post-Development_PARK

Type III 24-hr 10-Yr Storm Rainfall=4.60"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 27

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	3,128	0	0
74.50	4,186	5,486	5,486
75.00	4,566	2,188	7,674
76.00	5,370	4,968	12,642
77.00	6,231	5,801	18,442

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.08 cfs @ 12.13 hrs HW=74.90' TW=0.00' (Dynamic Tailwater)↑ **1=Exfiltration** (Exfiltration Controls 0.08 cfs)**Secondary OutFlow** Max=5.29 cfs @ 12.13 hrs HW=74.90' TW=72.36' (Dynamic Tailwater)↑ **2=Orifice/Grate** (Weir Controls 5.29 cfs @ 2.08 fps)**Tertiary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)↑ **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)**Summary for Link AP8:**

Inflow Area = 15.871 ac, 31.48% Impervious, Inflow Depth > 2.64" for 10-Yr Storm event
 Inflow = 29.56 cfs @ 12.10 hrs, Volume= 3.495 af
 Primary = 29.56 cfs @ 12.10 hrs, Volume= 3.495 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 28

Time span=0.00-24.00 hrs, dt=0.02 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

Subcatchment 7.0:	Runoff Area=332,135 sf 2.58% Impervious Runoff Depth>3.17" Flow Length=270' Tc=49.4 min CN=76 Runoff=12.65 cfs 2.017 af
Subcatchment 7.1:	Runoff Area=14,953 sf 2.15% Impervious Runoff Depth>3.50" Tc=5.0 min CN=79 Runoff=1.45 cfs 0.100 af
Subcatchment 8.1:	Runoff Area=22,593 sf 79.37% Impervious Runoff Depth>4.98" Tc=5.0 min CN=93 Runoff=2.91 cfs 0.215 af
Subcatchment 8.10:	Runoff Area=82,702 sf 61.99% Impervious Runoff Depth>4.43" Tc=5.0 min CN=88 Runoff=9.87 cfs 0.701 af
Subcatchment 8.11:	Runoff Area=73,887 sf 20.41% Impervious Runoff Depth>3.90" Tc=5.0 min CN=83 Runoff=7.94 cfs 0.552 af
Subcatchment 8.2:	Runoff Area=28,897 sf 55.19% Impervious Runoff Depth>4.54" Tc=5.0 min CN=89 Runoff=3.51 cfs 0.251 af
Subcatchment 8.3:	Runoff Area=14,823 sf 92.36% Impervious Runoff Depth>5.32" Tc=5.0 min CN=96 Runoff=1.97 cfs 0.151 af
Subcatchment 8.4:	Runoff Area=9,967 sf 0.00% Impervious Runoff Depth>3.60" Tc=5.0 min CN=80 Runoff=1.00 cfs 0.069 af
Subcatchment 8.5:	Runoff Area=29,532 sf 92.76% Impervious Runoff Depth>5.32" Tc=5.0 min CN=96 Runoff=3.93 cfs 0.301 af
Subcatchment 8.6:	Runoff Area=18,684 sf 90.78% Impervious Runoff Depth>5.32" Tc=5.0 min CN=96 Runoff=2.48 cfs 0.190 af
Subcatchment 8.7:	Runoff Area=9,738 sf 100.00% Impervious Runoff Depth>5.56" Tc=5.0 min CN=98 Runoff=1.31 cfs 0.104 af
Subcatchment 8.8:	Runoff Area=9,646 sf 0.00% Impervious Runoff Depth>3.60" Tc=5.0 min CN=80 Runoff=0.96 cfs 0.066 af
Subcatchment 8.9:	Runoff Area=43,780 sf 92.94% Impervious Runoff Depth>5.32" Tc=5.0 min CN=96 Runoff=5.82 cfs 0.446 af
Reach R7.1: Stream	Avg. Flow Depth=0.82' Max Vel=4.04 fps Inflow=12.83 cfs 2.117 af n=0.025 L=860.0' S=0.0093 '/' Capacity=63.12 cfs Outflow=12.73 cfs 2.111 af
Pond C1: CB5.3	Peak Elev=79.35' Inflow=2.91 cfs 0.215 af 12.0" Round Culvert n=0.013 L=80.0' S=0.0053 '/' Outflow=2.91 cfs 0.215 af
Pond C10: OCS4	Peak Elev=72.90' Inflow=15.23 cfs 0.869 af 24.0" Round Culvert n=0.013 L=63.0' S=0.0052 '/' Outflow=15.23 cfs 0.869 af
Pond C2: CB5.5	Peak Elev=78.58' Inflow=6.42 cfs 0.466 af 15.0" Round Culvert n=0.013 L=209.0' S=0.0051 '/' Outflow=6.42 cfs 0.466 af

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 29

Pond C3: CB5.6Peak Elev=75.93' Inflow=8.39 cfs 0.617 af
18.0" Round Culvert n=0.013 L=62.0' S=0.0052 '/ Outflow=8.39 cfs 0.617 af**Pond C4: CB6.6**Peak Elev=76.41' Inflow=3.93 cfs 0.301 af
12.0" Round Culvert n=0.013 L=74.0' S=0.0050 '/ Outflow=3.93 cfs 0.301 af**Pond C5: CB6.3**Peak Elev=76.63' Inflow=1.31 cfs 0.104 af
12.0" Round Culvert n=0.013 L=168.0' S=0.0083 '/ Outflow=1.31 cfs 0.104 af**Pond C6: CB6.4**Peak Elev=76.36' Inflow=3.80 cfs 0.294 af
12.0" Round Culvert n=0.013 L=78.0' S=0.0026 '/ Outflow=3.80 cfs 0.294 af**Pond C7: CB7.3**Peak Elev=75.94' Inflow=9.87 cfs 0.701 af
18.0" Round Culvert n=0.013 L=196.0' S=0.0130 '/ Outflow=9.87 cfs 0.701 af**Pond C8: CB7.5**Peak Elev=73.39' Inflow=15.69 cfs 1.147 af
24.0" Round Culvert n=0.013 L=96.0' S=0.0083 '/ Outflow=15.69 cfs 1.147 af**Pond C9: OCS3**Peak Elev=73.78' Inflow=7.89 cfs 0.452 af
18.0" Round Culvert n=0.013 L=77.0' S=0.0053 '/ Outflow=7.89 cfs 0.452 af**Pond SF3: Soil Fliter**Peak Elev=75.03' Storage=7,731 cf Inflow=9.39 cfs 0.686 af
Primary=0.08 cfs 0.109 af Secondary=7.89 cfs 0.452 af Tertiary=0.12 cfs 0.000 af Outflow=8.09 cfs 0.561 af**Pond SF4: Soil Filter**Peak Elev=75.00' Storage=7,689 cf Inflow=8.69 cfs 0.661 af
Primary=0.08 cfs 0.117 af Secondary=7.34 cfs 0.417 af Tertiary=0.00 cfs 0.000 af Outflow=7.42 cfs 0.535 af**Link AP8:**Inflow=41.75 cfs 4.905 af
Primary=41.75 cfs 4.905 af**Total Runoff Area = 15.871 ac Runoff Volume = 5.163 af Average Runoff Depth = 3.90"**
68.52% Pervious = 10.876 ac 31.48% Impervious = 4.995 ac

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 30

Summary for Subcatchment 7.0:

Runoff = 12.65 cfs @ 12.68 hrs, Volume= 2.017 af, Depth> 3.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	8,574	98	Impervious
	1,029	74	>75% Grass cover, Good, HSG C
	19,605	65	Brush, Good, HSG C
	48,667	73	Brush, Good, HSG D
	1,406	70	Woods, Good, HSG C
	252,854	77	Woods, Good, HSG D
	332,135	76	Weighted Average
	323,561		97.42% Pervious Area
	8,574		2.58% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
46.6	150	0.0270	0.05		Sheet Flow, AB
					Woods: Dense underbrush n= 0.800 P2= 3.10"
2.8	120	0.0800	0.71		Shallow Concentrated Flow, BC
					Forest w/Heavy Litter Kv= 2.5 fps
49.4	270	Total			

Summary for Subcatchment 7.1:

Runoff = 1.45 cfs @ 12.07 hrs, Volume= 0.100 af, Depth> 3.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	321	98	Impervious
	4,645	74	>75% Grass cover, Good, HSG C
	9,987	80	>75% Grass cover, Good, HSG D
	14,953	79	Weighted Average
	14,632		97.85% Pervious Area
	321		2.15% Impervious Area

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

Summary for Subcatchment 8.1:

Runoff = 2.91 cfs @ 12.07 hrs, Volume= 0.215 af, Depth> 4.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 31

	Area (sf)	CN	Description
*	17,932	98	Impervious
	3,258	74	>75% Grass cover, Good, HSG C
	1,403	80	>75% Grass cover, Good, HSG D
	22,593	93	Weighted Average
	4,661		20.63% Pervious Area
	17,932		79.37% Impervious Area

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

Summary for Subcatchment 8.10:

Runoff = 9.87 cfs @ 12.07 hrs, Volume= 0.701 af, Depth> 4.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	51,270	98	Impervious
	4,732	74	>75% Grass cover, Good, HSG C
	26,700	70	Woods, Good, HSG C
	82,702	88	Weighted Average
	31,432		38.01% Pervious Area
	51,270		61.99% Impervious Area

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

Summary for Subcatchment 8.11:

Runoff = 7.94 cfs @ 12.07 hrs, Volume= 0.552 af, Depth> 3.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	15,081	98	Impervious
	2,598	74	>75% Grass cover, Good, HSG C
	56,208	80	>75% Grass cover, Good, HSG D
	73,887	83	Weighted Average
	58,806		79.59% Pervious Area
	15,081		20.41% Impervious Area

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

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 32

Summary for Subcatchment 8.2:

Runoff = 3.51 cfs @ 12.07 hrs, Volume= 0.251 af, Depth> 4.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	15,948	98	Impervious
	6,561	74	>75% Grass cover, Good, HSG C
	6,388	80	>75% Grass cover, Good, HSG D
	28,897	89	Weighted Average
	12,949		44.81% Pervious Area
	15,948		55.19% Impervious Area

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

Summary for Subcatchment 8.3:

Runoff = 1.97 cfs @ 12.07 hrs, Volume= 0.151 af, Depth> 5.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	13,690	98	Impervious
	895	74	>75% Grass cover, Good, HSG C
	238	80	>75% Grass cover, Good, HSG D
	14,823	96	Weighted Average
	1,133		7.64% Pervious Area
	13,690		92.36% Impervious Area

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

Summary for Subcatchment 8.4:

Runoff = 1.00 cfs @ 12.07 hrs, Volume= 0.069 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
	9,967	80	>75% Grass cover, Good, HSG D
	9,967		100.00% Pervious Area

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

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 33

Summary for Subcatchment 8.5:

Runoff = 3.93 cfs @ 12.07 hrs, Volume= 0.301 af, Depth> 5.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	27,395	98	Impervious
	1,533	74	>75% Grass cover, Good, HSG C
	604	80	>75% Grass cover, Good, HSG D
	29,532	96	Weighted Average
	2,137		7.24% Pervious Area
	27,395		92.76% Impervious Area

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

Summary for Subcatchment 8.6:

Runoff = 2.48 cfs @ 12.07 hrs, Volume= 0.190 af, Depth> 5.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	16,962	98	Impervious
	1,216	74	>75% Grass cover, Good, HSG C
	506	80	>75% Grass cover, Good, HSG D
	18,684	96	Weighted Average
	1,722		9.22% Pervious Area
	16,962		90.78% Impervious Area

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

Summary for Subcatchment 8.7:

Runoff = 1.31 cfs @ 12.07 hrs, Volume= 0.104 af, Depth> 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

	Area (sf)	CN	Description
*	9,738	98	Impervious
	9,738		100.00% Impervious Area

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

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 34

Summary for Subcatchment 8.8:

Runoff = 0.96 cfs @ 12.07 hrs, Volume= 0.066 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

Area (sf)	CN	Description
9,646	80	>75% Grass cover, Good, HSG D
9,646		100.00% Pervious Area

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

Summary for Subcatchment 8.9:

Runoff = 5.82 cfs @ 12.07 hrs, Volume= 0.446 af, Depth> 5.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Type III 24-hr 25-Yr Storm Rainfall=5.80"

Area (sf)	CN	Description
* 40,689	98	Impervious
2,672	74	>75% Grass cover, Good, HSG C
419	80	>75% Grass cover, Good, HSG D
43,780	96	Weighted Average
3,091		7.06% Pervious Area
40,689		92.94% Impervious Area

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

Summary for Reach R7.1: Stream

Inflow Area = 7.968 ac, 2.56% Impervious, Inflow Depth > 3.19" for 25-Yr Storm event

Inflow = 12.83 cfs @ 12.68 hrs, Volume= 2.117 af

Outflow = 12.73 cfs @ 12.72 hrs, Volume= 2.111 af, Atten= 1%, Lag= 2.3 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Max. Velocity= 4.04 fps, Min. Travel Time= 3.5 min

Avg. Velocity= 1.62 fps, Avg. Travel Time= 8.8 min

Peak Storage= 2,711 cf @ 12.72 hrs

Average Depth at Peak Storage= 0.82'

Bank-Full Depth= 2.00' Flow Area= 10.0 sf, Capacity= 63.12 cfs

3.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding

Side Slope Z-value= 1.0 '/' Top Width= 7.00'

Length= 860.0' Slope= 0.0093 '/'

Inlet Invert= 76.00', Outlet Invert= 68.00'



Summary for Pond C1: CB5.3

Inflow Area = 0.519 ac, 79.37% Impervious, Inflow Depth > 4.98" for 25-Yr Storm event
 Inflow = 2.91 cfs @ 12.07 hrs, Volume= 0.215 af
 Outflow = 2.91 cfs @ 12.07 hrs, Volume= 0.215 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.91 cfs @ 12.07 hrs, Volume= 0.215 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 79.35' @ 12.09 hrs

Flood Elev= 80.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	75.80'	12.0" Round Culvert L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 75.80' / 75.38' S= 0.0053 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.11 cfs @ 12.07 hrs HW=78.93' TW=78.48' (Dynamic Tailwater)

↑1=Culvert (Outlet Controls 2.11 cfs @ 2.69 fps)

Summary for Pond C10: OCS4

Inflow = 15.23 cfs @ 12.12 hrs, Volume= 0.869 af
 Outflow = 15.23 cfs @ 12.12 hrs, Volume= 0.869 af, Atten= 0%, Lag= 0.0 min
 Primary = 15.23 cfs @ 12.12 hrs, Volume= 0.869 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 72.90' @ 12.12 hrs

Flood Elev= 74.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	70.59'	24.0" Round Culvert L= 63.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 70.59' / 70.26' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=15.20 cfs @ 12.12 hrs HW=72.90' TW=0.00' (Dynamic Tailwater)

↑1=Culvert (Barrel Controls 15.20 cfs @ 5.26 fps)

Summary for Pond C2: CB5.5

Inflow Area = 1.182 ac, 65.80% Impervious, Inflow Depth > 4.73" for 25-Yr Storm event
 Inflow = 6.42 cfs @ 12.07 hrs, Volume= 0.466 af
 Outflow = 6.42 cfs @ 12.07 hrs, Volume= 0.466 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.42 cfs @ 12.07 hrs, Volume= 0.466 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 36

Peak Elev= 78.58' @ 12.08 hrs

Flood Elev= 79.23'

Device	Routing	Invert	Outlet Devices
#1	Primary	74.89'	15.0" Round Culvert L= 209.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 74.89' / 73.82' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.25 cfs @ 12.07 hrs HW=78.48' TW=75.92' (Dynamic Tailwater)↑**1=Culvert** (Outlet Controls 6.25 cfs @ 5.09 fps)**Summary for Pond C3: CB5.6**

Inflow Area = 1.522 ac, 71.74% Impervious, Inflow Depth > 4.87" for 25-Yr Storm event
Inflow = 8.39 cfs @ 12.07 hrs, Volume= 0.617 af
Outflow = 8.39 cfs @ 12.07 hrs, Volume= 0.617 af, Atten= 0%, Lag= 0.0 min
Primary = 8.39 cfs @ 12.07 hrs, Volume= 0.617 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 75.93' @ 12.07 hrs

Flood Elev= 78.90'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.82'	18.0" Round Culvert L= 62.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.82' / 73.50' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=8.21 cfs @ 12.07 hrs HW=75.92' TW=74.99' (Dynamic Tailwater)↑**1=Culvert** (Inlet Controls 8.21 cfs @ 4.65 fps)**Summary for Pond C4: CB6.6**

Inflow Area = 0.678 ac, 92.76% Impervious, Inflow Depth > 5.32" for 25-Yr Storm event
Inflow = 3.93 cfs @ 12.07 hrs, Volume= 0.301 af
Outflow = 3.93 cfs @ 12.07 hrs, Volume= 0.301 af, Atten= 0%, Lag= 0.0 min
Primary = 3.93 cfs @ 12.07 hrs, Volume= 0.301 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 76.41' @ 12.07 hrs

Flood Elev= 77.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.87'	12.0" Round Culvert L= 74.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.87' / 73.50' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.85 cfs @ 12.07 hrs HW=76.39' TW=74.96' (Dynamic Tailwater)↑**1=Culvert** (Outlet Controls 3.85 cfs @ 4.90 fps)

Summary for Pond C5: CB6.3

Inflow Area = 0.224 ac, 100.00% Impervious, Inflow Depth > 5.56" for 25-Yr Storm event
 Inflow = 1.31 cfs @ 12.07 hrs, Volume= 0.104 af
 Outflow = 1.31 cfs @ 12.07 hrs, Volume= 0.104 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.31 cfs @ 12.07 hrs, Volume= 0.104 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 76.63' @ 12.09 hrs

Flood Elev= 79.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	75.10'	12.0" Round Culvert L= 168.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 75.10' / 73.70' S= 0.0083 ' ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.90 cfs @ 12.07 hrs HW=76.47' TW=76.34' (Dynamic Tailwater)

↑**1=Culvert** (Outlet Controls 0.90 cfs @ 1.14 fps)

Summary for Pond C6: CB6.4

Inflow Area = 0.652 ac, 93.94% Impervious, Inflow Depth > 5.41" for 25-Yr Storm event
 Inflow = 3.80 cfs @ 12.07 hrs, Volume= 0.294 af
 Outflow = 3.80 cfs @ 12.07 hrs, Volume= 0.294 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.80 cfs @ 12.07 hrs, Volume= 0.294 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 76.36' @ 12.07 hrs

Flood Elev= 76.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.70'	12.0" Round Culvert L= 78.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.70' / 73.50' S= 0.0026 ' ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.72 cfs @ 12.07 hrs HW=76.34' TW=74.96' (Dynamic Tailwater)

↑**1=Culvert** (Outlet Controls 3.72 cfs @ 4.73 fps)

Summary for Pond C7: CB7.3

Inflow Area = 1.899 ac, 61.99% Impervious, Inflow Depth > 4.43" for 25-Yr Storm event
 Inflow = 9.87 cfs @ 12.07 hrs, Volume= 0.701 af
 Outflow = 9.87 cfs @ 12.07 hrs, Volume= 0.701 af, Atten= 0%, Lag= 0.0 min
 Primary = 9.87 cfs @ 12.07 hrs, Volume= 0.701 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 75.94' @ 12.07 hrs

Flood Elev= 76.85'

Device	Routing	Invert	Outlet Devices
#1	Primary	73.85'	18.0" Round Culvert L= 196.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 73.85' / 71.30' S= 0.0130 ' ' Cc= 0.900

n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=9.79 cfs @ 12.07 hrs HW=75.92' TW=73.38' (Dynamic Tailwater)

↑1=Culvert (Inlet Controls 9.79 cfs @ 5.54 fps)

Summary for Pond C8: CB7.5

Inflow Area = 2.904 ac, 72.71% Impervious, Inflow Depth > 4.74" for 25-Yr Storm event
 Inflow = 15.69 cfs @ 12.07 hrs, Volume= 1.147 af
 Outflow = 15.69 cfs @ 12.07 hrs, Volume= 1.147 af, Atten= 0%, Lag= 0.0 min
 Primary = 15.69 cfs @ 12.07 hrs, Volume= 1.147 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 73.39' @ 12.07 hrs

Flood Elev= 75.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	71.30'	24.0" Round Culvert L= 96.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 71.30' / 70.50' S= 0.0083 ' S= 0.0083 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=15.57 cfs @ 12.07 hrs HW=73.38' TW=0.00' (Dynamic Tailwater)

↑1=Culvert (Barrel Controls 15.57 cfs @ 5.92 fps)

Summary for Pond C9: OCS3

Inflow = 7.89 cfs @ 12.12 hrs, Volume= 0.452 af
 Outflow = 7.89 cfs @ 12.12 hrs, Volume= 0.452 af, Atten= 0%, Lag= 0.0 min
 Primary = 7.89 cfs @ 12.12 hrs, Volume= 0.452 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 73.78' @ 12.13 hrs

Flood Elev= 74.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	71.00'	18.0" Round Culvert L= 77.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 71.00' / 70.59' S= 0.0053 ' S= 0.0053 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=7.68 cfs @ 12.12 hrs HW=73.75' TW=72.90' (Dynamic Tailwater)

↑1=Culvert (Outlet Controls 7.68 cfs @ 4.35 fps)

Summary for Pond SF3: Soil Fliter

Inflow Area = 1.751 ac, 62.36% Impervious, Inflow Depth > 4.70" for 25-Yr Storm event
 Inflow = 9.39 cfs @ 12.07 hrs, Volume= 0.686 af
 Outflow = 8.09 cfs @ 12.12 hrs, Volume= 0.561 af, Atten= 14%, Lag= 2.7 min
 Primary = 0.08 cfs @ 12.12 hrs, Volume= 0.109 af
 Secondary = 7.89 cfs @ 12.12 hrs, Volume= 0.452 af
 Tertiary = 0.12 cfs @ 12.12 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 39

Peak Elev= 75.03' @ 12.12 hrs Surf.Area= 4,650 sf Storage= 7,731 cf

Plug-Flow detention time= 112.2 min calculated for 0.561 af (82% of inflow)

Center-of-Mass det. time= 40.6 min (819.6 - 779.0)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,675 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	2,993	0	0
74.50	4,198	5,393	5,393
75.00	4,624	2,206	7,599
76.00	5,524	5,074	12,673
77.00	6,481	6,003	18,675

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.08 cfs @ 12.12 hrs HW=75.03' TW=0.00' (Dynamic Tailwater)↑**1=Exfiltration** (Exfiltration Controls 0.08 cfs)**Secondary OutFlow** Max=7.87 cfs @ 12.12 hrs HW=75.03' TW=73.75' (Dynamic Tailwater)↑**2=Orifice/Grate** (Weir Controls 7.87 cfs @ 2.38 fps)**Tertiary OutFlow** Max=0.11 cfs @ 12.12 hrs HW=75.03' TW=0.00' (Dynamic Tailwater)↑**3=Broad-Crested Rectangular Weir** (Weir Controls 0.11 cfs @ 0.41 fps)**Summary for Pond SF4: Soil Filter**

Inflow Area = 1.552 ac, 80.02% Impervious, Inflow Depth > 5.11" for 25-Yr Storm event
 Inflow = 8.69 cfs @ 12.07 hrs, Volume= 0.661 af
 Outflow = 7.42 cfs @ 12.12 hrs, Volume= 0.535 af, Atten= 15%, Lag= 2.8 min
 Primary = 0.08 cfs @ 12.12 hrs, Volume= 0.117 af
 Secondary = 7.34 cfs @ 12.12 hrs, Volume= 0.417 af
 Tertiary = 0.00 cfs @ 12.12 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Peak Elev= 75.00' @ 12.12 hrs Surf.Area= 4,569 sf Storage= 7,689 cf

Plug-Flow detention time= 119.2 min calculated for 0.535 af (81% of inflow)

Center-of-Mass det. time= 44.7 min (805.9 - 761.2)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,442 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Page 40

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	3,128	0	0
74.50	4,186	5,486	5,486
75.00	4,566	2,188	7,674
76.00	5,370	4,968	12,642
77.00	6,231	5,801	18,442

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.08 cfs @ 12.12 hrs HW=75.00' TW=0.00' (Dynamic Tailwater)↑ **1=Exfiltration** (Exfiltration Controls 0.08 cfs)**Secondary OutFlow** Max=7.32 cfs @ 12.12 hrs HW=75.00' TW=72.90' (Dynamic Tailwater)↑ **2=Orifice/Grate** (Weir Controls 7.32 cfs @ 2.32 fps)**Tertiary OutFlow** Max=0.00 cfs @ 12.12 hrs HW=75.00' TW=0.00' (Dynamic Tailwater)↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.14 fps)**Summary for Link AP8:**

Inflow Area = 15.871 ac, 31.48% Impervious, Inflow Depth > 3.71" for 25-Yr Storm event

Inflow = 41.75 cfs @ 12.09 hrs, Volume= 4.905 af

Primary = 41.75 cfs @ 12.09 hrs, Volume= 4.905 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs

Appendix C:
Stormwater BMP Spillway Calculations

SOIL FILTER SF3 SPILLWAY CALCULATION - 25-YEAR

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Summary for Pond SF3: Soil Fliter

Inflow Area = 1.751 ac, 62.36% Impervious, Inflow Depth > 4.70" for 25-Yr Storm event
 Inflow = 9.39 cfs @ 12.07 hrs, Volume= 0.686 af
 Outflow = 8.17 cfs @ 12.12 hrs, Volume= 0.509 af, Atten= 13%, Lag= 2.6 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Tertiary = 8.17 cfs @ 12.12 hrs, Volume= 0.509 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 75.46' @ 12.12 hrs Surf.Area= 5,040 sf Storage= 9,830 cf

Plug-Flow detention time= 151.8 min calculated for 0.509 af (74% of inflow)
 Center-of-Mass det. time= 65.8 min (844.8 - 779.0)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,675 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	2,993	0	0
74.50	4,198	5,393	5,393
75.00	4,624	2,200	7,599
76.00	5,524	5,074	12,673
77.00	6,481	6,003	18,675

1' of freeboard
with primary
outlets clogged

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration X 0.00 over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate X 0.00 C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)
 ↑ **1=Exfiltration** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=71.00' (Dynamic Tailwater)
 ↑ **2=Orifice/Grate** (Controls 0.00 cfs)

Tertiary OutFlow Max=8.13 cfs @ 12.12 hrs HW=75.46' TW=0.00' (Dynamic Tailwater)
 ↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 8.13 cfs @ 1.77 fps)

SOIL FILTER SF3 SPILLWAY CALCULATION - 100-YEAR

Post-Development_PARK

Type III 24-hr 100-Yr Storm Rainfall=8.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Summary for Pond SF3: Soil Fliter

Inflow Area = 1.751 ac, 62.36% Impervious, Inflow Depth > 6.94" for 100-Yr Storm event
 Inflow = 13.61 cfs @ 12.07 hrs, Volume= 1.013 af
 Outflow = 12.25 cfs @ 12.11 hrs, Volume= 0.836 af, Atten= 10%, Lag= 2.2 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Tertiary = 12.25 cfs @ 12.11 hrs, Volume= 0.836 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 75.59' @ 12.11 hrs Surf.Area= 5,156 sf Storage= 10,491 cf

Plug-Flow detention time= 124.8 min calculated for 0.836 af (82% of inflow)
 Center-of-Mass det. time= 54.9 min (824.9 - 770.0)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,675 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	2,993	0	0
74.50	4,198	5,393	5,393
75.00	4,624	2,206	7,599
76.00	5,524	5,074	12,673
77.00	6,481	6,003	18,675

Filter does not
overtop in 100-
year with primary
outlets clogged.

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration X 0.00 over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate X 0.00 C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)
 ↑1=Exfiltration (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=71.00' (Dynamic Tailwater)
 ↑2=Orifice/Grate (Controls 0.00 cfs)

Tertiary OutFlow Max=12.17 cfs @ 12.11 hrs HW=75.59' TW=0.00' (Dynamic Tailwater)
 ↑3=Broad-Crested Rectangular Weir (Weir Controls 12.17 cfs @ 2.07 fps)

SOIL FILTER SF4 SPILLWAY CALCULATION - 25-YEAR

Post-Development_PARK

Type III 24-hr 25-Yr Storm Rainfall=5.80"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Summary for Pond SF4: Soil Filter

Inflow Area = 1.552 ac, 80.02% Impervious, Inflow Depth > 5.11" for 25-Yr Storm event
Inflow = 8.69 cfs @ 12.07 hrs, Volume= 0.661 af
Outflow = 7.59 cfs @ 12.11 hrs, Volume= 0.483 af, Atten= 13%, Lag= 2.6 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Tertiary = 7.59 cfs @ 12.11 hrs, Volume= 0.483 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
Peak Elev= 75.44' @ 12.11 hrs Surf.Area= 4,921 sf Storage= 9,767 cf

Plug-Flow detention time= 166.3 min calculated for 0.483 af (73% of inflow)
Center-of-Mass det. time= 77.2 min (838.4 - 761.2)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,442 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	3,128	0	0
74.50	4,186	5,486	5,486
75.00	4,566	2,188	7,674
76.00	5,370	4,968	12,642
77.00	6,231	5,801	18,442

1' of freeboard
with primary
outlets clogged

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration X 0.00 over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate X 0.00 C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)
↑1=Exfiltration (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=70.59' (Dynamic Tailwater)
↑2=Orifice/Grate (Controls 0.00 cfs)

Tertiary OutFlow Max=7.55 cfs @ 12.11 hrs HW=75.44' TW=0.00' (Dynamic Tailwater)
↑3=Broad-Crested Rectangular Weir (Weir Controls 7.55 cfs @ 1.72 fps)

SOIL FILTER SF4 SPILLWAY CALCULATION - 100-YEAR

Post-Development_PARK

Type III 24-hr 100-Yr Storm Rainfall=8.10"

Prepared by Site Design Associates

Printed 12/15/2022

HydroCAD® 10.00-26 s/n 08018 © 2020 HydroCAD Software Solutions LLC

Summary for Pond SF4: Soil Filter

Inflow Area = 1.552 ac, 80.02% Impervious, Inflow Depth > 7.38" for 100-Yr Storm event
 Inflow = 12.37 cfs @ 12.07 hrs, Volume= 0.954 af
 Outflow = 11.11 cfs @ 12.11 hrs, Volume= 0.775 af, Atten= 10%, Lag= 2.3 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Tertiary = 11.11 cfs @ 12.11 hrs, Volume= 0.775 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.02 hrs
 Peak Elev= 75.56' @ 12.11 hrs Surf.Area= 5,014 sf Storage= 10,343 cf

Plug-Flow detention time= 138.6 min calculated for 0.775 af (81% of inflow)
 Center-of-Mass det. time= 65.3 min (819.9 - 754.6)

Volume	Invert	Avail.Storage	Storage Description
#1	73.00'	18,442 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
73.00	3,128	0	0
74.50	4,186	5,486	5,486
75.00	4,566	2,188	7,674
76.00	5,370	4,968	12,642
77.00	6,231	5,801	18,442

Filter does not
overtop in 100-
year with primary
outlets clogged.

Device	Routing	Invert	Outlet Devices
#1	Primary	73.00'	0.750 in/hr Exfiltration X 0.00 over Surface area Phase-In= 0.01'
#2	Secondary	74.50'	24.0" Horiz. Orifice/Grate X 0.00 C= 0.600 Limited to weir flow at low heads
#3	Tertiary	75.00'	10.0' long x 10.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

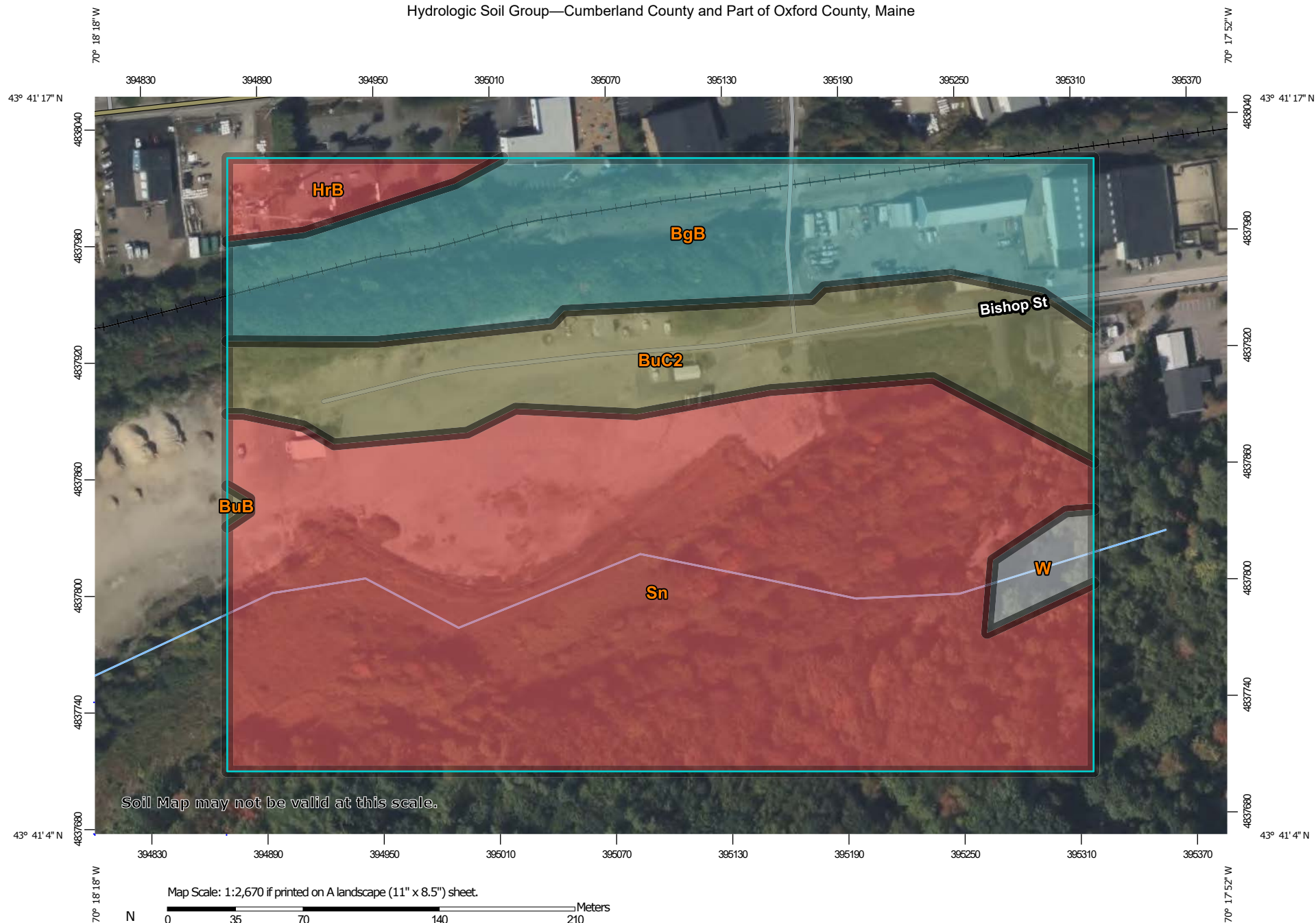
Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=0.00' (Dynamic Tailwater)
 ↑ **1=Exfiltration** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=70.59' (Dynamic Tailwater)
 ↑ **2=Orifice/Grate** (Controls 0.00 cfs)

Tertiary OutFlow Max=11.04 cfs @ 12.11 hrs HW=75.56' TW=0.00' (Dynamic Tailwater)
 ↑ **3=Broad-Crested Rectangular Weir** (Weir Controls 11.04 cfs @ 1.99 fps)

Appendix D:
USDA Soil Map

Hydrologic Soil Group—Cumberland County and Part of Oxford County, Maine



Soil Map may not be valid at this scale.

Map Scale: 1:2,670 if printed on A landscape (11" x 8.5") sheet.

0 35 70 140 210 Meters

0 100 200 400 600 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge ticks: UTM Zone 19N WGS84



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey
Page 189

12/15/2022
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
 Survey Area Data: Version 19, Aug 30, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BgB	Nicholville very fine sandy loam, 0 to 8 percent slopes	C	7.8	22.3%
BuB	Lamoine silt loam, 3 to 8 percent slopes	C/D	0.0	0.1%
BuC2	Buxton silt loam, 8 to 15 percent slopes	C/D	5.8	16.5%
HrB	Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky	D	0.9	2.7%
Sn	Scantic silt loam, 0 to 3 percent slopes	D	19.9	56.9%
W	Water		0.5	1.5%
Totals for Area of Interest			35.0	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix E:
Inspection & Maintenance Plan &
City of Portland Stormwater Maintenance Agreement

**Inspection and Maintenance Plan
For Stormwater Management Facilities**

**University of New England
Intermodal Transportation Facility
Bishop Street, Portland, Maine
January 20, 2023**

Stormwater management facilities include paved surfaces, catch basins and drainage manholes, culverts, storm drain pipe, ditches/swales, and grassed underdrain soil filters. During construction activities and upon completion of construction, the operation and maintenance of all stormwater management facilities, the establishment of any contract services required to implement the program, and the keeping of records and maintenance log book will be the responsibility of the University of New England.

The University of New England shall enter into a Stormwater Drainage System Maintenance Agreement with the City of Portland to be recorded at the Cumberland County Registry of Deeds. A template for this agreement is included in this section and shall be completed upon final approval of the project.

At a minimum, the following maintenance activities for each stormwater management system shall be performed on a prescribed schedule.

Paved Surfaces

Accumulations of winter sand along paved surfaces shall be cleared at least once a year, preferably in the spring, and periodically during the year on an as-needed basis, to minimize transportation of sediment during rainfall events. Accumulations on pavement may be removed by pavement sweeping or vacuuming. 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.

Ditches and Swales

Open swales and ditches shall be inspected twice per year (in spring and fall) to assure that debris and/or sediments do not reduce the effectiveness of the system. Debris and sediments shall be removed at that time. Any sign of erosion or blockage shall be immediately repaired to assure a vigorous growth of vegetation for the stability of the ditches and slopes proper function. Maintenance shall include, but not be limited to, mowing, trimming and removal vegetation in the ditches and slopes as required in order to prevent vegetation from blocking or diverting storm flows, replacement of riprap channel lining to prevent scour of the channel invert, removing vegetation and debris from the culverts.

Vegetated ditches should be mowed at least monthly during the growing season. Larger brush or trees must not be allowed to become established in the channel. Any areas where

the vegetation fails will be subject to erosion and should be reseeded and mulched immediately.

Riprap ditches and aprons where stone is displaced should be replaced and chinked to assure stability. With time, additional riprap may be added. Vegetation growing through riprap should be removed on an annual basis.

Catch Basins, Field Inlets, and Drainage Manholes

All catch basins, field inlets, and drainage manholes throughout the collection system shall be inspected twice per year (in spring and fall) to assure that the inlet entry and grates are clear of debris and will accept the intended flows. Any debris and sediments shall be cleared. Sediment should be removed from these structures when it accumulates within 12 inches of the lowest pipe invert. At a minimum, remove floating debris and hydrocarbons at the time of the inspection. The removed material must be disposed of in accordance with the Maine Solid Waste Disposal Rules. Confined space entry safety procedures shall be practiced should entry into these structures be required.

Culverts and Storm Drainage Pipes

Culverts and piped drainage systems shall be inspected on an annual basis to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the pipe inlet and outlet. Sediment should be removed when its level exceeds 20% of the pipe diameter. This may be accomplished by hydraulic flushing or any mechanical means; however, care should be taken to contain the sediment at the pipe outlet, and not flush the sediments into the stormwater filter or wetland areas as this will reduce the ponds capacity and ability to infiltrate runoff, and will hasten the time when the pond must be cleaned or rehabilitated.

Riprap aprons where stone is displaced should be replaced and chinked to assure stability. With time, additional riprap may be added. Vegetation growing through riprap should be removed on an annual basis.

Grassed Underdrained Soil Filters

Mowing and removal of woody growth – underdrained soil filters are designed to grow water tolerant plantings and mowing is not required in the interior of the structure. However, the external and top slopes of earthen embankments will be mowed up to three times per growing season to control over growth.

Outlet inspection and cleaning – The soil filter outlet consists of a layer of planting loam and sand with a stone and perforated pipe underdrain. Influx of sediments will be limited by sumps on all upstream catch basin structures and vegetated swales. Outlet inspections shall include flushing of the underdrain through the cleanout at the end of the pipe. Trash, sediment and debris shall be removed from the vicinity of the outlet and disposed of at a

licensed off-site facility. The basin shall be inspected bi-annually for evidence of excessive retention or rapid release of flow.

If the filter fails to drain within 72 hours, the surface of the pond shall be rototilled to promote aeration of the filter media and vegetation shall be re-established. If aeration of the surface soil fails to promote filtration of impounded water within 72 hours, then the filter media shall be replaced as necessary. The stone underdrain shall also be replaced at this time, along with the perforated pipe.

If the filter drains too rapidly, (i.e. prior to 24 hours), then an adjustable orifice shall be installed on the underdrain outlet pipe. The orifice shall be adjusted such that the filter completely drains within 24 to 72 hours.

Underdrained soil filters shall not be used for snow storage areas.

Vehicular equipment used to maintain or rehabilitate underdrained soil filters should work from the basin perimeter and not enter the basin area, as this will compact the soil surface and reduce the design infiltration rate.

Disposal

Any sediment or debris removed during maintenance of the stormwater system must be disposed of in accordance with the Maine Solid Waste Disposal Rules.

Recordkeeping

University of New England will keep a written maintenance log that summarizes inspections, maintenance, and any corrective actions taken. The log shall include the date on which each inspection or maintenance task was performed, a description of the inspection findings or maintenance completed, and the name of the inspector or maintenance personnel performing the task. If a maintenance task requires the clean-out of any sediment or debris, the location where the sediment or debris was disposed after removal will be indicated. This log shall be made available to the City of Portland upon request.

[illegible]

**UNE Intermodal Transportation Facility
Bishop Street, Portland, Maine**

INSPECTION / MAINTENANCE LOG

OUTLET STRUCTURES, CATCH BASINS, AND DRAIN PIPES

I: INSPECTED - C: CLEANED - R: REPAIRED

DATE	INITIALS	ACTION	COMMENT
3/28/22	JKL	I, C	EXAMPLE: Called ACME to clean the outlet structure in pond 1, cleaned debris from culvert inlet in pond 2.

**UNE Intermodal Transportation Facility
Bishop Street, Portland, Maine**

INSPECTION / MAINTENANCE LOG

UNDERDRAINED SOIL FILTERS

I: INSPECTED - C: CLEANED - S: SWEPT - R: REPAIRED

DATE	INITIALS	ACTION	COMMENT
3/28/22	RST	I	EXAMPLE: Cleared sediment and plant debris from inlet area, mowed filter area, crest, and sideslopes.

UNE Intermodal Transportation Facility Bishop Street, Portland, Maine					
STORMWATER MANAGEMENT SYSTEM MAINTENANCE PROGRAM SUMMARY CHECKLIST					
Item	Commentary	Frequency			
		Month	Semi-Annual	Annual	Long-Term
Pavement	Review for damage and buildup of debris and sand.	X	X Sweep		
Swales, Ditches, and Riprap Aprons	Inspect for debris accumulation, erosion and excessive vegetation. Mow monthly, remove debris, repair and revegetate any area of erosion	X Mow		X	
Outlet Structures, Catch Basins, and Drain Pipes	Inspect for sediment buildup in pipe. Flush and remove as required.			X	
Underdrained Soil Filter	Mow twice per year. Inspect for erosion.		X		

**STORMWATER DRAINAGE SYSTEM
MAINTENANCE AGREEMENT**

DRAFT

For SITE PLANS (THAT ARE NOT SUBDIVISIONS)

IN CONSIDERATION OF the site plan approval granted by the Planning Board/Planning Authority of the City of Portland for the proposed Intermodal Transportation Facility Parking Improvements project, project number TBD, and the associated Site Grading and Drainage Site Erosion and Sediment Control Plan (Exhibit A) submitted by University of New England, prepared by Site Design Associates, Inc. of 23 Whitney Way, Topsham, Maine 04086, dated TBD, and pursuant to a condition thereof, University of New England with a principal place of business in Portland, Maine, and having a mailing address of 11 Hills Beach Road, Biddeford, Maine 04005, the owner of the subject premises, does hereby agree, for itself, its successors and assigns (the “Owner”), as follows:

Maintenance Agreement

That it, its successors and assigns, will, at its own cost and expense and at all times in perpetuity, maintain in good repair and in proper working order the underdrained soil filters, vegetated areas, catch basins, stormdrain piping, and level spreader, (hereinafter collectively referred to as the “stormwater system”), as shown on the plans in Exhibit A and in strict compliance with the approved University of New England Inspection and Maintenance Plan of Stormwater Management Facilities prepared for the Owner by Site Design Associates (copy attached as Exhibit B) and Chapter 32 of the Portland City Code.

Owner of the subject premises further agrees, at its own cost, to keep a Stormwater Maintenance Log. Such log shall be made available for inspection by the City of Portland upon reasonable notice and request.

Said agreement is for the benefit of the said City of Portland and all persons in lawful possession of said premises and abutters thereto; further, that the said City of Portland and said persons in lawful possession may enforce this Agreement by an action at law or in equity in any court of competent jurisdiction; further, that after giving the Owner written notice and a stated time to perform, the said City of Portland, by its authorized agents or representatives, may, but is not obligated to, enter upon said premises to maintain, repair, or replace said stormwater system in the event of any failure or neglect thereof, the cost and expense thereof to be reimbursed in full to the said City of Portland by the Owner upon written demand. Any funds owed to the City under this paragraph shall be secured by a lien on the property.

This Agreement shall also not be construed to allow any change or deviation from the requirements of the site plan most recently and formally approved by the Planning Board/Planning Authority of the City of Portland.

This agreement shall bind the undersigned only so long as it retains any interest in said premises, and shall run with the land and be binding upon the Owner's successors and assigns as their interests may from time to time appear.

The Owner agrees to record a copy of this Agreement in the Cumberland County Registry of Deeds within thirty (30) days of final execution of this Agreement. The Owner further agrees to provide a copy of this Agreement to any Condominium Association or management company, and to any successor or assign and to forward to the City an Addendum signed by any successor or assign in which the successor or assign states that the successor or assign has read the Agreement, agrees to all its terms and conditions and the successor or assign will obtain and forward to the City's Department of Public Services and Department of Planning and Urban Development a similar Addendum from any other successor or assign.

For the purpose of this agreement and release "Owner" is any person or entity who is a successor or assign and has a legal interest in part, or all, of the real estate and any building. The real estate shown by chart, block and lot number in the records on file in the City Assessor's office shall constitute "the property" that may be entered by the City and lienied if the City is not paid all of its costs and charges following the mailing of a written demand for payment to the owner pursuant to the process and with the same force and effect as that established by 36 M.R.S.A. §§ 942 and 943 for real estate tax liens.

Any written notices or demands required by the agreement shall be complete on the date the notice is attached to one or more doors providing entry to any buildings and mailed by certified mail, return receipt requested or ordinary mail or both to the owner of record as shown on the tax roles on file in the City Assessor's Office.

If the property has more than one owner on the tax rolls, service shall be complete by mailing it to only the first listed owner. The failure to receive any written notice required by this agreement shall not prevent the City from entering the property and performing maintenance or repairs on the stormwater system, or any component thereof, or lienied it or create a cause of action against the City.

Dated at Portland, Maine this _____ day of _____, 2021.

University of New England

Alan Thibeault, Vice President for University Operations

STATE OF MAINE
CUMBERLAND, ss.

Date: _____

Personally appeared the above-named _____ (*name and title*), and acknowledged the foregoing instrument to be his free act and deed in his said capacity.

Before me,

Notary Public/Attorney at Law

Print name: _____

Exhibit A: Approved Grading, Drainage, and Erosion Control Plan

Exhibit B: University of New England Inspection and Maintenance Plan of Stormwater Management Facilities

Appendix F

Drainage Plans

I1.0 – Pre Development Impervious Area Plan

I2.0 – Post Development Impervious Area Plan

R1.0 – Pre Development Pollutant Loading Plan

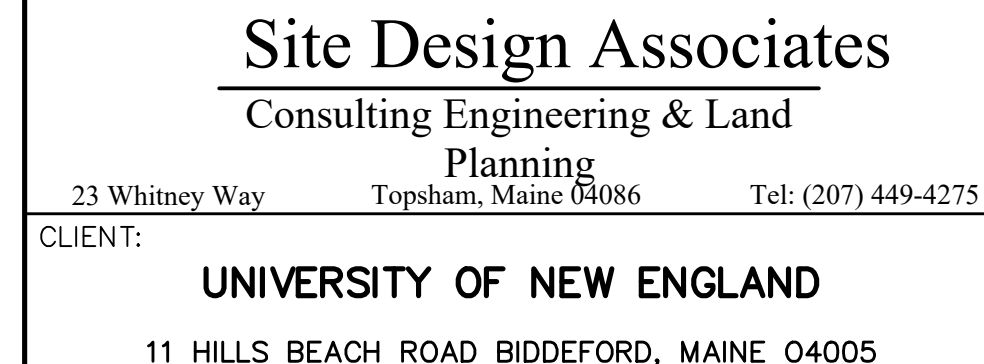
R2.0 – Post Development Pollutant Loading Plan

D1.0 – Pre Development Drainage Plan

D2.0 – Post Development Drainage Plan

D3.0 – Stormwater Treatment Plan

SOIL TYPES AND BOUNDARIES OBTAINED FROM SOIL SURVEY STAFF, NATURAL RESOURCES CONSERVATION SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE. WEB SOIL SURVEY. AVAILABLE ONLINE AT THE FOLLOWING LINK: [HTTP://WEBSOILSURVEY.SC.EGOV.USDA.GOV/](http://websoilsurvey.sc.egov.usda.gov/). ACCESSED 12/15/2022.

[illegible]

DESIGN: DEPT.	PROJECT: RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING 160-172 BISHOP STREET PORTLAND, MAINE			
DRAWN: DEPT.				
CHKD: TWS				
	PRE DEVELOPMENT DRAINAGE PLAN			
DATE: DEC. 2022	PROJ. NO.	21-216-00		REV.
SCALE: 1" = 40'	DWG. NO.	D1.0		A

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY
 ITERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

STATE OF MAINE
THOMAS W. SAUCIER
NO. 6095
LICENSED
PROFESSIONAL ENGINEER
1/20/2023

PROJECT:		RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING 160-172 BISHOP STREET PORTLAND, MAINE	
		STORMWATER TREATMENT PLAN	
PROJ. NO.		21-216-00	R
DWG. NO.		D3.0	



VINCENT A. DIORIO, INC.

CONSULTING ENGINEERS

89 Access Road, Suite 18
Norwood, Massachusetts, 02062

Att. K

April 21, 2023

Saucier Design Associates
23 Whitney Way
Topsham, Maine 04086
Attention: Tom Saucier
tsaucier@sitedesignassociates.biz

RE: University of New England
Intermodal Parking Lot
Bishop Street
Portland, ME

SUBJECT: Site Lighting

Dear Tom,

The proposed parking lot area is approximately 95,500 square feet and our current design consists of 30'-0" poles with single lighting fixtures around the perimeter of the parking lot and dual lighting fixtures located on the inboard islands within the lot.

The University standard lighting fixture is the Lithonia Lighting RSX2 LED family of site lighting fixtures. The fixtures that are being used are a full cut-off luminaire that is Dark Skies compliant, DLC Premium listed and night-time friendly.

Each lighting fixture delivers 11,285 lumens and consumes 71 watts of power, uses a Type 3 lighting distribution and the Correlated Color Temperature (CCT) is 4000 Kelvin.

This system delivers an average footcandle value of 2.5 with a maximum of 10.2 and a minimum of 0.1 foot-candles with minimal light trespass. The maximum value is directly under the light fixture.

In accordance with the recommendations from the Illuminating Engineering Society of North America (IES-NA) publication RP-20, outdoor lighting, parking garages and security lighting levels are between 2-5 footcandles and is generally designed with 4000 – 5000 CCT. This CCT combined with the illumination levels, provides a safer environment for both pedestrian and vehicle traffic and allows viewing of the full color spectrum whenever the lighting is activated.

This lighting design is also consistent with the previous design that was approved by the City of Portland for the Harold and Bibby Alford Center for Health and Sciences on Stevens Avenue.

Based on the above-mentioned information, this office would request that the design be accepted as designed.

If you any questions regarding the topic above, please do not hesitate to contact this office.

Very Truly Yours,
VINCENT A. DIORIO INC.

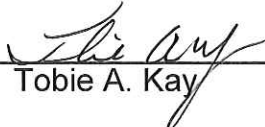
Vincent A. Dilorio Jr.
President

PROJECT:
UNE Harold and Bibby Alford Center for Health Services
Bishop Street

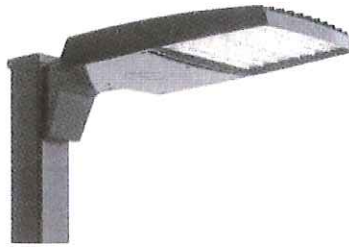
DATA:
Site Lighting

FAVREAU ELECTRIC
37 JORDAN AVENUE
BRUNSWICK, MAINE 04011
VOICE (207) 725-2005
FAX (207) 725-2920

DATE: 1/13/23

SUBMITTED BY: 
Tobie A. Kay

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA



RSX2 LED Area Luminaire

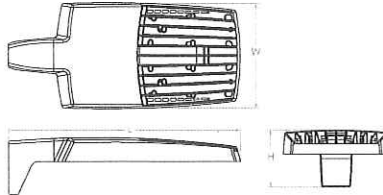


Catalog Number
Notes
Type

Hit the tab key or mouse over the page to see all instruction details.

Specifications

EPA (ft²@0°):	0.69 ft² (0.06 m²)
Length:	29.3" (74.4 cm) (SPA mount)
Width:	13.4" (34.0 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.3 cm) Arm
Weight: (SPA mount)	30.0 lbs (13.6 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD

RSX2 LED	P1	40K	R3	MVOLT	SPA
Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX2 LED	P1 P2 P3 P4 P5 P6	30K 3000K 40K 4000K 50K 5000K	R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide ¹ R5S Type 5 Short ¹ AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	MVOLT (120V-277V) ² HVOLT (347V-480V) ³ XVOLT (277V-480V) ⁴ (use specific voltage for options as noted) 120 ³ 277 ⁵ 208 ³ 347 ⁵ 240 ³ 480 ⁵	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) ⁶ WBA Wall bracket ¹ WBASC Wall bracket with surface conduit box AASP Adjustable tilt arm square pole mounting ⁶ AARP Adjustable tilt arm round pole mounting ⁶ AAWB Adjustable tilt arm with wall bracket ⁶ AAWSC Adjustable tilt arm wall bracket and surface conduit box ⁶

PER7

DBLXD

Options	Finish
Shipped Installed HS House-side shield ⁷ PE Photocontrol, button style ^{8,9} PEX Photocontrol external threaded, adjustable ^{9,11} PER7 Seven-wire twist-lock receptacle only (no controls) ^{9,11,12,13} CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) ⁵ DF Double fuse (208, 240, 480) ⁵ SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output ^{9,14} DMG 0-10V dimming extend out back of housing for external control (control ordered separate) ^{9,11} DS Dual switching ^{9,14}	Shipped Installed *Standalone and Networked Sensors/Controls (factory default settings, see table page 9) NLTAIR2 nLight AIR generation 2 ^{11,15,16} PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) ^{11,16,17} BAA Buy America(n) Act Compliant *Note: PIRHN with nLight Air can be used as a standalone dimming sensor with out-of-box settings or as a wireless networked solution. See factory default settings table. Sensor coverage pattern is affected when luminaire is tilted. Shipped Separately (requires some field assembly) EGS External glare shield ⁶ EGFV External glare full visor (360° around light aperture) ⁷ BS Bird spikes ¹²
	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 1 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA

Ordering Information

Accessories

Ordered and shipped separately.

RSX2HS	RSX2 House side shield (includes 2 shields)
RSX2EGS (FINISH) U	External glare shield (specify finish)
RSX2HSAFRR (FINISH) U	RSX2 House side shields for AFR rotated optics (includes 2 shields)
RSX2EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) ¹
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) ²
DLL347F 1.5 CULJU	Photocell -SSL twist-lock (347V) ³
DLL480F 1.5 CULJU	Photocell -SSL twist-lock (480V) ³
DSHORT SBK U	Shorting cap ³

NOTES

- Any Type 5 distribution, is not available with WBA.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- XVOLT driver not available with P1. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, DS, PIRHN). Exception: PE or PEX and FAO can be combined.
- Requires 120V, 208V, 240V, or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, DS, PER7, FAO and PIRHN.
- DS only available on performance package P5 and P6.
- Must be ordered with PIRHN.
- Requires MVOLT or HVOLT.
- Must be ordered with NLAIR2. For additional information on PIRHN visit www.acuitybrands.com.
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields



House Side Shield



External Glare Shield

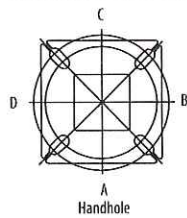


External 360 Full Visor

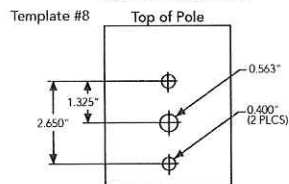
Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

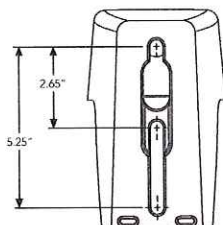
HANDHOLE ORIENTATION



RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2 - 3/8"	RPA, AARP	AS3-5190	AS3-5280	AS3-5290	AS3-5320	AS3-5390	AS3-5490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
#B	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
Drill Nomenclature		DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX2 - Luminaire EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

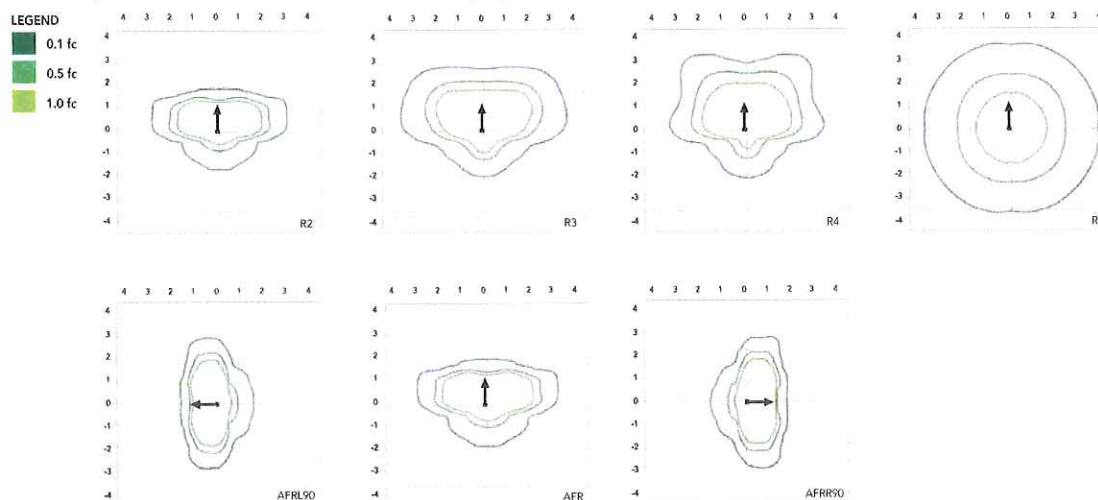
Fixture Quantity & Mounting Configuration		Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	4 @ 90°	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
RPA - Round Pole Adaptor		0.74	1.27	1.37	1.9	1.71	2.49	1.42	2.16	2.84
MA - Mast Arm Adaptor		0.61	1.14	1.11	1.64	1.45	2.23	1.29	1.9	2.58
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole										
	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
	10°	0.53	1.06	1.05	1.58	1.37	2.08	1.06	1.59	2.12
	20°	0.52	1.02	1.03	1.52	1.33	2.02	1.03	1.55	2.07
	30°	0.64	1.11	1.18	1.63	1.45	2.21	1.27	1.91	2.54
	40°	0.81	1.21	1.35	1.74	1.65	2.39	1.62	2.43	3.23
	45°	0.91	1.25	1.5	1.81	1.75	2.48	1.82	2.73	3.64
	50°	1.34	1.83	2.17	2.61	2.56	3.62	2.68	4.02	5.36
	60°	2.2	2.97	3.57	4.24	4.17	5.89	4.41	6.61	8.82
	70°	2.86	4.13	4.7	5.89	5.71	8.21	5.71	8.57	11.42
80°	3.4	5.13	5.67	7.34	7.09	10.21	6.79	10.19	13.59	
	90°	3.85	5.96	6.55	8.58	8.31	11.88	7.70	11.56	15.41

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURED REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isolootcandle plots for the RSX2 LED P6 40K. Distances are in units of mounting height (30').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	71W	0.59	0.34	0.30	0.26	0.20	0.15
P2	111W	0.93	0.53	0.46	0.40	0.32	0.23
P3	147W	1.23	0.70	0.61	0.53	0.42	0.31
P4	187W	1.55	0.90	0.78	0.68	0.53	0.38
P5	210W	1.75	1.01	0.87	0.76	0.60	0.44
P6	244W	2.03	1.17	1.01	0.88	0.70	0.51

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
 © 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
 Rev. 06/16/22
 Page 3 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	71W	R2	10,040	2	0	1	139	11,031	2	0	1	153	11,031	2	0	1	153
		R3	10,005	2	0	2	141	10,992	2	0	2	155	10,992	2	0	2	155
		R35	10,271	2	0	2	143	11,285	2	0	2	157	11,285	2	0	2	157
		R4	10,136	2	0	2	143	11,136	2	0	2	157	11,136	2	0	2	157
		R45	9,779	2	0	2	138	10,744	2	0	2	151	10,744	2	0	2	151
		R5	10,271	4	0	2	145	11,285	4	0	2	159	11,285	4	0	2	159
		R55	10,544	3	0	1	149	11,585	3	0	2	163	11,585	3	0	2	163
		AFR	10,026	2	0	1	141	11,016	2	0	1	155	11,016	2	0	1	155
		AFRR90	10,122	3	0	2	140	11,121	3	0	2	154	11,121	3	0	2	154
		AFRL90	10,164	3	0	2	141	11,167	3	0	2	155	11,167	3	0	2	155
P2	111W	R2	15,712	2	0	2	138	17,263	2	0	2	151	17,263	2	0	2	151
		R3	15,657	2	0	3	141	17,202	3	0	3	155	17,202	3	0	3	155
		R35	16,075	2	0	2	141	17,661	2	0	2	155	17,661	2	0	2	155
		R4	15,862	2	0	3	143	17,427	2	0	3	157	17,427	2	0	3	157
		R45	15,304	2	0	2	138	16,815	2	0	2	151	16,815	2	0	2	151
		R5	16,075	4	0	2	145	17,661	5	0	3	159	17,661	5	0	3	159
		R55	16,502	4	0	2	149	18,130	4	0	2	163	18,130	4	0	2	163
		AFR	15,691	2	0	2	141	17,240	2	0	2	155	17,240	2	0	2	155
		AFRR90	15,841	3	0	3	139	17,404	4	0	3	153	17,404	4	0	3	153
		AFRL90	15,907	3	0	3	139	17,477	4	0	3	153	17,477	4	0	3	153
P3	147W	R2	19,855	3	0	2	132	21,814	3	0	2	145	21,814	3	0	2	145
		R3	19,785	3	0	3	135	21,737	3	0	4	148	21,737	3	0	4	148
		R35	20,312	3	0	3	135	22,317	3	0	3	149	22,317	3	0	3	149
		R4	20,044	3	0	3	136	22,022	3	0	4	150	22,022	3	0	4	150
		R45	19,339	3	0	3	132	21,247	3	0	3	145	21,247	3	0	3	145
		R5	20,313	5	0	3	138	22,317	5	0	3	152	22,317	5	0	3	152
		R55	20,852	4	0	2	142	22,910	4	0	2	156	22,910	4	0	2	156
		AFR	19,828	3	0	2	135	21,785	3	0	2	148	21,785	3	0	2	148
		AFRR90	20,017	4	0	3	133	21,992	4	0	3	147	21,992	4	0	3	147
		AFRL90	20,101	4	0	3	134	22,084	4	0	3	147	22,084	4	0	3	147
P4	187W	R2	22,836	3	0	2	120	25,090	3	0	2	132	25,090	3	0	2	132
		R3	22,756	3	0	4	122	25,002	3	0	4	134	25,002	3	0	4	134
		R35	23,363	3	0	3	123	25,668	3	0	3	135	25,668	3	0	3	135
		R4	23,054	3	0	4	123	25,329	3	0	4	135	25,329	3	0	4	135
		R45	22,243	3	0	3	119	25,059	3	0	3	134	25,059	3	0	3	134
		R5	23,363	5	0	3	125	25,669	5	0	4	137	25,669	5	0	4	137
		R55	23,983	4	0	2	128	26,350	4	0	2	141	26,350	4	0	2	141
		AFR	22,806	3	0	2	122	25,056	3	0	2	134	25,056	3	0	2	134
		AFRR90	23,023	4	0	3	121	25,295	4	0	3	133	25,295	4	0	3	133
		AFRL90	23,120	4	0	3	122	25,401	4	0	3	134	25,401	4	0	3	134
P5	210W	R2	26,141	3	0	2	122	28,721	3	0	2	135	28,721	3	0	2	135
		R3	26,049	3	0	4	124	28,620	3	0	4	136	28,620	3	0	4	136
		R35	26,744	3	0	3	125	29,383	3	0	4	138	29,383	3	0	4	138
		R4	26,390	3	0	4	126	28,994	3	0	4	138	28,994	3	0	4	138
		R45	25,462	3	0	3	121	27,974	3	0	3	133	27,974	3	0	3	133
		R5	26,744	5	0	4	127	29,383	5	0	4	140	29,383	5	0	4	140
		R55	27,454	4	0	2	131	30,163	4	0	2	144	30,163	4	0	2	144
		AFR	26,106	3	0	2	124	28,682	3	0	2	137	28,682	3	0	2	137
		AFRR90	26,354	4	0	3	123	28,955	5	0	3	136	28,955	5	0	3	136
		AFRL90	26,465	4	0	3	124	29,077	5	0	3	136	29,077	5	0	3	136
P6	244W	R2	27,646	3	0	2	112	30,374	3	0	2	123	30,374	3	0	2	123
		R3	27,549	3	0	4	113	30,267	3	0	4	124	30,267	3	0	4	124
		R35	28,283	3	0	3	115	31,075	3	0	4	126	31,075	3	0	4	126
		R4	27,909	3	0	4	114	30,663	3	0	4	126	30,663	3	0	4	126
		R45	26,928	3	0	3	110	29,585	3	0	3	121	29,585	3	0	3	121
		R5	28,284	5	0	4	116	31,075	5	0	4	127	31,075	5	0	4	127
		R55	29,035	4	0	2	119	31,900	5	0	3	131	31,900	5	0	3	131
		AFR	27,608	3	0	2	112	30,332	3	0	2	123	30,332	3	0	2	123
		AFRR90	27,872	4	0	3	113	30,622	5	0	3	124	30,622	5	0	3	124
		AFRL90	27,989	4	0	3	113	30,751	5	0	3	125	30,751	5	0	3	125

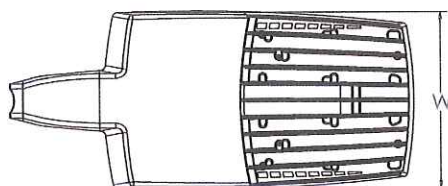
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA

Dimensions & Weights

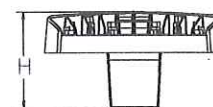
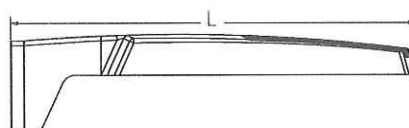
Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	30 lbs
RPA	32 lbs
MA	30 lbs
WBA	33 lbs
WBASC	36 lbs
IS	33 lbs
AASP	33 lbs
AARP	35 lbs
AAWB	36 lbs
AAWSC	39 lbs

RSX2 with Round Pole Adapter (RPA)



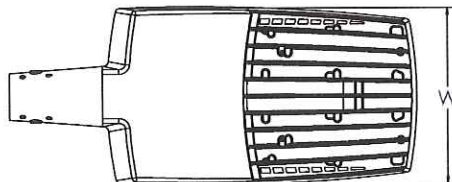
Length: 30.3" (77.0 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.3 cm) Arm



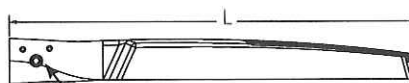
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



RSX2 with Mast Arm Adapter (MA)

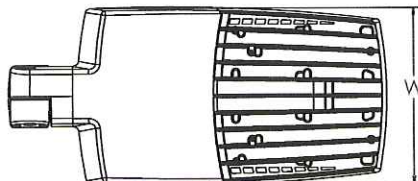


Length: 30.6" (77.7 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
3.5" (8.9 cm) Arm

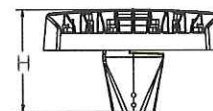
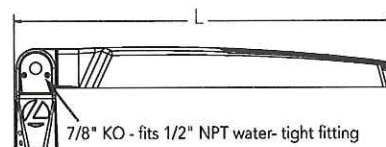


7/16" locking thru bolt/nut provided

RSX2 with Adjustable Slipfitter (IS)



Length: 28.3" (71.9 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
7.6" (19.3 cm) Arm



7/8" KO - fits 1/2" NPT water-tight fitting



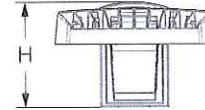
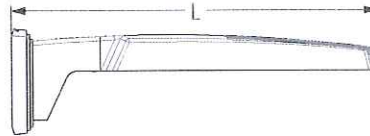
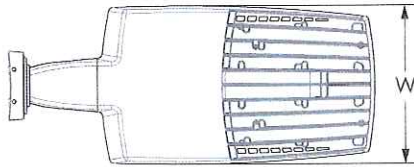
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 5 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLE LIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA

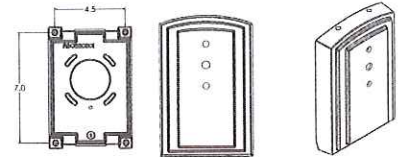
Dimensions

RSX2 with Wall Bracket (WBA)

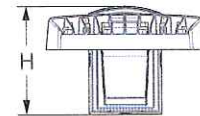
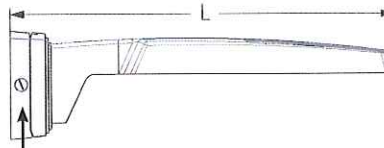
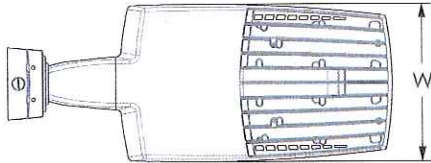


Length: 31.2" (79.2 cm)
Width: 13.4" (41.7 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



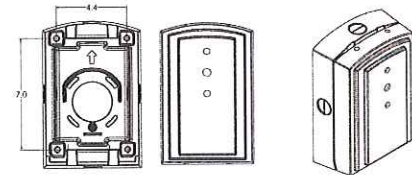
RSX2 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

Length: 32.8" (83.3 cm)
Width: 13.4" (41.7 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

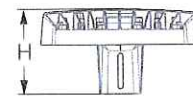
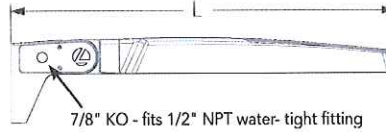
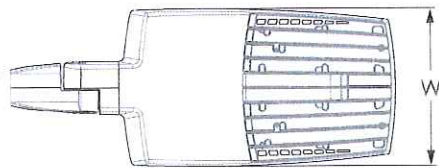
Surface Conduit Box (SCB) Mounting Detail



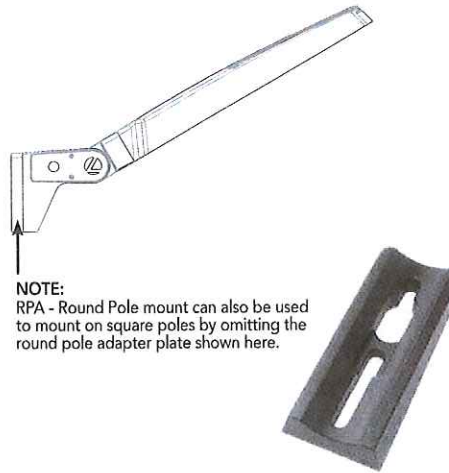
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA

Dimensions

RSX2 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 32.8" (83.3 cm) AASP
 33.8" (85.9 cm) AARP
 Width: 13.4" (34.0 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.2 cm) Arm



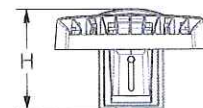
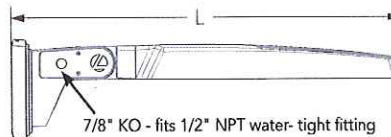
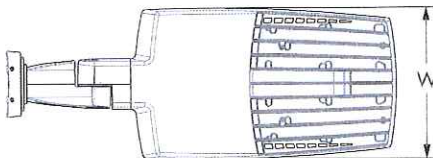
NOTE:
 RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

Notes

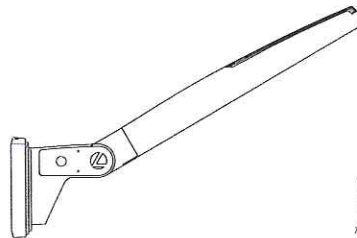
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

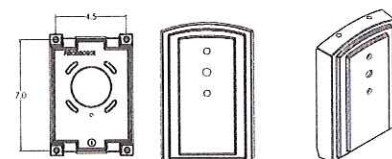
RSX2 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 34.7" (88.0 cm)
 Width: 13.4" (34.0 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm



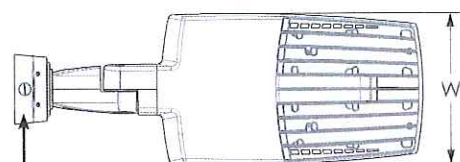
Wall Bracket (WBA) Mounting Detail



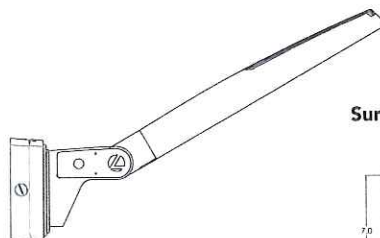
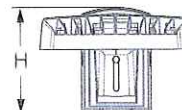
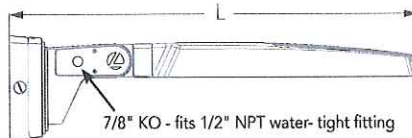
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLE LIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA

Dimensions

RSX2 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)

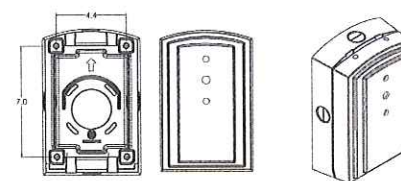


3/4" NPT taps with plugs - Qty (4) provided

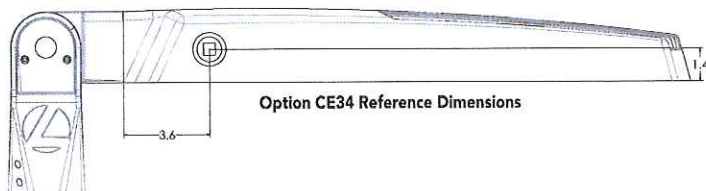


Length: 36.2" (91.9 cm)
Width: 13.4" (40.0 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail

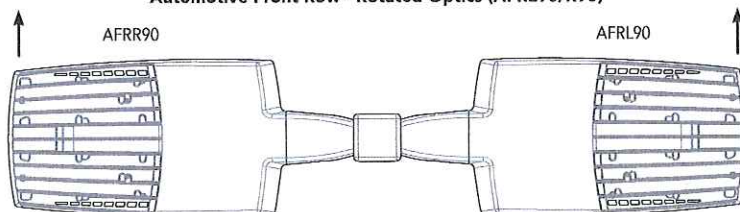


Additional Reference Drawings



Option CE34 Reference Dimensions

Automotive Front Row - Rotated Optics (AFRL90/R90)

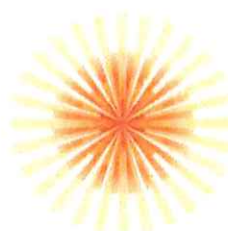
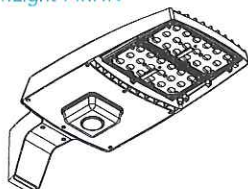


(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

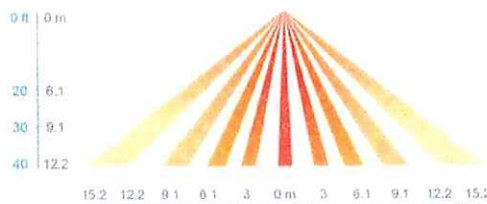
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURED REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R3 NVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AA

nLight Control - Sensor Coverage and Settings

NLTAIR2 PIRHN nLight Sensor Coverage Pattern nLight PIRHN



Top



Side

Motion Sensor Default Settings - Option PIRHN					
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds
					Ramp-down Time (from occupied to unoccupied)
					5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

FEATURES & SPECIFICATIONS

INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX2 delivers 11,000 to 31,000 lumens and is ideal for replacing 250W to 1000W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION AND DESIGN

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. Vibration rated per ANSI C136.31: 3G Mountings: Include SPA, RPA, MA, IS, AASP, AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row) and AFR rotated AFR90 and AFR190.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Fixtures ship standard with 0-10v dimming driver. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/DPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only. US Patent No. D882, 1465

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT.

Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

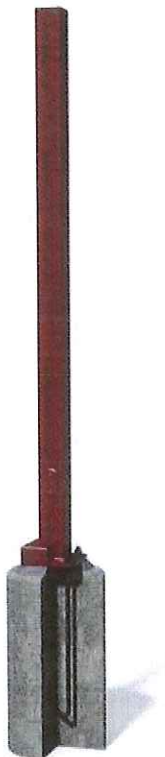
Lithonia RSX2 Area LED
Rev. 06/16/22
Page 9 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLERIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	SSP27-5.0-11-BLK-DM10-BC	AA



SSP

Square Non-Tapered Steel Poles



Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"). The pole shaft material shall conform to ASTM A500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

Base Plate

The anchor base is fabricated from a structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

Bolt Circle: 1.00 (in.) **Dimension :** 12.0 (in.) **Thickness:** 1.00 (in.) **Conduit Opening:** 4 (in.)

Consult KW representative for non-standard dimensions.

Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A153. Fully galvanized anchor bolts are available upon request.

Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" inside opening, located 1' - 6" above base, is standard on all poles. A grounding provision is located inside the handhole ring.

Finish

Standard - The exterior surface is cleaned with an alkaline rinse to remove surface contaminants and shot blasted to specifications as published by the Steel Structures Painting Council Standards SSPC-SP10 (near white). The exterior surface is chemically pretreated with an iron phosphate conversion coating then rinsed with ambient fresh water containing special surfactants and sealers forming a dry tight micro-crystalline coating. A polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils is standard on all color finishes. The internal surface including the powder coated area at the base-end is coated with **K-SPEL**, a thermoplastic hydrocarbon resin system specially formulated for application over untreated steel surfaces, to a thickness of 3 mils. The internal coating shall contain special corrosion inhibitors and is capable of passing 1000 hours of salt spray exposure (ASTM B117).

Series: **SSP** - Square Non-Tapered Steel Poles

Nominal Height: **27'** Base Diameter: **5.0"** Gauge: **11**

Finish: **BLK** - Standard - Black

Mounting Designation: **DM10** - Drilled for 1 Luminaire

Options: **BC** - Base Cover

Height (ft.)	Pole Shaft (in.) x (ft.)	Gauge	Handhole Size (in.)	Anchor Bolt (in.) x (in.) x (in.)	Bolt Circle (in.)	80 MPH (ft.)	90 MPH (ft.)	100 MPH (ft.)	Ship WT. (lbs.)
27	5.0 x 27.0	11	3 x 5	1.00 x 36 x 4	11	9.8	6.1	3.2	300
SSP27-5.0-11-BLK-DM10-BC									

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB



RSX2 LED Area Luminaire

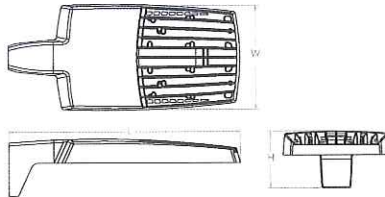


Catalog Number
Notes
Type

If the link does not move over the page to see all interactive elements

Specifications

EPA (ft²@0°):	0.69 ft² (0.06 m²)
Length:	29.3" (74.4 cm) (SPA mount)
Width:	13.4" (34.0 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.3 cm) Arm
Weight: (SPA mount)	30.0 lbs (13.6 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD

RSX2 LED	P1	40K	R4	MVOLT	SPA
Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX2 LED	P1 P2 P3 P4 P5 P6	30K 3000K 40K 4000K 50K 5000K	R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide ¹ R5S Type 5 Short ¹ AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	MVOLT (120V-277V) ² HVOLT (347V-480V) ³ XVOLT (277V-480V) ⁴ (use specific voltage for options as noted) 120 ³ 277 ⁵ 208 ³ 347 ⁵ 240 ³ 480 ⁵	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) ⁶ WBA Wall bracket ¹ WBASC Wall bracket with surface conduit box AASP Adjustable tilt arm square pole mounting ⁶ AARP Adjustable tilt arm round pole mounting ⁶ AAWB Adjustable tilt arm with wall bracket ⁶ AAWSC Adjustable tilt arm wall bracket and surface conduit box ⁶

PER7

DBLXD

Options	Finish
Shipped Installed HS House-side shield ⁷ PE Photocontrol, button style ^{8,9} PEX Photocontrol external threaded, adjustable ^{9,10} PER7 Seven-wire twist-lock receptacle only (no controls)^{10,11,12,13} CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) ⁵ DF Double fuse (208, 240, 480) ⁵ SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output ^{9,14} DMG 0-10V dimming extend out back of housing for external control (control ordered separate) ^{9,10} DS Dual switching ^{9,14}	Shipped Installed *Standalone and Networked Sensors/Controls (factory default settings, see table page 9) NLTAIR2 nLight AIR generation 2 ^{13,15,16} PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) ^{13,16,17} BAA Buy America(n) Act Compliant *Note: PIRHN with nLight Air can be used as a standalone dimming sensor with out-of-box settings or as a wireless networked solution. See factory default settings table. Sensor coverage pattern is affected when luminaire is tilted. Shipped Separately (requires some field assembly) EGS External glare shield ⁵ EGFV External glare full visor (360° around light aperture) ⁷ BS Bird spikes ¹⁸
	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLTXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 1 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB

Ordering Information

Accessories

Ordered and shipped separately:

RSX2HS	RSX2 House side shield (includes 2 shields)
RSX2EGS (FINISH) U	External glare shield (specify finish)
RSX2USAFRR (FINISH) U	RSX2 House side shields for AFR rotated optics (includes 2 shields)
RSX2EGV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) ¹
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	PhotoCell -SSL twist-lock (120-277V) ¹¹
DLL347F 1.5 CULJU	PhotoCell -SSL twist-lock (347V) ¹¹
DLL480F 1.5 CULJU	PhotoCell -SSL twist-lock (480V) ¹¹
DSHORT SBK U	Shorting cap ¹¹

NOTES

- Any Type 5 distribution, is not available with WBA.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- XVOLT driver not available with P1. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, DS, PIR-HV). Exception: PE or PEX and FAO can be combined.
- Requires 120V, 208V, 240V, or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, DS, PER7, FAO and PIR-HV.
- DS only available on performance package P5 and P6.
- Must be ordered with PIR-HV.
- Requires MVOLT or HVOLT.
- Must be ordered with NLTAR2. For additional information on PIR-HV visit www.acuitybrands.com.
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields



House Side Shield



External Glare Shield

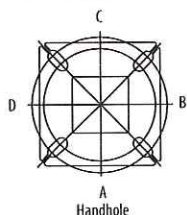


External 360 Full Visor

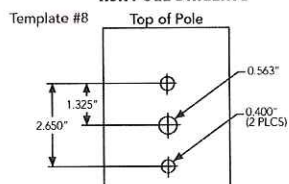
Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

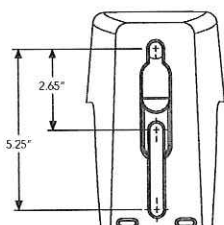
HANDHOLE ORIENTATION



RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
2 - 3/8"	RPA, AARP	AS3-5190	AS3-5280	AS3-5290	AS3-5320	AS3-5390	AS3-5490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
#B	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX2 - Luminaire EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

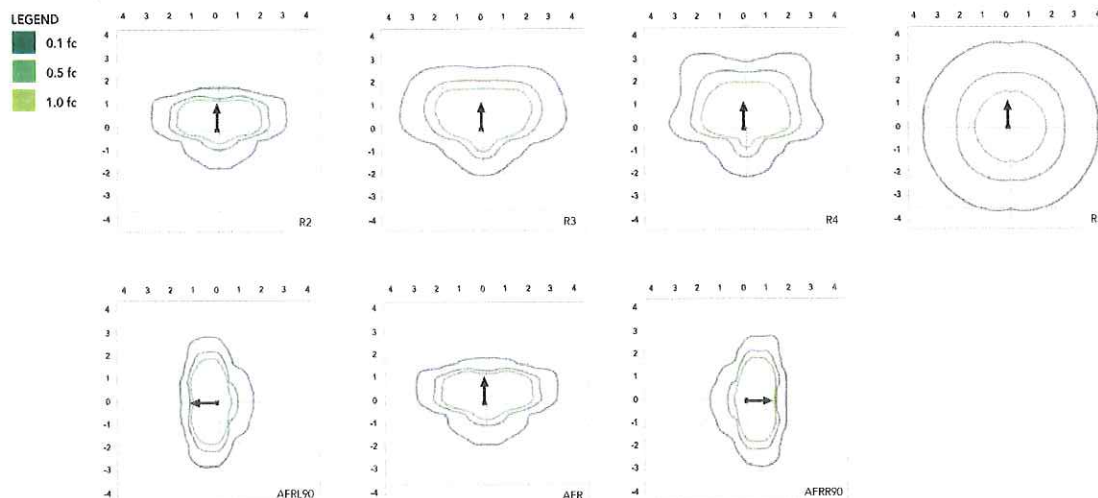
Fixture Quantity & Mounting Configuration		Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	4 @ 90°	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
RPA - Round Pole Adaptor		0.74	1.27	1.37	1.9	1.71	2.49	1.42	2.16	2.84
MA - Mast Arm Adaptor		0.61	1.14	1.11	1.64	1.45	2.23	1.29	1.9	2.58
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
	10°	0.53	1.06	1.05	1.58	1.37	2.08	1.06	1.59	2.12
	20°	0.52	1.02	1.03	1.52	1.33	2.02	1.03	1.55	2.07
	30°	0.64	1.11	1.18	1.63	1.45	2.21	1.27	1.91	2.54
	40°	0.81	1.21	1.35	1.74	1.65	2.39	1.62	2.43	3.23
	45°	0.91	1.25	1.5	1.81	1.75	2.48	1.82	2.73	3.64
	50°	1.34	1.83	2.17	2.61	2.56	3.62	2.68	4.02	5.36
	60°	2.2	2.97	3.57	4.24	4.17	5.89	4.41	6.61	8.82
	70°	2.86	4.13	4.7	5.89	5.71	8.21	5.71	8.57	11.42
	80°	3.4	5.13	5.67	7.34	7.09	10.21	6.79	10.19	13.59
	90°	3.85	5.96	6.55	8.58	8.31	11.88	7.70	11.56	15.41

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX2 LED P6 40K. Distances are in units of mounting height (30').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	71W	0.59	0.34	0.30	0.26	0.20	0.15
P2	111W	0.93	0.53	0.46	0.40	0.32	0.23
P3	147W	1.23	0.70	0.61	0.53	0.42	0.31
P4	187W	1.55	0.90	0.78	0.68	0.53	0.38
P5	210W	1.75	1.01	0.87	0.76	0.60	0.44
P6	244W	2.03	1.17	1.01	0.88	0.70	0.51

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
 © 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
 Rev. 06/16/22
 Page 3 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT HANUFACTURED BY REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	71W	R2	10,040	2	0	1	139	11,031	2	0	1	153	11,031	2	0	1	153
		R3	10,005	2	0	2	141	10,992	2	0	2	155	10,992	2	0	2	155
		R3S	10,271	2	0	2	143	11,285	2	0	2	157	11,285	2	0	2	157
		R4	10,136	2	0	2	143	11,136	2	0	2	157	11,136	2	0	2	157
		R4S	9,779	2	0	2	138	10,744	2	0	2	151	10,744	2	0	2	151
		R5	10,271	4	0	2	145	11,285	4	0	2	159	11,285	4	0	2	159
		R5S	10,544	3	0	1	149	11,585	3	0	2	163	11,585	3	0	2	163
		AFR	10,026	2	0	1	141	11,016	2	0	1	155	11,016	2	0	1	155
		AFRR90	10,122	3	0	2	140	11,121	3	0	2	154	11,121	3	0	2	154
		AFRL90	10,164	3	0	2	141	11,167	3	0	2	155	11,167	3	0	2	155
P2	111W	R2	15,712	2	0	2	138	17,263	2	0	2	151	17,263	2	0	2	151
		R3	15,657	2	0	3	141	17,202	3	0	3	155	17,202	3	0	3	155
		R3S	16,075	2	0	2	141	17,661	2	0	2	155	17,661	2	0	2	155
		R4	15,862	2	0	3	143	17,427	2	0	3	157	17,427	2	0	3	157
		R4S	15,304	2	0	2	138	16,815	2	0	2	151	16,815	2	0	2	151
		R5	16,075	4	0	2	145	17,661	5	0	3	159	17,661	5	0	3	159
		R5S	16,502	4	0	2	149	18,130	4	0	2	163	18,130	4	0	2	163
		AFR	15,691	2	0	2	141	17,240	2	0	2	155	17,240	2	0	2	155
		AFRR90	15,841	3	0	3	139	17,404	4	0	3	153	17,404	4	0	3	153
		AFRL90	15,907	3	0	3	139	17,477	4	0	3	153	17,477	4	0	3	153
P3	147W	R2	19,855	3	0	2	132	21,814	3	0	2	145	21,814	3	0	2	145
		R3	19,785	3	0	3	135	21,737	3	0	4	148	21,737	3	0	4	148
		R3S	20,312	3	0	3	135	22,317	3	0	3	149	22,317	3	0	3	149
		R4	20,044	3	0	3	136	22,022	3	0	4	150	22,022	3	0	4	150
		R4S	19,339	3	0	3	132	21,247	3	0	3	145	21,247	3	0	3	145
		R5	20,313	5	0	3	138	22,317	5	0	3	152	22,317	5	0	3	152
		R5S	20,852	4	0	2	142	22,910	4	0	2	156	22,910	4	0	2	156
		AFR	19,828	3	0	2	135	21,785	3	0	2	148	21,785	3	0	2	148
		AFRR90	20,017	4	0	3	133	21,992	4	0	3	147	21,992	4	0	3	147
		AFRL90	20,101	4	0	3	134	22,084	4	0	3	147	22,084	4	0	3	147
P4	187W	R2	22,836	3	0	2	120	25,090	3	0	2	132	25,090	3	0	2	132
		R3	22,756	3	0	4	122	25,002	3	0	4	134	25,002	3	0	4	134
		R3S	23,363	3	0	3	123	25,668	3	0	3	135	25,668	3	0	3	135
		R4	23,054	3	0	4	123	25,329	3	0	4	135	25,329	3	0	4	135
		R4S	22,743	3	0	3	119	25,059	3	0	3	134	25,059	3	0	3	134
		R5	23,363	5	0	3	125	25,669	5	0	4	137	25,669	5	0	4	137
		R5S	23,983	4	0	2	128	26,350	4	0	2	141	26,350	4	0	2	141
		AFR	22,806	3	0	2	122	25,056	3	0	2	134	25,056	3	0	2	134
		AFRR90	23,023	4	0	3	121	25,295	4	0	3	133	25,295	4	0	3	133
		AFRL90	23,120	4	0	3	122	25,401	4	0	3	134	25,401	4	0	3	134
P5	210W	R2	26,141	3	0	2	122	28,721	3	0	2	135	28,721	3	0	2	135
		R3	26,049	3	0	4	124	28,620	3	0	4	136	28,620	3	0	4	136
		R3S	26,744	3	0	3	125	29,383	3	0	4	138	29,383	3	0	4	138
		R4	26,390	3	0	4	126	28,994	3	0	4	138	28,994	3	0	4	138
		R4S	25,462	3	0	3	121	27,974	3	0	3	133	27,974	3	0	3	133
		R5	26,744	5	0	4	127	29,383	5	0	4	140	29,383	5	0	4	140
		R5S	27,454	4	0	2	131	30,163	4	0	2	144	30,163	4	0	2	144
		AFR	26,106	3	0	2	124	28,682	3	0	2	137	28,682	3	0	2	137
		AFRR90	26,354	4	0	3	123	28,955	5	0	3	136	28,955	5	0	3	136
		AFRL90	26,465	4	0	3	124	29,077	5	0	3	136	29,077	5	0	3	136
P6	244W	R2	27,646	3	0	2	112	30,374	3	0	2	123	30,374	3	0	2	123
		R3	27,549	3	0	4	113	30,267	3	0	4	124	30,267	3	0	4	124
		R3S	28,283	3	0	3	115	31,075	3	0	4	126	31,075	3	0	4	126
		R4	27,909	3	0	4	114	30,663	3	0	4	126	30,663	3	0	4	126
		R4S	26,928	3	0	3	110	29,585	3	0	3	121	29,585	3	0	3	121
		R5	28,284	5	0	4	116	31,075	5	0	4	127	31,075	5	0	4	127
		R5S	29,035	4	0	2	119	31,900	5	0	3	131	31,900	5	0	3	131
		AFR	27,608	3	0	2	112	30,332	3	0	2	123	30,332	3	0	2	123
		AFRR90	27,872	4	0	3	113	30,622	5	0	3	124	30,622	5	0	3	124
		AFRL90	27,989	4	0	3	113	30,751	5	0	3	125	30,751	5	0	3	125



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
 © 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
 Rev. 06/16/22
 Page 4 of 9

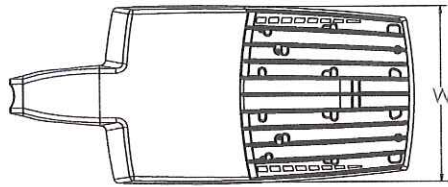
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB

Dimensions & Weights

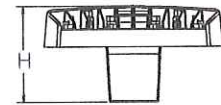
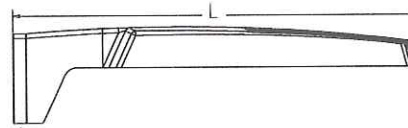
Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	30 lbs
RPA	32 lbs
MA	30 lbs
WBA	33 lbs
WBASC	36 lbs
IS	33 lbs
AASP	33 lbs
AARP	35 lbs
AAWB	36 lbs
AAWSC	39 lbs

RSX2 with Round Pole Adapter (RPA)



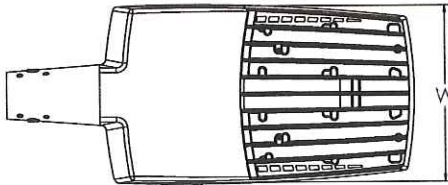
Length: 30.3" (77.0 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.3 cm) Arm



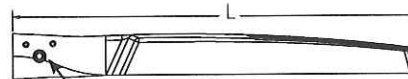
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



RSX2 with Mast Arm Adapter (MA)



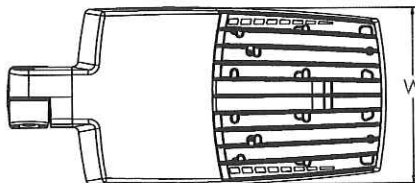
Length: 30.6" (77.7 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
3.5" (8.9 cm) Arm



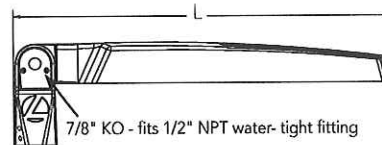
7/16" locking thru bolt/nut provided



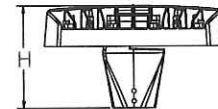
RSX2 with Adjustable Slipfitter (IS)



Length: 28.3" (71.9 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
7.6" (19.3 cm) Arm



7/8" KO - fits 1/2" NPT water-tight fitting



COMMERCIAL OUTDOOR

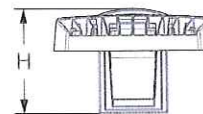
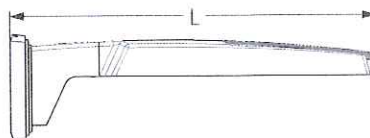
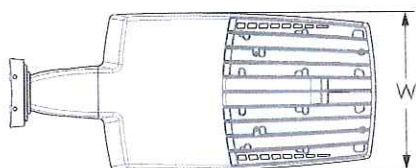
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 5 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLE LIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB

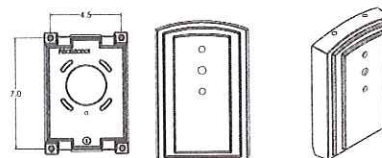
Dimensions

RSX2 with Wall Bracket (WBA)

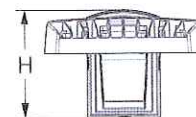
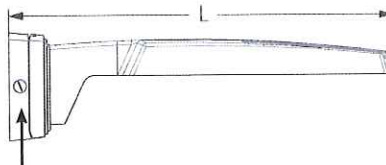
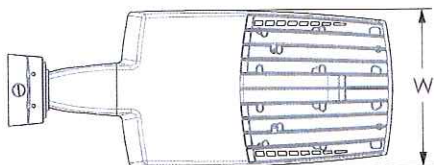


Length: 31.2" (79.2 cm)
Width: 13.4" (41.7 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



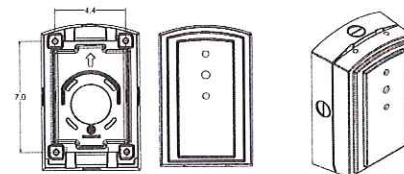
RSX2 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

Length: 32.8" (83.3 cm)
Width: 13.4" (41.7 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail



COMMERCIAL OUTDOOR

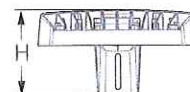
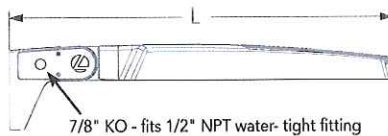
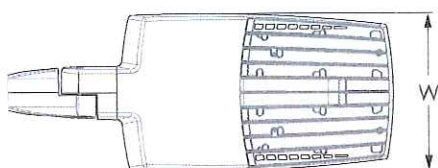
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 6 of 9

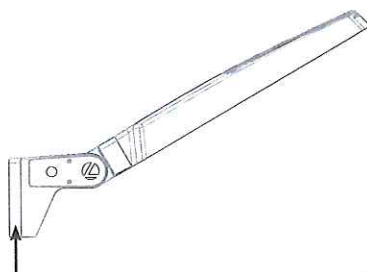
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB

Dimensions

RSX2 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 32.8" (83.3 cm) AASP
 33.8" (85.9 cm) AARP
 Width: 13.4" (34.0 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.2 cm) Arm



NOTE:
 RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

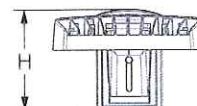
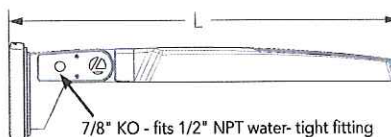
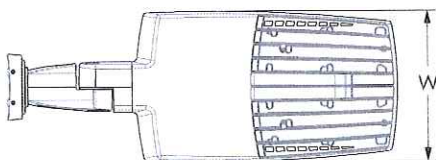


Notes

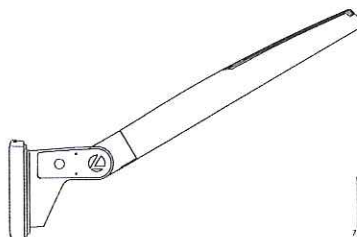
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

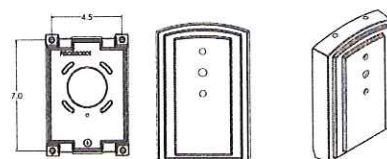
RSX2 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 34.7" (88.0 cm)
 Width: 13.4" (34.0 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm



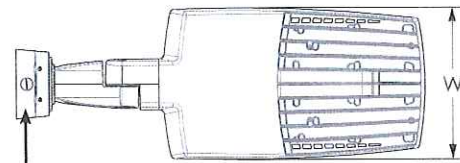
Wall Bracket (WBA) Mounting Detail



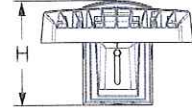
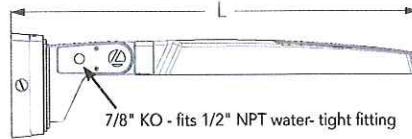
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLE LIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB

Dimensions

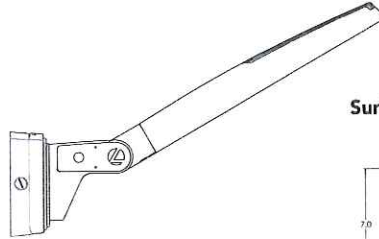
RSX2 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



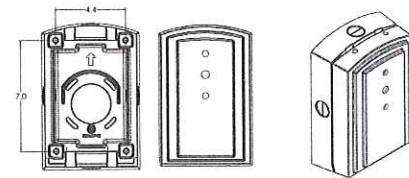
3/4" NPT taps
with plugs - Qty (4)
provided



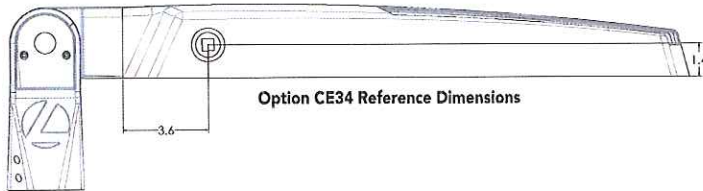
Length: 36.2" (91.9 cm)
Width: 13.4" (40.0 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm



Surface Conduit Box (SCB) Mounting Detail

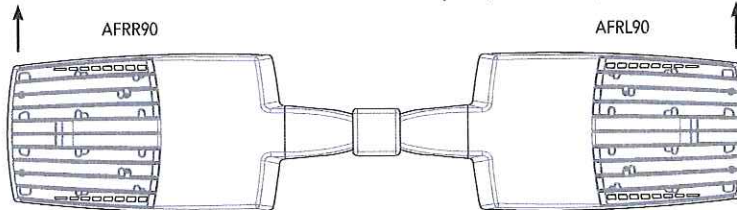


Additional Reference Drawings



Option CE34 Reference Dimensions

Automotive Front Row - Rotated Optics (AFRL90/R90)

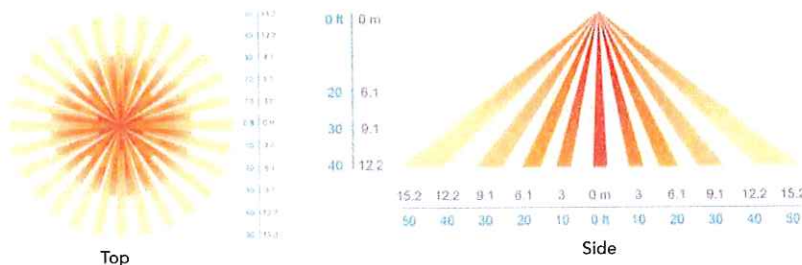
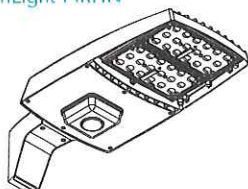


(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R4 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AB

nLight Control - Sensor Coverage and Settings

NLTAIR2 PIRHN nLight Sensor Coverage Pattern nLight PIRHN



Motion Sensor Default Settings - Option PIRHN					
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds
					Ramp-down Time (from occupied to unoccupied)
					5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clarity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

FEATURES & SPECIFICATIONS

INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX2 delivers 11,000 to 31,000 lumens and is ideal for replacing 250W to 1000W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION AND DESIGN

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. Vibration rated per ANSI C136.31: 3G Mountings: Include SPA, RPA, MA, IS, AASP, AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row) and AFR rotated AFR90 and AFR190.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Fixtures ship standard with 0-10v dimming driver. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLARITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

INSTALLATION

Integral "no drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only. US Patent No. D882, 146S

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT.

Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 9 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLE LIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	SSP27-5.0-11-BLK-DM2180-BC	AB



SSP

Square Non-Tapered Steel Poles



Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"). The pole shaft material shall conform to ASTM A500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

Base Plate

The anchor base is fabricated from a structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

Bolt Circle: 1.00 (in.) **Dimension:** 12.0 (in.) **Thickness:** 1.00 (in.) **Conduit Opening:** 4 (in.)

Consult KW representative for non-standard dimensions.

Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A153. Fully galvanized anchor bolts are available upon request.

Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" inside opening, located 1' - 6" above base, is standard on all poles. A grounding provision is located inside the handhole ring.

Finish

Standard - The exterior surface is cleaned with an alkaline rinse to remove surface contaminants and shot blasted to specifications as published by the Steel Structures Painting Council Standards SSPC-SP10 (near white). The exterior surface is chemically pretreated with an iron phosphate conversion coating then rinsed with ambient fresh water containing special surfactants and sealers forming a dry tight micro-crystalline coating. A polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils is standard on all color finishes. The internal surface including the powder coated area at the base-end is coated with **KSPAL**, a thermoplastic hydrocarbon resin system specially formulated for application over untreated steel surfaces, to a thickness of 3 mils. The internal coating shall contain special corrosion inhibitors and is capable of passing 1000 hours of salt spray exposure (ASTM B117).

Series: **SSP** - Square Non-Tapered Steel Poles

Nominal Height: **27'** Base Diameter: **5.0"** Gauge: **11**

Finish: **BLK** - Standard - Black

Mounting Designation: **DM2180** - Drilled for 2 Luminaires @ 180°

Options: **BC** - Base Cover

Height (ft.)	Pole Shaft (in.) x (ft.)	Gauge	Handhole Size (in.)	Anchor Bolt (in.) x (in.) x (in.)	Bolt Circle (in.)	80 MPH (ft.)	90 MPH (ft.)	100 MPH (ft.)	Ship WT. (lbs.)
27	5.0 x 27.0	11	3 x 5	1.00 x 36 x 4	11	9.8	6.1	3.2	300

SSP27-5.0-11-BLK-DM2180-BC

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC



RSX2 LED Area Luminaire

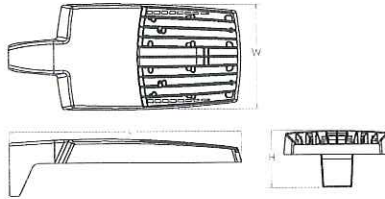


Catalog Number
Notes
Type

Hit the link or mouse over the page to see all interactive elements.

Specifications

EPA (ft ² @0°):	0.69 ft ² (0.06 m ²)
Length:	29.3" (74.4 cm) (SPA mount)
Width:	13.4" (34.0 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.3 cm) Arm
Weight: (SPA mount)	30.0 lbs (13.6 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD

RSX2 LED	P1	40K	R2	MVOLT	SPA
Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX2 LED	P1 P2 P3 P4 P5 P6	30K 3000K 40K 4000K 50K 5000K	R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide ¹ R5S Type 5 Short ¹ AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	MVOLT (120V-277V) ² HVOLT (347V-480V) ³ XVOLT (277V-480V) ⁴ (use specific voltage for options as noted) 120 ³ 277 ⁵ 208 ³ 347 ⁵ 240 ³ 480 ⁵	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) ⁶ WBA Wall bracket ¹ WBASC Wall bracket with surface conduit box AASP Adjustable tilt arm square pole mounting ⁶ AARP Adjustable tilt arm round pole mounting ⁶ AAWB Adjustable tilt arm with wall bracket ⁶ AAWSC Adjustable tilt arm wall bracket and surface conduit box ⁶

PER7

DBLXD

Options	Finish
Shipped Installed HS House-side shield ⁷ PE Photocontrol, button style ^{8,9} PEX Photocontrol external threaded, adjustable ^{9,10} PER7 Seven-wire twist-lock receptacle only (no controls) ^{11,12,13} CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) ⁵ DF Double fuse (208, 240, 480) ⁵ SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output ^{9,11} DMG 0-10V dimming extend out back of housing for external control (control ordered separately) ^{9,11} DS Dual switching ^{9,14}	Shipped Installed *Standalone and Networked Sensors/Controls (factory default settings, see table page 9) NLTAIR2 nLight AIR generation 2 ^{15,16,18} PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) ^{11,16,17} BAA Buy America(n) Act Compliant *Note: PIRHN with nLight Air can be used as a standalone dimming sensor with out-of-box settings or as a wireless networked solution. See factory default settings table. Sensor coverage pattern is affected when luminaire is tilted. Shipped Separately (requires some field assembly) EGS External glare shield ⁶ EGFV External glare full visor (360° around light aperture) ⁷ BS Bird spikes ¹⁵
	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLTXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 1 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLERIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC

Ordering Information

Accessories

Ordered and shipped separately.

RSX2HS	RSX2 House side shield (includes 2 shields)
RSX2EGS (FINISH) U	External glare shield (specify finish)
RSX2HSAFRR (FINISH) U	RSX2 House side shields for AFR rotated optics (includes 2 shields)
RSX2EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXVBA (FINISH) U	RSX VBA wall bracket (specify finish)
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) ¹¹
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) ¹¹
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) ¹¹
DSHORT SBK U	Shorting cap ¹¹

NOTES

- Any Type 5 distribution, is not available with WBA.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- XVOLT driver not available with P1. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, DS, PIRHN). Exception: PE or PEX and FAO can be combined.
- Requires 120V, 208V, 240V, or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, DS, PER7, FAO and PIRHN.
- DS only available on performance package P5 and P6.
- Must be ordered with PIRHN.
- Requires MVOLT or HVOLT.
- Must be ordered with NLTAIR2. For additional information on PIRHN visit www.acuitybrands.com.
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields



House Side Shield



External Glare Shield

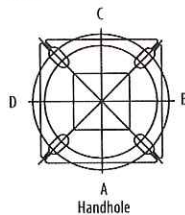


External 360 Full Visor

Pole/Mounting Information

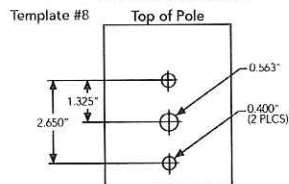
Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

HANDHOLE ORIENTATION

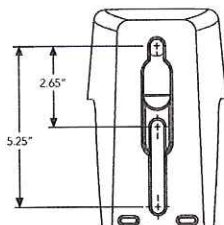


Handhole

RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	RPA, AARP	AS3-S190	AS3-S280	AS3-S290	AS3-S320	AS3-S390	AS3-S490
2-7/8"	RPA, AARP	AST25-S190	AST25-S280	AST25-S290	AST25-S320	AST25-S390	AST25-S490
4"	RPA, AARP	AST35-S190	AST35-S280	AST35-S290	AST35-S320	AST35-S390	AST35-S490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX2 - Luminaire EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

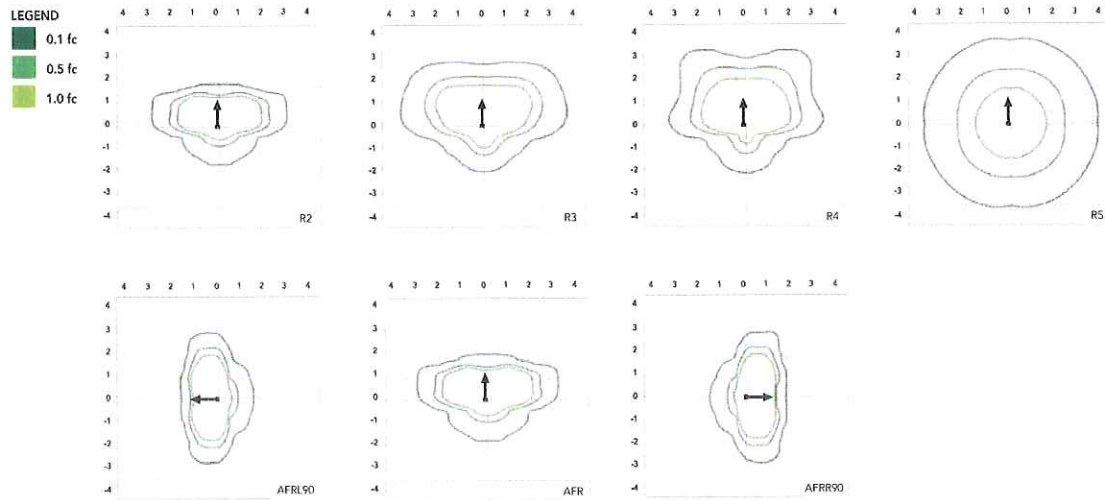
Fixture Quantity & Mounting Configuration		Single	2 @ 90°	2 @ 180°	3 @ 90°	3 @ 120°	4 @ 90°	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
RPA - Round Pole Adaptor		0.74	1.27	1.37	1.9	1.71	2.49	1.42	2.16	2.84
MA - Mast Arm Adaptor		0.61	1.14	1.11	1.64	1.45	2.23	1.29	1.9	2.58
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
	10°	0.53	1.06	1.05	1.58	1.37	2.08	1.06	1.59	2.12
	20°	0.52	1.02	1.03	1.52	1.33	2.02	1.03	1.55	2.07
	30°	0.64	1.11	1.18	1.63	1.45	2.21	1.27	1.91	2.54
	40°	0.81	1.21	1.35	1.74	1.65	2.39	1.62	2.43	3.23
	45°	0.91	1.25	1.5	1.81	1.75	2.48	1.82	2.73	3.64
	50°	1.34	1.83	2.17	2.61	2.56	3.62	2.68	4.02	5.36
	60°	2.2	2.97	3.57	4.24	4.17	5.89	4.41	6.61	8.82
	70°	2.86	4.13	4.7	5.89	5.71	8.21	5.71	8.57	11.42
	80°	3.4	5.13	5.67	7.34	7.09	10.21	6.79	10.19	13.59
	90°	3.85	5.96	6.55	8.58	8.31	11.88	7.70	11.56	15.41

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

Isofootcandle plots for the RSX2 LED P6 40K. Distances are in units of mounting height (30').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	71W	0.59	0.34	0.30	0.26	0.20	0.15
P2	111W	0.93	0.53	0.46	0.40	0.32	0.23
P3	147W	1.23	0.70	0.61	0.53	0.42	0.31
P4	187W	1.55	0.90	0.78	0.68	0.53	0.38
P5	210W	1.75	1.01	0.87	0.76	0.60	0.44
P6	244W	2.03	1.17	1.01	0.88	0.70	0.51

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.



One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
 © 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
 Rev. 06/16/22
 Page 3 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	71W	R2	10,040	2	0	1	139	11,031	2	0	1	153	11,031	2	0	1	153
		R3	10,005	2	0	2	141	10,992	2	0	2	155	10,992	2	0	2	155
		R35	10,271	2	0	2	143	11,285	2	0	2	157	11,285	2	0	2	157
		R4	10,136	2	0	2	143	11,136	2	0	2	157	11,136	2	0	2	157
		R45	9,779	2	0	2	138	10,744	2	0	2	151	10,744	2	0	2	151
		R5	10,271	4	0	2	145	11,285	4	0	2	159	11,285	4	0	2	159
		R55	10,544	3	0	1	149	11,585	3	0	2	163	11,585	3	0	2	163
		AFR	10,026	2	0	1	141	11,016	2	0	1	155	11,016	2	0	1	155
		AFRR90	10,122	3	0	2	140	11,121	3	0	2	154	11,121	3	0	2	154
		AFRL90	10,164	3	0	2	141	11,167	3	0	2	155	11,167	3	0	2	155
P2	111W	R2	15,712	2	0	2	138	17,263	2	0	2	151	17,263	2	0	2	151
		R3	15,657	2	0	3	141	17,202	3	0	3	155	17,202	3	0	3	155
		R35	16,075	2	0	2	141	17,661	2	0	2	155	17,661	2	0	2	155
		R4	15,862	2	0	3	143	17,427	2	0	3	157	17,427	2	0	3	157
		R45	15,304	2	0	2	138	16,815	2	0	2	151	16,815	2	0	2	151
		R5	16,075	4	0	2	145	17,661	5	0	3	159	17,661	5	0	3	159
		R55	16,502	4	0	2	149	18,130	4	0	2	163	18,130	4	0	2	163
		AFR	15,691	2	0	2	141	17,240	2	0	2	155	17,240	2	0	2	155
		AFRR90	15,841	3	0	3	139	17,404	4	0	3	153	17,404	4	0	3	153
		AFRL90	15,907	3	0	3	139	17,477	4	0	3	153	17,477	4	0	3	153
P3	147W	R2	19,855	3	0	2	132	21,814	3	0	2	145	21,814	3	0	2	145
		R3	19,785	3	0	3	135	21,737	3	0	4	148	21,737	3	0	4	148
		R35	20,312	3	0	3	135	22,317	3	0	3	149	22,317	3	0	3	149
		R4	20,044	3	0	3	136	22,022	3	0	4	150	22,022	3	0	4	150
		R45	19,339	3	0	3	132	21,247	3	0	3	145	21,247	3	0	3	145
		R5	20,313	5	0	3	138	22,317	5	0	3	152	22,317	5	0	3	152
		R55	20,852	4	0	2	142	22,910	4	0	2	156	22,910	4	0	2	156
		AFR	19,828	3	0	2	135	21,785	3	0	2	148	21,785	3	0	2	148
		AFRR90	20,017	4	0	3	133	21,992	4	0	3	147	21,992	4	0	3	147
		AFRL90	20,101	4	0	3	134	22,084	4	0	3	147	22,084	4	0	3	147
P4	187W	R2	22,836	3	0	2	120	25,090	3	0	2	132	25,090	3	0	2	132
		R3	22,756	3	0	4	122	25,002	3	0	4	134	25,002	3	0	4	134
		R35	23,363	3	0	3	123	25,668	3	0	3	135	25,668	3	0	3	135
		R4	23,054	3	0	4	123	25,329	3	0	4	135	25,329	3	0	4	135
		R45	22,243	3	0	3	119	25,059	3	0	3	134	25,059	3	0	3	134
		R5	23,363	5	0	3	125	25,669	5	0	4	137	25,669	5	0	4	137
		R55	23,983	4	0	2	128	26,350	4	0	2	141	26,350	4	0	2	141
		AFR	22,806	3	0	2	122	25,056	3	0	2	134	25,056	3	0	2	134
		AFRR90	23,023	4	0	3	121	25,295	4	0	3	133	25,295	4	0	3	133
		AFRL90	23,120	4	0	3	122	25,401	4	0	3	134	25,401	4	0	3	134
P5	210W	R2	26,141	3	0	2	122	28,721	3	0	2	135	28,721	3	0	2	135
		R3	26,049	3	0	4	124	28,620	3	0	4	136	28,620	3	0	4	136
		R35	26,744	3	0	3	125	29,383	3	0	4	138	29,383	3	0	4	138
		R4	26,390	3	0	4	126	28,994	3	0	4	138	28,994	3	0	4	138
		R45	25,462	3	0	3	121	27,974	3	0	3	133	27,974	3	0	3	133
		R5	26,744	5	0	4	127	29,383	5	0	4	140	29,383	5	0	4	140
		R55	27,454	4	0	2	131	30,163	4	0	2	144	30,163	4	0	2	144
		AFR	26,106	3	0	2	124	28,682	3	0	2	137	28,682	3	0	2	137
		AFRR90	26,354	4	0	3	123	28,955	5	0	3	136	28,955	5	0	3	136
		AFRL90	26,465	4	0	3	124	29,077	5	0	3	136	29,077	5	0	3	136
P6	244W	R2	27,646	3	0	2	112	30,374	3	0	2	123	30,374	3	0	2	123
		R3	27,549	3	0	4	113	30,267	3	0	4	124	30,267	3	0	4	124
		R35	28,283	3	0	3	115	31,075	3	0	4	126	31,075	3	0	4	126
		R4	27,909	3	0	4	114	30,663	3	0	4	126	30,663	3	0	4	126
		R45	26,928	3	0	3	110	29,585	3	0	3	121	29,585	3	0	3	121
		R5	28,284	5	0	4	116	31,075	5	0	4	127	31,075	5	0	4	127
		R55	29,035	4	0	2	119	31,900	5	0	3	131	31,900	5	0	3	131
		AFR	27,608	3	0	2	112	30,332	3	0	2	123	30,332	3	0	2	123
		AFRR90	27,872	4	0	3	113	30,622	5	0	3	124	30,622	5	0	3	124
		AFRL90	27,989	4	0	3	113	30,751	5	0	3	125	30,751	5	0	3	125

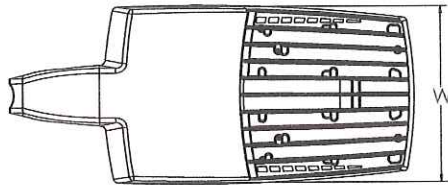
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC

Dimensions & Weights

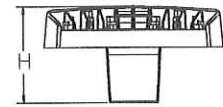
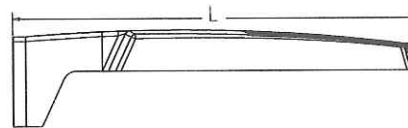
Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	30 lbs
RPA	32 lbs
MA	30 lbs
WBA	33 lbs
WBASC	36 lbs
IS	33 lbs
AASP	33 lbs
AARP	35 lbs
AAWB	36 lbs
AAWSC	39 lbs

RSX2 with Round Pole Adapter (RPA)



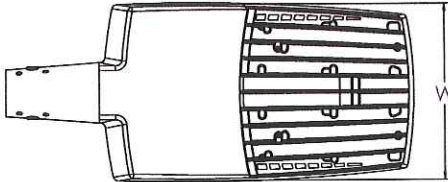
Length: 30.3" (77.0 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
7.2" (18.3 cm) Arm



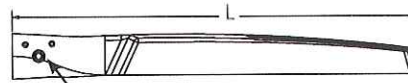
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



RSX2 with Mast Arm Adapter (MA)



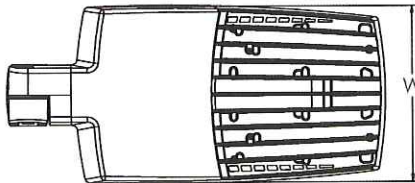
Length: 30.6" (77.7 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
3.5" (8.9 cm) Arm



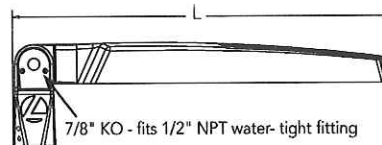
7/16" locking thru bolt/nut provided



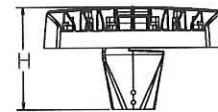
RSX2 with Adjustable Slipfitter (IS)



Length: 28.3" (71.9 cm)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body
7.6" (19.3 cm) Arm



7/8" KO - fits 1/2" NPT water-tight fitting



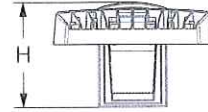
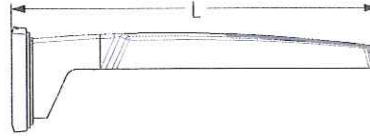
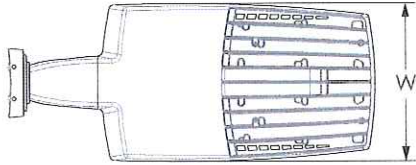
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 5 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC

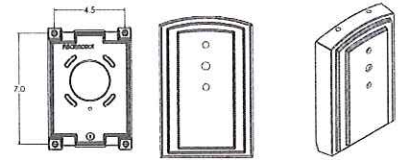
Dimensions

RSX2 with Wall Bracket (WBA)

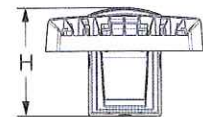
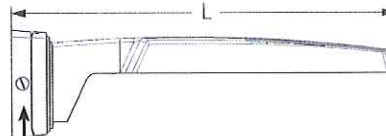
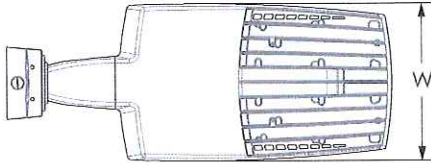


Length: 31.2" (79.2 cm)
Width: 13.4" (41.7 cm)
Height: 3.0" (7.6 cm) Main Body
8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



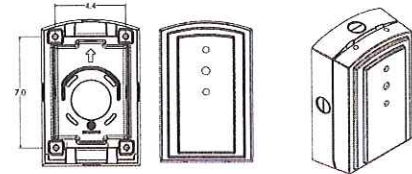
RSX2 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

Length: 32.8" (83.3 cm)
Width: 13.4" (41.7 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm

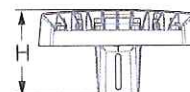
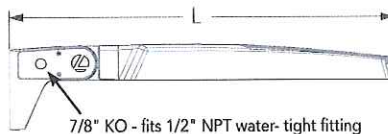
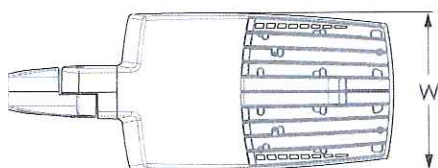
Surface Conduit Box (SCB) Mounting Detail



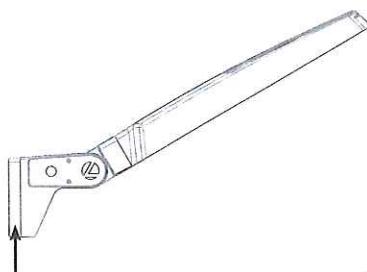
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC

Dimensions

RSX2 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 32.8" (83.3 cm) AASP
 33.8" (85.9 cm) AARP
 Width: 13.4" (34.0 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.2 cm) Arm



NOTE:
 RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

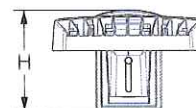
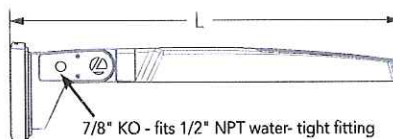
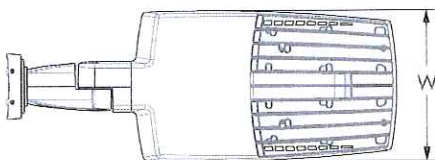


Notes

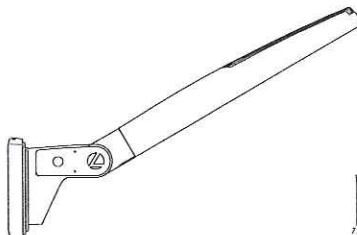
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

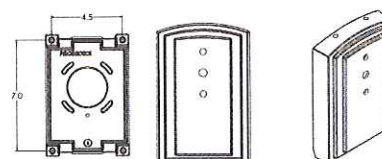
RSX2 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 34.7" (88.0 cm)
 Width: 13.4" (34.0 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm



Wall Bracket (WBA) Mounting Detail



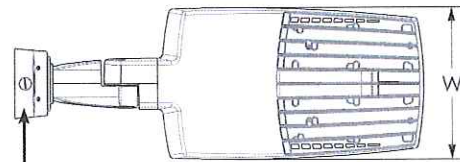
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
 © 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
 Rev. 06/16/22
 Page 7 of 9

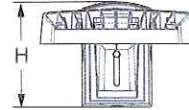
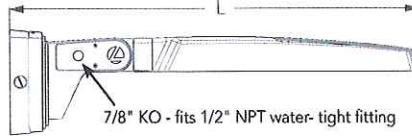
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLELIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC

Dimensions

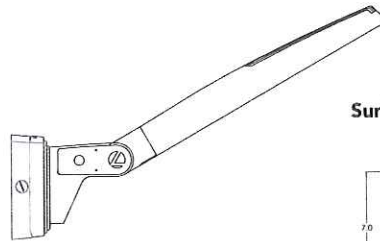
RSX2 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



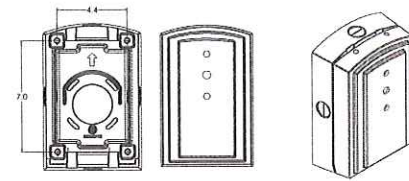
3/4" NPT taps
with plugs - Qty (4)
provided



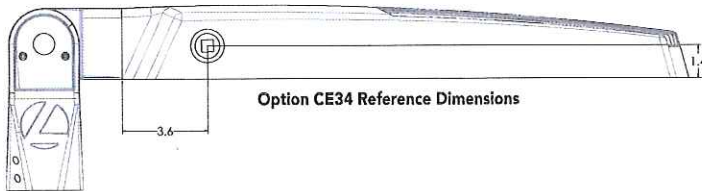
Length: 36.2" (91.9 cm)
Width: 13.4" (40.0 cm)
Height: 3.0" (7.6 cm) Main Body
9.2" (23.4 cm) Arm



Surface Conduit Box (SCB) Mounting Detail

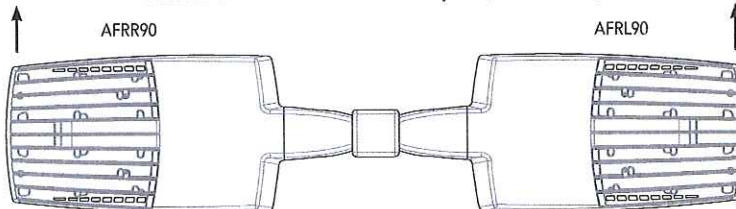


Additional Reference Drawings



Option CE34 Reference Dimensions

Automotive Front Row - Rotated Optics (AFRL90/R90)

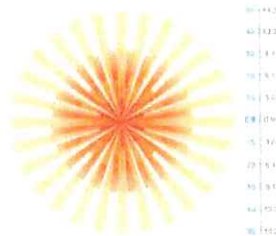
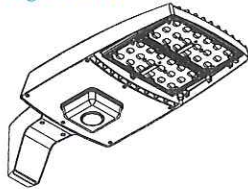


(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

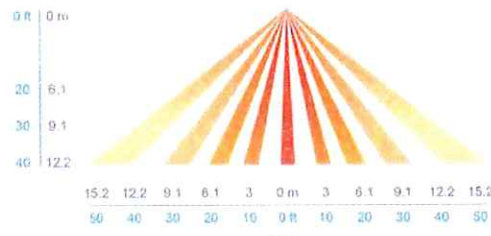
Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLERIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	RSX2 LED P1 40K R2 MVOLT SPA PER7 DBLXD / DLL127F 1.5 JU	AC

nLight Control - Sensor Coverage and Settings

NLTAIR2 PIRHN nLight Sensor Coverage Pattern nLight PIRHN



Top



Side

Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clarity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

FEATURES & SPECIFICATIONS

INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX2 delivers 11,000 to 31,000 lumens and is ideal for replacing 250W to 1000W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION AND DESIGN

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. Vibration rated per ANSI C136.31: 3G Mountings: Include SPA, RPA, MA, IS, AASP, AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row) and AFR rotated AFR90 and ARFL90.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Fixtures ship standard with 0-10v dimming driver. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLARITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/DLP to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only. US Patent No. D882, 146S

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT.

Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.



COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.acuitybrands.com
© 2011-2022 Acuity Brands Lighting, Inc. All rights reserved.

Lithonia RSX2 Area LED
Rev. 06/16/22
Page 9 of 9

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLE LIGHT MANUFACTURER'S REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	SSP17-5.0-11-BLK-DM10-BC	AC



SSP

Square Non-Tapered Steel Poles



Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"). The pole shaft material shall conform to ASTM A500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

Base Plate

The anchor base is fabricated from a structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

Bolt Circle: 11 **Rd. Dim. :** 12 **Thickness:** 1 **Conduit Opening:** 4.25

Consult KW representative for non-standard dimensions.

Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A153. Fully galvanized anchor bolts are available upon request.

Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" inside opening, located 1' - 6" above base, is standard on all poles. A grounding provision is located inside the handhole ring.

Finish

Standard - The exterior surface is cleaned with an alkaline rinse to remove surface contaminants and shot blasted to specifications as published by the Steel Structures Painting Council Standards SSPC-SP10 (near white). The exterior surface is chemically pretreated with an iron phosphate conversion coating then rinsed with ambient fresh water containing special surfactants and sealers forming a dry tight micro-crystalline coating. A polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils is standard on all color finishes. The internal surface including the powder coated area at the base-end is coated with **FL-3000**, a thermoplastic hydrocarbon resin system specially formulated for application over untreated steel surfaces, to a thickness of 3 mils. The internal coating shall contain special corrosion inhibitors and is capable of passing 1000 hours of salt spray exposure (ASTM B117).

Series: **SSP** - Square Non-Tapered Steel Poles

Nominal Height: **17'** Base Diameter: **5.0"** Gauge: **11**

Finish: **BLK** - Standard - Black

Mounting Designation: **DM10** Drilled for 1 Luminaire

Options: **BC** - Base Cover

Height (ft.)	Pole Shaft (in.) x (ft.)	Gauge	Handhole Size (in.)	Anchor Bolt (in.) x (in.) x (in.)	Bolt Circle (in.)	80 MPH (ft.)	90 MPH (ft.)	100 MPH (ft.)	Ship WT. (lbs.)
17	5.0 x 17.0	11	3 x 5	1.00 x 36 x 4	11	27	19.5	15	218

SSP17-5.0-11-BLK-DM10-BC

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLE LIGHT MANUFACTURERS' REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	DSXB LED 12C 350 40K ASY MVOLT H36 DBLXD	BB



D-Series LED Bollard



Buy American

d¹series

Specifications

Diameter: 8" Round
(20.3 cm)
Height: 42"
(106.7 cm)
Weight (max): 27 lbs
(12.25 kg)



Catalog
Number

Notes

Type

Hit the tab key or mouse over the page to see all interactive elements.

Introduction

The D-Series LED Bollard is a stylish, energy-saving, long-life solution designed to perform the way a bollard should—with zero uplight. An optical leap forward, this full cut-off luminaire will meet the most stringent of lighting codes. The D-Series LED Bollard's rugged construction, durable finish and long-lasting LEDs will provide years of maintenance-free service.

Ordering Information

EXAMPLE: DSXB LED 16C 700 40K SYM MVOLT DDBXD

DSXB LED	12C	350	40K	ASY	MVOLT	H36	DBLXD	
Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Control options	Other options	Finish <i>(required)</i>
DSXB LED	Asymmetric 12C 12 LEDs ¹	350 350 mA	30K 3000 K	ASY Asymmetric ¹ SYM Symmetric ²	MVOLT ³ 120 ³ 208 ³ 240 ³ 277 ³ 347 ⁴	Shipped installed PE Photoelectric cell, button type DMG 00-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ELCW Emergency battery backup ⁶	Shipped installed SF Single fuse (120, 277, 347V) ^{4,7} DF Double fuse (208, 240V) ^{4,7} H24 24" overall height H30 30" overall height H36 36" overall height FG Ground-fault festoon outlet L/AB Without anchor bolts L/AB4 4-bolt retrofit base without anchor bolts ⁸	DWHXD White DNAXD Natural aluminum DDBXD Dark bronze DBLXD Black DDBTXD Textured dark bronze DBLBDX Textured black DNATXD Textured natural aluminum DWHGXD Textured white
		450 450 mA ^{3,4}	40K 4000 K					
		530 530 mA	50K 5000 K					
	Symmetric 16C 16 LEDs ¹	700 700 mA	AMBPB Amber phosphor converted AMBLW Amber limited wavelength ^{3,4}					

Accessories

Ordered and shipped separately.

MRAB U Anchor bolts for DSXB⁸

NOTES

- Only available in the 12C, ASY version.
- Only available in the 16C, SYM version.
- Only available with 450 AMBLW version.
- Not available with ELCW.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
- Not available with 347V. Not available with fusing. Not available with 450 AMBLW.
- Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
- MRAB U not available with L/AB4 option.



One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com
© 2012-2022 Acuity Brands Lighting, Inc. All rights reserved.

Submitted by:	Job Name:	Catalog Number:	Type:
 VISIBLE LIGHT MANUFACTURED REPRESENTATIVE	UNE ALFOND CENTER SITE LIGHTING	DSXB LED 12C 350 40K ASY MVOLT H36 DBLXD	BB

Performance Data

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%.

Light Engines	Drive Current	System Watts	3000 K					4000 K					5000 K					Limited Wavelength Amber				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
Asymmetric (12 LEDs)	350	16	1,194	75	1	0	1	1,283	80	1	0	1	1,291	81	1	0	1					
	530	22	1,719	78	1	0	1	1,847	84	1	0	1	1,859	85	1	0	1					
	700	31	2,173	70	1	0	1	2,335	75	1	0	1	2,349	76	1	0	1					
	Amber 450	16																348	22	1	0	1
Symmetric (16 LEDs)	350	20	1,558	78	1	0	0	1,674	84	1	0	0	1,685	84	1	0	0					
	530	28	2,232	80	2	0	1	2,397	86	2	0	1	2,412	86	2	0	1					
	700	39	2,802	72	2	0	1	3,009	77	2	0	1	3,028	78	2	0	1					
	Amber 450	20																419	21	1	0	1

Note: Available with phosphor-converted amber LED's (nomenclature AMBPC). These LED's produce light with 97+% >530 nm. Output can be calculated by applying a 0.7 factor to 4000 K lumen values and photometric files.

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.00	0.98	0.97	0.95

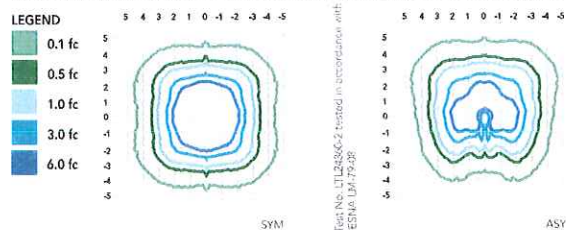
Electrical Load

Light Engines	Drive Current (mA)	System Watts	Current (A)				
			120	208	240	277	347
12C	350	16W	0.158	0.118	0.114	0.109	0.105
	530	22W	0.217	0.166	0.136	0.128	0.118
	700	31W	0.296	0.185	0.168	0.153	0.139
	Amber 450	16W	0.161	0.120	0.115	0.110	0.106
16C	350	20W	0.197	0.137	0.128	0.121	0.114
	530	28W	0.282	0.178	0.162	0.148	0.135
	700	39W	0.385	0.231	0.207	0.185	0.163
	Amber 450	20W	0.199	0.139	0.130	0.123	0.116

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Bollard homepage.

Isofootcandle plots for the DSXB LED 700 40K. Distances are in units of mounting height (3').



FEATURES & SPECIFICATIONS

INTENDED USE

The rugged construction and maintenance-free performance of the D-Series LED Bollard is ideal for illuminating building entryways, walking paths and pedestrian plazas, as well as any other location requiring a low-mounting-height light source.

CONSTRUCTION

One-piece 8-inch-round extruded aluminum shaft with thick side walls for extreme durability, and die-cast aluminum reflector and top cap. Die-cast aluminum mounting ring allows for easy leveling even in uneven areas and full 360-degree rotation for precise alignment during installation. Three 1/2" x 11" anchor bolts with double nuts and washers and 3-5/8" max. bolt circle template ensure stability. Overall height is 42" standard.

FINISH

Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering for maximum retention of gloss and luster. A tightly controlled multi-stage process ensures a minimum 3-mil thickness for a finish that can withstand the elements without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS

Two 0% uplight optical distributions are available: symmetrical and asymmetrical. IP66 sealed LED light engine provides smoothly graduated illumination without uplight. Light engines are available in standard 4000 K (>70 CRI) or optional 3000 K (>80 CRI) or 5000 K (67 CRI). Limited-wavelength amber LEDs are also available.

ELECTRICAL

Light engines consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (L95/100,000 hours at 700mA at 25°C). Class 2 electronic drivers are designed for an expected life of 100,000 hours with < 1% failure rate. Electrical components are mounted on a removable power tray.

LISTINGS

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated. Rated for -40°C minimum ambient. Cold-weather emergency battery backup rated for -20°C minimum ambient.

BUY AMERICAN

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com
© 2012-2022 Acuity Brands Lighting, Inc. All rights reserved.

DSXB-LED
Rev. 3/7/22

ZONING INFORMATION	
1. CLASSIFICATION:	IH - HIGH IMPACT INDUSTRIAL ZONE IM - MODERATE IMPACT INDUSTRIAL ZONE R3 - RESIDENTIAL ZONE INTERMODAL TRANSPORTATION FACILITY (IM/IH) OFF-STREET PARKING (R3)
2. PERMITTED USES:	

IH & IM INDUSTRIAL ZONE STANDARDS*	
1. MIN. STREET FRONTAGE:	60 FEET
EXISTING	= 433 FEET
PROPOSED	= NO CHANGE
2. MAX. IMPERVIOUS SURFACE RATIO:	IM ZONE = 75% IH ZONE = 85%
EXISTING	= 57%
PROPOSED	= 46%
3. MIN. PAVEMENT SETBACK:	10 FEET
EXISTING	= 0 FEET
PROPOSED	= 10 FEET

R3 RESIDENTIAL ZONE STANDARDS*	
1. MIN. LOT SIZE:	6,500 SQUARE FEET
EXISTING	= 836,442 SQUARE FEET
PROPOSED	= NO CHANGE
2. MIN. STREET FRONTAGE:	50 FEET
EXISTING	= 433 FEET
PROPOSED	= NO CHANGE

*STRUCTURE SETBACKS NOT SHOWN BECAUSE NO NEW BUILDINGS ARE PROPOSED.

PARCEL INFORMATION:

1. OWNER OF RECORD:	UNIVERSITY OF NEW ENGLAND 11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005 CCRD BOOK 36396, PAGE 323
2. STREET ADDRESS:	160-172 BISHOP STREET, PORTLAND, MAINE
3. PARCELS:	CITY OF PORTLAND TAX MAPS MAP 281 BLOCK A LOT 3 MAP 291 BLOCK A, LOT 1
4. TOTAL AREA OF PARCEL:	836,442 SF (19.202 AC.)
SITE BENCHMARK:	PROJECT BENCHMARK IS A MANHOLE RIM IN BISHOP STREET.

PLAN REFERENCES

- TOPOGRAPHIC INFORMATION OBTAINED BY GROUND SURVEY CONDUCTED IN SPRING OF 2021 AND SPRING 2022 BY STATEWIDE SURVEYS, INC. OF CAPE ELIZABETH, MAINE.
- ELEVATIONS SHOWN ON THIS PLAN ARE ON THE CITY OF PORTLAND VERTICAL DATUM (NGVD29). PROJECT BENCHMARK IS A MANHOLE RIM IN BISHOP STREET.
- HORIZONTAL DATUM IS BASED ON NAD83 STATE PLANE GRID WEST ZONE IN FEET.
- UNDERGROUND UTILITIES WERE OBTAINED FROM SURFACE OBSERVATIONS AND TAKEN FROM PLANS OF SEVERAL SOURCES. SEE SURVEY PLAN REFERENCES.

GENERAL NOTES:

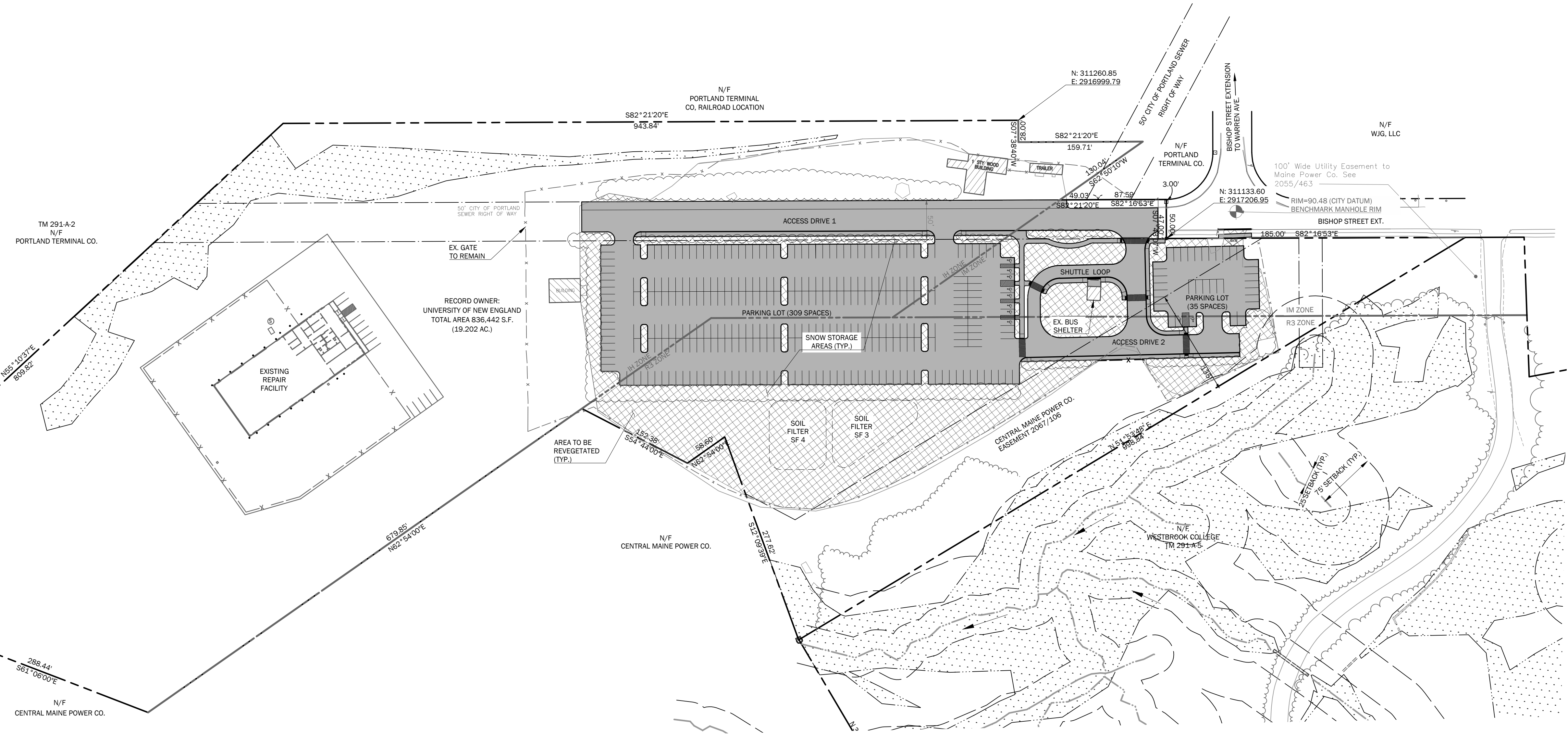
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG SAFE" AND LOCAL UTILITY COMPANIES AT LEAST THREE (3) BUSINESS DAYS, BUT NOT MORE THAN 30 CALENDAR DAYS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, IN ACCORDANCE WITH MAINE STATE LAW. "DIG SAFE" TELEPHONE NUMBER IS 1-888-344-7233.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL AND ANY MEANS, METHODS, AND TECHNIQUES EMPLOYED TO PERFORM THE WORK SHOWN ON THE PLANS.
- ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS INCLUDING ALL SAFETY REGULATIONS (OSHA).
- ALL WORK SHALL BE IN CONFORMANCE ALL UTILITY COMPANIES STANDARDS.
- THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THE WORK SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION.
- ALL PAVEMENT/CONCRETE CUTS SHALL BE SAW CUT TO RESULT IN CLEAN EDGES. A TACK COAT SHALL BE APPLIED ALONG THE PAVEMENT CUT EDGES AND THE NEW PAVEMENT BUTTED TO IT, UNLESS OTHERWISE DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- ALL WORK SHALL COMPLY WITH THE CITY OF PORTLAND STREET OPENING PERMIT REQUIREMENTS.
- ALL WORK SHALL COMPLY WITH THE CITY OF PORTLAND TECHNICAL MANUAL.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING. REFER TO THE EROSION CONTROL PLAN NOTSE AND DRAWINGS FOR FURTHER EROSION CONTROL GUIDELINES.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS. IF ANY DISCREPANCIES ARE FOUND, THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY.
- CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO MDOT SPECIFICATIONS, LATEST EDITION.
- A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT BY SUMMIT GEOENGINEERING, DATED DECEMBER 2021.
- THE OWNER REQUIRES THAT THE PROJECT BE CONSTRUCTED IN TWO PHASES TO ALLOW FOR USE OF HALF OF THE PARKING LOT DURING CONSTRUCTION. THE PHASING PLAN SHALL BE PROVIDED TO THE OWNER FOR REVIEW AND COMMENT PRIOR TO CONSTRUCTION.

SNOW STORAGE:

- SNOW IS TO BE STORED WITHIN THE SNOW STORAGE AREAS.
- SNOW MAY BE PHYSICALLY REMOVED AND TRANSPORTED OFFSITE IF NECESSARY.
- SNOW TRANSPORTED OFFSITE SHALL BE BROUGHT TO A MAINE DEP APPROVED "SNOW DUMP" OR MEET THE EXEMPTION REQUIREMENTS SPECIFIED WITHIN CHAPTER 573 WHEN THE ABOVE REQUIREMENTS CANNOT BE MET DUE TO AN ABUNDANCE OF SNOW.

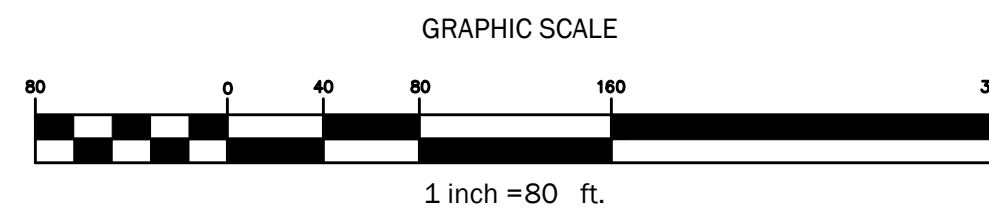
PARKING SUMMARY:

HANDICAP SPACES:	10
LEVEL 2 EV CHARGING SPACES:	8
LEVEL 1 EV CHARGING SPACES:	64
TOTAL SPACES:	344



LEGEND

EXISTING	PROPOSED
ROAD	PROPERTY LINE
	RIGHT-OF-WAY LINE
	ABUTTERS PROPERTY LINE
	ZONING LINE
	IRON ROD OR PIN FOUND
	WETLANDS
	BOLLARD LIGHT
	UTILITY POLE
	HYDRANT
	BUILDING
	BITUMINOUS PAVEMENT
	CURB
	TREELINE
	REVEGETATION AREA
	SNOW STORAGE AREA



TAX MAP I.D.
291 A001
281 A003

Drawing Name: C:\Users\Site\Documents\Drawings\21-216-001\21-216-001_R01_SitePlan.dwg / Date: 12/21/2022 / Time: 10:23:12 AM

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
C	1/20/2023	FOR CITY REVIEW									
B	12/21/2022	FOR PRICING ADDENDUM 1 ONLY - NOT FOR CONSTRUCTION	DEPT.	TWS	TWS						
A	12/5/2022	FOR PRICING ONLY - NOT FOR CONSTRUCTION	DEPT.	TWS	TWS						



Site Design Associates

Consulting Engineering & Land Planning

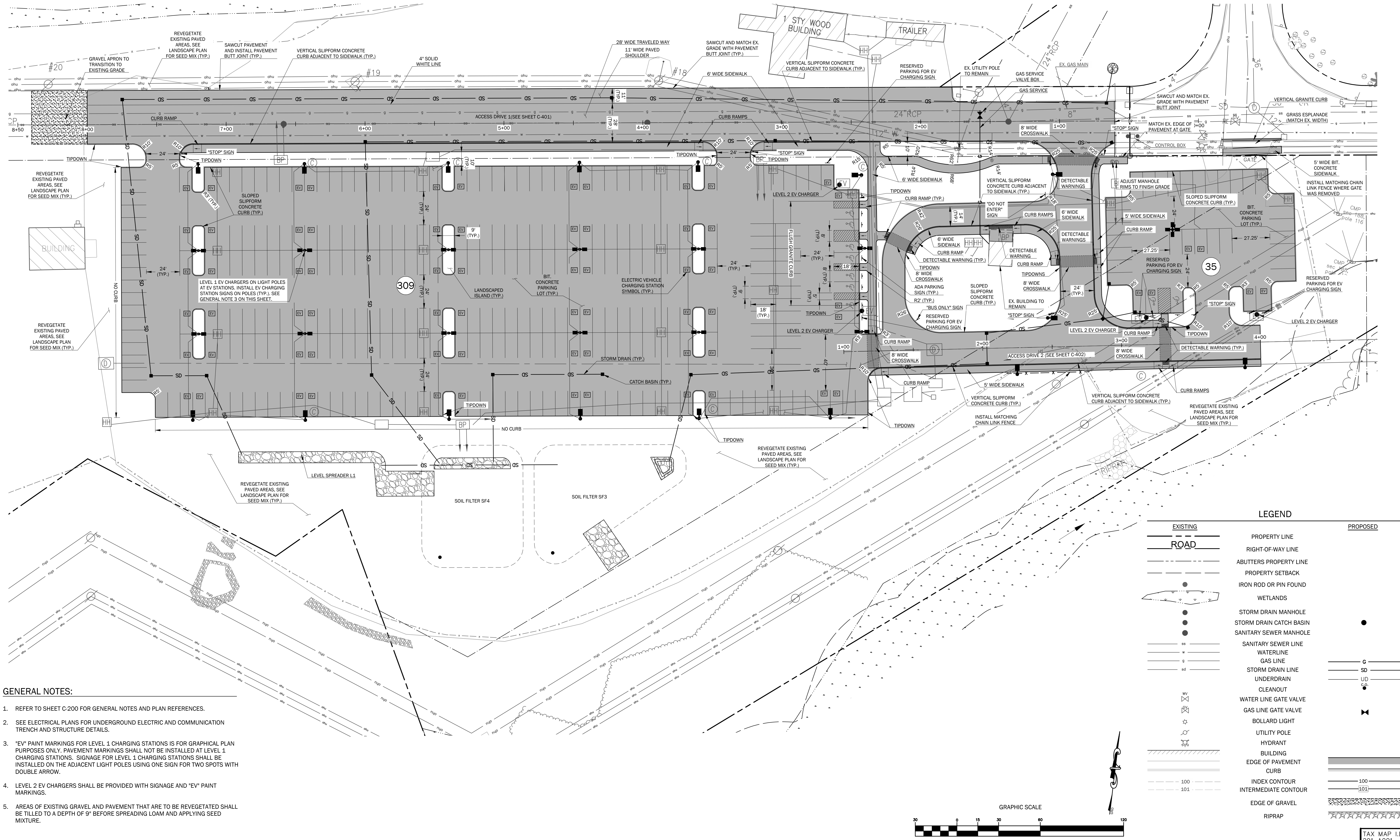
23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275

CLIENT: UNIVERSITY OF NEW ENGLAND

11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005

DESIGN: DEPT.	PROJECT: RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING
DRAWN: DEPT.	160-172 BISHOP STREET PORTLAND, MAINE
CHKD: TWS	SITE PLAN
DATE: DEC. 2022	PROJ. NO. 21-216-00
SCALE: 1" = 80'	DWG. NO. C-200

Drawing Name: C:\Users\Site\Documents\Drawings\21-216-001\21-216-001_Riprap_Landscaping.dwg Plot Date: / Time: 4/25/2023 1:59 PM
Drawing Name: C:\Users\Site\Documents\Drawings\21-216-001\21-216-001_Riprap_Landscaping.dwg Plot Date: / Time: 4/25/2023 1:59 PM



GENERAL NOTES:

- REFER TO SHEET C-200 FOR GENERAL NOTES AND PLAN REFERENCES.
- SEE ELECTRICAL PLANS FOR UNDERGROUND ELECTRIC AND COMMUNICATION TRENCH AND STRUCTURE DETAILS.
- "EV" PAINT MARKINGS FOR LEVEL 1 CHARGING STATIONS IS FOR GRAPHICAL PLAN PURPOSES ONLY. PAVEMENT MARKINGS SHALL NOT BE INSTALLED AT LEVEL 1 CHARGING STATIONS. SIGNAGE FOR LEVEL 1 CHARGING STATIONS SHALL BE INSTALLED ON THE ADJACENT LIGHT POLES USING ONE SIGN FOR TWO SPOTS WITH DOUBLE ARROW.
- LEVEL 2 EV CHARGERS SHALL BE PROVIDED WITH SIGNAGE AND "EV" PAINT MARKINGS.
- AREAS OF EXISTING GRAVEL AND PAVEMENT THAT ARE TO BE REVEGETATED SHALL BE TILLED TO A DEPTH OF 9" BEFORE SPREADING LOAM AND APPLYING SEED MIXTURE.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
D	4/25/2023	REVISED PER CITY COMMENTS									
C	1/20/2023	FOR CITY REVIEW									
B	12/21/2022	FOR PRICING ADDENDUM 1 ONLY - NOT FOR CONSTRUCTION									
A	12/5/2022	FOR PRICING ONLY - NOT FOR CONSTRUCTION									



Site Design Associates
Consulting Engineering & Land Planning
23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275
CLIENT: **UNIVERSITY OF NEW ENGLAND**
11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005

DESIGN: DEPT.
DRAWN: DEPT.
CHKD: TWS
DATE: DEC. 2022
SCALE: 1" = 30'

PROJECT: **RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING**
160-172 BISHOP STREET PORTLAND, MAINE
SITE LAYOUT AND UTILITY PLAN
PROJ. NO. **21-216-00**
DWG. NO. **C-201**
REV. **D**

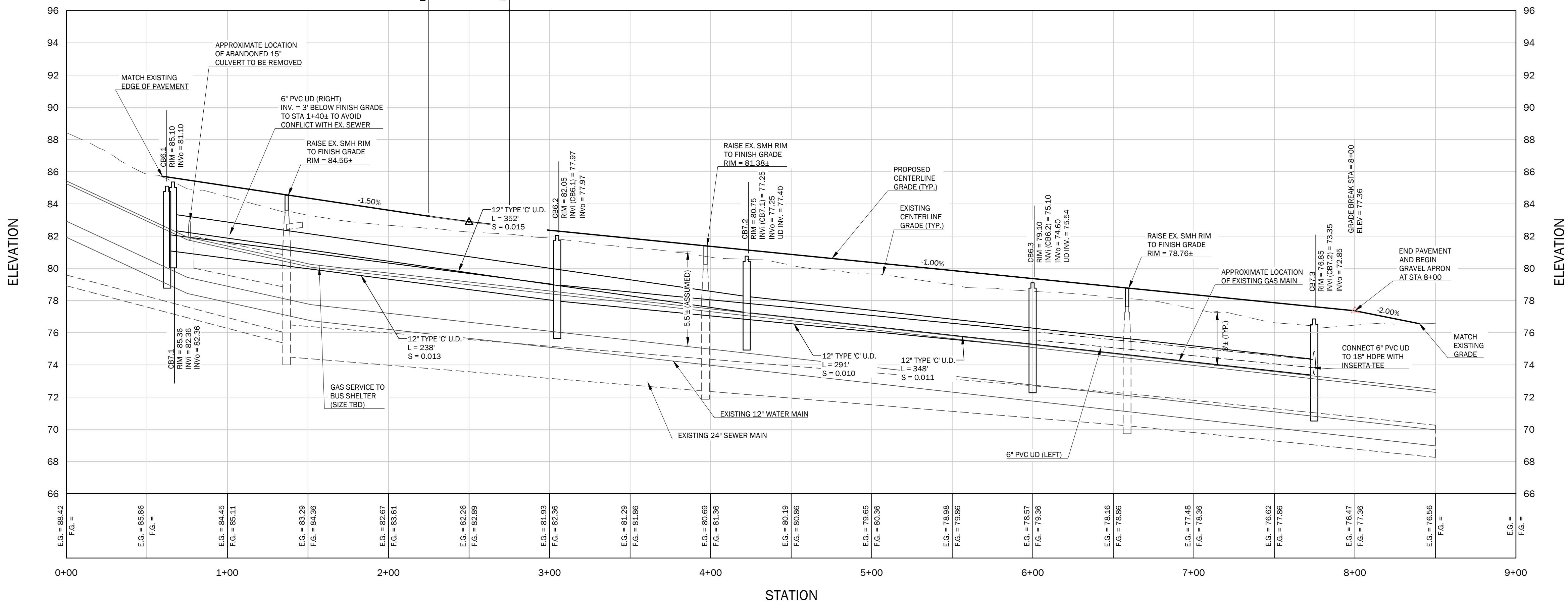
1. REFER TO SHEET C-200 FOR GENERAL NOTES AND PLAN REFERENCES.
2. PRIOR TO ANY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL VERIFY ALL AFFECTED GRADES. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE OWNER OR OWNER'S REPRESENTATIVE.
3. ALL AREAS NOT REQUIRING GRADING SHALL BE LEFT UNDISTURBED. CONTRACTOR SHALL NOT DISTURB THESE AREAS AND PRESERVE EXISTING VEGETATION.
4. GRADE ALL NEW WORK FOR POSITIVE DRAINAGE AND NO PUDDLING. MATCH EXISTING GRADES SMOOTHLY AND CONTINUOUSLY.

[illegible]

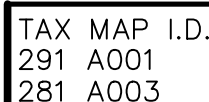
23 Whitney Way	Topsham, Maine 04086	Tel: (207) 449-4275
CLIENT:		
UNIVERSITY OF NEW ENGLAND		
11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005		

DESIGN: DEPT.	PROJECT: RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING 160-172 BISHOP STREET PORTLAND, MAINE		
DRAWN: DEPT.	OVERALL GRADING, DRAINAGE, AND EROSION AND SEDIMENTATION CONTROL PLAN		
CHKD: TWS			
DATE: DEC. 2022	PROJ. NO.	21-216-00	REV.
SCALE: 1" = 30'	DWG. NO.	C-300	D

1. REFER TO SHEET C-200 FOR GENERAL NOTES AND PLAN REFERENCES.
2. REFER TO SHEET C-300 FOR GRADING AND DRAINAGE NOTES AND LEGEND.

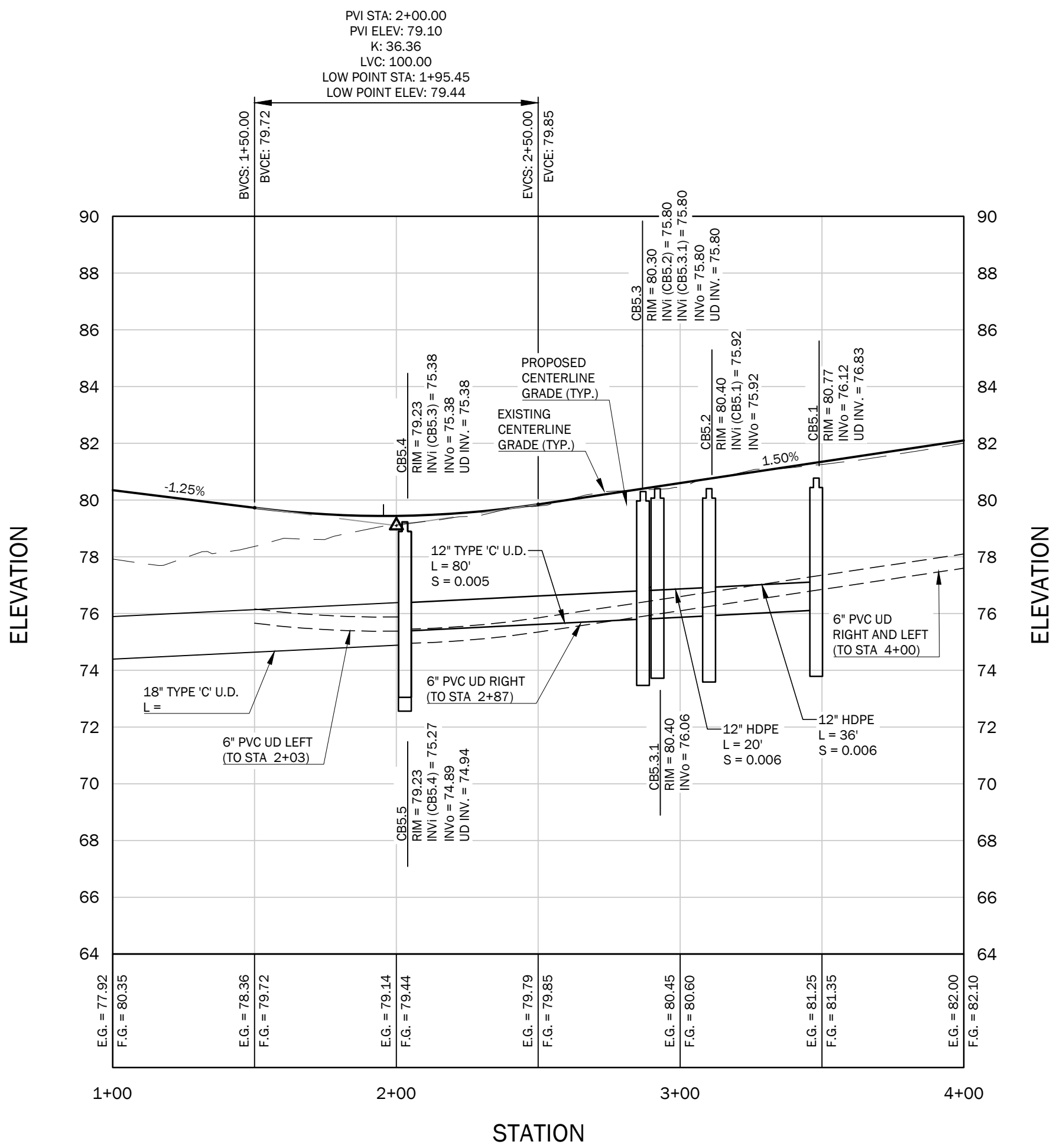
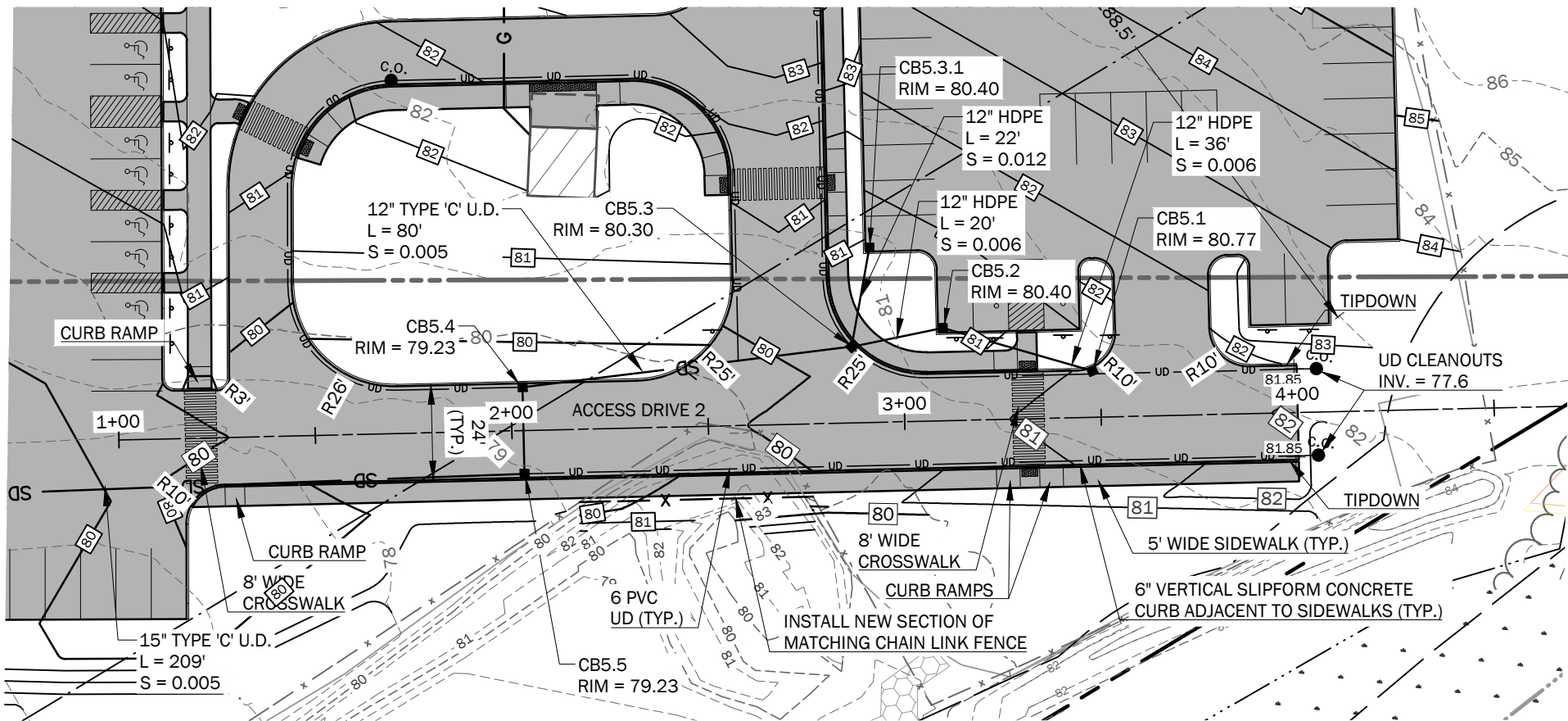


EXISTING		PROPOSED
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	ABUTTERS PROPERTY LINE	
	PROPERTY SETBACK	
	IRON ROD OR PIN FOUND	
	WETLANDS	
	STORM DRAIN MANHOLE	
	STORM DRAIN CATCH BASIN	
	SANITARY SEWER MANHOLE	
	SANITARY SEWER LINE	
	WATERLINE	
	GAS LINE	
	UNDERDRAIN	
	CLEANOUT	
	WATER LINE GATE VALVE	
	GAS LINE GATE VALVE	
	BOLLARD LIGHT	
	UTILITY POLE	
	HYDRANT	
	BUILDING	
	EDGE OF PAVEMENT	
	CURB	
	INDEX CONTOUR	
	INTERMEDIATE CONTOUR	
	EDGE OF GRAVEL	

[illegible]

DESIGN: DEPT.	PROJECT: RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING 160-172 BISHOP STREET PORTLAND, MAINE			
DRAWN: DEPT.	ACCESS DRIVE 1 PLAN & PROFILE			
CHKD: TWS				
DATE: DEC. 2022	PROJ. NO.	21-216-00		REV.
SCALE: 1" = 40 FT	DWG. NO.	C-401		C

- GENERAL NOTES:
1. REFER TO SHEET C-200 FOR GENERAL NOTES AND PLAN REFERENCES.
 2. REFER TO SHEET C-300 FOR GRADING AND DRAINAGE NOTES AND LEGEND.



ACCESS DRIVE 2 PROFILE

LEGEND	
EXISTING	PROPOSED
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	ABUTTERS PROPERTY LINE
	PROPERTY SETBACK
	IRON ROD OR PIN FOUND
	WETLANDS
	STORM DRAIN MANHOLE
	STORM DRAIN CATCH BASIN
	SANITARY SEWER MANHOLE
	SANITARY SEWER LINE
	WATERLINE
	GAS LINE
	SD
	UD
	C.O.
	WATER LINE GATE VALVE
	GAS LINE GATE VALVE
	BOLLARD LIGHT
	UTILITY POLE
	HYDRANT
	BUILDING
	EDGE OF PAVEMENT
	CURB
	100
	101



TAX MAP I.D.
291 A001
281 A003

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
C	1/20/2023	FOR CITY REVIEW									
B	12/21/2022	FOR PRICING ADDENDUM 1 ONLY - NOT FOR CONSTRUCTION									
A	12/5/2022	FOR PRICING ONLY - NOT FOR CONSTRUCTION									



Site Design Associates
Consulting Engineering & Land Planning
23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275
CLIENT: **UNIVERSITY OF NEW ENGLAND**
11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005

DESIGN: DEPT.	PROJECT:
DRAWN: DEPT.	RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING 160-172 BISHOP STREET PORTLAND, MAINE
CHKD: TWS	ACCESS DRIVE 2 PLAN & PROFILE STA 1+00 TO 4+00
DATE: DEC. 2022	PROJ. NO. 21-216-00
SCALE: 1" = 40'	DWG. NO. C-402

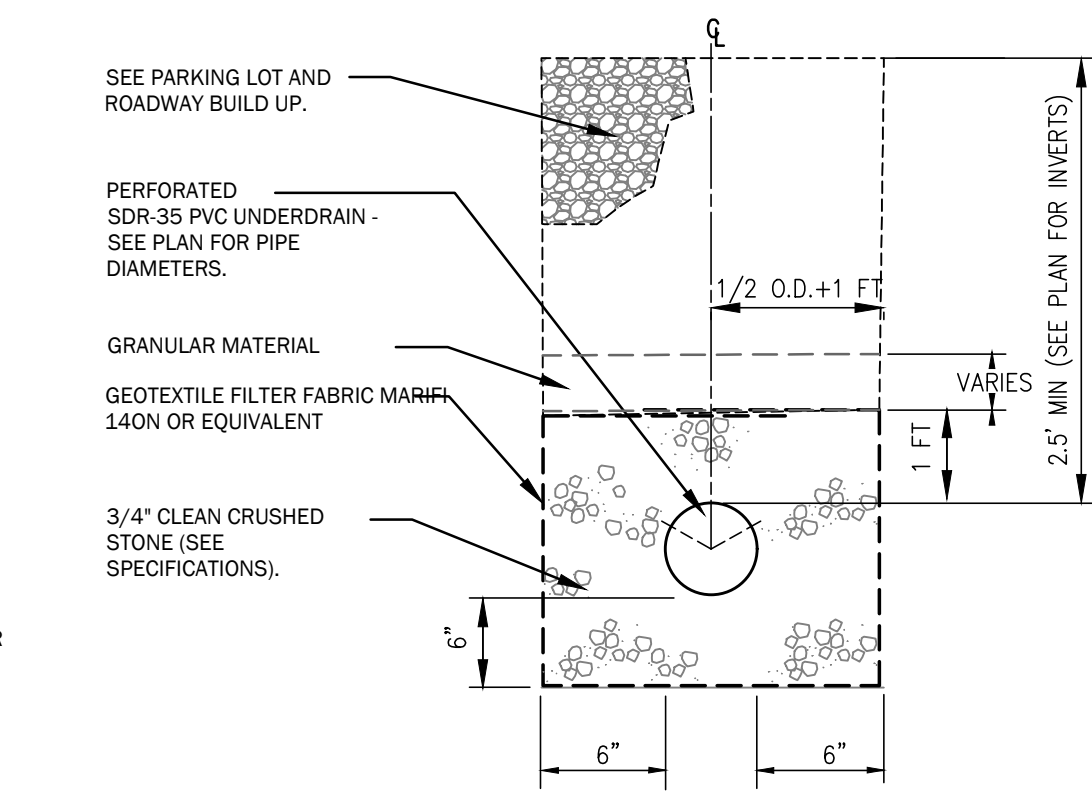


Diagram illustrating the dimensions and components of a saw cut existing pavement repair:

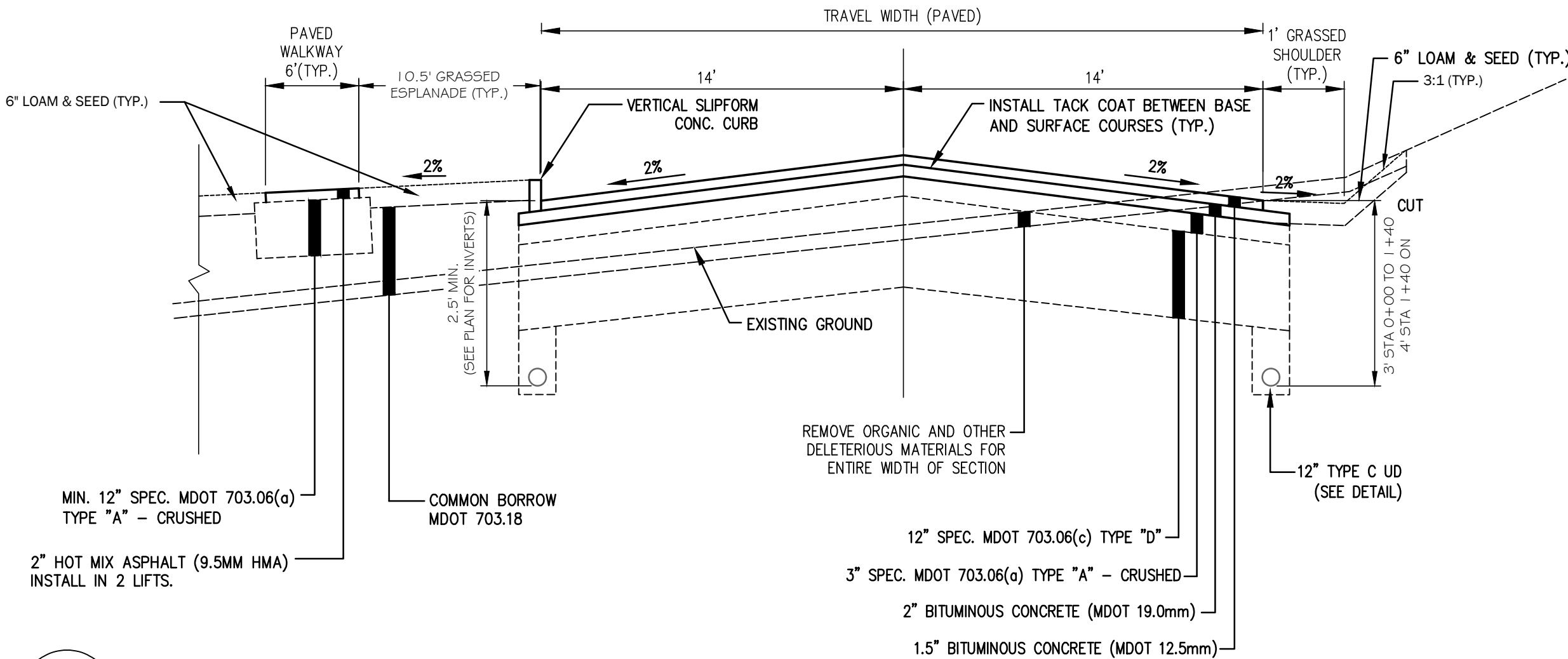
- Grind Existing Surface Course:** 24"
- Grind Existing Surface Course:** 18"
- Grind Existing Surface Course:** 6"
- EDGE OF EXISTING PAVEMENT**
- PROPOSED SURFACE PAVEMENT**
- PROPOSED BASE PAVEMENT**
- EXIST. SURFACE PAVEMENT**
- EXIST. BASE PAVEMENT**
- SAW CUT EXISTING PAVEMENT**

Diagram illustrating the dimensions for a standard parking space:

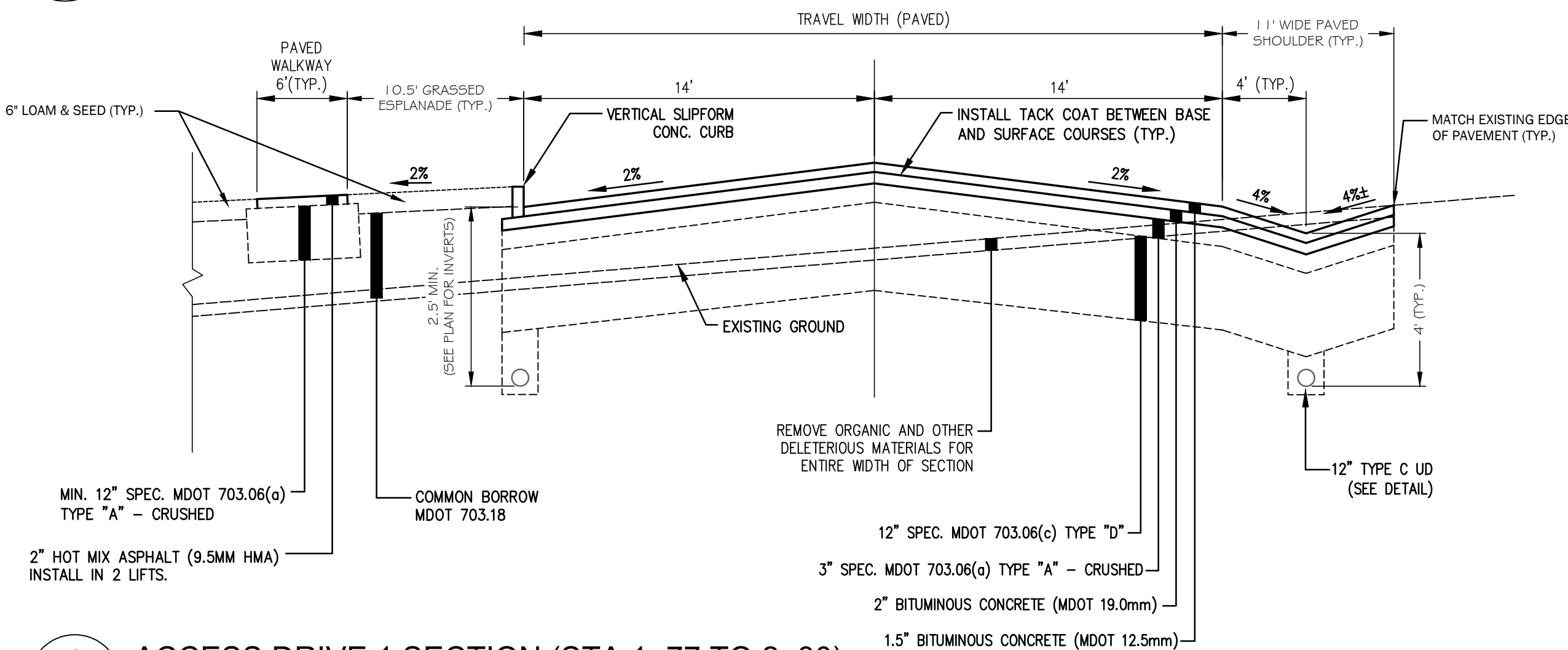
- Overall width: 8' (AUTO) or 8' (VAN)
- Overall length: 16'
- Wheelchair icon dimensions:
 - Width: 3' (total), 2' (seat area)
 - Height: 12" (seat), 26" (backrest), 26" (total)
 - Wheel diameter: 26"
- Text: "PAINTED PAVEMENT STRIPES AND LINES TO BE 4 INCHES WIDE (TYP.)"
- Text: "HANDICAP PARKING SIGN, SEE NOTES"

Page 253

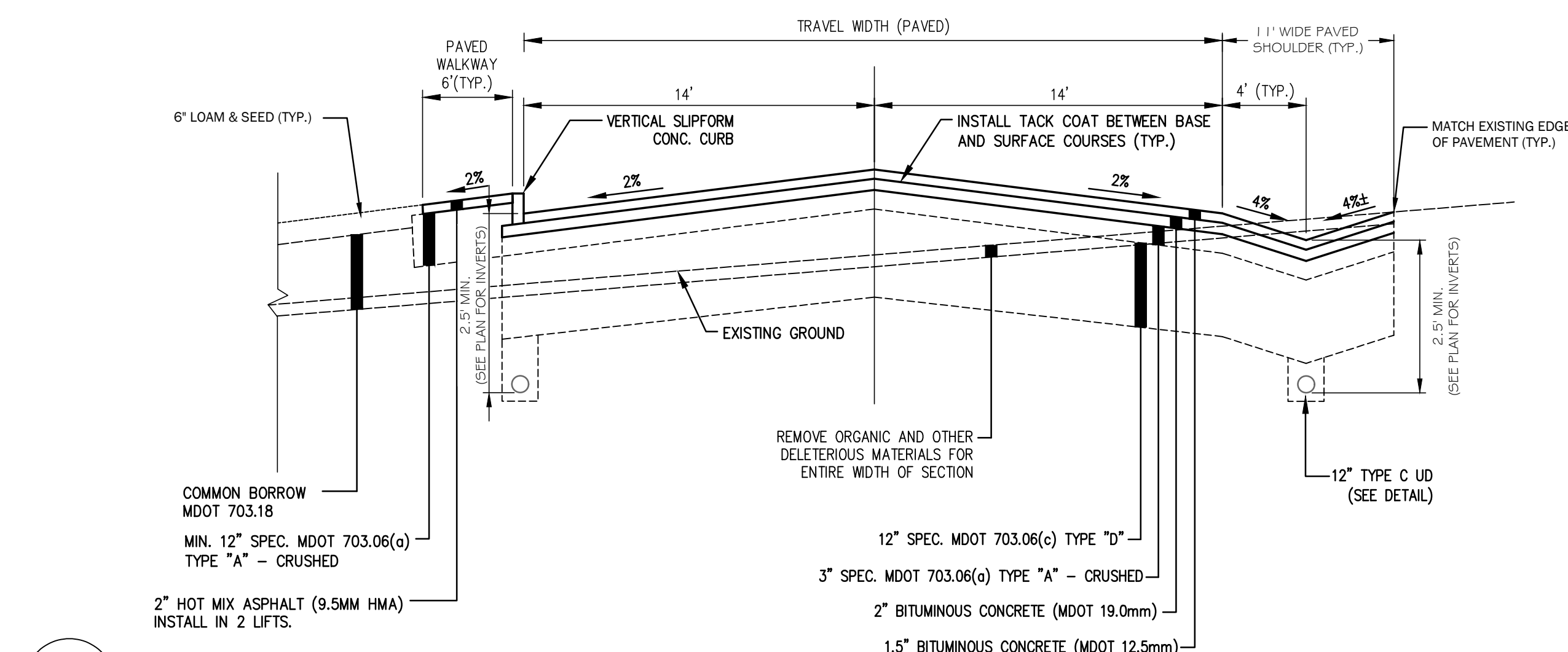
Drawing Name: C:\Users\Site\Documents\Drawings\21-216-001\21-216-001.dwg, Project: 21-216-001, Title: 21-216-001, Date: 12/28/2023, Time: 10:23:11 AM, 12/28/2023



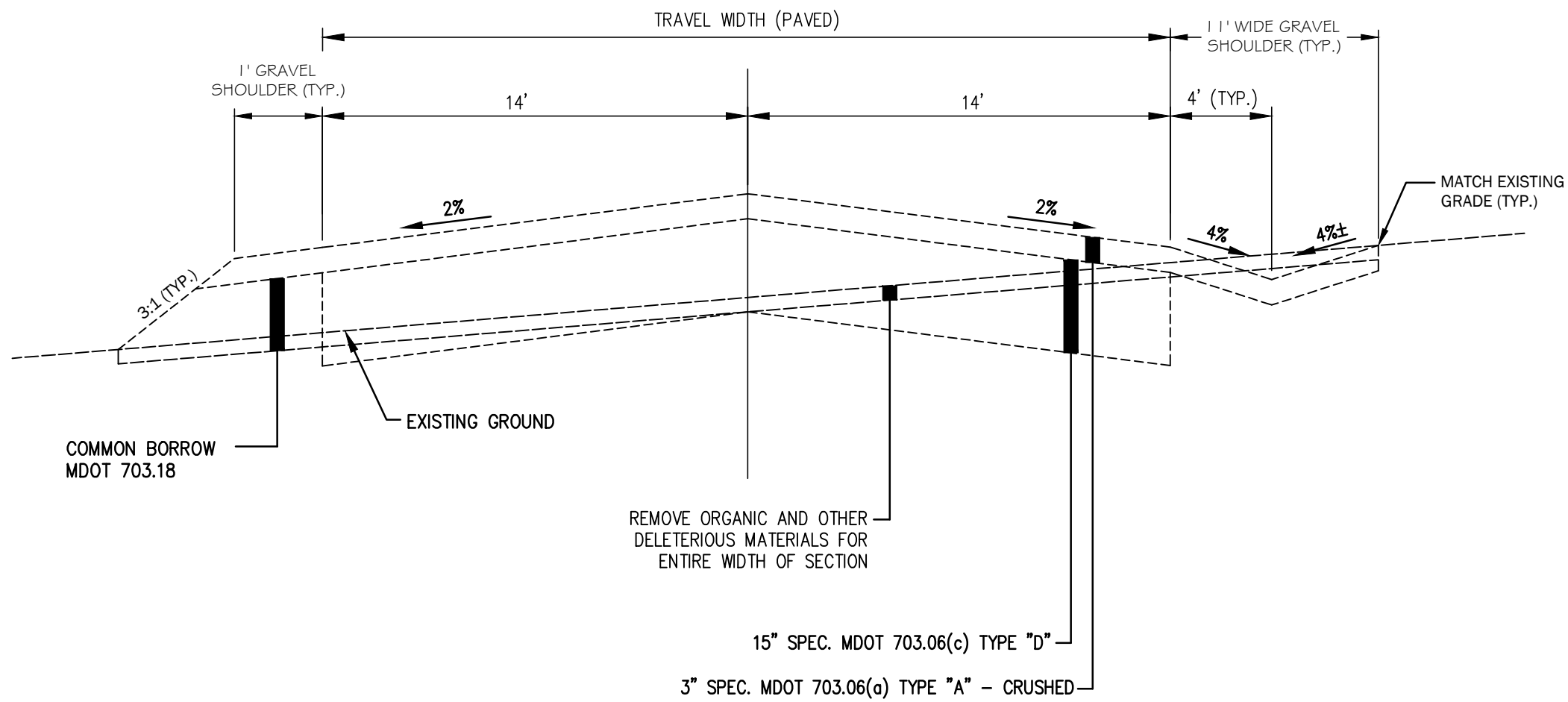
1 ACCESS DRIVE 1 SECTION (STA 0+60 TO 1+77)
C-502 NOT TO SCALE



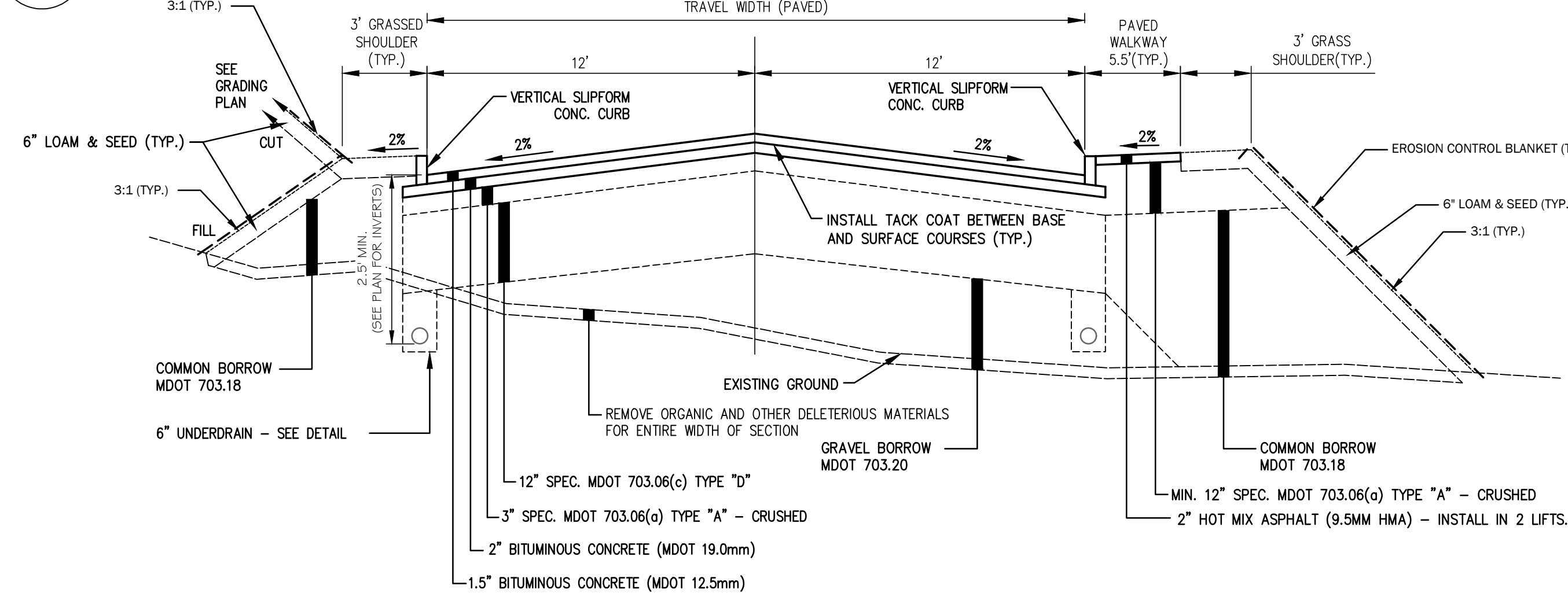
4 ACCESS DRIVE 1 SECTION (STA 1+77 TO 2+30)
C-502 NOT TO SCALE



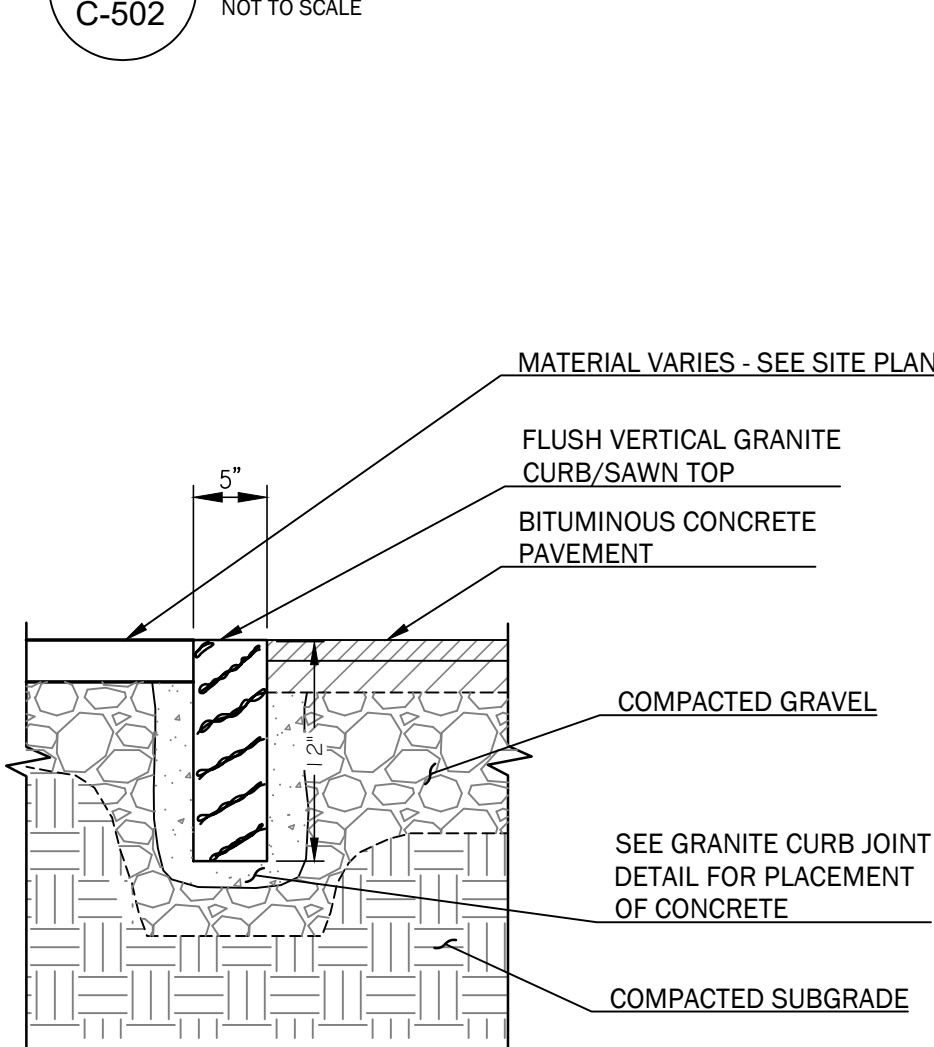
6 ACCESS DRIVE 1 SECTION (STA 2+30 TO 8+00)
C-502 NOT TO SCALE



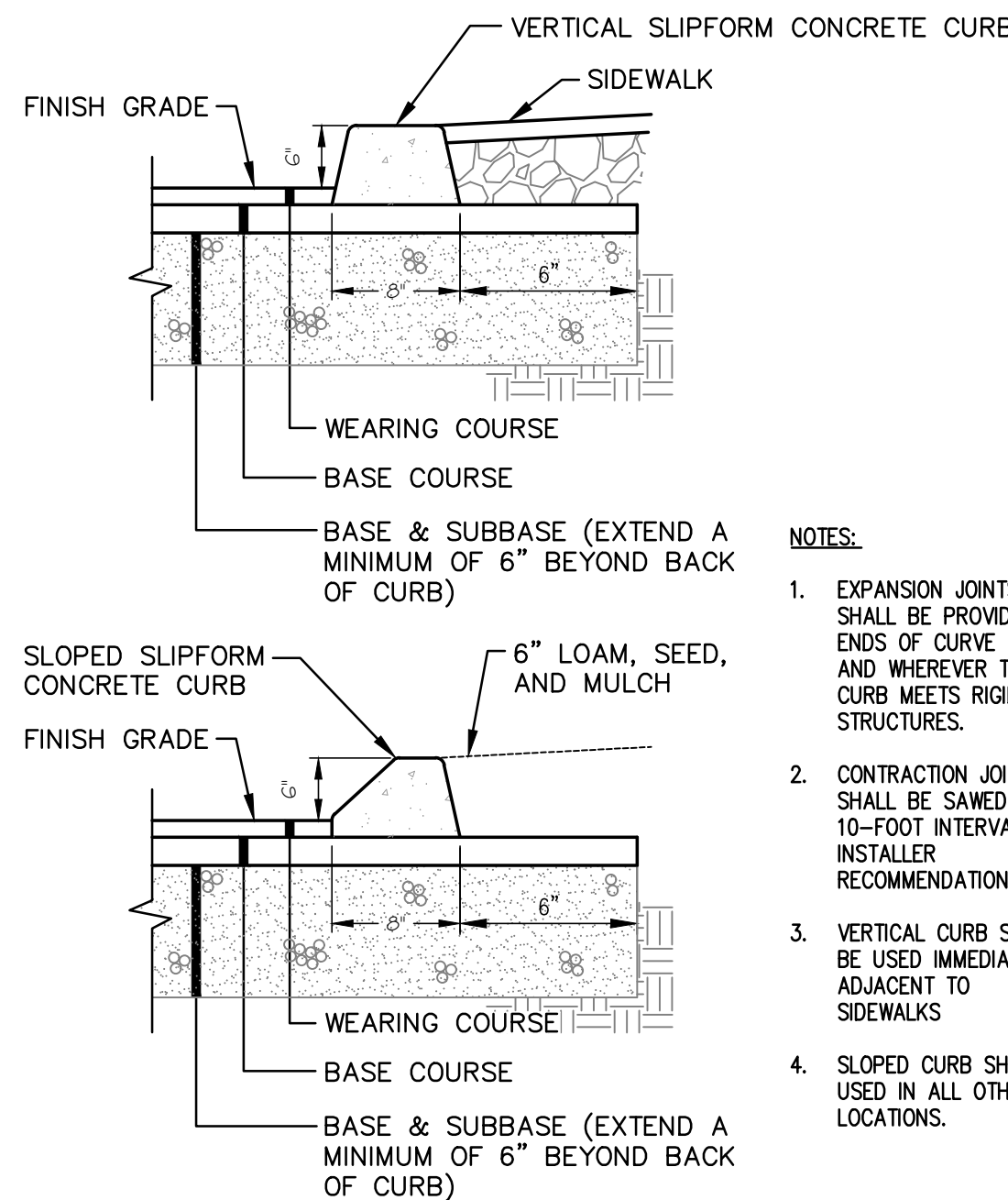
2 ACCESS ROAD 1 SECTION (STA 8+00 TO 8+40)
C-502 NOT TO SCALE



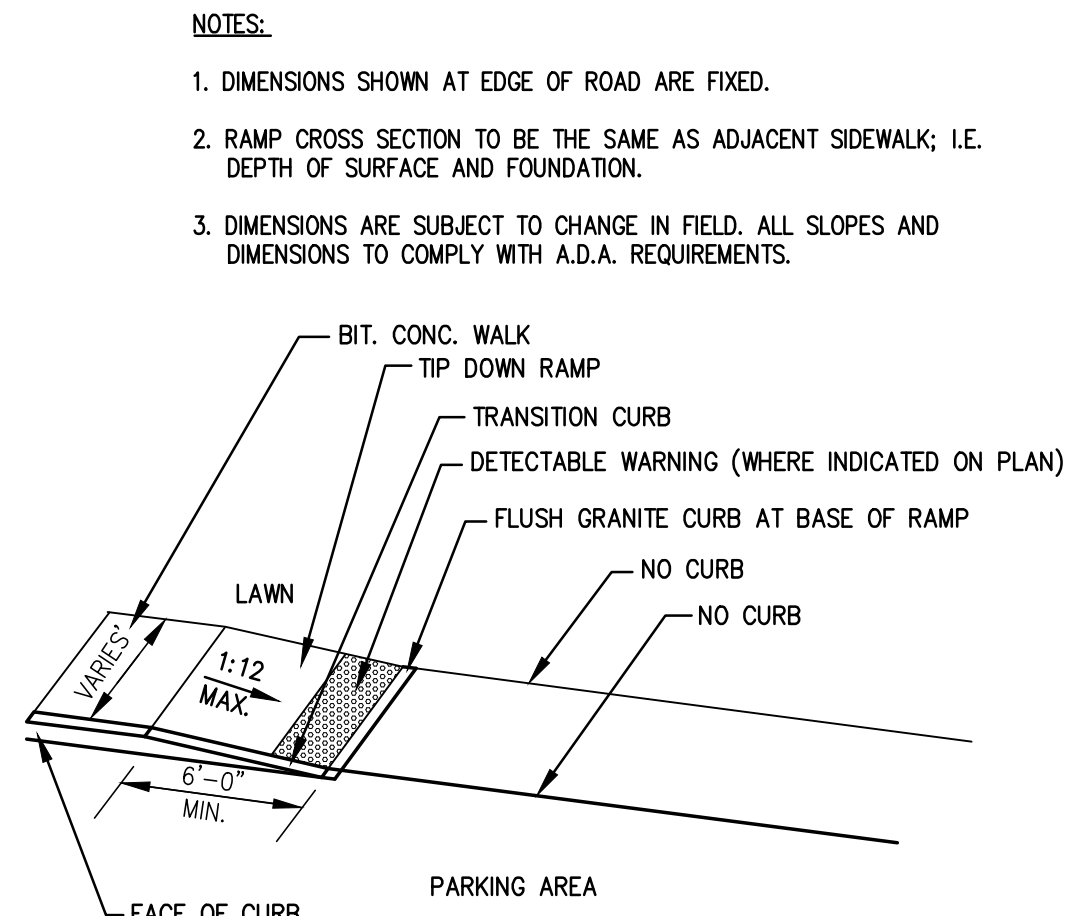
5 ACCESS DRIVE 2 SECTION (STA 1+00 TO 4+00)
C-502 NOT TO SCALE



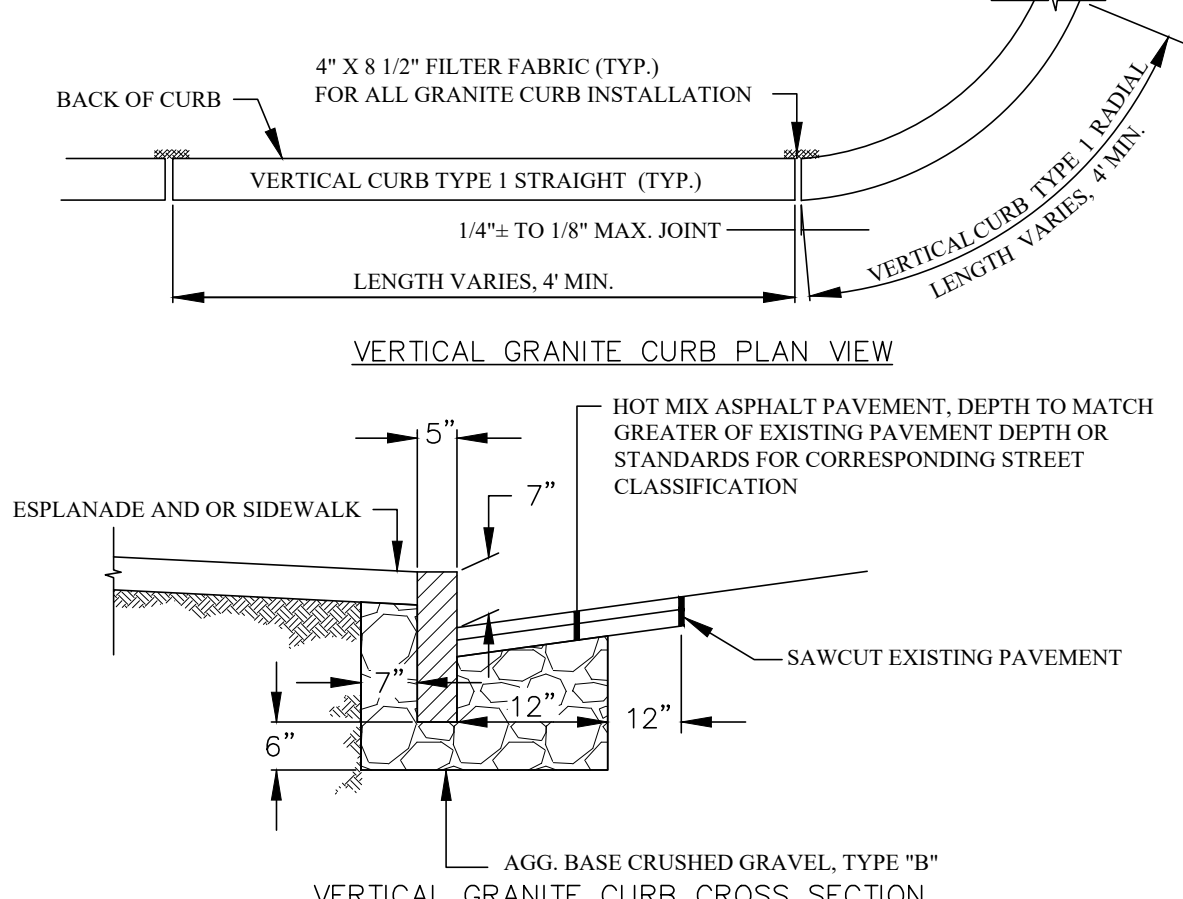
7 FLUSH GRANITE CURB
C-502 NOT TO SCALE



8 SLIPFORM CONCRETE CURB
C-502 NOT TO SCALE



3 PEDESTRIAN CURB RAMP
C-502 NOT TO SCALE



9 VERTICAL GRANITE CURB INSTALLATION IN EXISTING STREETS
C-502 NOT TO SCALE

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
C	1/20/2023	FOR CITY REVIEW									
B	12/21/2022	FOR PRICING ADDENDUM 1 ONLY - NOT FOR CONSTRUCTION									
A	12/5/2022	FOR PRICING ONLY - NOT FOR CONSTRUCTION									



Site Design Associates
Consulting Engineering & Land
Planning

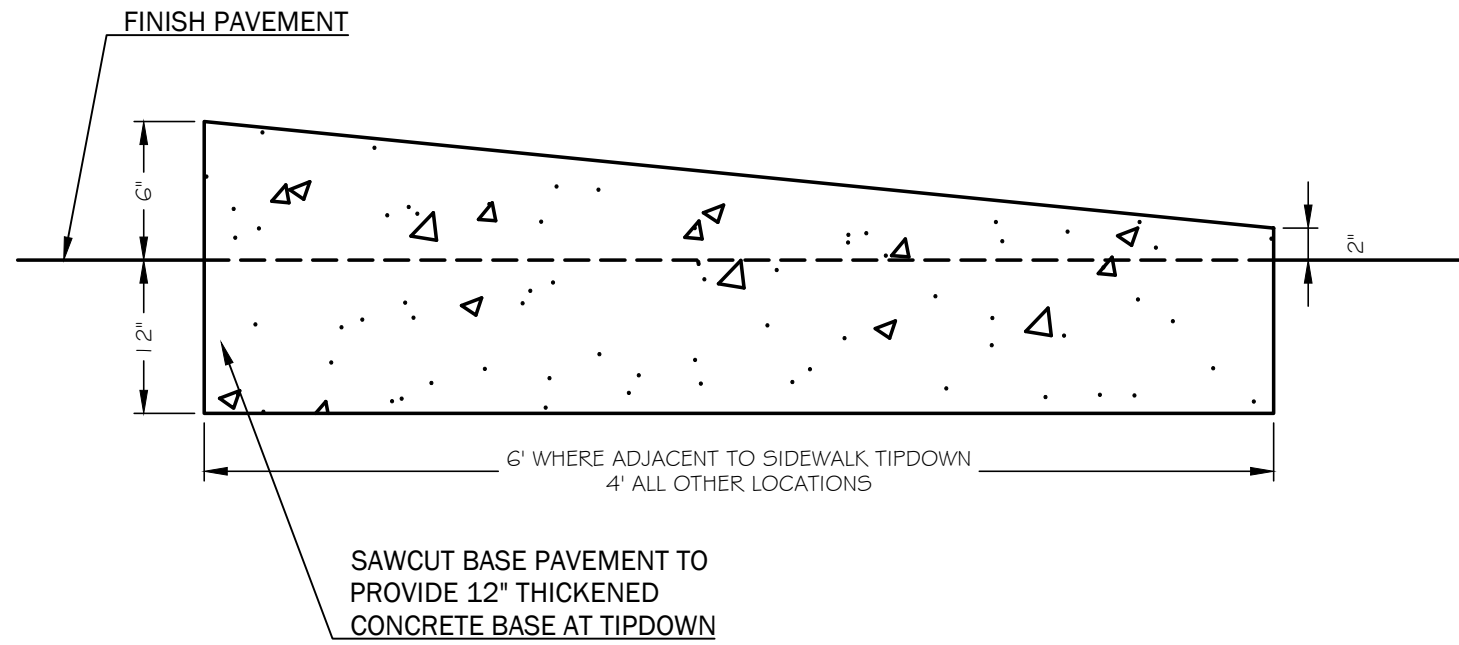
23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275

CLIENT: UNIVERSITY OF NEW ENGLAND

11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005

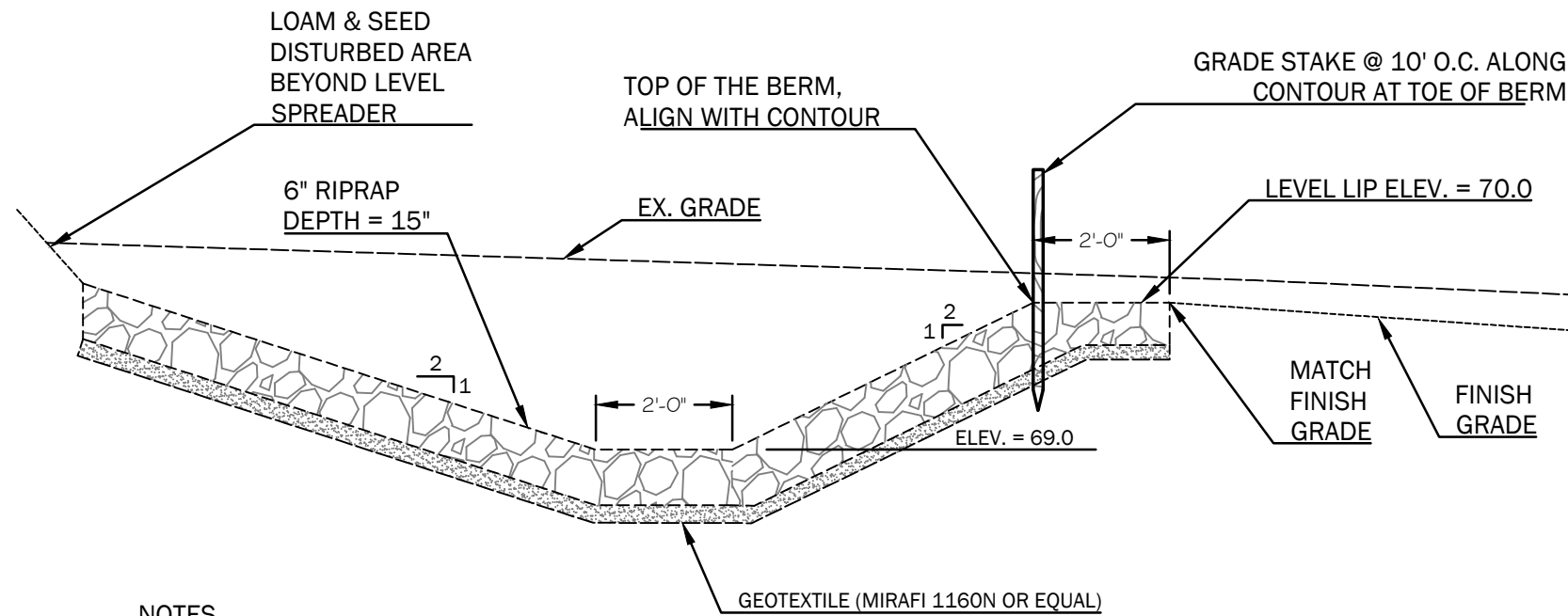
DESIGN: DEPT.	PROJECT: RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING 160-172 BISHOP STREET PORTLAND, MAINE
DRAWN: DEPT.	SITE DETAILS
CHKD: TWS	
DATE: DEC. 2022	PROJ. NO. 21-216-00
SCALE: AS NOTED	DWG. NO. C-502

TAX MAP I.D.
291 A001
281 A003



1
C-503
NOT TO SCALE

SLIPFORM CURB TIPDOWN



NOTES

1. CONSTRUCT LEVEL LIP AND SPREADER ON ZERO PERCENT GRADE.
2. DO NOT CONSTRUCT LEVEL SPREADER ON FILL.
3. STORM RUNOFF CONVERTED TO SHEET FLOW SHALL OUTLET ONTO STABILIZED AREA. WATER SHALL NOT BE CHANNELIZED IMMEDIATELY BELOW POINT OF DISCHARGE.
4. THE LAYOUT AND CONSTRUCTION OF THE LEVEL SPREADER IS CRITICAL TO IT'S SUCCESS. CLEAR THE AREA AND STAKE OUT LEVEL LIP ELEVATION WITH STAKES EVERY 10'. WORK THE STONE BELOW THE STAKES AND THEN EXCAVATE AND GRADE THE UPHILL SECTION. REMOVE THE STAKES AFTER THE STONE IS INSTALLED.

2
C-503
NOT TO SCALE

LEVEL SPREADER

SOIL FILTER MEDIA NOTES:

SOIL FILTER MEDIA SHALL CONFORM TO MAINE DEP SOIL FILTER MEDIA OPTION 1, PER MAINE DEP STORMWATER BMP MANUAL CHAPTER 7.1. AS FOLLOWS:

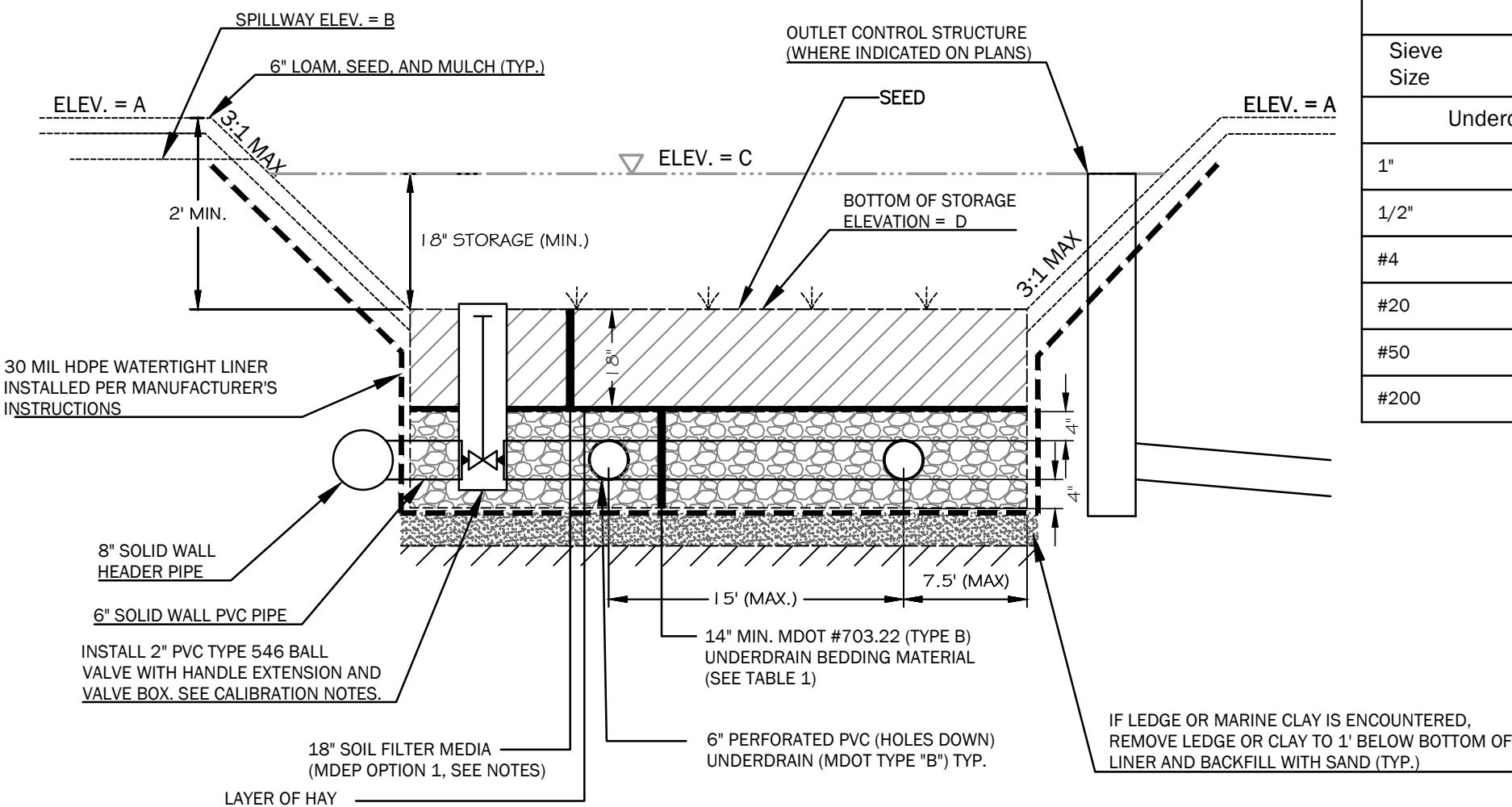
- 1.1. SOIL FILTER MEDIA SHALL CONSIST OF A SILTY SAND SOIL OR SOIL MIXTURE COMBINED WITH A MATURE, MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH.
- 1.2. THE RESULTING MIX SHALL CONTAIN NO LESS THAN 10% BY DRY WEIGHT ORGANIC MATERIAL.
- 1.3. THE RESULTING MIX SHALL CONTAIN 8% TO 12% PASSING THE NO. 200 SIEVE.
- 1.4. THE RESULTING MIX SHALL CONTAIN A MAXIMUM CLAY CONTENT OF 2%.

UNDERDRAIN OUTLET VALVE CALIBRATION NOTES:

AFTER THE COMPLETION OF INSTALLATION OF THE SOIL FILTER MEDIA, THE CONTRACTOR SHALL PERFORM THE FOLLOWING PROCEDURE TO CALIBRATE THE UNDERDRAIN OUTLET VALVE TO ACHIEVE THE 0.75"/HOUR DESIGN FLOW RATE.

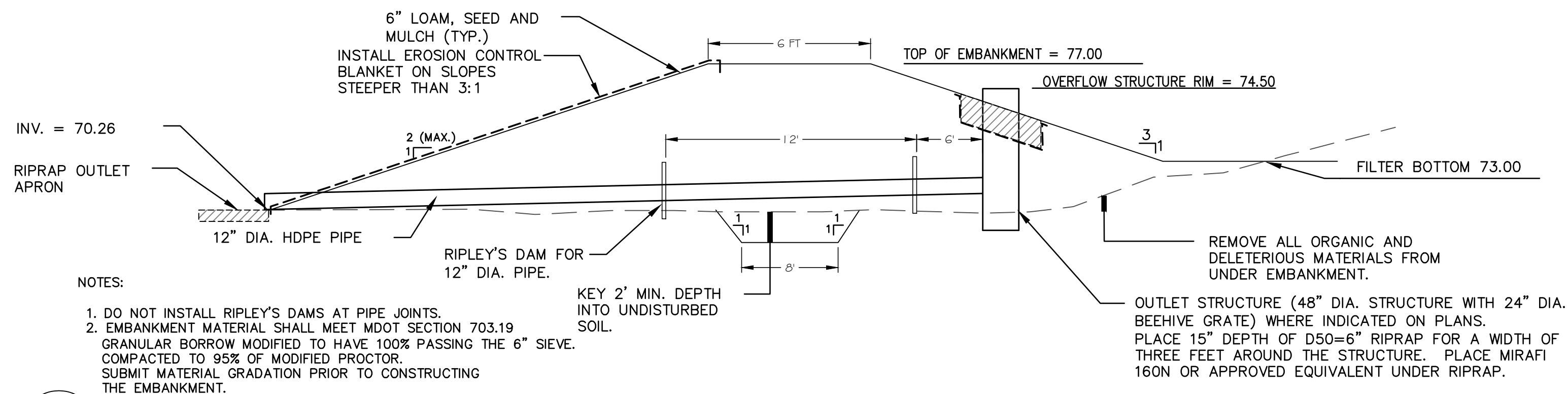
1. BEGIN WITH VALVE HALF-OPEN.
2. CAREFULLY FLOOD THE BASIN UNTIL THERE IS 18" OF WATER STORED ABOVE THE SOIL FILTER MEDIA (UP TO THE HEIGHT OF OUTLET STRUCTURE RIM) WITHOUT CAUSING EROSION OF THE SOIL FILTER MEDIA.
3. RECORD THE TIME IT TAKES FOR THE 18" OF WATER TO DRAIN TO THE TOP OF THE SOIL FILTER MEDIA. THE TARGET DRAINDOWN TIME IS 24 HOURS.
4. IF THE 18" OF WATER DRAINS IN LESS THAN 24 HOURS, CLOSE THE VALVE SLIGHTLY AND REPEAT STEPS 2 & 3 ABOVE.
5. IF THE 18" OF WATER DRAINS IN MORE THAN 24 HOURS, OPEN THE VALVE SLIGHTLY AND REPEAT STEPS 2 & 3 ABOVE.
6. REPEAT THIS PROCESS UNTIL THE 18" OF WATER DRAINS IN 24 HOURS.

GRASSED UNDERDRAINED SOIL FILTER SCHEDULE							
GRASSED UNDERDRAINED SOIL FILTER #	EMBKMNT. ELEV.	SPILLWAY ELEV.	TOP OF OUTLET STRUCT. ELEV.	BOTTOM OF STORAGE ELEV.	INTERIOR UNDERDRAIN INVERT (START)	UNDERDRAIN OUTLET INVERT	FILTER AREA (SQ. FT.)
SF3	77.00	75.00	74.50	73.00	70.70	70.00	2,993
SF4	77.00	75.00	74.50	73.00	70.70	70.00	3,128



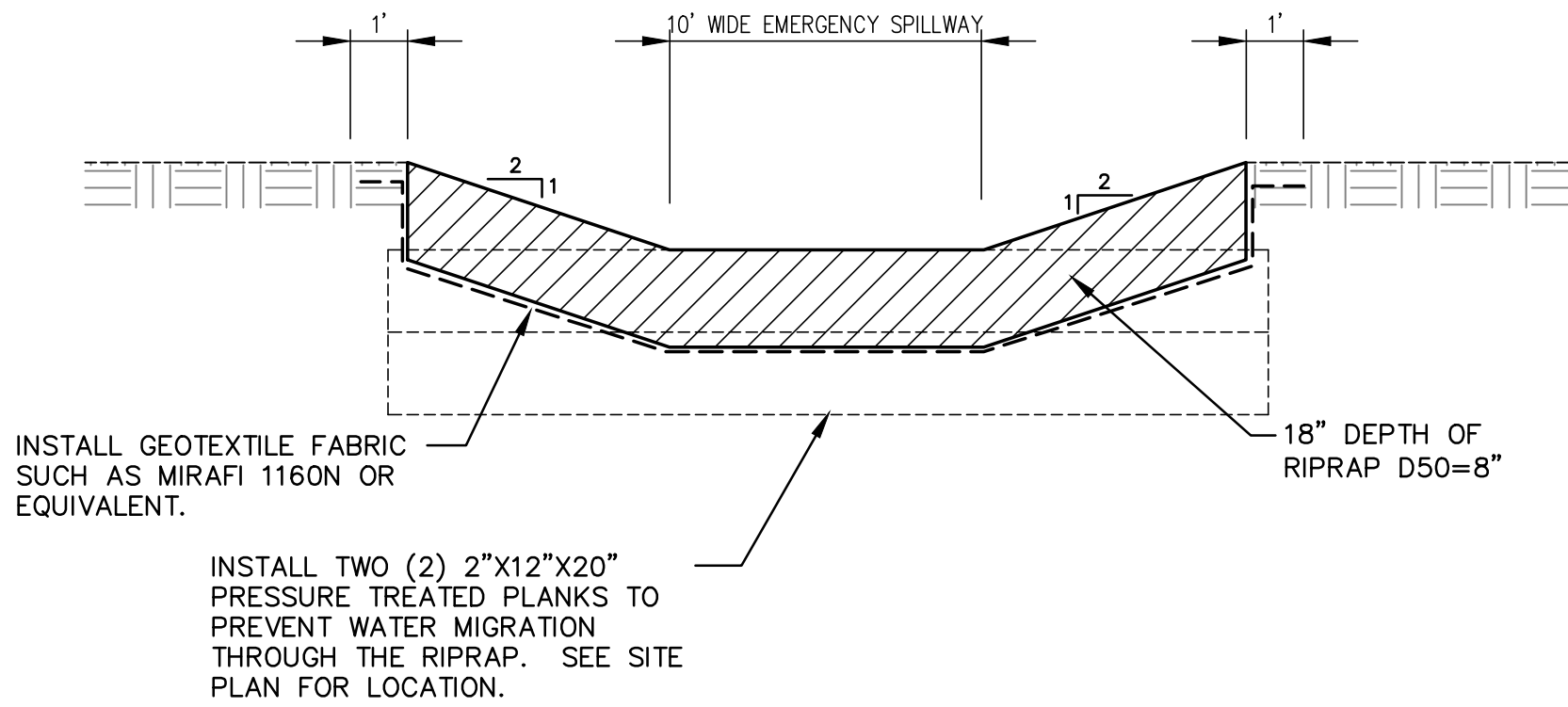
3
C-503
NOT TO SCALE

GRASSED UNDERDRAIN SOIL FILTER TYPICAL CROSS SECTION



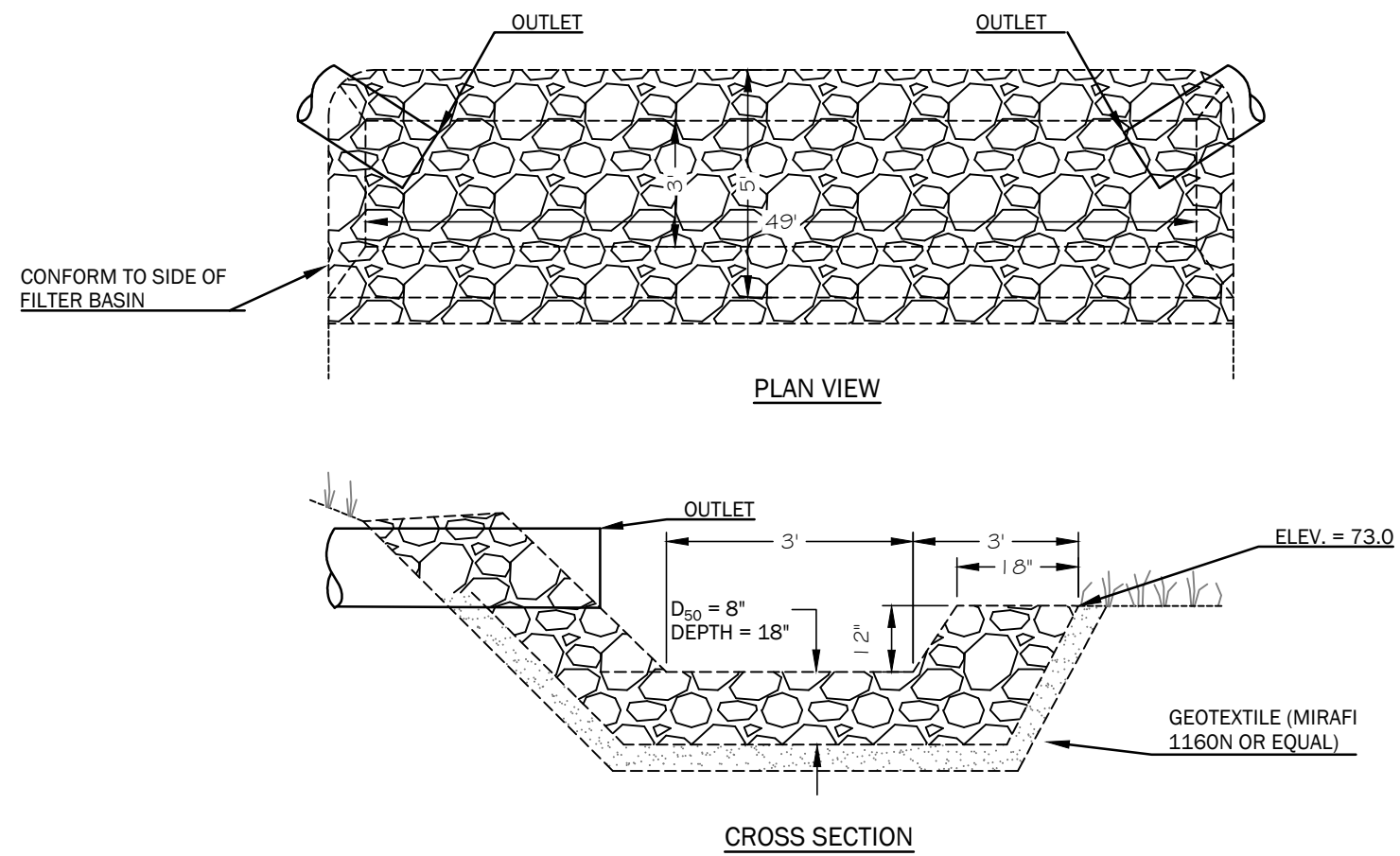
4
C-503
NOT TO SCALE

EMBANKMENT BUILD-UP



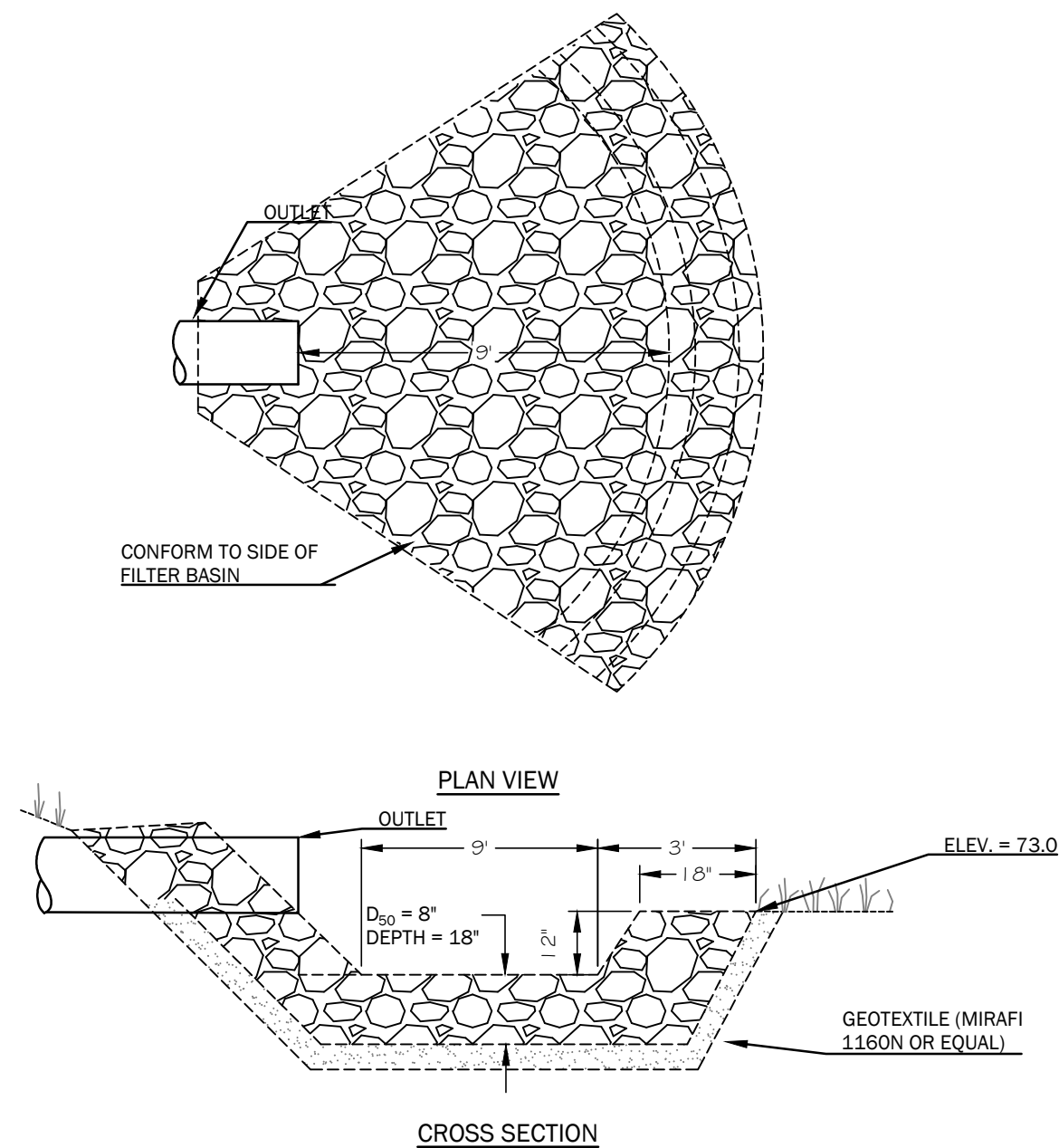
5
C-503
NOT TO SCALE

EMERGENCY SPILLWAY DETAIL



6
C-503
NOT TO SCALE

RIP-RAP INLET FOREBAY DETAIL (SF4)



7
C-503
NOT TO SCALE

RIP-RAP INLET FOREBAY DETAIL (SF3)

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

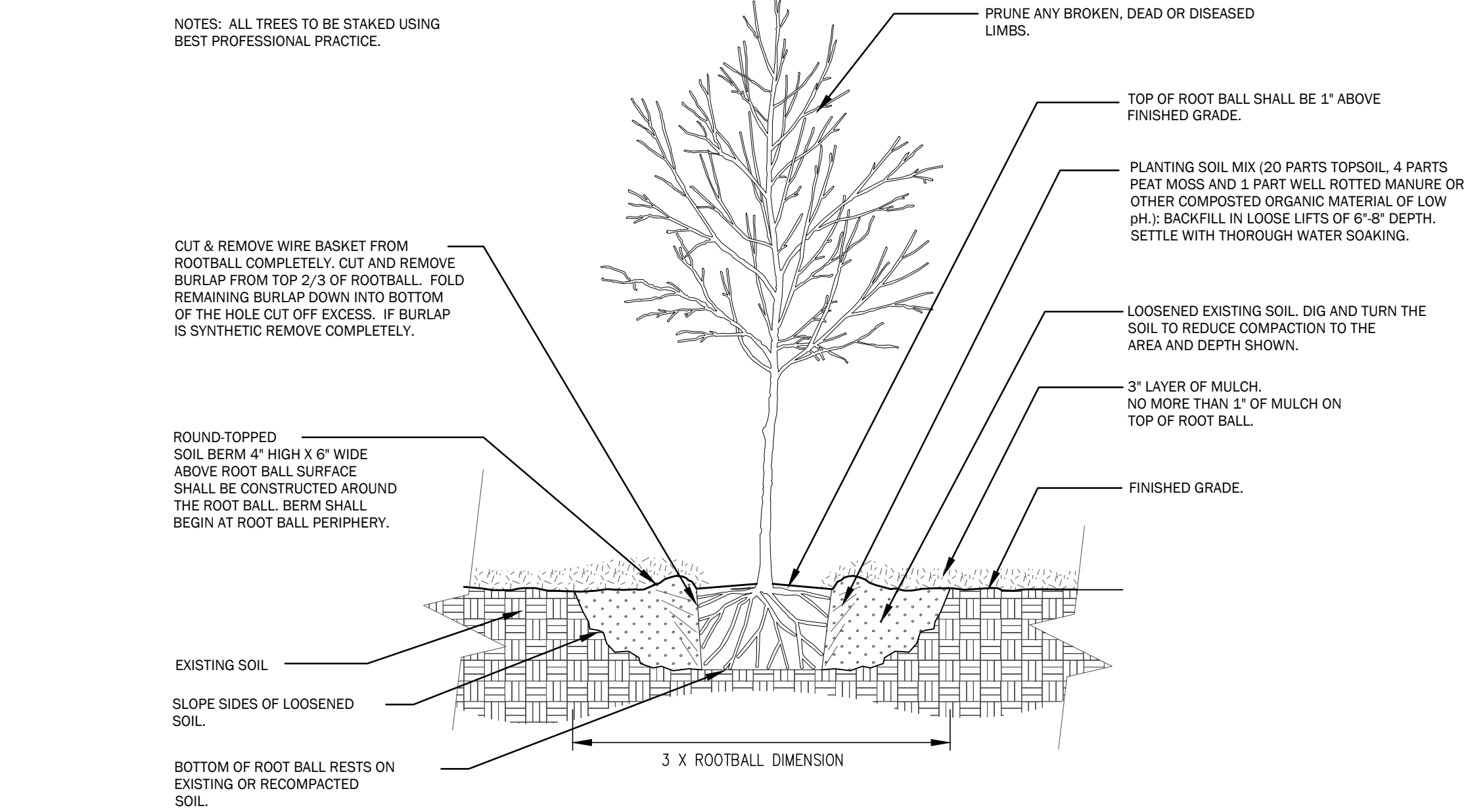
REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
C	1/20/2023	FOR CITY REVIEW									
B	12/21/2022	FOR PRICING ADDENDUM 1 ONLY - NOT FOR CONSTRUCTION									
A	12/5/2022	FOR PRICING ONLY - NOT FOR CONSTRUCTION									



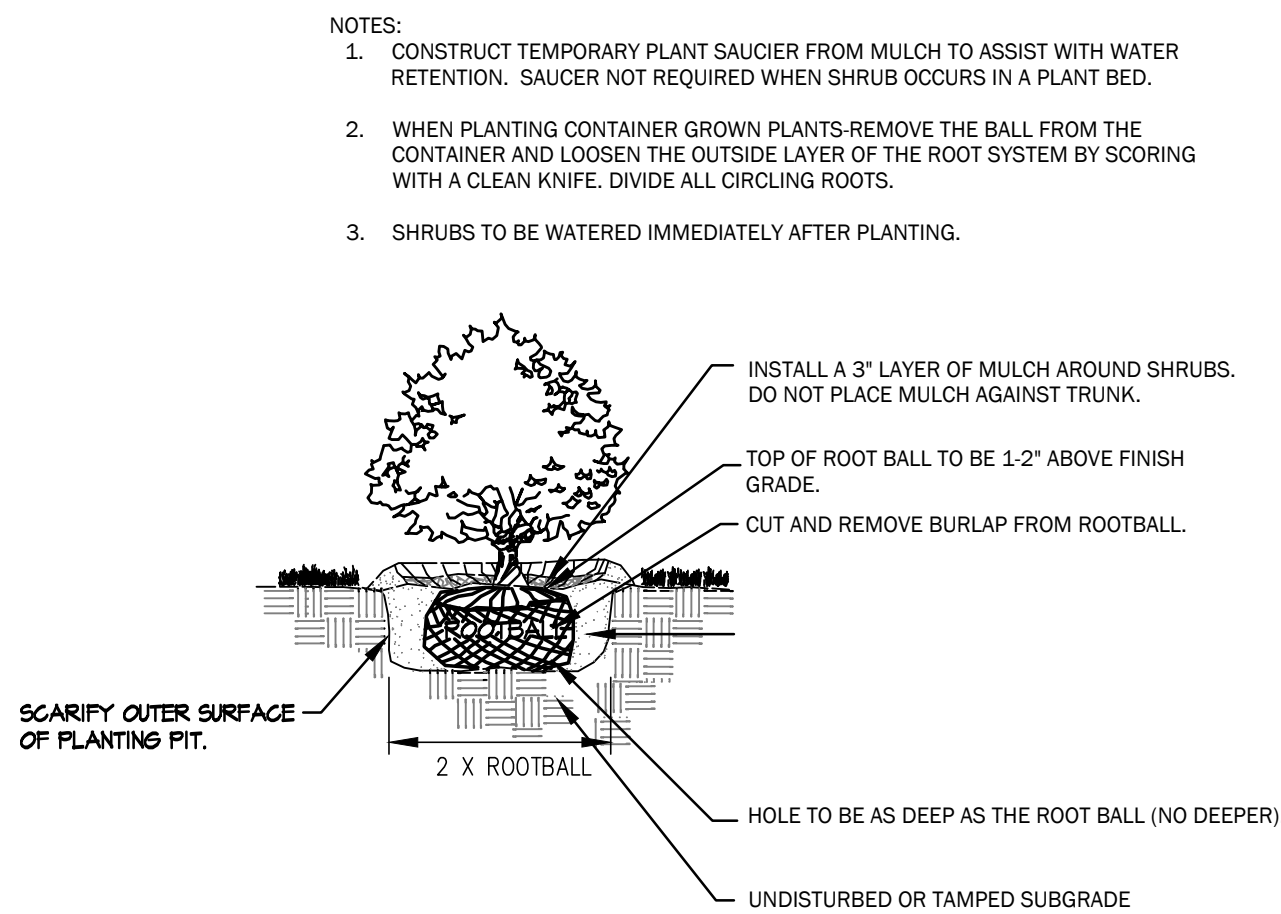
Site Design Associates
Consulting Engineering & Land Planning
23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275
CLIENT: UNIVERSITY OF NEW ENGLAND
11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005

DESIGN: DEPT.	PROJECT: RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING 160-172 BISHOP STREET PORTLAND, MAINE
DRAWN: DEPT.	SITE DETAILS
CHKD: TWS	
DATE: DEC. 2022	PROJ. NO. 21-216-00
SCALE: AS NOTED	DWG. NO. C-503

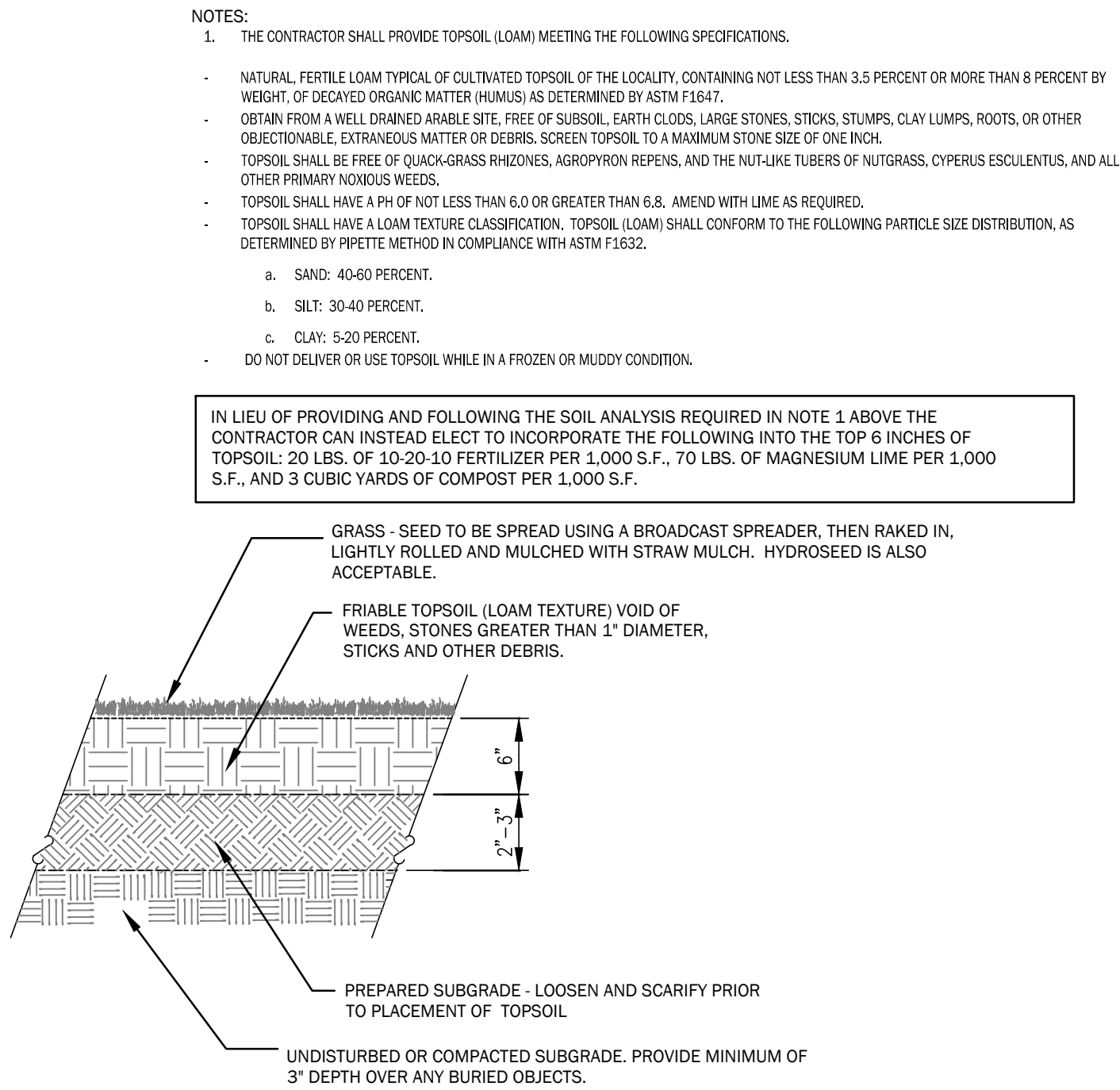
TAX MAP I.D.
291 A001
281 A003



1 DECIDUOUS TREE PLANTING DETAIL
C-504 NOT TO SCALE



2 SHRUB PLANTING DETAIL
C-504 NOT TO SCALE



3 LAWN INSTALLATION DETAIL
C-504 NOT TO SCALE



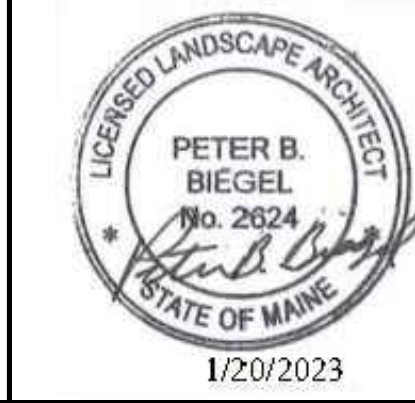
4 ELECTRIC VEHICLE CHARGING STATION SIGN
C-504 NOT TO SCALE



5 LEVEL 2 ELECTRIC VEHICLE CHARGING STATION PAVEMENT MARKING
C-504 NOT TO SCALE

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
C	1/20/2023	FOR CITY REVIEW									
B	12/21/2022	FOR PRICING ADDENDUM 1 ONLY - NOT FOR CONSTRUCTION	DEPT.	TWS	TWS						
A	12/5/2022	FOR PRICING ONLY - NOT FOR CONSTRUCTION	DEPT.	TWS	TWS						

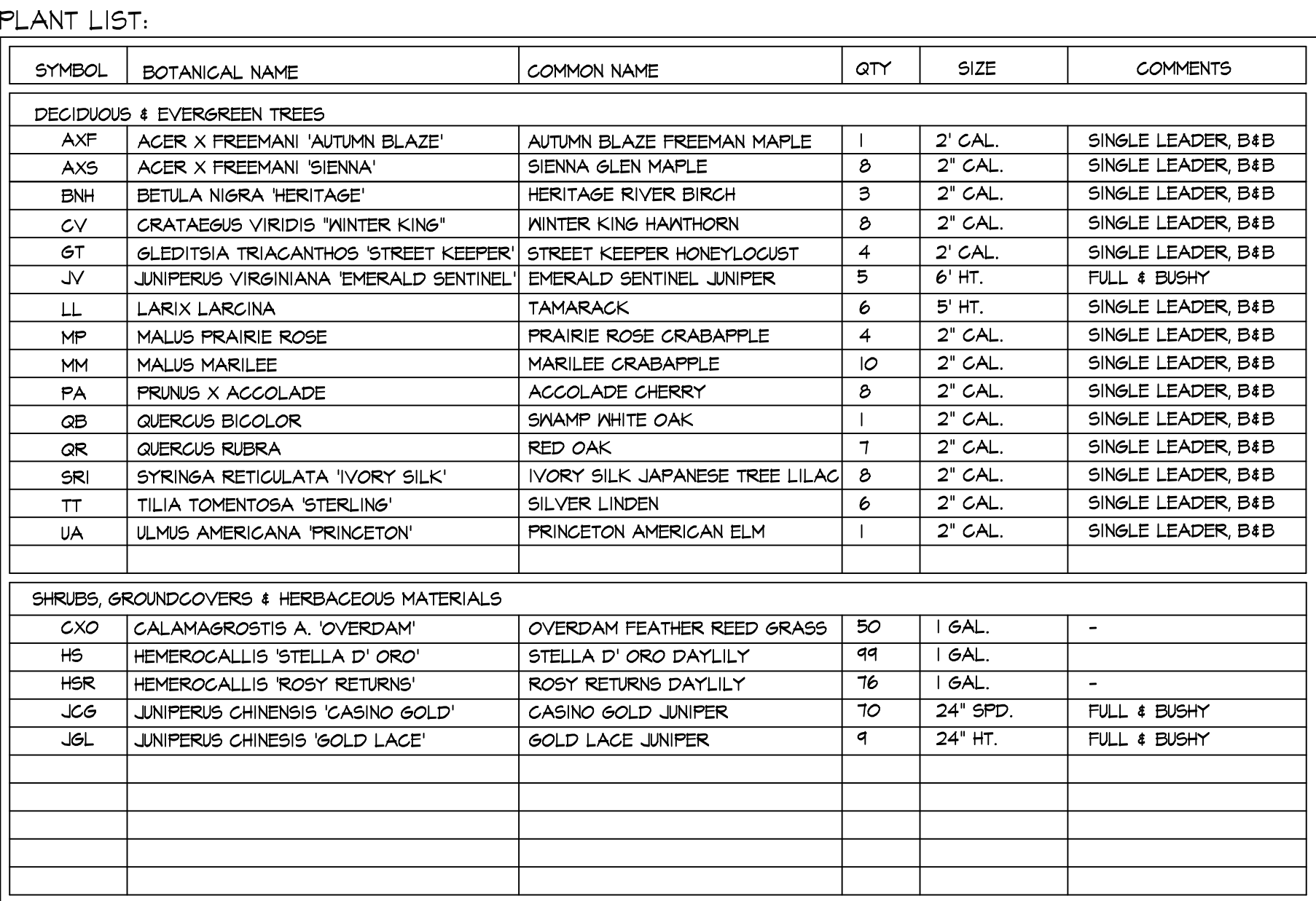


Site Design Associates
Consulting Engineering & Land Planning
23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275
CLIENT: **UNIVERSITY OF NEW ENGLAND**
11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005

DESIGN: DEPT.
DRAWN: DEPT.
CHKD: TWS
DATE: DEC. 2022
SCALE: AS NOTED

PROJECT: **RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING**
160-172 BISHOP STREET PORTLAND, MAINE
SITE DETAILS
PROJ. NO. **21-216-00**
DWG. NO. **C-504**

TAX MAP I.D.
291 A001
281 A003



GRAPHIC SCALE



1 inch = 30 ft.

[illegible]

Symbol	Code	Height	Quantity	Calculation	Notes	Quantity	Calculation	Notes	Quantity
□	A			1000' x 1000' x 1000'	1000' x 1000' x 1000'	1	1000'	1000'	1000'
□	B			1000' x 1000' x 1000'	1000' x 1000' x 1000'	1	1000'	1000'	1000'
□	C			1000' x 1000' x 1000'	1000' x 1000' x 1000'	1	1000'	1000'	1000'
□	D			1000' x 1000' x 1000'	1000' x 1000' x 1000'	1	1000'	1000'	1000'

MOUNTED 30'-0" 27'
POLE W/ A 3' BASE

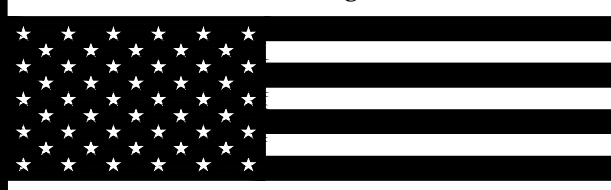
MOUNTED 20'-0" 17'
POLE W/ A 3' BASE

Statistics	Symbol	Avg	Min	Max/Min	Avg/Min
Calc Zone	+	0.8 ft	10.2 ft	N/A	N/A
Stat Zone	X	2.5 ft	10.2 ft	102.0 ft	25.0 ft

PHOTOMETRY PART "A"
SCALE: 1"=20'-0"



VINCENT A. DIORIO, INC.
CONSULTING ENGINEERS
89 Access Rd., Suite 18
Norwood, MA 02062
(781)255-9754 | vadjr@vadeng.com
www.vadeng.com



REVISIONS:

REV.: DATE: DESCRIPTION:

REV.	DATE	DESCRIPTION

Favreau
ELECTRIC
37 Jordan Avenue, Brunswick, ME 04011 • PH: 207-725-2005

CLIENT:

UNIVERSITY OF
NEW ENGLAND

PROJECT:

Intermodal Transportation,
Facility, Parking Lot
Improvements

DRAWING TITLE

PHOTOMETRY PART "A"

DRAWN:

CWQ

CHECKED:

VAD Jr

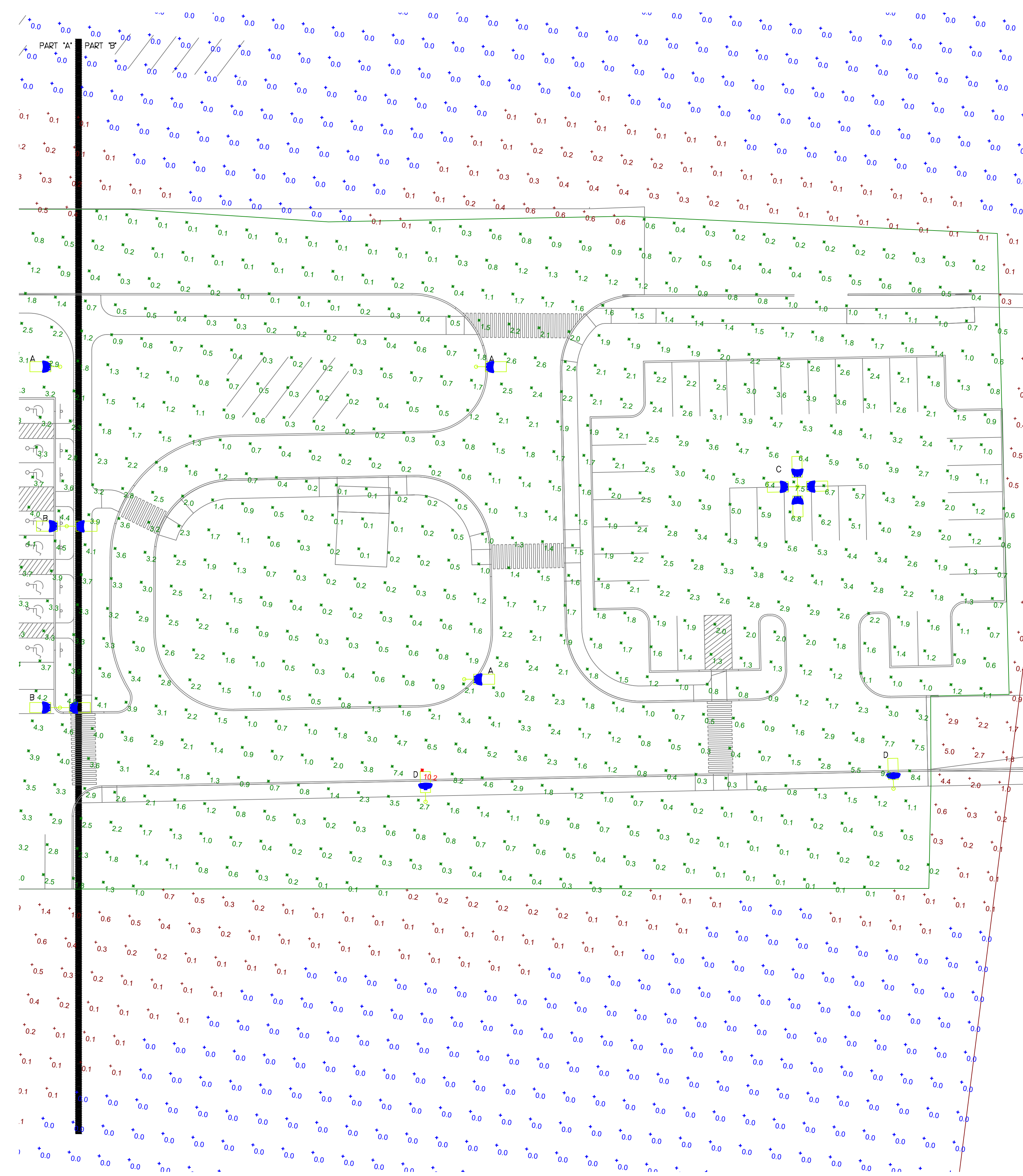
SCALE:

1"=20'-0"

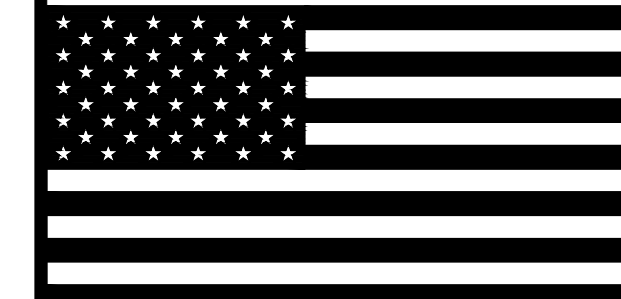
DATE:

JANUARY 11, 2022

PH1.1A



PHOTOMETRY PART "B"
SCALE: 1"=20'-0"



REVISIONS:		
REV.:	DATE:	DESCRIPTION:



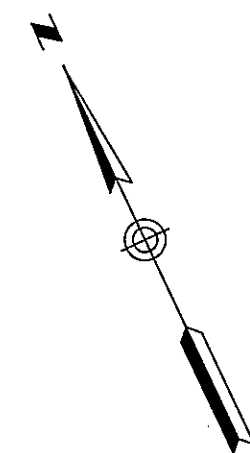
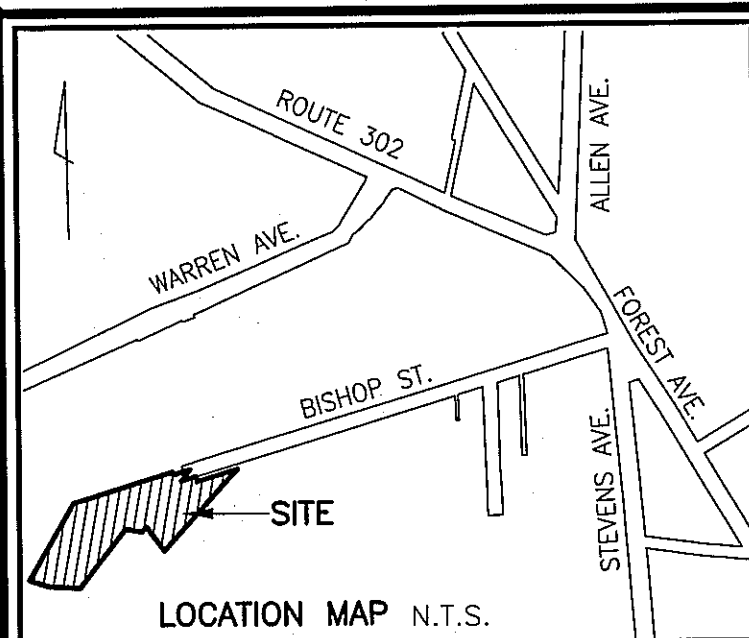
CLIENT:
**UNIVERSITY OF
NEW ENGLAND**

PROJECT:
*Intermodal Transportation,
Facility, Parking Lot
Improvements*

DRAWING TITLE
PHOTOMETRY PART "B"

DRAWN: CWQ
CHECKED: VAD Jr.
SCALE: 1"=20'-0"
DATE: JANUARY 11, 2022

PH1.1B



- LEGEND:**
- IRON PIPE OR ROD FOUND
 - GAS VALVE
 - WATER VALVE
 - HYDRANT
 - UTILITY POLE
 - LIGHT POLE
 - MANHOLE
 - CATCH BASIN
 - SIGN
 - FENCE
 - CURB
 - OVERHEAD UTILITIES
 - W WATER MAIN
 - G GAS MAIN
 - SS SANITARY SEWER
 - SD STORM DRAIN
 - 70 EXISTING 1' CONTOUR
 - WETLANDS

TM 291-A-2
N/F
PORTLAND TERMINAL CO.

N/F
PORTLAND TERMINAL CO.
RAILROAD LOCATION

TOTAL AREA
836,442 S.F.
19.2202 AC.

N/F
CENTRAL MAINE POWER CO.

N/F
WESTBROOK COLLEGE
TM 291-A-5

RIM=90.48 (CITY DATUM)
BENCHMARK MANHOLE
RIM AS SHOWN ON
PLAN REFERENCE 7

CENTERLINE CITY OF PORTLAND
30' DRAINAGE EASEMENT
BOOK 12886 PAGE 214

- NOTES:**
- OWNER OF RECORD: UNIVERSITY OF NEW ENGLAND, 11 HILLS BEACH ROAD, BIDDEFORD, MAINE C.C.R.D. BOOK 29387 PAGE 289.
 - THE SURVEYED PREMISES IS SHOWN AS LOT 1 ON THE CITY OF PORTLAND'S ASSESSORS MAP 291 BLOCK A AND LOT 3 ON THE CITY OF PORTLAND ASSESSORS MAP 281 BLOCK A.
 - LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND SHOULD BE CONFIRMED PRIOR TO EXCAVATION OR CRITICAL DESIGN.
 - WETLANDS DELINEATED BY MARK HAMPTON AND SURVEY LOCATED BY OWEN HASKELL, INC.
 - BEARINGS SHOWN ARE PER PLAN REFERENCE 1, COORDINATES LISTED ARE MAINE STATE PLANE NAD 83 OBTAINED WITH STATIC GPS.

- PLAN REFERENCES:**
- TOPOGRAPHIC SURVEY ON BISHOP STREET, PORTLAND, MAINE MADE FOR PIKE INDUSTRIES, INC. DATED JUNE 17, 1999 BY OWEN HASKELL, INC.
 - STANDARD BOUNDARY SURVEY OF BISHOP STREET EXTENSION DATED NOV. 1995 BY CITY OF PORTLAND PUBLIC WORKS DEPARTMENT.
 - RIGHT OF WAY AND TRACK MAP PORTLAND TERMINAL COMPANY STATION 135+04.0 TO STATION 187+84.0 DATED JUNE 30, 1916 VALUATION SHEET NUMBER V1-B/1.
 - PLAN OF LAND AND FARM CROSSING DATED FEBRUARY 1904 RECORDED IN REGISTRY OF DEEDS IN DEED BOOK 747 PAGE 58.
 - PLAN OF PROPERTY LOCATED IN PORTLAND, MAINE MADE FOR WARREN BROS. ROADS CO. DATED JUNE 22 1962.
 - PLANS ON FILE AT CENTRAL MAINE POWER COMPANY & SEWER PLANS AT CITY OF PORTLAND PUBLIC WORKS ENGINEERING DEPARTMENT.
 - CITY OF PORTLAND BISHOP STREET CONNECTOR STA. 0+100 TO STA. 3+50 AS-BUILT PLAN CITY TITLE 944/B.
 - PLAN OF LAND ON BISHOP STREET, PORTLAND, MAINE MADE FOR SITE DESIGN ASSOCIATES JUNE 15, 2012 BY OWEN HASKELL, INC.

CERTIFICATION:
OWEN HASKELL, INC. HEREBY CERTIFIES THAT THIS PLAN IS BASED ON, AND THE RESULT OF, AN ON THE GROUND FIELD SURVEY AND THAT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT STANDARDS OF PRACTICE.

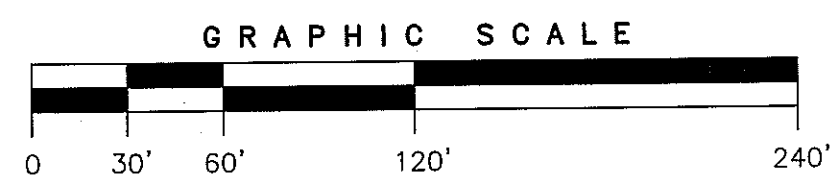
7/24/12
DATE
JOHN W. SWAN, PLS NO. 1038



BOUNDARY SURVEY
ON
BISHOP STREET, PORTLAND, MAINE
MADE FOR RECORD OWNER
UNIVERSITY OF NEW ENGLAND
11 HILLS BEACH ROAD, BIDDEFORD, MAINE 04005

OWEN HASKELL, INC.
390 U.S. ROUTE ONE, FAIRMOUTH, ME 04105 (207) 774-0424
PROFESSIONAL LAND SURVEYORS

Drawn By	RS	Date	Job No.
Trace By	JLW/SG	JULY 24, 2012	2012-059P
Check By	JWS	Scale	Drwg. No.
Book No.	1107	1" = 60'	19ND



Review Criteria:

- Portland's Site Plan Ordinance

GENERAL

- The maximum foot candle allowable for surface parking lot is 4, per Tech Manual standards. The value shown is 10.2. The average foot candle shall not be above .5 FC. Please adjust the photometric plan per Tech Manual Standards.
- Please confirm the lighting is full cut-off.
- Please confirm that the lighting is conforming to the lighting curfew standard, "For surface and structured parking, lighting in vehicle parking areas containing twenty or more spaces shall be reduced to 50% of permitted levels from one hour after the business (school) closing to one hour before business (school) opening."

TRANSPORTATION

- In the 35-space parking lot the aisle width exceeds the 24-foot dimensional city standard. A waiver request is required. I would note that one additional parking space could be added to the middle row (from 5 to 6 spaces), and a waiver could be requested for a reduced aisle width (22.75-foot aisle width). Given low parking space turnover, I would support a reduced aisle width in this area. Wide aisle widths also exist where Access Drive 2 intersects with the main parking lot., where 30 feet and 40 feet of pavement is provided. A waiver from the city's technical standards shall be provided.
- Additional information should be provided on the sidewalk connection between the new and existing sidewalk on the main access road near Station O+50.
- Regulatory signage should be provided for the Shuttle Loop given that it is restricted to one-way flow.
- Access Drive 2 dead ends near the entrance to the 35-space parking lot. The design appears to consider extension of the roadway and sidewalk. The applicant should provide information that document future conditions.
- Access Drive 1 has a typical section with 28-feet of travel width and a 11-foot paved shoulder. The applicant should note the functional purpose of the paved 11-foot shoulder.
- The applicant shall provide internal pedestrian circulation (walkways for the users) throughout the entire parking lot.
- Provide a raised pedestrian walkway for each parking aisle. The overall width shall account for vehicle overhang resulting in a 5 ft min clearance at all times.

WATER QUALITY, STORMWATER, & INFRASTRUCTURE

- There are several sanitary sewer manholes that are currently inaccessible. These manholes need to be raised to grade prior to paving.
- The areas to be revegetated need to be tilled 9" before loam and seed; prefer a mix of woody vegetation and conservation seed mix.
- Design information for the level spreaders should be provided to ensure they are designed per DEP manual

LANDSCAPING & ENVIRONMENTAL QUALITY

- **Trail Connectivity:**
 - This project is located along the proposed Riverton Neighborhood Byway and is well positioned to promote multi-modal connectivity to neighboring trail systems at Evergreen Cemetery.
 - A meeting between Portland Trails, Bruce Hyman and a representative of Parks, Recreation and Facilities would be very helpful for exploring opportunities to promote pedestrian connectivity between the proposed facility and the UNE campus as well as surrounding trails (both existing and proposed).
- **Planting Design/Selection:**
 - On sheet C-200 a long stretch of parking-lot adjacent land is designated “Snow Storage Area”. On Sheet L-100, this area is also identified to host dozens of new trees. There is a conflict of use with this zone- trees will not survive if the area is being used for snow storage. In order to maintain some shading of the parking lot and the desired amount of tree canopy, the City’s recommendation is to cluster the trees in focused areas along the southern edge of the parking lot, leaving some continuous gaps between plantings to serve as snow-storage areas. Some proposed trees may be shifted downslope of the parking lot. Larches and Black Gum may thrive in the wetter conditions in these lower-lying areas. See notes on L-100.
 - Maples make up a disproportionately large proportion of the City’s tree canopy currently, so alternative species would be preferred where they are appropriate. Greater species diversity allows Portland’s urban canopy to be more resilient to new pests and diseases.
 - City arborists advise against clumping form birches because of its proclivity for splitting after several years of growth. This tendency makes these trees short-lived, irregular in appearance (due to cut/broken limbs) and costly to maintain as they mature. Single leader form of this tree is recommended.
 - Suggest replacing *Tilia tomentosa* with *Tilia americana*. See notes on L-100
 - ‘Princeton’ and ‘Liberty’ cultivars of American Elm have proven more resilient to disease and are better cultivar alternatives to ‘Valley Forge’ which has poor structure.
 - Hostas will not survive in the parking lot, especially the large-leafed variety specified. The variety specified requires sheltered, part sun conditions. Suggest replacing this plant selection with a more tolerant native shrub or perennial.
 - *Thuja occidentalis* ‘Mr. Bowling Ball’ does not tolerate road salt and will exhibit significant foliage die-back in the proposed location.
- **General Planting Selection Notes:**
 - Native species are preferred.
 - Several native plants that have proven themselves resilient in parking lot islands include *Prunus pumila* var. *Depressa*, *Diervilla lonicera*, *Comptonia peregrina*, *Myrica gale*, *Eubotrys racemosa*.
 - Others that could be good candidates for plantbeds not surrounded by parking: *Ilex verticillata*, *Viburnum dentatum*, *Juniperus horizontalis* cultivars, *Arctostaphylos uva-ursi* (straight species).
 - Low-lying areas such as the stormwater filtration facilities could benefit from groundcover/shrub planting: *Aronia melanocarpa*, *Azalea viscosum*, *Cephalanthus occidentalis*, *Cornus sericea*, *Clethra alnifolia*, *Ilex verticillata*, *Viburnum cassinoides*, *Panicum virgatum*, *Deschampsia cespitosa*, *Monarda fistulosa*.

- Please add detail to landscaping plan to show plant selection, planting placement, grade changes, etc for further review.

Site Design Associates

Consulting Engineering and Land Planning

April 27, 2023

Maya Balassa, Planner
City of Portland
Via email

**RE: University of New England - Portland Campus
Major Site Plan Application for:
Intermodal Transportation Facility Reconstruction
Parcel ID 291 A001, 281 A003
160-172 Bishop Street
Responses to Staff Comments**

Dear Maya;

On behalf of University of New England (UNE), Site Design Associates (SDA) is pleased to provide this response to review comments provided by the city in your April 4, 2023 review memorandum. We have listed each of your comments in the order they were presented in your memorandum followed by our responses.

1. General comments:

Comment *The maximum foot candle allowable for surface parking lot is 4, per Tech Manual standards. The value shown is 10.2. The average foot candle shall not be above .5 FC. Please adjust the photometric plan per Tech Manual Standards.*

Response: Please see the attached memorandum from our lighting engineer. They have expressed concern that the city is requiring what is generally considered an outdated standard, that would actually result in a less safe environment and significantly reduces the quality of CCTV monitoring. The city standard does not provide the safety and security UNE requires. This is a remote facility, with known transient/homeless persons residing in the abutting woods. There will be no off-site light trespass. The nature of the abutting properties is industrial, commercial, and university uses, with no residential uses. We prefer to keep the lighting as designed in the interest of the user safety and facility security, particularly given the somewhat remote location of this facility. Therefore, we request a waiver of these technical manual standards.

Comment: *Please confirm the lighting is full cut-off.*

Response: The fixtures are full cut-off luminaires that are Dark Skies compliant, DLC Premium listed and night-time friendly.

23 Whitney Way Topsham, Maine 04086
Phone: (207) 449-4275 email: info@sitedesignassociates.biz

Comment: *Please confirm that the lighting is conforming to the lighting curfew standard, “For surface and structured parking, lighting in vehicle parking areas containing twenty or more spaces shall be reduced to 50% of permitted levels from one hour after the business (school) closing to one hour before business (school) opening.*

Response: Given the graduate student population of the campus, the intermodal facility will be open and active 24 hours a day, seven days per week. Therefore, it appears this standard is not applicable.

2. Transportation:

Comment: *In the 35-space parking lot the aisle width exceeds the 24-foot dimensional city standard. A waiver request is required. I would note that one additional parking space could be added to the middle row (from 5 to 6 spaces), and a waiver could be requested for a reduced aisle width (22.75-foot aisle width). Given low parking space turnover, I would support a reduced aisle width in this area. Wide aisle widths also exist where Access Drive 2 intersects with the main parking lot., where 30 feet and 40 feet of pavement is provided. A waiver from the city’s technical standards shall be provided.*

Response: If a waiver is required for aisle widths that are wider than the city minimum, please consider this a request for the waiver.

Comment: *Additional information should be provided on the sidewalk connection between the new and existing sidewalk on the main access road near Station 0+50.*

Response: The new sidewalk will tie into the existing sidewalk on the Bishop Street side of the existing pedestrian gate. Additional notes and spot grades have been provided on drawing C-300. We have also attached a photo sketch of the area.

Comment: *Regulatory signage should be provided for the Shuttle Loop given that it is restricted to one-way flow.*

Response: “Bus only” and “Do not enter” signage has been added to drawing C-201.

Comment: *Access Drive 2 dead ends near the entrance to the 35-space parking lot. The design appears to consider extension of the roadway and sidewalk. The applicant should provide information that document future conditions.*

Response: The design provides for a future internal connection to the campus. This would eliminate the need for the shuttle, Campus Service vehicles, and graduate students to travel on Bishop Street. This will also provide for travel from the campus and the new College of Osteopathic Medicine parking to the intermodal facility and the Campus Services structures on the site, without travel through Morrill's Corner. The access would be controlled through the use of gates at each end to prevent unauthorized users from utilizing the access to avoid Morrill's Corner. General public bicycle and pedestrian traffic would be permitted.

Comment: *Access Drive 1 has a typical section with 28-feet of travel width and a 11-foot paved shoulder. The applicant should note the functional purpose of the paved 11-foot shoulder.*

Response: There is a grade transition between the proposed edge of road and the existing grade. This entire area is currently paved. The paved swale is an integral part of the stormwater management plan, collecting and diverting upgradient runoff. The paved area also provides vehicular access to the existing adjacent paved area and Campus Services structures.

Comment: *The applicant shall provide internal pedestrian circulation (walkways for the users) throughout the entire parking lot.*

Comment: *Provide a raised pedestrian walkway for each parking aisle. The overall width shall account for vehicle overhang resulting in a 5 ft min clearance at all times.*

Response: UNE respectfully declines to implement these suggestions. We are unaware of any requirement in the code or technical manual which would be the basis for these requests. The technical manual transportation standard section 1.10.2. is "all spaces provided shall be safely accessible". We do not interpret this to mean all users need a sidewalk. All spaces are safely accessible and the layout of the spaces are typical for any parking lot of this nature throughout the city. The users of this lot will be graduate students and faculty, who generally will be in attendance for a much longer period of time during the day than the typical college student would be. The turnover on the spaces will be low. There is no history of vehicle/pedestrian conflicts in any UNE campus parking lot in Portland or Biddeford. Adding the walkways as suggested would result in a significant increase in impervious area in the Capisic Brook watershed, which directly contradicts the city goals for this area. Additionally, the walkways would be a hindrance to snow removal. Lastly, the additional cost of \$200-250,000 associated with these requests will jeopardize some of the associated benefits that come with the improvements, including:

- 1) Safety enhancements including emergency call boxes and camera upgrades;
- 2) New lighting;

- 3) Removal of 96,940 sf of impervious surface;
- 4) Enhanced vehicular circulation, including for the UNE shuttle between the facility and the main campus;
- 5) Elimination of trip hazards;
- 6) The addition of significant landscaping and trees;
- 7) Construction of stormwater quality enhancement facilities, and;
- 8) The installation of new EV charging stations;

It is our opinion that the sidewalk along Access Drive 1 and along the easterly edge of the parking lot (adjacent to the ADA spaces) provide adequate internal pedestrian circulation within the site from the parking lot to the bus stop.

Further, recall we had a very productive meeting with city staff and Portland Trails on April 26 to discuss the vision for a 30-mile bike path system and walking path connectivity in the city. It was apparent to all that a component crucial to both will require access through and improvements on UNE's property. In the spirit of cooperation UNE committed to working with all parties to facilitate this vision. We are in hopes that this spirit of cooperation and need for compromise will extend to this project.

3. Water Quality, Stormwater, & Infrastructure

Comment: *There are several sanitary sewer manholes that are currently inaccessible. These manholes need to be raised to grade prior to paving.*

Response: This was previously addressed on drawing C-401.

Comment: *The areas to be revegetated need to be tilled 9" before loam and seed; prefer a mix of woody vegetation and conservation seed mix.*

Response: A note has been added to sheet C-201 indicating the tilling requirement. See the landscape plan for revegetation information.

Comment: *Design information for the level spreaders should be provided to ensure they are designed per DEP manual*

Response: There is only one level spreader proposed for this project. A detail for the level spreader was provided on sheet C-503. The 10-year flow to level spreader is 21.6 CFS. DEP requires a length of 1 foot per 0.25 CFS, which would require a length of 87' feet for this level spreader. The proposed level spreader is 96 feet long.

4. Landscaping and Environmental Quality

Comment: This project is located along the proposed Riverton Neighborhood Byway and is well positioned to promote multi-modal connectivity to neighboring trail systems at Evergreen Cemetery. A meeting between Portland Trails, Bruce Hyman and a representative of Parks, Recreation and Facilities would be very helpful for exploring opportunities to promote pedestrian connectivity between the proposed facility and the UNE campus as well as surrounding trails (both existing and proposed).

Response: A meeting has been scheduled for April 25.

Comment: *On sheet C-200 a long stretch of parking-lot adjacent land is designated "Snow Storage Area". On Sheet L-100, this area is also identified to host dozens of new trees. There is a conflict of use with this zone- trees will not survive if the area is being used for snow storage. In order to maintain some shading of the parking lot and the desired amount of tree canopy, the City's recommendation is to cluster the trees in focused areas along the southern edge of the parking lot, leaving some continuous gaps between plantings to serve as snow-storage areas. Some proposed trees may be shifted downslope of the parking lot. Larches and Black Gum may thrive in the wetter conditions in these lower-lying areas. See notes on L-100.*

Response: The landscape plan has been revised to show the trees along the south side of the parking area clustered and pulled back off the edge of pavement to allow for snow storage with minimal conflict with trees. American Larch trees have been used in the area just below the level spreader.

Comment: *Maples make up a disproportionately large proportion of the City's tree canopy currently, so alternative species would be preferred where they are appropriate. Greater species diversity allows Portland's urban canopy to be more resilient to new pests and diseases.*

Response: We have revised the plant list to reduce the percentage of proposed Maple trees.

Comment: *City arborists advise against clumping form birches because of its proclivity for splitting after several years of growth. This tendency makes these trees short-lived, irregular in appearance (due to cut/broken limbs) and costly to maintain as they mature. Single leader form of this tree is recommended.*

Response: The clump birch trees have been changed to single leader trees.

Comment: *Suggest replacing Tilia tomentosa with Tilia americana. See notes on L-100.*

Response: We have not changed the Sterling Linden to the American Linden due to what we believe is the American Linden's greater susceptibility to the Japanese Beetle.

Comment: *'Princeton' and 'Liberty' cultivars of American Elm have proven more resilient to disease and are better cultivar alternatives to 'Valley Forge' which has poor structure.*

Response: We were unaware of the issues with the structure of the 'Valley Forge' Elm. We have changed the Valley Forge Elm to the 'Princeton' American Elm.

Comment: *Hostas will not survive in the parking lot, especially the large-leaved variety specified. The variety specified requires sheltered, part sun conditions. Suggest replacing this plant selection with a more tolerant native shrub or perennial.*

Response: We have changed the 18 Hosta plants to daylilies to match the other islands.

Comment: *Thuja occidentalis 'Mr. Bowling Ball' does not tolerate road salt and will exhibit significant foliage die-back in the proposed location.*

Response: We have replaced the 9 'Mr. Bowling Ball' shrubs with the 'Gold Lace' Juniper.

Comment: *Native species are preferred.*

Response: We try to use native species where possible, but sometimes the site challenges, design and maintenance considerations require the use of non-natives to give us the best overall outcome.

Comment: *Several native plants that have proven themselves resilient in parking lot islands include Prunus pumila var. Depressa, Diervilla lonicera, Comptonia peregrina, Myrica gale, Eubotrys racemosa.*

Response: We will investigate these plants for possible use in the future.

Comment: *Others that could be good candidates for plantbeds not surrounded by parking: Ilex verticillata, Viburnum dentatum, Juniperus horizontalis cultivars, Arctostaphylos uva-ursi (straight species).*

Response: We will investigate these plants for possible use in the future.

Comment: *Low-lying areas such as the stormwater filtration facilities could benefit from groundcover/shrub planting: Aronia melanocrpa, Azalea viscosum, Cephalanthus occidentalis, Cornus sericea, Clethra alnifolia, Ilex verticillata, Viburnum cassinoides, Panicum virgatum, Deschampsia cespitosa, Monarda fistulosa.*

Response: We agree the addition of the above groundcover and shrubs may be of benefit. However, we have had success with the meadow mix we have specified and it allows the stormwater areas to be mowed once a year which helps keep the invasives out.

Comment: *Please add detail to landscaping plan to show plant selection, planting placement, grade changes, etc for further review.*

Response: The layers showing the proposed and existing contours have been turned on.

A revised landscape plan is attached.

If you have any questions, or require additional information, please do not hesitate to contact me.

Sincerely,
Site Design Associates



Tom Saucier, P.E.
President

c: Alan Thibeault, Vice President for Campus Operations



VINCENT A. DIORIO, INC.

CONSULTING ENGINEERS

89 Access Road, Suite 18
Norwood, Massachusetts, 02062

April 21, 2023

Saucier Design Associates
23 Whitney Way
Topsham, Maine 04086
Attention: Tom Saucier
tsaucier@sitedesignassociates.biz

RE: University of New England
Intermodal Parking Lot
Bishop Street
Portland, ME

SUBJECT: Site Lighting

Dear Tom,

The proposed parking lot area is approximately 95,500 square feet and our current design consists of 30'-0" poles with single lighting fixtures around the perimeter of the parking lot and dual lighting fixtures located on the inboard islands within the lot.

The University standard lighting fixture is the Lithonia Lighting RSX2 LED family of site lighting fixtures. The fixtures that are being used are a full cut-off luminaire that is Dark Skies compliant, DLC Premium listed and night-time friendly.

Each lighting fixture delivers 11,285 lumens and consumes 71 watts of power, uses a Type 3 lighting distribution and the Correlated Color Temperature (CCT) is 4000 Kelvin.

This system delivers an average footcandle value of 2.5 with a maximum of 10.2 and a minimum of 0.1 foot-candles with minimal light trespass. The maximum value is directly under the light fixture.

In accordance with the recommendations from the Illuminating Engineering Society of North America (IES-NA) publication RP-20, outdoor lighting, parking garages and security lighting levels are between 2-5 footcandles and is generally designed with 4000 – 5000 CCT. This CCT combined with the illumination levels, provides a safer environment for both pedestrian and vehicle traffic and allows viewing of the full color spectrum whenever the lighting is activated.

This lighting design is also consistent with the previous design that was approved by the City of Portland for the Harold and Bibby Alford Center for Health and Sciences on Stevens Avenue.

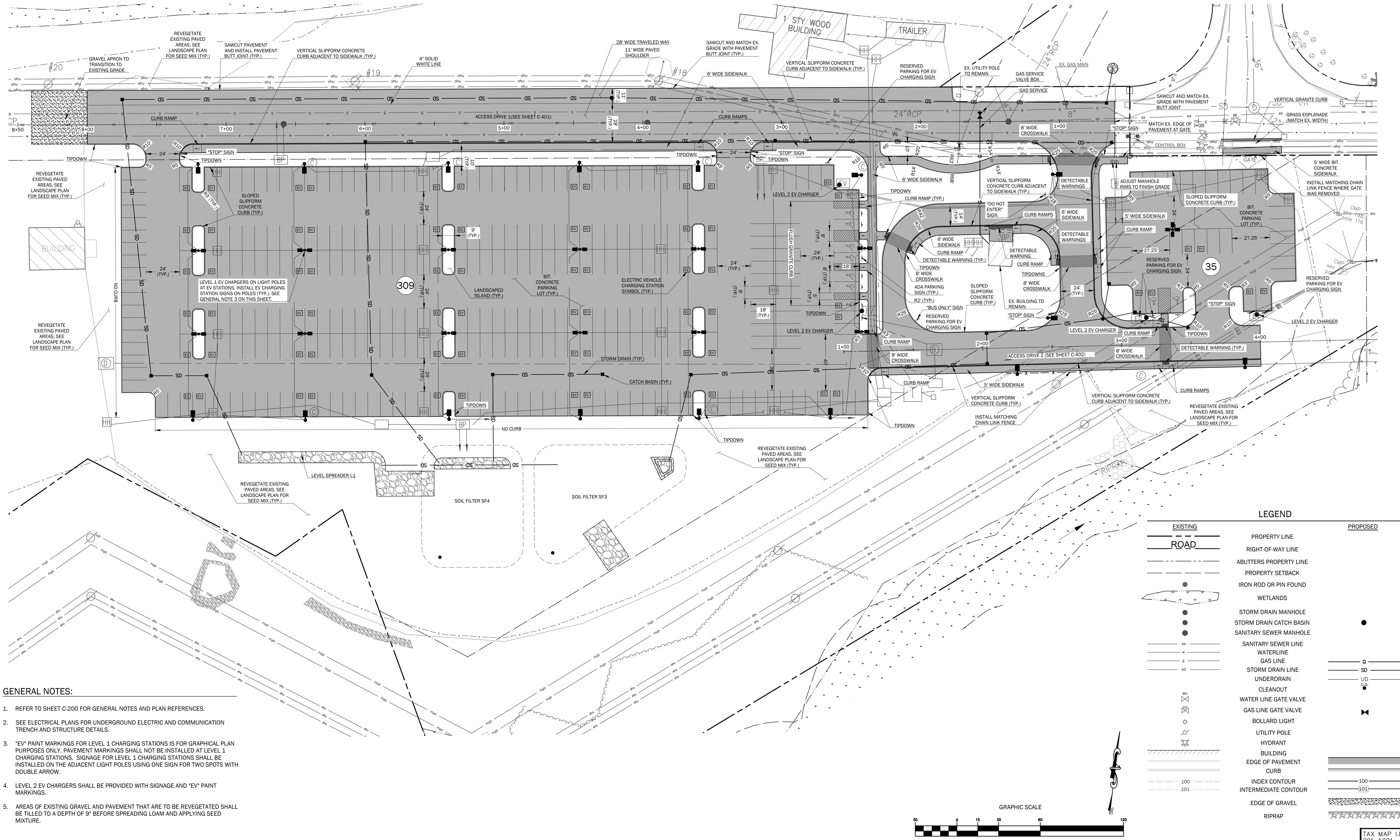
Based on the above-mentioned information, this office would request that the design be accepted as designed.

If you any questions regarding the topic above, please do not hesitate to contact this office.

Very Truly Yours,
VINCENT A. DIORIO INC.

Vincent A. Dilorio Jr.
President

Drawing Name: C:\Users\Site\Documents\Drawings\21-216-00_01_Road Layout.dwg Plot Date: / Time: 4:25:23 / 1:59 PM
Drawing Name: C:\Users\Site\Documents\Drawings\21-216-00_01_Road Layout.dwg Plot Date: / Time: 4:25:23 / 1:59 PM

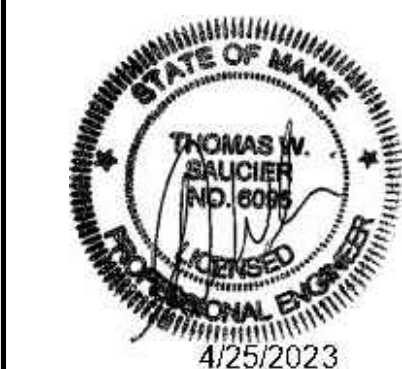


GENERAL NOTES:

- REFER TO SHEET C-200 FOR GENERAL NOTES AND PLAN REFERENCES.
- SEE ELECTRICAL PLANS FOR UNDERGROUND ELECTRIC AND COMMUNICATION TRENCH AND STRUCTURE DETAILS.
- "EV" PAINT MARKINGS FOR LEVEL 1 CHARGING STATIONS IS FOR GRAPHICAL PLAN PURPOSES ONLY. PAVEMENT MARKINGS SHALL NOT BE INSTALLED AT LEVEL 1 CHARGING STATIONS. SIGNAGE FOR LEVEL 1 CHARGING STATIONS SHALL BE INSTALLED ON THE ADJACENT LIGHT POLES USING ONE SIGN FOR TWO SPOTS WITH DOUBLE ARROW.
- LEVEL 2 EV CHARGERS SHALL BE PROVIDED WITH SIGNAGE AND "EV" PAINT MARKINGS.
- AREAS OF EXISTING GRAVEL AND PAVEMENT THAT ARE TO BE REVEGETATED SHALL BE TILLED TO A DEPTH OF 9" BEFORE SPREADING LOAM AND APPLYING SEED MIXTURE.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
D	4/25/2023	REVISED PER CITY COMMENTS									
C	1/20/2023	FOR CITY REVIEW									
B	12/21/2022	FOR PRICING ADDENDUM 1 ONLY - NOT FOR CONSTRUCTION									
A	12/5/2022	FOR PRICING ONLY - NOT FOR CONSTRUCTION									

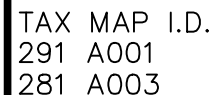


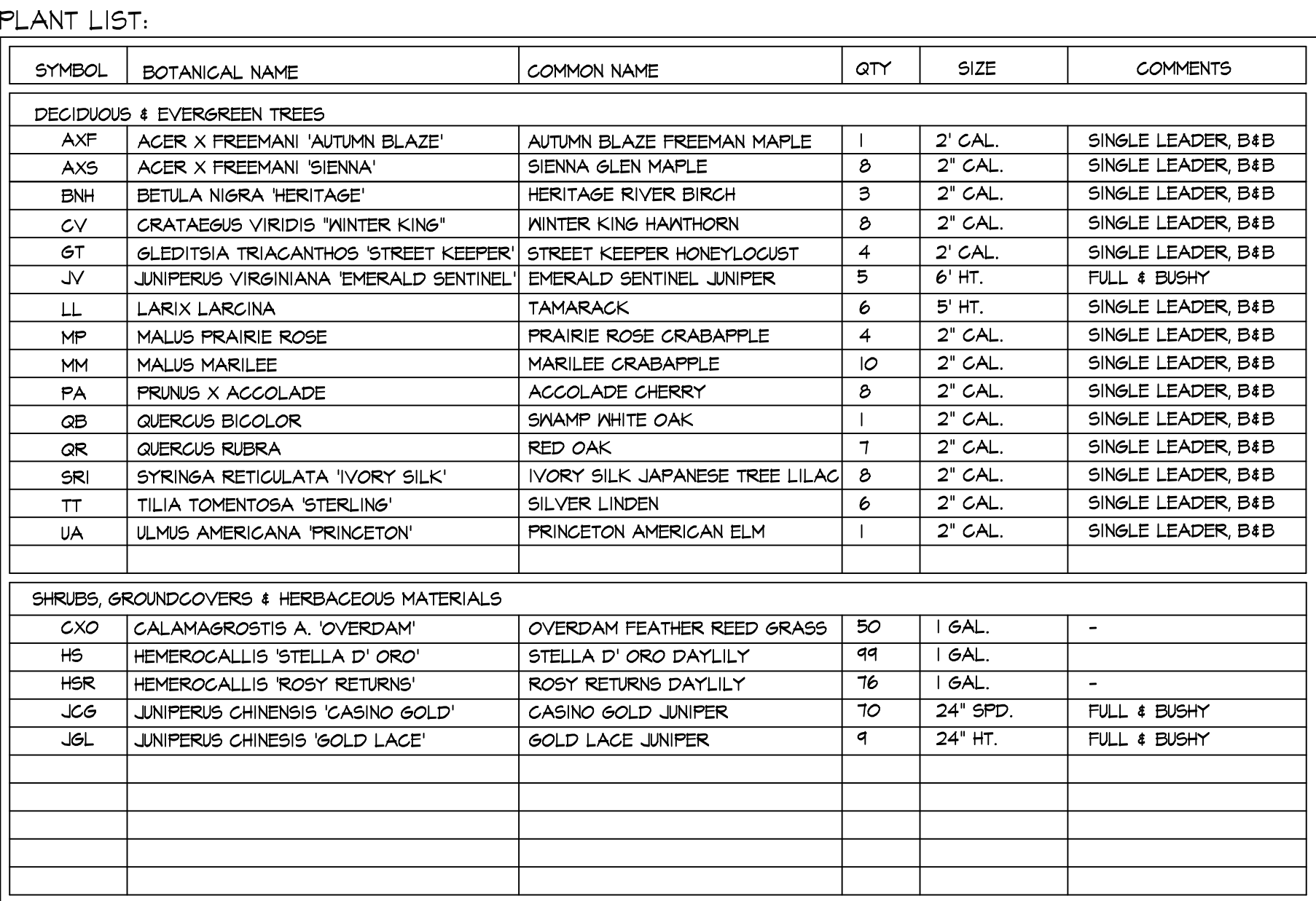
Site Design Associates
Consulting Engineering & Land Planning
23 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4275
CLIENT: **UNIVERSITY OF NEW ENGLAND**
11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005

DESIGN: DEPT.	PROJECT: RECONSTRUCTION OF INTERMODAL TRANSPORTATION FACILITY AND PARKING 160-172 BISHOP STREET PORTLAND, MAINE
DRAWN: DEPT.	SITE LAYOUT AND UTILITY PLAN
CHKD: TWS	
DATE: DEC. 2022	PROJ. NO. 21-216-00
SCALE: 1" = 30'	DWG. NO. C-201
	REV. D

1. REFER TO SHEET C-200 FOR GENERAL NOTES AND PLAN REFERENCES.
2. PRIOR TO ANY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL VERIFY ALL AFFECTED GRADES. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE OWNER OR OWNER'S REPRESENTATIVE.
3. ALL AREAS NOT REQUIRING GRADING SHALL BE LEFT UNDISTURBED. CONTRACTOR SHALL NOT DISTURB THESE AREAS AND PRESERVE EXISTING VEGETATION.
4. GRADE ALL NEW WORK FOR POSITIVE DRAINAGE AND NO PUDDLING. MATCH EXISTING GRADES SMOOTHLY AND CONTINUOUSLY.

The diagram illustrates a cross-section of a stabilized construction entrance. At the top, a horizontal line is labeled "SILT FENCE". Below this, a large rectangular area is filled with a pattern of irregular polygons representing stones or aggregate, labeled "STABILIZED CONSTRUCTION ENTRANCE". At the bottom of this structure, there is a circular feature labeled "CATCH BASIN INLET PROTECTION".

Page 273



GRAPHIC SCALE

1 inch = 30 ft.



1. PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIGSAFE AND BE PROVIDED WITH A DIGSAFE NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
2. LANDSCAPE CONTRACTOR IS ENCOURAGED TO PROVIDE THE LANDSCAPE ARCHITECT WITH CONCERNS AND/OR SUGGESTIONS WITH REGARDS TO PROPOSED PLANT MATERIAL SELECTION PRIOR TO PLACING A PURCHASE ORDER.
3. THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE ALL PLANTINGS SHOWN GRAPHICALLY ON THIS DRAWING. CLARIFY ANY DISCREPANCIES WITH THE LANDSCAPE ARCHITECT PRIOR TO PRICING ANY PLANT MATERIAL.
4. ALL PLANT MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S "AMERICAN STANDARD OF NURSERY STOCK".
5. ALL PLANT MATERIALS ARE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE AT THE SITE. PLANTS WHICH ARE REJECTED SHALL BE REMOVED FROM THE SITE IMMEDIATELY AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
6. MULCH FOR PLANTED AREAS TO BE AGED SPRUCE AND FIR BARK, PARTIALLY DECOMPOSED, DARK BROWN IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4 INCH.
7. NO PLANTS SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING AND BEFORE CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
8. ALL TREES ALONG WALK AND PARKING AREAS SHALL BEGIN BRANCHING AT 6' HT. MIN.
9. ALL PLANT MATERIAL OR REPRESENTATIVE SAMPLES SHALL BE LEGIBLY TAGGED WITH PROPER COMMON AND BOTANICAL NAMES. TAGS SHALL REMAIN ON THE PLANTS UNTIL FINAL ACCEPTANCE.
10. CONTRACTOR SHALL LOAM DISTURBED AREAS AS FOLLOWS:
 - LAWN AREAS 6" DEPTH OF TOPSOIL (LOAM)
 - SHRUB BEDS IN CURBED PARKING LOT ISLANDS AND FILL AREAS 18" DEPTH OF TOPSOIL (LOAM).
 - TREE AREAS (10'X10') AROUND EACH TREE INSTALL 24" DEPTH OF TOPSOIL (LOAM).
11. SEED MIXTURES FOR AREAS TO BE SEEDDED SHALL BE AS FOLLOWS.
 - LIMITED MAINTENANCE AREAS AND SOIL FILTERS ARE TO BE SEEDDED WITH NEW ENGLAND CONSERVATION/WILDLIFE MIX AS DISTRIBUTED BY NEW ENGLAND WETLAND PLANTS, INC. 800 MAIN STREET, AMHERST, MA 01002 (413) 256-1752. APPLY AT A RATE OF 1LB PER 1745 SF. OR APPROVED EQUAL.
 - LAWN AREAS SHALL BE SEEDDED WITH "PARK MIX" AS DISTRIBUTED BY ALLEN, STERLING AND LOTHROP OF FALMOUTH MAINE. SEEDING RATE TO BE 5 LBS PER 1,000 SF.
12. CONTRACTOR SHALL BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING AND WILL CONTINUE UNTIL FINAL ACCEPTANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS OF WATERING AND MAINTENANCE.
13. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF FINAL ACCEPTANCE.
14. SCREENED IMAGES SHOW EXISTING CONDITIONS, WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND OR CAPPED OR DEMOLISHED AS REQUIRED.
15. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
16. THE CONTRACTOR SHALL INSTALL WATERING BAGS SUCH AS THE TREEGATOR ON ALL TREES AT THE TIME OF INSTALLATION. THESE BAGS SHALL REMAIN ON THE TREES UNTIL FREEZING TEMPERATURES.

[illegible]



INNOVATION FOR A HEALTHIER PLANET

Transportation Demand Management Plan

Updated April 2022



Table of Contents

Introduction	4
Purpose of the TDM Plan	4
Mission, Vision and Core Values	4
MISSION	4
VISION	4
CORE VALUES	5
Portland Campus History and Programs	5
Facility Planning	7
Mobility Context.....	7
Neighborhood Context.....	7
Pedestrian Access.....	8
Bicycle Access.....	11
Transit Service	13
Vehicle Access	14
Parking.....	15
Existing Parking Analysis	17
Shuttle Service.....	17
Transportation Demand Management Plan	17
Overview	17
TDM Strategies.....	18
EDUCATION & PROMOTION.....	18
GOMAIN	18
WAY-2-GO COMPETITION	18
CARPOOLING	18
TRANSIT SERVICE.....	18
INCENTIVES	19
ON-GOING ASSESSMENTS OF EFFECTIVENESS.....	19
EV CHARGING INFRASTRUCTURE.....	19
BICYCLE INFRASTRUCTURE.....	19
CAMPUS PLANNING	19
Proposed Access and Circulation Modifications	20
VEHICLE ACCESS AND PARKING	20
PEDESTRIAN AND BICYCLE ACCESS	20

Future Parking Needs..... 21

Reduction Goals 22

Future Planning Efforts 22

Appendix A: TDM Roles & Responsibilities 23

 TDM COORDINATOR/ASSISTANT DIRECTOR OF SUSTAINABILITY..... 23

 VICE PRESIDENT OF CAMPUS OPERATIONS 23

 DIRECTOR OF SAFETY AND SECURITY..... 23

 DIRECTOR OF INSTITUTIONAL RESEARCH AND DATA ANALYTICS 24



INNOVATION FOR A HEALTHIER PLANET

Introduction

University of New England's Portland Campus has been a member of the Portland community and a provider of quality and inclusive education since its inception in 1831 as the Westbrook Seminary. The campus has been strategically transformed since its modest beginning, in both size and curriculum, to meet the secondary educational and work force needs of the Portland, Maine area and beyond.

Purpose of the TDM Plan

University of New England's, UNE's, Transportation Demand Management Plan, in effect since 2010, is intended to provide a comprehensive strategy towards reducing the amount of single-occupancy vehicles coming to campus and seeks to promote multimodal accessibility to and from the University's Portland campus. UNE is continually updating the plan and is always considering enhancements to encourage more walking, cycling and public transportation use by its students, faculty and staff.

UNE believes that its promotion of alternative modes of transportation and success in transportation demand management has and will continue to positively impact the City's issues with traffic in and around the Morrill's Corner node and routes feeding to it.

UNE offers transportation alternatives designed to preserve the green spaces on campus and to reduce our carbon footprint, in concert with one of the University's Core Values; Stewardship of Our Planet.

Mission, Vision and Core Values

The University of New England is directed by its Mission, Vision Statement and Core Values. These were utilized to create the Strategic Plan 2018-2023, *Our World, Our Future*.

MISSION

The University of New England prepares students to thrive in a rapidly changing world and, in so doing, to improve the health of people, communities, and our planet.

VISION

We will realize this mission by committing to a distinctive approach to education that will make UNE among the most experientially driven institutions of higher education in the nation. We will provide teaching and learning that conjoins problem-based and hands-on learning, liberal education, and professional training to immerse students in an educational experience that prepares them with:

- Habits of mind, such as cultural, quantitative, and information literacy, critical thinking, tolerance for ambiguity, and problem solving;
- Discipline-based knowledge in their chosen programs of study; and
- Professional competencies, including emotional intelligence, the ability to collaborate in diverse teams, communicate persuasively, and be a thoughtful leader.

We are an institution that challenges students to learn broadly, master their professional skills, and ask probing questions. In this way, they will prepare themselves for further study and successful careers, deeply rewarding lives, and meaningful contributions to their communities and the world.

CORE VALUES

We are guided by the following values, essential to the culture of the UNE community.

Student Centeredness - We put the aspirations, needs, and success of our students at the center of all we do.

Diversity, Inclusion, Connection - We believe the benefits of a richly varied campus community arise not only from the diversity of its people but also from a sense of belonging and the context this creates to explore and celebrate differences in backgrounds, experiences, and perspectives, underpinned by a sense of cultural humility and a commitment to ethical ideals.

Relentless Inquiry - We take nothing for granted and view thoughtful—even uncomfortable—questioning as essential to the pursuit of knowledge, contribution to society, and a life worth living. Our commitment to University-wide academic freedom is fundamental to this value.

Boundary Crossing - Solutions to the complex and varied challenges we face in our personal and professional lives, our communities, and society will not be found in any single discipline, college, physical location, or individual. Thus, our ability to move easily across such boundaries in order to collaborate with colleagues makes us better problem solvers and more likely of success in whatever ventures we undertake.

Learning Everywhere - We believe that teaching and learning should occur beyond traditional classrooms and laboratories—in any place ripe for inquiry and experimentation, including clinics, environmental and field-study sites, online forums, libraries, museums, theaters, and places of civic engagement, among many others.

Progressive Change - We are not afraid to take thoughtful risks in the pursuit of our shared goals.

Stewardship of Our Planet - We recognize that the health of individuals, communities, and the natural environment is essential to the survival of the planet and its inhabitants and to a well-functioning society.

Portland Campus History and Programs

Although UNE's 70 acre campus has always been located in the same geographic place, the neighborhood where it is located has been part of three different municipalities over the years: Westbrook (1831-1870), Deering (1871-1898), and Portland (1899-present). UNE itself has had five name changes – Westbrook Seminary, Westbrook Junior College, Westbrook College, the Westbrook College Campus of the University of New England, and its current name the Portland Campus of the University of New England.

In July 1996, Westbrook College and the University of New England in Biddeford merged, creating a larger, more diverse institution of higher learning. The merger took place under the original 1831 Westbrook College charter. When the documents were signed, the combined institutions became Westbrook College and Westbrook College changed its name to the University of New England.

Today the University of New England Portland Campus is home to three of the UNE's premier Colleges.

The Westbrook College of Health Professions (WCHP) is a model for interdisciplinary health and wellness. With students, faculty and staff working in graduate programs in Social Work, Physician Assistant, Occupational Therapy, Physical Therapy, Pharmacy and Nurse Anesthesia and with undergraduate students in Nursing and Dental Hygiene, the WCHP honors the academic legacy of Westbrook College.

In the fall of 2013, the College of Dental Medicine unveiled a state-of-the-art Oral Health Center, built on Stevens Avenue, as it welcomed its inaugural class of dental students on the Portland Campus.

The College of Professional Studies is the University's on-line college, whose faculty and staff are also located on the Portland Campus, but whose students do not travel to campus.

Additionally, UNE NORTH is housed at 1075 Forest Avenue. UNE NORTH – the Institute for North Atlantic Studies of the University of New England — connects researchers, educators, policymakers, and industry leaders from across Maine and the North Atlantic region to implement collaborative approaches to building resilient communities, healthy environments, and thriving economies.



FACILITIES

- 1 Finley Recreation Center
- 2 College of Pharmacy
- 3 Ludcke Auditorium
- 4 Coleman Dental Hygiene Building
- 5 Goddard Hall
- 6 Hersey Hall
- 6A Graduate Admissions
- 7 Blewett Hall
- 8 Parker Pavilion
- 9 WCHP Lecture Hall
- 10 Proctor Hall
- 11 Art Gallery
- 12 Alumni Hall
- 13 Abplanalp Library
- 14 Ginn Hall
- 15 McDougall Hall
- 16 Safety and Security/ Shuttle Terminal
- 17 Alexander Hall
- 18 Linnell Hall
- 19 Oral Health Center
- 20 Facilities Management
- 21 Innovation Hall
- 22 UNE North (see inset)
- 23 Gulliver's Field (see inset)

PARKING

- 3 Innovation Hall South: Patient Parking ONLY
- 4 Oral Health Center: Patient Parking ONLY
- 5 Behind Ginn/McDougall Halls
- 6 Behind Library
- 7 Behind Proctor Hall
- 8 Finley Recreation Center
- Handicap Parking
- Additional UNE Parking Available (see inset)
- 1 812 Stevens Avenue
- 2 Innovation Hall Rear
- 9 Stevens Avenue Congregational Church (2 Middle Rows, Mon-Fri)
- 10 UNE North: 1075 Forest Avenue (South Side Only)
- 11 Bishop Street Extension Lot

The UNE Portland Campus is proud to be on the National Register of Historic Places (1977) and to be the original home of Westbrook Seminary (1831-1929), Westbrook Junior College (1929-1970), and Westbrook College (1970-1996).

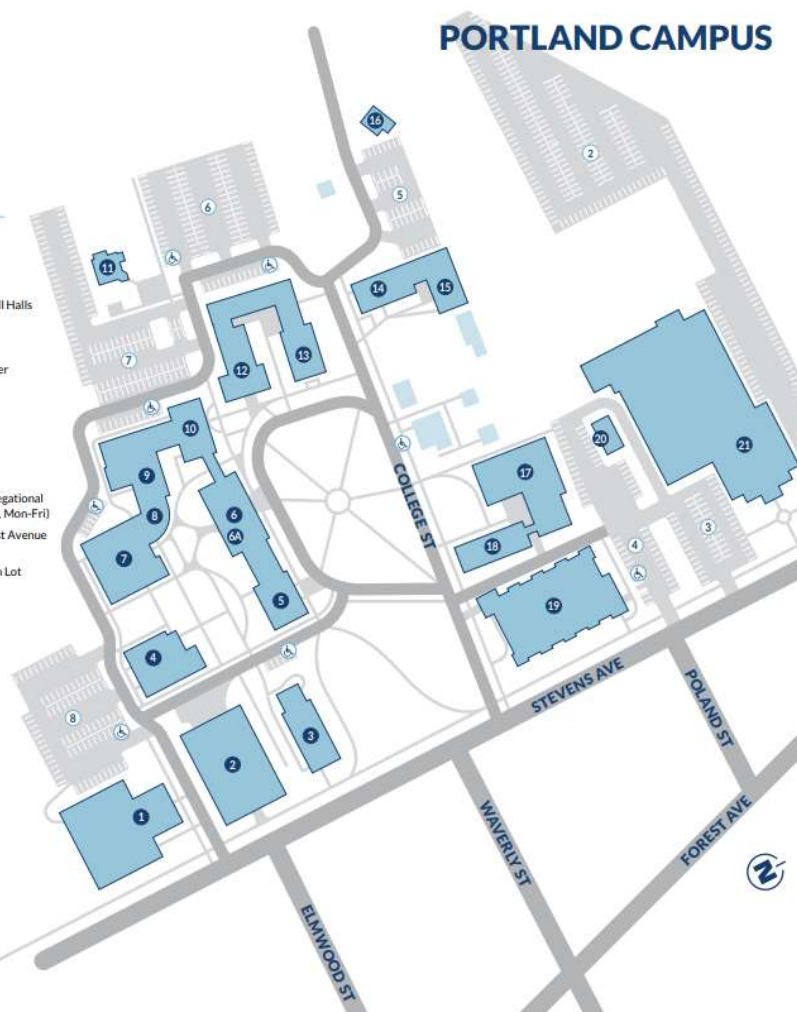


Figure 1 – Site Location Map

UNE's Portland Campus is essentially a graduate, commuter (non-residential) campus, supporting health professions programs. All of these academic programs require clinical experience towards the awarding of a degree. Each program has different clinical criteria, in regards to timing and duration, and thus the student population on campus can fluctuate during the course of an academic year as the students rotate into clinical settings. UNE has approximately 100 clinical affiliations, at 65 sites in Portland, and over 450 statewide. UNE

students generally complete their degree programming on either the Biddeford or Portland campus, and faculty and staff are generally assigned to one campus or the other. There is, however, some commuting between campuses that occurs.

Facility Planning

University of New England continues to improve its ability to provide state of the art post-secondary and graduate studies in fields such as healthcare, dentistry and pharmacy in order to provide a highly skilled and much needed workforce to the City of Portland and local areas. UNE is Maine's leader in providing health care professionals. UNE has recently announced plans to consolidate its College of Osteopathic Medicine onto its Portland campus to improve its Inter-professional Education (IPE) model to provide an even better prepared and more robust workforce in the future.

The establishment of a unique, nationally recognized Institute for Professional Education and Practice in Portland can only be achieved with the relocation of the College of Osteopathic Medicine from its current home on the Biddeford campus to the Portland campus. This reorganization is UNE's highest priority which will establish a world-class academic healthcare campus in Portland, oriented around inter-professional education, and will allow UNE to strengthen its collaboration with clinical partners throughout Portland and the state. By introducing, strengthening and supporting Inter-professional Practice with hospitals and healthcare networks such as Maine General, Maine Health, Northern Light and others, UNE will develop a distributed teaching hospital model, using telemedicine and digital health technologies to transform healthcare access and delivery across Maine, with a particular focus on Maine's underserved, rural population.

In order to support the transformation discussed above, UNE will be building a new, state-of-the-art home for the College of Osteopathic Medicine on the Portland campus, creating a comprehensive, fully integrated educational institution that can efficiently and effectively tackle Maine's deepest healthcare problems through systemic, coordinated education and clinical practice. Moving the College of Osteopathic Medicine to the Portland campus also will afford the opportunity to repurpose spaces on the Biddeford campus to expand existing undergraduate programs and to develop new ones to address critical workforce needs for the State.

Additionally, anticipated short term improvements to the campus parking and parking access road will be undertaken in support of this project, and will positively impact the university's TDM Plan.

Mobility Context

Neighborhood Context

UNE's Portland campus is located in the Deering Center area of the City of Portland, along the northern end of Stevens Avenue. The campus abuts the 239 acre Evergreen Cemetery, a National Historic Landmark, which was established by the city in 1854. The campus serves, in many ways, as a transitional zone between areas with diverse character, land uses, and demographics. Along with Evergreen Cemetery, it is bordered by residential neighborhoods (Mayfield Street off of Bishop Street, Stevens Avenue and the streets off of Stevens Avenue: College Street, Poland Street, Waverly Street, Elmwood Street and St. Joseph Street), an assisted living and senior housing complex (Park Danforth) across Stevens Avenue, two churches: (Stevens Avenue Congregational Church and St. Joseph Catholic Church), a Catholic elementary school (St. Brigid), and several small businesses.

Pedestrian Access

Pedestrian access is provided by numerous sidewalks both on campus and off campus. Sidewalks exist on both sides of Stevens Avenue and on both sides of Forest Avenue, as well as on the primary side streets between these arterials, including Poland Street, which allows access to UNE's property at 1075 Forest Avenue. There are crosswalks across Stevens Avenue and Forest Avenue in the vicinity of the campus at both signalized and un-signalized locations, including direct signalized access to UNE's property at 1075 Forest Avenue. These pedestrian facilities also provide contiguous pedestrian access to other educational facilities, namely Longfellow Elementary School, Lincoln Middle School, and Deering High School, as well as the local businesses frequented by UNE community members.

The Portland Trails network abuts the campus and could be utilized by some local community members to access the campus. UNE is working with Portland Trails to extend this network across the UNE campus as the new access road is developed, which would provide additional alternative pedestrian access to the campus. See Figure 2.

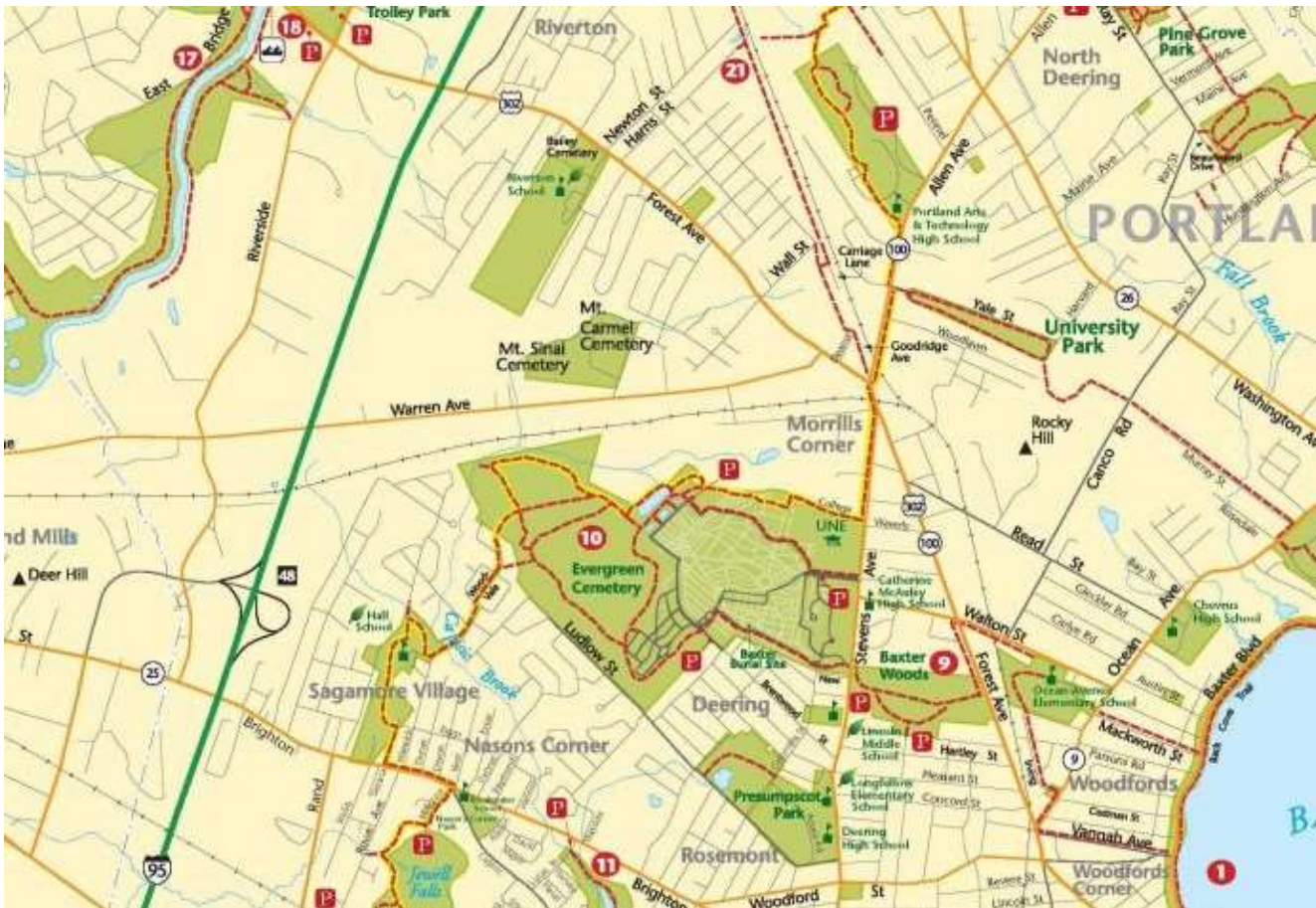


Figure 2 – Portland Trails trail map adjacent to the UNE Campus

Walkscore.com, a real estate website that evaluates walkability and transportation when choosing where to live, scores the Portland Campus as a 69 out of 100 and considers the campus location to be “Somewhat Walkable”, indicating “some errands can be accomplished on foot”. Their walking Travel Time Map, in Figure 3 below, illustrates this.

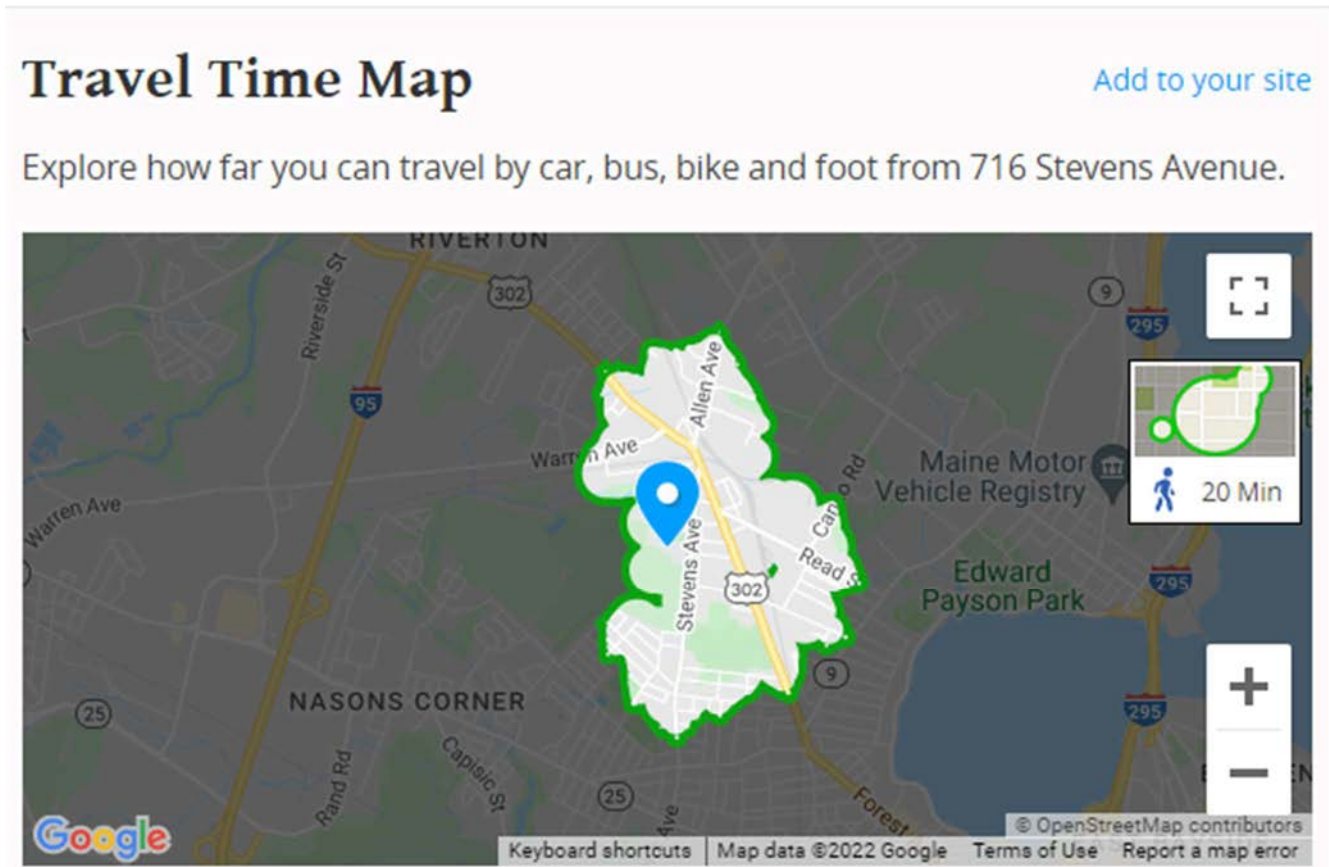


Figure 3 – Pedestrian Travel Time Map from Walkscore.com

Data analysis of current student and employee home addresses indicate 13% of the of the UNE Portland Campus community live within a walkable 1.5 miles radius and a bikeable 1.5 - 5 mile radius of the campus, as indicated in Figure 4 and Figure 5. A recent survey of faculty, students, and staff of the Portland campus revealed that 11.5% of the survey respondents walk to campus 1-9% of the time. Comments indicate that 31% of the survey respondents desire using an alternative mode of transportation, but are unable due to external commitments, such as work, daycare pickups and clinical requirements. Opportunities to increase the alternative modes of transportation percentage exist, and efforts will continue to be made to identify incentives that would increase these modes of commuting, including potential extension of the Portland Trails network through the campus, which might allow additional Deering Center or Riverton residents to more easily walk to campus.

UNE Student & Employee Commute Distances

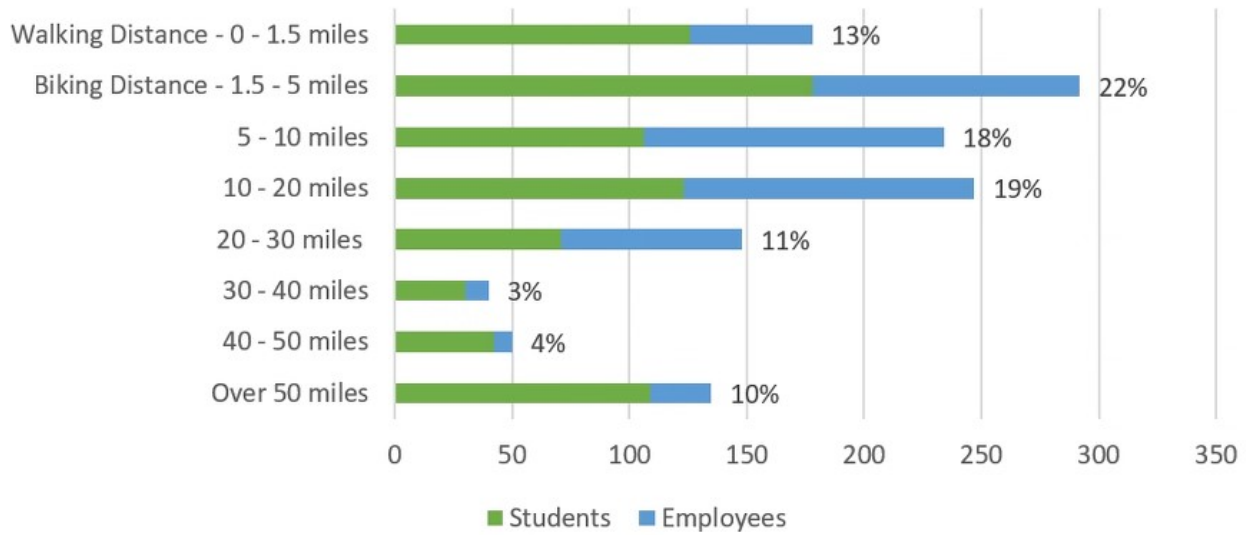


Figure 4 – Commute distances from UNE Portland Campus

University of New England Distances to Portland Campus - 10 Mile Focus

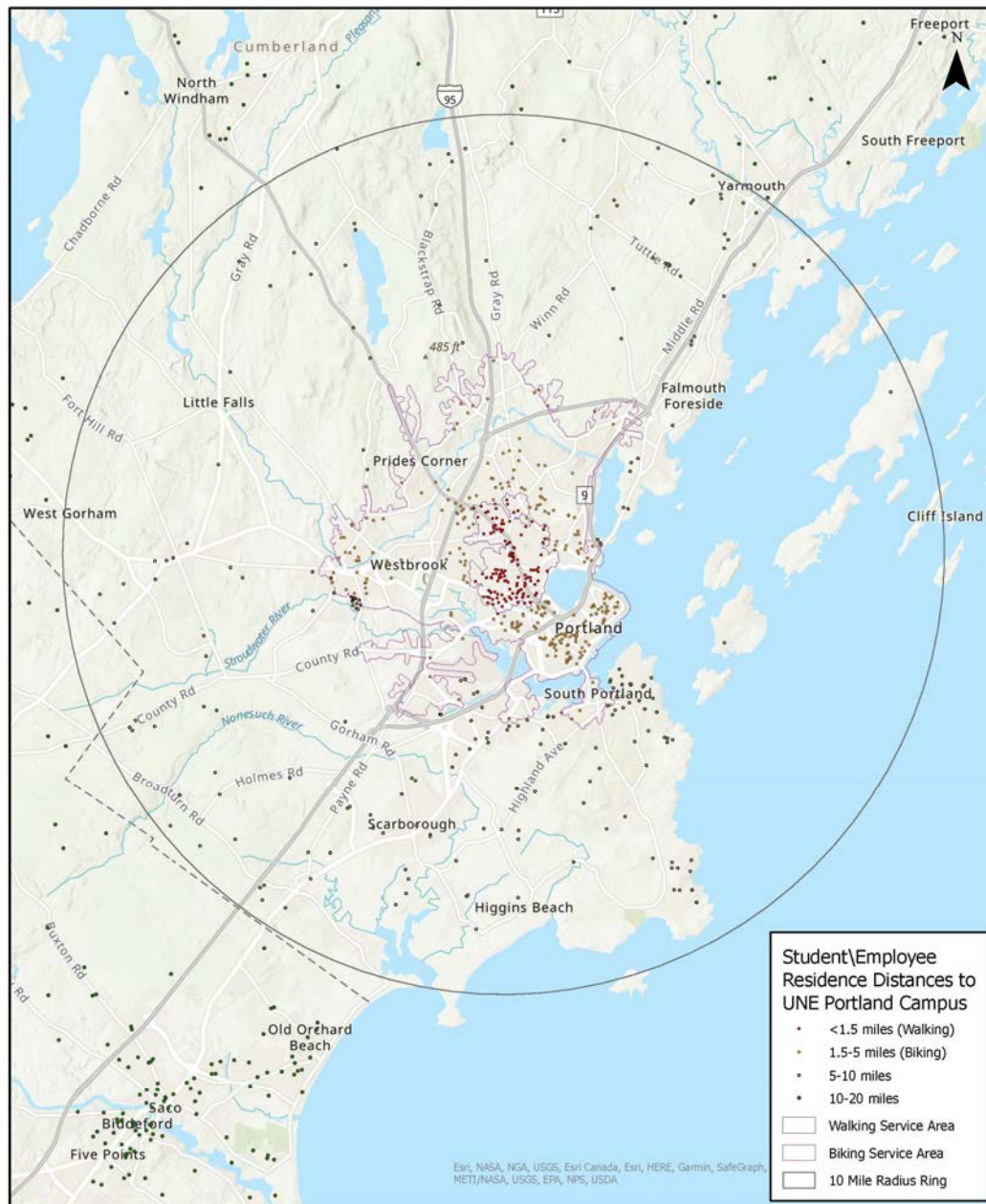


Figure 5 - Home Address Distances to Campus

Bicycle Access

Stevens Avenue is a designated bicycle route in the City of Portland, providing direct access to the campus. UNE provides bicycle racks at a ratio of 1 bicycle rack space per every 20 UNE Portland Campus community members. Additionally, there is access to showers and lockers in the Finley Recreation Center, further facilitating bicycle commuting.

The Stevens Avenue on-road bike route connects to multiple nearby bike routes, including Allen Avenue, Walton Street, Read Street, Woodford Street and Congress Street. These bike routes then connect to facilities

with dedicated bicycle lanes, such as Forest Avenue. See Figure 6 - City of Portland Bikeway and Pedestrian Network map.

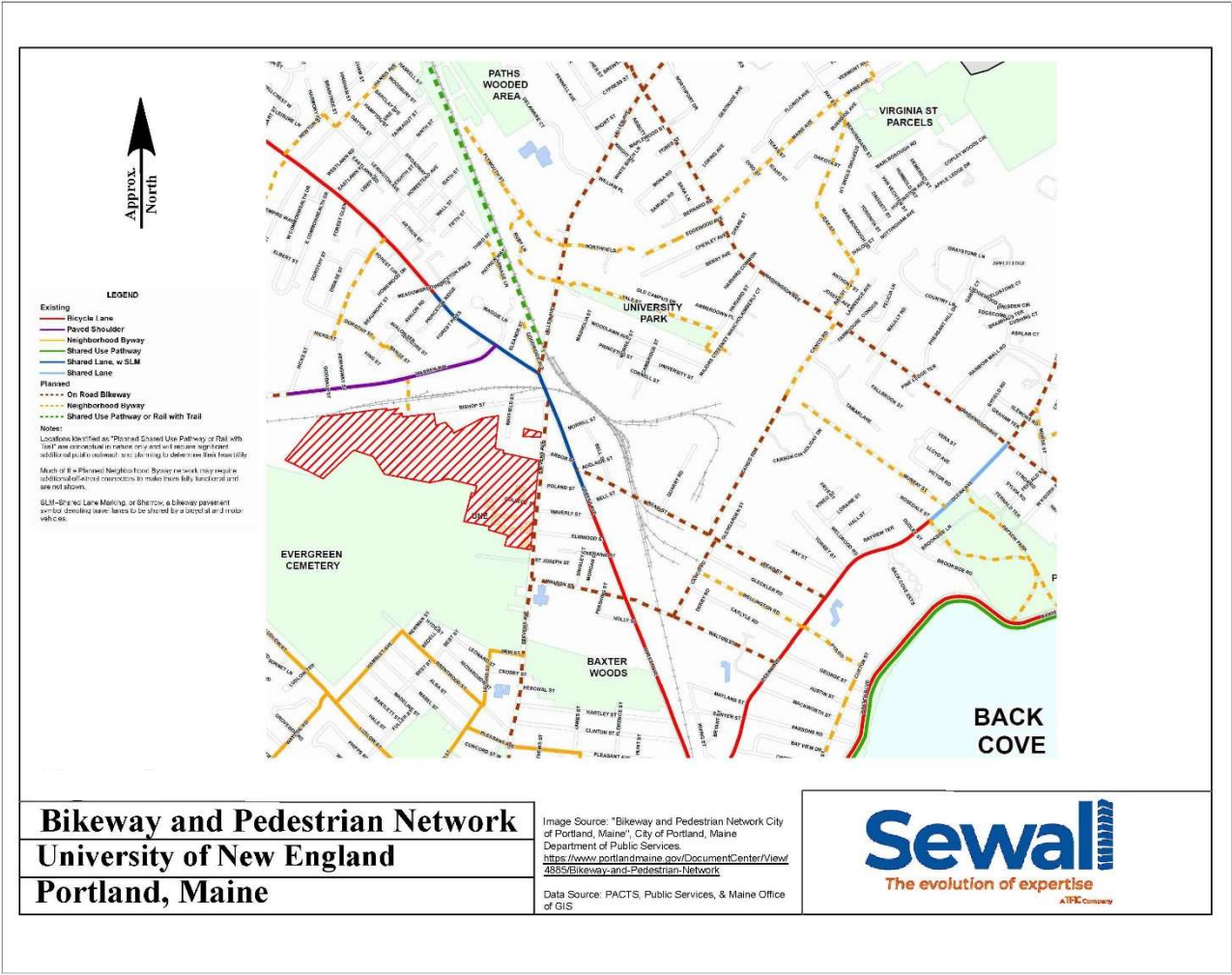


Figure 6 – City of Portland Local Bikeway and Pedestrian Network

Walkscore.com scores the Portland Campus as a 65 out of 100 for bicycle commuting and designates the campus location to be “Bikeable”, indicating “some bike infrastructure” in the vicinity of the campus. Their Travel Time map, in Figure 7 below, illustrates this.

Travel Time Map

[Add to your site](#)

Explore how far you can travel by car, bus, bike and foot from 716 Stevens Avenue.

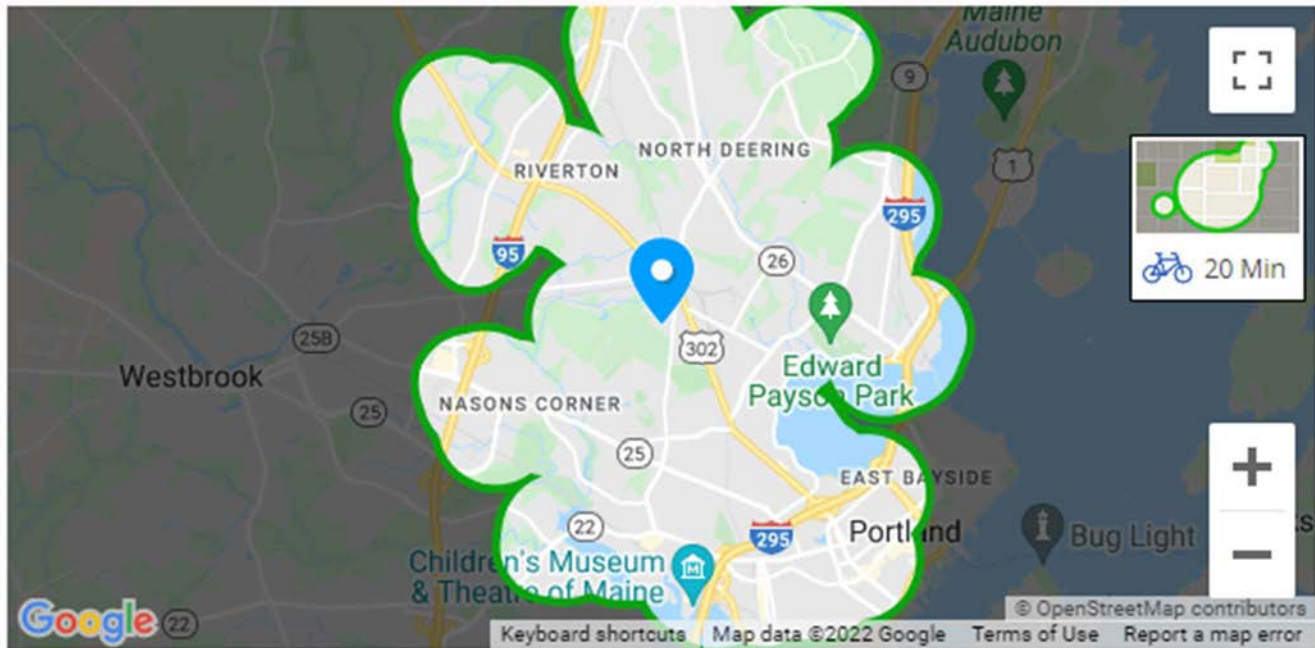


Figure 7 – Bicycle Travel Time Map from Walkscore.com

Transit Service

Transit service is available via Greater Portland Metro's Route 9, which connects downtown Portland to North Deering via Stevens Avenue and also by Metro Route 2, which connects downtown Portland to Riverton via Forest Avenue. There are two Route 9 Metro stops located at the Portland campus, both of which are equipped with ADA complaint shelters and are located in well lit, conveniently located areas of the campus. The Route 2 stops on Forest Avenue are within 1,000 feet of the core campus and are immediately adjacent to the UNE's 1075 Forest Avenue property (UNE North). UNE provides free bus passes to all students and employees to encourage Metro use, including the Metro Breeze from Portland to Brunswick, and the Route 2 bus route to the Metro Pulse (the downtown hub). Additionally, the University provides free bus passes to the South Portland City Bus Services as well as the Biddeford, Saco, Old Orchard Beach Transit (BSOOB Transit) including the ZOOM Express between Portland and Biddeford. Free public transportation is thus offered between the University's two Maine campuses, as well as to/from the Portland Transportation Center, the Saco Transportation Center, the Greyhound Bus terminal, and the Portland International Jetport.

With UNE's recent (January 2021) upgrade to the centralized automated fare payment system, Dirigo TouchPass, for all of these transit services, enhanced ridership data is now available to UNE and can be utilized in future TDM considerations. Previously, the ridership data was recorded manually or only available for the number of passes issued, and not actual rides utilized. Previously, UNE would procure and manually distribute hardcopy passes, as community members requested them from the Student Affairs office. Thus, UNE community members were required to conscientiously obtain these in advance of their use, and there was no way to track whether or not all passes in the packet were used. For 2019, UNE purchased and distributed

monthly passes (40 rides per month) and weekly passes (10 rides per week) totaling approximately 10,590 rides, or 882 ride passes per month. During the academic year 2021-2022 actual average ridership, now tracked electronically through the Dirigo TouchPass system, is averaging approximately 107 rides per month. While the pandemic has undoubtedly impacted ridership, it is unlikely that the significantly lower ridership in 2021-2022 is only due to this cause. We believe the manually distributed hardcopy passes artificially inflated the ridership data, and the Dirigo TouchPass system will provide better data sets moving forward.

Additionally, the Dirigo TouchPass has improved convenience and removed barriers for all students, faculty, and staff to ride the buses for free, without first having to obtain a hardcopy pass. Now that the pandemic is entering an endemic phase, UNE anticipates the ridership to increase with the added ease and convenience of accessing these transit services. Current survey results indicate 10.5% of the respondents ride the bus between 1-20% of the time. Enhanced promotional activities are underway to highlight this free transit option, and ridership is anticipated to rebound and expand to at least double the current rate within the next year.

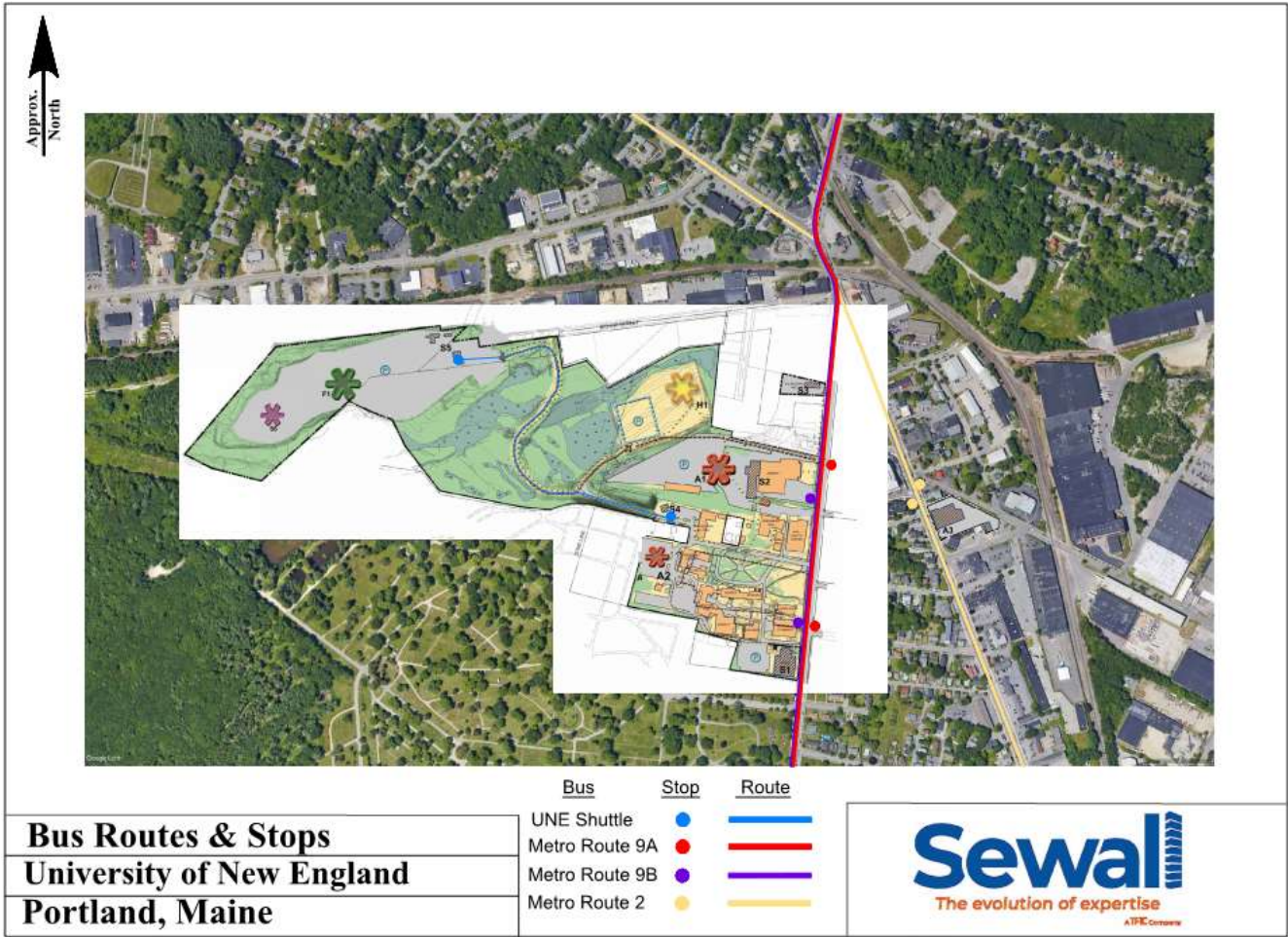


Figure 8 - Greater Portland Metro routes servicing the Portland Campus

Vehicle Access

The campus is located off of Stevens Avenue, which is classified as a minor arterial. Nearby Forest Avenue is a principal arterial, and Warren Avenue to the north is a minor arterial. The campus, located within close

proximity of these three arterials, provides convenient access to the Maine Turnpike, I-95 and to Interstate I-295.

The Portland campus has no on-campus housing, so all students, faculty, and staff arrive from Portland and surrounding communities, and utilize multiple unsignalized access drives from Stevens Avenue, or from the Bishop Street Extension to the Bishop Street parking lot. The access point is generally determined by the parking permit acquired by each individual, as it relates to the parking lot in which they are authorized to park. Access points are depicted in Figure 9.

Recent survey results indicate approximately 68% of the respondents drive alone to campus most of the time and 19% carpool occasionally. This results in approximately 13 percent of persons utilizing alternative methods to arrive to campus.

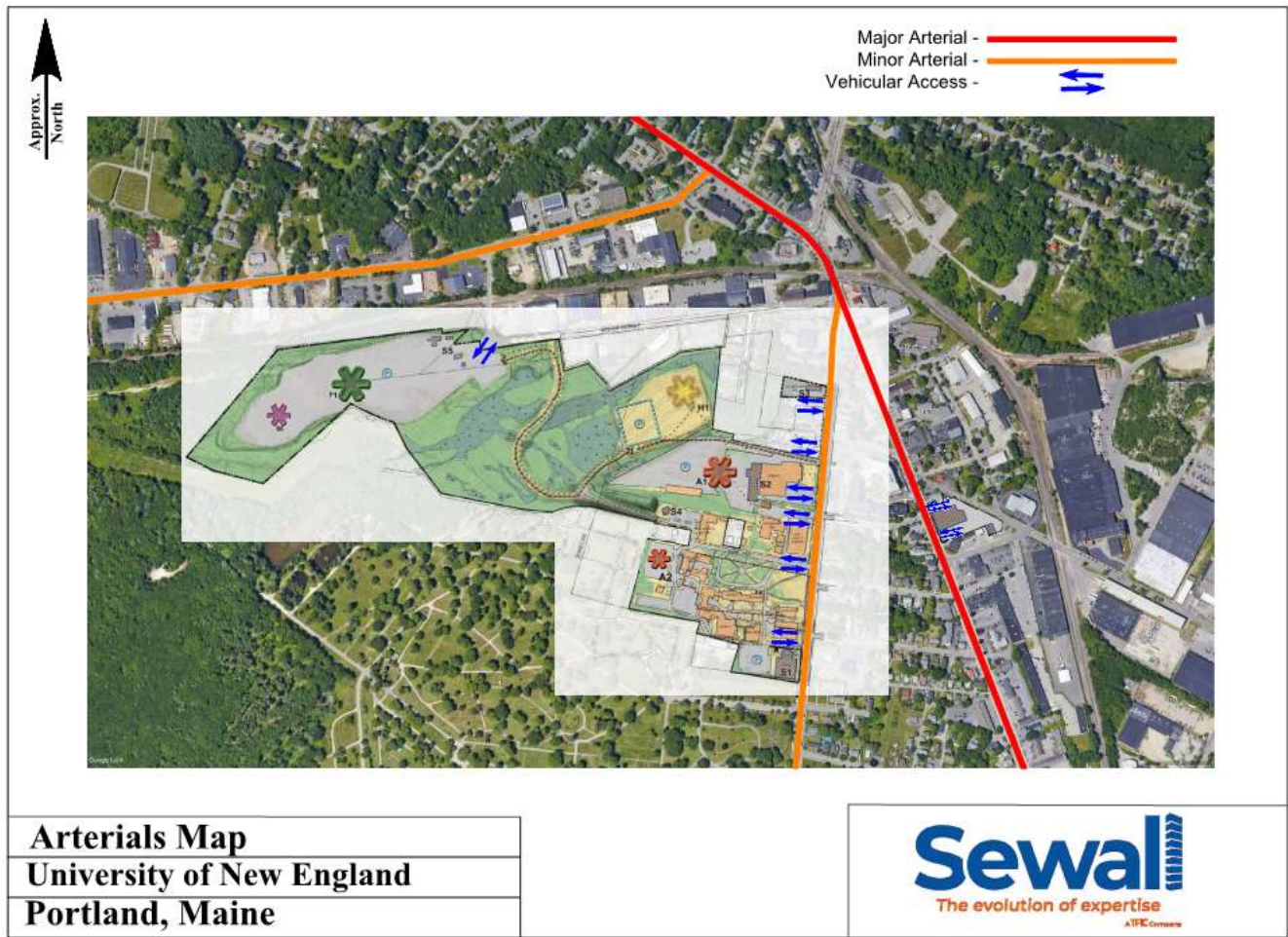


Figure 9 – Vehicle access points

Parking

There are currently eleven parking lots located at UNE’s Portland campus, plus on-street parking along two campus roadways. The lot locations are depicted in yellow dashes in Figure 10 below. The number of spaces located in each of these lots is detailed below in Table 1. All campus parking lots require the display of parking decals, and the lots on the core campus require the purchase of a parking permit through a lottery process. If a UNE community member isn’t successful in obtaining a permit in the lottery process, they can park for free in

the remote lots, which include Bishop Street parking, 1075 Forest Avenue, 812 Stevens Avenue, the leased lot at the neighboring Congregational Church, or the dirt parking lot behind Innovation Hall.

In addition to the on-campus parking, there is also on-street parking located on some of the surrounding streets, which is available to UNE community members. This on-street parking includes College Street on the core campus and parking along both sides of Stevens Avenue off-campus.



Figure 10 - Portland Campus parking lot diagram



Lot # & Description	# of Parking Spaces
1 – 812 Stevens	30
2 – Innovation Hall, Upper/Lower	101
3 – Innovation Hall, Front	34
4 – Oral Health Center/Alexander	38
5 – Ginn/McDougal	28
6 – Library	104
7 – Proctor	121
8 – Finley Rec Center	85
9 – Stevens Ave. Church	36
10 – UNE North, 1075 Forest Ave.	77
11 – Bishop St., Extension Lot	600

X – Proctor Access Road	3
Y – Hersey Circle	4
Total	1,261

Table 1- Current parking lot and space inventory

Existing Parking Analysis

While there are several alternative transportation modes available to access the Portland campus, the majority, 87%, of students and employees arrive by private vehicle, based on the most recent transportation survey. The UNE Office of Safety and Security conducts biannual parking lot counts in October and April in all campus lots. Security Officers count the open spaces daily for one week between the hours of 8 am and 5 pm. Based upon the most recent parking counts conducted in fall of 2021, parking demand generally peaks between 11:00 am and 2:00 pm. The largest number of vehicles recorded during the fall 2021 counts in the university lots was 651. This highest demand occurred on a Wednesday at 1:00 PM. This represents 51.5% of current overall on-campus capacity. The overall capacity will decrease when the Repair Facility building, currently under construction on the Bishop Street lot, is opened.

On-street parking census counts are included in the biannual parking analysis; however, these on-street vehicles counts are informational only, as the parking along these streets is also utilized by the general public with no UNE connection. The number of vehicles parked along College Avenue during the peak periods ranged from 18 to 22. The majority of these users are likely UNE community members. The number of vehicles recorded in the Stevens Avenue spaces during the 2021 peak period was 109. As previously noted, not all of these users are UNE community members, as there are private single and multifamily residences, local businesses, a daycare center, a school, a couple of churches, and a couple of larger housing complexes located along this stretch of road.

The City of Portland has implemented residential parking permit requirements and one-hour parking restrictions on most side streets in the vicinity of campus, reducing the amount of on-street parking available to UNE community members. However, as long as there continues to be free on-street parking along Stevens Avenue, proximal to the campus core, continued use of these spaces by UNE community member is expected, given their convenience. UNE will continue to support the city in its parking regulations in this area, and will consider these parking needs in the total on-campus parking capacity.

Shuttle Service

A free shuttle bus, outfitted with Wi-Fi, is provided from the Bishop Street parking lot to the campus core to provide for convenient parking access. There is a heated shelter with Wi-Fi at each end of the shuttle route to encourage ridership. The shuttle runs continuously from 7 am to 7 pm with minimal wait times. With these incentives, parking in this remote lot has increased significantly from 37 vehicles in October 2012, to 179 during the peak period (11:00 am to 2:00 pm) in October 2021.

Transportation Demand Management Plan

Overview

The University has had a Transportation Demand Management (TDM) Plan in place since 2010. This 2022 TDM Plan revision has been developed with the primary goal of reducing vehicle trips to campus and, thus, reducing the demand for on-site parking. The plan further aims to reduce traffic impacts, both on-campus and off-site, improve traffic flow in the surrounding area, and reduce UNE's Scope 3 carbon emissions.

UNE hopes to achieve these goals by implementing TDM strategies that promote and encourage alternative modes of transportation. In June 2019 a “Transportation Think Tank” (TTT) committee formed, with representation from Campus Planning, Student Affairs, Safety and Security, Undergraduate and COM Student Governments, Sustainability Office, and the Environmental Council. With oversight from the TTT committee, the Transportation Demand Management (TDM) strategies are regularly reviewed and updated to respond to changing conditions and needs. The TTT committee is actively engaged in implementing the TDM strategies outlined below.

TDM Strategies

EDUCATION & PROMOTION

UNE provides both educational and promotional material regarding the advantages of alternative transportation modes. The TDM Coordinator regularly publishes the “*Movements*” newsletter, which is hung in all bathroom stalls throughout the campus, ensuring visibility and contemplation. The newsletter informs the UNE community about ongoing, new, or revised transportation programs, events and resources, like bus maps and schedules, GoMaine carpool and rideshare information, parking updates, bike infrastructure updates, incentive program information and safety practices for pedestrians, among other topics. Additionally the university regularly provides specific TDM-related information to the campus community through various methods and media formats, including bulletin boards, strategically placed bus schedule brochure holders, weekly community-wide emails, digital screens, and website.

GOMAINE

UNE utilizes the GoMaine service to encourage “greener commuting” to each campus as well as between campuses when required. UNE has its own landing page on the [GoMaine website](#), which helps users find carpool partners, map out alternative transportation methods with transit, walking and biking routes, incentivizes users with rewards, and offers emergency “ride home guarantee” for regular users. Additionally UNE takes advantage of the expertise of GoMaine staff for educational and promotional events with informational tabling, swag give-aways, and educational presentations.

WAY-2-GO COMPETITION

During the last Way-2-Go, GoMaine competition in 2019, UNE won two awards: Most New Members in the XXL Company Category and the Team Spirit Awards. There was significant momentum developing in the alternative transportation realm and the university is eager to return to this pre-pandemic activity and progress. The TTT committee plans to participate in and support future Way-2-Go competitions.

CARPOOLING

The university provides free parking to carpoolers and dedicates some of the most convenient parking spaces as incentives. The carpool program is not widely publicized, as it is administered manually and challenging to enforce. The TTT committee has identified the need to streamline carpool permitting procedures, which would make the incentive more desirable while making administration of the program less cumbersome. This update is a goal for the 2022-2023 academic year.

TRANSIT SERVICE

The TDM plan includes the continuation of the provision of free GP Metro, South Portland City Bus Services, and Biddeford, Saco Old Orchard Beach Bus Transit (BSOOB) passes for all students, faculty, and staff to encourage transit usage. Each of these services provides GPS trackers with mobile apps for cell phones, which aid riders in knowing exactly where the bus is located and how close it is to their stop. The TTT committee actively engages with administration from these transit providers to update materials and promote ridership.

INCENTIVES

Since 2008, UNE has continually promoted the use of alternative modes of transportation through incentives, including: raffling of new bicycles and iPads for transportation competitions, providing free coffee and doughnuts to users of the Bishop Street parking lot, free use of electric vehicle charging stations, and free public transit passes. The TTT committee will continue to evaluate the effectiveness of incentives, and implement when warranted.

ON-GOING ASSESSMENTS OF EFFECTIVENESS

UNE has performed several student and employee surveys to determine arrival and departure times, transportation modality and parking usage, as well as to gauge interest in various alternative transportation and incentive programs. The results have guided UNE in making adjustments to its TDM plan, including infrastructure upgrades, and bus schedule changes, among others.

Recent hot mapping of faculty, staff, and student home addresses is being utilized to identify additional measures for enhanced promotional activities towards fostering alternative transportation modes and programs.

The Director of Safety and Security monitors the effectiveness of the TDM plan through biannual parking utilization studies. The TDM Coordinator and TTT Committee use the data collected from these parking studies to continually review and anticipate parking demand on campus and guide ongoing revisions to the TDM plan.

EV CHARGING INFRASTRUCTURE

UNE provides free charging for electric vehicles. There are three EV charging stations located at the Bishop Street parking lot behind the bus shelter. These charging stations are powered by grid-tied solar panels on the roof of the bus shelter. Additionally, there are five outlets on campus designated for EV slow-charging. Expanded EV infrastructure is planned with the development of the Harold and Bibby Alford Center of Health Sciences, as described later. The TTT Committee will continue to monitor the growth of EV adoption in the campus community and will advise administration regarding further expansion of charging infrastructure as needed.

BICYCLE INFRASTRUCTURE

UNE promotes bicycling as a convenient means to access campus for those students and employees that reside within the appropriate range, and for exercise and wellness benefits. The university has several bikes on campus that the UNE community members can borrow to utilize during the day. Bike racks are conveniently located across campus for campus community members to store their personal bikes as well. Additional bikes and racks will be added with the anticipated development of the Harold and Bibby Alford Center of Health Sciences, as described later. UNE has previously discussed, and would consider, being a site for a city-wide bike share program.

CAMPUS PLANNING

The University has traditionally located its programs so that it limits the travel between campuses by its community members. Thus, faculty and staff are generally assigned to only one campus and student degree programs are generally offered/completed on one campus or the other. However, there are several programs that are currently required to travel between campuses to access the highly specific and state-of-the-art facilities housed only on one of the two Maine campuses. For example, graduate students studying Dental Medicine in Portland are required to learn Gross Anatomy on the Biddeford Campus. Conversely, the Osteopathic Medicine students, located in Biddeford, are required to access the Simulation Center on the Portland Campus to learn using hi-tech robotics and virtual reality health care programming offered there. This

results in potentially hundreds of students commuting between Portland and Biddeford, during the day, several times a week. Development of the Harold and Bibby Alfond Center of Health Sciences, described below will further limit this intercampus travel.

Proposed Access and Circulation Modifications

VEHICLE ACCESS AND PARKING

The Harold and Bibby Alfond Center of Health Sciences (HBACHS) project will reconfigure the access point on Stevens Avenue at Innovation Hall, extending beyond the HBACHS, to the expanded parking area behind this new facility. The current drive will be widened and installed with a sidewalk from Stevens Avenue to the renovated parking area. The parking lot capacity will be approximately doubled. Pavement and lighting will be installed that meets the University's enhanced safety standards. Charging stations, a combination of Level 2 and 110v outlets, will be installed for free and convenient electric vehicle charging.

The Campus Master Plan provides for additional improvements to the parking access road connecting the proposed HBACHS facility parking lot, College Street, and the Bishop Street lot. This future access road will allow vehicles, bicycles and pedestrians, to travel between the core campus on Stevens Avenue, through to the Bishop Street parking lot and on to Warren Avenue. This future access road will eliminate unnecessary trips on Stevens Avenue, Forest Avenue, Bishop Street and Warren Avenue by allowing UNE community members to enter and exit the campus at the location most proximal to their origin/destination by either Bishop Street Extension or Stevens Avenue. More importantly, it will eliminate traffic that is currently routed through Morrill's Corner. The University is currently discussing its design with the Maine Department of Transportation and Portland Trails. Additional information related to this proposed development will be made available as it is developed.

PEDESTRIAN AND BICYCLE ACCESS

The Harold and Bibby Alfond Center for Health Sciences building will include men's, women's and gender-neutral locker room facilities, complete with showers. These additional facilities encourage and support additional active transportation commuting modes to campus.

The Portland Trails network of trails abuts the campus and could be utilized by some local community members to access the campus. UNE is actively working with Portland Trails to extend this network across the UNE campus as the future access road is developed, which could provide additional alternative pedestrian access to the campus, as well as rerouting the Portland Trails route away from Morrill's Corner.

Additionally, the University anticipates the UNE community utilizing this future access road for increased bicycle access to campus. This would provide additional opportunities for UNE community members to bike to campus, without having to bike through Morrill's Corner, with its intimidating shared vehicle and bicycle lanes.

City Planning staff have suggested that the University consider allowing bike access to the general public along this future access drive. See Figure 11, below. However, the current design and anticipated funding sources limit the access road to two shared travel lanes and a sidewalk, and would not support significant additional traffic, including bicycles. The Maine DOT has also expressed interest in this alternative pedestrian and bicycle route away from Morrill's Corner. They are seeking grant opportunities to assist with the addition of bike lanes, which would allow for this potential increased usage. This expanded infrastructure would aid in connecting pedestrians and bicyclists from the Riverton Neighborhood to the Deering Center Neighborhood, without traveling through Morrill's Corner. If external funding is available, UNE may be able to consider the addition of bike lanes to the access road to accommodate this additional bicycle traffic.



Figure 11 – City of Portland - Riverton Neighborhood Byway Conceptual Plan

Future Parking Needs

Through all of these actions, UNE has shown long-term dedication to reducing overall single-occupancy vehicle trips to campus and the associated traffic impacts to the area, and in being a good neighbor, as well as reducing its carbon footprint. Alternative transportation goals remain focused on realizing further reductions in these areas.

The goals for UNE in terms of parking are to:

- Continue to provide an adequate on-campus parking supply
- Reduce parking needs over time through continued TDM strategies
- Reduce neighborhood impact by reducing on-street parking usage by UNE community members

In previous projects, as approved by the City, UNE's parking needs, based on actual data, has been typically based on the student population, at an actual rate of 0.58 spaces per student. With a campus dominated by health professions graduate students, who often spend their entire day and week on campus, the parking demand is significantly more than the Institute of Transportation Engineers (ITE) would predict for a typical college or university. UNE intends to continue to monitor parking demand, twice a year, with the goal being to reduce the parking supply rate over time. With the construction of the HBACHS, the development will result in a net gain of 92 spaces in this area of campus. The recently approved Repair Facility near the Bishop Street parking lot, results in the loss of 256 spaces, while adding additional green space, resulting in a total of 1086 spaces on campus. With completion of these projects, the resultant parking need would be estimated at 0.54 spaces per student. This projected need does not include UNE community vehicles legally parked on adjacent public streets.

Lot # & Description	# of Parking Spaces
1 – 812 Stevens	30
2 – Innovation Hall, Upper/Lower	193
3 – Innovation Hall, Front	34
4 – Oral Health Center/Alexander	27
5 – Ginn/McDougal	28
6 – Library	104
7 – Proctor	121
8 – Finley Rec Center	85
9 – Stevens Ave. Church	36
10 – UNE North, 1075 Forest Ave.	77
11 – Bishop St., Extension Lot	344
X – Proctor Access Road	3
Y – Hersey Circle	4
Total	1,086

Table 2 - Anticipated parking availability with the development of HBACHS

Reduction Goals

With the ongoing efforts to increase transit ridership and increase carpooling and other alternative means of transportation, UNE anticipates a reduction in parking demand of approximately 4% over the next couple of years. With the completion of the HBACHS facility, UNE aims to increase on-campus parking and begin to reduce the on-street parking demand. This would be achieved through the addition of more on-campus parking within the campus core and incentivizing the use of alternative methods of transportation, primarily transit and carpooling. Survey results indicate options for carpooling could be enhanced with additional promotional events. The Go Maine Programs are featured prominently and regularly in the UNE Movements Newsletter, and a GO Maine informational event was recently held on campus.

Future Planning Efforts

UNE will continue to work with neighbors and neighborhood groups as campus development projects are planned to identify any neighborhood transportation issues and concerns so that they can be considered in the planning and design process. This will ensure that UNE will continue to be a good neighbor and minimize the impact on surrounding roadways as much as possible.

Additionally, UNE will continue to work with the City of Portland, the Maine Department of Transportation, Portland trails and other stakeholders to review and consider options for increasing active transportation to, from, and through the campus.

Appendix A: TDM Roles & Responsibilities

TDM COORDINATOR/ASSISTANT DIRECTOR OF SUSTAINABILITY

- Promote non-SOV transportation choices to faculty, staff, and commuter and resident students.
- Review potential new alternative transportation technology or SOV reduction technology and coordinate implementation efforts associated with them.
- Champion the implementation of new TDM strategies to reduce parking demand and increase the use of non-SOV transportation modes.
- Recruit and engage participants for any outreach events or campaigns associated with the TDM program over time.
- Conduct/provide information for new student/new employee orientation to educate incoming affiliates regarding their transportation options to and from the campus.
- Maintain the transportation webpage (<https://www.une.edu/studentlife/security/transportation>) content to include TDM strategies outlined in the TDM plan.
- Coordinate the implementation of TDM strategies with Student Affairs, Registrar, Human Resources, Safety and Security, Campus Planning, and any other departments as necessary.
- Work with the City of Portland, GP Metro, GoMaine, and other potential partners to improve non-SOV transportation access to the campus and to gain support for program implementation.
- Coordinate all monitoring and evaluation activities necessary to measure the effectiveness of the TDM program in achieving the targets.
- Facilitate collaborative, representative Transportation Think Tank Committee reviews.
- Co-develop with the Transportation Think Tank Committee financial parking incentives or disincentives as identified by the TDM plan.
- Update annual TDM Report, which will provide an assessment of strategies implemented to date and outline the activities to be implemented in the upcoming year.

VICE PRESIDENT OF CAMPUS OPERATIONS

- Maintain regular membership with the Transportation Think Tank Committee.
- Assist in the coordination of all monitoring and evaluation activities necessary to measure the effectiveness of the TDM program in achieving the targets.
- Review annual TDM Report, which will provide an assessment of strategies implemented to date and outline the activities to be implemented in the upcoming year.
- Provide consultation on TDM strategies that impact parking supply, services, and technology.
- Provide up-to-date data on parking lot inventories.
- Provide support for conducting additional parking assessments and measurements annually.
- Co-develop with the Transportation Think Tank Committee financial parking incentives or disincentives as identified by the TDM plan.
- Maintain existing parking infrastructure and technology, with support of Facilities Management and Campus Planning.
- Maintain parking services, including payments, campus notifications, and website updates.

DIRECTOR OF SAFETY AND SECURITY

- Maintain regular membership with the Transportation Think Tank Committee.
- Administer the parking permit process.
- Carry-out parking enforcement.
- Maintain interactive parking maps on transportation website.

- Conduct parking assessments in October and April annually, and report data to Transportation Think Tank Committee.

DIRECTOR OF INSTITUTIONAL RESEARCH AND DATA ANALYTICS

- Assist with annual transportation survey to faculty, students and professional staff.
- Provide data to assist with affiliate population density mapping to develop non-SOV transportation programming.

Planning Board Report

Planning & Urban Development Department

St. Lawrence Arts Addition
76 Congress Street
Major Site Plan
PL-002341-2023
Friends of the St. Lawrence Church, Applicant

Submitted to:	Portland Planning Board	Prepared By:	Charles Tetelman
Public Hearing Date:	May 9, 2023	Date:	May 5, 2023

I. INTRODUCTION

Friends of the St. Lawrence Church have submitted a Major Site Plan and Traffic Movement Permit (TMP) amendment application to facilitate the construction of a 6,519 square foot addition to the existing auditorium space at 76 Congress Street. The application also includes renovation to the existing Parish Hall Theater and a rear driveway for backstage access. This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code Site Plan Standards, section 14.6.



Figure 1: Proposed Rendering at 76 Congress Street

On January 23, 2018, the Planning Board unanimously (7-0) approved a Level III Site Plan application (2016-265) for a similar proposal submitted by the Friends of the St. Lawrence Arts Center at 76 Congress Street. However, development was never undertaken in accordance with the approved site plan and the 2018 approval expired. Because of the previous approval in 2018 and limited changes between the two applications, the proposed Major Site Plan application has been scheduled for a Public Hearing without a workshop.

The Planning and Urban Development Department mailed 312 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the April 29, 2023 and May 2, 2023 editions of the *Portland Press Herald*.

Applicant: Friends of the St. Lawrence Church
 Applicant: Walsh Engineering Associates, Inc.
 Representatives:

II. REQUIRED REVIEWS

Review	Applicable Standards
Site Plan Standards	Section 14.6
Munjoy Hill Historic District	Historic Preservation Certificate of Appropriateness
Traffic Movement Permit	State Delegated Review

Waiver Requests	Applicable Standards
<i>Driveway Separation</i> - seeking waiver to allow a driveway on Munjoy Street ~6 feet away from adjacent property.	City of Portland Technical Manual, Section 1.7.2.7 – along arterial, collector, and local streets, minimum acceptable spacing shall be 100-150 feet, depending on speed limit.

III. PROJECT DATA

Existing Zoning	Contract Zone C-58
Property Size	10,601 sq. ft.
Existing Use	Place of Assembly
Proposed Use	Place of Assembly

	Existing	Proposed	Net Change
Building Footprint	3,360 sq. ft.	9,879 sq. ft.	+ 6,519 sq. ft.
Building Floor Area	10,540 sq. ft.	25,308 sq. ft.	+ 14,768 sq. ft.
Impervious Surface Area	9,463 sq. ft.	9,978 sq. ft.	+ 515 sq. ft.
Parking Spaces	0	0	0
Bicycle Parking Spaces	0	20	+ 20

IV. BACKGROUND

The St. Lawrence Arts Center was constructed in 1897 and functioned as a church until its closure in 1986. The original building included a parish hall and a sanctuary. In 2001, Friends of the St. Lawrence Arts Center took ownership of the building and converted the parish hall into an auditorium space. The sanctuary space was never rebuilt and the primary roof trusses collapsed in 2006 leaving the sanctuary unsalvageable.

In 2017, Friends of the St. Lawrence Arts Center submitted a site plan application (Attachment C) for a building addition to the St. Lawrence Arts Center as well as a traffic movement permit. The proposed development included a building addition which included 401 auditorium seats, a stage, and other rooms and spaces for the operation of the facility. On January 23, 2018, the Planning Board voted 7-0 to approve the proposed building addition and traffic movement permit. The Planning Board approved the project with seven conditions of approval related to easements, financial capacity, construction management, site plan revisions, a revised Transportation Demand Management plan, and a Certificate of Appropriateness from the Historic Preservation Board (Attachment D).

The Planning and Urban Development Department granted a three-year site plan approval for the approved building addition (Attachment E). Friends of the St. Lawrence Arts Center did not construct the approved building addition and the site plan approval expired on January 23, 2021.

V. EXISTING CONDITIONS AND SURROUNDING AREA

Located on Congress Street between Munjoy Street and Beckett Street, the St. Lawrence Arts center is in the center of Munjoy Hill. The proposed development is located in Contract Zone C-58 which was established in 2010 and amended in 2015. The surrounding zoning is generally R-6 Residential with a B-1 Neighborhood Business zone mapped along Congress Street to the South and a B-1b



Figure 2: Existing Street View

Neighborhood Business zone mapped across the street, which contains a four-story mixed-use residential building with ground floor restaurant. The site is also located within the Munjoy Hill Historic District that was established in 2021. Munjoy Hill is primarily residential, with residential uses surrounding the proposed development to the north, east, and south. Congress Street contains a mixture of residential and commercial uses. Three blocks north of the proposed development is the Eastern Promenade.

VI. PROPOSED DEVELOPMENT

Friends of St. Lawrence Arts Church are proposing to construct a new auditorium located on the former sanctuary site and renovate the existing Parish Hall auditorium. The new, approximately 6,000 square foot auditorium includes 401 seats, a primary lobby space that will serve both the new Performance Arts Hall and the renovated Parish Hall, new auxiliary spaces including a catering kitchen, concession area, green room, dressing room, and bathrooms, and an additional function space on the third floor. The renovations to the existing Parish Hall auditorium will expand the seating capacity from 99 to 120, add additional office space, and a meeting room.

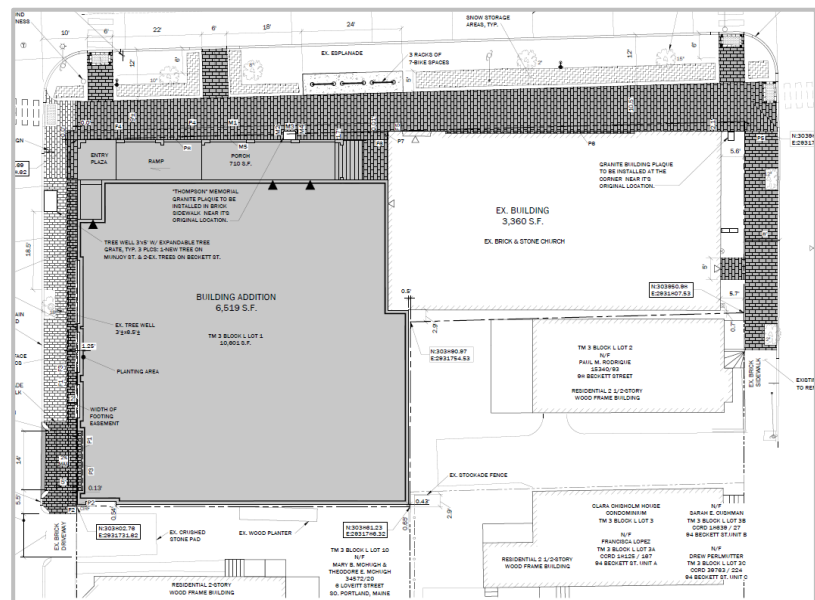


Figure 3: Proposed Site Plan

VII. RIGHT, TITLE, & INTEREST

The applicant submitted a deed as evidence of right, title, and interest (Attachment 7). The proposed development will require a public access easement from the applicant to the City of Portland for areas of the sidewalk that are proposed on private property, a maintenance agreement from the City of Portland to maintain the Thompson Memorial Plaque, and an encroachment agreement from the City of Portland for portions of the footings proposed within the right-of-way. The applicant has provided draft easements with an abutting neighbor for portions of the footings proposed on the neighbor's property. The applicant has provided draft copies of the easement and agreements (Attachments 18 + 19). Conditions of approval have been included to finalize the easement and the agreements with the Planning Authority and Corporation Counsel, and submit final recorded documentation to the city.

VIII. FINANCIAL & TECHNICAL CAPACITY

The applicant provided a letter dated April 14, 2022 (Attachment 21) that depicts the Friends of St. Lawrence Church success as a 501(c)3 charity organization. The letter highlights the organization's 2021 Capital Campaign and Budget process that estimates the project budget at \$13.5 million. The organization notes that they have received only 1/3 of the funding through a donor and require site plan approval to complete fundraising. A condition of approval requiring the applicant to provide final evidence of financial capacity from a financial institution has been included.

The applicant submitted a document (Attachment 22) demonstrating the technical capacity of the organization and consulting companies assisting with the proposed development. The applicant team includes Walsh Engineering Associates, Archetype Architects, Bennett Engineering Inc., Mechanical Systems Engineers, Wright-Ryan Construction, and Structural Design Consulting Inc.

IX. ZONING ANALYSIS

The proposed development is contained entirely within Contract Zone C-58 (Attachments F+G). The table below includes both dimensional standards and other requirements of the conditional zoning agreement:

	C-58 Standard	C-58 Requirement	Proposed
Dimensional Standards	Use	Place of Assembly / Community Hall	Place of Assembly
	Lot Size (minimum)	10,500 sq. ft.	10,601 sq. ft.
	Rear Yard (minimum)	0 ft.	0 ft.
	Side Yard (minimum)	0 ft.	3 ft.
	Lot Coverage (maximum)	0 sq. ft.	0 sq. ft.
	Sanctuary Structure Height (maximum)	54 ft.	54 ft.
	Lot Width (minimum)	50 ft.	160 ft.
	Open Space Ratio	0%	0%
Occupancy Restriction		Maximum number of attendees at any single event or combination of events limited to 485 persons. Maximum seats in Parish Hall theater restricted to 120. Seats in sanctuary auditorium restricted to 401. No separate audience events to be held in Parish Hall and sanctuary at same time.	Applicant is proposing a new 401 seat auditorium and renovations in the existing Parish Hall auditorium include 120 seats.
Maintenance		Owner responsible for ongoing maintenance.	n/a

Sidewalks	Owner to install brick sidewalks along Munjoy, Beckett, and Congress Street frontages and reset existing pink granite curbing as necessary.	The proposed development includes brick sidewalks and repairing any existing brick sidewalks due to construction.
Street Trees	Owner to provide two street trees along Munjoy, Beckett, and Congress Street frontages, unless healthy trees exist.	The proposed development includes two street trees along Munjoy and Beckett Frontages and four street trees along the Congress Street frontage.
Street Lighting	Owner to install two Downtown District street lights along Congress Street frontage.	The proposed development includes two decorative street lights according to Technical Manual Section 10 – Municipal Street Lighting.
Crosswalks and Ramps	Owner to install remaining crosswalks, ADA-compliant ramps, and other pedestrian improvements at Congress/Beckett Streets, Congress/Howard Streets, and Congress/Munjoy Streets.	The proposed development includes details to update all sidewalk ramps and crossings according to ADA standards.
TDM/Off-Street Parking Requirement	TDM plan required, and must include annual \$70,000 contribution to Sustainable Transportation Fund and monitoring provisions. Requirement of TDM plan to supersede any and all parking requirements of the land use code. During site plan review, Planning Board to provide communication to Council that may include recommendations for on-street parking regulations.	Applicant has submitted a TDM plan which includes \$70,000 annual contribution to the Sustainable Transportation Fund and monitoring provisions. No off-street parking proposed.
Tour Buses	Owner to ensure that tour buses, vans, and trucks affiliated with events unload and relocate to remote, off-street parking location during event.	Loading restrictions noted in TDM Plan.

SITE PLAN REVIEW STANDARDS (Section 14.6)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's Site Plan Ordinance, Section 14.6. Staff comments are attached (Attachments A + B) and are summarized below:

1. Transportation Standards (Section 14.6.1)

A. Impact on surrounding street systems

The applicant has submitted a Modified Traffic Movement Permit (TMP) Application and Traffic Study (Attachments 12 + 13). The City's Third-Party Traffic Engineer reviewed the application and determined no scoping meeting was required. The Modified TMP provides updated parking and

crash data. Following a review by the City's Third-Party Traffic Engineer and City Staff, the information is found to be acceptable.

B. Access and circulation

The proposed development includes plans and details noting improvements to the frontages along Congress Street, Munjoy Street, and Beckett Street. These improvements include brick sidewalks and repairs to sidewalks impacted by development, ADA-compliant sidewalk ramps and street crossings. The applicant is proposing to replace the existing on-street parking along Congress Street with a limited passenger drop-off area.

The proposed development also includes a service driveway off of Munjoy Street. The applicant has submitted a waiver request to Technical Manual Standard 1.7.2.7 that requires 100-150 ft. between driveways depending on speed limits. The proposed driveway is 5.5 ft. from the adjacent driveway. The applicant notes that extraordinary conditions exist or undue hardship may result with strict compliance to this standard. The proposed driveway will function as a service entrance for the two auditoriums including load-in and load-out of events and deliveries to the facilities. Given low traffic volumes along Munjoy Street and limited use of the driveway, City Staff and the consulting Third-Party Traffic Engineer are supportive of this waiver request.

The applicant is proposing valet service along Congress Street to mitigate vehicle congestion in the surrounding area. Monitoring elements and valet operations are discussed below as part of the TDM plan. Furthermore, the contract zone requires the applicant to ensure tour buses, vans, and trucks affiliated with performances and events at the proposed development unload and then relocate to a remote, off street parking location away from the venue for the duration of the event.

C. Public transit access

The proposed development is not located directly along any Greater Portland METRO line. However, METRO Route 1 circles Munjoy Hill along North Street, Eastern Promenade, Fore Street, Atlantic Street, and Congress Street before heading back downtown along Congress Street. METRO Route 1 has stops at approximately quarter-mile intervals along the entire route. The proposed development has three stops nearby: 1) a stop at North Street and Congress Street; 2) a stop at Lafayette Street and Congress Street; and 3) a stop at Atlantic Street and Monument Street. Headways are thirty minutes between 5:25 a.m. and 9:10 p.m. with reduced service after 9:10 p.m. On Sundays, the headways are increased to an hour.

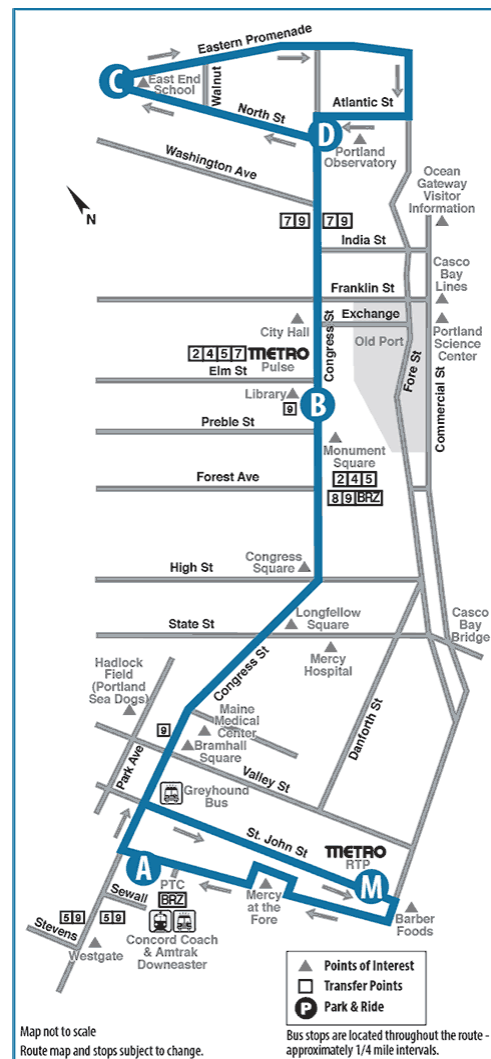


Figure 4: GP Metro Route 1

The TDM Plan requires Friends of St. Lawrence Church to provide an annual contribution of \$70,000 to the Sustainable Transportation Fund. This contribution will be directed to METRO in order to enhance and expand existing services on Route 1 with the intention of reducing evening headways to 15-20 minutes and expanding service to 11 p.m. Monday through Saturday. Additionally, Friends of St. Lawrence Church is proposing to subsidize transit passes for ticket holders, allowing patrons to use their ticket as valid bus fare.

D. Parking

According to the requirements of Contract Zone C-58, the requirements of a TDM Plan “supersede any and all parking requirements of the land use code for the property.” Moreover, according to Table 19-B Categorical Exceptions to Off-street Parking Minimums, no off-street parking is required for sites within ¼ mile of fixed route transit. The applicant has provided a Parking Demand Assessment, as part of the updated TMP application (Attachments 10 + 11), for the proposed development. The site will generate a net increase of 170 vehicle trips during peak hours of the site typically when events are scheduled in the early evening hours. The 401-seat auditorium will generate a peak parking demand of 158 parking spaces. The applicant notes that 883 public on-street parking spaces are located within 5 minutes of the proposed development and measured a peak neighborhood parking demand of 574 spaces on Thursday and 661 spaces on Sunday leaving an anticipated 309 parking spaces on Thursday and 222 spaces on Sunday. The City’s Third-Party Traffic Engineer has reviewed the provided parking analysis and finds the information sufficient.

The applicant is also providing bike racks with 20 bicycle parking spaces along the frontage on Congress Street.

E. Transportation demand management (TDM)

As required in the C-58 Contract Zone, the applicant has submitted a TDM plan (Attachment 24) based upon the anticipated attendance at events. The TDM aims to reduce trips and parking demand by 6-10% in the first year. The proposed TDM is based on the draft included as part of the C-58 Contract Zone agreement. The applicant proposes the following:

- **GP Metro Subsidies and Traffic Incentives:** The primary strategy of this TDM is a \$70,000 annual subsidy to GP METRO to improve its Route 1 service as shown above. This contribution would increase evening headways from 45 minutes to 30 minutes and extent service to 11 p.m. Monday through Saturday. This annual subsidy will allow patrons of the proposed development to use theater tickets as valid fare to board the bus. The renovated lobby will include a display screen with real-time tracking information, allowing this area to effectively serve as a waiting area.
- **Valet Parking:** The TDM plan also includes front-door valet service for patrons with incentives at point of ticket purchase. Cars would be stored in remote lots.
- **Bicycle and Pedestrian Infrastructure:** The applicant will be providing bicycle racks with 20 bicycle parking spaces in front of the building along Congress Street. The applicant is also proposing to improve all sidewalks and crosswalks according to ADA guidelines and requirements.
- **Free Market Options:** The TDM Plan also notes the existence of other mode choices, such as cabs, pedicabs, and transportation network companies (TNCs), which will be available to patrons. The applicant also seeks to collaborate with the City of Portland as part of a future TDM monitoring to incorporate the Portland Bikeshare program.
- **Rideshare:** The applicant will offer discounted tickets for carpooling patrons and will facilitate ridesharing by developing one-time ride-matching services in conjunction with GoMaine.

- Overall Incentives: In addition to discounted ticket pricing for those who use alternative modes of transportation, the TDM Plan proposes an incentive campaign with monthly raffles for the first year of operation.

The City's Third-Party Traffic Engineer reviewed the updated TDM based off of the previous comments provided during the 2018 Level III Site Plan review. The Parking Demand Assessment (PDA) and PDA Addendum (Attachments 10 + 11) discuss changes and updates to the original TDM plan. The original PDA utilized 2022 traffic calculations which have since been updated in the most recent TMP application. The PDA Addendum responds to the Third-Party Traffic Engineer's previous comments on the TDM. A condition of approval has been included as part of this application to incorporate new elements of the PDA into the TDM plan.

The PDA includes incentives for reducing vehicle impacts. These incentives include free transportation and discounts on future tickets to encourage patrons to use downtown lots and parking garages. The Third-Party Traffic Engineer suggests incorporating these incentives directly into the TDM Plan and confirm that the required monitoring include specific details on incentives. The PDA provides additional details on ticket surcharge and describes how these surcharges will be distributed towards TDM approaches. Although final details depend on specific events, the fees collected would be allocated towards operating costs and transportation incentives including subsidized bus rides. The applicant will be subsidizing parking costs away from the proposed development at various parking garages such as Temple Street Garage, the Bay Club, and Free Street. The applicant will cover some of the parking costs associated with the garage via parking validation. The applicant notes parking validation is typically limited and can vary depending on the garage. For example, the Temple Street Garage typically only offers three hours of validated parking. As part of a final TDM, the City's Third-Party Traffic Engineer requests the applicant to confirm the extent and scope of subsidies at all parking garages to be used. In addition to subsidizing parking costs at the Temple Street garage, the applicant is planning to provide information related to alternative parking locations, hours, and costs enabling patrons to choose other parking opportunities in Portland.

The TDM Plan also includes a \$70,000 yearly contribution to Greater Portland METRO to increase trips along METRO Route 1 as discussed above. The applicant provided an updated letter of commitment from GP Metro (Attachment 25).

The Third-Party Traffic Engineer notes that specific details have not been provided regarding the monitoring program, but the final TDM plan should include specific monitoring components regarding the valet parking program. City Staff and Third-Party Traffic Engineer are comfortable with adjusting the operation and scope of valet parking on site depending on demand as it relates to other measures of the TDM plan.

2. Environmental Quality Standards (Section 14.6.2)

A. Preservation of significant natural features

There are no known significant natural features located on site.

B. Landscape preservation

The proposed development covers the entire parcel and no on-site landscaping will be preserved.

C. Site landscaping and buffers

The applicant is proposing to maintain existing street trees along Congress, Munjoy and Beckett Streets, and to add two street trees along both Munjoy and Beckett streets and four street trees along Congress Street.

D. Water quality/storm water management/erosion control

The City of Portland has assessed the former sanctuary space (the site of the proposed new auditorium) as impervious area since its demolition. As such, the proposed expansion is not increasing the amount of impervious surface on site. The applicant is not proposing any stormwater treatment measures.

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

A. Consistency with City Master Plans

The project is generally deemed consistent with related master plans.

B. Public safety and fire prevention

Fire and Public Safety have found the proposal to be sufficient and meets the applicable standards.

C. Availability and capacity of public utilities

The applicant has provided evidence of water (Attachment 14) and wastewater capacity (Attachment 15).

4. Site Design Standards (Section 14.6.4)

A. Massing, ventilation, and wind impact

The proposed bulk, location, and height of the new auditorium and renovations to the existing auditorium will not result in health or safety problems from a reduction in ventilation to abutting structures. The proposed project is within the permitted height limits of the contract zone.

B. Shadows

The proposed development will not result in shadows on publicly accessible open space.

C. Snow and ice loading

The applicant will be required to remove any snow on side walks along Congress, Beckett, and Munjoy Streets.

D. View corridors

The project does not abut a protected view corridor.

E. Historic resources

The proposed development is a historic property on the National Register of Historic Places, a landmark for the City of Portland, and within the Munjoy Hill Historic District. The City's Historic Preservation Board is currently reviewing the proposed development and reviewing renderings (Plans 2-6), elevations (Plans 13 + 14), and other documents. The applicant will be required to receive a Certificate of Appropriateness from the Historic Preservation Board. This has been included as a condition of approval.

F. Exterior lighting

The applicant has provided an update lighting plan (Attachment 17) that includes direct references to the City's Technical Manual. The proposed development meets the street lighting and exterior lighting standards of the Technical Manual.

G. Noise and vibration

The proposed development includes rooftop mechanicals that will be screened from the public right-of-way.

H. Signage and wayfinding

Signage will be reviewed as part of the Historic Preservation Board's Certificate of Appropriateness and issued via a permit by Zoning and Historic Preservation.

I. Zoning-related design standards

Given the historic landmark status of the existing structure, and location within the Munjoy Hill Historic District, the applicant is required to obtain a certificate of appropriateness from the Historic Preservation Board for the proposed addition. The site plan ordinance exempts projects from design review when the design review is under the purview of the historic preservation ordinance.

X. NEIGHBORHOOD MEETING & PUBLIC COMMENT

The Planning & Urban Development Department has received four written comments (PC 1-5). Most of the public comments express concerns over parking in the Munjoy Hill neighborhood noting that the proposed development will increase parking demand in the area. Four public comments voiced concerns regarding parking capacity on Munjoy Hill and one expressed support over the proposed development.

The applicant has held a Neighborhood Meeting on March 8, 2023 at 4 p.m. as required (Attachment 23).

XI. STAFF RECOMMENDATION

Subject to the proposed motions and conditions of approval listed below, Planning & Urban Development Department staff recommend to the Planning Board that PL-002341-2023, an application to construct a new auditorium and renovate an existing auditorium at 76 Congress Street, meets the applicable standards of Portland's Land Use Code.

XII. PROPOSED MOTIONS

A. WAIVERS

On the basis of the application, plans, reports, and other information submitted by the applicant, findings and recommendations contained in the Planning Board Report for the public hearing on May 9, 2023 for application PL-002341-2023 at 76 Congress Street relevant to the Site Plan Standards of the Land Use Code and Portland's Technical and Design Standards, and other regulations, and testimony presented at the Planning Board public hearing:

1. The Planning Board [**finds/does not find**], based upon City Staff and the Third-Party Traffic Engineer's review, that extraordinary conditions exist or undue hardship may result from strict compliance with the City of Portland's Technical Manual section 1.7.2.7 which a 100-150 ft. driveway separation along arterial, collector, and local streets. The Planning Board [**waives/does not waive**] the Technical Manual standard for driveway separation.

B. TRAFFIC MOVEMENT PERMIT

On the basis of the application, plans, reports, and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on May 9, 2023 for application PL-002341-2023 at 76 Congress Street relevant to Portland's Technical Standards and other regulations; and the testimony presented at the Planning Board hearing, the Planning Board [finds / does not find] that the plan is in conformance with 23 MRSA 704-A and Chapter 305 Rules and Regulations pertaining to Traffic Movement Permits.

C. SITE PLAN REVIEW

On the basis of the application, plans, reports, and other information submitted by the applicant, findings and recommendations contained in the Planning Board Report for the public hearing on May 9, 2023 for application PL-002341-2023 at 76 Congress Street relevant to the site plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board [finds/does not find] that the plan is in conformance with the site plan standards of the land use code subject to the following conditions of approval:

PRIOR TO APPLYING FOR A BUILDING PERMIT.

1. The applicant shall provide a final executed easement agreement with the abutting neighbor related to construction of the building footings across property lines.
2. The applicant shall provide recorded copies of all required easements and licenses with the City, including:
 - a. A license from the City of Portland for footings proposed in the right-of-way for review and approval by Corporation Counsel, the Department of Public Works, and the Planning Authority;
 - b. A public access easement from the applicant to the City of Portland for areas of sidewalk that are proposed on private property.
3. The applicant shall provide further evidence of financial capacity from a financial institution for review and approval by the Planning Authority.
4. The applicant shall provide evidence of a Certificate of Appropriateness from the Historic Preservation Board.

PRIOR TO ISSUANCE OF BUILDING PERMIT

5. The applicant shall enter into a maintenance agreement with the City of Portland related to the maintenance of the Thompson Memorial Plaque for review and approval by the Department of Public Works and the Planning Authority.
6. The applicant shall provide a revised TDM plan addressing the comments of the City's Consulting Third-Party Traffic Engineer including confirmation on parking garage subsidies, including specific details on incentives as part of the monitoring requirements, and utilization and management of ticket surcharge allocations for review and approval by the Department of Public Works and the Planning Authority.

XIII. ATTACHMENTS

APPLICANT SUBMITTAL

1. Project Description and Cover Letter
2. List of Documents + Drawings
3. January 2018 PB Approval Letter
4. Construction Management Plan
5. General Documents Checklist
6. General Application Standards Compliance

7. Warranty Deed
8. Agent Authorization
9. Zoning Analysis Table
10. Parking Demand Assessment
11. Parking Demand Assessment Addendum
12. TMP Application 2022
13. TMP Application 2023 Update
14. PWD Ability to Serve
15. Wastewater Capacity
16. Portland Fire Department
17. Site Electrical Lighting
18. 18 Draft Footing License
19. Draft Sidewalk Easement
20. Waiver Table
21. Financial Capability Letter
22. Technical Capability
23. Neighborhood Meeting Material
24. TDM Plan
25. GP Metro Letter

PLANS

- Plan 1. Boundary and Topo Survey
- Plan 2. NW Rendering
- Plan 3. SW Rendering
- Plan 4. NE Rendering
- Plan 5. West Street View
- Plan 6. East Street View
- Plan 7. Basement
- Plan 8. First Floor
- Plan 9. Upper Balcony
- Plan 10. Intermediate Balcony
- Plan 11. Promenade
- Plan 12. Street Views
- Plan 13. Elevations 1
- Plan 14. Elevations 2
- Plan 15. Project Notes
- Plan 16. Site Plan
- Plan 17. Existing Conditions
- Plan 18. Grading + Utilities
- Plan 19. Erosion Control
- Plan 20. Landscape
- Plan 21. Sidewalk Ramp Details
- Plan 22. Details 1
- Plan 23. Details 2

STAFF ATTACHMENTS

- A. Staff + Third-Party Preliminary Comments
- B. Staff + Third-Party Final Comments

- C. 2018 Planning Board Report
- D. 2018 Planning Board Approval Letter
- E. 2018 Approval Extension Letter

PUBLIC COMMENT

- PC 1. Caren Zarolinski 3/8/23
- PC 2. Christine Kiley 3/9/23
- PC 3. Mary McHugh 3/9/23
- PC 4. Will Bleakley 3/8/23
- PC 5. Madisen Corcoran 3/21/23 + 5/4/23



December 28, 2022

City of Portland Planning Authority
City Hall, 4th Floor
389 Congress Street
Portland, Maine 04101

RE: St. Lawrence Arts Addition
76 Congress Street
Parcel ID: 003-L-001
Project ID: 2016-265

On behalf of Friends of the St. Lawrence Church, Walsh Engineering Associates (WEA) is pleased to submit this Major Site Plan Development Application along with supporting documents for the St. Lawrence Arts addition located at 76 Congress Street.

The project was originally reviewed and approved as a Major Site Plan by the Portland Planning Board in January 2018. Due to a variety of factors, the project was not undertaken, and the approval lapsed. Therefore, the application included with this submission includes the plans and supporting documents as previously approved with some minor adjustments.

Project History

The City of Portland approved a 10-year contract zone to the property in 2010 so plans for the restoration of the historical sanctuary could begin. With the decision to move forward with a more contemporary design, the City approved a 10-year contract zone amendment in 2014 (expiration 2024).

A Major Site Plan application was originally submitted to the City of Portland Planning Board in 2016. The application was approved with waivers and conditions on January 30, 2018. Due to an extended fundraising period, the permit lapsed before construction could begin.

Now, with the commitment of a major capital gift that has brought the organization over a third towards its working campaign goal, the project is being resubmitted to update the approval. The structure and site are essentially unchanged from the 2018 approval. Minor adjustments to accommodate normal neighborhood changes or upgrades that have occurred over the five-year period are listed in this letter.

The project includes the construction of the Performance Arts Hall in the former sanctuary space at the corner of Congress and Munjoy Streets. This will consist of a 401-seat auditorium, a lobby serving both the Performance Arts Hall and the Parish Hall, an upper function room integrated with the roof providing sweeping views of Casco Bay, and support spaces (kitchen, concession area, dressing rooms, and bathrooms).

The project includes the renovation of the existing Parish Hall Theater.

The complex will have an integrated accessible entrance and an elevator to serve all public areas of the buildings.

Only one waiver was requested for this project. It references the Technical Manual standard Section 1.7.2.7, to allow a driveway cut on Munjoy Street approximately 7.5 feet from the adjacent driveway to the south. This waiver was accepted by the Planning Board in 2018. The waiver is updated to the current design and is requesting a waiver to allow the driveway cut on Munjoy Street to be approximately 5.5 feet from the adjacent driveway.

The Conditions of Approval from 2018 are addressed as follows:

Conditions of Approval (2018)

The Planning Board voted 7-0 in January 2018 that the plan was in conformance with the site plan standards of the Land Use Code, subject to the following Conditions of Approval, which must be met prior to the issuance of a building permit. The requests from the Board are in italics, and WEA's responses are in regular type:

1. *The applicant shall provide recorded copies of all required easements and licenses, including:*
 - a. *A public access easement from the applicant to the City of Portland for areas of sidewalk that are proposed on private property;*
 - b. *A license from the City of Portland for purposes of the Thompson Memorial plaque;*
 - c. *A license from the City of Portland for footings proposed in the right-of-way for review and approval by Corporation Counsel, the Department of Public Works, and the Planning Division;*

Easements and licenses requested by the City are depicted on the plans and will be submitted for acceptance to Corporation Counsel, the Department of Public Works, and the Planning Division. The easements and licenses will be recorded at the Cumberland County Registry of Deeds after site plan approval.

Draft copies of the Public Access Easement, and the licenses for the Thompson Memorial Plaque and Proposed Footings have been included with this submission.

2. *The applicant shall provide evidence of financial capacity from a financial institution for review and approval by the Planning Division;*

A letter from the Friends of St. Lawrence Church, serving as evidence of financial capacity, has been included with this submission.

3. *The applicant shall provide a final construction management plan for review and approval by the Department of Public Works and the Planning Division;*

A construction management plan prepared by Wright-Ryan Construction has been included with this submission.

4. *The applicant shall provide a revised site plan including:*

- *Details are required to determine ADA compliance of sidewalk ramps with respect to grades and clearances for review and approval by the Department of Public Works;*

The ramps that align with the crosswalk across Munjoy Street have been improved by the City since the original approval. The remaining six ramps, located on Congress and Beckett Streets, will be improved as part of this project. The details for the accessible ramps are shown on Sheet C1.6.

- *Street lighting as specified on Congress Street per pending revisions to the City's Technical Manual; for review and approval by the Department of Public Works and the Planning Division;*

A lighting plan and calculations prepared by Bartlett Design have been included with this submission. The lighting cut sheets reflect the current Technical Manual recommendations.

5. *The applicant shall provide a revised TDM plan addressing the comments of the city's consulting traffic engineer for review and approval by the Department of Public Works and the Planning Division;*

A revised plan (now called a Parking Demand Assessment) prepared by Traffic Solutions dated March 2022, has been submitted with this application. The 2018 review comments of the city's consulting traffic engineer have been addressed in an addendum letter by Deirdre Nice, Executive Director, St. Lawrence Arts. The letter outlines incentives for reducing vehicle impacts, such as a bicycle discount program, valet services, and expanded METRO services. This letter has been included with this submission.

6. *The applicant shall provide evidence of a Certificate of Appropriateness from the Historic Preservation Board;*

Archetype Architects has worked closely with the Historic Preservation Board regarding the material selections and building details for the project. Following more discussion, additional communication with the Planning Board on these decisions, and public final approval, we are confident that a *Certificate of Appropriateness* will be granted from the Board.

7. *The applicant shall provide a final site lighting plan including photometric calculations compliant with the City of Portland Technical Manual and a plan for integration with the Sanctuary for review and approval by the Planning Division.*

A lighting plan and calculations prepared by Bartlett Design have been included with this submission. The lighting cut sheets reflect the current Technical Manual recommendations.

Plan Changes to the Previously Approved Project (2018)

Only minor changes have been made to the plans and details that were originally submitted to the City in 2016 and approved in 2018. Below is a list of the site alterations, which are reflected on the updated 2022 site plans:

Along Munjoy Street:

- The backstage access driveway has been redesigned to use granite stones at the transitions to the sidewalk instead of flared ramps per the Cities current preferred driveway detail. The driveway has been widened to 14 feet;
- The Munjoy Street sidewalk was reconstructed in 2021 so reconstruction of the entire sidewalk is no longer required. However, a portion of the sidewalk will need to be removed to install the new building's foundation. The sidewalk will be reinstalled where removal of the brick is necessary and extended to the face of the future building as shown on the plans. Due to the rebuild the granite curb along Munjoy Street no longer needs to be removed and reset;
- A tree well on Munjoy Street was resized when the sidewalk was rebuilt to accommodate the existing tree. Due to the tree size and configuration the current tree well cannot accommodate a tree grate;
- The plant alcove in the building wall has been removed and plant beds for the Greenscreens are added in 3 places along the wall.

Along Congress Street:

- Between June of 2020 and October of 2021 an existing 8" caliper tree in the Congress Street esplanade was removed and a new tree installed. The new tree is installed in a slightly different location than the previous tree. This does not interfere with or alter the layout, and the plans have been updated to indicate the current 3" caliper tree size and location;
- The *City of Portland Standard Details* have been updated to current versions;
- The basis of bearing has been added to the north arrows on all the plan sheets;
- A public pedestrian easement from Friends of St. Lawrence to the City of Portland has been included on Congress and Munjoy Streets where the brick sidewalk extends on to the subject parcel.

A complete index of all documents is included in the application following this letter. We look forward to working with the City of Portland and Planning Staff in the review of this project.

Respectfully,

William R. Walsh III, PE, LEED AP
Principal
Walsh Engineering Associates, Inc.

cc: Deirdre Nice, Executive Director, St. Lawrence Art
David Lloyd, Archetype Architects

**St. Lawrence Arts Center Addition
76 Congress Street
Parcel ID: 003-L-001
Project ID: 2016-265**

**MAJOR SITE PLAN GENERAL DOCUMENT & DRAWINGS CHECKLIST
List of Documents & Drawings**

General Application Documents

Project Description, Cover Letter

- Project Description & Cover Letter
- List of Documents & Drawings
- January 2018 PB Approval Letter
- Construction Management Report & Plans

Completed Checklist

- General Document & Drawings Checklist
- General Application Standards, Compliance

Evidence of Right, Title & Interest

- Warranty Deed CCRD Bk 1333 Pg 9 – 1997
- Agent Authorization

Zoning Assessment

- Zoning Analysis Table (Zoning Assessment Table)

Site Plan Standards Assessment (Section 14.6)

- General Application Standards
 - 14.6.1 Transportation Systems
 - Parking Demand Assessment
 - Parking Demand Assessment Addendum
 - Traffic Movement Permit Application Modification
 - 14.6.2 Environmental Quality Standards
 - Site Plan, C1.4 Erosion Control Plan
 - Site Plan, C1.5 Landscape Plan
 - 14.6.3 Public Infrastructure & Community Safety Standards
 - PWD, Ability to Serve, Revised 2022
 - Wastewater Capacity
 - Portland Fire Department Email
 - 14.6.4 Site Design Standards
 - Site Electrical, Lighting

Summary of Existing and/or Proposed Easements or Covenants

- Draft Footing License
- Draft Sidewalk Easements

Waiver Requests

- Waiver Table

Financial Capability

- Financial Capability Letter

Technical Capability

- Technical Capability

Site Plans and Details

C1.0	Project Notes
C1.1	Site Plan
C1.2	Existing Conditions and Demolition Plan
C1.3	Grading and Utilities Plan
C1.4	Erosion Control Plan, Notes and Details
C1.5	Landscape Plan, Notes and Details
C1.6	Sidewalk Ramp Details
C2.1	Details
C2.2	Details
1	Boundary and Topographic Survey

Architectural Plans and Elevations

A0.01	Northwest Rendering
A0.02	Southwest Rendering
A0.03	Northeast Rendering
A0.04	Street View from the West
A0.05	Street View from the East
A1.00	Basement Plan
A1.01	First Floor Plan
A1.02	Upper Balcony Plan
A1.03	Intermediate Balcony Plan
A1.04	Promenade Plan
A1.07	Street Views
A2.01	Building Elevations
A2.02	Building Elevations

CITY OF PORTLAND, MAINE

PLANNING BOARD

Sean Dundon, Chair
 Brandon Mazer, Vice Chair
 Elizabeth Boepple
 David Eaton
 Carol Morrisette
 Maggie Stanley
 Lisa Whited

January 30, 2018

Friends of the St. Lawrence Arts Center
 76 Congress Street
 Portland, ME 04101

Project Name:	St. Lawrence Arts Center Addition	Project ID:	2016-265
Address:	76 Congress St.	CBL:	003-L-001
Applicant:	Friends of the St. Lawrence Arts Center		
Planner:	Nell Donaldson		

Dear Ms. Nice:

On January 23, 2018, the Planning Board considered your proposed addition to the St. Lawrence Arts Center. The Planning Board reviewed the proposal for conformance with the standards of the City of Portland's site plan ordinance. The Planning Board voted 7-0 to approve the application with the following waiver(s) and condition(s):

Waivers

The Planning Board voted 7-0 to waive the Technical Manual standard, Section 1.7.2.7 as follows:

1. The Planning Board finds, based upon the consulting transportation engineer's review, that extraordinary conditions exist or undue hardship may result from strict compliance with the *Technical Manual* standard (Section 1.7.2.7) which requires that along arterials, collectors, and local streets, minimum acceptable spacing between driveways shall be 100-150 feet, depending on speed limit, that substantial justice and the public interest are secured with the proposed variation in this standard, and that the variation is consistent with the intent of the ordinance. The Planning Board waives the *Technical Manual* standard (Section 1.7.2.7) to allow the driveway cut on Munjoy Street approximately 20 feet from the adjacent driveway to the south as shown on the final plans.

Traffic Movement Permit

Based upon the City of Portland's Delegated Review Authority, the Planning Board voted 7-0 to approve the Traffic Movement Permit application, as submitted, as follows:

389 Congress Street / www.portlandmaine.gov / tel, 207•874•8720 / tty, 207•874•8936 / fax, 207•756•8258

1. On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the proposed plan is in conformance with 23 MRSA 704-A and Chapter 305 Rules and Regulations pertaining to Traffic Movement Permits.

Site Plan Review

The Planning Board voted 7-0 that the plan is in conformance with the site plan standards of the Land Use Code, subject to the following condition(s) of approval, which must be met prior to the issuance of a building permit, unless otherwise stated:

1. The applicant shall provide recorded copies of all required easements and licenses, including:
 - i. A public access easement from the applicant to the City of Portland for areas of sidewalk that are proposed on private property;
 - ii. A license from the City of Portland for purposes of the Thompson Memorial plaque; and
 - iii. A license from the City of Portland for footings proposed in the right-of-way for review and approval by Corporation Counsel, the Department of Public Works, and the Planning Division;
2. The applicant shall provide evidence of financial capacity from a financial institution for review and approval by the Planning Division;
3. The applicant shall provide a final construction management plan for review and approval by the Department of Public Works and the Planning Division;
4. The applicant shall provide a revised site plan including:
 - i. Details required to determine ADA compliance of sidewalk ramps with respect to grades and clearances for review and approval by the Department of Public Works;
 - ii. Street lighting as specified on Congress Street per pending revisions to the city's Technical Manual; for review and approval by the Department of Public Works and the Planning Division;
5. The applicant shall provide a revised TDM plan addressing the comments of the city's consulting traffic engineer for review and approval by the Department of Public Works and the Planning Division;
6. The applicant shall provide evidence of a Certificate of Appropriateness from the Historic Preservation Board; and
7. The applicant shall provide a final site lighting plan including photometric calculations compliant with the City of Portland *Technical Manual* and a plan for integration with the Sanctuary for review and approval by the Planning Division.

The approval is based on the submitted plans and the findings related to site plan review standards as contained in the Planning Report for application 2016-265 which is attached.

Standard Conditions of Approval

Please Note: The following standard conditions of approval and requirements apply to all approved site plans:

1. Develop Site According to Plan The site shall be developed and maintained as depicted on the site plan and in the written submission of the applicant. Modification of any approved site plan or

alteration of a parcel which was the subject of site plan approval after May 20, 1974, shall require the prior approval of a revised site plan by the Planning Board or Planning Authority pursuant to the terms of Chapter 14, Land Use, of the Portland City Code.

2. Separate Building Permits Are Required This approval does not constitute approval of building plans, which must be reviewed and approved by the City of Portland's Permitting and Inspections Department.
3. Site Plan Expiration The site plan approval will be deemed to have expired unless work has commenced within one (1) year of the approval or within a time period up to three (3) years from the approval date as agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the one (1) year expiration date.
4. Performance Guarantee and Inspection Fees A performance guarantee covering the site improvements, inspection fee payment of 2.0% of the guarantee amount and seven (7) final sets of plans must be submitted to and approved by the Planning and Urban Development Department and Public Works Department prior to the release of a building permit, street opening permit or certificate of occupancy for site plans. If you need to make any modifications to the approved plans, you must submit a revised site plan application for staff review and approval.
5. Defect Guarantee A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
6. Preconstruction Meeting Prior to the release of a building permit or site construction, a pre-construction meeting shall be held at the project site. This meeting will be held with the contractor, Development Review Coordinator, Public Works representative and owner to review the construction schedule and critical aspects of the site work. At that time, the Development Review Coordinator will confirm that the contractor is working from the approved site plan. The site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
7. Construction Management Plans The applicant, contractor and subcontractors are required to conform to the approved Construction Management Plan, and all conditions contained within the project's approval, for the entire duration of the project. Any amendments to the approved Construction Management Plan shall be reviewed and approved by the Department of Public Works prior to the execution. The Planning Authority and the Department of Public Works have the right to seek revisions to an approved Construction Management Plan. The applicant shall coordinate the project's construction schedule with the timing of nearby construction activities to avoid cumulative impacts on a neighborhood and prevent unsafe vehicle and pedestrian movements. Accordingly, nearby construction activities could involve a delay in the commencement of construction.
8. Department of Public Works Permits If work or obstructions will occur within the public right-of-way, such as utilities, curb, sidewalk, driveway construction, site deliveries and equipment siting, a Street Opening and/or Occupancy Permit (s) is required for your site. Please contact the

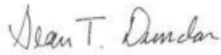
Department of Public Works Permit Clerk at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

9. As-Built Final Plans Final sets of as-built plans shall be submitted digitally to the Planning and Urban Development Department, on a CD or DVD, in AutoCAD format (*.dwg), release AutoCAD 2005 or greater.

The Development Review Coordinator must be notified five (5) working days prior to the date required for final site inspection. The Development Review Coordinator can be reached at the Planning and Urban Development Department at 874-8632. All site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Nell Donaldson at (207) 874- 8723

Sincerely,



Sean Dundon, Chair
Portland Planning Board

Attachments:

1. Planning Board Report
2. Portland City Code: Chapter 32
3. Sample Stormwater Maintenance Agreement [if applicable]
4. Performance Guarantee Packet

Electronic Distribution:

cc: Jeff Levine, AICP, Director of Planning and Urban Development
Stuart G. O'Brien, City Planning Director, Planning and Urban Development
Barbara Barhydt, Development Review Services Manager, Planning and Urban Development
Nell Donaldson, Planner/Senior Planner, Planning and Urban Development
Philip DiPierro, DRC, Planning and Urban Development
Mike Russell, Director of Permitting and Inspections
Ann Machado, Zoning Administrator, Permitting and Inspections
Jonathan Rioux, Deputy Director, Permitting and Inspections
Jeanie Bourke, Plan Reviewer/CEO, Permitting and Inspections
Chris Branch, Director of Public Works
Keith Gray, Senior Engineer, Public Works
Doug Roncarati, Stormwater Coordinator, Public Works
Jane Ward, Engineering, Public Works
Rhonda Zazzara, Construction Engineering Coordinator, Public Works
Jeff Tarling, City Arborist, Public Works
Jeremiah Bartlett, Transportation Systems Engineer, Public Works
William Scott, Chief Surveyor, Public Works
Mike Thompson, Fire
Danielle West-Chuhta, Corporation Counsel

Jennifer Thompson, Corporation Counsel
Victoria Volent, Housing Program Manager, Housing and Community Development
Thomas Errico, P.E., TY Lin Associates
Lauren Swett, P.E., Woodard and Curran
Christopher Huff, Assessor

PLANNING BOARD REPORT PORTLAND, MAINE



St. Lawrence Arts Center Addition
66-76 Congress Street
Level III Site Plan Review
2016-265
Friends of the Saint Lawrence Church

Submitted to: Portland Planning Board Date: January 19, 2018 Public Hearing Date: January 23, 2018	Prepared by: Nell Donaldson, Planner CBL: 3-L001 Project #: 2016-265
--	--

I. INTRODUCTION

The Friends of the St. Lawrence Church appears before the Planning Board for a public hearing for the site plan review of a proposed addition to their property at 76 Congress Street, the St. Lawrence Arts Center. Notice of this hearing appeared in the *Portland Press Herald* on January 22 and 23, 2018. Notices were sent to 275 property owners within 500 feet and to the interested citizens list.

Applicant: Friends of the St. Lawrence Church

Consultants: David Lloyd, Archetype; Thomas Greer, Pinkham & Greer; William Bray, Traffic Solutions; Sarah Cushman, Cushman Transportation Consulting

II. REQUIRED REVIEWS

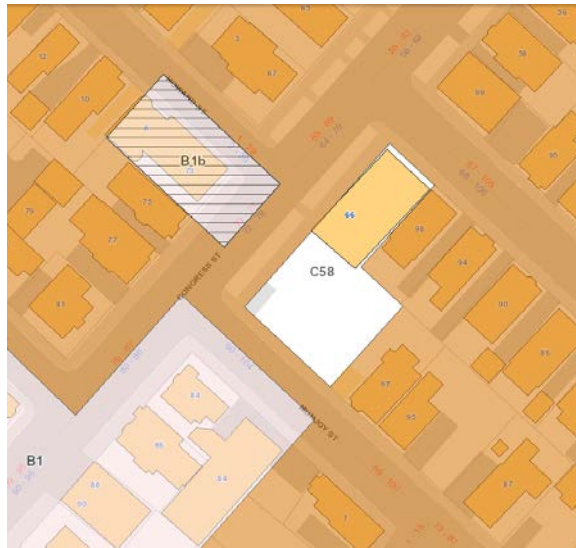
<i>Waiver Requests</i>	<i>Applicable Standards</i>
<i>Driveway Separation</i> – to allow a curb cut approximately 20' from the adjacent property's	Technical Manual, <i>Section 1.7.2.7</i> . Along arterial, collector, and local streets, minimum acceptable spacing shall be 100-150 feet, depending on speed limit.

<i>Review</i>	<i>Applicable Statute</i>
Site Plan	<i>Section 14-526, with Historic Preservation review</i>

III. PROJECT DATA

Existing Zoning	Conditional Zoning Agreement C58
Existing Use	Place of Assembly
Proposed Use	Place of Assembly
Proposed Development Program	14,768 SF Addition to include: • 401 seats and stage in sanctuary • New lobby and support space (green rooms, dressing rooms, bathroom, storage) • New conference and office space • New Promenade Room (to serve as lobby break area during performances, meeting space at other times)(200 person capacity)
Parcel Size	10,601 SF

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	3,360	9,075 SF	5,715 SF
Building Floor Area	10,540 SF	25,308 SF	14,768 SF
Impervious Surface Area	9,463 SF	9,978 SF	515 SF
Parking Spaces (on site)	0	0	0
Bicycle Parking Spaces	0	20	20
Estimated Cost of Project	\$10 million		



Figures 1 & 2: Zoning context (left) and St. Lawrence Arts Center (existing Parish Hall theater) at present (above)

IV. CONTEXT

The St. Lawrence Arts Center sits at 76 Congress Street in the heart of Munjoy Hill. The property is subject to a conditional zoning agreement adopted in early 2015. While the underlying zoning is R-6 Residential, the St. Lawrence neighbors a B-1 Neighborhood Business zone and lies directly across from an active restaurant use in a B-1b zone (*Figure 1*). Commercial uses sit on the Congress Street block immediately west. Residential uses surround the site to the north, east, and south. The property lies three blocks from the Eastern Promenade.

V. BACKGROUND

The building now occupied by the St. Lawrence Arts Center was originally constructed in 1897 as a church with two major building elements - the Parish Hall and the sanctuary. The building served as a church for almost a hundred years until its closure in 1986. In 2001, the Friends of the St. Lawrence took ownership of the building and renovated the Parish Hall into a live theater/auditorium space under the zoning provisions for a community hall; the sanctuary portion of the building, however, was left vacant as the Friends of St. Lawrence sought the means for renovation. Ultimately, the sanctuary fell into disrepair. In 2006, the primary roof trusses partially collapsed; shortly thereafter, the sanctuary was deemed unsalvageable. The sanctuary was dismantled in 2009. The Friends of the St. Lawrence recovered significant architectural features during the demolition with the intent of someday reconstructing the sanctuary building.

In 2010, the Friends of the St. Lawrence developed a proposal to rebuild the former church sanctuary in much its original form for use as a 402-seat performance venue. The applicant proposed a plan for the sanctuary that included many of the historic details of the old church building, including curbing, rose windows, and stone work. In order to rebuild such a structure, the applicant required relief from several provisions of the underlying R-6

zone, including the dimensional requirements. The concept was endorsed by the Historic Preservation Board and a conditional zoning agreement was drafted and formally adopted in November of 2010.

Following adoption of the agreement, the applicant embarked on a feasibility study with the intent of determining the extent of possible funding for the reconstruction project. It shortly became clear that the proposed reconstruction of the historic structure would be cost prohibitive. Instead, the Friends of the St. Lawrence shifted their vision for the proposed addition, focusing on what evolved into a contemporary expansion. In order to allow the change in design, an amended conditional zoning agreement was adopted by the City Council in early 2015.

It should be noted that the building was placed on the National Register in 1979, and was designated locally as a historic landmark in 1990. As a designated historic property, development on the site is subject to the Historic Preservation ordinance. The Historic Preservation Board has previously reviewed not only the demolition plans of the late 2000s, but also the reconstruction plans of 2010 and 2014.

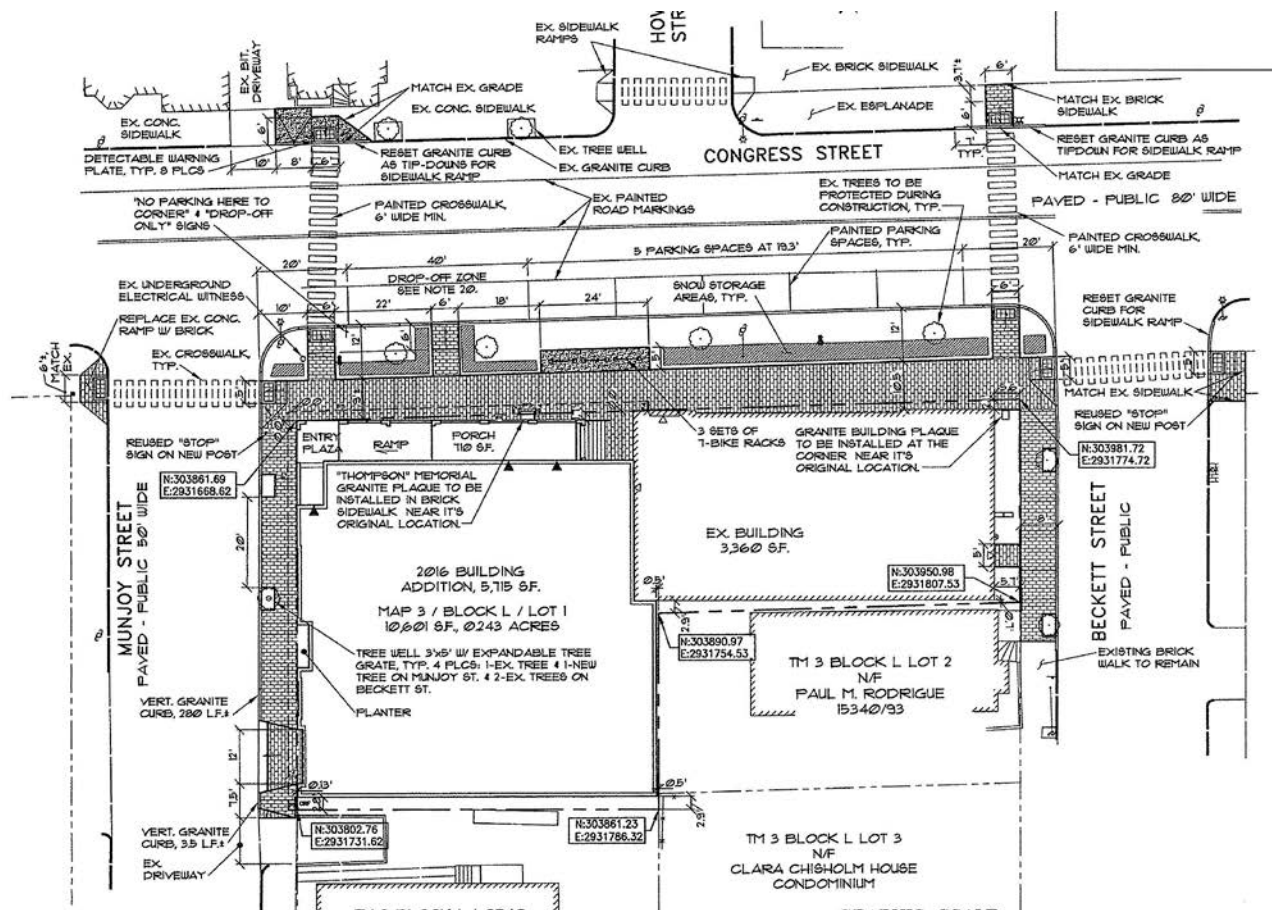


Figure 3: Final site plan

VI. PROPOSED DEVELOPMENT

The proposed St. Lawrence Arts Center project includes the renovation of the existing Parish Hall auditorium to increase the seating capacity to 120, add office space, and build a meeting room. The plans also include an addition in the old sanctuary space, including:

1. A 401-seat auditorium;

2. A new lobby to serve both the sanctuary and Parish Hall venues;
3. New support spaces including a catering kitchen, concession area, green room, dressing room, and bathrooms; and
4. A new function room, the Promenade Room, on the upper level, which would primarily be used as a lobby for the 401 seat performance hall

Overall, the footprint of the Arts Center is proposed to expand by just under 6,000 SF.

IX. PUBLIC COMMENT

The Planning Division has received no public comments on the site plan application for the St. Lawrence addition. However, the Planning Division did receive a number of comments over the course of the preceding conditional zoning agreement review. In general, the concerns regarding the development included its scale and massing, the proposed parking arrangement, and the TDM plan. The St. Lawrence held a neighborhood meeting at the outset of this site plan review. The summary indicates that attendees raised questions about architecture and parking (*Attachment P*).

VII. RIGHT, TITLE, & INTEREST

The St. Lawrence's application includes a deed as evidence of right, title, and interest (*Attachment D*). The final site plan shows areas of sidewalk on Congress Street that are proposed on private property; these will require a public access easement. Licenses will also be required for a plaque to be set in the sidewalk near the addition and building footings, which are proposed to encroach into the right-of-way. These have been included as conditions of approval.

VIII. FINANCIAL & TECHNICAL CAPACITY

The estimated cost of the project is approximately \$10 million. In their final submittal, the applicant has provided a letter attesting to their performance in fundraising as a 501(c)3 non-profit, and arguing that Planning Board approvals are necessary to allow effective fundraising for the Arts Center addition (*Attachment E*). Staff is recommending a condition of approval requiring that the applicant provide final evidence of financial and technical capacity prior to issuance of a building permit.

IX. ZONING ANALYSIS

Staff has conducted a zoning analysis based on the conditional zoning agreement (*Attachment F*).

Major Element of CZA		CZA Requirement	Proposal
Dimensional Standards	Use	Notwithstanding section 14-137(b)(6)(e)(i), the use shall be a place of assembly/community hall	Place of assembly
	Min. Lot Size	10,500 SF	10,601 SF
	Min. Front yard	0 ft.	0 ft.
	Min. Rear Yard	0 ft.	3 ft.
	Min. Side Yard on Side St.	0 ft.	0 ft.
	Max. Lot Coverage	95%	92% (9,785/10,601)
	Max. Sanctuary Structure Height	54 ft.	54 ft.
	Open Space Ratio	0%	0%
	Min. Lot Width	50 ft.	160 ft.

<i>Major Element of CZA</i>	<i>CZA Requirement</i>	<i>Proposal</i>
<i>Occupancy restriction</i>	Maximum number of attendees at any single event or combination of events limited to 485 persons. Maximum seats in Parish Hall theater restricted to 120. Seats in sanctuary auditorium restricted to 401. No separate audience events to be held in Parish Hall and sanctuary at same time.	
<i>Maintenance</i>	Owner responsible for ongoing maintenance.	
<i>Sidewalks</i>	Owner to install brick sidewalks along Munjoy, Beckett, and Congress Street frontages and reset existing pink granite curbing as necessary.	Brick sidewalks and note regarding pink granite curbing shown on final plan.
<i>Street Trees</i>	Owner to provide two street trees along Munjoy, Beckett, and Congress Street frontages, unless healthy trees exist.	One additional tree proposed on Munjoy Street. Other frontages have existing trees.
<i>Street Lighting</i>	Owner to install two Downtown District street lights along Congress Street frontage.	Two lights shown on plan. Use of Downtown light fixtures on this portion of Congress Street currently under review as city staff update the Technical Manual. Final lighting design suggested as condition of approval.
<i>Crosswalks and Ramps</i>	Owner to install remaining crosswalks, ADA-compliant ramps, and other pedestrian improvements at Congress/Beckett Streets or Congress/Howard Streets and Congress/Munjoy Streets.	Crosswalks denoted on plan. See specific comments under site plan review below.
<i>TDM/Off-Street Parking Requirement¹</i>	TDM plan required, and must include annual \$70,000 contribution to Sustainable Transportation Fund and monitoring provisions. Requirement of TDM plan to supersede any and all parking requirements of the land use code. During site plan review, Planning Board to provide communication to Council that may include recommendations for on-street parking regulations.	No off-street parking proposed. \$70,000 annual contribution and monitoring requirements noted in TDM plan.
<i>Tour buses</i>	Owner to ensure that tour buses, vans, and trucks affiliated with events unload and relocate to remote, off-street parking location during event	Loading restrictions noted in TDM plan and in truck loading memo.

¹The off-street parking requirement for places of assembly (including community halls) in Division 20 of the city's land use ordinance is 1 space/125 SF used for assembly purposes. Division 20 includes an exception for historic structures subject to the Historic Preservation ordinance (*Section 14-332.2*).

X. SITE PLAN SUBMISSION REQUIREMENTS (*Section 14-527*)

The applicant has provided all required submittals. Staff has suggested a condition of approval that a final construction management plan be reviewed and approved at the time of building permit. Jeff Tarling, the city's arborist, has requested that the final construction management plan include notes regarding the preservation of street trees along Congress Street and Munjoy Street.

XI. SITE PLAN REVIEW

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's site plan ordinance. Staff comments are below.

1. *Transportation Standards*

a. *Impact on Surrounding Street Systems*

The final submittal includes an application for a Traffic Movement Permit (*Attachments J and K*). The analysis included in this application estimates a total trip generation of 182 vehicle trips during the future peak hour, and a net change in trip generation of 170, most of which are anticipated to use Congress Street to access the Arts Center and its vicinity. Thomas Errico, the city's consulting traffic engineer, has reviewed the application and found the following,

In response to the TMP Scoping meeting, the applicant provided an estimate of likely traffic patterns for patrons attending SLAC events. As noted in the assessment, 182 vehicle trips can be expected to travel to an SLAC event during the peak hour. The applicant assumed 60 trips would be associated with the Valet Parking Services; 80 trips would be associated with patron drop-off activity – and parking locally; and 42 trips would directly park locally and walk to the site. The applicant estimated the following for traffic increases:

- 67 vehicles would travel to the project site via eastbound Congress Street.*
- 30 vehicles would depart the site on Congress Street as part of valet services.*
- 20 vehicles would travel to the project site via eastbound Cumberland Avenue.*
- 15 vehicles would travel to the project site via eastbound Fore Street.*
- 10 vehicles would travel to the project site via Walnut Street*

I find the estimate provided to be acceptable and the information satisfies the requirement of the Traffic Movement Permit (with the TDM Plan). The key outcome regarding the mitigation of traffic impacts is associated with the effectiveness of the TDM Plan.

The TDM Plan is discussed in further detail below.

b. *Access and Circulation*

The proposed Arts Center addition will fill out the remainder of the block frontage on Congress Street between Beckett and Munjoy Streets. New brick sidewalks are proposed on the Beckett, Congress, and Munjoy Street frontages. Two ADA-accessible crosswalks are proposed across Congress Street, at both Beckett and Munjoy Streets, and improvements are proposed to the existing crosswalks across Beckett and Munjoy Streets. In his final review, Mr. Errico has requested slight modifications to proposed ramps in these locations, writing,

The [Congress Street at Munjoy Street crosswalk] ramp flares impact pedestrian accessibility along the sidewalk. The ramp should be redesigned with dimensional details. A condition of approval should be included for final design details to be provided for review and approval prior to any City Permit.

Ramp flares at the westerly corner of Munjoy Street and Beckett Street currently impact the accessible route and revisions shall be provided including dimensioned

details. A condition of approval should be included for final design details to be provided for review and approval prior to any City Permit.

The plans show a curb cut at the southeasterly corner of the site along Munjoy Street, where an overhead door will stand. A driveway separation waiver has been requested. This waiver is supported by Mr. Errico.

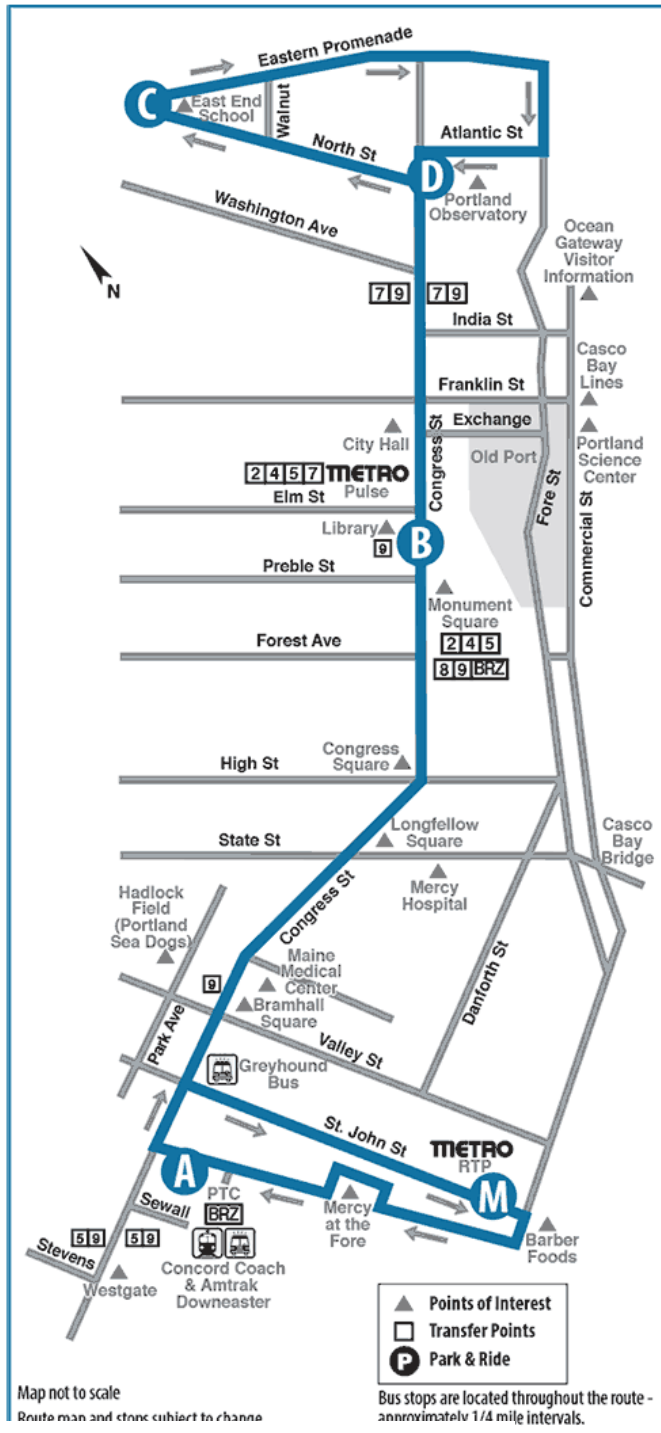


Figure 4: METRO Route 1

In the final submittal, the applicant has provided a plan for accommodating load-ins at this overhead door (*Attachment O*). The conditional zoning agreement continues to require that the property owner ensure that tour buses, vans, and trucks serving the site unload and then relocate to a remote, off-street parking location. Mr. Errico has reviewed the plan and indicated his approval.

c. Public Transit Access

Greater Portland METRO's Route 1 extends up and down Congress Street into Munjoy Hill, where the route proceeds in a clockwise loop around the East End, first on North Street past the East End School, along the Eastern Promenade, and then up Atlantic Street (one block south of Munjoy Street) back to Congress. Though the St. Lawrence is not located directly on this route, the Route 1 has three stops proximate to the St. Lawrence, at North and Congress Streets, Lafayette and Congress, and Atlantic and Monument Streets. Headways are thirty minutes between 5:15 a.m. and 8:45 p.m., with decreased frequencies after 9. Sunday headways are one hour.

Since the St. Lawrence is not located directly on a transit route, they are not required to provide transit accommodations. However, in their Transportation Demand Management (TDM) Plan (*Attachment M*), the St. Lawrence has proposed to provide an annual contribution of \$70,000, to be directed to METRO, to enhance and expand existing service on Route 1, which would permit METRO to improve evening headways to 15-20 minutes and offer service to 11 p.m., Monday through Saturday. In addition to the contribution to METRO, the St. Lawrence is proposing to subsidize transit passes for ticket holders, allowing patrons to use their ticket as valid bus fare.

d. Parking

The St. Lawrence's conditional zoning agreement states that the requirements of a TDM plan "supersede any and all parking requirements of the land use code for the property." However, given neighborhood concerns raised through the conditional zoning agreement review, and at the request of the city's traffic engineer, the applicant has made an effort to show the potential impact of patron parking on the surrounding on-street parking supply. (*Attachment K*). This analysis develops parking ratios based on survey data from recent shows at the St. Lawrence, and arrives at a total projected patron demand, at peak occupancy, of 158 spaces. This figure is below that from the original Parking Demand Management Plan developed in association with the conditional zoning agreement, which projected a total demand (including staff) of 228, but greater than that suggested by the city's TDM peer reviewer for the conditional zoning agreement review, Nelson-Nygaard, who developed an estimate of 122 based on ITE parking generation rates. Mr. Errico has reviewed the parking study methodology and writes,

The general estimate of a parking demand rate for the facility should be calculated according to the number of vehicles compared to the number of attendees at each of the surveyed events. Based upon the data supplied by the applicant for events that occurred on Tuesday, February 28, 2017; Tuesday, April 4, 2017; Wednesday, April 26, 2017; Saturday, April 29, 2017; Friday, May 5, 2017; Saturday, May 6, 2017; and Sunday, May 7, 2017, the average number of vehicles generated by each attendee is 0.4 vehicles. This rate corresponds well with ITE Parking Generation Rates (0.4 parking spaces per seat or attendee) and a parking survey conducted as part of the Contract Zone process on December 12, 2013 (0.4 parking spaces per seat or attendee). A parking survey was conducted on October 25, 2013 and determined a parking rate of 0.54 vehicles per seat or attendee. My general conclusions is that parking demand for a sold out event of 485 seats would be approximately 194 vehicles.

As with the parking study developed along with the conditional zoning agreement, the St. Lawrence has provided the results of a parking utilization study conducted in April of 2017. This study, which surveyed on-street parking spaces within a 5-minute walk of the St. Lawrence, showed a total on-street supply of approximately 880 spaces, between 65% and 72% of which were occupied during recent show times (with 572 and 636 spaces occupied, respectively). Of all the April occupancy counts, the highest (taken on an early Sunday morning) continued to leave approximately 220 on-street spaces within a 5-minute walk of the St. Lawrence available. This capacity is considerably greater than the total parking demand projected by the applicant's consulting engineer (158 spaces) and above that of Mr. Errico (194 spaces) as well.

The applicant has proposed to modify on-street parking on Congress Street to include a 40-foot drop-off zone directly in front of the entrance at the southerly end of the block and five on-street spaces in the space between this zone and the Congress/Beckett Street corner. The drop-off zone would be used during show times only. Mr. Errico writes,

The City does not recommend a continuous 5-minute parking regulation in front of the site. City staff would prefer to provide longer time parking opportunities for the neighborhood during non-event time periods. Temporary 5-minute parking regulations will be permitted during events via portable signs.

e. *Transportation Demand Management*

As required under the conditional zoning agreement, the applicant has included an updated Transportation Demand Management Plan in the preliminary submittal (*Attachment M*). The applicant developed this plan based on the draft included by reference in the conditional zoning agreement. As with the original plan, the current TDM plan includes a number of mechanisms designed to foster use of alternative modes and thus reduce SOV trips and parking demand. The St. Lawrence proposes the following:

- *METRO subsidies and transit incentives:* The central strategy of the TDM plan is a \$70,000 annual subsidy to METRO to improve its Route #1 service, both in terms of arrival frequencies and extended hours. METRO has stated that this \$70,000 would be sufficient to increase evening headways from 45 minutes to 30 minutes and extend service to 11 p.m. Monday through Saturday (*Attachment N*). The St. Lawrence has argued that this expansion of service will not only effectively serve their patrons but the greater neighborhood as well, and in this reduce baseline parking demand. As an incentive and as part of the arrangement with METRO, St. Lawrence patrons will be able to use their theater tickets as valid fare to board the bus. The lobby of SLA would be designed to include a display screen with real-time tracking information, allowing this area to effectively serve as a waiting area.
- *Valet parking:* The TDM plan also includes front-door valet service for patrons, with “simple incentives” at point of ticket purchase. Cars would be stored in remote lots.
- *Bicycle and pedestrian infrastructure:* The St. Lawrence proposes to encourage bicycling by providing racks with 20 bicycle parking spaces in front of the building on Congress Street and becoming a Bicycle Benefits partner. They also propose pedestrian infrastructure improvements, such as sidewalks and crosswalks.
- *Free market options:* The TDM plan also notes the existence of other mode choices, such as cabs, pedicabs, and TNCs, which will be available to patrons.
- *Rideshare:* The TDM plan states that the St. Lawrence will offer discounted tickets for carpooling patrons and will facilitate ridesharing by developing one-time ride-matching services in conjunction with GoMaine.
- *Overall incentives:* In addition to discounted ticket pricing for those who use alternative modes, the TDM Plan proposes an incentive campaign with monthly raffles for the first year of operation.
- In addition to the above, the St. Lawrence proposes a number of programmatic elements around education and marketing in the TDM plan. The TDM plan states that the St. Lawrence will provide information regarding alternative mode choices on their website, at the point of ticket purchase, at a kiosk on site, and through consistent and regular communication with their patrons. The plan also includes a marketing campaign.

Lastly, the plan includes the designation of a TDM coordinator and provisions for immediate and long-term monitoring. The plan specifies monitoring to begin one month after opening and twice annual monitoring thereafter for five years. Annual monitoring would occur subsequently. Through surveys, ridership tracking, and valet data, the St. Lawrence would monitor mode choice and the potential for mode shifts. Ultimately, the goals of the TDM plan are to reduce trips and parking demand by 6-10% in the first year.

Mr. Errico has reviewed the TDM plan and writes,

The TDM Plan notes a number of incentives for reducing vehicle impacts. I would suggest some detail (likely amount or percentage) on ticket discounts and coupons be provided.

It notes that SLAC will be partnering with the City on infrastructure improvements. Further detail on what is envisioned regarding this partnership and possible commitments should be provided.

The applicant should provide details on the ticket surcharge (likely amount or percentage) and specifically describe how the surcharge proceeds will be managed/allocated towards TDM strategies.

It is noted that METRO “could” further increase evening service. It is my understanding that METRO service will increase evening service and therefore the applicant should confirm this assumption.

The applicant should note why only the Temple Street garage is the only facility eligible for a subsidy. Additionally, the applicant should note why free parking is limited to three hours (dinner plus event could be more than 3 hours).

The applicant should provide greater detail on the anticipated Valet service program at the first event and details on specific operations and how the service is funded? Related to this is the relatively far distance to the parking lots for valet vehicles and how this may impact service and use.

The applicant should provide details on the bicycle ticket discount program.

A condition of approval related to final modifications of the TDM plan has been included.

2. Environmental Quality Standards

a. Preservation of Significant Natural Features

There are no known significant natural features on the site.

b. Landscaping and Landscape Preservation

The conditional zoning agreement requires two street trees along the Munjoy Street, Beckett Street, and Congress Street frontages. Each of these frontages currently has two or more trees, although one on Munjoy Street will need to be eliminated in order to allow room for the overhead door. This tree is proposed for replacement with an Armstrong maple. The landscaping plan shows other landscaping on the Beckett and Munjoy Street frontages, including miscanthus and hakonechloa grasses. Clematis and honeysuckle are proposed for the eastern property line. Jeff Tarling, the city’s arborist, has reviewed the plans and verbally indicated his approval.

c. Water Quality/Storm Water Management/Erosion Control

Although the area of the proposed St. Lawrence expansion is currently undeveloped, it is the site of the former church sanctuary, and the city’s records indicate that it has been assessed as impervious area since the sanctuary demolition. As such, the proposed expansion is not deemed to change the quantity

of existing impervious surface on site (*Attachment I*). The applicant has not proposed any stormwater quality treatment measures. Roof drains are proposed to surface discharge, as requested by the city's consulting civil engineer.

3. *Public Infrastructure and Community Safety Standards*

a. *Consistency with Related Master Plans*

The project is generally deemed consistent with related master plans.

b. *Public Safety and Fire Prevention*

Keith Gatreau, Assistant Fire Chief, has reviewed the plans and has not requested any modifications (*Attachment 5*).

c. *Availability and Capacity of Public Utilities*

The applicant has provided evidence of water and wastewater capacity (*Attachments G and H*).

4. *Site Design Standards*

a. *Massing, Ventilation, and Wind Impact*

The bulk, location, or height of the proposed buildings are not likely to result in health or safety problems from a reduction in ventilation to abutting structures.

b. *Shadows*

The project is not anticipated to result in shadows on publicly accessible open space.

c. *Snow and Ice Loading*

The project is not anticipated to result in snow or ice accumulation on public ways or adjacent properties.

d. *View Corridors*

The project does not abut a protected view corridor.

e. *Historic Resources*

The St. Lawrence is a historic property on the National Register of Historic Places. As such, development on the site is subject to Historic Preservation review. The city's Historic Preservation Board previously reviewed preliminary architectural plans for the St. Lawrence addition. Final approval by the Historic Preservation Board has been suggested as a condition of approval.

f. *Exterior Lighting*

In the final submittal, the applicant has provided a draft lighting plan (*Plan 21*) and cut sheets (*Attachment Q*). This lighting plan will require further refinement, including an analysis of the plan with respect to the *Technical Manual* standards and an examination of the way in which the addition lighting is anticipated to relate to the existing exterior lighting on the Parish Hall. The final exterior lighting plan has been suggested as a condition of approval.

Likewise, the plan shows two street lights on Congress Street, which are specified as Downtown fixtures in the final plans. Planning staff are currently working on updating the city's *Technical Manual*, and it is anticipated that the lights specified on this portion of Congress Street may change. As such, final street lighting specifications have been suggested as a condition of approval.

g. Noise and Vibration

In the final submittal, the applicant has provided a roof plan showing that rooftop mechanicals will be screened from the public right-of-way.

h. Signage and Wayfinding

Signage will be reviewed under a separate sign permit by both Zoning and Historic Preservation.

i. Zoning-Related Design Standards

The conditional zoning agreement incorporates a set of elevations and floor plans by reference. These have been resubmitted with the site plan application (*Plans 10-20*). Given the historic landmark status of the existing structure, the applicant is required to obtain a certificate of appropriateness from the Historic Preservation Board for the proposed addition. The site plan ordinance exempts projects from design review when the development affects a designated historic landmark or is within a historic district and thus requires a certificate of appropriateness. The Friends of the St. Lawrence have not yet submitted drawings to the Historic Preservation Board for final design review. The Historic Preservation Board has generally given positive indications of their support for the design.

XII. RECOMMENDATION

Subject to the proposed motions and conditions of approval listed below, Planning Division staff recommends that the Planning Board approve the proposed St. Lawrence Arts Center addition at 76 Congress Street.

XIV. PROPOSED MOTIONS**A. WAIVERS**

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing:

1. The planning board [finds/does not find], based upon the consulting transportation engineer's review, that extraordinary conditions exist or undue hardship may result from strict compliance with the *Technical Manual* standard (*Section 1.7.2.7*) which requires that along arterials, collectors, and local streets, minimum acceptable spacing between driveways shall be 100-150 feet, depending on speed limit, that substantial justice and the public interest are secured with the proposed variation in this standard, and that the variation is consistent with the intent of the ordinance. The Planning Board [waives/does not waive] the *Technical Manual* standard (*Section 1.7.2.7*) to allow the driveway cut on Munjoy Street approximately 20 feet from the adjacent driveway to the south as shown on the final plans.

B. TRAFFIC MOVEMENT PERMIT

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the proposed plan [is/is not] in conformance with 23 MRSA 704-A and Chapter 305 Rules and Regulations pertaining to Traffic Movement Permits.

C. DEVELOPMENT REVIEW

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to the site plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the plan [is/is not] in conformance with the site plan standards of the land use code and [approves/does not approve] the application, subject to the following conditions of approval that must be met prior to the issuance of a building permit, unless otherwise stated:

1. The applicant shall provide recorded copies of all required easements and licenses, including:
 - i. A public access easement from the applicant to the City of Portland for areas of sidewalk that are proposed on private property;
 - ii. A license from the City of Portland for purposes of the Thompson Memorial plaque; and
 - iii. A license from the City of Portland for footings proposed in the right-of-way for review and approval by Corporation Counsel, the Department of Public Works, and the Planning Division;
2. The applicant shall provide evidence of financial capacity from a financial institution for review and approval by the Planning Division;
3. The applicant shall provide a final construction management plan for review and approval by the Department of Public Works and the Planning Division;
4. The applicant shall provide a revised site plan including:
 - i. Details required to determine ADA compliance of sidewalk and driveway ramps with respect to grades and clearances for review and approval by the Department of Public Works;
 - ii. Street lighting as specified on Congress Street per pending revisions to the city's Technical Manual;
5. The applicant shall provide a revised TDM plan addressing the comments of the city's consulting traffic engineer for review and approval by the Department of Public Works and the Planning Division;
6. The applicant shall provide evidence of a Certificate of Appropriateness from the Historic Preservation Board; and
7. The applicant shall provide a final site lighting plan including photometric calculations compliant with the City of Portland *Technical Manual* and a plan for integration with the Sanctuary for review and approval by the Planning Division.

XIII. ATTACHMENTS**PLANNING BOARD REPORT ATTACHMENTS**

1. Traffic Engineer review (memo from Thomas Errico, 1/15/18)
2. City Arborist review (memo from Jeff Tarling, 12/20/16)
3. Civil Engineer review (memo from Lauren Swett, 12/27/17)
4. Civil Engineer review (memo from Lauren Swett, 1/8/18)
5. Fire Prevention Bureau review (memo from Keith Gautreau, 12/21/16)

APPLICANT'S SUBMITTALS

- A. Cover Letter (from Tom Greer, 11/18/16)

- B. Authorization Letter
- C. Level III Site Plan Application
- D. Evidence of Right, Title, and Interest
- E. Financial Capacity Letter
- F. Recorded Contract Zone
- G. Wastewater Capacity Letter
- H. PWD Capacity Letter
- I. Stormwater Narrative
- J. TMP Application
- K. Traffic and Parking Demand Assessment
- L. Supplemental TMP Information
- M. TDM Plan
- N. METRO letter (from Greg Jordan, 9/17/14)
- O. Truck Loading Memo
- P. Neighborhood Meeting Minutes
- Q. Lighting Cut Sheets

PLANS

- Plan 1 Boundary & Topographic Survey
- Plan 2 Site Plan
- Plan 3 Existing Conditions & Demolition Plan
- Plan 4 Grading & Utilities Plan
- Plan 5 Erosion Control Plan
- Plan 6 Landscape Plan
- Plan 7 Sidewalk Ramp Details
- Plan 8 Details
- Plan 9 Details
- Plan 10 Basement Plan
- Plan 11 First Floor Plan
- Plan 12 Upper Theater Level
- Plan 13 Upper Theater Level Continued
- Plan 14 Promenade Floor Plan
- Plan 15 Roof Plan
- Plan 16 North Elevation
- Plan 17 West Elevation
- Plan 18 South Elevation
- Plan 19 East Elevation
- Plan 20 Building Section
- Plan 21 Lighting Plan
- Plan 22 Construction Management Plan

Construction Management Plan

[Wright-Ryan Construction – St. Lawrence Arts Addition]

The following is the Construction Management Plan for the St. Lawrence Arts Addition located at 76 Congress Street in Portland, Maine. This new addition will add an events space with a stage that complements the existing theater program.

The Site of the St. Lawrence Arts Addition is a tight and urban in nature, and very similar to several projects Wright-Ryan has successfully completed on the Portland Peninsula. (See attached *Site Utilization plan for traffic, deliveries, and pedestrian control Plan 01*)

A. Construction Management Principles.

The proposed Construction Management Plan is configured to lessen the impact of the construction activities on Congress Street, Munjoy Street, Beckett Street, abutters, and the surrounding neighborhood. Below is a list of control measures being taken

1. **Site Access:** A temporary construction site fence with gates will be used to control pedestrian and vehicle access to the site, for the safety of pedestrians and workers alike. The temporary fence will remain during all phases of construction management. Signage will be utilized to inform pedestrians to cross the street as the sidewalks will be closed during the construction of this building. (See attached plan 01)
2. **Traffic control:** Will be required throughout the entire project and will be crucial to logistics of the project.
 - A. Our initial plan is to close off the Congress Street, Munjoy Street, and Beckett Street sidewalks around the building for laydown, deliveries, and trash removal. We would also work with the city to close at minimum the parking spots immediately adjacent to the project on Congress, Munjoy, and Beckett Streets. We will need to close the sidewalk on these three streets as well where they are touching the project site. This will require rerouting sidewalks and installing clear road and pedestrian signage to ensure a safe traffic flow. We have attached a plan showing the safe rerouting of pedestrians around the project site utilizing existing public crosswalks.
 - B. Trenching activities for utilities and services in both Munjoy and Beckett Streets will have traffic control on a as needed basis, and none of which is anticipated to extend past a week. All trenches will be either steel plate covered or fenced completely when not actively being worked on. This work will take place during normal daylight hours as to not cause overnight disruptions to the surrounding residents. Traffic control and flaggers will ensure that one-way traffic is always maintained.
 - C. We will supply and remove materials to and from the building utilizing the area on the Congress Street side of the building, as this most efficient way to get materials to their destination and allow for debris to be removed. A crane will lift and place materials as needed around the site from just-in-time delivery trucks, pulling into the site

from the limited Congress Street parking spot closures.

- D. We intend to use a combination of hydro-mobile and scaffold systems around the exterior of the building. This will allow for multiple activities to take place at the same time to expedite the schedule.

B. Development Review of Construction Management Plan.

Wright-Ryan will submit this construction management plan which outlines the logistics and safety measures being taken to protect the city and its residents as well as the workers during construction of this building. We will review this plan with the planning authority and Department of Public Works and obtain approval prior to start of construction. Minimizing impacts to areas surrounding the building site will be an important consideration in the development of this plan. (An initial proposed plan is attached P01)

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

1. **Street Opening Permit:** A street opening permit will be needed for the hook up of domestic water, sprinkler, sanitary, storm water, and gas during the project. These will happen at different areas and times along both Munjoy and Beckett Streets. Our site contractor will be applying for these individually as the work is scheduled.
 - A. **Munjoy Street:** We Understand that Munjoy Street is currently under moratorium and is subject to the moratorium restoration requirements. We fully intend to comply with the Sec 4.09 restoration requirements and will layout our street opening permits once final project design is completed.
2. **Street Occupancy, Lane Closure, Parking and Sidewalk Closure Permits:** Sidewalk occupancy permits will be required for Congress, Munjoy, and Beckett Streets. We will be closing 7 parking spots on the east side of Congress Street, 4 spots on the north side of Munjoy Street, and 3 spots on the south side of Beckett Street. The Street opening permits will be for limited duration scheduled with the City for the utility hookups, the sidewalk and parking permits will be occupied for the duration of the project. We will need to close and divert two sidewalks as shown on the utilization plan during the duration of the project.
3. **Blasting:** Blasting will not be required for this project.

D. Construction Administration and Communication.

Wright-Ryan Construction will work diligently to ensure that communication with all parties involved is paramount. We intend to assist the client in their conversations with abutters before and during construction to inform them of the work that is scheduled to occur, to minimize the impact of construction to the surrounding abutters during the renovations. We will also provide construction signage with the contact information of our company, so we can be contacted should any issues arise. We propose the following contact persons at this time:

1. Project Manager: Chris Simmons – (207)747-8530
2. Project Superintendent: Jeff Giggey – (207) 405-1515

Note: These are subject to change based on Wright-Ryan personnel availability, but the final construction management plan will be up to date with the actual persons of

contact. Also, until this project reaches the construction phase, contact should be limited to the Wright-Ryan Preconstruction Department which can be reached at 207- 773-3625.

3. Construction Signage will be clear and concise and will be removed at end of project.

E. Construction Schedule.

1. The preliminary timeline for this project is as follows:
 - a. Proposed Construction Start: start
 - b. Proposed Final Completion: end
(Summary Schedule is attached)
2. Hours of construction are currently foreseen as being limited to 7:00am to 5:00pm, Monday-Friday. Occasional weekend work is anticipated at this time, it will be limited to the hours allowed by the City of Portland. We may accept early deliveries to alleviate congestion on Congress Street, but no construction activities until 7AM.
3. Extended hours or night work are not foreseen at this time, but the city will be notified if these are required at any point during construction.
4. The majority of material deliveries will take place on Congress Street in the fenced off areas and directed to a laydown area on site or at a future satellite site as required.

F. Security & Public Safety.

1. The construction management plan drawings show where temporary construction fences and gates will be located during all phases of construction. These fences and gates will both secure the site as well as protect pedestrians from the construction equipment and work. (please see attached plans)
2. This construction project will be operated in accordance with all OSHA regulations.
3. A Fire Safety Program will be developed and adhered to during construction of this project. Access to the existing fire sprinkler connection on the existing building will be maintained at all times for emergency access. Egresses from the existing building will be maintained at all times to allow for unimpeded exit from the structure.

G. Construction Permitting and Traffic Control Plans.

1. **Construction Activity in Public Streets:** Construction activity in public streets will have traffic control in place during working hours. This includes for any open excavations or construction equipment/vehicles temporarily parked on the side of the road. If open excavations will be left overnight, these excavations will be covered with steel plates and signage will alert drivers and pedestrians of the work.
2. **Sewer, Water, and Gas Services:** The sewer, water, and gas piping will need to be hooked up to city services for this project. Applicable Street Opening, and Excavation permits will be pulled prior to the start of this work.
3. **Traffic Control Plans:** A preliminary plan is included in page 01 of the attachment. Individual plans will be developed for each street opening once we get closer to the work and a site contractor is engaged.

H. Site Management and Controls.

1. **Waste:** This construction site will have dumpsters stored near the construction entrances and will be changed out on a regular basis.
2. **Noise:** Will be confined to normal work hours. This noise will consist of normal vehicle traffic, construction equipment and normal construction noises such as banging and the sounds of power tools. This should not disturb the surrounding neighborhood.
3. **Snow Removal:** Wright-Ryan will be responsible for snow removal inside of the construction site and any closings of streets. We will rely on the city to plow all accessible public roads. Snow built up along the temporary construction fencing will be removed by the project site contractor as part of the winter conditions package.
4. **Dust Controls:** Streets will be swept by the projects as to adhere to Section 25-129 as required.

I. Erosion Control and Preservation of Trees.

1. Erosion control measures and protection of trees will be implemented on the site as shown on the submitted project plans. Best management practices as outlined by the City of Portland and the Maine DEP will be implemented on this project.
2. We will use sediment control measures to prevent dirt and dust from our site from flowing into storm drains during inclement weather or melting.
3. Storage areas around trees will be barricaded to the extent to prevent materials from being placed in the sensitive areas surrounding the street trees that are to be saved.

J. Construction Staging Area.

1. Staging for vehicle off loading and material storage will be on site and will occur on Congress Street. Deliveries will be scheduled to minimize queuing in the public streets. We will have a crane/lift to place/lift material into its intended location as the construction site will have a limited footprint for storage. We will implement a plan to stage delivery vehicles in a way so they will not queue in the surrounding neighborhoods.
2. Off-site staging locations will be determined by Wright-Ryan when we arrive closer to the start of construction.

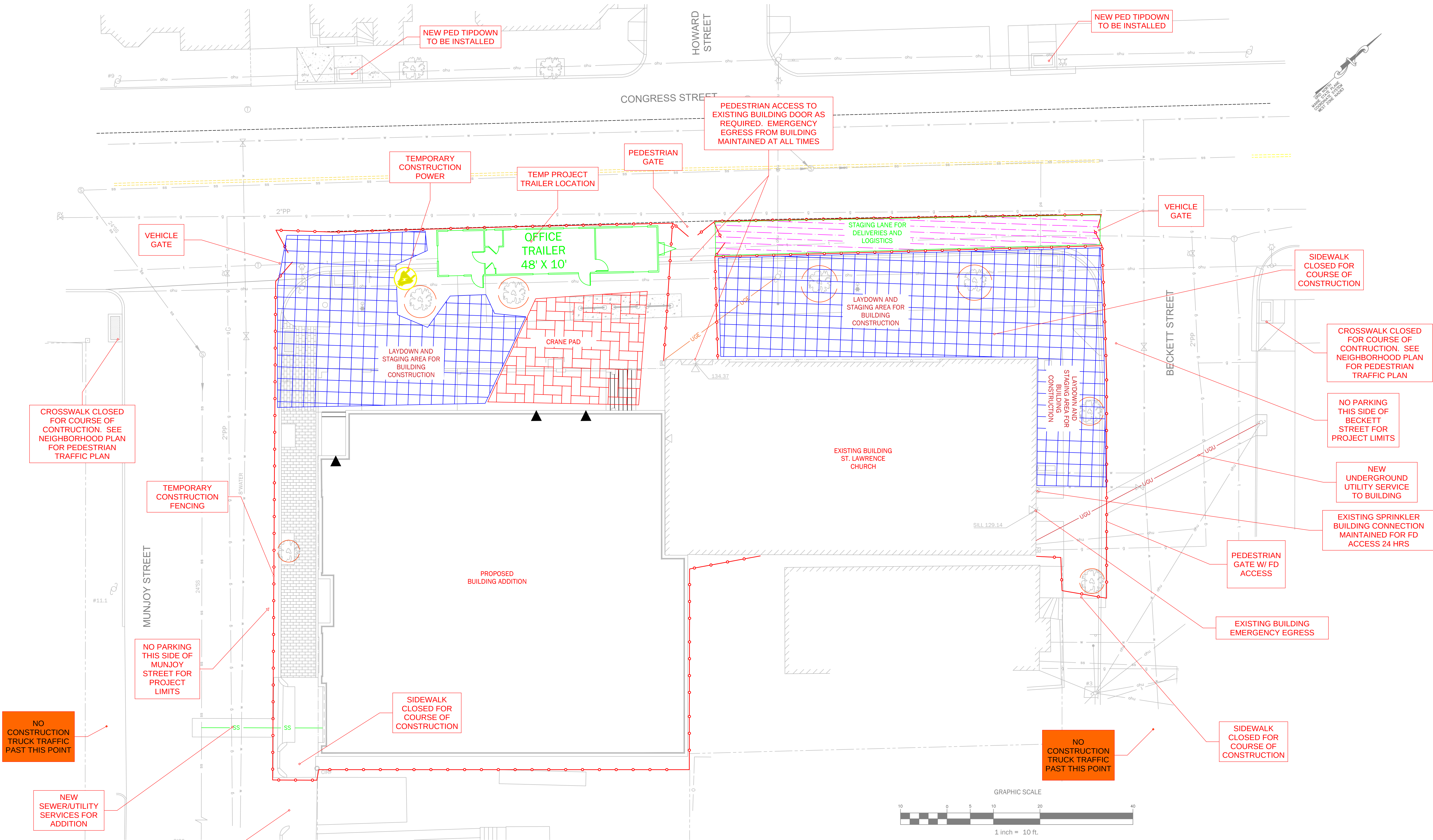
K. Parking during construction

1. Parking on the construction site will be extremely limited. We will work with our subcontractor partners to establish offsite parking as we have done many times successfully in the past.
2. **Truck Routes and Volumes:** The expected truck route will be to arrive at the site going eastbound on Congress Street, pulling off or backing into a fenced off area to accept deliveries. Once deliveries are offloaded, the truck will then pull safely into the eastbound flow of traffic on Congress Street and resume travel back out major city streets to their next destination.

L. Special Measures as Necessary

1. **Special measures:** Basement excavation on areas that abut property lines

will be supported as to not impede on any adjacent property utilizing shoring as determined by the project engineer. Final excavation plans will be fully developed once we have final drawings for the project.



CONSTRUCTION MANAGEMENT PLAN NOTES:

1. PARKING SPACES ON EAST SIDE OF CONGRESS STREET FROM MUNJOY STREET TO BECKETT STREET WILL BE CLOSED TO THE PUBLIC FOR THE COURSE OF CONSTRUCTION.
2. PEDESTRIAN TRAFFIC FOR CONGRESS STREET WILL BE MAINTAINED ON THE WEST EXISTING SIDEWALK. PEDESTRIANS ON THE EAST SIDEWALKS WILL BE REROUTED VIA APPROPRIATE SIGNAGE. SEE ATTACHED NEIGHBORHOOD PLAN FOR DETAILED PEDESTRIAN TRAFFIC PLAN.
3. ALL EXISTING STREET TREES WILL BE PROTECTED FOR THE COURSE OF CONSTRUCTION. PLEASE SEE TREE PROTECTION DETAIL IN THE SUBMISSION PACKAGE FOR ADDITIONAL INFORMATION.
4. CONSTRUCTION FENCING WILL ENCIRCLE THE PROJECT SITE TO PROTECT THE GENERAL PUBLIC FROM ANY SITE HAZARDS. FENCING ALONG CONGRESS STREET WILL NOT EXTEND INTO THE EXISTING TRAVEL LANE. SITE WILL HAVE TEMPORARY IDENTIFYING SIGNAGE AND BE SECURED NIGHTLY.
5. TEMPORARY SHORT TERM TRAFFIC DISTURPTIONS ON MUNJOY AND BECKETT STREETS WILL ENSURE AT MINIMUM ONE-WAY ALTERNATING TRAFFIC AT ALL TIMES. CONSTRUCTION ACTIVITES REQUIRING THESE RESTRICTIONS ARE ANTICIPATED TO BE ONE WEEK ON EACH STREET.
6. TRAFFIC SIGNAGE PACKAGE ON CONGRESS STREET WILL BE SIGNED APPROPRIATELY TO ENSURE PROPER TRAFFIC FLOW (BIKE MAY USE FULL LANE, TRUCKS ENTERING, ETC.) MUTCD COMPLIANT

DRAFT NOT FINAL
Spring 2022



*Building Maine's
Great Spaces*
www.wright-ryan.com

ORIGINAL DRAWINGS BY:
ENGINEER:
WALSH ENGINEERING

OWNER:
FRIENDS OF ST.
LAWRENCE CHURCH

PROJECT:
ST. LAWRENCE ARTS
ADDITION

MUNICIPALITY:
PORTLAND

3	-	xx.xx.2022
2	-	xx.xx.2022
1	-	xx.xx.2022
REV	DESCRIPTION	DATE
SCALE: 1:10		
PROJECT NO: x		
ISSUE DATE: 05.05.2022		
CAD DWG: x		
DRAWN BY: MAR		
REVIEWED BY: CP		

SHEET TITLE:
CM PLAN

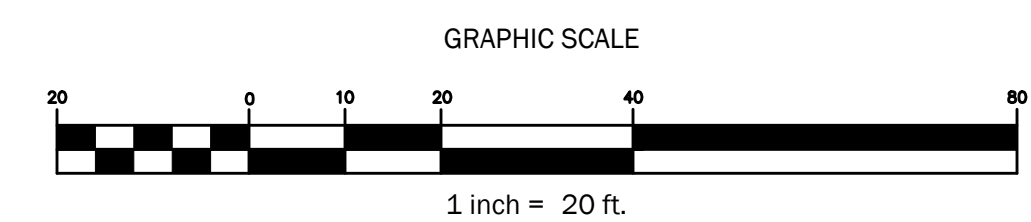
LOG-101

SHEET NO. X OF X

TAX MAP 3 / BLOCK L / LOT 1	
Job No.: 777	Sheet No.:
Date:	NH-1
Scale: AS SHOWN	
Drawn: JDC	
Checked: WRW	

NH-1

Spring 2022



PRELIMINARY - NOT FOR CONSTRUCTION

CITY OF PORTLAND
Planning & Urban Development Department

MAJOR SITE PLAN GENERAL DOCUMENT AND DRAWINGS CHECKLIST Please submit each document as a separate PDF file. Please confirm by electronically checking the boxes in the left-hand column. ** PLEASE FILL OUT AND UPLOAD THE ZONING ASSESSMENT TABLE AND WAIVER TABLE SEPARATELY AS NOTED BELOW ** At the time of application submission, please contact the Department of Public Works regarding E-911 addressing for your project.		
GENERAL APPLICATION DOCUMENTS		
☒	NA	Project Description Cover letter with detailed project description
☒	NA	Completed Checklist (this document)
☒	NA	Evidence of Right, Title, and Interest Deeds, leases, or purchase and sales agreements
Yes	☒	Evidence of State or Federal Approvals Permits or letters of non-jurisdiction, if applicable
☒	NA	Zoning Assessment (see Zoning Assessment Table) Summary of compliance with use and dimensional standards of the land use code
☒	NA	Site Plan Standards Assessment (see Section 14.6 of the land use code) Summary of project compliance with site plan standards of the land use code
☒	NA	Summary of Existing and/or Proposed Easements or Covenants, applicable. Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way
☒	NA	Waiver Requests (see Waiver Table) Written request for waiver describing request and compliance with applicable waiver standards
☒	NA	Financial Capability Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
☒	NA	Technical Capability Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

MAJOR SITE PLAN STANDARDS AND SUBMISSION CHECKLIST

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

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

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

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

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

MAJOR SITE PLAN DRAWINGS CHECKLIST

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

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

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

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

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

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

Existing Conditions Plan with the following:

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

Proposed Site Plan with the following:

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

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



**St. Lawrence Arts Center Addition
76 Congress Street
Parcel ID: 003-L-001
Project ID: 2016-265**

GENERAL APPLICATION STANDARDS

14.6 Site Plan Review Standards

14.6.1 Transportation Standards

A. Impact on surrounding street systems (14-14.6.1(A))

The final submittal includes an application for a Traffic Movement Permit – Modification (revised March 25, 2022). The analysis included in this application estimates a total trip generation of 182 vehicle trips during the peak hour following the development of the project, and a net change in trip generation of 170, most of which are anticipated to use Congress Street to access the arts center and its vicinity. This does not differ from the original Traffic Movement Permit submitted to the City in May 2017, revealing no substantial increase in congestion or creation of any significant hazard to safety on the surrounding street network.

B. Access and circulation (14-14.6.1(B))

The proposed arts center addition will fill out the remainder of the block frontage on Congress Street between Beckett and Munjoy Streets. New brick sidewalks are proposed on the Beckett and Congress Street frontages.

Six crosswalks with ADA compliant sidewalk ramps are proposed across Congress Street, near the Beckett and Munjoy Street intersections. Improvements are proposed to the existing crosswalk across Beckett Street.

Munjoy Street was recently paved, and the crosswalk and sidewalks were rebuilt in 2021. This street is under a City moratorium.

Following submission and approval of the 2018 permit, Mr. Errico requested modifications to ramps in these locations, adding that condition of approval should be included for final design details to be provided for review and approval prior to any City Permit.

The plans show a curb cut at the southeasterly corner of the site along Munjoy Street, where an overhead door is required. A driveway separation waiver has been requested, which was supported by Thomas Errico, the City's consulting traffic engineer, in the 2018 permit approval. A plan for accommodating load-ins at an overhead door has been submitted. The

conditional zoning agreement continues to require that tour buses, vans, and trucks serving the site unload and then relocate to a remote, off-street parking location. Mr. Errico reviewed the plan in 2018 and indicated his approval for this use.

C. Public transit access (14-14.6.1(C))

Greater Portland METRO's Route 1 follows Congress Street into Munjoy Hill, where the route proceeds to loop around the East End, first on North Street past the East End Community School, along the Eastern Promenade, and then up Atlantic Street back to Congress. The Route 1 METRO has three stops proximate to the St. Lawrence: North and Congress Streets; Lafayette and Congress; and Atlantic and Monument Streets.

Since the St. Lawrence Arts Center is not located directly on a transit route, they are not required to provide transit accommodations. However, in their Transportation Demand Management (TDM) Plan, the St. Lawrence Arts Center has offered to provide an annual contribution of \$70,000 to be directed to METRO. This donation would expand existing service on the Route 1 line and subsidize transit passes for tickets.

D. Off-Street Parking (14-14.6.1(D))

An updated Parking Demand Assessment was completed by Traffic Solutions on June 1, 2022. Comparing the numbers from the original 2017 study, it appears that the overall parking demand for the neighborhood area remain more or less unchanged. The report states that the current peak parking demand within the established neighborhood area is considerably less than the measured on-street parking for the same area.

Three bicycle racks, each having seven bike spaces, are indicated on the project plan.

The required areas for snow storage are included on Sheet C1.1.

E. Transportation Demand Management (TDM) (14-14.6.1(E))

The Parking Demand Assessment and Traffic Movement Permit Application has been included with this submission.

14.6.2 Environmental quality standards

A. Preservation of significant natural features (14-14.6.2(A))

There are no known significant natural features on the site.

B. Landscape preservation (14-14.6.2(B))

The conditional zoning agreement requires two street trees along the Munjoy Street, Beckett Street, and Congress Street frontages. Each of the frontages currently have two or more trees. However, on Munjoy Street one tree will need to be removed for driveway access. A replacement tree (an Armstrong Maple) will be planted to replace it. Jeff Tarling, the City's arborist, reviewed the plans in 2018 and indicated his approval of the replacement.

C. Site landscaping and buffers (14-14.6.2(C))

WEA has developed a landscaping plan for the property, in accordance with the City of Portland standard that a minimum of one shade tree or six planting per 30 linear feet of all frontages is required. Beckett and Munjoy Street landscaping will include miscanthus and hakonechloa grasses. Clematis and honeysuckle are proposed for the eastern property line. Jeff Tarling, the City's arborist, reviewed the plan in 2018 and indicated his approval of the landscaping plan.

D. Water quality, stormwater management, and erosion control (14-14.6.2(D))

Although the area of the proposed St. Lawrence expansion is currently undeveloped, it is the site of the former church sanctuary, and the city's records indicate that it has been assessed as impervious area since the sanctuary demolition. As such, the proposed expansion is not deemed to change the quantity of existing impervious surface on site. The applicant has not proposed any stormwater quality treatment measures. Roof drains are proposed to surface discharge, as requested by the City in 2018. No ponding or flooding in adjacent lots is anticipated. This development will comply with the stormwater technical management standards in the City of Portland *Technical Manual*.

14.6.3 Public infrastructure and community safety standards

A. Consistency with City master plans (14-14.6.3(A))

The project has been designed to be consistent with City Council-approved master and facilities plans and with suitable easements, rights, and improvements to connect or continue off-premises public infrastructure.

B. Public safety and fire prevention (14-14.6.3(B))

The development incorporates public safety principals for Crime Prevention through Environmental Design. In addition, emergency vehicles have adequate access to the site. According to a June 2022 email from Captain Aaron Bridges, Portland Fire Department, any involvement from the Fire Department will occur during the review process of the permit. A copy of this email has been included with the submission.

C. Availability and Adequacy of Public Utilities (14-14.6.3(C))

Water

An “Ability to Serve” letter from the Portland Water District (PWD) dated May 27, 2022, is attached. The PWD specifies that the demand for water at this site is not anticipated to exceed the capacity of the current service. They do recommend the 1.5 inch pipe be upgraded to 2 inches to avoid significant water pressure loss. In addition, the PWD indicates that a licensed sprinkler system designer be contacted to confirm the fire service capacity.

Solid Waste

Trash or recycling produced at the property will be removed in a timely manner. No storage is planned for outside of the building.

Wastewater

Bradley Roland, PE, Senior Project Engineer at the Portland Public Works, re-approved an estimated net change +3,100 GPD wastewater capacity authorization in an email dated June 27, 2022, which has been included with this submission.

Electrical Service

Electric service will be extended from existing poles on Congress and Beckett Streets underground to the new facility.

14.6.4 Site design standards

A. Massing, ventilation, and wind impact (14-14.6.4(A))

The bulk, location, or height of the proposed building is not likely to result in health or safety problems from a reduction in ventilation to abutting structures or changes to the existing wind climate. The proposed structure is not anticipated to minimize the value or utility to neighboring structures. Any HVAC venting exhaust will be directed away from public spaces and residential properties directly adjacent to the site.

B. Shadows (14-14.6.4(B))

In accordance with the shadow standards of the *Technical Manual*, the proposed development will not cast a shadow on a publicly accessible open space.

C. Snow and ice loading (14-14.6.4(C))

The project has been designed to prevent significant amounts of accumulated snow and ice from loading or falling onto adjacent properties or public ways.

D. View corridors (14-14.6.4(D))

According to the *Downtown Vision View Corridor Protection Plan*, the project is not located near a public view corridor, and no obstruction of a public view corridor will occur.

E. Historic resources (14-14.6.4(E))

The building was placed on the National Register in 1979 and was designated locally as a historic landmark in 1990. As such, the development is required to obtain a Certificate of Appropriateness (Article 17) from the Historic Preservation Board. The Friends of St. Lawrence Church and the architect for the project, David Lloyd of Archetype, are working closely with the Board on this objective and will submit the Certificate to the City of Portland as soon as it is received.

F. Exterior lighting (14-14.6.4(F))

A lighting plan and calculations prepared by Bartlett Design have been included with this submission. The lighting cut sheets reflect the current Technical Manual recommendations.

G. Noise and vibration (14-14.6.4(G))

All heating, ventilation and air conditioning equipment and similar equipment shall meet applicable state and federal emissions requirements and shall be located to the interior of the site, away from abutting residential properties.

H. Signage and wayfinding (14-14.6.4(H))

Signage will be reviewed under a separate sign permit by both Zoning and Historic Preservation.

I. Zone-Related Design standards (14-14.6.4(I))

Given the historic landmark status of the existing structure, the applicant is required to obtain a Certificate of Appropriateness from the Historic Preservation Board for the proposed addition. The site plan ordinance exempts projects from design review when the development affects a designated historic landmark or is within a historic district and thus requires a Certificate of Appropriateness. The Friends of the St. Lawrence and the architect for the project, David Lloyd of Archetype, are in communication with the Board, who has given positive indications of their support for the design. Once a Certificate is obtained it will be forwarded to the City of Portland.

056583

WARRANTY DEED

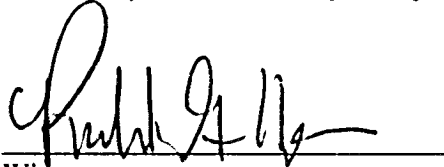
Know all Ye by these Presents,

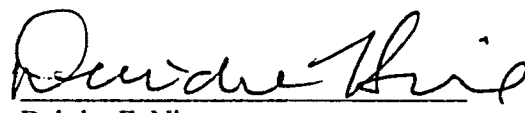
That I, DEIRDRE E. NICE (Grantor) of 4 Glen Road, Falmouth, Maine 04105,
for consideration paid, do hereby grant unto the said FRIENDS OF THE ST.
LAWRENCE CHURCH (Grantee), of 76 Congress Street, Portland, Maine 04101, with
Warranty Covenants, the following real property situated at 66-76 Congress Street, City
of Portland, County of Cumberland, described as follows:

A certain lot or parcel of land with the buildings thereon, situated in said
Portland, and being more particularly described on Exhibit A attached
hereto and made a part hereof.

Meaning and intending to convey the same premises described in a
warranty deed from Stephen P. Sunenblick and Roger Conover to Grantor
and Grantee dated December 9, 1993, and recorded in the Cumberland
County Registry of Deeds in Book 11160, Page 21.

Witness my hand this 12 day of September, 1997.


Witness


Deirdre E. Nice

STATE OF MAINE
CUMBERLAND, ss

September 12, 1997

Personally appeared the above Deirdre E. Nice, and acknowledged the foregoing
instrument to be her free act and deed.

Before me,


Attorney at Law/Notary Public

MAINE ESTATE TAX PAID

EXHIBIT A

Three certain lots or parcels of land and the church edifice and buildings on the same situated at the corners of Congress, Munjoy and Beckett Streets, in the said City of Portland and more particularly bounded and described as follows:

FIRST: Beginning at the corner formed by the intersection of the southerly side line of said Congress Street and the westerly side line of said Beckett Street; thence southeasterly by said Beckett Street forty-five (45) feet to a point; thence westerly on a line at right angles to said Beckett Street eighty (80) feet to Lot No. 1 in Block marked E. on a plan recorded in the Cumberland Registry of Deeds in Plan Book No. 4, Page 18; thence northerly by said Lot No. 1, forty-five (45) feet to said Congress Street; thence easterly by said Congress Street eighty (80) feet to the point begun at.

SECOND: Beginning at the northeasterly corner as formed by the intersection of the Southeasterly line of said Congress Street and the northeasterly line of said Munjoy Street; thence southeasterly by said Munjoy Street a distance of forty three and 27/100 (43.27) feet to a point; thence northeasterly at right angles to said Munjoy Street a distance of eighty (80) feet to a point; thence northwesterly at right angles to the last described line a distance of forty five and 69/100 (45.69) feet to Congress Street; thence southwesterly by said Congress Street to the corner begun at. Said lot is further shown on a plan of the premises recorded in said Cumberland Registry of Deeds in Plan Book 4, Page 18, and is the lot number one (1) in Block E on said Plan. The two parcels above described are the same conveyed to the St. Lawrence Street Parish by Jacob H. Groves by his deed dated September 28, 1895, and recorded in the Cumberland Registry of Deeds, Book 630, Page 261.

THIRD: Beginning at a point on the easterly side of Munjoy Street which point is forty three and 27/100 (43.27) feet southerly from the corner made by the intersection of the southerly line of Congress Street with the easterly line of Munjoy Street; thence southerly on said Munjoy Street forty three (43) feet to a point, and from these two points and keeping the same width extending back at right angles to Munjoy Street eighty (80) feet. Being the same premises conveyed to the Saint Lawrence Street Parish by John Cousens by his deed dated August 24, 1896 and recorded in said Registry, Book 639, Page 438. To the several deeds aforesaid and the records thereof reference is hereby made for further description of the premises hereby conveyed.

THIS CONVEYANCE IS MADE SUBJECT to an outstanding mortgage from the Grantor and Grantee herein to Fleet Bank of Maine, which mortgage the Grantee, as part of the consideration for this transaction, assumes and agrees to pay.

RECEIVED
RECORDED REGISTRY OF DEEDS

1997 SEP 19 PM 4: 16

CUMBERLAND COUNTY

John B O'Brien

To Whom It May Concern,

By this letter, the undersigned, a representative of Friends of St. Lawrence Church, authorizes Walsh Engineering Associates, Inc. to act as the agent for the undersigned in the preparation and submission of all Federal, State, and Local City permit applications and relevant documents and correspondence for all necessary permits for the construction/reconstruction of the property at 76 Congress Street, Portland, to attend meetings and site visits; to appear before all boards, commissions, and committees, and to provide such other services as are necessary and appropriate in furtherance of the aforementioned project.

Sincerely,



Signature

Deirdre Nice, Executive Director

Printed Name and Title

March 28, 2022

Date

ZONING ANALYSIS Relevant Zone(s) Conditional Zoning Agreement C58*

All Projects:

	Required	Proposed
Lot Size	10,500 SF	10,601 SF
Area Per Dwelling Unit		
Minimum Street Frontage		
Front Yard Minimum	0 ft	0 ft
Front Yard Maximum		
Rear Yard	0 ft	3 ft
Yard Right		
Yard Left		
Side Street Setback	0 ft	0 ft
Step Back		
Maximum Lot Coverage	95%	92%
Minimum Lot Coverage		
Maximum Height	54 ft	54 ft
Open Space	0%	0%
Maximum Impervious Area		
Pavement Setback		
Floor Area Ratio		
Off Street Parking Spaces		
Loading Bays		
Other 1 Minimum Lot Width	50 ft	160 ft
Other 2		
Other 3		

* Pursuant to the Amended Conditional Zone Agreement recorded in the Cumberland County Registry of Deeds on January 15, 2015 (Book 32031, Pages 180-210).



June 1, 2022

Thomas A. Errico, P.E.
Senior Associate-Traffic Engineering Director
T.Y. Lin International, Inc.
12 Northbrook Drive
Falmouth, Maine 04105

RE: St. Lawrence Arts – Parking Demand Assessment

Dear Tom:

Please find attached an updated parking demand study for the St. Lawrence Arts venue based upon field occupancy studies conducted on Wednesday, February 16 and Saturday, March 5, 2022. You will find enclosed a copy of the prior May 6, 2017 Traffic and Parking Study and copies of 2022 field surveys for both noted days for your reference. You will also find accompanying this letter an email dated March 10, 2022 from Deirdre Nice, Executive Director, St. Lawrence Arts that confirms the number of theater attendees for both noted dates.

2022 Updated Parking Assessment

Pursuant to your earlier direction, field occupancy studies were completed for the same geographic area previously used in the conduct of the 2017 study (Please refer to the attached Figure 1 On-Street Parking Occupancy – Study Area). The parking studies were performed for three separate time periods: early morning hours, early evening hours pre-event and during the scheduled event on Wednesday, February 16 and Saturday, March 5, 2022. Table 1: On-Street Parking Occupancy Study from the prior 2017 study is updated with presentation of the most current 2022 field study data, as follows:

Table 1

Summary Report
On-Street Parking Occupancy Study

<u>Street/Segment</u>	<u>Measured ⁽¹⁾ Spaces</u>	<u>February 16, 2022</u>			<u>March 5, 2022</u>		
		<u>4:00 to 4:30 AM</u>	<u>4:30 to 5:00 PM</u>	<u>7:30 to 8:30 PM</u>	<u>4:00 to 5:00 AM</u>	<u>5:30 to 6:30 PM</u>	<u>8:00 to 9:00 PM</u>
Howard Street Entire	17	15	13	18	16	16	17
Merrill Street	41	31	22	31	28	25	30
- Congress to Quebec							
Quebec Street	11	10	9	9	12	9	9
- Merrill to Emerson							
Emerson Street Entire	45	38	22	30	37	29	30
Congress Street	75	60	44	69	58	42	64
- North to E. Prom							
North Street	14	13	14	13	14	14	13
- Congress to Stetson							
Lafayette Street Entire	40	25	15	21	26	27	32
Eastern Promenade	47	11	7	9	14	8	7
- Turner to Wilson							



Cumberland Avenue	26	25	15	20	25	18	22
- North to Merrill							
Turner Street	60	36	21	29	44	42	44
Morning Street	67	58	36	51	58	49	54
- Wilson to Turner							
Wilson Street Entire	64	45	28	36	42	37	37
Moody Street Entire	46	39	15	31	31	30	38
St. Lawrence Street	51	30	17	27	24	21	23
- Congress to Hoyt's							
Sherbrook Street	13	8	4	7	7	3	3
Waterville Street	38	15	11	14	14	12	15
- Congress to Hoyt's							
Atlantic Street	44	27	24	28	26	27	29
- Congress to Gilbert							
Munjoy Street	48	31	20	35	25	26	36
- Congress to Alley							
Beckett Street Entire	42	22	16	23	23	21	24
Vesper Street	54	56	33	38	40	35	38
- Congress to Alley							
Monument Street	40	18	16	24	16	25	28
- Waterville to Munjoy							
TOTAL	883	613	402	563	580	516	593
PERCENT OCCUPANCY		69%	46%	64%	66%	58%	67%

NOTE: (1) Number of spaces estimated based upon City Ordinance requirements and parking stall length of 20-feet.

Table 2, below, compares the findings of the 2017 study with the current parking trends for the same defined study area on Munjoy Hill.

Table 2
Parking Occupancy Data Comparison – 2017 and 2022

Survey Time Period	2017 Parking Data Weekday			2022 Parking Data Weekday			2017 Parking Data Saturday			2022 Parking Data Saturday		
	Early AM	Pre-Event	During Event	Early AM	Pre-Event	During Event	Early AM	Pre-Event	During Event	Early AM	Pre-Event	During Event
Total Recorded Parked Vehicles	574	490	572	613	402	563	661	631	636	580	516	593
Percent ⁽¹⁾ Occupancy	65%	55%	65%	69%	46%	64%	75%	71%	72%	66%	58%	67%

NOTE: (1) The percent parking occupancy is derived by dividing the measured field parking total for each noted time period by 883 total spaces. The 883-parking space total is based upon a detailed parking inventory performed for the entire parking study area highlighted on Figure 1 used in the earlier 2017 parking study.

Parking occupancy trends measured in 2022 for the established neighborhood area on Munjoy Hill, when compared with results from the earlier 2017 study, suggest the overall parking demand for the neighborhood area remains more or less unchanged. The peak parking demand for the weekday time period in 2017 was recorded at 574 vehicles, whereas, the parking occupancy level in 2022 was determined at 613 vehicles. Parking trends for Saturday are reversed with the higher peak parking value recorded in 2017 at 661 vehicles compared to the 2022 peak parking demand value of 593 vehicles.

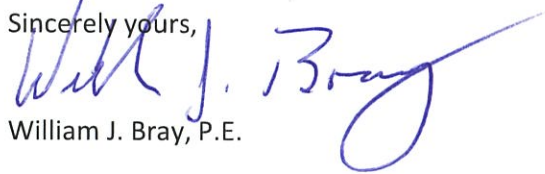
You will find the number of attendees at the scheduled 2022 St Lawrence Arts facility for the two study dates (76 people on 2-16 and 88 on March 5) is consistent with the number of attendees recorded in 2017.

Overall, it is safe to assume that the current peak parking demand within the established neighborhood area is considerably less than the measured on-street parking supply for the same geographic area. Based upon the 2022 parking occupancy data, a balance of 270 spaces exists during a typical weekday and the number of available spaces increases to 290 spaces on a Saturday. Earlier parking demand projections presented in the 2017 study estimates the proposed St. Lawrence Arts facility at full capacity generates a peak parking demand of 158 parking spaces; far less than the measured parking supply found within the neighborhood area defined on the attached Figure 1.

Please reach out to me if you would like to discuss the information and back-up materials enclosed with this letter.

Thank you for your direction and assistance with this updated parking assessment effort.

Sincerely yours,



William J. Bray, P.E.

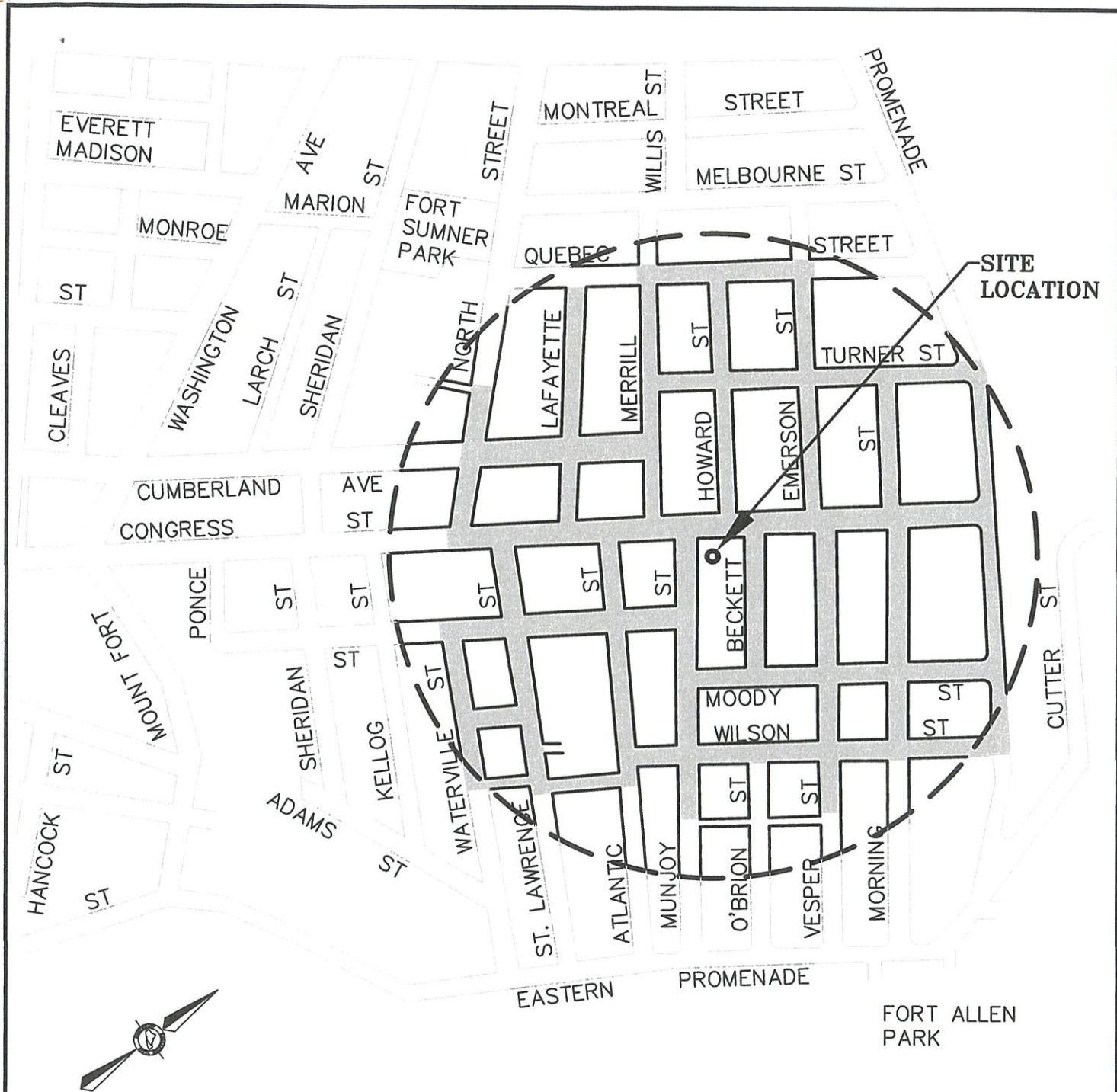


FIGURE 1
ON-STREET PARKING OCCUPANCY
STUDY AREA

LEGEND

— — 5 MINUTE WALK RADUIS

■ STUDY AREA

E:\LAND PROJECTS\34000\344388 TRAFFIC SOLUTIONS\ST. LAWRENCE ART CENTER\PLANSET\ST. LAWRENCE ART CENTER.DWG

Project Name and Location:
ST. LAWRENCE ART CENTER
 PORTLAND, MAINE
 DATE: MAY 4, 2017

FIGURE: 1

TRAFFIC SOLUTIONS
 235 BANCROFT STREET, PORTLAND, MAINE 04102-1730

William J. Bray

From: bill <trafficsolutions@maine.rr.com>
Sent: Monday, May 30, 2022 5:46 AM
To: William J. Bray
Subject: Fwd: SLA house counts 2/16 & 3/5

ATTENTION --> This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

----- Forwarded Message -----

Subject: SLA house counts 2/16 & 3/5

Date: Thu, 10 Mar 2022 06:38:46 -0500

From: Deirdre Nice <deirdre.nice@stlawrencearts.org>

To: Bray, Bill <trafficsolutions@maine.rr.com>

Hi Bill,

Nice talking with you. I hope you have a great visit with your family in Florida and a restful April that helps relieve your stomach issues.

Here are the counts for 2/16 - 76 people and 3/5 - 88 people.

Here's to good health!

~ Deirdre

Sent from my spaceship

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 2-16-22 Start Time: 0400 End Time: 0500

Recorder: NST

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET eastside only	E. Promenade to North Street	25
ST LAWRENCE STREET	Congress Street to Gilbert Lane	30
ATLANTIC STREET	Gilbert Lane to Congress Street	27
MUNJOY STREET	Congress Street to Hanson Lane	31
VESPER STREET	Hanson Lane to Congress Street	56
MORNING STREET	Congress Street to Wilson Street	39
E. PROMENADE	Wilson Street to Congress Street	6
BECKETT STREET	Congress Street to Moody Street	22
MONUMENT STREET	Munjoy Street to Waterville Street	18
WATERVILLE STREET	Monument Street to Hoyt's Lane	15
WILSON STREET	Atlantic Street to E. Promenade	45
MOODY STREET	E. Promenade to Munjoy Street	39
SHERBROOKE STREET	St Lawrence Street to Waterville Street	8

361

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 2-16-22 Start Time: 1630 End Time: 1700

Recorder: Jen

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET eastside only	E. Promenade to North Street	23	✓
ST LAWRENCE STREET	Congress Street to Gilbert Lane	17	✓
ATLANTIC STREET	Gilbert Lane to Congress Street	24	✓
MUNJOY STREET	Congress Street to Hanson Lane	20	✓
VESPER STREET	Hanson Lane to Congress Street	33	✓
MORNING STREET	Congress Street to Wilson Street	23	✓
E. PROMENADE	Wilson Street to Congress Street	4	✓
BECKETT STREET	Congress Street to Moody Street	16	✓
MONUMENT STREET	Munjoy Street to Waterville Street	16	✓
WATERVILLE STREET	Monument Street to Hoyt's Lane	11	✓
WILSON STREET	Atlantic Street to E. Promenade	20	✓
MOODY STREET	E. Promenade to Munjoy Street	15	✓
SHERBROOKE STREET	St Lawrence Street to Waterville Street	4	✓

234

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 2-16-22 Start Time: 1930 End Time: 2000

Recorder: Jen

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET eastside only	E. Promenade to North Street	36
ST LAWRENCE STREET	Congress Street to Gilbert Lane	27
ATLANTIC STREET	Gilbert Lane to Congress Street	28
MUNJOY STREET	Congress Street to Hanson Lane	35
VESPER STREET	Hanson Lane to Congress Street	38
MORNING STREET	Congress Street to Wilson Street	35
E. PROMENADE	Wilson Street to Congress Street	4
BECKETT STREET	Congress Street to Moody Street	23
MONUMENT STREET	Munjoy Street to Waterville Street	24
WATERVILLE STREET	Monument Street to Hoyt's Lane	14
WILSON STREET	Atlantic Street to E. Promenade	36
MOODY STREET	E. Promenade to Munjoy Street	31
SHERBROOKE STREET	St Lawrence Street to Waterville Street	7

333

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 2-16-22 Start Time: 0400 End Time: 0500

Recorder: NST

Street Name	Street Segment	Number of Parked Vehicles
CONGRESS STREET westside only	E. Promenade to North Street	35
NORTH STREET	Congress Street to Summer Court	13
CUMBERLAND AVENUE	North Street to Merrill Street	25
LAFAYETTE STREET	Congress Street to Quebec Street	32
MERRILL STREET	Quebec Street to Congress Street	31
QUEBEC STREET	Merrill Street to Emerson Street	10
TURNER STREET	Eastern Promenade to Merrill Street	36
EMERSON STREET	Quebec Street to Congress Street	38
HOWARD STREET	Congress Street to Quebec Street	15
MORNING STREET	Congress Street to Turner Street	19
E. PROMENADE	Turner Street to Congress Street	5

259

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 2-16-22 Start Time: 1130 End Time: 1700

Recorder: NST

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	21	✓
NORTH STREET	Congress Street to Summer Court	14	✓
CUMBERLAND AVENUE	North Street to Merrill Street	15	✓
LAFAYETTE STREET	Congress Street to Quebec Street	15	✓
MERRILL STREET	Quebec Street to Congress Street	22	✓
QUEBEC STREET	Merrill Street to Emerson Street	9	✓
TURNER STREET	Eastern Promenade to Merrill Street	21	✓
EMERSON STREET	Quebec Street to Congress Street	22	✓
HOWARD STREET	Congress Street to Quebec Street	13	✓
MORNING STREET	Congress Street to Turner Street	13	✓
E. PROMENADE	Turner Street to Congress Street	3	✓

168

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 2-16-22 Start Time: 1930 End Time: 2000

Recorder: NST

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	33	✓
NORTH STREET	Congress Street to Summer Court	13	✓
CUMBERLAND AVENUE	North Street to Merrill Street	20	✓
LAFAYETTE STREET	Congress Street to Quebec Street	21	✓
MERRILL STREET	Quebec Street to Congress Street	31	✓
QUEBEC STREET	Merrill Street to Emerson Street	9	✓
TURNER STREET	Eastern Promenade to Merrill Street	29	✓
EMERSON STREET	Quebec Street to Congress Street	30	✓
HOWARD STREET	Congress Street to Quebec Street	18	✓
MORNING STREET	Congress Street to Turner Street	16	✓
E. PROMENADE	Turner Street to Congress Street	2	✓

222

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 3/5/22 Start Time: 0400 End Time: 0430

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET eastside only	E. Promenade to North Street	29	✓
ST LAWRENCE STREET	Congress Street to Gilbert Lane	24	✓
ATLANTIC STREET	Gilbert Lane to Congress Street	26	✓
MUNJOY STREET	Congress Street to Hanson Lane	25	✓
VESPER STREET	Hanson Lane to Congress Street	40	✓
MORNING STREET	Congress Street to Wilson Street	41	✓
E. PROMENADE	Wilson Street to Congress Street	9	✓
BECKETT STREET	Congress Street to Moody Street	23	✓
MONUMENT STREET	Munjoy Street to Waterville Street	16	✓
WATERVILLE STREET	Monument Street to Hoyt's Lane	14	✓
WILSON STREET	Atlantic Street to E. Promenade	42	✓
MOODY STREET	E. Promenade to Munjoy Street	31	✓
SHERBROOKE STREET	St Lawrence Street to Waterville Street	7	✓

327

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 3/5/22 Start Time: 1730 End Time: 1800

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET eastside only	E. Promenade to North Street	19	✓
ST LAWRENCE STREET	Congress Street to Gilbert Lane	21	✓
ATLANTIC STREET	Gilbert Lane to Congress Street	27	✓
MUNJOY STREET	Congress Street to Hanson Lane	26	✓
VESPER STREET	Hanson Lane to Congress Street	35	✓
MORNING STREET	Congress Street to Wilson Street	32	✓
E. PROMENADE	Wilson Street to Congress Street	7	✓
BECKETT STREET	Congress Street to Moody Street	21	✓
MONUMENT STREET	Munjoy Street to Waterville Street	25	✓
WATERVILLE STREET	Monument Street to Hoyt's Lane	12	✓
WILSON STREET	Atlantic Street to E. Promenade	37	✓
MOODY STREET	E. Promenade to Munjoy Street	30	✓
SHERBROOKE STREET	St Lawrence Street to Waterville Street	3	✓

295

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 3/5/22 Start Time: 2000 End Time: 2030

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET eastside only	E. Promenade to North Street	32
ST LAWRENCE STREET	Congress Street to Gilbert Lane	23
ATLANTIC STREET	Gilbert Lane to Congress Street	29
MUNJOY STREET	Congress Street to Hanson Lane	36
VESPER STREET	Hanson Lane to Congress Street	38
MORNING STREET	Congress Street to Wilson Street	35
E. PROMENADE	Wilson Street to Congress Street	7
BECKETT STREET	Congress Street to Moody Street	24
MONUMENT STREET	Munjoy Street to Waterville Street	28
WATERVILLE STREET	Monument Street to Hoyt's Lane	15
WILSON STREET	Atlantic Street to E. Promenade	37
MOODY STREET	E. Promenade to Munjoy Street	38
SHERBROOKE STREET	St Lawrence Street to Waterville Street	3

345-

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 3/5/22 Start Time: 0430 End Time: 0500

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	29	✓
NORTH STREET	Congress Street to Summer Court	14	✓
CUMBERLAND AVENUE	North Street to Merrill Street	25	✓
LAFAYETTE STREET	Congress Street to Quebec Street	26	✓
MERRILL STREET	Quebec Street to Congress Street	28	✓
QUEBEC STREET	Merrill Street to Emerson Street	12	✓
TURNER STREET	Eastern Promenade to Merrill Street	44	✓
EMERSON STREET	Quebec Street to Congress Street	37	✓
HOWARD STREET	Congress Street to Quebec Street	16	✓
MORNING STREET	Congress Street to Turner Street	17	✓
E. PROMENADE	Turner Street to Congress Street	4	✓

252

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 3/5/22 Start Time: 1800 End Time: 1830

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	23	✓
NORTH STREET	Congress Street to Summer Court	14	✓
CUMBERLAND AVENUE	North Street to Merrill Street	18	✓
LAFAYETTE STREET	Congress Street to Quebec Street	27	✓
MERRILL STREET	Quebec Street to Congress Street	25	✓
QUEBEC STREET	Merrill Street to Emerson Street	9	✓
TURNER STREET	Eastern Promenade to Merrill Street	42	✓
EMERSON STREET	Quebec Street to Congress Street	29	✓
HOWARD STREET	Congress Street to Quebec Street	16	✓
MORNING STREET	Congress Street to Turner Street	17	✓
E. PROMENADE	Turner Street to Congress Street	1	✓

221

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 3/5/22 Start Time: 2030 End Time: 2100

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET westside only	E. Promenade to North Street	32
NORTH STREET	Congress Street to Summer Court	13
CUMBERLAND AVENUE	North Street to Merrill Street	22
LAFAYETTE STREET	Congress Street to Quebec Street	32
MERRILL STREET	Quebec Street to Congress Street	30
QUEBEC STREET	Merrill Street to Emerson Street	9
TURNER STREET	Eastern Promenade to Merrill Street	44
EMERSON STREET	Quebec Street to Congress Street	30
HOWARD STREET	Congress Street to Quebec Street	17
MORNING STREET	Congress Street to Turner Street	19
E. PROMENADE	Turner Street to Congress Street	0

✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

248

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.



Traffic Solutions
William J. Bray, P.E.
235 Bancroft Street
Portland, ME 04102
(207) 774-3603
(207) 400-6890 mobile
trafficsolutions@maine.rr.com

May 6, 2017

**Traffic and Parking Demand Assessment
For Proposed
St. Lawrence Arts Center
Portland, Maine**

Friends of St. Lawrence Church are proposing a 401-seat addition to the existing St. Lawrence Arts Center (SLAC) at 76 Congress Street increasing the capacity of the arts venue from 110 to 485 seats. Preliminary traffic and parking demand forecasts have been developed for the proposed project based upon travel choice and parking trends measured at the existing 110-seat venue.

Theater attendees to seven scheduled shows in 2017 were interviewed by the SLAC staff to establish travel modal choice trends of the existing 110-seat facility. Neighborhood parking supply and demand studies were also conducted on the eve of two of these events; Wednesday and Saturday events to develop parking demand and supply patterns within the extended neighborhood area.

Travel Mode Survey Summary

Patron interviews were completed by SLAC staff during the following scheduled events:

Tuesday, February 28, 2017
Tuesday, April 4, 2017
Wednesday, April 26, 2017
Saturday, April 29, 2017
Friday, May 5, 2017
Saturday, May 6, 2017
Sunday, May 7, 2017

SLAC staff interviewed each attendee upon entering the theater:

1. *How did you get here?*
2. *If the answer was auto, a second question was asked: were you the driver?*
3. *If the answer was yes, a third question was asked – how many people traveled with you in your auto?*

A summary of the interview survey information is presented as follows:

<u>Tuesday, February 28, 2017</u>	<u>Tuesday, April 4, 2017</u>	<u>Wednesday, April 26, 2017</u>	<u>Saturday, April 29, 2017</u>
72 attendees	80 attendees	74 attendees	78 attendees
59 passengers in 24 autos	61 passengers in 21 autos	44 auto trips	64 passengers in 36 autos
7 attendees walked	15 attendees walked		3 people Uber
1 attendee METRO	2 people METRO		6 people walked
5 attendees cab/Uber	2 people scooter/Moped		

<u>Friday, May 5, 2017</u>	<u>Saturday, May 6, 2017</u>	<u>Sunday, May 7, 2017</u>
58 attendees	54 attendees	58 attendees
51 passengers in 23 autos	44 passengers in 21 autos	50 passengers in 22 autos
7 people walked	10 people walked	1 person biked
		5 people walked
		2 people in hotel shuttle

Vehicle occupancy and parking space rates were established for the existing 110-seat SLAC by “*averaging*” the survey results recorded for each scheduled event. The average vehicle occupancy rate determined for the SLAC is **2.20** persons per automobile [$59 \div 24 = 2.46 + 61 \div 21 = 2.90 + 74 \div 44 = 1.68 + 64 \div 36 = 1.77 = 51 \div 23 = 2.22 + 44 \div 21 = 2.10 + 50 \div 22 = 2.27$].

Average peak parking rates were established for the SLAC venue based upon the survey data for two variables consistent with the Institute of Transportation Engineers 4th edition of the Parking Generation publication; 1) per attendee and, 2) per seat. The calculations for each follows:

Average Parking Rate/Attendee = **0.40** spaces per attendee [$24 \div 72 = 0.33 + 21 \div 80 = 0.26 + 44 \div 74 = 0.59 + 36 \div 78 = 0.46 + 23 \div 58 = 0.40 + 21 \div 54 = 0.39 + 22 \div 58 = 0.38$]

Average Parking Rate/Seat = **0.25** spaces per seat [$24 \div 110 = 0.21 + 21 \div 110 = 0.19 + 44 \div 110 = 0.40 + 36 \div 110 = 0.33 + 23 \div 110 = 0.21 + 21 \div 110 = 0.19 + 22 \div 110 = 0.20$]

Estimate of Peak Hour Trip and Parking Demand

Peak hour trip generation and parking demand values were determined for the proposed SLAC project based upon rates determined for the existing smaller 110-seat SLAC site.

Peak Hour Trip Generation: An increase of 182 vehicle trips are generated in the peak hour of the site with completion of the proposed 401-seat expansion of the SLAC [485 total seats of new facility minus existing 110 seat facility] equals a “*net*” increase of $375 \text{ seats} \div 2.20 =$ **170** vehicle trips.

Peak Parking Space Demand: Peak parking space demand was calculated for the proposed SLAC site by averaging the calculations performed for two variables: 0.40 spaces per attendee and 0.25 spaces per seat. The former rate generates a parking demand of 194 spaces and the latter value estimates the parking demand at 121 spaces. Accordingly, the proposed 485-seat facility can be expected to generate peak parking demand of **158** spaces¹.

Parking Supply Determination

Parking Space Inventory: An inventory of existing neighborhood parking spaces was completed for all streets located within an approximate 900-foot walking radius (approximately 5-minute walk at 3 feet/second) from the 76 Congress SLAC site. Figure 1 illustratively identifies all streets and street segments included in the survey. The number of parking spaces were estimated applying City ordinance requirements (i.e. parking restrictions at hydrants, driveways, crosswalks and intersections) and an average parking stall length of 20-feet. A total of **883** parking spaces were counted within the study area.

Parking Studies: Parking occupancy studies were conducted on Wednesday, April 26 and Saturday, April 29, 2017. Both dates coincide with scheduled theater events at the existing SLAC. Total vehicle parking counts were recorded for each street block during three separate time periods: 1) Pre-event time, 2) During the show, and 3) Early morning after show. Actual survey times were as follows:

¹ April 18, 2014 Nelson/Nygaard project review memorandum estimated peak parking demand at 122 spaces.
August 18, 2014 Gorrill-Palmer, Inc. study estimated peak parking demand at 218 spaces.

<u>Wednesday, April 26, 2017</u>	<u>Saturday, April 29, 2017</u>
1. Pre-Show = 5:00 to 5:30 PM	1. Pre-Show = 5:30 to 6:00 PM
2. During Show = 7:15 to 7:45 PM	2. During Show = 7:45 to 8:15 PM
3. Thursday morning = 4:30 to 5:00 AM	3. Thursday morning = 4:30 to 5:00 AM

Table 1 presents the actual vehicle occupancy counts recorded for each street and street segment located with the defined study area.

Table 1
Summary Report
On-Street Parking Occupancy Study

<u>Street/Segment</u>	<u>Measured⁽¹⁾</u> <u>Spaces</u>	<u>April 26/27, 2017</u>			<u>April 29/30, 2017</u>		
		<u>5:00 to</u>	<u>7:15 to</u>	<u>4:30 to</u>	<u>5:30 to</u>	<u>7:45 to</u>	<u>4:30 to</u>
		<u>5:30</u>	<u>7:45</u>	<u>5:00</u>	<u>6:00</u>	<u>8:15</u>	<u>5:00</u>
		<u>PM</u>	<u>PM</u>	<u>AM</u>	<u>PM</u>	<u>PM</u>	<u>PM</u>
Howard Street Entire	17	14	18	18	15	18	17
Merrill Street	41	30	30	20	28	28	24
- Congress to Quebec							
Quebec Street	11	15	11	9	15	13	12
- Merrill to Emerson							
Emerson Street Entire	45	14	30	32	26	26	33
Congress Street	75	57	73	70	66	74	62
- North to E. Prom							
North Street	14	12	15	14	14	13	12
- Congress to Stetson							
Lafayette Street Entire	40	28	17	16	33	25	25
Eastern Promenade	47	7	10	14	36	20	15
- Turner to Wilson							
Cumberland Avenue	26	20	16	11	21	17	16
- North to Merrill							
Turner Street	60	37	35	13	41	31	29
Morning Street	67	54	59	61	55	57	65
- Wilson to Turner							
Wilson Street Entire	64	13	14	31	24	27	37
Moody Street Entire	46	5	14	21	14	20	20
St. Lawrence Street	51	30	32	36	33	36	39
- Congress to Hoyt's							
Sherbrook Street	13	3	5	10	7	5	9
Waterville Street	38	13	19	25	22	22	25
- Congress to Hoyt's							
Atlantic Street	44	25	33	31	27	35	32
- Congress to Gilbert							
Munjoy Street	48	28	44	37	43	51	42
- Congress to Alley							
Beckett Street Entire	42	17	25	24	26	24	25
Vesper Street	54	50	45	54	55	58	61
- Congress to Alley							
Monument Street	40	18	27	27	30	36	30
- Waterville to Munjoy							
TOTAL	883	490	572	574	631	636	661
PERCENT OCCUPANCY		55%	65%	65%	71%	72%	75%

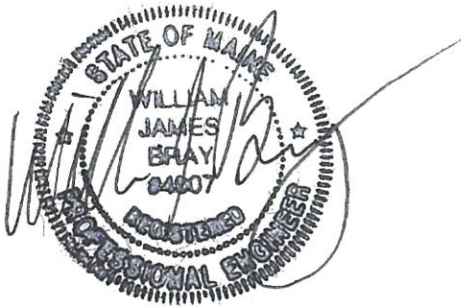
Note ⁽¹⁾: Number of spaces estimated based upon City Ordinance Requirements and parking stall length of 20-feet

Approximately 56% of the parking spaces located in the neighborhood study area were occupied on Wednesday evening prior to the theater show time and the number of spaces occupied during the show time increased to 572 spaces. A total of 574 spaces were occupied in the early hours of Thursday morning. Parking occupancy trends measured on Saturday, overall, were somewhat higher than the weekday values. A total of 631 vehicles were parked in the study area before the start of the event, that number increased to 636 vehicles during the show, increased again in the early morning hours of Sunday to 661 vehicles.

The early Sunday morning parking usage value (661 vehicles), which represents the highest recorded number of parked vehicles in the study area, leaves a balance of **222** unused parking spaces in the neighborhood.

Summary of Findings

- The proposed 485-seat St. Lawrence Arts Center project will generate a “*net*” increase of **170** vehicle trips during the peak hour of the site. Show times are presently scheduled in the early evening hours when peak traffic times have diminished and that practice will continue with the new arts center.
- The Maine Department of Transportation requires any project whose peak hour trip generation exceeds 100 trips per hour to file for and obtain a Traffic Movement Permit. An application permit is currently being prepared and will be submitted to the City this month.
- The proposed Arts Center project can be expected to generate a peak parking demand of **158** parking spaces with sellout of all 401 theater seats and companion events occurring in other rooms of the facility.
- A total of **883** public on-street parking spaces exists on streets located within a walking time of 5-minutes or less (approximately 900-feet) from the SLAC site at 76 Congress Street. Parking studies conducted in the early morning hours (4:30 to 5:00 AM) on Thursday, April 27 and Sunday, April 30, 2017 (Both dates follow a schedule evening theater event at SLAC) measured a peak neighborhood parking demand of 574 spaces on Thursday and 661 spaces on Sunday, leaving an unencumbered balance of **309** parking spaces on Thursday and **222** spaces on Sunday.





November 7, 2022

City of Portland Planning Authority
City Hall, 4th Floor
389 Congress Street
Portland, Maine 04101

RE: St. Lawrence Arts Addition
76 Congress Street
Parcel ID: 003-L-001
Project ID: 2016-265

BOARD OF DIRECTORS

Guy Gaudette, CPA
PRESIDENT

Glenn Morin, CPA
TREASURER/SECRETARY

Christopher Akerlind
Frank H. Bishop, Jr., Esq.
Nan Cumming
Bruce Hyman
Jamie Isaacson
A. Robert Ruesch, Esq.
Rob Tod
William Umbel

Deirdre Nice
EXECUTIVE DIRECTOR

Julia Kirby
DEVELOPMENT DIRECTOR

Gerry Shannon
THEATER MANAGER

St. Lawrence Arts is please to be resubmitting its application for Site Plan Approval for construction of a 401-seat Performance Hall Theater on the Congress and Munjoy block of Munjoy Hill at 76 Congress Street.

The project was originally reviewed and approved as a Major Site Plan by the Portland Planning Board in January 2018, subject to the Conditions of Approval which must be met prior to the issuance of a building permit. One condition specified that the applicant provide a revised Parking Demand Assessment (PDA) plan that addresses comments from the city's consulting traffic engineer, Thomas Errico.

A revised PDA plan prepared by Traffic Solutions (dated March 2022) has been submitted as part of the application. This report includes a narrative that outlines St. Lawrence Arts' (SLA) commitment to addressing the traffic and parking concerns in the immediate area of the project.

This letter will address Mr. Errico's comments regarding aspects of the 2017 TDM from the previously submitted Site Plan application. The comments from Mr. Errico are in italics, and our responses are in regular type below each.

• The PDA Plan notes a number of incentives for reducing vehicle impacts. I would suggest some detail (likely amount or percentage) on ticket discounts and coupons be provided.

SLA anticipates the use of incentives, such as free transportation and a discount on future tickets, to encourage patrons to use downtown lots and parking garages.

Through a partnership with the City of Portland, the Metro Number One bus will be able to offer free transportation to and from several area parking areas to the venue. SLA will be providing clear information that relays this to patrons before and at the time of ticket purchase.

At this point our organization does not have the exact data to assess the percentage it will be able to offer on a ticket. Factors that would influence this decision include overall talent bookings and ticket sales for each individual show. This data will become available once groups and performers are booked into the space, which would happen 6-8 months in advance of opening (anticipated spring or summer of 2025).

- *It notes that SLAC will be partnering with the City on infrastructure improvements. Further detail on what is envisioned regarding this partnership and possible commitments should be provided.*

As part of SLA's continued partnership with the City of Portland to improve infrastructure, SLA will cover the cost of three bike racks (space for 7 bikes on each) on the site of the venue. Planned improvements to six sidewalk crossings in the immediate vicinity of the project will ensure safe passage to pedestrians and bicyclists and be ADA compliant.

- *The applicant should provide details on the ticket surcharge (likely amount or percentage) and specifically describe how the surcharge proceeds will be managed/allocated towards TDM strategies.*

SLA will charge fees on each ticket that will both be allocated towards operating costs such as credit card fees, transportation incentive costs (i.e. free rides on the Number One bus), and handling fees (all common practice for organizations with a ticket system). Again, it is difficult to determine the exact surcharge until talent bookings and ticket sales can be assessed. This data will become available once groups and performers are booked into the space, which would happen 6-8 months in advance of opening (anticipated spring or summer of 2025).

Fees are currently charged on tickets sold at the existing Parish Hall Theater. Our organization is adept at allocating these monies to the proper line item budget in our accounting system and anticipates using this same system with the expansion of our theater. SLA would be happy to provide a recent budget spreadsheet to show its proper accounting practices.

- *It is noted that METRO "could" further increase evening service. It is my understanding that METRO service will increase evening service and therefore the applicant should confirm this assumption.*

Greater Portland METRO Executive Director Greg Jordan has informed SLA in the past that the METRO service is committed to increasing service in the area of the theater. Mr. Jordan has stated:

Metro would increase evening frequency on the Route 1 (Congress) from about every 45 minutes to every 30 minutes and extend service to 11:00 p.m. (Monday-Saturday). As part of this program, theater patrons will be able to use their venue ticket as valid fare to board the bus. This plan will make it easier for patrons to park in Portland's downtown district, enjoy pre-performance activities or dinner, then catch the Route 1 for a quick ride up to the theater on Munjoy Hill.

SLA has requested a meeting with Greater Portland Metro to update this letter for 2022 (2014 letter attached). Information regarding these transportation options would be made readily available to ticket purchasers.

- *The applicant should note why only the Temple Street garage is the only facility eligible for a subsidy. Additionally, the applicant should note why free parking is limited to three hours (dinner plus event could be more than 3 hours).*

SLA has done a thorough search of downtown parking garages and parking lots within walking distance of the Number One bus line (see Table 1). The Temple Street garage stands as a good example of just one downtown garage that will provide both ample parking and proximity to the Number One bus line.

SLA is planning to update its website with comprehensive information on parking areas, hours, and costs. This will enable patrons a full picture of downtown parking opportunities that are readily available.

The ability to cover some of the cost of downtown parking is part of the PDA but will be limited to three hours (the time a patron would reasonably be at the venue). SLA is committed to providing incentives and discounts to mitigate congestion issues in the area, but as a community-based, non-profit organization we are limited in the scope of what can be provided. Should patrons park for longer in a downtown garage or parking lot to shop and/or dine, the cost of that additional parking would fall to the patron and would not be the responsibility of the organization.

Parking validation for a limited time is a standard practice by many area businesses in the Old Port. For example, The Bay Club in One City Center offers members 2 hours of free parking in the Free Street garage. Should a member choose to do other activities in the downtown area while parked in the Free Street garage extending their parking stay beyond two hours, the member would be responsible for the extra time.

- *The applicant should provide greater detail on the anticipated Valet service program at the first event and details on specific operations and how the service is funded? Related to this is the relatively far distance to the parking lots for valet vehicles and how this may impact service and use.*

Valet service will be a key part of SLA's parking plan to mitigate vehicle congestion in the neighborhood. SLA's understanding is that there is a cost to bring Valet service to the venue, which the organization would cover. Valet service is used successfully in the City, most notably at the Portland Press Hotel on Congress Street.

For the purpose of the PDA, the organization consulted *Successful Management of a Valet Service* by Richard Raskin to assess best practices and viability of the service for this venue. It has been determined that Valet Service will be a viable option for the theater given that of the two primary factors to bring Valet to a venue, one is "...in parking operations in which an operator or facility owner needs to optimize use of limited or undesirable parking." Once this need has been established, the use of Valet service is down to the numbers (see Table 2 and Table 3). Valet service depends on careful orchestration of wait times and staff.

Once careful balance with these two determining factors is achieved it is not as important the proximity of the closest lot (i.e. if it is 10 minutes away, the numbers in the tables below will be adjusted to meet that need).

- *The applicant should provide details on the bicycle ticket discount program.*

In August 2022, a bike-share program (a partnership with Tandem Mobility and the City of Portland) was launched in Portland, Maine. This program, along with infrastructure upgrades at the site will encourage bicycle use to and from the venue.

Similar to the previously discussed ticket discounts, our organization will need more data on number of shows and tickets sales to determine the particulars of a bicycle ticket discount program.

SLA prides itself as a neighborhood arts center, providing a safe, accessible, inclusive, and inspiring atmosphere to engage in all forms of performing arts. The construction of our expanded facility is an exiting opportunity to provide even more of the same, and we are committed to assuring residents and the City of Portland that it will be a positive addition to the burgeoning Munjoy Hill area.

St. Lawrence Arts has been an excellent neighbor since 2001 and will continue to do so with this endeavor. We trust we have provided the applicable information and look forward to both receiving feedback and working together with the City of Portland to make this project a success.

Sincerely,

A handwritten signature that reads "Deirdre" followed by a simple hand-drawn smiley face consisting of a circle with two dots for eyes and a curved line for a mouth.

Deirdre Nice
Executive Director

TABLE 1: Downtown Parking Garages (this will be expanded)

Garage	Hours of Operation	Cost per hour/per day	# of spaces	Proximity to Bus Stop	Address
One City Center	24 Hours	\$5/\$50	Not Provided	1 min walk	23 Free Street (2 entrances, one from Congress Street).
Temple Street	7 am – 12 am. M-Saturday	\$5/\$40	Not Provided	3 min walk	11 Temple Street
Top of the Old Port Parking	24 Hours 7 days a week	\$4	543	2 min walk	119 Pearl Street
Portland Public Market	7 a.m. – 5:30 p.m. M-F	\$5/\$45	Not provided	5 min walk	315 Cumberland Avenue
Elm Street	6 a.m. – 10 p.m. M-F 8 a.m. – 10 p.m. Sat.	\$3/\$28	333	2 min walk	21 Elm Street
Cumberland County Parking Garage	24 Hours 7 days a week	\$3.50/\$25	Not Provided	5-6 min walk	192 Newbury Street

TABLE 2: Valet Wait Times, Level of Service (LOS)

The following are ideal levels of service (LOS) for wait times when claiming vehicles:

<i>Table 1: Valet Wait Times -- Level of Service (LOS)</i>	
LOS	Wait Time ⁽¹⁾
A	Less than 4 minutes
B	4 - 6 minutes
C	6 - 8 minutes
D	8 - 10 minutes
F	Exceeds 10 minutes

TABLE 3: Valet Attendant Staffing Calculation

Activity		Activity Time	Total Time
Arriving Vehicles	15	5.50 Minutes	82.5 Minutes
Departing Vehicles	50	4.25 Minutes	212.5 Minutes
Totals	65		295.0 Minutes

METRO

Greater Portland Transit District

September 17, 2014

Ms. Deirdre Nice
Executive Director
St. Lawrence Arts
76 Congress Street
Portland, Maine 04101

Re: Enhanced Transit Service on Congress in support of St. Lawrence Theater

Dear Deirdre:

The Greater Portland Transit District (Metro) is pleased to partner with St. Lawrence Arts and offer useable transit services as part of your multi-pronged effort to manage the traffic and parking impacts associated with the theater's proposed expansion.

Using the approximate \$70,000 in annual funding that St. Lawrence Arts is proposing to commit, Metro would increase evening frequency on the Route 1 (Congress) from about every 45 minutes to every 30 minutes and extend service to 11:00 p.m. (Monday-Saturday). As part of this program, theater patrons will be able to use their venue ticket as valid fare to board the bus. This plan will make it easier for patrons to park in Portland's downtown district, enjoy pre-performance activities or dinner, then catch the Route 1 for a quick ride up to the theater on Munjoy Hill.

Additionally METRO will work with St. Lawrence Arts staff to develop a marketing plan to promote these public transit options in a way that catches people's attention. Elements of this plan will include promoting patron's use of "Real-Time Arrival" technology either through smartphones, text or possibly on display in the theater's lobby as well as providing incentives for taking public transit to performances at St. Lawrence.

While this service improvement to 30 minute frequency will help the Route 1 be an effective transit option for some theater patrons, we must be mindful of the number of patrons the Route 1 can reasonably transport both before and after events. Realistically, 2 trips both before and after events (depending on performance start and end times) are likely to be reasonable options for theater patrons. Metro buses' seating and standing capacity can comfortably accommodate 30-40 people. So, the Route 1 can be a realistic option for up to 60-80 people per event. Service improvements that lower frequency to 15 minutes would increase Metro's capacity to the point where we could accommodate 120-160 patrons in the hour before and after an event.

Not only does this partnership benefit St. Lawrence patrons with convenient transit service connecting the downtown district with the theater, it will also provide enhanced transit service for Portland residents and visitors travelling on the peninsula and up to Munjoy Hill and the Eastern Promenade. This is truly a strategic partnership in that we can work together toward making transit a

useable option for theater patrons while also improving transit service generally for Portland residents of Munjoy Hill and the Eastern Promenade.

As Metro continues advancing transit in Portland and growing ridership, we also plan to expand this concept and work with other cultural and artistic venues along our transit routes to promote public transit use through this kind of creative payment arrangement. As we expand our local partners, Metro can more effectively work with the city of Portland and the Federal Transit Administration to develop the funding programs needed to seriously improve transit service on the peninsula with all day frequencies of 20 minutes or better, hours of service through midnight, and added weekend service.

Thank you for this opportunity to work with you and we look forward to a successful partnership.

Sincerely,

Gregory Jordan
General Manager

**TRAFFIC MOVEMENT PERMIT APPLICATION
MODIFICATION**

St Lawrence Arts

PREPARED FOR: St Lawrence Arts

PREPARED BY: William J. Bray, PE

May 2017



Traffic Solutions

a Barton & Loguidice company

March 25, 2022

Thomas A. Errico, PE
Senior Associate-Traffic Engineering Director
T.Y. Lin International, Inc.
12 Northbrook Drive
Falmouth, Maine 04105

RE: St. Lawrence Arts – Traffic Movement Permit Modification

Dear Tom;

Please find attached a Maine Department of Transportation Traffic Movement Permit – Modification (TMP-M) application for the proposed St Lawrence Arts project. Consistent with direction provided by Randy Illian, P.E., MaineDOT's Region 1 Traffic Engineer we have revised the current standard TMP-M form to reflect the City's delegated review authority.

Our submittal includes:

- a. A TMP-M application signed by Deirdre Nice; Executive Director of the St Lawrence Arts dated March 21, 2022.
- b. Copy of current crash data (2018-2020) for the same study area submitted with the prior 2017 Traffic Movement Permit application. Additionally, we have provided a summary report of the crash data; which you will note doesn't identify any High Crash Locations within the study area.
- c. We are also attaching for your review and information an updated stamped copy of the proposed site plan. The plan doesn't substantively differ from the prior site plan that accompanied the 2017 TMP application.
- d. Attached as an appendix to the TMP-M application is a complete copy of the 2017 Traffic Movement Permit Application.

As requested through your office we are preparing a revised areawide parking study in support of the proposed project, which will be completed in early May.

If you seek additional information or required clarification related to this TMP-M application, please contact John Adams, P.E., from our office; for, I will be away on an extended leave.

Thank you for your direction on this project.

Very truly yours,

William Bray, P.E.,



DEPARTMENT OF
TRANSPORTATION TRAFFIC
ENGINEERING DIVISION
City of Portland with Delegated
Review Authority

ID#: _____

Fees Paid: _____

Date Received: _____

APPLICATION FOR TRAFFIC MOVEMENT PERMIT MODIFICATION

This form shall be used to request approval of minor changes to: (a) project design or operation; or (b) the conditions of a permit as previously approved by the City of Portland.

A processing fee of \$1,500.00 (check payable to Treasurer, City of Portland) is required at the time of application submittal.

If significant changes are proposed, then a complete new or amendment application may be required by the City of Portland.

Name of Applicant: St. Lawrence Arts

Address: 76 Congress Street, Portland, ME 04101

Telephone Number: (207) 347-7177

Name of Contact or Agent: Deirdre Nice

Telephone Number: (207) 347-7177

LOCATION OF ACTIVITY

Name of Project: St. Lawrence Arts

Municipality or Township: Portland County: Cumberland

REQUIRED INFORMATION

1. Existing City Permit Number: _____

2. DOT or DEP Project Manager for previous application (if known): Thomas A. Errico, P.E.

3. Description of Proposed Change: There are no substantive changes to the proposed St. Lawrence Arts Center project. The Applicant is requesting an updated issuance of the Traffic Movement Permit.

(Attach additional sheet(s), if necessary)

4. **The May 2017 Traffic Movement Permit Application is updated, as noted, and attached to the Traffic Movement Permit Modification.**

5. Does your proposal involve a significant expansion of the project, change the nature of the project, or modify any City findings with respect to any licensing criteria? There are no substantive changes to the project.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete I authorize the City to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment".



SIGNATURE OF APPLICANT

March 21, 2022

DATE:

Deirdre Nice

PRINT OR TYPED NAME

Executive Director

TITLE

THE APPLICATION FEE IS DUE AT THE TIME OF APPLICATION SUBMITTAL. THE APPLICATION WILL NOT BE PROCESSED UNTIL THE \$1,500 FEE IS PAID.

TRAFFIC ACCIDENTS

The Maine Department of Transportation's (MaineDOT) Accident Records Section provided three-year (2018 through 2020) safety records for the sections of streets highlighted on the attached figure, which includes all streets and street segments directly adjacent to the SLAC site. MaineDOT's report is presented as follows:

2018 through 2020 Crash Summary

<u>Location</u>	<u>Number of Accidents</u>	<u>Critical Rate Factor</u>
1. Beckett Street @ Congress Street	1	0.63
2. Munjoy Street @ Congress Street	1	0.47
3. Atlantic Street @ Congress Street	1	0.42
4. Moody Street @ Vesper Street	1	4.76
5. Monument Street @ St. Lawrence Street	1	2.32
6. Cumberland Avenue @ Merrill Street	1	2.17
7. North Street @ Quebec Street	3	2.42
8. North Street @ Cumberland Avenue	3	1.37
9. North Street @ Congress Street	2	0.76
10. Congress St. btw. Morning St. and Eastern Prom.	2	2.69
11. Congress St. btw. Vesper St. and Morning St.	2	2.82
12. Congress St. btw. Beckett St. and Emerson St.	1	1.63
13. Congress St. btw. Merrill St. and Munjoy St.	1	1.72
14. Moody St. btw. Vesper St. and Morning St.	1	2.43
15. Lafayette St. btw. Quebec St. and Cumberland Ave.	2	1.84
16. St. Lawrence St. btw. Congress St. and Monument St.	1	1.96
17. St. Lawrence St. btw. Sherbrooke St. and Hoyts Ln.	1	2.93
18. Waterville St. btw. Monument St. and Sherbrooke St.	1	13.30
19. Monument St. btw. Waterville St. and St. Lawrence St.	1	15.85
20. Cumberland Ave. btw. Merrill St. and Lafayette St.	1	1.33
21. Merrill St. btw. Turner St. and Cumberland Ave.	1	10.65
22. Howard St. btw. Quebec St. and Turner St.	1	2.18
23. Howard St. btw. Turner St. and Congress St.	2	3.17
24. Atlantic St. btw. Congress St. and Monument St.	4	5.80
25. Atlantic St. btw. Monument St. and Wilson St.	1	1.00
26. Munjoy St. btw. Monument St. and Congress St.	2	3.08
27. Vesper St. btw. Congress St. and Moody St.	3	5.00
28. Moody St. btw. Beckett St. and Vesper St.	2	9.90
29. Emerson St. btw. Turner St. and Congress St.	3	19.21
30. North St. btw. Quebec St. and Sumner St.	2	0.93
31. North St. btw. Sumner St. and Cumberland Ave.	2	1.77
32. North St. btw. Cumberland Ave. and Congress St.	4	3.44
33. Quebec St. btw. North St. and Lafayette St.	1	2.78
34. Quebec St. btw. Howard St. and Emerson St.	1	3.31
35. Eastern Prom. Btw. Turner St. and Congress St.	3	1.50

The MaineDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- ***8 or more accidents***
- ***A Critical Rate Factor greater than 1.00***

As the data presented in the table shows, the incidence of traffic crashes occurring on the noted sections of roadways is below MaineDOT's threshold criteria for identification of a high crash location.

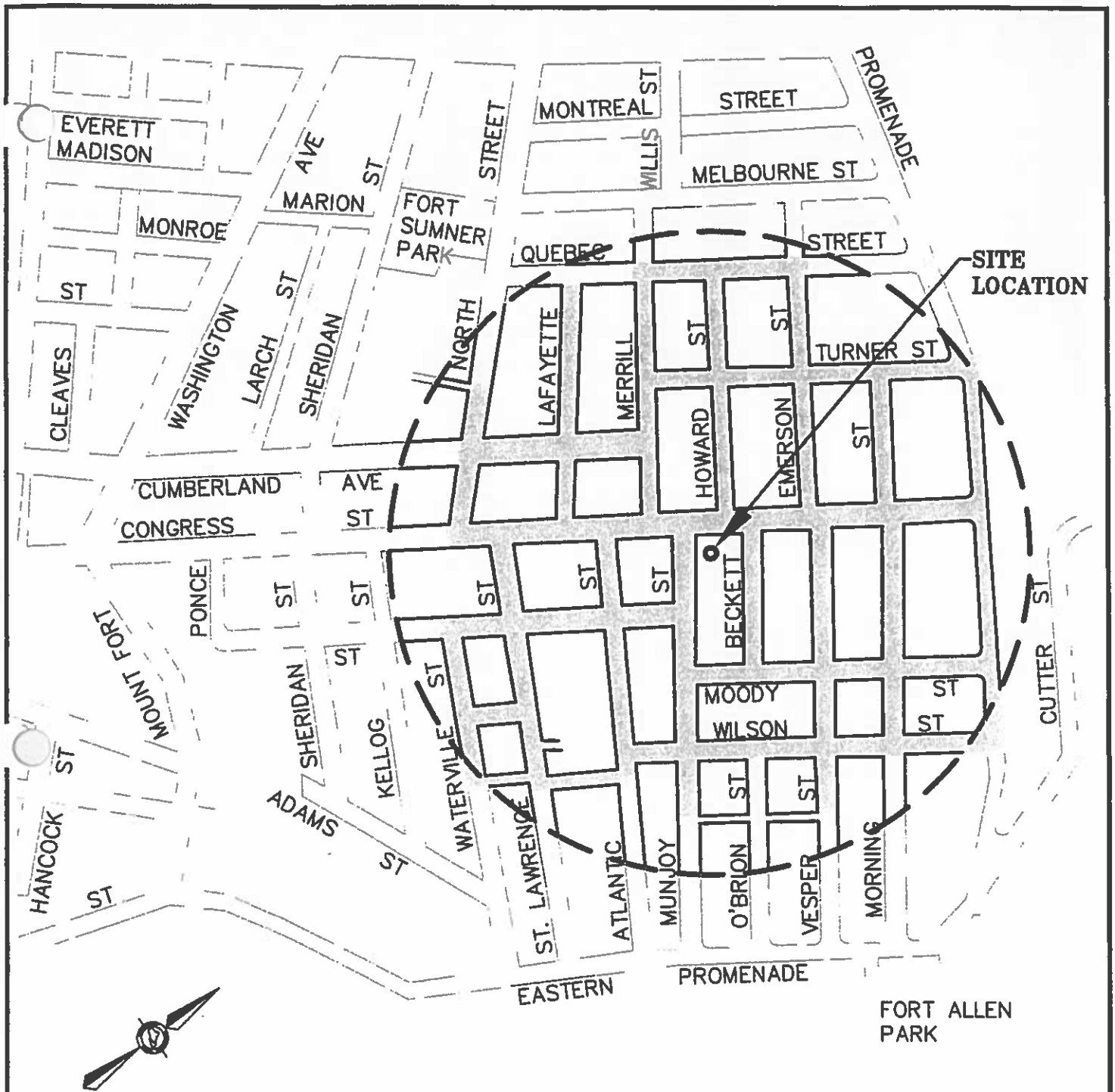


FIGURE 1
ON-STREET PARKING OCCUPANCY
STUDY AREA

LEGEND

— 5 MINUTE WALK
 RADUIS

STUDY AREA



Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS☒ Crash Summary I ☐ Section Detail ☒ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 SummaryREPORT DESCRIPTIONPortland
Munjoy HillREPORT PARAMETERS

Year 2018, Start Month 1 through Year 2020 End Month: 12

Route: 0561238	End Node: 18901	End Offset: 0	☒ Exclude Last Node
	Start Node: 18901	Start Offset: 0	☒ Exclude First Node
	End Node: 18892	End Offset: 0	☒ Exclude Last Node
Route: 0560503	Start Node: 18894	Start Offset: 0	☒ Exclude First Node
	End Node: 18893	End Offset: 0	☒ Exclude Last Node
Route: 0560503	Start Node: 18893	Start Offset: 0	☒ Exclude First Node
	End Node: 18891	End Offset: 0	☒ Exclude Last Node
Route: 0560383	Start Node: 18897	Start Offset: 0	☒ Exclude First Node
	End Node: 18903	End Offset: 0	☒ Exclude Last Node
Route: 0560383	Start Node: 18903	Start Offset: 0	☒ Exclude First Node
	End Node: 18902	End Offset: 0	☒ Exclude Last Node
Route: 0560025	Start Node: 18845	Start Offset: 0	☒ Exclude First Node
	End Node: 18846	End Offset: 0	☒ Exclude Last Node
Route: 0560025	Start Node: 18846	Start Offset: 0	☒ Exclude First Node
	End Node: 18847	End Offset: 0	☒ Exclude Last Node
Route: 0560525	Start Node: 18850	Start Offset: 0	☒ Exclude First Node
	End Node: 18853	End Offset: 0	☒ Exclude Last Node
Route: 0560757	Start Node: 18856	Start Offset: 0	☒ Exclude First Node
	End Node: 18857	End Offset: 0	☒ Exclude Last Node
Route: 0560757	Start Node: 18857	Start Offset: 0	☒ Exclude First Node
	End Node: 18858	End Offset: 0	☒ Exclude Last Node

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS☒ Crash Summary I☐ Section Detail☒ Crash Summary II☐ 1320 Public ☐ 1320 Private ☐ 1320 SummaryREPORT DESCRIPTIONPortland
Munjoy HillREPORT PARAMETERS

Year 2018, Start Month 1 through Year 2020 End Month: 12

Route: 0560516	Start Node: 18861 End Node: 18862	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560516	Start Node: 18862 End Node: 18863	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560516	Start Node: 18863 End Node: 18864	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560045	Start Node: 18854 End Node: 18855	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560254	Start Node: 18896 End Node: 18905	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560254	Start Node: 18905 End Node: 18904	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560536	Start Node: 18899 End Node: 18907	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 0560606	Start Node: 18899 End Node: 18896	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☐ Exclude Last Node
Route: 0560236	Start Node: 18866 End Node: 18906	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 0560799	Start Node: 18847 End Node: 18866	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☒ Exclude Last Node

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes			Percent Annual M Injury Ent-Veh	Crash Rate	Critical Rate	CRF
				K	A	B	C	PD			
18903	0560717 - 0.15	Int of HOWARD ST TURNER ST	2	0	0	0	0	0	0.327	0.00	0.65
									Statewide Crash Rate:	0.15	0.00
18905	0560717 - 0.10	Int of EMERSON ST TURNER ST	2	0	0	0	0	0	0.283	0.00	0.64
									Statewide Crash Rate:	0.15	0.00
18864	0560717 - 0.05	Int of MORNING ST TURNER ST	2	0	0	0	0	0	0.211	0.00	0.61
									Statewide Crash Rate:	0.15	0.00
18893	0560717 - 0.19	Int of MERRILL ST TURNER ST	2	0	0	0	0	0	0.203	0.00	0.61
									Statewide Crash Rate:	0.15	0.00
18863	0560160 - 0.05	Int of CONGRESS ST, MORNING ST	2	0	0	0	0	0	0.762	0.00	0.59
									Statewide Crash Rate:	0.15	0.00
P18856	0560160 - 0.09	Int of CONGRESS ST VESPER ST	2	0	0	0	0	0	0.941	0.00	0.57
									Statewide Crash Rate:	0.15	0.00
A18904	0560160 - 0.10	Int of CONGRESS ST EMERSON ST	2	0	0	0	0	0	0.000	0.00	0.00
									Statewide Crash Rate:	0.15	0.00
18854	0560160 - 0.13	Int of BECKETT ST CONGRESS ST	2	1	0	0	0	1	0.962	0.35	0.56
									Statewide Crash Rate:	0.15	0.00
18902	0560160 - 0.15	Int of CONGRESS ST HOWARD ST	2	0	0	0	0	0	1.084	0.00	0.55
									Statewide Crash Rate:	0.15	0.00
18853	0560160 - 0.17	Int of CONGRESS ST, MUNJOY ST	2	1	0	0	1	0	1.317	0.25	0.53
									Statewide Crash Rate:	0.15	0.00
18891	0560160 - 0.19	Int of CONGRESS ST MERRILL ST	2	0	0	0	0	0	1.306	0.00	0.53
									Statewide Crash Rate:	0.15	0.00
18845	0560160 - 0.22	Int of ATLANTIC ST, CONGRESS ST	2	1	0	0	0	1	1.571	0.21	0.50
									Statewide Crash Rate:	0.15	0.00
18900	0560160 - 0.24	Int of CONGRESS ST LAFAYETTE ST	2	0	0	0	0	0	1.669	0.00	0.50
									Statewide Crash Rate:	0.15	0.00
18840	0560160 - 0.27	Int of CONGRESS ST ST LAWRENCE ST	2	0	0	0	0	0	1.655	0.00	0.50
									Statewide Crash Rate:	0.15	0.00
18855	0560514 - 0.04	Int of BECKETT ST MOODY ST	2	0	0	0	0	0	0.040	0.00	-1.14
									Statewide Crash Rate:	0.15	0.00
18857	0560514 - 0.08	Int of MOODY ST VESPER ST	2	1	0	0	0	1	0.140	2.38	0.50
									Statewide Crash Rate:	0.15	4.76
18862	0560514 - 0.12	Int of MOODY ST MORNING ST	2	0	0	0	0	0	0.136	0.00	0.49
									Statewide Crash Rate:	0.15	0.00
18901	0560424 - 0.10	Int of CUMBERLAND AV LAFAYETTE ST	2	0	0	0	0	0	0.544	0.00	0.62
									Statewide Crash Rate:	0.15	0.00
18841	0560640 - 0.06	Int of MONUMENT ST ST LAWRENCE ST	2	1	0	0	0	1	0.228	1.46	0.63
									Statewide Crash Rate:	0.15	2.34
18842	0560640 - 0.11	Int of SHERBROOKE ST ST LAWRENCE ST	2	0	0	0	0	0	0.185	0.00	0.59
									Statewide Crash Rate:	0.15	0.00
18838	0560772 - 0.05	Int of SHERBROOKE ST WATERVILLE ST	2	0	0	0	0	0	0.069	0.00	-0.08
									Statewide Crash Rate:	0.15	0.00
18837	0560384 - 0	Int of HOYT LN WATERVILLE ST	2	0	0	0	0	0	0.048	0.00	-0.69
									Statewide Crash Rate:	0.15	0.00

Crash Summary I

Notes

Node	Route - MP	Node Description	U/R	Total Crashes	K	A	B	C	PD	Injury	Percent Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
18843	0560384 - 0.04	Int of HOYTS LN ST LAWRENCE ST	2	0	0	0	0	0	0	0.0	0.187	0.00	0.59	0.00
18846	0560513 - 0.04	0509266 POR, ATLANTIC, MONUMENT ST.	2	0	0	0	0	0	0	0.0	0.325	0.00	0.65	0.00
18839	0560513 - 0.13	0509259 POR, MONUMENT, WATERVILLE ST.	2	0	0	0	0	0	0	0.0	0.109	0.00	0.37	0.00
18892	0560503 - 0.14	Int of CUMBERLAND AV MERRILL ST	2	1	0	0	0	0	1	0.0	0.244	1.37	0.63	2.16
18851	0560525 - 0.17	Int of MOODY ST MUNJOY ST	2	0	0	0	0	0	0	0.0	0.189	0.00	0.59	0.00
18852	0560525 - 0.21	0509272 POR, MUNJOY, MONUMENT ST.	2	0	0	0	0	0	0	0.0	0.253	0.00	0.64	0.00
18899	0560536 - 0.42	Int of NORTH ST QUEBEC ST	2	3	0	0	0	0	3	0.0	0.690	1.45	0.60	2.41
12459	0560536 - 0.49	Int of NORTH ST SUMNER ST	2	0	0	0	0	0	0	0.0	0.753	0.00	0.59	0.00
18909	0560536 - 0.52	Int of CUMBERLAND AV NORTH ST	2	3	0	0	1	0	2	33.3	1.411	0.71	0.52	1.37
18907	0560536 - 0.57	Int of CONGRESS ST NORTH ST	2	2	0	0	0	0	2	0.0	1.798	0.37	0.49	0.00
18898	0560606 - 0.04	Int of LAFAYETTE ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.174	0.00	0.57	0.00
18894	0560606 - 0.08	Int of MERRILL ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.251	0.00	0.64	0.00
18897	0560606 - 0.12	Int of HOWARD ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.300	0.00	0.65	0.00
18896	0560606 - 0.16	Int of EMERSON ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.171	0.00	0.57	0.00
18866	0560236 - 0.29	Int of EASTERN PROMENADE WILSON ST	2	0	0	0	0	0	0	0.0	1.081	0.00	0.55	0.00
18865	0560236 - 0.34	Int of EASTERN PROMENADE MOODY ST	2	0	0	0	0	0	0	0.0	1.100	0.00	0.55	0.00
18963	0560236 - 0.43	Int of CONGRESS ST EASTERN PROMENADE	2	0	0	0	0	0	0	0.0	1.447	0.00	0.51	0.00
18906	0560236 - 0.52	Int of EASTERN PROMENADE TURNER ST	2	0	0	0	0	0	0	0.0	1.258	0.00	0.53	0.00
18847	0560799 - 0	Int of ATLANTIC ST WILSON ST	2	0	0	0	0	0	0	0.0	0.269	0.00	0.64	0.00
18850	0560799 - 0.04	0509270 POR, MUNJOY, WILSON ST.	2	0	0	0	0	0	0	0.0	0.260	0.00	0.64	0.00
18867	0560799 - 0.08	0509287 POR, OBRION, WILSON ST.	2	0	0	0	0	0	0	0.0	0.124	0.00	0.44	0.00
18858	0560799 - 0.12	0509278 POR, VESPER, WILSON ST.	2	0	0	0	0	0	0	0.0	0.162	0.00	0.55	0.00

Crash Summary I

Nodes														
Node	Route - MP	Node Description	U/R	Total Crashes	K	A	B	C	PD	Injury	Percent Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
18861	0560799 - 0.16	Int of MORNING ST WILSON ST	2	0	0	0	0	0	0	0.0	0.162	0.00	0.55	0.00
Statewide Crash Rate: 0.15														
Study Years: 3.00			NODE TOTALS: 14 0 0 1 12 14.3 26.399 0.18 0.26 0.69											

Crash Summary I

Summary													
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	A	B	C	PD	Percent Injury	Annual HMVM
Crash Rate	Critical Rate	CRF											
18864	18906	5080160	0 - 0.05	0560717 - 0	0.05	2	0	0	0	0	0	0.0	0.00007
Int of MORNING ST TURNER ST													
18864	18905	194509	0 - 0.05	0560717 - 0.05	0.05	2	0	0	0	0	0	0.0	0.00008
Int of MORNING ST TURNER ST													
18903	18905	194567	0 - 0.05	0560717 - 0.10	0.05	2	0	0	0	0	0	0.0	0.00008
Int of HOWARD ST TURNER ST													
18893	18903	5080184	0 - 0.04	0560717 - 0.15	0.04	2	0	0	0	0	0	0.0	0.00007
Int of MERRILL ST TURNER ST													
18863	18963	3131700	0 - 0.05	0560160 - 0	0.05	2	2	0	0	1	0	100.0	0.00032
Int of CONGRESS ST, MORNING ST													
18856	18863	194491	0 - 0.04	0560160 - 0.05	0.04	2	2	0	0	0	0	0.0	0.00031
Int of CONGRESS ST VESPER ST													
18856	18904	3123722	0 - 0.01	0560160 - 0.09	0.01	2	0	0	0	0	0	0.0	0.00009
Int of CONGRESS ST VESPER ST													
18854	18904	194488	0 - 0.03	0560160 - 0.10	0.03	2	1	0	0	0	1	0.0	0.00026
Int of BECKETT ST CONGRESS ST													
18854	18902	3120116	0 - 0.02	0560160 - 0.13	0.02	2	0	0	0	0	0	0.0	0.00020
Int of BECKETT ST CONGRESS ST													
18853	18902	3124002	0 - 0.02	0560160 - 0.15	0.02	2	0	0	0	0	0	0.0	0.00023
Int of CONGRESS ST, MUNJOY ST													
18853	18891	3122294	0 - 0.02	0560160 - 0.17	0.02	2	1	0	0	0	1	0.0	0.00025
Int of CONGRESS ST, MUNJOY ST													
18845	18891	3118712	0 - 0.03	0560160 - 0.19	0.03	2	0	0	0	0	0	0.0	0.00038
Int of ATLANTIC ST, CONGRESS ST													
18845	18900	3130201	0 - 0.02	0560160 - 0.22	0.02	2	0	0	0	0	0	0.0	0.00032
Int of ATLANTIC ST, CONGRESS ST													
18840	18900	3129297	0 - 0.03	0560160 - 0.24	0.03	2	0	0	0	0	0	0.0	0.00048
Int of CONGRESS ST ST LAWRENCE ST													
18840	18907	3106817	0 - 0.03	0560160 - 0.27	0.03	2	0	0	0	0	0	0.0	0.00047
Int of CONGRESS ST ST LAWRENCE ST													
18851	18855	5080185	0 - 0.04	0560514 - 0	0.04	2	0	0	0	0	0	0.0	0.00001
Int of MOODY ST MUNJOY ST													
18855	18857	194489	0 - 0.04	0560514 - 0.04	0.04	2	0	0	0	0	0	0.0	0.00001
Int of BECKETT ST MOODY ST													
18857	18862	194494	0 - 0.04	0560514 - 0.08	0.04	2	1	0	0	0	1	0.0	0.00001
Int of MOODY ST VESPER ST													
18862	18865	5080166	0 - 0.05	0560514 - 0.12	0.05	2	0	0	0	0	0	0.0	0.00002
Int of MOODY ST MORNING ST													
18898	18901	5080176	0 - 0.10	0560424 - 0	0.10	2	2	0	0	0	1	0.0	0.00022
Int of LAFAYETTE ST QUEBEC ST													

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	A	B	C	PD	Injury	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
18900	18901	194564	0 - 0.05	0560424 - 0.10	0.05	2	0	0	0	0	0	0	0.0	0.00004	0.00	858.35	0.00
Int of CONGRESS ST LAFAYETTE ST RD INV 05 60424																	
18840	18841	5080183	0 - 0.06	0560640 - 0	0.06	2	1	0	0	0	0	0	0.0	0.00010	3374.88	1726.18	1.96
Int of CONGRESS ST ST LAWRENCE ST RD INV 05 60640																	
18841	18842	5080226	0 - 0.05	0560640 - 0.06	0.05	2	0	0	0	0	0	0	0.0	0.00009	0.00	1691.14	0.00
Int of MONUMENT ST ST LAWRENCE ST RD INV 05 60640																	
18842	18843	194466	0 - 0.04	0560640 - 0.11	0.04	2	1	0	0	0	1	0	0.0	0.00007	4697.75	1605.87	2.93
Int of SHERBROOKE ST ST LAWRENCE ST RD INV 05 60640																	
18838	18839	194458	0 - 0.05	0560772 - 0	0.05	2	1	0	0	0	1	0	0.0	0.00004	9463.65	711.71	13.30
Int of SHERBROOKE ST WATERVILLE ST RD INV 05 60772																	
18837	18838	194456	0 - 0.04	0560772 - 0.05	0.04	2	0	0	0	0	0	0	0.0	0.00002	0.00	-1595.90	0.00
Int of HOYTS LN WATERVILLE ST RD INV 05 60772																	
18837	18843	5080223	0 - 0.04	0560384 - 0	0.04	2	0	0	0	0	0	0	0.0	0.00001	0.00	-	0.00
Int of HOYTS LN WATERVILLE ST RD INV 05 60384																	
18838	18842	194459	0 - 0.04	0560658 - 0	0.04	2	0	0	0	0	0	0	0.0	0.00001	0.00	-9797.27	0.00
Int of SHERBROOKE ST WATERVILLE ST RD INV 05 60658																	
18846	18852	194473	0 - 0.04	0560513 - 0	0.04	2	0	0	0	0	0	0	0.0	0.00003	0.00	260.14	0.00
0509266 POR, ATLANTIC, MONUMENT ST. RD INV 05 60513																	
18841	18846	194465	0 - 0.05	0560513 - 0.04	0.05	2	0	0	0	0	0	0	0.0	0.00003	0.00	588.99	0.00
Int of MONUMENT ST ST LAWRENCE ST RD INV 05 60513																	
18839	18841	194460	0 - 0.04	0560513 - 0.09	0.04	2	1	0	0	0	1	0	0.0	0.00002	15854.90	-1000.62	0.00
0509259 POR, MONUMENT, WATERVILLE ST. RD INV 05 60513																	
18901	18909	5080179	0 - 0.05	0561238 - 1.25	0.05	2	0	0	0	0	0	0	0.0	0.00018	0.00	1705.11	0.00
Int of CUMBERLAND AV LAFAYETTE ST RD INV 05 61238																	
18892	18901	5080181	0 - 0.05	0561238 - 1.30	0.05	2	1	0	0	0	1	0	0.0	0.00014	2312.01	1739.07	1.33
Int of CUMBERLAND AV MERRILL ST RD INV 05 61238																	
18893	18894	194553	0 - 0.06	0560503 - 0.04	0.06	2	0	0	0	0	0	0	0.0	0.00008	0.00	1649.87	0.00
Int of MERRILL ST TURNER ST RD INV 05 60503																	
18892	18893	194551	0 - 0.04	0560503 - 0.10	0.04	2	1	0	0	0	1	0	0.0	0.00004	8918.38	837.02	10.65
Int of CUMBERLAND AV MERRILL ST RD INV 05 60503																	
18891	18892	5080182	0 - 0.05	0560503 - 0.14	0.05	2	0	0	0	0	0	0	0.0	0.00005	0.00	1369.92	0.00
Int of CONGRESS ST MERRILL ST RD INV 05 60503																	
18897	18903	5080163	0 - 0.06	0560383 - 0	0.06	2	1	0	0	0	0	0	0.0	0.00009	3712.37	1704.31	2.18
Int of HOWARD ST QUEBEC ST RD INV 05 60383																	
18902	18903	5080164	0 - 0.08	0560383 - 0.06	0.08	2	2	0	0	0	1	0	0.0	0.00012	5528.10	1745.68	3.17
Int of CONGRESS ST HOWARD ST RD INV 05 60383																	
18845	18846	194469	0 - 0.05	0560025 - 0	0.05	2	4	0	0	0	1	1	50.0	0.00013	10119.03	1744.85	5.80
Int of ATLANTIC ST, CONGRESS ST RD INV 05 60025																	
18846	18847	194472	0 - 0.08	0560025 - 0.05	0.08	2	1	0	0	0	1	0	0.0	0.00020	1693.70	1689.32	1.00
0509266 POR, ATLANTIC, MONUMENT ST. RD INV 05 60025																	

Crash Summary I

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes					Injury Crashes	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
						K	A	B	C	PD						
18850	18851	194479	0 - 0.05	0560525 - 0.12 RD INV 05 60525	0.05	2	0	0	0	0	0	0.0	0.00008	0.00	1685.39	0.00
				RD INV 05 60525										Statewide Crash Rate: 404.36		
18851	18852	194481	0 - 0.04	0560525 - 0.17 RD INV 05 60525	0.04	2	0	0	0	0	0	0.0	0.00007	0.00	1625.78	0.00
				RD INV 05 60525										Statewide Crash Rate: 404.36		
18852	18853	194483	0 - 0.05	0560525 - 0.21 RD INV 05 60525	0.05	2	2	0	0	1	0	0.0	0.00012	5379.92	1745.98	3.08
				RD INV 05 60525										Statewide Crash Rate: 404.36		
18856	18857	5080187	0 - 0.09	0560757 - 0 RD INV 05 60757	0.09	2	3	0	0	3	0	0.0	0.00011	8722.46	1743.73	5.00
				RD INV 05 60757										Statewide Crash Rate: 404.36		
18857	18858	194493	0 - 0.05	0560757 - 0.09 RD INV 05 60757	0.05	2	2	0	0	2	0	0.0	0.00005	13093.08	1322.27	9.90
				RD INV 05 60757										Statewide Crash Rate: 404.36		
18861	18862	194503	0 - 0.05	0560516 - 0.12 RD INV 05 60516	0.05	2	0	0	0	0	0	0.0	0.00004	0.00	1020.22	0.00
				RD INV 05 60516										Statewide Crash Rate: 404.36		
18862	18863	194505	0 - 0.09	0560516 - 0.17 RD INV 05 60516	0.09	2	0	0	0	0	0	0.0	0.00011	0.00	1737.32	0.00
				RD INV 05 60516										Statewide Crash Rate: 404.36		
18863	18864	194507	0 - 0.08	0560516 - 0.26 RD INV 05 60516	0.08	2	0	0	0	0	0	0.0	0.00004	0.00	1097.09	0.00
				RD INV 05 60516										Statewide Crash Rate: 404.36		
18854	18855	5080186	0 - 0.09	0560045 - 0 RD INV 05 60045	0.09	2	0	0	0	0	0	0.0	0.00003	0.00	498.20	0.00
				RD INV 05 60045										Statewide Crash Rate: 404.36		
18896	18905	5080162	0 - 0.06	0560254 - 0.04 RD INV 05 60254	0.06	2	0	0	0	0	0	0.0	0.00007	0.00	1589.12	0.00
				RD INV 05 60254										Statewide Crash Rate: 404.36		
18904	18905	5080161	0 - 0.08	0560254 - 0.10 RD INV 05 60254	0.08	2	3	0	0	3	0	0.0	0.00004	22238.04	1157.84	19.21
				RD INV 05 60254										Statewide Crash Rate: 404.36		
12459	18899	5080173	0 - 0.07	0560536 - 0.42 RD INV 05 60536	0.07	2	2	0	0	2	0	0.0	0.00051	1302.68	1400.70	0.00
				RD INV 05 60536										Statewide Crash Rate: 404.36		
12459	18909	186811	0 - 0.03	0560536 - 0.49 RD INV 05 60536	0.03	2	2	0	0	0	0	0.0	0.00023	2934.11	1654.89	1.77
				RD INV 05 60536										Statewide Crash Rate: 404.36		
18907	18909	5080177	0 - 0.05	0560536 - 0.52 RD INV 05 60536	0.05	2	4	0	0	3	0	0.0	0.00024	5654.75	1645.15	3.44
				RD INV 05 60536										Statewide Crash Rate: 404.36		
18898	18899	194562	0 - 0.04	0560606 - 0 RD INV 05 60606	0.04	2	1	0	0	1	0	0.0	0.00007	4521.00	1626.81	2.78
				RD INV 05 60606										Statewide Crash Rate: 404.36		
18894	18898	5080192	0 - 0.04	0560606 - 0.04 RD INV 05 60606	0.04	2	0	0	0	0	0	0.0	0.00007	0.00	1554.14	0.00
				RD INV 05 60606										Statewide Crash Rate: 404.36		
18894	18897	5080193	0 - 0.04	0560606 - 0.08 RD INV 05 60606	0.04	2	0	0	0	0	0	0.0	0.00006	0.00	1418.03	0.00
				RD INV 05 60606										Statewide Crash Rate: 404.36		
18896	18897	194559	0 - 0.04	0560606 - 0.12 RD INV 05 60606	0.04	2	1	0	0	1	0	0.0	0.00006	5130.57	1549.41	3.31
				RD INV 05 60606										Statewide Crash Rate: 404.36		
18865	18866	3120758	0 - 0.05	0560236 - 0.29 RD INV 05 60236	0.05	2	0	0	0	0	0	0.0	0.00054	0.00	728.66	0.00
				RD INV 05 60236										Statewide Crash Rate: 179.30		
18865	18963	3106820	0 - 0.09	0560236 - 0.34 RD INV 05 60236	0.09	2	0	0	0	0	0	0.0	0.00098	0.00	645.10	0.00
				RD INV 05 60236										Statewide Crash Rate: 179.30		

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	A	B	C	PD	Injury Percent	Annual HMVM	Crash Rate	Critical Rate	CRF
18906	18963	3106827	0 - 0.09	0560236 - 0.43	0.09	2	3	0	0	0	2	0.0	0.00105	956.37	635.77	1.50
Int of EASTERN PROMENADE TURNER ST																
18847	18850	194475	0 - 0.04	0560799 - 0	0.04	2	0	0	0	0	0	0.0	0.00003	0.00	139.50	0.00
Int of ATLANTIC ST WILSON ST																
18850	18867	194480	0 - 0.04	0560799 - 0.04	0.04	2	0	0	0	0	0	0.0	0.00005	0.00	1190.37	0.00
0509270 POR, MUNJOY, WILSON ST.																
18858	18867	194497	0 - 0.04	0560799 - 0.08	0.04	2	0	0	0	0	0	0.0	0.00002	0.00	-1866.43	0.00
0509278 POR, VESPER, WILSON ST.																
18858	18861	194496	0 - 0.04	0560799 - 0.12	0.04	2	0	0	0	0	0	0.0	0.00003	0.00	-142.30	0.00
0509278 POR, VESPER, WILSON ST.																
18861	18866	5080165	0 - 0.06	0560799 - 0.16	0.06	2	0	0	0	0	0	0.0	0.00002	0.00	-1750.05	0.00
Int of MORNING ST WILSON ST																

Study Years: 3.00

Section Totals:

3.27 46 0 0 0 0 2 30 4.3 0.01008 1520.98 501.82 3.03

Grand Totals:

3.27 60 0 0 0 1 3 42 6.7 0.01008 1983.89 657.35 3.02

Crash Summary

Start Node	L..J Node	Element	Offset Begin - End	Route - MP	Total Crashes		Sect Details				Crash Report	Crash Date	Crash Mile Point	Injury Degree
							K	A	B	C	PD			
18864	18906	5080160	0 - 0.05	0560717 - 0	0	0	0	0	0	0	0			
18864	18905	194509	0 - 0.05	0560717 - 0.05	0	0	0	0	0	0	0			
18903	18905	194567	0 - 0.05	0560717 - 0.10	0	0	0	0	0	0	0			
18893	18903	5080184	0 - 0.04	0560717 - 0.15	0	0	0	0	0	0	0			
18863	18963	3131700	0 - 0.05	0560160 - 0	2	0	0	0	0	1	0	2020-18604	0.03	C
												04/13/2018	0.04	
18856	18863	194491	0 - 0.04	0560160 - 0.05	2	0	0	0	0	0	0	2019-4171	0.06	
												09/26/2018	0.06	
18856	18904	3123722	0 - 0.01	0560160 - 0.09	0	0	0	0	0	0	0	2018-27578	0.12	PD
18854	18904	194488	0 - 0.03	0560160 - 0.10	1	0	0	0	0	0	1			
18854	18902	3120116	0 - 0.02	0560160 - 0.13	0	0	0	0	0	0	0			
18853	18902	3124002	0 - 0.02	0560160 - 0.15	0	0	0	0	0	0	0			
18853	18891	3122294	0 - 0.02	0560160 - 0.17	1	0	0	0	0	0	1	2019-61674	0.18	PD
18845	18891	3118712	0 - 0.03	0560160 - 0.19	0	0	0	0	0	0	0			
18845	18900	3130201	0 - 0.02	0560160 - 0.22	0	0	0	0	0	0	0			
18840	18900	3129297	0 - 0.03	0560160 - 0.24	0	0	0	0	0	0	0			
18840	18907	3106817	0 - 0.03	0560160 - 0.27	0	0	0	0	0	0	0			
18851	18855	5080185	0 - 0.04	0560514 - 0	0	0	0	0	0	0	0			
18855	18857	194489	0 - 0.04	0560514 - 0.04	0	0	0	0	0	0	0			
18857	18862	194494	0 - 0.04	0560514 - 0.08	1	0	0	0	0	0	1	2020-12387	0.10	PD
18862	18865	5080166	0 - 0.05	0560514 - 0.12	0	0	0	0	0	0	0	2018-9111	0.07	PD
18898	18901	5080176	0 - 0.10	0560424 - 0	2	0	0	0	0	0	1	2018-29199	0.09	
18900	18901	194564	0 - 0.05	0560424 - 0.10	0	0	0	0	0	0	0			
18840	18841	5080183	0 - 0.06	0560640 - 0	1	0	0	0	0	0	0	2019-67136	0.03	
18841	18842	5080226	0 - 0.05	0560640 - 0.06	0	0	0	0	0	0	0			
18842	18843	194466	0 - 0.04	0560640 - 0.11	1	0	0	0	0	0	1	2019-46107	0.14	PD
18838	18839	194458	0 - 0.05	0560772 - 0	1	0	0	0	0	0	1	2020-9616	0.02	PD
18837	18838	194456	0 - 0.04	0560772 - 0.05	0	0	0	0	0	0	0			
18837	18843	5080223	0 - 0.04	0560384 - 0	0	0	0	0	0	0	0			
18838	18842	194459	0 - 0.04	0560658 - 0	0	0	0	0	0	0	0			
18846	18852	194473	0 - 0.04	0560513 - 0	0	0	0	0	0	0	0			
18841	18846	194465	0 - 0.05	0560513 - 0.04	0	0	0	0	0	0	0			
18839	18841	194460	0 - 0.04	0560513 - 0.09	1	0	0	0	0	0	1	2019-67927	0.11	PD
18901	18909	5080179	0 - 0.05	0561238 - 1.25	0	0	0	0	0	0	0			
18892	18901	5080181	0 - 0.05	0561238 - 1.30	1	0	0	0	0	0	1	2019-67149	1.34	PD
18893	18894	194553	0 - 0.06	0560503 - 0.04	0	0	0	0	0	0	0			
18892	18893	194551	0 - 0.04	0560503 - 0.10	1	0	0	0	0	0	1	2018-36769	0.11	PD

Crash Summary

Section Details													
Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	K	A	B	C	Crash Report	Crash Date	Crash Mile Point	Injury Degree
18891	18892	5080182	0 - 0.05	0560503 - 0.14	0	0	0	0	0	0			
18897	18903	5080163	0 - 0.06	0560383 - 0	1	0	0	0	0	2020-2371	01/05/2020	0.03	
18902	18903	5080164	0 - 0.08	0560383 - 0.06	2	0	0	0	0	2020-32952	12/26/2020	0.12	PD
										2019-69323	10/16/2019	0.13	
18845	18846	194469	0 - 0.05	0560025 - 0	4	0	0	0	1	2018-18334	06/29/2018	0.01	PD
										2018-26803	09/21/2018	0.04	
										2018-13368	05/05/2018	0.04	
										2018-26191	09/16/2018	0.04	C
18846	18847	194472	0 - 0.08	0560025 - 0.05	1	0	0	0	0	2020-17591	07/26/2020	0.11	PD
18850	18851	194479	0 - 0.05	0560525 - 0.12	0	0	0	0	0	0			
18851	18852	194481	0 - 0.04	0560525 - 0.17	0	0	0	0	0	0			
18852	18853	194483	0 - 0.05	0560525 - 0.21	2	0	0	0	0	2018-23650	08/22/2018	0.25	
										2019-814	01/08/2019	0.25	PD
18856	18857	5080187	0 - 0.09	0560757 - 0	3	0	0	0	0	2019-43945	02/28/2019	0.03	PD
										2018-619	01/06/2018	0.06	PD
18857	18858	194493	0 - 0.05	0560757 - 0.09	2	0	0	0	0	2018-6961	02/24/2018	0.07	PD
										2020-1419	01/09/2020	0.10	PD
										2018-21465	08/09/2018	0.13	PD
18861	18862	194503	0 - 0.05	0560516 - 0.12	0	0	0	0	0	0			
18862	18863	194505	0 - 0.09	0560516 - 0.17	0	0	0	0	0	0			
18863	18864	194507	0 - 0.08	0560516 - 0.26	0	0	0	0	0	0			
18854	18855	5080186	0 - 0.09	0560045 - 0	0	0	0	0	0	0			
18896	18905	5080162	0 - 0.06	0560254 - 0.04	0	0	0	0	0	0			
18904	18905	5080161	0 - 0.08	0560254 - 0.10	3	0	0	0	0	2018-6897	02/26/2018	0.15	PD
										2020-986	01/10/2020	0.15	PD
12459	18899	5080173	0 - 0.07	0560536 - 0.42	2	0	0	0	0	2020-33519	12/31/2020	0.15	PD
12459	18909	186811	0 - 0.03	0560536 - 0.49	2	0	0	0	0	2019-67984	10/08/2019	0.45	PD
										2019-54981	06/14/2019	0.47	PD
18907	18909	5080177	0 - 0.05	0560536 - 0.52	4	0	0	0	0	2019-44253	03/02/2019	0.50	
										2018-41183	12/10/2018	0.50	
										2018-2273	01/10/2018	0.53	PD
										2020-20308	08/26/2020	0.55	
										2018-41309	12/20/2018	0.55	PD
18898	18899	194562	0 - 0.04	0560606 - 0	1	0	0	0	0	2019-50052	04/24/2019	0.56	PD
										2018-25655	09/12/2018	0.03	PD

Crash Summary

Start Node	L..J Node	Element	Offset Begin - End	Route - MP	Section Details					Crash Report	Crash Date	Crash Mile Point	Injury Degree
					Total Crashes	K	A	B	C				
18894	18898	5080192	0 - 0.04	0560606 - 0.04	0	0	0	0	0	0			
18894	18897	5080193	0 - 0.04	0560606 - 0.08	0	0	0	0	0	0			
18896	18897	194559	0 - 0.04	0560606 - 0.12	1	0	0	0	0	1	2020-13268	06/03/2020	0.13 PD
18865	18866	3120758	0 - 0.05	0560236 - 0.29	0	0	0	0	0	0			
18865	18963	3106820	0 - 0.09	0560236 - 0.34	0	0	0	0	0	0			
18906	18963	3106827	0 - 0.09	0560236 - 0.43	3	0	0	0	0	2	2020-20011	08/22/2020	0.46 PD
											2019-63957	09/05/2019	0.49 PD
											2018-24267	08/28/2018	0.50
18847	18850	194475	0 - 0.04	0560799 - 0	0	0	0	0	0	0			
18850	18867	194480	0 - 0.04	0560799 - 0.04	0	0	0	0	0	0			
18858	18867	194497	0 - 0.04	0560799 - 0.08	0	0	0	0	0	0			
18858	18861	194496	0 - 0.04	0560799 - 0.12	0	0	0	0	0	0			
18861	18866	5080165	0 - 0.06	0560799 - 0.16	0	0	0	0	0	0			
Totals:					46	0	0	0	0	2	30		

Crash Summary II Characteristics

Crashes by Day and Hour

Day Of Week	Hour of Day												PM												Un	Tot
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11		
SUNDAY	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	1	1	0	1	0	0	0	1	0	7
MONDAY	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	5
TUESDAY	0	0	0	0	0	0	0	1	1	1	1	0	0	1	0	1	0	1	2	0	0	0	0	0	0	9
WEDNESDAY	0	0	0	0	0	0	1	1	0	2	0	1	0	0	0	0	0	0	2	0	1	1	0	1	0	10
THURSDAY	0	1	0	0	0	0	0	1	0	1	0	0	1	2	1	0	0	0	1	1	0	0	1	0	0	10
FRIDAY	0	0	0	0	0	0	0	0	0	1	0	1	2	0	1	0	1	1	0	0	1	0	0	0	0	8
SATURDAY	0	0	0	0	0	1	1	0	0	3	0	2	1	1	0	0	0	0	0	1	1	0	0	0	0	11
Totals	0	1	0	0	0	1	2	3	3	10	1	4	7	4	2	2	2	2	7	2	3	1	1	2	0	60

Vehicle Counts by Type

Unit Type	Unit Type												Total	
	Total	23-Bicyclist	24-Witness	25-Other	26-Construction	27-Farm Vehicle	Total							
1-Passenger Car	63						0							
2-Sport Utility Vehicle	25						9							
3-Passenger Van	4						19							
4-Cargo Van (10K lbs or Less)	0						0							
5-Pickup	4						0							
6-Motor Home	0						134							
7-School Bus	0													
8-Transit Bus	0													
9-Motor Coach	0													
10-Other Bus	0													
11-Motorcycle	0													
12-Moped	0													
13-Low Speed Vehicle	0													
14-Autocycle	0													
15-Experimental	0													
16-Other Light Trucks (10,000 lbs or Less)	1													
17-Medium/Heavy Trucks (More than 10,000 lbs)	9													
18-ATV - (4 wheel)	0													
20-ATV - (2 wheel)	0													
21-Snowmobile	0													
22-Pedestrian	0													

Crash Summary II Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	11	14	0	0	0	0	25
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	3	4	0	0	0	0	7
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	0	0	0	0	0	0	0
Improper Turn	7	0	0	0	0	0	7
Improper Backing	6	1	0	0	0	0	7
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	2	0	0	0	0	0	2
Failed to Keep in Proper Lane	4	1	0	0	0	0	5
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	1	0	0	0	0	1
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	1	0	0	0	0	1
Over-Correcting/Over-Steering	4	1	0	0	0	0	5
Other Contributing Action	7	0	0	0	0	0	7
Unknown	0	0	0	0	0	0	0
Total	44	23	0	0	0	0	67

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	42	24	0	0	0	0	66
Physically Impaired or Handicapped	1	0	0	0	0	0	1
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	1	0	0	0	0	0	1
Total	44	24	0	0	0	0	68

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	1	0	0	0	0	1
20-24	9	0	0	0	0	9
25-29	22	0	0	0	0	22
30-39	22	0	0	0	0	22
40-49	10	0	0	0	0	10
50-59	18	0	0	0	0	18
60-69	14	0	0	0	0	14
70-79	4	0	0	0	0	4
80-Over	0	0	0	0	0	0
Unknown	25	0	0	0	0	25
Total	125	0	0	0	0	125

Crash Summary II Characteristics

Most Harmful Event		Injury Data	
Most Harmful Event	Total	Severity Code	Number Of Injuries
1-Overtum / Rollover	0		
2-Fire / Explosion	0	K	0
3-Immersion	0	A	0
4-Jackknife	0	B	2
5-Cargo / Equipment Loss Or Shift	0	C	4
6-Fell / Jumped from Motor Vehicle	110	PD	0
7-Thrown or Falling Object	0		
8-Other Non-Collision	2		46
9-Pedestrian	0		6
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	79		
14-Parked Motor Vehicle	29		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	0		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post Pole or Support	0		
Total			60

Most Harmful Event		Traffic Control Devices	
Most Harmful Event	Total	Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	2		
2-Traffic Signals (Flashing)	0		
3-Advisory/Warning Sign	0		
4-Stop Signs - All Approaches	7		
5-Stop Signs - Other	10		
6-Yield Sign	0		
7-Curve Warning Sign	0		
8-Officer, Flagman, School Patrol	0		
9-School Bus Stop Arm	0		
10-School Zone Sign	0		
11-R.R. Crossing Device	0		
12-No Passing Zone	0		
13-None	41		
14-Other	0		
Total			60

Road Character		Light	
Road Grade	Total	Light Condition	Total
1-Level	49	1-Daylight	41
2-On Grade	10	2-Dawn	1
3-Top of Hill	0	3-Dusk	1
4-Bottom of Hill	1	4-Dark - Lighted	14
5-Other	0	5-Dark - Not Lighted	1
Total		6-Dark - Unknown Lighting	0
		7-Unknown	2
Total			60

Crash Summary II Characteristics

Crashes by Year and Month

Month	2018	2019	2020	Total
JANUARY	3	2	3	8
FEBRUARY	2	1	0	3
MARCH	2	2	0	4
APRIL	1	2	2	5
MAY	1	3	1	5
JUNE	2	1	1	4
JULY	0	0	1	1
AUGUST	3	1	3	7
SEPTEMBER	6	2	0	8
OCTOBER	1	7	0	8
NOVEMBER	1	0	0	1
DECEMBER	3	0	3	6
Total	25	21	14	60

Report is limited to the last 10 years of data.

Crash Summary Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	30	1	7	2	0	5	0	0	0	0	0	0	0	0	45
Lead-on - Sideswipe	5	0	0	1	0	0	0	0	0	0	0	0	0	0	6
Intersection Movement	0	0	2	2	0	4	0	0	0	0	0	0	0	0	8
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Left Off Road	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hit Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Knifed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Over	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Car	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	36	1	9	5	0	9	0	0	0	0	0	0	0	0	60

Crash Summary by Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	1	0	0	0	1
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	7	1	0	0	0	0	0	0	0	0	0	8
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	1	0	0	0	0	0	0	0	0	0	0	1
Daylight	27	0	0	0	0	0	2	1	0	0	0	30
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	2	0	0	0	0	0	0	0	0	0	0	2
Cloudy												
Dark - Lighted	3	0	0	0	0	0	0	0	0	0	1	4
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	6	0	0	0	0	0	0	0	0	0	1	7
Dusk	1	0	0	0	0	0	0	0	0	0	0	1
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary by Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	1	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	1	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	2	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary by Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	2	0	0	0	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	47	1	0	0	0	0	2	4	0	0	6	60

WAIVER REQUESTED FOR MINIMUM DRIVEWAY SEPARATION ON MUNJOY STREET,
TECHNICAL MANUAL, SECTION 1.7.2.7

1. THE PLANNING BOARD FINDS, BASED UPON THE CONSULTING TRANSPORTATION ENGINEER'S REVIEW, THAT EXTRAORDINARY CONDITIONS EXIST OR UNDUE HARDSHIP MAY RESULT FROM STRICT COMPLIANCE WITH THE TECHNICAL MANUAL STANDARD (SECTION 1.7.2.7) THAT ALONG ARTERIALS, COLLECTORS, AND LOCAL STREETS, MINIMUM ACCEPTABLE SPACING BETWEEN DRIVEWAYS SHALL BE 100-150 FEET, DEPENDING ON SPEED LIMIT, THAT SUBSTANTIAL JUSTICE AND THE PUBLIC INTEREST ARE SECURED WITH THE PROPOSED VARIATION IN THIS STANDARD, AND THAT THE VARIATION IS CONSISTENT WITH THE INTENT OF THE STANDARD OF DRIVEWAY WAIVES. THE TECHNICAL MANUAL STANDARD (SECTION 1.7.2.7) TO ALLOW THE DRIVEWAY CUT ON MUNJOY STREET APPROXIMATELY 20 FEET FROM THE ADJACENT DRIVEWAY TO THE SOUTH AS SHOWN ON THE FINAL PLANS.

BASED UPON THE CITY OF PORTLAND'S DELEGATED REVIEW AUTHORITY, THE PLANNING BOARD VOTED 7-0 TO APPROVE THE TRAFFIC MOVEMENT PERMIT APPLICATION, AS SUBMITTED, AS FOLLOWS:

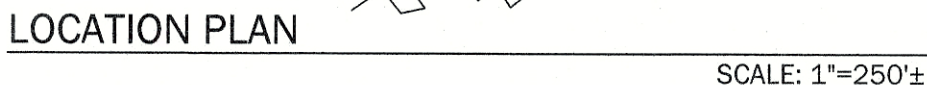
1. ON THE BASIS OF THE APPLICATION, PLANS, REPORTS AND OTHER INFORMATION SUBMITTED BY THE APPLICANT; FINDINGS AND RECOMMENDATIONS CONTAINED IN THE PLANNING BOARD REPORT FOR THE PUBLIC HEARING ON JANUARY 23, 2018 FOR APPLICATION 2016-265 RELEVANT TO PORTLAND'S TECHNICAL AND DESIGN STANDARDS AND OTHER REGULATIONS; AND THE TESTIMONY PRESENTED AT THE PLANNING BOARD HEARING, THE PLANNING BOARD FINDS THAT THE PROPOSED PLAN IS IN CONFORMANCE WITH 23 MRSA 704-A AND CHAPTER 305 RULES AND REGULATIONS PERTAINING TO TRAFFIC MOVEMENT PERMITS.

PLANNING BOARD CONDITIONS OF APPROVAL PER THE CITY OF PORTLAND PLANNING BOARD REVIEW MEMO DATED:

3. LANDSCAPING SHALL MEET THE "ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
2. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION, AND SURFACING OF PARKING AREAS AND LOCATION AND SIZE OF BUILDINGS.
3. ALL POWERLINE UTILITIES SHALL BE UNDERGROUND FROM THE EXISTING SERVICE POLE...
4. SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TIPDOWN RAMPS AT ALL STREET CORNERS, CROSSWALKS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPs PUBLISHED BY THE BUREAU OF LAND AND QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
6. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
7. ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES (SEE ABOVE).
8. PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORKS REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.
9. EXISTING VEGETATION SHALL BE CONSERVED IN AREAS SHOWN ON THIS SITE. FENCING OR OTHER PROTECTIVE BARRIERS SHALL BE ERECTED OUTSIDE THE DRIP-LINE OF INDIVIDUAL, GROUPINGS OF TREES DESIGNATED FOR PRESERVATION PRIOR TO THE ONSET OF CONSTRUCTION. REGRADING SHALL NOT TAKE PLACE WITHIN THE DRIP-LINE OF TREES DESIGNATED FOR PRESERVATION. NO STORAGE OF CONSTRUCTION MATERIALS SHALL BE PERMITTED WITHIN THE DRIP-LINE OF TREES TO BE PRESERVED.

- OWNER/APPLICANT: FRIENDS OF THE ST. LAWRENCE CHURCH, 76 CONGRESS STREET
PORTLAND MAINE 04101. DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS
BK. 13333, PG. 9, DATED SEPTEMBER 19, 1997.
2. CIVIL ENGINEER:
2018 APPROVAL: PINKHAM & GREER CIVIL ENGINEERS, 28 VANNAH AVENUE, PORTLAND, MAINE
04103. APPROVAL GRANTED JANUARY 23, 2018.
2022 APPROVAL: WALSH ENGINEERING ASSOCIATES, INC. 1 KAREN DRIVE, SUITE 2A,
WESTBROOK, MAINE 04092
3. ARCHITECT: ARCHETYPE ARCHITECTS, 48 UNION WHARF, PORTLAND, MAINE, 04101
4. TOPOGRAPHIC AND BOUNDARY INFORMATION: OWEN HASKELL, INC. 390 US ROUTE ONE,
FALMOUTH, MAINE. BENCHMARK: MONUMENT WITH BOLT NORTHWEST CORNER OF MORNING
AND WILSON STREETS ELEVATION 114.63. BASIS OF BEARINGS: MAINE STATE PLANE
COORDINATE SYSTEM WEST ZONE NAD83. BASED ON CITY MONUMENTS T102-69-7 AND
T102-68-5.
5. SOILS MAPPING TAKEN FROM SOIL CONSERVATION STUDY OF CUMBERLAND COUNTY AND
CLASSIFIED AS HINCKLEY (H1B), GRAVELLY SANDY LOAM, 3-8% SLOPES, HYDROLOGICAL GROUP
"A".
6. TAX MAP REFERENCE: MAP 3 / BLOCK L / LOT 1.
7. TOTAL PARCEL = 0.243 acres
8. CALL DIG-SAFE PRIOR TO COMMENCING WORK. 1-800-DIG-SAFE.
9. ALL WORK WITHIN THE RIGHT OF WAY IS TO MEET CITY OF PORTLAND STANDARDS.
10. BUILDING TO BE SERVICED BY PUBLIC WATER AND SEWER. THESE SERVICES, INCLUDING
EXISTING HYDRANTS, ARE AS SHOWN ON SHEET C1.4, GRADING AND UTILITIES PLAN.
11. POWER, TELEPHONE AND CABLE SERVICES ARE TO BE UNDERGROUND. THESE SERVICES ARE
SHOWN ON SHEET C1.4, GRADING AND UTILITIES PLAN.
12. EXISTING UTILITIES, INCLUDING SIZE AND VERTICAL AND HORIZONTAL LOCATIONS, ARE SHOWN
ON SHEET C1.4, GRADING AND UTILITIES PLAN.
13. THERE ARE NO APPARENT PERMANENT ONSITE EASEMENTS OR RESTRICTIONS BURDENING OR
BENEFITING THE SUBJECT PROPERTY.
14. THE EXISTING ONSITE STRUCTURE IS LISTED BY THE CITY OF PORTLAND AS A HISTORIC
LANDMARK. NO OTHER STRUCTURES OR HISTORIC SITES ON OR ADJACENT TO THIS SITE APPEAR
ON OR ARE NOMINATED TO THE NATIONAL REGISTER.
15. THE SUBJECT PARCEL SHOWN AS 76 CONGRESS STREET IS SUBJECT TO THE CITY OF PORTLAND
LEVEL III SITE PLAN DEVELOPMENT REVIEW APPLICATION.
16. REQUIRED STREET TREES ARE INCLUDED ON THE LANDSCAPE PLAN AS PART OF THE APPROVAL
FOR ST. LAWRENCE ARTS ADDITION SITE PLAN.
17. FLOODPLAIN: THIS PROPERTY SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL
230051 0014 A, EFFECTIVE DATE JULY 17, 1986. IT IS NOT IN A SPECIAL FLOOD HAZARD ZONE.
18. THIS PROJECT COMPLIES WITH CONDITIONS OF PORTLAND CODE OF ORDINANCES, CHAPTER 32
STORMWATER, INCLUDING ARTICLE III, POST-CONSTRUCTION STORMWATER MANAGEMENT. THE
DEVELOPER/CONTRACTOR/SUBCONTRACTORS MUST COMPLY WITH CONDITIONS OF THE
CONSTRUCTION STORMWATER MANAGEMENT PLAN AND SEDIMENT & EROSION CONTROL PLAN
BASED ON CITY STANDARDS AND STATE GUIDELINES. SEE SHEET C1.4, GRADING AND UTILITIES
PLAN, FOR THE LIST OF INSPECTION AND MAINTENANCE OF STORMWATER MANAGEMENT
FACILITIES REQUIREMENTS.
19. EXISTING TREE PRESERVATION AND PROTECTION MEASURES ARE TO BE UNDERTAKEN IN
ACCORDANCE WITH THE STANDARDS SHOWN ON SHEET L1.0, LANDSCAPE IMPROVEMENT PLAN
20. THE PARKING SPACE AT THE DROP-OFF ZONE SHALL BE MARKED WITH MOVEABLE SIGNS
DURING PERFORMANCES. ALL OTHER TIMES IT WILL BE TWO REGULAR SPACES.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG SAFE" AND LOCAL UTILITY COMPANIES AT LEAST THREE (3) BUSINESS DAYS, BUT NOT MORE THAN 30 CALENDAR DAYS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, IN ACCORDANCE WITH MAINE STATE LAW. "DIG SAFE" TELEPHONE NUMBER IS 1-888-344-7233.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL AND ANY MEANS, METHODS, AND TECHNIQUES EMPLOYED TO PERFORM THE WORK SHOWN ON THE PLANS.
3. ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS INCLUDING ALL SAFETY REGULATIONS (OSHA).
4. ALL WORK SHALL BE IN CONFORMANCE ALL UTILITY COMPANIES STANDARDS.
5. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THE WORK SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION.
6. ALL PAVEMENT/CONCRETE CUTS SHALL BE SAW CUT TO RESULT IN CLEAN EDGES. A TACK COAT SHALL BE APPLIED ALONG THE PAVEMENT CUT EDGES AND THE NEW PAVEMENT BUTTED TO IT, UNLESS OTHERWISE DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
7. ALL WORK SHALL COMPLY WITH THE CITY OF PORTLAND STREET OPENING PERMIT REQUIREMENTS.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING. REFER TO THE WRITTEN EROSION CONTROL PLAN AND DRAWINGS FOR FURTHER EROSION CONTROL GUIDELINES.
9. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS. IF ANY DISCREPANCIES ARE FOUND, THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY.



C1.0	PROJECT NOTES
C1.1	SITE PLAN
C1.2	EXISTING CONDITIONS AND DEMOLITION PLAN
C1.3	GRADING AND UTILITIES PLAN
C1.4	EROSION CONTROL PLAN, NOTES AND DETAILS
C1.5	LANDSCAPE PLAN, NOTES AND DETAILS
C2.1	DETAILS
C2.2	DETAILS
1	BOUNDARY AND TOPOGRAPHIC SURVEY

CLASSIFICATION:	EXISTING ZONE: C58 (UNDERLYING ZONE: R-6)		
EXISTING USE:	PERFORMING ARTS HALL		
MIN. LOT SIZE: PROVIDED:	10,500 S.F. 10,601 S.F.		
MINIMUM FRONT YARD: PROVIDED:	0 FEET 0 FEET		
MINIMUM REAR YARD: PROVIDED:	0 FEET 3 FEET		
MINIMUM SIDE ON A SIDE STREET: PROVIDED:	0 FEET 0 FEET		
MAXIMUM LOT COVERAGE: PROVIDED:	95% 92%		
MAXIMUM TOWER HEIGHT:	NA		
MAXIMUM SANCTUARY STRUCTURE HEIGHT: PROVIDED:		54 FEET EXISTING	
OPEN SPACE RATION: PROVIDED:	0% 0%		
MINIMUM LOT WIDTH: PROVIDED:	50 FEET 160 FEET		
*ZONING STANDARDS FROM CITY OF PORTLAND LAND USE ORDINANCE DATED XXXXX, AMENDED [DATE].			

76 CONGRESS STREET
PORTLAND, MAINE 04101

OWNER / APPLICANT:

76 CONGRESS STREET
PORTLAND, MAINE 04101

76 CONGRESS STREET
PORTLAND, MAINE 04101

PRELIMINARY - NOT FOR CONSTRUCTION

TRAFFIC MOVEMENT PERMIT APPLICATION

FOR PROPOSED

St Lawrence Arts Center

PREPARED FOR: Friends of St Lawrence Church

PREPARED BY: William J. Bray, PE

May 2017

NOTICE OF INTENT TO FILE

ase take notice that:

**Friends of St. Lawrence Church
76 Congress Street
Portland, Maine**

Is intending to file a Traffic Movement Permit application with the Maine Department of Transportation (**City of Portland**) pursuant to the provisions of 23 M.R.S.A. § 704-A on or about

May 22, 2017

The application is for:

A proposed 401-seat building addition to the St. Lawrence Arts Center located at 76 Congress Street. The proposed project increases the existing seating capacity of the arts venue from 110 seats to a total of 485 seats. The proposed theater addition project will generate a total of 170 vehicle trips during the peak hour of the site.

At the following location: **76 Congress Street, Portland, Maine**

A request for a public hearing must be received by the Department (**City**), in writing, no later than 20 days after the application is found by the Department (**City**) to be complete and is accepted for processing. Public comment on the application will be accepted throughout the processing of the application.

The application will be filed for public inspection at the **City of Portland's Planning office**, during normal working hours.

Written public comments may be sent to the Department of Transportation, Traffic Engineering Division, 16 State House Station, Augusta, Maine 04333.

1/2000

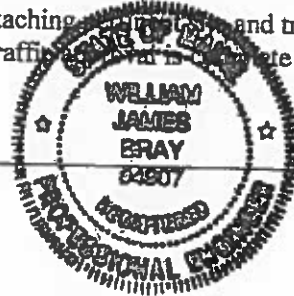
CERTIFICATION

The traffic engineer responsible for preparing this application and/or attaching and traffic information hereto, by signing below, certifies that the application for traffic is true and accurate to the best of his/her knowledge.

Signature: William J. Bray Re/Cert/Lic No.: _____

Name (print): William J. Bray

Date: May 21, 2017



If the signature below is not the applicant's signature, attach letter of agent authorization signed by applicant.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Deidra Fine

Signature of applicant

May 21, 2017

Date

Property Abutters

Paul Rodrique
98 Beckett Street
Portland, Maine 04101

Robert Levin, President
Clara Chisolm Condominium Association
98 Beckett Street
Portland, Maine 04101

Mary B. & Theodore E. McHugh
6 Loveitt Street
South Portland, Maine 04106

SECTION 1

A/B. SITE PLAN/EXISTING AND PROPOSED SITE USES

Friends of St. Lawrence Church are proposing a 401-seat building expansion to the existing St. Lawrence Arts Center located at 76 Congress Street in Portland. The proposed project increases the seating capacity of the arts venue from 110 (existing) seats to a total of 485 seats. Pedestrian sidewalk and street crossing improvements are incorporated into the proposed project design. Existing sidewalks that front the site on the sections of Munjoy Street, Beckett Street, and Congress Street will be fully reconstructed and two crosswalks added including required ADA ramps and detectable warning plates.

SECTION 1

C. SITE AND VICINITY BOUNDARIES

The attached regional map depicts the existing 76 Congress Street site in the City of Portland.

SECTION 1

D. PROPOSED USES IN THE GENERAL VICINITY OF THE PROPOSED DEVELOPMENT

Traffic generated by projects that have been approved by the Local Planning Board and/or the Maine Department of Transportation, yet are not opened, must be included in the estimate of pre-development traffic. Any follow-up traffic evaluations or study required by the City in their review of the proposed project will incorporate, as necessary, the traffic impacts associated with other development traffic.

SECTION 1

E. TRIP GENERATION

The proposed St. Lawrence Arts Center building expansion project, with a total of 401 seats, increases the seating capacity of the existing arts venue from the current capacity of 110 seats to a total of 485 seats.

The Institute of Transportation Engineers *Trip Generation* manual is generally the accepted source of information applied in developing trip estimates for a specific project. The most recent edition of this document, the ninth edition, is very limited in this regard for a live theater venue. Land-Use Code #441 (Live Theater) in the noted publication presents a peak hour trip rate based upon the results of a single study. Users are cautioned in using the information “because of the small sample size”.

Alternatively, peak hour trip forecasts are developed for the proposed arts center expansion project based upon travel choice surveys conducted at the existing smaller 110 arts center venue.

Patron surveys were conducted at seven recent scheduled shows by St. Lawrence Arts Center (SLAC) staff members to establish travel modal choice trends at the existing 110-seat arts center. SLAC staff interviewed each attendee upon entering the theater asking the following questions:

1. *How did you get here?*
2. *If the answer was auto, a second question was asked; were you the driver?*
3. *If the answer was yes, a third question was asked; how many people traveled with you in your auto?*

A summary of the interview data is presented as follows:

<u>Tuesday, February 28, 2017</u> 72 attendees 59 passengers in 24 autos 7 attendees walked 1 attendee METRO 5 attendees cab/Uber	<u>Tuesday, April 4, 2017</u> 80 attendees 61 passengers in 21 autos 15 attendees walked 2 people METRO 2 people scooter/Moped	<u>Wednesday, April 26, 2017</u> 74 attendees 44 auto trips	<u>Saturday, April 29, 2017</u> 78 attendees 64 passengers in 36 autos 3 people Uber 6 people walked
<u>Friday, May 5, 2017</u> 58 attendees 51 passengers in 23 autos 7 people walked	<u>Saturday, May 6, 2017</u> 54 attendees 44 passengers in 21 autos 10 people walked	<u>Sunday, May 7, 2017</u> 58 attendees 50 passengers in 22 autos 1 person biked 5 people walked 2 people in hotel shuttle	

The survey data shows that the average number of occupants per vehicle attending an event at the existing SLAC is 2.20 persons.

The estimate of future peak hour trip generation assumes that the existing per vehicle occupancy levels will continue. Accordingly, the combined SLAC facility with 485 seats can be expected to generate a total of 182 vehicle trips and the actual “net” change [485 total proposed seats minus existing 110 seats] in trip generation for the site is somewhat lower at 170 vehicle trips.

SECTION 1

F. TRIP DISTRIBUTION

The directional split of vehicle trips generated by the proposed SLAC site is expected at 100 percent arriving to the general area of the site pre-event and 100% of the trips departing the general geographic area of the site after the scheduled show.

SECTION 1

G. TRIP ASSIGNMENT

vehicle trips generated by the proposed SLAC site are generally expected to travel along the Congress Street corridor traveling to or from the SLAC site. Upon arriving at the SLAC, motorists will further divert to other nearby streets seeking both on and off-street parking options.

SECTION 2

TRAFFIC ACCIDENTS

The Maine Department of Transportation's (MaineDOT) Accident Records Section provided three-year (2014 through 2016) safety records for the sections of streets highlighted on the attached figure, which includes all streets and street segments directly adjacent to the SLAC site. MaineDOT's report is presented as follows:

2014 - 2016 Accident Summary

<u>Location</u>	<u>Number of Accidents</u>	<u>Critical Rate Factor</u>
1. Eastern Promenade @ Moody Street	1	0.55
2. Moody Street @ Munjoy Street	1	5.96
3. St. Lawrence Street @ Monument Street	1	2.72
4. St. Lawrence Street @ Sherbrook Street	1	3.38
5. Congress Street @ Howard Street	1	0.60
6. Congress Street @ Merrill Street	1	0.60
7. Congress Street @ North Street	1	0.40
8. Turner Street @ Howard Street	1	1.92
9. Turner Street @ Merrill Street	1	3.39
10. Cumberland Avenue @ Merrill Street	1	2.99
11. Wilson Street btw. Morning St. and Eastern Prom.	2	n/a
12. Morning Street btw. Moody St. and Congress St.	1	2.28
13. Emerson Street btw. Quebec St. and Turner St.	1	2.35
14. Beckett Street btw. Congress St. and Moody St.	1	15.10
15. Munjoy Street btw. Monument St. and Congress St.	1	7.54
16. Atlantic Street btw. Wilson St. and Monument St.	1	2.73
17. St. Lawrence Street btw. Congress St. and Monument St.	1	3.76
18. St. Lawrence Street btw. Monument St. and Sherbrook St.	2	3.98
19. Waterville Street btw. Sherbrook St. and Monument St.	1	11.08
20. Congress Street btw. Morning St. and Eastern Prom.	4	5.93
21. Congress Street btw. Beckett St. and Emerson St.	1	1.85
22. Congress Street btw. St. Lawrence St. and Lafayette St.	1	1.06
23. Congress Street btw. St. Lawrence St. and North St.	1	1.07
24. North Street btw. Cumberland Ave. and Sumner Ct.	1	0.94
25. North Street btw. Congress St. and Cumberland Ave.	3	2.05
26. Lafayette Street btw. Quebec St. and Cumberland Ave.	3	2.91
27. Lafayette Street btw. Congress St. and Cumberland Ave.	1	8.95
28. Quebec Street btw. Merrill St. and Howard St.	1	2.63
29. Quebec Street btw. Merrill St. and Lafayette St.	1	4.92
30. Howard Street btw. Congress St. and Turner St.	1	1.98
31. Howard Street btw. Turner St. and Quebec St.	1	2.49
32. Merrill Street btw. Congress St. and Cumberland Ave.	1	13.30
33. Turner Street btw. Morning St. and Eastern Prom.	1	n/a
34. Cumberland Avenue btw. North St. and Lafayette St.	1	1.00
35. Monument Street btw. Waterville St. and Atlantic St.	2	29.35

The MaineDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- **8 or more accidents**
- **A Critical Rate Factor greater than 1.00**

the data presented in the table shows, the incidence of traffic crashes occurring on the noted sections of roadways is below MaineDOT's threshold criteria for identification of a high crash location.

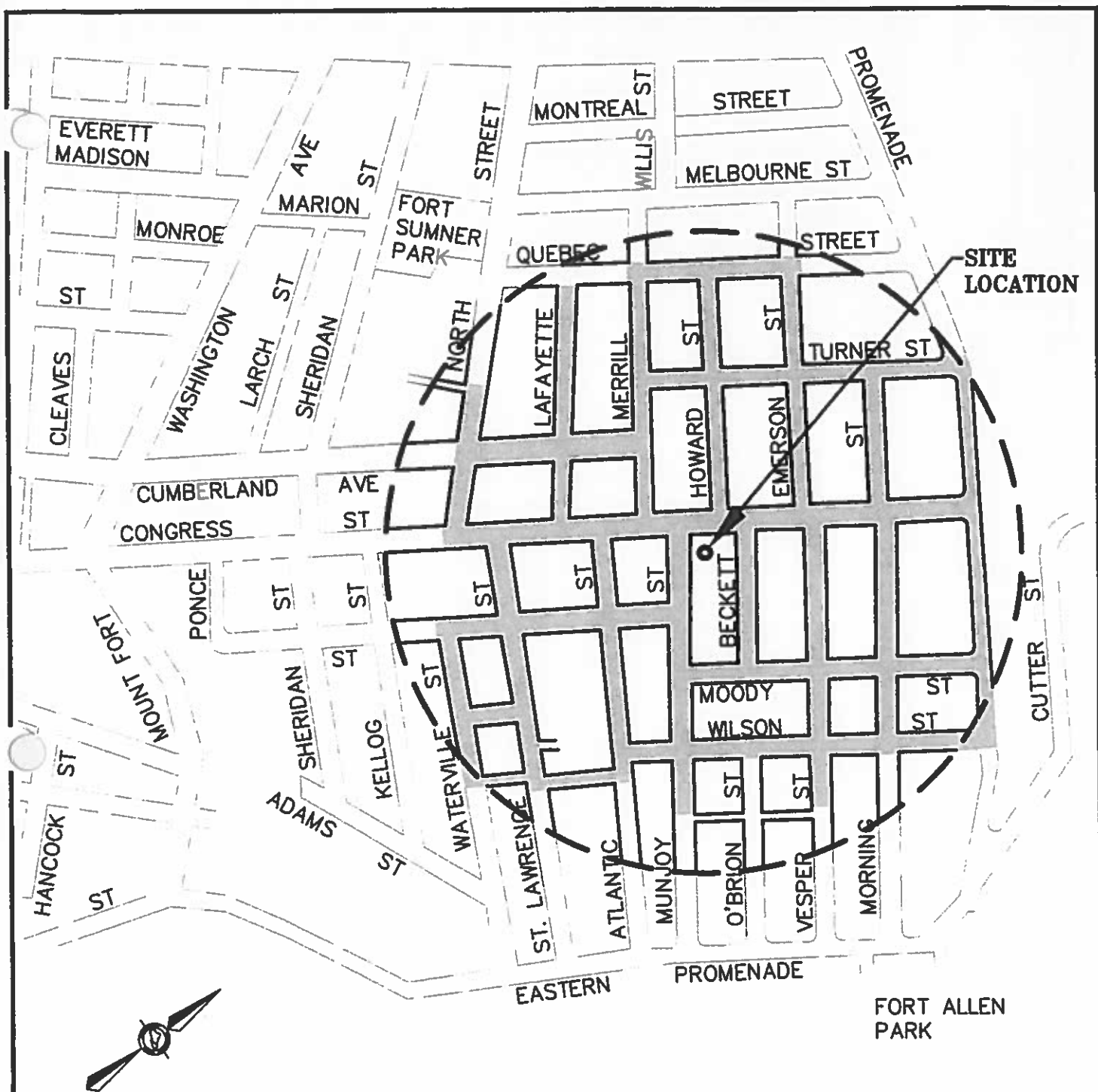


FIGURE 1
ON-STREET PARKING OCCUPANCY
STUDY AREA

LEGEND

— — — 5 MINUTE WALK RADIUS

■ STUDY AREA

18959

18881
18949

18916
18944
18943
18938
18931
18932
18934
19164
18916
18910
18919

18922
18910
18919

18793

18792

REGION 1
SOUTHERN

EASTERN
PROMENADE

18877

18883

18890

18895

18906

18870

18880

18884

18888

18887

18897

18905

18885

18886

18898

18903

18856

18865

19160

18878

19459

18831

18879

18960

18942

18941

18940

18939

18936

18933

18934

18912

18913

18914

18915

18916

18917

18918

18919

18920

18921

18922

18923

18924

18925

18926

18927

18928

18929

18930

18885

18886

18887

18888

18889

18890

18891

18892

18893

18894

18895

18896

18897

18898

18899

18900

18901

18902

18903

18904

18905

18906

18907

18908

18909

18910

18911

18912

18913

18885

18886

18887

18888

18889

18890

18891

18892

18893

18894

18895

18896

18897

18898

18899

18900

18901

18902

18903

18904

18905

18906

18907

18908

18909

18910

18911

18912

18913

18903

18904

18905

18906

18907

18908

18909

18910

18911

18912

18913

18914

18915

18916

18917

18918

18919

18920

18921

18922

18923

18924

18925

18926

18927

18928

18929

18930

18931

18856

18904

18857

18861

18862

18863

18864

18865

18866

18867

18868

18869

18870

18871

18872

18873

18874

18875

18876

18877

18878

18879

18880

18881

18882

18883

18884

18885

18886

18865

18866

18867

18868

18869

18870

18871

18872

18873

18874

18875

18876

18877

18878

18879

18880

18881

18882

18883

18884

18885

18886

18887

18888

18889

18890

18891

18892

18893

18865

18866

18867

18868

18869

18870

18871

18872

18873

18874

18875

18876

18877

18878

18879

18880

18881

18882

18883

18884

18885

18886

18887

18888

18889

18890

18891

18892

18893

18870

18871

18872

18873

18874

18875

18876

18877

18878

18879

18880

18881

18882

18883

18884

18885

18886

18887

18888

18889

18890

18891

18892

18893

18894

18895

18896

18897

18898

18899

18900

18901

18902

18903

18870

18871

18872

18873

18874

18875

18876

18877

18878

18879

18880

18881

18882

18883

18884

18885

18886

18887

18888

18889

18890

18891

18892

18893

18894

18895

18896

18897

18898

18899

18900

18901

18902

18903

18870

18871

18872

18873

18874

18875

18876

18877

18878

18879

18880

18881

18882

18883

18884

18885

18886

18887

18888

18889

18890

18891

18892

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS
☒ Crash Summary I
 ☒ Section Detail
 ☒ Crash Summary II
 ☐ 1320 Public
 ☐ 1320 Private
 ☐ 1320 Summary
REPORT DESCRIPTION

Munjoy St area in Portland

REPORT PARAMETERS

Year 2014, Start Month 1 through Year 2016 End Month: 12

Route: 0560236	Start Node: 18866 End Node: 18906	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 0560799	Start Node: 18847 End Node: 18866	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☒ Exclude Last Node
Route: 0560516	Start Node: 18861 End Node: 18864	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560757	Start Node: 18856 End Node: 18858	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560254	Start Node: 18896 End Node: 18904	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560045	Start Node: 18854 End Node: 18855	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560525	Start Node: 18850 End Node: 18853	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560025	Start Node: 18845 End Node: 18847	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560640	Start Node: 18840 End Node: 18843	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☐ Exclude Last Node
Route: 0560772	Start Node: 18839 End Node: 18837	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☒ Crash Summary I ☒ Section Detail ☒ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 Summary

REPORT DESCRIPTION

Munjoy St area in Portland

REPORT PARAMETERS

Year 2014, Start Month 1 through Year 2016 End Month: 12

Route: 0560160	Start Node: 18863 End Node: 18863	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560160	Start Node: 18863 End Node: 18907	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☐ Exclude Last Node
Route: 0560536	Start Node: 18899 End Node: 18907	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☒ Exclude Last Node
Route: 0560424	Start Node: 18898 End Node: 18900	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560606	Start Node: 18899 End Node: 18896	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☐ Exclude Last Node
Route: 0560383	Start Node: 18897 End Node: 18902	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560503	Start Node: 18894 End Node: 18891	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560717	Start Node: 18903 End Node: 18893	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560717	Start Node: 18906 End Node: 18903	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560717	Start Node: 18906 End Node: 18906	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☒ Crash Summary I ☒ Section Detail ☒ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 Summary

REPORT DESCRIPTION

Munjoy St area in Portland

REPORT PARAMETERS

Year 2014, Start Month 1 through Year 2016 End Month: 12

Route: 0561238	Start Node: 18901 End Node: 18892	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0561238	Start Node: 18909 End Node: 18901	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560513	Start Node: 18862 End Node: 18846	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560513	Start Node: 18846 End Node: 18841	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560513	Start Node: 18841 End Node: 18839	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560514	Start Node: 18851 End Node: 18857	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560514	Start Node: 18857 End Node: 18862	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560514	Start Node: 18862 End Node: 18866	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560668	Start Node: 18838 End Node: 18842	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560384	Start Node: 18837 End Node: 18843	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☒ Crash Summary I ☒ Section Detail ☒ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 Summary

REPORT DESCRIPTION

Munjoy St area in Portland

REPORT PARAMETERS

Year 2014, Start Month 1 through Year 2016 End Month: 12

Route: 0560525	Start Node: 18849	Start Offset: 0	☒ Exclude First Node
	End Node: 18850	End Offset: 0	☒ Exclude Last Node
Route: 0660757	Start Node: 18858	Start Offset: 0	☒ Exclude First Node
	End Node: 18859	End Offset: 0	☒ Exclude Last Node

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Node	Route - MP	Node Description	Nodes		U/R	Injury Crashes				Percent Annual M Injury	Ent-Veh	Crash Rate	Critical Rate	CRF
			Total Crashes	K		A	B	C	PD					
18886	0560236 - 0.29	Int of EASTERN PROMENADE WILSON ST	2	0	0	0	0	0	0	0.0	1.188	0.00	0.51	0.00
												Statewide Crash Rate:	0.14	
18865	0560236 - 0.34	Int of EASTERN PROMENADE MOODY ST	2	1	0	0	0	1	0	100.0	1.204	0.28	0.51	0.00
												Statewide Crash Rate:	0.14	
18963	0560236 - 0.43	Int of CONGRESS ST EASTERN PROMENADE	2	0	0	0	0	0	0	0.0	1.548	0.00	0.48	0.00
												Statewide Crash Rate:	0.14	
18906	0560236 - 0.52	Int of EASTERN PROMENADE TURNER ST	2	0	0	0	0	0	0	0.0	1.311	0.00	0.50	0.00
												Statewide Crash Rate:	0.14	
18847	0560799 - 0	0509257 POR, ATLANTIC, WILSON ST.	2	0	0	0	0	0	0	0.0	0.122	0.00	0.37	0.00
												Statewide Crash Rate:	0.14	
18850	0560799 - 0.04	0509270 POR, MUNJOY, WILSON ST.	2	0	0	0	0	0	0	0.0	0.190	0.00	0.54	0.00
												Statewide Crash Rate:	0.14	
18867	0560799 - 0.08	0509267 POR, OBRION, WILSON ST.	2	0	0	0	0	0	0	0.0	0.109	0.00	0.30	0.00
												Statewide Crash Rate:	0.14	
18858	0560799 - 0.12	0509278 POR, VESPER, WILSON ST.	2	0	0	0	0	0	0	0.0	0.168	0.00	0.50	0.00
												Statewide Crash Rate:	0.14	
18861	0560799 - 0.16	0509281 POR, MORNING, WILSON ST.	2	0	0	0	0	0	0	0.0	0.144	0.00	0.45	0.00
												Statewide Crash Rate:	0.14	
18882	0560516 - 0.17	0509282 POR, MORNING, MOODY ST.	2	0	0	0	0	0	0	0.0	0.113	0.00	0.32	0.00
												Statewide Crash Rate:	0.14	
18863	0560516 - 0.26	Int of CONGRESS ST, MORNING ST	2	0	0	0	0	0	0	0.0	0.703	0.00	0.57	0.00
												Statewide Crash Rate:	0.14	
18857	0560757 - 0.08	0509277 POR, VESPER, MOODY ST.	2	0	0	0	0	0	0	0.0	0.131	0.00	0.40	0.00
												Statewide Crash Rate:	0.14	
18905	0560254 - 0.11	0509325 POR, TURNER, EMERSON ST.	2	0	0	0	0	0	0	0.0	0.238	0.00	0.58	0.00
												Statewide Crash Rate:	0.14	
18851	0560525 - 0.17	0509271 POR, MUNJOY, MOODY ST.	2	1	0	0	0	0	1	0.0	0.134	2.49	0.42	5.96
												Statewide Crash Rate:	0.14	
18852	0560525 - 0.21	0509272 POR, MUNJOY, MONUMENT ST.	2	0	0	0	0	0	0	0.0	0.142	0.00	0.44	0.00
												Statewide Crash Rate:	0.14	
18848	0560025 - 0.05	0509286 POR, ATLANTIC, MONUMENT ST.	2	0	0	0	0	0	0	0.0	0.183	0.00	0.53	0.00
												Statewide Crash Rate:	0.14	
18841	0560640 - 0.04	0509281 POR, ST. LAWRENCE, MONUMENT ST.	2	1	0	0	0	0	1	0.0	0.216	1.54	0.57	2.72
												Statewide Crash Rate:	0.14	
18842	0560640 - 0.10	Int of SHERBROOKE ST ST LAWRENCE ST	2	1	0	0	0	0	1	0.0	0.185	1.80	0.53	3.38
												Statewide Crash Rate:	0.14	
18843	0560640 - 0.14	0509283 POR, ST. LAWRENCE ST, HOYTS LA.	2	0	0	0	0	0	0	0.0	0.212	0.00	0.56	0.00
												Statewide Crash Rate:	0.14	
18839	0560772 - 0	0509259 POR, MONUMENT, WATERTOWN ST.	2	0	0	0	0	0	0	0.0	0.110	0.00	0.31	0.00
												Statewide Crash Rate:	0.14	
18838	0560772 - 0.05	Int of SHERBROOKE ST WATERTOWN ST	2	0	0	0	0	0	0	0.0	0.075	0.00	-0.05	0.00
												Statewide Crash Rate:	0.14	
18837	0560772 - 0.09	0509257 POR, WATERTOWN ST, HOYTS LA.	2	0	0	0	0	0	0	0.0	0.058	0.00	-0.43	0.00
												Statewide Crash Rate:	0.14	

Maine Department Of Transportation - Traffic Engineering, Crash Records Section
Crash Summary I

Crash Summary															
Node	Route - MP	Node Description	Nodes				Injury Crashes				Percent Annual M		Crash Rate	Critical Rate	CRF
			U/R	Total Crashes	K	A	B	C	PD	Injury	Ent-Veh				
P18856	0560160 - 0.09	Int of CONGRESS ST, VESPER ST	2	0	0	0	0	0	0	0.0	0.876	0.00	0.54	0.00	
A18904	0560160 - 0.10	Int of CONGRESS ST, EMERSON ST	2	0	0	0	0	0	0	0.0	0.000	Statewide Crash Rate:	0.14	0.00	
												0.00			
18854	0560160 - 0.13	Int of BECKETT ST, CONGRESS ST	2	0	0	0	0	0	0	0.0	0.850	0.00	0.55	0.00	
18902	0560160 - 0.15	Int of CONGRESS ST, HOWARD ST	2	1	0	0	0	0	1	0.0	0.905	Statewide Crash Rate:	0.14	0.54	
												0.37			
18853	0560160 - 0.17	Int of CONGRESS ST, MUNJOY ST	2	0	0	0	0	0	0	0.0	1.039	0.00	0.53	0.00	
18891	0560160 - 0.19	Int of CONGRESS ST, MERRILL ST	2	1	0	0	1	0	0	100.0	1.090	Statewide Crash Rate:	0.14	0.52	
												0.31			
18845	0560160 - 0.22	Int of ATLANTIC ST, CONGRESS ST	2	0	0	0	0	0	0	0.0	1.292	0.00	0.50	0.00	
18900	0560160 - 0.24	Int of CONGRESS ST, LAFAYETTE ST	2	0	0	0	0	0	0	0.0	1.501	Statewide Crash Rate:	0.14	0.48	
												0.00			
18840	0560160 - 0.27	Int of CONGRESS ST, ST LAWRENCE ST	2	0	0	0	0	0	0	0.0	1.514	0.00	0.48	0.00	
18907	0560160 - 0.30	Int of CONGRESS ST, NORTH ST	2	1	0	0	0	0	1	0.0	1.731	Statewide Crash Rate:	0.14	0.47	
												0.19			
899	0560536 - 0.42	0509319 POR, NORTH, QUEBEC ST.	2	0	0	0	0	0	0	0.0	0.739	0.00	0.56	0.00	
12459	0560536 - 0.50	0502871 POR, NORTH ST, SUMNER CT	2	0	0	0	0	0	0	0.0	0.706	Statewide Crash Rate:	0.14	0.57	
												0.00			
18909	0560536 - 0.53	0509329 POR, CUMBERLAND AVE, NORTH ST.	2	0	0	0	0	0	0	0.0	1.244	0.00	0.50	0.00	
18901	0560424 - 0.09	Int of CUMBERLAND AV, LAFAYETTE ST	2	0	0	0	0	0	0	0.0	0.450	Statewide Crash Rate:	0.14	0.60	
												0.00			
18898	0560606 - 0.04	0509318 POR, QUEBEC, LAFAYETTE ST.	2	0	0	0	0	0	0	0.0	0.183	0.00	0.53	0.00	
18894	0560606 - 0.07	0509314 POR, QUEBEC, MERRILL ST.	2	0	0	0	0	0	0	0.0	0.266	Statewide Crash Rate:	0.14	0.59	
												0.00			
18897	0560606 - 0.12	0509317 POR, HOWARD, QUEBEC ST.	2	0	0	0	0	0	0	0.0	0.318	0.00	0.60	0.00	
18896	0560606 - 0.16	0509316 POR, QUEBEC, EMERSON ST.	2	0	0	0	0	0	0	0.0	0.180	Statewide Crash Rate:	0.14	0.53	
												0.00			
18903	0560383 - 0.07	0509323 POR, TURNER, HOWARD ST.	2	1	0	0	0	0	1	0.0	0.290	1.15	0.60	1.92	
18893	0560503 - 0.10	0509313 POR, MERRILL, TURNER ST.	2	1	0	0	0	0	1	0.0	0.185	Statewide Crash Rate:	0.14	0.53	
												1.80			
18892	0560503 - 0.14	Int of CUMBERLAND AV, MERRILL ST	2	1	0	0	0	0	1	0.0	0.201	1.65	0.55	2.99	
18864	0560717 - 0.04	0509284 POR, TURNER, MORNING ST.	2	0	0	0	0	0	0	0.0	0.117	Statewide Crash Rate:	0.14	0.34	
												0.00			

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Node	Route - MP	Node Description	Nodes							Percent Annual M Injury	Ent-Veh	Crash Rate	Critical Rate	CRF
			U/R	Total Crashes	K	A	B	C	PD					
18855	0560514 - 0.03	0506275 POR, MOODY, BECKETT ST.	2	0	0	0	0	0	0	0.0	0.048	0.00	-0.78	0.00
												Statewide Crash Rate: 0.14		
Study Years: 3.00			NODE TOTALS:		10	0	0	1	1	8	20.0	24.203	0.14	0.25 0.58

Maine Department Of Transportation - Traffic Engineering, Crash Records Section
Crash Summary I

Sections																
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes				Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
18865	18866	3120758	0 - 0.05	0560236 - 0.29	0.05	2	0	0	0	0	0	0.0	0.00059	0.00	892.57	0.00
Int of EASTERN PROMENADE MOODY ST														Statewide Crash Rate: 171.87		
18865	18863	3108820	0 - 0.09	0560236 - 0.34	0.09	2	0	0	0	0	0	0.0	0.00108	0.00	611.18	0.00
Int of EASTERN PROMENADE MOODY ST														Statewide Crash Rate: 171.87		
18906	18863	3108827	0 - 0.09	0560236 - 0.43	0.09	2	0	0	0	0	0	0.0	0.00116	0.00	600.31	0.00
Int of EASTERN PROMENADE TURNER ST														Statewide Crash Rate: 171.87		
18847	18850	194475	0 - 0.04	0560799 - 0	0.04	2	0	0	0	0	0	0.0	0.00002	0.00	-1581.77	0.00
0509267 POR, ATLANTIC, WILSON ST.														Statewide Crash Rate: 401.41		
18850	18867	194480	0 - 0.04	0560799 - 0.04	0.04	2	0	0	0	0	0	0.0	0.00002	0.00	-354.61	0.00
0509270 POR, MUNJOY, WILSON ST														Statewide Crash Rate: 401.41		
18858	18867	194497	0 - 0.04	0560799 - 0.08	0.04	2	0	0	0	0	0	0.0	0.00003	0.00	83.80	0.00
0509278 POR, VESPER, WILSON ST.														Statewide Crash Rate: 401.41		
18858	18861	194498	0 - 0.04	0560799 - 0.12	0.04	2	0	0	0	0	0	0.0	0.00002	0.00	-593.67	0.00
0509278 POR, VESPER, WILSON ST														Statewide Crash Rate: 401.41		
18861	18866	194504	0 - 0.05	0560799 - 0.16	0.05	2	2	0	0	0	2	0.0	0.00002	40142.51	-2322.37	0.00
0509281 POR, MORNING, WILSON ST.														Statewide Crash Rate: 401.41		
18861	18862	194503	0 - 0.05	0560516 - 0.12	0.05	2	0	0	0	0	0	0.0	0.00003	0.00	593.13	0.00
0509281 POR, MORNING, WILSON ST.														Statewide Crash Rate: 401.41		
18862	18863	194505	0 - 0.09	0560516 - 0.17	0.09	2	1	0	0	0	1	0.0	0.00009	3829.11	1680.52	2.28
0509282 POR, MORNING, MOODY ST.														Statewide Crash Rate: 401.41		
33	18864	194507	0 - 0.08	0560516 - 0.28	0.08	2	0	0	0	0	0	0.0	0.00004	0.00	767.31	0.00
Int of CONGRESS ST, MORNING ST														Statewide Crash Rate: 401.41		
18856	18857	194490	0 - 0.08	0560757 - 0	0.08	2	0	0	0	0	0	0.0	0.00009	0.00	1701.06	0.00
Int of CONGRESS ST, VESPER ST														Statewide Crash Rate: 401.41		
18857	18858	194493	0 - 0.05	0560757 - 0.08	0.05	2	0	0	0	0	0	0.0	0.00005	0.00	1214.69	0.00
0509277 POR, VESPER, MOODY ST.														Statewide Crash Rate: 401.41		
18896	18905	194560	0 - 0.07	0560254 - 0.04	0.07	2	1	0	0	0	1	0.0	0.00008	3929.61	1671.91	2.35
0509316 POR, QUEBEC, EMERSON ST.														Statewide Crash Rate: 401.41		
18904	18905	194568	0 - 0.07	0560254 - 0.11	0.07	2	0	0	0	0	0	0.0	0.00004	0.00	1006.32	0.00
Int of CONGRESS ST EMERSON ST														Statewide Crash Rate: 401.41		
18854	18855	194486	0 - 0.08	0560045 - 0	0.08	2	1	0	0	0	1	0.0	0.00003	9674.17	640.62	15.10
Int of BECKETT ST, CONGRESS ST														Statewide Crash Rate: 401.41		
18850	18851	194479	0 - 0.05	0560525 - 0.12	0.05	2	0	0	0	0	0	0.0	0.00006	0.00	1435.18	0.00
0509270 POR, MUNJOY, WILSON ST.														Statewide Crash Rate: 401.41		
18851	18852	194481	0 - 0.04	0560525 - 0.17	0.04	2	0	0	0	0	0	0.0	0.00005	0.00	1254.49	0.00
0509271 POR, MUNJOY, MOODY ST.														Statewide Crash Rate: 401.41		
18852	18853	194483	0 - 0.05	0560525 - 0.21	0.05	2	1	0	0	0	1	0.0	0.00004	7872.78	1044.37	7.54
0509272 POR, MUNJOY, MONUMENT ST.														Statewide Crash Rate: 401.41		
18845	18846	194469	0 - 0.05	0560025 - 0	0.05	2	0	0	0	0	0	0.0	0.00006	0.00	1507.34	0.00
Int of ATLANTIC ST, CONGRESS ST														Statewide Crash Rate: 401.41		

Maine Department Of Transportation - Traffic Engineering, Crash Records Section
Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes					Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
18846	18847	194472	0 - 0.08	0560025 - 0.05	0.08	2	1	0	0	0	0	1	0.0	0.00008	4424.62	1622.13	2.73
0509288 POR, ATLANTIC MONUMENT ST.															Statewide Crash Rate: 401.41		
18840	18841	194461	0 - 0.04	0560640 - 0	0.04	2	1	0	0	0	0	1	0.0	0.00006	5541.52	1472.62	3.78
Int of CONGRESS ST, ST LAWRENCE ST															Statewide Crash Rate: 401.41		
18841	18842	194464	0 - 0.06	0560640 - 0.04	0.06	2	2	0	0	0	0	2	0.0	0.00010	6810.16	1710.51	3.98
0509281 POR, ST LAWRENCE MONUMENT ST.															Statewide Crash Rate: 401.41		
18842	18843	194466	0 - 0.04	0560640 - 0.10	0.04	2	0	0	0	0	0	0	0.0	0.00008	0.00	1621.17	0.00
Int of SHERBROOKE ST, ST LAWRENCE ST															Statewide Crash Rate: 401.41		
18838	18839	194458	0 - 0.05	0560772 - 0	0.05	2	1	0	0	0	0	1	0.0	0.00004	8953.35	808.25	11.08
Int of SHERBROOKE ST, WATERVILLE ST															Statewide Crash Rate: 401.41		
18837	18838	194458	0 - 0.04	0560772 - 0.05	0.04	2	0	0	0	0	0	0	0.0	0.00002	0.00	-727.18	0.00
0509257 POR, WATERVILLE ST, HOYTS LA.															Statewide Crash Rate: 401.41		
18863	18863	3131700	0 - 0.05	0560160 - 0	0.05	2	4	0	0	0	0	3	0.0	0.00030	4401.17	741.94	5.93
Int of CONGRESS ST, MORNING ST															Statewide Crash Rate: 171.87		
18858	18863	194491	0 - 0.04	0560160 - 0.05	0.04	2	0	0	0	0	0	0	0.0	0.00028	0.00	741.89	0.00
Int of CONGRESS ST, VESPER ST															Statewide Crash Rate: 171.87		
18856	18904	3123722	0 - 0.01	0560160 - 0.09	0.01	2	0	0	0	0	0	0	0.0	0.00008	0.00	254.72	0.00
Int of CONGRESS ST, VESPER ST															Statewide Crash Rate: 171.87		
18854	18904	194488	0 - 0.03	0560160 - 0.10	0.03	2	1	0	0	0	0	1	0.0	0.00024	1363.86	737.12	1.85
BECKETT ST, CONGRESS ST															Statewide Crash Rate: 171.87		
18854	18902	3120116	0 - 0.02	0560160 - 0.13	0.02	2	0	0	0	0	0	0	0.0	0.00017	0.00	684.88	0.00
Int of BECKETT ST, CONGRESS ST															Statewide Crash Rate: 171.87		
18853	18902	3124002	0 - 0.02	0560160 - 0.15	0.02	2	0	0	0	0	0	0	0.0	0.00019	0.00	712.05	0.00
Int of CONGRESS ST, MUNJOY ST															Statewide Crash Rate: 171.87		
18853	18891	3122294	0 - 0.02	0560160 - 0.17	0.02	2	0	0	0	0	0	0	0.0	0.00021	0.00	720.78	0.00
Int of CONGRESS ST, MUNJOY ST															Statewide Crash Rate: 171.87		
18845	18891	3118712	0 - 0.03	0560160 - 0.19	0.03	2	0	0	0	0	0	0	0.0	0.00032	0.00	741.02	0.00
Int of ATLANTIC ST, CONGRESS ST															Statewide Crash Rate: 171.87		
18845	18900	3130201	0 - 0.02	0560160 - 0.22	0.02	2	0	0	0	0	0	0	0.0	0.00028	0.00	741.78	0.00
Int of ATLANTIC ST, CONGRESS ST															Statewide Crash Rate: 171.87		
18840	18900	3129297	0 - 0.03	0560160 - 0.24	0.03	2	1	0	0	1	0	0	100.0	0.00044	766.01	723.55	1.06
Int of CONGRESS ST, ST LAWRENCE ST															Statewide Crash Rate: 171.87		
18840	18907	3106817	0 - 0.03	0560160 - 0.27	0.03	2	1	0	0	0	0	1	0.0	0.00043	778.35	724.87	1.07
Int of CONGRESS ST, ST LAWRENCE ST															Statewide Crash Rate: 171.87		
12459	18899	186810	0 - 0.08	0560536 - 0.42	0.08	2	6	0	0	1	0	1	50.0	0.00055	3649.08	1370.11	2.66
0502871 POR, NORTH ST, SUMNER CT															Statewide Crash Rate: 401.41		
12459	18909	186811	0 - 0.03	0560536 - 0.50	0.03	2	1	0	0	0	0	0	0.0	0.00021	1565.11	1660.65	0.00
0502871 POR, NORTH ST, SUMNER CT															Statewide Crash Rate: 401.41		
18907	18909	194570	0 - 0.07	0560536 - 0.53	0.07	2	3	0	0	0	0	3	0.0	0.00031	3187.21	1552.44	2.05
Int of CONGRESS ST, NORTH ST															Statewide Crash Rate: 401.41		

Maine Department Of Transportation - Traffic Engineering, Crash Records Section
Crash Summary I

Sections																		
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	K	Injury Crashes				Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF	
18898	18901	194563	0 - 0.09	0560424 - 0	0.09	2	3	0	0	0	0	3	0.0	0.00021	4855.09	1668.47	2.91	
0509318 POR, QUEBEC, LAFAYETTE ST															Statewide Crash Rate: 401.41			
18900	18901	194564	0 - 0.05	0560424 - 0.09	0.05	2	1	0	0	0	0	1	0.0	0.00004	8378.37	936.33	8.95	
Int of CONGRESS ST LAFAYETTE ST															Statewide Crash Rate: 401.41			
18898	18899	194562	0 - 0.04	0560606 - 0	0.04	2	1	0	0	0	0	1	0.0	0.00008	4299.63	1635.79	2.63	
0509318 POR, QUEBEC, LAFAYETTE ST															Statewide Crash Rate: 401.41			
18894	18898	194556	0 - 0.03	0560606 - 0.04	0.03	2	1	0	0	0	0	1	0.0	0.00005	6476.89	1316.55	4.92	
0509314 POR, QUEBEC, MERRILL ST															Statewide Crash Rate: 401.41			
18894	18897	194555	0 - 0.05	0560606 - 0.07	0.05	2	0	0	0	0	0	0	0.0	0.00007	0.00	1605.83	0.00	
0509314 POR, QUEBEC, MERRILL ST															Statewide Crash Rate: 401.41			
18896	18897	194559	0 - 0.04	0560606 - 0.12	0.04	2	0	0	0	0	0	0	0.0	0.00007	0.00	1566.99	0.00	
0509316 POR, QUEBEC, EMERSON ST															Statewide Crash Rate: 401.41			
18897	18903	194561	0 - 0.07	0560363 - 0	0.07	2	0	0	0	0	0	0	0.0	0.00011	0.00	1727.65	0.00	
0509317 POR, HOWARD, QUEBEC ST															Statewide Crash Rate: 401.41			
18902	18903	194566	0 - 0.07	0560363 - 0.07	0.07	2	1	0	0	0	0	1	0.0	0.00010	3388.65	1711.45	1.98	
Int of CONGRESS ST HOWARD ST															Statewide Crash Rate: 401.41			
18893	18894	194553	0 - 0.06	0560503 - 0.04	0.06	2	1	0	0	0	0	1	0.0	0.00008	4113.70	1654.78	2.49	
0509313 POR, MERRILL, TURNER ST															Statewide Crash Rate: 401.41			
18892	18893	194551	0 - 0.04	0560503 - 0.10	0.04	2	0	0	0	0	0	0	0.0	0.00004	0.00	800.23	0.00	
CUMBERLAND AV, MERRILL ST															Statewide Crash Rate: 401.41			
J1	18892	194550	0 - 0.04	0560503 - 0.14	0.04	2	1	0	0	0	0	1	0.0	0.00004	9395.49	706.31	13.30	
Int of CONGRESS ST MERRILL ST															Statewide Crash Rate: 401.41			
18893	18903	194554	0 - 0.03	0560717 - 0.14	0.03	2	0	0	0	0	0	0	0.0	0.00004	0.00	1050.02	0.00	
0509313 POR, MERRILL, TURNER ST															Statewide Crash Rate: 401.41			
18903	18905	194567	0 - 0.05	0560717 - 0.09	0.05	2	0	0	0	0	0	0	0.0	0.00008	0.00	1643.30	0.00	
0509323 POR, TURNER, HOWARD ST															Statewide Crash Rate: 401.41			
18864	18906	194510	0 - 0.04	0560717 - 0	0.04	2	1	0	0	0	0	1	0.0	0.00003	12408.18	-53.66	0.00	
0509284 POR, TURNER, MORNING ST															Statewide Crash Rate: 401.41			
18864	18905	194509	0 - 0.05	0560717 - 0.04	0.05	2	0	0	0	0	0	0	0.0	0.00004	0.00	827.95	0.00	
0509284 POR, TURNER, MORNING ST															Statewide Crash Rate: 401.41			
18892	18901	2724912	0 - 0.05	0561238 - 1.34	0.05	2	0	0	0	0	0	0	0.0	0.00011	0.00	1727.98	0.00	
Int of CUMBERLAND AV, MERRILL ST															Statewide Crash Rate: 401.41			
18901	18909	194565	0 - 0.09	0561238 - 1.25	0.09	2	1	0	0	0	0	0	0.0	0.00020	1682.78	1677.18	1.00	
Int of CUMBERLAND AV, LAFAYETTE ST															Statewide Crash Rate: 401.41			
18846	18852	194473	0 - 0.04	0560513 - 0	0.04	2	0	0	0	0	0	0	0.0	0.00003	0.00	346.82	0.00	
0509266 POR, ATLANTIC, MONUMENT ST															Statewide Crash Rate: 401.41			
18841	18846	194465	0 - 0.05	0560513 - 0.04	0.05	2	2	0	0	0	0	2	0.0	0.00003	19226.15	655.11	29.35	
0509261 POR, ST LAWRENCE, MONUMENT ST															Statewide Crash Rate: 401.41			
18839	18841	194460	0 - 0.04	0560513 - 0.09	0.04	2	0	0	0	0	0	0	0.0	0.00002	0.00	-1268.51	0.00	
0509259 POR, MONUMENT, WATERVILLE ST															Statewide Crash Rate: 401.41			

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

Crash Summary I

Sections

Sections																	
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes				Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF	
18851	18855	194482	0 - 0.03	0580514 - 0	0.03	2	0	0	0	0	0	0.0	0.00001	0.00	-7893.47	0.00	
0509271 POR,MUNJOY,MOODY ST.				RD INV 05 60514										Statewide Crash Rate: 401.41			
18855	18857	194489	0 - 0.04	0580514 - 0.03	0.04	2	0	0	0	0	0	0.0	0.00001	0.00	-7893.47	0.00	
0509275 POR,MOODY,BECKETT ST.				RD INV 05 60514										Statewide Crash Rate: 401.41			
18857	18862	194494	0 - 0.04	0580514 - 0.07	0.04	2	0	0	0	0	0	0.0	0.00001	0.00	-6283.04	0.00	
0509277 POR,VESPER,MOODY ST.				RD INV 05 60514										Statewide Crash Rate: 401.41			
18862	18865	194506	0 - 0.06	0580514 - 0.11	0.06	2	0	0	0	0	0	0.0	0.00002	0.00	-932.28	0.00	
0509282 POR,MORNING,MOODY ST.				RD INV 05 60514										Statewide Crash Rate: 401.41			
18838	18842	194459	0 - 0.04	0580658 - 0	0.04	2	0	0	0	0	0	0.0	0.00001	0.00	-	0.00	
Int of SHERBROOKE ST WATERVILLE ST				RD INV 05 60858										Statewide Crash Rate: 401.41			
18837	18843	194457	0 - 0.03	0580384 - 0	0.03	2	0	0	0	0	0	0.0	0.00000	0.00	-	0.00	
0509257 POR,WATERVILLE ST,HOYTS LA.				RD INV 05 60384										Statewide Crash Rate: 401.41			
18849	18850	194477	0 - 0.12	0580525 - 0	0.12	2	1	0	0	0	1	0.0	0.00019	1773.97	1688.19	1.05	
Int of EASTERN PROMENADE MUNJOY ST				RD INV 05 60525										Statewide Crash Rate: 401.41			
18858	18859	194495	0 - 0.12	0580757 - 0.13	0.12	2	0	0	0	0	0	0.0	0.00013	0.00	1732.67	0.00	
0509278 POR,VESPER,WILSON ST.				RD INV 05 60757										Statewide Crash Rate: 401.41			
Study Years: 3.00					Section Totals:	3.49	42	0	0	2	0	33	4.8	0.00983	1424.37	494.87	2.88
					Grand Totals:	3.49	52	0	0	3	1	41	7.7	0.00983	1763.50	641.00	2.75

SECTION 3

A. ENTRANCE/EXIT LOCATION

City ordinances do not require driveway access to the proposed St. Lawrence Arts Center project.

SECTION 3

B. ENTRANCE AND EXIT PLAN VIEW

The requirements of this section of the Traffic Movement Permit application are not applicable to the project site design.

SECTION 3

C. ENTRANCE/EXIT DESIGN

The proposed project, including all required off-site improvements, will be designed and constructed as directed by the City.

SECTION 4

TITLE, RIGHT OR INTEREST

The attached Warranty Deed and Exhibit A documents show proof that Deirdre E. Nice conveyed for considerations paid the property rights of the 76 Congress Street property to the Friends of the St. Lawrence Church on September 12, 1997.

EXHIBIT A

Three certain lots or parcels of land and the church edifice and buildings on the same situated at the corners of Congress, Munjoy and Beckett Streets, in the said City of Portland and more particularly bounded and described as follows:

FIRST: Beginning at the corner formed by the intersection of the southerly side line of said Congress Street and the westerly side line of said Beckett Street; thence southeasterly by said Beckett Street forty-five (45) feet to a point; thence westerly on a line at right angles to said Beckett Street eighty (80) feet to Lot No. 1 in Block marked E. on a plan recorded in the Cumberland Registry of Deeds in Plan Book No. 4, Page 18; thence northerly by said Lot No. 1, forty-five (45) feet to said Congress Street; thence easterly by said Congress Street eighty (80) feet to the point begun at.

SECOND: Beginning at the northeasterly corner as formed by the intersection of the Southeasterly line of said Congress Street and the northeasterly line of said Munjoy Street; thence southeasterly by said Munjoy Street a distance of forty three and 27/100 (43.27) feet to a point; thence northeasterly at right angles to said Munjoy Street a distance of eighty (80) feet to a point; thence northwesterly at right angles to the last described line a distance of forty five and 69/100 (45.69) feet to Congress Street; thence southwesterly by said Congress Street to the corner begun at. Said lot is further shown on a plan of the premises recorded in said Cumberland Registry of Deeds in Plan Book 4, Page 18, and is the lot number one (1) in Block E on said Plan. The two parcels above described are the same conveyed to the St. Lawrence Street Parish by Jacob H. Groves by his deed dated September 28, 1895, and recorded in the Cumberland Registry of Deeds, Book 630, Page 261.

THIRD: Beginning at a point on the easterly side of Munjoy Street which point is forty three and 27/100 (43.27) feet southerly from the corner made by the intersection of the southerly line of Congress Street with the easterly line of Munjoy Street; thence southerly on said Munjoy Street forty three (43) feet to a point, and from these two points and keeping the same width extending back at right angles to Munjoy Street eighty (80) feet. Being the same premises conveyed to the Saint Lawrence Street Parish by John Cousens by his deed dated August 24, 1896 and recorded in said Registry, Book 639, Page 438. To the several deeds aforesaid and the records thereof reference is hereby made for further description of the premises hereby conveyed.

THIS CONVEYANCE IS MADE SUBJECT to an outstanding mortgage from the Grantor and Grantee herein to Fleet Bank of Maine, which mortgage the Grantee, as part of the consideration for this transaction, assumes and agrees to pay.

RECEIVED
RECORDED REGISTRY OF DEEDS

1997 SEP 19 PM 4: 16

CUMBERLAND COUNTY

John B O'Brien

056583

WARRANTY DEED

Know all Ye by these Presents,

That I, DEIRDRE E. NICE (Grantor) of 4 Glen Road, Falmouth, Maine 04105,

for consideration paid, do hereby grant unto the said FRIENDS OF THE ST.

LAWRENCE CHURCH (Grantee), of 76 Congress Street, Portland, Maine 04101, with

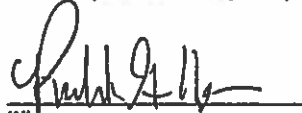
Warranty Covenants, the following real property situated at 66-76 Congress Street, City

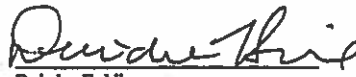
of Portland, County of Cumberland, described as follows:

A certain lot or parcel of land with the buildings thereon, situated in said Portland, and being more particularly described on Exhibit A attached hereto and made a part hereof.

Meaning and intending to convey the same premises described in a warranty deed from Stephen P. Sunenblick and Roger Conover to Grantor and Grantee dated December 9, 1993, and recorded in the Cumberland County Registry of Deeds in Book 11160, Page 21.

Witness my hand this 12 day of September, 1997.


Witness


Deirdre E. Nice

STATE OF MAINE
CUMBERLAND, ss

September 12, 1997

Personally appeared the above Deirdre E. Nice, and acknowledged the foregoing instrument to be her free act and deed.

Before me,


Attorney at Law/Notary Public

MAINE ESTATE TAX PAID

SECTION 5

PUBLIC OR PRIVATE RIGHTS-OF-WAY

There are no known public or private easements that encumber the site.

SECTION 6

SCHEDULE

Friends of the St. Lawrence Church have not established a construction schedule for the project at this point; construction is likely to commence in the next 3 to 5-year time period.

CITY OF PORTLAND SITE PLAN NOTES

- LANDSCAPING SHALL MEET THE "ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION, AND SURFACING OF PARKING AREAS AND LOCATION AND SIZE OF BUILDINGS.
- ALL POWERLINE UTILITIES SHALL BE UNDERGROUND FROM THE EXISTING SERVICE POLE.
- SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TYPED RAMP AT ALL STREET CORNERS, CROSSWALKS AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPs PUBLISHED BY THE BUREAU OF LAND AND QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
- ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES (SEE ABOVE).
- PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORKS REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.
- EXISTING VEGETATION SHALL BE CONSERVED IN AREAS SHOWN ON THIS SITE. FENCING OR OTHER PROTECTIVE BARRIERS SHALL BE ERECTED OUTSIDE THE DRIP-LINE OF INDIVIDUAL GROUPINGS OF TREES DESIGNATED FOR PRESERVATION PRIOR TO THE ONSET OF CONSTRUCTION. REGRADING SHALL NOT TAKE PLACE WITHIN THE DRIP-LINE OF TREES DESIGNATED FOR PRESERVATION. NO STORAGE OR CONSTRUCTION MATERIALS SHALL BE PERMITTED WITHIN THE DRIP-LINE OF TREES TO BE PRESERVED.

ZONE INFORMATION

EXISTING ZONE: C88 (UNDERLYING ZONE: R-6)
EXISTING USE: PERFORMING ARTS HALL

SPACE STANDARDS	REQUIRED	PROVIDED
MINIMUM LOT SIZE	10,500 SF.	10,601 SQ. FT.
MINIMUM FRONT YARD	0 FEET	0 FEET
MINIMUM REAR YARD	0 FEET	3 FEET
MINIMUM SIDE ON A SIDE STREET	0 FEET	0 FEET
MAXIMUM LOT COVERAGE	95%	92%
MAXIMUM TOWER HEIGHT	NA	-
MAXIMUM SANCTUARY STRUCTURE HEIGHT	54 FEET	EXISTING
OPEN SPACE RATIO	0%	0%
MINIMUM LOT WIDTH	50 FEET	160 FEET

GENERAL NOTES

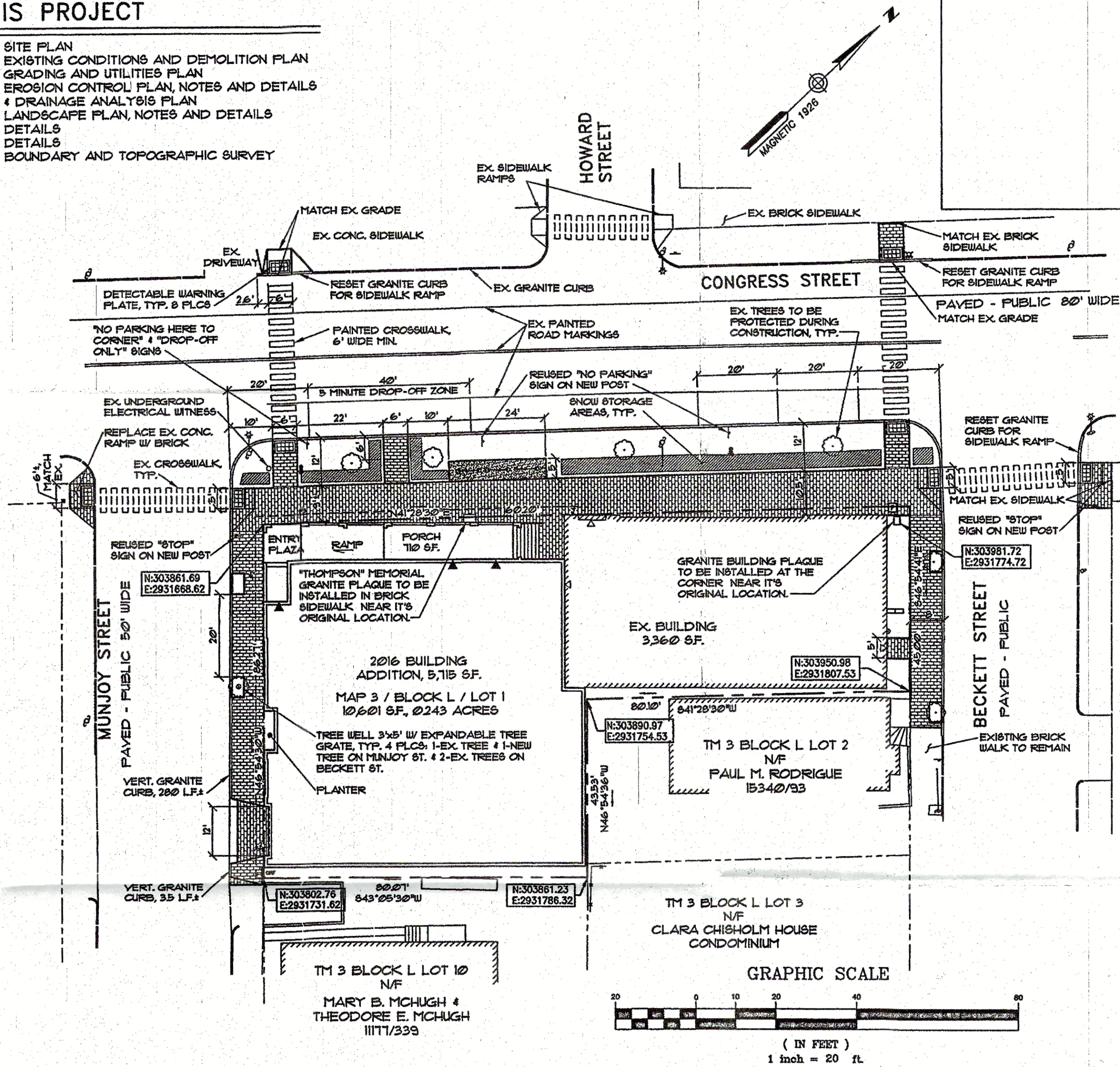
- OWNER/APPLICANT: FRIENDS OF THE ST. LAWRENCE CHURCH, 76 CONGRESS STREET PORTLAND MAINE 04101. DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS BK. 13333, PG. 9, DATED SEPTEMBER 19, 1991.
- ENGINEER: PINKHAM & GREER CIVIL ENGINEERS, 28 VANNIAH AVENUE, PORTLAND, MAINE, 04103.
- ARCHITECT: ARCHETYPE ARCHITECTS, 48 UNION WHARF, PORTLAND, MAINE, 04101
- TOPOGRAPHIC AND BOUNDARY INFORMATION: OLIVER HASKELL, INC. 390 US ROUTE ONE, FALMOUTH, MAINE. BENCHMARK MONUMENT WITH BOLT NORTHWEST CORNER OF MORNING AND WILSON STREETS ELEVATION 114.63. BASIS OF BEARINGS: MAINE STATE PLANE COORDINATE SYSTEM WEST ZONE NAD83. BASED ON CITY MONUMENTS 1102-69-1 AND 1102-68-5.
- SOILS MAPPING TAKEN FROM SOIL CONSERVATION STUDY OF CUMBERLAND COUNTY AND CLASSIFIED AS HINCKLEY (HIB), GRAVELLY SANDY LOAM, 3-8% SLOPES, HYDROLOGICAL GROUP "A".
- TAX MAP REFERENCE: MAP 3 / BLOCK L / LOT 1
- TOTAL PARCEL = 0.243 acres
- CALL DIG-SAFE PRIOR TO COMMENCING WORK, 1-800-DIG-SAFE.
- ALL WORK WITHIN THE RIGHT OF WAY IS TO MEET CITY OF PORTLAND STANDARDS.
- BUILDING TO BE SERVICED BY PUBLIC WATER AND SEWER. THESE SERVICES, INCLUDING EXISTING HYDRANTS, ARE AS SHOWN ON SHEET C14, GRADING AND UTILITIES PLAN.
- POWER, TELEPHONE AND CABLE SERVICES ARE TO BE UNDERGROUND. THESE SERVICES ARE SHOWN ON SHEET C14, GRADING AND UTILITIES PLAN.
- EXISTING UTILITIES, INCLUDING SIZE AND VERTICAL AND HORIZONTAL LOCATIONS, ARE SHOWN ON SHEET C14, GRADING AND UTILITIES PLAN.
- THERE ARE NO APPARENT PERMANENT ONSITE EASEMENTS OR RESTRICTIONS BURDENING OR BENEFITING THE SUBJECT PROPERTY.
- THE EXISTING ONSITE STRUCTURE IS LISTED BY THE CITY OF PORTLAND AS A HISTORIC LANDMARK. NO OTHER STRUCTURES OR HISTORIC SITES ON OR ADJACENT TO THIS SITE APPEAR ON OR ARE NOMINATED TO THE NATIONAL REGISTER.
- THE SUBJECT PARCEL SHOWN AS 76 CONGRESS STREET IS SUBJECT TO THE CITY OF PORTLAND LEVEL III SITE PLAN DEVELOPMENT REVIEW APPLICATION.
- REQUIRED STREET TREES ARE INCLUDED ON THE LANDSCAPE PLAN AS PART OF THE APPROVAL FOR ST. LAWRENCE ARTS ADDITION SITE PLAN.
- FLOODPLAIN: THIS PROPERTY SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL 2300B1 0014 A, EFFECTIVE DATE JULY 11, 1986. IT IS NOT IN A SPECIAL FLOOD HAZARD ZONE.
- THIS PROJECT COMPLIES WITH CONDITIONS OF PORTLAND CODE OF ORDINANCES, CHAPTER 32 STORMWATER, INCLUDING ARTICLE III, POST-CONSTRUCTION STORMWATER MANAGEMENT. THE DEVELOPER/CONTRACTOR/SUB-CONTRACTORS MUST COMPLY WITH CONDITIONS OF THE CONSTRUCTION STORMWATER MANAGEMENT PLAN AND SEDIMENT & EROSION CONTROL PLAN BASED ON CITY STANDARDS AND STATE GUIDELINES. SEE SHEET C14, GRADING AND UTILITIES PLAN, FOR THE LIST OF INSPECTION AND MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES REQUIREMENTS.
- EXISTING TREE PRESERVATION AND PROTECTION MEASURES ARE TO BE UNDERTAKEN IN ACCORDANCE WITH THE STANDARDS SHOWN ON SHEET L10, LANDSCAPE IMPROVEMENT PLAN.

SITE PLAN CONDITIONS OF APPROVAL

PLANNING BOARD CONDITIONS OF APPROVAL PER THE CITY OF PORTLAND PLANNING BOARD REVIEW MEMO DATED:

SITE DRAWINGS INCLUDED IN THIS PROJECT

- C11 SITE PLAN
- C12 EXISTING CONDITIONS AND DEMOLITION PLAN
- C13 GRADING AND UTILITIES PLAN
- C14 EROSION CONTROL PLAN, NOTES AND DETAILS
- C15 DRAINAGE ANALYSIS PLAN
- C21 LANDSCAPE PLAN, NOTES AND DETAILS
- C22 DETAILS
- 1 BOUNDARY AND TOPOGRAPHIC SURVEY



LEGEND

EXISTING

- PROPERTY LINE
- ADJUTERS PROPERTY
- EDGE OF PAVEMENT
- BUILDING CURB
- UTILITY POLE W/ GUY WIRE
- LIGHT POST
- SIGN
- PLANTER WALL
- CHAINLINK FENCE
- MONUMENT FOUND
- IRON ROD FOUND OR SET
- HYDRANT
- PAINTED CROSSWALK
- TREE

PROPOSED

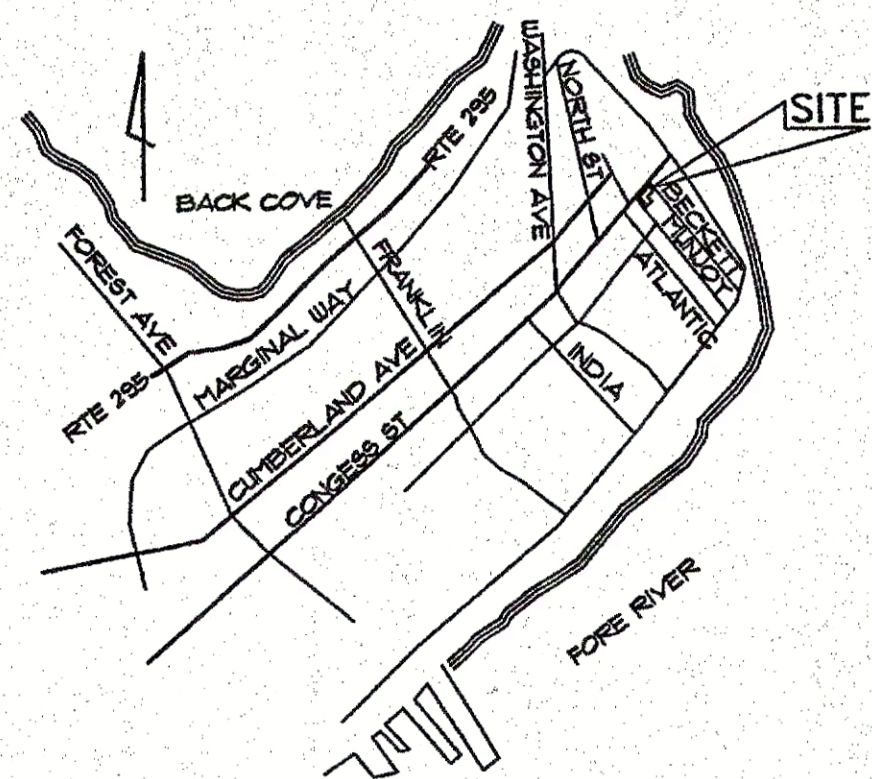
- FOOTING LICENSE
- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- GRADE BREAKS IN SIDEWALKS
- BUILDING ENTRY/EGRESS
- DRIPSTRIP W/ UNDERDRAIN
- FIELD INLET
- PEDESTRIAN SCALE LIGHTING
- BIKE RACK
- SIGN
- GRANITE CURB & POST
- FULL DEPTH BITUMINOUS PAVEMENT
- BRICK SIDEWALK
- DETECTABLE SURFACE AT RAMP
- SNOW STORAGE AREAS
- CROSSWALK, 6' WIDE

EASEMENTS & LICENSES

- PROPOSED TEMPORARY EASEMENT, CONSTRUCTION EASEMENT FROM CITY OF PORTLAND TO THE FRIENDS OF ST. LAWRENCE CHURCH.
- PROPOSED LICENSE: FROM THE CITY OF PORTLAND TO THE FRIENDS OF ST. LAWRENCE CHURCH FOR BUILDING FOOTINGS.

FOOTING LICENSE

LINE	BEARING	DISTANCE
F1	S 43°05'30" W	2.00'
F2	N 46°54'30" W	88.21'
F3	N 41°28'30" E	80.00'
F4	S 46°54'30" E	2.00'

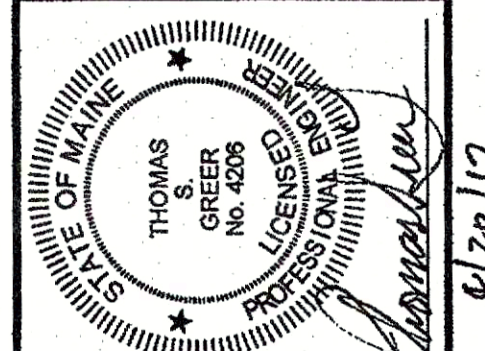


LOCATION PLAN

SCALE: 1"=250'

PINKHAM & GREER CIVIL ENGINEERS

28 VANNIAH AVENUE, PORTLAND, ME 04103
TEL: 207.761.5424 FAX: 207.761.4245



REV.	DATE	DESCRIPTION
1	4/20/17	REV'D SIDEWALK PER STAFF REVIEW

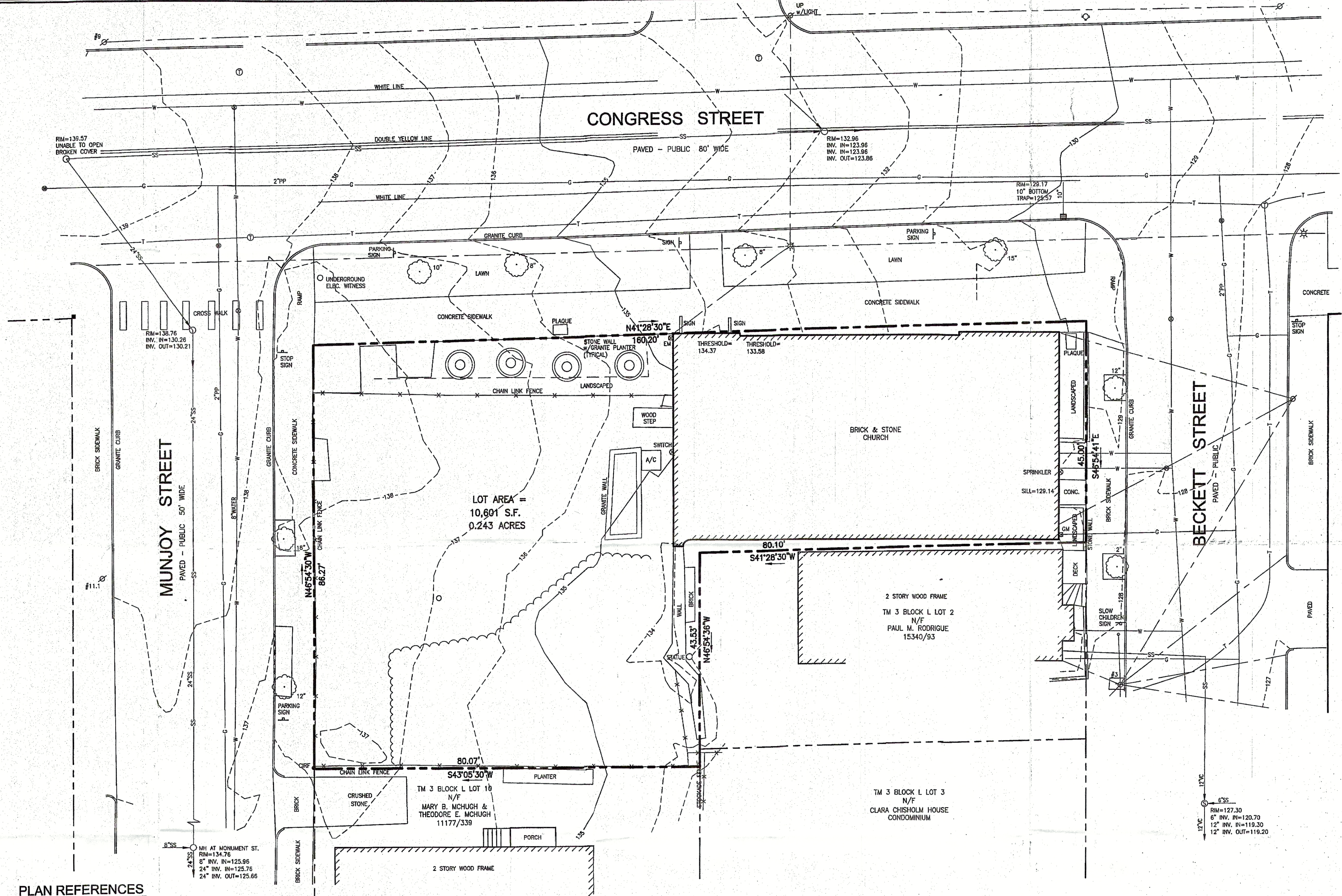
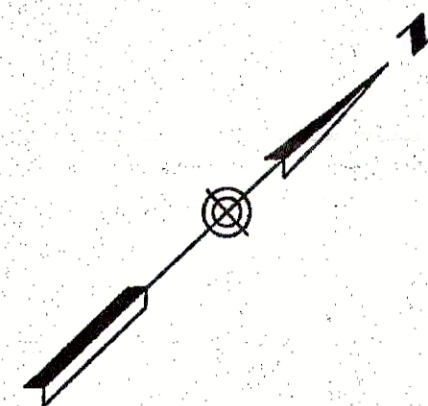
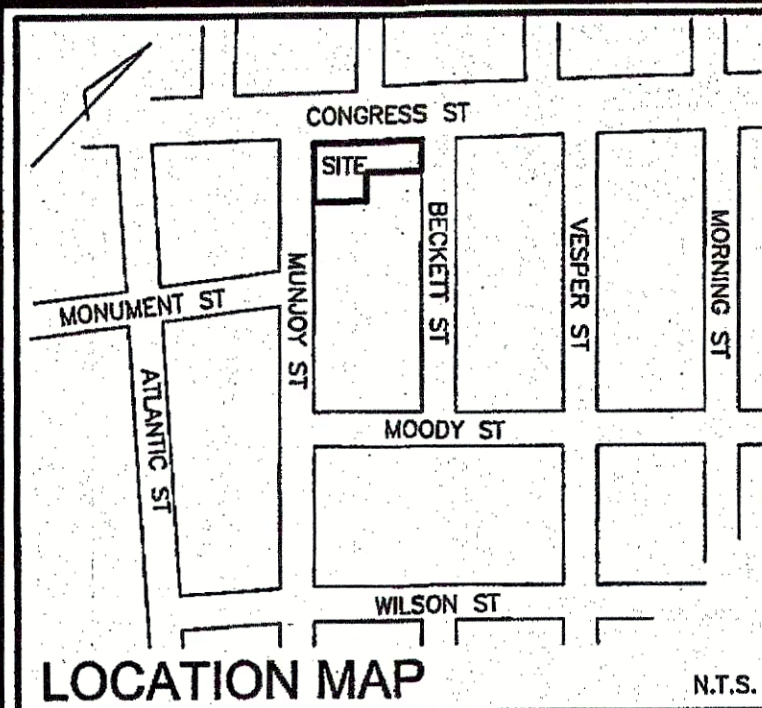
ST. LAWRENCE CHURCH
76 CONGRESS STREET
PORTLAND, MAINE 04101

SCALE: AS SHOWN
DATE: OCTOBER 4, 2016
PROJECT: 18107

SITE PLAN

C1.1

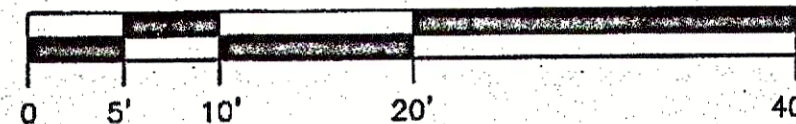
MAP/LOT/BLOCK 3/L/1



LEGEND

- IRON PIPE OR ROD FOUND
- MONUMENT FOUND
- UTILITY POLE
- MANHOLE
- ⊗ ELECTRIC/GAS METER
- ⊕ SIGN
- ⊕ CATCH BASIN
- ⊕ HYDRANT
- ⊕ WATER VALVE OR SHUTOFF
- ⊕ GAS VALVE
- ⊕ LIGHT POLE
- ⊕ DECIDUOUS TREE
- ⊕ FENCE
- ⊕ CURB
- OHW OVERHEAD WIRES
- UNDERGROUND POWER
- WATER LINE
- GAS LINE
- TELEPHONE
- STORM DRAIN
- SANITARY SEWER
- 1' CONTOUR
- FFE FINISHED FLOOR ELEVATION
- N/F NOW OR FORMERLY
- 000/000 DEED BOOK AND PAGE

GRAPHIC SCALE



PLAN REFERENCES

1. "CONDOMINIUM PLAT OF THE CLARA CHISHOLM HOUSE CONDOMINIUM, 94 BECKETT STREET, PORTLAND, MAINE FOR JEFFREY J. LOWERY" MAY 13, 2002 BY BACK BAY BOUNDARY, INC. RECORDED IN C.C.R.D. IN PLAN BOOK 202, PAGE 458.
2. "STANDARD BOUNDARY SURVEY OF THE ST. LAWRENCE ARTS & COMMUNITY CENTER, 66-76 CONGRESS STREET, PORTLAND, MAINE FOR THE FRIENDS OF THE ST. LAWRENCE CHURCH" OCT. 18, 2002 BY BACK BAY BOUNDARY, INC.
3. "SURVEY PLAT 'BECKETT ON THE PROM' CONDOMINIUMS, 99 BECKETT STREET, PORTLAND, MAINE MADE FOR CYNTHIA L. HOLMES" AUGUST 2, 2001 BY OWEN HASKELL, INC.
4. "PLAN OF BOUNDARY SURVEY, 59 MUNJOY STREET CONDOMINIUMS, 59 MUNJOY STREET, PORTLAND, MAINE MADE FOR PENINSULA PROPERTY DEVELOPMENT LLC" FEBRUARY 11, 2013 BY TITCOMB ASSOCIATES RECORDED IN C.C.R.D. PLAN BOOK 215, PAGE 355.
5. "EXISTING CONDITIONS PLAN, BECKETT STREET, WILSON STREET TO CONGRESS STREET, FOR CITY OF PORTLAND, MAINE PUBLIC SERVICES DEPARTMENT ENGINEERING DEPARTMENT" DECEMBER 16, 2014 BY OWEN HASKELL, INC.

UTILITY NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

GENERAL NOTES

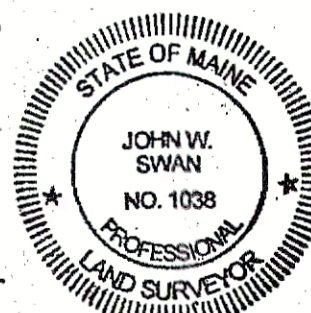
1. OWNER OF RECORD: FRIENDS OF THE ST. LAWRENCE CHURCH, 76 CONGRESS STREET, PORTLAND, MAINE. CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 13333, PAGE 9 TAX MAP 3 BLOCK L LOT 1
2. BASIS OF BEARINGS: MAINE STATE PLANE COORDINATE SYSTEM WEST ZONE NAD83. BASED ON CITY MONUMENTS T102-69-7 AND T102-68-5.
3. ELEVATIONS ARE BASED ON NGVD 1929. BENCH MARK: MONUMENT WITH BOLT NORTHWEST CORNER OF MORNING AND WILSON STREETS ELEVATION 114.63.

CERTIFICATE

OWEN HASKELL, INC. HEREBY CERTIFIES THAT THIS PLAN IS BASED ON, AND THE RESULT OF, AN ON THE GROUND FIELD SURVEY AND THAT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT STANDARDS OF PRACTICE, WITH THE EXCEPTION OF MARKERS NOT SET AT ALL CORNERS.

9/28/16
DATE

JOHN W. SWAN, PLS NO. 1038
DATE



BOUNDARY AND TOPOGRAPHIC SURVEY

OF
SAINT LAWRENCE ARTS CENTER
66 CONGRESS STREET, PORTLAND, MAINE
MADE FOR
ARCHETYPE, P.A.



OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS

390 U.S. ROUTE ONE, FALMOUTH, ME 04106 (207) 774-0424

Drawn By: RS	Date: MARCH 23, 2016	Job No.: 2016-045 P
Trace By: JLW	Scale: 1" = 10'	Drwg. No.: 1
Check By: JWS		
Book No.: FILE		

April 6, 2023

Thomas A. Errico, PE
Senior Associate – Traffic Engineering Director
T.Y. Lin International, Inc.
12 Northbrook Drive
Falmouth, Maine 04105

RE: St Lawrence Arts – Traffic Movement Permit Modification

Dear Tom;

Please find attached a Maine Department of Transportation Traffic Movement Permit Modification (TMP-M) Application for the proposed St Lawrence Arts project. Consistent with direction provided by Randy Illian, P.E., MaineDOT's Region 1 Traffic Engineer we have revised the current standard TMP-M form to reflect the City of Portland's delegated review authority.

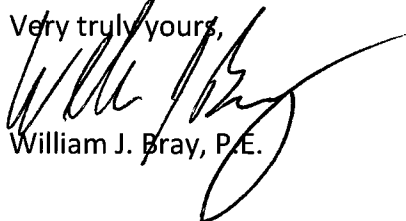
Our submittal includes:

- a. An TMP-M application signed by Deirdre Nice, Executive Director of the St Lawrence Arts dated April 4, 2023.
- b. Copy of current crash data (2019 through 2021) for the same study area submitted with the prior 2017 Traffic Movement Permit application. Additionally, we have provided an updated crash summary report; which you will note doesn't identify and High Crash Locations within the study area.
- c. We are also attaching for your review and information an updated stamped copy of the proposed site plan dated December 27, 2022.
- d. Attached as an appendix to the TMP-M application is a complete copy of the 2017 Traffic Movement Permit Sections 1 through 6.
- e. The final documents attached for your review and reference are an updated Parking Demand Assessment report for the same study area defined in the May 16, 2017 report submitted to your office, which is also attached.

If you seek additional information or require further clarification related to this TMP-M application, please contact me directly at 400-6890.

Thank you for your direction, it has been most helpful.

Very truly yours,


William J. Bray, P.E.

DEPARTMENT OF
TRANSPORTATION TRAFFIC
ENGINEERING DIVISION
**City of Portland with Delegated
Review Authority**

ID#: _____

Fees Paid: _____

Date Received: _____

APPLICATION FOR TRAFFIC MOVEMENT PERMIT MODIFICATION

This form shall be used to request approval of minor changes to: (a) project design or operation; or (b) the conditions of a permit as previously approved by the City of Portland.

A processing fee of \$1,500.00 (check payable to Treasurer, City of Portland) is required at the time of application submittal.

If significant changes are proposed, then a complete new or amendment application may be required by the City of Portland.

Name of Applicant: St. Lawrence Arts Center

Address: 76 Congress Street, Portland, ME 04101

Telephone Number: (207) 347-7177

Name of Contact or Agent: Deirdre Nice

Telephone Number: (207) 347-7177

LOCATION OF ACTIVITY

Name of Project: St. Lawrence Arts Center

Municipality or Township: Portland County: Cumberland

REQUIRED INFORMATION

1. Existing City Permit Number: _____

2. DOT or DEP Project Manager for previous application (if known): Thomas A. Errico, P.E.

3. Description of Proposed Change: There are no substantive changes to the proposed St. Lawrence Arts Center project. The Applicant is requesting an updated issuance of the Traffic Movement Permit.

(Attach additional sheet(s), if necessary)

4. The May 2017 Traffic Movement Permit Application is updated, as noted, and attached to the Traffic Movement Permit Modification.

5. Does your proposal involve a significant expansion of the project, change the nature of the project, or modify any City findings with respect to any licensing criteria? There are no substantive changes to the project.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete I authorize the City to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment".

Deirdre Nice

April 4, 2023

SIGNATURE OF APPLICANT

DATE:

Deirdre Nice

PRINT OR TYPED NAME

Executive Director

TITLE

THE APPLICATION FEE IS DUE AT THE TIME OF APPLICATION SUBMITTAL. THE APPLICATION WILL NOT BE PROCESSED UNTIL THE \$1,500 FEE IS PAID.

**2019 through 2021
Vehicle Crash Data**

TRAFFIC ACCIDENTS

The Maine Department of Transportation's (MaineDOT) Accident Records Section provided three-year (2019-2021) safety records for the sections of streets highlighted on the attached figure, which includes all streets and street segments directly adjacent to the SLAC site. MaineDOT's report is presented as follows:

2019 through 2021 Crash Summary

<u>Location</u>	<u>Number of Accidents</u>	<u>Critical Rate Factor</u>
1. Beckett St. @ Congress St.	1	0.64
2. Munjoy St. @ Congress St.	1	0.50
3. Monument St. @ St. Lawrence St.	1	3.81
4. Cumberland Ave. @ Merrill St.	1	2.57
5. North St. @ Quebec St.	3	1.53
6. North St. @ Congress St.	2	0.79
7. Howard St. @ Turner St.	2	3.66
8. Congress St. btw. Morning St. and Eastern Prom.	1	1.41
9. Congress St. btw. Vesper St. and Morning St.	1	1.48
10. Congress St. btw. Merrill St. and Munjoy St.	2	3.70
11. Congress St. btw. Merrill St. and Atlantic St.	1	1.19
12. Congress St. btw. Atlantic St. and Lafayette St.	1	1.41
13. Vesper St. btw. Moody St. and Wilson St.	1	5.66
14. Moody St. btw. Vesper St. and Morning St.	1	N/A
15. Lafayette St. btw. Quebec St. and Cumberland Ave.	2	10.12
16. St. Lawrence St. btw. Congress St. and Monument St.	1	2.51
17. Waterville St. btw. Monument St. and Sherbrooke St.	1	17.88
18. Monument St. btw. Waterville St. and St. Lawrence St.	1	N/A
19. Cumberland Ave. btw. Merrill St. and Lafayette St.	2	2.83
20. Howard St. btw. Turner St. and Congress St.	2	3.39
21. Atlantic St. btw. Monument St. and Wilson St.	1	1.06
22. Munjoy St. btw. Monument St. and Congress St.	1	1.65
23. Vesper St. btw. Congress St. and Moody St.	1	1.79
24. Emerson St. btw. Turner St. and Congress St.	2	15.10
25. Emerson St. btw. Quebec St. and Turner St.	1	3.34
26. Turner St. btw. Emerson St. and Morning St.	1	2.59
27. Turner St. btw. Emerson St. and Howard St.	1	2.53
28. North St. btw. Quebec St. and Sumner St.	4	1.96
29. North St. btw. Sumner St. and Cumberland Ave.	2	1.87
30. North St. btw. Cumberland Ave. and Congress St.	2	1.82
31. Quebec St. btw. Howard St. and Emerson St.	1	2.35
32. Quebec St. btw. Merrill St. and Lafayette St.	1	3.62
33. Wilson St. btw. Eastern Prom. and Morning St.	1	N/A
34. Eastern Prom. btw. Turner St. and Congress St.	2	1.04

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☒ Crash Summary I ☐ Section Detail ☒ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 Summary

REPORT DESCRIPTION

Portland
Munjoy Hill Area

REPORT PARAMETERS

Year 2019, Start Month 1 through Year 2021 End Month: 12

Route: 0560717

Start Node: 18906
End Node: 18893

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☐ Exclude Last Node

Route: 0560160

Start Node: 18963
End Node: 18907

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☒ Exclude Last Node

Route: 0560514

Start Node: 18851
End Node: 18865

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☒ Exclude Last Node

Route: 0560424

Start Node: 18898
End Node: 18900

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☒ Exclude Last Node

Route: 0560640

Start Node: 18840
End Node: 18843

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☒ Exclude Last Node

Route: 0560772

Start Node: 18839
End Node: 18837

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☒ Exclude Last Node

Route: 0560384

Start Node: 18837
End Node: 18843

Start Offset: 0
End Offset: 0

☐ Exclude First Node
☐ Exclude Last Node

Route: 0560658

Start Node: 18838
End Node: 18842

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☒ Exclude Last Node

Route: 0560513

Start Node: 18852
End Node: 18841

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☒ Exclude Last Node

Route: 0560513

Start Node: 18841
End Node: 18839

Start Offset: 0
End Offset: 0

☒ Exclude First Node
☐ Exclude Last Node

Route: 0561238

Start Node: 18909

Start Offset: 0

☒ Exclude First Node

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS☒ Crash Summary I☐ Section Detail☒ Crash Summary II☐ 1320 Public☐ 1320 Private☐ 1320 SummaryREPORT DESCRIPTIONPortland
Munjoy Hill AreaREPORT PARAMETERS

Year 2019, Start Month 1 through Year 2021 End Month: 12

Route: 0561238	End Node: 18901	End Offset: 0	☒ Exclude Last Node
	Start Node: 18901	Start Offset: 0	☒ Exclude First Node
	End Node: 18892	End Offset: 0	☒ Exclude Last Node
Route: 0560503	Start Node: 18894	Start Offset: 0	☒ Exclude First Node
	End Node: 18893	End Offset: 0	☒ Exclude Last Node
Route: 0560503	Start Node: 18893	Start Offset: 0	☒ Exclude First Node
	End Node: 18891	End Offset: 0	☒ Exclude Last Node
Route: 0560383	Start Node: 18897	Start Offset: 0	☒ Exclude First Node
	End Node: 18903	End Offset: 0	☒ Exclude Last Node
Route: 0560383	Start Node: 18903	Start Offset: 0	☒ Exclude First Node
	End Node: 18902	End Offset: 0	☒ Exclude Last Node
Route: 0560025	Start Node: 18845	Start Offset: 0	☒ Exclude First Node
	End Node: 18846	End Offset: 0	☒ Exclude Last Node
Route: 0560025	Start Node: 18846	Start Offset: 0	☒ Exclude First Node
	End Node: 18847	End Offset: 0	☒ Exclude Last Node
Route: 0560525	Start Node: 18850	Start Offset: 0	☒ Exclude First Node
	End Node: 18853	End Offset: 0	☒ Exclude Last Node
Route: 0560757	Start Node: 18856	Start Offset: 0	☒ Exclude First Node
	End Node: 18857	End Offset: 0	☒ Exclude Last Node
Route: 0560757	Start Node: 18857	Start Offset: 0	☒ Exclude First Node
	End Node: 18858	End Offset: 0	☒ Exclude Last Node

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS☒ Crash Summary I☐ Section Detail☒ Crash Summary II☐ 1320 Public☐ 1320 Private☐ 1320 SummaryREPORT DESCRIPTIONPortland
Munjoy Hill AreaREPORT PARAMETERS

Year 2019, Start Month 1 through Year 2021 End Month: 12

Route: 0560516	Start Node: 18861 End Node: 18862	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560516	Start Node: 18862 End Node: 18863	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560516	Start Node: 18863 End Node: 18864	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560045	Start Node: 18854 End Node: 18855	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560254	Start Node: 18896 End Node: 18905	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560254	Start Node: 18905 End Node: 18904	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 0560536	Start Node: 18899 End Node: 18907	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 0560606	Start Node: 18899 End Node: 18896	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☐ Exclude Last Node
Route: 0560236	Start Node: 18866 End Node: 18906	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 0560799	Start Node: 18847 End Node: 18866	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☒ Exclude Last Node

Crash Summary I

Node	Route - MP	Node Description	Nodes										U/R	Total Crashes	Injury Crashes				Percent Annual Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
			K	A	B	C	PD	Injury	Crash Rate	Crash Rate	Crash Rate	Crash Rate											
✓ 18903	0560717 - 0.15	Int of HOWARD ST TURNER ST	2	0	0	0	0	2	0.0	0.354	1.89	0.52	0.12	2	0	0	0	0	0.0	0.354	Statewide Crash Rate: 0.12	0.52	3.66
18893	0560717 - 0.19	Int of MERRILL ST TURNER ST	2	0	0	0	0	0	0.0	0.219	0.00	0.46	0.12	2	0	0	0	0	0.0	0.219	Statewide Crash Rate: 0.12	0.46	0.00
18864	0560717 - 0.05	Int of MORNING ST TURNER ST	2	0	0	0	0	0	0.0	0.228	0.00	0.47	0.12	2	0	0	0	0	0.0	0.228	Statewide Crash Rate: 0.12	0.47	0.00
18905	0560717 - 0.10	Int of EMERSON ST TURNER ST	2	0	0	0	0	0	0.0	0.306	0.00	0.51	0.12	2	0	0	0	0	0.0	0.306	Statewide Crash Rate: 0.12	0.51	0.00
18863	0560160 - 0.05	Int of CONGRESS ST, MORNING ST	2	0	0	0	0	0	0.0	0.822	0.00	0.52	0.13	2	0	0	0	0	0.0	0.822	Statewide Crash Rate: 0.13	0.52	0.00
P18856	0560160 - 0.09	Int of CONGRESS ST VESPER ST	2	0	0	0	0	0	0.0	1.015	0.00	0.50	0.13	2	0	0	0	0	0.0	1.015	Statewide Crash Rate: 0.13	0.50	0.00
A18904	0560160 - 0.10	Int of CONGRESS ST EMERSON ST	2	0	0	0	0	0	0.0	0.000	0.00	0.00	0.13	2	0	0	0	0	0.0	0.000	Statewide Crash Rate: 0.13	0.00	0.00
18854	0560160 - 0.13	Int of BECKETT ST CONGRESS ST	2	1	0	0	0	1	0.0	1.038	0.32	0.50	0.13	2	1	0	0	0	0.0	1.038	Statewide Crash Rate: 0.13	0.50	0.00
18902	0560160 - 0.15	Int of CONGRESS ST HOWARD ST	2	0	0	0	0	0	0.0	1.169	0.00	0.48	0.13	2	0	0	0	0	0.0	1.169	Statewide Crash Rate: 0.13	0.48	0.00
✓ 18853	0560160 - 0.17	Int of CONGRESS ST, MUNJOY ST	2	1	0	0	1	0	100.0	1.421	0.23	0.46	0.13	2	1	0	0	0	100.0	1.421	Statewide Crash Rate: 0.13	0.46	0.00
18891	0560160 - 0.19	Int of CONGRESS ST MERRILL ST	2	0	0	0	0	0	0.0	1.409	0.00	0.46	0.13	2	0	0	0	0	0.0	1.409	Statewide Crash Rate: 0.13	0.46	0.00
18845	0560160 - 0.22	Int of ATLANTIC ST, CONGRESS ST	2	0	0	0	0	0	0.0	1.694	0.00	0.44	0.13	2	0	0	0	0	0.0	1.694	Statewide Crash Rate: 0.13	0.44	0.00
18900	0560160 - 0.24	Int of CONGRESS ST LAFAYETTE ST	2	0	0	0	0	0	0.0	1.800	0.00	0.44	0.13	2	0	0	0	0	0.0	1.800	Statewide Crash Rate: 0.13	0.44	0.00
18840	0560160 - 0.27	Int of CONGRESS ST ST LAWRENCE ST	2	0	0	0	0	0	0.0	1.773	0.00	0.44	0.13	2	0	0	0	0	0.0	1.773	Statewide Crash Rate: 0.13	0.44	0.00
18855	0560514 - 0.04	Int of BECKETT ST MOODY ST	2	0	0	0	0	0	0.0	0.043	0.00	-1.26	0.12	2	0	0	0	0	0.0	0.043	Statewide Crash Rate: 0.12	-1.26	0.00
18857	0560514 - 0.08	Int of MOODY ST VESPER ST	2	0	0	0	0	0	0.0	0.151	0.00	0.34	0.12	2	0	0	0	0	0.0	0.151	Statewide Crash Rate: 0.12	0.34	0.00
18862	0560514 - 0.12	Int of MOODY ST MORNING ST	2	0	0	0	0	0	0.0	0.146	0.00	0.33	0.12	2	0	0	0	0	0.0	0.146	Statewide Crash Rate: 0.12	0.33	0.00
18901	0560424 - 0.10	Int of CUMBERLAND AV LAFAYETTE ST	2	0	0	0	0	0	0.0	0.588	0.00	0.51	0.12	2	0	0	0	0	0.0	0.588	Statewide Crash Rate: 0.12	0.51	0.00
- 18841	0560640 - 0.06	Int of MONUMENT ST ST LAWRENCE ST	2	1	0	0	0	1	0.0	0.200	1.67	0.44	0.12	2	1	0	0	0	0.0	0.200	Statewide Crash Rate: 0.12	0.44	3.81
18842	0560640 - 0.11	Int of SHERBROOKE ST ST LAWRENCE ST	2	0	0	0	0	0	0.0	0.124	0.00	0.24	0.12	2	0	0	0	0	0.0	0.124	Statewide Crash Rate: 0.12	0.24	0.00
18838	0560772 - 0.05	Int of SHERBROOKE ST WATERVILLE ST	2	0	0	0	0	0	0.0	0.074	0.00	-0.24	0.12	2	0	0	0	0	0.0	0.074	Statewide Crash Rate: 0.12	-0.24	0.00
18837	0560384 - 0	Int of HOYTS LN WATERVILLE ST	2	0	0	0	0	0	0.0	0.052	0.00	-0.83	0.12	2	0	0	0	0	0.0	0.052	Statewide Crash Rate: 0.12	-0.83	0.00

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	K	A	B	C	PD	Injury	Percent Annual M Injury Ent-Veh	Crash Rate	Critical Rate	CRF
18843	0560384 - 0.04	Int of HOYTS LN ST LAWRENCE ST	2	0	0	0	0	0	0	0.0	0.115	0.00	0.19	0.00
18846	0560513 - 0.04	0509266 POR, ATLANTIC, MONUMENT ST.	2	0	0	0	0	0	0	0.0	0.351	0.00	0.51	0.00
18839	0560513 - 0.13	0509259 POR, MONUMENT, WATERVILLE ST.	2	0	0	0	0	0	0	0.0	0.118	0.00	0.21	0.00
✓ 18892	0560503 - 0.14	Int of CUMBERLAND AV MERRILL ST	2	1	0	0	0	0	1	0.0	0.264	1.26	0.49	2.57
18851	0560525 - 0.17	Int of MOODY ST MUNJOY ST	2	0	0	0	0	0	0	0.0	0.204	0.00	0.44	0.00
18852	0560525 - 0.21	0509272 POR, MUNJOY, MONUMENT ST.	2	0	0	0	0	0	0	0.0	0.273	0.00	0.50	0.00
18899	0560536 - 0.42	Int of NORTH ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.746	0.00	0.49	0.00
12459	0560536 - 0.49	Int of NORTH ST SUMNER ST	2	0	0	0	0	0	0	0.0	0.814	0.00	0.49	0.00
18909	0560536 - 0.52	Int of CUMBERLAND AV NORTH ST	2	3	0	0	1	0	2	33.3	1.526	0.66	0.43	1.53
18907	0560536 - 0.57	Int of CONGRESS ST NORTH ST	2	2	0	0	0	0	2	0.0	1.940	0.34	0.43	0.00
18898	0560606 - 0.04	Int of LAFAYETTE ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.188	0.00	0.42	0.00
18894	0560606 - 0.08	Int of MERRILL ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.271	0.00	0.49	0.00
18897	0560606 - 0.12	Int of HOWARD ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.325	0.00	0.51	0.00
18896	0560606 - 0.16	Int of EMERSON ST QUEBEC ST	2	0	0	0	0	0	0	0.0	0.185	0.00	0.42	0.00
18866	0560236 - 0.29	Int of EASTERN PROMENADE WILSON ST	2	0	0	0	0	0	0	0.0	1.166	0.00	0.48	0.00
18865	0560236 - 0.34	Int of EASTERN PROMENADE MOODY ST	2	0	0	0	0	0	0	0.0	1.187	0.00	0.48	0.00
18963	0560236 - 0.43	Int of CONGRESS ST EASTERN PROMENADE	2	0	0	0	0	0	0	0.0	1.561	0.00	0.45	0.00
18906	0560236 - 0.52	Int of EASTERN PROMENADE TURNER ST	2	0	0	0	0	0	0	0.0	1.357	0.00	0.47	0.00
18847	0560799 - 0	Int of ATLANTIC ST WILSON ST	2	0	0	0	0	0	0	0.0	0.290	0.00	0.50	0.00
18850	0560799 - 0.04	0509270 POR, MUNJOY, WILSON ST.	2	0	0	0	0	0	0	0.0	0.281	0.00	0.50	0.00
18867	0560799 - 0.08	0509287 POR, OBRION, WILSON ST.	2	0	0	0	0	0	0	0.0	0.135	0.00	0.29	0.00
18858	0560799 - 0.12	0509278 POR, VESPER, WILSON ST.	2	0	0	0	0	0	0	0.0	0.175	0.00	0.40	0.00

Crash Summary I

Nodes															
Node	Route - MP	Node Description	U/R	Total Crashes	K	A	B	C	PD	Injury	Percent Annual M Ent-Veh	Crash Rate	Critical Rate	CRF	
18861	0560799 - 0.16	Int of MORNING ST WILSON ST	2	0	0	0	0	0	0	0.0	0.175	0.00	0.40	0.00	
												Statewide Crash Rate: 0.12			
Study Years: 3.00			NODE TOTALS:		11	0	0	1	1	9	18.2	28.273	0.13	0.22	0.59

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes			PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
18864	18906	5080160 Int of MORNING ST TURNER ST	0 - 0.05	0560717 - 0 RD INV 05 60717	0.05	2	0	0	0	0	0	0.0	0.00008	0.00	1381.68 Statewide Crash Rate: 350.41	0.00
✓ 18864	18905	194509 Int of MORNING ST TURNER ST	0 - 0.05	0560717 - 0.05 RD INV 05 60717	0.05	2	1	0	0	0	1	0.0	0.00009	3712.37	1432.28 Statewide Crash Rate: 350.41	2.59
✓ 18903	18905	194567 Int of HOWARD ST TURNER ST	0 - 0.05	0560717 - 0.10 RD INV 05 60717	0.05	2	1	0	0	0	0	0.0	0.00009	3638.41	1439.84 Statewide Crash Rate: 350.41	2.53
18893	18903	5080184 Int of MERRILL ST TURNER ST	0 - 0.04	0560717 - 0.15 RD INV 05 60717	0.04	2	0	0	0	0	0	0.0	0.00008	0.00	1374.88 Statewide Crash Rate: 350.41	0.00
✓ 18863	18963	3131700 Int of CONGRESS ST, MORNING ST	0 - 0.05	0560160 - 0 RD INV 05 60160	0.05	2	1	0	0	1	0	100.0	0.00035	963.34	683.50 Statewide Crash Rate: 158.52	1.41
✓ 18856	18863	194491 Int of CONGRESS ST VESPER ST	0 - 0.04	0560160 - 0.05 RD INV 05 60160	0.04	2	1	0	0	0	0	0.0	0.00033	1011.12	684.27 Statewide Crash Rate: 158.52	1.48
18856	18904	3123722 Int of CONGRESS ST VESPER ST	0 - 0.01	0560160 - 0.09 RD INV 05 60160	0.01	2	0	0	0	0	0	0.0	0.00009	0.00	304.57 Statewide Crash Rate: 158.52	0.00
18854	18904	194488 Int of BECKETT ST CONGRESS ST	0 - 0.03	0560160 - 0.10 RD INV 05 60160	0.03	2	0	0	0	0	0	0.0	0.00028	0.00	682.83 Statewide Crash Rate: 158.52	0.00
18854	18902	3120116 Int of BECKETT ST CONGRESS ST	0 - 0.02	0560160 - 0.13 RD INV 05 60160	0.02	2	0	0	0	0	0	0.0	0.00022	0.00	662.08 Statewide Crash Rate: 158.52	0.00
18853	18902	3124002 Int of CONGRESS ST, MUNJOY ST	0 - 0.02	0560160 - 0.15 RD INV 05 60160	0.02	2	0	0	0	0	0	0.0	0.00025	0.00	676.06 Statewide Crash Rate: 158.52	0.00
18853	18891	3122294 Int of CONGRESS ST, MUNJOY ST	0 - 0.02	0560160 - 0.17 RD INV 05 60160	0.02	2	2	0	0	0	2	0.0	0.00027	2514.43	679.90 Statewide Crash Rate: 158.52	3.70
✓ 18845	18891	3118712 Int of ATLANTIC ST, CONGRESS ST	0 - 0.03	0560160 - 0.19 RD INV 05 60160	0.03	2	1	0	0	0	0	0.0	0.00041	807.04	676.37 Statewide Crash Rate: 158.52	1.19
✓ 18845	18900	3130201 Int of ATLANTIC ST, CONGRESS ST	0 - 0.02	0560160 - 0.22 RD INV 05 60160	0.02	2	1	0	0	0	1	0.0	0.00035	964.96	683.53 Statewide Crash Rate: 158.52	1.41
18840	18900	3129297 Int of CONGRESS ST ST LAWRENCE ST	0 - 0.03	0560160 - 0.24 RD INV 05 60160	0.03	2	0	0	0	0	0	0.0	0.00051	0.00	660.37 Statewide Crash Rate: 158.52	0.00
18840	18907	3106817 Int of CONGRESS ST ST LAWRENCE ST	0 - 0.03	0560160 - 0.27 RD INV 05 60160	0.03	2	0	0	0	0	0	0.0	0.00050	0.00	661.77 Statewide Crash Rate: 158.52	0.00
18851	18855	5080185 Int of MOODY ST MUNJOY ST	0 - 0.04	0560514 - 0 RD INV 05 60514	0.04	2	0	0	0	0	0	0.0	0.00001	0.00	-6456.99 Statewide Crash Rate: 350.41	0.00
18855	18857	194489 Int of BECKETT ST MOODY ST	0 - 0.04	0560514 - 0.04 RD INV 05 60514	0.04	2	0	0	0	0	0	0.0	0.00001	0.00	0.00 Statewide Crash Rate: 350.41	0.00
✓ 18857	18862	194494 Int of MOODY ST VESPER ST	0 - 0.04	0560514 - 0.08 RD INV 05 60514	0.04	2	1	0	0	0	1	0.0	0.00001	24032.68	-4190.52 Statewide Crash Rate: 350.41	0.00
18862	18865	5080166 Int of MOODY ST MORNING ST	0 - 0.05	0560514 - 0.12 RD INV 05 60514	0.05	2	0	0	0	0	0	0.0	0.00002	0.00	-1600.78 Statewide Crash Rate: 350.41	0.00
18898	18901	5080176 Int of LAFAYETTE ST QUEBEC ST	0 - 0.10	0560424 - 0 RD INV 05 60424	0.10	2	0	0	0	0	0	0.0	0.00024	0.00	1456.93 Statewide Crash Rate: 350.41	0.00

Crash Summary I

Sections																	
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	Section U/R	Total Crashes	K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
18900 Int of CONGRESS ST LAFAYETTE ST	18901	194564	0 - 0.05	0560424 - 0.10 RD INV 05 60424	0.05	2	0	0	0	0	0	0	0.0	0.00004	0.00	627.73	0.00
18840 Int of CONGRESS ST ST LAWRENCE ST	18841	5080183	0 - 0.06	0560640 - 0 RD INV 05 60640	0.06	2	1	0	0	0	0	0	0.0	0.00009	3623.98	1441.29	2.51
18841 Int of MONUMENT ST ST LAWRENCE ST	18842	5080226	0 - 0.05	0560640 - 0.06 RD INV 05 60640	0.05	2	0	0	0	0	0	0	0.0	0.00006	0.00	1139.59	0.00
18842 Int of SHERBROOKE ST ST LAWRENCE ST	18843	194466	0 - 0.04	0560640 - 0.11 RD INV 05 60640	0.04	2	1	0	0	0	0	1	0.0	0.00004	7610.35	751.89	10.12
18838 Int of SHERBROOKE ST WATERVILLE ST	18839	194458	0 - 0.05	0560772 - 0 RD INV 05 60772	0.05	2	1	0	0	0	0	1	0.0	0.00004	8739.16	488.68	17.88
18837 Int of HOYTS LN WATERVILLE ST	18838	194456	0 - 0.04	0560772 - 0.05 RD INV 05 60772	0.04	2	0	0	0	0	0	0	0.0	0.00002	0.00	-1719.34	0.00
18837 Int of HOYTS LN WATERVILLE ST	18843	5080223	0 - 0.04	0560384 - 0 RD INV 05 60384	0.04	2	0	0	0	0	0	0	0.0	0.00001	0.00	-	0.00
18838 Int of SHERBROOKE ST WATERVILLE ST	18842	194459	0 - 0.04	0560658 - 0 RD INV 05 60658	0.04	2	0	0	0	0	0	0	0.0	0.00001	0.00	-9512.20	0.00
18846 0509266 POR, ATLANTIC, MONUMENT ST.	18852	194473	0 - 0.04	0560513 - 0 RD INV 05 60513	0.04	2	0	0	0	0	0	0	0.0	0.00003	0.00	48.72	0.00
18841 Int of MONUMENT ST ST LAWRENCE ST	18846	194465	0 - 0.05	0560513 - 0.04 RD INV 05 60513	0.05	2	0	0	0	0	0	0	0.0	0.00004	0.00	369.45	0.00
18839 0509259 POR, MONUMENT, WATERVILLE ST.	18841	194460	0 - 0.04	0560513 - 0.09 RD INV 05 60513	0.04	2	1	0	0	0	0	1	0.0	0.00002	14635.29	-1133.66	0.00
18901 Int of CUMBERLAND AV LAFAYETTE ST	18909	5080179	0 - 0.05	0561238 - 1.25 RD INV 05 61238	0.05	2	0	0	0	0	0	0	0.0	0.00020	0.00	1487.85	0.00
18892 Int of CUMBERLAND AV MERRILL ST	18901	5080181	0 - 0.05	0561238 - 1.30 RD INV 05 61238	0.05	2	2	0	0	0	0	2	0.0	0.00016	4277.48	1511.08	2.83
18893 Int of MERRILL ST TURNER ST	18894	194553	0 - 0.06	0560503 - 0.04 RD INV 05 60503	0.06	2	0	0	0	0	0	0	0.0	0.00008	0.00	1400.76	0.00
18892 Int of CUMBERLAND AV MERRILL ST	18893	194551	0 - 0.04	0560503 - 0.10 RD INV 05 60503	0.04	2	0	0	0	0	0	0	0.0	0.00004	0.00	607.09	0.00
18891 Int of CONGRESS ST MERRILL ST	18892	5080182	0 - 0.05	0560503 - 0.14 RD INV 05 60503	0.05	2	0	0	0	0	0	0	0.0	0.00006	0.00	1123.09	0.00
18897 Int of HOWARD ST QUEBEC ST	18903	5080163	0 - 0.06	0560383 - 0 RD INV 05 60383	0.06	2	1	0	0	0	0	0	0.0	0.00010	3435.82	1459.00	2.35
18902 Int of CONGRESS ST HOWARD ST	18903	5080164	0 - 0.08	0560383 - 0.06 RD INV 05 60383	0.08	2	2	0	0	0	0	1	0.0	0.00013	5119.07	1510.22	3.39
18845 Int of ATLANTIC ST, CONGRESS ST	18846	194469	0 - 0.05	0560025 - 0 RD INV 05 60025	0.05	2	0	0	0	0	0	0	0.0	0.00014	0.00	1513.02	0.00
18846 0509266 POR, ATLANTIC, MONUMENT ST.	18847	194472	0 - 0.08	0560025 - 0.05 RD INV 05 60025	0.08	2	1	0	0	0	0	1	0.0	0.00021	1568.07	1475.86	1.06

Page 467

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	K	A	B	C	PD	Injury	Percent	Annual HMVM	Crash Rate	Critical Rate	CRF
18850	18851	194479	0 - 0.05	0560525 - 0.12 RD INV 05 60525	0.05	2	0	0	0	0	0	0	0.0	0.00009	0.00	1438.38	Statewide Crash Rate: 350.41	0.00
18851	18852	194481	0 - 0.04	0560525 - 0.17 RD INV 05 60525	0.04	2	0	0	0	0	0	0	0.0	0.00008	0.00	1376.85	Statewide Crash Rate: 350.41	0.00
18852	18853	194483	0 - 0.05	0560525 - 0.21 RD INV 05 60525	0.05	2	1	0	0	0	0	1	0.0	0.00013	0.00	2488.40	1511.65	1.65
18856	18857	5080187	0 - 0.09	0560757 - 0 RD INV 05 60757	0.09	2	1	0	0	0	0	1	0.0	0.00012	0.00	2691.55	1506.34	1.79
18857	18858	194493	0 - 0.05	0560757 - 0.09 RD INV 05 60757	0.05	2	1	0	0	0	0	1	0.0	0.00005	0.00	6068.05	1072.67	5.66
18861	18862	194503	0 - 0.05	0560516 - 0.12 RD INV 05 60516	0.05	2	0	0	0	0	0	0	0.0	0.00004	0.00	779.64	350.41	0.00
18862	18863	194505	0 - 0.09	0560516 - 0.17 RD INV 05 60516	0.09	2	0	0	0	0	0	0	0.0	0.00011	0.00	1497.22	350.41	0.00
18863	18864	194507	0 - 0.08	0560516 - 0.26 RD INV 05 60516	0.08	2	0	0	0	0	0	0	0.0	0.00005	0.00	856.13	350.41	0.00
18854	18855	5080186	0 - 0.09	0560045 - 0 RD INV 05 60045	0.09	2	0	0	0	0	0	0	0.0	0.00003	0.00	281.97	350.41	0.00
18896	18905	5080162	0 - 0.06	0560254 - 0.04 RD INV 05 60254	0.06	2	1	0	0	0	0	1	0.0	0.00007	0.00	4476.68	1338.43	3.34
18904	18905	5080161	0 - 0.08	0560254 - 0.10 RD INV 05 60254	0.08	2	2	0	0	0	0	2	0.0	0.00005	0.00	13753.64	910.78	15.10
12459	18899	5080173	0 - 0.07	0560536 - 0.42 RD INV 05 60536	0.07	2	4	0	0	0	0	4	0.0	0.00055	0.00	2410.40	1232.83	1.96
12459	18909	186811	0 - 0.03	0560536 - 0.49 RD INV 05 60536	0.03	2	2	0	0	0	0	1	0.0	0.00025	0.00	2714.35	1448.27	1.87
18907	18909	5080177	0 - 0.05	0560536 - 0.52 RD INV 05 60536	0.05	2	2	0	0	0	0	1	0.0	0.00025	0.00	2616.74	1440.44	1.82
18898	18899	194562	0 - 0.04	0560606 - 0 RD INV 05 60606	0.04	2	0	0	0	0	0	0	0.0	0.00008	0.00	1377.83	350.41	0.00
18894	18898	5080192	0 - 0.04	0560606 - 0.04 RD INV 05 60606	0.04	2	1	0	0	0	0	1	0.0	0.00007	0.00	4717.16	1303.71	3.62
18894	18897	5080193	0 - 0.04	0560606 - 0.08 RD INV 05 60606	0.04	2	0	0	0	0	0	0	0.0	0.00006	0.00	1169.27	350.41	0.00
18896	18897	194559	0 - 0.04	0560606 - 0.12 RD INV 05 60606	0.04	2	1	0	0	0	0	1	0.0	0.00007	0.00	4746.58	1299.31	3.65
18865	18866	3120758	0 - 0.05	0560236 - 0.29 RD INV 05 60236	0.05	2	0	0	0	0	0	0	0.0	0.00058	0.00	649.10	350.41	0.00
18865	18963	3106820	0 - 0.09	0560236 - 0.34 RD INV 05 60236	0.09	2	0	0	0	0	0	0	0.0	0.00106	0.00	576.54	158.52	0.00

Crash Summary I

Sections																	
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section U/R Length	Total Crashes	K	Injury Crashes			Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF		
18906	18963	3106827 Int of EASTERN PROMENADE TURNER ST	0 - 0.09	0560236 - 0.43 RD INV 05 60236	0.09	2	0	0	0	2	0.0	0.00113	591.15	568.33 Statewide Crash Rate: 158.52	1.04		
18847	18850	194475 Int of ATLANTIC ST WILSON ST	0 - 0.04	0560799 - 0 RD INV 05 60799	0.04	2	0	0	0	0	0.0	0.00003	0.00	-57.65 Statewide Crash Rate: 350.41	0.00		
18850	18867	194480 0509270 POR,MUNJOY,WILSON ST.	0 - 0.04	0560799 - 0.04 RD INV 05 60799	0.04	2	0	0	0	0	0.0	0.00005	0.00	944.36 Statewide Crash Rate: 350.41	0.00		
18858	18867	194497 0509278 POR,VESPER,WILSON ST.	0 - 0.04	0560799 - 0.08 RD INV 05 60799	0.04	2	0	0	0	0	0.0	0.00002	0.00	-1955.95 Statewide Crash Rate: 350.41	0.00		
18858	18861	194496 0509278 POR,VESPER,WILSON ST.	0 - 0.04	0560799 - 0.12 RD INV 05 60799	0.04	2	1	0	0	0	0.0	0.00003	11891.17	-336.86 Statewide Crash Rate: 350.41	0.00		
18861	18866	5080165 Int of MORNING ST WILSON ST	0 - 0.06	0560799 - 0.16 RD INV 05 60799	0.06	2	0	0	0	0	0.0	0.00002	0.00	-1834.63 Statewide Crash Rate: 350.41	0.00		
Study Years: 3.00				Section Totals:	3.27	38	0	0	0	1	29	2.6	0.01080	1172.83	443.36	2.65	
Grand Totals:					3.27	49	0	0	0	1	2	38	6.1	0.01080	1512.34	579.47	2.61

Crash Summary

Section Details														
Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
18864	18906	5080160	0 - 0.05	0560717 - 0	0	0	0	0	0	0				
18864	18905	194509	0 - 0.05	0560717 - 0.05	1	0	0	0	0	1	2021-3587	02/10/2021	0.09	PD
18903	18905	194567	0 - 0.05	0560717 - 0.10	1	0	0	0	0	0	2021-10360	04/30/2021	0.12	
18893	18903	5080184	0 - 0.04	0560717 - 0.15	0	0	0	0	0	0				
18863	18963	3131700	0 - 0.05	0560160 - 0	1	0	0	0	1	0	2020-18604	08/06/2020	0.03	C
18856	18863	194491	0 - 0.04	0560160 - 0.05	1	0	0	0	0	0	2019-4171	01/31/2019	0.06	
18856	18904	3123722	0 - 0.01	0560160 - 0.09	0	0	0	0	0	0				
18854	18904	194488	0 - 0.03	0560160 - 0.10	0	0	0	0	0	0				
18854	18902	3120116	0 - 0.02	0560160 - 0.13	0	0	0	0	0	0				
18853	18902	3124002	0 - 0.02	0560160 - 0.15	0	0	0	0	0	0				
18853	18891	3122294	0 - 0.02	0560160 - 0.17	2	0	0	0	0	2	2019-61674	08/07/2019	0.18	PD
18845	18891	3118712	0 - 0.03	0560160 - 0.19	1	0	0	0	0	0	2021-12334	05/21/2021	0.18	PD
18845	18900	3130201	0 - 0.02	0560160 - 0.22	1	0	0	0	0	1	2021-7999	03/26/2021	0.20	
18840	18900	3129297	0 - 0.03	0560160 - 0.24	0	0	0	0	0	0	2021-21592	08/18/2021	0.23	PD
18840	18907	3106817	0 - 0.03	0560160 - 0.27	0	0	0	0	0	0				
18851	18855	5080185	0 - 0.04	0560514 - 0	0	0	0	0	0	0				
18855	18857	194489	0 - 0.04	0560514 - 0.04	0	0	0	0	0	0				
18857	18862	194494	0 - 0.04	0560514 - 0.08	1	0	0	0	0	1	2020-12387	05/22/2020	0.10	PD
18862	18865	5080166	0 - 0.05	0560514 - 0.12	0	0	0	0	0	0				
18898	18901	5080176	0 - 0.10	0560424 - 0	0	0	0	0	0	0				
18900	18901	194564	0 - 0.05	0560424 - 0.10	0	0	0	0	0	0				
18840	18841	5080183	0 - 0.06	0560640 - 0	1	0	0	0	0	0	2019-67136	10/06/2019	0.03	
18841	18842	5080226	0 - 0.05	0560640 - 0.06	0	0	0	0	0	0				
18842	18843	194466	0 - 0.04	0560640 - 0.11	1	0	0	0	0	1	2019-46107	03/17/2019	0.14	PD
18838	18839	194458	0 - 0.05	0560772 - 0	1	0	0	0	0	1	2020-9616	04/07/2020	0.02	PD
18837	18838	194456	0 - 0.04	0560772 - 0.05	0	0	0	0	0	0				
18837	18843	5080223	0 - 0.04	0560384 - 0	0	0	0	0	0	0				
18838	18842	194459	0 - 0.04	0560658 - 0	0	0	0	0	0	0				
18846	18852	194473	0 - 0.04	0560513 - 0	0	0	0	0	0	0				
18841	18846	194465	0 - 0.05	0560513 - 0.04	0	0	0	0	0	0				
18839	18841	194460	0 - 0.04	0560513 - 0.09	1	0	0	0	0	1	2019-67927	10/14/2019	0.11	PD
18901	18909	5080179	0 - 0.05	0561238 - 1.25	0	0	0	0	0	0				
18892	18901	5080181	0 - 0.05	0561238 - 1.30	2	0	0	0	0	2	2021-9420	04/16/2021	1.31	PD
18893	18894	194553	0 - 0.06	0560503 - 0.04	0	0	0	0	0	0	2019-67149	10/06/2019	1.34	PD
18892	18893	194551	0 - 0.04	0560503 - 0.10	0	0	0	0	0	0				

Crash Summary

Section Details													
Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes				Crash Report	Crash Date	Crash Mile Point	Injury Degree
						K	A	B	C				
18891	18892	5080182	0 - 0.05	0560503 - 0.14	0	0	0	0	0				
18897	18903	5080163	0 - 0.06	0560383 - 0	1	0	0	0	0	2020-2371	01/05/2020	0.03	
18902	18903	5080164	0 - 0.08	0560383 - 0.06	2	0	0	0	0	2020-32952 2019-69323	12/26/2020 10/16/2019	0.12 0.13	PD
18845	18846	194469	0 - 0.05	0560025 - 0	0	0	0	0	0				
18846	18847	194472	0 - 0.08	0560025 - 0.05	1	0	0	0	0	2020-17591	07/26/2020	0.11	PD
18850	18851	194479	0 - 0.05	0560525 - 0.12	0	0	0	0	0				
18851	18852	194481	0 - 0.04	0560525 - 0.17	0	0	0	0	0				
18852	18853	194483	0 - 0.05	0560525 - 0.21	1	0	0	0	0	2019-814	01/08/2019	0.25	PD
18856	18857	5080187	0 - 0.09	0560757 - 0	1	0	0	0	0	2019-43945	02/28/2019	0.03	PD
18857	18858	194493	0 - 0.05	0560757 - 0.09	1	0	0	0	0	2020-1419	01/09/2020	0.10	PD
18861	18862	194503	0 - 0.05	0560516 - 0.12	0	0	0	0	0				
18862	18863	194505	0 - 0.09	0560516 - 0.17	0	0	0	0	0				
18863	18864	194507	0 - 0.08	0560516 - 0.26	0	0	0	0	0				
18854	18855	5080186	0 - 0.09	0560045 - 0	0	0	0	0	0				
18896	18905	5080162	0 - 0.06	0560254 - 0.04	1	0	0	0	0	2021-23510	09/01/2021	0.05	PD
18904	18905	5080161	0 - 0.08	0560254 - 0.10	2	0	0	0	0	2020-986	01/10/2020	0.15	PD
12459	18899	5080173	0 - 0.07	0560536 - 0.42	4	0	0	0	0	2020-33519	12/31/2020	0.15	PD
12459	18909	186811	0 - 0.03	0560536 - 0.49	2	0	0	0	0	2019-67984	10/08/2019	0.45	PD
18907	18909	5080177	0 - 0.05	0560536 - 0.52	2	0	0	0	0	2019-54981	06/14/2019	0.47	PD
18898	18899	194562	0 - 0.04	0560606 - 0	0	0	0	0	0	2021-37362	12/27/2021	0.47	PD
18894	18898	5080192	0 - 0.04	0560606 - 0.04	1	0	0	0	0	2021-22258	07/02/2021	0.48	PD
18894	18897	5080193	0 - 0.04	0560606 - 0.08	0	0	0	0	0	2019-44253	03/02/2019	0.50	
18896	18897	194559	0 - 0.04	0560606 - 0.12	1	0	0	0	0	2021-14240	06/09/2021	0.51	PD
18865	18866	3120758	0 - 0.05	0560236 - 0.29	0	0	0	0	0	2020-20308	08/26/2020	0.55	
18865	18963	3106820	0 - 0.09	0560236 - 0.34	0	0	0	0	0	2019-50052	04/24/2019	0.56	PD
18906	18963	3106827	0 - 0.09	0560236 - 0.43	2	0	0	0	0	2021-6385	03/03/2021	0.06	PD
										2020-13268	06/03/2020	0.13	PD

Crash Summary

Section Details														
Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
18858	18867	194497	0 - 0.04	0560799 - 0.08	0	0	0	0	0	0				
18858	18861	194496	0 - 0.04	0560799 - 0.12	1	0	0	0	0	1	2021-30022	11/03/2021	0.14	PD
18861	18866	5080165	0 - 0.06	0560799 - 0.16	0	0	0	0	0	0				
Totals:					38	0	0	0	0	1				

Crash Summary II - Characteristics

Crashes by Day and Hour

Day Of Week	Hour of Day												PM												Un	Tot
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11		
SUNDAY	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	0	0	1	0	5
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	4
TUESDAY	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	6
WEDNESDAY	0	0	0	0	0	0	1	0	1	0	3	0	0	0	0	2	0	1	1	0	1	1	0	0	0	11
THURSDAY	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1	0	0	0	1	1	0	0	1	0	0	8
FRIDAY	0	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	1	4	0	0	0	0	0	0	0	9
SATURDAY	0	0	0	0	1	1	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Totals	0	0	0	0	0	1	1	3	0	5	2	4	6	3	2	4	2	6	4	1	1	1	2	1	0	49

Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	48	23-Bicyclist	0
2-(Sport) Utility Vehicle	22	24-Witness	6
3-Passenger Van	4	25-Other	11
4-Cargo Van (10K lbs or Less)	1	26-Construction	0
5-Pickup	5	27-Farm Vehicle	0
6-Motor Home	0	Total	108
7-School Bus	0		
8-Transit Bus	1		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	10		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	9	14	0	0	0	0	23
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	5	3	0	0	0	0	8
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	0	0	0	0	0	0	0
Improper Turn	5	0	0	0	0	0	5
Improper Backing	6	1	0	0	0	0	7
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	2	0	0	0	0	0	2
Failed to Keep in Proper Lane	2	2	0	0	0	0	4
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	1	0	0	0	0	1
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	5	0	0	0	0	0	5
Other Contributing Action	5	1	0	0	0	0	6
Unknown	1	0	0	0	0	0	1
Total	40	22	0	0	0	0	62

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	37	22	0	0	0	0	59
Physically Impaired	1	0	0	0	0	0	1
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	1	0	0	0	0	0	1
Total	39	22	0	0	0	0	61

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	1	0	0	0	0	1
20-24	5	0	0	0	0	5
25-29	14	0	0	0	0	14
30-39	23	0	0	0	0	23
40-49	10	0	0	0	0	10
50-59	13	0	0	0	0	13
60-69	9	0	0	0	0	9
70-79	5	0	0	0	0	5
80-Over	1	0	0	0	0	1
Unknown	21	0	0	0	0	21
Total	102	0	0	0	0	102

Crash Summary II - Characteristics

Most Harmful Event		Injury Data	
Most Harmful Event	Total	Severity Code	Number Of Injuries
1-Overturn / Rollover	0		
2-Fire / Explosion	0	K	0
3-Immersion	0	A	0
4-Jackknife	0	B	2
5-Cargo / Equipment Loss Or Shift	0	C	2
6-Fell / Jumped from Motor Vehicle	0	PD	0
7-Thrown or Falling Object	0		
8-Other Non-Collision	2		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	59		
14-Parked Motor Vehicle	31		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	0		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		
Total	92	41	4

Road Character	
Road Grade	Total
1-Level	35
2-On Grade	14
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
Total	49

Light	
Light Condition	Total
1-Daylight	34
2-Dawn	2
3-Dusk	0
4-Dark - Lighted	9
5-Dark - Not Lighted	1
6-Dark - Unknown Lighting	1
7-Unknown	2
Total	49

Traffic Control Devices	
Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	1
2-Traffic Signals (Flashing)	0
3-Advisory/Warning Sign	0
4-Stop Signs - All Approaches	6
5-Stop Signs - Other	6
6-Yield Sign	0
7-Curve Warning Sign	0
8-Officer, Flagman, School Patrol	0
9-School Bus Stop Arm	0
10-School Zone Sign	0
11-R.R. Crossing Device	0
12-No Passing Zone	0
13-None	36
14-Other	0
Total	49

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2019	2020	2021	Total
JANUARY	2	3	0	5
FEBRUARY	1	0	1	2
MARCH	2	0	2	4
APRIL	2	2	3	7
MAY	3	1	1	5
JUNE	1	1	1	3
JULY	0	1	1	2
AUGUST	1	3	1	5
SEPTEMBER	2	0	1	3
OCTOBER	7	0	0	7
NOVEMBER	0	0	1	1
DECEMBER	0	3	2	5
Total	21	14	14	49

Report is limited to the last 10 years of data.

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	25	1	5	2	0	4	0	0	0	0	0	0	0	0	37
Head-on - Sideswipe	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3
Intersection Movement	0	0	0	3	0	5	0	0	0	0	0	0	0	0	8
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	28	1	5	6	0	9	0	0	0	0	0	0	0	0	49

Crash Summary II - Characteristics**Crashes by Weather, Light Condition and Road Surface**

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	5	1	0	0	0	0	0	0	0	0	0	6
Dark - Not Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	1	0	0	0	0	0	0	0	0	0	0	1
Daylight	23	0	0	0	0	0	1	2	0	0	0	26
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	1	0	0	0	0	0	0	0	0	0	0	1
Cloudy												
Dark - Lighted	2	0	0	0	0	0	0	0	0	0	1	3
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	5	0	0	0	0	0	0	0	0	0	0	5
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

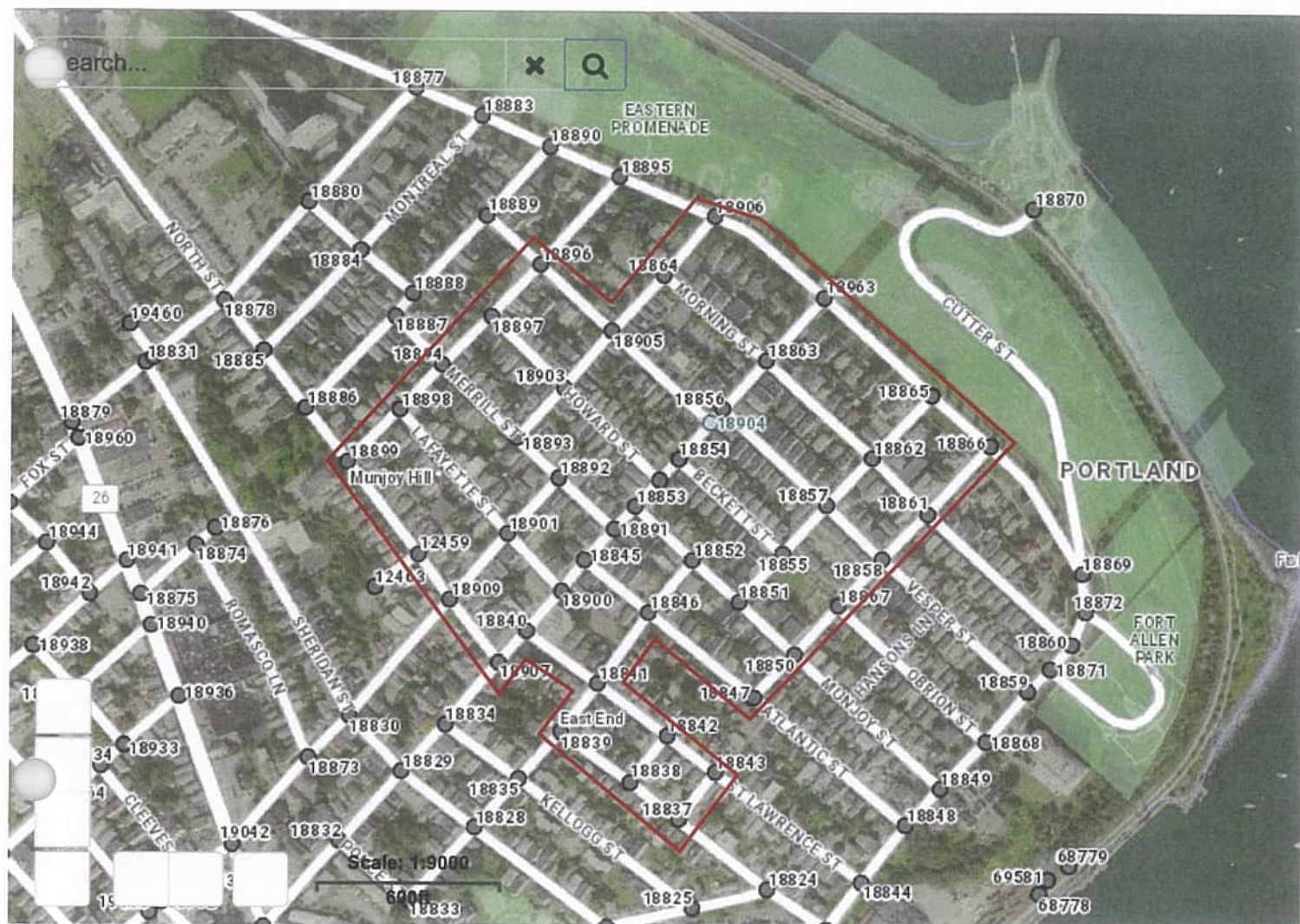
Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	1	1
Dawn	0	0	0	0	0	0	0	0	0	0	1	1
Daylight	0	0	0	0	0	0	0	0	0	0	2	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	1	1
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics**Crashes by Weather, Light Condition and Road Surface**

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	1	0	0	0	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	38	1	0	0	0	0	1	3	0	0	6	49

**2019 through 2021
Vehicle Crash Data**



The MaineDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- ***8 or more accidents***
- ***A Critical Rate Factor greater than 1.00***

As the data presented in the table shows, the incidence of traffic crashes occurring on the noted sections of roadways is below MaineDOT's threshold criteria for identification of a high crash location.

2022 Parking Demand Assessment Report - Update



Traffic Solutions

a Barton & Loguidice company

June 1, 2022

Thomas A. Errico, P.E.
Senior Associate-Traffic Engineering Director
T.Y. Lin International, Inc.
12 Northbrook Drive
Falmouth, Maine 04105

RE: St. Lawrence Arts – Parking Demand Assessment

Dear Tom:

Please find attached an updated parking demand study for the St. Lawrence Arts venue based upon field occupancy studies conducted on Wednesday, February 16 and Saturday, March 5, 2022. You will find enclosed a copy of the prior May 6, 2017 Traffic and Parking Study and copies of 2022 field surveys for both noted days for your reference. You will also find accompanying this letter an email dated March 10, 2022 from Deirdre Nice, Executive Director, St. Lawrence Arts that confirms the number of theater attendees for both noted dates.

2022 Updated Parking Assessment

Pursuant to your earlier direction, field occupancy studies were completed for the same geographic area previously used in the conduct of the 2017 study (Please refer to the attached Figure 1 On-Street Parking Occupancy – Study Area). The parking studies were performed for three separate time periods: early morning hours, early evening hours pre-event and during the scheduled event on Wednesday, February 16 and Saturday, March 5, 2022. Table 1: On-Street Parking Occupancy Study from the prior 2017 study is updated with presentation of the most current 2022 field study data, as follows:

Table 1

Summary Report
On-Street Parking Occupancy Study

Street/Segment	Measured ⁽¹⁾ Spaces	February 16, 2022			March 5, 2022		
		4:00 to 4:30 AM	4:30 to 5:00 PM	7:30 to 8:30 PM	4:00 to 5:00 AM	5:30 to 6:30 PM	8:00 to 9:00 PM
Howard Street Entire	17	15	13	18	16	16	17
Merrill Street	41	31	22	31	28	25	30
- Congress to Quebec							
Quebec Street	11	10	9	9	12	9	9
- Merrill to Emerson							
Emerson Street Entire	45	38	22	30	37	29	30
Congress Street	75	60	44	69	58	42	64
- North to E. Prom							
North Street	14	13	14	13	14	14	13
- Congress to Stetson							
Lafayette Street Entire	40	25	15	21	26	27	32
Eastern Promenade	47	11	7	9	14	8	7
- Turner to Wilson							

Cumberland Avenue	26	25	15	20	25	18	22
- North to Merrill							
Turner Street	60	36	21	29	44	42	44
Morning Street	67	58	36	51	58	49	54
- Wilson to Turner							
Wilson Street Entire	64	45	28	36	42	37	37
Moody Street Entire	46	39	15	31	31	30	38
St. Lawrence Street	51	30	17	27	24	21	23
- Congress to Hoyt's							
Sherbrook Street	13	8	4	7	7	3	3
Waterville Street	38	15	11	14	14	12	15
- Congress to Hoyt's							
Atlantic Street	44	27	24	28	26	27	29
- Congress to Gilbert							
Munjoy Street	48	31	20	35	25	26	36
- Congress to Alley							
Beckett Street Entire	42	22	16	23	23	21	24
Vesper Street	54	56	33	38	40	35	38
- Congress to Alley							
Monument Street	40	18	16	24	16	25	28
- Waterville to Munjoy							
TOTAL	883	613	402	563	580	516	593
PERCENT OCCUPANCY		69%	46%	64%	66%	58%	67%

NOTE: (1) Number of spaces estimated based upon City Ordinance requirements and parking stall length of 20-feet.

Table 2, below, compares the findings of the 2017 study with the current parking trends for the same defined study area on Munjoy Hill.

Table 2
Parking Occupancy Data Comparison – 2017 and 2022

Survey Time Period	2017 Parking Data Weekday			2022 Parking Data Weekday			2017 Parking Data Saturday			2022 Parking Data Saturday		
	Early AM	Pre-Event	During Event	Early AM	Pre-Event	During Event	Early AM	Pre-Event	During Event	Early AM	Pre-Event	During Event
Total Recorded Parked Vehicles	574	490	572	613	402	563	661	631	636	580	516	593
Percent ⁽¹⁾ Occupancy	65%	55%	65%	69%	46%	64%	75%	71%	72%	66%	58%	67%

NOTE: (1) The percent parking occupancy is derived by dividing the measured field parking total for each noted time period by 883 total spaces. The 883-parking space total is based upon a detailed parking inventory performed for the entire parking study area highlighted on Figure 1 used in the earlier 2017 parking study.

Parking occupancy trends measured in 2022 for the established neighborhood area on Munjoy Hill, when compared with results from the earlier 2017 study, suggest the overall parking demand for the neighborhood area remains more or less unchanged. The peak parking demand for the weekday time period in 2017 was recorded at 574 vehicles, whereas, the parking occupancy level in 2022 was determined at 613 vehicles. Parking trends for Saturday are reversed with the higher peak parking value recorded in 2017 at 661 vehicles compared to the 2022 peak parking demand value of 593 vehicles.



You will find the number of attendees at the scheduled 2022 St Lawrence Arts facility for the two study dates (76 people on 2-16 and 88 on March 5) is consistent with the number of attendees recorded in 2017.

Overall, it is safe to assume that the current peak parking demand within the established neighborhood area is considerably less than the measured on-street parking supply for the same geographic area. Based upon the 2022 parking occupancy data, a balance of 270 spaces exists during a typical weekday and the number of available spaces increases to 290 spaces on a Saturday. Earlier parking demand projections presented in the 2017 study estimates the proposed St. Lawrence Arts facility at full capacity generates a peak parking demand of 158 parking spaces; far less than the measured parking supply found within the neighborhood area defined on the attached Figure 1.

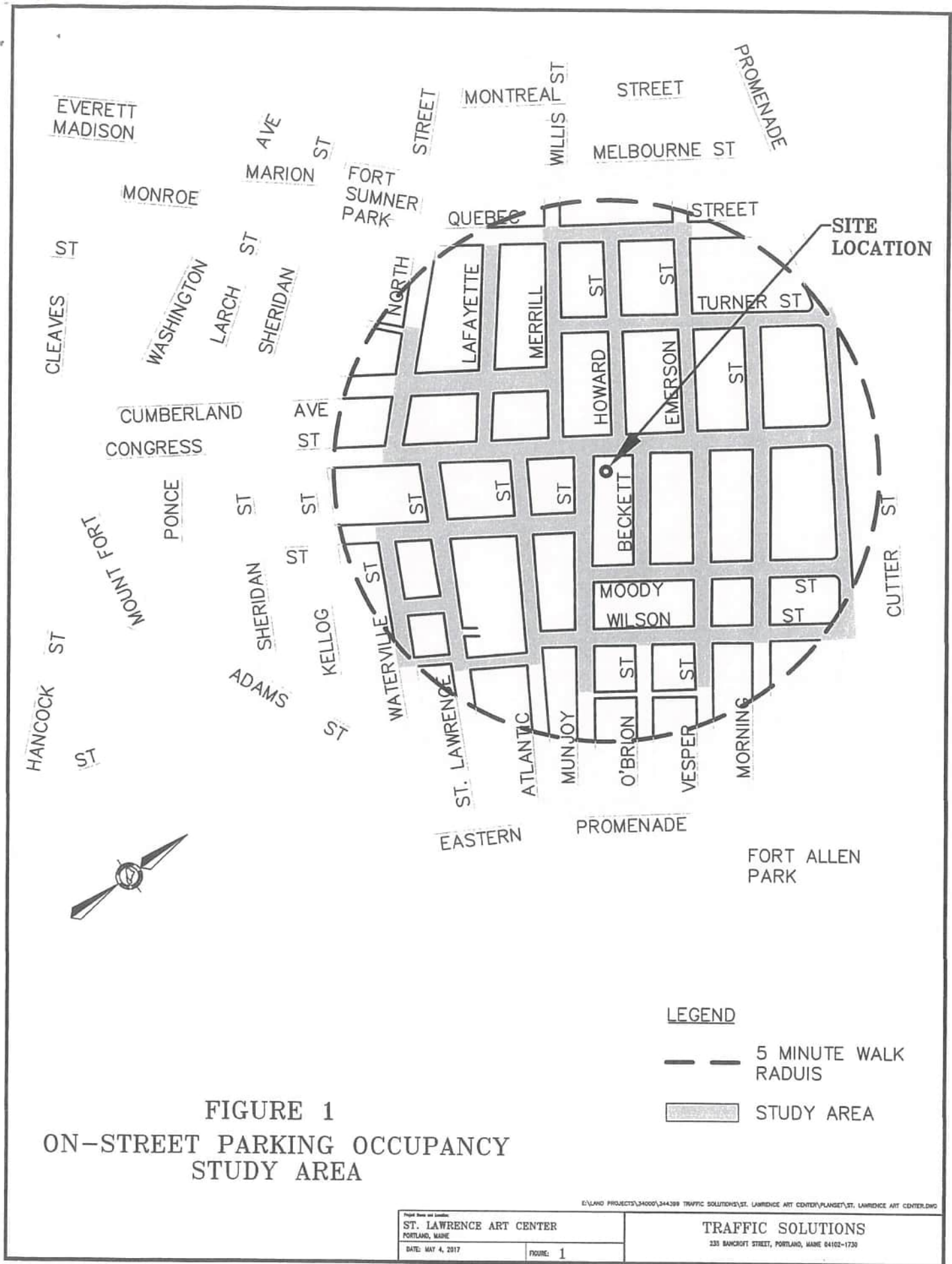
Please reach out to me if you would like to discuss the information and back-up materials enclosed with this letter.

Thank you for your direction and assistance with this updated parking assessment effort.

Sincerely yours,

A handwritten signature in blue ink that reads 'William J. Bray'. The signature is fluid and cursive, with a large loop at the end of the last name.

William J. Bray, P.E.



William J. Bray

From: bill <trafficsolutions@maine.rr.com>
Sent: Monday, May 30, 2022 5:46 AM
To: William J. Bray
Subject: Fwd: SLA house counts 2/16 & 3/5

ATTENTION --> This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

----- Forwarded Message -----

Subject: SLA house counts 2/16 & 3/5
Date: Thu, 10 Mar 2022 06:38:46 -0500
From: Deirdre Nice <deirdre.nice@stlawrencearts.org>
To: Bray, Bill <trafficsolutions@maine.rr.com>

Hi Bill,

Nice talking with you. I hope you have a great visit with your family in Florida and a restful April that helps relieve your stomach issues.

Here are the counts for 2/16 - 76 people and 3/5 - 88 people.

Here's to good health!

~ Deirdre

Sent from my spaceship

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 2-16-22 Start Time: 0400 End Time: 0500

Recorder: NST

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET eastside only	E. Promenade to North Street	25	✓
ST LAWRENCE STREET	Congress Street to Gilbert Lane	30	✓
ATLANTIC STREET	Gilbert Lane to Congress Street	27	✓
MUNJOY STREET	Congress Street to Hanson Lane	31	✓
VESPER STREET	Hanson Lane to Congress Street	56	✓
MORNING STREET	Congress Street to Wilson Street	39	✓
E. PROMENADE	Wilson Street to Congress Street	6	✓
BECKETT STREET	Congress Street to Moody Street	22	✓
MONUMENT STREET	Munjoy Street to Waterville Street	18	✓
WATERVILLE STREET	Monument Street to Hoyt's Lane	15	✓
WILSON STREET	Atlantic Street to E. Promenade	45	✓
MOODY STREET	E. Promenade to Munjoy Street	39	✓
SHERBROOKE STREET	St Lawrence Street to Waterville Street	8	✓

361

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 2-16-22 Start Time: 1630 End Time: 1700

Recorder: Jen

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET eastside only	E. Promenade to North Street	23	✓
ST LAWRENCE STREET	Congress Street to Gilbert Lane	17	✓
ATLANTIC STREET	Gilbert Lane to Congress Street	24	✓
MUNJOY STREET	Congress Street to Hanson Lane	20	✓
VESPER STREET	Hanson Lane to Congress Street	33	✓
MORNING STREET	Congress Street to Wilson Street	23	✓
E. PROMENADE	Wilson Street to Congress Street	4	✓
BECKETT STREET	Congress Street to Moody Street	16	✓
MONUMENT STREET	Munjoy Street to Waterville Street	16	✓
WATERVILLE STREET	Monument Street to Hoyt's Lane	11	✓
WILSON STREET	Atlantic Street to E. Promenade	28	✓
MOODY STREET	E. Promenade to Munjoy Street	15	✓
SHERBROOKE STREET	St Lawrence Street to Waterville Street	4	✓

234

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 2-16-22 Start Time: 1930 End Time: 2000

Recorder: Jen

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET eastside only	E. Promenade to North Street	36 ✓
ST LAWRENCE STREET	Congress Street to Gilbert Lane	27 ✓
ATLANTIC STREET	Gilbert Lane to Congress Street	28 ✓
MUNJOY STREET	Congress Street to Hanson Lane	35 ✓
VESPER STREET	Hanson Lane to Congress Street	38 ✓
MORNING STREET	Congress Street to Wilson Street	35 ✓
E. PROMENADE	Wilson Street to Congress Street	4 ✓
BECKETT STREET	Congress Street to Moody Street	23 ✓
MONUMENT STREET	Munjoy Street to Waterville Street	24 ✓
WATERVILLE STREET	Monument Street to Hoyt's Lane	14 ✓
WILSON STREET	Atlantic Street to E. Promenade	36 ✓
MOODY STREET	E. Promenade to Munjoy Street	31 ✓
SHERBROOKE STREET	St Lawrence Street to Waterville Street	7 ✓

333

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 2-16-22 Start Time: 0400 End Time: 0500

Recorder: NST

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	35	✓
NORTH STREET	Congress Street to Summer Court	13	✓
CUMBERLAND AVENUE	North Street to Merrill Street	25	✓
LAFAYETTE STREET	Congress Street to Quebec Street	32	✓
MERRILL STREET	Quebec Street to Congress Street	31	✓
QUEBEC STREET	Merrill Street to Emerson Street	10	✓
TURNER STREET	Eastern Promenade to Merrill Street	36	✓
EMERSON STREET	Quebec Street to Congress Street	38	✓
HOWARD STREET	Congress Street to Quebec Street	15	✓
MORNING STREET	Congress Street to Turner Street	19	✓
E. PROMENADE	Turner Street to Congress Street	5	✓

259

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 2-16-22 Start Time: 11030 End Time: 1700

Recorder: NST

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	21	✓
NORTH STREET	Congress Street to Summer Court	14	✓
CUMBERLAND AVENUE	North Street to Merrill Street	15	✓
LAFAYETTE STREET	Congress Street to Quebec Street	15	✓
MERRILL STREET	Quebec Street to Congress Street	22	✓
QUEBEC STREET	Merrill Street to Emerson Street	9	✓
TURNER STREET	Eastern Promenade to Merrill Street	21	✓
EMERSON STREET	Quebec Street to Congress Street	22	✓
HOWARD STREET	Congress Street to Quebec Street	13	✓
MORNING STREET	Congress Street to Turner Street	13	✓
E. PROMENADE	Turner Street to Congress Street	3	✓

168

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 2-16-22 Start Time: 1930 End Time: 2000

Recorder: NST

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	33	✓
NORTH STREET	Congress Street to Summer Court	13	✓
CUMBERLAND AVENUE	North Street to Merrill Street	20	✓
LAFAYETTE STREET	Congress Street to Quebec Street	21	✓
MERRILL STREET	Quebec Street to Congress Street	31	✓
QUEBEC STREET	Merrill Street to Emerson Street	9	✓
TURNER STREET	Eastern Promenade to Merrill Street	29	✓
EMERSON STREET	Quebec Street to Congress Street	30	✓
HOWARD STREET	Congress Street to Quebec Street	18	✓
MORNING STREET	Congress Street to Turner Street	16	✓
E. PROMENADE	Turner Street to Congress Street	2	✓

222

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 3/5/22 Start Time: 0400 End Time: 0430

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET eastside only	E. Promenade to North Street	29
ST LAWRENCE STREET	Congress Street to Gilbert Lane	24
ATLANTIC STREET	Gilbert Lane to Congress Street	26
MUNJOY STREET	Congress Street to Hanson Lane	25
VESPER STREET	Hanson Lane to Congress Street	40
MORNING STREET	Congress Street to Wilson Street	41
E. PROMENADE	Wilson Street to Congress Street	9
BECKETT STREET	Congress Street to Moody Street	23
MONUMENT STREET	Munjoy Street to Waterville Street	16
WATERVILLE STREET	Monument Street to Hoyt's Lane	14
WILSON STREET	Atlantic Street to E. Promenade	42
MOODY STREET	E. Promenade to Munjoy Street	31
SHERBROOKE STREET	St Lawrence Street to Waterville Street	7

327

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 3/5/22 Start Time: 1730 End Time: 1800

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET eastside only	E. Promenade to North Street	19 ✓
ST LAWRENCE STREET	Congress Street to Gilbert Lane	21 ✓
ATLANTIC STREET	Gilbert Lane to Congress Street	27 ✓
MUNJOY STREET	Congress Street to Hanson Lane	26 ✓
VESPER STREET	Hanson Lane to Congress Street	35 ✓
MORNING STREET	Congress Street to Wilson Street	32 ✓
E. PROMENADE	Wilson Street to Congress Street	7 ✓
BECKETT STREET	Congress Street to Moody Street	21 ✓
MONUMENT STREET	Munjoy Street to Waterville Street	25 ✓
WATERVILLE STREET	Monument Street to Hoyt's Lane	12 ✓
WILSON STREET	Atlantic Street to E. Promenade	37 ✓
MOODY STREET	E. Promenade to Munjoy Street	30 ✓
SHERBROOKE STREET	St Lawrence Street to Waterville Street	3 ✓

295

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

EASTSIDE AREA

Date: 3/5/22 Start Time: 2000 End Time: 2030

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET eastside only	E. Promenade to North Street	32
ST LAWRENCE STREET	Congress Street to Gilbert Lane	23
ATLANTIC STREET	Gilbert Lane to Congress Street	29
MUNJOY STREET	Congress Street to Hanson Lane	36
VESPER STREET	Hanson Lane to Congress Street	38
MORNING STREET	Congress Street to Wilson Street	35
E. PROMENADE	Wilson Street to Congress Street	7
BECKETT STREET	Congress Street to Moody Street	24
MONUMENT STREET	Munjoy Street to Waterville Street	20
WATERVILLE STREET	Monument Street to Hoyt's Lane	15
WILSON STREET	Atlantic Street to E. Promenade	37
MOODY STREET	E. Promenade to Munjoy Street	38
SHERBROOKE STREET	St Lawrence Street to Waterville Street	3

345-

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 3/5/22 Start Time: 0430 End Time: 0500

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	29	✓
NORTH STREET	Congress Street to Summer Court	14	✓
CUMBERLAND AVENUE	North Street to Merrill Street	25	✓
LAFAYETTE STREET	Congress Street to Quebec Street	26	✓
MERRILL STREET	Quebec Street to Congress Street	28	✓
QUEBEC STREET	Merrill Street to Emerson Street	12	✓
TURNER STREET	Eastern Promenade to Merrill Street	44	✓
EMERSON STREET	Quebec Street to Congress Street	37	✓
HOWARD STREET	Congress Street to Quebec Street	16	✓
MORNING STREET	Congress Street to Turner Street	17	✓
E. PROMENADE	Turner Street to Congress Street	4	✓

255

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 3/5/22 Start Time: 1800 End Time: 1830

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>	
CONGRESS STREET westside only	E. Promenade to North Street	23	✓
NORTH STREET	Congress Street to Summer Court	14	✓
CUMBERLAND AVENUE	North Street to Merrill Street	18	✓
LAFAYETTE STREET	Congress Street to Quebec Street	27	✓
MERRILL STREET	Quebec Street to Congress Street	25	✓
QUEBEC STREET	Merrill Street to Emerson Street	9	✓
TURNER STREET	Eastern Promenade to Merrill Street	42	✓
EMERSON STREET	Quebec Street to Congress Street	29	✓
HOWARD STREET	Congress Street to Quebec Street	16	✓
MORNING STREET	Congress Street to Turner Street	17	✓
E. PROMENADE	Turner Street to Congress Street	1	✓

221

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

St Lawrence Arts Center-Re-development Project

On-Street Parking Survey Form

WESTSIDE AREA

Date: 3/5/22 Start Time: 2030 End Time: 2100

Recorder: Jen Gilbert

<u>Street Name</u>	<u>Street Segment</u>	<u>Number of Parked Vehicles</u>
CONGRESS STREET westside only	E. Promenade to North Street	32
NORTH STREET	Congress Street to Summer Court	13
CUMBERLAND AVENUE	North Street to Merrill Street	22
LAFAYETTE STREET	Congress Street to Quebec Street	32
MERRILL STREET	Quebec Street to Congress Street	30
QUEBEC STREET	Merrill Street to Emerson Street	9
TURNER STREET	Eastern Promenade to Merrill Street	44
EMERSON STREET	Quebec Street to Congress Street	30
HOWARD STREET	Congress Street to Quebec Street	17
MORNING STREET	Congress Street to Turner Street	19
E. PROMENADE	Turner Street to Congress Street	0

✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

248

NOTES

1. Please fill out information at top of sheet before starting
2. Count all cars that are parked even if they are in a no parking area; except, any vehicle with persons in them and/or running do not include in survey.
3. Try to start and end survey run(s) on time as much as possible.

2017 Traffic and Parking Assessment Report



Traffic Solutions
William J. Bray, P.E.
235 Bancroft Street
Portland, ME 04102
(207) 774-3603
(207) 400-6890 mobile
trafficsolutions@maine.rr.com

May 6, 2017

**Traffic and Parking Demand Assessment
For Proposed
St. Lawrence Arts Center
Portland, Maine**

Friends of St. Lawrence Church are proposing a 401-seat addition to the existing St. Lawrence Arts Center (SLAC) at 76 Congress Street increasing the capacity of the arts venue from 110 to 485 seats. Preliminary traffic and parking demand forecasts have been developed for the proposed project based upon travel choice and parking trends measured at the existing 110-seat venue.

Theater attendees to seven scheduled shows in 2017 were interviewed by the SLAC staff to establish travel modal choice trends of the existing 110-seat facility. Neighborhood parking supply and demand studies were also conducted on the eve of two of these events; Wednesday and Saturday events to develop parking demand and supply patterns within the extended neighborhood area.

Travel Mode Survey Summary

Patron interviews were completed by SLAC staff during the following scheduled events:

Tuesday, February 28, 2017
Tuesday, April 4, 2017
Wednesday, April 26, 2017
Saturday, April 29, 2017
Friday, May 5, 2017
Saturday, May 6, 2017
Sunday, May 7, 2017

SLAC staff interviewed each attendee upon entering the theater:

1. *How did you get here?*
2. *If the answer was auto, a second question was asked: were you the driver?*
3. *If the answer was yes, a third question was asked – how many people traveled with you in your auto?*

A summary of the interview survey information is presented as follows:

<u>Tuesday, February 28, 2017</u>	<u>Tuesday, April 4, 2017</u>	<u>Wednesday, April 26, 2017</u>	<u>Saturday, April 29, 2017</u>
72 attendees	80 attendees	74 attendees	78 attendees
59 passengers in 24 autos	61 passengers in 21 autos	44 auto trips	64 passengers in 36 autos
7 attendees walked	15 attendees walked		3 people Uber
1 attendee METRO	2 people METRO		6 people walked
5 attendees cab/Uber	2 people scooter/Moped		

<u>Friday, May 5, 2017</u>	<u>Saturday, May 6, 2017</u>	<u>Sunday, May 7, 2017</u>
58 attendees	54 attendees	58 attendees
51 passengers in 23 autos	44 passengers in 21 autos	50 passengers in 22 autos
7 people walked	10 people walked	1 person biked
		5 people walked
		2 people in hotel shuttle

Vehicle occupancy and parking space rates were established for the existing 110-seat SLAC by “*averaging*” the survey results recorded for each scheduled event. The average vehicle occupancy rate determined for the SLAC is **2.20** persons per automobile [$59 \div 24 = 2.46 + 61 \div 21 = 2.90 + 74 \div 44 = 1.68 + 64 \div 36 = 1.77 = 51 \div 23 = 2.22 + 44 \div 21 = 2.10 + 50 \div 22 = 2.27$].

Average peak parking rates were established for the SLAC venue based upon the survey data for two variables consistent with the Institute of Transportation Engineers 4th edition of the Parking Generation publication; 1) per attendee and, 2) per seat. The calculations for each follows:

Average Parking Rate/Attendee = **0.40** spaces per attendee [$24 \div 72 = 0.33 + 21 \div 80 = 0.26 + 44 \div 74 = 0.59 + 36 \div 78 = 0.46 + 23 \div 58 = 0.40 + 21 \div 54 = 0.39 + 22 \div 58 = 0.38$]

Average Parking Rate/Seat = **0.25** spaces per seat [$24 \div 110 = 0.21 + 21 \div 110 = 0.19 + 44 \div 110 = 0.40 + 36 \div 110 = 0.33 + 23 \div 110 = 0.21 + 21 \div 110 = 0.19 + 22 \div 110 = 0.20$]

Estimate of Peak Hour Trip and Parking Demand

Peak hour trip generation and parking demand values were determined for the proposed SLAC project based upon rates determined for the existing smaller 110-seat SLAC site.

Peak Hour Trip Generation: An increase of 182 vehicle trips are generated in the peak hour of the site with completion of the proposed 401-seat expansion of the SLAC [485 total seats of new facility minus existing 110 seat facility] equals a “*net*” increase of $375 \text{ seats} \div 2.20 =$ **170** vehicle trips.

Peak Parking Space Demand: Peak parking space demand was calculated for the proposed SLAC site by averaging the calculations performed for two variables: 0.40 spaces per attendee and 0.25 spaces per seat. The former rate generates a parking demand of 194 spaces and the latter value estimates the parking demand at 121 spaces. Accordingly, the proposed 485-seat facility can be expected to generate peak parking demand of **158** spaces¹.

Parking Supply Determination

Parking Space Inventory: An inventory of existing neighborhood parking spaces was completed for all streets located within an approximate 900-foot walking radius (approximately 5-minute walk at 3 feet/second) from the 76 Congress SLAC site. Figure 1 illustratively identifies all streets and street segments included in the survey. The number of parking spaces were estimated applying City ordinance requirements (i.e. parking restrictions at hydrants, driveways, crosswalks and intersections) and an average parking stall length of 20-feet. A total of **883** parking spaces were counted within the study area.

Parking Studies: Parking occupancy studies were conducted on Wednesday, April 26 and Saturday, April 29, 2017. Both dates coincide with scheduled theater events at the existing SLAC. Total vehicle parking counts were recorded for each street block during three separate time periods: 1) Pre-event time, 2) During the show, and 3) Early morning after show. Actual survey times were as follows:

¹ April 18, 2014 Nelson/Nygaard project review memorandum estimated peak parking demand at 122 spaces.
August 18, 2014 Gorrill-Palmer, Inc. study estimated peak parking demand at 218 spaces.

<u>Wednesday, April 26, 2017</u>	<u>Saturday, April 29, 2017</u>
1. Pre-Show = 5:00 to 5:30 PM	1. Pre-Show = 5:30 to 6:00 PM
2. During Show = 7:15 to 7:45 PM	2. During Show = 7:45 to 8:15 PM
3. Thursday morning = 4:30 to 5:00 AM	3. Thursday morning = 4:30 to 5:00 AM

Table 1 presents the actual vehicle occupancy counts recorded for each street and street segment located with the defined study area.

Table 1
Summary Report
On-Street Parking Occupancy Study

<u>Street/Segment</u>	<u>Measured⁽¹⁾ Spaces</u>	<u>April 26/27, 2017</u>			<u>April 29/30, 2017</u>		
		<u>5:00 to</u>	<u>7:15 to</u>	<u>4:30 to</u>	<u>5:30 to</u>	<u>7:45 to</u>	<u>4:30 to</u>
		<u>5:30</u>	<u>7:45</u>	<u>5:00</u>	<u>6:00</u>	<u>8:15</u>	<u>5:00</u>
		<u>PM</u>	<u>PM</u>	<u>AM</u>	<u>PM</u>	<u>PM</u>	<u>PM</u>
Howard Street Entire	17	14	18	18	15	18	17
Merrill Street	41	30	30	20	28	28	24
- Congress to Quebec							
Quebec Street	11	15	11	9	15	13	12
- Merrill to Emerson							
Emerson Street Entire	45	14	30	32	26	26	33
Congress Street	75	57	73	70	66	74	62
- North to E. Prom							
North Street	14	12	15	14	14	13	12
- Congress to Stetson							
Lafayette Street Entire	40	28	17	16	33	25	25
Eastern Promenade	47	7	10	14	36	20	15
- Turner to Wilson							
Cumberland Avenue	26	20	16	11	21	17	16
- North to Merrill							
Turner Street	60	37	35	13	41	31	29
Morning Street	67	54	59	61	55	57	65
- Wilson to Turner							
Wilson Street Entire	64	13	14	31	24	27	37
Moody Street Entire	46	5	14	21	14	20	20
St. Lawrence Street	51	30	32	36	33	36	39
- Congress to Hoyt's							
Sherbrook Street	13	3	5	10	7	5	9
Waterville Street	38	13	19	25	22	22	25
- Congress to Hoyt's							
Atlantic Street	44	25	33	31	27	35	32
- Congress to Gilbert							
Munjoy Street	48	28	44	37	43	51	42
- Congress to Alley							
Beckett Street Entire	42	17	25	24	26	24	25
Vesper Street	54	50	45	54	55	58	61
- Congress to Alley							
Monument Street	40	18	27	27	30	36	30
- Waterville to Munjoy							
TOTAL	883	490	572	574	631	636	661
PERCENT OCCUPANCY		55%	65%	65%	71%	72%	75%

Note⁽¹⁾: Number of spaces estimated based upon City Ordinance Requirements and parking stall length of 20-feet

Approximately 56% of the parking spaces located in the neighborhood study area were occupied on Wednesday evening prior to the theater show time and the number of spaces occupied during the show time increased to 572 spaces. A total of 574 spaces were occupied in the early hours of Thursday morning. Parking occupancy trends measured on Saturday, overall, were somewhat higher than the weekday values. A total of 631 vehicles were parked in the study area before the start of the event, that number increased to 636 vehicles during the show, increased again in the early morning hours of Sunday to 661 vehicles.

The early Sunday morning parking usage value (661 vehicles), which represents the highest recorded number of parked vehicles in the study area, leaves a balance of **222** unused parking spaces in the neighborhood.

Summary of Findings

- The proposed 485-seat St. Lawrence Arts Center project will generate a “*net*” increase of **170** vehicle trips during the peak hour of the site. Show times are presently scheduled in the early evening hours when peak traffic times have diminished and that practice will continue with the new arts center.
- The Maine Department of Transportation requires any project whose peak hour trip generation exceeds 100 trips per hour to file for and obtain a Traffic Movement Permit. An application permit is currently being prepared and will be submitted to the City this month.
- The proposed Arts Center project can be expected to generate a peak parking demand of **158** parking spaces with sellout of all 401 theater seats and companion events occurring in other rooms of the facility.
- A total of **883** public on-street parking spaces exists on streets located within a walking time of 5-minutes or less (approximately 900-feet) from the SLAC site at 76 Congress Street. Parking studies conducted in the early morning hours (4:30 to 5:00 AM) on Thursday, April 27 and Sunday, April 30, 2017 (Both dates follow a schedule evening theater event at SLAC) measured a peak neighborhood parking demand of 574 spaces on Thursday and 661 spaces on Sunday, leaving an unencumbered balance of **309** parking spaces on Thursday and **222** spaces on Sunday.



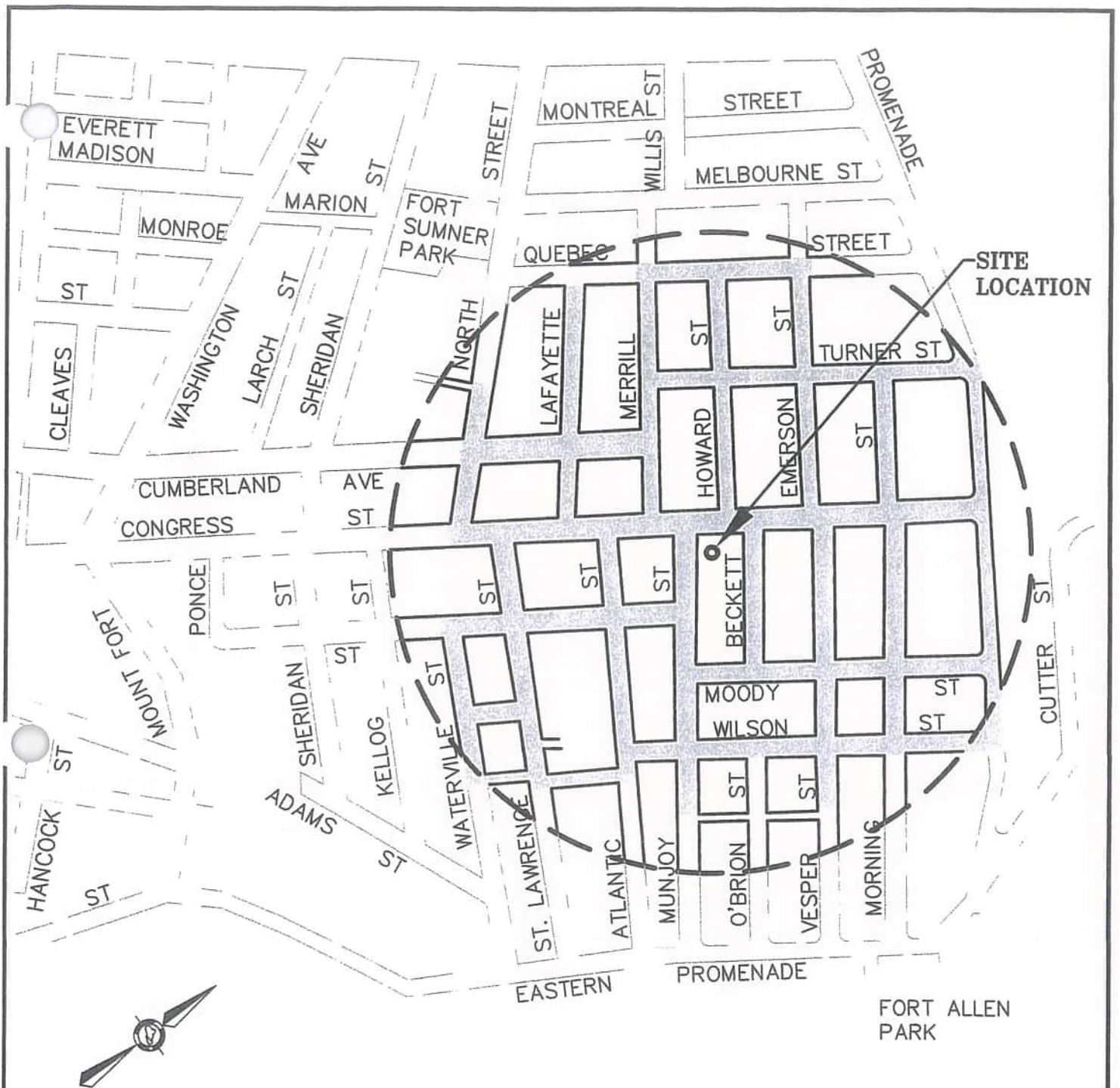


FIGURE 1
ON-STREET PARKING OCCUPANCY
STUDY AREA

LEGEND

— 5 MINUTE WALK
 RADUIS

STUDY AREA



Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

May 27, 2022

Rita Sawyer
Pinkham and Greer
28 Vannah Ave
Portland, ME 04103

Re: 66 Congress Street, PO
Ability to Serve with PWD Water

Dear Ms. Sawyer:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on May 9, 2022. Based on the information provided, we can confirm that the District will be able to serve the proposed project as further described in this letter. **Please note that this letter does not constitute approval of this project from the District. Review and approval of final plans is required.**

Conditions of Service

The following conditions of service apply:

- Since the water demand at this site is not anticipated to exceed the capacity of the current service, the existing service line at this site may be used to provide domestic water to the building. Our records show that the property is currently served with a 1.5-inch domestic water service and 1-inch meter. If any use other than that stated in your letter of May 9, 2022 is expected, please contact the District so we can review the ability of the existing service to meet your domestic water needs. It is highly recommended that the service size on private be increased to 2-inches in order to avoid significant pressure loss due to pipe friction.
- The existing 6-inch fire service at this site may continue to be used to provide water to the building. The Portland Water District does not size fire services and recommends you reach out to a licenced sprinkler designer to confirm capacity.



Existing Site Service

According to District records, the project site does currently have existing water service. A 1.5-inch diameter copper domestic water service line and a 6-inch ductile iron fire service line provides water service to this site. Please refer to the “Conditions of Service” section of this letter for requirements related to the use of these services.

Water System Characteristics

According to District records, there is an 8-inch diameter ductile iron water main in Beckett Street where the fire and domestic services originate and a public fire hydrant located 100 feet from the site. The most recent static pressure reading was 60 psi on April 30, 2020.

Public Fire Protection

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

Domestic Water Needs

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

Private Fire Protection Water Needs

You have indicated that this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service. Please share these results with your sprinkler system designer so that they can design the fire protection system to best fit the noted conditions. If the data is out of date or insufficient for their needs, please contact MEANS to request a hydrant flow test and we will work with you to get more complete data.

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

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

Sincerely,
Portland Water District



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

Portland, Maine



Yes. Life's good here.

Date: October 31, 2017

Re: Wastewater Capacity Authorization

Address: 76 Congress Street

Applicant: Friends of the St. Lawrence Church

Planner: Helen Donaldson

Anticipated Wastewater Flow:

Estimate of Anticipated Design Flows				
Development	Unit Size	Number of Units	Gallons per Day per Unit	Total Gallons per Day
Proposed flow				
Theater - Indoor	# Employees	50	12 GPD/Employee	600
Theater - Indoor	# Seats	500	5 GPD/Seat	2500
Net Change				+ 3,100
*Values based on STATE OF MAINE: SUBSURFACE WASTEWATER DISPOSAL RULES, most recent edition				

Comments:

The Department of Public Works, which includes the Water Resource Division, have reviewed and determined that the downstream sewers from the project address have the capacity to convey the estimated dry weather wastewater flows which will be generated from this development.

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

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

Sincerely,

CITY OF PORTLAND

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

CC:

Jeffrey Levine, Director, Department of Planning and Urban Development, City of Portland

Stuart O'Brien, Planning Director, Department of Planning and Urban Development, City of Portland

Barbara Barhydt, Development Review Services Mgr., Dep't. of Planning and Urban Development, City of Portland

Kathi Earley, City Engineer/Engineering Manager, Portland Department of Public Works
Keith Gray, Senior Project Engineer, Portland Department of Public Works

Nancy Gallinaro, Water Resources Manager, Portland Department of Public Works
Rachel Smith, Industrial Pretreatment Coordinator, Portland Department of Public Works
John Emerson, Wastewater Coordinator, Portland Department of Public Works

Lauren Swett, Woodard & Curran, DPW Development Review
Scott Firmin, Director of Wastewater, Portland Water District

Email Correspondence between Randee McDonald (Walsh Engineering Associates) and Bradley Roland, Portland Public Works - June 2022

Was already approved with the letter I sent.

You should be good.

And yes we use the State's wastewater disposal rules for generating flow estimates.

the residential section and Table 4C most importantly

Attached

Brad

--

Bradley A. Roland, P.E.

Senior Project Engineer

Portland Public Works - Water Resources

212 Canco Road

Portland, ME 04103

Tel: 207-874-8840

brad@portlandmaine.gov

On Mon, Jun 27, 2022 at 11:16 AM Randee McDonald <Randee@walsh-eng.com> wrote:

Ahhh...now I see where you are talking about the 5000. That is what we asked for, but I can not find a break down of how that amount was calculated (I was not working here at the time). Honestly, looks arbitrary....can you approve us for the +3,100? R

From: Bradley Roland <brad@portlandmaine.gov>

Sent: Monday, June 27, 2022 9:40 AM

To: Randee McDonald <Randee@Walsh-eng.com>

Subject: Re: St. Lawrence Connection

Hello Randee,

Thank you for the nudge. Attached is what was originally approved. I don't see how they came up with the 5000 gpd.

How is it broken out for the additional 1900 pd over what was already approved?

Brad

Bradley A. Roland, P.E.

Senior Project Engineer

Portland Public Works - Water Resources

212 Canco Road

Portland, ME 04103

Tel: 207-874-8840

brad@portlandmaine.gov

On Mon, Jun 27, 2022 at 8:49 AM Randee McDonald <Randee@walsh-eng.com> wrote:

Hello Bradley,

Just following up on the status of this request. Is there anything else you need from me to verify the sanitary sewer connection? Thank you!

Randee McDonald, *Project Coordinator*

Walsh Engineering Associates

207.553.9898

From: Bradley Roland <brad@portlandmaine.gov>

Sent: Thursday, June 2, 2022 12:45 PM

To: Randee McDonald <Randee@Walsh-eng.com>

Subject: Re: St. Lawrence Connection

Hello Randee

I have added it to the list for tomorrow and will get back to you with any questions.

Brad

Bradley A. Roland, P.E.
Senior Project Engineer
Portland Public Works - Water Resources
212 Canco Road
Portland, ME 04103
Tel: 207-874-8840
brad@portlandmaine.gov

On Wed, Jun 1, 2022 at 9:37 AM Randee McDonald <Randee@walsh-eng.com> wrote:

Good afternoon,

I am working on permitting the St Lawrence Church expansion on 76 Congress Street in Portland. It was previously permitted in 2018 but not constructed at that time. Attached is a revised application. Is there anything additional you would need? Thank you!

Randee McDonald

Project Coordinator

WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Drive, Suite 2A

Westbrook, ME 04092

(207) 553-9898, Ext 103

www.walsh-eng.com

Randee McDonald

From: Aaron Bridges <bridgesa@portlandmaine.gov>
Sent: Wednesday, June 1, 2022 12:36 PM
To: Randee McDonald; Fire Prevention
Subject: St. Lawrence Church - 76 Congress Street

Hello Randee,

You'll need to go through the permitting process as any old permits from 2018 have probably expired by now. You can reach them through (permitting@portlandmaine.gov). Any involvement from the fire dept. standpoint will be brought up through the plan review process of your permits and will be looked at then. Thanks,

Captain Aaron Bridges
Portland Fire Department
Fire Prevention Office
207-756-8096
FirePrevention@portlandmaine.gov
Bridgesa@portlandmaine.gov



Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

Bartlett Design

LIGHTING & ELECTRICAL ENGINEERING

5 PALMER STREET BATH, MAINE 04530

TEL (207) 443-5447

bartlettdesigninc@comcast.net

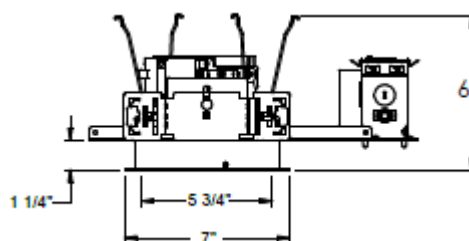
St. Lawrence Arts Addition Lighting Fixtures

Congress Street

Portland, Maine

November 3, 2017

TYPES S1 & S1A

**HOUSING:**

One-piece 22 gauge non-corrosive steel platform. Pre-wired j-box with snap-on cover for easy access. Snap-in connection from driver compartment allows easy installation of light engine/trim assembly without tools above or below the ceiling and can be upgraded to accommodate technology improvements. Approve for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring.

REFLECTOR:

High purity aluminum, Alzak, iridescence suppressed, semi-diffuse reflector. Self-trim standard.

LED LIGHT ENGINE:

The LF6SL uses the Philips Fortimo DLM Gen 5 LED Module with remote phosphor technology. This technology provides controlled color consistency (3 SDCM) from fixture to fixture. The system is designed for optimal life and lumen maintenance (>50,000 hours at 70% lumen maintenance). Both reflector and light engine assembly are mechanically retained to housing. The light engine comes standard with 90 CRI in all Kelvin temperatures

LED DRIVER:

The LF6SL utilizes the Philips Fortimo LED Driver specifically designed to optimize efficiency of the Fortimo DLM Module. Driver is designed to match the 50,000 hour minimum life expectancy of the system. Meets UL Class 2, inherent short circuit protection, self limited, overload protected. If critical temperatures are reached on driver or LED module, integrated thermal feedback loop will gradually reduce current to protect system life. Driver is universal 120V-277V. Optional Lutron Series A driver is also available.

DIMMING:

Comes standard with 0-10V dimming capability. Flicker-free dimming to 10%. 0-10V control may consume up to 1mA. Lutron 2 wire, 3 wire, and EcoSystem dimming available to 1% and DMX with RDM (remote device management) dimming to less than 0.1%.



A Division of Hubbell Lighting, Inc.

TYPE S1 – 1500 Lumens

Type S1A – 1100 Lumens

HOUSING	DRIVER OPTION	HOUSING OPTIONS	TRIM APERTURE	KELVIN	REF. FINISH OPTION	REF. COLOR OPTIONS	TRIM OPTIONS	LENS
☐ LF6SL Standard Lumen 0-10V 10% dimming 120-277V	Standard 0-10V 10% Dimming ☐ DM1 0-10V dimming at 1% ☐ DMT^{14,15} SpectraSync™ Tunable White ☐ DMTW¹⁶ SpectraSync™ Tunable Dim to Warm VOLTAGE OPTION Standard 120V-277V ☐ 347 347V	☐ EMR² Emergency Battery Pack with remote test switch and indicator light ☐ CP^{2,3,4,5,15,17} Chicago Plenum ☐ LV¹² Lutron Vive Enabled, 0-10V, 120-277V ☐ NXWE^{3,15,18,19} NX Wireless Enabled ☐ NXE^{3,15,18,19} NX Enabled, Dual SmartPorts	☐ 6LFSL Semi-Diffuse Clear Alzak OUTPUT ☐ 11L 1100 Lumen Module ☐ 15L 1500 Lumen Module ☐ 20L¹⁷ 2000 Lumen Module	☐ 30K 3000 Kelvin, 90 CRI ☐ 35K 3500 Kelvin, 90 CRI ☐ 40K 4000 Kelvin, 90 CRI ☐ 2230TD 2200K-3000K SpectraSync™ Dim to Warm ☐ 2750T 2700K-5000K SpectraSync™ Tunable White ☐ 2765T 2700K-6500K SpectraSync™ Tunable White	☐ SP Specular ☐ SS Semi-Specular ☐ MFC American Matte™ ☐ V Kurt Versen Specular ☐ VS Kurt Versen Softglow® ☐ VSS Kurt Versen SoftSheen™	Standard Clear Alzak ☐ CG Champagne Gold Alzak ☐ GD Gold Alzak ☐ BL Black Alzak ☐ WE Wheat Alzak ☐ LW Light Wheat Alzak ☐ PW Pewter Alzak ☐ WH Painted Matte White Reflector and Flange ☐ BC Painted Black Reflector and Flange	☐ WT Painted White Flange Only ☐ TRG Trim Ring Gasket ☐ WF¹⁰ Wide Flange ☐ BNCT^{9,13} Black Non-conductive Trim ☐ WNCT^{9,13} White Non-conductive Trim ☐ BNCTB^{9,13} Black Non-conductive Trim Baffled ☐ WNCTB^{9,13} White Non-conductive Trim Baffled	☐ CL⁸ Clear Lens (Regressed Standard) ☐ DL⁸ Diffuse Lens (Regressed Standard)

TYPE S2**DIMENSIONS**

Height: 12-1/4"

Diameter: 6"

Projection: 8-7/8"

HOUSING:

Seamless heavy gauge extruded aluminum cylinder body with durable powder coat paint finish and die cast aluminum canopy arm (wall mount) in a variety of architectural colors including Prescolite's exclusive Zet, metallic silver.

REFLECTOR:

High purity spun aluminum self-flanged reflector with iridescence suppressed Alzak semi-diffuse anodized (standard) or optional white or black painted finish.

LED LIGHT ENGINE:

The LCC6LED light engines apply mid power Nichia LEDs, specifically mixed to provide a minimum of 80 CRI with 3 SDCM color consistency. The use of multiple mid power LEDs allows for optimal thermal management by effectively spreading the heat over a larger area, eliminating hot spots. A diffuse yet highly transmissive lens obscures the view of the LEDs and creates a smooth, even look from below.

The light engine is available in multiple lumen packages and Kelvin temperatures to accommodate any design requirement. The system is designed to provide optimal life and lumen maintenance (50,000 hrs at 70% lumen maintenance). The reflector/light engine assembly features a twist-and-lock installation and is mechanically retained with a safety cable for ease of maintenance.

LED DRIVER:

The LCC6LED is offered standard with a 25-watt constant current Osram LED driver with 0-10V flicker free dimming to 10%. Other driver options are available including Osram LED 0-10V dimming to 1% (DM1), Lutron EcoSystem to 1% (EDM), or Lutron 2-wire Leading Edge dimming to 1% (120V only). All options are Class 2 compliant, have inherent short-circuit and overload protection, and meet UL 8750 with a 50,000 hour minimum anticipated life.

CYLINDER	MOUNTING	OUTPUT	LED COLOR TEMP	CRI	VOLTAGE	OPTIONS	BEAM	REFLECTOR FINISH	REFLECTOR COLOR	CYLINDER COLOR
☐ LCC6LED 6" LED Cylinder	☐ P Pendant (18" standard)	☐ 10L 1000 Delivered Lumens	☐ 27K 2700 Kelvin	☐ 8 80+ CRI	☐ Blank 120-277 Volt	☐ Blank Standard 0-10V dimming to 10%	☐ WFL45 45 Degree Cutoff	☐ Blank Clear Alzak	☐ BC Painted Black Cone	☐ BA Brushed Aluminum
	☐ S Surface	☐ 14L 1400 Delivered Lumens	☐ 30K 3000 Kelvin		☐ 120V 120V (for 2DM)	☐ EDM Hi-Lume 1% EcoSystem LED Driver	☐ WW Wall Wash		☐ WC Painted White Cone	☐ BZ Bronze
	☐ CM1.2 Cord Mount	☐ 18L 1800 Delivered Lumens	☐ 35K 3500 Kelvin			☐ 2DM Hi-Lume 1% 2-wire LED Driver (120V only)				☐ BL Matte Black
	☐ W Wall Mount		☐ 40K 4000 Kelvin			☐ DM1 Osram dimming to 1% 0-10V				☐ WH Matte White
			☐ 50K 5000 Kelvin							☐ Z Zet

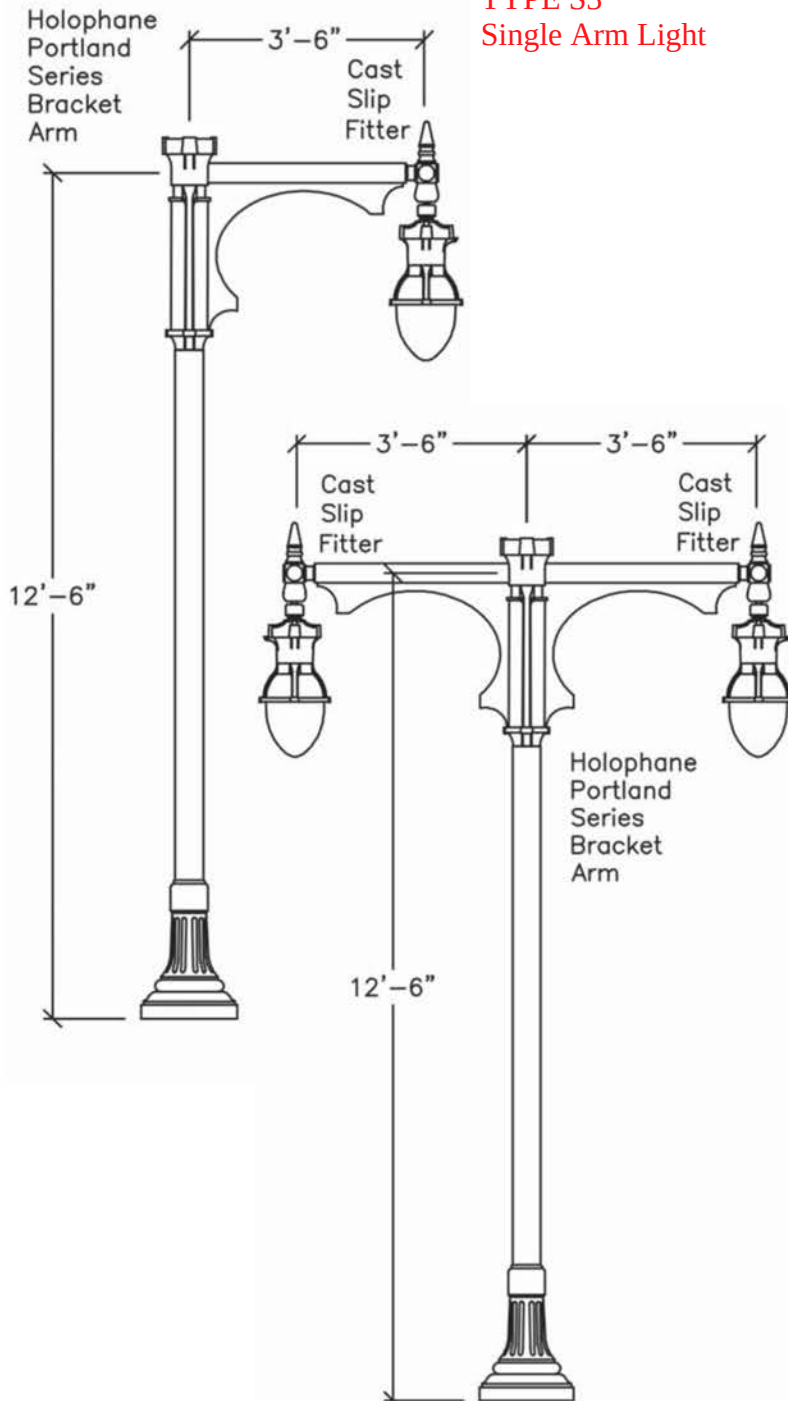
 **prescolite**
A Division of Hubbell Lighting, Inc.



PORTLAND | me

Street & Sidewalk Lighting DECORATIVE LIGHT - DOWNTOWN

TYPE S3 Single Arm Light



LUMINAIRE

Holophane Esplanade LED II
Model:
ESL2-P20S-30K-AS-CMC-TG3-S-P7-NL2X2-BHDF13-200CMC

Cast aluminum housing with stainless steel hardware. Dropped refractor shall be thermal resistant borosilicate glass. Internal reflector and prismatic diffuser shall provide an IES Type IV distribution pattern. Luminaire shall include an integral ballast with modular wiring connectors and multi-voltage taps. Provide an internal receptacle type photocell control. LED 3000K color temperature

BRACKET ARM

Holophane Portland Series (custom)
Model PD42CA-RAL6012

Portland Series steel crossarm with a post-top fitting for a 3-1/2" by 8" tenon.

SLIP FITTER

Holophane
Model :WLLF200SCA-RAL6012
2-3/8" O.D. with swivel cast fitter.

LIGHTING POLE AND BASE

Holophane North Yorkshire Cast Steel
Model NY-S-13-FTB-P13-ABG-RAL6012

Cast steel pole, smooth 5" diameter shaft with integrated base rated for a 90mph wind load with a 1.3 gust factor. Provide four hot-dipped galvanized steel L-type anchor bolts. Lighting pole shall be hot dip galvanized prior to powder coat paint.

DIMENSIONS

Overall Height = 12' 6"
Bracket Arm Length = 3' 6"
Base Diameter = 17"

FINISH

Dark Green: RAL-6012 (custom)

APPLICATION

Sidewalk lighting or pedestrian lighting areas

Spacing:
One side: 60' - 80' on center
Alternating sides: 100' - 175' on center

Single-arm fixture placed in furnishing zone with luminaire oriented over sidewalk. Double-arm fixture placed with bracket arms parallel to sidewalk. If sidewalk space is limited, Planning Authority may approve lights within private property or attached to building.

Date:
March, 2019

CITY OF PORTLAND, MAINE
TECHNICAL MANUAL

MUNICIPAL STREET
LIGHTING STANDARDS
SECTION 10

Figure:

X-5B

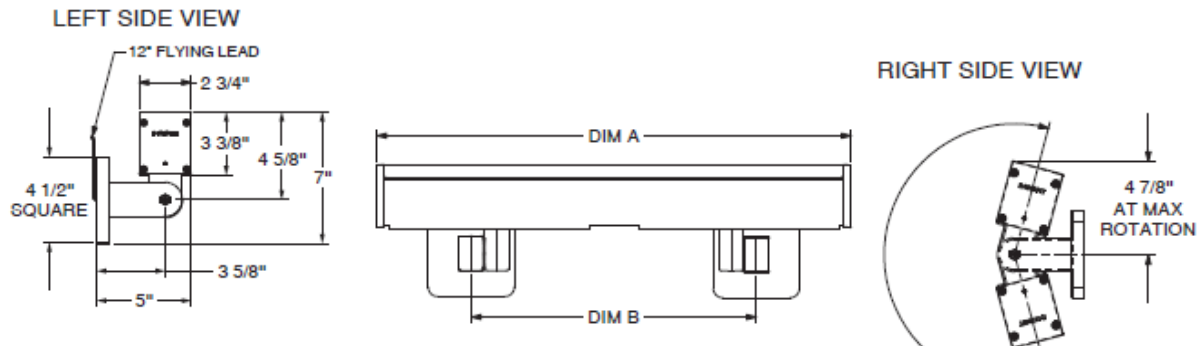
Revised Date:

DOWNTOWN PED 1

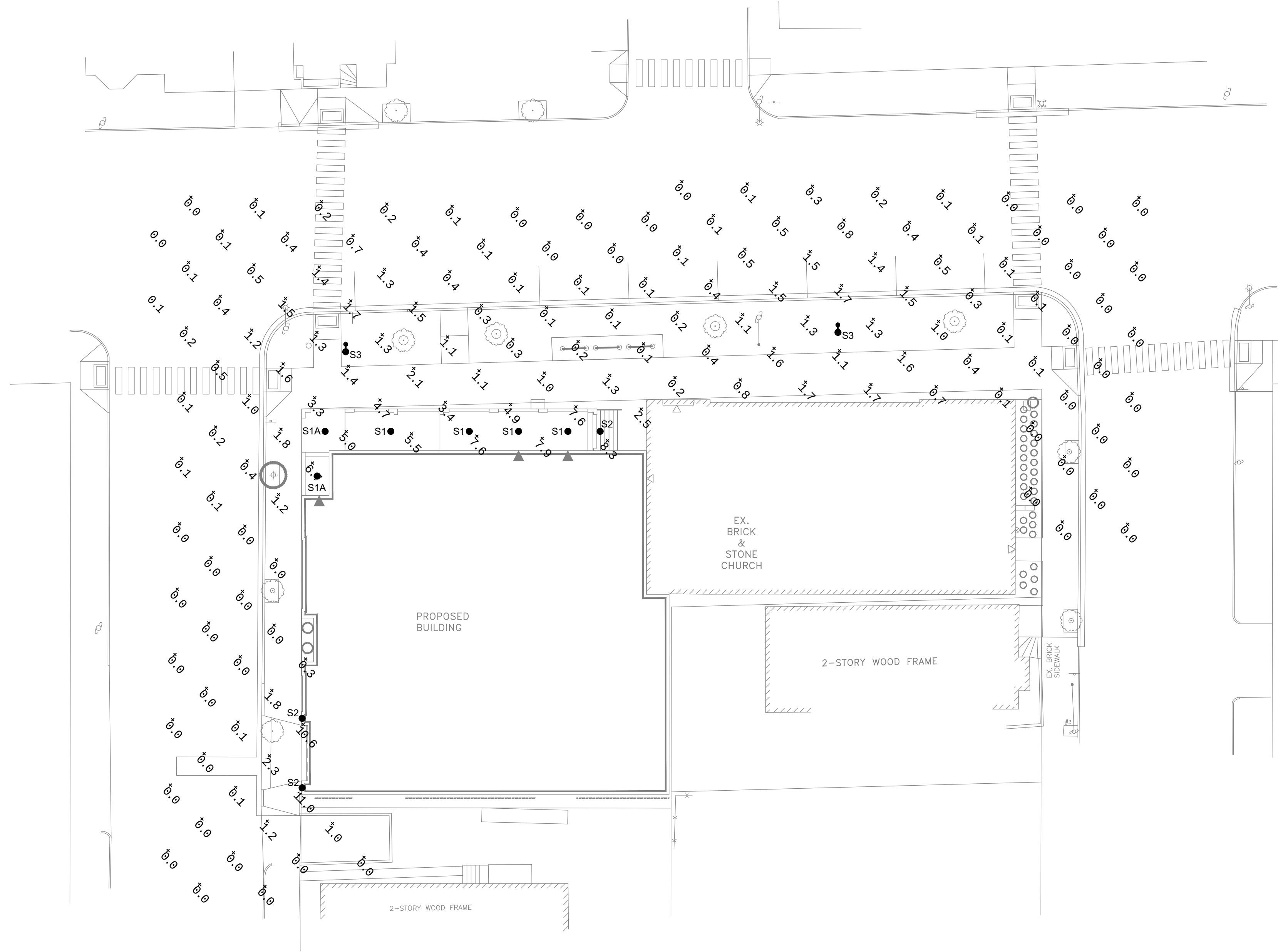
TYPE S4



LENGTHS TO BE DETERMINED BY LOCATION



PREFIX	WATTAGE W / FT	LED COLOR	OPTICS	MOUNTING	FIXTURE LENGTH	VOLTAGE/ WIRING METHOD	CONTROL OPTIONS	FINISH	
MVWII	RGB - TRI-CHROMATIC			CONCEALED WIRE MOUNTING OPTIONS (12" - 48" FIXTURES)			DMXFX = DMX Control Fixture Resolution	TW = Textured White	
MEDLEY VIEW II SERIES	6	RGB	100° = 100°X100°	SMSCW = Surface Mount	12" 24" 36" 48"	INT1 = 120V Integral power supply	DMXFT = DMX Control Foot By Foot Resolution Not available with 6W RGB or 12W RGB+W DMXSY = DMX Control System Resolution	TBL = Textured Black	
	9	RGB	12° = 12°X60° 20° = 20°X60° 45° = 45°X60° 100° = 100°X100°	EASCW-X = Extended Arm X = Arm Length		INT2 = 277V Integral power supply		TBR = Textured Bronze	
	6W RGB: fixture control only			CDSCW = Conduit Mount		Load not to exceed 16 amps.		TLB = Textured Light Bronze	
	RGB - DISCREET			EXPOSED WIRE MOUNTING OPTIONS (24" - 48" FIXTURES)				DMX controls are required. Order separately.	TN = Textured Natural
	17	RGBd	7° = 7° X 60° 15° = 15°X60° 30° = 30° X 60° 45° = 45° X 60° 60° = 60° X 60° 100° = 100°X100°	SMS = Surface Mount SMSS = Surface Side Mount FMS = Fixed	24" 36" 48"	INT1 = 120V Integral power supply INT2 = 277V Integral power supply		Contact factory for Insights wireless option.	TS = Textured Sandstone
RGB+W - TRI-CHROMATIC			FMSS = Fixed Side Mount		ACV1 = 120V feed thru wiring for plug and play connection for multiple fixture runs ^③		CC = Custom Color ^②		
12	RGB+W	100° = 100°X100°	EAS-X = Extended Arm X = Arm Length		ACV2 = 277V feed thru wiring for plug and play connection for multiple fixture runs ^③				
RGB + W: RGB (tri-chromatic) plus 4000K (fixture control only)			EXA-S-X = Extended Arm Side Mount X = Arm Length						
RGBW - DISCREET			CDS = Conduit Mount		③ ACV1 & ACV2 require a Leader Cable at the beginning of a fixture run. See below.				
17	RGBWd	7° = 7° X 60° 15° = 15°X60° 30° = 30° X 60° 45° = 45° X 60° 60° = 60° X 60° 100° = 100°X100°							
LPT	DMX PROGRAMMING TOOL: One LPT is required for field re-addressing of factory DMX settings.								
CDS-A	DMX DISTRIBUTION KIT ONLY (4 OUTPUTS): CDS-A consists of four outputs. Each output accommodates up to 32 fixtures in INT/REM wiring methods and unlimited fixtures in method. Four terminators are included for use as required.								



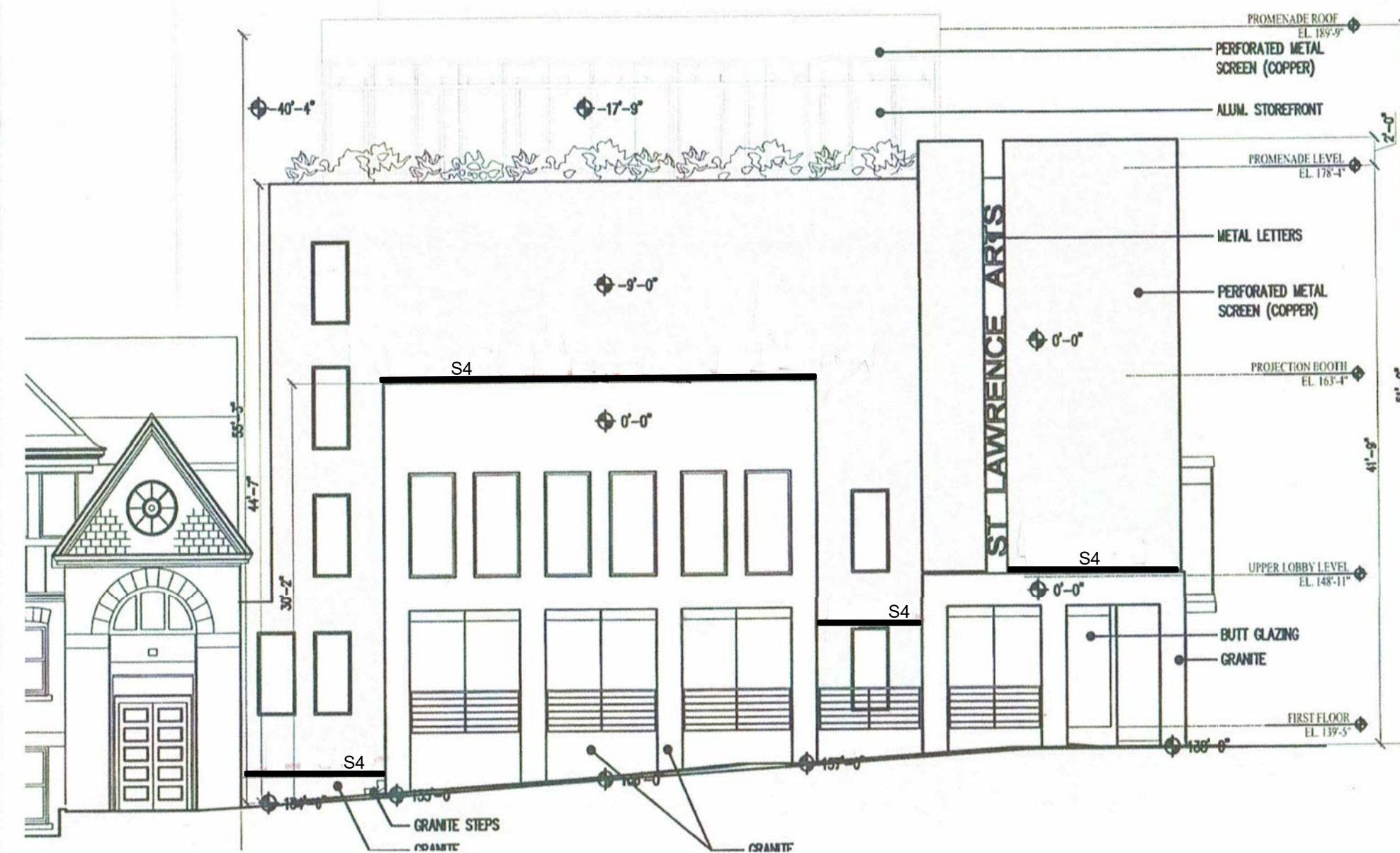
1 | SITE LIGHTING CALCULATION PLAN

1/16" = 1'-0"

0 8'-0" 16'-0" 32'-0"

INITIAL HORIZONTAL ILLUMINANCE IN FOOTCANDLES INDICATED AT GRADE.

CONTRIBUTION FROM EXISTING STREET LIGHTS ALONG CONGRESS STREET IS NOT INCLUDED.

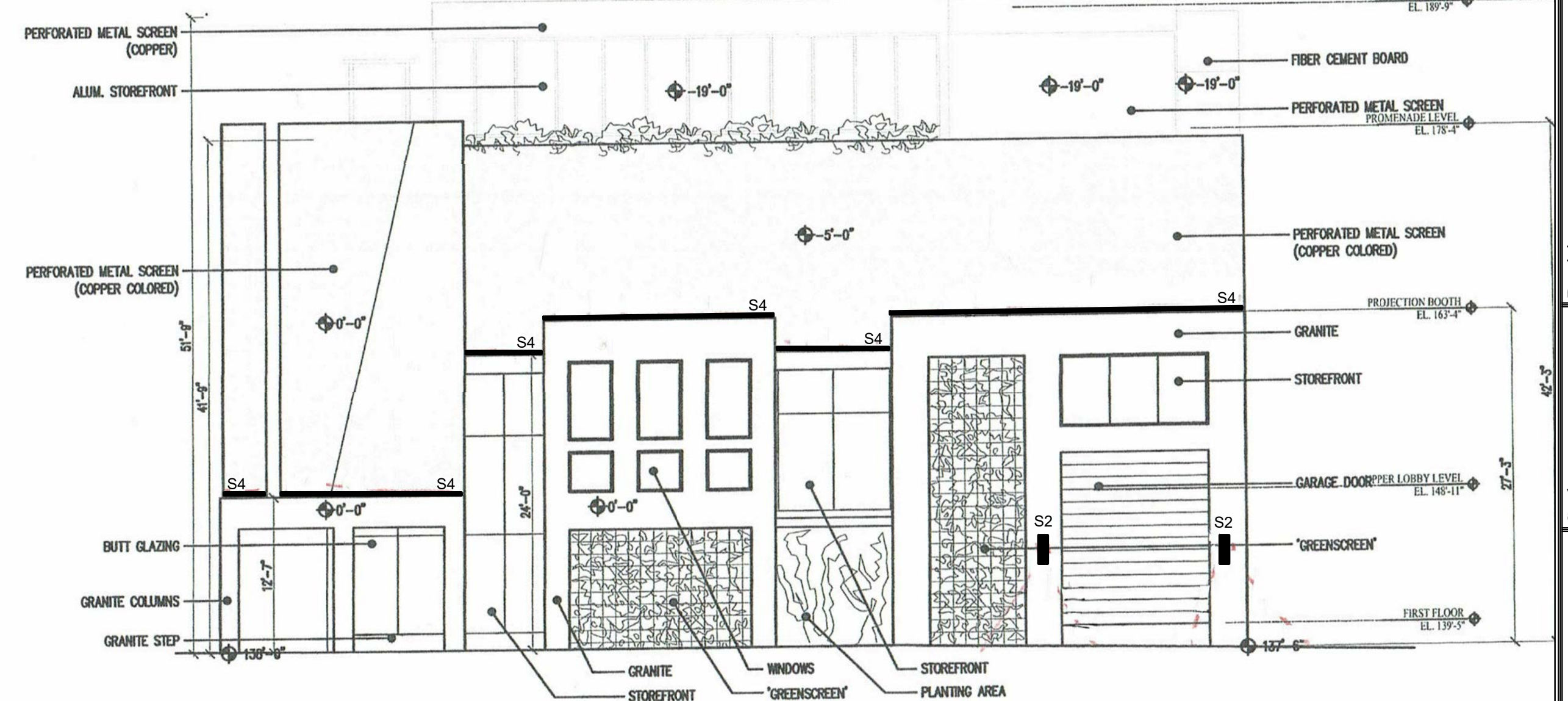


3 | CONGRESS STREET ELEVATION

NOT TO SCALE

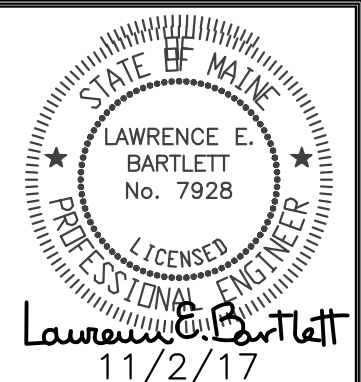
TYPE S2 LIGHTS TO BE INSTALLED AT 8'-0" ABOVE GRADE.

TYPE S4 LIGHTS ARE TO BE INSTALLED BEHIND DECORATIVE PERFORATED METAL PANEL SYSTEM. CONTRIBUTION FROM TYPE S4 LIGHTS IS NOT INCLUDED IN ILLUMINANCE CALCULATION BECAUSE THEY WILL NOT PROVIDE ANY SIGNIFICANT ILLUMINANCE AT GRADE.



2 | MUNJOY STREET ELEVATION

NOT TO SCALE



Owner:
FRIENDS OF THE
ST. LAWRENCE CHURCH
76 CONGRESS STREET
PORTLAND, MAINE 04101

Consulting Engineer:
Bartlett Design
LIGHTING & ELECTRICAL ENGINEERING
5 PALMER STREET, BATH, ME 04630
TEL (207) 443-3447

Architect:
ARCHETYPE
architects
48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

Project:
ST. LAWRENCE ARTS
ADDITION
76 CONGRESS STREET
PORTLAND, MAINE 04101

Revisions:

Date: 02 Nov. 2017
Scale: AS NOTED
SITE LIGHTING
CALCULATION PLAN

E0.01

**St. Lawrence Arts Center Addition
76 Congress Street
Parcel ID: 003-L-001
Project ID: 2016-265**

Summary of Existing and/or Proposed Easements or Covenants

Two licenses are proposed, both from the City of Portland to Friends of the St. Lawrence Church: for the Thompson Memorial granite plaque to be installed in the brick sidewalk near its original location, and one for building footings. A temporary easement is proposed for construction, also from the City of Portland to the Friends of St. Lawrence Church. A public pedestrian easement has been added where the brick sidewalk extends on to the subject parcel. A draft footing license and a draft sidewalk easement have been included with this submittal.

[Semi-Permanent License] LICENSE AGREEMENT

This License Agreement ("Agreement") is entered into as of the ____ day of _____, 2022, between the **City of Portland**, a body public and corporate with a mailing address of 389 Congress Street, Portland, Maine 04101 (the "**City**" or "**Licensor**"), and **Friends of the St. Lawrence Church**, a Maine nonprofit corporation with a mailing address of 76 Congress Street, Portland, Maine 04101 (the "**Licensee**"), who hereby agree as follows:

FOR VALUABLE CONSIDERATION, the receipt and sufficiency of which is hereby acknowledged, a revocable license is hereby granted to Licensee to occupy portions of land owned by the City on Congress Street and Munjoy Street in the City of Portland, Cumberland County, Maine, which property abuts the property of Licensee described in a deed to Licensee recorded in the Cumberland County Registry of Deeds in Book 13333, Page 9 (the "**Licensee's Property**"), for the purpose of permitting the encroachment of the concrete foundation footings within the area described in **Exhibit A** attached hereto and as depicted on **Exhibit B** attached hereto, both of which are incorporated and made a part hereof (the "**Licensed Areas**"), together with the right from time to time to bring upon the Licensed Areas and areas adjacent thereto workers, materials and machinery necessary for the use and enjoyment of the License granted herein, all in connection with the development of Licensee's project being developed on the Licensee's Property (the "**Project**"). Occupancy of the Licensed Areas is subject to the following conditions:

1. All work performed upon and use of the Licensed Areas for the purposes set forth herein shall be at Licensee's sole cost and expense (unless otherwise agreed in writing), the parties acknowledging that there may be temporary interruptions in enjoyment of the City's property adjacent to the Licensed Areas related to the conduct of any work related to this License. Licensee agrees at its sole expense to restore any portion of the Licensed Areas and adjacent City property damaged by work conducted by Licensee related to this License to substantially its condition prior to such work, or as shown on the Site Plan (as defined below) for the Project, or as close to that condition as is reasonably practicable. Licensee, its successors and assigns, shall defend, indemnify and hold the City, its officers, agents, and employees harmless from any and all claims, including but not limited to claims for damage to City property and reasonable attorney's fees, which arise out of Licensee's use, or the use of others, of the City's property as described above.

2. At all times during the Term of this License Agreement, Licensee, its agents and assigns, shall exclusively be responsible for repairing, keeping and maintaining the Licensed Areas in a safe condition generally, by, among other things: ensuring prompt removal of, or otherwise eliminating snow and ice from all encroachments and in a manner that does not endanger pedestrians; preventing, by design and rules and supervision, objects stored or otherwise present on the encroachments from falling or being dropped or thrown onto the City's sidewalk; repairing, replacing or removing all encroachments as necessary for public safety; taking any and all other measures necessary to protect pedestrians in the sidewalk from injury or other harm arising out of the presence of the encroachments.

3. Licensee shall procure and maintain liability insurance in an amount of at least _____ (\$_____) combined single limit (or the amount stated in the Maine Tort Claims Act as the same may be amended from time to time), covering claims for bodily

injury, death and property damage and shall either name the City of Portland as an additional insured with respect to such coverage or shall obtain a contractual liability endorsement covering the obligations of Licensee under the terms of this license. Licensee shall provide City with evidence of such insurance coverage and shall obtain an endorsement providing City with no less than ten (10) days' notice prior to non-renewal or cancellation thereof. Such notice shall be sent to City of Portland, Corporation Counsel, 389 Congress Street, Portland, ME 04101. Failure of Licensee to procure or maintain such insurance coverage shall be an Event of Revocation as set forth in Section 4 below.

4. Subject to the provisions of Sections 5 and 6 hereof, this Agreement may be revoked six (6) months after receipt by the Licensee of written notice that an Event of Revocation has occurred, identifying such Event of Revocation, provided that such Event of Revocation is not cured within six (6) months after receipt of such notice by Licensee except as set forth in clause 3) below. "Event of Revocation" shall mean: 1) the building shown on the Site Plan fails to be constructed substantially in accordance with the Site Plan or any amendments thereto; 2) the building as shown on the Site Plan is destroyed, removed or otherwise thereafter ceases to exist on Licensee's Property and construction to rebuild said building has not begun within twelve (12) months of said destruction or removal, or 3) failure to maintain insurance as required under Section 2 above, and such failure is not remedied within thirty (30) days after written notice thereof. City acknowledges that Licensee may amend this Agreement, upon the written approval of the City, for the purpose of correcting and/or revising Exhibit A, to more accurately show the encroachments described above that are being licensed under this Agreement.

5. Any notice of an Event of Revocation delivered pursuant to Section 4 of this Agreement must be sent by certified mail, return receipt requested to the Licensee at the address for Licensee set forth above, or at such other address as the Licensee may provide to the City in writing from time to time. Copies of any notices sent to Licensee shall also be sent to:

Friends of the St. Lawrence Church
76 Congress Street
Portland, Maine 04101

With a copy to:
Drummond & Drummond, LLP
Attn: Matthew Simone, Esq.
One Monument Way
Portland, Maine 04101

6. Notwithstanding any other provision herein, in the event that a notice of an Event of Revocation is delivered pursuant to Section 4 hereof, any mortgagee of Licensee's Property shall be entitled to cure the matter set forth in such notice within the time frames set forth in Section 4 hereof, and the City agrees to accept such performance by any such mortgagee of Licensee's obligations hereunder.

IN WITNESS WHEREOF, the City of Portland has caused this instrument to be executed by _____, its _____ thereunto duly authorized as of the _____ day of _____, 2022.

City of Portland

By: _____

Name: _____

Title: _____

STATE OF MAINE
COUNTY OF CUMBERLAND

_____, 2022

Then personally appeared the above-named _____, in his/her/its capacity as _____ of the Friends of St. Lawrence Church and acknowledged the foregoing to his/her/its free act and deed in said capacity and the free act and deed of said entity.

Before me, _____

Notary Public/Attorney at Law

Printed Name: _____

Commission Expires: _____

Exhibit A

A certain lot or parcel of land situated on the southeasterly side of Congress street and the northeasterly side of Munjoy Street in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Beginning at a point at the intersection of the southeasterly sideline of Congress Street with the northeasterly sideline of Munjoy Street;

THENCE, S 46°54'30" E along the northeasterly sideline of said Munjoy Street 86.27 feet to land now or formerly of Mary B. and Theodore E. McHugh as described in deed book 11177, page 339;

THENCE, S 43°05'30" W into said Munjoy Street right of way 2.00 feet to a point;

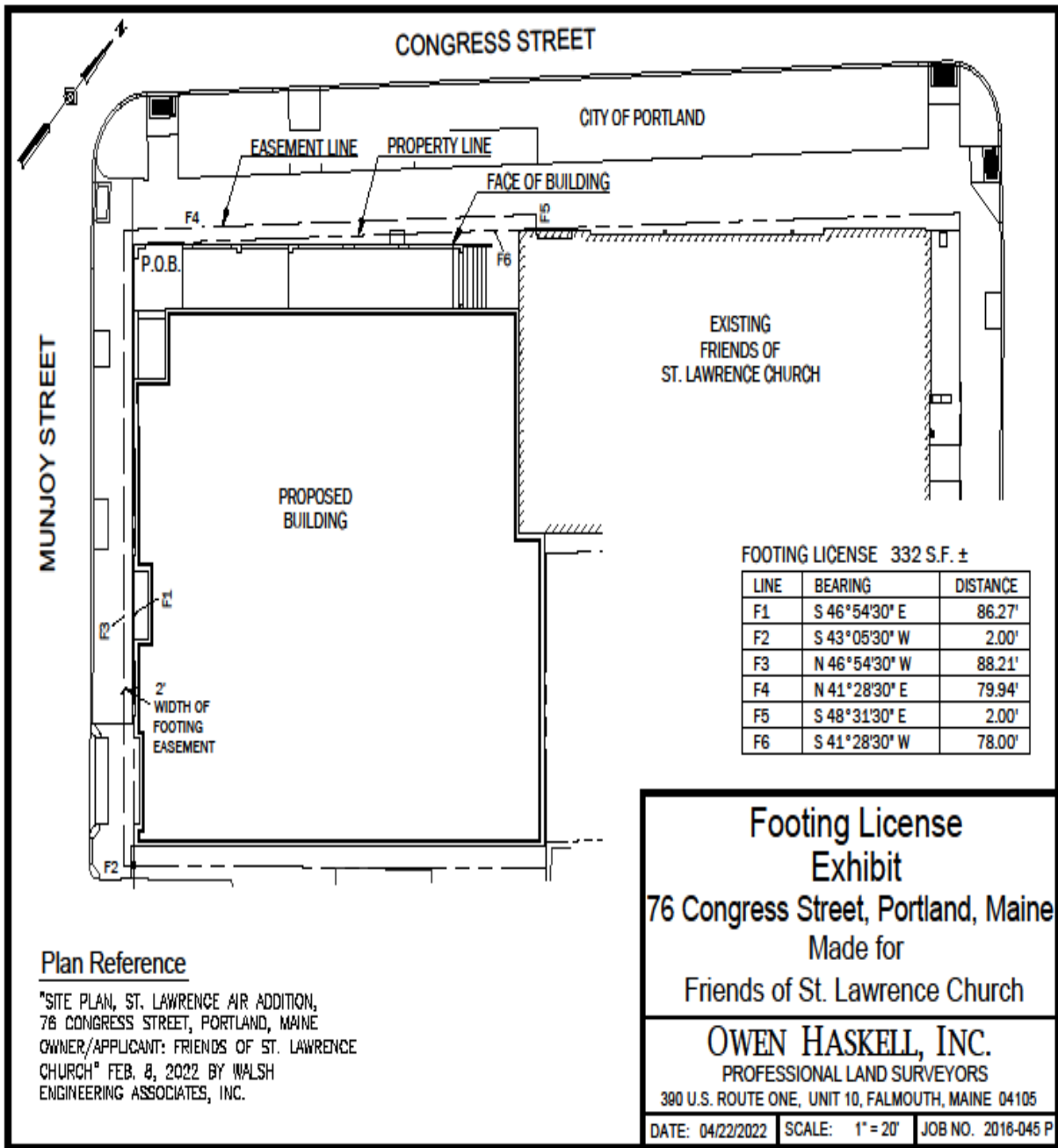
THENCE, N 46°54'30" W through said Munjoy Street right of way 88.21 feet to a point within the Congress Street right of way;

THENCE, N 41°28'30" E through said Congress Street right of way 79.94 feet to a point;

THENCE, S 48°31'30" E through said Congress Street right of way 2.00 feet to a point on the southeasterly sideline of Congress Street;

THENCE, S 41°28'30" W along the southeasterly sideline of said Congress Street 78.00 feet to the northeasterly sideline of said Munjoy Street and the point of beginning containing 332 square feet more or less.

Exhibit B





**St. Lawrence Arts Center Addition
76 Congress Street
Parcel ID: 003-L-001
Project ID: 2016-265**

Summary of Existing and/or Proposed Easements or Covenants

Two licenses are proposed, both from the City of Portland to Friends of the St. Lawrence Church: for the Thompson Memorial granite plaque to be installed in the brick sidewalk near its original location, and one for building footings. A temporary easement is proposed for construction, also from the City of Portland to the Friends of St. Lawrence Church. A public pedestrian easement has been added where the brick sidewalk extends on to the subject parcel. A draft footing license and a draft sidewalk easement have been included with this submittal.

**SIDEWALK EASEMENT
TO THE
CITY OF PORTLAND**

KNOW ALL PERSONS BY THESE PRESENTS that **Friends of the St. Lawrence Church**, a Maine nonprofit corporation with a mailing address of 76 Congress Street, Portland, Maine 04101 (the “**Grantor**”), for one dollar and other good and valuable consideration paid by the **City of Portland**, a body public and corporate with a mailing address of 389 Congress Street, Portland, Maine 04101 (the “**Grantee**”), does hereby grant to the said CITY OF PORTLAND the perpetual easements and rights described below on the land described below.

The purpose of said easement is to grant Grantee the right, but not the obligation, to construct, maintain, repair and replace a sidewalk in, on, under and over the portions of that certain parcel of land of Grantor as described in **Exhibit A** (the “**Easement Area**”) and as depicted on **Exhibit B**, said sidewalk to be used by the public for pedestrian, bicycle and similar non-motorized (other than wheelchair and emergency vehicles and snow removal equipment, which shall be permitted) pedestrian recreational uses, subject, however, to such rules or ordinances that Grantee may adopt from time to time in the interests of public safety. Notwithstanding anything contrary in this Easement, it shall be the responsibility of the Grantor, and not the Grantee, to remove snow and ice from said sidewalk and to otherwise comply with all laws, rules, regulations, and ordinances governing the removal of snow and ice.

Grantor further covenants and agrees for itself, its successors and assigns, that the land that lies in the Easement Area shall, except for the construction, maintenance, repair, or replacement of the sidewalk and any appurtenances by Grantee, its successors and assigns, shall, as provided and permitted herein, be maintained as a sidewalk for the uses set forth and described herein and Grantor shall not use or permit any use that would be contrary to such condition.

Grantor RESERVES the right, but not the obligation, to construct, maintain, repair and replace a plaque in, on under and over the portions of the Easement Area as described in **Exhibit C** (the “**Plaque Area**”) and as depicted on **Exhibit D**, subject to such rules or ordinances that Grantee may adopt from time to time in the interests of public safety. Notwithstanding anything contrary in this Easement, it shall be the responsibility of the Grantor, not the Grantee, to remove snow and ice from said Plaque Area and to otherwise comply with all laws, rules, regulations, and ordinances governing the removal of snow and ice.

To have and to hold the said Easement and all rights granted hereunder to the said Grantee and its successors and assigns forever.

[Signature Page Follows]

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed by _____, its _____ thereunto duly authorized as of the _____ day of _____, 2022.

Friends of St. Lawrence Church

By: _____
Name: _____
Title: _____

STATE OF MAINE
COUNTY OF CUMBERLAND

_____, 2022

Then personally appeared the above-named _____, in his/her/its capacity as _____ of the Friends of St. Lawrence Church and acknowledged the foregoing to his/her/its free act and deed in said capacity and the free act and deed of said entity.

Before me, _____
Notary Public/Attorney at Law
Printed Name: _____
Commission Expires: _____

Exhibit A

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

Beginning at a point on the northeasterly sideline of Munjoy Street at the southeasterly sideline of Congress Street;

Thence, S 46°59'00" E through land of the Grantor 83.48 feet to a point;

Thence, S 43°05'30" W through land of the Grantor 0.13 feet to the northeasterly sideline of said Munjoy Street;

Thence, N 46°54'30" W along the northeasterly sideline of said Munjoy Street 83.48 feet to the southeasterly sideline of said Congress Street and the point of beginning, containing 5.4 square feet more or less.

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

Beginning at a point on the northeasterly sideline of Munjoy Street at the southeasterly sideline of Congress Street;

Thence, N 41°28'30" E along the southeasterly sideline of said Congress Street 160.20 feet to the northwesterly sideline of Beckett Street;

Thence, S 46°54'41" E along the northwesterly sideline of said Beckett Street 2.25 feet;

Thence, S 42°58'23" W through land of the Grantor 85.55 feet to the corner of the existing brick and stone church;

Thence, S 47°00'00" E along the face of said church 1.98 feet;

Thence, S 43°00'00" W through land of the Grantor 74.59 feet to the northeasterly sideline of said Munjoy Street and the point of beginning, containing 170.5 square feet more or less.

Exhibit B

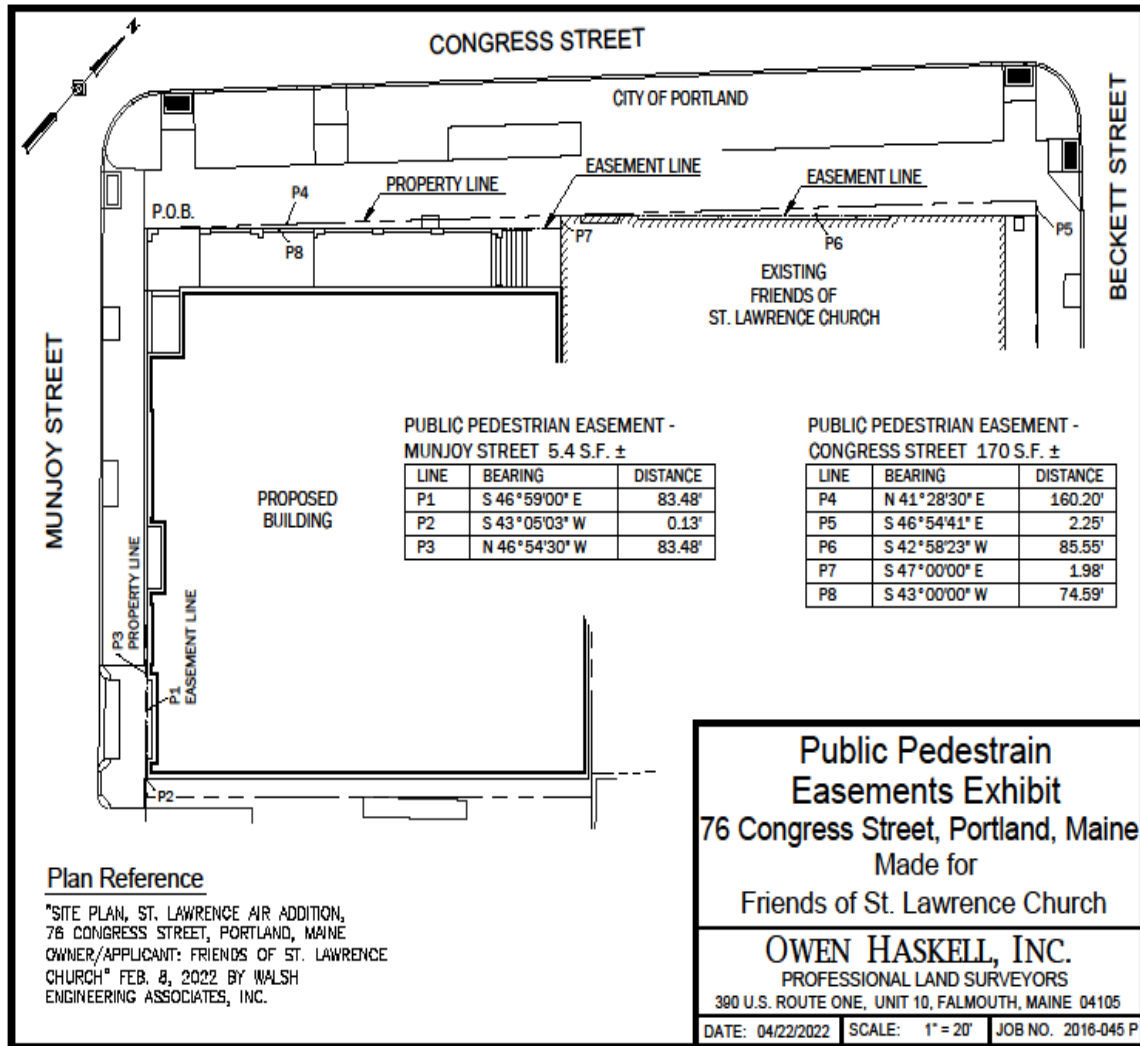


Exhibit C

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

Commencing at a point at the intersection of the southeasterly sideline of Congress Street with the northeasterly sideline of Munjoy Street;

THENCE, N 41°28'30" E along the southeasterly sideline of said Congress Street 49.00 feet to the point of beginning;

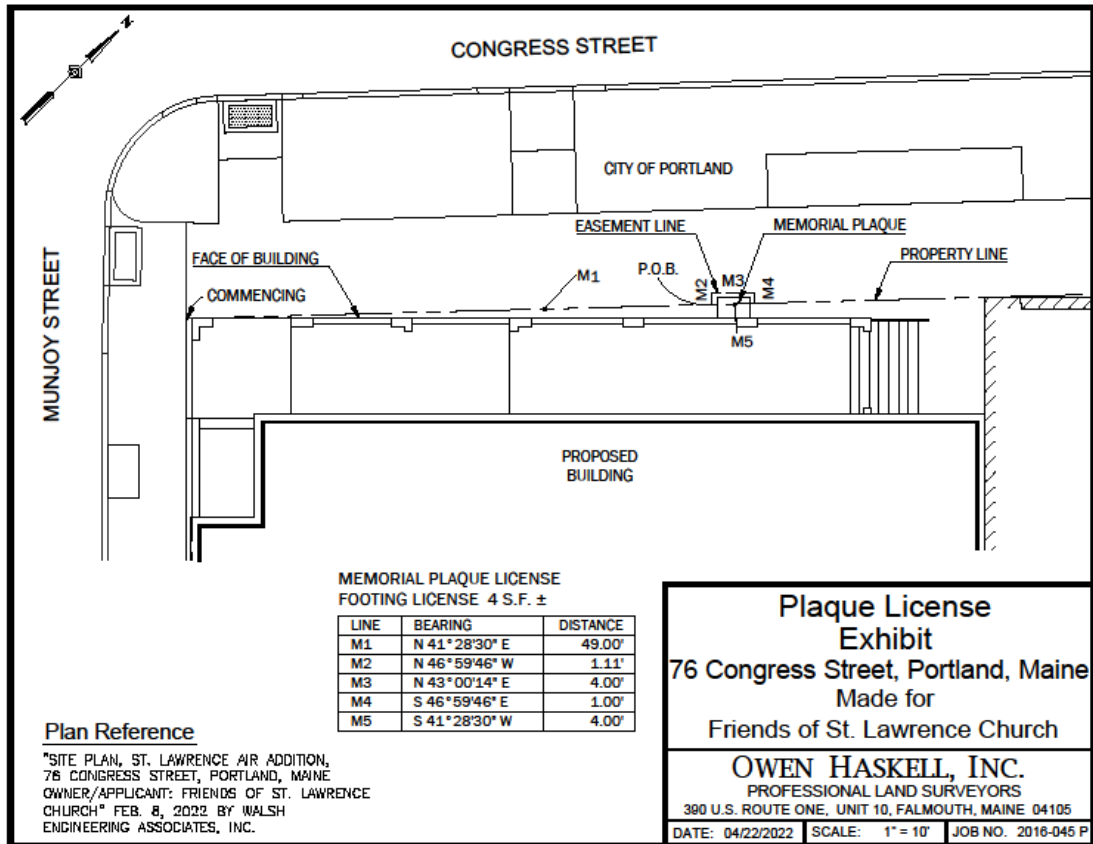
THENCE from said point of beginning, N 46°59'46" W into said Congress Street right of way 1.11 feet to a point;

THENCE, N 43°00'14" E through said Congress Street right of way 4.00 feet to a point;

THENCE, S 46°59'46" E through said Congress Street right of way 1.00 foot to the southeasterly sideline of said Congress Street;

THENCE, S 41°28'30" W along the southeasterly sideline of said Congress Street 4.00 feet to the point of beginning, containing 4 square feet more or less.

Exhibit D



Standard to be Waived: Cite Ordinance or Technical Manual Standard	Cite Standard Language: Cite specific language of applicable Ordinance or Technical Manual Standard	Waiver Being Sought: Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	Justification for Waiver: Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Technical Manual Standard, Section 1.7.2.7	Requires that along arterials, collectors, and local streets, minimum acceptable spacing between driveways shall be 100-150 feet, depending on speed limit.	Seeking to allow the driveway cut on Munjoy Street approximately 5.5 feet from the adjacent driveway to the south, as shown on plans.	Extraordinary conditions exist or undue hardship may result with strict compliance with the Technical Manual Standard (Section 1.7.2.7).



April 14, 2022

Helen Donaldson
City of Portland Planning Department
389 Congress Street
Portland, Maine 04101

BOARD OF DIRECTORS

Guy Gaudette, CPA
PRESIDENT
Glenn Morin, CPA
TREASURER/SECRETARY

Christopher Akerlind
Peter Bass
Frank H. Bishop, Jr., Esq.
Nan Cumming
Bruce Hyman, AICP
Jamie Isaacson
A. Robert Ruesch, Esq.
William Umbel

Deirdre Nice
EXECUTIVE DIRECTOR
Julia Kirby
DEVELOPMENT DIRECTOR
Gerry Shannon
THEATER MANAGER

Dear Ms. Donaldson and Members of the City of Portland Planning Board,

Friends of St. Lawrence Church (FSLC) is seeking site plan approval to build a 401-seat Performance Arts Theater on the site of the original, historic sanctuary. This approval was obtained in 2017 with a subsequent three-year extension that expired in 2020. In 2017 the or

ty for the application
plan approval would

generate interest in the project among Portland's funding community, which was successful. I capacity, a third of the
project funding is committed.

Brief history

By the 1980s, the St. Lawrence Church, a nineteenth-century, stone building had been abandoned by the congregation and was deteriorating rapidly. This empty, derelict building occupying an entire city block on Congress Street, a major city thoroughfare, accelerated the slow decline of the neighborhood that began in the 1970s. By the 1990s this neighborhood, situated on the East End of the Portland Peninsula, was known for high crime, poverty, and absentee landlords. FSLC rehabilitated an entire half of the deteriorating St. Lawrence Church and opened St. Lawrence Arts (SLA), a small community arts center and 100-seat theater in 2001. The organization did not have funding upon commencement of this project or a dedicated income stream during renovation.

FSLC had a strong, grass roots level of support and a vision to bring art and culture to Munjoy Hill, a part of Portland that was struggling economically.

The organization has been operating successfully since its inception, bringing a wide range of performing arts to Munjoy Hill, serving this neighborhood, the City of Portland, as well as dozens of theater companies, performance arts groups musicians, and artists. Furthermore, as another grueling test of its mettle, SLA just survived a global pandemic and a complete shut down and loss of programming for 18 months from March 2020 – August 2021.

Munjoy Hill Today

The adaptive reuse of the Church as an arts center and its very successful twenty-one years in business has had a profound impact on the revitalization of Munjoy Hill,

76 Congress Street, Portland, Maine 04101
(207) 775-5568 www.stlawrencearts.org

Arts & Culture Neighborhood & Community Historic Preservation

driving development and economic growth. Rehabilitation of this historic building not only created a thriving arts center, but also an environment conducive and inviting for residential and business investment. The neighborhood flourished after the opening of the Parish Hall Theater in 2001. In addition to serving the neighborhood of Munjoy Hill, SLA also serves Portland, Southern Maine and Northern New England by bringing people and performers to the venue on a consistent basis, bringing a steady stream of commerce and vitality to Munjoy Hill. FSLC, after years of planning, preparing, and overcoming challenging obstacles is ready to move forward with its initial goal of bringing a whole St. Lawrence back to the community. This will create even greater economic value and serve the ever growing population of the neighborhood. Growth not only in numbers of people, but also in average median income.

Upon successful completion, FSLC will provide Portland with a mid- sized, community-based venue for the arts that will be an economic engine, a major contributor to the Creative Economy of Portland, and a solid support for the lively community of businesses in the neighborhood. More importantly, the new building will ensure that the nineteenth-century property will remain a part of the historic fabric of the city. Upon its completion, the new Performance Arts Theater will provide a revenue stream that will support the operating expenses of the organization in perpetuity. At present SLA relies on grant funding, donations, and limited earned income from its small, 110-seat theater to successfully carry out its mission. Operating as a vibrant arts center, providing a venue for the arts, and ensuring accessibility and access to all; FSLC will continue to work closely with the community and collaborate with other organizations to ensure the success of the new arts center. The new arts center is at the core of SLA's mission.

History of Sanctuary Project

FSLC has demonstrated savvy and resourceful fundraising capacity since 2006, when the rehabilitation of the sanctuary half of the building began with a \$250,000 Jane's Trust Grant. The project has progressed a long way over the years, surmounting many daunting challenges. FSLC has been able to develop funding streams as opportunities have arisen. The initial response to the unfortunate loss of the original sanctuary in 2008. These plans proposed a 400-seat, state-of-the-art venue for music, dance, and theatrical performances and an exterior in mass and style that exactly recreated the Sanctuary complete with a bell tower, granite façade, gabled roof and the ecclesiastical details that were its hallmark. These plans piqued the interest of many funders, and opened the door for conversation about FSLC's project. An exhaustive feasibility study conducted after receiving the conditional rezoning in 2010 determined that the plans, which carried a \$17M dollar budget, were too expensive and extravagant for the underlying purpose of building an arts center. The study concluded that the project focus and majority of the budget should not be usurped by recreating an old landmark but instead should be tailored to create a dynamic, sustainable arts center and preserve the original building still in existence that today houses the very successful Parish Hall

April 14, 2022
Helen Donaldson
Page 3

Theater. The organization researched recent building projects that are similar in scope, size, and program to the project proposed by FSLC and worked tirelessly with a Portland based \$10 Million.

al plans was selecting an architect who could meet the challenge of designing a building with a reduced budget that complements the existing historic structure. Archetype Architects and Principal David Lloyd was selected to lead the or y restored arts center. The challenge has always been to make the project economically viable. In consultation with interested funders, SLA has developed a more realistic development budget and has received feedback that support of the project will be forthcoming based on more reasonable costs.

Capital Campaign and Budget

In 2021, a donor stepped forward, motivated by both the mission of St. Lawrence Arts and its shovel ready status. This gift brought the organization over a third of the way towards its present project budget of \$13.5M. This gift prompted the organization to enter a quiet phase of a Capital Campaign in December, 2021. At present, SLA is working with the Campaign Toolkit and Campaign Chair, Jamie Isaacson, SLA Board Member, to raise the remaining funds. David Lloyd Architects, Wright-Ryan Construction, and Old Port Advisors are partners with FSLC in this project.

Conclusion

From the purchase of the building in 1993, the formation of the 501(c)3 in 1997, and the opening of the Parish Hall Theater in 2001, dedication to this project has been consistent giving it great momentum and making it successful.

must make a strong case for support, have a clear vision that donors can understand and engage with and demonstrate the impact of the project/program to position itself for funding. For FSLC to succeed with its Capital Campaign, the new Performance Arts Theater must have City approvals.

Sincerely,



Deirdre Nice
Executive and Artistic Director

St. Lawrence Arts Center Addition
76 Congress Street
Parcel ID: 003-L-001
Project ID: 2016-265

Technical Capability

Several outstanding companies have worked collaboratively on this project. Their technical capability is summarized below:

Walsh Engineering Associates (WEA) is the lead on permitting and civil engineering for the proposed project. Founded in 2009 by William R. Walsh, PE, WEA provides expertise in the areas of civil engineering design, environmental compliance and permitting, site planning and design, project management, and construction management to clients throughout New England with their team of licensed engineers.

Archetype Architects has been practicing architecture in the City of Portland for the past 40 years. They have developed a strong presence on the peninsula for creating urban infill projects. Although they work primarily in the housing, hotel and office building arena, they are presently designing a 400-seat theater in Gardner along with the art center. We have a full staff of 12 architects, an interior designer and an office manager.

Bennett Engineering, Inc. is electrical consulting engineer for the project. BEI was founded in 1982 by William S. Bennett, P.E. They specialize in electrical power distribution, telecommunications, and lighting systems. Their experience includes commercial, industrial and institutional projects working with industry, government, architects, owners, design/build teams and other engineers throughout New England.

Mechanical Systems Engineers was founded by Herb Powers, P.E. in 1968 and has provided all stages of mechanical engineering for architectural-based construction projects since that time. In 2004 Kurt Magnusson, P.E. joined the firm as a principal and owner. Kurt has over 30 years' experience in design-build mechanical contracting.

Founded in 1984, **Wright-Ryan Construction** has delivered construction services of the highest professional standard to clients throughout northern New England for nearly forty years. As one of Maine's largest building contractors, Wright-Ryan draws upon its resources to provide clients with peace of mind during their construction project. They have expertise in Construction Management, General Contracting, and Design-Build services for clients throughout the region.

Structural Design Consulting, Inc (SDC) was founded in 1983 with the goal of providing a broad range of structural engineering and design services to New England architects, building owners, municipalities, and industries. SDC provides complete structural engineering services including design of new structures, evaluation of existing structures, failure investigations and construction quality assurance. The primary goal on each project is to provide a timely, accurate and economical structural design that anticipates, and addresses uncertainties related to construction.

March 22, 2023

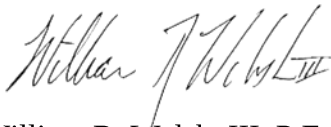
Neighborhood Meeting Certification

I, William R. Walsh, III, P.E., hereby certify that a neighborhood meeting was held on March 8, 2023, via Zoom from 4:00 – 5:00 pm for the proposed project located at 76 Congress Street, Portland, Maine 04101.

I also certify that on February 24, 2023, 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.

Respectfully,



William R. Walsh, III, P.E., LEED AP
Walsh Engineering Associates, Inc.

- Enc. Meeting Summary
 Copy of Meeting Notification
 Meeting Attendee List
 Presented Plans:
- NH-1 – Existing Conditions Neighborhood Plan
 - NH-1 – Proposed Neighborhood Plan
 - C1.1 – Site Plan
 - A0.01 – NW Rendering
 - A1.00 – Basement Plan
 - A1.01 – First Floor Plan
 - A1.02 – Upper Balcony Plan
 - A1.03 – Intermediate Balcony Plan

March 22, 2023

Neighborhood Meeting Summary

St. Lawrence Arts Center
76 Congress Street, Portland, Maine

The neighborhood meeting for the proposed St Lawrence Arts Center (SLA), located at 76 Congress Street, Portland, Maine was held March 8th, 2023, via Zoom from 4:00 – 5:00 pm. Approximately 34 members of the public were in attendance (attendee list attached). Bill Walsh of Walsh Engineering Associates, Inc. (WEA) opened the meeting explaining that the neighborhood meeting is part of the site plan approval process. He also discussed that this project was previously approved by the Planning Board in 2018, and that minor changes to the project have been made for this reapproval. David Lloyd and Virginie Stanley of Archetype Architects then followed up with a discussion of the proposed architectural features and presented renderings of the proposed building. Deirdre Nice from SLA then explained the vision for the facility, and how this project has been developing over the years. Lastly, Julia Kirby from SLA explained how the project would handle parking challenges and spoke to the proposed agreements with the Portland Metro Service. Consultant presentations concluded, and the meeting was then opened to the public for questions. Please see a summary of questions received from the public below:

Mat Zarolinski – Concerned about the parking situation. Resident of Munjoy Hill for over 18 years, skeptical that the project will be able to manage parking demand in the surrounding area.

Response: Bill Walsh thanked Mat for his comments and ensured parking would be looked at in depth.

John Goldberg – Interested to know what physical elements of the architecture are going to promote a culture of equity and inclusion, especially for transgender individuals and people of color.

Response: David Lloyd mentioned the building would provide all gender bathrooms, but there is no architectural features that speak to racial equality. John saw this as problematic.

Enoch Wenstrom – Voiced concerns about parking situation, agreed with Mat's comments. Concerned about noise nuisances into abutting properties during performances.

Response: Bill Walsh and David Lloyd responding stating the building will be well insulated, and that the city has a noise ordinance that will be met.

Jason Walker – Parking is already a major concern on Munjoy Hill. Has witnessed individuals parking in front of homeowner's driveways regularly. Will this project continue if the city does not agree with the proposed parking arrangements?

Response: Deidre Nice responded that they were tied together because it is a contract zone and they're required to come up with a parking plan. Julia Kirby added that in response to Enoch's

parking question as well, people parking in front of driveways is obviously a problem. Having the cars towed seems to be a good solution in her experience as a resident on Emerson Street, but also perhaps better signage is needed to delineate driveways. She agreed with Jason that people coming up the hill are going to have problems finding parking, but that's why they're going to provide many other options to deter them from parking in that area of the neighborhood.

Pamela Hawkes – Would like to understand how many programs will be with outside groups, and how will loading for busses be managed during performances?

Response: Deidre Nice said the current parish hall isn't under a parking plan, but there is a loading dock on Munjoy Street. She also said that the parking plan needs to be reviewed every year to come up with updates where needed. Julia Kirby added that it must be reviewed within 6 months of the first year.

John Kittredge – Voiced concerns about parking. Will there be an increase in employees daily?

Response: Julia Kirby responded that most of the use will be during the evening performances, and the extra staff would be for concessions, ushering, and other support staff. Day usage would be limited, but it could be used for school/after-school programs, retreats/seminars for businesses (for which they'd ask the companies to bus in employees), matinee performances, or rehearsals for evening performances. Deidre Nice also mentioned that there is a policy that requires all the performers/employees to park 5 minutes away.

Michael Marsocci – Curious if there were any proposals for traffic management related to people driving the wrong way down one-way streets in the project area.

Response: Deidre said that was a better question for the City of Portland and they don't have the answer now, but they can find out.

Susan Fraser – Asked if any resident only parking could be provided.

Response: Bill Walsh responded that we could ask city staff about that.

Mary McHugh – Asked if the fundraising goal had been met.

Response: Julia Kirby replied that it has not but is ongoing. Deidre Nice added that they hope to have all the funds in by next year.

Barbara Vestal – Asked if this was just a site plan and would this project be presented to the Historic Preservation Commission.

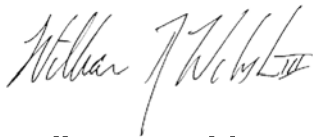
Response: Julia Kirby responded that the contract zone is nearing the end but that this is for site plan reapproval. Julia stated they started working with the Historic Preservation Commission in 2014 and recently picked back up the conversation. There's an upcoming workshop that people can join if they're interested.

Michelle Breidenbach – Asked if the revised traffic study accounted for the increase in short-term rentals.

Response: David Lloyd responded that the traffic/parking analysis was redone recently and is as up to date as it can be.

Bill Walsh concluded the meeting by explaining to everyone that the project is in the early stages of review with the city and there will be additional meetings with the Planning Board that the public can participate in.

Respectfully,

A handwritten signature in cursive script, appearing to read "William R. Walsh, III".

William R. Walsh, III, P.E., LEED AP
Walsh Engineering Associates, Inc.

February 24, 2023

Dear Neighbor of the St. Lawrence Arts Center:

On behalf of Friends of the St. Lawrence Church (Applicant), Walsh Engineering Associates, Inc. (WEA) would like to cordially invite you to the scheduled neighborhood meeting to discuss our proposed plan for expansion of the St. Lawrence Arts Center located at 76 Congress Street, Portland, Maine 04101. Planned development includes the construction of a 401-seat auditorium, a lobby, an upper function room providing views of Casco Bay, and other various support spaces (kitchen, concession area, dressing rooms, bathrooms). This meeting will be held virtually via Zoom and can be accessed online using the link below.

Meeting Location: Zoom

Link: <https://us02web.zoom.us/join/91234567890>

Meeting Date: March 8th, 2023

Meeting Time: 4:00 P.M.

Please copy the above link into your internet browser to **register in advance** for this meeting. After registering, you will receive a confirmation email containing information about joining the meeting.

The City of Portland Land Use Code requires that neighboring property owners and residents on an “interested parties list” be invited to participate in this neighborhood meeting. Zoom attendance will be recorded, and a record of the meeting will be taken. Both the attendance list and meeting record will be submitted to the Planning Board.

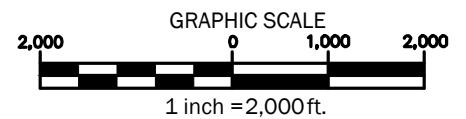
If you have any questions, please contact Isaiah Bates at (207) 553-9898.

Respectfully,



William R. Walsh, III, P.E., LEED AP
Walsh Engineering Associates, Inc.

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.



WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Dr., Suite 2A | Westbrook, Maine 04092
ph: 207.553.9898 | www.walsh-eng.com

Copyright © 2022

ST. LAWRENCE ARTS ADDITION

76 CONGRESS STREET
PORTLAND, MAINE 04101

Sheet Title:

SITE LOCATION

Job No.: 777

Date: APRIL 2022

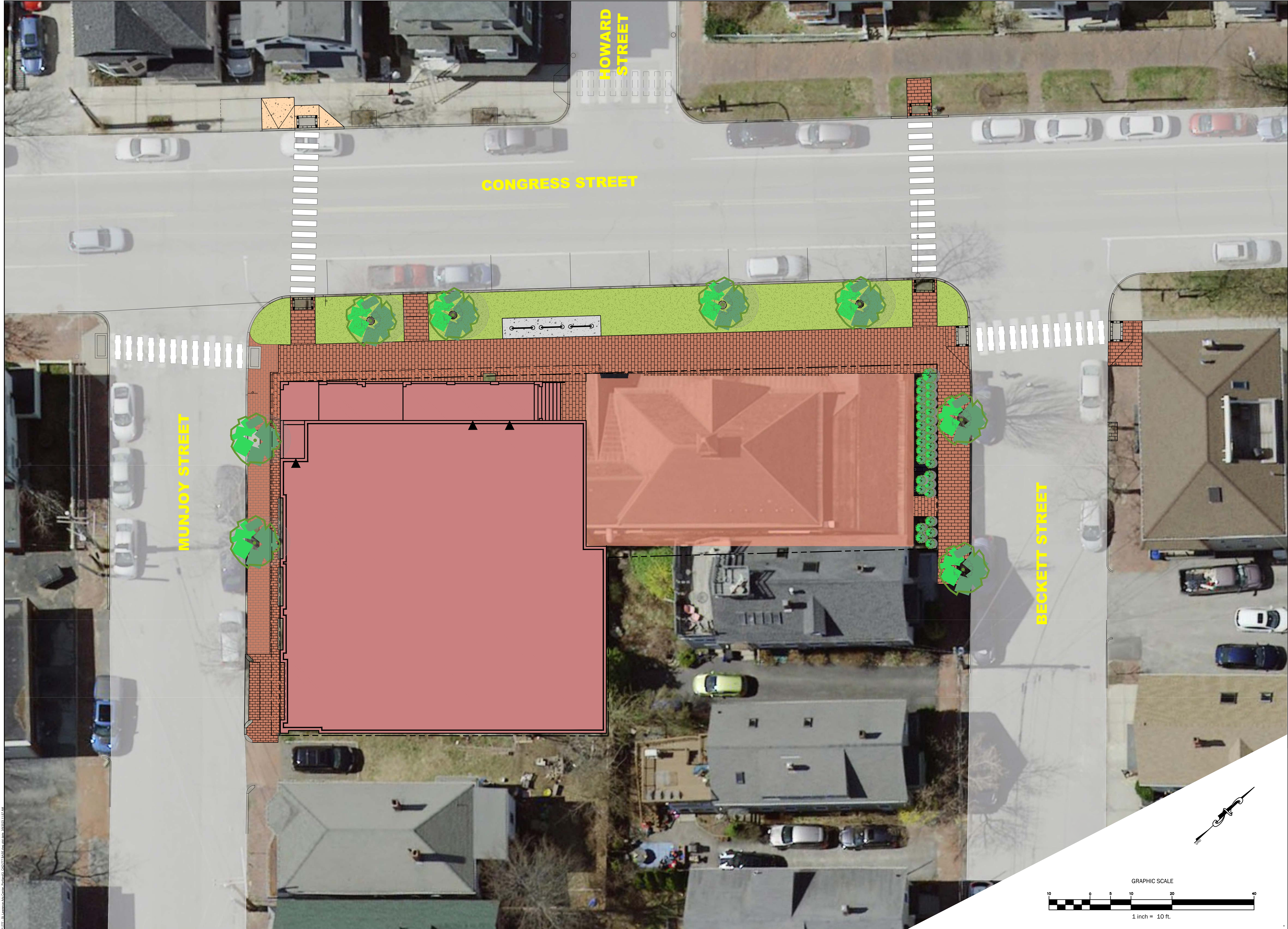
Scale: AS SHOWN

Drawn: TEF

Checked: WRW

Public Attendees					
First Name	Last Name	Email	Registration Time	Approval Status	Address
Jamie	Isaacson	Jamieisaacson@mac.com	2/27/2023 11:51	approved	71 st Lawrence st
Greg	Pomerleau	gpomerleau448866@outlook.com	2/27/2023 12:01	approved	97A Exchange Street
Ruth	Freeman	ruth.w.freeman@gmail.com	2/27/2023 20:24	approved	64 Vesper St.
Mary	McHugh	mchughmary01@gmail.com	2/28/2023 9:34	approved	6 LOVEITT ST
Susan	Fraser	op_me4me@yahoo.com	2/28/2023 14:15	approved	74 Vesper St, Unit 1
Emily	McConnell	emily@newheightgroup.com	2/28/2023 14:55	approved	97A Exchange St. Suite 204
Suzahne	Riendeau	suzahne.riendeau@gmail.com	3/1/2023 9:15	approved	82 Beckett Street
Barbara	Vestal	vestal@chesterandvestal.com	3/1/2023 9:21	approved	107 Congress St., Portland, Maine
Pamela	Hawkes	pamela.hawkes1@gmail.com	3/1/2023 14:09	approved	90 Morning St
Ryan	Little	charles.ryan.little@gmail.com	3/1/2023 14:36	approved	10 Howard St
Sive	Neilan	siveneilan@yahoo.com	3/1/2023 16:15	approved	29 Emerson St, , Apt 3
Michael	Keaney	mpkeaney@icloud.com	3/2/2023 12:33	approved	3 Cumberland Avenue
Kenneth	Spirer	Kenspirer@gmail.com	3/4/2023 11:48	approved	25 Monument xStreet #.3A
Nan	Cumming	nancumming@gmail.com	3/4/2023 14:43	approved	6 Sagamore Lane
Carson	Pease	evanspease@gmail.com	3/5/2023 18:34	approved	25 Monument St., #3B
Christopher	Akerlind	chrisakerlind@gmail.com	3/6/2023 15:45	approved	44 Monument Street Portland 04101
Michael	Marsocci	marsomt@gmail.com	3/7/2023 12:00	approved	9 howard st, portland me 04101
Enoch	Wenstrom	eenebw@gmail.com	3/7/2023 22:20	approved	88 Beckett St
Glenn	Morin	gmcpa@prexar.com	3/8/2023 9:52	approved	83 St Lawrence Street Portland Maine
jamie	isaacson	jakeisaac1@aol.com	3/8/2023 11:36	approved	7 1 st lawrence st portland, me
Mat	Zarolinski	bass-box@hotmail.com	3/8/2023 12:59	approved	58 Congress St. Portland, ME 04101
Jason	Walker	jalkerway@gmail.com	3/8/2023 13:31	approved	58 Congress Street apt 3 Portland ME 04101
Michelle	Breidenbach	mrbreid@verizon.net	3/8/2023 13:37	approved	73 Congress St, Apt 3
Madalyn	Minot	Madalynminot@gmail.com	3/8/2023 13:40	approved	58 Congress St. #1
Jenileigh	St. Clair	jenileigh@walsh-eng.com	3/8/2023 15:45	approved	1 Karen Drive, Westbrook, ME
John	Goldberg	goldasokol66@gmail.com	3/8/2023 15:57	approved	54 stevens ave
Albert	Sneed	wylsdwqopwxmdgulug@tcwlm.com	3/8/2023 15:57	approved	32 Merrill St
Kristen	Levesque	kristen@kristenlevesquepr.com	3/8/2023 15:58	approved	86 Bradley Street
John	Kittredge	john.thomas.kittredge@gmail.com	3/8/2023 16:01	approved	95 Beckett Street, Portland, Maine
mollie	rutz	mollierutz@gmail.com	3/8/2023 16:01	approved	65 congress st portland maine 04101
Antonio	Mbuco	antonio.mbuco802@gmail.com	3/8/2023 16:21	approved	6 Cumberland Avenue Apt3 Portland, Maine 04101
Kasey	Little	kasey.r.kraft@gmail.com	3/8/2023 16:26	approved	10 Howard St
Brenda	Garrand	bgarrand@gmail.com	3/8/2023 16:33	approved	401 Cumberland Avenue
Zeynep	Turk	zturk@hotmail.com	3/8/2023 16:37	approved	40 Turner St
Consultant Team					
David	Lloyd	lloyd@archetypepa.com	3/6/2023 12:25	approved	29 Waterville st
Virginie	Stanley	virginie@invividarchitecture.com	3/6/2023 13:37	approved	631 Stevens Avenue - Suite 200, Portland
Deirdre	Nice	deirdre.nice@stlawrencearts.org	2/27/2023 11:38	approved	76 Congress Street, Portland ME 04101
Julia	Kirby	julia.kirby@stlawrencearts.org	2/27/2023 15:09	approved	76 Congress Street
Isaiah	Bates	isaiah@walsh-eng.com	2/24/2023 14:56	approved	WEA Office
Bill	Walsh	bill@walsh-eng.com	2/25/2023 14:56	approved	WEA Office





WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Dr., Suite 2A | Westbrook, Maine 04092
ph: 207.553.9898 | www.walsh-eng.com

Copyright © 2023

ST LAWRENCE
ARTS

ST. LAWRENCE ARTS, PERFORMANCE ARTS HALL

76 CONGRESS STREET
PORTLAND, MAINE 04101

OWNER / APPLICANT:
FRIENDS OF THE ST. LAWRENCE CHURCH

76 CONGRESS STREET
PORTLAND, MAINE 04101

Rev.	Date	Description	Drawn	Check

Sheet Title:
**NEIGHBORHOOD
PLAN**

TAX MAP 3 / BLOCK L / LOT 1	
Job No.: 777	Sheet No.:
Date: DEC. 27, 2022	NH-1
Scale: AS SHOWN	
Drawn: JDC	
Checked: WRW	

ST. LAWRENCE ARTS, PERFORMANCE ARTS HALL

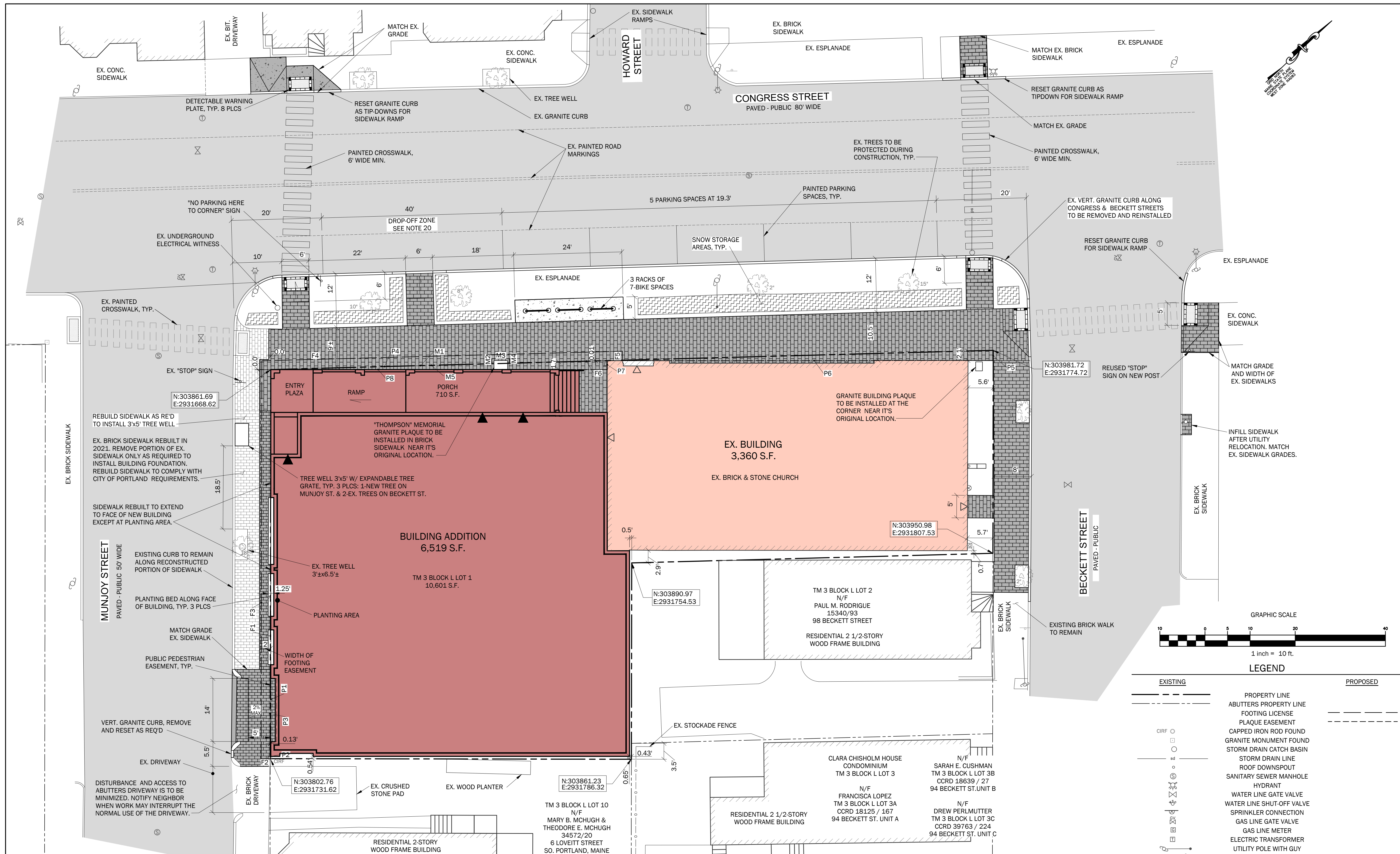
76 CONGRESS STREET
PORTLAND, MAINE 04101OWNER / APPLICANT:
FRIENDS OF THE ST. LAWRENCE CHURCH76 CONGRESS STREET
PORTLAND, MAINE 04101

PRELIMINARY - NOT FOR CONSTRUCTION

SITE PLAN

TAX MAP 3 / BLOCK L / LOT 1			
Job No.:	777	Sheet No.:	
Date:	DEC. 27, 2022		
Scale:	AS SHOWN		
Drawn:	JDC		
Checked:	WRW		

C1.1



EASEMENTS & LICENSES:

- PROPOSED TEMPORARY EASEMENT: CONSTRUCTION EASEMENT FROM CITY OF PORTLAND TO THE FRIENDS OF ST. LAWRENCE CHURCH.
- PROPOSED LICENSE: FROM THE CITY OF PORTLAND TO THE FRIENDS OF ST. LAWRENCE CHURCH FOR BUILDING FOOTINGS.
- PROPOSED LICENSE: FROM THE CITY OF PORTLAND TO THE FRIENDS OF ST. LAWRENCE CHURCH FOR "THOMPSON" MEMORIAL PLAQUE PLACEMENT.

FOOTING LICENSE

LINE	BEARING	DISTANCE
F1	S 46°54'30" E	86.27'
F2	S 43°05'30" W	2.00'
F3	N 46°54'30" W	88.21'
F4	N 41°28'30" E	79.94'
F5	S 48°31'30" E	2.00'
F6	S 41°28'30" W	78.00'

MEMORIAL PLAQUE LICENSE

LINE	BEARING	DISTANCE
M1	N 41°28'30" E	49.00'
M2	N 46°59'46" W	1.11'
M3	N 43°00'14" E	4.00'
M4	S 46°59'46" E	1.00'
M5	S 41°28'30" W	4.00'

PUBLIC PEDESTRIAN

EASEMENT - MUNJOY STREET

LINE	BEARING	DISTANCE
P1	S 46°59'00" E	83.48'
P2	S 43°05'03" W	0.13'
P3	N 46°54'30" W	83.48'

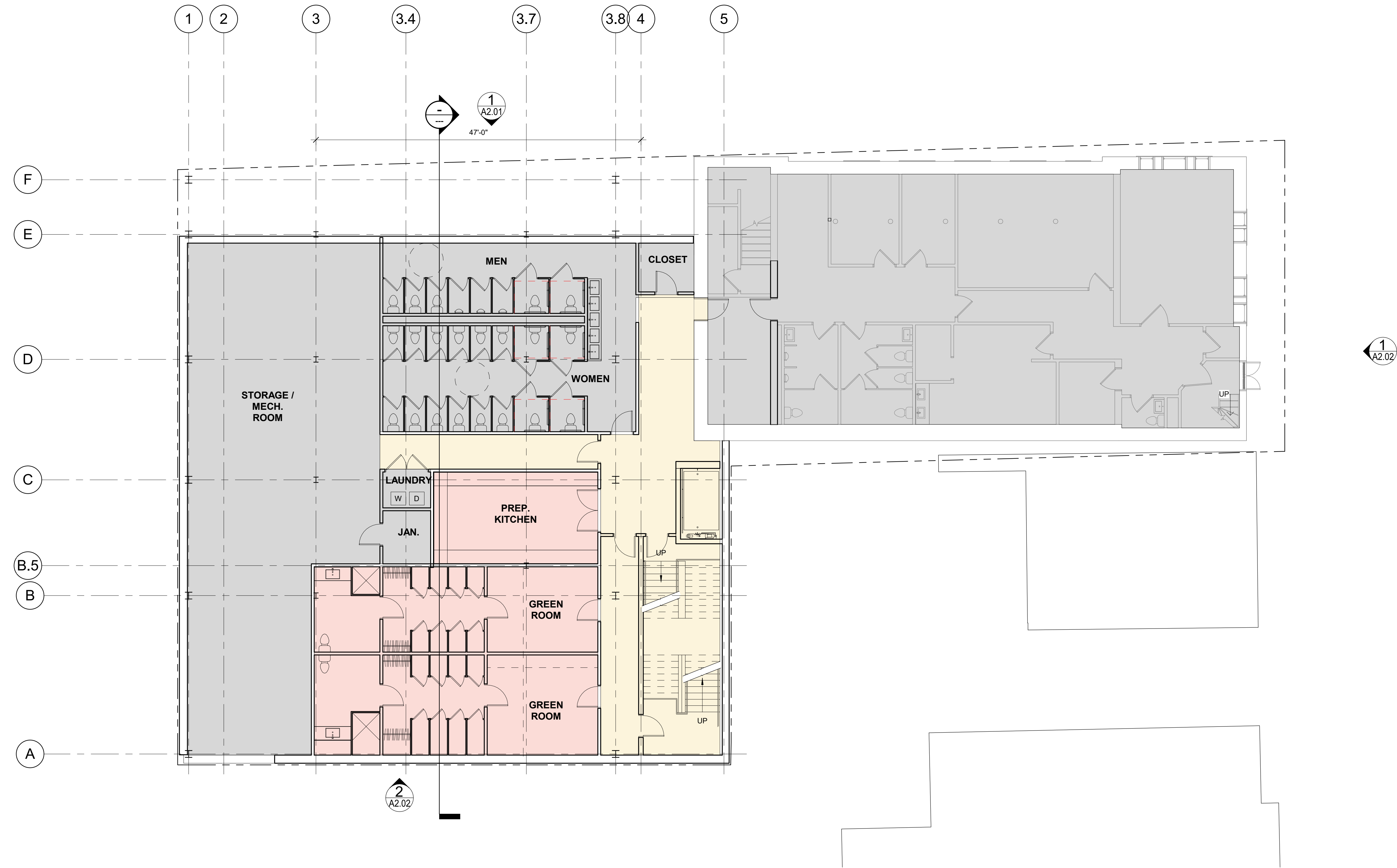
PUBLIC PEDESTRIAN

EASEMENT - CONGRESS STREET

LINE	BEARING	DISTANCE
P4	N 41°28'30" E	160.20'
P5	S 46°54'41" E	2.25'
P6	S 42°58'23" W	85.55'
P7	S 47°00'00" E	1.98'
P8	S 43°00'00" W	74.59'

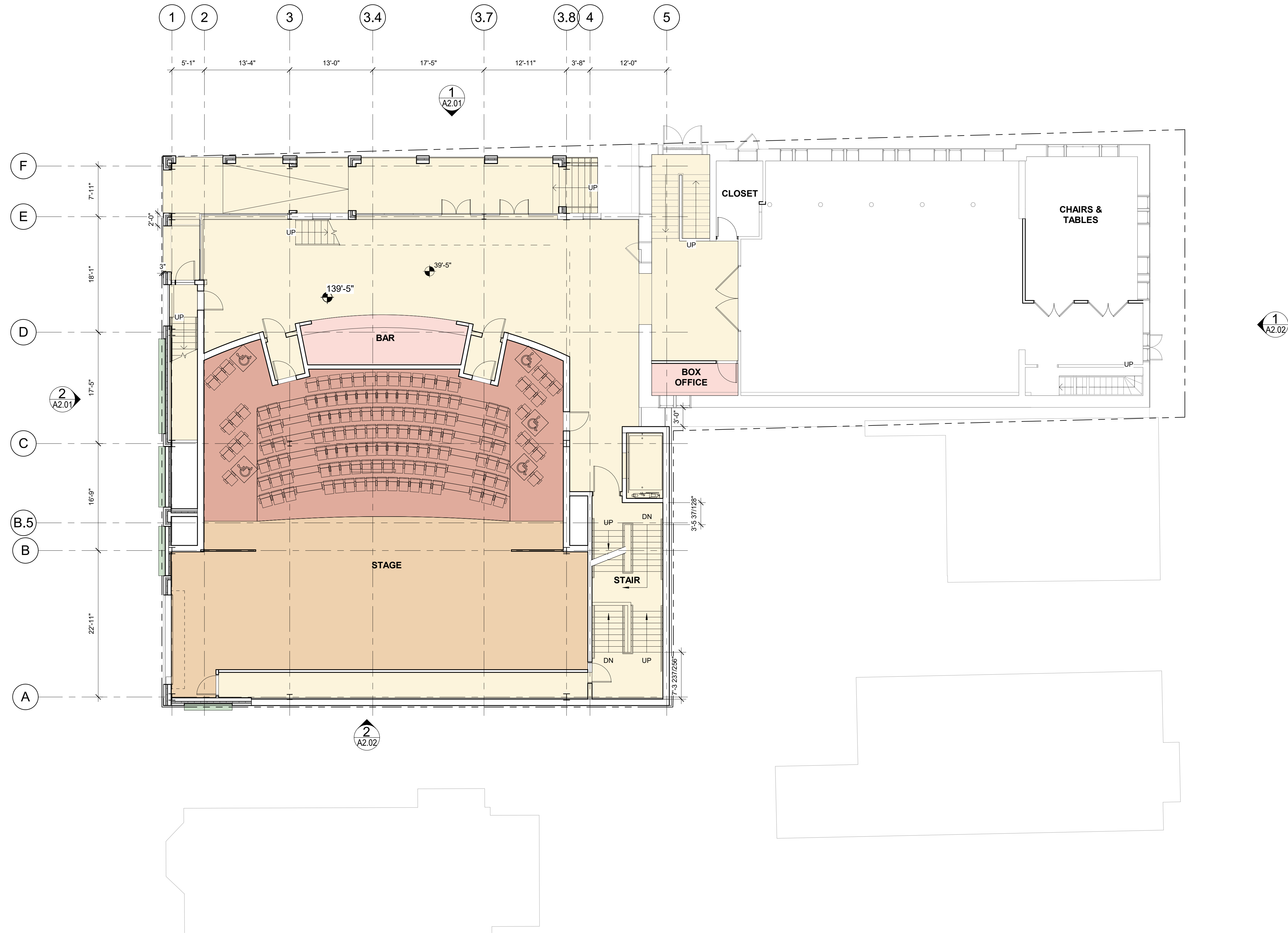
FOR ZONING, CITY NOTES, GENERAL NOTES
AND LAYOUT, MATERIALS & UTILITY NOTES
SEE SHEET C1.0

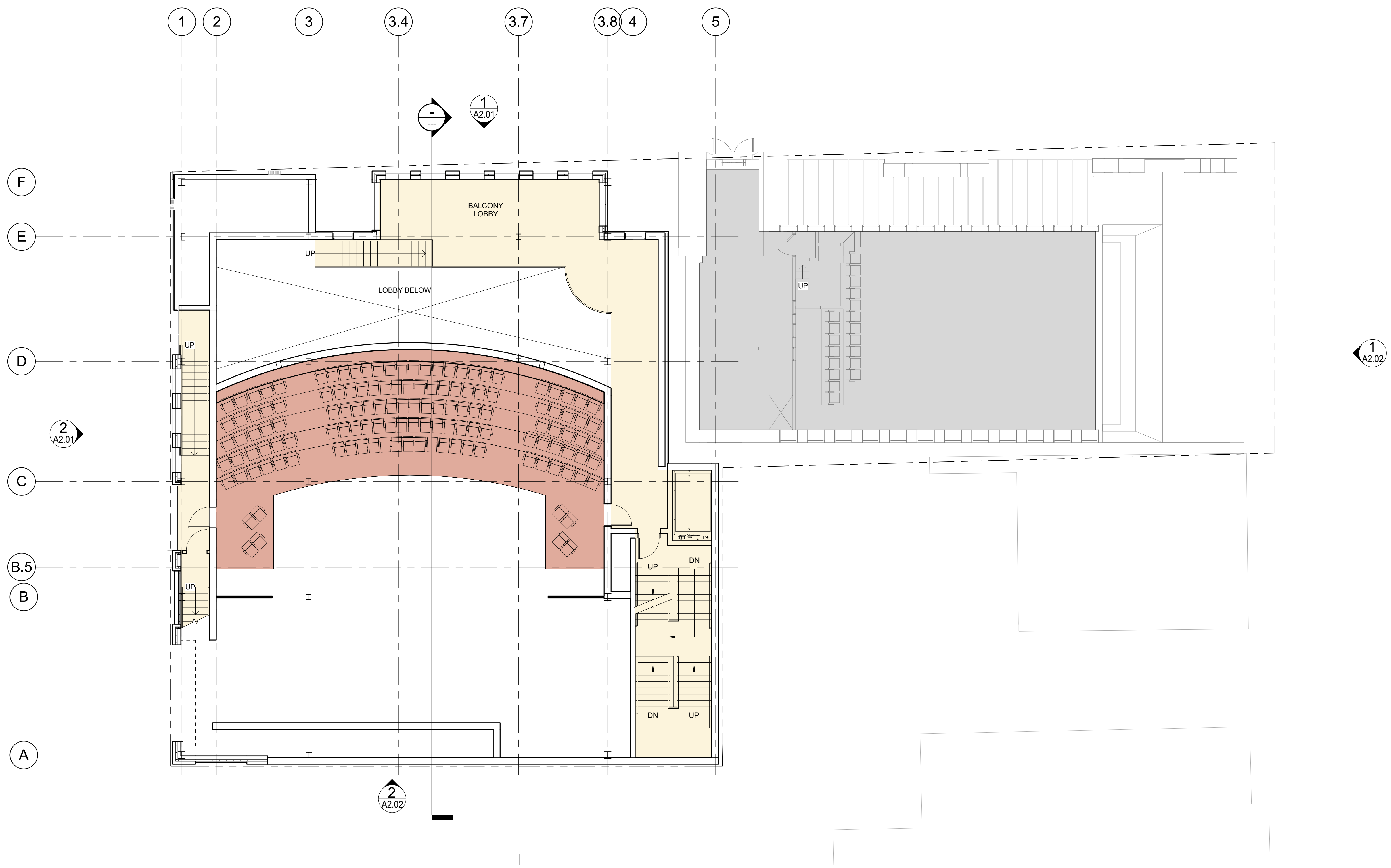




1 | BASEMENT
1/8" = 1'-0"

A1.00		Date: DEC 20, 2022		Scale: 1/8" = 1'-0"	Revisions:	Project: THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101	Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM	Consultant:	Prepared For:	
		BASEMENT PLAN								

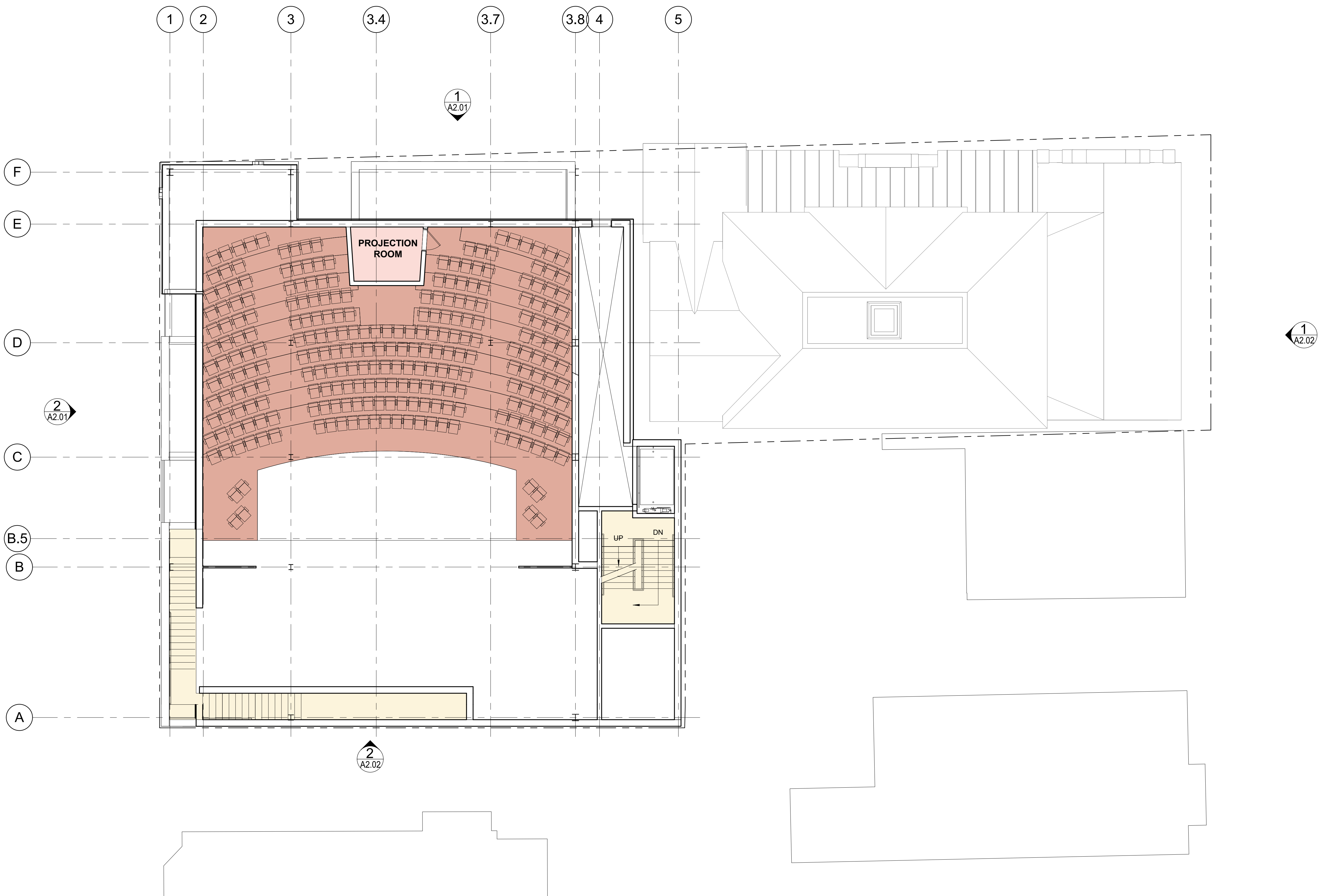




1 | UPPER LOBBY LEVEL
1/8" = 1'-0"

Date: DEC 20, 2022		Scale: 1/8" = 1'-0"		UPPER BALCONY PLAN
Revisions:				
Project:		THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101		Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM
Consultant:				
Prepared For:				

A1.02



1 | PROJECTION BOOTH
1/8" = 1'-0"

Date: DEC 20, 2022		Scale: 1/8" = 1'-0"		INTERMEDIATE BALCONY PLAN	A1.03
Revisions:					
Project:				THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101	
Architect:				ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM	
Consultant:					
Prepared For:					

August 19, 2014

Deirdre Nice, Executive and Artistic Director
St Lawrence Art Center
76 Congress Street
Portland, ME 04101

Subject: Parking Demand Management Plan
St. Lawrence Arts Center
76 Congress Street Portland, Maine

Dear Ms Nice:

Gorrill-Palmer Consulting Engineers, Inc (GP) completed an evaluation of the parking demand anticipated when the capacity at St Lawrence Arts (SLA) on Congress Street in Portland is expanded from 110 to 485 seats and worked with SLA to develop a Parking Demand Management Plan. While maximum seating in the proposed auditorium is 401, there are other rooms that could be occupied at the same time with an additional capacity of 84 people. While this is unlikely, it will be the assumed case in our parking plan. This report takes into consideration the comments and suggestions provided by an outside peer review (Nelson Nygaard Consulting) on the first TDM completed January, 2014, as well as input from City of Portland planning staff. GP and SLA appreciate that the peer review focused on tangible solutions to discourage patrons of SLA from seeking parking primarily on residential streets directly near the building. SLA plans to implement a combination of solutions to successfully mitigate a parking problem for Munjoy Hill residents, and businesses, as well as patrons of SLA.

Estimate of Parking Demand

There are three potential sources to estimate the parking demand for the facility. Each of these sources is discussed below:

Institute of Transportation Engineers

The Institute of Transportation Engineers (ITE) publication, "Parking Generation, 4th Edition" presents parking rates for various land uses based on studies across the country. Land Use 441, Live Theater projects an average parking ratio of 0.38 vehicles per attendee with a range of 0.37 to 0.40 vehicles per attendee based on rural sites with an average of 800 attendees. The information was based on four studies. Since SLA is only projected to have 485 attendees and the trip rate increases with fewer attendees, the rate would likely be closer to 0.40 vehicles per attendee.

Ms Deirdre Nice
August 19, 2014
Page 2 of 11

St Lawrence Arts Survey Data

SLA has furnished our office with the results of surveys of attendees to two Friday night shows which started at 7:30 p.m. on October 25, 2013 and December 13, 2013. The results are summarized below:

DATE	ATTENDANCE	SURVEYS COMPLETED	PARKING RATIO	NO. OF VEHICLES
10-25-13	103	103	0.54	56
12-13-13	110	110	0.40	44

It is our understanding that the October show attracted an older crowd and therefore the number of people traveling by car may have been higher than other shows.

Staff Demand- Based on information provided by SLA, an attendance of 485 people will require 10 staff members. Assuming each staff member commutes in their own vehicle results in a need for 10 staff parking spaces.

Parking Observations

A parking study was conducted by Gorrill-Palmer Consulting Engineers, Inc. on October 25th, the same night as the first survey was distributed to attendees. Two counts were conducted, the first was done before the show (5:45 p.m. to 7:00 p.m.) and the second was completed during the show (7:40 p.m. to 9:10 p.m.). Parked vehicles were counted on all surrounding streets within a half-mile radius of SLA. However, vehicles parked in the vicinity of SLA were the main focus. A walking radius was measured from a one minute walk to the St Lawrence Arts Center up to a four minute walk, assuming the average person walks 3 feet per second (180 feet per minute).

The increase in parked vehicles during the show is provided below:

LENGTH OF WALK	WALKING RADIUS	# OF VEHICLES BEFORE SHOW	# OF VEHICLES DURING SHOW	DIFFERENCE (+/-)
1 minute	180 feet	36	45	+ 9
2 minutes	360 feet	129	147	+ 18
3 minutes	540 feet	293	336	+ 43
4 minutes	720 feet	415	490	+ 75
5 minutes	900 feet	544	664	+ 120

Although we might find these results informative and useful, we can't assume the entire difference of vehicles is representing SLA. The Front Room is a local restaurant and bar located across the street from

Ms Deirdre Nice
August 19, 2014
Page 3 of 11

SLA, a popular spot on a Friday evening. Venues, like The Front Room, located near SLA can also influence the demand. Based on these considerations, the 56 vehicles based on the survey appear reasonable.

Comparing Estimates

The parking rate of 0.40 based on ITE coincides with the 0.40 ratio determined from the December show but is less than the 0.54 determined from the October show. However, as previously mentioned, the October show attracted an older crowd and therefore the number of people traveling by car may have been higher than other shows. In addition, as a general principal, parking ratio can be expected to decline as the number of seats increases.

Recommendation for Number of Spaces

After consideration of these variations, our office estimates a demand of 218 spaces (0.45 vehicles per attendee) for the site. This recommendation is more than forecast by ITE for a live theater and observed during the December show but less than the 0.54 ratio derived from October show which attracted an older crowd. We recommend an additional 10 spaces be available for employees. Furthermore, employees of SLA will have a designated parking area on the street at a distance of at least 300 feet from the building. Nelson Nygaard's review of the parking demand for a 401-seat Performance Hall in the Munjoy Hill neighborhood estimates that SLA will need to provide 122 parking spaces. Our parking analysis cited a need for 218 parking spaces, which is based on occupancy of 485 people among the three different spaces (Parish Hall Theater, Performance Hall, and the Promenade Room) for one event. It should be noted the typical maximum audience will not exceed 401 people, and many times much less. However, it is the opinion of GP based on these analyses and discussions with SLA that Nelson Nygaard's figure is well below what will be needed. It is our opinion that 218 spaces is more realistic as it is based on statistically significant surveys conducted during sold-out performances of the current 110-seat Parish Hall Theater (10/25/2013 and 12/13/13) operated by SLA. Furthermore, an independent survey of needed parking spaces for the venue conducted by members of the Concerned Citizens of Munjoy Hill (CCMH) complemented the recommended 218 spaces and therefore, we have proceeded drafting the plan based on a need of 218 spaces.

Parking Supply

A count was also done of the total number of occupied parking spaces on each street within a 900 foot radius of the SLA on Tuesday evening, December 10th beginning at midnight. The purpose of the counts was to estimate the number of spaces used by the area residences and most of the parking that late at night should be associated with residences. The results of these parking observations are provided as follows.

Ms Deirdre Nice
August 19, 2014
Page 4 of 11

<i>Length of Walk</i>	<i>Walking Radius</i>	<i># of Spaces</i>	<i># Occupied 12:00 midnight Tuesday</i>	<i>Available Spaces</i>
1 minute	180 feet	42	30	12
2 minutes	360 feet	144	107	37
3 minutes	540 feet	345	273	72
4 minutes	720 feet	551	436	115
5 minutes	900 feet	838	659	179

The Cutter Street parking lots located on the Eastern Promenade were vacant during our surveys and have a capacity of 95 vehicles. Results of the Cutter Street parking lots are provided on the following page.

<i>Parking Area</i>	<i># of Available Spaces</i>
Lower Parking Lot	24
Middle Parking Lot	35
Upper Parking Lot	15
On-Street Parking	21
Total:	95

Combining the results of the available on-street parking and Cutter Street lot parking, a total of 274 spaces are available to attendees.

Parking Demand and Supply

As discussed in the “Recommendations for Number of Spaces” section, SLA will typically incur a parking demand of approximately 218 vehicles plus 10 employees during show events. Though these spaces have been identified, SLA plans to encourage patrons to park downtown and travel by public transportation to the facility.

The available parking in the vicinity of the site is as follows:

- 179 on-street automobile parking spaces
- 95 Cutter Street automobile parking spaces

This will provide 274 automobile parking spaces for attendees of each show. The 179 on-street parking spaces are based on a 5 minute walk radius around SLA.

Ms Deirdre Nice
August 19, 2014
Page 5 of 11

Transportation Demand Management (TDM)

Purpose of Plan

The City of Portland requires the creation of a Transportation Demand Management Plan for all projects in excess of 50,000 square feet, or with 100 or more employees or students. SLA meets these requirements. However, in the case of this project, the TDM Plan serves a series of important needs:

- Make maximum use of nearby existing transit infrastructure
- Reduce peak hour trip impacts to adjacent roadway infrastructure
- Reduce the amount of needed parking on-site, especially as land is limited
- Encourage healthy activities

It is important to note that this Plan should not be viewed as a series of fixed, or unchanging recommendations. It is a living document intended to be reviewed and updated on a regular basis as SLA works with changes in local transportation patterns, preferences, and prices. Ultimately, the goal will be to make significant reductions in peak hour single-occupancy vehicle (SOV) activity on the local street networks as well as the need for on-site parking.

TDM Coordinator

SLA has designated its Executive Director as the TDM Coordinator, charged with coordinating the TDM plan. The TDM coordinator will be responsible for the following:

- Coordinating and promoting rideshare opportunities
- Coordinating with and promoting Metro
- Monitoring parking usage
- Overseeing event scheduling
- Encouraging the greater use of bicycling, walking, and bus-based transit
- Overseeing ongoing monitoring and updating of the plan
- Filing annual reports with the City

Ms Deirdre Nice
August 19, 2014
Page 6 of 11

Single Occupancy Reduction Strategies

METRO Subsidies

SLA is located on Munjoy Hill in Portland on Congress Street. Its location is nearby the following transit services:

- *Metro Route #1, Congress Street:* Portland METRO provides twice an hour service to Munjoy Hill with other major stops including Monument Square and the State Theatre. It also allows access to the Greyhound Bus Station and the Elm Street METRO facility. A limited service combining Routes 1 and 5 is provided on Sundays.
- *Primary User:* Patrons of SLA and Community Members
- *Responsibility:* SLA, METRO

SLA is proposing that the core of its TDM be a partnership with Metro to both extend and enhance the service of the Art Line that travels up and down Congress Street. At present the Art Line runs on a thirty-minute frequency between 7:00 a.m. and 8:00 p.m. with less frequency between 8:00 p.m. and 10:00 p.m. Based on our conversations with SLA, they are mindful of the discussion taking place at the City of Portland on changes to the downtown's Tax Increment Finance (TIF) policy and that peninsula transit improvements are a potential use of this revenue. SLA recognizes that its proposed partnership with Metro and the revenue SLA proposes to bring to the table could be joined with TIF revenue to support a broader and more consequential transit improvement, one that could lead to 15 minute frequency on the Art Line all day and evening. The implications of this plan would not only serve the patrons of SLA, but would also allow residents the opportunity to take advantage of more frequent evening transit service on the peninsula.

With enhanced Metro service, patrons of SLA would be encouraged to utilize downtown parking lots, garages and street parking and use the Art Line to travel up to SLA. The Temple Street and Free Street garages are open until 10:00 p.m. Monday – Saturday and it is our understanding that both have plenty of available parking after 5:00 p.m. Both garages are within one block of stops along the Art Line. The number of parking spaces that these parking facilities provide should exceed the 219 spaces we recommend. Patrons of SLA would have their parking ticket validated for up to three-hours of free parking. It is our understanding that SLA will subsidize and encourage use of this remote parking.

SLA has met with representatives from Metro and it is our understanding that both organizations are highly enthusiastic about a partnership. The Nelson Nygaard review encourages SLA to create a “more specific and targeted PTDM” and part of doing so will be understanding what motivates patrons of SLA to drive and park close to SLA. For this approach to work, SLA and Metro will need to effectively communicate and market the transit option as convenient, affordable, easy, and fun. In particular, the

Ms Deirdre Nice
August 19, 2014
Page 7 of 11

marketing effort should promote transit as a key piece of a fun night out that includes both dining and entertainment. In addition to the higher frequency service on the Art Line proposed by this plan, Metro will be rolling out real-time bus arrival information in 2015. This technology will allow riders to get actual bus arrival information through smart phones, text, website and, in some places, message boards at bus shelters.

A financial investment by SLA to the Metro will enhance these kinds of conveniences to Portland's public transportation system. Another key of this partnership is making parking downtown and travelling to and from SLA easy by suggesting patrons park in a specific place (lot or garage) and wait for the Art Line bus at a specific spot to ride up Munjoy Hill to SLA. It is our understanding that SLA and Metro agree that a carefully laid out marketing plan is essential to the success of the TDM as well as making the parking and bus ride part of a ticket surcharge so that patrons do not incur extra charges along the way. Based on discussions with SLA, they have included in their financial projections that each patron will pay a ticket surcharge. Patrons then will show their ticket (paper or smart phone) to the bus driver to receive a ride to SLA.

The cost for Metro to shorten its arrival frequency from 30 minutes to 20 minutes Monday – Saturday and extend this service to 11:00 p.m. is estimated by Metro at \$70,000 annually. Based on our discussions with SLA, this funding will be provided by SLA through its ticket surcharge. Also, by virtue of growing ridership and diversifying the transit system's revenue base, the partnership can make Metro more competitive in obtaining new federal grant funds that can support further transit expansion. In this manner, this partnership is truly strategic in that it can help achieve positive transportation outcomes for the broader community in addition to the specific goal of getting SLA patrons from point A to point B.

Valet Parking

➤ Primary User: Patrons

Gorrill-Palmer agrees with Nelson Nygaard's finding that a superior front-door valet service should be available to patrons who want to arrive at the Performance Hall with their car. SLA is proposing to work with Unified Parking Partners, a full service parking Management Company based in Portland, Maine and servicing all of New England. Their focus is garage, flat lot, healthcare, hotel and restaurant, and event parking management. This service will be available to patrons who wish to pay for exceptionally convenient parking on top of tickets to a concert. Patrons utilizing this service would be charged a minimal fee to cover the cost above the (parking) ticket surcharge as well as giving a tip. Every ticket buyer will pay either at the point of sale or at the door. The cost to bring valet service to SLA for events is \$25/\$30 an hour, which includes an environmentally safe and friendly vehicle shuttle for the valet parking staff. Unified Parking Partners manages several parking lots in Portland and their owner would also utilize the Cutter Street and its two parking lots (95 spaces).

Ms Deirdre Nice
August 19, 2014
Page 8 of 11

Bicycle Transportation

Portland is an extremely friendly pedestrian and biking city. SLA will encourage patrons who live within a walking and biking distance to access these TDM friendly modes of transportation. SLA will provide 10 bike racks outside the facility (20 spaces) encouraging patrons and staff members to bike to the Performance Hall. SLA will become a participating business in Bicycle Benefits (www.bicyclebenefits.org), a national program that offers incentives and rewards for patrons who show up to an establishment on a bicycle. Portland, Maine businesses already have strong membership in Bicycle Benefits.

- Primary User: Patrons
- Responsibility: SLA

SLA will also work with the City of Portland's Pedestrian-Bicycle Committee as well as The Bicycle Coalition of Maine, an organization that formed in 1992 to make Maine better for bicycling and promote bicycling in Maine.

Pedestrian Accommodations

Pedestrian connections currently surround the SLA building. Congress Street provides sidewalks on both sides of the street for pedestrians walking from in-town Portland. A majority of side streets provide sidewalks for guests who are walking from local neighborhoods. Crosswalks are also provided to nearby streets including Beckett Street, Munjoy Street, and Howard Street as well as on the Eastern Promenade at Moody and Wilson Streets.

- Primary User: Patrons
- Responsibility: City of Portland

Education for Patrons

As discussed, the SLA will provide route maps, schedules, and ticket information via the website with ticket reservations. Information about the METRO Route 1 and downtown parking will be provided. There will also be announcements before and after the show regarding the bus schedule, including real-time arrivals available in the lobby. It is important that this information also be provided on SLA's website along with a link to the METRO Route 1 webpage. A direct link to the parking information should be at the top of SLA's website, next to "Directions." This link should provide exact directions to parking and bus incentives encouraging attendees to carpool or use the transit system.

- Primary User: Patrons
- Responsibility: SLA

Ms Deirdre Nice
August 19, 2014
Page 9 of 11

Free Market Options

Transportation by Cabs and Pedicabs (bicycle cabs), will also be a viable option to patrons of SLA who live in Portland, or patrons who have parked downtown and elect to not use public transportation.

Carpooling

Some patrons will still travel by automobile up to Munjoy Hill and SLA will promote car sharing as an option to reduce the number of cars that travel to the facility for an event. SLA will provide information on its website for Go Maine, which is Maine's statewide commuter service providing access to low-cost, healthy, economical and eco-friendly options for commuting. SLA will promote ride share, a multi-modal, one-time ride share opportunity.

MARKETING

A carefully thought-out marketing plan that provides easily accessible information is the key to implementing a successful TDM for SLA. SLA will create a marketing strategy that complements and works closely with the other area Portland organizations that promote walking, bicycling, and public transit as alternative modes of transportation. SLA will also implement "honor system" strategies such as a button at the end of the online ticket system to check if you are carpooling or travelling by bus/foot/bike with an associated discount. An outline of the marketing plan is presented below:

- SLA will have a "Where to Park" tab clearly posted on its website that outlines instructions on utilizing the Metro system, including what downtown garage to park in and where to wait for the Art Line bus. Instructions on how to use public transportation, walk, and bike will be provided at the top of the page emphasizing it over travelling by automobile.
- SLA will have a travel information kiosk in its lobby
- All ticket holders will receive instructions on parking at the time of purchase.
- SLA's website will include a map of the neighborhood encouraging patrons NOT park within 300 feet of SLA citing the negative impact such congestion will have on residents and neighboring businesses.
- SLA's website will have easy to understand information (and links to Portland Trails and Metro) on how to bike or use transit to get to the Performance Hall. SLA will provide a link to Google Transit walk trip planner.
- SLA will try to establish its Performance Hall as a Green Certified event space, acknowledging that the biggest carbon element to an event is how people travel to and from the property (i.e. encourage people to leave cars behind).

Ms Deirdre Nice
August 19, 2014
Page 10 of 11

- SLA will work with Metro to create a catchy and green marketing campaign to target its audience. The marketing campaign will need to be developed, but will generally focus on the following key messages: Using the Art Line to get to SLA is easy, free, fast, green and connects dining and entertainment.

Monitoring

Parking Counts

As part of its TDM Plan monitoring program, SLA will assess the use of its various operational components, starting one month after the opening of the expansion and annually thereafter. As the most critical component of the TDM program will be to reduce parking demand, the first part of each monitoring effort will include a parking count of the surrounding streets before and during an event. This count will include the Cutter Street parking lots on the Eastern Promenade.

Surveys - Employees

One month after the expansion of the facility, SLA employees will be surveyed regarding their transportation choices such as automobile/bicycle ownership, parking demand, and the frequency of trips using bicycle, walking carpool/vanpool, and the bus. The survey will be developed in consultation with the City's TDM manager and conform to overall City TDM modeling planning.

The surveys will be conducted to determine:

- Mode of travel to and from work (car/carpool/biking/walking/bus)
- Preferences or concerns with mode of travel
- An important component of the survey will be to determine the flexibility of employees to utilizing various travel modes to access the facility

Surveys - Attendees

For attendees to SLA, surveys will be either conducted as patrons enter the site in the form of one or two questions from a volunteer, or patrons will be given a survey they can complete and return in exchange for a free gift.

The surveys will be conducted to determine:

- Mode of travel to and from the show (car/carpool/walking/bus)
- Preferences or concerns with model of travel
- Specify as a driver or a passenger

Ms Deirdre Nice
August 19, 2014
Page 11 of 11

Submission of Monitoring Information/Updated TDM Plan

Based upon the results of the monitoring, SLA will update the TDM Plan and submit a draft plan to the City's TDM Manager for review and comments. The primary goal of the initial year will be to reduce the parking demand five percent from the calculated demand.

Closure

The TDM plan and SLA's investment in Greater Portland Metro will be a tremendous benefit to the community at large as well as SLA patrons, emphasizing less reliance on automobile traffic, utilization of downtown structures, and investment in an important public infrastructure.

Please contact us with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.


Thomas L Gorrill, P.E., PTOE
Principal

TLG/tlg/JN2818 /TDM August 2014.doc

November 22, 2022

Ms. Deirdre Nice
Executive Director
St. Lawrence Arts
76 Congress Street
Portland, Maine 04101

Re: Updated information including METRO enhancements and service expansions

Dear Deirdre:

Since initial meetings in 2014, Greater Portland Transit District (Metro) has made several enhancements, created partnerships, and expanded service north and west of Portland. We continue to support St. Lawrence Arts efforts to offer transit services as part of your efforts to manage the traffic and parking impacts associated with the theater's proposed expansion.

As you know, METRO's Route 1 provides close service to the St. Lawrence Arts site, with stops as close as North Street (800 feet away). Two other routes stop approximately 2000 feet (0.4 miles, or an 8 minute walk) away at the intersection of Congress Street/Washington Avenue; the Route 7, which runs from downtown Portland to Route 1 in Falmouth, and the Route 9, which runs around Washington Avenue, Allen Avenue, Stevens Avenue, and Congress Street in Portland. These routes are all potential options for patrons of the existing and proposed facilities at St. Lawrence Arts.

Listed below are service enhancements and highlights since originally discussing this project in 2017:

- In 2020, METRO, along with our regional partners, South Portland Bus Service (SPBS) and Biddeford Saco Old Orchard Beach (BSOOB) Transit, rolled out a new fare payment system called the DiriGo Pass, which allows users to pay fares using pre-loaded balances on a smartcard or mobile app (Umo Mobility). The DiriGo pass encourages users to switch from paying bus fares with cash by providing free transfers within 90 minutes of the first payment across the entire regional transit network (METRO, SPBS, and BSOOB). Additionally, fares are capped for all DiriGo pass users; after the third ride of the day or 30th ride of a given month, no additional fares are collected for that user for the remainder of the day or month the cap is reached. At the same time as the rollout of the new fare payment system, fares were increased from \$1.50 per ride to \$2.00 per ride for local, full-fare passengers.
- In 2018, a new route called the Husky Line was introduced, running from USM's campus in Gorham to downtown Portland via the USM campus in Portland. This route runs with limited stops, and completes a one-way trip between Portland and Gorham in about 40 minutes. In 2023, METRO plans to extend the Husky Line to the Portland waterfront. In the future, a rapid transit corridor is envisioned by regional planners between Gorham and Portland, with the intention to provide faster

www.gpmetro.org

114 Valley St. • Portland, ME • 04102
Phone: 207-774-0351 Fax: 207-774-6241



service between Portland and the western suburbs on dedicated rights-of-way and/or aggressive transit priority measures on public streets.

- In May 2022, METRO introduced two battery-electric buses, the first in what is anticipated to be an all-electric fleet by 2040. In addition to environmental benefits of improved fuel efficiency and the potential to power electric buses with renewable fuel sources, battery-electric buses also run quieter than diesel buses, which is beneficial to residents and businesses in dense neighborhoods like Munjoy Hill.
- In 2022, METRO has worked with regional partners on the Transit Together initiative, which, among other goals, aims to optimize METRO's routes in a cost-neutral, quick-to-implement way. These improvements are likely to include the extension of the Route 1 to the Portland International Jetport; extension of the Route 7 to Thompson's Point, and several other changes to routing and frequency. When fully implemented, buses serving the entirety of Congress Street between St. John Street and Washington Avenue (the "High Frequency Corridor") will be as frequent as every 9 minutes.

As you can see, METRO is on the move with many projects and several more under consideration. In the near future, METRO hopes to expand our bus fleet and bus storage and maintenance capacity, and improve bus frequency on all routes.

METRO is willing to discuss partnering with St. Lawrence Arts to provide free rides to patrons with their ticket to an event. This would likely entail providing barcodes on electronic tickets. METRO is investigating the logistics of this type of program, but if it's implementable, it'll provide an added incentive to patrons to arrive to the show via transit.

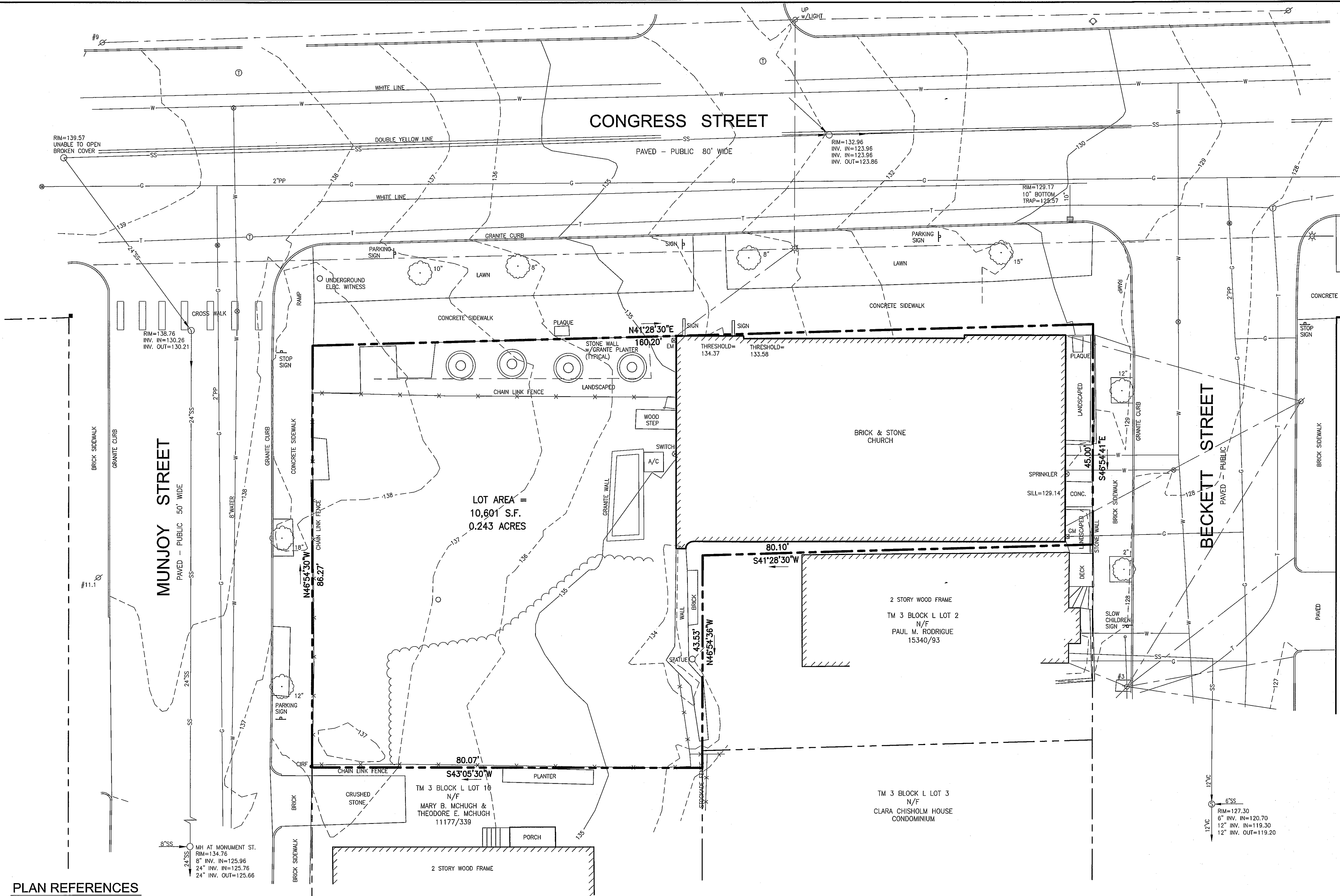
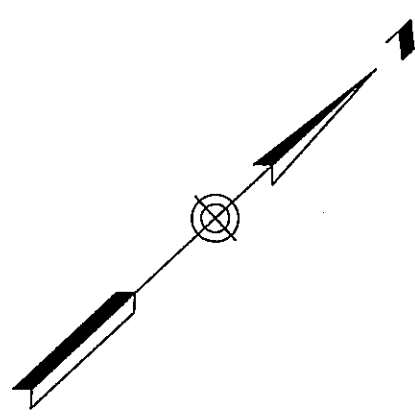
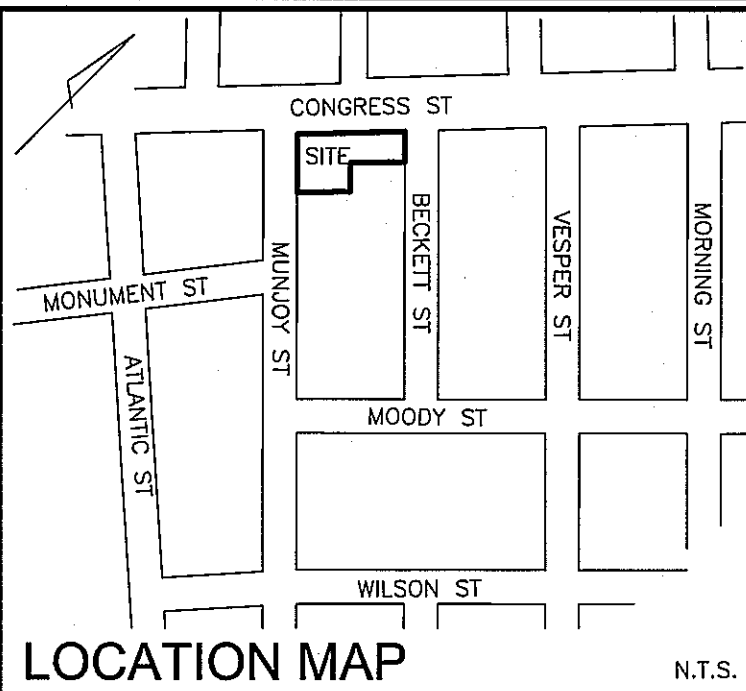
We look forward to hearing back from you on your progress. Thank you for this opportunity to work with you and we look forward to a successful partnership.

Sincerely,

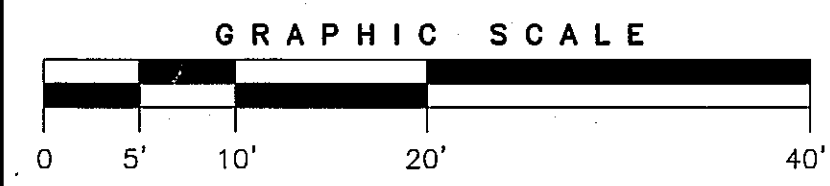


Mike Tremblay, Director of Transit Development
Greater Portland METRO
mtremblay@gpmetro.org





- LEGEND**
- IRON PIPE OR ROD FOUND
 - MONUMENT FOUND
 - UTILITY POLE
 - MANHOLE
 - ELECTRIC/GAS METER
 - SIGN
 - CATCH BASIN
 - HYDRANT
 - WATER VALVE OR SHUTOFF
 - GAS VALVE
 - LIGHT POLE
 - DECIDUOUS TREE
 - FENCE
 - CURB
 - OVERHEAD WIRES
 - UNDERGROUND POWER
 - WATER LINE
 - GAS LINE
 - TELEPHONE
 - STORM DRAIN
 - SANITARY SEWER
 - 1' CONTOUR
 - FINISHED FLOOR ELEVATION
 - NOW OR FORMERLY
 - DEED BOOK AND PAGE



- PLAN REFERENCES**
- "CONDOMINIUM PLAT OF THE CLARA CHISHOLM HOUSE CONDOMINIUM, 94 BECKETT STREET, PORTLAND, MAINE FOR JEFFREY J. LOWERY" MAY 13, 2002 BY BACK BAY BOUNDARY, INC. RECORDED IN C.C.R.D. IN PLAN BOOK 202, PAGE 458.
 - "STANDARD BOUNDARY SURVEY OF THE ST. LAWRENCE ARTS & COMMUNITY CENTER, 66-76 CONGRESS STREET, PORTLAND, MAINE FOR THE FRIENDS OF THE ST. LAWRENCE CHURCH" OCT. 18, 2002 BY BACK BAY BOUNDARY, INC.
 - "SURVEY PLAT 'BECKETT ON THE PROM' CONDOMINIUMS, 99 BECKETT STREET, PORTLAND, MAINE MADE FOR CYNTHIA L. HOLMES" AUGUST 2, 2001 BY OWEN HASKELL, INC.
 - "PLAN OF BOUNDARY SURVEY, 59 MUNJOY STREET CONDOMINIUMS, 59 MUNJOY STREET, PORTLAND, MAINE MADE FOR PENINSULA PROPERTY DEVELOPMENT LLC" FEBRUARY 11, 2013 BY TITCOMB ASSOCIATES RECORDED IN C.C.R.D. PLAN BOOK 215, PAGE 355.
 - "EXISTING CONDITIONS PLAN, BECKETT STREET, WILSON STREET TO CONGRESS STREET, FOR CITY OF PORTLAND, MAINE PUBLIC SERVICES DEPARTMENT ENGINEERING DEPARTMENT" DECEMBER 16, 2014 BY OWEN HASKELL, INC.

UTILITY NOTE

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

GENERAL NOTES

- OWNER OF RECORD: FRIENDS OF THE ST. LAWRENCE CHURCH, 76 CONGRESS STREET, PORTLAND, MAINE CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 13333, PAGE 9 TAX MAP 3 BLOCK L LOT 1
- BASIS OF BEARINGS: MAINE STATE PLANE COORDINATE SYSTEM WEST ZONE NAD83. BASED ON CITY MONUMENTS T102-69-7 AND T102-68-5.
- ELEVATIONS ARE BASED ON NGVD 1929. BENCH MARK: MONUMENT WITH BOLT NORTHWEST CORNER OF MORNING AND WILSON STREETS ELEVATION 114.63.

CERTIFICATE

OWEN HASKELL, INC. HEREBY CERTIFIES THAT THIS PLAN IS BASED ON, AND THE RESULT OF, AN ON THE GROUND FIELD SURVEY AND THAT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT STANDARDS OF PRACTICE, WITH THE EXCEPTION OF MARKERS NOT SET AT ALL CORNERS.

DATE 9/28/16

JOHN W. SWAN, PLS NO. 1038

BOUNDARY AND TOPOGRAPHIC SURVEY

OF

SAINT LAWRENCE ARTS CENTER

66 CONGRESS STREET, PORTLAND, MAINE

MADE FOR

ARCHETYPE, P.A.

OWEN HASKELL, INC.

PROFESSIONAL LAND SURVEYORS

390 U.S. ROUTE ONE, FALMOUTH, ME 04105 (207) 774-0424

Drawn By RS	Date MARCH 23, 2016	Job No. 2016-045 P
Trace By JLW	Scale 1" = 10'	Drwg. No. 1
Check By JWS		
Book No. FILE		





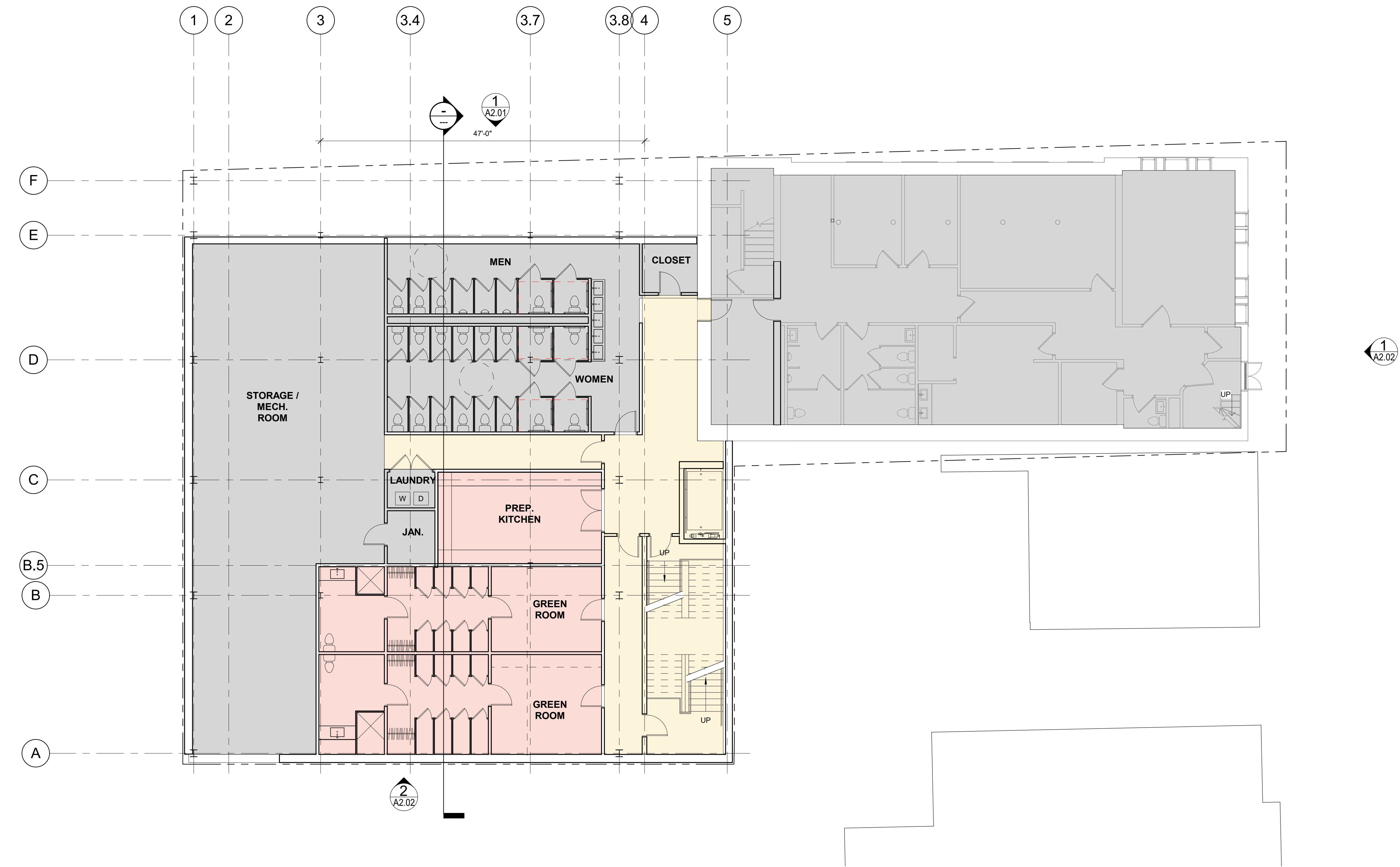




PERSPECTIVE C - LOOKING WEST UP CONGRESS STREET

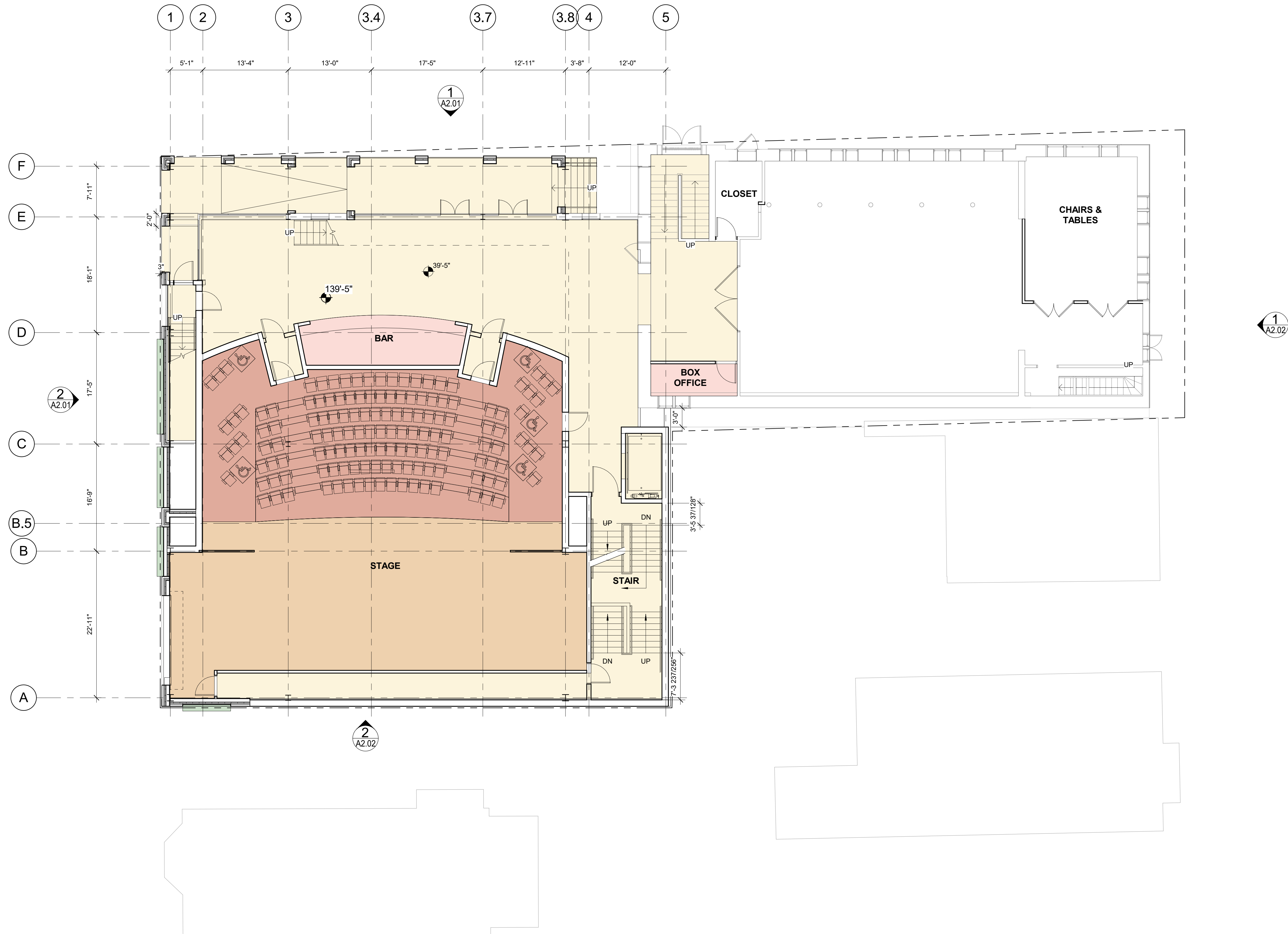


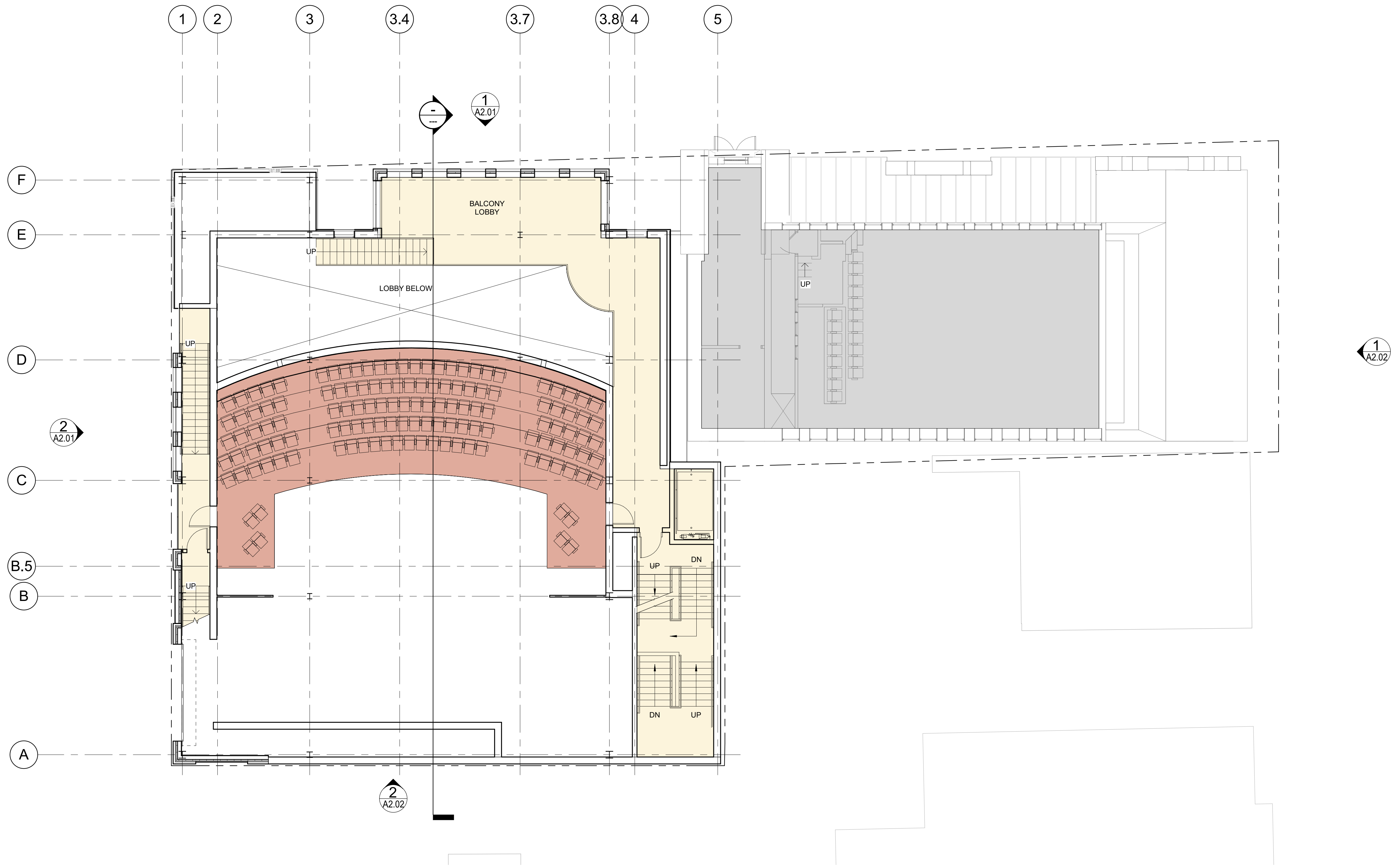
PERSPECTIVE B - LOOKING EAST UP CONGRESS STREET



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

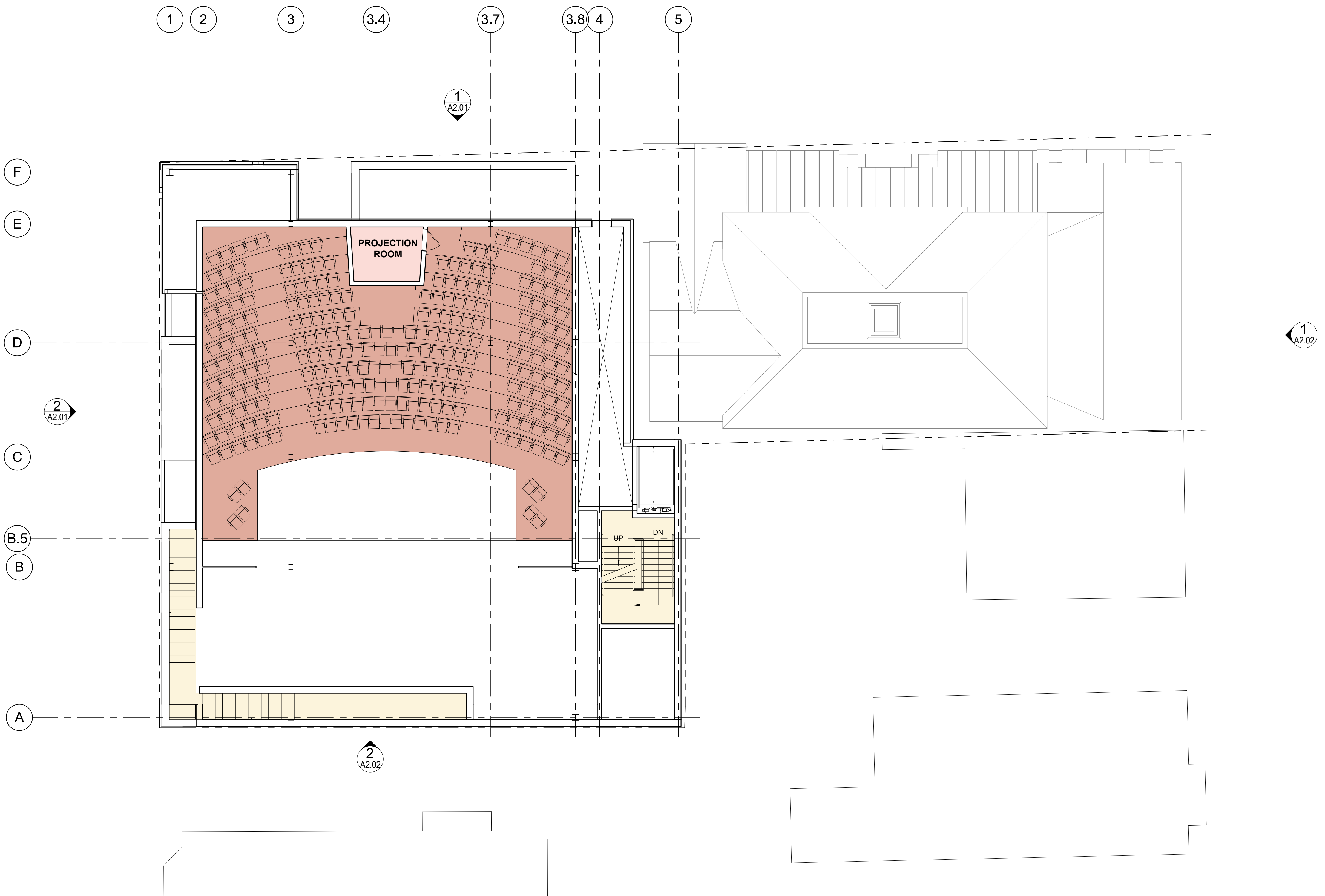
A1.00	
Date: DEC 20, 2022	Scale: 1/8" = 1'-0"
Revisions:	
Project: THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101	
Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM	
Consultant:	
Prepared For:	





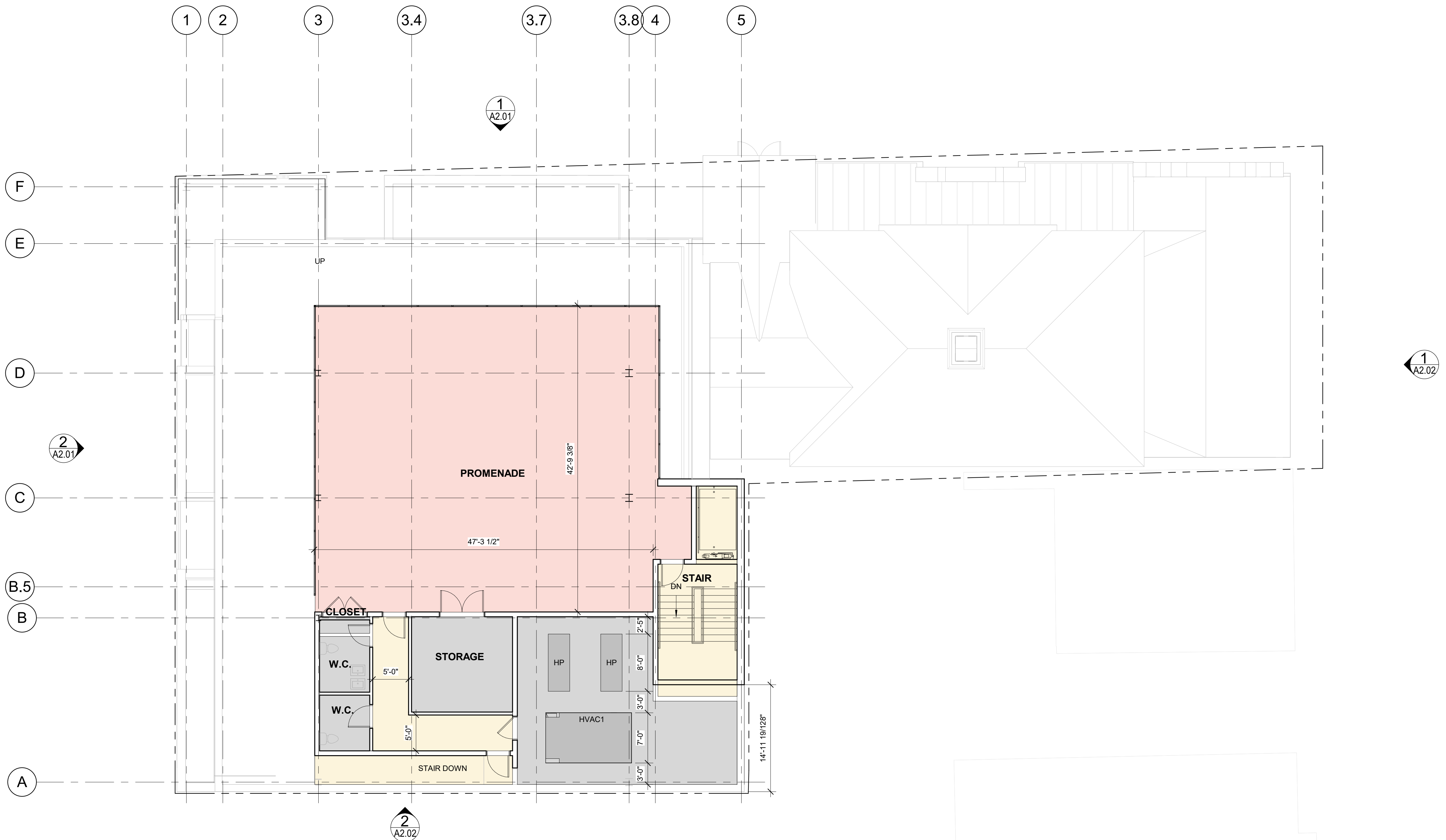
1 | UPPER LOBBY LEVEL
1/8" = 1'-0"

Prepared For:		Consultant:		Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM		Project: THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101		Revisions:		Date: DEC 20, 2022	Scale: 1/8" = 1'-0"	UPPER BALCONY PLAN	A1.02



1 | PROJECTION BOOTH
1/8" = 1'-0"

Date: DEC 20, 2022		Scale: 1/8" = 1'-0"		Revisions:		Project:		Architect:		Consultant:		Prepared For:	
INTERMEDIATE BALCONY PLAN				THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101				ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM					
A1.03													



1 | PROMENADE
1/8" = 1'-0"

Date: DEC 20, 2022		Scale: 1/8" = 1'-0"	PROMENADE PLAN	Revisions:		Project:	Architect:	Consultant:	Prepared For:					
						THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101	ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM							



3 | NORTHWEST CORNER VIEW



2 | NORTHEAST CORNER VIEW

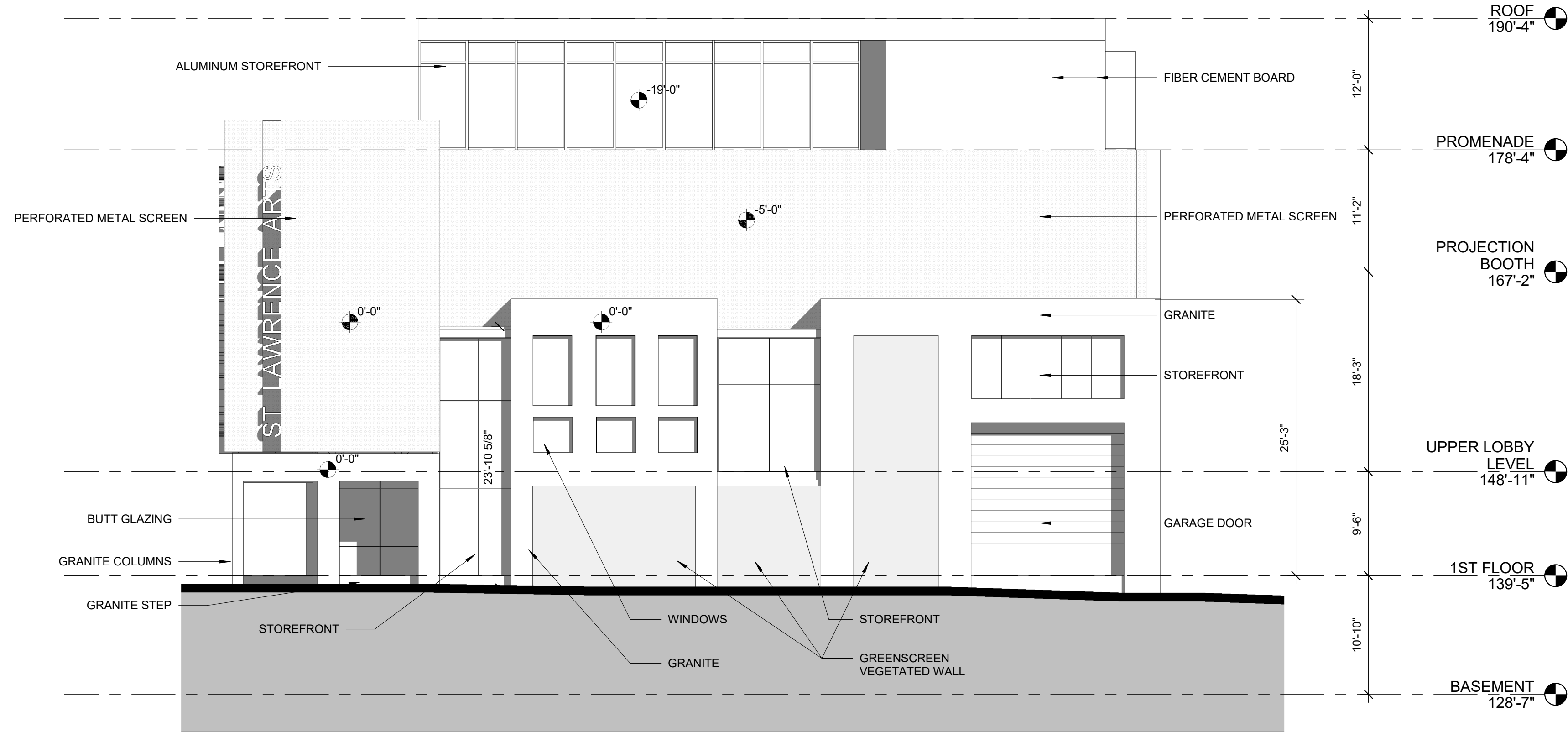


1 | MUNJOY STREET VIEW

Date: DEC 8, 2022		Scale:		Revisions:		Project:		Architect:		Consultant:		Prepared For:	
A1.07		STREET VIEWS				ST. LAWRENCE ARTS THEATER 76 CONGRESS STREET PORTLAND, MAINE 04101		ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM					



1 | NORTH ELEVATION
1/8" = 1'-0"

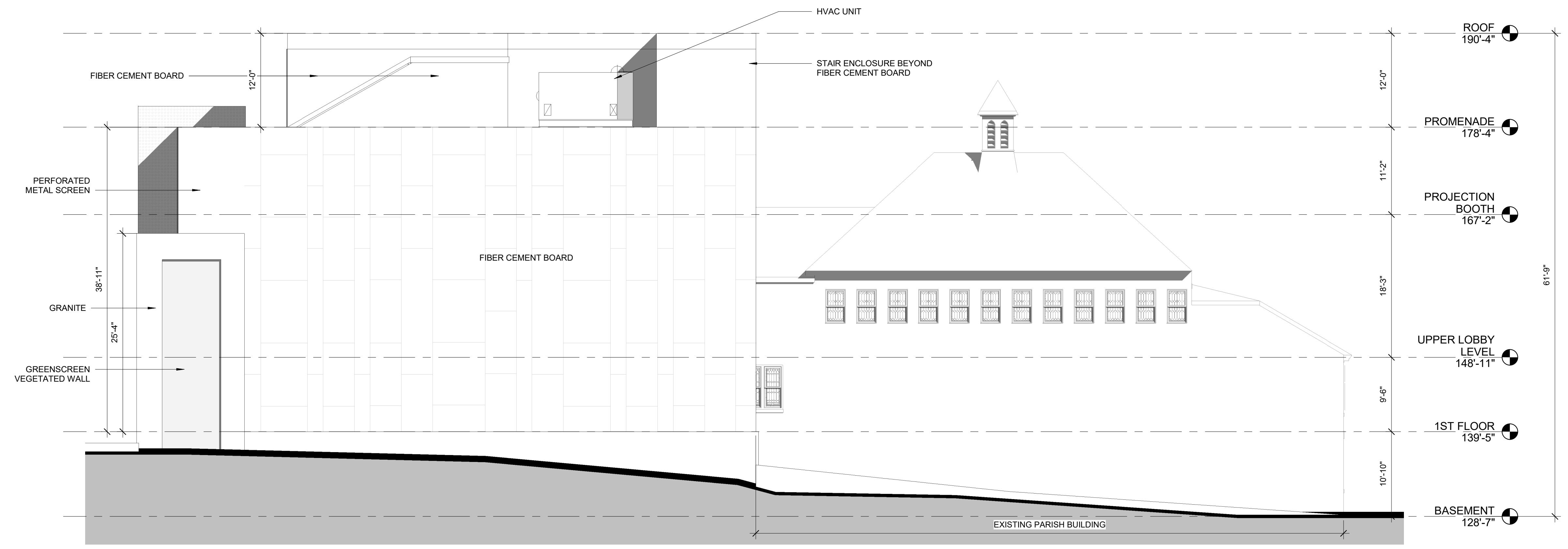


2 | WEST ELEVATION
1/8" = 1'-0"

Prepared For:	
Consultant:	
Architect:	ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM
Project:	THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101
Revisions:	
Date: DEC 20, 2022	Scale: 1/8" = 1'-0"
BUILDING ELEVATIONS	
A2.01	



1 | EAST ELEVATION
1/8" = 1'-0"



2 | SOUTH ELEVATION
1/8" = 1'-0"

Prepared For:		Consultant:	
Architect:		ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 WWW.ARCHETYPE-ARCHITECTS.COM	
Project:		THE HILL ARTS 76 CONGRESS STREET PORTLAND, MAINE 04101	
Revisions:		BUILDING ELEVATIONS	
Date:	DEC 20, 2022	Scale:	1/8" = 1'-0"
A2.02			

WAIVER REQUESTED FOR MINIMUM DRIVEWAY SEPARATION ON MUNJOY STREET,
TECHNICAL MANUAL, SECTION 1.7.2.7

1. THE PLANNING BOARD FINDS, BASED UPON THE CONSULTING TRANSPORTATION ENGINEER'S REVIEW, THAT EXTRAORDINARY CONDITIONS EXIST OR UNDUE HARDSHIP MAY RESULT FROM STRICT COMPLIANCE WITH THE TECHNICAL MANUAL STANDARD (SECTION 4.7.2) THAT ALONG WITH MATERIALS, COLLECTORS, AND LOCAL STREETS, MINIMUM ACCEPTABLE SPACING BETWEEN DRIVEWAYS SHALL BE 100-150 FEET, DEPENDING ON SPEED LIMIT, THAT SUBSTANTIAL JUSTICE AND THE PUBLIC INTEREST ARE SECURED WITH THE PROPOSED VARIATION IN THIS STANDARD, AND THAT THE VARIATION IS CONSISTENT WITH THE INTENT OF THE PLANNING BOARD'S DRIVEWAY WAIVER. THE TECHNICAL MANUAL STANDARD (SECTION 4.7.2) ALLOW THE DRIVEWAY CUT ON MUNJOY STREET APPROXIMATELY 20 FEET FROM THE ADJACENT DRIVEWAY TO THE SOUTH AS SHOWN ON THE FINAL PLANS.

BASED UPON THE CITY OF PORTLAND'S DELEGATED REVIEW AUTHORITY, THE PLANNING BOARD VOTED 7-0 TO APPROVE THE TRAFFIC MOVEMENT PERMIT APPLICATION, AS SUBMITTED, AS FOLLOWS:

1. ON THE BASIS OF THE APPLICATION, PLANS, REPORTS AND OTHER INFORMATION SUBMITTED BY THE APPLICANT; FINDINGS AND RECOMMENDATIONS CONTAINED IN THE PLANNING BOARD REPORT FOR THE PUBLIC HEARING ON JANUARY 23, 2018 FOR APPLICATION 2016-265 RELEVANT TO PORTLAND'S TECHNICAL AND DESIGN STANDARDS AND OTHER REGULATIONS; AND THE TESTIMONY PRESENTED AT THE PLANNING BOARD HEARING, THE PLANNING BOARD FINDS THAT THE PROPOSED PLAN IS IN CONFORMANCE WITH 23 MRSA 704-A AND CHAPTER 305 RULES AND REGULATIONS PERTAINING TO TRAFFIC MOVEMENT PERMITS.

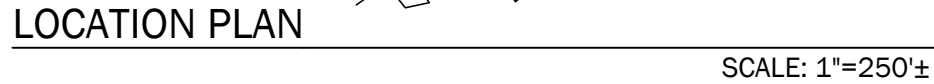
PLANNING BOARD CONDITIONS OF APPROVAL PER THE CITY OF PORTLAND PLANNING BOARD REVIEW MEMO DATED:

1. LANDSCAPING SHALL MEET THE "ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE AND LANDSCAPE GUIDELINES" OF THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
2. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION, AND SURFACING OF PARKING AREAS AND LOCATION AND SIZE OF BUILDINGS.
3. ALL POWERLINE UTILITIES SHALL BE UNDERGROUND FROM THE EXISTING SERVICE POLE..
4. SIDEWALKS AND CURBING SHALL BE DESIGNED AND BUILT WITH TIPDOWN RAMPS AT ALL STREET CORNERS, CROSSLAKES AND DRIVEWAYS IN CONFORMANCE WITH THE CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPs PUBLISHED BY THE BUREAU OF LAND AND QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
6. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING.
7. ALL DISTURBED AREAS ON THE SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED OR OTHER METHODS AS REQUIRED BY BEST MANAGEMENT PRACTICES (SEE ABOVE).
8. PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, DEVELOPMENT REVIEW COORDINATOR, PUBLIC WORKS REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.
9. EXISTING VEGETATION SHALL BE CONSERVED IN AREAS SHOWN ON THIS SITE. FENCING OR OTHER PROTECTIVE BARRIERS SHALL BE ERECTED OUTSIDE THE DRIP-LINE OF INDIVIDUAL GROUPINGS OF TREES DESIGNATED FOR PRESERVATION PRIOR TO THE ONSET OF CONSTRUCTION. REGRADING SHALL NOT TAKE PLACE WITHIN THE DRIP-LINE OF TREES DESIGNATED FOR PRESERVATION. NO STORAGE OR CONSTRUCTION MATERIALS SHALL BE PERMITTED WITHIN THE DRIP-LINE OF TREES TO BE PRESERVED.

1. REFER TO "BOUNDARY AND TOPOGRAPHIC SURVEY" BY OWEN HASKELL, INC. PROFESSIONAL LAND SURVEYORS FOR BOUNDARY AND TOPOGRAPHIC INFORMATION.
2. ALL DIMENSIONS, LOCATIONS AND CONTROLS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITIES. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE OWNER OR OWNER'S REPRESENTATIVE.
3. DO NOT SCALE THE DRAWINGS FOR REQUIRED DIMENSIONS. ANY DISCREPANCIES IN DIMENSIONING SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE.
4. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE SHOWN.
5. ALL EDGES OF PAVING SHALL BE STAKED OUT BY THE CONTRACTOR AND REVIEWED BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
6. PROVIDE A SMOOTH TRANSITION WHERE NEW WORK MEETS EXISTING.
7. ALL DISTURBED AREAS NOT OTHERWISE TREATED SHALL BE LOAMED AND SEEDED.
8. CENTERLINES OF DRIVEWAY AND WALKWAY, PROPOSED PARKING LOTS AND PROPOSED UTILITY LINES SHALL BE LOCATED AND LAID OUT BY PROFESSIONALLY LICENSED SURVEYOR.
9. SEE LANDSCAPING PLAN FOR NON-PAVED AREA SURFACE TREATMENTS AND CONCRETE PAVEMENT PATTERN LAYOUTS.

- OWNER/APPLICANT: FRIENDS OF THE ST. LAWRENCE CHURCH, 76 CONGRESS STREET
PORTLAND MAINE 04101. DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS
BK. 13333, PG. 9. DATED SEPTEMBER 19, 1997.
- CIVIL ENGINEER:
2018 APPROVAL: PINKHAM & GREER CIVIL ENGINEERS, 28 VANNAH AVENUE, PORTLAND, MAINE,
04103. APPROVAL GRANTED JANUARY 23, 2018.
2022 APPROVAL: WALSH ENGINEERING ASSOCIATES, INC. 1 KAREN DRIVE, SUITE 2A,
WESTBROOK, MAINE 04092
- ARCHITECT: ARCHETYPE ARCHITECTS, 48 UNION WHARF, PORTLAND, MAINE, 04101
- TOPOGRAPHIC AND BOUNDARY INFORMATION: OWEN HASKELL, INC. 390 US ROUTE ONE,
FALMOUTH, MAINE. BENCHMARK: MONUMENT WITH BOLT NORTHWEST CORNER OF MORNING
AND WILSON STREETS ELEVATION 114.63. BASIS OF BEARINGS: MAIN STATE PLANE
COORDINATE SYSTEM WEST ZONE NAD83. BASED ON CITY MONUMENTS T102-69-7 AND
T102-68-5.
- SOILS MAPPING TAKEN FROM SOIL CONSERVATION STUDY OF CUMBERLAND COUNTY AND
CLASSIFIED AS HINCKLEY (HIB), GRAVELLY SANDY LOAM, 3-8% SLOPES, HYDROLOGICAL GROUP
"A".
- TAX MAP REFERENCE: MAP 3 / BLOCK L / LOT 1.
- TOTAL PARCEL = 0.243 acres
- CALL DIG-SAFE PRIOR TO COMMENCING WORK, 1-800-DIG-SAFE.
- ALL WORK WITHIN THE RIGHT OF WAY IS TO MEET CITY OF PORTLAND STANDARDS.
- BUILDING TO BE SERVICED BY PUBLIC WATER AND SEWER. THESE SERVICES, INCLUDING
EXISTING HYDRANTS, ARE AS SHOWN ON SHEET C1.4, GRADING AND UTILITIES PLAN.
- POWER, TELEPHONE AND CABLE SERVICES ARE TO BE UNDERGROUND. THESE SERVICES ARE
SHOWN ON SHEET C1.4, GRADING AND UTILITIES PLAN.
- EXISTING UTILITIES, INCLUDING SIZE AND VERTICAL AND HORIZONTAL LOCATIONS, ARE SHOWN
ON SHEET C1.4, GRADING AND UTILITIES PLAN.
- THERE ARE NO APPARENT EXISTING PERMANENT ONSITE EASEMENTS OR RESTRICTIONS
BURDENING OR BENEFITING THE SUBJECT PROPERTY.
- THE EXISTING ONSITE STRUCTURE IS LISTED BY THE CITY OF PORTLAND AS A HISTORIC
LANDMARK. NO OTHER STRUCTURES OR HISTORIC SITES ON OR ADJACENT TO THIS SITE APPEAR
ON OR ARE NOMINATED TO THE NATIONAL REGISTER.
- THE SUBJECT PARCEL SHOWN AS 76 CONGRESS STREET IS SUBJECT TO THE CITY OF PORTLAND
LEVEL III SITE PLAN DEVELOPMENT REVIEW APPLICATION.
- REQUIRED STREET TREES ARE INCLUDED ON THE LANDSCAPE PLAN AS PART OF THE APPROVAL
FOR ST. LAWRENCE ARTS ADDITION SITE PLAN.
- FLOODPLAIN: THIS PROPERTY SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL
230051 0014 A, EFFECTIVE DATE JULY 17, 1986. IT IS NOT IN A SPECIAL FLOOD HAZARD ZONE.
- THIS PROJECT COMPLIES WITH CONDITIONS OF PORTLAND CODE OF ORDINANCES, CHAPTER 32
STORMWATER, INCLUDING ARTICLE III, POST-CONSTRUCTION STORMWATER MANAGEMENT. THE
DEVELOPER/CONTRACTOR/SUBCONTRACTORS MUST COMPLY WITH CONDITIONS OF THE
CONSTRUCTION STORMWATER MANAGEMENT PLAN AND SEDIMENT & EROSION CONTROL PLAN
BASED ON CITY STANDARDS AND STATE GUIDELINES. SEE SHEET C1.4, GRADING AND UTILITIES
PLAN, FOR THE LIST OF INSPECTION AND MAINTENANCE OF STORMWATER MANAGEMENT
FACILITIES REQUIREMENTS.
- EXISTING TREE PRESERVATION AND PROTECTION MEASURES ARE TO BE UNDERTAKEN IN
ACCORDANCE WITH THE STANDARDS SHOWN ON SHEET L1.0, LANDSCAPE IMPROVEMENT PLAN.
- THE PARKING SPACE AT THE DROP-OFF ZONE SHALL BE MARKED WITH MOVEABLE SIGNS
DURING PERFORMANCES. ALL OTHER TIMES IT WILL BE TWO REGULAR SPACES.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG SAFE" AND LOCAL UTILITY COMPANIES AT LEAST THREE (3) BUSINESS DAYS, BUT NOT MORE THAN 30 CALENDAR DAYS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, IN ACCORDANCE WITH MAINE STATE LAW. "DIG SAFE" TELEPHONE NUMBER IS 1-888-344-7233.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL, AND ANY MEANS, METHODS, AND TECHNIQUES EMPLOYED TO PERFORM THE WORK SHOWN ON THE PLANS.
3. ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS INCLUDING ALL SAFETY REGULATIONS (OSHA).
4. ALL WORK SHALL BE IN CONFORMANCE ALL UTILITY COMPANIES STANDARDS.
5. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THE WORK SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION.
6. ALL PAVEMENT/CONCRETE CUTS SHALL BE SAW CUT TO RESULT IN CLEAN EDGES. A TACK COAT SHALL BE APPLIED ALONG THE PAVEMENT CUT EDGES AND THE NEW PAVEMENT BUTTED TO IT, UNLESS OTHERWISE DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
7. ALL WORK SHALL COMPLY WITH THE CITY OF PORTLAND STREET OPENING PERMIT REQUIREMENTS.
8. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING. REFER TO THE WRITTEN EROSION CONTROL PLAN AND DRAWINGS FOR FURTHER EROSION CONTROL GUIDELINES.
9. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS. IF ANY DISCREPANCIES ARE FOUND, THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY.



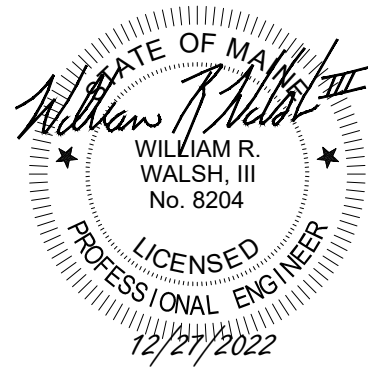
C1.0	PROJECT NOTES
C1.1	SITE PLAN
C1.2	EXISTING CONDITIONS AND DEMOLITION PLAN
C1.3	GRADING AND UTILITIES PLAN
C1.4	EROSION CONTROL PLAN, NOTES AND DETAILS
C1.5	LANDSCAPE PLAN, NOTES AND DETAILS
C1.6	SIDEWALK RAMP DETAILS
C2.1	DETAILS
C2.2	DETAILS
1	BOUNDARY AND TOPOGRAPHIC SURVEY

CLASSIFICATION:	EXISTING ZONE: C58 (UNDERLYING ZONE: R-6)
EXISTING USE:	PERFORMING ARTS HALL
MIN. LOT SIZE: PROVIDED:	10,500 S.F. 10,601 S.F.
MINIMUM FRONT YARD: PROVIDED:	0 FEET 0 FEET
MINIMUM REAR YARD: PROVIDED:	0 FEET 3 FEET
MINIMUM SIDE ON A SIDE STREET: PROVIDED:	0 FEET 0 FEET
MAXIMUM LOT COVERAGE: PROVIDED:	95% 93%
MAXIMUM TOWER HEIGHT:	NA
MAXIMUM SANCTUARY STRUCTURE HEIGHT: PROVIDED:	54 FEET EXISTING
OPEN SPACE RATION: PROVIDED:	0% 0%
MINIMUM LOT WIDTH: PROVIDED:	50 FEET 160 FEET

*ZONING STANDARDS FROM CITY OF PORTLAND LAND USE RECODE, REVISED 7/19/2021.



Copyright © 2022



ST. LAWRENCE ARTS, PERFORMANCE ARTS HALL

76 CONGRESS STREET
PORTLAND, MAINE 04101

OWNER / APPLICANT:
FRIENDS OF THE ST. LAWRENCE CHURCH

76 CONGRESS STREET
PORTLAND, MAINE 04101

[illegible]

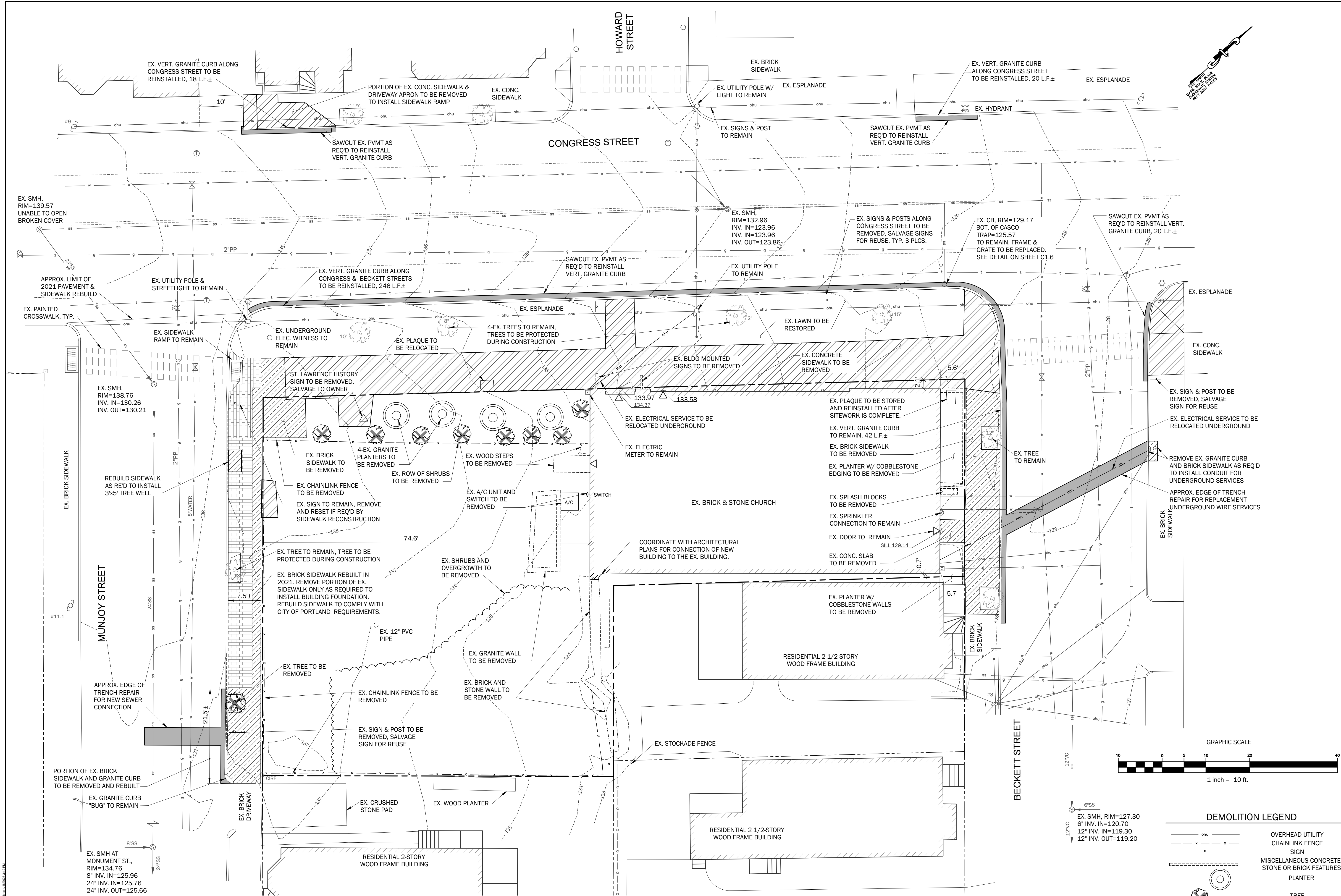
Sheet Title

PROJECT NOTES

TAX MAP 3 / BLOCK L / LOT 1	
Job No.: 777	Sheet No.:
Date: DEC. 27, 2022	C1.0
Scale: AS SHOWN	
Drawn: JDC	
Checked: WRW	

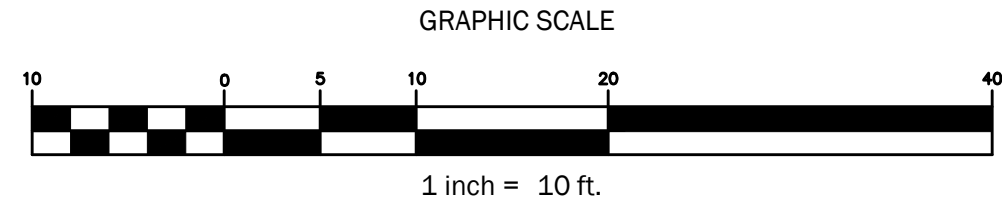
C1.0

PRELIMINARY - NOT FOR CONSTRUCTION



DEMOLITION NOTES:

- ANY UNUSED SERVICE LINES ARE TO BE PROPERLY REMOVED TO THE MAIN. CAP EACH IN ACCORDANCE WITH THE APPROPRIATE UTILITY REQUIREMENTS.
- NOTIFY THE CITY OF PORTLAND ARBORIST 5 DAYS PRIOR TO REMOVING THE EXISTING TREES.
- CONTRACTOR IS TO TAKE CARE TO ACTUALLY SAVE THE TREES DESIGNATED TO REMAIN WITH THE HELP OF GOOD TREE PROTECTION MEASURES. PROTECTION MEASURES ARE TO BE PLACED PRIOR TO ANY CONSTRUCTION OR SITE WORK. CONSTRUCTION FENCING IS TO BE USED TO SEPARATE THE ESPLANADE AREA FROM THE CONSTRUCTION AREA AND TO PREVENT STORAGE OF EQUIPMENT OR MATERIALS UNDER OR AROUND THE EXISTING TREES.



DEMOLITION LEGEND

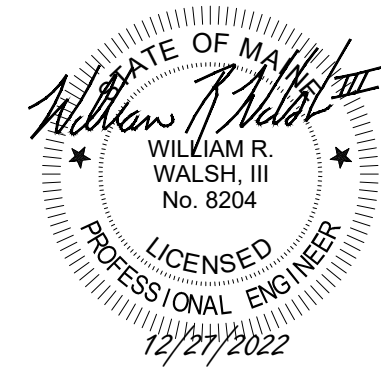
- OVERHEAD UTILITY
- CHAINLINK FENCE
- SIGN
- MISCELLANEOUS CONCRETE, STONE OR BRICK FEATURES
- PLANTER
- TREE
- CONCRETE PAD OR SIDEWALK
- BRICK SIDEWALK
- BITUMINOUS PAVEMENT
- VERTICAL GRANITE CURB

FOR SITE PLAN LEGEND SEE SHEET C1.3

WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Dr., Suite 2A | Westbrook, Maine 04092
ph: 207.553.9898 | www.walsh-eng.com

Copyright © 2023



ST. LAWRENCE ARTS, PERFORMANCE ARTS HALL

76 CONGRESS STREET
PORTLAND, MAINE 04101

FRIENDS OF THE ST. LAWRENCE CHURCH

76 CONGRESS STREET
PORTLAND, MAINE 04101

PRELIMINARY - NOT FOR CONSTRUCTION

Rev.	Date	Description	Drawn	Check

Sheet Title:

EXISTING
CONDITIONS AND
DEMOLITION PLAN

TAX MAP 3 / BLOCK L / LOT 1

Job No.: 777
Date: DEC. 27, 2022
Scale: AS SHOWN
Drawn: JDC
Checked: WRW

C1.2

INTRODUCTION

THE FOLLOWING PLAN FOR CONTROLLING SEDIMENTATION AND EROSION IN THIS PROJECT IS BASED ON CONSERVATION PRACTICES FOUND IN THE MAINE EROSION & SEDIMENT CONTROL BMPs MANUAL, OCTOBER 2016, AND MAINE EROSION AND SEDIMENT CONTROL PRACTICE FIELD GUIDE FOR CONTRACTORS, REVISED 2014, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR WHO IMPLEMENTS THIS PLAN SHALL BE FAMILIAR WITH THESE PUBLICATIONS AND ADHERE TO THEM AND THE PRACTICES PRESENTED HEREIN

REFERENCE IS MADE TO THE GRADING AND DRAINAGE PLANS WITHIN THE PLAN SET, SHOWING THE LOCATIONS AND TYPES OF PROPOSED MEASURES TO BE IMPLEMENTED.

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES

THE FOLLOWING IS A LIST OF GENERAL EROSION CONTROL PRACTICES THAT WILL BE USED TO PREVENT EROSION AND SEDIMENTATION BEFORE, DURING AND AFTER THE CONSTRUCTION OF THIS PROJECT. IN ADDITION, SPECIAL CARE SHALL BE USED AT ALL TIMES TO: LIMIT DISTURBANCE AND, HENCE, EROSION

- 1) CORRECT ANY EROSION PROBLEMS IMMEDIATELY
- 2) REGULARLY MONITOR THE IMPLEMENTED PRACTICES, ESPECIALLY AFTER EVERY RAINFALL
- 3) REVEGETATE DISTURBED AREAS AS SOON AS POSSIBLE AFTER CONSTRUCTION
- 4) CONFORM TO ALL REQUIREMENTS/STANDARDS OF THE SITE'S MAINE DEP EROSION & SEDIMENT CONTROL BMP MANUAL.

SILT FENCE AND/OR EROSION CONTROL MIX SEDIMENT BARRIERS

SILT FENCE AND/OR EROSION CONTROL MIX SEDIMENT BARRIERS WILL BE INSTALLED ALONG THE DOWN GRADIENT SIDE OF THE PROPOSED GROUND DISTURBANCE AREAS PRIOR TO ANY CONSTRUCTION ACTIVITIES WHERE SLOPES EXCEED 8% OR THERE IS FLOWING WATER BOTH SILT FENCE AND EROSION CONTROL MATTING BERMS SHALL BE USED.

CATCH BASIN PROTECTION

CATCH BASIN PROTECTION WILL BE INSTALLED AT THE FIRST DOWNGRADIENT CATCH BASIN IN STREET ADJACENT TO ANY CONSTRUCTION ACTIVITIES AND IN ALL ONSITE CATCH BASINS UNTIL SITE HAS BEEN COMPLETELY STABILIZED.

CONSTRUCTION PHASE

THE FOLLOWING GENERAL PRACTICES WILL BE IMPLEMENTED TO PREVENT EROSION DURING CONSTRUCTION ON THIS PROJECT:

1. EROSION AND SEDIMENTATION CONTROL BMPs SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHWORK ACTIVITIES.
2. ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. AN AREA NO LARGER THAN ONE DAY CAN BE MULCHED IN ONE DAY. ONCE CONSTRUCTION OF AN AREA IS COMPLETE, FINAL GRADING, LOAMING AND SEEDING SHALL OCCUR IMMEDIATELY (REFER TO "POST CONSTRUCTION REVEGETATION" SECTION). IF DURING FINAL GRADING, LOAMING AND SEEDING CAN NOT OCCUR IMMEDIATELY, IT SHALL BE DONE PRIOR TO ANY STORM EVENT AND WITHIN 15 DAYS OF COMPLETING CONSTRUCTION IN THE AREA. IF FINAL GRADING, LOAMING AND SEEDING CANNOT OCCUR WITHIN 7 DAYS, OR IF THE AREA IS NOT UNDER ACTIVE CONSTRUCTION FOR A PERIOD LONGER THAN 7 DAYS, SEE ITEM NO. 4, BELOW.
3. PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC AREA, SILT FENCING SHALL BE INSTALLED ON DOWNGRADIENT PORTIONS OF THE SITE AS LOCATED ON THE PLANS TO PROTECT AGAINST ANY CONSTRUCTION RELATED EROSION.
4. TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE MINIMUM POTENTIAL FOR EROSION AND WILL BE KEPT AS FAR AS POSSIBLE FROM EXISTING DRAINAGE AREAS AND WETLANDS. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 7 DAYS SHALL BE:
 - A. TREATED WITH ANCHORED MULCH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL).
 - B. SEEDDED WITH CONSERVATION MIX AND MULCHED IMMEDIATELY.
 - C. STOCKPILES SHALL BE EITHER PLACED UPHILL OF AN EXISTING SEDIMENT BARRIER ON THE SITE OR ENCIRCLED BY A HAY BALE OR SILT FENCE BARRIER THE FIRST DAY THAT STOCKPIILING COMMENCES.
5. ALL DISTURBED AREAS EXPECTED TO REMAIN LONGER THAN 7 DAYS SHALL BE:
 - A. TREATED WITH STRAW AT A RATE OF 70-90 LBS. PER 1,000 SQUARE FEET FROM 4/16 TO 10/1, OR AT A RATE OF 150-200 LBS. PER 1,000 SQUARE FEET FROM 10/1 TO 4/15.
 - B. SEEDDED WITH CONSERVATION MIX OF PERENNIAL RYE GRASS (1.0 LBS./1,000 SQ.FT.) AND MULCHED IMMEDIATELY. FROM 10/1 TO 4/15, FOLLOW THE SEEDING RATES AS OUTLINED BELOW IN SUB-SECTION 4.D. OF THE "POST CONSTRUCTION REVEGETATION" SECTION.
 - C. MONITORED EVERY TWO WEEKS UNTIL SEEDING CAN OCCUR AND REMULCHED AS NEEDED TO PROTECT SLOPES.
5. ALL GRADING WILL BE HELD TO A MAXIMUM 3:1 SLOPE WHERE PRACTICAL. GREATER SLOPES MAY BE USED WHERE THE BANKS ARE PROTECTED WITH SOFT ARMOUR MATTING, EROSION CONTROL MATTING, OR RIPRAP. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY AFTER FINAL GRADING IS COMPLETE. (IT IS UNDERSTOOD THAT IMMEDIATELY MEANS WITHIN 5 DAYS OF THE COMPLETION OF WORK. SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION).
6. APPLICATION RATE MUST BE 2 BALES (70-90 LBS.) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE. DRIVE OVER WITH TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
7. CONSTRUCTION TRAFFIC WILL BE DIRECTED OVER THE EXISTING SITE ENTRANCE. THE ROAD SHALL BE SWEEPED AND VACUUMED DAILY SHOULD SEDIMENT BE TRACKED ONTO IT.

DEWATERING

1. ALL DEWATERING DISCHARGE LOCATIONS SHALL BE LOCATED ON RELATIVELY FLAT GROUND AT LEAST 75' FROM STREAMS AND 25' FROM WETLANDS. THE CONTRACTOR SHALL UTILIZE DIRTBAES, EROSION CONTROL MIX BERMS, OR SIMILAR METHODS FOR FILTRATION OF DEWATERING AND SHALL CONFORM TO THE MAINE EROSION AND SEDIMENT CONTROL BMPs G-1, G-2, AND G-3.

POST CONSTRUCTION REVEGETATION

THE FOLLOWING GENERAL PRACTICES WILL BE IMPLEMENTED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING:

1. A MINIMUM OF 6" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE.
2. LAWN AREAS: "PARK MIX" GRASS SEED BY ALLEN, STERLING & LOTHROP (FALMOUTH, MAINE), OR APPROVED EQUAL.
3. MULCH SHALL BE HAY OR STRAW MULCHES THAT ARE DRY AND FREE FROM UNDESIRABLE SEEDS AND COARSE MATERIALS.
 - A. APPLICATION RATE MUST BE 2 BALES (70-90 LBS.) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE.
 - B. DRIVE OVER WITH TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
 - C. BLANKET WITH TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING ON GRADES GREATER THAN 5%.
4. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF ASPHALT, WOOD FIBRE OR PAPER FIBRE AND WATER, WHICH IS SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 10/1 AND 4/15.
5. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN OCTOBER 1ST AND APRIL 15TH. SHOULD SEEDING BE NECESSARY BETWEEN THESE DATES, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED:
 - A. ONLY UNFROZEN LOAM SHALL BE USED.
 - B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
 - C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS./1,000 S.F.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
 - D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.5 LBS./1,000 S.F.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
 - E. FERTILIZING, SEEDING AND MULCHING SHALL BE DONE ON LOAM THE DAY THE LOAM IS SPREAD.
 - F. HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE. WINTER MULCHING RATES, SHALL BE DOUBLE AS SPECIFIED ABOVE IN SUBSECTION 3.A OF THE "POST CONSTRUCTION REVEGETATION" SECTION, SHOULD BE APPLIED DURING THIS PERIOD.
6. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 90% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE DESIGN PROFESSIONAL THAT THE EXISTING CATCH IS INADEQUATE.

MONITORING SCHEDULE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL, AND AT LEAST ONCE A WEEK, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

1. SILT FENCE SHALL BE INSPECTED AND REPAIRED. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING.
2. CONSTRUCTION ENTRANCE SHALL BE VISUALLY INSPECTED AND REPAIRED AS NEEDED. ANY AREAS SUBJECT TO RUTTING SHALL BE STABILIZED IMMEDIATELY. IF THE VOIDS OF THE CONSTRUCTION ENTRANCE BECOME FILLED WITH MUD, MORE CRUSHED STONE SHALL BE ADDED AS NEEDED. THE PUBLIC ROADWAY SHALL BE SWEEPED AND VACUUMED SHOULD MUD BE DEPOSITED/TRACKED ONTO THEM.

STANDARDS FOR STABILIZING SITES FOR THE WINTER

THE FOLLOWING STANDARDS AND METHODOLOGIES SHALL BE USED FOR STABILIZING THE SITE DURING THE WINTER CONSTRUCTION PERIOD:

1. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES (ANY AREA HAVING A GRADE GREATER THAN 25%) - THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15TH. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15TH, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.
 - A. **STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS:** BY OCTOBER 1ST THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED HAY MULCH OVER THE SEEDING AT TWICE THE RATE AS SPECIFIED ABOVE IN SUBSECTION 3.A OF THE "POST CONSTRUCTION REVEGETATION" SECTION. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS.
 - B. **STABILIZE THE SLOPE WITH WOOD-WASTE COMPOST:** THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD-WASTE COMPOST ON THE SLOPE BY NOVEMBER 15TH. THE CONTRACTOR WILL NOT USE WOOD-WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
2. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS - BY SEPTEMBER 15TH THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON THE SITE. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.
 - A. **STABILIZE THE SOIL WITH TEMPORARY VEGETATION:** BY OCTOBER 1ST THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET, LIGHTLY MULCH THE SEEDDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM III OF THIS STANDARD.
 - B. **STABILIZE THE SOIL WITH SOD:** THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
 - C. **STABILIZE THE SOIL WITH MULCH:** BY NOVEMBER 15TH THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1,000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH NETTING OR OTHER METHOD TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.
3. **STABILIZE THE SLOPE WITH STONE RIPRAP:** THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15TH. THE DEVELOPMENT'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

EROSION CONTROL REMOVAL

AN AREA IS CONSIDERED STABLE IF IT IS PAVED OR IF 90% GROWTH OF PLANTED SEEDS IS ESTABLISHED. ONCE AN AREA IS CONSIDERED STABLE, THE EROSION CONTROL MEASURES CAN BE REMOVED AS FOLLOWS:

1. **SILT FENCE:** SILT FENCE SHALL BE DISPOSED OF LEGALLY AND PROPERLY OFF-SITE. ALL SEDIMENT TRAPPED BEHIND THESE CONTROLS SHALL BE DISTRIBUTED TO AN AREA UNDERGOING FINAL GRADING OR REMOVED AND RELOCATED OFF-SITE.
2. **STABILIZED CONSTRUCTION ENTRANCE:** THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE REMOVED ONCE THE COMPACTED ROADWAY BASE IS IN PLACE. STONE AND SEDIMENT FROM THE CONSTRUCTION ENTRANCE SHALL BE REDISTRIBUTED TO AN AREA UNDERGOING GRADING OR REMOVED AND RELOCATED OFFSITE.
3. **MISCELLANEOUS:** ONCE ALL THE TRAPPED SEDIMENTS HAVE BEEN REMOVED FROM THE TEMPORARY SEDIMENTATION DEVICES THE DISTURBED AREAS MUST BE RETURNED TO CONFORM TO THE SURROUNDING TOPOGRAPHY. ONCE GRADED THESE DISTURBED AREAS MUST BE LOAMED (IF NECESSARY), FERTILIZED, SEEDDED AND MULCHED IN ACCORDANCE WITH THE RATES PREVIOUSLY STATED.

THE ABOVE EROSION CONTROLS MUST BE REMOVED WITHIN 30 DAYS OF FINAL STABILIZATION OF THE SITE. CONFORMANCE WITH THIS PLAN AND FOLLOWING THESE PRACTICES WILL RESULT IN A PROJECT THAT COMPLIES WITH THE STATE REGULATIONS AND THE STANDARDS OF THE NATURAL RESOURCES PROTECTION ACT, AND WILL PROTECT WATER QUALITY IN AREAS DOWNSTREAM FROM THE PROJECT.

MAINE CONSTRUCTION GENERAL PERMIT REQUIRED

SUBMISSION OF A MAINE CONSTRUCTION GENERAL PERMIT (MCGP) IS REQUIRED PRIOR TO COMMENCEMENT OF ANY EXCAVATION ACTIVITIES.

INSPECTION AND MAINTENANCE (APPENDIX B)

1. **INSPECTION AND MAINTENANCE REQUIREMENTS:** INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORMWATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER A SIGNIFICANT STORM EVENT (0.5 INCHES OF RAINFALL IN A 24-HOUR PERIOD) AND PRIOR TO COMPLETION OF PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS IN THE MCGP AND ANY DEPARTMENTAL COMPANION DOCUMENT TO THE MCGP, MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY, IMPLEMENTATION MUST BE STARTED BY THE END OF THE NEXT WORKING DAY AND COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED. DOCUMENTATION OF CORRECTION ACTIONS SHALL BE MAINTAINED WITH THE INSPECTION FORMS.
2. **INSPECTION LOG (REPORT):** A LOG (REPORT) MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS PROVIDED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATIONS(S) WHERE ADDITIONAL BMPs ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPs, NOTE IN THE INSPECTION LOG THE CORRECT ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO THE DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF THE PERMANENT STABILIZATION.

HOUSEKEEPING (APPENDIX C)

1. **SPILL PREVENTION:** CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1-800-452-6077 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT: HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGENCIES/
2. **GROUNDWATER PROTECTION:** DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING

INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPs) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465-C(1).
3. **FUGITIVE SEDIMENT AND DUST:** ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEPED 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.

NOTE: DEWATERING A STREAM WITHOUT A PERMIT FROM THE DEPARTMENT MAY VIOLATE STATE WATER QUALITY STANDARDS AND THE NATURAL RESOURCES PROTECTION ACT.
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.

NOTE: TO PREVENT THESE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST-CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISIONS OF RULES RELATED TO SOLID, UNIVERSAL, AND HAZARDOUS WASTE, INCLUDING, BUT NOT LIMITED TO, THE MAINE SOLID WASTE AND HAZARDOUS WASTE MANAGEMENT RULES; MAINE HAZARDOUS WASTE MANAGEMENT RULES; MAINE OIL CONVEYANCE AND STORAGE RULES; AND MAINE PESTICIDE REQUIREMENTS.
5. **EXCAVATION DEWATERING:** EXCAVATION DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR 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.

NOTE: DEWATERING CONTROLS ARE DISCUSSED IN THE "MAINE EROSION AND SEDIMENT CONTROL BMPs, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION."
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 TRANSMISSIONS);
 - DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX C(1);
 - ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
 - PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
 - UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
 - UNCONTAMINATED GROUNDWATER OR SPRING WATER;
 - FOUNDATION OR FOOTER DRAINAGE WHERE FLOWS ARE NOT CONTAMINATED;
 - UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
 - POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
 - LANDSCAPE IRRIGATION
7. **UNAUTHORIZED NON-STORMWATER DISCHARGES:** THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
 - WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
 - FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
 - SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
 - TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.
8. **ADDITIONAL REQUIREMENTS:** ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

CONGRESS STREET

CATCHBASIN PROTECTION

BECKETT STREET

EX. TREES TO BE PROTECTED DURING CONSTRUCTION, TYP.

STABILIZED CONSTRUCTION ENTRANCE

SILT FENCE

GRAPHIC SCALE

20 0 10 20 40 80

1 inch = 20 ft.

EROSION CONTROL PLAN

SCALE: 1"=20'

METAL COUPLER

1 1/4" SQ. HARDWOOD POSTS

FENCING STAPLED TO POST

BACKFILL 6"x6" TRENCH

SEE POST WRAP DETAIL

POST "B"

8' ±

POST "A"

SECTION "A"

SECTION "B"

1 1/4" SQ. HARDWOOD POST

SUPPORT NET INDUSTRIAL POLYPROPYLENE

12-MONTH UV RESISTANT GEOTEXTILE: MIRAFI ENVIROFENCE OR APPROVED EQUAL

BACKFILL 6"x6" TRENCH

LOOSE FABRIC IN TRENCH

POST "B"

POST "A"

POST WRAP DETAIL

NOTES:

1. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

2. SILT FENCE SHALL BE MAINTAINED CONTINUALLY THROUGHOUT THE ENTIRE CONSTRUCTION CYCLE.

2

PREFABRICATED SILT FENCE

NOT TO SCALE

CATCH BASIN/FIELD INLET FRAME

PLACE SILTSACK IN EXISTING FRAME. EXISTING GRATE MAY BE REPLACED DURING CONSTRUCTION

EX. GRADE

ACCUMULATED SEDIMENT

EXISTING BASIN

1"Ø REBAR (TYP.) FOR LIFTING AND REMOVAL

CATCH BASIN/FIELD INLET FRAME OR BASIN OPENING

SILTSACK BY ACF ENVIRONMENTAL (A.H. HARRIS & SONS, INC.)

SILT-SACK

NOTES:

1. INSTALLATION PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

2. EMPTY AND REMOVE SEDIMENT FROM SILTSACK WHEN RESTRAINT CORD IS NO LONGER VISIBLE. CLEAN, RINSE AND REPLACE AS NEEDED.

3. CONTRACTOR SHALL INSPECT CATCH BASIN PROTECTION AFTER EACH MAJOR STORM EVENT AND CLEAN SILT AS NEEDED.

4. SILT SACKS TO BE INSTALLED IN ALL CATCH BASINS DURING CONSTRUCTION WHILE GROUND IS NOT PERMANENTLY STABILIZED.

3

SILT SACK AT DRAINAGE STRUCTURE INLET

NOT TO SCALE

1

TREE PRESERVATION DETAIL (IV-2)

NOT TO SCALE

2

PREFABRICATED SILT FENCE

NOT TO SCALE

X

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

EROSION CONTROL LEGEND

SILT FENCE — SF —

CATCH BASIN INLET PROTECTION

CONSTRUCTION ENTRANCE

FOR SITE PLAN LEGEND SEE SHEET C1.3

ST. LAWRENCE ARTS, PERFORMANCE ARTS HALL

76 CONGRESS STREET
PORTLAND, MAINE 04101

OWNER/APPLICANT:
FRIENDS OF THE ST. LAWRENCE CHURCH

76 CONGRESS STREET
PORTLAND, MAINE 04101

Rev.

Date

Description

Drawn

Check

Sheet Title:

EROSION CONTROL PLANS, NOTES & DETAILS

TAX MAP 3 / BLOCK L / LOT 1

Job No.: 777

Date: DEC. 27, 2022

Scale: AS SHOWN

Drawn: JDC

Checked: WRW

C1.4

INTRODUCTION

THE FOLLOWING PLAN FOR CONTROLLING SEDIMENTATION AND EROSION IN THIS PROJECT IS BASED ON CONSERVATION PRACTICES FOUND IN THE MAINE EROSION & SEDIMENT CONTROL BMPs MANUAL, OCTOBER 2016, AND MAINE EROSION AND SEDIMENT CONTROL PRACTICE FIELD GUIDE FOR CONTRACTORS, REVISED 2014, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION. THE CONTRACTOR WHO IMPLEMENTS THIS PLAN SHALL BE FAMILIAR WITH THESE PUBLICATIONS AND ADHERE TO THEM AND THE PRACTICES PRESENTED HEREIN

REFERENCE IS MADE TO THE GRADING AND DRAINAGE PLANS WITHIN THE PLAN SET, SHOWING THE LOCATIONS AND TYPES OF PROPOSED MEASURES TO BE IMPLEMENTED.

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES

THE FOLLOWING IS A LIST OF GENERAL EROSION CONTROL PRACTICES THAT WILL BE USED TO PREVENT EROSION AND SEDIMENTATION BEFORE, DURING AND AFTER THE CONSTRUCTION OF THIS PROJECT. IN ADDITION, SPECIAL CARE SHALL BE USED AT ALL TIMES TO: LIMIT DISTURBANCE AND, HENCE, EROSION

- 1) CORRECT ANY EROSION PROBLEMS IMMEDIATELY
- 2) REGULARLY MONITOR THE IMPLEMENTED PRACTICES, ESPECIALLY AFTER EVERY RAINFALL
- 3) REVEGETATE DISTURBED AREAS AS SOON AS POSSIBLE AFTER CONSTRUCTION
- 4) CONFORM TO ALL REQUIREMENTS/STANDARDS OF THE SITE'S MAINE DEP EROSION & SEDIMENT CONTROL BMP MANUAL.

SILT FENCE AND/OR EROSION CONTROL MIX SEDIMENT BARRIERS

SILT FENCE AND/OR EROSION CONTROL MIX SEDIMENT BARRIERS WILL BE INSTALLED ALONG THE DOWN GRADIENT SIDE OF THE PROPOSED GROUND DISTURBANCE AREAS PRIOR TO ANY CONSTRUCTION ACTIVITIES WHERE SLOPES EXCEED 8% OR THERE IS FLOWING WATER BOTH SILT FENCE AND EROSION CONTROL MATTING BERMS SHALL BE USED.

CATCH BASIN PROTECTION

CATCH BASIN PROTECTION WILL BE INSTALLED AT THE FIRST DOWNGRADIENT CATCH BASIN IN STREET ADJACENT TO ANY CONSTRUCTION ACTIVITIES AND IN ALL ONSITE CATCH BASINS UNTIL SITE HAS BEEN COMPLETELY STABILIZED.

CONSTRUCTION PHASE

THE FOLLOWING GENERAL PRACTICES WILL BE IMPLEMENTED TO PREVENT EROSION DURING CONSTRUCTION ON THIS PROJECT:

1. EROSION AND SEDIMENTATION CONTROL BMPs SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHWORK ACTIVITIES.
2. ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. AN AREA NO LARGER THAN ONE DAY CAN BE MULCHED IN ONE DAY. ONCE CONSTRUCTION OF AN AREA IS COMPLETE, FINAL GRADING, LOAMING AND SEEDING SHALL OCCUR IMMEDIATELY (REFER TO "POST CONSTRUCTION REVEGETATION" SECTION). IF DURING FINAL GRADING, LOAMING AND SEEDING CAN NOT OCCUR IMMEDIATELY, IT SHALL BE DONE PRIOR TO ANY STORM EVENT AND WITHIN 15 DAYS OF COMPLETING CONSTRUCTION IN THE AREA. IF FINAL GRADING, LOAMING AND SEEDING CANNOT OCCUR WITHIN 7 DAYS, OR IF THE AREA IS NOT UNDER ACTIVE CONSTRUCTION FOR A PERIOD LONGER THAN 7 DAYS, SEE ITEM NO. 4, BELOW.
3. PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC AREA, SILT FENCING SHALL BE INSTALLED ON DOWNGRADIENT PORTIONS OF THE SITE AS LOCATED ON THE PLANS TO PROTECT AGAINST ANY CONSTRUCTION RELATED EROSION.
4. TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE MINIMUM POTENTIAL FOR EROSION AND WILL BE KEPT AS FAR AS POSSIBLE FROM EXISTING DRAINAGE AREAS AND WETLANDS. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 7 DAYS SHALL BE:
 - A. TREATED WITH ANCHORED MULCH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL).
 - B. SEEDDED WITH CONSERVATION MIX AND MULCHED IMMEDIATELY.
 - C. STOCKPILES SHALL BE EITHER PLACED UPHILL OF AN EXISTING SEDIMENT BARRIER ON THE SITE OR ENCIRCLED BY A HAY BALE OR SILT FENCE BARRIER THE FIRST DAY THAT STOCKPIILING COMMENCES.
5. ALL DISTURBED AREAS EXPECTED TO REMAIN LONGER THAN 7 DAYS SHALL BE:
 - A. TREATED WITH STRAW AT A RATE OF 70-90 LBS. PER 1,000 SQUARE FEET FROM 4/16 TO 10/1, OR AT A RATE OF 150-200 LBS. PER 1,000 SQUARE FEET FROM 10/1 TO 4/15.
 - B. SEEDDED WITH CONSERVATION MIX OF PERENNIAL RYE GRASS (1.0 LBS./1,000 SQ.FT.) AND MULCHED IMMEDIATELY. FROM 10/1 TO 4/15, FOLLOW THE SEEDING RATES AS OUTLINED BELOW IN SUB-SECTION 4.D. OF THE "POST CONSTRUCTION REVEGETATION" SECTION.
 - C. MONITORED EVERY TWO WEEKS UNTIL SEEDING CAN OCCUR AND REMULCHED AS NEEDED TO PROTECT SLOPES.
5. ALL GRADING WILL BE HELD TO A MAXIMUM 3:1 SLOPE WHERE PRACTICAL. GREATER SLOPES MAY BE USED WHERE THE BANKS ARE PROTECTED WITH SOFT ARMOUR MATTING, EROSION CONTROL MATTING, OR RIPRAP. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY AFTER FINAL GRADING IS COMPLETE. (IT IS UNDERSTOOD THAT IMMEDIATELY MEANS WITHIN 5 DAYS OF THE COMPLETION OF WORK. SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION).
6. APPLICATION RATE MUST BE 2 BALES (70-90 LBS.) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE. DRIVE OVER WITH TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
7. CONSTRUCTION TRAFFIC WILL BE DIRECTED OVER THE EXISTING SITE ENTRANCE. THE ROAD SHALL BE SWEEPED AND VACUUMED DAILY SHOULD SEDIMENT BE TRACKED ONTO IT.

DEWATERING

1. ALL DEWATERING DISCHARGE LOCATIONS SHALL BE LOCATED ON RELATIVELY FLAT GROUND AT LEAST 75' FROM STREAMS AND 25' FROM WETLANDS. THE CONTRACTOR SHALL UTILIZE DIRTBAES, EROSION CONTROL MIX BERMS, OR SIMILAR METHODS FOR FILTRATION OF DEWATERING AND SHALL CONFORM TO THE MAINE EROSION AND SEDIMENT CONTROL BMPs G-1, G-2, AND G-3.

POST CONSTRUCTION REVEGETATION

THE FOLLOWING GENERAL PRACTICES WILL BE IMPLEMENTED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING:

1. A MINIMUM OF 6" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE.
2. LAWN AREAS: "PARK MIX" GRASS SEED BY ALLEN, STERLING & LOTHROP (FALMOUTH, MAINE), OR APPROVED EQUAL.
3. MULCH SHALL BE HAY OR STRAW MULCHES THAT ARE DRY AND FREE FROM UNDESIRABLE SEEDS AND COARSE MATERIALS.
 - A. APPLICATION RATE MUST BE 2 BALES (70-90 LBS.) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE.
 - B. DRIVE OVER WITH TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
 - C. BLANKET WITH TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING ON GRADES GREATER THAN 5%.
4. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF ASPHALT, WOOD FIBRE OR PAPER FIBRE AND WATER, WHICH IS SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 10/1 AND 4/15.
5. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN OCTOBER 1ST AND APRIL 15TH. SHOULD SEEDING BE NECESSARY BETWEEN THESE DATES, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED:
 - A. ONLY UNFROZEN LOAM SHALL BE USED.
 - B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
 - C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS./1,000 S.F.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
 - D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.5 LBS./1,000 S.F.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
 - E. FERTILIZING, SEEDING AND MULCHING SHALL BE DONE ON LOAM THE DAY THE LOAM IS SPREAD.
 - F. HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE. WINTER MULCHING RATES, SHALL BE DOUBLE AS SPECIFIED ABOVE IN SUBSECTION 3.A OF THE "POST CONSTRUCTION REVEGETATION" SECTION, SHOULD BE APPLIED DURING THIS PERIOD.
6. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 90% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE DESIGN PROFESSIONAL THAT THE EXISTING CATCH IS INADEQUATE.

MONITORING SCHEDULE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL, AND AT LEAST ONCE A WEEK, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

1. SILT FENCE SHALL BE INSPECTED AND REPAIRED. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING.
2. CONSTRUCTION ENTRANCE SHALL BE VISUALLY INSPECTED AND REPAIRED AS NEEDED. ANY AREAS SUBJECT TO RUTTING SHALL BE STABILIZED IMMEDIATELY. IF THE VOIDS OF THE CONSTRUCTION ENTRANCE BECOME FILLED WITH MUD, MORE CRUSHED STONE SHALL BE ADDED AS NEEDED. THE PUBLIC ROADWAY SHALL BE SWEEPED AND VACUUMED SHOULD MUD BE DEPOSITED/TRACKED ONTO THEM.

STANDARDS FOR STABILIZING SITES FOR THE WINTER

THE FOLLOWING STANDARDS AND METHODOLOGIES SHALL BE USED FOR STABILIZING THE SITE DURING THE WINTER CONSTRUCTION PERIOD:

1. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES (ANY AREA HAVING A GRADE GREATER THAN 25%) - THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15TH. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15TH, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.
 - A. **STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS:** BY OCTOBER 1ST THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED HAY MULCH OVER THE SEEDING AT TWICE THE RATE AS SPECIFIED ABOVE IN SUBSECTION 3.A OF THE "POST CONSTRUCTION REVEGETATION" SECTION. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS.
 - B. **STABILIZE THE SLOPE WITH WOOD-WASTE COMPOST:** THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD-WASTE COMPOST ON THE SLOPE BY NOVEMBER 15TH. THE CONTRACTOR WILL NOT USE WOOD-WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
2. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS - BY SEPTEMBER 15TH THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON THE SITE. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.
 - A. **STABILIZE THE SOIL WITH TEMPORARY VEGETATION:** BY OCTOBER 1ST THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET, LIGHTLY MULCH THE SEEDDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM III OF THIS STANDARD.
 - B. **STABILIZE THE SOIL WITH SOD:** THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
 - C. **STABILIZE THE SOIL WITH MULCH:** BY NOVEMBER 15TH THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1,000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH NETTING OR OTHER METHOD TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.</

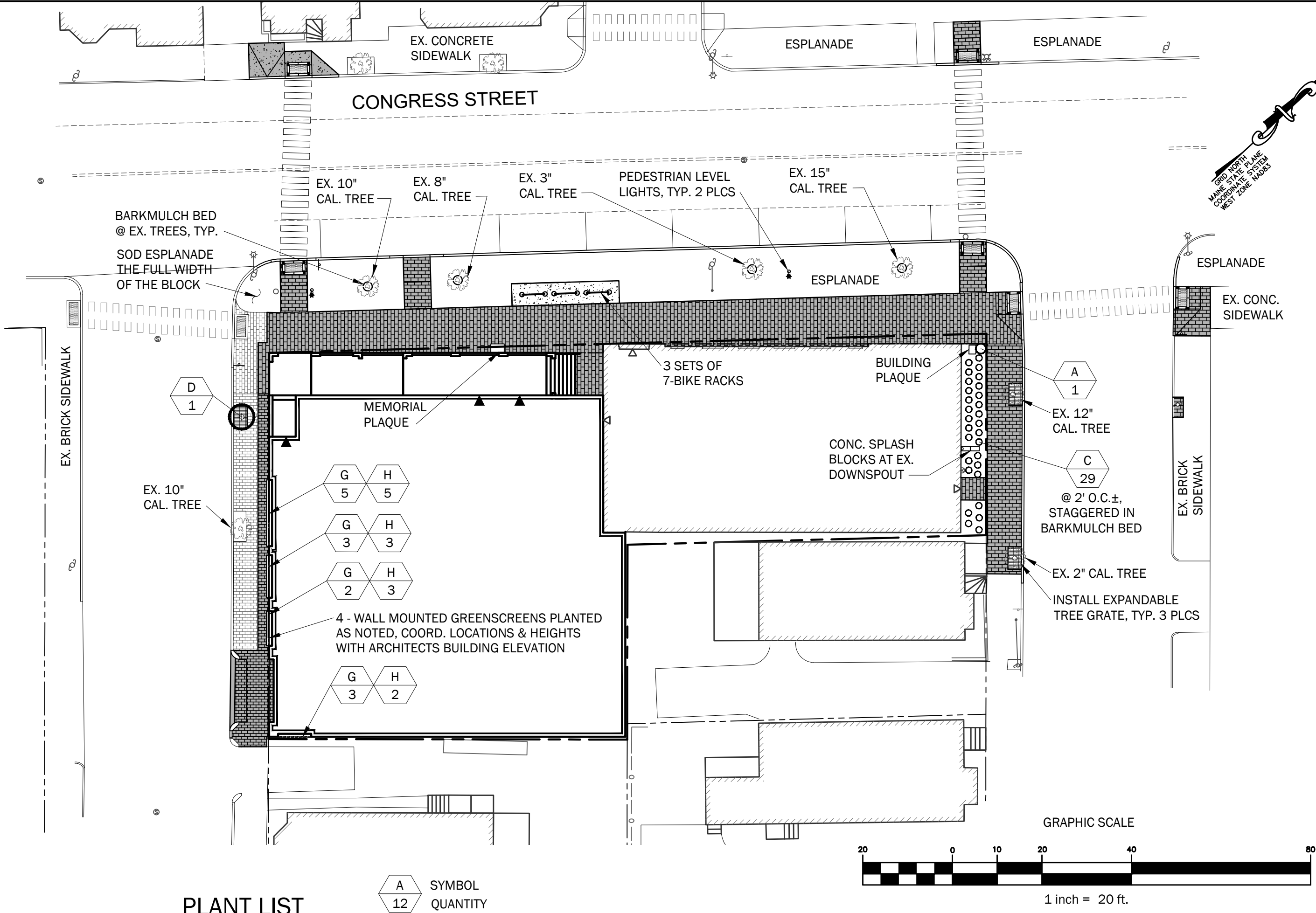
LANDSCAPE NOTES

GENERAL:

1. SAVE EXISTING TREES AS SHOWN. DO NOT CUT OR CLEAR ANY VEGETATION BEYOND THE CONSTRUCTION LIMIT.
2. ALL PLANT MATERIALS INSTALLED ARE TO MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSEYMEN.
3. ALL PROPOSED PLANT LOCATIONS SHALL BE AS SHOWN ON PLANS. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO PLANTING AND WILL NOTIFY OWNER'S REPRESENTATIVE IN THE EVENT OF CONFLICTS.
4. PLANT LOCATIONS ARE TO BE SCALED FROM THE LANDSCAPE PLAN UNLESS NOTED OTHERWISE.
5. NO PLANT MATERIAL SHALL BE INSTALLED UNTIL FINAL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
6. FINAL QUANTITY FOR EACH PLANT TYPE IS NOTED IN THE PLANT LIST. THIS NUMBER SHALL TAKE PRECEDENCE IN THE CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE LIST AND ON THE PLAN.
7. ANY PROPOSED SUBSTITUTIONS MUST BE APPROVED BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
8. ALL NON-LANDSCAPED DISTURBED AREAS TO BE LOAMED AND SEEDDED.

MAINTENANCE:

1. LAWNS: SHALL BE WATERED, FERTILIZED AND MOWN ON A REGULAR BASIS ACCORDING TO SEASON AND RAINFALL, TO PRODUCE A STRONG TURF OF 80% MIN. COVERAGE WITHIN THE FIRST YEAR, FREE FROM SIZABLE THIN OR BARE SPOTS. REGRADING AND RESEEDING WILL BE PERFORMED ON BARE SPOTS UNTIL COVERAGE IS COMPLETE.
2. TREES & SHRUBS: THE ESTABLISHMENT PERIOD SHALL BE TWO CALENDAR YEARS FROM THE DATE OF FINAL ACCEPTANCE. DURING THE ESTABLISHMENT PERIOD THE OWNER OR OWNER'S CONTRACTOR SHALL WATER, CULTIVATE AND PRUNE AS REQUIRED TO MAINTAIN A HEALTHY GROWING CONDITION.
3. AT THE END OF THE ESTABLISHMENT PERIOD AND UPON SUBSEQUENT ANNUAL INSPECTIONS, PLANTS WHICH HAVE DIED OR FAILED TO THRIVE SHALL BE REPLACED WITH EQUIVALENT SIZE AND SPECIES. AFTER THE CONTRACTOR'S GUARANTEE PERIOD HAS ENDED, IT IS THE OWNER'S RESPONSIBILITY TO MAINTAIN AND REPLACE PLANTINGS.
4. TREES, SHRUBS AND LAWNS WHICH ARE NOT IRRIGATED WITH AN AUTOMATIC SPRINKLER OR DRIP SYSTEM SHALL BE THOROUGHLY WATERED ON A REGULAR BASIS DURING PERIODS OF BELOW AVERAGE RAINFALL. SOIL SHOULD BE SAMPLED AT A DEPTH OF 12" AND IF DRY, WATER TO DEPTH OF 24".
5. MULCH IS TO BE MAINTAINED AT A DEPTH TO COMPLETELY COVER THE SOIL AND TO PRESERVE MOISTURE AND MINIMIZE WEEDS.
6. TREES, SHRUBS AND LAWNS SHALL BE FERTILIZED ANNUALLY AND TREATED WITH INSECTICIDES AND/OR FUNGICIDES AS REQUIRED FOR CONTINUED HEALTHY GROWTH.
7. SUCKERS, WEEDS, AND DEAD WOOD SHALL BE REMOVED ON A SEASONAL BASIS, AND SHRUBS SHALL BE PRUNED TWICE A YEAR ACCORDING TO THE REQUIREMENTS OF EACH SPECIES (I.E. SOME SPECIES SHOULD NOT BE PRUNED AT ALL). SHRUBS SHALL NOT BE PRUNED INTO INDIVIDUALS BUT ALLOWED TO GROW INTO A MASS.
8. WHERE TREES ARE LOCATED NEAR SIDEWALKS OR PARKING LOTS, THE CANOPY SHALL BE LIMBED UP TO PROMOTE SAFE CLEARANCE TO 8' ABOVE GRADE.
9. LAWN AREAS SHALL BE MOWN AS OFTEN AS NECESSARY TO KEEP LAWNS TO A 2 1/2 - 3" HEIGHT, AND AERATED ON A SEASONAL BASIS.
10. BEDS AND LAWN EDGES SHALL BE REGULARLY TRIMMED AND EDGED.
11. PERENNIAL AND ANNUAL BEDS SHALL BE DESIGNED, PLANTED AND MAINTAINED FOR SEASONAL COLOR AND INTEREST. ANNUALS MAY BE INCORPORATED TO A MAXIMUM LIMIT OF 25% OF THE BED AREA OF MAINTAINED BEDS FROM MAY 15 THROUGH NOVEMBER 15. PERENNIAL BEDS SHALL BE WATERED AS REQUIRED FOR HEALTHY PLANT GROWTH, AND WEEDED AND DEADHEADED ON A MONTHLY BASIS.



PLANT LIST

SYMBOL	COMMON NAME/BOTANICAL NAME	SIZE	QUANTITY	ROOT
A	MISCANTHUS / Miscanthus Autumn Anthem	1 gal.	1	POTTED
C	HAKONECHLOA / Hakonechloa macra All Gold	1 gal.	29	POTTED
D	ARMSTRONG MAPLE / acer freemanii 'Armstrong'	2" cal.	1	B&B
G	CLEMATIS VARIETIES / SWEET AUTUMN / paniculata	-	13	POTTED
H	HONEYSUCKLE VINE / Ionicera x heckrottii 'goldflame'	-	13	POTTED

FOR SITE PLAN LEGEND SEE SHEET C1.3

LANDSCAPE PLAN

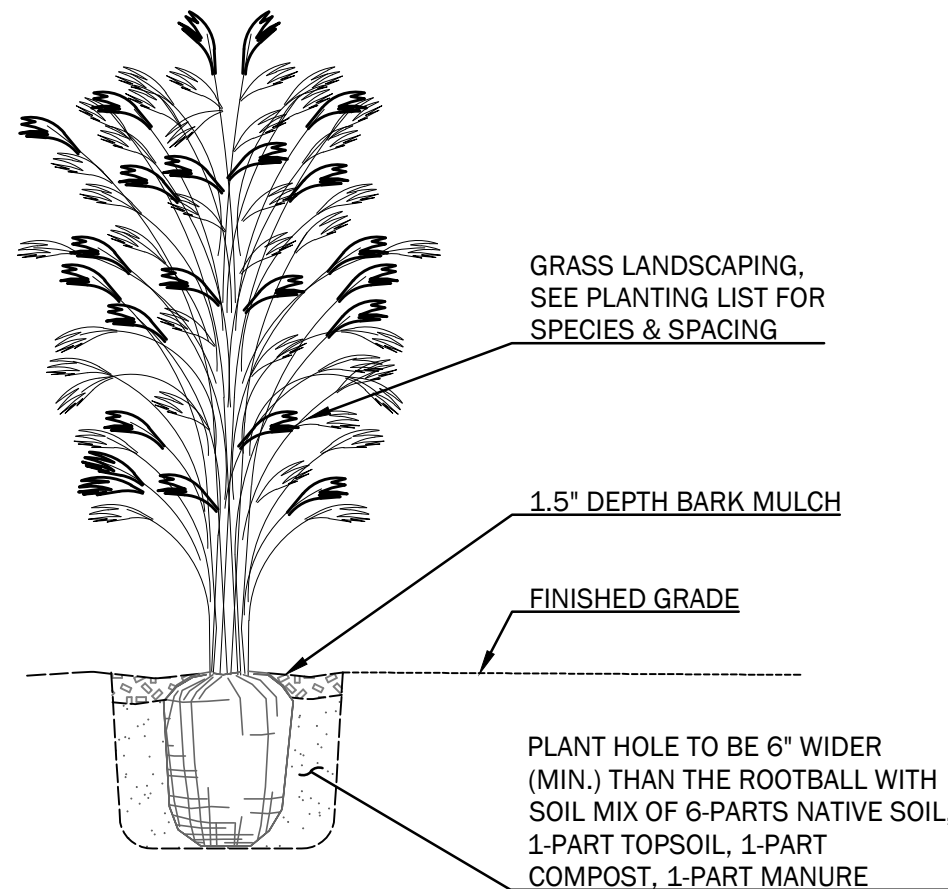
SCALE: 1"=20'

NOTES:

16"Ø EXPANDABLE TREE OPENING. 0.25" SLOT OPENINGS.

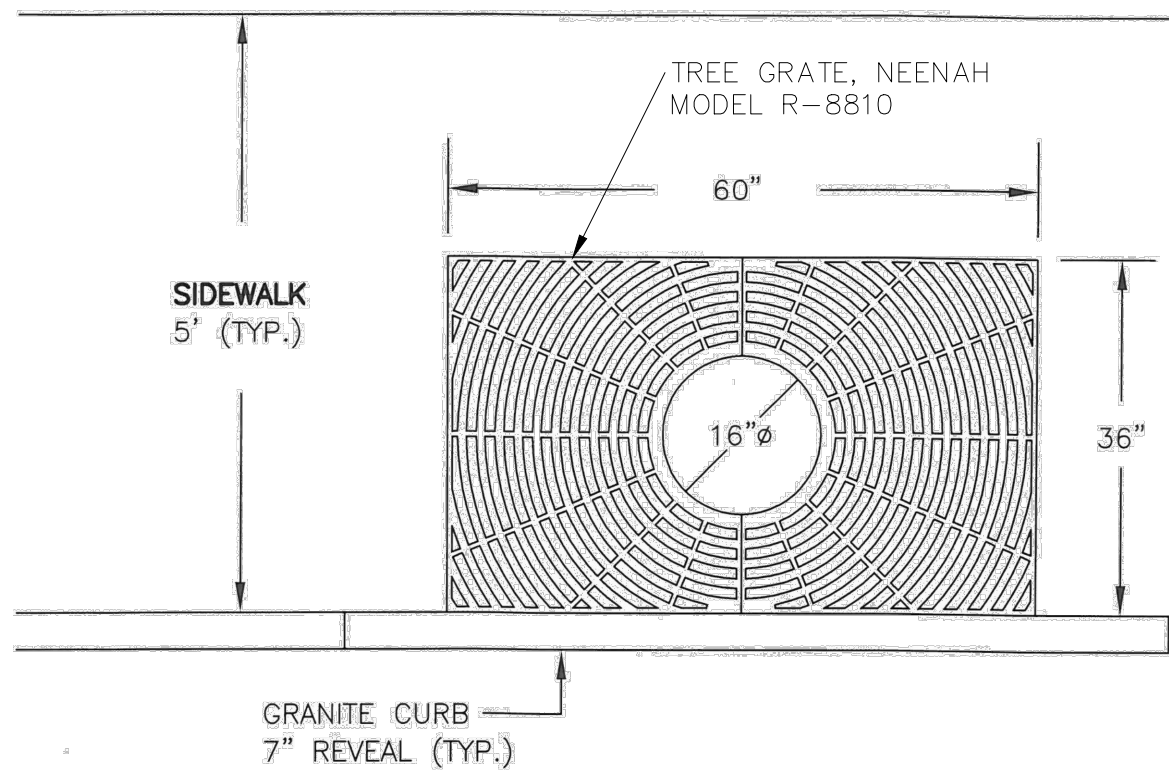
SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY.

WHEN THE TREE GRATE IS INSTALLED IN A CONCRETE SIDEWALK, A NOTCH MUST BE INSTALLED ALONG THE EDGE TO HOLD THE GRATE, WHEN INSTALLED IN A BRICK SIDEWALK IT REQUIRES A FRAME TO BE INSTALLED TO HOLD THE GRATE IN PLACE.



GRASSES PLANTING DETAIL

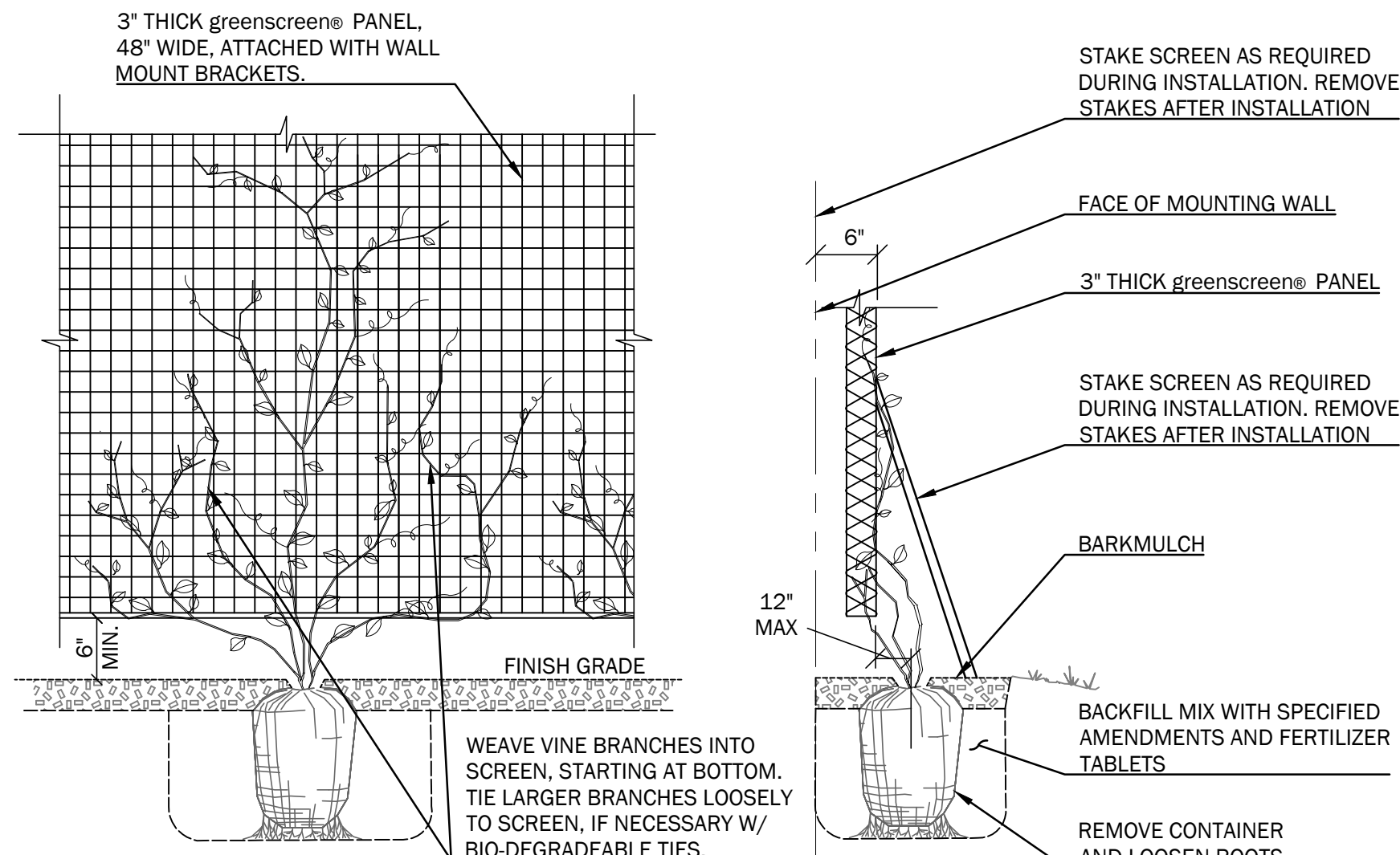
NOT TO SCALE



EXPANDABLE TREE GRATE FOR NARROW RESIDENTIAL URBAN STREETS

CITY OF PORTLAND: DETAIL IV-4A

NOT TO SCALE



ELEVATION

SECTION

greenscreen® VINE PLANTING DETAIL

NOT TO SCALE

WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Dr., Suite 2A | Westbrook, Maine 04092
ph: 207.553.9898 | www.walsh-eng.com

Copyright © 2023



ST. LAWRENCE ARTS, PERFORMANCE ARTS HALL

76 CONGRESS STREET
PORTLAND, MAINE 04101

OWNER / APPLICANT:
FRIENDS OF THE ST. LAWRENCE CHURCH

76 CONGRESS STREET
PORTLAND, MAINE 04101

Rev.	Date	Description	Drawn	Check

Sheet Title:

LANDSCAPE PLAN, NOTES & DETAILS

TAX MAP 3 / BLOCK L / LOT 1

Job No.: 777

Date: DEC. 27, 2022

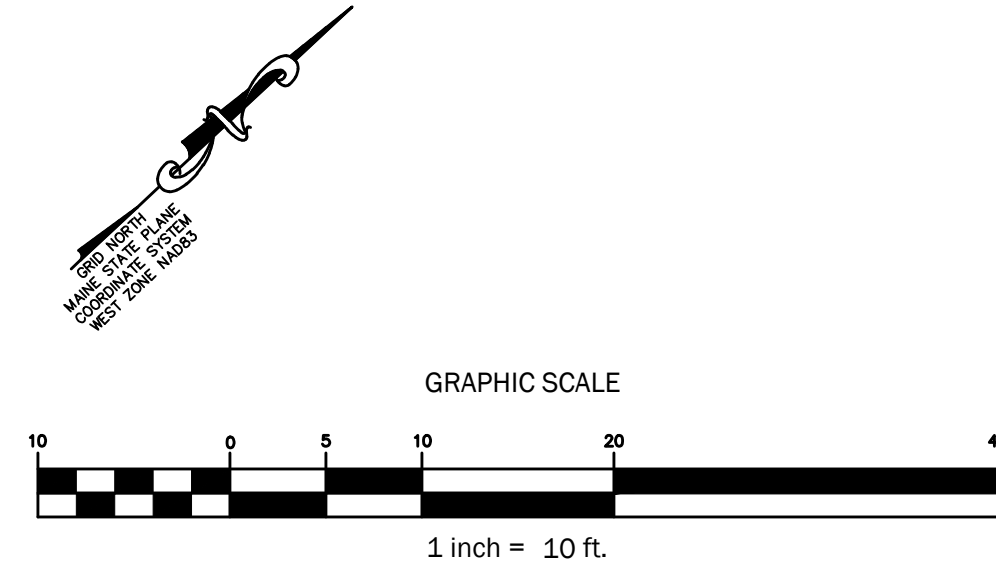
Scale: AS SHOWN

Drawn: JDC

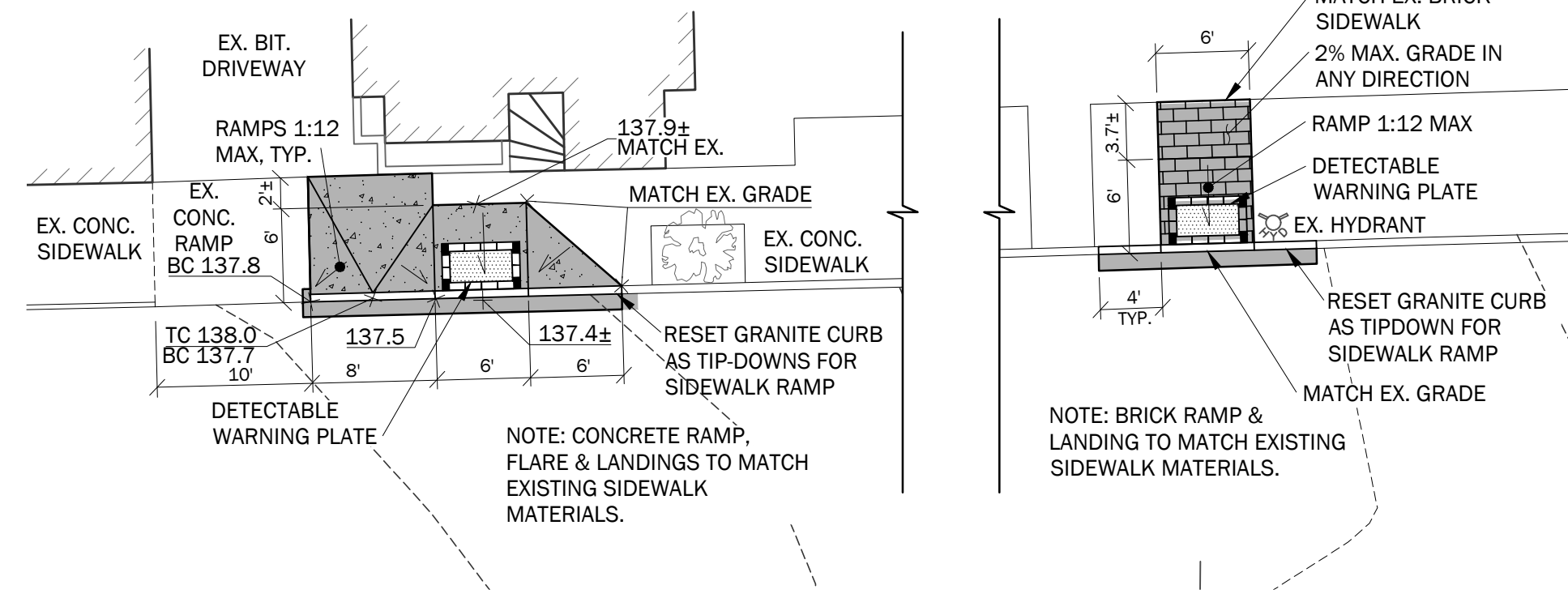
Checked: WRW

C1.5

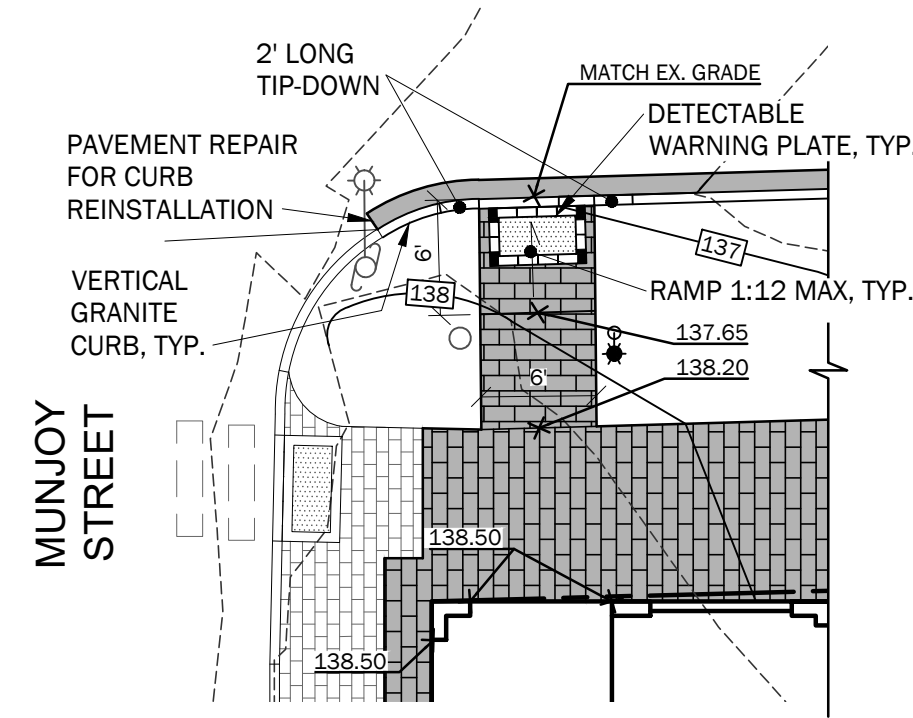
PRELIMINARY - NOT FOR CONSTRUCTION



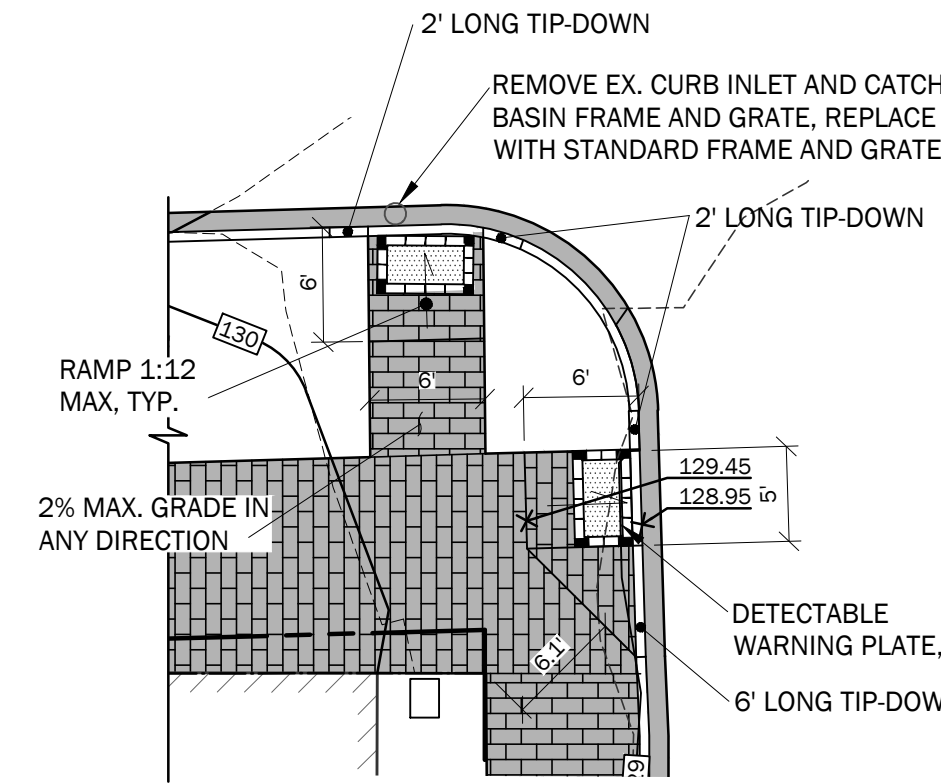
FOR SITE PLAN LEGEND SEE
SHEET C1.3



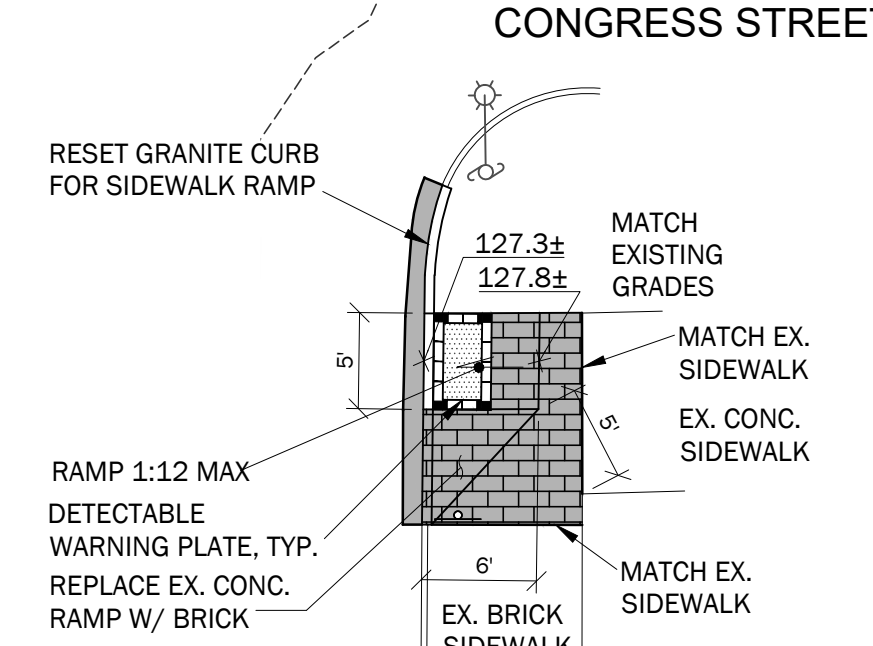
CONGRESS STREET



MUNJOY STREET



BECKETT STREET



CONGRESS STREET

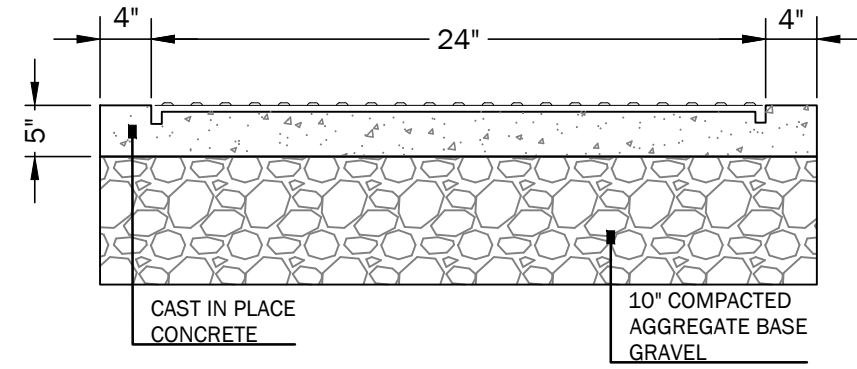
SIDEWALK RAMP PLANS

NOT TO SCALE

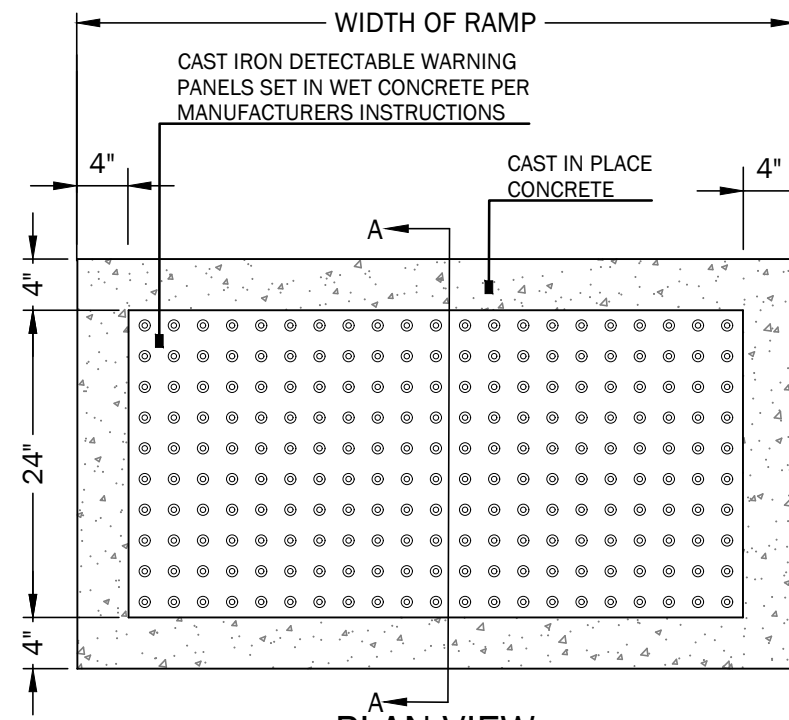
NOTE: BRICK RAMPS, FLARES, LANDINGS & SIDEWALKS
PER CITY SIDEWALK REPLACEMENT MATERIALS MAP.

NOTES:

- ALL DETECTABLE WARNING PLATES SHALL BE UNCOATED CAST IRON. FOLLOW MANUFACTURES INSTRUCTIONS FOR INSTALLATION.
- CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MDOT CLASS A STRUCTURAL CONCRETE. MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
- TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
- SIZE: THE DETECTABLE WARNING PLATES SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE PLATE WIDTH + CONCRETE SHALL EXTEND THE WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION TO THE STREET.
- ORIENTATION: THE DETECTABLE WARNING PANEL SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE. THE PANEL SHALL BE ORIENTED TO THE DIRECTION OF TRAVEL AS IDENTIFIED BY THE POINT OF EGRESS.



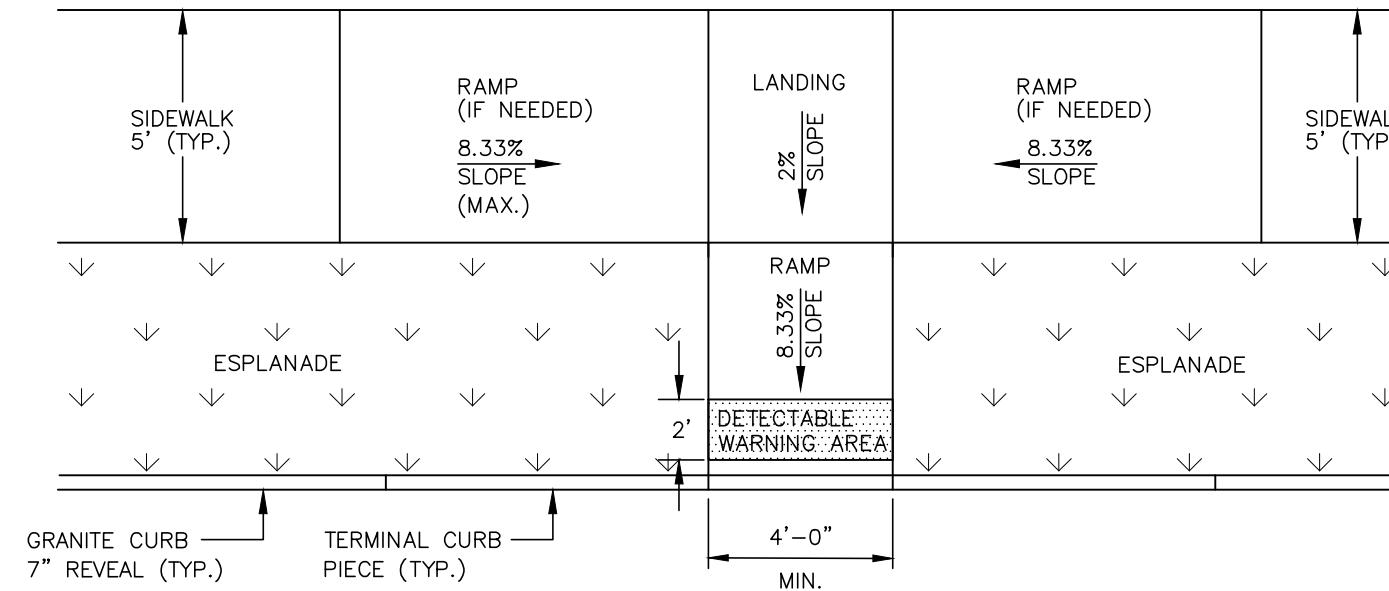
SECTION A-A



PLAN VIEW

NOTES:

- ALL RAMPS SHALL COMPLY WITH ADA STANDARDS.
- GRANITE CURB ADJACENT TO LANDING SHALL BE FLUSH WITH STREET.
- SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY.



PLAN VIEW

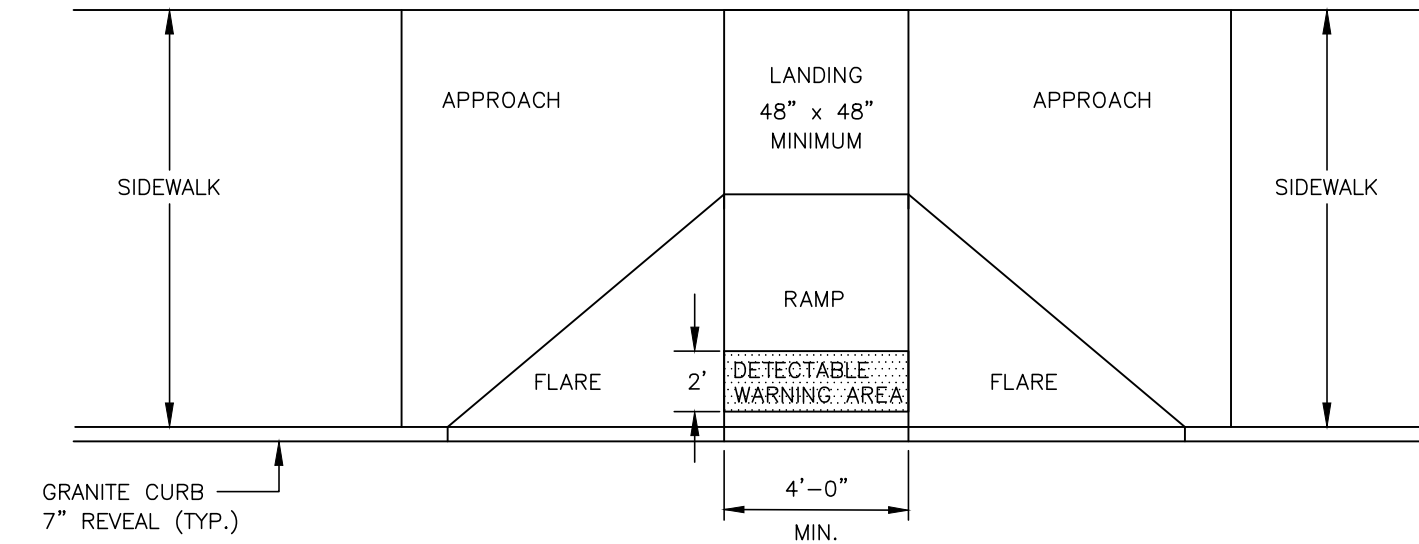
PERPENDICULAR ADA RAMP LAYOUT FOR NARROW SIDEWALK WITH ESPLANADE

NOT TO SCALE

NOTES:

- ALL RAMPS SHALL COMPLY WITH ADA STANDARDS.
- GRANITE CURB ADJACENT TO RAMP SHALL BE FLUSH WITH STREET.

DESIGN ELEMENT	SLOPE IN DIRECTION OF TRAVEL	CROSS SLOPE
APPROACH	8.33% MAXIMUM	2%
LANDING	2%	2%
RAMP	8.33% MAXIMUM	MATCH STREET GRADE
FLARE	10% MAX. AT CURB FACE	-
SIDEWALK	MATCH STREET GRADE	2%



PLAN VIEW

PERPENDICULAR ADA RAMP LAYOUT FOR WIDE SIDEWALK WITH NO ESPLANADE

NOT TO SCALE

CITY OF PORTLAND: DETAIL I-6A

ST. LAWRENCE ARTS, PERFORMANCE ARTS HALL

76 CONGRESS STREET
PORTLAND, MAINE 04101

OWNER / APPLICANT:
FRIENDS OF THE ST. LAWRENCE CHURCH

76 CONGRESS STREET
PORTLAND, MAINE 04101

PRELIMINARY - NOT FOR CONSTRUCTION

Rev.	Date	Description	Drawn	Check

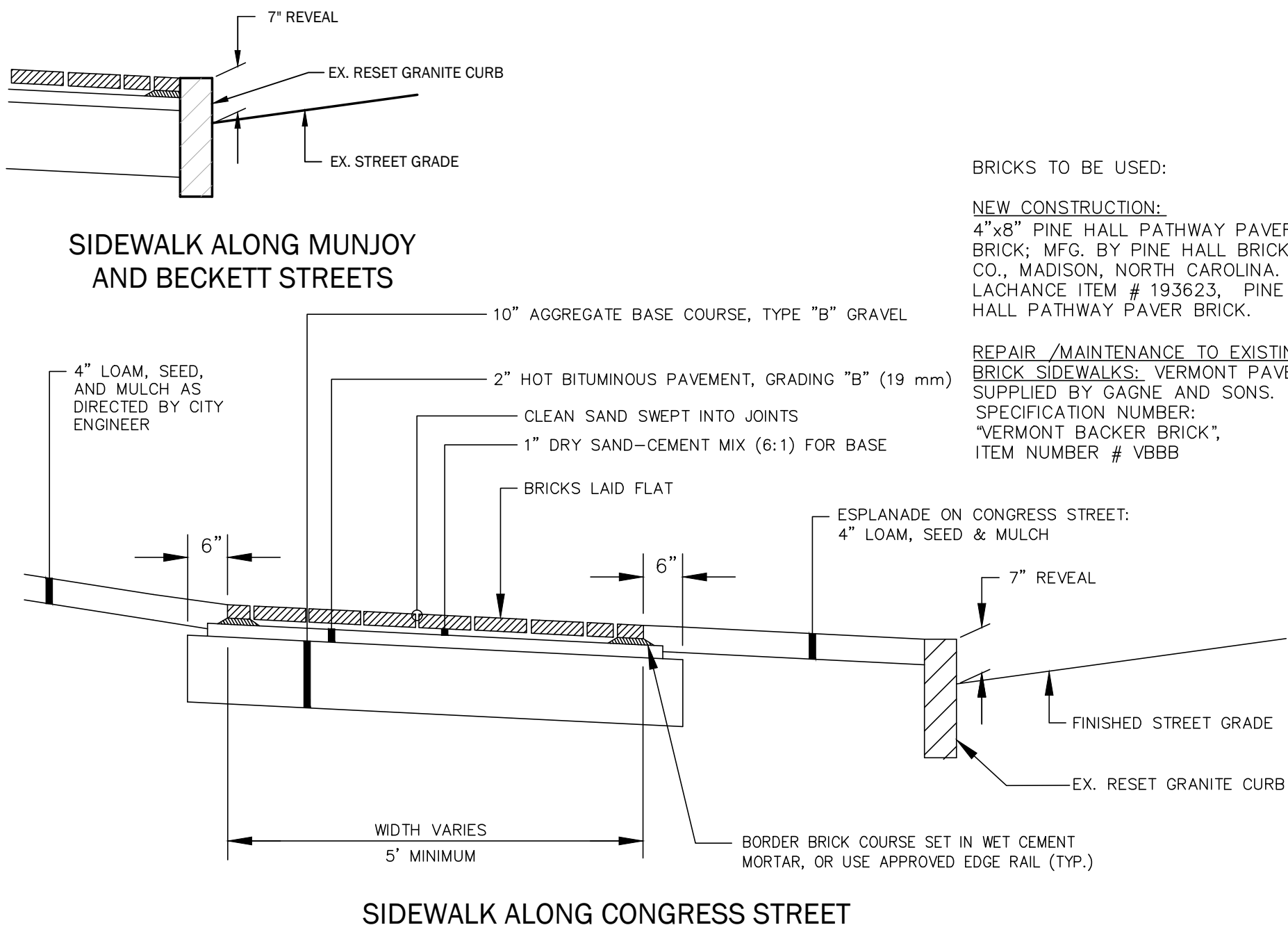
Sheet Title:
**SIDEWALK RAMP
DETAILS**

TAX MAP 3 / BLOCK L / LOT 1

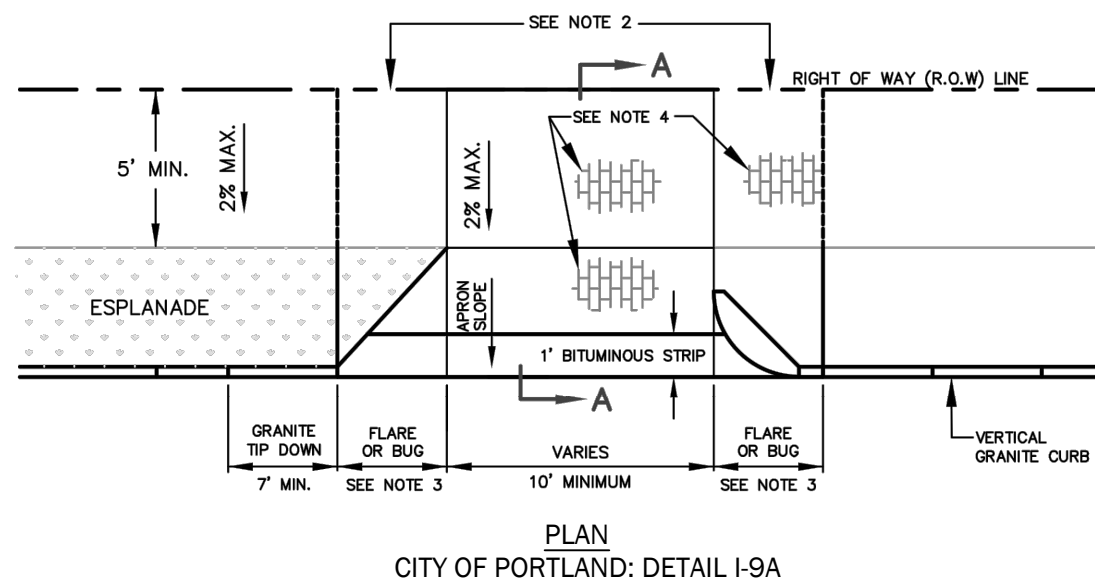
Job No.: 777 Sheet No.:
Date: DEC. 27, 2022
Scale: AS SHOWN
Drawn: JDC
Checked: WRW

C1.6

2/27/22, 10:14 AM - 10:14 AM

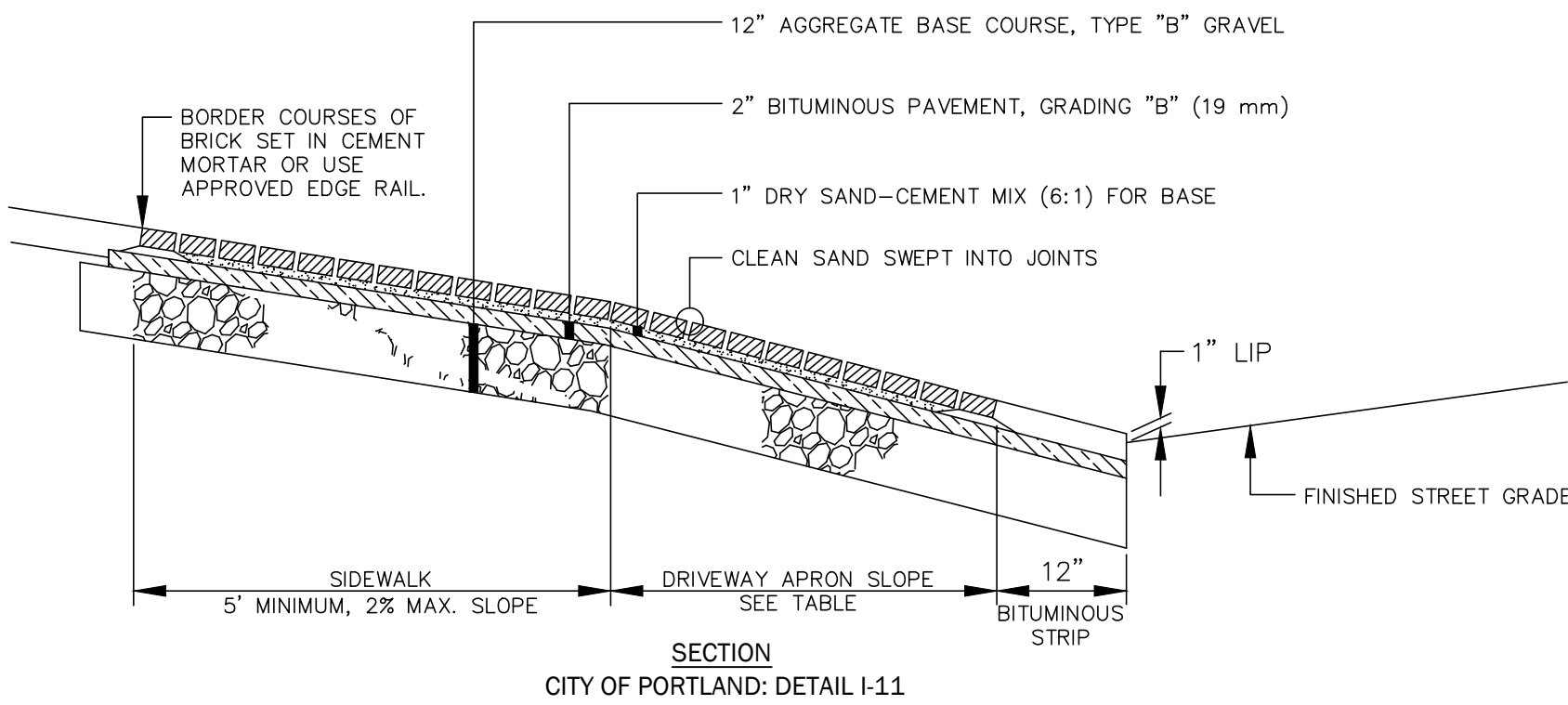


3 BRICK SIDEWALK WITH BITUMINOUS BASE CITY OF PORTLAND: DETAIL I-10 NOT TO SCALE

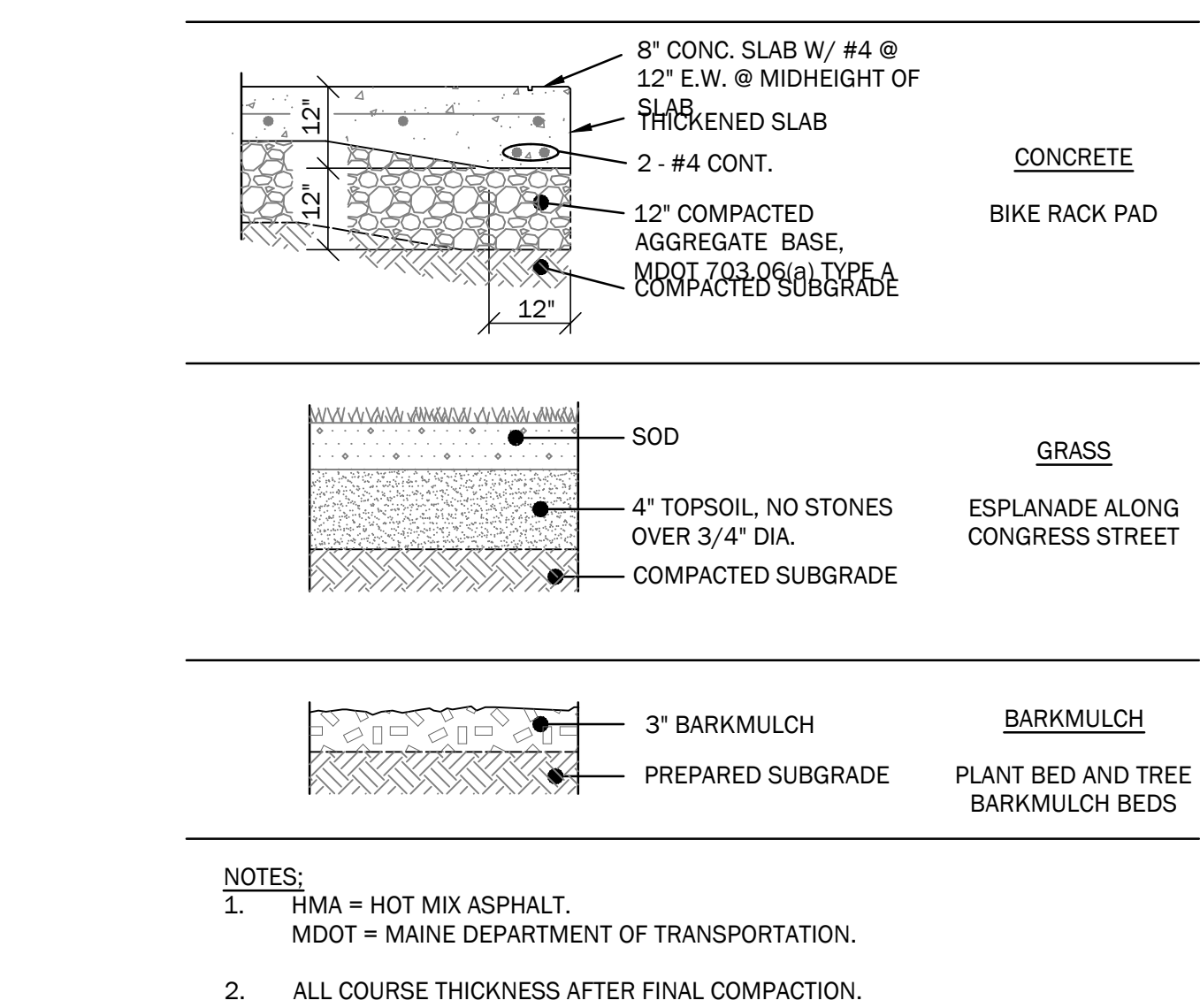


APRON SLOPE TABLE	
LAND USE	MAXIMUM RECOMMENDED GRADE CHANGE AT STREET
RESIDENTIAL WITH <9 PARKING SPACES	14%
ALL OTHER DRIVEWAYS	10%

- NOTE:
- MATCH GRADE OF EXISTING GRADE AT R.O.W. LINE. WHERE REQUIRED TO MEET A.D.A. AND DRIVEWAY APRON SLOPE REQUIREMENTS, A CONSTRUCTION EASEMENT MAY BE REQUIRED.
 - IF MATCHING THE EXISTING GRADE AT R.O.W. CAUSES APRON SLOPE TO EXCEED RECOMMENDED %, SIDEWALK TRANSITION AREAS MAY BE ADDED, BUT SHALL NOT EXCEED 8.33%.
 - TWO-FOOT RADIUS CORNER GRANITE PIECES ("BUGS") ARE REQUIRED AT LOW-VOLUME DRIVEWAYS UNLESS OTHERWISE DIRECTED BY DPW. AT OTHER DRIVEWAYS, STANDARD FLARE / TIPDOWN TREATMENTS SHALL BE USED.
 - ALL MATERIALS TO COMPLY WITH CITY'S SIDEWALK & DRIVEWAY MATERIAL POLICY. BRICK IN DRIVEWAY APRONS, WHERE APPLICABLE, SHALL BE ORIENTED IN THE SAME WAY AS THE ADJACENT BRICK SIDEWALK.
 - BRICKS TO BE USED:
NEW CONSTRUCTION: 4"x8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA. LACHANCE ITEM # 193623, PINE HALL PATHWAY PAVER BRICK.
REPAIR /MAINTENANCE TO EXISTING BRICK SIDEWALKS: VERMONT PAVER; SUPPLIED BY GAGNE AND SONS. SPECIFICATION NUMBER: "VERMONT BACKER BRICK", ITEM NUMBER # VBBB

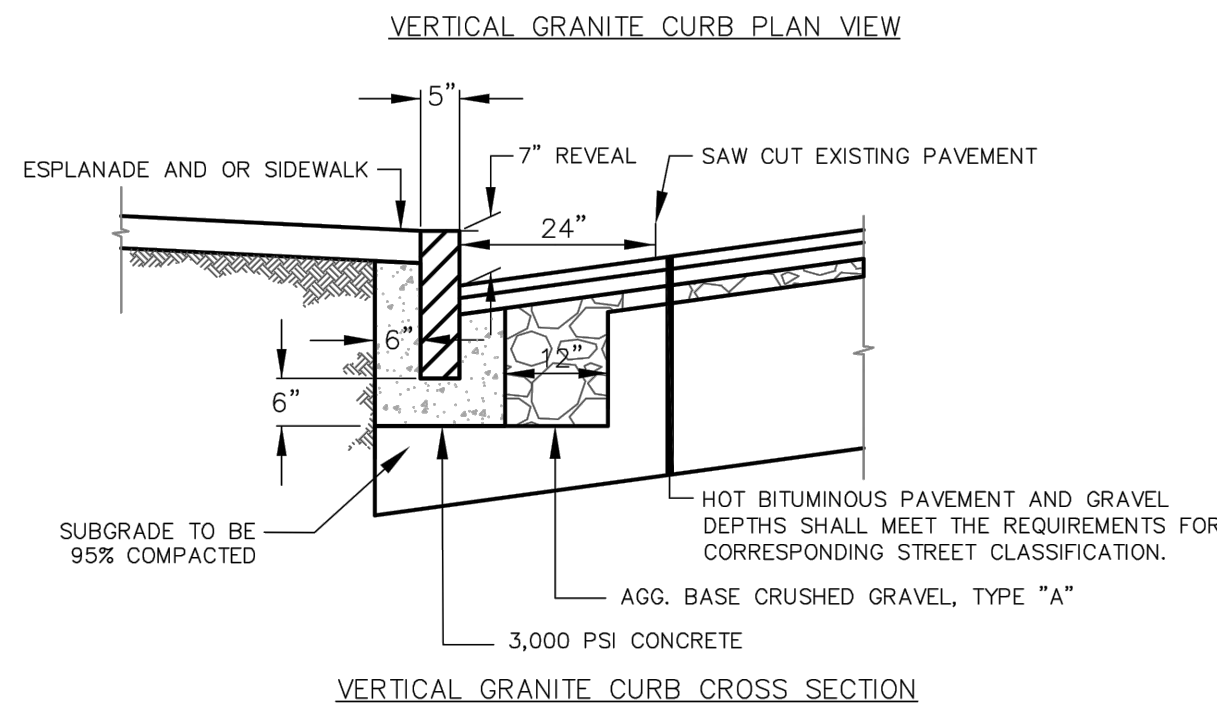
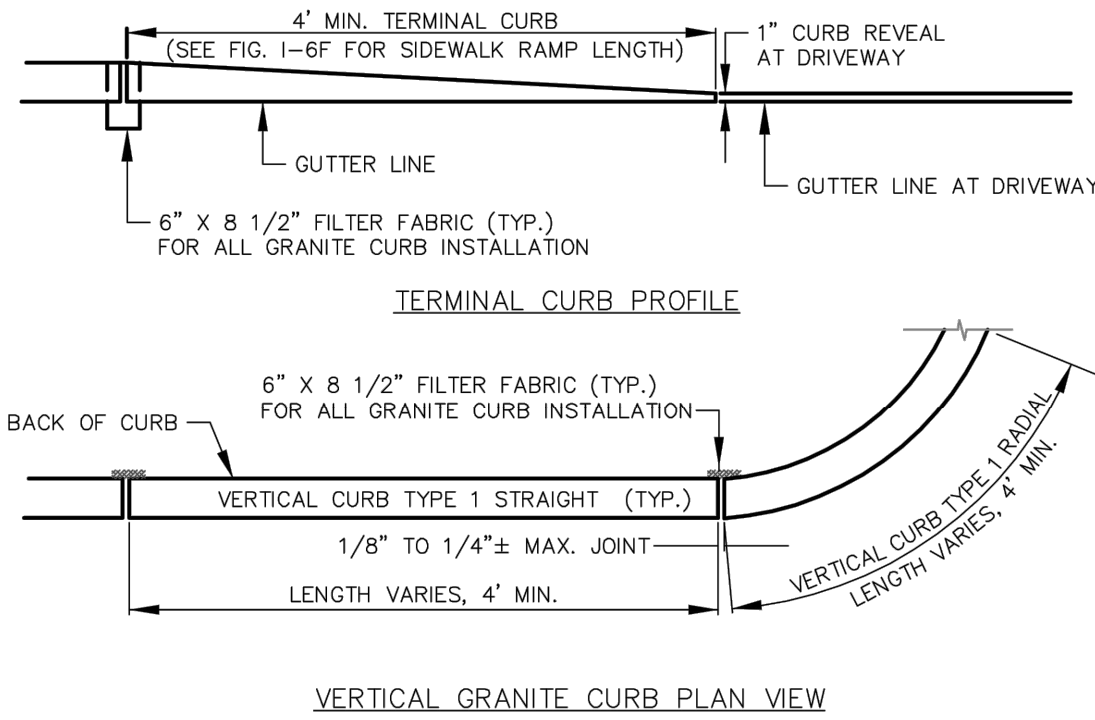


4 MUNJOY STREET BRICK DRIVEWAY APRON WITH BITUMINOUS BASE NOT TO SCALE



- NOTES:
- HMA = HOT MIX ASPHALT.
MDOT = MAINE DEPARTMENT OF TRANSPORTATION.
 - ALL COURSE THICKNESS AFTER FINAL COMPACTION.

1 SCHEDULE OF SURFACE FINISHES NOT TO SCALE



- NOTES:
- INDIVIDUAL PIECES OF CURB SHORTER THAN 4 L.F. ARE NOT ALLOWED, WITH THE EXCEPTION OF RADIAL CURB.
 - THE MINIMUM HEIGHT OF THE CONCRETE BACKING SHALL BE 10-INCHES OR TO THE BOTTOM OF THE HOT MIX ASPHALT PAVEMENT, WHICHEVER IS GREATER, MEASURED FROM THE BOTTOM OF CURB.
 - CURBING SHALL BE SET IN A 6-INCH BED OF POURED IN PLACE 3,000 PSI CONCRETE MIX.
 - WOODEN SHIMS MAY BE USED TO SET CURB.

2 VERTICAL GRANITE CURB INSTALLATION IN EXISTING STREETS CITY OF PORTLAND: DETAIL I-12 NOT TO SCALE

CITY OF PORTLAND STANDARD AFTER TECHNICAL MANUAL UPDATE. VERIFY STATUS WITH PUBLIC WORKS PRIOR TO USING.

WALSH
ENGINEERING ASSOCIATES, INC.

One Karen Dr., Suite 2A | Westbrook, Maine 04092
ph: 207.553.9898 | www.walsh-eng.com

Copyright © 2022

STATE OF MAINE
WILLIAM R. WALSH, III
No. 8204
LICENSED PROFESSIONAL ENGINEER
12/27/2022

ST. LAWRENCE ARTS, PERFORMANCE ARTS HALL
78 CONGRESS STREET
PORTLAND, MAINE 04101

OWNER / APPLICANT:
FRIENDS OF THE ST. LAWRENCE CHURCH
78 CONGRESS STREET
PORTLAND, MAINE 04101

Rev.	Date	Description	Drawn	Check

Sheet Title:

SITE DETAILS

TAX MAP 3 / BLOCK L / LOT 1

Job No.: 777 Sheet No.:
Date: DEC. 27, 2022
Scale: AS SHOWN
Drawn: JDC
Checked: WRW

C2.2

PRELIMINARY - NOT FOR CONSTRUCTION

Caren Sweeney <caren.sweeney@yahoo.com>

Mar 8, 2023, 5:26:57 PM (15 hours ago)

to planning@portlandmaine.gov

Hello,

I was unable to attend the meeting this afternoon regarding the expansion of the St Lawrence theater. Had we, in the neighborhood, been informed of this meeting sooner than the morning of the meeting I would have planned to attend.

Please keep in mind that having an auditorium this large on the hill will devastate us parking wise. We already have trouble finding parking on the days/evenings the theater holds events.

Thank you,

Caren Zarolinski

Kiley Associates' via Planning Board

to planningboard@portlandmaine.gov

Street Parking around the St. Lawrence has become far scarcer since 2018 when this project was approved. Traffic has also increased due to the increasing short term rentals in the area. Since 2018 Portland's east end has exploded with visitors. I do not feel that the Traffic and parking studies from 2018 still apply and that an expansion of the St Lawrence to this capacity without designated parking will only add to the existing strain for residents trying to live, work and park in this neighborhood. There has to be a compromise.

Sincerely,
Christine Kiley
Turner St.

St. Lawrence Arts Center



Subscribe ☐

0 views



Mary McHugh <mchughmary01@gmail.com>

6:25 AM (2 hours ago)

to planning@portlandmaine.gov

Hello,

I am writing in response to the neighborhood meeting held yesterday afternoon for the St. Lawrence Arts Center proposal as I was not able to speak at the meeting. I am very concerned about the scope of this project in a residential area. We own the property at 97 Munjoy Street which would be directly impacted by this project. Aside from the parking which was discussed I have a few other concerns listed below.

1. What are the set back requirements?
2. Are there height restrictions for buildings in residential areas?
3. What is the noise ordinance level for a residential community?
4. What are the next steps for this project and what are our rights as property owners?

I feel the size of this project is way out of scope for a residential area and is a much different use than a church, not to mention a lot has changed since the church was in use.

I appreciate you taking the time to respond to my concerns.

Mary and Ted McHugh
97 Munjoy Street

Will Bleakley <willbleakley@gmail.com>

Mar 8, 2023, 6:22:19 PM (14 hours ago)

to planning@portlandmaine.gov

Hi there,

I wasn't able to make the zoom call today so I wanted to just send my total support of the St Lawrence Arts proposal. I'm someone that owns a condo just 2 blocks away and I 100% support this development. This will be great for the neighborhood and the city. I live right here, will hear the construction noise, be impacted in theory by less parking (I don't actually believe I'll even notice a difference in parking, but even if I did, that's fine) and I welcome everything about it.

We live in a city, the city is meant for people, the arts, coming together, and more communal spaces. It's not meant to protect parking spaces and cars. That attitude is what ruins cities.

I have a feeling that you probably heard an overwhelming number of voices at this meeting being against it because of parking. I hope that wasn't true, but I noticed that my car, and everyone's on the block, had a note on them telling them to show up against this because it would take away parking. Let me be clear, every single person i've talked to in the neighborhood thinks parking is totally fine and is in support of this. But also none of those people I know could leave their job at 4pm on a Wednesday to attend. So please keep that in mind that I doubt it was a representative sample.

If there's anything I can do to support this happening, please let me know.

Will Bleakley
77 Vesper St. Unit 1



Charles Tetelman <ctetelman@portlandmaine.gov>

Re: St. Lawrence Arts Center development concerns

1 message

Madisen Corcoran <madisencorcoran@gmail.com>

Thu, May 4, 2023 at 9:21 AM

To: planning@portlandmaine.gov, "ctetelman@portlandmaine.gov" <ctetelman@portlandmaine.gov>

Hello-

I live in the neighborhood of the St. Lawrence Arts Center and received communication from developers and the City about proposed plans for development. My only real concern over this development is the very clear lack of adequate parking to support this development and planned activities at the St. Lawrence. As it stands now, parking on Munjoy Hill and specifically around the St. Lawrence Arts Center is taxed during the busy summer season and whenever there is an event held at the St. Lawrence (even in the winter) Congress Street becomes congested with double parked buses in dangerous intersections and vehicles trying to find spots.

My other concern is for this non-profit as well. I don't think they are really understanding how the lack of parking could impact their ability to sell tickets to events once patrons realize how difficult it is to park and easily access the venue.

Please take a critical eye while reviewing these plans and take special consideration to the impacts on the neighborhood due to the inadequate parking and lack of planning around that issue. There are no parking garages or large public parking facilities in this area of the city.

Best,
Madisen Corcoran
Munjoy Hill Resident

On Tue, Mar 21, 2023 at 4:38 PM Madisen Corcoran <madisencorcoran@gmail.com> wrote:

Hello-

I live in the neighborhood of the St. Lawrence Arts Center and received communication from developers and the City about proposed plans for development. My only real concern over this development is the very clear lack of adequate parking to support this development and planned activities at the St. Lawrence. As it stands now, parking on Munjoy Hill and specifically around the St. Lawrence Arts Center is taxed during the busy summer season and whenever there is an event held at the St. Lawrence (even in the winter) Congress Street becomes congested with double parked buses and vehicles trying to find spots.

My other concern is for this non-profit as well. I don't think they are really understanding how the lack of parking could impact their ability to sell tickets to events once patrons realize how difficult it is to park and easily access the venue.

Please take a critical eye while reviewing these plans and take special consideration to the impacts on the neighborhood due to the inadequate parking and lack of planning around that issue. There are no parking garages or large public parking facilities in this area of the city.

Best,
Madisen Corcoran
Munjoy Hill Resident

Review Criteria:

- Major Site Plan (Article 14.6)
- Certificate of Appropriateness (Landmark, Munjoy Hill Historic District)
- Traffic Movement Permit (City of Portland Delegated Review)
- Contract Zone C-58

Please provide a written response to the comments below:

TRANSPORTATION

- Truck loading plan dated 5.19.17 still acceptable. Staff recommend updating the building design to provide a off street loading bay for smaller vehicles. The curb cut would also provide space to park another vehicle essentially blocking the driveway.
- The applicant has submitted a Traffic Movement Permit Modification Application. The Application is dated May 2022 and should be updated to account for current traffic and crash data. A Traffic Movement Permit scoping meeting will be scheduled upon receipt of the revised Application.
- As waived during the 2018 review, City Staff and the Third Party Traffic Engineer support a waiver from the City Technical standards for driveway separation on Munjoy Street given low traffic volumes and limited use of the project driveway.
- City Staff and the Third Party Traffic Engineer also support a waiver for driveway width (14 feet is proposed) given the limited use of the driveway for event deliveries.

STORMWATER

- Storm drainage and sanitary sewer flows in this project area are served by the City's combined sewer system. Lack of wet weather capacity in the City's combined sewer systems leads to Combined Sewer Overflows (CSO) throughout the City. City wide mitigation of combined Sewer overflows is required as part of the City's CSO consent decree administered by the EPA and Maine DEP.
- Section 2.2.3 of the City's Technical Manual requires DPW Water Resources approval when Rain Water is being proposed to discharge into a sewer which conveys sanitary waste. Prior to authorizing a new stormwater connection into the combined sewer, DPW will require that stormwater storage and flow control as listed below be provided based on the lack of wet weather capacity in the system.
- DPW will authorize this development to make a new stormwater connection into the combined sewer if the applicant can provide on-site stormwater detention volume equal to the greater of;
 - 1" pf rainfall over the entire project redeveloped area being proposed on the parcel or;
 - The projected average 24 hour daily sanitary sewer flow each parcel is proposing to add to the system.
- The overflow diversion elevation of the detention system should be set at the top of the proposed system to ensure storage in the system is maximized prior to overflow discharging into the City's combined sewer system during larger storm events.

- The maximum permissible stormwater outflow rate into the City's system during the design storm event shall be less than or equal to 0.1 CFS per acre of watershed area draining to the detention system.
- The new stormwater and sewer connections being proposed by this project shall be made into the combined sewer system in Munjoy Street and shall be completed in accordance with all City Technical Standards found in section # 2 of the technical manual.

DPW

- The City's Technical Manual has been recently updated and approved. The applicant shall update all proposed details (Site, Sewer, Stormwater, Landscape, details) to meet the requirements of the recently approved technical manual update or add a note to each to the proposed details that states the City standard detail (figure # and name) shall be followed.
- The current plans show proposed utility cuts in Munjoy Street and Beckett Street. Recognize that Munjoy Street and Beckett Street are under moratorium and will require a moratorium repair. The applicant shall get permission from the Department of Public Works prior to any work within the street Right of Way.
- The plans do not have enough information to determine if the existing sidewalks are accessible (ADA complaint). The applicant shall update the plans. Spot grades and slopes shall be added to plans at locations where existing sidewalk meets proposed (driveways, egress locations, pedestrian ramps, accessible crossings, sidewalks and steps).
- All downspouts need to be connected to the storm drain.
- The proposed underground electrical and cable services (UGU) may conflict with existing utilities in Beckett Street. The applicant shall provide a profile for the proposed connection.
- The proposed connection shall be perpendicular and encased in concrete.



Review Criteria:

- Major Site Plan (Article 14.6)
- Certificate of Appropriateness (Landmark, Munjoy Hill Historic District)
- Traffic Movement Permit (City of Portland Delegated Review)
- Contract Zone C-58

TRANSPORTATION

- The applicant submitted a Traffic Movement Permit Modification Application as the original TMP expired. The Modified TMP provides updated parking and crash data. Following a review of the Application, the third-party consulting traffic engineer finds the information to be acceptable.
- The following is a status of previous comments regarding the 2017 TDM Plan and responses provided by the applicant on November 7, 2022. The third-party consulting traffic engineer would suggest that the applicant either update the 2017 TDM Plan or acknowledge that all contents are up to date.
 - *The PDA Plan notes a number of incentives for reducing vehicle impacts. I would suggest some detail (likely amount or percentage) on ticket discounts and coupons be provided.*
 Status: The applicant has provided a response and is found acceptable, and the required monitoring as defined in the TDM Plan should include specific details on incentives.
 - *The PDA Plan notes that SLAC will be partnering with the city on infrastructure improvements. Further detail on what is envisioned regarding this partnership and possible commitments should be provided.*
 Status: The applicant has noted the implementation of sidewalk and crosswalk improvements as well as providing bike racks. No further comment.
 - *The applicant should provide details on the ticket surcharge (likely amount or percentage) and specifically describe how the surcharge proceeds will be managed/allocated towards TDM strategies.*
 Status: The applicant has provided a response that is acceptable and required monitoring as defined in the TDM Plan should include specific details on this item.
 - *It is noted that METRO “could” further increase evening service. It is my understanding that METRO service will increase evening service and therefore the applicant should confirm this assumption.*
 Status: The applicant shall provide an updated letter of commitment from Metro.
 - *The applicant should note why only the Temple Street garage is the only facility eligible for a subsidy. Additionally, the applicant should note why free parking is limited to three hours (dinner plus event could be more than 3 hours).*
 Status: City Staff and the third-party consulting traffic engineer find the response to a three-hour limit for a parking subsidy to reasonable. The applicant should confirm that the subsidy will apply to other parking facilities in the city and not just the Temple Street garage.

- *The applicant should provide greater detail on the anticipated Valet service program at the first event and details on specific operations and how the service is funded? Related to this is the relatively far distance to the parking lots for valet vehicles and how this may impact service and use.*

Status: Specific details have not been provided but the monitoring program requires a review of the TDM Plan's components including Valet parking one month after opening. This is acceptable as Valet operations can be adjusted soon after opening to meet target metrics defined in the TDM Plan.

- *The applicant should provide details on the bicycle ticket discount program.*

Status: Specific details have not been provided but the monitoring program requires a review of the TDM Plan's components including mode share for the project. This is acceptable as the TDM incentives program can be adjusted soon after opening to meet target metrics defined in the TDM Plan.



PLANNING BOARD REPORT PORTLAND, MAINE

St. Lawrence Arts Center Addition
66-76 Congress Street
Level III Site Plan Review
2016-265
Friends of the Saint Lawrence Church

Submitted to: Portland Planning Board Date: January 19, 2018 Public Hearing Date: January 23, 2018	Prepared by: Nell Donaldson, Planner CBL: 3-L001 Project #: 2016-265
--	--

I. INTRODUCTION

The Friends of the St. Lawrence Church appears before the Planning Board for a public hearing for the site plan review of a proposed addition to their property at 76 Congress Street, the St. Lawrence Arts Center. Notice of this hearing appeared in the *Portland Press Herald* on January 22 and 23, 2018. Notices were sent to 275 property owners within 500 feet and to the interested citizens list.

Applicant: Friends of the St. Lawrence Church

Consultants: David Lloyd, Archetype; Thomas Greer, Pinkham & Greer; William Bray, Traffic Solutions; Sarah Cushman, Cushman Transportation Consulting

II. REQUIRED REVIEWS

<i>Waiver Requests</i>	<i>Applicable Standards</i>
<i>Driveway Separation</i> – to allow a curb cut approximately 20' from the adjacent property's	Technical Manual, <i>Section 1.7.2.7</i> . Along arterial, collector, and local streets, minimum acceptable spacing shall be 100-150 feet, depending on speed limit.

<i>Review</i>	<i>Applicable Statute</i>
Site Plan	<i>Section 14-526, with Historic Preservation review</i>

III. PROJECT DATA

Existing Zoning	Conditional Zoning Agreement C58
Existing Use	Place of Assembly
Proposed Use	Place of Assembly
Proposed Development Program	14,768 SF Addition to include: • 401 seats and stage in sanctuary • New lobby and support space (green rooms, dressing rooms, bathroom, storage) • New conference and office space • New Promenade Room (to serve as lobby break area during performances, meeting space at other times)(200 person capacity)
Parcel Size	10,601 SF

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	3,360	9,075 SF	5,715 SF
Building Floor Area	10,540 SF	25,308 SF	14,768 SF
Impervious Surface Area	9,463 SF	9,978 SF	515 SF
Parking Spaces (on site)	0	0	0
Bicycle Parking Spaces	0	20	20
Estimated Cost of Project	\$10 million		



Figures 1 & 2: Zoning context (left) and St. Lawrence Arts Center (existing Parish Hall theater) at present (above)

IV. CONTEXT

The St. Lawrence Arts Center sits at 76 Congress Street in the heart of Munjoy Hill. The property is subject to a conditional zoning agreement adopted in early 2015. While the underlying zoning is R-6 Residential, the St. Lawrence neighbors a B-1 Neighborhood Business zone and lies directly across from an active restaurant use in a B-1b zone (*Figure 1*). Commercial uses sit on the Congress Street block immediately west. Residential uses surround the site to the north, east, and south. The property lies three blocks from the Eastern Promenade.

V. BACKGROUND

The building now occupied by the St. Lawrence Arts Center was originally constructed in 1897 as a church with two major building elements - the Parish Hall and the sanctuary. The building served as a church for almost a hundred years until its closure in 1986. In 2001, the Friends of the St. Lawrence took ownership of the building and renovated the Parish Hall into a live theater/auditorium space under the zoning provisions for a community hall; the sanctuary portion of the building, however, was left vacant as the Friends of St. Lawrence sought the means for renovation. Ultimately, the sanctuary fell into disrepair. In 2006, the primary roof trusses partially collapsed; shortly thereafter, the sanctuary was deemed unsalvageable. The sanctuary was dismantled in 2009. The Friends of the St. Lawrence recovered significant architectural features during the demolition with the intent of someday reconstructing the sanctuary building.

In 2010, the Friends of the St. Lawrence developed a proposal to rebuild the former church sanctuary in much its original form for use as a 402-seat performance venue. The applicant proposed a plan for the sanctuary that included many of the historic details of the old church building, including curbing, rose windows, and stone work. In order to rebuild such a structure, the applicant required relief from several provisions of the underlying R-6

zone, including the dimensional requirements. The concept was endorsed by the Historic Preservation Board and a conditional zoning agreement was drafted and formally adopted in November of 2010.

Following adoption of the agreement, the applicant embarked on a feasibility study with the intent of determining the extent of possible funding for the reconstruction project. It shortly became clear that the proposed reconstruction of the historic structure would be cost prohibitive. Instead, the Friends of the St. Lawrence shifted their vision for the proposed addition, focusing on what evolved into a contemporary expansion. In order to allow the change in design, an amended conditional zoning agreement was adopted by the City Council in early 2015.

It should be noted that the building was placed on the National Register in 1979, and was designated locally as a historic landmark in 1990. As a designated historic property, development on the site is subject to the Historic Preservation ordinance. The Historic Preservation Board has previously reviewed not only the demolition plans of the late 2000s, but also the reconstruction plans of 2010 and 2014.

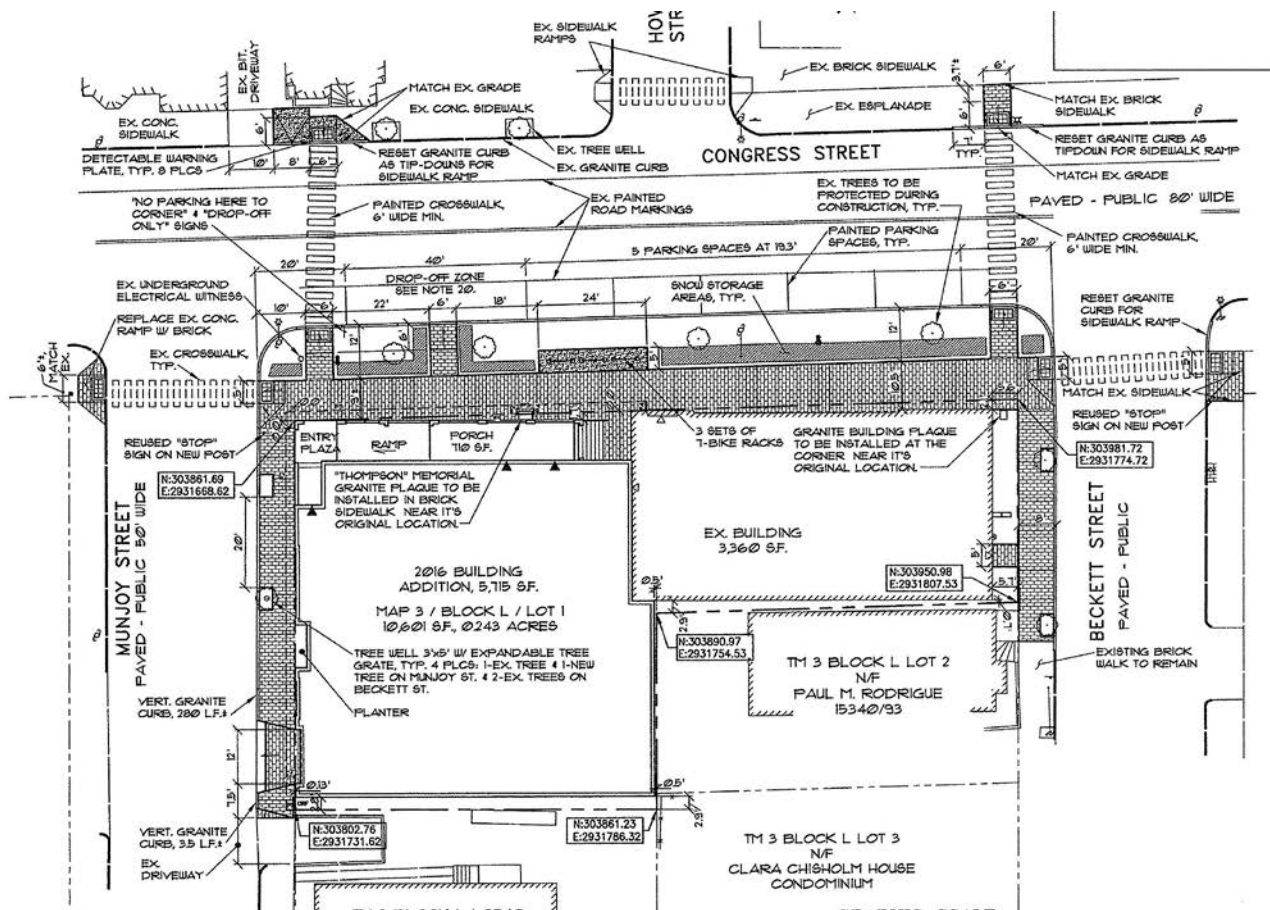


Figure 3: Final site plan

VI. PROPOSED DEVELOPMENT

The proposed St. Lawrence Arts Center project includes the renovation of the existing Parish Hall auditorium to increase the seating capacity to 120, add office space, and build a meeting room. The plans also include an addition in the old sanctuary space, including:

1. A 401-seat auditorium;

2. A new lobby to serve both the sanctuary and Parish Hall venues;
3. New support spaces including a catering kitchen, concession area, green room, dressing room, and bathrooms; and
4. A new function room, the Promenade Room, on the upper level, which would primarily be used as a lobby for the 401 seat performance hall

Overall, the footprint of the Arts Center is proposed to expand by just under 6,000 SF.

IX. PUBLIC COMMENT

The Planning Division has received no public comments on the site plan application for the St. Lawrence addition. However, the Planning Division did receive a number of comments over the course of the preceding conditional zoning agreement review. In general, the concerns regarding the development included its scale and massing, the proposed parking arrangement, and the TDM plan. The St. Lawrence held a neighborhood meeting at the outset of this site plan review. The summary indicates that attendees raised questions about architecture and parking (*Attachment P*).

VII. RIGHT, TITLE, & INTEREST

The St. Lawrence's application includes a deed as evidence of right, title, and interest (*Attachment D*). The final site plan shows areas of sidewalk on Congress Street that are proposed on private property; these will require a public access easement. Licenses will also be required for a plaque to be set in the sidewalk near the addition and building footings, which are proposed to encroach into the right-of-way. These have been included as conditions of approval.

VIII. FINANCIAL & TECHNICAL CAPACITY

The estimated cost of the project is approximately \$10 million. In their final submittal, the applicant has provided a letter attesting to their performance in fundraising as a 501(c)3 non-profit, and arguing that Planning Board approvals are necessary to allow effective fundraising for the Arts Center addition (*Attachment E*). Staff is recommending a condition of approval requiring that the applicant provide final evidence of financial and technical capacity prior to issuance of a building permit.

IX. ZONING ANALYSIS

Staff has conducted a zoning analysis based on the conditional zoning agreement (*Attachment F*).

Major Element of CZA		CZA Requirement	Proposal
Dimensional Standards	Use	Notwithstanding section 14-137(b)(6)(e)(i), the use shall be a place of assembly/community hall	Place of assembly
	Min. Lot Size	10,500 SF	10,601 SF
	Min. Front yard	0 ft.	0 ft.
	Min. Rear Yard	0 ft.	3 ft.
	Min. Side Yard on Side St.	0 ft.	0 ft.
	Max. Lot Coverage	95%	92% (9,785/10,601)
	Max. Sanctuary Structure Height	54 ft.	54 ft.
	Open Space Ratio	0%	0%
	Min. Lot Width	50 ft.	160 ft.

<i>Major Element of CZA</i>	<i>CZA Requirement</i>	<i>Proposal</i>
<i>Occupancy restriction</i>	Maximum number of attendees at any single event or combination of events limited to 485 persons. Maximum seats in Parish Hall theater restricted to 120. Seats in sanctuary auditorium restricted to 401. No separate audience events to be held in Parish Hall and sanctuary at same time.	
<i>Maintenance</i>	Owner responsible for ongoing maintenance.	
<i>Sidewalks</i>	Owner to install brick sidewalks along Munjoy, Beckett, and Congress Street frontages and reset existing pink granite curbing as necessary.	Brick sidewalks and note regarding pink granite curbing shown on final plan.
<i>Street Trees</i>	Owner to provide two street trees along Munjoy, Beckett, and Congress Street frontages, unless healthy trees exist.	One additional tree proposed on Munjoy Street. Other frontages have existing trees.
<i>Street Lighting</i>	Owner to install two Downtown District street lights along Congress Street frontage.	Two lights shown on plan. Use of Downtown light fixtures on this portion of Congress Street currently under review as city staff update the Technical Manual. Final lighting design suggested as condition of approval.
<i>Crosswalks and Ramps</i>	Owner to install remaining crosswalks, ADA-compliant ramps, and other pedestrian improvements at Congress/Beckett Streets or Congress/Howard Streets and Congress/Munjoy Streets.	Crosswalks denoted on plan. See specific comments under site plan review below.
<i>TDM/Off-Street Parking Requirement¹</i>	TDM plan required, and must include annual \$70,000 contribution to Sustainable Transportation Fund and monitoring provisions. Requirement of TDM plan to supersede any and all parking requirements of the land use code. During site plan review, Planning Board to provide communication to Council that may include recommendations for on-street parking regulations.	No off-street parking proposed. \$70,000 annual contribution and monitoring requirements noted in TDM plan.
<i>Tour buses</i>	Owner to ensure that tour buses, vans, and trucks affiliated with events unload and relocate to remote, off-street parking location during event	Loading restrictions noted in TDM plan and in truck loading memo.

¹The off-street parking requirement for places of assembly (including community halls) in Division 20 of the city's land use ordinance is 1 space/125 SF used for assembly purposes. Division 20 includes an exception for historic structures subject to the Historic Preservation ordinance (*Section 14-332.2*).

X. SITE PLAN SUBMISSION REQUIREMENTS (*Section 14-527*)

The applicant has provided all required submittals. Staff has suggested a condition of approval that a final construction management plan be reviewed and approved at the time of building permit. Jeff Tarling, the city's arborist, has requested that the final construction management plan include notes regarding the preservation of street trees along Congress Street and Munjoy Street.

XI. SITE PLAN REVIEW

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's site plan ordinance. Staff comments are below.

1. *Transportation Standards*

a. *Impact on Surrounding Street Systems*

The final submittal includes an application for a Traffic Movement Permit (*Attachments J and K*). The analysis included in this application estimates a total trip generation of 182 vehicle trips during the future peak hour, and a net change in trip generation of 170, most of which are anticipated to use Congress Street to access the Arts Center and its vicinity. Thomas Errico, the city's consulting traffic engineer, has reviewed the application and found the following,

In response to the TMP Scoping meeting, the applicant provided an estimate of likely traffic patterns for patrons attending SLAC events. As noted in the assessment, 182 vehicle trips can be expected to travel to an SLAC event during the peak hour. The applicant assumed 60 trips would be associated with the Valet Parking Services; 80 trips would be associated with patron drop-off activity – and parking locally; and 42 trips would directly park locally and walk to the site. The applicant estimated the following for traffic increases:

- 67 vehicles would travel to the project site via eastbound Congress Street.*
- 30 vehicles would depart the site on Congress Street as part of valet services.*
- 20 vehicles would travel to the project site via eastbound Cumberland Avenue.*
- 15 vehicles would travel to the project site via eastbound Fore Street.*
- 10 vehicles would travel to the project site via Walnut Street*

I find the estimate provided to be acceptable and the information satisfies the requirement of the Traffic Movement Permit (with the TDM Plan). The key outcome regarding the mitigation of traffic impacts is associated with the effectiveness of the TDM Plan.

The TDM Plan is discussed in further detail below.

b. *Access and Circulation*

The proposed Arts Center addition will fill out the remainder of the block frontage on Congress Street between Beckett and Munjoy Streets. New brick sidewalks are proposed on the Beckett, Congress, and Munjoy Street frontages. Two ADA-accessible crosswalks are proposed across Congress Street, at both Beckett and Munjoy Streets, and improvements are proposed to the existing crosswalks across Beckett and Munjoy Streets. In his final review, Mr. Errico has requested slight modifications to proposed ramps in these locations, writing,

The [Congress Street at Munjoy Street crosswalk] ramp flares impact pedestrian accessibility along the sidewalk. The ramp should be redesigned with dimensional details. A condition of approval should be included for final design details to be provided for review and approval prior to any City Permit.

Ramp flares at the westerly corner of Munjoy Street and Beckett Street currently impact the accessible route and revisions shall be provided including dimensioned

details. A condition of approval should be included for final design details to be provided for review and approval prior to any City Permit.

The plans show a curb cut at the southeasterly corner of the site along Munjoy Street, where an overhead door will stand. A driveway separation waiver has been requested. This waiver is supported by Mr. Errico.

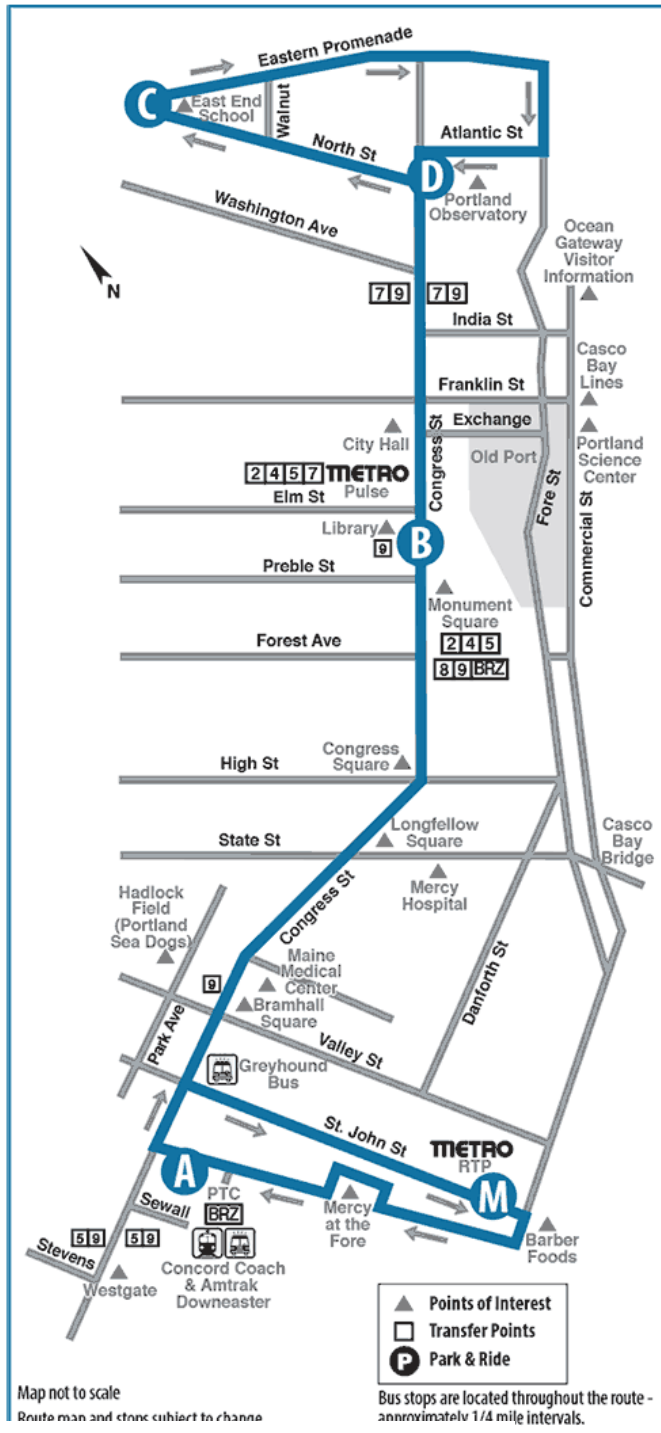


Figure 4: METRO Route 1

In the final submittal, the applicant has provided a plan for accommodating load-ins at this overhead door (*Attachment O*). The conditional zoning agreement continues to require that the property owner ensure that tour buses, vans, and trucks serving the site unload and then relocate to a remote, off-street parking location. Mr. Errico has reviewed the plan and indicated his approval.

c. Public Transit Access

Greater Portland METRO's Route 1 extends up and down Congress Street into Munjoy Hill, where the route proceeds in a clockwise loop around the East End, first on North Street past the East End School, along the Eastern Promenade, and then up Atlantic Street (one block south of Munjoy Street) back to Congress. Though the St. Lawrence is not located directly on this route, the Route 1 has three stops proximate to the St. Lawrence, at North and Congress Streets, Lafayette and Congress, and Atlantic and Monument Streets. Headways are thirty minutes between 5:15 a.m. and 8:45 p.m., with decreased frequencies after 9. Sunday headways are one hour.

Since the St. Lawrence is not located directly on a transit route, they are not required to provide transit accommodations. However, in their Transportation Demand Management (TDM) Plan (*Attachment M*), the St. Lawrence has proposed to provide an annual contribution of \$70,000, to be directed to METRO, to enhance and expand existing service on Route 1, which would permit METRO to improve evening headways to 15-20 minutes and offer service to 11 p.m., Monday through Saturday. In addition to the contribution to METRO, the St. Lawrence is proposing to subsidize transit passes for ticket holders, allowing patrons to use their ticket as valid bus fare.

d. Parking

The St. Lawrence's conditional zoning agreement states that the requirements of a TDM plan "supersede any and all parking requirements of the land use code for the property." However, given neighborhood concerns raised through the conditional zoning agreement review, and at the request of the city's traffic engineer, the applicant has made an effort to show the potential impact of patron parking on the surrounding on-street parking supply. (*Attachment K*). This analysis develops parking ratios based on survey data from recent shows at the St. Lawrence, and arrives at a total projected patron demand, at peak occupancy, of 158 spaces. This figure is below that from the original Parking Demand Management Plan developed in association with the conditional zoning agreement, which projected a total demand (including staff) of 228, but greater than that suggested by the city's TDM peer reviewer for the conditional zoning agreement review, Nelson-Nygaard, who developed an estimate of 122 based on ITE parking generation rates. Mr. Errico has reviewed the parking study methodology and writes,

The general estimate of a parking demand rate for the facility should be calculated according to the number of vehicles compared to the number of attendees at each of the surveyed events. Based upon the data supplied by the applicant for events that occurred on Tuesday, February 28, 2017; Tuesday, April 4, 2017; Wednesday, April 26, 2017; Saturday, April 29, 2017; Friday, May 5, 2017; Saturday, May 6, 2017; and Sunday, May 7, 2017, the average number of vehicles generated by each attendee is 0.4 vehicles. This rate corresponds well with ITE Parking Generation Rates (0.4 parking spaces per seat or attendee) and a parking survey conducted as part of the Contract Zone process on December 12, 2013 (0.4 parking spaces per seat or attendee). A parking survey was conducted on October 25, 2013 and determined a parking rate of 0.54 vehicles per seat or attendee. My general conclusions is that parking demand for a sold out event of 485 seats would be approximately 194 vehicles.

As with the parking study developed along with the conditional zoning agreement, the St. Lawrence has provided the results of a parking utilization study conducted in April of 2017. This study, which surveyed on-street parking spaces within a 5-minute walk of the St. Lawrence, showed a total on-street supply of approximately 880 spaces, between 65% and 72% of which were occupied during recent show times (with 572 and 636 spaces occupied, respectively). Of all the April occupancy counts, the highest (taken on an early Sunday morning) continued to leave approximately 220 on-street spaces within a 5-minute walk of the St. Lawrence available. This capacity is considerably greater than the total parking demand projected by the applicant's consulting engineer (158 spaces) and above that of Mr. Errico (194 spaces) as well.

The applicant has proposed to modify on-street parking on Congress Street to include a 40-foot drop-off zone directly in front of the entrance at the southerly end of the block and five on-street spaces in the space between this zone and the Congress/Beckett Street corner. The drop-off zone would be used during show times only. Mr. Errico writes,

The City does not recommend a continuous 5-minute parking regulation in front of the site. City staff would prefer to provide longer time parking opportunities for the neighborhood during non-event time periods. Temporary 5-minute parking regulations will be permitted during events via portable signs.

e. *Transportation Demand Management*

As required under the conditional zoning agreement, the applicant has included an updated Transportation Demand Management Plan in the preliminary submittal (*Attachment M*). The applicant developed this plan based on the draft included by reference in the conditional zoning agreement. As with the original plan, the current TDM plan includes a number of mechanisms designed to foster use of alternative modes and thus reduce SOV trips and parking demand. The St. Lawrence proposes the following:

- *METRO subsidies and transit incentives:* The central strategy of the TDM plan is a \$70,000 annual subsidy to METRO to improve its Route #1 service, both in terms of arrival frequencies and extended hours. METRO has stated that this \$70,000 would be sufficient to increase evening headways from 45 minutes to 30 minutes and extend service to 11 p.m. Monday through Saturday (*Attachment N*). The St. Lawrence has argued that this expansion of service will not only effectively serve their patrons but the greater neighborhood as well, and in this reduce baseline parking demand. As an incentive and as part of the arrangement with METRO, St. Lawrence patrons will be able to use their theater tickets as valid fare to board the bus. The lobby of SLA would be designed to include a display screen with real-time tracking information, allowing this area to effectively serve as a waiting area.
- *Valet parking:* The TDM plan also includes front-door valet service for patrons, with “simple incentives” at point of ticket purchase. Cars would be stored in remote lots.
- *Bicycle and pedestrian infrastructure:* The St. Lawrence proposes to encourage bicycling by providing racks with 20 bicycle parking spaces in front of the building on Congress Street and becoming a Bicycle Benefits partner. They also propose pedestrian infrastructure improvements, such as sidewalks and crosswalks.
- *Free market options:* The TDM plan also notes the existence of other mode choices, such as cabs, pedicabs, and TNCs, which will be available to patrons.
- *Rideshare:* The TDM plan states that the St. Lawrence will offer discounted tickets for carpooling patrons and will facilitate ridesharing by developing one-time ride-matching services in conjunction with GoMaine.
- *Overall incentives:* In addition to discounted ticket pricing for those who use alternative modes, the TDM Plan proposes an incentive campaign with monthly raffles for the first year of operation.
- In addition to the above, the St. Lawrence proposes a number of programmatic elements around education and marketing in the TDM plan. The TDM plan states that the St. Lawrence will provide information regarding alternative mode choices on their website, at the point of ticket purchase, at a kiosk on site, and through consistent and regular communication with their patrons. The plan also includes a marketing campaign.

Lastly, the plan includes the designation of a TDM coordinator and provisions for immediate and long-term monitoring. The plan specifies monitoring to begin one month after opening and twice annual monitoring thereafter for five years. Annual monitoring would occur subsequently. Through surveys, ridership tracking, and valet data, the St. Lawrence would monitor mode choice and the potential for mode shifts. Ultimately, the goals of the TDM plan are to reduce trips and parking demand by 6-10% in the first year.

Mr. Errico has reviewed the TDM plan and writes,

The TDM Plan notes a number of incentives for reducing vehicle impacts. I would suggest some detail (likely amount or percentage) on ticket discounts and coupons be provided.

It notes that SLAC will be partnering with the City on infrastructure improvements. Further detail on what is envisioned regarding this partnership and possible commitments should be provided.

The applicant should provide details on the ticket surcharge (likely amount or percentage) and specifically describe how the surcharge proceeds will be managed/allocated towards TDM strategies.

It is noted that METRO “could” further increase evening service. It is my understanding that METRO service will increase evening service and therefore the applicant should confirm this assumption.

The applicant should note why only the Temple Street garage is the only facility eligible for a subsidy. Additionally, the applicant should note why free parking is limited to three hours (dinner plus event could be more than 3 hours).

The applicant should provide greater detail on the anticipated Valet service program at the first event and details on specific operations and how the service is funded? Related to this is the relatively far distance to the parking lots for valet vehicles and how this may impact service and use.

The applicant should provide details on the bicycle ticket discount program.

A condition of approval related to final modifications of the TDM plan has been included.

2. Environmental Quality Standards

a. Preservation of Significant Natural Features

There are no known significant natural features on the site.

b. Landscaping and Landscape Preservation

The conditional zoning agreement requires two street trees along the Munjoy Street, Beckett Street, and Congress Street frontages. Each of these frontages currently has two or more trees, although one on Munjoy Street will need to be eliminated in order to allow room for the overhead door. This tree is proposed for replacement with an Armstrong maple. The landscaping plan shows other landscaping on the Beckett and Munjoy Street frontages, including miscanthus and hakonechloa grasses. Clematis and honeysuckle are proposed for the eastern property line. Jeff Tarling, the city’s arborist, has reviewed the plans and verbally indicated his approval.

c. Water Quality/Storm Water Management/Erosion Control

Although the area of the proposed St. Lawrence expansion is currently undeveloped, it is the site of the former church sanctuary, and the city’s records indicate that it has been assessed as impervious area since the sanctuary demolition. As such, the proposed expansion is not deemed to change the quantity

of existing impervious surface on site (*Attachment I*). The applicant has not proposed any stormwater quality treatment measures. Roof drains are proposed to surface discharge, as requested by the city's consulting civil engineer.

3. *Public Infrastructure and Community Safety Standards*

a. *Consistency with Related Master Plans*

The project is generally deemed consistent with related master plans.

b. *Public Safety and Fire Prevention*

Keith Gatreau, Assistant Fire Chief, has reviewed the plans and has not requested any modifications (*Attachment 5*).

c. *Availability and Capacity of Public Utilities*

The applicant has provided evidence of water and wastewater capacity (*Attachments G and H*).

4. *Site Design Standards*

a. *Massing, Ventilation, and Wind Impact*

The bulk, location, or height of the proposed buildings are not likely to result in health or safety problems from a reduction in ventilation to abutting structures.

b. *Shadows*

The project is not anticipated to result in shadows on publicly accessible open space.

c. *Snow and Ice Loading*

The project is not anticipated to result in snow or ice accumulation on public ways or adjacent properties.

d. *View Corridors*

The project does not abut a protected view corridor.

e. *Historic Resources*

The St. Lawrence is a historic property on the National Register of Historic Places. As such, development on the site is subject to Historic Preservation review. The city's Historic Preservation Board previously reviewed preliminary architectural plans for the St. Lawrence addition. Final approval by the Historic Preservation Board has been suggested as a condition of approval.

f. *Exterior Lighting*

In the final submittal, the applicant has provided a draft lighting plan (*Plan 21*) and cut sheets (*Attachment Q*). This lighting plan will require further refinement, including an analysis of the plan with respect to the *Technical Manual* standards and an examination of the way in which the addition lighting is anticipated to relate to the existing exterior lighting on the Parish Hall. The final exterior lighting plan has been suggested as a condition of approval.

Likewise, the plan shows two street lights on Congress Street, which are specified as Downtown fixtures in the final plans. Planning staff are currently working on updating the city's *Technical Manual*, and it is anticipated that the lights specified on this portion of Congress Street may change. As such, final street lighting specifications have been suggested as a condition of approval.

g. Noise and Vibration

In the final submittal, the applicant has provided a roof plan showing that rooftop mechanicals will be screened from the public right-of-way.

h. Signage and Wayfinding

Signage will be reviewed under a separate sign permit by both Zoning and Historic Preservation.

i. Zoning-Related Design Standards

The conditional zoning agreement incorporates a set of elevations and floor plans by reference. These have been resubmitted with the site plan application (*Plans 10-20*). Given the historic landmark status of the existing structure, the applicant is required to obtain a certificate of appropriateness from the Historic Preservation Board for the proposed addition. The site plan ordinance exempts projects from design review when the development affects a designated historic landmark or is within a historic district and thus requires a certificate of appropriateness. The Friends of the St. Lawrence have not yet submitted drawings to the Historic Preservation Board for final design review. The Historic Preservation Board has generally given positive indications of their support for the design.

XII. RECOMMENDATION

Subject to the proposed motions and conditions of approval listed below, Planning Division staff recommends that the Planning Board approve the proposed St. Lawrence Arts Center addition at 76 Congress Street.

XIV. PROPOSED MOTIONS**A. WAIVERS**

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing:

1. The planning board [finds/does not find], based upon the consulting transportation engineer's review, that extraordinary conditions exist or undue hardship may result from strict compliance with the *Technical Manual* standard (*Section 1.7.2.7*) which requires that along arterials, collectors, and local streets, minimum acceptable spacing between driveways shall be 100-150 feet, depending on speed limit, that substantial justice and the public interest are secured with the proposed variation in this standard, and that the variation is consistent with the intent of the ordinance. The Planning Board [waives/does not waive] the *Technical Manual* standard (*Section 1.7.2.7*) to allow the driveway cut on Munjoy Street approximately 20 feet from the adjacent driveway to the south as shown on the final plans.

B. TRAFFIC MOVEMENT PERMIT

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the proposed plan [is/is not] in conformance with 23 MRSA 704-A and Chapter 305 Rules and Regulations pertaining to Traffic Movement Permits.

C. DEVELOPMENT REVIEW

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to the site plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the plan [is/is not] in conformance with the site plan standards of the land use code and [approves/does not approve] the application, subject to the following conditions of approval that must be met prior to the issuance of a building permit, unless otherwise stated:

1. The applicant shall provide recorded copies of all required easements and licenses, including:
 - i. A public access easement from the applicant to the City of Portland for areas of sidewalk that are proposed on private property;
 - ii. A license from the City of Portland for purposes of the Thompson Memorial plaque; and
 - iii. A license from the City of Portland for footings proposed in the right-of-way for review and approval by Corporation Counsel, the Department of Public Works, and the Planning Division;
2. The applicant shall provide evidence of financial capacity from a financial institution for review and approval by the Planning Division;
3. The applicant shall provide a final construction management plan for review and approval by the Department of Public Works and the Planning Division;
4. The applicant shall provide a revised site plan including:
 - i. Details required to determine ADA compliance of sidewalk and driveway ramps with respect to grades and clearances for review and approval by the Department of Public Works;
 - ii. Street lighting as specified on Congress Street per pending revisions to the city's Technical Manual;
5. The applicant shall provide a revised TDM plan addressing the comments of the city's consulting traffic engineer for review and approval by the Department of Public Works and the Planning Division;
6. The applicant shall provide evidence of a Certificate of Appropriateness from the Historic Preservation Board; and
7. The applicant shall provide a final site lighting plan including photometric calculations compliant with the City of Portland *Technical Manual* and a plan for integration with the Sanctuary for review and approval by the Planning Division.

XIII. ATTACHMENTS**PLANNING BOARD REPORT ATTACHMENTS**

1. Traffic Engineer review (memo from Thomas Errico, 1/15/18)
2. City Arborist review (memo from Jeff Tarling, 12/20/16)
3. Civil Engineer review (memo from Lauren Swett, 12/27/17)
4. Civil Engineer review (memo from Lauren Swett, 1/8/18)
5. Fire Prevention Bureau review (memo from Keith Gautreau, 12/21/16)

APPLICANT'S SUBMITTALS

- A. Cover Letter (from Tom Greer, 11/18/16)

- B. Authorization Letter
- C. Level III Site Plan Application
- D. Evidence of Right, Title, and Interest
- E. Financial Capacity Letter
- F. Recorded Contract Zone
- G. Wastewater Capacity Letter
- H. PWD Capacity Letter
- I. Stormwater Narrative
- J. TMP Application
- K. Traffic and Parking Demand Assessment
- L. Supplemental TMP Information
- M. TDM Plan
- N. METRO letter (from Greg Jordan, 9/17/14)
- O. Truck Loading Memo
- P. Neighborhood Meeting Minutes
- Q. Lighting Cut Sheets

PLANS

- Plan 1 Boundary & Topographic Survey
- Plan 2 Site Plan
- Plan 3 Existing Conditions & Demolition Plan
- Plan 4 Grading & Utilities Plan
- Plan 5 Erosion Control Plan
- Plan 6 Landscape Plan
- Plan 7 Sidewalk Ramp Details
- Plan 8 Details
- Plan 9 Details
- Plan 10 Basement Plan
- Plan 11 First Floor Plan
- Plan 12 Upper Theater Level
- Plan 13 Upper Theater Level Continued
- Plan 14 Promenade Floor Plan
- Plan 15 Roof Plan
- Plan 16 North Elevation
- Plan 17 West Elevation
- Plan 18 South Elevation
- Plan 19 East Elevation
- Plan 20 Building Section
- Plan 21 Lighting Plan
- Plan 22 Construction Management Plan

CITY OF PORTLAND, MAINE

PLANNING BOARD

Sean Dundon, Chair
Brandon Mazer, Vice Chair
Elizabeth Boepple
David Eaton
Carol Morrisette
Maggie Stanley
Lisa Whited

January 30, 2018

Friends of the St. Lawrence Arts Center
76 Congress Street
Portland, ME 04101

Project Name:	St. Lawrence Arts Center Addition	Project ID:	2016-265
Address:	76 Congress St.	CBL:	003-L-001
Applicant:	Friends of the St. Lawrence Arts Center		
Planner:	Nell Donaldson		

Dear Ms. Nice:

On January 23, 2018, the Planning Board considered your proposed addition to the St. Lawrence Arts Center. The Planning Board reviewed the proposal for conformance with the standards of the City of Portland's site plan ordinance. The Planning Board voted 7-0 to approve the application with the following waiver(s) and condition(s):

Waivers

The Planning Board voted 7-0 to waive the Technical Manual standard, Section 1.7.2.7 as follows:

1. The Planning Board finds, based upon the consulting transportation engineer's review, that extraordinary conditions exist or undue hardship may result from strict compliance with the *Technical Manual* standard (Section 1.7.2.7) which requires that along arterials, collectors, and local streets, minimum acceptable spacing between driveways shall be 100-150 feet, depending on speed limit, that substantial justice and the public interest are secured with the proposed variation in this standard, and that the variation is consistent with the intent of the ordinance. The Planning Board waives the *Technical Manual* standard (Section 1.7.2.7) to allow the driveway cut on Munjoy Street approximately 20 feet from the adjacent driveway to the south as shown on the final plans.

Traffic Movement Permit

Based upon the City of Portland's Delegated Review Authority, the Planning Board voted 7-0 to approve the Traffic Movement Permit application, as submitted, as follows:

389 Congress Street / www.portlandmaine.gov / tel, 207•874•8720 / tty, 207•874•8936 / fax, 207•756•8258

1. On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the proposed plan is in conformance with 23 MRSA 704-A and Chapter 305 Rules and Regulations pertaining to Traffic Movement Permits.

Site Plan Review

The Planning Board voted 7-0 that the plan is in conformance with the site plan standards of the Land Use Code, subject to the following condition(s) of approval, which must be met prior to the issuance of a building permit, unless otherwise stated:

1. The applicant shall provide recorded copies of all required easements and licenses, including:
 - i. A public access easement from the applicant to the City of Portland for areas of sidewalk that are proposed on private property;
 - ii. A license from the City of Portland for purposes of the Thompson Memorial plaque; and
 - iii. A license from the City of Portland for footings proposed in the right-of-way for review and approval by Corporation Counsel, the Department of Public Works, and the Planning Division;
2. The applicant shall provide evidence of financial capacity from a financial institution for review and approval by the Planning Division;
3. The applicant shall provide a final construction management plan for review and approval by the Department of Public Works and the Planning Division;
4. The applicant shall provide a revised site plan including:
 - i. Details required to determine ADA compliance of sidewalk ramps with respect to grades and clearances for review and approval by the Department of Public Works;
 - ii. Street lighting as specified on Congress Street per pending revisions to the city's Technical Manual; for review and approval by the Department of Public Works and the Planning Division;
5. The applicant shall provide a revised TDM plan addressing the comments of the city's consulting traffic engineer for review and approval by the Department of Public Works and the Planning Division;
6. The applicant shall provide evidence of a Certificate of Appropriateness from the Historic Preservation Board; and
7. The applicant shall provide a final site lighting plan including photometric calculations compliant with the City of Portland *Technical Manual* and a plan for integration with the Sanctuary for review and approval by the Planning Division.

The approval is based on the submitted plans and the findings related to site plan review standards as contained in the Planning Report for application 2016-265 which is attached.

Standard Conditions of Approval

Please Note: The following standard conditions of approval and requirements apply to all approved site plans:

1. Develop Site According to Plan The site shall be developed and maintained as depicted on the site plan and in the written submission of the applicant. Modification of any approved site plan or

alteration of a parcel which was the subject of site plan approval after May 20, 1974, shall require the prior approval of a revised site plan by the Planning Board or Planning Authority pursuant to the terms of Chapter 14, Land Use, of the Portland City Code.

2. Separate Building Permits Are Required This approval does not constitute approval of building plans, which must be reviewed and approved by the City of Portland's Permitting and Inspections Department.
3. Site Plan Expiration The site plan approval will be deemed to have expired unless work has commenced within one (1) year of the approval or within a time period up to three (3) years from the approval date as agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the one (1) year expiration date.
4. Performance Guarantee and Inspection Fees A performance guarantee covering the site improvements, inspection fee payment of 2.0% of the guarantee amount and seven (7) final sets of plans must be submitted to and approved by the Planning and Urban Development Department and Public Works Department prior to the release of a building permit, street opening permit or certificate of occupancy for site plans. If you need to make any modifications to the approved plans, you must submit a revised site plan application for staff review and approval.
5. Defect Guarantee A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
6. Preconstruction Meeting Prior to the release of a building permit or site construction, a pre-construction meeting shall be held at the project site. This meeting will be held with the contractor, Development Review Coordinator, Public Works representative and owner to review the construction schedule and critical aspects of the site work. At that time, the Development Review Coordinator will confirm that the contractor is working from the approved site plan. The site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
7. Construction Management Plans The applicant, contractor and subcontractors are required to conform to the approved Construction Management Plan, and all conditions contained within the project's approval, for the entire duration of the project. Any amendments to the approved Construction Management Plan shall be reviewed and approved by the Department of Public Works prior to the execution. The Planning Authority and the Department of Public Works have the right to seek revisions to an approved Construction Management Plan. The applicant shall coordinate the project's construction schedule with the timing of nearby construction activities to avoid cumulative impacts on a neighborhood and prevent unsafe vehicle and pedestrian movements. Accordingly, nearby construction activities could involve a delay in the commencement of construction.
8. Department of Public Works Permits If work or obstructions will occur within the public right-of-way, such as utilities, curb, sidewalk, driveway construction, site deliveries and equipment siting, a Street Opening and/or Occupancy Permit (s) is required for your site. Please contact the

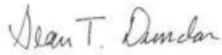
Department of Public Works Permit Clerk at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

9. As-Built Final Plans Final sets of as-built plans shall be submitted digitally to the Planning and Urban Development Department, on a CD or DVD, in AutoCAD format (*.dwg), release AutoCAD 2005 or greater.

The Development Review Coordinator must be notified five (5) working days prior to the date required for final site inspection. The Development Review Coordinator can be reached at the Planning and Urban Development Department at 874-8632. All site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Nell Donaldson at (207) 874- 8723

Sincerely,



Sean Dundon, Chair
Portland Planning Board

Attachments:

1. Planning Board Report
2. Portland City Code: Chapter 32
3. Sample Stormwater Maintenance Agreement [if applicable]
4. Performance Guarantee Packet

Electronic Distribution:

cc: Jeff Levine, AICP, Director of Planning and Urban Development
Stuart G. O'Brien, City Planning Director, Planning and Urban Development
Barbara Barhydt, Development Review Services Manager, Planning and Urban Development
Nell Donaldson, Planner/Senior Planner, Planning and Urban Development
Philip DiPierro, DRC, Planning and Urban Development
Mike Russell, Director of Permitting and Inspections
Ann Machado, Zoning Administrator, Permitting and Inspections
Jonathan Rioux, Deputy Director, Permitting and Inspections
Jeanie Bourke, Plan Reviewer/CEO, Permitting and Inspections
Chris Branch, Director of Public Works
Keith Gray, Senior Engineer, Public Works
Doug Roncarati, Stormwater Coordinator, Public Works
Jane Ward, Engineering, Public Works
Rhonda Zazzara, Construction Engineering Coordinator, Public Works
Jeff Tarling, City Arborist, Public Works
Jeremiah Bartlett, Transportation Systems Engineer, Public Works
William Scott, Chief Surveyor, Public Works
Mike Thompson, Fire
Danielle West-Chuhta, Corporation Counsel

Jennifer Thompson, Corporation Counsel
Victoria Volent, Housing Program Manager, Housing and Community Development
Thomas Errico, P.E., TY Lin Associates
Lauren Swett, P.E., Woodard and Curran
Christopher Huff, Assessor

PLANNING BOARD REPORT PORTLAND, MAINE



St. Lawrence Arts Center Addition
66-76 Congress Street
Level III Site Plan Review
2016-265
Friends of the Saint Lawrence Church

Submitted to: Portland Planning Board Date: January 19, 2018 Public Hearing Date: January 23, 2018	Prepared by: Nell Donaldson, Planner CBL: 3-L001 Project #: 2016-265
--	--

I. INTRODUCTION

The Friends of the St. Lawrence Church appears before the Planning Board for a public hearing for the site plan review of a proposed addition to their property at 76 Congress Street, the St. Lawrence Arts Center. Notice of this hearing appeared in the *Portland Press Herald* on January 22 and 23, 2018. Notices were sent to 275 property owners within 500 feet and to the interested citizens list.

Applicant: Friends of the St. Lawrence Church

Consultants: David Lloyd, Archetype; Thomas Greer, Pinkham & Greer; William Bray, Traffic Solutions; Sarah Cushman, Cushman Transportation Consulting

II. REQUIRED REVIEWS

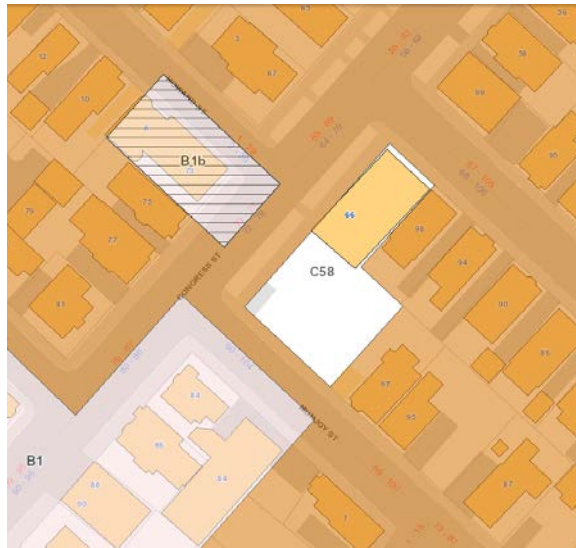
<i>Waiver Requests</i>	<i>Applicable Standards</i>
<i>Driveway Separation</i> – to allow a curb cut approximately 20' from the adjacent property's	Technical Manual, <i>Section 1.7.2.7</i> . Along arterial, collector, and local streets, minimum acceptable spacing shall be 100-150 feet, depending on speed limit.

<i>Review</i>	<i>Applicable Statute</i>
Site Plan	<i>Section 14-526, with Historic Preservation review</i>

III. PROJECT DATA

Existing Zoning	Conditional Zoning Agreement C58
Existing Use	Place of Assembly
Proposed Use	Place of Assembly
Proposed Development Program	14,768 SF Addition to include: • 401 seats and stage in sanctuary • New lobby and support space (green rooms, dressing rooms, bathroom, storage) • New conference and office space • New Promenade Room (to serve as lobby break area during performances, meeting space at other times)(200 person capacity)
Parcel Size	10,601 SF

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	3,360	9,075 SF	5,715 SF
Building Floor Area	10,540 SF	25,308 SF	14,768 SF
Impervious Surface Area	9,463 SF	9,978 SF	515 SF
Parking Spaces (on site)	0	0	0
Bicycle Parking Spaces	0	20	20
Estimated Cost of Project	\$10 million		



Figures 1 & 2: Zoning context (left) and St. Lawrence Arts Center (existing Parish Hall theater) at present (above)

IV. CONTEXT

The St. Lawrence Arts Center sits at 76 Congress Street in the heart of Munjoy Hill. The property is subject to a conditional zoning agreement adopted in early 2015. While the underlying zoning is R-6 Residential, the St. Lawrence neighbors a B-1 Neighborhood Business zone and lies directly across from an active restaurant use in a B-1b zone (*Figure 1*). Commercial uses sit on the Congress Street block immediately west. Residential uses surround the site to the north, east, and south. The property lies three blocks from the Eastern Promenade.

V. BACKGROUND

The building now occupied by the St. Lawrence Arts Center was originally constructed in 1897 as a church with two major building elements - the Parish Hall and the sanctuary. The building served as a church for almost a hundred years until its closure in 1986. In 2001, the Friends of the St. Lawrence took ownership of the building and renovated the Parish Hall into a live theater/auditorium space under the zoning provisions for a community hall; the sanctuary portion of the building, however, was left vacant as the Friends of St. Lawrence sought the means for renovation. Ultimately, the sanctuary fell into disrepair. In 2006, the primary roof trusses partially collapsed; shortly thereafter, the sanctuary was deemed unsalvageable. The sanctuary was dismantled in 2009. The Friends of the St. Lawrence recovered significant architectural features during the demolition with the intent of someday reconstructing the sanctuary building.

In 2010, the Friends of the St. Lawrence developed a proposal to rebuild the former church sanctuary in much its original form for use as a 402-seat performance venue. The applicant proposed a plan for the sanctuary that included many of the historic details of the old church building, including curbing, rose windows, and stone work. In order to rebuild such a structure, the applicant required relief from several provisions of the underlying R-6

zone, including the dimensional requirements. The concept was endorsed by the Historic Preservation Board and a conditional zoning agreement was drafted and formally adopted in November of 2010.

Following adoption of the agreement, the applicant embarked on a feasibility study with the intent of determining the extent of possible funding for the reconstruction project. It shortly became clear that the proposed reconstruction of the historic structure would be cost prohibitive. Instead, the Friends of the St. Lawrence shifted their vision for the proposed addition, focusing on what evolved into a contemporary expansion. In order to allow the change in design, an amended conditional zoning agreement was adopted by the City Council in early 2015.

It should be noted that the building was placed on the National Register in 1979, and was designated locally as a historic landmark in 1990. As a designated historic property, development on the site is subject to the Historic Preservation ordinance. The Historic Preservation Board has previously reviewed not only the demolition plans of the late 2000s, but also the reconstruction plans of 2010 and 2014.

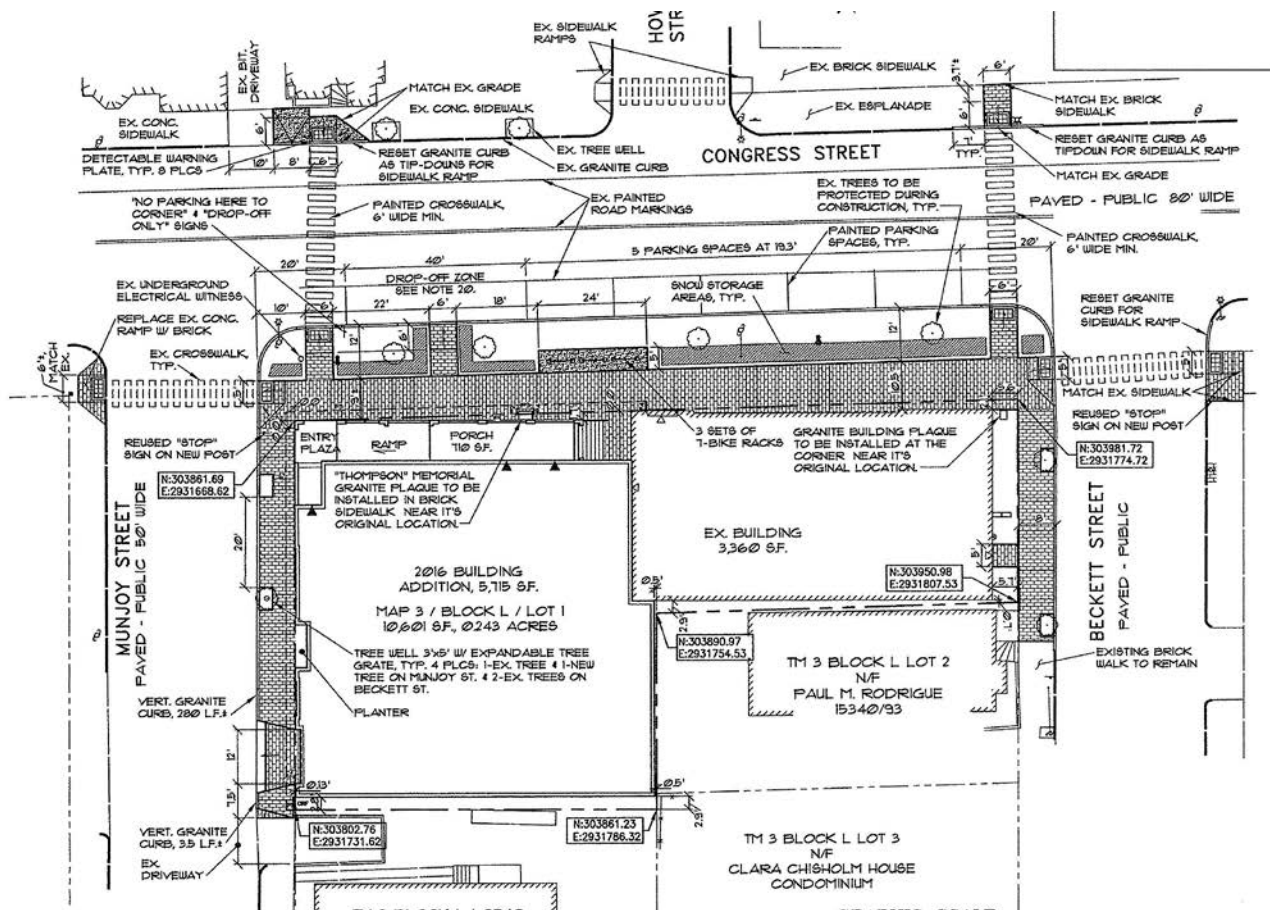


Figure 3: Final site plan

VI. PROPOSED DEVELOPMENT

The proposed St. Lawrence Arts Center project includes the renovation of the existing Parish Hall auditorium to increase the seating capacity to 120, add office space, and build a meeting room. The plans also include an addition in the old sanctuary space, including:

1. A 401-seat auditorium;

2. A new lobby to serve both the sanctuary and Parish Hall venues;
3. New support spaces including a catering kitchen, concession area, green room, dressing room, and bathrooms; and
4. A new function room, the Promenade Room, on the upper level, which would primarily be used as a lobby for the 401 seat performance hall

Overall, the footprint of the Arts Center is proposed to expand by just under 6,000 SF.

IX. PUBLIC COMMENT

The Planning Division has received no public comments on the site plan application for the St. Lawrence addition. However, the Planning Division did receive a number of comments over the course of the preceding conditional zoning agreement review. In general, the concerns regarding the development included its scale and massing, the proposed parking arrangement, and the TDM plan. The St. Lawrence held a neighborhood meeting at the outset of this site plan review. The summary indicates that attendees raised questions about architecture and parking (*Attachment P*).

VII. RIGHT, TITLE, & INTEREST

The St. Lawrence's application includes a deed as evidence of right, title, and interest (*Attachment D*). The final site plan shows areas of sidewalk on Congress Street that are proposed on private property; these will require a public access easement. Licenses will also be required for a plaque to be set in the sidewalk near the addition and building footings, which are proposed to encroach into the right-of-way. These have been included as conditions of approval.

VIII. FINANCIAL & TECHNICAL CAPACITY

The estimated cost of the project is approximately \$10 million. In their final submittal, the applicant has provided a letter attesting to their performance in fundraising as a 501(c)3 non-profit, and arguing that Planning Board approvals are necessary to allow effective fundraising for the Arts Center addition (*Attachment E*). Staff is recommending a condition of approval requiring that the applicant provide final evidence of financial and technical capacity prior to issuance of a building permit.

IX. ZONING ANALYSIS

Staff has conducted a zoning analysis based on the conditional zoning agreement (*Attachment F*).

Major Element of CZA		CZA Requirement	Proposal
Dimensional Standards	Use	Notwithstanding section 14-137(b)(6)(e)(i), the use shall be a place of assembly/community hall	Place of assembly
	Min. Lot Size	10,500 SF	10,601 SF
	Min. Front yard	0 ft.	0 ft.
	Min. Rear Yard	0 ft.	3 ft.
	Min. Side Yard on Side St.	0 ft.	0 ft.
	Max. Lot Coverage	95%	92% (9,785/10,601)
	Max. Sanctuary Structure Height	54 ft.	54 ft.
	Open Space Ratio	0%	0%
	Min. Lot Width	50 ft.	160 ft.

<i>Major Element of CZA</i>	<i>CZA Requirement</i>	<i>Proposal</i>
<i>Occupancy restriction</i>	Maximum number of attendees at any single event or combination of events limited to 485 persons. Maximum seats in Parish Hall theater restricted to 120. Seats in sanctuary auditorium restricted to 401. No separate audience events to be held in Parish Hall and sanctuary at same time.	
<i>Maintenance</i>	Owner responsible for ongoing maintenance.	
<i>Sidewalks</i>	Owner to install brick sidewalks along Munjoy, Beckett, and Congress Street frontages and reset existing pink granite curbing as necessary.	Brick sidewalks and note regarding pink granite curbing shown on final plan.
<i>Street Trees</i>	Owner to provide two street trees along Munjoy, Beckett, and Congress Street frontages, unless healthy trees exist.	One additional tree proposed on Munjoy Street. Other frontages have existing trees.
<i>Street Lighting</i>	Owner to install two Downtown District street lights along Congress Street frontage.	Two lights shown on plan. Use of Downtown light fixtures on this portion of Congress Street currently under review as city staff update the Technical Manual. Final lighting design suggested as condition of approval.
<i>Crosswalks and Ramps</i>	Owner to install remaining crosswalks, ADA-compliant ramps, and other pedestrian improvements at Congress/Beckett Streets or Congress/Howard Streets and Congress/Munjoy Streets.	Crosswalks denoted on plan. See specific comments under site plan review below.
<i>TDM/Off-Street Parking Requirement¹</i>	TDM plan required, and must include annual \$70,000 contribution to Sustainable Transportation Fund and monitoring provisions. Requirement of TDM plan to supersede any and all parking requirements of the land use code. During site plan review, Planning Board to provide communication to Council that may include recommendations for on-street parking regulations.	No off-street parking proposed. \$70,000 annual contribution and monitoring requirements noted in TDM plan.
<i>Tour buses</i>	Owner to ensure that tour buses, vans, and trucks affiliated with events unload and relocate to remote, off-street parking location during event	Loading restrictions noted in TDM plan and in truck loading memo.

¹The off-street parking requirement for places of assembly (including community halls) in Division 20 of the city's land use ordinance is 1 space/125 SF used for assembly purposes. Division 20 includes an exception for historic structures subject to the Historic Preservation ordinance (*Section 14-332.2*).

X. SITE PLAN SUBMISSION REQUIREMENTS (*Section 14-527*)

The applicant has provided all required submittals. Staff has suggested a condition of approval that a final construction management plan be reviewed and approved at the time of building permit. Jeff Tarling, the city's arborist, has requested that the final construction management plan include notes regarding the preservation of street trees along Congress Street and Munjoy Street.

XI. SITE PLAN REVIEW

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's site plan ordinance. Staff comments are below.

1. *Transportation Standards*

a. *Impact on Surrounding Street Systems*

The final submittal includes an application for a Traffic Movement Permit (*Attachments J and K*). The analysis included in this application estimates a total trip generation of 182 vehicle trips during the future peak hour, and a net change in trip generation of 170, most of which are anticipated to use Congress Street to access the Arts Center and its vicinity. Thomas Errico, the city's consulting traffic engineer, has reviewed the application and found the following,

In response to the TMP Scoping meeting, the applicant provided an estimate of likely traffic patterns for patrons attending SLAC events. As noted in the assessment, 182 vehicle trips can be expected to travel to an SLAC event during the peak hour. The applicant assumed 60 trips would be associated with the Valet Parking Services; 80 trips would be associated with patron drop-off activity – and parking locally; and 42 trips would directly park locally and walk to the site. The applicant estimated the following for traffic increases:

- 67 vehicles would travel to the project site via eastbound Congress Street.*
- 30 vehicles would depart the site on Congress Street as part of valet services.*
- 20 vehicles would travel to the project site via eastbound Cumberland Avenue.*
- 15 vehicles would travel to the project site via eastbound Fore Street.*
- 10 vehicles would travel to the project site via Walnut Street*

I find the estimate provided to be acceptable and the information satisfies the requirement of the Traffic Movement Permit (with the TDM Plan). The key outcome regarding the mitigation of traffic impacts is associated with the effectiveness of the TDM Plan.

The TDM Plan is discussed in further detail below.

b. *Access and Circulation*

The proposed Arts Center addition will fill out the remainder of the block frontage on Congress Street between Beckett and Munjoy Streets. New brick sidewalks are proposed on the Beckett, Congress, and Munjoy Street frontages. Two ADA-accessible crosswalks are proposed across Congress Street, at both Beckett and Munjoy Streets, and improvements are proposed to the existing crosswalks across Beckett and Munjoy Streets. In his final review, Mr. Errico has requested slight modifications to proposed ramps in these locations, writing,

The [Congress Street at Munjoy Street crosswalk] ramp flares impact pedestrian accessibility along the sidewalk. The ramp should be redesigned with dimensional details. A condition of approval should be included for final design details to be provided for review and approval prior to any City Permit.

Ramp flares at the westerly corner of Munjoy Street and Beckett Street currently impact the accessible route and revisions shall be provided including dimensioned

details. A condition of approval should be included for final design details to be provided for review and approval prior to any City Permit.

The plans show a curb cut at the southeasterly corner of the site along Munjoy Street, where an overhead door will stand. A driveway separation waiver has been requested. This waiver is supported by Mr. Errico.

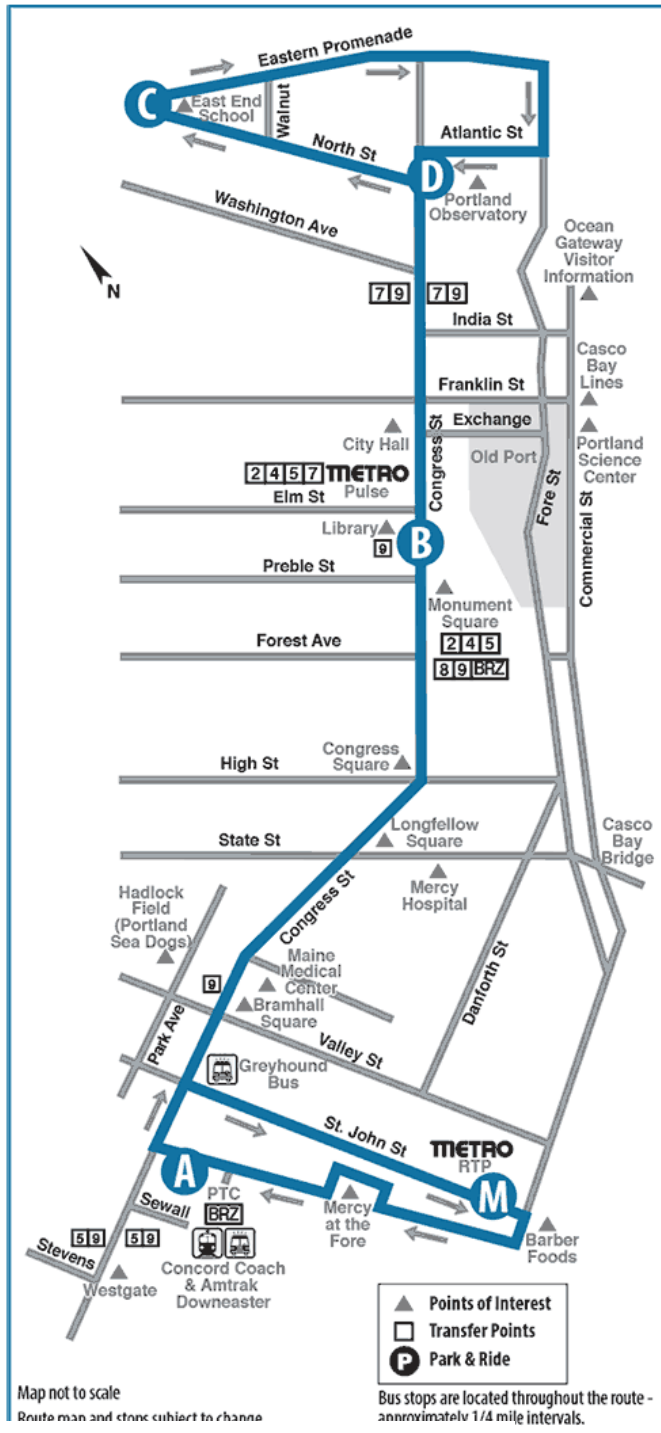


Figure 4: METRO Route 1

In the final submittal, the applicant has provided a plan for accommodating load-ins at this overhead door (*Attachment O*). The conditional zoning agreement continues to require that the property owner ensure that tour buses, vans, and trucks serving the site unload and then relocate to a remote, off-street parking location. Mr. Errico has reviewed the plan and indicated his approval.

c. Public Transit Access

Greater Portland METRO's Route 1 extends up and down Congress Street into Munjoy Hill, where the route proceeds in a clockwise loop around the East End, first on North Street past the East End School, along the Eastern Promenade, and then up Atlantic Street (one block south of Munjoy Street) back to Congress. Though the St. Lawrence is not located directly on this route, the Route 1 has three stops proximate to the St. Lawrence, at North and Congress Streets, Lafayette and Congress, and Atlantic and Monument Streets. Headways are thirty minutes between 5:15 a.m. and 8:45 p.m., with decreased frequencies after 9. Sunday headways are one hour.

Since the St. Lawrence is not located directly on a transit route, they are not required to provide transit accommodations. However, in their Transportation Demand Management (TDM) Plan (*Attachment M*), the St. Lawrence has proposed to provide an annual contribution of \$70,000, to be directed to METRO, to enhance and expand existing service on Route 1, which would permit METRO to improve evening headways to 15-20 minutes and offer service to 11 p.m., Monday through Saturday. In addition to the contribution to METRO, the St. Lawrence is proposing to subsidize transit passes for ticket holders, allowing patrons to use their ticket as valid bus fare.

d. Parking

The St. Lawrence's conditional zoning agreement states that the requirements of a TDM plan "supersede any and all parking requirements of the land use code for the property." However, given neighborhood concerns raised through the conditional zoning agreement review, and at the request of the city's traffic engineer, the applicant has made an effort to show the potential impact of patron parking on the surrounding on-street parking supply. (*Attachment K*). This analysis develops parking ratios based on survey data from recent shows at the St. Lawrence, and arrives at a total projected patron demand, at peak occupancy, of 158 spaces. This figure is below that from the original Parking Demand Management Plan developed in association with the conditional zoning agreement, which projected a total demand (including staff) of 228, but greater than that suggested by the city's TDM peer reviewer for the conditional zoning agreement review, Nelson-Nygaard, who developed an estimate of 122 based on ITE parking generation rates. Mr. Errico has reviewed the parking study methodology and writes,

The general estimate of a parking demand rate for the facility should be calculated according to the number of vehicles compared to the number of attendees at each of the surveyed events. Based upon the data supplied by the applicant for events that occurred on Tuesday, February 28, 2017; Tuesday, April 4, 2017; Wednesday, April 26, 2017; Saturday, April 29, 2017; Friday, May 5, 2017; Saturday, May 6, 2017; and Sunday, May 7, 2017, the average number of vehicles generated by each attendee is 0.4 vehicles. This rate corresponds well with ITE Parking Generation Rates (0.4 parking spaces per seat or attendee) and a parking survey conducted as part of the Contract Zone process on December 12, 2013 (0.4 parking spaces per seat or attendee). A parking survey was conducted on October 25, 2013 and determined a parking rate of 0.54 vehicles per seat or attendee. My general conclusions is that parking demand for a sold out event of 485 seats would be approximately 194 vehicles.

As with the parking study developed along with the conditional zoning agreement, the St. Lawrence has provided the results of a parking utilization study conducted in April of 2017. This study, which surveyed on-street parking spaces within a 5-minute walk of the St. Lawrence, showed a total on-street supply of approximately 880 spaces, between 65% and 72% of which were occupied during recent show times (with 572 and 636 spaces occupied, respectively). Of all the April occupancy counts, the highest (taken on an early Sunday morning) continued to leave approximately 220 on-street spaces within a 5-minute walk of the St. Lawrence available. This capacity is considerably greater than the total parking demand projected by the applicant's consulting engineer (158 spaces) and above that of Mr. Errico (194 spaces) as well.

The applicant has proposed to modify on-street parking on Congress Street to include a 40-foot drop-off zone directly in front of the entrance at the southerly end of the block and five on-street spaces in the space between this zone and the Congress/Beckett Street corner. The drop-off zone would be used during show times only. Mr. Errico writes,

The City does not recommend a continuous 5-minute parking regulation in front of the site. City staff would prefer to provide longer time parking opportunities for the neighborhood during non-event time periods. Temporary 5-minute parking regulations will be permitted during events via portable signs.

e. *Transportation Demand Management*

As required under the conditional zoning agreement, the applicant has included an updated Transportation Demand Management Plan in the preliminary submittal (*Attachment M*). The applicant developed this plan based on the draft included by reference in the conditional zoning agreement. As with the original plan, the current TDM plan includes a number of mechanisms designed to foster use of alternative modes and thus reduce SOV trips and parking demand. The St. Lawrence proposes the following:

- *METRO subsidies and transit incentives:* The central strategy of the TDM plan is a \$70,000 annual subsidy to METRO to improve its Route #1 service, both in terms of arrival frequencies and extended hours. METRO has stated that this \$70,000 would be sufficient to increase evening headways from 45 minutes to 30 minutes and extend service to 11 p.m. Monday through Saturday (*Attachment N*). The St. Lawrence has argued that this expansion of service will not only effectively serve their patrons but the greater neighborhood as well, and in this reduce baseline parking demand. As an incentive and as part of the arrangement with METRO, St. Lawrence patrons will be able to use their theater tickets as valid fare to board the bus. The lobby of SLA would be designed to include a display screen with real-time tracking information, allowing this area to effectively serve as a waiting area.
- *Valet parking:* The TDM plan also includes front-door valet service for patrons, with “simple incentives” at point of ticket purchase. Cars would be stored in remote lots.
- *Bicycle and pedestrian infrastructure:* The St. Lawrence proposes to encourage bicycling by providing racks with 20 bicycle parking spaces in front of the building on Congress Street and becoming a Bicycle Benefits partner. They also propose pedestrian infrastructure improvements, such as sidewalks and crosswalks.
- *Free market options:* The TDM plan also notes the existence of other mode choices, such as cabs, pedicabs, and TNCs, which will be available to patrons.
- *Rideshare:* The TDM plan states that the St. Lawrence will offer discounted tickets for carpooling patrons and will facilitate ridesharing by developing one-time ride-matching services in conjunction with GoMaine.
- *Overall incentives:* In addition to discounted ticket pricing for those who use alternative modes, the TDM Plan proposes an incentive campaign with monthly raffles for the first year of operation.
- In addition to the above, the St. Lawrence proposes a number of programmatic elements around education and marketing in the TDM plan. The TDM plan states that the St. Lawrence will provide information regarding alternative mode choices on their website, at the point of ticket purchase, at a kiosk on site, and through consistent and regular communication with their patrons. The plan also includes a marketing campaign.

Lastly, the plan includes the designation of a TDM coordinator and provisions for immediate and long-term monitoring. The plan specifies monitoring to begin one month after opening and twice annual monitoring thereafter for five years. Annual monitoring would occur subsequently. Through surveys, ridership tracking, and valet data, the St. Lawrence would monitor mode choice and the potential for mode shifts. Ultimately, the goals of the TDM plan are to reduce trips and parking demand by 6-10% in the first year.

Mr. Errico has reviewed the TDM plan and writes,

The TDM Plan notes a number of incentives for reducing vehicle impacts. I would suggest some detail (likely amount or percentage) on ticket discounts and coupons be provided.

It notes that SLAC will be partnering with the City on infrastructure improvements. Further detail on what is envisioned regarding this partnership and possible commitments should be provided.

The applicant should provide details on the ticket surcharge (likely amount or percentage) and specifically describe how the surcharge proceeds will be managed/allocated towards TDM strategies.

It is noted that METRO “could” further increase evening service. It is my understanding that METRO service will increase evening service and therefore the applicant should confirm this assumption.

The applicant should note why only the Temple Street garage is the only facility eligible for a subsidy. Additionally, the applicant should note why free parking is limited to three hours (dinner plus event could be more than 3 hours).

The applicant should provide greater detail on the anticipated Valet service program at the first event and details on specific operations and how the service is funded? Related to this is the relatively far distance to the parking lots for valet vehicles and how this may impact service and use.

The applicant should provide details on the bicycle ticket discount program.

A condition of approval related to final modifications of the TDM plan has been included.

2. Environmental Quality Standards

a. Preservation of Significant Natural Features

There are no known significant natural features on the site.

b. Landscaping and Landscape Preservation

The conditional zoning agreement requires two street trees along the Munjoy Street, Beckett Street, and Congress Street frontages. Each of these frontages currently has two or more trees, although one on Munjoy Street will need to be eliminated in order to allow room for the overhead door. This tree is proposed for replacement with an Armstrong maple. The landscaping plan shows other landscaping on the Beckett and Munjoy Street frontages, including miscanthus and hakonechloa grasses. Clematis and honeysuckle are proposed for the eastern property line. Jeff Tarling, the city’s arborist, has reviewed the plans and verbally indicated his approval.

c. Water Quality/Storm Water Management/Erosion Control

Although the area of the proposed St. Lawrence expansion is currently undeveloped, it is the site of the former church sanctuary, and the city’s records indicate that it has been assessed as impervious area since the sanctuary demolition. As such, the proposed expansion is not deemed to change the quantity

of existing impervious surface on site (*Attachment I*). The applicant has not proposed any stormwater quality treatment measures. Roof drains are proposed to surface discharge, as requested by the city's consulting civil engineer.

3. *Public Infrastructure and Community Safety Standards*

a. *Consistency with Related Master Plans*

The project is generally deemed consistent with related master plans.

b. *Public Safety and Fire Prevention*

Keith Gatreau, Assistant Fire Chief, has reviewed the plans and has not requested any modifications (*Attachment 5*).

c. *Availability and Capacity of Public Utilities*

The applicant has provided evidence of water and wastewater capacity (*Attachments G and H*).

4. *Site Design Standards*

a. *Massing, Ventilation, and Wind Impact*

The bulk, location, or height of the proposed buildings are not likely to result in health or safety problems from a reduction in ventilation to abutting structures.

b. *Shadows*

The project is not anticipated to result in shadows on publicly accessible open space.

c. *Snow and Ice Loading*

The project is not anticipated to result in snow or ice accumulation on public ways or adjacent properties.

d. *View Corridors*

The project does not abut a protected view corridor.

e. *Historic Resources*

The St. Lawrence is a historic property on the National Register of Historic Places. As such, development on the site is subject to Historic Preservation review. The city's Historic Preservation Board previously reviewed preliminary architectural plans for the St. Lawrence addition. Final approval by the Historic Preservation Board has been suggested as a condition of approval.

f. *Exterior Lighting*

In the final submittal, the applicant has provided a draft lighting plan (*Plan 21*) and cut sheets (*Attachment Q*). This lighting plan will require further refinement, including an analysis of the plan with respect to the *Technical Manual* standards and an examination of the way in which the addition lighting is anticipated to relate to the existing exterior lighting on the Parish Hall. The final exterior lighting plan has been suggested as a condition of approval.

Likewise, the plan shows two street lights on Congress Street, which are specified as Downtown fixtures in the final plans. Planning staff are currently working on updating the city's *Technical Manual*, and it is anticipated that the lights specified on this portion of Congress Street may change. As such, final street lighting specifications have been suggested as a condition of approval.

g. Noise and Vibration

In the final submittal, the applicant has provided a roof plan showing that rooftop mechanicals will be screened from the public right-of-way.

h. Signage and Wayfinding

Signage will be reviewed under a separate sign permit by both Zoning and Historic Preservation.

i. Zoning-Related Design Standards

The conditional zoning agreement incorporates a set of elevations and floor plans by reference. These have been resubmitted with the site plan application (*Plans 10-20*). Given the historic landmark status of the existing structure, the applicant is required to obtain a certificate of appropriateness from the Historic Preservation Board for the proposed addition. The site plan ordinance exempts projects from design review when the development affects a designated historic landmark or is within a historic district and thus requires a certificate of appropriateness. The Friends of the St. Lawrence have not yet submitted drawings to the Historic Preservation Board for final design review. The Historic Preservation Board has generally given positive indications of their support for the design.

XII. RECOMMENDATION

Subject to the proposed motions and conditions of approval listed below, Planning Division staff recommends that the Planning Board approve the proposed St. Lawrence Arts Center addition at 76 Congress Street.

XIV. PROPOSED MOTIONS**A. WAIVERS**

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing:

1. The planning board [finds/does not find], based upon the consulting transportation engineer's review, that extraordinary conditions exist or undue hardship may result from strict compliance with the *Technical Manual* standard (*Section 1.7.2.7*) which requires that along arterials, collectors, and local streets, minimum acceptable spacing between driveways shall be 100-150 feet, depending on speed limit, that substantial justice and the public interest are secured with the proposed variation in this standard, and that the variation is consistent with the intent of the ordinance. The Planning Board [waives/does not waive] the *Technical Manual* standard (*Section 1.7.2.7*) to allow the driveway cut on Munjoy Street approximately 20 feet from the adjacent driveway to the south as shown on the final plans.

B. TRAFFIC MOVEMENT PERMIT

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the proposed plan [is/is not] in conformance with 23 MRSA 704-A and Chapter 305 Rules and Regulations pertaining to Traffic Movement Permits.

C. DEVELOPMENT REVIEW

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board report for the public hearing on January 23, 2018 for application 2016-265 relevant to the site plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the plan [is/is not] in conformance with the site plan standards of the land use code and [approves/does not approve] the application, subject to the following conditions of approval that must be met prior to the issuance of a building permit, unless otherwise stated:

1. The applicant shall provide recorded copies of all required easements and licenses, including:
 - i. A public access easement from the applicant to the City of Portland for areas of sidewalk that are proposed on private property;
 - ii. A license from the City of Portland for purposes of the Thompson Memorial plaque; and
 - iii. A license from the City of Portland for footings proposed in the right-of-way for review and approval by Corporation Counsel, the Department of Public Works, and the Planning Division;
2. The applicant shall provide evidence of financial capacity from a financial institution for review and approval by the Planning Division;
3. The applicant shall provide a final construction management plan for review and approval by the Department of Public Works and the Planning Division;
4. The applicant shall provide a revised site plan including:
 - i. Details required to determine ADA compliance of sidewalk and driveway ramps with respect to grades and clearances for review and approval by the Department of Public Works;
 - ii. Street lighting as specified on Congress Street per pending revisions to the city's Technical Manual;
5. The applicant shall provide a revised TDM plan addressing the comments of the city's consulting traffic engineer for review and approval by the Department of Public Works and the Planning Division;
6. The applicant shall provide evidence of a Certificate of Appropriateness from the Historic Preservation Board; and
7. The applicant shall provide a final site lighting plan including photometric calculations compliant with the City of Portland *Technical Manual* and a plan for integration with the Sanctuary for review and approval by the Planning Division.

XIII. ATTACHMENTS**PLANNING BOARD REPORT ATTACHMENTS**

1. Traffic Engineer review (memo from Thomas Errico, 1/15/18)
2. City Arborist review (memo from Jeff Tarling, 12/20/16)
3. Civil Engineer review (memo from Lauren Swett, 12/27/17)
4. Civil Engineer review (memo from Lauren Swett, 1/8/18)
5. Fire Prevention Bureau review (memo from Keith Gautreau, 12/21/16)

APPLICANT'S SUBMITTALS

- A. Cover Letter (from Tom Greer, 11/18/16)

- B. Authorization Letter
- C. Level III Site Plan Application
- D. Evidence of Right, Title, and Interest
- E. Financial Capacity Letter
- F. Recorded Contract Zone
- G. Wastewater Capacity Letter
- H. PWD Capacity Letter
- I. Stormwater Narrative
- J. TMP Application
- K. Traffic and Parking Demand Assessment
- L. Supplemental TMP Information
- M. TDM Plan
- N. METRO letter (from Greg Jordan, 9/17/14)
- O. Truck Loading Memo
- P. Neighborhood Meeting Minutes
- Q. Lighting Cut Sheets

PLANS

- Plan 1 Boundary & Topographic Survey
- Plan 2 Site Plan
- Plan 3 Existing Conditions & Demolition Plan
- Plan 4 Grading & Utilities Plan
- Plan 5 Erosion Control Plan
- Plan 6 Landscape Plan
- Plan 7 Sidewalk Ramp Details
- Plan 8 Details
- Plan 9 Details
- Plan 10 Basement Plan
- Plan 11 First Floor Plan
- Plan 12 Upper Theater Level
- Plan 13 Upper Theater Level Continued
- Plan 14 Promenade Floor Plan
- Plan 15 Roof Plan
- Plan 16 North Elevation
- Plan 17 West Elevation
- Plan 18 South Elevation
- Plan 19 East Elevation
- Plan 20 Building Section
- Plan 21 Lighting Plan
- Plan 22 Construction Management Plan



CITY OF PORTLAND
Planning & Urban Development
Christine Grimando, AICP, Director

March 3, 2020

Deidre Nice
Friends of the St. Lawrence Art Center
76 Congress Street
Portland, ME 04101

Project Name:	St. Lawrence Arts Center Addition	Project ID:	2016-265
Address:	76 Congress Street	CBL:	003-L-001
Applicant:	Friends of the St. Lawrence Arts Center		
Planner:	Nell Donaldson		

Dear Ms. Nice:

Thank you for your letter dated February 28, 2020 requesting an extension of the approval for the St. Lawrence Arts Center Addition located at 76 Congress Street.

In my capacity as Planning Director and under the provisions of Section 14-532 (c) expiration of site plan approval, I am granting your request to extend your approval to January 23, 2021.

If there are any questions, please contact Nell Donaldson at (207)874-8723.

Sincerely,

Christine Grimando, AICP
Director

NICHOLAS M. MAVODONES (MAYOR)
KEVIN J. DONOGHUE (1)
DAVID A. MARSHALL (2)
DANIEL S. SKOLNIK (3)
CHERYL A. LEEMAN (4)

CITY OF PORTLAND
IN THE CITY COUNCIL

JOHN R. COYNE (5)
JOHN M. ANTON (A/L)
DORY RICHARDS WAXMAN (A/L)
JILL C. DUSON (A/L)

**AMENDMENT TO CITY CODE
SEC. 14-49 (ZONING MAP AMENDMENT)
RE: CONDITIONAL REZONING FOR PROPERTY
IN VICINITY OF ST. LAWRENCE ARTS CENTER/CONGRESS STREET**

ORDERED, that the Zoning Map of the City of Portland, dated December 2000 as amended and on file in the Department of Planning & Development, and incorporated by reference into the Zoning Ordinance by Sec. 14-49 of the Portland City Code, is hereby amended to reflect a conditional rezoning as detailed below:

CONDITIONAL ZONE AGREEMENT

**RE:
ST. LAWRENCE CHURCH**

AGREEMENT made this 4th day of November 2010 by Friends of the St. Lawrence Church, 76 Congress Street, Portland, Maine ("Developer"), and its successors and assigns.

WITNESSETH

WHEREAS, the Developer owns land located at 76 Congress Street, and more particularly described in a deed from Deirdre E. Nice dated September 12, 1997 and recorded in the Cumberland County Registry of Deeds in Book 13333, Page 9 (the "Property"); and

WHEREAS, the existing building located on the Property was formerly used as the St. Lawrence Congregational Church until 1986; and

WHEREAS, in 1996, the St. Lawrence Arts Center was founded; and

WHEREAS, in 2001, the building located on the Property has two principal portions, the sanctuary and the parish hall; and

WHEREAS, in 2001, the parish hall portion of the building was renovated to house a one hundred and ten (110) seat theater, green room, art studio workshops and staff offices; and

WHEREAS, in 2008, the sanctuary portion of the building was dismantled due to structural failure; and

WHEREAS, the Developer proposes and intends to renovate the parish hall theater in order to increase its seating capacity to one hundred and twenty (120) seats substantially in accordance with the plans submitted as Exhibit A attached hereto; and

WHEREAS, the Developer proposes and intends to reconstruct the sanctuary to provide a full basement, lobby that serves both the auditorium and theater space and a new four hundred (400) seat auditorium substantially in accordance with the plans submitted as Exhibit A attached hereto; and

WHEREAS, the Developer proposes and intends to develop the building on the Property as an energy efficient and LEED-certified facility; and

WHEREAS, the Developer intends to maintain the character of the original structure and Property and complement the adjacent residential neighborhood; and

WHEREAS, the existing zoning is R-6 which has dimensional requirements that the existing structure on the site does not meet; and

WHEREAS, the Developer has requested a rezoning of the Property in order to permit the proposed development of the Property; and

WHEREAS, the proposed community hall use of the Property is consistent with the existing and permitted uses in the neighborhood, which include a mix of residential, commercial and institutional uses including churches, schools, the Portland Observatory Museum and the Portland Company Marine Complex; and

WHEREAS, the City's Comprehensive Plan calls for strengthening neighborhood identity through cultural programming and creating connections between neighborhoods and the Arts District; and

WHEREAS, the City's Comprehensive Plan calls for the preservation of the Downtown's unique identity and historic fabric through the re-use of existing structures and the development of new construction that is respectful of the built and natural surroundings; and

WHEREAS, the City's Comprehensive Plan promotes the enhancement of Portland's cultural community through retaining and encouraging arts and cultural organizations and retaining and expanding performance and exhibition space, studio space and office/support space for artists, institutions and organizations; and

WHEREAS, the Planning Board, after notice and hearing and due deliberation thereon, recommended the rezoning of the Property as aforesaid, subject, however, to certain conditions contained in this Agreement; and

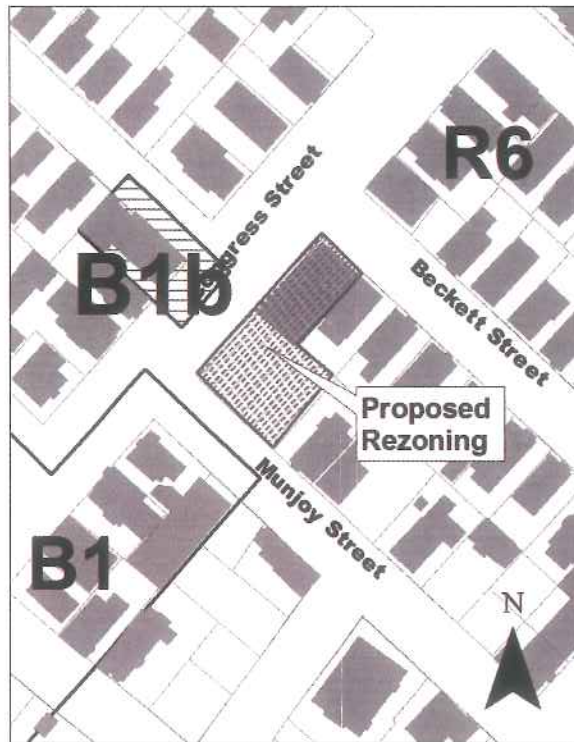
WHEREAS, the Portland City Council, pursuant to 30-A M.R.S.A. § 4352(8) and Portland City Land Use Code (the "Code") §§ 14-60 to 14-62, after notice, hearing and due deliberation thereon, has determined that because of the unusual nature and unique location of the proposed development, and its minimal impact on and compatibility with the surrounding community, it is necessary and appropriate to recommend the rezoning of the Property as aforesaid, with the following conditions and restrictions set forth in this Agreement; and

WHEREAS, the Portland City Council has on _____, 2010 approved this Agreement in its entirety, by City Council Order No. _____, a true copy of which is attached hereto as Attachment 1 (the "Order");

NOW, THEREFORE, in consideration of the rezoning, the Developer covenants and agrees as follows:

1. Pursuant to the Order, the City shall amend the Zoning Map of the City of Portland, dated September, 2000 (as amended from time to time and on file in the Department of Planning and Urban Development, and incorporated by reference into the Zoning Ordinance by § 14-49 of the Code) by adopting the map change amendment shown below to zone the property conditional R-6, subject to the conditions contained below.

Image 1: Proposed Rezoning



Prepared by Department of Planning and Development based on GIS Workgroup Data

If this Agreement is not recorded within sixty (60) days after the effective date of the City Council's approval of the Order, then the conditional rezoning shall become null and void and the zoning of the Property shall revert to the pre-existing R-6 zone or the equivalent zone in effect at the time of reversion.

2. Notwithstanding section 14-137(b)(6)(e)(i), the use of the Property shall be considered and be operated as a place of assembly/community hall.

3. The underlying dimensional requirements of the R-6 zone shall apply and are modified as follows:

- a. Minimum lot Size: 10,500 square feet.
- b. Minimum Yard Dimensions:
 1. Front yard: 0 feet.
 2. Rear Yard: 0 feet.
 3. Side Yard on Side Streets: 0 feet.
- c. Maximum Lot Coverage: 90%.
- d. Maximum Tower Height: 90 feet.

- e. Maximum Sanctuary Structure Height: 65 feet.
- f. Open Space Ratio: 0%.
- g. Minimum Lot Width: 50 feet

4. The proposed theater in the parish hall shall have no more than one hundred and twenty (120) seats, and the proposed auditorium in the sanctuary shall have no more than four hundred and five (405) seats. The Developer and its successors and assigns shall not be permitted to hold separate events in the parish hall and the sanctuary auditorium at the same time. The Developer shall be permitted to hold a separate event in the Promenade Room when another concurrent event is being held in the parish hall or the sanctuary auditorium. This does not preclude the Developer from using the parish hall, the Promenade Room and/or the sanctuary Auditorium for one (1) single event with the total number of attendees of said event not to exceed four hundred and eighty five (485) people.

5. The owner of the Property shall be responsible for ongoing maintenance of the Property, including snowplowing, salting, sanding, sweeping, lighting, trash removal (at least weekly), mowing, etc.

6. Prior to the issuance of a Certificate of Occupancy, the Developer shall install, according to City specifications, new brick sidewalk along the Munjoy Street, Beckett Street and Congress Street property frontages and shall reset, as necessary, the existing pink granite curbing. If, at the time of site plan review, the Public Services Department determines that the curbing is in poor condition, the applicant shall replace it, as necessary.

7. Prior to the issuance of a Certificate of Occupancy, the Developer shall provide two (2) trees along each of the Munjoy Street, Beckett Street and Congress Street property frontages. If healthy street trees are already in place along any of these frontages, they may be counted towards this requirement. The size and type of trees to be planted shall be approved by the Portland City Arborist or their designee. If, due to site constraints, the Developer is unable to provide the two (2) required trees per street frontage, they shall contribute \$200.00 per tree or, if the required contribution is greater at the time of the application, that amount, to the City of Portland's Tree Fund. This contribution, if necessary, is independent of any conditions which the Planning Board may lawfully require under site plan review. The Planning Board shall not be authorized, however, to waive this requirement.

8. Prior to the issuance of a Certificate of Occupancy, the Developer shall, at its own expense, install a minimum of two (2) municipal street lights along the Congress Street frontage of the property that meet the specifications and color designated for the Downtown Lighting District, as detailed in the Municipal Street Lighting Standards of the City of Portland Technical Manual, or of a type as may be specified by the City Lighting Plan at the time of the application or by the Planning Division.

9. Prior to the issuance of a Certificate of Occupancy, the Developer shall construct any remaining sidewalk connections and sidewalk ramps meeting City technical standards at the intersection of Congress Street and Eastern Promenade on both sides of the street and at the intersection of Moody Street and Eastern Promenade on both sides of the street, unless these improvements are already in place at the time of the application. This may include walkway connections to the Cutter Street parking lots as described in the Eastern Promenade Master Plan (2004).

10. The Developer shall submit a transportation demand management ("TDM") plan during site plan and conditional use review for review and approval by the Planning Board in a form substantially in accordance with Exhibit B attached hereto as a starting point subject to Planning Board and applicant modification during Site Plan Review (the terms of the attached TDM are incorporated by reference herein). The requirement of TDM plan shall supersede any and all parking requirements under the Land Use Code for the Property. During the site plan review process, the Planning Board shall provide a communication to the City Council that may include recommendations, if the Board deems it necessary, for additional on-street parking regulations in the vicinity of the project site. These may include but shall not be limited to two (2) hour parking limits and/or a residential parking program.

The TDM plan shall include monitoring provisions to periodically review the efficacy of the plan over time. The efficacy of the TDM plan shall be reviewed by the TDM plan administrator within three (3) months from the issuance of the certificate of occupancy. The results shall be promptly provided to the City for evaluation upon completion of the review. From that time forward, the TDM plan administrator shall review the TDM plan and report results to the City for evaluation on, at a minimum, an annual basis or in accordance with the TDM monitoring schedule outlined in the TDM plan.

If at the time of review (and/or at any time thereafter) the City and/or the Developer has received five (5) or more complaints within a one (1) year period about traffic/parking generated by the use of the facility, the Developer will be required to institute a review process, working in concert with the Planning Authority, in accordance with subparagraph F of the attached TDM plan.

11. The Developer shall be responsible for ensuring that tour buses, vans and trucks affiliated with performances and events at the Property unload and then relocate to a remote, off street parking location away from the venue for the duration of the event.

12. The provisions of this Agreement are intended to replace and/or supersede the requirements of the underlying R-6 zone. As stated above, to the extent not otherwise altered herein, the zoning requirements for the R-6 zone shall otherwise apply to the Property.

13. In the event of a breach by the Developer or its successors or assigns of the zoning provisions contained herein (whether the Zoning Administrator, the Zoning Board of Appeals or a court determines such breach), the Planning Board, after notice and hearing, may recommend to the City Council that the conditional zone and this

Agreement be amended, or be rescinded, such rescission to result in the termination of this Agreement and a reversion of the Property to the R-6 zone requirements in place before the execution of this Agreement or its equivalent in effect at the time of the reversion.

14. The above stated restrictions, provisions, and conditions are an essential part of the rezoning, shall run with the Property, shall bind and benefit the Developer, any entity affiliated with the Developer that takes title to the Property, its successors and assigns, and any party in possession or occupancy of said Property or any part thereof, and shall inure to the benefit of and be enforceable by the City of Portland, by and through its duly authorized representatives. The Developer shall file a counterpart original of this Agreement in the Cumberland County Registry of Deeds.

15. This conditional rezoning shall become null and void and the Property shall revert to the existing R-6 zone or its equivalent in effect at the time of the reversion in the event that the Developer fails to commence construction within ten (10) years from the date of the Council approval of this rezoning. This ten (10) year period shall be extended up to an additional one (1) year period if:

- a. The Developer has applied for all required approvals but has not received all required approvals within the aforementioned ten (10) year period; or
- b. Any other event beyond the control of the Developer has occurred which will delay the closing on some or all of the parcels and Developer has notified the City of such event.

If any required approval, including the Council's approval of this conditional rezoning, has been appealed, then this rezoning shall become null and void and shall revert to the underlying R-6 zoning or its equivalent in effect at the time of the reversion if the Developer fails to commence construction within one (1) year from the final disposition of such appeal or the above mentioned ten (10) year period, whichever occurs last.

16. This conditional rezoning agreement shall be enforced pursuant to the land use enforcement provisions of state law including, but not limited to, 30-A MRSA § 4452 and the Portland City Code.

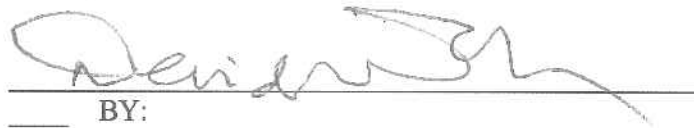
17. If any of the restrictions, provisions, conditions, or portions thereof set forth herein is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision and such determination shall not affect the validity of the remaining portions hereof.

18. Except as expressly modified herein, the development shall be governed by and comply with the provisions of the Portland City Code and any applicable amendments thereto or replacement thereof.

WITNESS:



FRIENDS OF THE ST. LAWRENCE CHURCH



BY:

STATE OF MAINE
CUMBERLAND, ss.

Nov 4, 2010

Personally appeared before me the above-named DEIRDRE NICE, in his/her capacity as EXECUTIVE DIRECTOR of FRIENDS OF THE ST. LAWRENCE CHURCH, and acknowledged the foregoing instrument to be his/her free act and deed in his/her said capacity and the free act and deed of said corporation.

Before me,



~~Notary Public~~/Attorney at Law

William S. Miliken, ESQ.,
ME. Bar # 75241

Received
Recorded Register of Deeds
Nov 08, 2010 03:54:04P
Cumberland County
Pamela E. Lovley

CHESTER & VESTAL

A PROFESSIONAL ASSOCIATION

ATTORNEYS AT LAW

107 Congress Street, Portland, Maine 04101

Telephone (207) 772-7426 Fax (207) 761-5822

EDWIN P. CHESTER
BARBARA A. VESTAL
MICHAEL P. DIXON

chester@chesterandvestal.com
vestal@chesterandvestal.com
dixon@chesterandvestal.com

January 31, 2015

Nell Donaldson, Planner
Planning Division
City of Portland
389 Congress Street
Portland, Maine 04101

RE: Amended Conditional Rezoning/St. Lawrence Arts

Dear Nell:

Attached for the Planning Division records is a photocopy of the Amended Conditional Zone Agreement Re: St. Lawrence Church, with attached Exhibits A and B. As indicated on the copy, the document was recorded in the Cumberland County Registry of Deeds on January 15, 2015 in Book 32031, Pages 180 – 210.

It was a pleasure working with you on this matter.

Very truly yours,



Barbara A. Vestal

Enclosure
BAV/om
cc: Deirdre Nice

A TRUE COPY
 ATTEST: Katharine L. Jones
Katharine L. Jones, City Clerk
 Portland, Maine
 DATE 1-12-2015

Order 101-14/15
 Tab 7 12-1-14

MICHAEL F. BRENNAN (MAYOR)
 KEVIN J. DONOGHUE (1)
 DAVID A. MARSHALL (2)
 EDWARD J. SUSLOVIC (3)
 JUSTIN COSTA (4)

**CITY OF PORTLAND
 IN THE CITY COUNCIL**

DAVID H. BRENNERMAN (5)
 JILL C. DUSON (A/L)
 JON HINCK (A/L)
 NICHOLAS M. MAVODONES, JR (A/L)

**AMENDMENT TO CITY CODE
 SEC. 14-49 (ZONING TEXT AND MAP AMENDMENT)
 RE: FIRST AMENDMENT TO THE
 CONDITIONAL REZONING AGREEMENT
 FOR PROPERTY IN THE VICINITY OF
 ST. LAWRENCE ARTS/CONGRESS STREET**

SEAL

ORDERED, that the zoning map and text of the City of Portland, dated December 2000, as amended and on file in the Department of Planning & Development, and incorporated by reference into the Zoning Ordinance by Sec. 14-49 of the Portland City Code, is hereby amended to reflect a conditional rezoning as detailed below.

**AMENDMENT TO CITY CODE
 SEC. 14-49 (ZONING MAP AMENDMENT)
 RE: FIRST AMENDMENT TO THE CONDITIONAL REZONING FOR
 PROPERTY
 IN VICINITY OF ST. LAWRENCE ARTS CENTER/CONGRESS STREET**

ORDERED, that the Zoning Map of the City of Portland, dated December 2000 as amended and on file in the Department of Planning & Development, and incorporated by reference into the Zoning Ordinance by Sec. 14-49 of the Portland City Code, which was amended by a Conditional Zone Agreement dated November 4, 2010 and recorded in the Cumberland County Registry of Deeds in Book 28250, Page 201. is hereby further amended to reflect an amended conditional rezoning as detailed below:

**AMENDED CONDITIONAL ZONE AGREEMENT
 RE:
 ST. LAWRENCE CHURCH**

AGREEMENT made this 12 day of January, ²⁰¹⁵~~2014~~ by Friends of the St. Lawrence Church, 76 Congress Street, Portland, Maine ("Developer"), and its successors and assigns.

WITNESSETH

WHEREAS, the Developer owns land located at 76 Congress Street, and more particularly described in a deed from Deirdre E. Nice dated September 12, 1997 and recorded in the Cumberland County Registry of Deeds in Book 13333, Page 9 (the "Property"); and

WHEREAS, the existing building and a previously dismantled portion of the building located on the Property were formerly used as the St. Lawrence Congregational Church until 1986; and

WHEREAS, in 1996, the St. Lawrence Arts Center was founded; and

WHEREAS, in 2001, the building located on the Property had two principal portions, the sanctuary and the parish hall; and

WHEREAS, in 2001, the parish hall portion of the building was renovated to house a one hundred and ten (110) seat theater, green room, art studio workshops and staff offices; and

WHEREAS, in 2008, the sanctuary portion of the building was dismantled due to structural failure; and

WHEREAS, a conditional rezoning was approved in 2010 which was based upon a reconstruction of the dismantled sanctuary, but that reconstruction proved to be economically infeasible, so the Developer is seeking an amendment to the 2010 conditional rezoning which retains the same programmatic functions as proposed and approved in 2010 but contains them in a new rather than a reconstructed structure; and

WHEREAS, the Developer, as in 2010, proposes and intends to renovate the parish hall theater in order to increase its seating capacity to one hundred and twenty (120) seats substantially in accordance with the plans submitted as Exhibit A attached hereto; and

WHEREAS, the Developer proposes and intends to -reconstruct a performance arts hall on the site of the former sanctuary to provide a full basement for "back of house" green rooms, ADA toilets and storage; a lobby that serves both the auditorium and theater space, a top floor "promenade room"/additional lobby, and a new four hundred and one (401) seat auditorium substantially in accordance with the plans submitted as Exhibit A attached hereto; and

WHEREAS, the Developer proposes and intends to develop the building on the Property as an energy efficient and ~~LEED-certified facility~~; and

WHEREAS, the Developer intends to maintain the character of the original parish house, and construct a new structure which will respect the character-defining features of the historic and Property and complement the adjacent residential neighborhood; and

WHEREAS, the existing underlying zoning is R-6 which has dimensional requirements that the existing structure on the site does not meet; and

WHEREAS, the Developer has requested an amended rezoning of the Property in order to permit the proposed development of the Property; and

WHEREAS, the proposed community hall use of the Property is consistent with the Comprehensive Plan and existing and permitted uses in the underlying zone and neighborhood, which include a mix of residential, commercial and institutional uses including churches places of assembly, schools, the Portland Observatory Museum and the Portland Company Marine Complex; and

WHEREAS, the City's Comprehensive Plan calls for strengthening neighborhood identity through cultural programming and creating connections between neighborhoods and the Arts District; and

WHEREAS, the City's Comprehensive Plan calls for the preservation of the Downtown's Portland's unique identity and historic fabric through the re-use of existing structures and the development of new construction that is respectful of the built and natural surroundings; and

WHEREAS, the City's Comprehensive Plan promotes the enhancement of Portland's cultural community and creative economy through retaining and encouraging arts and cultural organizations and retaining and expanding performance and exhibition space, studio space and office/support space for artists, institutions and organizations; and

WHEREAS, the Planning Board, after notice and hearing and due deliberation thereon, recommended the rezoning of the Property as aforesaid, subject, however, to certain conditions contained in this Agreement; and

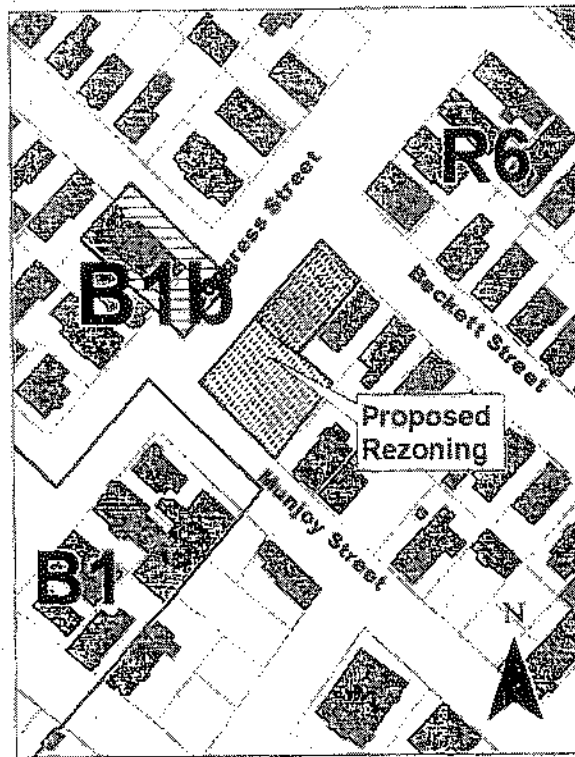
WHEREAS, the Portland City Council, pursuant to 30-A M.R.S.A. § 4352(8) and Portland City Land Use Code (the "Code") §§ 14-60 to 14-62, after notice, hearing and due deliberation thereon, has determined that because of the unusual nature and unique location of the proposed development, and its minimal impact on and compatibility with the surrounding community, it is necessary and appropriate to recommend the amended rezoning of the Property as aforesaid, with the following conditions and restrictions set forth in this Agreement; and

WHEREAS, the Portland City Council has on December 15, 2014 approved this Agreement in its entirety, by City Council Order No. 101-14/15, a true copy of which is attached hereto as Attachment 1 (the "Order");

NOW, THEREFORE, in consideration of the rezoning, the Developer covenants and agrees as follows:

1. Pursuant to the Order, the City shall amend the Zoning Map of the City of Portland, dated September, 2000 (as amended from time to time and on file in the Department of Planning and Urban Development, and incorporated by reference into the Zoning Ordinance by § 14-49 of the Code) by adopting the map change amendment shown below to zone the property conditional R-6, subject to the conditions contained below.

Image 1: Proposed Rezoning



Prepared by Department of Planning and Development based on GIS Workgroup Data

If this Agreement is not recorded within sixty (60) days after the effective date of the City Council's approval of the Order, then the first amendment to the conditional rezoning shall become null and void and the zoning of the Property shall revert to the pre-existing R-6 zone or the equivalent zone in effect at the time of reversion.

2. Notwithstanding section 14-137(b)(6)(c)(i), the use of the Property shall be considered and be operated as a place of assembly/community hall.

3. The underlying dimensional requirements of the R-6 zone shall apply and are modified as follows:

- a. Minimum lot Size: 10,500 square feet.
- b. Minimum Yard Dimensions:
 - 1. Front yard: 0 feet.
 - 2. Rear Yard: 0 feet.
 - 3. Side Yard on Side Streets: 0 feet.
- c. Maximum Lot Coverage: 905%.
- d. Maximum Tower Height: 90 feet NA.
- e. Maximum Sanctuary Structure Height: 5465 feet.
- f. Open Space Ratio: 0%.
- g. Minimum Lot Width: 50 feet
- h. The following plans and documents are attached hereto and incorporated into this agreement by reference. The Property will be developed substantially in accordance with these plans and documents, provided, however, that the development of the Property shall be subject to site plan review by the Planning Board and to review by the Historic Preservation Board. Any site plan or historic preservation review applications shall fully comply with the application requirements in the City's Land Use Code. The Planning Board and Historic Preservation Board may require modifications to these documents during their review: subject to such subsequent modifications as may be required by the Planning Board during site plan review and by the Historic Preservation Board during its review and approval: Site Plan A0.01 dated October 15, 2014, Floor Plans A1.00 through A1.04 dated January 16, 2014, and Elevations A2.00 through A2.03, dated September 10, 2014, St. Lawrence Arts Addition for Friends of the St. Lawrence Church by Archetype Architects.

4. The proposed theater in the parish hall shall have no more than one hundred and twenty (120) seats, and the proposed auditorium on the former sanctuary site shall have no more than four hundred and fiveone (4015) seats. The Developer and its successors and assigns shall not be permitted to hold separate audience events in the parish hall and the sanctuary auditorium at the same time. The Developer shall be permitted to hold a separate event in the Promenade Room when another concurrent event is being held in the parish hall or the sanctuary auditorium. This does not preclude the Developer from using the parish hall, the Promenade Room and/or the

sanctuary auditorium for one (1) single event with the total number of attendees of said event not to exceed four hundred and eighty five (485) people. Under no circumstances may more than 485 attendees of any single event or combination of events be present on the Property at the same time.

5. The owner of the Property shall be responsible for ongoing maintenance of the Property, including snowplowing, salting, sanding, sweeping, lighting, trash removal (at least weekly), mowing, etc.

6. Prior to the issuance of a Certificate of Occupancy, the Developer shall install, according to City specifications, new brick sidewalk along the Munjoy Street, Beckett Street and Congress Street property frontages and shall reset, as necessary, the existing pink granite curbing. If, at the time of site plan review, the Public Services Department determines that the curbing is in poor condition, the applicant shall replace it, as necessary.

7. Prior to the issuance of a Certificate of Occupancy, the Developer shall provide two (2) trees along each of the Munjoy Street, Beckett Street and Congress Street property frontages. If healthy street trees are already in place along any of these frontages, they may be counted towards this requirement. The size and type of trees to be planted shall be approved by the Portland City Arborist or their designee. If, due to site constraints, the Developer is unable to provide the two (2) required trees per street frontage, they shall contribute \$200.00 per tree or, if the required contribution is greater at the time of the application, that amount, to the City of Portland's Tree Fund. This contribution, if necessary, is independent of any conditions which the Planning Board may lawfully require under site plan review. The Planning Board shall not be authorized, however, to waive this requirement.

8. Prior to the issuance of a Certificate of Occupancy, the Developer shall, at its own expense, install a minimum of two (2) municipal street lights along the Congress Street frontage of the property that meet the specifications and color designated for the Downtown Lighting District, as detailed in the Municipal Street Lighting Standards of the City of Portland Technical Manual, or of a type as may be specified by the City Lighting Plan at the time of the application or by the Planning Division.

~~9. Prior to the issuance of a Certificate of Occupancy, the Developer shall construct any remaining sidewalk connections and sidewalk ramps meeting City technical standards at the intersection of Congress Street and Eastern Promenade on both sides of the street and at the intersection of Moody Street and Eastern Promenade on both sides of the street, unless these improvements are already in place at the time of the application. This may include walkway connections to the Cutter Street parking lots as described in the Eastern Promenade Master Plan (2004).~~

9. Prior to the issuance of a Certificate of Occupancy, the developer shall install any remaining crosswalks, ADA-compliant sidewalk ramps, and other pedestrian improvements meeting City technical standards at the intersections of Congress Street

and Beckett Street or Howard Street and Congress Street and Munjoy Street, unless these improvements are already in place at the time of application.

10 The Developer shall submit a transportation demand management ("TDM") plan during site plan and conditional use review for review and approval by the Planning Board in a form substantially in accordance with Exhibit B attached hereto as a starting point subject to Planning Board and applicant modification during Site Plan Review (the terms of the attached TDM are incorporated by reference herein). The requirement of TDM plan shall supersede any and all parking requirements under the Land Use Code for the Property. During the site plan review process, the Planning Board shall provide a communication to the City Council that may include recommendations, if the Board deems it necessary, for additional on-street parking regulations in the vicinity of the project site. These may include but shall not be limited to two (2) hour parking limits and/or a residential parking program.

The TDM plan shall include provisions for the contribution of \$70,000 annually to the city's Sustainable Transportation Fund, with the initial contribution due at the time of Certificate of Occupancy. This funding shall be designated at the city's sole discretion consistent with the provisions of Section 14-346.2 for improvements intended to enhance transportation choice, promote transit, and/or promote non-automotive transportation to and from Munjoy Hill, and shall initially be used for improvements to Greater Portland Transit District's #1 Line, which serves Congress Street and Munjoy Hill. If, following monitoring of the TDM plan, the Planning Board or Planning Authority deem other transportation demand management strategies to be more effective in meeting the benchmarks of the TDM plan, the Planning Board or Planning Authority may recommend redesignation of those funds toward such strategies.

The TDM plan shall include monitoring provisions to periodically review the efficacy of the plan over time. The efficacy of the TDM plan shall be reviewed by the TDM plan administrator within three (3) months from the issuance of the certificate of occupancy. The results shall be promptly provided to the City for evaluation upon completion of the review. From that time forward, the TDM plan administrator shall review the TDM plan and report results to the City for evaluation on, at a minimum, an annual basis or in accordance with the TDM monitoring schedule outlined in the TDM plan. Changes to the TDM plan as a product of monitoring shall be reviewed and approved by the Planning Authority.

If at the time of review (and/or at any time thereafter) the City and/or the Developer has received any five (5) or more complaints within a one (1) year period about traffic/parking generated by the use of the facility, the Developer shall report that information to will be required to institute a review process, working in concert with the Planning Authority as part of the annual review process, in accordance with sub-paragraph F of the attached TDM plan.

11. The Developer shall be responsible for ensuring that tour buses, vans and trucks affiliated with performances and events at the Property unload and then relocate to a remote, off street parking location away from the venue for the duration of the event.

12. The provisions of this Agreement are intended to replace and/or supersede the requirements of the underlying R-6 zone and the requirements of the 2010 conditional rezoning. As stated above, to the extent not otherwise altered herein, the zoning requirements for the R-6 zone shall otherwise apply to the Property.

13. In the event of a breach by the Developer or its successors or assigns of the zoning provisions and conditions contained herein (whether the Zoning Administrator, the Planning Authority, the Zoning Board of Appeals or a court determines such breach), the Planning Board, after notice and hearing, may recommend to the City Council that the conditional zone and this Agreement be amended, or be rescinded, such rescission to result in the termination of this Amended Agreement and a reversion of the Property to the underlying R-6 zone requirements in place before the execution of this Agreement or its equivalent in effect at the time of the reversion.

14. The above stated restrictions, provisions, and conditions are an essential part of the rezoning, shall run with the Property, shall bind and benefit the Developer, any entity affiliated with the Developer that takes title to the Property, its successors and assigns, and any party in possession or occupancy of said Property or any part thereof, and shall inure to the benefit of and be enforceable by the City of Portland, by and through its duly authorized representatives. The Developer shall file a counterpart original of this Agreement in the Cumberland County Registry of Deeds.

15. This amended conditional rezoning shall become null and void and the Property shall revert to the pre-existing R-6 zone or its equivalent in effect at the time of the reversion in the event that the Developer fails to commence construction within ten (10) years from the date of the Council approval of this amended rezoning agreement. This ten (10) year period shall be extended up to an additional one (1) year period if:

- a. The Developer has applied for all required approvals but has not received all required approvals within the aforementioned ten (10) year period; or
- b. Any other event beyond the control of the Developer has occurred which will delay the closing on some or all of the parcels and Developer has notified the City of such event.

If any required approval, including the Council's approval of this amended conditional rezoning, has been appealed, then this rezoning shall become null and void and shall revert to the underlying R-6 zoning or its equivalent in effect at the time of the reversion if the Developer fails to commence construction within one (1) year from the final disposition of such appeal or the above mentioned ten (10) year period, whichever occurs last.

16. This amended conditional rezoning agreement shall be enforced pursuant to the land use enforcement provisions of state law including, but not limited to, 30-A, MRSA § 4452 and the Portland City Code.

17. If any of the restrictions, provisions, conditions, or portions thereof set forth herein is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct, and independent provision and such determination shall not affect the validity of the remaining portions hereof.

18. Except as expressly modified herein, the development shall be governed by and comply with the provisions of the Portland City Code and any applicable amendments thereto or replacement thereof.

WITNESS: Deirdre Nize

FRIENDS OF THE ST. LAWRENCE CHURCH

Deirdre Nize

BY: Deirdre Nize
Its Executive Director

1/12/2015

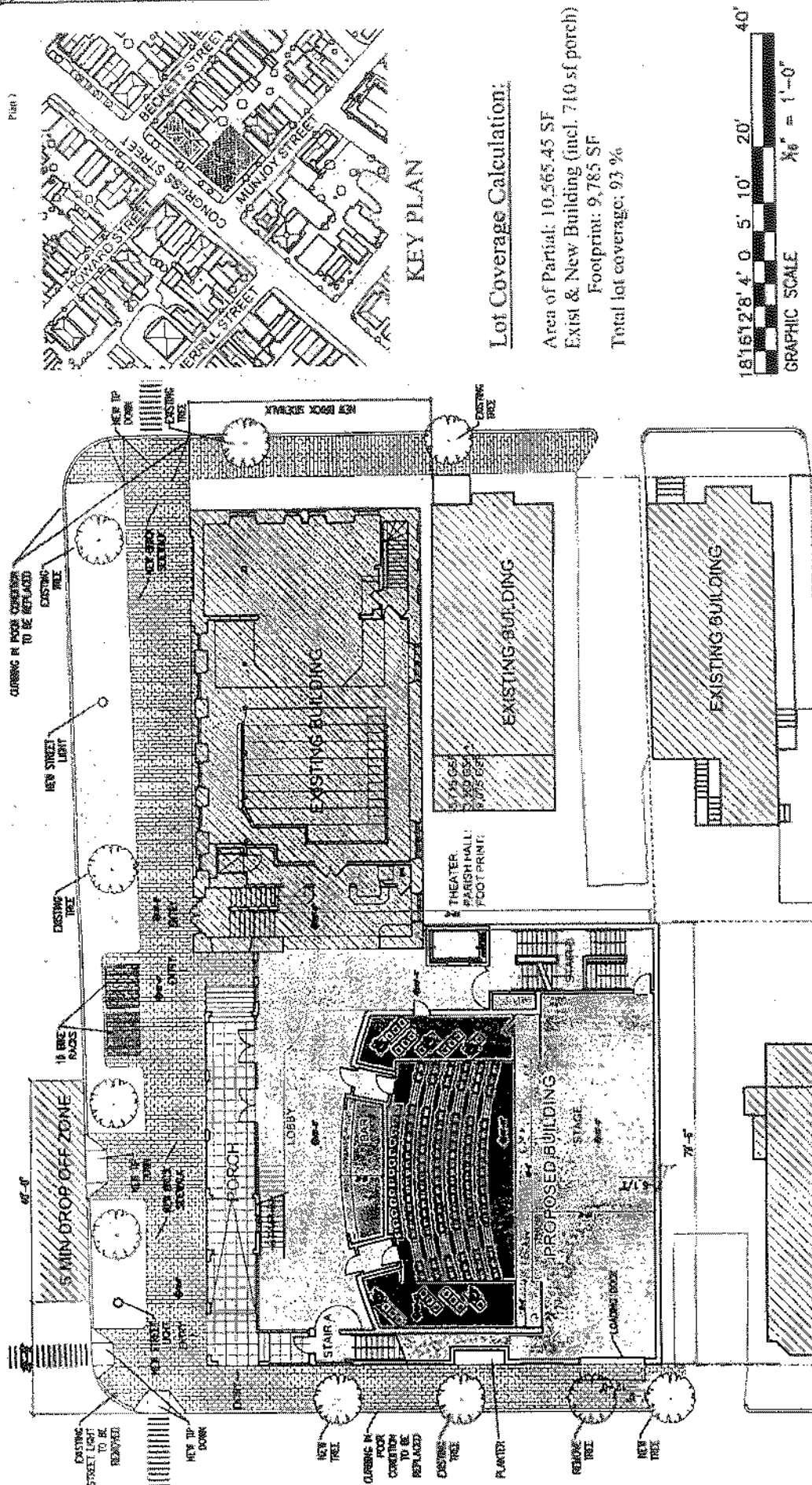
STATE OF MAINE
CUMBERLAND, ss.
20104 2015

Personally appeared before me the above-named Deirdre Nize, in his/her capacity as Executive Director of FRIENDS OF THE ST. LAWRENCE CHURCH, and acknowledged the foregoing instrument to be his/her free act and deed in his/her said capacity and the free act and deed of said corporation.

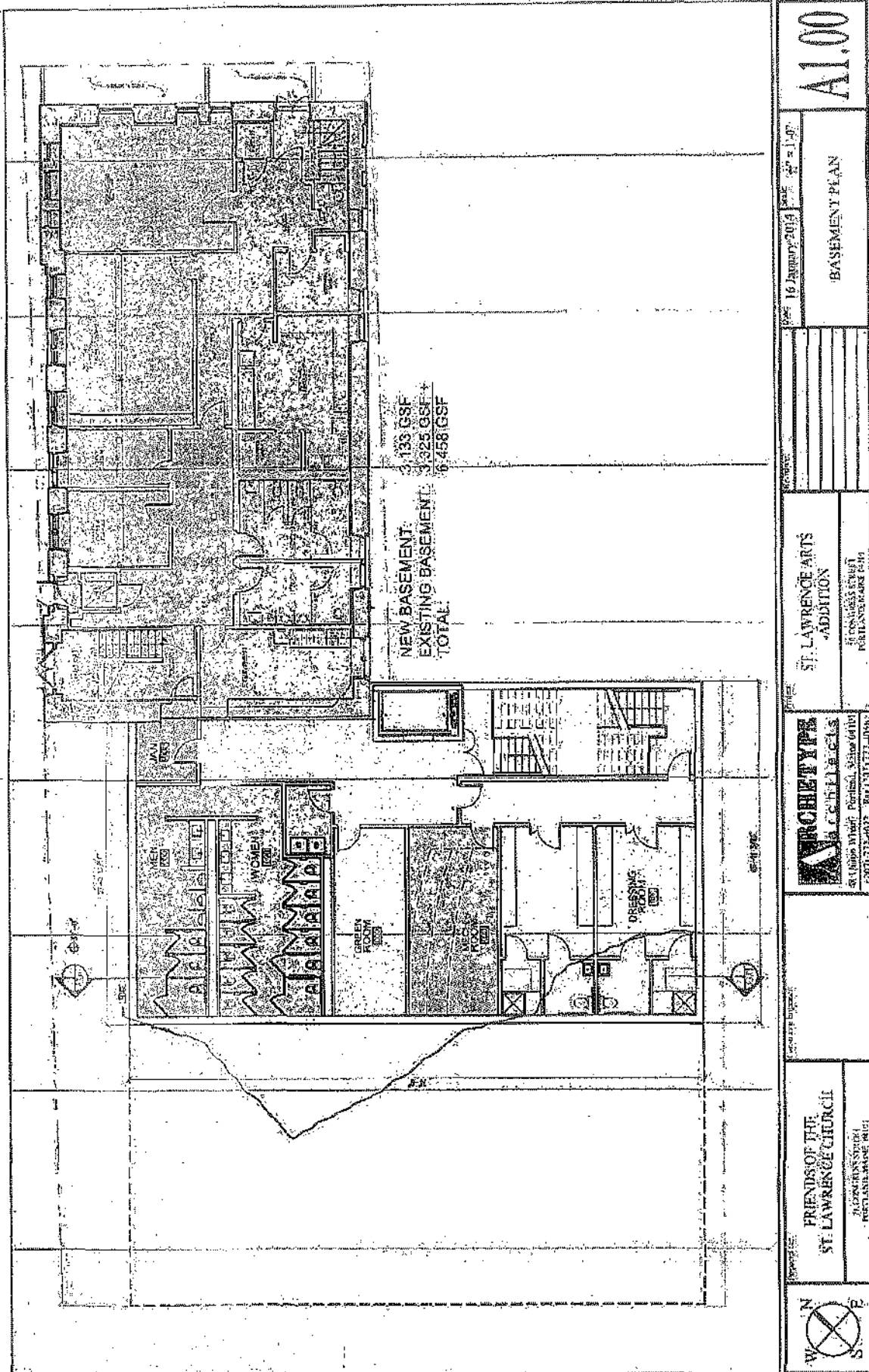
Before me,

Katherine L. Jones

Notary Public/Attorney at Law



	75 CONGRESS STREET BOSTON, MA 02108	ST. LAWRENCE CHURCH	ST. LAWRENCE ARTS ADDITION	75 CONGRESS STREET BOSTON, MA 02108	DATE: 15 OCT 2014	SCALE: 1/16" = 1'-0"	A0.01
PROJECT: FRIENDS OF THE ST. LAWRENCE CHURCH	ARCHITECT: ARCHITECTS	48 Union Wharf Portland, Maine 04101 Phone: 207.633.4034 Fax: 207.775.4076	ST. LAWRENCE ARTS ADDITION	75 CONGRESS STREET BOSTON, MA 02108	DATE: 15 OCT 2014	SCALE: 1/16" = 1'-0"	A0.01



A1.00

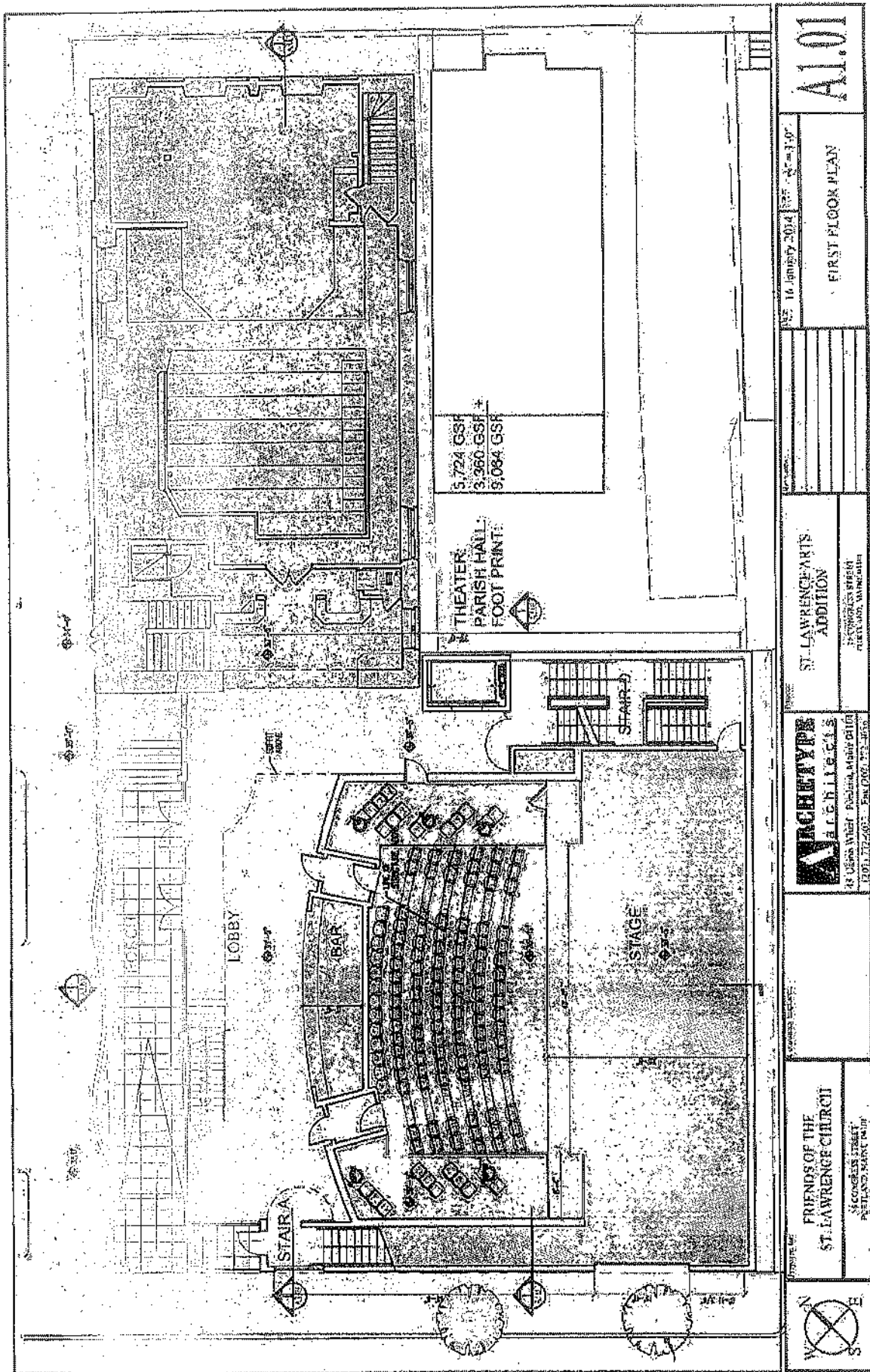
16 January 2019
BASEMENT PLAN

ST. LAWRENCE ARTS
ADDITION
16 CONGRESS STREET
PORTLAND, ME 04101

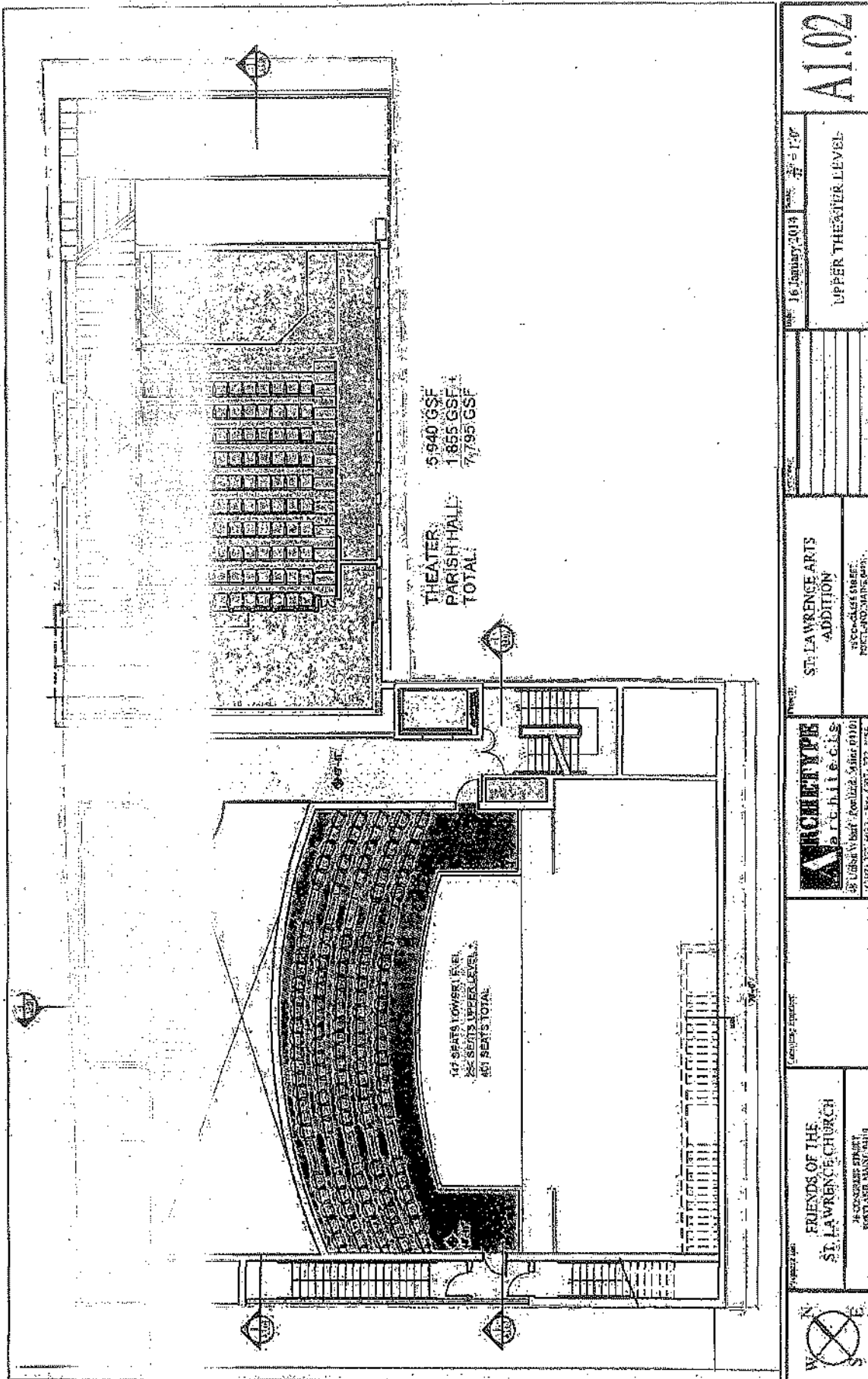
ARCHITECT
J. C. C. ARCHITECTS
451 Union Street, Portland, ME 04101
(207) 773-0012 Fax (207) 773-0063

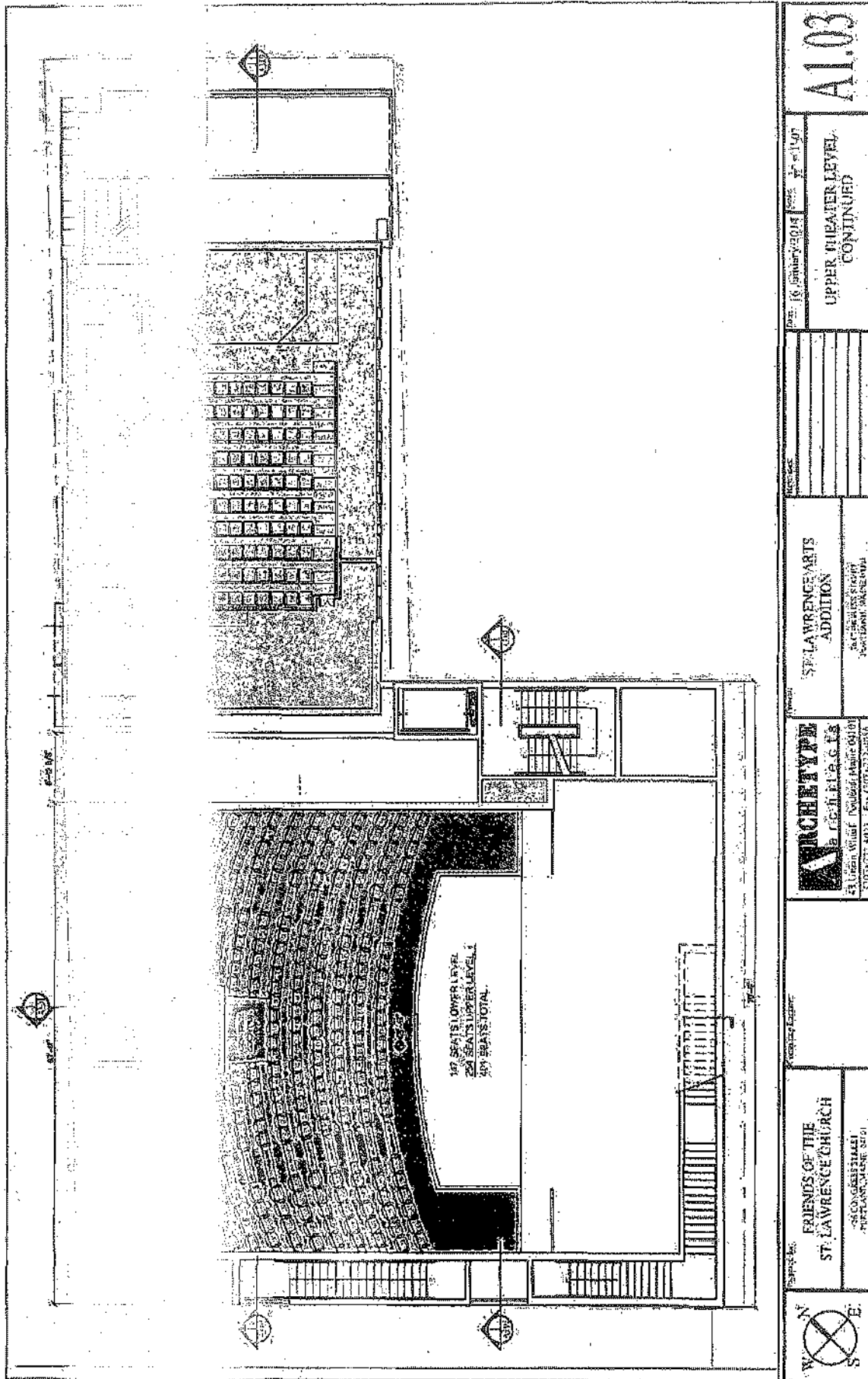
FRIENDS OF THE
ST. LAWRENCE CHURCH
2100-10th Street
Portland, Maine 04101





A1.01	FIRST FLOOR PLAN		ST. LAWRENCE ARTS ADDITION 1200 1/2 STREET PORTLAND, MAINE 04101	ARCHITECT ARCHITECTS 48 USDA STREET PORTLAND, MAINE 04101 (207) 773-2600 FAX (207) 773-2605	FRIENDS OF THE ST. LAWRENCE CHURCH 1200 1/2 STREET PORTLAND, MAINE 04101	N W E S
-------	------------------	--	--	---	---	------------------





A1.03

16 January 2014
UPPER THEATER LEVEL
CONTINUED

ST. LAWRENCE ARTS
ADDITION

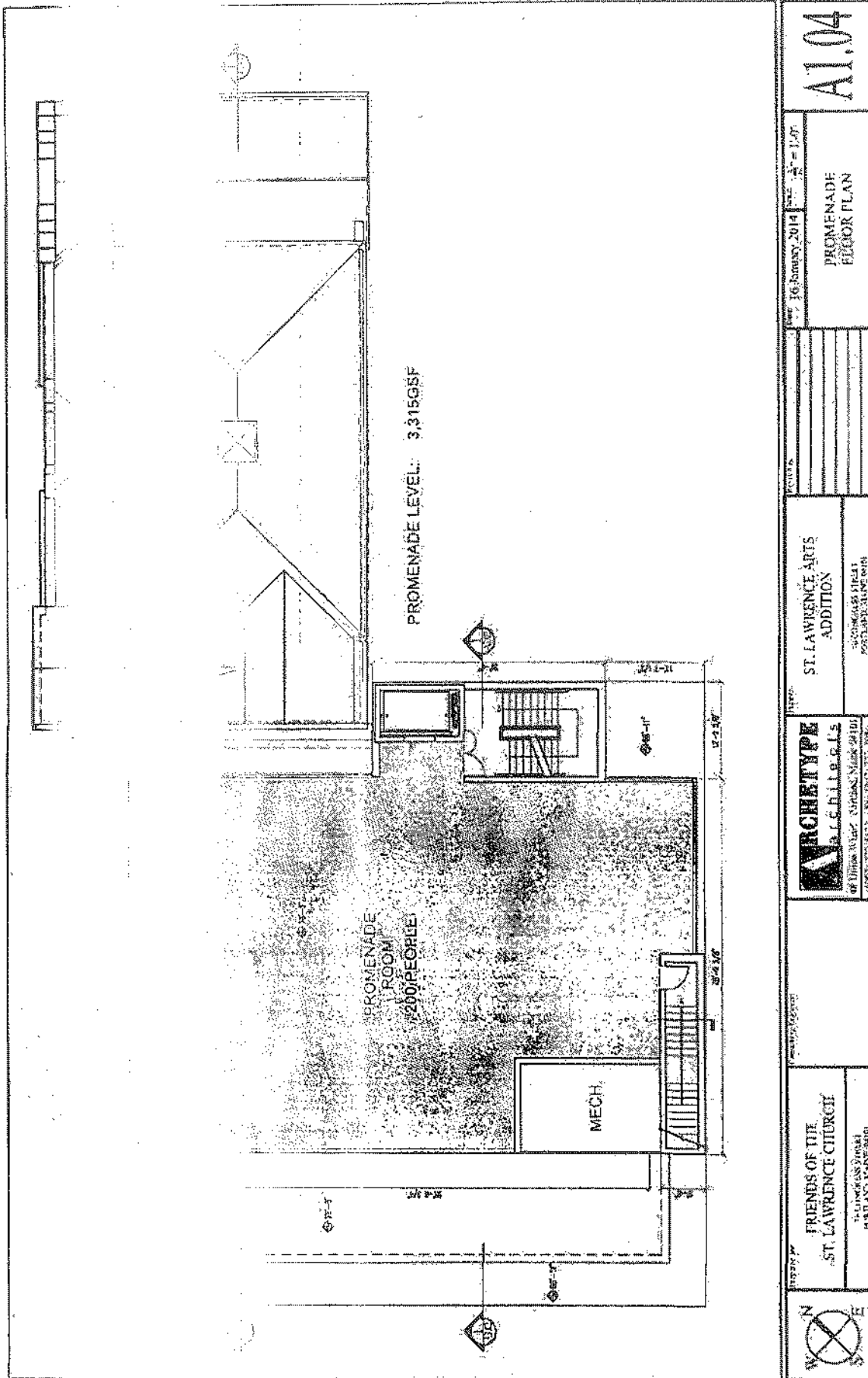
240 SEWING STREET
PORTLAND, MAINE 04101

ARCHETYPE
ARCHITECTS
24 Green Street Portland, Maine 04101
207.877.4001 Fax 207.877.4000

FRIENDS OF THE
ST. LAWRENCE CHURCH

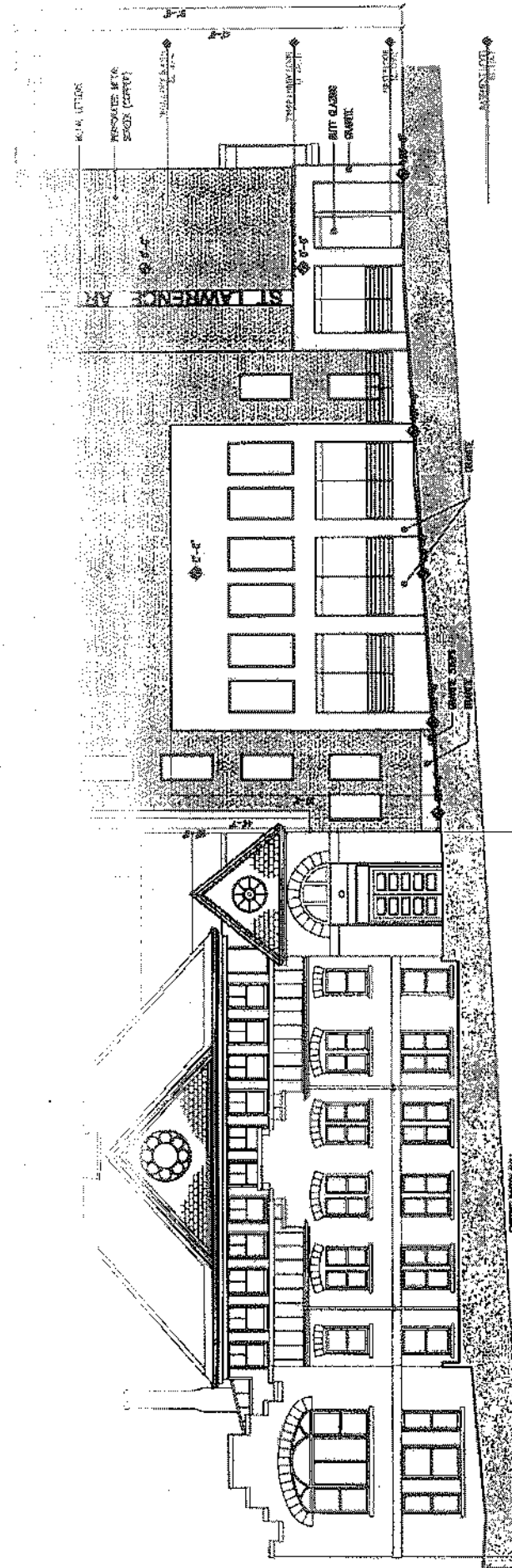
240 GREEN STREET
PORTLAND, MAINE 04101





Plan 76

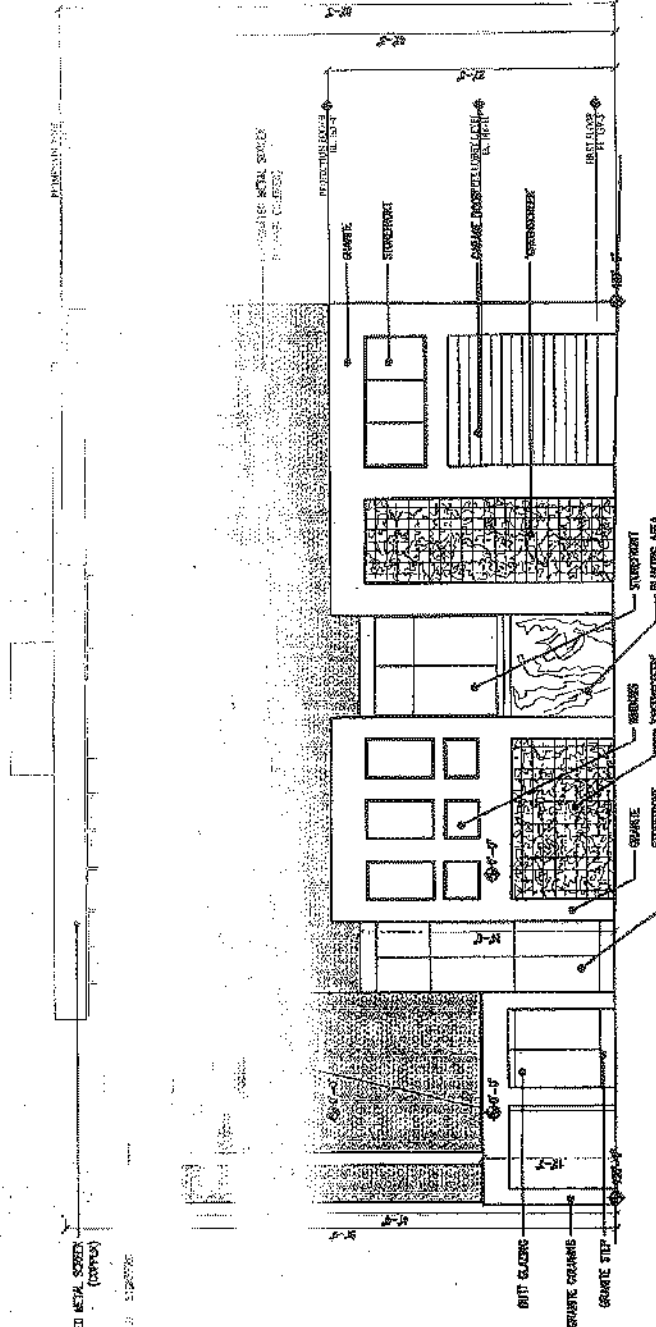
ST. LAWRENCE CHURCH
36 CONGRESS STREET
PORTLAND, MAINE 04101



10' 8' 6' 4' 2' 0' 5' 10' 20'
GRAPHIC SCALE 1/32\"/>

	Project for FRIENDS OF THE ST. LAWRENCE CHURCH 36 CONGRESS STREET PORTLAND, MAINE 04101	Consulting Engineer: ARCHETYPE a t c h i t e c t s 48 Union Street Portland, Maine 04101 (207) 774-0022 Fax (207) 772-4026	Client ST. LAWRENCE ARTS ADDITION 14 CONGRESS STREET PORTLAND, MAINE 04101	Architect [Blank lines for architect information]	Date: 10 Sept. 2014 Scale: 1/32\"/>	A2.00 NORTH ELEVATION
--	---	--	--	--	--	---

Plan 52



FORWARDED WITH SCREEN - (COPY)

100

INDEX

10' 8' 6' 4' 2' 0' 5' 10' 20'

GRAPHIC SCALE $\frac{3}{32}" = 1' - 0"$

102

DATE: 10 Sept. 2014

TIME: 14:00

Scale: 1" = 1.0"

WEST ELEVATION

**ST. LAWRENCE ARTS
ADDITION**
76 CONGRESS STREET
PORTLAND, MAINE 02101

ARCHITYPE
Architects
455 Union Wharf Portland, Maine 04101
207/523-6122 Fax: 207/523-6456

1. **Subject:** Mathematics

**FRIENDS OF THE
ST. LAWRENCE CHURCH**
76 CONGRESS STREET
PORT AND, MAINE 04101





10' 8' 6' 4' 2' 0' 5' 10' 20'

GRAPHIC SCALE $\frac{1}{32}'' = 1'-0''$

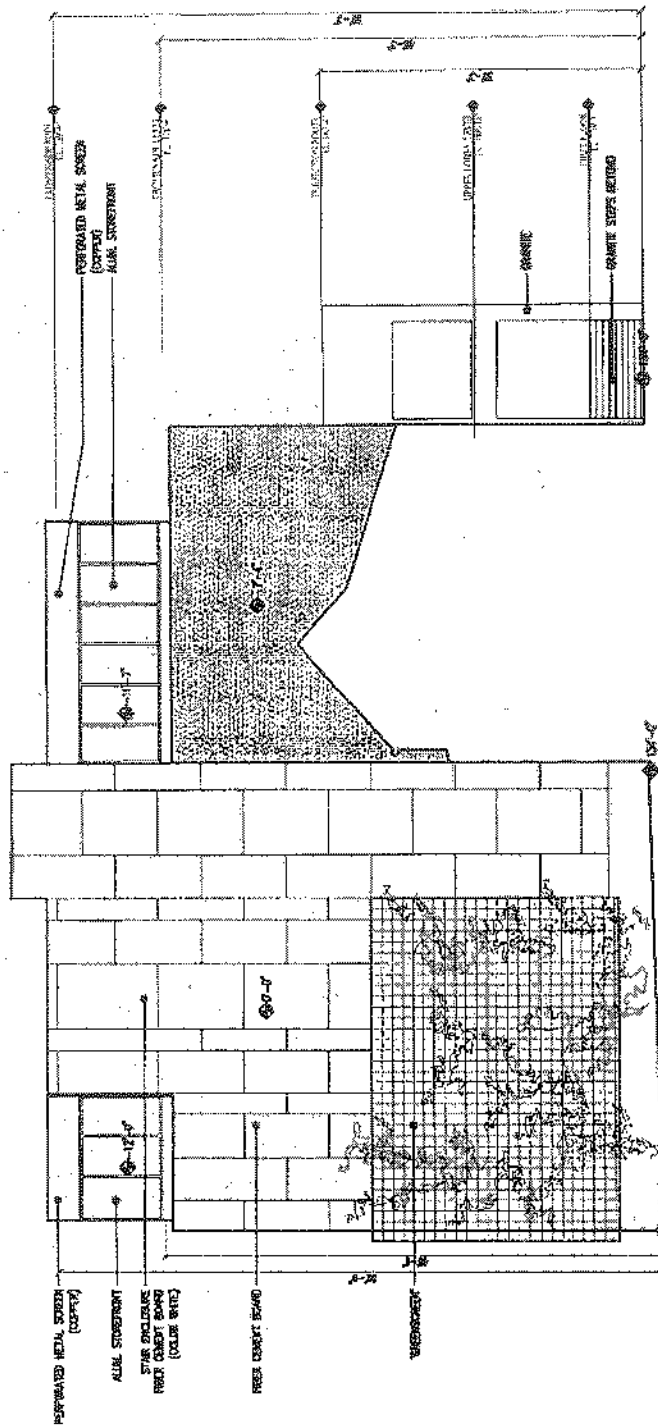


PLATE 1

10' 8' 6" 4" 2" 0' 5' 10' 20'

GRAPHIC SCALE $\frac{3}{32}" = 1' - 0"$

	Report to: FRIENDS OF THE ST. LAWRENCE CHURCH TO CONGRESS STREET PORTLAND, MAINE 04101	Containing Figures:	ARCHETYPE architects 45 Urban Wharf, Portland, Maine 04101 503.733.6000 • Fax 503.733.6166	ST. LAWRENCE ARTS ADDITION TO CONGRESS STREET PORTLAND, MAINE 04101	10 Sept. 2014 EAST ELEVATION	Scale: $\frac{1}{4"} = 1'-0"$	A2.03
						Drawn by: Architect:	



PO Box 1237
15 Shaker Rd.
Gray, ME 04039

207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

October 1, 2014

Deirdre Nice, Executive and Artistic Director
St Lawrence Art Center
76 Congress Street
Portland, ME 04101

Subject: Parking Demand Management Plan
St. Lawrence Arts Center
76 Congress Street Portland, Maine

Dear Ms Nice:

Gorrill-Palmer Consulting Engineers, Inc (GP) completed an evaluation of the parking demand anticipated when the capacity at St Lawrence Arts (SLA) on Congress Street in Portland is expanded from a capacity of 110 to 485 and worked with SLA to develop a Parking Demand Management Plan. The Performance Hall will be 401 seats; however, 485 is the limit set under the current Conditional Rezoning Agreement (2010) and is the number used to estimate parking demand. This report takes into consideration the comments and suggestions provided by an outside peer review (Nelson Nygaard Consulting) on the first TDM completed January, 2014, as well as input from City of Portland planning staff. GP and SLA appreciate that the peer review focused on tangible solutions to discourage patrons of SLA from seeking parking primarily on residential streets directly near the building. SLA plans to implement a combination of solutions to successfully mitigate a parking problem for Munjoy Hill residents, and businesses, as well as patrons of SLA.

Estimate of Parking Demand

There are three potential sources to estimate the parking demand for the facility. Each of these sources is discussed below:

Institute of Transportation Engineers

The Institute of Transportation Engineers (ITE) publication, "Parking Generation, 4th Edition" presents parking rates for various land uses based on studies across the country. Land Use 441, Live Theater projects an average parking ratio of 0.38 vehicles per attendee with a range of 0.37 to 0.40 vehicles per attendee based on rural sites with an average of 800 attendees. The information was based on four studies. Since SLA is only projected to have capacity for 485 and the trip rate increases with fewer attendees, the rate would likely be closer to 0.40 vehicles per attendee.

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 2 of 12

St Lawrence Arts Survey Data

SLA has furnished our office with the results of surveys of attendees to two Friday night shows which started at 7:30 p.m. on October 25, 2013 and December 13, 2013. The results are summarized below:

DATE	ATTENDANCE	SURVEYS COMPLETED	PARKING RATIO	NO. OF VEHICLES
10-25-13	103	103	0.54	56
12-13-13	110	110	0.40	44

It is our understanding that the October show attracted an older crowd and therefore the number of people traveling by car may have been higher than other shows.

Staff Demand- Based on information provided by SLA, an attendance of 401 people (sold-out performance) will require 10 staff members. Assuming each staff member commutes in their own vehicle results in a need for 10 staff parking spaces.

Parking Observations

A parking study was conducted by Gorrill-Palmer Consulting Engineers, Inc. on October 25th, the same night as the first survey was distributed to attendees. Two counts were conducted, the first was done before the show (5:45 p.m. to 7:00 p.m.) and the second was completed during the show (7:40 p.m. to 9:10 p.m.). Parked vehicles were counted on all surrounding streets within a half-mile radius of SLA. However, vehicles parked in the vicinity of SLA were the main focus. A walking radius was measured from a one minute walk to the St Lawrence Arts Center up to a four minute walk, assuming the average person walks 3 feet per second (180 feet per minute).

The increase in parked vehicles during the show is provided below:

LENGTH OF WALK	WALKING RADIUS	# OF VEHICLES BEFORE SHOW	# OF VEHICLES DURING SHOW	DIFFERENCE (+/-)
1 minute	180 feet	36	45	+ 9
2 minutes	360 feet	129	147	+ 18
3 minutes	540 feet	293	336	+ 43
4 minutes	720 feet	415	490	+ 75
5 minutes	900 feet	544	664	+ 120

Although we might find these results informative and useful, we can't assume the entire difference of vehicles is representing SLA. The Front Room is a local restaurant and bar located across the street from

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 3 of 12

SLA, a popular spot on a Friday evening. Venues, like The Front Room, located near SLA can also influence the demand. Based on these considerations, the 56 vehicles based on the survey appear reasonable.

Comparing Estimates

The parking rate of 0.40 based on ITE coincides with the 0.40 ratio determined from the December show but is less than the 0.54 determined from the October show. However, as previously mentioned, the October show attracted an older crowd and therefore the number of people traveling by car may have been higher than other shows. In addition, as a general principal, parking ratio can be expected to decline as the number of seats increases.

Recommendation for Number of Spaces

After consideration of these variations, our office estimates a demand of 228 spaces (0.45 vehicles per attendee) for the site. This number comprises 218 cars from patrons, and 10 cars for staff. It is our understanding that SLA will distribute a policy to staff and performers that staff park at a set distance from the Performance Hall. This policy will apply to any performers, cast and crew travelling by bus to the Performance Hall in their own vehicle. Performers, cast, and crew who arrive in a bus will be able to unload on Munjoy Street, and all buses will be contractually required to park in an accommodating lot (i.e. not on a residential street). The recommendation for 228 spaces exceeds that forecast by ITE for a live theater and observed during the December show but less than the 0.54 ratio derived from October show which attracted an older crowd. Nelson Nygaard's review of the parking demand for a 401-seat Performance Hall in the Munjoy Hill neighborhood estimates that SLA will need to provide 122 parking spaces. Our parking analysis cited a need for 228 parking spaces, which is based on occupancy of 485 among the three different spaces (Parish Hall Theater, Performance Hall, and the Promenade Room) for one event. It should be noted the typical maximum audience will not exceed 401 people, and many times much less. It is our opinion that 228 spaces is more realistic as it is based on statistically significant surveys conducted during sold-out performances of the current 110-seat Parish Hall Theater (10/25/2013 and 12/13/13) operated by SLA. Furthermore, an independent survey of needed parking spaces for the venue conducted by members of the Concerned Citizens of Munjoy Hill (CCMH) complemented the recommended 228 spaces and therefore, we have proceeded drafting the plan based on a need of 228 spaces.

During the first year of monitoring, SLA will determine the actual parking demand. Once the actual number has been established, SLA will base its monitoring and reduction of single occupancy vehicle (SOV) goal upon the correct and realistic parking demand.

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 4 of 12

Parking Supply

A count was also done of the total number of occupied parking spaces on each street within a 900 foot radius of the SLA on Tuesday evening, December 10th beginning at midnight. The purpose of the counts was to estimate the number of spaces used by the area residences and most of the parking that late at night should be associated with residences. The results of these parking observations are provided as follows.

<i>Length of Walk</i>	<i>Walking Radius</i>	<i># of Spaces</i>	<i># Occupied 12:00 midnight Tuesday</i>	<i>Available Spaces</i>
1 minute	180 feet	42	30	12
2 minutes	360 feet	144	107	37
3 minutes	540 feet	345	273	72
4 minutes	720 feet	551	436	115
5 minutes	900 feet	838	659	179

The Cutter Street parking lots located on the Eastern Promenade were vacant during our surveys and have a capacity of 95 vehicles. Results of the Cutter Street parking lots are provided on the following page.

<i>Parking Area</i>	<i># of Available Spaces</i>
Lower Parking Lot	24
Middle Parking Lot	35
Upper Parking Lot	15
On-Street Parking	21
Total:	95

Combining the results of the available on-street parking and Cutter Street lot parking, a total of 274 spaces are available to attendees.

Parking Demand and Supply

As discussed in the "Recommendations for Number of Spaces" section, SLA will typically incur a parking demand of approximately 228 vehicles (including 10 cars for staff) during show events. Though these spaces have been identified, SLA plans to encourage patrons to park downtown and travel by public transportation to the facility.

The available parking in the vicinity of the site is as follows:

- 179 on-street automobile parking spaces
- 95 Cutter Street automobile parking spaces

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 5 of 12

This will provide 274 automobile parking spaces for attendees of each show. The 179 on-street parking spaces are based on a 5 minute walk radius around SLA.

Transportation Demand Management (TDM)**Purpose of Plan**

The City of Portland requires the creation of a Transportation Demand Management Plan for all projects in excess of 50,000 square feet, or with 100 or more employees or students. SLA meets these requirements. However, in the case of this project, the TDM Plan serves a series of important needs:

- Make maximum use of nearby existing transit infrastructure
- Reduce peak hour trip impacts to adjacent roadway infrastructure
- Reduce the amount of needed parking on-site, especially as land is limited
- Encourage healthy activities

It is important to note that this Plan should not be viewed as a series of fixed, or unchanging recommendations. It is a living document intended to be reviewed and updated on a regular basis as SLA works with changes in local transportation patterns, preferences, and prices. Ultimately, the goal will be to make significant reductions in peak hour single-occupancy vehicle (SOV) activity on the local street networks as well as the need for on-site parking.

TDM Coordinator

SLA has designated its Executive Director as the TDM Coordinator, charged with coordinating the TDM plan. The TDM coordinator will be responsible for the following:

- Coordinating and promoting rideshare opportunities
- Coordinating with and promoting Metro
- Monitoring parking usage
- Overseeing event scheduling
- Encouraging the greater use of bicycling, walking, and bus-based transit
- Overseeing ongoing monitoring and updating of the plan
- Filing annual reports with the City

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 6 of 12

The proposed TDM plan will be utilized during both public and private (i.e. corporate rental) events.

Single Occupancy Reduction Strategies

METRO Subsidies

SLA is located on Munjoy Hill in Portland on Congress Street. Its location is nearby the following transit services:

- *Metro Route 1, Congress Street:* Portland METRO provides service to Munjoy Hill with other major stops including Monument Square and the State Theatre. It also allows access to the Greyhound Bus Station and the Elm Street METRO facility. A limited service combining Routes 1 and 5 is provided on Sundays.
- *Primary User:* Patrons of SLA and Community Members
- *Responsibility:* SLA, METRO

SLA is proposing that the core of its TDM be a partnership with Metro to both extend and enhance the service of the Route 1 that travels up and down Congress Street. At present the Route 1 runs on a thirty-minute frequency between 7:00 a.m. and 8:00 p.m. with less frequency between 8:00 p.m. and 10:00 p.m. It is our understanding that Metro is working independently of this project to reduce those intervals to 20 minutes. Based on our conversations with SLA, they are mindful of the discussion taking place at the City of Portland on changes to the downtown's Tax Increment Finance (TIF) policy and that peninsula transit improvements are a potential use of this revenue. SLA recognizes that its proposed partnership with Metro and the revenue SLA proposes to bring to the table could be joined with TIF revenue to support a broader and more consequential transit improvement, one that could eventually lead to 15 minute frequency on the Route 1 all day and evening. The implications of this plan would not only serve the patrons of SLA, but would also allow residents the opportunity to take advantage of more frequent evening transit service on the peninsula.

With enhanced Metro service, patrons of SLA would be encouraged to utilize downtown parking lots, garages and street parking and use the Route 1 to travel up to SLA. The Temple Street and Free Street garages are open until 10:00 p.m. Monday – Saturday and it is our understanding that both have plenty of available parking after 5:00 p.m. Both garages are within one block of stops along the Route 1. The number of parking spaces that these parking facilities provide should exceed the 228 spaces we recommend. Patrons of SLA would have their parking ticket validated for up to three-hours of free parking. It is our understanding that SLA will subsidize and encourage use of this remote parking.

SLA has met with representatives from Metro and it is our understanding that both organizations are highly enthusiastic about a partnership. The Nelson Nygaard review encourages SLA to create a "more

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 7 of 12

specific and targeted PTDM" and part of doing so will be an understanding what motivates patrons of SLA to drive and park close to SLA. For this approach to work, SLA and Metro will need to effectively communicate and market the transit option as convenient, affordable, easy, and fun. In particular, the marketing effort should promote transit as a key piece of a fun night out that includes both dining and entertainment. In addition to the higher frequency service on the Route 1 proposed by this plan, Metro will be rolling out real-time bus arrival information in 2015. This technology will allow riders to get actual bus arrival information through smart phones, text, website and, in some places, message boards at bus shelters.

A financial investment by SLA to the Metro will enhance these kinds of conveniences to Portland's public transportation system. Another key of this partnership is making parking downtown and travelling to and from SLA easy by suggesting patrons park in a specific place (lot or garage) and wait for the Route 1 bus at a specific spot to ride up Munjoy Hill to SLA. At present, the Route 1 stops at the corner of North Street and Cumberland. Possible modifications to the Route 1 would include a stop at Congress and North Street as well as bringing the stop currently on Atlantic and Congress back to Munjoy and Congress (the corner of the new Performance Hall), where it originally was until poor street conditions forced it to be relocated. It is our understanding that SLA and Metro agree that a carefully laid out marketing plan is essential to the success of the TDM plan as well as making the parking and bus ride part of a ticket surcharge so that patrons do not incur extra charges along the way. SLA will commit to validating up to 3 hours of parking in a downtown garage. If patrons partake of other downtown entertainment, i.e. shopping or dinner, the "Park and Shop" system in place by Portland's Downtown District can be used by patrons to cover additional time in the parking garage. SLA patrons will be able to use their venue ticket as valid fare to board the bus. Based on discussions with SLA, they have included in their financial projections that each patron will pay a ticket surcharge.

SLA is proposing to commit \$70,000 in annual funding to the Greater Portland Metro, which would increase evening frequency on the Route 1 (Congress) from about every 45 minutes to every 30 minutes and extend service to 11:00 p.m. (Monday-Saturday). SLA will provide this funding through its ticket surcharge. Furthermore, the long-term plan of the Greater Portland Metro is to expand its local partnerships in an effort to effectively work with the city of Portland and the Federal Transit Administration to develop the funding programs needed to improve transit service on the peninsula that will include all day frequencies of 20 minutes or even 15 minutes, hours of service through midnight, and added weekend service. While this service improvement to 30 minute frequency will help the Route 1 be an effective transit option for patrons, the number of patrons that can reasonably use the Route 1 bus must be considered. Metro buses' seating and standing capacity can comfortably accommodate 30-40 people; hence, it is realistic that 2 trips will be required before and after an event to accommodate SLA patrons. This makes the Route 1 option possible for 60-80 patrons. Service improvements that lower frequency to 15 minutes would increase Metro's capacity to the point where we could accommodate 120-160 patrons in the hour before and after an event. By growing ridership and diversifying the transit system's revenue base, the partnership can make Metro more competitive in obtaining new federal grant funds that can support further transit expansion. In this manner, this partnership is truly strategic in that it can help

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 8 of 12

achieve positive transportation outcomes for the broader community in addition to the specific goal of getting SLA patrons from point A to point B.

Patrons who use the Greater Portland Metro system will be able to wait in the lobby of the Performance Hall for the Route 1, which will negate needing a structure in inclement weather.

Valet Parking

➤ Primary User: Patrons

Gorrill-Palmer agrees with Nelson Nygaard's finding that a superior front-door valet service should be available to patrons who want to arrive at the Performance Hall with their car. SLA is proposing to work with Unified Parking Partners (UPP), a full service parking Management Company based in Portland, Maine, and servicing all of New England. UPP is an affiliate of Towne Park Ltd. from Annapolis, MD. Their focus is garage, flat lot, healthcare, hotel and restaurant, and event parking management. UPP is experienced with accommodating parking for large scale sporting and entertainment events. This service will be available to patrons who wish to pay for exceptionally convenient parking over and above the price of event tickets. Patrons can pay in advance for VIP valet parking as well as pay at the door. Patrons utilizing this service would be charged a fee to cover the cost above the (parking) ticket surcharge. Valet parking fees will fluctuate based on event sales as well as the performer(s). UPP will staff its valet parking service based on estimates of how many patrons will utilize the service. For example, if UPP expects to valet park 50 – 60 cars, a minimum of 5 valet parking attendants would be present. Estimates will be figured by how many patrons sign up in advance to use VIP valet parking as well as a "capture rate" that is based on how many cars are expected for a given event. The number of valet parking attendants is based on services levels, the primary one being the time the patron has to wait. Successful valet parking will have enough valet parking attendants to ensure patrons have a less than 4-minute wait time. For a per-staff, per-hour fee, UPP provides valet parking attendants, environmentally safe and friendly vehicle shuttle for the valet parking staff, and security of the lot where cars are parked during the event. Unified Parking Partners manages several parking lots in Portland and their owner would also utilize Cutter Street and its two parking lots (95 spaces).

Patrons who use Valet Parking will be able to wait in the lobby of the Performance Hall for their car, which will negate needing a structure in inclement weather.

Bicycle Transportation

Portland is an extremely friendly pedestrian and biking city. SLA will encourage patrons who live within a walking and biking distance to access these TDM friendly modes of transportation. SLA will provide 10, uncovered bike racks outside the facility (20 spaces) encouraging patrons and staff members to bike to the Performance Hall. SLA will become a participating business in Bicycle Benefits (www.bicyclebenefits.org), a national program that offers incentives and rewards for patrons who show

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 9 of 12

up to an establishment on a bicycle. Portland, Maine businesses already have strong membership in Bicycle Benefits.

- Primary User: Patrons
- Responsibility: SLA

SLA will also work with the City of Portland's Pedestrian-Bicycle Committee as well as The Bicycle Coalition of Maine, an organization that formed in 1992 to make Maine better for bicycling and promote bicycling in Maine.

Pedestrian Accommodations

Pedestrian connections currently surround the SLA building. Congress Street provides sidewalks on both sides of the street for pedestrians walking from in-town Portland. A majority of side streets provide sidewalks for guests who are walking from local neighborhoods. Crosswalks are also provided to nearby streets including Beckett Street, Munjoy Street, and Howard Street as well as on the Eastern Promenade at Moody and Wilson Streets.

- Primary User: Patrons
- Responsibility: City of Portland

Education for Patrons

As discussed, the SLA will provide route maps, schedules, and ticket information via the website with ticket reservations. Information about the METRO Route 1 and downtown parking will be provided. There will also be announcements before and after the show regarding the bus schedule, including real-time arrivals available in the lobby. It is important that this information also be provided on SLA's website along with a link to the METRO Route 1 webpage. A direct link to the parking information should be at the top of SLA's website, next to "Directions." This link should provide exact directions to parking and bus incentives encouraging attendees to carpool or use the transit system.

- Primary User: Patrons
- Responsibility: SLA

Free Market Options

Transportation by Cabs and Pedicabs (bicycle cabs), will also be a viable option to patrons of SLA who live in Portland, or patrons who have parked downtown and elect to not use public transportation.

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 10 of 12

Carpooling

Some patrons will still travel by automobile up to Munjoy Hill and SLA will promote car sharing as an option to reduce the number of cars that travel to the facility for an event. SLA will provide information on its website for Go Maine, which is Maine's statewide commuter service providing access to low-cost, healthy, economical and eco-friendly options for commuting. SLA will promote ride share, a multi-modal, one-time ride share opportunity.

Marketing

A carefully thought-out marketing plan that provides easily accessible information is the key to implementing a successful TDM for SLA. SLA will create a marketing strategy that complements and works closely with the other area Portland organizations that promote walking, bicycling, and public transit as alternative modes of transportation. SLA will also implement "honor system" strategies such as a button at the end of the online ticket system to check if you are carpooling or travelling by bus/foot/bike with an associated discount. An outline of the marketing plan is presented below:

- SLA will have a "Where to Park" tab clearly posted on its website that outlines instructions on utilizing the Metro system, including what downtown garage to park in and where to wait for the Route 1 bus. Instructions on how to use public transportation, walk, and bike will be provided at the top of the page emphasizing it over travelling by automobile.
- SLA will have a travel information kiosk in its lobby
- All ticket holders will receive instructions on parking at the time of purchase.
- SLA's website will include a map of the neighborhood encouraging patrons NOT park within 300 feet of SLA citing the negative impact such congestion will have on residents and neighboring businesses.
- SLA's website will have easy to understand information (and links to Portland Trails and Metro) on how to bike or use transit to get to the Performance Hall. SLA will provide a link to Google Transit walk trip planner.
- SLA will try to establish its Performance Hall as a Green Certified event space, acknowledging that the biggest carbon element to an event is how people travel to and from the property (i.e. encourage people to leave cars behind).
- SLA will work with Metro to create a catchy and green marketing campaign to target its audience. The marketing campaign will need to be developed, but will generally focus on the following key messages: Using the Route 1 to get to SLA is easy, free, fast, green and connects dining and entertainment.

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 11 of 12

Monitoring*Parking Counts*

As part of its TDM Plan monitoring program, SLA will assess the use of its various operational components, starting one month after the opening of the expansion and twice annually thereafter for five years. After five years, once a year monitoring will take effect. As the most critical component of the TDM program will be to reduce parking demand, the first part of each monitoring effort will include a parking count of the surrounding streets before and during an event. This count will include the Cutter Street parking lots on the Eastern Promenade.

Greater Portland Metro

The goal is to have the Metro reduce SOV traffic by 6% in the first year or eliminate 14 cars. In order for SLA patrons to gain ridership on the Route 1, they will have to show their ticket (paper or smart phone), allowing Metro to keep track of ridership as well. This will provide SLA with an exact count of how many Performance Hall patrons are using the bus system.

Surveys – Employees

One month after the expansion of the facility, SLA employees will be surveyed regarding their transportation choices such as automobile/bicycle ownership, parking demand, and the frequency of trips using bicycle, walking carpool/vanpool, and the bus. The survey will be developed in consultation with the City's TDM manager and conform to overall City TDM modeling planning.

The surveys will be conducted to determine:

- Mode of travel to and from work (car/carpool/biking/walking/bus)
- Preferences or concerns with mode of travel
- An important component of the survey will be to determine the flexibility of employees to utilizing various travel modes to access the facility

Surveys – Attendees

For attendees to SLA, surveys will be either conducted as patrons enter the site in the form of one or two questions from a volunteer, or patrons will be given a survey they can complete and return in exchange for a free gift.

The surveys will be conducted to determine:

- Mode of travel to and from the show (car/carpool/walking/bus)
- Preferences or concerns with model of travel

Gorrill-Palmer Consulting Engineers, Inc.

Ms Deirdre Nice
October 1, 2014
Page 12 of 12

➤ Specify as a driver or a passenger

Submission of Monitoring Information/Updated TDM Plan

Based upon the results of the monitoring, SLA will update the TDM Plan and submit a draft plan to the City's TDM Manager for review and comments. The primary goal of the initial year will be to ascertain the actual parking demand number (228 vs. 122) and reduce the parking demand six percent from the calculated demand.

Closure

The TDM plan and SLA's investment in Greater Portland Metro will be a tremendous benefit to the community at large as well as SLA patrons, emphasizing less reliance on automobile traffic, utilization of downtown structures, and investment in an important public infrastructure.

Please contact us with any questions.

Sincerely,

Gorrill-Palmer Consulting Engineers, Inc.



Thomas L. Gorrill, P.E., PTOE
Principal

TLG/tlg/JN2818 /TDM August 2014.doc

Received
Recorded Register of Deeds
Jan 15, 2015 02:41:04P
Cumberland County
Nancy A. Lane

Planning Board Report

Planning & Urban Development Department

900 Ocean Avenue Rezoning from R-3 to R-5a
900 Ocean Avenue
Zoning Map Amendment
ZN-002346-2023
Ocean Avenue Residential, LLC., Applicant

Submitted to:	Portland Planning Board	Prepared By:	Austen Torres Davis
Public Hearing Date:	May 9, 2023	Date:	May 5, 2023



Figure 1: Aerial Image of 900 Ocean Avenue Showing Property Line.

I. INTRODUCTION

Ocean Avenue Residential, LLC. is seeking a zoning map amendment to change an existing R-3 Residential zone to an R-5a Residential zone on an approximately 16-acre site located at 900 Ocean Avenue (CBL: 416A Aoo2001) in the North Deering neighborhood. This action is being sought to facilitate the development of a planned residential unit development (PRUD) at this location. The applicant is seeking this map-amendment as the R-5a zone permits greater residential density for PRUDs than the R-3 zone, and would allow for more concentrated density in certain locations on-site in order to reduce impacts on significant natural features such as wetlands.

The Planning and Urban Development Department mailed 103 notices advertising this meeting to interested parties and property owners within 500 feet of the site. The legal advertisements ran in April 29 and May 2, 2023 editions of the *Portland Press Herald*.

The Planning Board held a workshop for this application on April 11, 2023.

Applicant: Ocean Avenue Residential, LLC.
Applicant Representative: Sam Lebel; Acorn Engineering

II. PROJECT DATA

Existing Zoning	R-3 – Residential
Proposed Zoning	R-5a – Residential
Existing Use	Undeveloped Land
Proposed Use	Planned Residential Unit Development (PRUD)

III. BACKGROUND & EXISTING CONDITIONS

The subject property is comprised of two undeveloped parcels at 900 Ocean Avenue, consisting of woodland and wetland areas. Graves Hill, an area of comparatively higher elevation than the surrounding neighborhood, is located near the center of 900 Ocean Avenue. Overall the site is relatively flat, gradually rising in elevation from the edges toward the center of the site, with significant grade changes at the western, northern, and eastern edges of the property. The site is adjacent to a defunct quarry to the northeast and the Old City Landfill to the northwest. Along Ocean Avenue there are a number of other PRUD developments that are similar in scale to the conceptual development proposal for this site.

The site is within and bordered on all sides by the R-3 residential zone. Other nearby zones include the R-5 and R-5a Residential along portions of Ocean Avenue, as well as the I-M Moderate Impact Industrial zone along Presumpscot Street.

In addition to the two applicant-owned parcels at 900 Ocean Avenue, Planning and Urban Development staff recommend including two additional parcels at 852 and 840-846 Ocean Avenue. 852 Ocean Avenue (CBL: 416A A001001) is a 0.33 acre parcel occupied by a single family residence, including a driveway and wooded area. 840-846 Ocean Avenue (CBL: 416A A003000) is occupied by an approximately 10 acre 46-unit PRUD, the Ocean Ridge Condominium Development, accessed by Ridge Road and Osprey Terrace. The Ocean Ridge Condominiums are developed at a similar scale to the conceptual site plan proposed for 900 Ocean Avenue, while the single-family residence is non-conforming to zoning setbacks and would not be brought out of conformance by this map amendment. These two parcels are proposed to be added to the map amendment in order to form a contiguous R5-a zone along the western side of Ocean Avenue.

The nearest public transportation bus routes are the GP Metro routes 9A and 9B, approximately 0.7 miles south of the site along Washington Avenue. A sidewalk exists between Summer Place and Washington Avenue along the east side of Ocean Avenue.



Figure 2: 900 Ocean Avenue in Neighborhood Context



Figure 3: 900 Ocean Avenue Conceptual PRUD Site Plan Showing Interior Wetlands

IV. CONCEPTUAL DEVELOPMENT PROPOSAL

The proposed rezoning from R-3 to R-5a would facilitate the development of a multi-unit PRUD residential development and associated parking. The intent of this rezoning is to allow higher residential density within each building so that the applicant can concentrate development away from the most environmentally sensitive areas on-site resulting in a more compact form of development. The conceptual development proposal currently calls for a single, two-way access driveway that would connect to two clusters of multi-family structures and surface parking.

The development contemplated in this application is conceptual at this stage and no site plan application has yet been submitted (See attached Plan 3). Should the proposed rezoning be approved by the City Council, a site plan application, addressing all applicable land use standards, including design and layout would be required to be submitted by the applicant to facilitate the development of this project.

V. PROPOSED ZONING MAP AMENDMENT

Ocean Avenue Residential, LLC. proposes a zoning map amendment to change their 900 Ocean Avenue property from an R-3 Residential zone to an R-5a Residential zone (Compare Figures 4 and 5).

In addition to the applicant's request, Planning staff recommends that the Planning Board consider expanding the zoning map amendment to include Parcel 416A Aoo3ooo, which is currently improved with an existing 46-unit PRUD, the Ocean Ridge Condominium Development, which was approved by the Planning Board on August 14, 2001 and completed in 2006 (see Figure 6).

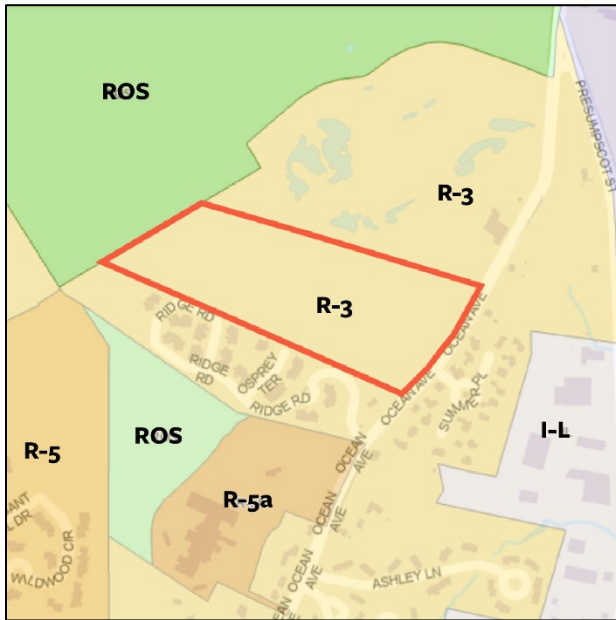


Figure 4: 900 Ocean Avenue Existing Zoning Context

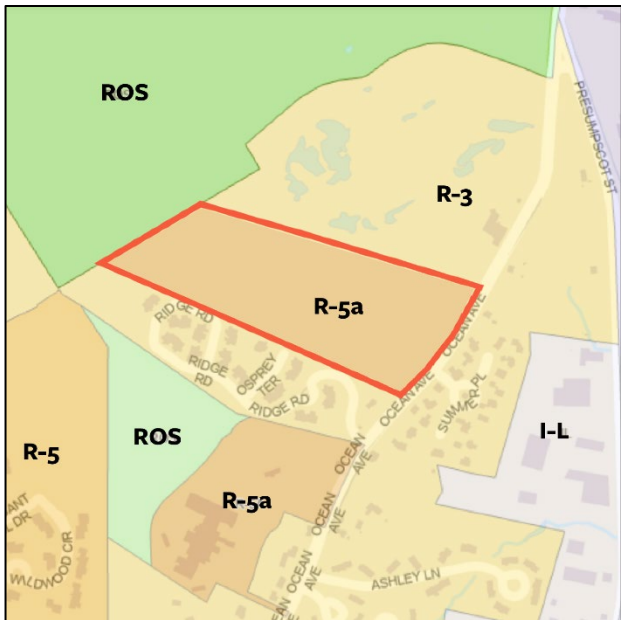


Figure 5: Applicant Proposed Map Amendment

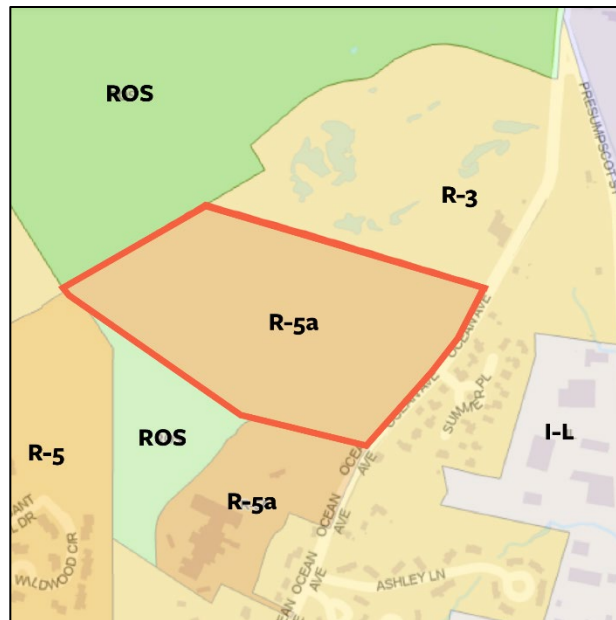


Figure 6: Staff-Proposed Map Amendment

VI. PLANNING BOARD WORKSHOP

The Planning Board held a Workshop for this application on April 11, 2023. The Planning Board, in its deliberations, As the proposal calls for increased density in order to protect natural features, members of the Planning Board requested more information around the anticipated preservation of significant on-site natural features, and how such features are likely to be incorporated into a future site plan. In response, the applicant has noted that they'd support working with Portland Trails to provide trail access through this property. Additionally, the applicant has suggested integrating boardwalks near the preserved wetlands, as well as benches and trails throughout the site.

Additionally, in response to public comment regarding the potential for blasting impacts, Planning Staff informed the Board that blasting operations are regulated under Article 22 of the Land Use Code and that blasting operations are not specifically linked to zoning and therefore are not considered when evaluating a zoning map amendment application.

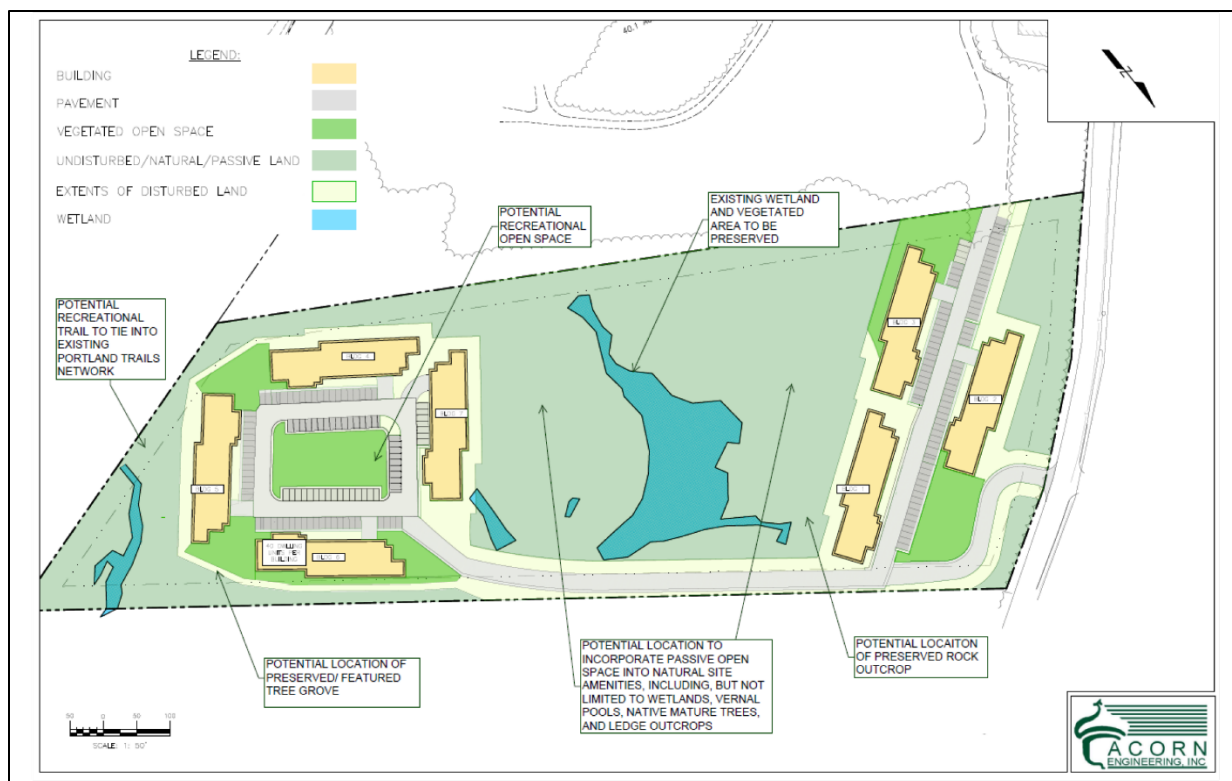


Figure 7: Conceptual Site Plan Showing Active & Passive Open Space

VII. ZONING ANALYSIS

Existing Versus Proposed Zoning: R-3 Residential, and R-5a Residential

The R-3 is a low to moderate density residential zone characterized by a mixture of single-family homes, certain institutional uses such as schools, care facilities and places of assembly, and PRUDs. The R-3 zone is mapped in locations throughout the city, primarily off-peninsula.

The R-3 and R-5a zones allow for a similar range of uses, though the R-3 does not allow post-secondary schools, lodging houses, special needs independent dwelling units, congregate care facilities, multiplexes, Two-family dwellings or Multi-family construction. PRUDs are allowed in both the R-3 and R-5a zones,

though the R-3 zone has more restrictive dimensional requirements, and permits lower residential density than the R-5a zone.

The purpose of the R-3 Residential zone is to:

“Provide for medium-density residential development characterized by single-family homes on individual lots and also to provide for planned residential unit developments on substantially sized parcels.”

Whereas the purpose of the R-5a Residential zone is:

“To provide for moderate-density residential development in off-peninsula locations that can provide a unique residential living experience with a high degree of natural site amenities; and to provide areas of the city in the general proximity of the peninsula that have the capability for adequate municipal services, including traffic corridors with adequate traffic capacity, that can appropriately accommodate a more intensive use of land than other lower-density zoned land and be compatible with surrounding neighborhoods; and to increase affordable housing opportunities in off-peninsula locations by providing a moderate-density zone..”

Table 1 provides a comparison of the permitted uses between existing and proposed zone. Uses marked with a ‘P’, are permitted uses in the zone. A ‘C’ indicates a conditional use, otherwise uses are not permitted.

TABLE 1: PERMITTED AND CONDITIONAL USES IN R-3 and R-5a Residential Zones		R-3	R-5a
Residential	Single-family dwellings	P	P
	Two-family dwellings		P
	Multi-family dwellings	C	P
	Multiplex		P
	Congregate care facilities		P
	Handicapped family units	P	P
	Planned Residential Unit Developments	P	P
	Special needs independent dwelling units		P
	Lodging houses		C
	Sheltered care group homes	C	C
Institutional	Elementary, middle, and secondary schools	C	C
	Governmental uses	P	P
	Hospitals	C	C
	Intermediate care facilities	C	P
	Long-term and extended care facilities	C	P
	Places of assembly (<10,000 SF)	C	C
	Places of assembly (>10,000 SF)	C	C
	Preschool facilities	C	C
	Post-secondary schools	C	C
Commercial	Bed and breakfasts		
	General offices (<5,000 SF)		
	Hostels		
	Agriculture		

	Cemeteries		
	Off-street Parking	C	C
	Parks and open spaces	P	P
	Raising of domesticated animals		
	Solar energy system (minor)	P	P
	Utility Substations	C	C

Dimensional Requirement Summary:

As the PRUD constitutes the most intensive form of development permitted in either zone, this analysis is limited to the discussion of the PRUD use.

The R-5a PRUD standards limits residential density by requiring a minimum of 1,600 square feet of net land area per dwelling unit and further requires a minimum lot area of two acres. There is no limit on the total amount of units per building and no restrictions on building length. Buildings with a length of 100 feet or less are required to be setback a minimum of 25 feet from external subdivision property lines while buildings with a building length greater than 100 feet are required to be setback 35 feet. The maximum height permitted in the R-5a zone for a PRUD is 55 feet. The maximum lot coverage permitted is 30 percent. A minimum of 200 square feet of common recreation space area per dwelling unit is also required.

The R-3 PRUD standards limit residential density by requiring a minimum of 6,500 square feet of net land area per dwelling unit and further requires a minimum lot area of three acres. The maximum number of units per building on a site less than five acres is two and the maximum number of units per building on a site greater than five acres is six. Building length is limited to a maximum of 100 feet without a garage and 140 feet with garages. Buildings with three or fewer units are required to be setback a minimum of 25 feet from external subdivision property lines, while buildings with four or more units are required to be setback a minimum of 35 feet. The minimum distance between detached PRUD dwelling units is 16 feet. The maximum height in the R-3 zone for a PRUD is 35 feet. A minimum of 300 square feet of common recreation space area per dwelling unit is required.

Any PRUD development that includes 50 percent of the units as low-income or workforce units for rent or sale is eligible for the following dimensional bonuses:

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 open space requirements.
5. Minimum recreation open space area is reduced to 200 square feet per dwelling unit of common area designed for recreational purposes by residents. Minimum contiguous size and setbacks do not apply and shall be set through site plan review.

For both the R-3 and R-5a zones one off-street parking space per single-, two, or multi-family unit is required and sites that are within a ¼ mile of fixed route transit may be exempt from providing parking as specified in Table 19-B of the Land Use Code.

Table 2 provides a comparison of the dimensional requirements between existing and proposed zone.

TABLE 2: PRUD Zoning Requirements by Use	R-3	R-5a
Lot area (min.)	3 acres	2 acres
Net land area per dwelling unit (min.)	6,500 sq. ft.	1,600 sq. ft.
Units per building (max.)	PRUD <5 ac.: 2 PRUD > 5 ac.: 6	
Average number of units per building (max.)	PRUD >5 ac.: 5	
Structure height (max.)	35 ft.	55 ft.
Building length (max.)	100 ft. without garages; 140 ft. with internal garages	N/A
Length of accessory garage structure (max.)	N/A	N/A
Building setback from external subdivision property lines (min.)	3 or fewer D.U. in building: 25 ft.; 4 or more D.U. in building: 35 ft.	Bldg. Length 100 ft. or less: 25 ft.; Bldg. Length >100 ft.: 35 ft.
Distance between detached PRUD dwelling units (min.)	16 ft.	N/A
Common recreation open space area (min.)	300 SF/D.U.	200 SF/D.U.
Habitable space elevation	No habitable space in a PRUD shall be below grade, except basements that are a part of and below above-ground units	

VIII. COMPREHENSIVE PLAN ANALYSIS Portland's Plan 2030

Comprehensive Plan goals and policies (state and local) relevant to the proposed zoning map amendment are included below. In the provided analysis the applicant lays out various portions of Portland's Plan 2030 that their proposal adheres to.

Several aspects of the proposed map amendment to R-5a Residential are consistent with the Comprehensive Plan. The Comprehensive Plan highlights the importance of diversifying housing types and increasing the supply of housing city-wide. The proposed map amendment would facilitate a residential development that would provide housing and provide opportunities for people who work Portland to have the opportunity to live in Portland.



Figure 8: Visions of Portland's Plan 2030

Relevant Comprehensive Plan goals have been excerpted below:

Housing:

- Increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences and financial capabilities of all Portland residents.
- Pursue policies to enable people who work in Portland to have the option to live in Portland.
- Encourage quality, sustainable design in new housing development.
- State Goal: To encourage and promote affordable decent, housing opportunities for all Maine citizens.
- Evaluate whether current zoning allows for new development consistent with historic patterns of form, density, and/or use, as whether it allows for priority in growth areas.

IX. NEIGHBORHOOD MEETING & PUBLIC COMMENT

As of the writing of this report eight public comments have been received, all from nearby residents in opposition to this map amendment. Public comments in opposition were largely centered on potential environmental impacts, including to wetlands and to rocky outcroppings requiring blasting.

A neighborhood meeting was held by the applicant on March 15th, 2023.

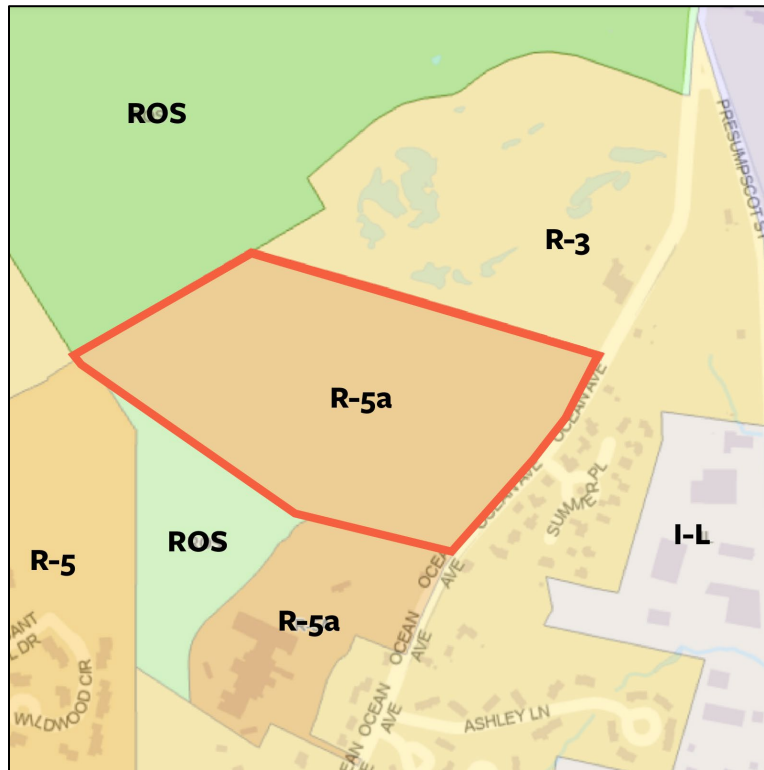
X. REQUISITE COUNCIL ACTION

Any proposed rezoning, regardless of whether it is recommended by the Planning Board, must be approved by City Council vote in order to take effect.

XI. PROPOSED MOTIONS

1. On the basis of materials submitted by the applicant, the City of Portland Land Use Code, Portland's Comprehensive Plan, public comment, and the information provided in the public hearing on May 9, 2023 for the application ZN-002346-2023 (900 Ocean Avenue), and/or other findings, the Planning Board finds that the proposed zoning map amendment **[is/is not]** consistent with the Comprehensive Plan for the city of Portland; and therefore, the Planning Board **[recommends/does not recommend]** to the City Council adoption of the Zoning Map Amendment for the area of land that includes 900 Ocean Avenue and the following parcels as listed and shown below:

Parcels to be included are 416A A001001, 416A A002001, and 416A A003000.



Area zoning map to be amended outlined in red.

XI. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Staff Review Comments
2. Planning Board Workshop Memo

APPLICANT'S SUBMITTAL

- A. Cover Letter
- B. Map Amendment Checklist
- C. Right, Title, and Interest
- D. Neighborhood Meeting Invite
- E. Comment Response Letter
- F. Comment Response Supplemental Document

PLANS

- Plan 1. 900 Ocean Avenue Vicinity Map
- Plan 2. Proposed Map Amendment
- Plan 3. Conceptual Site Plan

PUBLIC COMMENT

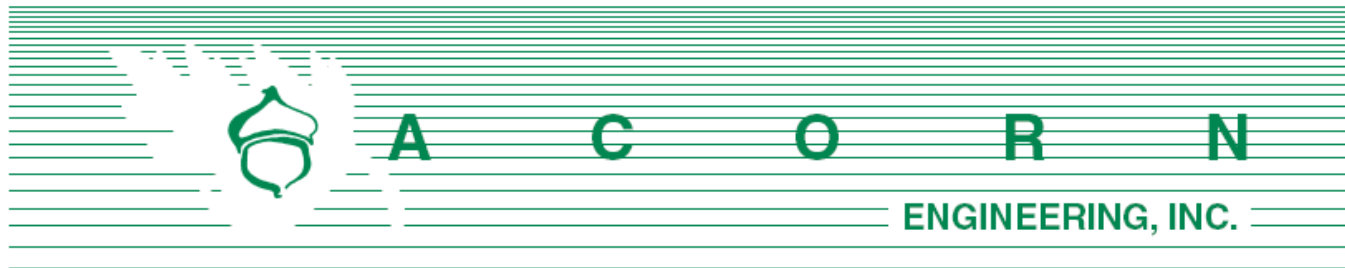
- Pc1. Chuck Grossman
- Pc2. Leslie Fuller
- Pc3. Ron Morris
- Pc4. Jean Mattimore

Pc5. Kimberly MacDonald

Pc6. Mary Jo Cross

Pc7. Dennis Fuller

Pc8. Ron Hills



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

January 20, 2023

Subject: Zoning Map Amendment – 900 Ocean Avenue

Matt:

On behalf of Ocean Avenue Residential, LLC, we are pleased to submit this map amendment for the approximate 16-acre parcel located at 900 Ocean Ave (Tax Map 416/A/2001). The parcel is currently within the R-3 zoning district (medium density residential) and is proposed to be rezoned into the R-5a zoning district (medium and high-density residential).

The parcel consists of vacant wooded land with several pockets of wetlands and steep slopes. Abutting the parcel to the west is the City's capped landfill/solar farm; to the south and east, a planned residential unit development (PRUD); and to the north, a discontinued concrete batch plant and an industrial warehouse/quarry currently used for construction laydown and material processing. The project team has conducted its due diligence phase to evaluate the site's suitability for land development. As part of this exercise, it was concluded that the development model that benefits the most stakeholders will require a map amendment to respond to the site's unique physical characteristics such as topography and natural resources. The zone change will allow the project to create a variety of housing options under a cluster subdivision model where the residential density is increased, and infrastructure is consolidated in favor of open space and natural resources. With an approved map amendment by City Council, the project would then be subject to the City's PRUD standards during the Major Site Plan process with the Planning Board.

We are pleased to submit this map amendment application which is consistent with Portland's Comprehensive Plan and will unlock the parcel's ability to increase the City's available housing stock through a low-impact approach. We look forward to your review of this project – if you have any questions regarding these application materials, please do not hesitate to reach out.

Sincerely,

Sam Lebel, P.E.
Project Manager
Acorn Engineering, Inc.

Consistency with Portland's Comprehensive Plan

This document provides an analysis of the consistency of the zone change request with the goals, policies and land use plan of Portland's Comprehensive Plan.

This map amendment helps implement goals and strategies outlined in *Portland's Plan 2030*, as well as the future land use plan. It will unlock the potential of the site for much-needed housing. In addition, given that this site is within walking distance of Washington Avenue, it will promote development along an identified growth corridor as well as a major transit route.

The R-5A designation will allow this site to better meet goals and strategies in the *Housing* and *Environment* sections of the Comprehensive Plan, as well as strategies from other areas. By unlocking the potential for higher density allowed under the R-5A, the large site will be more efficiently developed – Further it will allow for the preservation of sensitive open spaces through the ability to build more densely other areas of the site – the R-5A designation is more consistent with the Comprehensive Plan than the existing R-3 designation.

The R-5A zone is intended to “provide a unique residential living experience with a high degree of natural site amenities.” It allows for a plan that preserves open space and sensitive environmental areas, while allowing for efficient use of portions of the site that will be developed. Given the complex geography of this part of the city, this zoning designation will allow for both housing development and environmental protection.

Conversely, the R-3 zone is intended for areas “characterized by single-family homes on individual lots.” The Ocean Avenue corridor does not currently meet this characterization. In addition, the Comprehensive Plan doesn't envision it as a single-family corridor.

Specifically, this map change helps achieve the following Plan goals:

Housing

- ✓ Increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences and financial capabilities of all Portland residents.
- ✓ Encourage additional contextually appropriate housing density in and proximate to neighborhood centers, concentrations of services, and transit nodes and corridors as a means of supporting complete neighborhoods.
- ✓ Pursue policies to enable people who work in Portland to have the option to live in Portland.

Environment

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



Additionally, it helps meet the following strategies:

Housing

- ✓ Evaluate whether current zoning allows for new development consistent with historic patterns of form, density, and/or use, as well as whether it allows for priority growth areas.
- ✓ Coordinate linkages between accessible transportation and housing affordability.
- ✓ Support programs and tools that facilitate aging safely in place.

Facilities & Services

- ✓ Make fiscal stability a factor in land use planning by considering both public investments and potential gains in the City's tax base when planning for a sustainable future for the city, while recognizing that not all land use decisions will be driven by the fiscal impacts of the development produced.

Portland's Plan sets a goal of production of at least 2,557 new housing units in next ten years, or 256 a year. This map change will help meet approximately one year's worth of that ten-year goal. It will do so within a short distance of the Washington Avenue priority corridor and the priority node at Washington and Ocean Avenues.

In summary, this map change is fully consistent with the Comprehensive Plan. In fact, it is more consistent with City goals and strategies outlined in the plan than the existing R-3 designation.



CITY OF PORTLAND
Planning & Urban Development Department

MAP AMENDMENT SUBMISSION CHECKLIST	
* Please submit each document <u>and</u> drawing as a separate PDF file * Please submit all drawings in a <u>24 x 36</u> sheet size * Please confirm each item by electronically checking the boxes to the left for each document/drawing	
GENERAL APPLICATION DOCUMENTS	
☒	Project Description Cover Letter with detailed project description
☒	Consistency with Comprehensive Plan Analysis of the consistency of the zone change request with the goals, policies and land use plan of Portland's Comprehensive Plan.
☒	Completed Checklist – Map Amendment Application (this document)
☒	Right, Title and Interest Deeds, leases, or purchase and sales agreements
PLANS	
☒	Vicinity Map
☒	Proposed Map Amendment (please use the Portland zoning map as a reference)
☒	Site Plan (if applicable) Provide a site plan of the property showing existing and proposed improvements, including such features as buildings, parking, driveways, walkways, landscape and property boundaries.

DLN: 1002140137656

QUITCLAIM DEED WITH COVENANT

OCEAN AVENUE DEVELOPMENT, LLC

A Maine limited liability company with a mailing address of 33 Powderhorn Drive, Scarborough, Maine 04074

for consideration paid, grant to

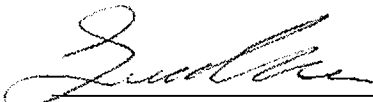
OCEAN AVENUE RESIDENTIAL, LLC

A Maine limited liability company with a mailing address of 33 Powderhorn Drive, Scarborough, Maine 04074, with QUITCLAIM COVENANTS, the following described real estate in Portland, County of Cumberland, and State of Maine:

See Exhibit A attached hereto and made a part hereof

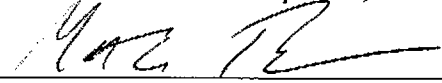
Also hereby conveying all rights, easements, privileges, and appurtenances, belonging to the premises hereinabove described.

WITNESS my hand and seal this 30th day of March 2021.



Witness

Ocean Avenue Development, LLC



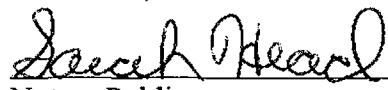
By: Matthew E. Tonello
Its: Manager

State of Maine
County of Cumberland,

March 30, 2021

Personally appeared before me the above-named Matthew E. Tonello, Manager of Ocean Avenue Development, LLC, and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of said Ocean Avenue Development, LLC.

Before me,



Notary Public:
Printed Name:
My commission expires:

SARAH HEAD
NOTARY PUBLIC
State of Maine
My Commission Expires
November 14, 2025

EXHIBIT A

A certain lot or parcel of land situated on the northwesterly side of Ocean Avenue in Portland, County of Cumberland and State of Maine and being more particularly bound and described as follows:

Commencing at a point on the northwesterly side of Ocean Avenue at the southeasterly corner of land now or formerly of Ocean Ridge Realty, LLC as described in a deed recorded in the Cumberland County Registry of Deeds in Book 18466, Page 304;

Thence North 61° 01' 40" East along the northwesterly side of Ocean Avenue a distance of 160.66 feet to an iron pipe found in ledge;

Thence North 52° 44' 40" East along the northwesterly side of Ocean Avenue a distance of 197.17 feet to a point;

Thence North 44° 53' 40" East along the northwesterly side of Ocean Avenue a distance of 250.15 feet to an iron rod found;

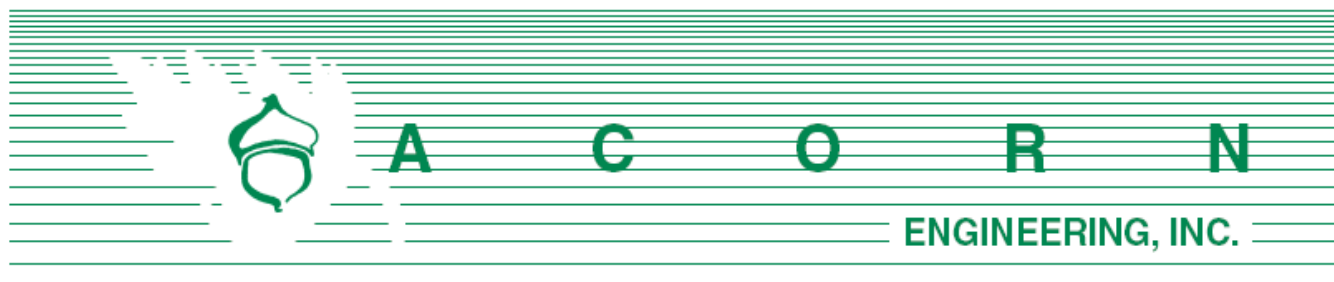
Thence southeasterly a distance of 1,313 feet, more or less, to an iron rod found on the southerly side of land now or formerly of the City of Portland as described in a deed recorded in the Cumberland County Registry of Deeds in Book 2451, Page 242, which iron pipe is located South 75° 17' 00" West from the southeasterly corner of said City of Portland land;

Thence South 75° 28' 40" West along the southerly side of said City of Portland land a distance of 524.52 feet to said land of Ocean Ridge Realty, LLC;

Thence South 50° 36' 20" East along the northeasterly side of said land of Ocean Ridge Realty, LLC a distance of 1,481.99 feet to the northwesterly side of Ocean Avenue and the point of beginning.

Being a portion of land conveyed to Ocean Avenue Development, LLC by Dragon Products by deed dated January 12, 2021 and recorded in Cumberland County Registry of Deeds in Book 37696 Page 130.

Reference is also made to a "Standard Boundary Survey on Ocean Avenue in Portland, Maine for Dragon Products Co." dated February 7, 1991 and recorded in the Cumberland County Registry of Deeds in Plan Book 189, Page 65.



Dear Neighbor:

March 3, 2023

On behalf of Ocean Avenue Residential, LLC, we are pleased to invite you to a neighborhood meeting on March 15th, 2023, to discuss a proposed map amendment for the approximate 16-acre parcel located at 900 Ocean Ave (Tax Map 416/A/2001). The parcel is currently within the R-3 zoning district and is proposed to be rezoned into the R-5a zoning district. The zone change will increase the potential of the site by providing the opportunity for new housing while preserving open space and natural resources. With an approved map amendment by City Council, the project would then be subject to the Major Site Plan process with the Planning Board.

Meeting Location: GPCOG – 970 Baxter Blvd, Suite 201, Portland, ME 04103

Meeting Date/Time: Wednesday, March 15, 2023 at 5:00pm

A sign-in sheet will be circulated, and a record of the meeting will be taken. Both the sign-in sheet and record will be submitted to the Planning Board. If you have any questions, please call (207) 775-2655.

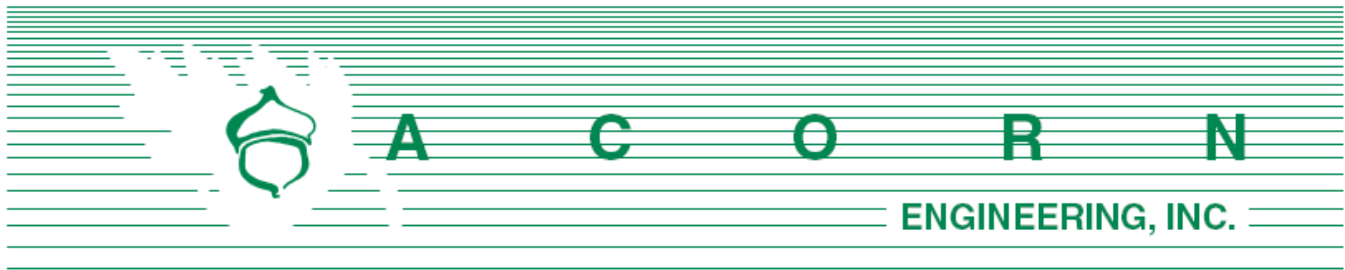
Sincerely,

A handwritten signature in blue ink that reads 'Sam Lebel'.

Sam Lebel, P.E.
Project Manager
Acorn Engineering, Inc.

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.





Austen Torres Davis
City Planner
389 Congress Street
Portland, ME 04101

April 24th, 2023

Subject: Comment Response Letter
900 Ocean Avenue – Portland, Maine

On behalf of Ocean Ave. Residential LLC, we are pleased to respond to the comments received by City Staff regarding the proposed R-3 to R-5A Map amendment. We look forward to discussing this project at a Planning Board hearing on May 9th.

City Planning Staff Comments

Zoning:

Comment – *The CBL provided by the applicant is incorrect. The lead (main) CBL is 416A A002, with 417 A004 as the trail (subordinate) CBL.*

Response – Understood, the CBL will be updated in future documentation.

Comment – *Please provide information on why the conceptual development cannot be achieved through a PRUD in the R-3 zone or a PRUD in the R-5 zone? (In other words, why does it need to be rezoned to R-5a? The only nearby R-5a zone was set up for a congregate-care-facility, not a PRUD for housing. Nearby housing developments are either R-3 or R-5.)*

Response – Ultimately, the proposed map amendment from R-3 to R-5A will support the City's goal of providing more housing, as outlined in the Comprehensive plan. The parcel can technically be developed under the current R-3 zoning district, however, due to the city standards, the development under the R-3 zone will generate more disturbed and impervious area per dwelling unit as opposed to the site being developed under the R-5A zone. Similarly, the R-5 zone is stringent in what it allows for building typology, including 12 units per building within 3 stories. With less efficient buildings, the development is forced to grow out (horizontally) instead of vertically, which results in additional impervious and disturbed areas. Please refer to Table 1 which compares the City's Standards for the R-3, R-5, and R-5a zones. The key metric is the building height and allowable units.

As outlined in Table 1 below, the R-5A zone provides the opportunity to limit disturbance by allowing more dwelling units per building in conjunction with a greater building height maximum. This allows more dwelling units per square foot of land area/building footprint, which minimizes the overall impervious and disturbed area and maximizes the area available to preserve existing natural site features and wildlife habitat, including native mature trees.

<u>PRUD Dimensional Standards:</u>	<u>R-3</u>	<u>R-5</u>	<u>R-5A</u>
<u>Net Land Area Per Dwelling Unit (min.): (sf)</u>	6,500	3,000	1,600
<u>Allowable Dwelling units: (with 25% housing bonus)</u>	106	230	431
<u>Allowable Number of Units per building: (max.)</u>	6	12	no max.
<u>Building Length: (max.)</u>	140 ft	140 ft	no max.
<u>Building Height: (max.)</u>	35 ft	35 ft	55 ft

Table 1: City of Portland PRUD Dimensional Standards per zoning district

In response to Board feedback, the project team prepared a conceptual site plan of the R-3 zone within the same development footprint as the current 280-unit R-5a concept. Below is a comparison of the resulting project metrics. As seen, the R-5a zone is approximately three times as efficient in providing housing per developed acre due the allowable building size. Given the unique site characteristics, the R-5a is the most appropriate zone, not only from a larger comprehensive planning perspective, but also from a localized site perspective.

Table 2, below, provides a comparison in the ratio of dwelling units per developed acre for the R-3 and R-5A zone, demonstrating the more efficient infrastructure utilization available if the parcel is rezoned to an R-5A. Approximately the same linear footage of roadway is required for the 90-unit R-3 development as compared to the R-5A. The R-3 concept requires greater than 2.5 times more linear footage of roadway per unit. The impervious area created per unit is nearly 3x more per unit for the R-3 development as compared to the R-5A.

	<u>R-3</u>	<u>R-5A</u>
Total Buildings:	16	7
Total Units:	90	280
	<u>% of Total Lot Area</u>	<u>% of Total Lot Area</u>
Lot Coverage:	12%	12%
Disturbed Area:	52%	48%
<i>Dwelling Units per Developed Acre:</i>	<i>11</i>	<i>37</i>
Preliminary Total Linear Footage of Roadway and Roadway per unit Impervious Area ¹ per housing unit:	2,500 / 25 feet per unit 2,100 sf/unit	2,700 / 9 feet per unit 730 sf/unit
¹ Impervious area is the sum of impervious from roadways, sidewalks, surface parking, building roofs		
<i>Total Linear Footage Roadway:</i>	2,500 ft	2,700 ft
<i>Roadway Linear Footage per unit:</i>	25 ft/ unit	9 ft/ unit
<i>Impervious area per housing unit:</i>	2,100 sf/unit	730 sf/unit

Table 2: Conceptual Zone Comparison



Landscaping and Environmental Quality:

Comment – *The City encourages the applicant to coordinate with Portland Trails when developing future plans for the site. There are numerous existing and planned trails in the vicinity of 900 Ocean Avenue operated by Portland Trails. Any residential development would benefit from connections to these trails.*

Response – We look forward to discussing opportunities in collaboration with Portland Trails as the project moves towards a full site plan application.

Comment – *The City also encourages future coordination with city departments regarding tree and landscape preservation, wetlands, and the location of ledge and potential blasting sites.*

Response – Once the design team establishes a limit of disturbance for the proposed development, closer to the site plan application, the site will undergo a tree survey and additional studies to address the comment above.

Stormwater & Utilities:

Comment – *The City's existing gravity sewer line in Ocean Avenue terminates approximately 350 LF to the southwest of this proposed development site. DPW has concerns that the existing 8" sewer system will not have the capacity to serve a high density residential development of this nature without upgrades to the existing system. Approximately 1,850 linear feet of new 12" sewer line may be required to be installed from the proposed development site to Wellstone Drive if it's ultimately confirmed the existing system does not have the capacity to serve this development. These concerns have previously been expressed to the developer's engineer.*

Response – The project team is aware of the existing sewer and necessary extension within Ocean Avenue. Coordination with DPW is underway and flow meters have been installed to analyze the existing capacity.

Please let us know if you have any additional questions or comments. Additionally, we have provided supplemental information regarding natural site amenities in response to Board comments. Please find that document enclosed as part of this comment response submission.

Sincerely,

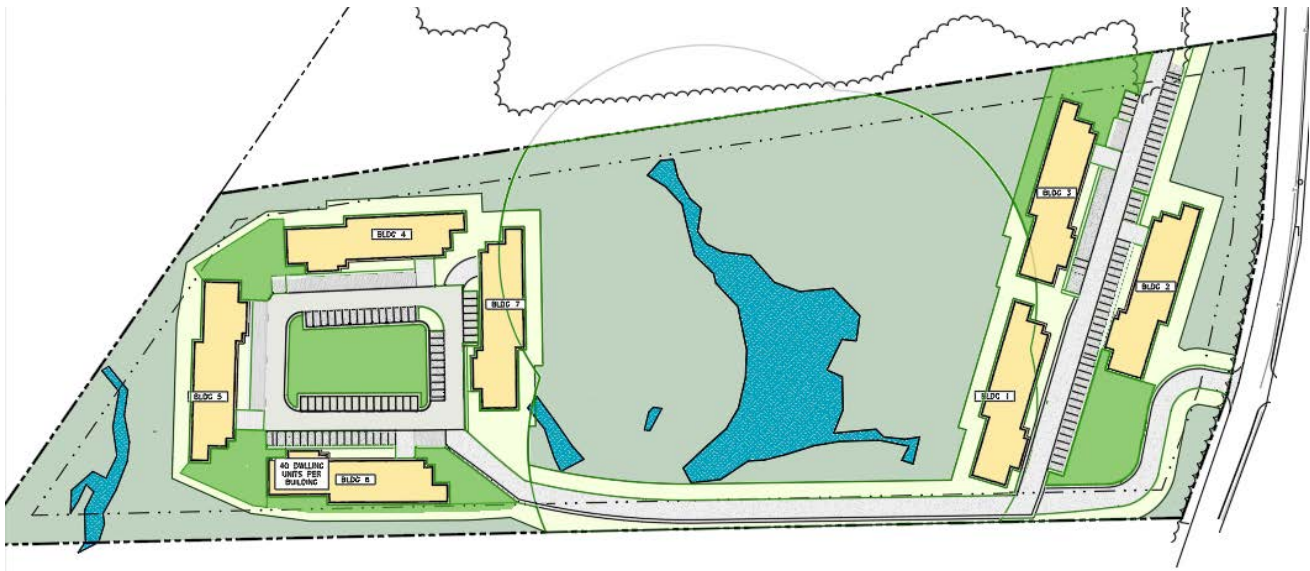


Sam Lebel, P.E.
Project Manager
Acorn Engineering, Inc.

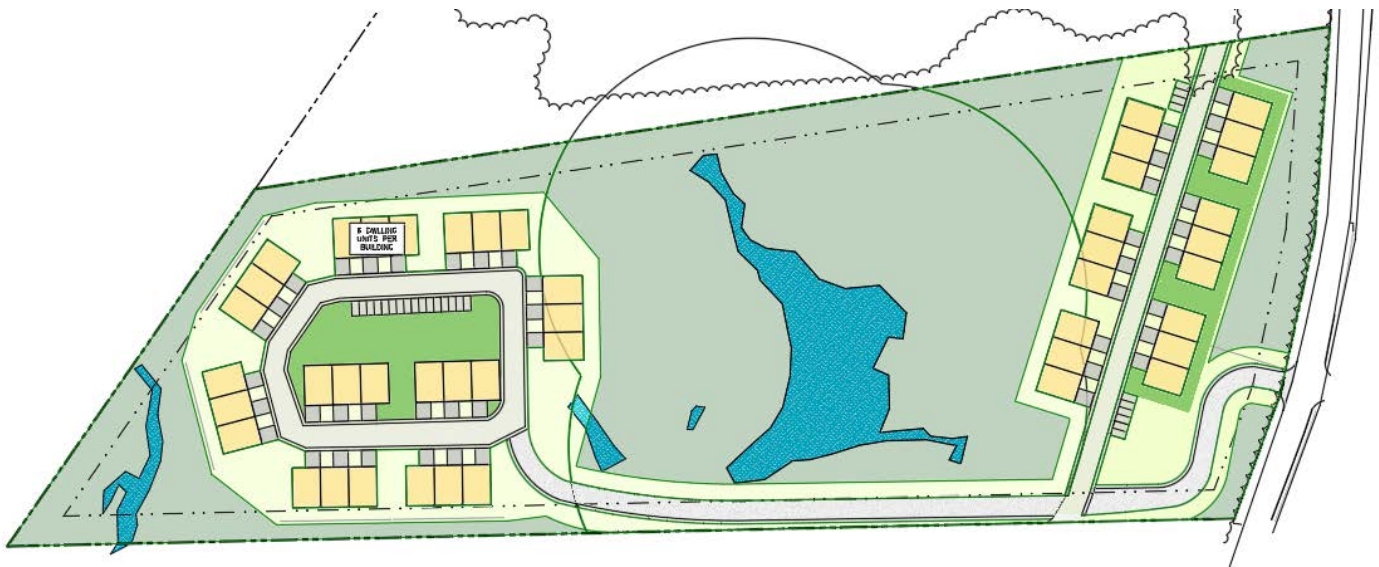


Danielle McGowan, E.I.
Project Engineer
Acorn Engineering, Inc.



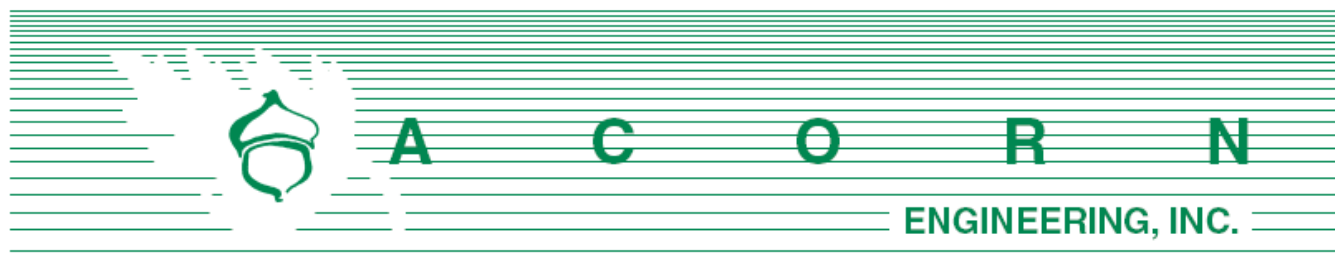


Conceptual R-5A: 280 Units



Conceptual R-3: 90 Units





Austen Torres Davis
City Planner
389 Congress Street
Portland, ME 04101

April 24th, 2023

Subject: Natural Site Amenities
900 Ocean Avenue – Portland, Maine

In response to feedback from the Planning Board workshop held on 4/11/23, this document provides examples of potential or anticipated preserved and natural site features associated with the proposed project. Further research is to be conducted as the project moves into the site plan application phase, pending approval of the R-5a map amendment. At that time, the specific location and type of natural site amenities will be further defined in coordination with a landscape architect and/or a forester; however, recognizing the R-5a purpose statement identifies natural site amenities, this document has been prepared to demonstrate that this 16-acre wooded site that sits above a rock face is well suited to showcase natural site amenities as part of a residential development.

As previously addressed, the purpose of the zone change from R-3 to R-5A is to optimize the site's potential and better align with the City's zoning purpose statement and comprehensive plan. The driving factor for the zone change is to allow a higher density and more flexible building typology, which in turns allows the project to provide three times as many units per developed acre when compared to the existing zone. By increasing height and overall building size, it allows more of the housing to be constructed vertically instead of horizontally, ultimately resulting in preservation of habitat and natural resources.

Figure A, below, provides a preliminary conceptual site plan for the R-5A zone with potential locations of where existing natural site amenities may be preserved or showcased. The concept provided includes 7 buildings with 280 units and accounts for the required open space under the PRUD requirements, but is subject to change once the design moves closer to the site plan application. Figures B through F provide visual examples of existing conditions to remain and examples of what can be expected with the proposed improvements.

Table of Contents:

- Figure A: Preliminary Conceptual Site Plan for R-5A Zone
- Figure B: Preservation of Existing Wetland and Vegetation (on site)
- Figure C: Example of Existing Vegetation and Rock Outcrop (on site)
- Figure D: Existing Woods Trail (on site)
- Figure E: Example of Wooded Recreational Trail
- Figure F: Existing Portland Trails Map in relation to proposed project

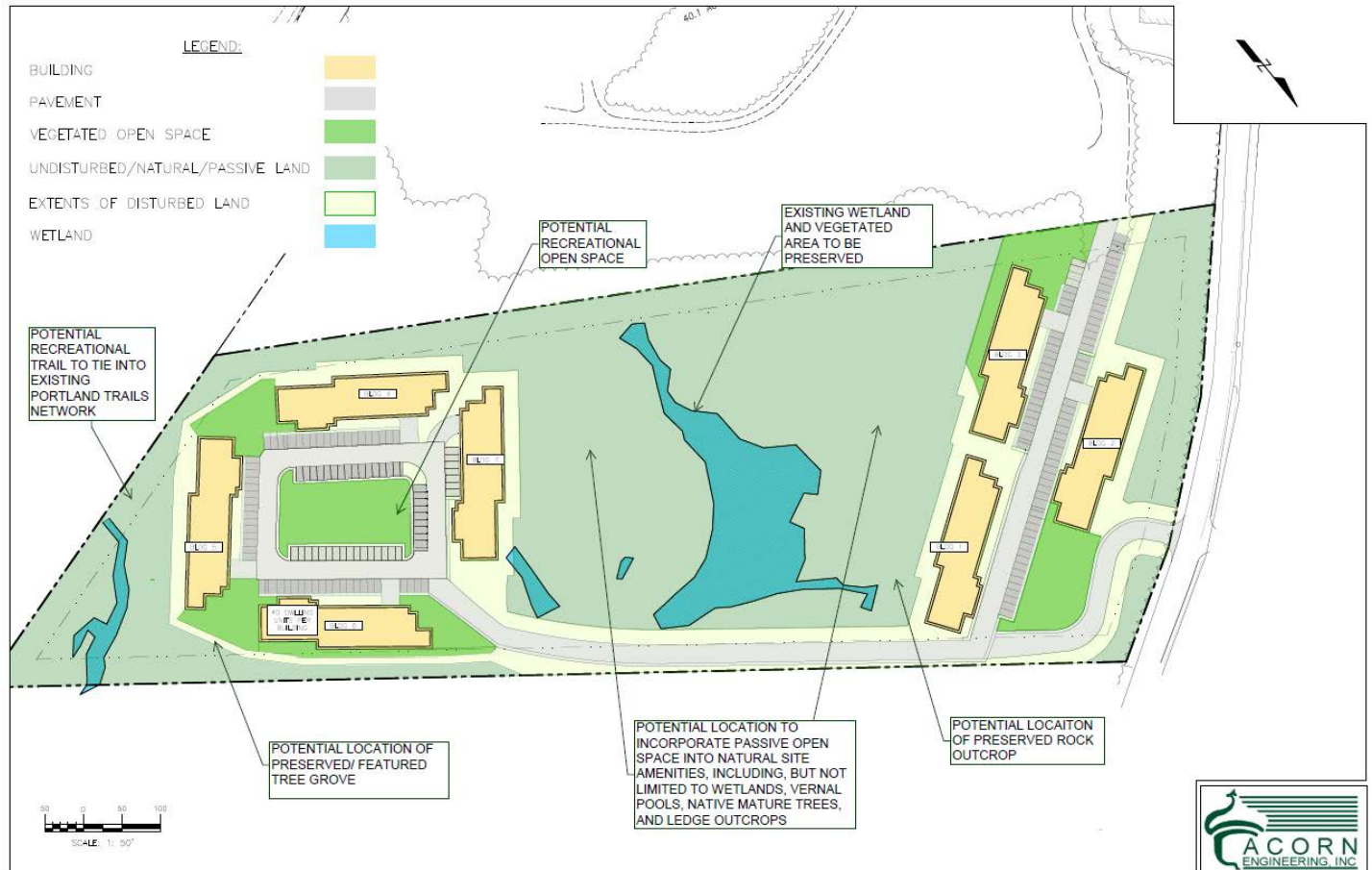


Figure A: Preliminary Conceptual Site Plan for R-5A Zone





Figure B: (900 Ocean Ave) Preservation of Existing Wetland and Vegetation, and potential incorporation into passive recreation opportunities (boardwalk, benches, etc.)



Figure C: (900 Ocean Avenue) Existing Vegetation and Rock Outcrop





Figure D: (900 Ocean Avenue) Existing Woods Trail



Figure E: Example of Wooded Recreational Trail that incorporates passive and active recreation opportunities into natural site amenities as previously described.
(Photo obtained online from Brownfield Maine Hiking Trails 4.20.23)



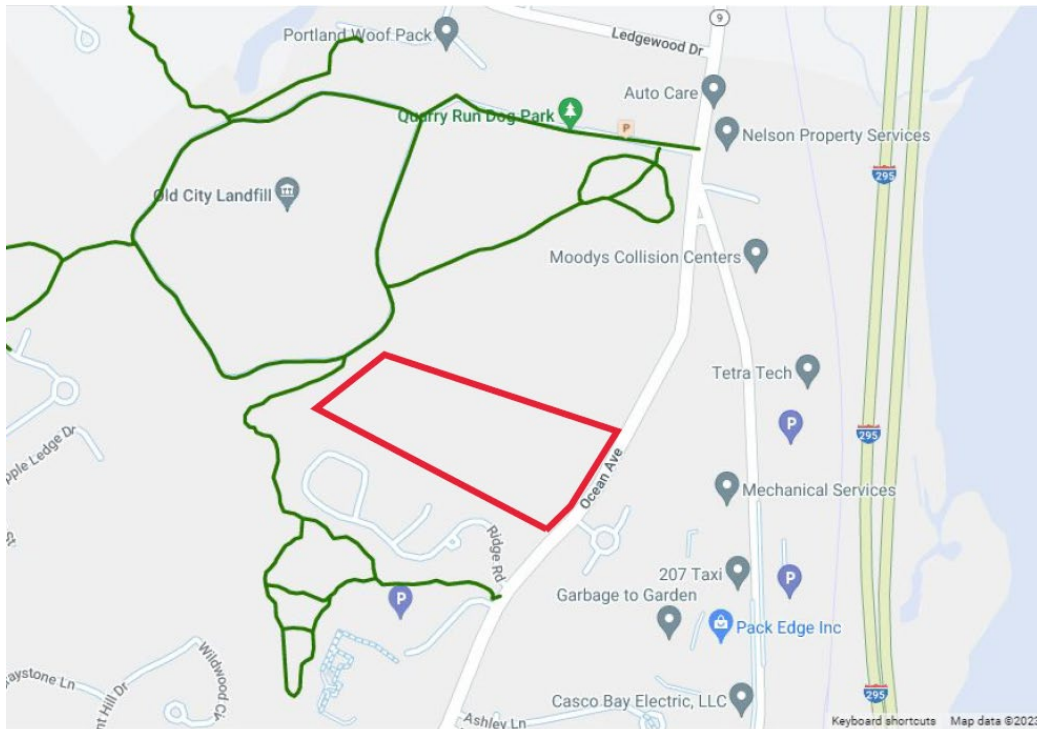
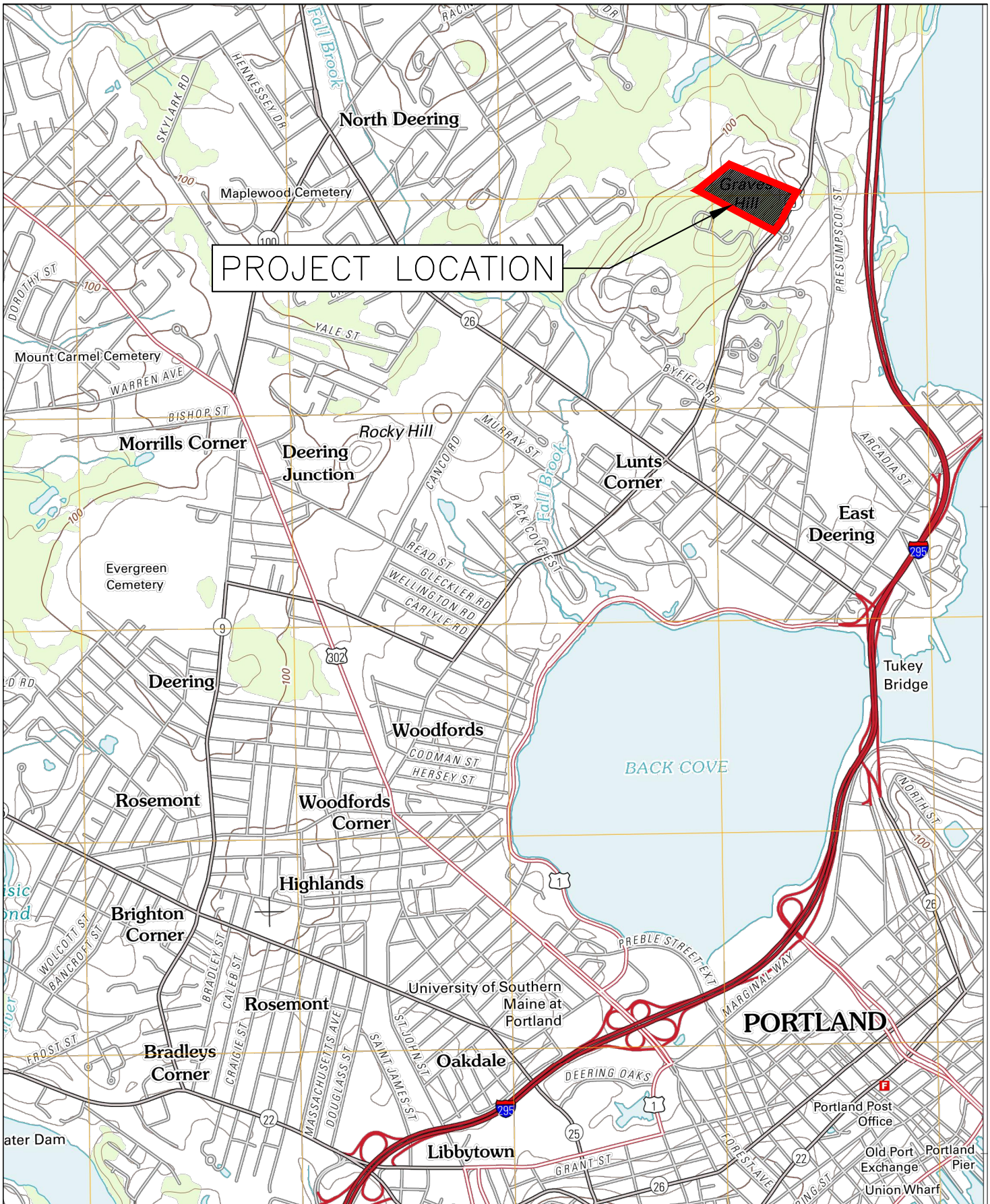


Figure F: Existing Portland Trails Map in relation to proposed project boundary line

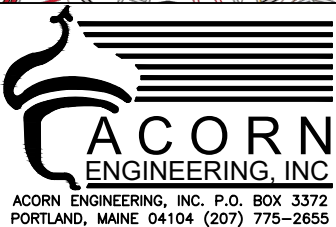




THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

DRAWING NO.
EX-01

FILE: 1190_CIVIL
JN: 1190.1
SCALE: AS NOTED
DESIGN BY: SJL
DRAWN BY: DNM
CHECKED BY: SJL



DRAWING NAME:
VICINITY MAP

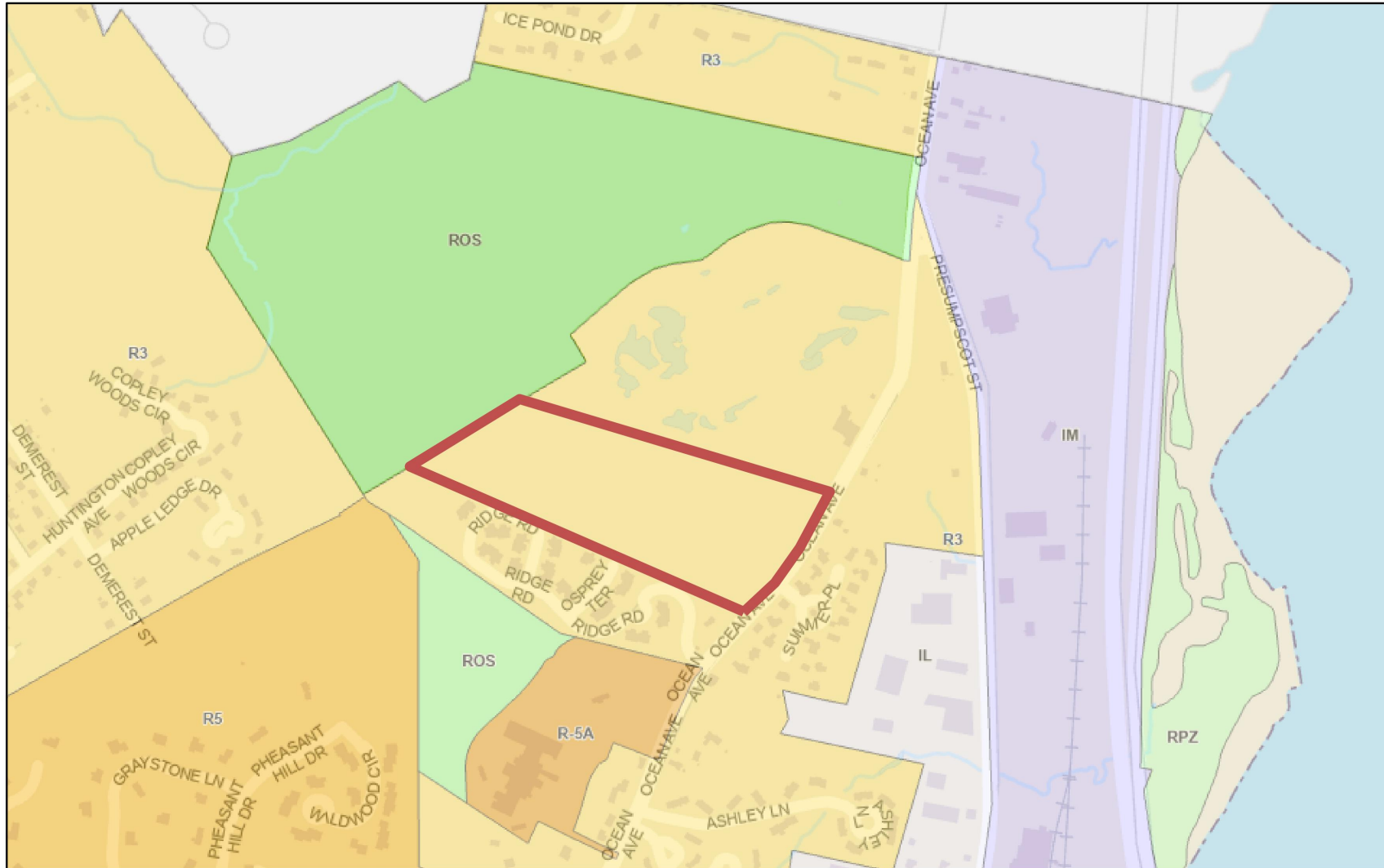
PROJECT NAME:
900 OCEAN AVENUE

CLIENT:
OCEAN AVENUE RESIDENTIAL LLC

ISSUED FOR	BY DATE
RESOURCE REVIEW	SIL 8/14/22
MAP AMENDMENT	SIL 1/16/23

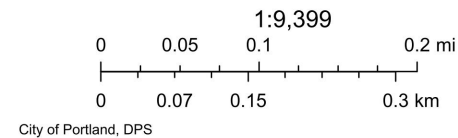
NOTES:
1. ZONING INFORMATION OBTAINED
FROM CITY OF PORTLAND ZONING
MAP. ADOPTED 12/28/22

ArcGIS Web Map



12/28/2022, 1:48:49 PM

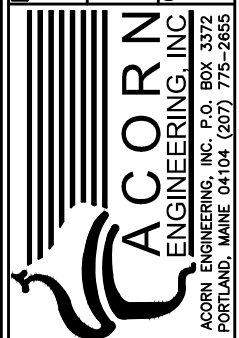
- | | | |
|--|--|---|
| — Override 1 | R5 Residential | IM Industrial - Moderate Impact |
| Zoning | R-5A Residential | RPZ Resource Protection |
| R3 Residential | IL Industrial - Low Impact | ROS Recreation Open Space |



ArcGIS Web AppBuilder
City of Portland, DPS |

ISSUED FOR	BY
MAP AMENDMENT	DATE
	1/6/23
	REV
	DATE

DRAWING NAME:	PROPOSED MAP AMENDMENT
PROJECT NAME:	900 OCEAN AVENUE, PORTLAND, ME
CLIENT:	OCEAN AVENUE RESIDENTIAL LLC



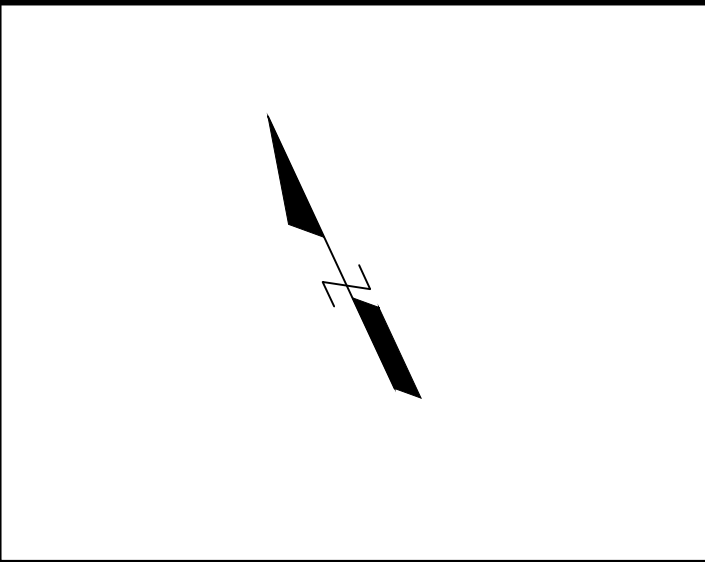
FILE:	1190.1
DATE:	1/6/23
JN:	1190.1
SCALE:	AS NOTED
DESIGN BY:	SJL
DRAWN BY:	DNM
CHECKED BY:	SJL

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

DRAWING NO.

EX-02

SPACE AND BULK STANDARDS		
	R-5A	PROPOSED
MIN. LOT AREA	2 AC	16.04 AC
MIN. STREET FRONTAGE	50 FT	607 FT
MIN. FRONT SETBACK	25 FT	70 FT
MIN. REAR SETBACK	25 FT	35 FT
MIN. SIDE SETBACK	5 FT	35 FT
MIN. BUILDING SETBACK FROM EXTERNAL SUBDIVISION PROPERTY LINES (BLDG. LENGTH >100FT)	35 FT	>35 FT
MAX. STRUCTURE HEIGHT	55 FT	TBD
MAX. LOT COVERAGE	30 %	< 30%
NET ALLOWABLE LAND AREA*	*	12.94 AC
MIN. NET LAND AREA PER DWELLING UNIT (1,600 SF)**	441	TBD
*NET LAND AREA DERIVED FROM LOT AREA MINUS THE SQUARE FOOTAGE OF ANY AREA WITH WETLAND COVERAGE OR SLOPES GREATER THAN 25%		
**INCLUDING THE 25% DENSITY BONUS		



Chuck NGrossman <chuckngrossman@gmail.com>

to planningboard

To Whom it May Concern:

My name is Charles Grossman and I live at 175 Ridge Road part of the Ocean Ridge Condo Association.

My comments/questions (focused on the Geology, Blasting and Environmental factors) for the Workshop on April 11th on the consideration for the requested zoning change at 900 Ocean Avenue from R-3 to R-5A.

**Comments/Questions for Workshop
Portland Planning Board
April 11th @ 4:30 p.m.
900 Ocean Avenue Proposed Rezoning from R-3 to R-5A**

This is an excerpt from Portland's Plan 2030, Housing - Local Goals: I don't believe that the proposed project checks off any of the goals in this statement.

"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."

Geology/Blasting/Environmental Survey/Site Plans

1. Geology – Graves Hill is a geologically unique place in Cumberland County and the State of Maine according to a Professor at USM. The whole area has been subjected to fault-type shearing that is reflected in the overall texture of the rock. The weaker rock in this case is the foliated metamorphic rocks that flank the mass of granite that makes up Graves Hill. You can see this in the steep grade of the entry drive into Ocean Ridge Condos. This is why the 13 buildings of Ocean Ridge were built on top of the mass of granite and not excavated into the mass. My question to the Planning Board is whether the plans have taken this into account and how would it affect the stability of the granite mass known as Graves Hill?
2. Blasting – I would like to raise the issue of blasting, and potential issues resulting therefrom. What are the regulations in place to limit any adverse effects of Blasting? Does the Planning Board require a project bond (in an adequate amount) in light of the blasting/fault lines and other safety concerns?
3. Environmental Survey – Has there been an Environmental Survey done? Has there been site consideration for the protection of the natural areas (Wetlands and Vernal Pools) and historic sites (Graves Hill)? Wetlands have been cited on Acorn's Powerpoint but some of the wetlands/vernal pools have not been included.
4. Site Plan - Is there an updated Site Plan? The proposed access road is over the top of Graves Hill. The proposed access road abuts the property line of Ocean Ridge Condo Association. Is the proposed access road outside of the legal buffer lines required?

Leslie Fuller <lfuller2@maine.rr.com>
to planning@portlandmaine.gov

Mar 16, 2023, 12:13:44 PM (3 days ago)



Hello,

I just returned from a neighborhood meeting held by Acorn Engineering regarding the proposal to change the zoning currently R-3 to R-5a for the parcel at 900 Ocean Avenue in Portland.

I live at 153 Ridge Road in Portland which will be directly impacted by the project. While I fully understand the property owners prerogative to develop the property I do not believe that 280 units and the traffic issues that would bring has a positive impact on this area.

One of the principals of the project was there along with the Engineer. I was disturbed by what I felt were rather evasive answers to questions. They stressed that their desire was to provide housing for "working people" but had no idea what the range of price points would be offered. I don't think anyone gets to the point of trying to change zoning without having some idea what their rate of return would be.

I wanted to stress that my opinion for the change in zoning is a resounding NO!

I look forward to the meeting on April 11th which I understand will be a zoom meeting. Can you please insure that interested parties receive the information to join in the meeting.

Wanted to share my thoughts, respectfully,
Leslie Fuller
153 RIDGE ROAD
Portland ME



Austen Davis <austentd@portlandmaine.gov>

900 Ocean Ave - Map Amendment

1 message

Ron Morris <remorris57@gmail.com>
To: austentd@portlandmaine.gov

Tue, Apr 4, 2023 at 5:58 PM

Mr. Davis,

My name is Ron Morris, President of the neighboring property, Ocean Ridge Condominium Association. I attended the informational meeting presented by Acorn Engineering on 3/15. Myself and my neighbors were quite shocked to hear about the magnitude of the proposed development. My association is planning to submit comments in opposition to this zone change request to the 4/11 Planning Board workshop.

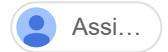
But I'm curious to know if you or members of the Board have walked the subject parcel. From Ocean Ave the land ascends to a high point on Graves Hill with vernal pools in between the rocky outcrops. A change to 5A, allowing as many as 450 housing units, would require a massive blasting & excavation of the site. Even the 107 units allowed under the current zone would be quite the project, sewer extension & traffic considerations. There is the Ashton Gardens complex to our south that provides a look into what is required to develop the site of this nature.

I know this is in the early stages of this process, but have you or the board walked this property?

Await your response, thank you!

Ron Morris
178 Ridge Rd.

Consideration of the Proposal to Rezone 900 Ocean Avenue from R-3 to R-5



0 views



Jean Mattimore <jeanmattimore@gmail.com> Apr 9, 2023, 8:28:15 PM (12 hours ago)



to planningboard@portlandmaine.gov

To Planning Board Members,

Thank you for your postcard clarifying that your meeting on April 11 to consider this proposal is a Board workshop to which we can listen. We have limited information about the actual development plan for the property if the rezoning is approved, but even what we've heard creates questions:

- The stone ridge on which Ocean Ridge is built would be central to construction on this site. The building that houses the condo unit I own is on a slab because of the nature of the ridge structure, as are others in this complex, and the potential that this natural structure might be compromised is of considerable concern. Will there be an assessment of that impact by geologists or other appropriate professionals early in your process?
- The blasting needed for construction further raises concerns about protection for possible damage to buildings or land on our property. Would there be a plan to address this?
- We haven't seen a detailed plan so don't know how close the roads and buildings could be to our property line for any new development. That is of concern, as would be any loss of existing green space that borders Ocean Ridge roads and buildings.
- A major concern is the increase in traffic that will be introduced onto Ocean Ave by the addition of new development. Ocean Ave has become a major roadway in recent years, and this new development would add substantial traffic given the increase in vehicles that come with increases in population. No doubt traffic studies will be done. Will those be available early in your considerations?

I appreciate the chance to send comments to you and look forward to following your consideration of the proposal.

Jean Mattimore

Kimberly MacDonald <kimberlykmacdonald@gmail.com>

8:45 AM (18 minutes ago)



to planningboard@portlandmaine.gov, Gary MacDonald

Hello Member of the Planning Board:

My name is Kimberly MacDonald and my husband Gary and I live at 183 Ridge Road, in the Ocean Ridge Condo Association next door to the proposed land area. We have lived here for 4 years, but have been residents of Portland for nearly 20 years.

I am writing to share my concerns about the proposed map amendment of 900 Ocean Ave, Portland from the current R3 to R-5A. I am a regular walker, with my dog both through the wooded area and also along Ocean Ave, both toward Falmouth and Washington Avenue. I have multiple concerns about this proposed change. For context I am not against further housing development in the Portland area and am acutely aware of the need for more affordable housing for families who work in the greater Portland area. It is clear that there has been huge burst of housing building across the area, including downtown. Most of the downtown area has provided high end as well as impractical solutions that are unattainable to most working class families, which leaves them looking further out for housing solutions. The need for housing for working class families is real.

It is unclear what building project will be proposed, but details were vague. The zoning change is obviously intended to allow for maximum development of the land area.

Geography/Blasting - the site will require significant blasting to develop any project. Both Ocean Ridge, and Summer Place as well as the small house below Ocean Ridge, are all particularly vulnerable to potential blasting. Foundations, pipes and other structural implications are huge. I realize there are regulations and protection protocols exist, but they are not enough to understand below ground and long term to foundations, pipes, etc. Last week I heard a neighbor off Ocean Ridge tell me how he had burst pipes around the holiday when a single house was under construction, when they blasted for foundation work. The land in question is basically a giant rock face and neighbors will be very vulnerable to damage with the needed multiple blastings to develop a site such as this.

Environment/Ecological

The proposed area is wooded and has numerous public trails as well as an abutting dog park which is used extensively by the public. Abundant wildlife exists in this small area - and has no doubt been pushed into this area as the land around it has been developed. Pushing the limits of development leaves the wildlife less and less places to "relocate" and also diminishes the beauty of the area, which is primarily single family homes. In addition, runoff is also an issue off the hill. During both rain storms and winter storms in that Ocean Avenue is at the bottom of the hill, water and ice has been frequently an issue. Destruction that further interrupts the natural flow off the hill will no doubt increase these issues.

Neighborhood

The neighborhood in question is primarily single family homes with some condo and apartment areas closer to Washington Avenue as well as an elderly complex next door. The condos and apartments are primarily built on the "flat" and not being developed into and over the top of a hill. The traffic flow is already an issue as Ocean Avenue is a connecting road between Falmouth and Portland. The speed limit on this road is 30 miles per hour. The speed at which people travel is generally 45-60 mph which creates an ongoing and daily danger. This is traffic that is both residential and business as the trucks and construction traffic that travel go also to Presumpscot Street. It begins early in the morning and continues through both morning and evening commutes. To add a significant additional flow of traffic to this road will have a negative impact, especially with only one proposed access road to Ocean Avenue.

With the elderly population next door and many neighbors who walk regularly, crossing Ocean Avenue can be risky at best. People do not even stop for the current cross walk at the bottom of both Ocean Ridge and Ashton Gardens.

I am not a "NIMBY" but certainly would like to see thoughtful development being considered across the city as there is a great need for housing for young families who we need and want to stay to support the positive growth of Portland. But haste must not be the major consideration when making plans that will affect the quality of the city for many years to come. Portland has always been grounded in being a wonderful place to live and host our many visitors. If we lose the charm, natural settings and beauty with careless development, it will ultimately fail us in the long run.

Sincerely,

Kimberly MacDonald

Mary Jo Cross <msgolbe@gmail.com>
to planningboard

We are writing regarding the proposed zone change at 900 Ocean Avenue, Portland, which is requesting a change from R-3 to R-5A. We attended the neighborhood meeting with the developer, who presented the documents that are also posted on your website. At the meeting, the developer stated that these were the minimum standards required to request a zone change. This requirement seems flawed since there does not appear to contain enough data to make a solid decision based on what we were shown.

For example, an in-depth traffic study and blasting plan would be a necessity. The parcel has very challenging geography and the amount of blasting to allow for the number of units that they are anticipated to build could be structurally devastating to the surrounding properties. Following the required guidelines to inspect abutting properties prior to blasting is probably not going to be adequate within this area due to the extraordinary amount of ledge and hillside involved. Many problems arise months, perhaps years, after the blasting has occurred and usually there is no recourse at that time.

The number of units that they are allowed to build in the current zone would be of some help in the current housing climate. However, the target audience who desperately need housing will not qualify whether there are 106 units or 280 units. The cost of private development is currently extremely expensive. This cost must be passed on to the buyers. This housing option could be another development for the demographic that is not the one that the city has to worry about trying to house. Simply put, this project will not be workforce housing because it is not feasible within the private development arena.

It seems premature to request such a drastic zoning change. Please do not recommend a zoning change to the city council without requiring more studies as to the feasibility and compatibility of this proposed development.

--

Best,
Mary Jo Cross and John Byron
184 Ridge Road, Portland

900 Ocean Avenue Project 0 views



Dennis Fuller <rdennis.fuller@gmail.com>

1:37 PM (14 minutes ago)



to planningboard@portlandmaine.gov

The concerns I have are as follows:

1: Being as the developer wants to add 250 plus homes that would be adding 250 additional vehicles, with most families now a days operating in the area of 2 vehicles per unit we're looking at 500 plus vehicles added to the community plus we're not considering, construction equipment/personnel laborers, delivery's, maintenance, friends and visitors. With that in mind.

When will we be provided with a Traffic impact study, (TIS), or a traffic impact analysis (TIA), that's been prepared by a qualified traffic engineer specialist, ([Professional Traffic Operations Engineer](#)(PTOE) and or Passenger car equivalent,(PCR)?

2: It was my understanding that when Ashton Gardens were under construction there were concerns that Ocean Ridge Association units had some problems in that develop.

Where will the Manganin gauges, or other gauges that measure the pressures caused by detonation be located and at what distance and position will they be placed?

3: Background

Ideally, the gaseous detonation products of explosives would consist of water (H₂O), carbon dioxide (CO₂), and nitrogen (N₂). Due to the kinetics of the chemical reaction, the detonation of explosives in a blasting operation also produces toxic nitrogen dioxide (NO₂), nitric oxide (NO), and carbon monoxide (CO) (ISEE, 1998). The concentrations Immediately Dangerous to Life or Health (IDLH) for NO₂, NO, and CO are 20, 100, and 1,200 ppm, respectively (NIOSH, 1994).

What are the effects of rock blasting?

The use of heavy machines and explosives in the blasting process can cause unwanted impacts such as **noise, air pollution, and soil vibrations** on surrounding communities (Bansah et al.Feb 23, 2021

Is Acorn Engineering, ie. 900 Ocean Avenue a good steward?

1. Take responsibility for your leadership role. ...
2. Take responsibility for your constituents. ...
3. Take responsibility for your organization and its actions. ...
4. Hold yourself and others accountable.

Leslie and Dennis Fuller
153 Ridge Road unit 42

Ron Hills <ronhills@gmail.com>
to planningboard@portlandmaine.gov

1:38 PM (14 minutes ago)



Dear Planning Board,

I attended the first meeting by the city engineer. It was pretty clear at that meeting that the owners have no intent to do their due diligence in good faith, stating multiple times that they "met the minimum disclosure required". They cited the current political climate/need for housing as justifying a rush-through approval process. Meetings are being scheduled during working hours so that few owners can attend.

1) It is outrageous that they aren't proposing to use the adjacent quarry, which they also own and want to reserve for a "rope course" because it would cost more to develop.

2) Instead their plan is to place a tall and large structure/parking over a steep grade (Graves Hill) and wetlands (some of which they have not circled on their map). This would have an obvious impact on wildlife and water runoff. They will have to clear nearly all trees and vegetation which they refuse to admit.

3) They are proposing a steep grade access road abutting our (ORCA property line) instead of making the investment to put a road through the quarry and spending to move the sewer line a little further.

4) They have proposed 1.1 parking spaces per unit, and mostly studio/ 1 bedroom apartments. This is clearly for their bottom line and does not help young families move to Portland to aid the economy.

5) The zone change (R3 to R-5A) and number of units proposed (280 units; 7 large buildings!) is not to scale or consistent with the existing neighborhood, and will negatively effect Ocean Ave traffic. It will decrease ORCA property values by removing the trees and building right next to our property line. If you can change a zone this quick without due diligence there's no point in having zones.

I work and cannot attend today's meeting.

Sincerely,

-Ron Hills
119 Ridge Rd.
Portland ME 04103



Review Criteria:

The proposed R-3 to R-5a Map Amendment located at 900 Ocean Avenue (ZN-002346-2023) was reviewed against Section 1.10 of the City of Portland Land Use Code. Please find below, comments from Planning & Urban Development Department staff and site plan peer-reviewers.

ZONING

- The CBL provided by the applicant is incorrect. The lead (main) CBL is 416A A002, with 417 A004 as the trail (subordinate) CBL.
- Please provide information on why the conceptual development cannot be achieved through a PRUD in the R-3 zone or a PRUD in the R-5 zone? *(In other words, why does it need to be rezoned to R-5a? The only nearby R-5a zone was set up for a congregate-care-facility, not a PRUD for housing. Nearby housing developments are either R-3 or R-5.)*

TRANSPORTATION

- No comments for the current submission.

LANDSCAPING & ENVIRONMENTAL QUALITY

- The City encourages the applicant to coordinate with Portland Trails when developing future plans for the site. There are numerous existing and planned trails in the vicinity of 900 Ocean Avenue operated by Portland Trails. Any residential development would benefit from connections to these trails.
- The City also encourages future coordination with city departments regarding tree and landscape preservation, wetlands, and the location of ledge and potential blasting sites.

STORMWATER & UTILITIES

- The City's existing gravity sewer line in Ocean Avenue terminates approximately 350 LF to the southwest of this proposed development site. DPW has concerns that the existing 8" sewer system will not have the capacity to serve a high density residential development of this nature without upgrades to the existing system. Approximately 1,850 linear feet of new 12" sewer line may be required to be installed from the proposed development site to Wellstone Drive if it's ultimately confirmed the existing system does not have the capacity to serve this development. These concerns have previously been expressed to the developer's engineer.

Memorandum
Planning and Urban Development Department



To: Chair Stanley & Members of the Planning Board
From: Austen Torres Davis
Date: April 7, 2023
Re: 900 Ocean Avenue Rezoning from R-3 to R-5a
Project ID: ZN-002346-2023
CBL: 416A A002001
Meeting Date: April 11, 2023



Figure 1: Aerial Image of 900 Ocean Avenue Showing Property Line.

I. INTRODUCTION

Ocean Avenue Residential, LLC. is seeking a zoning map amendment to change an existing R-3 Residential zone to an R-5a Residential zone on an approximately 16-acre site located at 900 Ocean Avenue (CBL: 416A A002001) in the North Deering neighborhood. This action is being sought to facilitate the development of a planned residential unit development (PRUD) at this location. The applicant is seeking this map-amendment as the R-5a zone permits greater residential density for PRUDs than the R-3 zone, and would allow for more concentrated density in certain locations on-site in order to reduce impacts on significant natural features such as wetlands.

The Planning and Urban Development Department mailed 103 notices advertising this meeting to interested parties and property owners within 500 feet of the site. The legal advertisement ran in April 1 and 4, 2023 editions of the *Portland Press Herald*. Additionally, the applicant held a neighborhood meeting on March 15th, 2023.

Applicant: Ocean Avenue Residential, LLC.
Applicant Representative: Sam Lebel; Acorn Engineering

II. PROJECT DATA

Existing Zoning	R-3 – Residential
Proposed Zoning	R-5a – Residential
Existing Use	Undeveloped Land
Proposed Use	Planned Residential Unit Development (PRUD)

III. BACKGROUND & EXISTING CONDITIONS

The subject property is comprised of two undeveloped parcels at 900 Ocean Avenue, consisting of woodland and wetland areas. Graves Hill, an area of comparatively higher elevation than the surrounding neighborhood, is located near the center of 900 Ocean Avenue. Overall the site is relatively flat, gradually rising in elevation from the edges toward the center of the site, with significant grade changes at the western, northern, and eastern edges of the property. The site is adjacent to a defunct quarry to the northeast and the Old City Landfill to the northwest. Along Ocean Avenue there are a number of other PRUD developments that are similar in scale to the conceptual development proposal for this site.

The site is within and bordered on all sides by the R-3 residential zone. Other nearby zones include the R-5 and R-5a Residential along portions of Ocean Avenue, as well as the I-M Moderate Impact Industrial zone along Presumpscot Street.

The nearest public transportation bus routes are the GP Metro routes 9A and 9B, approximately 0.7 miles south of the site along Washington Avenue. A sidewalk exists between Summer Place and Washington Avenue along the east side of Ocean Avenue.



Figure 2: 900 Ocean Avenue in Neighborhood Context



Figure 3: 900 Ocean Avenue Conceptual PRUD Site Plan Showing Interior Wetlands

IV. CONCEPTUAL DEVELOPMENT PROPOSAL

The proposed rezoning from R-3 to R-5a would facilitate the development of a multi-unit PRUD residential development and associated parking. The intent of this rezoning is to allow higher residential density within each building so that the applicant can concentrate development away from the most environmentally sensitive areas on-site. The conceptual development proposal currently calls for a single, two-way access driveway that would connect to two clusters of multi-family structures and surface parking.

The development contemplated in this application is conceptual at this stage and no site plan application has yet been submitted. The current 900 Ocean Avenue map amendment application package submitted by the applicant includes a conceptual plan showing the potential development that this map amendment would facilitate. (See attached Plan 3). Should the proposed rezoning be approved by the City Council, a site plan application, addressing all applicable land use standards, would be required to be submitted by the applicant to facilitate the development of this project.

V. PROPOSED ZONING MAP AMENDMENT

Ocean Avenue Residential, LLC. proposes a zoning map amendment to change their 900 Ocean Avenue property from an R-3 Residential zone to an R-5a Residential zone (Compare Figures 4 and 5).

In addition to the applicant's request, Planning staff recommends that the Planning Board consider expanding the zoning map amendment to include Parcel 416A A003034, which is currently improved with an existing 46-unit PRUD, the Ocean Ridge Condominium Development, which was approved by the Planning Board on August 14, 2001 and completed construction in 2006 (see Figure 6).

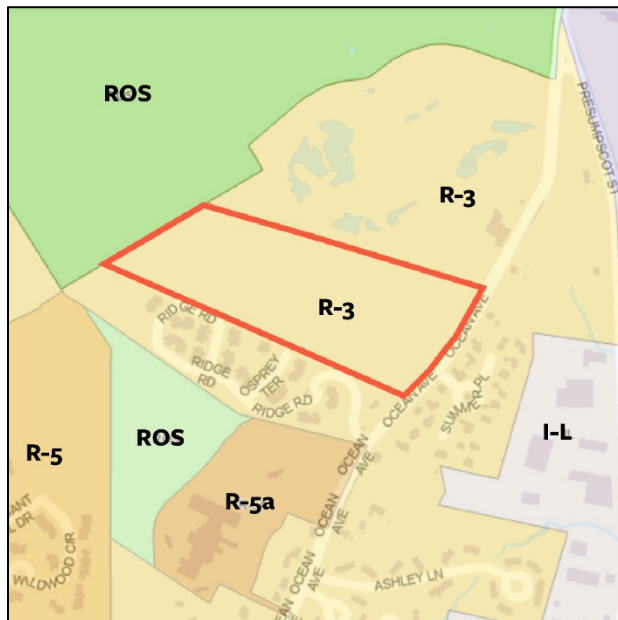


Figure 4: 900 Ocean Avenue Existing Zoning Context

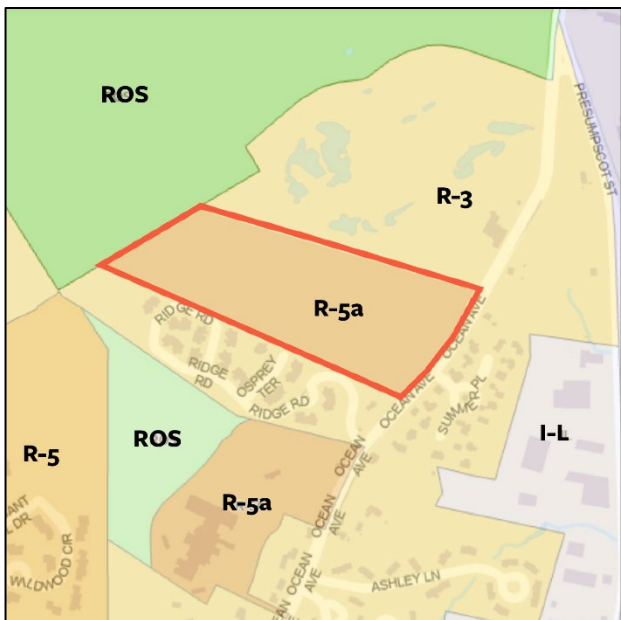


Figure 5: Applicant Proposed Map Amendment

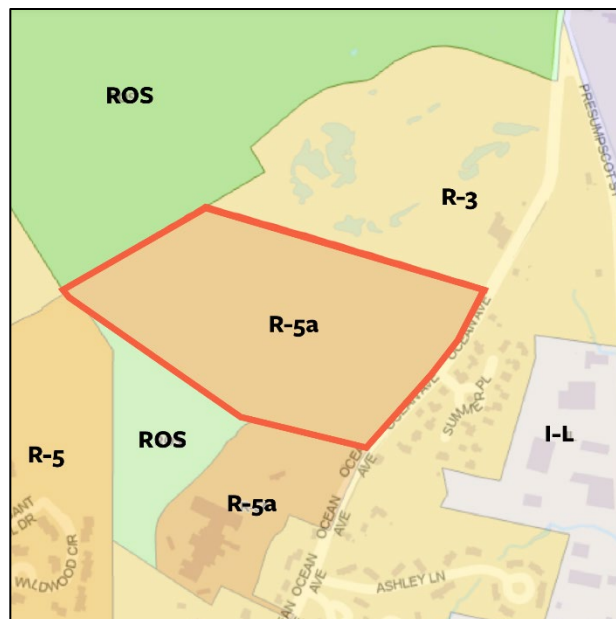


Figure 6: Staff-Proposed Map Amendment

VI. ZONING ANALYSIS

Existing Versus Proposed Zoning: R-3 Residential, and R-5a Residential

The R-3 is a low to moderate density residential zone characterized by a mixture of single-family homes, certain institutional uses such as schools, care facilities and places of assembly, and PRUDs. The R-3 zone is mapped in locations throughout the city, though primarily off-peninsula.

The R-3 and R-5a zones allow for a similar range of uses, though the R-3 does not allow post-secondary schools, lodging houses, special needs independent dwelling units, congregate care facilities, multiplexes, Two-family dwellings or Multi-family construction. PRUDs are allowed in both the R-3 and R-5a zones, though the R-3 zone has more restrictive dimensional requirements, and permits lower residential density than the R-5a zone.

The purpose of the R-3 Residential zone is to:

“Provide for medium-density residential development characterized by single-family homes on individual lots and also to provide for planned residential unit developments on substantially sized parcels.”

Whereas the purpose of the R-5a Residential zone is:

“To provide for moderate-density residential development in off-peninsula locations that can provide a unique residential living experience with a high degree of natural site amenities; and to provide areas of the city in the general proximity of the peninsula that have the capability for adequate municipal services, including traffic corridors with adequate traffic capacity, that can appropriately accommodate a more intensive use of land than other lower-density zoned land and be compatible with surrounding neighborhoods; and to increase affordable housing opportunities in off-peninsula locations by providing a moderate-density zone..”

Table 1 provides a comparison of the permitted uses between existing and proposed zone. Uses marked with a ‘P’, are permitted uses in the zone. A ‘C’ indicates a conditional use, otherwise uses are not permitted.

TABLE 1: PERMITTED AND CONDITIONAL USES IN R-3 and R-5a Residential Zones		R-3	R-5a
Residential	Single-family dwellings	P	P
	Two-family dwellings		P
	Multi-family dwellings	C	P
	Multiplex		P
	Congregate care facilities		P
	Handicapped family units	P	P
	Planned Residential Unit Developments	P	P
	Special needs independent dwelling units		P
	Lodging houses		C
	Sheltered care group homes	C	C
Instituti	Elementary, middle, and secondary schools	C	C
	Governmental uses	P	P
	Hospitals	C	C

	Intermediate care facilities	C	P
	Long-term and extended care facilities	C	P
	Places of assembly (<10,000 SF)	C	C
	Places of assembly (>10,000 SF)	C	C
	Preschool facilities	C	C
	Post-secondary schools	C	C
Commercial & Other	Bed and breakfasts		
	General offices (<5,000 SF)		
	Hostels		
	Agriculture		
	Cemeteries		
	Off-street Parking	C	C
	Parks and open spaces	P	P
	Raising of domesticated animals		
	Solar energy system (minor)	P	P
	Utility Substations	C	C

Dimensional Requirement Summary:

As the PRUD constitutes the most intensive form of development permitted in either zone, this analysis is limited to the discussion of the PRUD use.

The R-5a PRUD standards limits residential density by requiring a minimum of 1,600 square feet of net land area per dwelling unit and further requires a minimum lot area of two acres. There is no limit on the total amount of units per building and no restrictions on building length. Buildings with a length of 100 feet or less are required to be setback a minimum of 25 feet from external subdivision property lines while buildings with a building length greater than 100 feet are required to be setback 35 feet. The maximum height permitted in the R-5a zone for a PRUD is 55 feet. The maximum lot coverage permitted is 30 percent. A minimum of 200 square feet of common recreation space area per dwelling unit is also required.

The R-3 PRUD standards limit residential density by requiring a minimum of 6,500 square feet of net land area per dwelling unit and further requires a minimum lot area of three acres. The maximum number of units per building on a site less than five acres is two and the maximum number of units per building on a site greater than five acres is six. Building length is limited to a maximum of 100 feet without a garage and 140 feet with garages. Buildings with three or fewer units are required to be setback a minimum of 25 feet from external subdivision property lines, while buildings with four or more units are required to be setback a minimum of 35 feet. The minimum distance between detached PRUD dwelling units is 16 feet. The maximum height in the R-3 zone for a PRUD is 35 feet. A minimum of 300 square feet of common recreation space area per dwelling unit is required.

Any PRUD development that includes 50 percent of the units as low-income or workforce units for rent or sale is eligible for the following dimensional bonuses:

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 open space requirements.
5. Minimum recreation open space area is reduced to 200 square feet per dwelling unit of common area designed for recreational purposes by residents. Minimum contiguous size and setbacks do not apply and shall be set through site plan review.

For both the R-3 and R-5a zones one off-street parking space per single-, two-, or multi-family unit is required and sites that are within a ¼ mile of fixed route transit may be exempt from providing parking as specified in Table 19-B of the Land Use Code.

Table 2 provides a comparison of the dimensional requirements between existing and proposed zone.

TABLE 2: PRUD Zoning Requirements by Use	R-3	R-5a
Lot area (min.)	3 acres	2 acres
Net land area per dwelling unit (min.)	6,500 sq. ft.	1,600 sq. ft.
Units per building (max.)	PRUD <5 ac.: 2 PRUD > 5 ac.: 6	
Average number of units per building (max.)	PRUD >5 ac.: 5	
Structure height (max.)	35 ft.	55 ft.
Building length (max.)	100 ft. without garages; 140 ft. with internal garages	N/A
Length of accessory garage structure (max.)	N/A	N/A
Building setback from external subdivision property lines (min.)	3 or fewer D.U. in building: 25 ft.; 4 or more D.U. in building: 35 ft.	Bldg. Length 100 ft. or less: 25 ft.; Bldg. Length >100 ft.: 35 ft.
Distance between detached PRUD dwelling units (min.)	16 ft.	N/A
Common recreation open space area (min.)	300 SF/D.U.	200 SF/D.U.
Habitable space elevation	No habitable space in a PRUD shall be below grade, except basements that are a part of and below above-ground units	

VII. COMPREHENSIVE PLAN ANALYSIS

Portland's Plan 2030

Comprehensive Plan goals and policies (state and local) relevant to the proposed zoning map amendment are included below. In the provided analysis the applicant lays out various portions of Portland's Plan 2030 that their proposal adheres to.

Several aspects of the proposed map amendment to R-5a Residential are consistent with the Comprehensive Plan. The Comprehensive Plan highlights the importance of diversifying housing types and increasing the supply of housing city-wide. The proposed map amendment would facilitate a residential development that would provide housing and provide opportunities for people who work Portland to have the opportunity to live in Portland.



Figure 4: Visions of Portland's Plan 2030

Relevant Comprehensive Plan goals have been excerpted below:

Housing:

- Increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences and financial capabilities of all Portland residents.
- Pursue policies to enable people who work in Portland to have the option to live in Portland.
- Encourage quality, sustainable design in new housing development.
- State Goal: To encourage and promote affordable decent, housing opportunities for all Maine citizens.
- Evaluate whether current zoning allows for new development consistent with historic patterns of form, density, and/or use, as whether it allows for priority in growth areas.

VIII. PUBLIC COMMENT

As of the writing of this memo three public comments have been received, all from nearby residents in opposition to this map amendment. Public comments in opposition were largely centered on potential environmental impacts, including to wetlands and to rocky outcroppings requiring blasting.

A neighborhood meeting was held by the applicant March 15th, 2023, with attendance and minutes forthcoming.

IX. NEXT STEPS

- Incorporate feedback from Staff and Planning Board
- Return to Planning Board for future meeting
- Forward recommendation to City Council for consideration

X. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Staff Review Comments

APPLICANT'S SUBMITTAL

- A. Cover Letter
- B. Map Amendment Checklist
- C. Right, Title, and Interest
- D. Neighborhood Meeting Invite

PLANS

- Plan 1. 900 Ocean Avenue Vicinity Map
Plan 2. Proposed Map Amendment
Plan 3. Conceptual Site Plan

PUBLIC COMMENT

- Pc1. Leslie Fuller
Pc2. Ron Morris
Pc3. Chuck Grossman