

CITY OF PORTLAND, MAINE

PLANNING BOARD



Sean Dundon, Chair
Brandon Mazer, Vice Chair
David Eaton
David Silk
Austin Smith
Maggie Stanley
Lisa Whited

AGENDA PORTLAND PLANNING BOARD MEETING

The Portland Planning Board will hold a meeting on Tuesday, January 22, 2019, Room 209, 2nd Floor, City Hall, 389 Congress Street. **Public comments will be taken for each item on the agenda during the estimated allotted time and written comments should be submitted to planningboard@portlandmaine.gov.**

WORKSHOP - 4:30 PM

- i. Zoning Text Amendment to WCZ (Waterfront Central Zone), Elimination of Conditional Rezoning, City of Portland, Applicant. (4:30 - 6:30 p.m. estimated time) The Planning Board will hold a workshop on the proposed text amendments to update to Section 14-311 based on the Comprehensive Plan to prohibit conditional or contract zones in the Waterfront Central Zone (WCZ).

New public comment attached.

PUBLIC HEARING - 7:00 PM

1. **ROLL CALL AND DECLARATION OF QUORUM**
2. **COMMUNICATION AND REPORTS**
3. **REPORT OF ATTENDANCE AT THE MEETING HELD ON JANUARY 8, 2019**
Workshop: Dundon, Eaton, Mazer, Silk, Smith and Stanley present. Whited absent.
Public Hearing: Dundon, Eaton, Mazer, Silk, Smith and Stanley present. Whited absent.
4. **REPORTS OF DECISIONS AT THE MEETING HELD ON JANUARY 8, 2019**
 - i. Election of Officers Stanley moved and Eaton seconded a motion to have Sean Dundon serve as Chair and Brandon Mazer serve as Vice Chair. Vote: 6-0, Whited absent.

- ii. Level III Site Plan; 100 Fore Street; 100 Fore Street, LLC., Applicant. Mazer moved and Stanley seconded a motion to approve the conditional use application for structured parking in the B-6 zone. Vote: 6-0, Whited absent. Mazer moved and Stanley seconded a motion to grant a waiver of the technical standard to allow for a driveway separation of 33 feet for the P2 entrance from Fore Street. Vote: 6-0, Whited absent. Mazer moved and Stanley seconded a motion to grant a waiver of the Chapter 500 flooding standard to allow the stormwater discharge to go directly to a large body of water (Fore River). Vote: 6-0 Whited absent. Mazer moved and Stanley seconded a motion to grant a waiver of the requirement for first floor retail space along the ground floor of the building frontage and reserves space not dedicated to active uses for future conversion. Vote: 6-0, Whited absent. Mazer moved and Stanley seconded a motion to approve the Level III site plan application with 17 conditions of approval, as amended. The amendments added condition 9 for the applicant to submit a plan for left turn restrictions and to address pedestrian safety at the B2 ramp, for review and approval, and the post occupancy monitoring was extended to 5 years. Vote: 6-0, Whited absent.
- iii. Level III Site Plan; 250 Riverside Industrial Parkway; Two Eisenhower Drive, LLC., Applicant. Mazer moved and Stanley seconded a motion to find that 2 criteria for the curb waiver are met and to grant the waiver. Vote: 6-0, Whited absent. Mazer moved and Stanley seconded a motion to approve the Level III site plan application and the Site Location of Development review (delegated authority) with 15 conditions of approval, as amended. The amendments added the wetland areas for protection in conditions 8 and 15. Vote: 6-0, Whited absent.

5. NEW BUSINESS

- i. Cultural Plan Update, Creative Portland, Applicant. (7:00 - 7:30 p.m. estimated time) The Planning Board will hold a public hearing on the Cultural Plan Update of 2018: A Living Action Plan. The Cultural Plan Update is presented by Creative Portland as an update to the adopted City plan, Celebrating Community: A Cultural Plan for Portland, Maine (2008). The Plan is intended to provide a vision and plan for the creative economy in Portland and the region.
- ii. Zoning Text Amendments to B-2, B-2b and B-2c, Drive-throughs in buildings with upper floor residential uses; City of Portland, Applicant. (7:30 - 8:15 p.m. estimated time) The Planning Board will hold a public hearing on proposed text amendments to the B-2, B-2b and B-2c zones to revise the use table (Sec. 14-182) and the conditional use standards (Sec. 14-183). The proposal is to require all drive-throughs to be a conditional use and only allowed in buildings with 3 or more stories and upper floor residential uses.

6. EVENING WORKSHOP - IMMEDIATELY FOLLOWING THE PUBLIC HEARING

- i. Level III Site Plan; 56 Milliken Street; Jeff Witherell, representing Plymouth Industrial REIT, Inc., Applicant. (8:15 p.m. estimated time) The Planning Board will hold an evening workshop on a proposed 72,000 sf warehouse at 56 Milliken Street. The warehouse is proposed adjacent to an existing 200,035 sf warehouse, which will remain. Access is currently from Milliken Street and a second access is proposed off of Riverside Industrial Parkway. A total of 2.98 acres of impervious surface area will be added to the development site. The project is in the Industrial IM Zone and will be reviewed under Portland's Site Plan Standards and under the delegated review for the Site Location of Development Act.



Memorandum

Planning and Urban Development Department

Planning Division

To: Sean Dundon, Chair, and Members of the Portland Planning Board
From: Matthew Grooms, Planner
Date: January 18, 2019
Re: WCZ Text Amendment – Prohibit Contract and Conditional Rezoning
Meeting Date: January 22, 2018

I. INTRODUCTION

In December, 2018, the Portland City Council enacted a six-month moratorium on non-marine development within the Waterfront Central Zone (WCZ). This moratorium is designed to provide time for stakeholders to develop new thematic plans, financing strategies and regulations to protect the viability of water-dependent and marine uses along Portland's waterfront. The City is seeking now to engage with the various stakeholders to first better understand and then address issues. This process is being undertaken through a series of bi-weekly meetings between City officials, representatives of Portland's working waterfront, and members of the public, who compose the Waterfront Working Group, (see the link for more information <https://www.portlandmaine.gov/2411/Waterfront-Working-Group>).



Figure 1: View demonstrating unique marine/non-marine composition of Maine Wharf

Following the initial meeting held on January 3, 2019, members of the group suggested to City staff that a major source of concern was the conditional/contract rezoning section of the WCZ, which was perceived to have facilitated the hotel development proposal at Fisherman's Wharf. This proposal has been met with much trepidation among stakeholders due to the anticipated impacts that would result from additional traffic, pedestrian activity, and changes in character to the zone. In response to these concerns, the City is proposing to eliminate the contract and conditional rezoning section of the WCZ, thereby prohibiting property owners from seeking a contract or conditional rezoning for properties located within this zone.

Notice of this workshop appeared in the Portland Press Herald on January 15th and 16th 2019, and notices were distributed electronically to the interested citizen list. At the time of the writing of this memo, no public comments were received.

II. BACKGROUND

A. Overview

The Waterfront Central Zone (WCZ), perhaps the most iconic area of Portland's working waterfront, was created to protect and nurture water-dependent and marine-related uses while leveraging certain compatible non-marine uses for necessary investment of marine infrastructure. This hierarchy, implemented through a variety of land-use control measures, translates into a highly unique mixture of complementary though disparate uses within a small geographic area, transitioning from predominantly commercial and marine-related uses along the western edge (landward side) of the zone, to predominantly water-dependent uses along the eastern edge (seaward side), with some exceptions. Extending from Deake's Wharf in the south to just past Maine Wharf in the north, the zone consists of 13 separate, mostly privately-owned wharves, with an extensive array of uses including; retail and restaurants, marine-related tourism, residential, marine and non-marine offices, institutional, berthing for both recreational and commercial fishing and lobstering vessels and seafood processing. While not an exhaustive list, these uses demonstrate the unique challenges faced by users of this zone, in that all such uses are competing for adequate water access (either direct or visual) and vying for limited real-estate opportunities. This challenge is exacerbated by the different market realities for these industries, especially so as tourism in Portland continues to grow and with it, demand for recreational waterfront access.

B. Development Standards

As currently written, the WCZ establishes a regulatory balance between uses through an array of development standards including performance and more specific non-marine use standards.

Performance standards, which apply to all uses, are intended to limit nuisance/negative

externalities among uses, and range from general performance standards such as lighting, odor and noise, to more marine-specific standards, such as filling in of berthing areas and utility of piers. In all, the WCZ contains seventeen (17) performance standards, listed under Section 14-311(d).

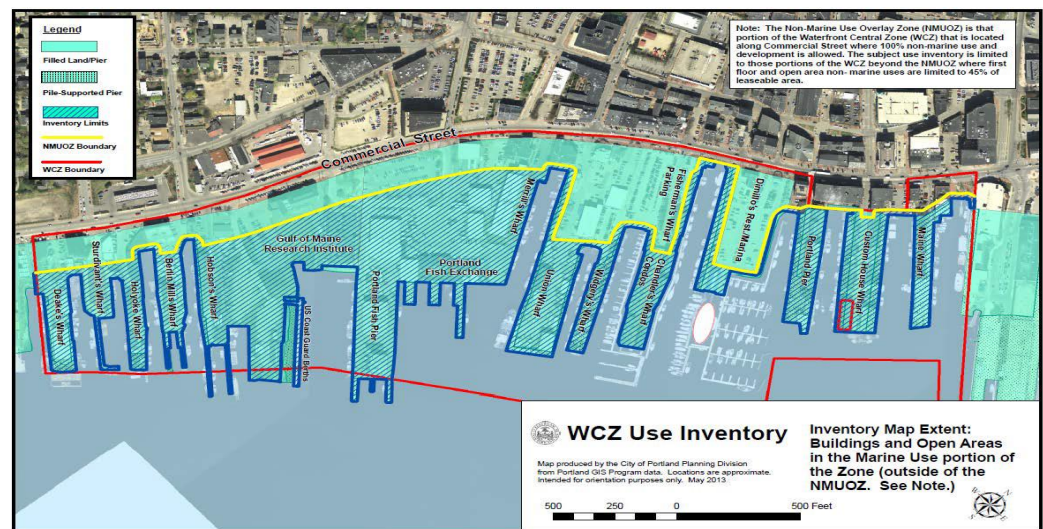


Figure 2: Non-Marine Use Overlay Zone

Non-Marine use standards, as their name would suggest, only apply to non-marine uses (identified as such in the permitted use section, 14-307(b)) and are dependent upon the location of that use within the zone. Regarding non-marine uses, the zone is geographically split into two parts; the first, being the Non-Marine Use Overlay Zone (NMUOZ), which spans the width of the zone and occupies the landward side of the zone along Commercial Street, as well as some larger surface parking areas extending into Union Wharf, Widgery Wharf, Chandler’s Wharf and Long Wharf. Generally the NMUOZ extends one hundred fifty (150) feet south of the Commercial Street right-of-way though no closer than twenty-five (25) feet from the average high tide line. Between Union Wharf and Dimillo’s Pier, the zone extends five hundred (500) feet south of the Commercial Street right-of-way. When the zone was amended in 2010, it was well-understood that the Old Port district (which consists largely of retail and restaurants popular among tourists) extended across Commercial Street and occupied significant real-estate within the zone. To reconcile this fact, and leverage the investment potential of such users, the City adopted the NMUOZ as part of the 2010 zoning amendment, which includes three standards aimed at facilitating an effective transition from non-marine to marine use within the zone.

Development Standards: Non-Marine Use Overlay Zone (NMUOZ)		
Vessel Access	Development Disposition	Marine Infrastructure Investment
Non-marine uses not to disrupt or block access to vessel berthing	- Lots with 75 feet of frontage or more along Commercial Street: Front façade of building must be no more than 35 feet from ROW, and front façade and pedestrian entrance oriented towards Commercial Street - Exemptions: - Frontage less than 75 feet - Change of use within existing building - Building addition of less than 5,000 square feet.	- Non-marine development valued at > \$250,000 required to provide marine investment totaling no less than 5% of total project cost. - Improvement may be direct, meaning; dredging, pile replacement, replacement decking, etc... - Financial contribution to City’s Waterfront Loan and Investment Fund

Non-marine uses proposed outside of the NMUOZ are subject to a separate set of standards, targeted towards maintaining a majority of the available ground-floor leasable space and undeveloped land area for marine uses, with a minimum requirement of 55% marine. This section of the ordinance also requires that property owners prioritize the leasing of vacant ground-floor space for marine users while reserving property immediate adjacent to piers and bulkheads for marine uses.

B. Contract or Conditional Rezoning Standards

Unusual within the City of Portland’s zoning code, the WCZ contains a list of standards to be met for development proposals in order to be considered eligible for a contract or conditional rezoning. Across Portland, property owners are entitled to seek either a map amendment for their property (changing their property from one established zone to another), a text amendment to a particular zone (to alter regulations governing a zone) or a contract/conditional rezoning agreement, which is an individualized agreement between the City and property owner, wherein a new zone is created with its own list of regulations and geographic boundary subject to the standards listed under Section 14-62 ‘Conditions and Restrictions’ listed below. At present, more than 60 such zones are in existence.

Section 14-62 - Conditions and Restrictions

- a. Limitations on the number and types of uses permitted
- b. Restrictions on the scale and density of development
- c. Specifications for the design and layout of buildings and other improvements
- d. Schedules for commencement and completion of construction
- e. Performance guarantees securing completion and maintenance of improvements, and guarantees against defects
- f. Preservation of open space and buffers, and protection of natural areas and historic sites
- g. Contributions toward the provision of municipal services required by the development
- h. Provisions for enforcement and remedies for breach of any condition or restriction.

In the WCZ, a property owner seeking a contract or conditional rezoning must first demonstrate compliance with the contract or conditional rezoning standards contained within the zone. This is the only zone to contain such standards that must be met prior to being considered eligible for a contract or conditional rezoning.

Section 14-311(c) contains nine (9) standards geared specifically towards proposals deviating from the dimensional standards for the zone, listed under Section 14-310, and/or permitted uses list, Section 14-307 and 14-308. These standards share many similarities with the non-marine and performance standards, and are largely concerned with maintaining water access for water-dependent users, ensuring that requisite marine investment by non-marine users is not avoided, and ensuring contextuality of a proposed project with permitted uses as it relates to traffic impacts and protection of water-dependent uses. A complete list of these standards may be seen below under the section, Proposed Text Amendments.

Difference Between Contract/Conditional Rezonings and Conditional Uses	
Contract/Conditional Rezoning	Conditional Use
Time intensive negotiation process wherein a new ‘site specific’ zoning district is agreed to between Property Owner and	A conditional use is a use that is permitted by-right so long as zone-specific and general conditional use

City • WCZ is unique in that it provides an extra step in the process, a requirement that certain standards be met before a proposal is considered eligible • City Council must find the proposed contract/conditional rezoning to be consistent with the Comprehensive Plan	standards are being met. • A conditional use is reviewed by either the Planning Board or ZBA and is not considered by City Council.
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C. Update on Contract and Conditional Rezoning

In recent years, the City has made a conscientious effort to work with property owners and avoid the creation of new contract or conditional zones. While not an official policy, the City recognizes that such zones are often too prescriptive (being based upon a concept project) and therefore often lack the flexibility required of a regulatory framework for a wider variety of project types. With the adoption of a new comprehensive plan in 2017, and an on-going effort to rewrite the city's land use code to be more streamlined, the City is committed to implementing policies as identified in that plan through existing zoning, with revisions as necessary. The end goal would be a document easier to work with, less redundant and/or conflicting and catered specifically towards facilitating Portland's vision and goals.

III. PROPOSED TEXT AMENDMENTS

As stated in the previous section, the City is actively working to discourage new contract and conditional zones. This holds particularly true for property located within the WCZ, given the zone's unique hierarchy of uses and its iconic image as the face of Portland's working waterfront, achieved in large part through the existing framework of performance standards, conditional use standards and non-marine development standards.

The contract and conditional rezoning standards are intended as an extra measure to ensure compatibility between proposed contract zones and development permitted under the WCZ. In practice however, there has been much confusion regarding this section. While intended as an extra layer of oversight it has been misunderstood as a baked-in means of circumventing the zone's use and dimensional standards. This confusion led to a proposal for a hotel at Fisherman's Wharf, a use specifically identified as a prohibited use within the WCZ. (See Attachments 3 and 5 for more information)

In response to concerns from the public and waterfront stakeholders, the City is proposing the following text amendment, that would prohibit contract and conditional rezonings within the WCZ on the basis of the City's comprehensive plan and the zone's highly unique characteristics as a hierarchically based mixed-use working waterfront, a defining feature of the City's brand and key to its future.

A. Draft Text (Attachment 1)

Sec. 14-311. Development standards.

(C) 1. Purpose: This section is intended to accomplish goals from Portland's Plan 2030. Specifically, these changes will:

- i. Prioritize and promote Portland's unique mix of water-dependent, marine-related uses and compatible non-marine uses;
- ii. Recognize and reinforce the respective roles of the Eastern, Central, and Western Waterfronts; and
- iii. Celebrate, promote, and protect Portland's lobster and fishing industry as a foundation of the region's economy and a feature of civic pride.

2. In light of this purpose 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.

~~(c) Contract or conditional rezoning standards: Applications for proposals deviating from any dimensional requirements under section 14-310 and/or including uses not listed under sections 14-307 and 14-308 may only be considered if the reviewing body finds the applicant has met the performance standards listed under 14-311(d) and the following standards:~~

1. ~~Conditional or contract rezoning located outside of the NMUOZ: The ground level floor area of any building, existing or proposed, on the subject lot and the un-built area of the subject lot and the un-built area of the subject lot shall be subject to and meet the requirements of section 14-311(a) of this code.~~
2. ~~Conditional or contract rezoning located within the NMUOZ: Conditional or contract rezoning applications located within the NMUOZ are subject to the provisions of 14-311(b) (3) (Investment in marine infrastructure).~~
3. ~~Residential dwellings are prohibited.~~

4. ~~The development is consistent with the comprehensive plan and without the development the site could not otherwise support an economically viable water-dependent use.~~
5. ~~Any physical or legal impediments which preclude or impede functional access from the site of the development to any portion of the water's edge are not the result of action taken by the current owner, the applicant for rezoning, or any prior owner after January 4, 1993.~~
6. ~~The project's public benefits outweigh its potential negative impacts, taking into consideration as public benefits: 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.~~
7. ~~The development responds to any unique physical conditions and development opportunities along the shoreline in a manner that is consistent with section 14-305 (purpose).~~
8. ~~The non-marine portion of the proposed development will not adversely affect the efficient operation of marine uses, such as producing less efficient traffic, parking or circulation patterns. Parking for the non-marine portion of the proposed development shall be subject to review under section 14-311(d) (8).~~
9. ~~The rezoning contains adequate provisions and/or conditions to ensure that any associated water-dependent infrastructure remains occupied by any commercial marine use as listed in 14-307(a) and that said use is not abandoned after the project is developed.~~

B. Discussion of Draft Text Amendment

The proposed amendment removes the entire contract and conditional rezoning standards section from the ordinance, replacing it with a short excerpt from the Comprehensive Plan that identifies key goals related to Portland's working waterfront as justification for prohibition of this zoning tool within the zone. In initial discussions, staff had considered adding a larger subset of uses, including hotels, to the list of uses not eligible for a conditional or contract rezoning. This approach however was determined to be ineffective for two main reasons. First, given the open-ended nature of contract and

conditional rezoning, it is difficult to define a list of uses that in perpetuity would be appropriate to prohibit. As Portland grows and its waterfront continues to experience changes, it is likely that new uses (perhaps not yet clearly identified), may serve as catalysts to reopen this conversation as to how best balance the needs between marine and non-marine uses within the WCZ. As such, the prohibition tool is inadequate in the long-term.

The second reason is that the WCZ, as currently written, is the product of a robust, decades long dialogue between highly disparate stakeholders, informed by industry best practices and numerous studies. As evidenced by the most recent WCZ waterfront inventory, released in early January 2019, the zone operates largely as it was intended, with a vast majority of available space (81%), either being occupied by or available to marine uses. Remaining non-marine uses subsidize vitally necessary infrastructure that is key to the success of Portland's working waterfront. This framework may require minor amendments as we move forward to accommodate changing needs, but it is important to recognize the fine balance that has been struck through such a lengthy and well-informed series of negotiations. A contract or conditional rezoning would undermine that framework, remove many key stakeholders from the negotiation process and create a new set of rules for a particular property that would still need to function cohesively with other properties and uses found within the WCZ.

For these reasons, the staff support prohibition of contract and conditional rezoning within the WCZ, relying instead on the myriad of use and development standards that are consistent with facilitative of the goals found within the Comprehensive Plan.

IV. COMPREHENSIVE PLAN

The City's ordinance states that any rezoning must be consistent with the City's Comprehensive Plan. In forming its recommendation to the City Council, the Board will need to make a finding on whether the proposal is consistent with the Comprehensive Plan. As seen below, the staff have identified below a number of the specific Comprehensive Plan goals and policies which are suggested as being relevant to the proposed text amendments to the WCZ.

The central vision of Portland's Plan 2030 is represented by the venn diagram demonstrating the integral interrelation of the community's core belief that Portland is equitable, sustainable, connected, dynamic, authentic and secure. The vision conveys the message of the City's need to balance many competing needs to assure the advance of the vision as a unified concept. In this instance, that the City's goals for maintaining a working waterfront and transforming Portland through orderly growth and development be balanced with needs for connectivity of residents and visitors to the waterfront, sustainability of marine-dependent infrastructure and the ability to maintain that infrastructure, and authentic as a defining characteristic Portland's image and economy.



As currently written, the WCZ promotes a mixture of marine and non-marine uses in accordance with the Waterfront Use Hierarchy pyramid. This pyramid acknowledges that water-dependent uses (ex. fishery berthing) cannot successfully exist or sustain maintenance of necessary infrastructure (ex. dredging, pier maintenance, fendering etc..) without investment by both marine-related industries (ex. marine product retail) and compatible non-marine uses (ex. offices or restaurants). The zoning provides mechanisms that both limit the total percentage of available land and floor area that may be occupied by a non-marine use, and exacts actual investment from non-marine users. Meanwhile the permitted, conditional and prohibited use list precludes many non-marine uses out right, notably residential, hotel and drinking establishment uses, which are considered incompatible. Those non-marine uses that are permitted, are required to comply with numerous performance and specific non-marine development standards that ensure compatibility of non-marine uses with integral uses of the working waterfront.

By removing the option for a conditional or contract rezoning, the City is eliminating a possible loophole by which a developer could establish a use specifically identified as incompatible with the developed hierarchy of uses. Elimination of this section also supports a number of goals within the City's Comprehensive Plan, as listed below.

Development Goals:

- Prioritize and promote Portland's unique mix of water-dependent, marine-related and compatible non-marine uses.
- Recognize and reinforce the respective roles of the Eastern, Central, and Western Waterfronts.

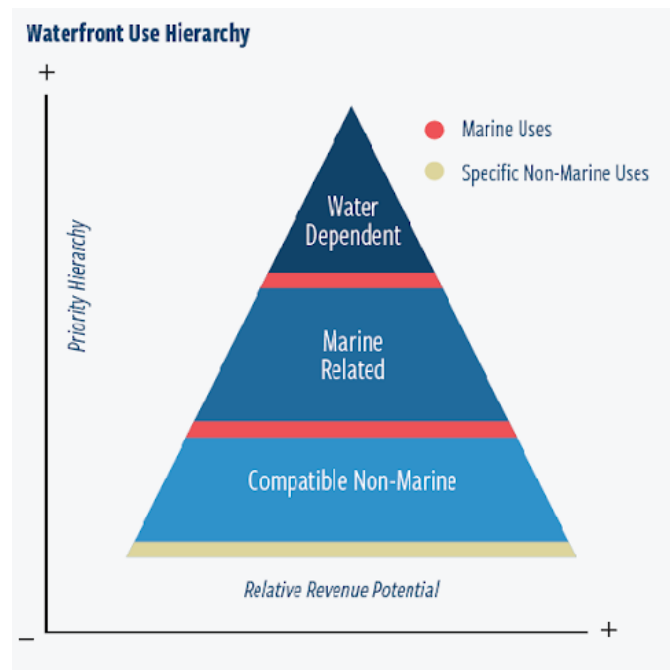


Figure 3: Waterfront Hierarchy Pyramid

- Celebrate, promote and protect Portland’s lobster and fishing industry as a foundation of the region’s economy and a feature of civic pride.

The staff’s estimation is that these goals are not only served by the proposed prohibition, but that they specifically inform this suggested amendment. For this reason, the actual goals are listed in the text for the WCZ as a rationale for why contract and conditional rezonings would be prohibited. As stated above, the WCZ ordinance is the result of a decades long negotiation process that has been tested and revamped over the years to regulate and maintain the many nuances of this highly unique working waterfront and has been shown, as seen in the Waterfront Inventory (Attachment 2), to function as prescribed, without ever having made use of the conditional or contract rezoning standards since they were adopted in 2010. In light of this, it is both logical and warranted to remove that option from property owners in order to fulfill the goals listed in the Comprehensive Plan.

V. PUBLIC COMMENT

Staff has received no public comment on the proposed text amendments to date. However, there have been a number of positive comments made during the Working Waterfront Group process from various stakeholders regarding the proposed amendments.

VI. NEXT STEPS

The Planning Board will hold a workshop on this proposal on Tuesday, January 22, 2019. The proposed amendment comes in response to feedback from the Waterfront Working Group, a group of waterfront stakeholders that meet on a bi-weekly basis to discuss policy initiatives regarding Portland’s central waterfront while there is a moratorium in effect. The staff decided to proceed with this amendment immediately due to its sensitive nature. At the workshop, staff will seek feedback on the approach taken, and provide an overview of other topics discussed at the Waterfront Working Group meetings. It is possible that additional amendments may be proposed in the near future as a result of this ongoing process.

VII. ATTACHMENTS

1. Draft Text Amendment – Div. 18 – Waterfront Central Zone
2. 2018 Waterfront Inventory
3. Fisherman’s Wharf Update – Press Release – 1.11.19
4. WCZ Zoning Presentation to Waterfront Working group – 1.17.19

Sec. 14-311. Development standards.

...

(c) No Contract or Conditional Rezoning Permitted

1. Purpose: This section is intended to accomplish goals from Portland's Plan 2030. Specifically, these changes will:

- i. Prioritize and promote Portland's unique mix of water-dependent, marine-related uses and compatible non-marine uses;
- ii. Recognize and reinforce the respective roles of the Eastern, Central, and Western Waterfronts; and
- iii. Celebrate, promote, and protect Portland's lobster and fishing industry as a foundation of the region's economy and a feature of civic pride.

2. In light of this purpose 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.

~~_____ (c) Contract or conditional rezoning standards:~~

~~Applications for proposals deviating from any dimensional requirements under section 14-310 and/or including uses not listed under sections 14-307 and 14-308 may only be considered if the reviewing body finds the applicant has met the performance standards listed under 14-311(d) and the following standards:~~

~~_____ 1. Conditional or contract rezoning located outside of the NMUOZ: The ground level floor area of any building, existing or proposed, on the subject lot and the un-built area of the subject lot and the un-built area of the subject lot shall be subject to and meet the requirements of section 14-311(a) of this code.~~

~~_____ 2. Conditional or contract rezoning located within the NMUOZ: Conditional or contract rezoning applications located within the NMUOZ are subject to the provisions of 14-311(b)(3) (Investment in marine infrastructure).~~

~~_____ 3. Residential dwellings are prohibited.~~

~~_____ 4. The development is consistent with the comprehensive~~

~~_____ plan and without the development the site could not
_____ otherwise support an economically viable water-
_____ dependent use.~~

~~_____ 5. Any physical or legal impediments which preclude or
_____ impede functional access from the site of the
_____ development to any portion of the water's edge are not
_____ the result of action taken by the current owner, the
_____ applicant for rezoning, or any prior owner after
_____ January 4, 1993.~~

~~6. The project's public benefits outweigh its potential
negative impacts, taking into consideration as public
benefits: 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.~~

~~7. The development responds to any unique physical
conditions and development opportunities along the
shoreline in a manner that is consistent with section
14-305 (purpose).~~

~~8. The non-marine portion of the proposed development
will not adversely affect the efficient operation of
marine uses, such as producing less efficient traffic,
parking or circulation patterns. Parking for the non-
marine portion of the proposed development shall be
subject to review under section 14-311(d)(8).~~

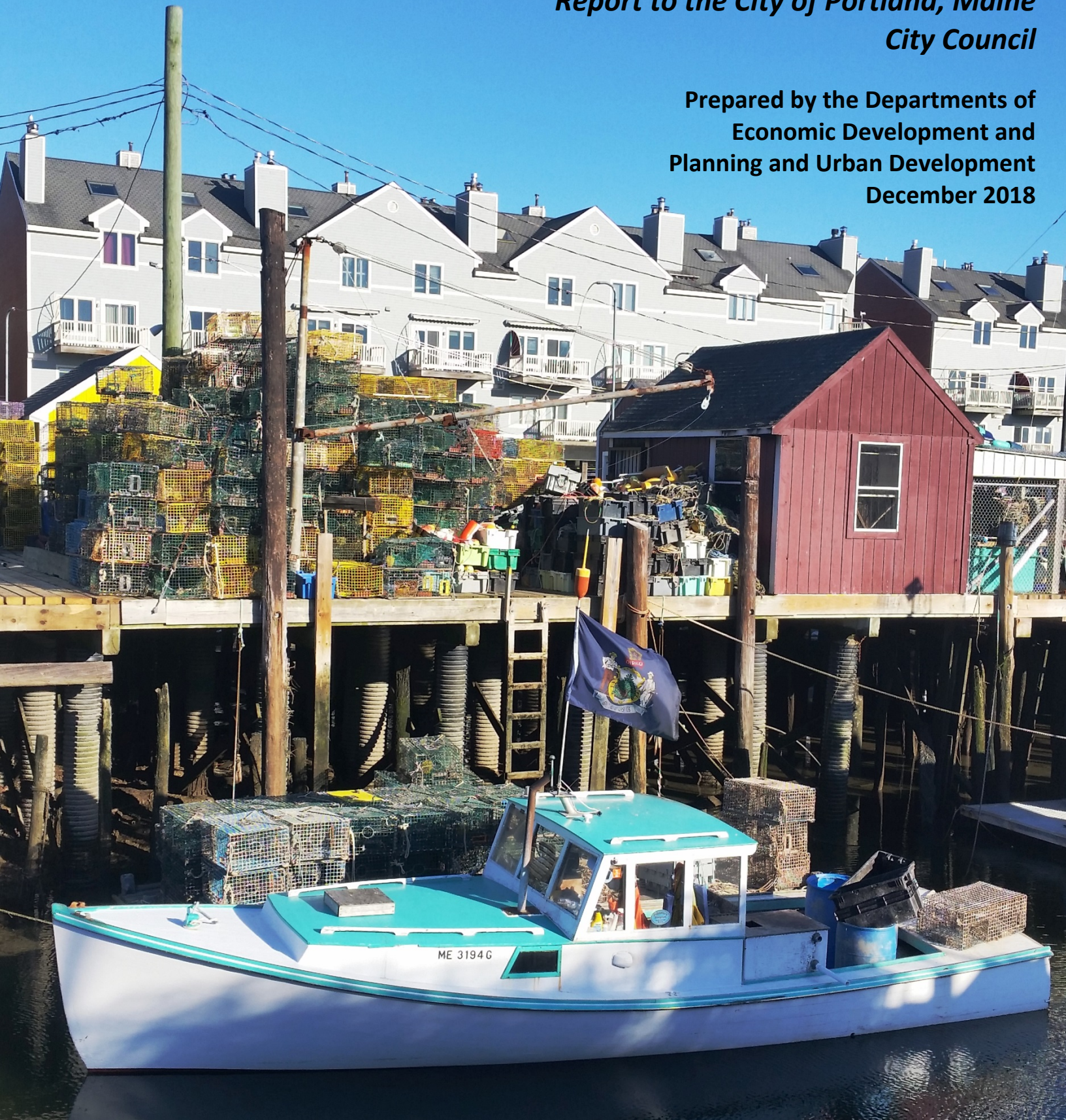
~~9. The rezoning contains adequate provisions and/or
conditions to ensure that any associated
water-dependent infrastructure remains occupied by any
commercial marine use as listed in 14-307(a) and that
said use is not abandoned after the project is
developed.~~

Waterfront Central Zone 2018 Marine Use Inventory



*Report to the City of Portland, Maine
City Council*

**Prepared by the Departments of
Economic Development and
Planning and Urban Development
December 2018**



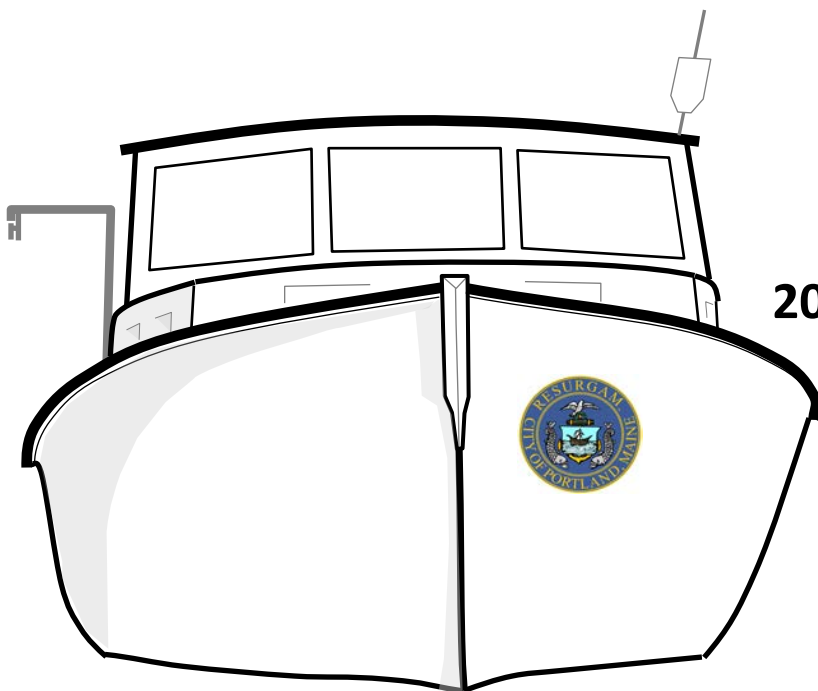
Waterfront Central Zone 2018

Marine Use Inventory:

Credits:

- Jon P. Jennings, City Manager
- Greg Mitchell, Economic Development Director
- Bill Needelman, Waterfront Coordinator, primary author
- Jeff Levine, Planning and Urban Development Director
- Tuck O'Brien, Planning Director
- James Dealaman, Administrative Officer, Planning and Urban Development
- Marguerite Fleming, Intern

Thanks to the owners and managers of piers and wharfs in the Central Waterfront who shared time and information in the generation of this report. December 2018



Waterfront Central Zone 2018 Marine Use Inventory December 2018

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Waterfront Central Zone 2018 Marine Use Inventory: Executive Summary

On December 20, 2010, the Portland City Council passed significant changes to the text of the Waterfront Central Zone (WCZ) allowing expanded non-marine use and development on Portland's Waterfront. When passing the 2010 zoning, the City Council required that the City conduct a periodic inventory of uses to understand the new regulation's impacts on marine industry and investment on the piers. Understanding the trends in marine use is important. This information helps the community understand: 1. The footprint of marine industry in the WCZ; 2. The extent of vacancies; and, 3. The growth of non-marine activity. Data is separated for first floor **buildings** and **open space** outside of the "Non-Marine Use Overlay Zone."

Building Results

As reported in 2012, the ground floors of buildings are still predominantly available to marine uses.

The percentage of space available to marine use (Active MU + Vacant) is down from +/-75% of space in 2012 to +/-67% in 2018. ***The percentage shift results mostly from conversion of vacant space to non-marine*** space with the largest change found on Maine Wharf (Scales.) The overall reported area of ***marine use building space has decreased marginally (less than 3%)*** from 2012 to 2018, with a corresponding dip in the percentage of first floor building space available to marine use.

Open Space Results

Like with the first floor building space above, open space in the inventory area has remained strongly dedicated to marine use in the WCZ. ***Marine Use on open areas has reduced by +/-60,000 sq ft (+/-8%)*** with a large portion of this reduction ***resulting from the recent vacancy of Berlin Mills Wharf***. Additional incremental loss of open space to non-marine parking is found throughout the easterly portion of the zone, some of which likely results from better reporting with this inventory.

Non-Marine use open area has increased by almost 24,000 sq ft. This reported increase is found imbedded in many properties, including:

- Better reporting of open space data – including parking allocations;
- Incremental increase in non-marine parking; and,
- Expansion of outside restaurant seating on Maine Wharf and Portland Pier.

Concluding Remarks:

As found in 2012, Waterfront Central Zone remains a center for marine industry, but continues to evolve as allowed under the WCZ text. The first floor **Building Space** results above demonstrate the zone policies working as they were intended. Vacant space has been filled with non-marine use (only after having been advertised to marine use as a condition of zoning.) **Open Space** results offer a more complicated picture than interior space – showing both an increase in vacancy and simultaneous increase in non-marine use. Parking uses, both marine and non-marine, have had a significant influence on the results herein.

Forward.

The City of Portland Departments of Economic Development and Planning and Urban Development are pleased to provide the City Council with the 2018 Waterfront Central Zone (WCZ) Marine Use inventory. This third version of the inventory has been a long time coming and we, as the responsible staff, apologize for the delay. Portland's waterfront has been a busy place for the past few years, and while we never took our eyes off the waterfront and its goings on, it does not excuse our failure in bringing important information to the Council in a timely manner.

Since the last presentation of a WCZ Inventory in 2013, the Portland Waterfront has experienced changes comparable to other parts of our community during this historic development cycle. International ferry service between Nova Scotia and Maine has restarted – twice –and is again in transition. The City of Portland and the Portland Harbor Commission continue to explore solutions for the vexing problem of pier and berthing dredging. Regular container freight service between Portland and northern Europe has started, grown, and fostered deepening business, cultural, and educational connections between Maine and the north Atlantic. Portland Yacht Services has transitioned from a modest recreational boating facility on the Eastern Waterfront to a robust full service shipyard on the Western Waterfront. The Maine Yacht Center in East Deering has grown, thrived and expanded. Portland has hosted the western Atlantic's premier professional ocean sailing race, the Atlantic Cup, twice. Cruise ship landings have grown, surpassing expectations for success, and cementing the cruise industry as an indispensable component of the working waterfront. The City Council passed sweeping and balanced zoning amendments for the Western Waterfront, re-committing our community as a port city into the 21st century. Over 7500 linear feet of new berthing is under construction on the Eastern Waterfront at the Portland Company. We members of City staff who have worked with public and private entities to contribute toward the above achievements, and many others, are proud of these accomplishments.

The WCZ inventory is an important contribution to the above list. The inventory is not, however, the total picture. As directed by City code, the inventory answers the question of: *How do current uses compare with the 55% marine use requirement of the zone?* The geographic extent of the inventory is further limited to only those portions of the Central Waterfront away from Commercial Street and outside of the "Non-Marine Use Overlay Zone" where the 55% requirement applies. Current concerns raised by the fishing community may warrant a broader evaluation of needs of the marine economy that lies beyond the scope of this effort.

Even with the limitations of the scope, this is valuable and useful information. What did we learn? We confirmed that the Central Waterfront remains a center of marine industry and

employment, consistent with the purpose of the zone and the policies of the Comprehensive Plan. The following data points stand out:

- 67% of first floor interior space is occupied by a marine use, or vacant and available to marine use.
- 5% of interior first floor space is vacant, down from 10% in 2012, showing a tightening of use within the zone
- 81% of open space (land and pier deck not covered by a building or common drive) is used or available to marine use.
- Many of the non-marine uses that are expanding, consistent with current rules, are tightly aligned with marine industries (seafood restaurants, Sea Bags, ...)
- Parking uses have increased, taking space and placing pressure on fishing and other uses in the zone.

These results do not answer the question of whether 55% is *sufficient* for marine industries. That policy discussion was well explored prior to passage of the 2010 WCZ amendments. Given the passage of time and the current building vacancy rate of +/-5%, the amount of building space *needed* for marine use may warrant further discussion in the near future. Open space for gear storage, gear maintenance, and crew parking is clearly a need now. Whether these needs are growing, stable, or contracting is unclear. However, industries such as aquaculture are expanding, landings at the Portland Fish Exchange appear to have reached their nadir and will hopefully begin to rise, and lobster remains the vital backbone of the waterfront. While the working waterfront continues to occupy a majority of buildings and pier space in the Central Waterfront, anecdotes from marine industry representatives make clear that many are feeling a squeeze and worry about their future access to the piers.

The City of Portland hears the concerns of fishermen and marine industry. The ongoing work by the City and the Greater Portland Council of Governments on a *Commercial Street Operations and Master Plan* is a timely commitment to address the functional access concerns expressed by many.

Transportation studies alone will not address the genuine concerns of fishermen. Likewise, abandonment of non-marine use will not benefit piers that require ongoing maintenance to provide fisheries access. Other issues, including dredging and climate change adaption, remain as ongoing efforts and calls to action. Committed to support traditional marine industries and their growth in Portland Harbor, the City stands ready to engage with all community members to discover the appropriate, fair, and functional balance for preservation of our treasured working waterfront.

We all have work to do.

**Vision Statement for the Central
Waterfront**

Commercial marine use is the highest and best use of waterfront land in the Central Waterfront. Preserving the waterfront for these uses should be a top priority and guiding principle for the City.

Development in the Central Waterfront will achieve a balance where non-marine economic development benefits the piers, Commercial Street, the Waterfront and the City by sustaining marine infrastructure, protecting opportunity for commercial marine activity, and promoting appropriate access by the public to views and activities in Portland Harbor.

WCZ Policy Statement, 2010

Order #101-10/11, passed as amended 12-20-10.

1. Introduction:

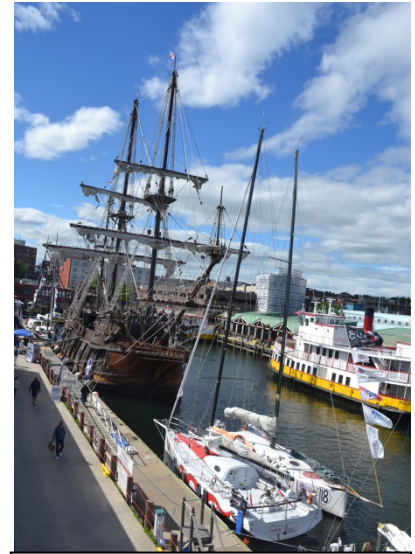
On December 20, 2010, the Portland City Council passed significant changes to the text of the Waterfront Central Zone (WCZ) allowing expanded non-marine use and development on Portland's Waterfront. When passing the 2010 zoning, the City Council required that the City conduct a periodic inventory of uses to understand the new regulation's impacts on marine industry and investment on the piers. In 2011, Planning staff submitted the baseline inventory report as a communication to the City Council. In 2013, the report was updated with improved data and updated to reflect 2012 development activity.

This report documents information collected from 2013 to November 2018 and provides the year-to-year comparison of data from 2012. In addition to the use inventory, the Planning staff provides a compilation of building permit and site plan projects for the same time period to document significant improvements and development activity within the impacted portions of the zone. The Economic Development staff and Planning staff submit this report in compliance with the Council's requirements (City Code, Chapter 14, Land Use Ordinance, Section 14-311.)



2. Background

The WCZ text regulates land use on Portland's waterfront in the areas located between but not including the Maine State Pier and the International Marine Terminal. The WCZ is home to the Portland Fish Pier, 14 private piers, the Gulf of Maine Research Institute, the majority of the city's commercial fishing fleet, fish processing and sales, lobster bait distributors, lobster buyers, tourist excursion vessels, and multiple marine and non-marine businesses. The condition of private property ownership distinguishes the Central Waterfront from many urban harbors and underlays the policies implicit in the zoning text. Prior to the 2010 changes, zoning limited *new development* almost entirely to marine uses. Non-marine uses were restricted to certain *existing buildings*, concentrating such uses in upper floors and buildings located near Commercial Street. The 2010 zoning broadened the amount and types of non-marine uses allowed in *new or existing space* on the piers of Portland Harbor.



El Galeon de Andalucia and the Atlantic Cup, hosted by Maine Wharf. June 2016

The 2010 WCZ amendments included two significant components that impact the form and content of this inventory, including:

- The creation of a Non-marine Use Overlay Zone adjacent to Commercial Street; and,
- Allowance for 45% first floor non-marine use outside of the overlay.

At the time of the 2010 WCZ amendments adoption, City Councilors recognized the need for non-marine use revenues to support pier maintenance. Likewise, Councilors heard the concerns of the fishing industry representatives worried about loss of needed space to support industrial use. The requirement for an inventory of marine use outside of the overlay was drafted at the time of adoption to ensure that policy makers could understand the impacts of the amendments moving forward.

The 2011 WCZ inventory and additional background and the text of the new zoning are found at:
<http://www.portlandmaine.gov/DocumentCenter/View/3422/WCZ-Inventory-7-18-11?bidId=>

The 2012 WCZ inventory is found at:

<http://www.portlandmaine.gov/DocumentCenter/View/3423/WCZ-Inventory-June-2013?bidId=>

Background information on the 2010 WCZ rezoning process is at:

<http://www.portlandmaine.gov/DocumentCenter/View/3425/WCZ-Process-Summary-Presentation-from-CC-Workshop?bidId=>

A complete record of the 2010 approval process and extensive narrative was provided to the State of Maine DEP for approval under Shoreland Zoning. The DEP request document is at:

<http://www.portlandmaine.gov/DocumentCenter/View/3421/Maine-DEP-Request-for-Zone-Amendment-Approval?bidId=>

3. Intent of the Inventory:

The intent of the inventory is to document use trends as allowed under the 2010 WCZ regulations.

One of the key requirements of the 2010 WCZ text is that at least 55% of ground floor space (both interior and exterior) must be reserved for marine use for that portion of the zone located outside of the “Non-Marine Use Overlay Zone” (NMUOZ.) The NMUOZ is located along Commercial Street and permits 100% occupancy by specified non-marine use and development. The 55% marine use requirement applies to the balance of the zone, on the seaward side of the NMUOZ boundary. The intention of the 55% marine use requirement is to ensure that marine uses are retained and protected in the portions of the zone best suited to serve marine industry needs.

Land Use Code Section 14-311(a) requires that any non-marine use application must demonstrate adherence to the 55% marine use requirement by submitting an inventory of ground level uses to the Planning Authority. The Code further requires that the Planning Authority must compile and aggregate use inventories within the zone for reporting to the City Council. The specific text requiring use inventories is excerpted below:

14-311(a) 3.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. Applicants for site plan review or a change of use permit outside of the NMUOZ shall provide the planning authority with proof of compliance with the requirements of this section as a condition of approval.

d. The city planning authority shall compile and report inventories of ground level uses, as reported under (b) above, into an annual report of ground level uses and investment in the Central Waterfront. The report shall include an aggregated assessment of ground floor marine and non-marine use occupancy and a catalogue of marine infrastructure investment for the reporting period. The report shall be submitted to the City Council as a communication not less than once every calendar year.



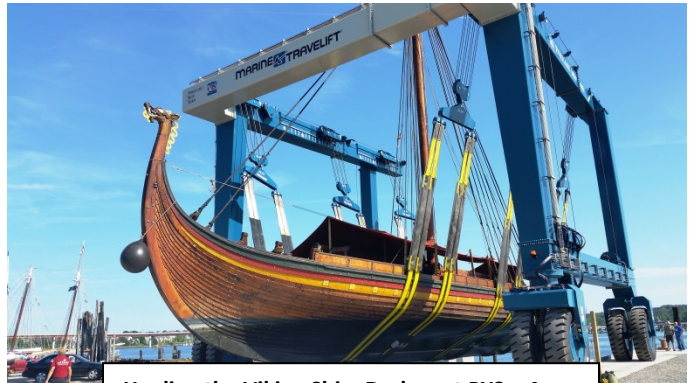
Development of the “Scales” building on Maine Wharf, 2014. Subject to the 55% rule

The above ordinance provisions apply only to those portions of the zone where first floor marine use is a requirement. Given that the NMUOZ is not restricted to a minimum percentage of marine use area, the properties within NMUOZ are not included within this inventory.

Readers should note that this document is not intended as a regulatory compliance tool. Applicants for new non-marine uses in the WCZ will need to map the NMUOZ boundary on their pier to show compliance with the 55% marine use requirement outside the NMUOZ, or for application of the 100% non-marine use allowance within the NMUOZ. Each applicant for change of use is expected to demonstrate compliance with the provisions of the WCZ, and City departments are not assuming that responsibility with this inventory.

In addition to excluding the NMUOZ, this inventory does not cover marine or non-marine activity under the following conditions:

- ***Floating facilities.*** Only Dimillo's floating restaurant is included as a counted element in the data below (the floating restaurant functions as a *building*.) Work floats, vessels, ramps, and other floating structures are not included.
- ***Marine activity outside of the WCZ.*** Marine activity and expansions in the Western Waterfront and Eastern Waterfront are not included. Over the timeframe covered in this inventory, significant expansion of marine industrial capacity and infrastructure has occurred on the Western Waterfront and further expansions are planned for the Eastern Waterfront. Changes within the WCZ should be considered within the context of the entire waterfront.



Hauling the Viking Ship, Draken at PYS. Aug. 2018. Western Waterfront expansions are not included within the WCZ inventory

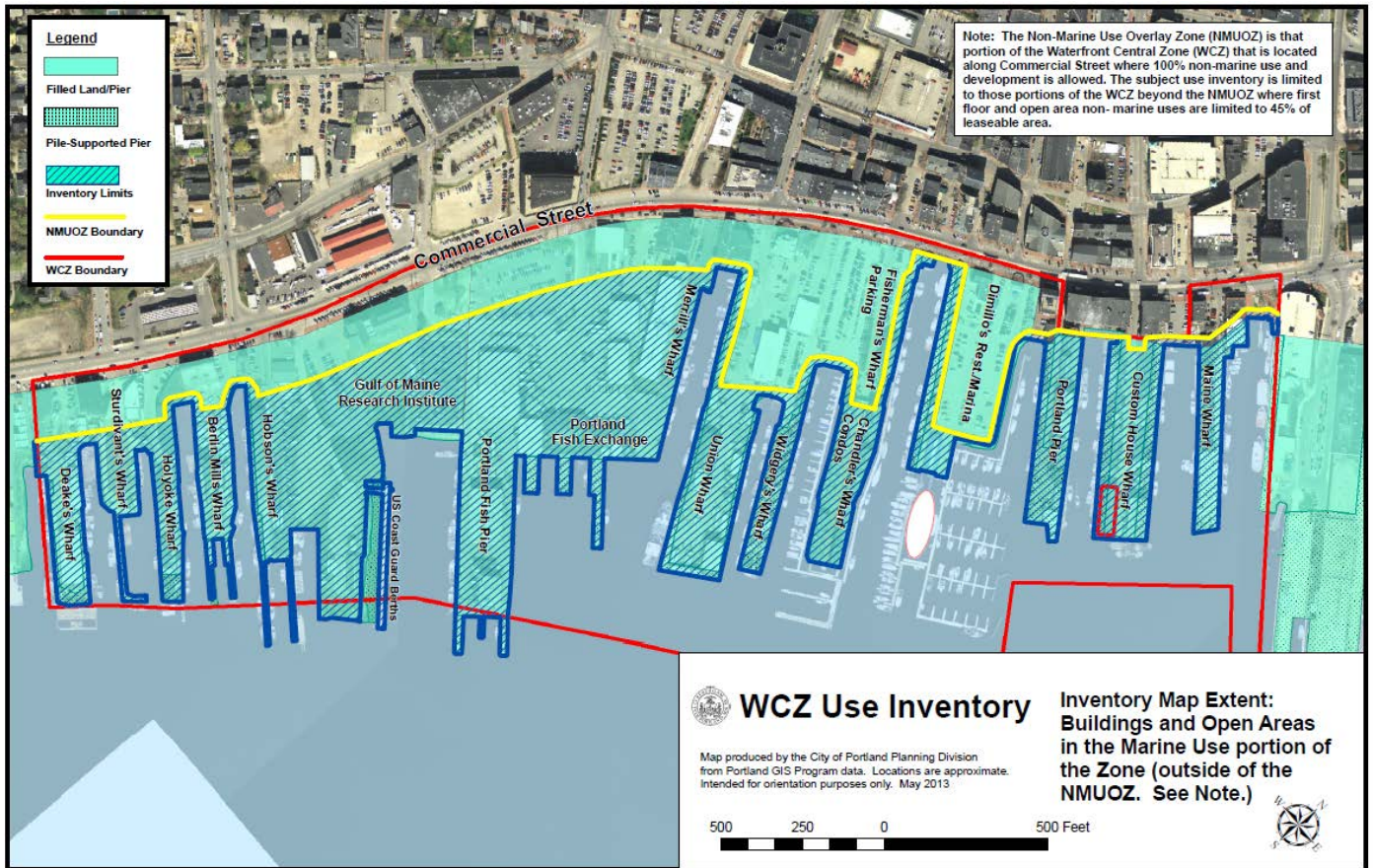


Improved floats, such as these recently installed at Portland Pier, increase marine use access, but are not accounted for in this inventory

4. Inventory Extent:

The inventory includes every building and property, or portions thereof, which are located within the WCZ and outside of the Non-Marine Use Overlay Zone (NMUOZ). Only ground level uses were mapped and counted, including buildings, pier deck, paved areas, and open space on filled land and pile supported piers.

The inventory only includes piers and filled land located outside of the Non-Marine Use Overlay Zone.



5. Methodology:

The current WCZ inventory reflects a snapshot in time concluding in November 2018.

Using the 2011 and 2012 inventories as a framework, the current inventory relies on three sources of information: direct observation by the Economic Development staff, pier owner and tenant inquiries, and City GIS program data (including 2018 aerial photography, *pictometry*.) Most pier inventories employed multiple data sources. A significant amount of judgement and estimation is needed to produce and compile these data. The estimates herein are reliable for the purpose of the inventory - identification of use distribution *trends* – and are best used in aggregate. As noted above, pier-by-pier regulatory compliance requires survey quality evaluation and is the responsibility of the property owner.

Mapping:

The first step in the process was to locate the NMUOZ boundary as the northerly extent of the inventory area. Section 14-306 of the WCZ text defines the NMUOZ boundary as:

“...parcels of land and piers within the waterfront central zone located on the landward side of a line established one hundred fifty (150) feet southerly from the southerly sideline of Commercial Street and modified as follows: the seaward limit of the NMUOZ extends to a line 500 feet southerly from the southerly sideline of Commercial Street in the area between the easterly sideline of Long Wharf to the westerly sideline of Union Wharf. Additionally, all areas subject to this provision are set back landward at least twenty-five (25) feet from the average high tide line of Portland Harbor...”

Essentially, the NMUOZ is located 150 feet south of Commercial Street, except between Union Wharf and Long Wharf, where the boundary is 500 feet south of Commercial Street. The line, however, does not extend over the water and is set back from high tide by 25 feet in all areas.

The NMUOZ boundary was mapped as a best estimate based on GIS Program data on the Commercial Street right of way and a previously mapped “filled land” boundary. When drawing the NMUOZ boundary, Economic Development staff estimated the 25-foot high water setback by measuring from visible landmarks such as seawall bulk heads, or used the previously mapped “filled land” boundary. A certain amount of approximation was needed as the “filled land” boundary is itself an estimate based on aerial photography and limited field observation.

Secondly, the seaward boundary of the inventory area was established from the edges of working piers, seawall bulkheads, and by property ownership. As with the NMUOZ, estimation was needed and errors are assumed.

Finally, every pier and property was separated individually with the results of each combined into an aggregate for the



zone. The “filled land” and “pile supported piers” layers from the City GIS Program were combined with City taxation parcel information to identify individual piers. Economic Development staff amended the pier perimeters as appropriate based on aerial photos and field observations. Slight variations in area calculations between 2012 and 2018 occurred with updated 2018 aerial “pictometry” providing more details informing the estimated pier boundary polygons.

Individual building polygons were taken from GIS program data, edited to subtract out building space within the NMUOZ, and corrected for errors observed from updated 2018 aerial pictometry.

Measurement Precision: Staff adjusted the filled land boundary as necessary to reflect conditions evident from aerial photos, corroborated with field observations. While the inventory spread sheets report observed results to the nearest whole square foot, individual parcel results are best rounded to the nearest 1000 square feet for land and 100 square feet for each building.

Occupancy and Use:

In updating the Inventory from 2012 to 2018, Economic Development staff conducted multiple walks within the zone using the 2012 inventory results used as a guide. Each building was observed for visual change or obvious signs of vacancy (boarded up, “For Lease” signs...) While this method may have missed some vacant space, staff is confident that significant changes were observed and captured for this inventory. Emailed inquiries to individual pier property owners helped to fine tune field observations.

Reporting Results:

The resulting inventory is essentially a series of individual pier maps with an accompanying spreadsheet of tabled square footage data. Properties, separated by ownership, are shown with bold lines and each parcel is numbered with a black numeral. Likewise, each building or applicable portion of building is shown as a red polygon. Buildings are numbered on the map in red and yellow. Where a building is bisected by the NMUOZ boundary, only that portion of the building outside of the NMUOZ is counted. Such buildings are noted with a “p” for “partial.”)

The inventory spreadsheet is keyed to each building and parcel by number. The spreadsheet groups buildings and parcels by pier. Certain piers have more than one parcel and the inventory is additionally separated by ownership as far as it is known. For quality control, each pier owner was provided a copy of their specific results in the form of an individual pier map with its specific tabled information excerpted.



Use of floats due to lack of yard space on
Merrill's Wharf, 2013

Building spaces were compiled according to the following categories.

Building Footprint Area	Building Footprint Area -Pier totals	Active Marine Use Building Area	Vacant Building Area, Avail to marine use	Building Area Avail to Marine use (Active Marine plus Vacant)	Active Non-marine use Building Area	% Building Area Avail to Marine Use (Active marine use plus vacant)
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“Marine Uses” in this inventory are the permitted uses listed under WCZ section 14-307(a) and conditional uses listed under 14-308(a).

Building vacancies were tallied where reported by pier owners or observed, but it is assumed that some of the areas designated as “Active Marine Use Building Area” may be vacant. Given that the WCZ text requires that vacant space is offered to marine tenants as a priority (with a 60 day marketing period,) the “Building Area Avail to Marine use” is calculated as an important indicator for tracking.

The percentage of space available to marine uses is the regulated figure stipulated in the code and is calculated by the following formula:

$$\begin{array}{c}
 \text{Active marine use building area + vacant building area} \\
 \hline
 \text{Total building footprint area} \\
 \times \\
 100 \\
 = \\
 \text{\%building area available to marine use}
 \end{array}$$

Note: Un-leaseable common space was subtracted from the basis for the Merrills Wharf (Pierce Atwood) building. Merrills Wharf from Union Wharf. 2014



Open spaces were treated similarly to building space.

Land Pier Area	Common Circulation Drive Area	Open Area - net (Land Pier area minus Com Drive - Building footprint)	Active Marine Use Open Area	Vacant Open Area, Avail to Marine use	Open Area Avail to Marine use (Active Marine plus Vacant)	Active Non-Marine Use Open Area	% Open Area Avail to Marine use (Active marine use plus vacant)
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When calculating the amount of land/pier area, the zone text requires that “common circulation drives” are subtracted from the total open space prior to calculating use percentages. Such driveways, as defined in the WCZ, were estimated from aerial photos and direct observation, and were mapped for subtraction from the total open space.

The percentage of open area available to marine use was calculated by the formula below. For the purpose of this calculation, “pier area” includes filled land and pile supported pier capable of lease for active use.

$$\begin{array}{c}
 \text{Active marine use area + vacant pier area} \\
 \hline
 \text{Total pier area - common circulation drive areas - building footprint area} \\
 \times \\
 100 \\
 = \\
 \text{\% open area available to marine use}
 \end{array}$$

Un-leasable open space, which was not a common circulation driveway, was combined with the adjacent use with which it was most closely related. For example, landscaping adjacent to a non-marine use parking lot was counted as non-marine use open space. Likewise, open area serving as circulation to only marine uses was counted as marine use space.

Note: Un-leaseable drainage areas were subtracted from the basis for the Merrills Wharf (Pierce Atwood) property.

A certain amount of approximation was necessary to create this inventory – both in the mapped features and in the use assumptions for certain buildings and open areas. For example, it was easier to identify non-marine uses than to differentiate between active marine use and vacant space. Casual storage of marine gear and refuse could be either a leased “active” use, or a “vacant” un-leased space currently filled with transient materials. There is greater reliability in the numbers reported as areas “Available to Marine Use” than in the split between vacancies and active marine uses.

When assigning uses to areas such as common circulation drives in particular, Economic Development staff employed a common sense, best judgment, approach given that the “drives” are more use patterns than constructed features on certain piers.

6. Notes on Year-to-Year Comparisons:

The 2012 aerial photography was updated using more detailed 2018 pictometry. The base maps of certain piers and the footprints of some buildings were adjusted to reflect the newer, improved imagery.

7. Building Results

As reported in 2012, after separating the NMUOZ portions of the zone the remaining ground floors of buildings are still predominantly available to marine uses.

There are approximately **381,000 sq ft total of ground floor building space** in the WCZ outside of the NMUOZ. This number is marginally more than the +/-371,000 sq ft reported in 2012, with the difference attributed to:

- rebuilding of space on Custom House Wharf now occupied by Seabags,
- better reporting of shed space on GMRI/Coast Guard site,
- adding a small portion of Becky's Diner located within 25' of high tide,
- better reporting of Merrills Wharf interior space with data provided by the owner,
- the addition of permanent sheds and bar areas at Portland Lobster Company, and
- minor deviations from 2012 likely resulting from new aerial imagery.

The above additions of space were partially offset by marginal reductions of shed space on Widgery Wharf and minor deviations resulting from new aerial imagery throughout the zone.

Total active marine use of interior space is estimated at 236,000 sq ft, which is a decrease of approximately 6000 sq ft from 2012.

Increases in marine use interior space include:

- the conversion of the former Lilly Law Office building to a Dimillo's Yacht sales use accounted for 3400sq ft of net increase,



Rebuilt portion of building on Custom House Wharf housing Sea Bags. November 2018

- conversion on Sturdivant Wharf of +/-11,000 sq ft of reported vacant space to active marine use, and
- Additional marine use office space on Merrills Wharf.

These gains were offset by:

- new vacancy of space on Berlin Mills Wharf,
- better reporting of +/-3000 sq ft of non-marine office on Union Wharf, and
- better reporting of vacancy at the Marine Trade Center on the Portland Fish Pier (subtracted from marine use reported in 2012.)
- Conversion of +/- 9500 sq ft of vacant space on Maine Wharf to non-marine use in the Scales building



The 2014 Scales building on Maine Wharf replaced a vacant structure which had been condemned for structural failure. November 2018

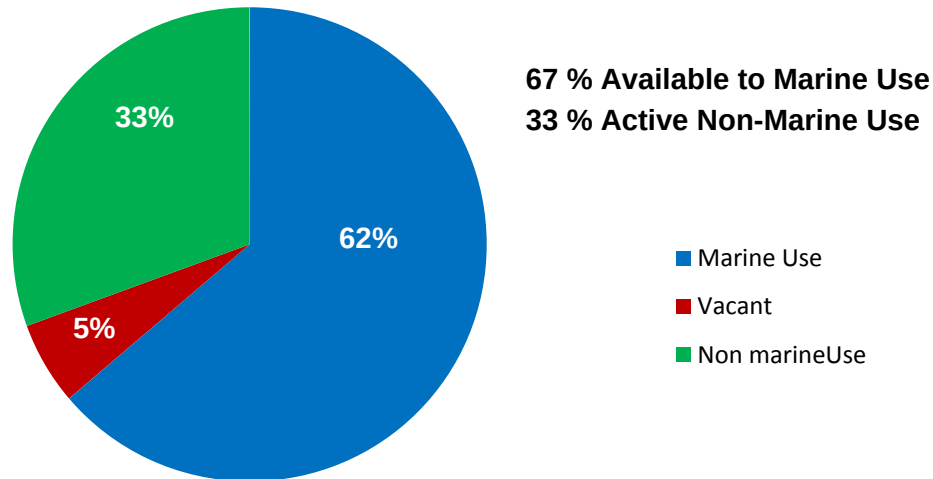
Total vacancy of interior space is down +/-15,000 sq ft from 2012 to approximately 5% of total interior space. Reduced vacancy is mostly due to:

- reporting of occupancy of space on Sturdivants Wharf noted above,
- Construction of the Scales building on Maine Wharf which replaced a similarly sized vacant structure (vacant due to structural failure and condemnation,)
- Incremental vacancies on Deakes, Holyoke, Berlin Mills, and Merrill's Wharfs, and
- +/-8200 sq ft of vacancy at the Marine Trade Center on the Portland Fish Pier.

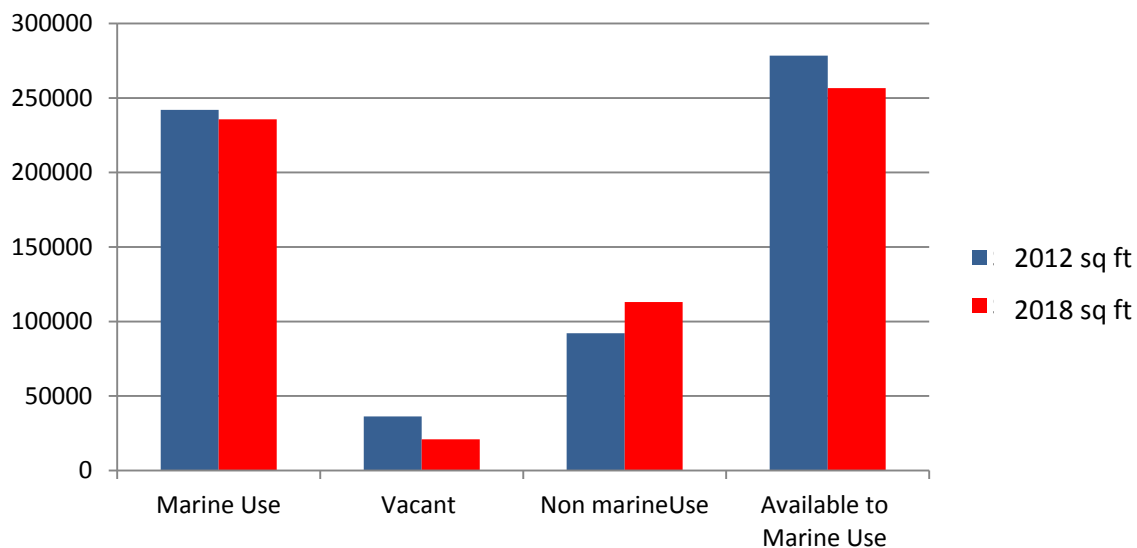
As noted in previous WCZ inventory reports, space that is apparently used by marine industry for casual storage may in fact be "vacant" from a tenancy perspective.

The percentage of space available to marine use (Active MU + Vacant) is down from +/-75% of space in 2012 to +/-67% in 2018.

Buildings	Marine Use	Vacant	Non marine-Use	Available to Marine Use	% Building Area Available to Marine Use
2012	242058	36314	92088	278372	75%
2018	235698	20926	113086	256624	67%



2018 BUILDING USE TOTALS



2012 to 2018 1st FLOOR BUILDING SPACE TOTALS

The overall reported area of marine use building space has decreased marginally, with a corresponding dip in the percentage of first floor building space available to marine use. The percentage shift results mostly from conversion of vacant space to non-marine space with the largest change found on Maine Wharf (Scales.) Conversion of marine use to non-marine use is seen to a lesser extent on Portland Pier (the restaurant portion of Luke's Lobster, under construction) and on Custom House Wharf (with the expansion of Sea Bags,) and small office conversions (Union Wharf, Holyoke Wharf.) Other non-marine uses expanded into new sheds or seasonal structures (Portland Lobster Company.) The balance of expansion of non-marine use is comprised of better reporting (Holyoke Wharf) and small scaled conversions from marine to non-marine (Union Wharf.)

It is an interesting side note that much of the expansion of non-marine use in the above list (Scales, Luke's, Seabags) are all tightly aligned with and dependent on marine industry.

Readers should note that the +/-33% non-marine ground floor space result is highly influenced by the large footprints of 1980's condominium complexes on Chandler's Wharf and Portland Pier. When the area of offices and condominiums of Portland Pier (buildings 52, 53, and 54p) are added to the area of Chandler's Wharf condominiums (building complex 42p) the resulting 55,000 sq ft of area represents nearly half of the total active non-marine use building space in the inventoried space. In short, the largest scale encroachment of non-marine uses in the zone occurred prior to the non-marine development moratorium referendum in 1987.

As in 2012, there continues to be a geographic concentration of non-marine space in the eastern portion of the zone adjacent to the Old Port.

8. Open Space

Like with the first floor building space above, open space in the inventory area has remained strongly dedicated to marine use in the WCZ.

The total net open area (piers and filled land available after subtracting out building footprints and common areas) is slightly smaller (by +/-3000 sq ft) in the current reporting. The current **total net open area inventoried is +/-963,000 sq ft (+/-22 acres.)** While mapping variability noted above may account for some of this loss, there was a comparable portion of Custom House Wharf subtracted from the total land/pier area adjacent to Building 59 due to loss/demolition. Given the condition of the wharf in this area, this portion of pier has been unused for many years and should have been reported as vacant in previous inventories.

Marine Use on open areas has reduced by +/-60,000 sq ft. A large portion of this reduction came from the recent vacancy of Berlin Mills Wharf. Additional incremental loss of open space to non-marine parking is found throughout the easterly portion of the zone, some of which likely results from better reporting with this inventory.

Vacancy has increased by over 27,000 sq ft, which is largely if not entirely due to Portland Yacht Service's move from Berlin Mills Wharf (formerly Gowen Marine) to the Western Waterfront. Berlin Mills wharf is for sale as of the writing of this report. Two "vacant" lots on the Portland Fish Pier are located within the NMUOZ and not included in this inventory.



The boat yard activity on Berlin Mills Wharf shown on this early 2018 image has recently moved to the PYS facility on the Western Waterfront. The vacancy of Berlin Mills Wharf is a significant influence on the Open Space results

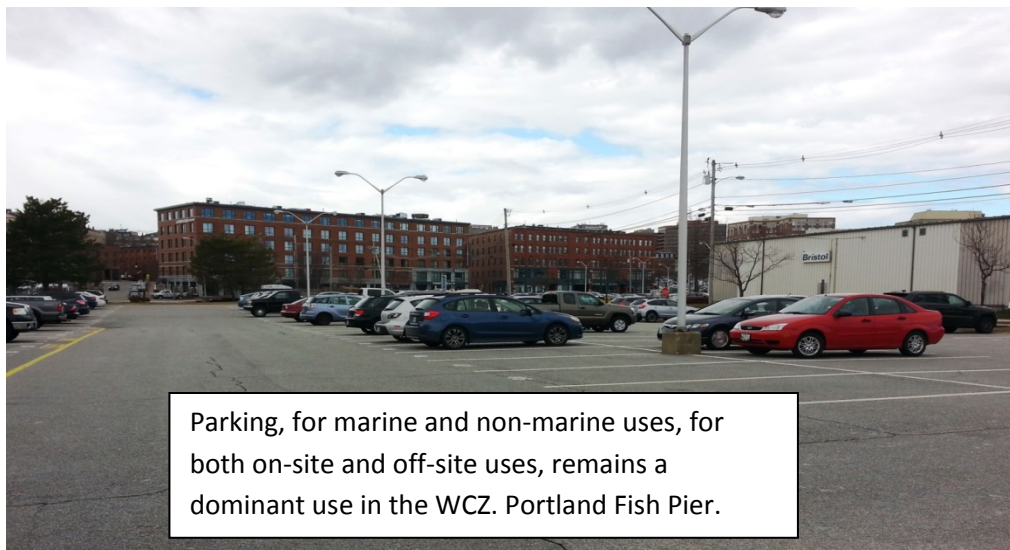
Non-Marine use open area has increased by almost 24,000 sq ft. This reported increase is found imbedded in many properties, including:

- Better reporting of land area on the Portland Fish Pier.
- Better reporting of non-marine parking on Berlin Mills Wharf (400 Commercial St.)
- Incremental increase in non-marine parking on Merrill's Wharf, Widgery Wharf.
- A more complete reporting of non-marine use space along the perimeter of the Long Wharf (Dimillo's) parking lot, and
- Expansion of outside restaurant seating on Maine Wharf and Portland Pier.

In aggregate, the **net open area available to marine use has decreased from +/- 813,000 sq ft to less than 781,000 sq ft** or from 84% to 81% of total respectively (a reduction of +/- 33,000 sq ft or approximately three fourths of an acre.) 10% of this decrease is seen in an actual reduction of the basis land/pier area within the inventory, including the demolished/abandoned section of pier noted above on Custom House Wharf. Better reporting and actual increases in **non-marine parking** across the zone appear to have combined with modest expansion of outside restaurant seating at Scales (Maine Wharf) and Luke's Lobster (Portland Pier) to explain the reduction in space available to marine use.



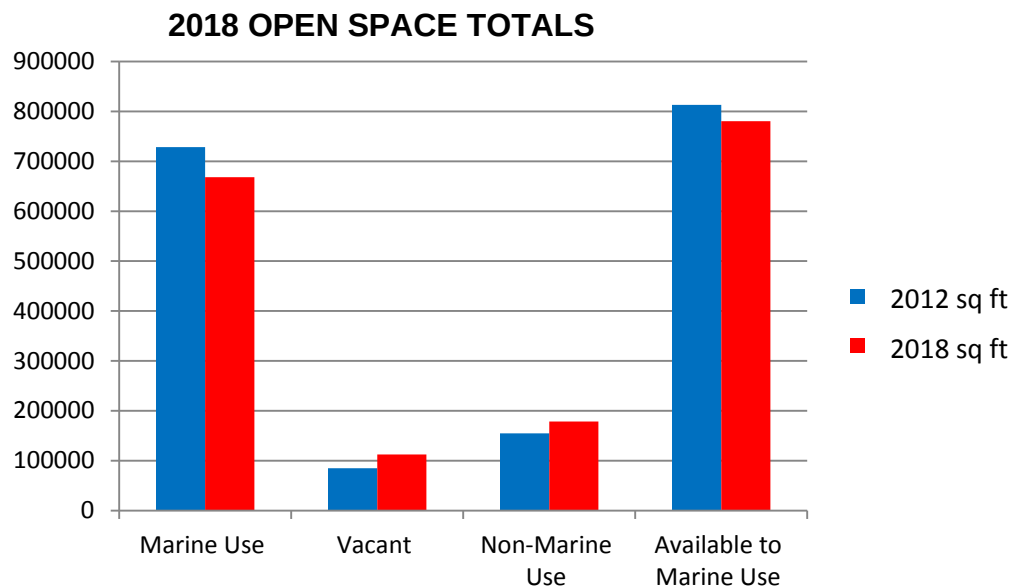
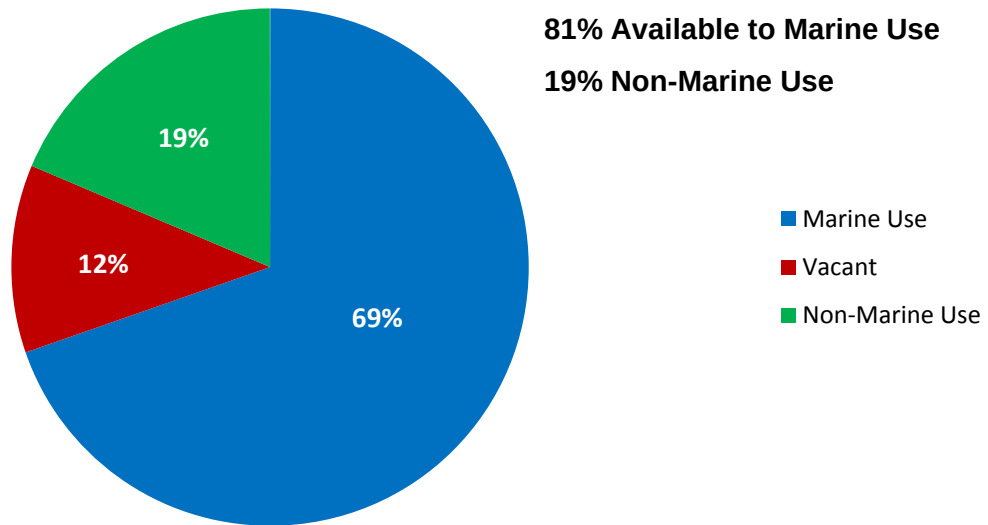
Restaurant seating, such as at Scales on Maine Wharf, appear to have had less impact than parking expansions on the amount of open space available. November 2018



Parking, for marine and non-marine uses, for both on-site and off-site uses, remains a dominant use in the WCZ. Portland Fish Pier.

The 81% total open area available to marine use is well within the 55% per pier minimum established within the WCZ zoning text.

Land/Piers Open space	Marine Use	Vacant	Non-Marine Use	Available to Marine Use	% Open area available to Marine Use
2012	728310	84905	154789	813215	84%
2018	668165	112362	178578	780527	81%



2012 to 2018 1st OPEN SPACE TOTALS

8. Concluding Remarks:

As found in 2012, Waterfront Central Zone remains a center for marine industry, but will continue to evolve as allowed under the WCZ text.

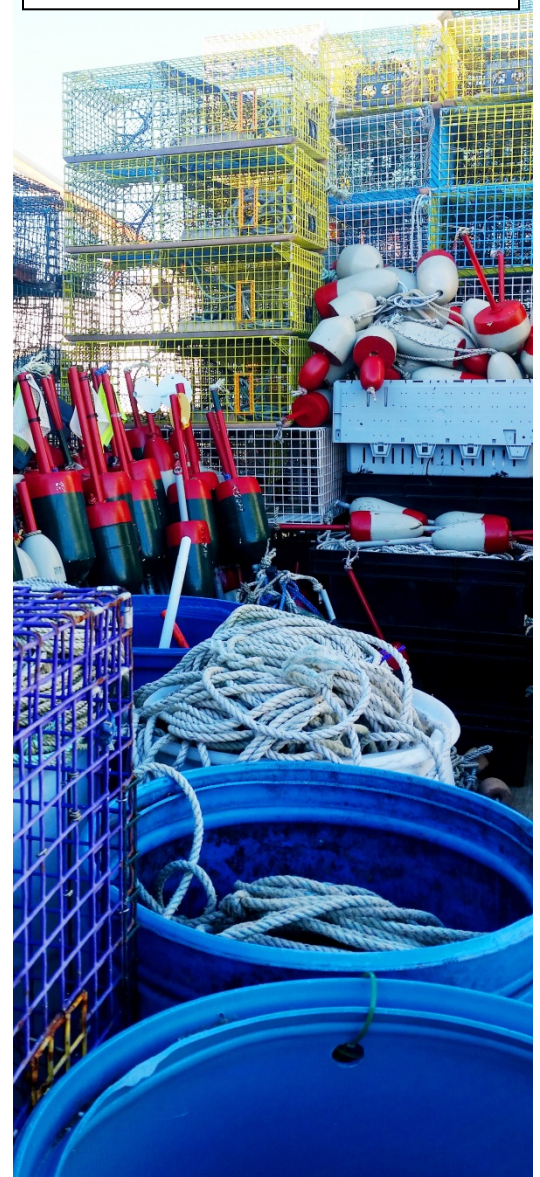
The first floor **Building Space** results above demonstrate the zone policies working as they were intended. Vacant space has been filled with non-marine use (only after having been advertised to marine use as a condition of zoning.) The shift **from** vacant to non-marine use influences the percentage of space available to marine use, but has not decreased the actual amount of marine use to percentages below the 55% requirement of the WCZ text.

Open Space results offer a more complicated picture than interior space – showing both an increase in vacancy and simultaneous increase in non-marine use. Meanwhile, marine use has dropped more significantly than interior building space (in square footage measure, recognizing that *the larger basis results in a smaller percentage decrease* in open space available for marine use.)

Clearly parking uses, both marine and non-marine, have had a significant influence on the results herein. Observations by staff while conducting this inventory suggest that commercial parking (both available to the public, and for off-site monthly non-marine uses) appears to have increased recently. Who is using this parking? That is difficult to discern. Distinguishing off-site parkers from on-site parkers is not possible from casual observation, nor is separating grandfathered legal spaces from more recent expansions that are inconsistent with current zoning. Further exploration of parking use and potential enforcement action may be warranted.

The loss of casual storage and yard space appears to be the victim of increases in parking supply. It is beyond the scope of this inventory to discover if the loss of casual storage and yard space has resulted from a filling of vacancy, or a displacement of active marine use. Regardless, anecdotes provided by fish harvesters would indicate a general tightening of space available. Recent

Lobster storage on Union Wharf. Union Wharf has more space for marine gear than most properties in the WCZ. Dec. 2018



applications to the Portland Board of Harbor Commissioners to permit free floating service rafts, not attached to wharfs, for fishing gear would indicate a near desperate need for space to stage and maintain fishing gear adjacent to the water.

Readers should note that the aggregated Open Space results here are significantly influenced by the recent vacancy of Berlin Mills Wharf. One might reasonably lament the loss of the full service boat yard use on Berlin Mills Wharf if viewed in isolation; however, this use has not been lost to the harbor. The long-standing boat yard use on the wharf has relocated to the Western Waterfront at the larger and more robust Portland Shipyard/Yacht Services facility. It is also worth noting, that in the 5 years since this inventory was updated, vessel repair and boat yard services have also increased at the Maine Yacht Center in East Deering.

The raw percentage of interior space available is likely not as important to marine users as the type of space provided. Proximity to vessel loading, parking availability, access for truck and fork lift loading, utility access, and a myriad of other use-specific issues all influence marine use siting decisions. Above all, price per square foot and compatibility between tenant and land lord are paramount – issues outside the control of municipal land use control.

These results do not answer the question of whether 55% is **sufficient** for marine industries. That policy discussion was well explored prior to passage of the 2010 WCZ amendments. Given the passage of time and the current building vacancy rate of +/-5%, the amount of building space **needed** for marine use may warrant further discussion in the near future. Open space for gear storage, gear maintenance, and crew parking is clearly a need now. Whether these needs are growing, stable, or contracting is unclear. However, industries such as aquaculture are expanding, landings at the Portland Fish Exchange appear to have reached their nadir and will hopefully begin to rise, and lobster remains the vital backbone of the waterfront. The City of Portland remains committed to support these industries and their growth in Portland Harbor.

Attachments:

1. Development Activity Summary
2. Summary Table of Results
3. Master Inventory Map of the Waterfront Central Zone



TO: Portland City Council

FROM: James Dealaman, Administrative Officer, Planning and Urban Development

DATE: December 6, 2018

SUBJECT: Development Activity Summary: WCZ Marine Use Inventory (December 2018)

Summary: As provided in chapter 14-311(d), the city planning authority is tasked with cataloguing marine infrastructure investment. In order to provide the most accurate snapshot of growth in the Waterfront Central Zone (WCZ) specific to Marine infrastructure investment, staff have compiled the most recent Permitting and Assessing data in the WCZ outside of the Non-Marine Use Overlay Zone (NMUOZ) to reflect trends over a five-year period.

- 1) **Valuation Data** – To show investment in the WCZ, issued permit data from 2013 – November 2018 was used across a variety of permit types when sufficiently available and grouped or renamed as appropriate. The permitting data is based solely upon the reported cost of work provided at the time each permit application is submitted. The following groups will be provided to indicate the amount in dollars invested:

Commercial and Residential Construction (*e.g. repair, building maintenance, installation, change of use renovations, alterations, additions, etc.*)

Pier Infrastructure (*e.g. installation or replacement of pilings/floats or piles, pile caps, deck, fender system, etc.*)

Building Upgrades (*e.g. Installation or replacement of HVAC, hood systems, tank, etc.*)

Fire Suppression (*e.g. Installation or replacement of sprinkler system, fire alarms, etc.*)

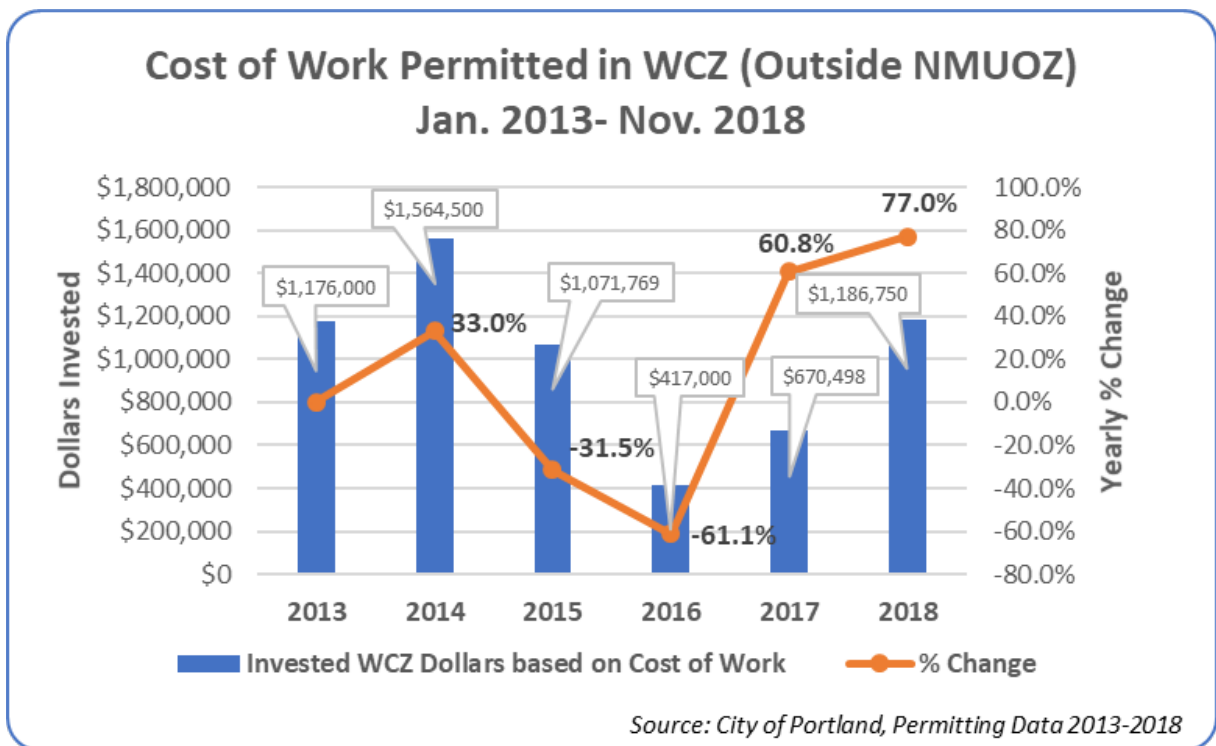
[Please note: permits types for exclusively electrical work, plumbing, outdoor seating and signage were not included due to insufficient valuation data available.]

Selected Permit Types Cost of Work (Outside the NMUOZ) 2013-18		
Permit Group	Total Valuation	% of Total
Commercial Construction	\$3,910,689	64.3%
Residential Construction	\$238,000	3.9%
Pier Infrastructure	\$700,000	11.5%
Building Upgrades	\$993,528	16.3%
Fire Suppression	\$244,300	4.0%
Total	\$6,086,517	
<i>(City of Portland Permitting Data 2013-18)</i>		

The largest share of investment (64.3%) being observed is found in the Commercial Construction types of permits which generally a focus on updating buildings either by repair, change of use renovations, alterations or additions, in an area where the average building was built around 1964, according to parcel data.

Similarly, the second largest area of investment is found in Building Upgrades, with HVAC installation representing just over 63 percent, hood installation with 23 percent, and tank replacement at nearly 14 percent of all Building Upgrades.

The total estimated cost of work reported in the WCZ (outside of the NMUOZ) is in the ballpark of more than \$6 million dollars since 2013.



- 2) **Square Footage Data** – In order to best show square footage trends over a five-year period, Assessor's data was selected from the 2012 and 2017 tax rolls in order to overcome the challenges of tracking square footage changes found in building

renovations, additions, and change of use scenarios. Additionally, the Assessor's IAS system will attach a "Land Use Type" to the specific parcel where building/s are situated for general classification. Please note that a Land Use Type assigned to a specific parcel does not necessarily indicate every existing use as there may or may not be multiple buildings on a parcel, or various uses within the same building. However, building square footages located in the WCZ outside of the NMUOZ should be reported in this data snapshot.

The Land Use Type for residential uses is limited to just Condominiums, and there were no square footage changes between 2012 to 2017. Therefore only a breakdown of commercial square footage by use is provided. Below are the seven commercial land use types present in the WCZ zone (outside of the NMUOZ).

Commercial Land Uses:

Wholesale	Multi-Use Commercial
Office Business	Retail Services
Commercial Condos	Governmental
	Manufacturing

Building Square Footage Change in WCZ (Outside the NMUOZ) 2012 & 2017			
Land Use Type	2012	2017	Change
Commercial Uses	486,118	503,779	17,661
Residential Use (Condominiums)	149,530	149,530	0
Total	635,648	653,309	
(City of Portland Assessor's Office Tax Rolls Data, 2012 & 2017)			

Based on the most recent tax rolls from 2017, residential building square footage located within the WCZ target area makes up nearly 23 percent of all building square footage, with commercial uses representing the lion's share at around 77 percent.

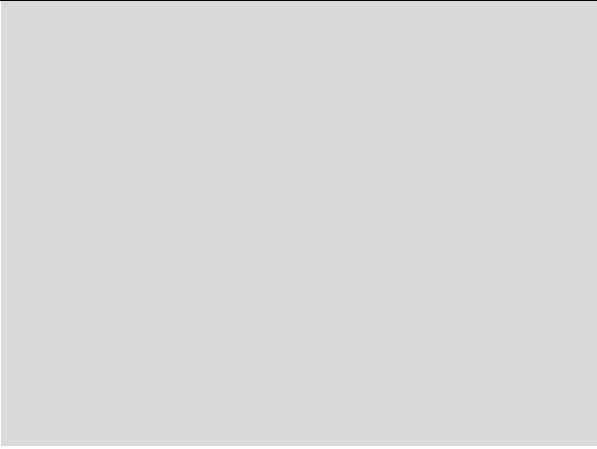
Att. 1. Development Activity Summary

Commercial Building Square Footage by Use Change in WCZ (Outside NMUOZ) 2012 & 2017				
Commercial Uses	2012	2017	SF Change	Change in %
Wholesale	123,726	128,435	4,709	3.8%
Office Business	179,960	192,912	12,952	7.2%
Commercial Condos	14,615	14,615	0	0.0%
Multi-Use Commercial	3,678	3,678	0	0.0%
Retail Services	7,122	7,122	0	0.0%
Governmental	43,856	43,856	0	0.0%
Manufacturing	66,415	66,415	0	0.0%
TOTAL	439,372	457,033	17,661	4.0%
(City of Portland Assessor's Office Tax Rolls Data, 2012 & 2017)				

Wholesale and Office Business were the only uses that saw any square footage increase over the five-year period. For Wholesale, the only change that occurred was on the parcel making up 86 Commercial Street (i.e. Harbor Fish Market) which saw an overall increase of 4,709 SF. The largest change in square footage occurred at 68 Commercial which is attributed to a slight decrease in SF in one of the two buildings, combined with added square footage from the new building where Scales Restaurant is located (formerly the Science Museum was demolished in 2015).

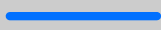
2018 Waterfront Central Zone Ground Floor Marine Use Inventory: Marine Use Area (Outside of the Non-Marine Use Overlay)																							November 2018		
Pier/Property Name	BLDG #	Object ID	Business Occupying Building	Buidling Footprint Area	Buidling Footprint Area-Pier Totals	Active Marine Use Building Area	Active MU, Pier totals	Vacant Building Area Available to Marine Use	Vacant building area, Pier Totals	Buidling Area Available to Marine Use (Active Marine Plus Vacant)Pier Total	Active Non-Marine Use Building Area	Active NonMU, Pier Totals	Percent Building Area Available to Marine Use (active marine use plus vacant divided by building footprint area pier totals)	Parcel ID Number	CBL Number	Property Owner	Land Pier Area	Common Circulation Drive Area	Open Area-net (land pier area minus Com Drive minus Building footprint area-pier total)	Active Marine Use Open Area	Vacant Open Area, Available to Marine Use	Open Area Available to Maine Use (Active Marine plus Vacant)	Active Non-Marine Use Open Area	Percent Open Area Available to Marine Use (Active Marine Use Plus Vacant divided by Open Area)	Notes: Vacancies are likely under reported within the percentage totals. Where casual storage, or no information was available, building area and open area is assumed to be available to marine use.
Deake's Wharf	1	38984		11056		9265		1800			0		100%												
	2	36868		4764		4764		0			0		100%												
	4p	38797		457		457		0			0		100%												
pier total				16277	16277	14486	14486	1800	1800	16286	0	0	100%	1	043 H001001	Gen Mar Con.	57527	5929	35321	35321	0	35321	0	100%	
Sturdivant's Wharf	6	38749		11104	11104	11104	11104	0	0	11104	0	0	100%	2	042 G001001	Sturdivants Wharf LLC	38737	1790	25843	25843	0	25843		100%	
Holyoke Wharf										0									0						
Alfiero	8p	38415	Seafood/Maine Marine	5960	5960	1500	1500	3960	3960	5460	500	500	92%	3	042 F003001	Harbor Fish Market	11518	1269	4289	4289	0	4289		100%	
Hale	9	38657		4109		4109																			
	10	38828		6919		5017		1849											0						
Hale pier total					11028	9179	9179	1849	1849	11028	0	0	100%	4	042 F002001	Gen Mar Con.	34324	4350	18946	18946	0	18946		100%	
Berlin Mills Wharf	12	36299	Portland Yacht Services	3156						0									0						
	12b	38420		708						0									0						
pier total					3864	0	0	3864	3864	3864	0	0	100%	5	042 E001001	Schmader	52034	0	48170	0	46362	46362	1808	96%	Recent vacancy due to departure of PYS. Pier for sale. NM open area is parking for 400 Comm st
Hobson's Pier	15	38554	ISF Trading/Maine Lobster Pound	16293		16293		0			0														
	15b	38608		857						0															
pier total					17150	17150	17150	0	0	17150	0	0	100%	6	042 D002001	Hobson's Pier Inc	67478	10812	39516	39516	0	39516	0	100%	
Becky's Parcel Remnant	16			375	375	0	0	0	0	0	375	375	0%	6b	042 D004001	Becky's	894	0	519	0	0	0	519	0%	
GMRI/Coast Guard (Wright's)	17	37489		3894						0				7	042 C003001										
I	17a	38577		500						0															
pier total					4394	4394	4394	0	0	4394	0	0	100%			GMRI	205990	19658	181938	115938	66000	181938	0	100%	
Portland Fish Pier	18	54072	Bristol Seafood	23298		23298		0																	
	19	38382	MTC	14911		14911		8200																	
	20	38466	Vessel Services	5152		5152		0																	
	21	38074	PFX	39245		39245		0																	
	22	37819	Douty Brothers	7240		7240		0																	
	23	37990	IFS	8338		8338		0																	
bait cooler (new in 2013)	24a	61253	Dropping Springs	1538		1538		0																	
pier total				99722	99722	99722	91522		8200	99722		0	100%	8	multiple Parcels	Fish Pier complex	458356	41466	317168	265111	0	265111	52057	84%	Non-marine open space is located in front parking lot, MTC parking, MTC visitor parking
Merrill's/Cumberland	26p	37870	Waterfront Maine	20247	14306	6615	6615	1253	1253	7868	6438	6438	55%	9	041 A018001	Waterfront Maine	47463	12205	15011	8940	0	8940	6071	60%	

Pier/Property Name	BLDG #	Object ID	Business Occupying Building	Building Footprint Area	Buidling Footprint Area-Pier Totals	Active Marine Use Building Area	Active MU, Pier totals	Vacant Building Area Available to Marine Use	Vacant building area, Pier Totals	Buidling Area Available to Marine Use (Active Marine Plus Vacant)	Active Non-Marine Use Building Area	Active NonMU, Pier Totals	Area Available to Marine Use (active marine use plus vacant divided by building footprint area pier totals)	Parcel ID Number	CBL Number	Property Owner	Land Pier Area	Common Circulation Drive Area	(land pier area minus Com Drive minus Building footprint area-pier total)	Active Marine Use Open Area	Vacant Open Area, Available to Marine Use	Open Area Available to Maine Use (Active Marine plus Vacant)	Active Non-Marine Use Open Area	Area Available to Marine Use (Active Marine Use Plus Vacant divided by Open Area)	Notes
Union Wharf	27p	37716		763						763															
	28p	36649		2850		2850																			
	29p			950						950															
	30	37982		1729		1729																			
	31	37802	Maine Lobster Direct	6963		5763				1200															
	32	38009	Maine Lobster Direct	1702		1702																			
	33	61243	Demoloished																						
	34	38075	Cozy Harbor	4963		4963																			
	35	37453	CBS Lobster	1943		1943																			
	36	38053	Demoloished																						
	36a		Replaced33 and 36	2722																					12 parking spaces, estimated
pier total					24585	21672	21672	0	0	21672	2913	2913	88%	10	031 L035001	Proprietors of Union Wharf	118533	14685	79263	73824	0		5439	93%	
Widgery Wharf,multiple, mobile buildings	41	multiple mobile buildings																				0			
	A			132		132																			
	B			76		76																			
	C			243		243																			
	D			208		208																			
	E			177		177																			
	F			216		216																			
	G			233		233																			
	H			215		215																			
	I			136		136																			
	J			211		211																			
	K			297		297																			
	L			177		177																			
	M			326		326																			
	N			261		261																			
	O			137		137																			
	P			1620		1620																			
	Q			776		776																			
	R			136		136																			
	S			159		159																			
	T			102		102																			
	U			120		120																			35-45 non-marine use parking spaces, some tandem layout. May have marine mixed in.
pier total				5958	5958	5958	5958	0	0	5958	0	0	100%	11	031 K008001	Kelly Family	45061	7318	31785	22019	0	22019	9766	69%	
Chandler's Wharf, multiple	42p	37926		7235						7235				12	031 J002577										
		37794		6389						6389															
		37751		4755						4755															
		36656		6700						6700															
		37891		6338						6338															
		37977		6436						6436															
				1298						1298												0			
pier total				39151	39151	0	0	0	0	0	39151	39151	0%				67748	0	28597	0	0	0	28597	0%	



Pier/Property Name	BLDG #	Object ID	Business Occupying Building	Buidling Footprint Area	Buidling Footprint Area-Pier Totals	Active Marine Use Building Area	Active MU, Pier totals	Vacant Building Area Available to Marine Use	Vacant building area, Pier Totals	Buidling Area Available to Marine Use (Active Marine Plus Vacant)	Active Non-Marine Use Building Area	Active NonMU, Pier Totals	Percent Building Area Available to Marine Use (active marine use plus vacant divided by building footprint area pier totals)	Parcel ID Number	CBL Number	Property Owner	Land Pier Area	Common Circulation Drive Area	Open Area-net (land pier area minus Com Drive minus Building footprint area-pier total)	Active Marine Use Open Area	Vacant Open Area, Available to Marine Use	Open Area Available to Mainie Use (Active Marine plus Vacant)	Active Non-Marine Use Open Area	Percent Open Area Available to Marine Use (Active Marine Use Plus Vacant divided by Open Area)	NOTES
Fishermen's/Port Lobster	43	37349	Portland Lobster	1140							1140														
		167291	Building replaced																						
Portland Lobster Co buildngs are a collection of tents, sheds and storage units with seasonal use		167292	Building replaced																						
	partial		partial, Portland Lobster	893							893														
	43B		Portland Lobster	672							672														
	43C		Portland Lobster	268							268														
	43D		Portland Lobster	342							342														
	43E		Harbor tours/Water taxi	252		252																			
				0																					
pier total				3567	3567	252	252	0	0	252	2175	2175	7%	13	031 J030001		10459	0	6892	345	0	345	6547	5%	
ishermen's parking remnant							0		0	0		0		14	031 J032001		2375	0	2375	0	0	0	0	0%	
Long Wharf/Dimillo's	44	37304		917		917																0			
																						0			
Multiple	45	37695		4934							4934														
	45a	54080		1098		1098																			
personal prop in assessment	46			13162		0																0			
pier total				20111	20111	2015	2015	0	0	2015	13162	13162	10%	15	030 H001001		47149		40200	12050	0	12050	28150	30%	Marina is considered non-comerical marine
Portland Pier						0				0												0			
Port Pier, J's Oyster	49p	37269		845	845	0	0	0	0	0	845	845	0%	16	030 H018001		2576	0	1731	0	0	0	1731	0%	
11 Port Pier, Law parking														17	030 H013001		1881	0	1881	0	0	0	1881	0%	
12 Port Pier, Law Offices	53	36856		1969			0		0	0							2439		1594			0			
Law offices	54p	33641	Formerly Lilley law offices	1637	3606	0	0	0	0	0	3606	3606	0%	18	030 B002001		11397	1117	6674	0	0	0	6674	0%	
ort Pier, Dimillos yacht sales	50	37386		1731	1731	1731	1731	0	0	1731	0	0	100%	19	030 H008001		4972	0	3241	1620	0	1620	1620	50%	Parking use % unclear
40 Port Pier Com Condos	52	37299								0					030 B001020							0			
50 Port Pier Res Condos	52			12564	12564	0	0	0	0	0	12564	12564	0%	20	030 B007		14555	0	1991	1405	0	1405	586	71%	
60 Portland Pier	51	37574	Lukes	4121		1902																0			
Bait Shack	51b	52 in GIS		1340		1208		0			132											0			Area calcs based on pending development plans
60 Port Pier total					5461	3110	3110	0	0	3110	2219	2219	57%	21	030 B004001		19947	5055	9431	5797	0	5797	3634	61%	spaces, 1 HC parking space, and 2000 sf exterior
Custom House Wharf																									
	55	53945	Harbor Fish	8473		8473										McGowen						0			
	56	53944	Seabags	4941		0					4941											0			
	56a	54081	various tenants	3582		3582																0			
	57	37384	Coastal Bait	8331		8331																0			
	58	53946	Coastal Bait	7552		7552																0			
	59		Lobster pound	4775		4775																			Extent of vacancies uncertain. Not apparent from land/pier total
	60	37251	Port Hole	2417		0					2417											0			
	61p	37170	Boones, Port Hole	7737		0					7737											0			
pier total				47808	47808	32713	32713		0	32713	15095	15095	68%	22	030 A001001		102161	10845	43508	25743		25743	17765	59%	assigned as non marine open space. Subject to
Maine Wharf																									
Goodrich	63	37092	Scales Bangs, Upstream, Nanuq	9501		0																0			
	64	37175		12297		12297					9501											0			Assumed 10 Non Marine parking spaces - variable
pier total					21798	12297	12297		0	12297		9501	56%	23			45023	8523	14702	11458		11458	3244	78%	
Flatbread/RiRa	65p	37020		4542	4542	0	0	0	0	0	4542	4542	0%	24	030 D001001		7303	272	2489	0	0	0	2489	0%	
TOTALS					381627		235698		20926	256624		113086	67%				1477900	145294	963075	668165	112362	780527	178578	81%	Discrepancies between totals due to rounding errors and subtracting common area from buildings causes inconsistent numbers between Land Pier and Buiding Area Available to Marine Use basis

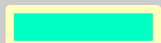
Legend



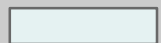
Non-Marine Use Overlay



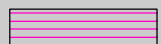
WCZ building



WCZ Parcel



Common Drive



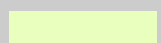
Active Non-marine Use
Open Area



Active Marine Use
in dominantly non-
marine property



Vacant Open Area



Pier area lost to
demolition/damage

#100

Building Number

#100

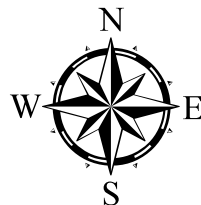
Parcel Number

Waterfront Central Zone Marine Use Inventory: Key Map



600 300 0 600 Feet

Map produced by the City of Portland Department of Economic Development from City of Portland 2018 pictometry, GIS parcel data, field observations, pier management interviews, and on-site interviews. December 2018



MEMORANDUM

TO: Sean Dundon, Chair & Members of Portland Planning Board

FROM: Jennifer Thompson, Associate Corporation Counsel

DATE: January 18, 2019

RE: Conditional Zoning Agreements in the Waterfront Central Zone (WCZ)

As you know, following the Council's adoption of a moratorium on non-marine development in the WCZ, a Waterfront Working Group has been convened to examine a number of possible initiatives aimed at relieving emergent development pressures. After two meetings of the Working Group, the Planning Board is now being asked to consider potential amendments to the existing zoning in the WCZ. Specifically, the Board has been asked to consider amending Section 14-311 of the Code to expressly prohibit the use of conditional zoning in the WCZ.

I write now to outline the legal framework applicable to conditional zoning agreements and to outline some issues for the Board and, ultimately, the Council to consider when determining whether an amendment to the ordinance is necessary and prudent.

The WCZ is among a small number of waterfront zones that provide detailed guidance and specific standards for the approval of conditional zoning agreements. Most zones are silent on the topic. As it currently exists, Section 14-311(c) of the zoning ordinance for the WCZ contemplates conditional zoning agreements for "uses not listed under sections 14-307 and 14-308." Sections 307 and 308, in turn, list a number of permitted and conditional uses that are allowable in the zone, including:

- seafood processing;
- shipbuilding and facilities for construction, maintenance and repair of vessels;
- bait sales and processing;
- restaurants provided that full course meal food service and consumption shall be the primary function of the restaurant;
- cold storage facilities;
- retail and service establishments, including craft and specialty shops; and
- professional office buildings.

In addition to listing a number of uses that are permitted in the WCZ, the City's Code also expressly prohibits a handful of uses. See 14-309.

Although Section 14-311(c) does authorize conditional zoning agreements (CZAs) and outlines a number of criteria that must be met in order for a use to be eligible for such an agreement, it is important to note that CZAs are not governed by Portland's Code of Ordinances, alone. They must also comply with the state statute that authorizes municipalities to grant CZAs and that contains the overarching legal framework for conditional zoning. Therefore, in order to be eligible for a CZA in the WCZ (or any other zone), a use must not only satisfy Portland's Code, it must also satisfy state law.

The state statute that confers authority for conditional zoning requires that rezoning accomplished through a conditional zoning agreement be: (1) Consistent with a municipality's

Comprehensive Plan, and (2) Establish rezoned areas that are consistent with the existing and permitted uses within the original zones. See 30-A M.R.S. § 4352(8).

In applying this statute, Maine courts have explained that a CZA is “consistent” with the comprehensive plan or with existing and permitted uses when it is “in basic harmony” with them. *Rommel v. City of Portland*, 2014 ME 114, 102 A.3d 1168. Under that case law, a use has been said to be “in basic harmony” and consistent if can coexist and show no noteworthy opposing, conflicting, inharmonious, or contradictory qualities or trends. See *McMillan et al. v. the City of Portland, Maine and Packard Development, LLC*, Superior Court, 2005 Me. Super. LEXIS 164 (November 22, 2005) (Crowley, J.). Put another way, in order to be in “basic harmony” a use need not be a perfect fit, but it cannot be expressly contradictory to or prohibited by a comprehensive plan or existing zoning. See *Adelman v. Town of Baldwin*, 2000 ME 91, ¶ 23, 750 A.2d 577.

My understanding is that neither the Planning Board nor the City Council have yet been called on to apply Section 311(c) of the City’s Code to allow a non-permitted use.¹ However, in light of the state statutory standard, Section 14-311(c) of the City’s Code, when read in combination with other sections applicable to the WCZ, may prove problematic should those reviewing authorities be asked to approve a CZA for a use that is not only “not listed under Sections 14-309 and 14-308” but that is expressly prohibited under Section 14-309.

By way of illustration of this point, consider the following:

As noted above, the current WCZ zoning ordinance lists permitted uses in Sections 14-307 and 308. Importantly for the purposes of this discussion, not only are hotels not included in the list of permitted uses, they are expressly *prohibited* in the WCZ. See 14-309.

Now, consider a situation where the Planning Board or Council are called on to determine whether a CZA allowing a hotel meets the state requirement that the CZA be “consistent with permitted uses in the zone.” Although the ultimate inquiry under this prong of the statute requires only consideration of whether a proposed use is consistent or in harmony with the uses that are permitted, the fact that certain uses, including hotels, have been expressly called out as *prohibited* constitutes a prior, affirmative legislative statement that those prohibited uses are so dissimilar (in character, intensity, impact, etc.) from the uses that *are* permitted that they are fundamentally inappropriate for the zone. This prior express finding may make it challenging for a later Planning Board or Council to determine that those previously prohibited uses are, in fact, consistent with permitted uses such that a CZA can be granted.

Stated another way, CZAs are often used to allow uses that may not have been expressly permitted when an ordinance was written, because, for example, they had not yet been created or identified as appropriate for the zone but are nevertheless “consistent” with the uses that were originally identified to warrant an allowance of them. Where, however, an ordinance expressly *prohibits* a use, that affirmative prohibition arguably constitutes a prior legislative finding that a particular use is not, by definition, consistent with the kinds of uses intended for a particular zone such that approval under a CZA may not be possible. This principle is express in other sections of the City’s code where CZAs are

¹ A 2004 CZA for a portion of Custom House Wharf (C35 on the City Zoning Map) allowed for an expansion of an otherwise permitted use (professional office) within a newly constructed building.

contemplated but limited only to uses that have not been expressly prohibited.² Under those sections, prohibited uses are expressly ineligible for approval under a CZA.

Given that state law requires a conditional zoning agreement be consistent with existing and permitted uses in the underlying zone and given that “consistency” generally cannot be found when a use is expressly contradictory to or prohibited by the policy and regulatory frameworks currently in effect,³ Sections 14-309 and 311(c) set up a challenging tension between the City’s Code and state law. This tension between, on the one hand, expressly prohibiting a use because it is inconsistent with the kinds of uses the City wants to allow in a particular zone and then, on the other, authorizing conditional zoning agreements for that very use may make a legislative determination whether to grant a CZA more challenging and legally tenuous than it should be.

In the interests of clarity and a strong legal foundation, if there is a desire to expressly disallow any given use in a zone, it would certainly be preferable to both expressly prohibit that use and state clearly, as we do in other sections of the Code, that prohibited uses are not eligible for conditional zoning agreements. That would continue to allow CZAs for uses that are more akin to the expressly permitted uses but may simply not have been identified yet, while also clarifying that prohibited uses are, in fact, prohibited and are not allowable under any circumstance. Alternatively, the Board could, as the Working Group has suggested, recommend disallowing any and all CZAs in the WCZ. That removes flexibility that may be beneficial at some point in the future, but it is legally permissible and would provide clear guidance for land owners and future Boards and Councils.

² See *e.g.* Section 14-302 (authorizing conditional zoning agreements in the Eastern Waterfront Port Zone but only for non-marine uses that “are not specifically prohibited in section 14-301.2.”)

³ See *Adelman v. Town of Baldwin*, 2000 ME 91, ¶ 23, 750 A.2d 577.

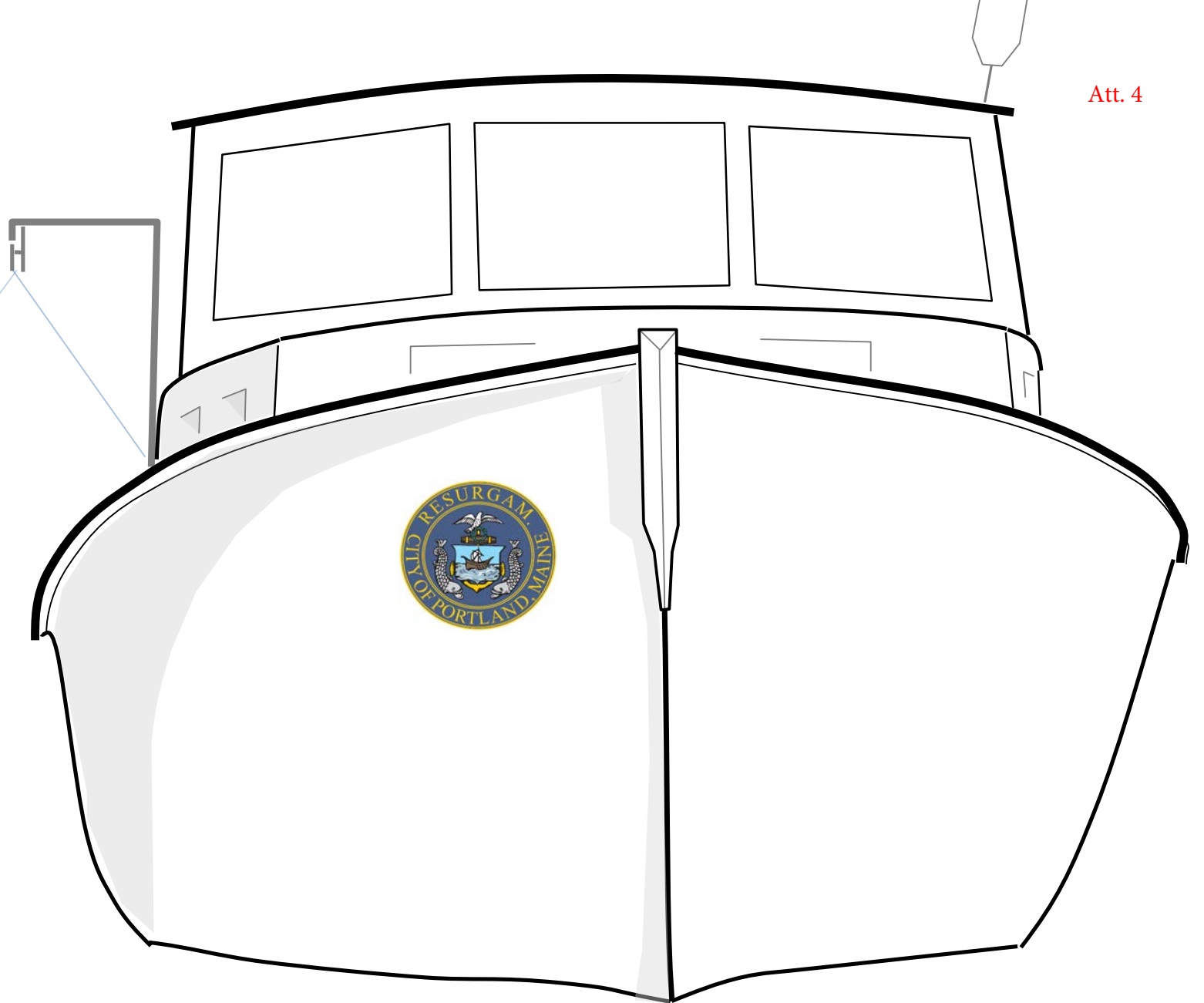
Waterfront Working Group

Meeting #2

January 17, 2019

City Hall Room 24

3:00- 6:00pm



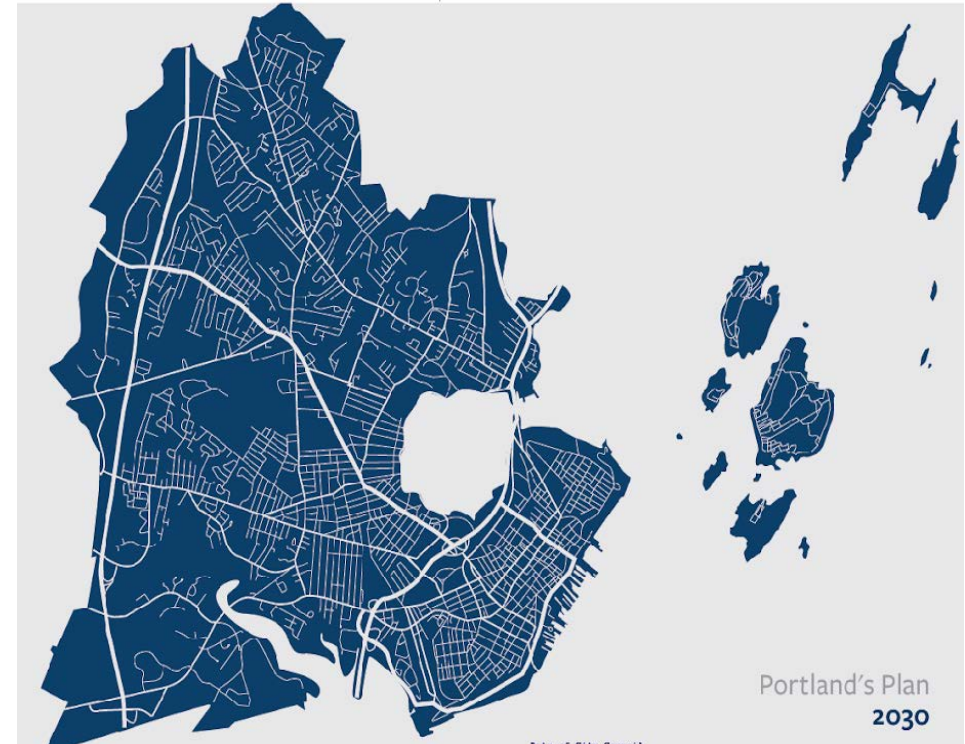
Waterfront Working Group - Agenda

1. Welcome and Introductions: *Jon Jennings, City Manager, Chair*
2. Waterfront Central Zone Background:
 - Comprehensive Plan: Portland's Plan 2030
 - 2010 WCZ Amendments
 - Current WCZ Language
3. Status on Current Projects:
 - Rufus Deering site
 - Fisherman's Wharf Conditional Rezoning
 - Other projects
4. Proposed amendments to the Waterfront Central Zone: *City Staff, Workgroup Members*
 - Contract and Conditional Rezoning
 - Other amendments suggested by Working Group
 - Fishing Priority – Options for discussion
5. Next steps

Portland's Plan 2030

Developed for Whole City:

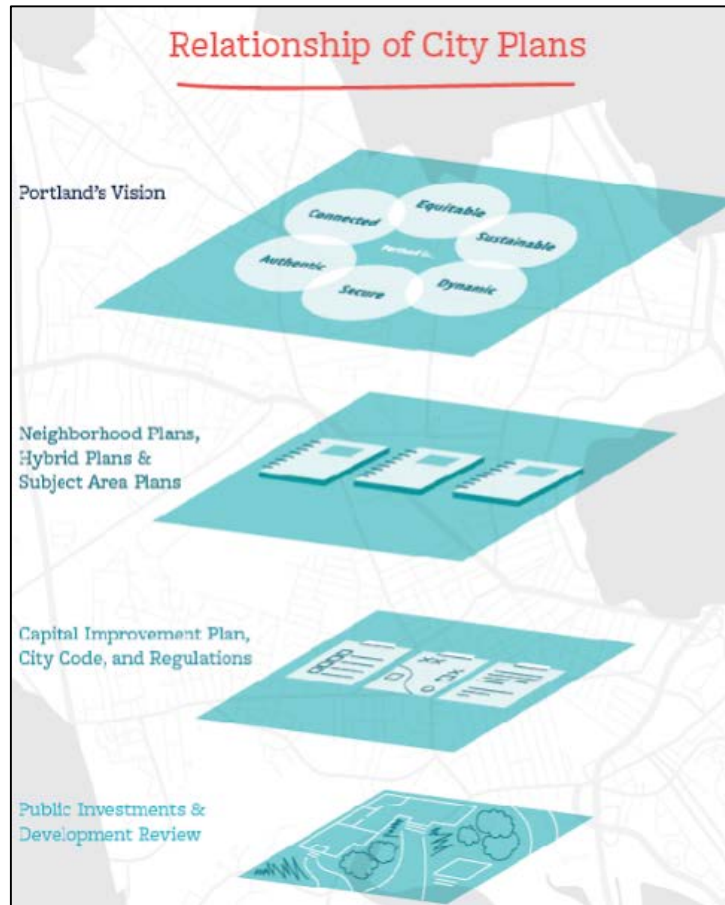
- Multi-year input process
- Guiding vision for Portland
- Informs land use and public policy with City-wide perspective



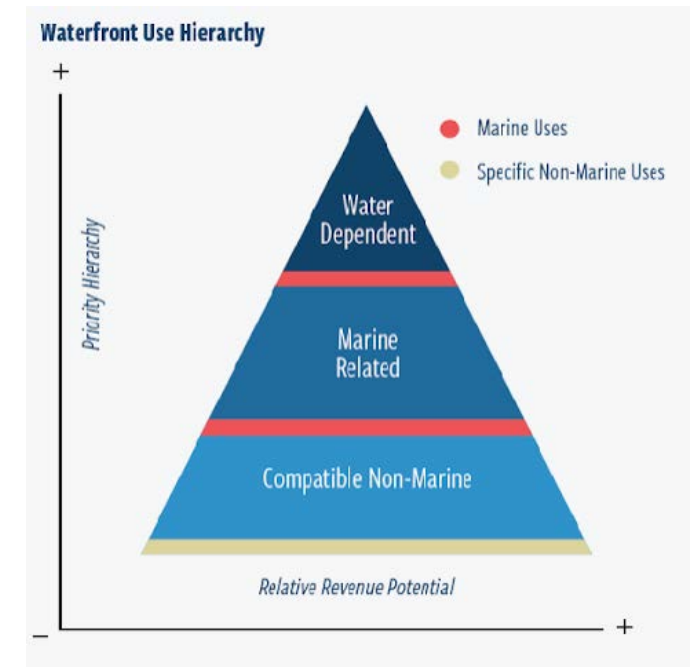
Portland's Plan 2030: What is it?



10-Year Vision



Establishes Goals/Strategies



Portland's Plan 2030: What is it not?

Transportation Master Planning



Commercial Street Operations and Master Plan

OR

Neighborhood/Thematic
Plan

all waterside development and internal circulation routes must be maintained or otherwise provided as an element of any development.
(Ord. No. 297-05/06, 9-18-06; Ord. No. 240-09/10, 6-21-10; Ord. No. 278-09/10, 7-19-10)

DIVISION 18. WATERFRONT CENTRAL ZONE*

*Editor's note—Ord. No. 168-93, § 2, adopted Jan. 4, 1993, repealed former Divs. 18, 18.5 and 18.7, §§ 14-306-14-320.2, which pertained to waterfront zones, and enacted new provisions as Divs. 18, 18.5 and 18.7 to read as herein set out. Formerly, such provisions derived from Ord. No. 426-83, § 1, adopted Apr. 25, 1983; Ord. No. 427-83, § 1, adopted Apr. 25, 1983; Ord. No. 355-85, § 1, adopted Jan. 7, 1985; Ord. No. 438-86, § 1, adopted Apr. 7, 1986; Ord. No. 189-87, § 3, adopted Feb. 7, 1987; Ord. No. 174-87, 's; 1, 2, adopted Mar. 4, 1987; Ref. of May 5, 1987; Ord. No. 385-87, adopted Apr. 6, 1987; Ord. No. 36-89, §§ 1, 2, adopted June 28, 1989; and Ord. No. 15-92, §§ 22, 23, adopted June 15, 1992.

Order 184-14/15 repealed Division 18.7 on 6-1-2015.

Zoning

2010 Policy Statement for the Central Waterfront: **Vision Statement**

Development in the Central Waterfront will achieve a balance where non-marine economic development benefits the piers, Commercial Street, the Waterfront and the City by sustaining marine infrastructure, protecting opportunity for commercial marine activity, and promoting appropriate access by the public to views and activities in Portland Harbor.

**Policy Statement adopted
Into the Comprehensive Plan 2010**

2010 Policy Statement for the Central Waterfront: **Development Policies**

- **Preserve access to berthing and adequate space for commercial marine activity .**
- **Expand non-marine use opportunities .**
- **Accommodate as much non-marine use as can reasonably be absorbed within the zone without detrimental impacts to the overall volume of marine activity .**
- **Link non-marine development revenues with marine infrastructure investments.**
- **Expand the public's opportunity to access the Central Waterfront .**
- **Plan for climate change resiliency.**
- **Prohibit residential development.**

Waterfront Central Zone (WCZ): Overview

Foundation

Purpose

Definitions

Uses

Permitted/
Conditional

Prohibited

Development Standards

Dimensional
Standards

Performance
Standards

WCZ: Uses Explained

- Water Dependent
- Marine Related
- Compatible Non-Marine

Permitted



- Reviewed by Planning Board using Conditional Use Standards

Conditional



- Not Generally Compatible
 - Drinking Establishments
 - Residential Uses
 - Hotels**

Prohibited



WCZ: Development Standards

All	Non-Marine	Not Permitted*
• Performance Standards	• NMUOZ • Non-Marine Standards	• Conditional/Contract Rezoning

* Exceeding Use/Dimensional Requirements must fulfill additional requirements prior to being eligible for a conditional/contract rezoning

Legend

- Filled Land/Pier
- Pile-Supported Pier
- Inventory Limits
- NMUOZ Boundary
- WCZ Boundary

Note: The Non-Marine Use Overlay Zone (NMUOZ) is that portion of the Waterfront Central Zone (WCZ) that is located along Commercial Street where 100% non-marine use and development is allowed. The subject use inventory is limited to those portions of the WCZ beyond the NMUOZ where first floor and open area non-marine uses are limited to 45% of leaseable area.

Non Marine Use Overlay Zone



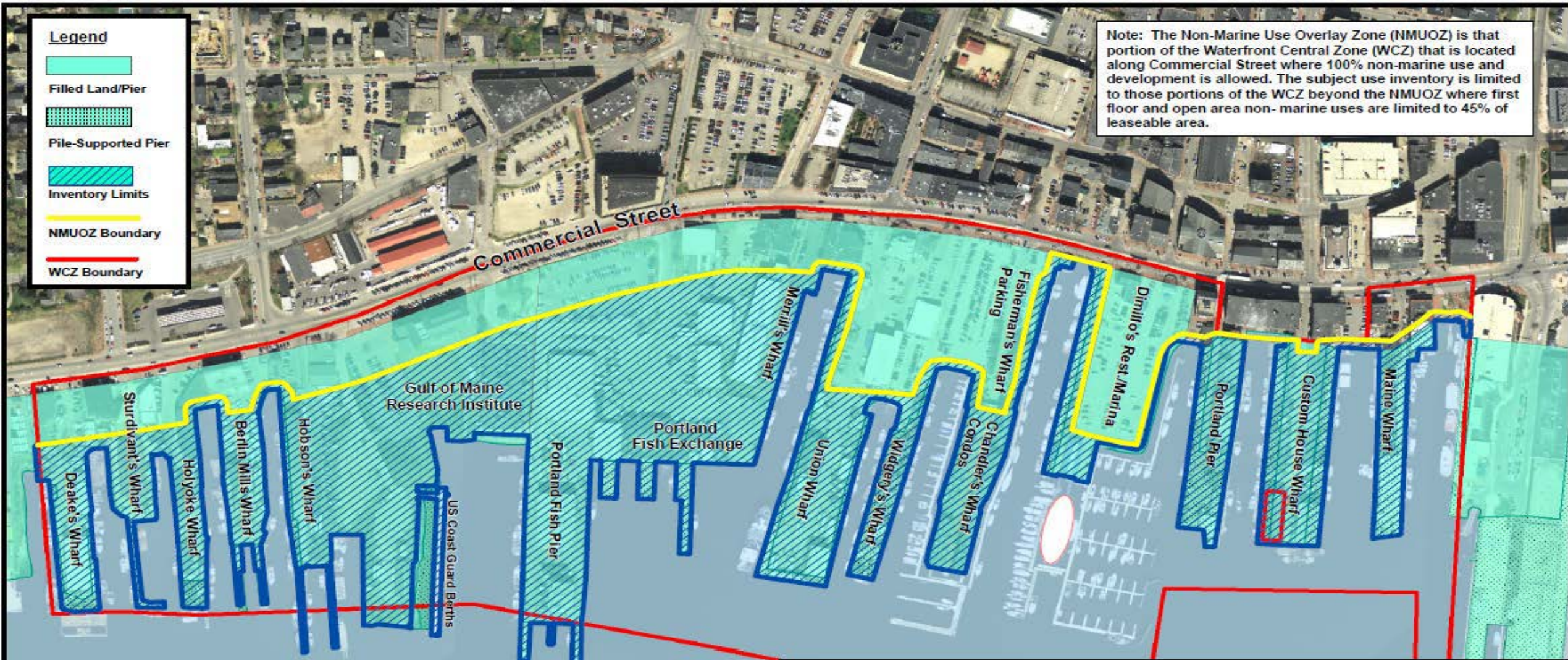
WCZ Use Inventory

Map produced by the City of Portland Planning Division from Portland GIS Program data. Locations are approximate. Intended for orientation purposes only. May 2013.

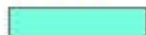
500 250 0 500 Feet



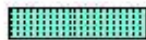
Inventory Map Extent:
Buildings and Open Areas
in the Marine Use portion of
the Zone (outside of the
NMUOZ. See Note.)



Legend



Filled Land/Pier



Pile-Supported Pier



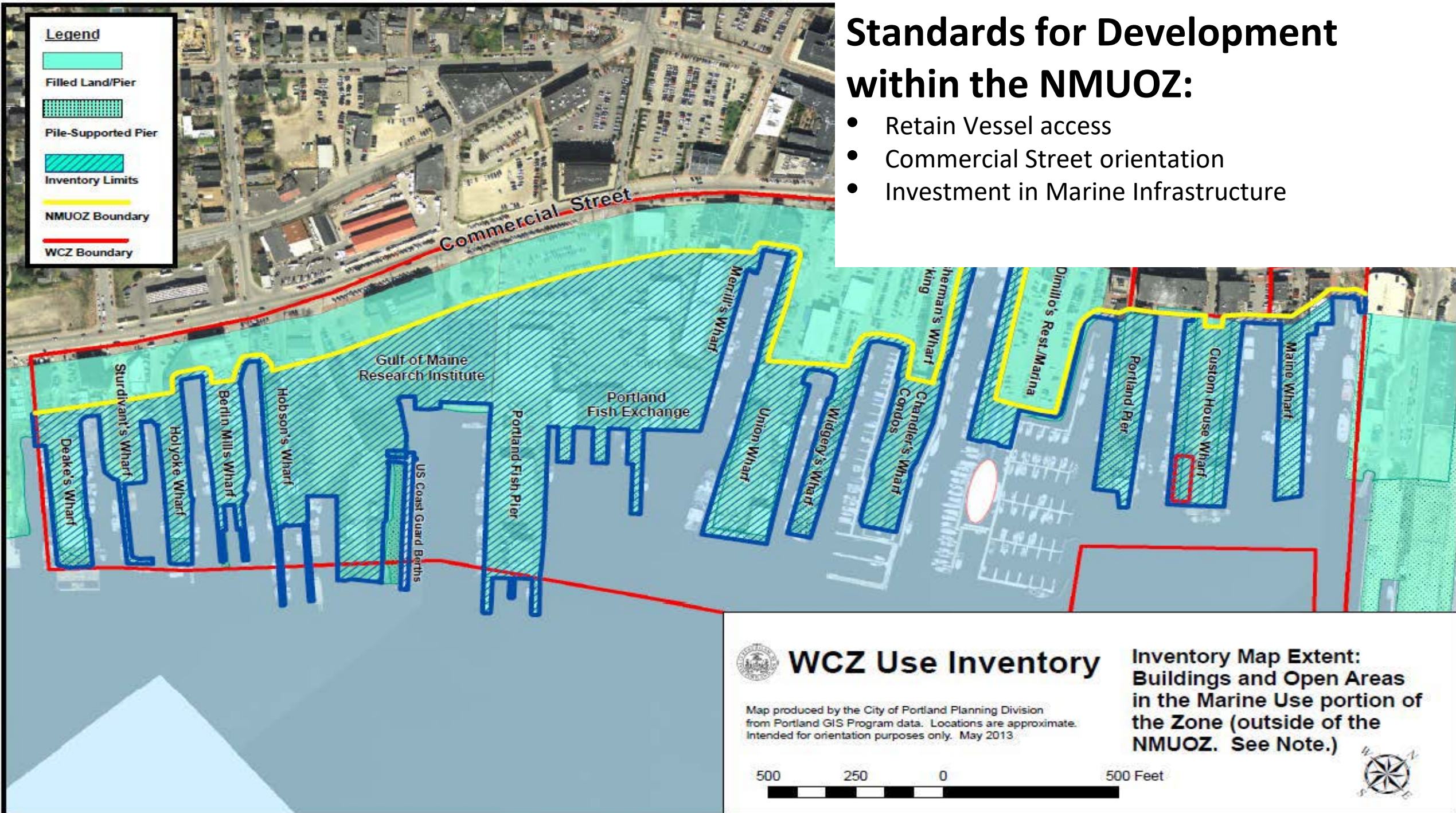
Inventory Limits

NMUOZ Boundary

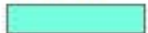
WCZ Boundary

Standards for Development within the NMUOZ:

- Retain Vessel access
- Commercial Street orientation
- Investment in Marine Infrastructure



Legend



Filled Land/Pier



Pile-Supported Pier



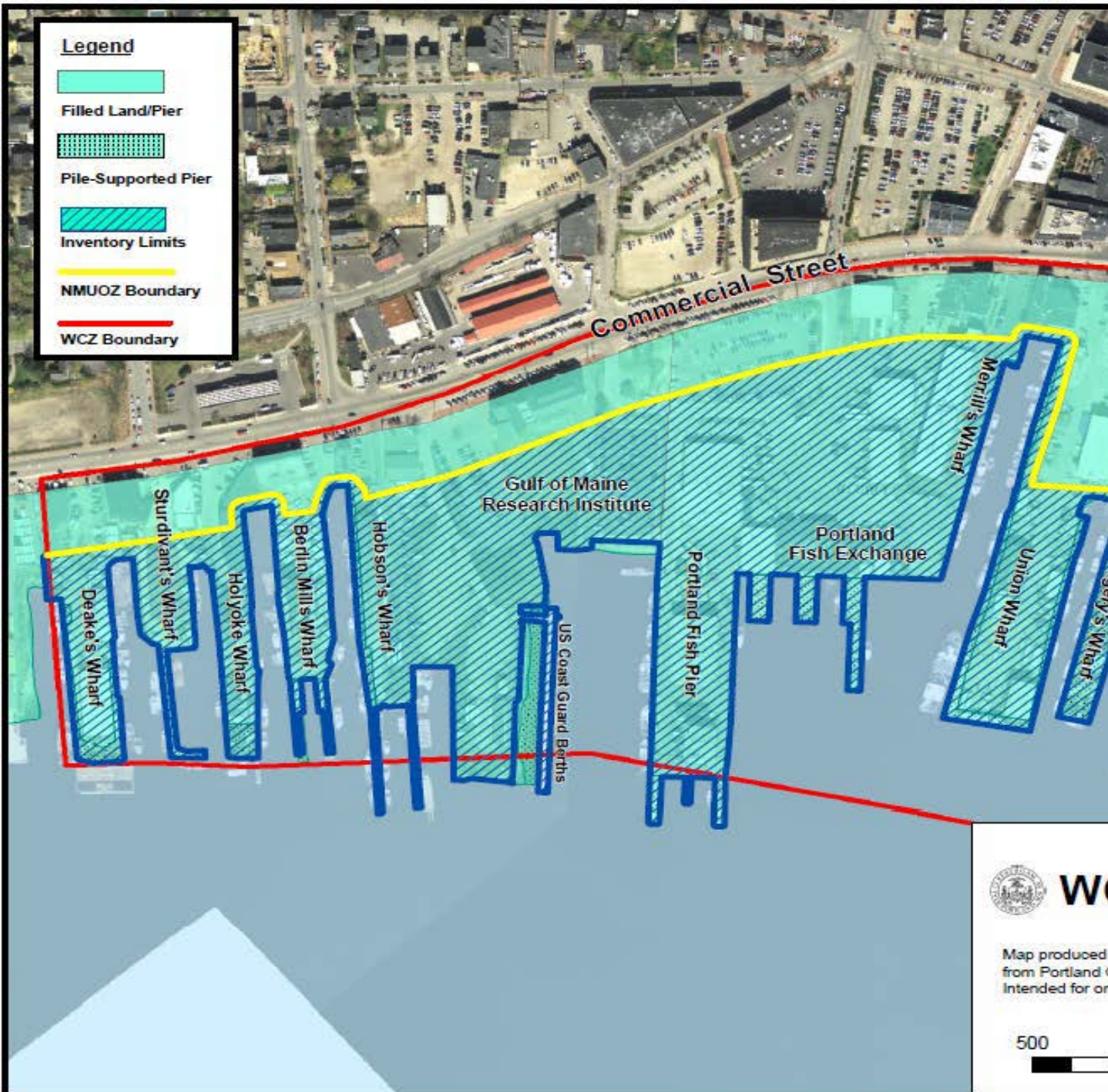
Inventory Limits

NMUOZ Boundary

WCZ Boundary

Non-marine uses outside of the NMUOZ:

- 55% Marine Use required on all ground floors and open areas
- Vacancies or change of tenancy must be offered to marine use – advertised in “targeted media”
- Uses inventoried – Required of the pier owner at time of application
- Inventories compiled for entire zone and reported by Planning Authority
- Pier edge (5' minimum) and berthing reserved for marine use

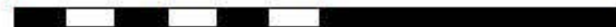


WCZ Use Inventory

Map produced by the City of Portland Planning Division from Portland GIS Program data. Locations are approximate. Intended for orientation purposes only. May 2013.

Inventory Map Extent:
Buildings and Open Areas
in the Marine Use portion of
the Zone (outside of the
NMUOZ. See Note.)

500 250 0 500 Feet





Maine Wharf : 44% Non-Marine



Maine Wharf : 56% Marine

60 Portland Pier: Luke's Lobster
57 % Marine (Building) 61% Marine (Open area)



**Public Access
retained to end of Pier**



Union Wharf Office Building

WCZ: Contract/Conditional Rezoning Explained

WHAT IS IT?

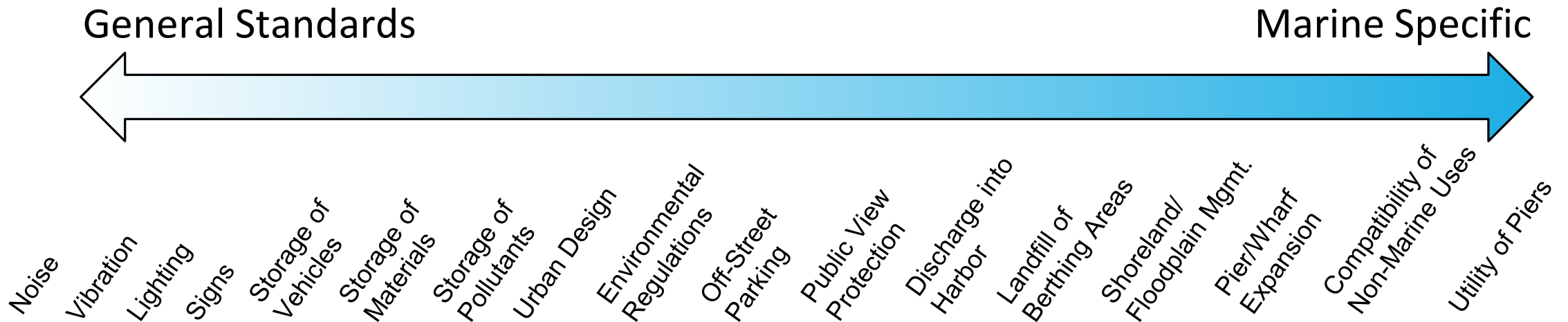
- Negotiation process wherein a new 'site-specific' zone is agreed to between Property Owner and City Council.
- Available to all property owners regardless of zone
- WCZ is UNIQUE in that it provides an extra step in the process, a requirement that certain standards be met before being found eligible.
- Council must still find proposals to be consistent with Comp Plan.

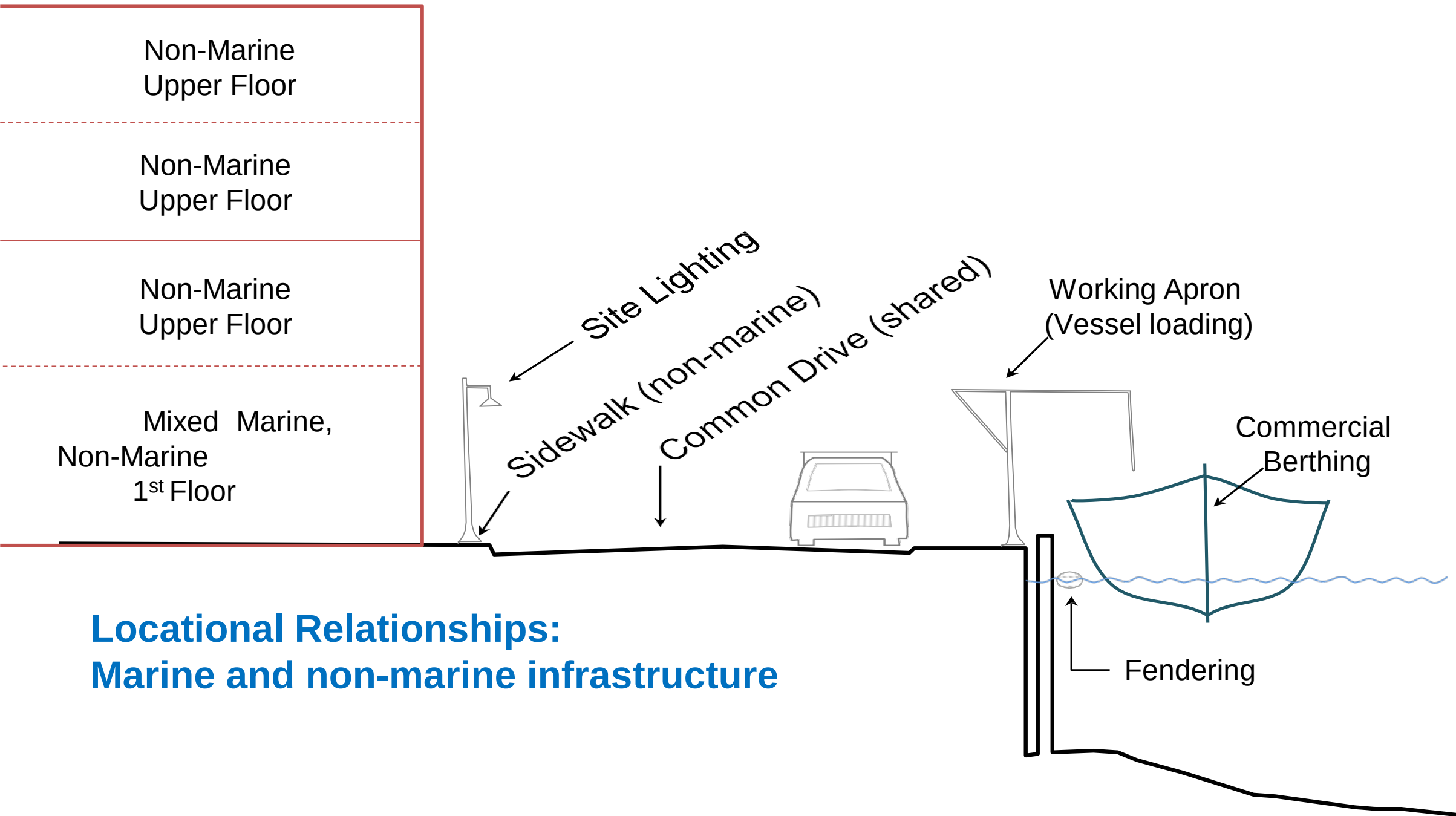
WHAT IT IS NOT?

- Contract/Conditional rezoning is NOT a Conditional Use, which is permitted by-right, so long as certain development standards are met.
- A single step process. Conformance with all performance and conditional rezoning standards must be evident, before property owner can move forward with rezoning.

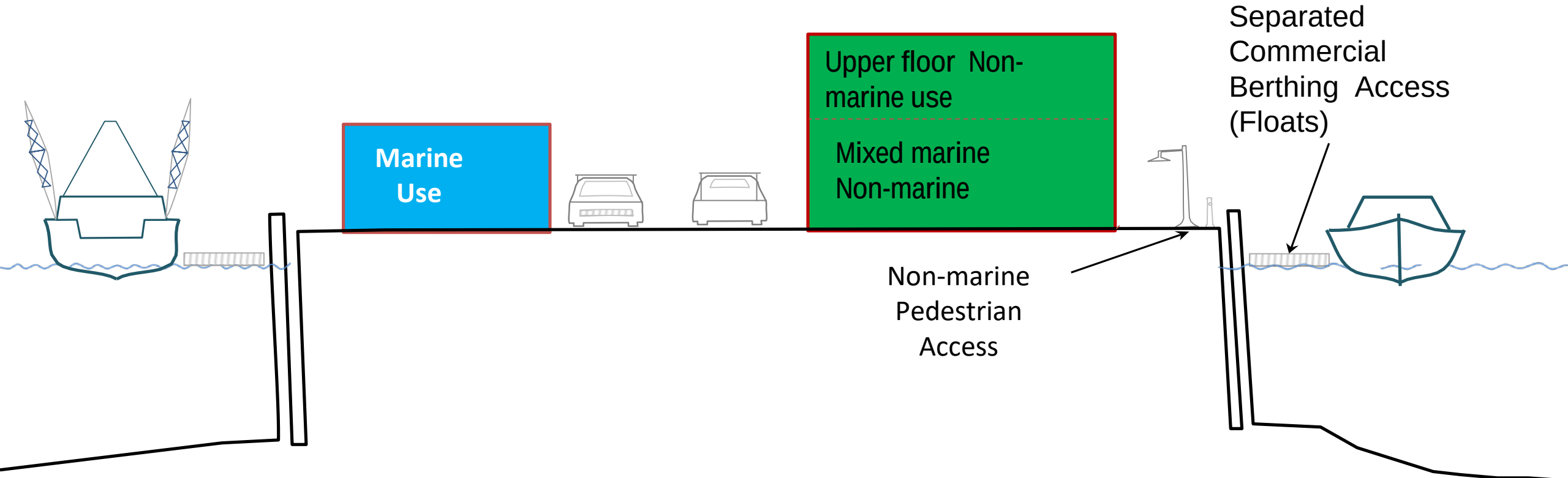
WCZ: Performance Standards

- Performance Standards = Means of ensuring compatibility and preventing nuisance among like uses

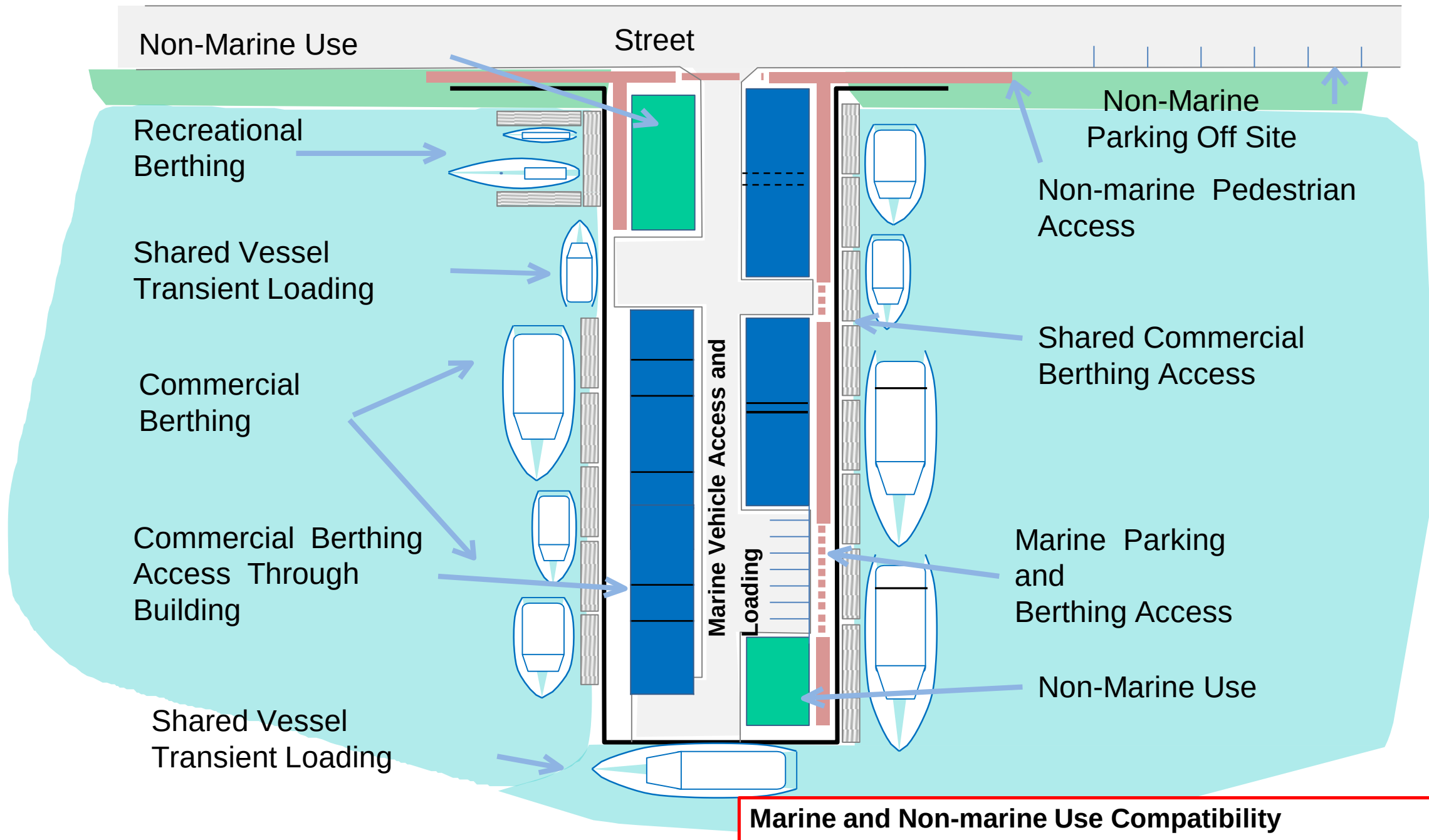




Marine and Non-marine Use Compatibility



Applicable to a variety of pier types and sizes



WCZ: Next Steps – Short Term

- Planning Board Workshop on January 22, 2019 to discuss changes to the conditional rezoning standards of the WCZ
- Proposal is to go beyond the additional standards required for conditional rezonings in the current WCZ and, based on the recent Comprehensive Plan, eliminate the option for conditional/contract zones in the WCZ
- Would be the only zone in the City that did so

Waterfront Working Group

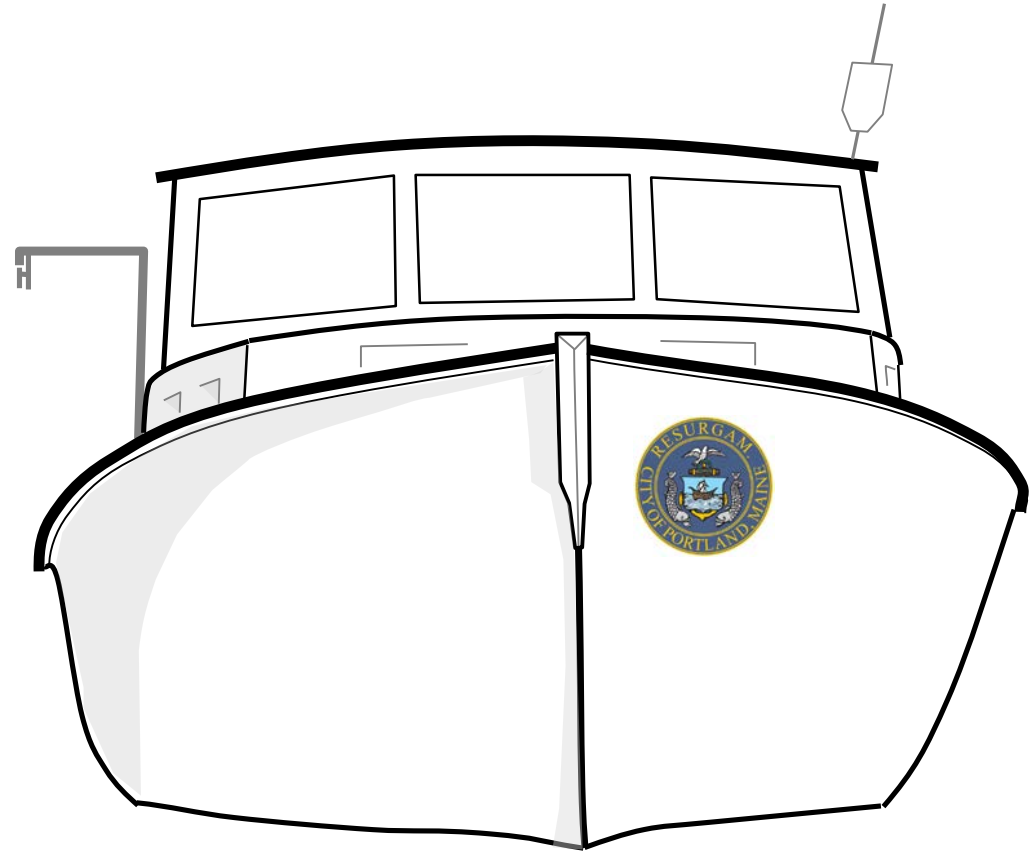
Questions?

Meeting #2

January 17, 2019

City Hall Room 24

3:00- 6:00pm



WCZ: Rufus Deering Contributions

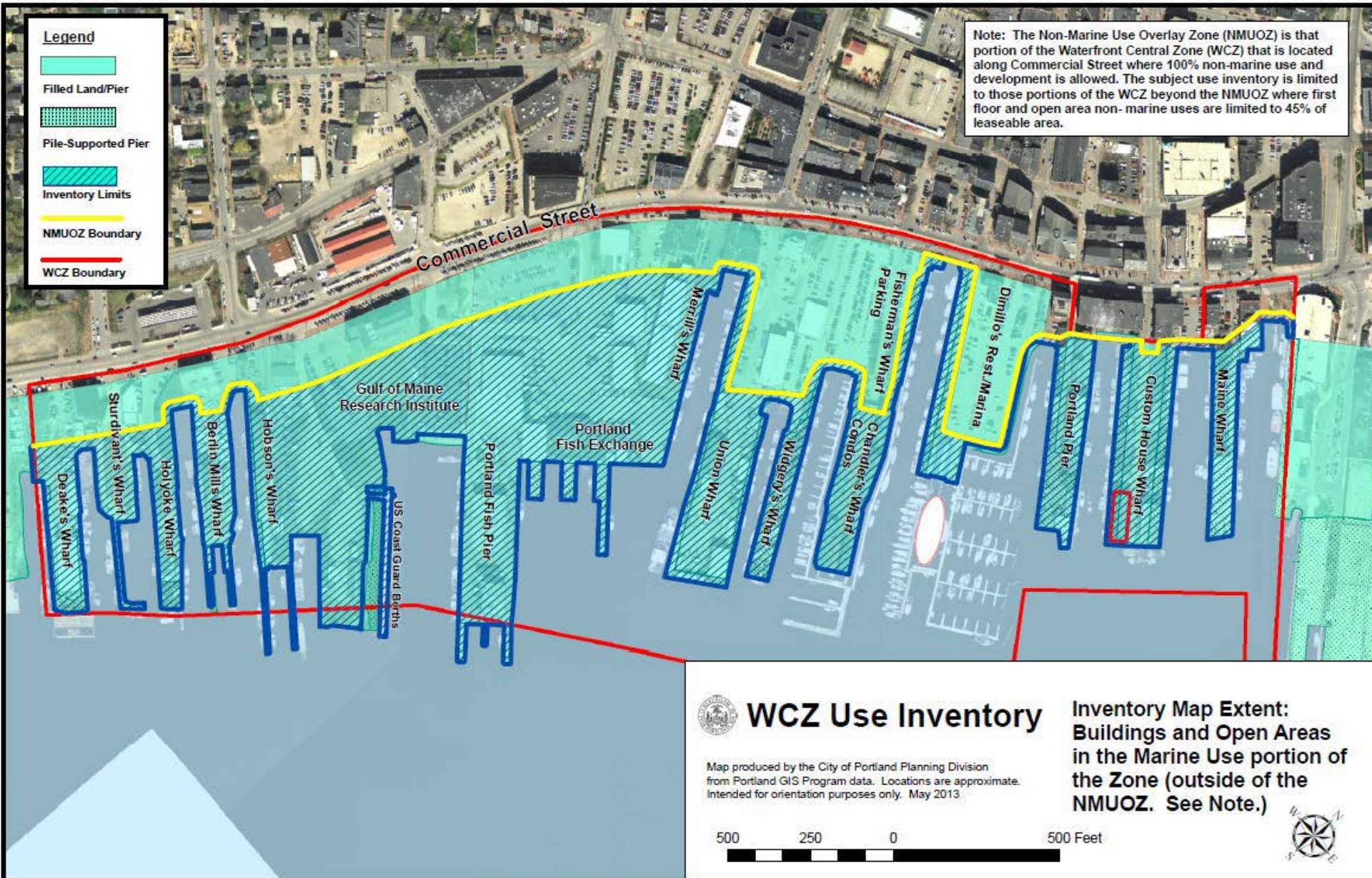
- B5b, not WCZ
- \$40,000 → Commercial Street Operations and Master Plan
- Traffic Movement Permit
 - \$35,000 → Beach Street
 - \$150,000 → Signal at High and Commercial
- \$10,000 → TMA
- Provides additional off-street parking for marine uses



Fisherman's Wharf Update

- Request for hotel has been withdrawn.
- Future plans for this site are unclear at this stage.





Fisheries Priority: Where and How?

Legend

Commercial Street
ROW Offset

NMUOZ

Commercial Street Right of Way

50 ft

100 ft

150 ft

200 ft

250 ft

300 ft

350 ft

400 ft

450 ft

500 ft

550 ft

Waterfront Central Zone Commercial Street Offsets

100 50 0 100 Feet

Map produced by the City of Portland Department of Economic Development
from City of Portland 2016 pictometry and GIS parcel data.
Offset distances are approximate. Intended for visualization only.
Not for design or regulatory compliance.
January 2019





Waterfront Central Zone

**Parking Areas:
Larger Scale and Commercial Lots**

600 300 0 600 Feet

Map produced by the Portland Planning Division from year 2005 GIS Program data. For use in the evaluation of Waterfront Central Zone text amendments. Parking lots shown are lots that are greater than 30,000 square feet and/or lease to off-site uses.

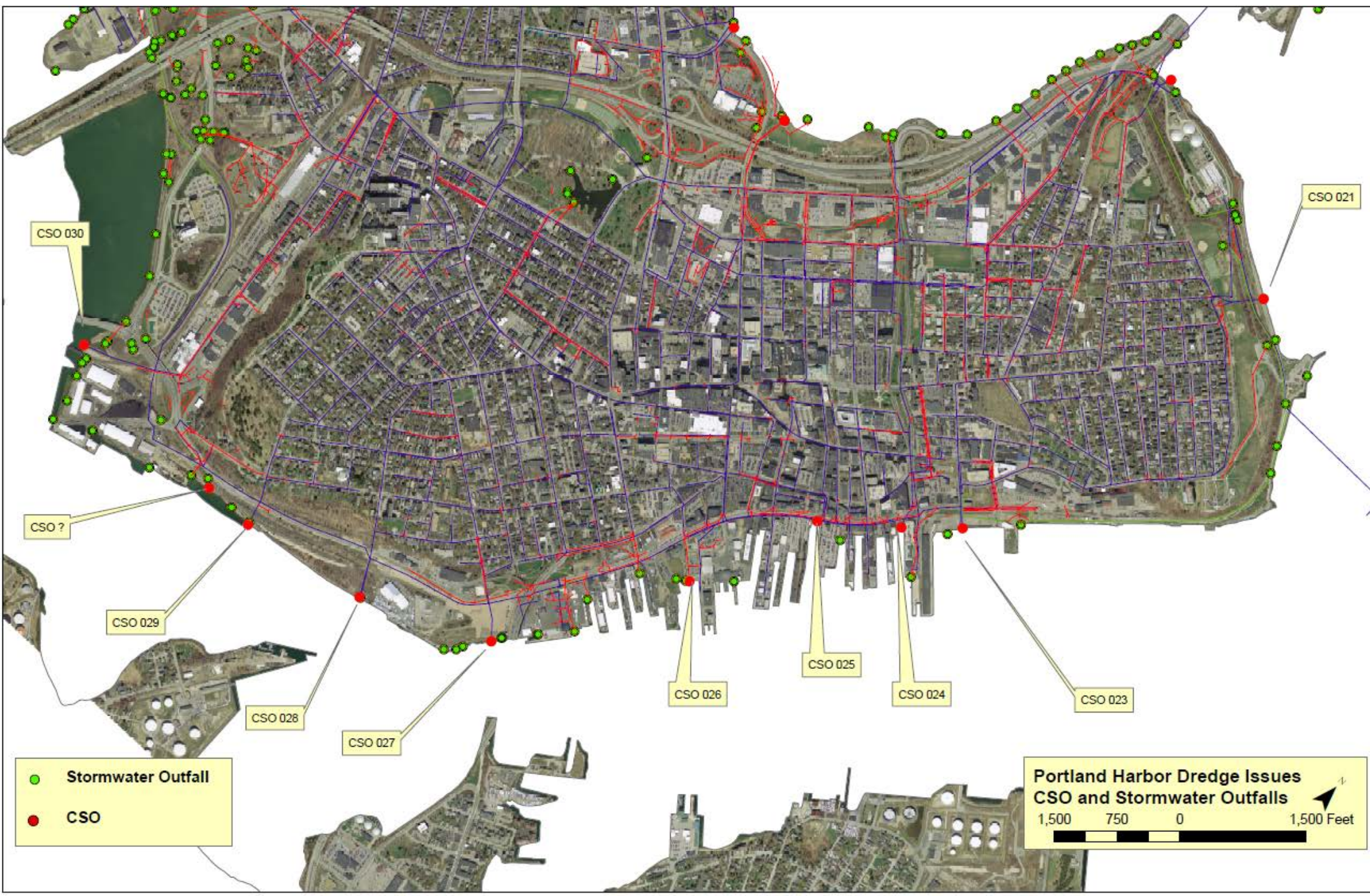
Parking Lots

Lot #	Lot Location (approximate)	Area (Sq Ft)	Number of Spaces
1	Hobson's Wharf/Coast Guard	26,000	120 +/- Capacity by calc. Variable - used also for marine storage
2	Gulf of Maine Research Inst.	22,000	80 By count
3	Coast Guard Berths (SOHRT)	22,000	70 By calc.
4	Fish Pier, Marine Trade Center Lot	22,500	90 By count
5	Fish Pier, Commercial St. Lot	56,300	156 By count
6	Merrill Wharf, Cumberland Storage	30,600	105 By count
7	Union Wharf	29,800	115 By count
8	Whigway Wharf/Union Wharf	22,400	80 By count
9	Fisherman's Wharf (1)	51,500	175 By calc.
10	Fisherman's Wharf (2)	14,000	40 By count
11	Long Wharf/Diesel Bldg	94,800	380 By calc.
12	Totals	422,000 Sq Ft	1325 approximate count

Parking Inventory

Parking Lots

<u>Lot Location (approximate)</u>	<u>Area (Sq Ft)</u>	<u>Number of Spaces</u>
Hobson's Wharf/Coast Guard	36,000	120 +/- Capacity by calc. Variable – used also for marine storage.
Gulf of Maine Research Inst.	33,000	83 By count
Coast Guard Berths (GOMRI)	22,000	73 By calc.
Fish Pier, Marine Trade Center Lot	33,500	99 By count
Fish Pier, Commercial St. Lot	56,300	156 By count
Merrill Wharf, Cumberland Storage	30,600	105 By count
Union Wharf	29,800	115 By count
Widgery Wharf/Union Wharf	22,400	80 By count
Fisherman's Wharf (1)	51,500	175 By calc
Fisherman's Wharf (2)	14,000	49 By count
Long Wharf/Dimillo's	94,800	280 By calc
Totals	423,900 Sq Ft	1335 approximate count



NEWS RELEASE

FOR IMMEDIATE RELEASE

January 11, 2019

MEDIA CONTACT

Jessica Grondin

207-756-8173

**City Announces Developer Pulls
Portland Waterfront Hotel Proposal**
*Staff proposes changes to zoning requirements
within Waterfront Central Zone*

PORTLAND, Maine -- The City of Portland announced today that the development team Fisherman's Wharf Portland, LLC has submitted a request to the Portland Planning Board to amend its current application for a conditional rezoning at 184 Commercial Street. The amendment eliminates the hotel use component from the development proposal.

"After many discussions with the Bateman family, I'd like to thank them for taking this important step, as we did not think a hotel use on the waterfront side of Commercial Street was compatible with our working waterfront," said City Manager Jon Jennings. "This change will go far in addressing one of the major concerns we heard from the fishermen of our working waterfront. I also want to thank City staff for the work they have done and continue to do to make the working waterfront viable for generations to come."

Following the first meeting of the [Waterfront Working Group](#) (WWG), City staff is proposing a zoning change to prohibit conditional or contract zones in the Waterfront Central Zone (WCZ). The proposal is consistent with the goals and recommendations of the City's recent [Comprehensive Plan](#) that emphasize the importance of the working waterfront in Portland. The proposed amendment will be discussed at the second WWG meeting on January 17 at 3:00 PM and will be presented at the Planning Board's January 22 [workshop](#) at 4:30 PM.

Jennings concluded, "the proposed zoning amendment would take the uncertainty out of future development opportunities along the water side of Commercial Street. I look forward to discussing this proposal with the WWG at our next meeting."

###



James Dealaman <jdealaman@portlandmaine.gov>

Problems with proposed amendment to WCZ

Barbara Vestal <vestal@chesterandvestal.com>

Sat, Jan 19, 2019 at 2:46 PM

To: Christine Grimando <CDG@portlandmaine.gov>, Jon Jennings <jpj@portlandmaine.gov>, "Needleman, Bill" <wbn@portlandmaine.gov>, planningboard@portlandmaine.gov, mgrooms@portlandmaine.gov, Sandra Guay <slg@woodedlaw.com>, Willis Spear Jr <spearjr@gmail.com>, Bill Coppersmith <coppersmithbill@gmail.com>, Jennifer Thompson <JLT@portlandmaine.gov>

Please see the attached letter commenting on the proposed amendment to the Waterfront Central Zone which would eliminate contract and conditional rezoning in its entirety.

--

Barbara A. Vestal, Esq.
Chester & Vestal, PA
107 Congress Street
Portland, Maine 04101
(207) 772-7426 - phone
(207) 761-5822 - facsimile

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WCZ conditional contract 1 19 19.pdf

108K

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
KRISTINA DOUGHERTY

chester@chesterandvestal.com
vestal@chesterandvestal.com
dixon@chesterandvestal.com
dougherty@chesterandvestal.com

January 19, 2019

Chair Dundon and Portland Planning Board
City of Portland
389 Congress Street
Portland, Maine 04101

Re: Elimination of Conditional Rezoning in WCZ

Dear Chair Dundon and Planning Board Members:

I write to urge you to reconsider the City's proposed amendment to the WCZ which would eliminate contract or conditional rezoning entirely. I agree that otherwise prohibited uses should not be allowed to come in through a contract or conditional rezoning. But I believe the best way to do that is to tighten up the standards pertaining to uses, rather than throwing out the contract or conditional rezoning tool in its entirety.

There may be instances in the future when it may be beneficial to water-dependent uses (WDUs) to have the flexibility of contract/conditional rezoning. The standards, if enforced as written, would only allow a contract or conditional rezoning only if it would benefit one or more WDUs. It is better to retain those standards to define the context for when contract or conditional rezoning could properly be entertained.

Instead of the text amendment that is before you, I suggest the following:

The contract or conditional rezoning standards (14-311(c)) would be retained as written EXCEPT that standard #3 would be amended to delete "Residential dwellings are prohibited." and to substitute in its place:

"No portion of the proposed development consists of any residential use; any hotel, motel or boate; any auditorium, civic center, convention center or other meeting facility; any drinking establishment; any ground mounted telecommunication tower, antennae, or disk; any drive-up services for any use other than a permitted use listed under 14-307(a) (permitted marine use) or 14-308(a)(1) (fish byproducts processing); or any other use which is listed under 14-309 (prohibited uses)."

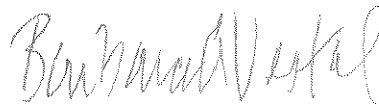
Portland Planning Board
January 19, 2019
Page Two

I believe this amendment would be consistent with what was proposed by the Working Waterfront Group, and it accomplishes the purpose articulated by the City, without throwing out the baby with the bathwater. It lists the uses that are now expressly prohibited in the zone, and applies to any other prohibited uses, allowing for the possibility that additional uses might be added to the list of expressly prohibited uses in the future.

The specific proposed language drafted by unidentified City staff is inartful and includes extraneous "purpose" and policy statements that are simply out of place in the middle of zoning text. It fails to acknowledge and then specifically override the fact that conditional or contract zoning is otherwise authorized throughout the City; for example, if you were to recommend the proposed language, it should include the statement "notwithstanding the provisions in 14-60 to the contrary" (the provision authorizing conditional or contract zoning throughout the City). Finally, by taking this overly-broad approach, the current proposal strips out the existing nuanced, detailed and WDU-protective standards, first developed in 1992, for when contract or conditional rezoning might in fact be appropriate in the Waterfront Central Zone.

I urge you to consider this more limited approach to restricting the uses that could not be achieved through conditional or contract rezoning.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Barbara A. Vestal".

Barbara A. Vestal

BAV/om
cc: Jon Jennings
William Needelman
Matthew Grooms
Sandra Guay, Esq.
Willis Spear
Bill Coppersmith
Jen Thompson, Esq.



James Dealaman <jdealaman@portlandmaine.gov>

Public Comment: Opposed to WCZ Text Amendment (Prohibiting Contract & Conditional Rezoning)

George Rheault <george.rheault@gmail.com>

Tue, Jan 22, 2019 at 1:59 PM

To: Matthew Grooms <mkgrooms@portlandmaine.gov>, Jeff Levine <jlevine@portlandmaine.gov>, Barbara Barhydt <bab@portlandmaine.gov>

Cc: planningboard@portlandmaine.gov

I am adamantly opposed to the elimination of contract and conditional rezoning in the Waterfront Central Zone.

It is obvious that our city's elected leadership, especially in a mayoral election year, would like to take off the table yet another flash-point in the ongoing NIMBY assaults that have incessantly plagued Portland (this time using "the lobstermen" as their cudgel and banner as was done in 1987).

I watched with great disappointment how the City Manager's hastily convened "Working Waterfront Group" immediately capitulated to the "no hotels" demand of the "fishermen" without any grounded analysis or assessment connecting increased pier side development (including a hotel) to actual threats to the area's fishing industry operations (such as they are).

However, the Planning Board can and should be moving far more carefully, gathering empirical evidence from both sides of the debate, before abruptly resorting to a crude and unnecessary tool (outright prohibitions of contract/conditional rezonings).

To begin with, we are ALL aware of the dangerous climate change forecasts that could demand a radical reassessment of Portland's waterfront status quo in as little as a decade. If Portland's waterfront is to be saved, it probably will require hundreds of millions of dollars in new development to defray the massive new investment in resiliency and adjustment that will be required. There is absolutely no question that without radical rezoning of the entire waterfront zone to allow for this new development and investment (including high-density occupancies to support feasible mass transit), the only other realistic option is abandonment and effective retreat with Fore Street once again becoming our harbor's edge.

Faced with this reality, the Planning Board sure better be able to make the case that effectively prohibiting all multi-use development on the south side of Commercial Street is absolutely necessary to "[c]elebrate, promote, and protect Portland's lobster and fishing industry as a foundation of the region's economy and a feature of civic pride."

Nothing in the planning staff memo and its various attachments along with the work to date of the "Working Waterfront Group" has even bothered to define the contours of Portland's "lobster and fishing industry" never mind buttress the claim that lobstering and fishing operations are "a foundation of the region's economy" (the claim is false) (as well as examining its evolution since the 1987 referendum and what kind of medium-term future it may have (looking 5-10 years out)).

To begin with, I urge each member of the Planning Board to read up on some history of the Portland waterfront. This 1988 master's thesis is a good start but obviously needs the period from 1989 to the present to be filled in: The Impact of Public Policy on Portland's Waterfront (John G. Ferland) https://digitalcommons.uri.edu/cgi/viewcontent.cgi?article=1244&context=ma_etds

Furthermore, there has been significant media emphasis on the annual waterfront "inventory" that the Planning Dept was required to maintain since 2010, but as part of this inventory there seems to be little emphasis on keeping track of the actual marine activity that is supposedly so deserving of zoning protection.

To that point, the Planning Board better be able to establish, with clear data, the thing it is desperately trying to "[c]elebrate, promote, and protect" because if there is no benchmark measurement established today how can it possibly measure "success" in the future from any policy-making adjustments made today.

ALL marine businesses, of any kind in the entire waterfront, should be required to register with the City (whether in existence for many years or not) and be willing to have their work categorized and be subject to long-term study and examination for their economic impacts (including employment/job creation, capital investment, gross revenue and profit margins).

The citizens of Portland, if they are going to be giving up the vast development potential of their most valuable and desirable assets (Commercial St waterfront), should at the very least, be given a clear accounting of EXACTLY how many "lobsterman" owner-operators there are in the WCZ, their gross revenue, how many employees they have, how many traps they deploy (or don't deploy), how much of the Cumberland County/Zone F lobster haulings their activity is associated with and why the upstream side of the lobster "industry" (processors/wholesalers/direct buyers) are not being asked to FIRST do more to subsidize the front-line harvesters on which everyone's livelihood in this industry depends. Since the lobster harvesters are largely self-regulating, there should be transparency and accountability demanded from the lobstermen to the rest of Portland about exactly what the current lobster licenses working out of Portland have been producing and what current wait-lists spell for the future of lobstering in Portland irrespective of whether or not a hotel or hotels are built in the vicinity of the piers.

Additionally, the State of Maine announced recently that individual grants up to \$2 million are being made available to provide working waterfront protections: <https://www.maine.gov/dacf/lmf/docs/wwapp/OverviewProcessAndTimeline2018.pdf> The deadline for letters of intent to participate in this program was January 4, 2019 and there is no indication that Portland or any of its private pier owners and their fishery partners are planning to take advantage of these opportunities. The Planning Board should ask why that is and if there is no interest in this program from direct stakeholders why then should development projects be stalled or rejected out of hand when self-help options like this go unnoticed or un-used.

Portlanders deserve to know what is going on along their waterfront but the answer to that demand should be facts, data, evidence and analysis, not vague conjecture, emotional grand-standing and hidden interests that stand to benefit while using almost-retired lobster licensees as frontmen.



PLANNING BOARD REPORT PORTLAND, MAINE

Cultural Plan Update

Submitted to: Chair Dundon and Members of the Planning Board Public Hearing Date: January 22, 2019	Prepared by: Christine Grimando, Senior Planner Date: January 18, 2019
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I. INTRODUCTION

Creative Portland has presented the *Cultural Plan Update of 2018: A Living Action Plan* for a public hearing. An update to the 1998 adopted City plan, [Celebrating Community: A Cultural Plan for Portland, Maine](#), it establishes strategic priorities and an action plan to support Portland's creative economy. It is presented for a public hearing, in order for the Planning Board to make a recommendation on its adoption to the City Council.

II. BACKGROUND

The 1998 Celebrating Community plan established a mission to: celebrate Portland's cultural diversity, promote awareness of and access to the arts; encourage greater community participation in the arts; and to strengthen community through arts and culture. It also includes a series of goals and action ideas. Over two decades old, Creative Portland facilitated a process to develop new priorities and recommendations for 2019 and the coming years. These include objectives for Congress Street enhancements to help celebrate downtown Portland as an art's center, advocating for affordable living, working and performance space for artists, and offering professional development opportunities for artists and creative entrepreneurs.

In 2017, Creative Portland contracted with CivicMoxie to lead a process on the needs and concerns of the arts, cultural, and creative economy of Portland. The effort was enabled by financial from the Maine Arts Commission, the City of Portland, and local businesses. The process included an assessment of the strategic plans of multiple organizations, a review of City policy documents, and dozens of interviews with key stakeholders. These findings were summarized (Attachment 2), and directly informed the action items of the *Cultural Plan Update*.



Defined loosely, the creative economy is economic activity generated from creative pursuits, whether in association with the arts, culture, technology, or other creative sectors. The creative economy has been widely credited with leading economic growth in the last decade, and communities across the country continue to explore ways to foster it. The expansion of the creative economy has clear planning implications: it has already reshaped the way people work and where people work, allowing for major shifts in patterns of land use and transportation.

One manifestation of the strength of the creative economy in Portland is Maine Startup & Create Week, launched in 2013, which brings people from around the country to Portland every June to learn, connect, and celebrate innovation and high-impact entrepreneurship. Hosted at Maine College of Art, thousands of attendees have come from more than 30 states to learn, collaborate, and hear speakers from founders of companies as diverse as Portland startups, Amazon, WEX, Google, and IDEXX.

Figure 1, Creative Economy call-out, Portland's Plan

III. COMPREHENSIVE PLAN

[*Portland's Plan 2030*](#) recognizes both the cultural and economic importance of the arts to Portland's present and future. One of the principles of the *Future Land Use* section is *Reinforce the Center*, recognizing that downtown Portland remains a predominant locus of arts, culture, and economic and civic health (p. 79-80). The *Economy Policy Guide* of *Portland's Plan* includes a section on the creative economy (pg. 45), with strategies that include: *Continue marketing and branding programs and refine recruitment strategies* and *Support policies that foster innovation, entrepreneurship, and the creative economy*. Recognition of the importance of the arts is also woven into multiple narrative sections of the plan.

The *Putting Portland's Plan to Work* chapter addresses how policy documents that are not part of the comprehensive plan should work together. This chapter applies to [policy documents](#) that had been adopted as part of previous comprehensive plans, and future ones, such as the Cultural Plan Update.

Portland's Plan was made with new input and new data, but it also recognizes the decades of previous planning efforts that preceded it. *Portland's Plan* is the City's guiding policy document, establishing the City's vision, city-wide goals, and strategies. It is meant to inform and support other, more granular planning efforts, whether efforts related to a specific topic, such as impact fees, or affordable housing initiatives, or a transit study, as well as area plans for particular neighborhoods, open spaces, and corridors. The *Relationship of City Plans* graphic (Figure 2) gives an overview of how each category of plan should inform other studies, regulations, and investments. The role of a subject area plan like the *Cultural Plan Update* is to be consistent with *Portland's Plan's* vision and goals and to give the subject more detail and elaboration than a broad vision document like a comprehensive plan allows for.

In presenting a series of strategies and action items specific to supporting the creative economy in Maine, the Cultural Plan update is consistent with the goals of the comprehensive plan and the intended application of subject area plans.

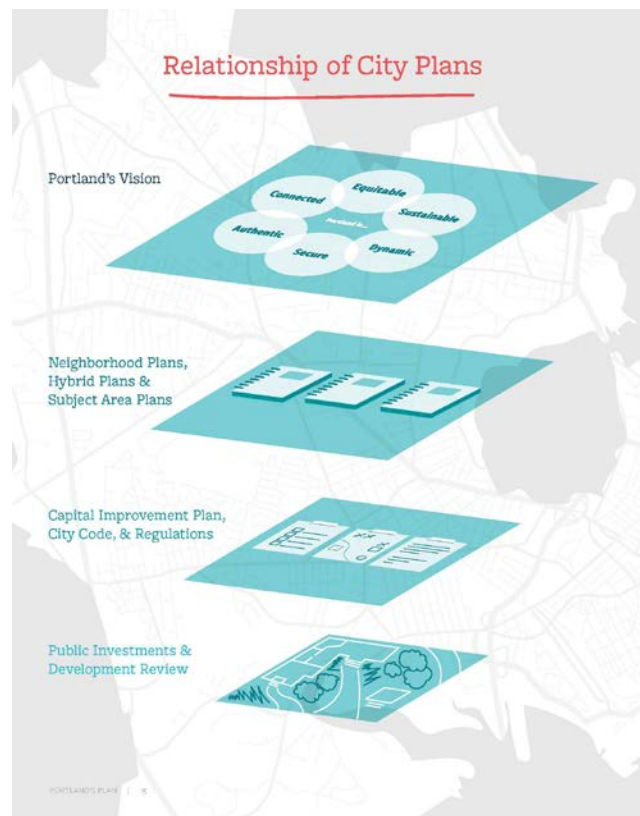


Figure 2, Relationship of City Plans visual

IV. NEXT STEPS

Following Planning Board recommendations on the Cultural Plan Update, it will be forwarded to the City Council for consideration.

V. RECOMMENDATION

Planning staff recommends that the Planning Board find that the proposed Cultural Plan Update is consistent with the Comprehensive Plan and that the Planning Board recommend adoption to the City Council.

VI. MOTION FOR THE BOARD TO CONSIDER

On the basis of the proposed plan, other information submitted by the applicant, findings and recommendations contained in the Planning Board Report for the public hearing on January 22, 2019, and on the basis of the testimony presented at the public hearing, the Planning Board finds that the proposed Cultural Plan Update **[is or is not]** consistent with Portland's Comprehensive Plan and therefore **[recommends or does not recommend]** adoption of the plan to the City Council.

VII. ATTACHMENTS

1. Cultural Plan Update of 2018: A Living Action Plan
2. Civic Moxie Executive Summary

Cultural Plan Update of 2018

A Living Action Plan



Presented by Creative Portland
on behalf of the Portland arts & cultural community
December 2018

Cultural Plan Update of 2018 - A Living Action Plan

SUMMARY

In 2016, Creative Portland began the process of updating the cultural plan of 1998 - Celebrating Community: A Cultural Plan for Portland, Maine - to develop a vision and plan for the creative economy in Portland and the region.

Phase 1: Laying the Groundwork consisted of interviews with 50 community leaders and stakeholders, conducted by a Boston-based urban design consulting company, CivicMoxie. In addition, over a half dozen community meetings were convened by CivicMoxie and Creative Portland to address successes, concerns, and gaps that need attention in the arts & culture sector. Phase 1 established the goal for the Cultural Plan update:

Make the collective arts, culture, and creative economy of Portland more visible and provide more support to arts organizations, individuals and creative businesses through collaborations and other means.

Phase 2: Getting Down to Action involved workgroups convening individually to tackle priority initiatives, and an Arts & Culture Summit to present feedback on what was learned and shared to date.

Phase 3: Putting it all Together consists of this written report that provides a framework for the Cultural Plan's strategic priorities for ongoing conversation, as well as recommendations for tracking implementation of an action plan.

Some strategic goals, such as securing affordable public-supported spaces for artists' public use, exhibition and work space, were identified a decade earlier at the first Creative Economy Summit in Portland in 2008, and still remain a priority. One goal of the report is for the City to acknowledge and support the Action Plan recommendations, which highlight a community desire to convene an annual summit to address progress, measure success, and tackle issues and priorities.

STRATEGIC PRIORITIES

1. **Celebrate Portland as a creative city with Congress Street as the spine.** Elevate Congress Street as an arts destination with signage, maps, tours that connect to other "hot spots," etc. Envision Congress Street as the spiritual home of the creative economy and use that home to give visibility to the broader creative community and to provide a magnet for art buyers, audiences, and organizational members.
 - 1a. **Focus on "experience design."** Ensure that the arts, culture, and creative economy of the city (and region) are visible and user-friendly to navigate, visit, and enjoy. This might include addressing parking and transportation, website

access and visitor information, signage, and on-the-ground experiences. The experience of enjoying music, dance, fine art, dining, and entertainment should be easy and joyful.

2. **Provide visibility and professional development/support for artists and creative entrepreneurs.** This could include: a website gallery of artists and entrepreneurs, a website of events, maps of art centers within the city and region, and professional supports including services to help performing and visual artists professionalize their craft and create a strong image of the city as a destination for buyers of art and audiences for performances and museums.
3. **Advocate for maintaining and growing affordable live, work, and performance space in Portland.** Explore incentives, policies, and zoning tools. Facilitate extended collaborations with the public, non-profit, and private sectors to create affordable space.

ACTION PLAN PRIORITY RECOMMENDATIONS

PLAN PRIORITY	OBJECTIVE	PROGRESS
PRIORITY 1 Celebrate Portland as a creative city with Congress Street as the spine.	Develop a plan for Congress Street enhancements	Creative Portland (CP) and Portland's cultural anchors have started meeting to discuss street safety issues, Congress Street enhancement, and economic development activity
	Market & brand Portland's artistic talents and cultural assets.	CP produced a one-minute sizzle reel to highlight the cultural life of Portland.
PRIORITY 1A Focus on "experience design."	Address and enhance the visitor's cultural experience on Congress Street and throughout the City.	CP will work closely with City planners and other partners to coordinate and avoid overlap. In October 2018, Portland Development Corporation awarded CP a PEDPIP grant of \$15K to undertake this work by hiring an "experience design" consultant.
PRIORITY 2 Provide visibility and professional development/support for artists and creative entrepreneurs.	Host an annual summit focusing on internal planning strategies - a workshop environment to address strategic priorities with best practice consultants.	First summit was held in May 2018 with approximately 75 arts and cultural leaders, steering committee members, and stakeholders in attendance to hear cultural plan community feedback.
PRIORITY 2 Provide visibility and	Create a multi-genre talent showcase opportunity to	In June 2018, Creative Portland presented "Art Outta the Park," a local showcase of arts and

professional development/support for artists and creative entrepreneurs.	expand audience reach, to attract arts patrons, to solicit opportunities from foundations, and to bring private investors and stakeholders to the table.	cultural organizations in an arts fair format at Hadlock Field. Participants integrated and addressed a large audience of 5000 stadium fans who don't necessarily go to the theater, museum, or art galleries. A local performing arts talent showcase, HEAR, HERE! is in development for February 2019 at Merrill Auditorium. These events attract new audiences and private investors.
	Provide a clearinghouse of information and a space for FREE 'community arts exhibitions, pop-up exhibitions and professional development workshops.	Public space to showcase art exhibitions - In January 2017, CP opened a vibrant new office space and street presence, allowing for community exhibitions and performances at 84 Free Street. CP has increased its volunteer base with a volunteer curatorial team to oversee bi-annual in-house art exhibitions as well as curate for other organizations. Professional Development Workshops - CP presented five community professional development workshops in 2018. All were free and open to the public and presented to a full house of over two dozen participants. Artist Meetups - In May 2017, CP started convening groups of artists by genre. These gatherings have provided artists a time and space to come together, discuss areas of concern, and share opportunities with others in their industry. Creative Portland Website - A Resource page is in development on CP's website. The social media impact on cross-promoting and re-posting existing events throughout the cultural sector has driven traffic and increased engagement at community cultural events. Increased visibility of CP has led to broader vision conversations with other arts administrators and leaders in the state of Maine, to collectively pool resources to brand Maine as an arts hub.

PRIORITY 2 Provide visibility and professional development/support for artists and creative entrepreneurs.	Provide a public forum inviting public comment, focused on the arts sector with an opportunity for Q & A and to share ideas to promote the creative economy through the arts.	An opportunity for public comment will be incorporated as part of the planning process for an annual arts and cultural summit.
	Provide public opportunities to utilize City structures, facilities, and/or parks to develop opportunities to showcase talent representing multiple arts sectors and to attract private investors and engage new audiences.	CP is working with the City to utilize Merrill Auditorium for a cross-discipline talent showcase in February 2019. The City also provides space and time for artists to showcase in the Arts in the Chamber program at the beginning of City Council meetings, and discussions for curated spaces during First Friday Art Walk are underway.
	Build arts engagement and tourism synergy	
PRIORITY 3 Advocate for maintaining and growing affordable live, work, and performance space in Portland.	Creative Portland provides fiscal sponsorship opportunities for independent initiatives in alignment with our mission, including live, work, and performance space creation.	Indigo Arts Alliance, an artist development space for artists of color in East Bayside, is supported by a CP fiscal sponsorship and has received startup funding from the Maine Community Foundation.

ROLE OF CREATIVE PORTLAND

Creative Portland will facilitate the establishment of a work group structure to focus on strategic priorities and to report on existing initiatives. CP will assume the role as leader in convening arts & cultural stakeholders on an annual basis, in a format to be determined each year, inspired by work group progress and depending on available budget to address internal and external planning initiatives, advocacy, arts patronage, and audience expansion and engagement.

If this Cultural Plan update is approved by the city council, Creative Portland will:

- Distribute and share cultural plan report and recommendations directly with arts & culture stakeholders and via social media channels.
- Apply for a cultural plan implementation grant, administered by Maine Arts Commission, with a focus on one initiative that has been identified in the cultural plan update.

Refer to Appendix A for information on how the cultural planning process has shaped Creative Portland's role and priorities.

BACKGROUND ON CULTURAL PLANNING PROCESS

GOAL

Our cultural planning goal was to assess where we are today and to take advantage of alignments of missions, goals, and interests of arts and cultural organizations, city agencies, and stakeholders to make the best use of community assets and achieve ambitious goals for the community.

FINANCIAL SUPPORT

A \$10,000 planning grant from the Maine Arts Commission led to a \$15,000 grant from the City of Portland and an additional \$5,000 from local businesses. The impetus for applying for cultural planning funding was Creative Portland's desire to mark the ten-year anniversary of the City of Portland's Creative Economy Summit of 2008 by making an assessment of what has been accomplished and what new endeavors should be undertaken. In addition, the City's most recent cultural plan, *Celebrating Community: A Cultural Plan for Portland, Maine*, was almost 20 years old and required updating to keep pace with new goals and changing circumstances in the city.

THE PROCESS

Creative Portland received early feedback that the community was exhausted from multiple surveys and community meetings, and that there was real concern about launching an ambitious planning process. People wanted top priorities and action, much more than widely inclusive planning and public discussion. A secondary concern was confidence in the community's ability to follow through. Creative Portland was reminded several times of the lack of action following the 1998 cultural plan, as well as several other well-meaning initiatives that ended up on the shelf. Below, we outline the three phases of the cultural planning process.

Phase 1: Laying the Groundwork

In early 2017, Creative Portland contracted Susan Silberberg of CivicMoxie to develop a snapshot of the needs and concerns of the arts, cultural, and creative economy organizations, businesses, and individuals in the City of Portland. Phase 1 included an in-depth review of past cultural plans as well as all of Portland's major arts organizations' current strategic plans, the city's comprehensive plan, and other relevant documents. This analysis was augmented with targeted individual interviews and several small focus groups spanning the arts and culture community, including representatives from large arts/cultural organizations, creative businesses and entrepreneurs, small/informal arts/cultural organizations, city hall, and individual artists. The first task was assessing response, interest, and commitment, and we were pleased with the unanticipated agreement and cohesion that was apparent.

50 key stakeholders were interviewed and 100% of the data feedback reinforced the conviction that the arts and cultural industry is a pivotal economic engine and the core of the creative economy. Interviews delved into the role and perception of the Cultural Planning process as well

as of Creative Portland itself so that the organization could assess how to lead creative economy efforts forward (Refer to Appendix A).

These interviews reinforced a universal recognition that Portland's arts and culture assets (and the marketing of them) is an important element of economic development, can attract a strong workforce and successful firms, and help sustain a positive quality of life. Although recent data¹ indicate growth and economic impact (\$75 million in expenditures for nonprofit arts in 2015), CivicMoxie interviews indicated that visibility and recognition of the impact of the arts and cultural community has not increased city budget allocated to the arts. In fact, some said that, in part because of economic growth, there are new pressures on the sustainability of the arts and cultural core of the creative economy.

One concern that was expressed in the interviews was whether or not Portland is leveraging the momentum of the growth in the arts sector at a time where many US cities are seeing a resurgence in residence and interest in "moving back to the city" for the benefits brought by walkable neighborhoods and the proximity of arts, culture, dining, and entertainment. The city's major arts and cultural institutions are doing well, but we have little quantitative data on smaller arts organizations and venues, for-profit organizations, and individual artists. Through interviews conducted by CivicMoxie, as well as Creative Portland Executive Director Dinah Minot's conversations with constituents, we know that many individuals cannot find affordable housing and studio space, there are limited venues for exhibiting work, and there is growing pressure amongst multiple organizations competing for a slice of the funding pie.

The good news is that there is a pervasive feeling that action is required now to celebrate the rich creative culture of Greater Portland and to take advantage of the abundant opportunities that exist. The arts and culture sector, which includes creative entrepreneurs and creative industries, is an economic driver deeply embedded in the economy and in need of constant reinforcement and validation through educational programs, lectures and initiatives to spread awareness on the value and necessity of the makers economy.

Phase 1 resulted in the development of five strategic priorities which became the focus of the cultural planning effort going forward:

- 1. Celebrate Congress Street and the Arts District.**
- 2. Provide visibility and professional development/support for artists and creative entrepreneurs.**
- 3. Focus on cultural tourism and coordinated marketing efforts.**
- 4. Focus on "experience design."**
- 5. Advocate for maintaining and growing affordable live, work, and performance space.**

¹ Americans for the Arts (2017). *Arts & Economic Prosperity V in the City of Portland, ME*. PDF available - please email your request to info@creativeportland.com.

Phase 2: Getting Down to Action

Goals for Phase 2:

1. Reach agreement among the various constituent groups on key issues brought up in Phase 1: Laying the Groundwork, and to arrive at a draft working agenda to share with a broader group for input and buy-in.
2. Engage steering committee members to assess data, highlight community progress addressing strategic priorities, and incorporate feedback from workgroup leaders in a living Action Plan with recommendations for tackling those strategies.

The workgroups in Phase 2 embraced three community-driven initiatives, a combination of the five strategic priorities identified in Phase 1, with the greatest support and momentum towards implementation:

1. **Celebrate Portland as a creative city with Congress Street as the spine.**
 - 1a. **Focus on “experience design.”**
2. **Provide visibility and professional development/support for artists and creative entrepreneurs.**
3. **Advocate for maintaining and growing affordable live, work, and performance space in Portland.**

The steps and progress taken to date are included in the Action Plan Priority Recommendations Chart above.

At the end of Phase 2, Creative Portland convened the city’s arts and cultural stakeholders at a summit in May 2018 to present cultural planning process results to date. A recap of the Arts & Culture Summit can be found in Appendix B.

Phase 3: Putting it all Together

Phase 3, completed in December 2018, is this finalized report and action plan recommendations. Throughout the planning process, groups built on momentum and/or splintered off with separate interests and initiatives, even though specific priorities remain the same. Identifying indicators for measuring success and taking responsibility for each action will lead to a more sustainable working group structure. An annual check-in is recommended to review the progress of smaller groups and to revisit plan implementation. The challenge will lie in community engagement, as cultural leaders and stakeholders turn their immediate focus back on their own organizations, which can result in waning participation.

CLOSING STATEMENT

The goal of the 2018 cultural planning process was to update the cultural plan of 1998, call attention to the arts community, and to make the collective arts, culture, and creative economy of Portland more visible by providing more support to arts organizations, individuals, and creative businesses through collaborations and shared resources. The process inspired increased community collaboration and conversations on a regular basis, a desire within the arts and cultural community to cross-promote and partner with each other on programming and improvement initiatives, and a recognition that arts and cultural organizations are extremely active.

The action plan recommendations presented in this report represent concrete objectives in line with community priorities to make the collective arts, culture, and creative economy of Portland more visible and provide more support to arts organizations, individuals and creative businesses.

This completed report compliments aspirations defined in the City's newly adopted comprehensive plan, *Portland's Plan 2030*, and will be adopted as an update to the cultural plan of 1998, *Celebrating Community: A Cultural Plan for Portland, Maine*.

APPENDIX A

Informing Creative Portland's Role & Priorities

Creative Portland served as the facilitator of Portland's cultural planning process. Creative Portland was the lead organization for the Maine Arts Commission (MAC) *Creative Communities = Economic Development (CCED) Phase I: Cultural Plan* grant application and administration and will also take the lead on the *Phase II: Implementation* grant application.

From the Phase 1 interviews and assessment of existing strategic plans of the cultural organizations, Creative Portland determined it would focus on continuing to attract and connect creatives while also strategically addressing some of the unintended consequences of growth. With the increased number of arts organizations, we also wanted to work together and think strategically about Portland's economic growth and creative sustainability.

Specifically, Creative Portland's role that emerged during the 2018 planning process is as a community convener, a promoter of cultural activity including the hosting of art exhibitions and pop-up performances, and as a clearinghouse of shared information. Embracing this role as collaborator and connector, Creative Portland convened an Arts & Culture summit in May 2018, marking the tenth anniversary of the first creative economy steering committee report of 2008.

As part of this altered strategic direction, Creative Portland rewrote its mission statement:

Creative Portland's mission is to support the creative economy through the arts by providing essential resources, by fostering partnerships, and by promoting Portland's artistic talents and cultural assets. As the official nonprofit arts agency, we support economic development efforts by strengthening and stimulating our workforce, creative industries, and enterprises.

The three strategic priorities as defined in Phase 2 and presented in this report are ongoing pursuits and have informed the direction of Creative Portland's work plan, including outreach efforts for networking and connectivity, while also providing immediate response to community needs by hosting an assortment of popular professional development workshops, made possible in large part by the new street presence.

On the verge of engaging in co-promotion and branding initiatives with the City, Creative Portland is making headway toward the goals of 2006, where the city planners and mayor at that time identified three goals, including recognition of Portland as an international creative center, developing increased communication and collaboration in the form of establishing an arts czar (Creative Portland), and securing affordable public space for artists. The challenge of securing public investment of a public space for artists, including performance space, studio space, housing and exhibition space, still remains a unified goal and desire within the arts community, yet lacks a unified vision and leadership commitment within the community to build momentum for this pursuit.

Creative Portland sees opportunities to accomplish the above, in part, by:

- Collaborating and building connections among and between arts and cultural organizations to support artists and creative organizations.

- Looking at regional collaborations that build on the already expanding geographical region that supports the arts and culture in Portland.

Although most of the priority strategies for celebrating the arts and promoting the creative economy are similar today to those identified ten years ago, progress has been made with the establishment of a city commitment to support a nonprofit organization that has the ability to leverage the city's investment in the pursuit of grants and private sponsorships. After two years since the initiation of the cultural planning process, Creative Portland is an organization that is building capacity to become a clearinghouse of information for the arts community and a catalyst for forging partnerships and marketing opportunities to cross-promote the artistic talents and cultural assets of Portland.

APPENDIX B

Recap & Summary of 2018 Arts & Culture Summit

Creative Economy Summit of 2006

The first creative economy summit was organized by the City in 2006. Mayor Jim Cohen and representatives from city planning and development convened approximately 200 stakeholders from the creative economy in the Merrill Auditorium Rehearsal Hall. After introductory remarks, the participants divided into three groups: creative individuals, creative organizations, and creative enterprises. Each group worked to develop three action steps for enhancing Portland's creative economy; and at the end of the Summit, this list of nine steps was reduced by the full group to three final recommendations.

These three recommendations focused on the following strategies to support and grow the creative economy:

1. Build Portland's identity as an international creative center.
2. Develop publicly supported and/or affordable public space for artists, including performance space, office space, studio space, housing, exhibition space.
3. Increase collaboration, coordination, and communication (Establish Arts Czar or Office of Arts & Cultural Affairs).

2018 Arts & Culture Summit

Creative Portland convened approximately 75 arts and cultural leaders, steering committee members, and stakeholders at One Longfellow Square on May 30, 2018 to celebrate the American for the Arts Economic Impact Survey 2017 (AEP5) data on the arts & culture sector and to present cultural plan feedback to participants.

A brief synopsis of the history of Portland's arts district and the formation of Creative Portland began opening remarks, followed by an explanation on how the current cultural planning

initiative will update the city's 1998 Cultural Plan. Creative Portland debuted a one-minute "sizzle reel" highlighting Portland's cultural life beyond lobsters and lighthouses.

Program Director of Research & Creative Economy at the New England Foundation for the Arts (NEFA), spoke about NEFA's report *The Jobs in New England's Creative Economy and Why They Matter*, including what constitutes the Creative Economy, a recap of Americans for the Arts *Arts & Economic Prosperity 5* study results for Portland compared to similar study regions, and the Creative Economy in Maine.

A senior planner at the City of Portland presented on *Portland's Plan 2030*, the recently adopted comprehensive plan for the City of Portland. She shared the process that the planning department had enacted to collect feedback, provided a quick breakdown of top concerns, and highlighted where the arts & culture sector was represented within the plan, including emphasizing that link between arts and culture and Portland's economy.

Creative Portland presented the Cultural Planning process to date, recapping the seven priorities that were part of the 1998 plan, and describing Phases 1 & 2 of the update process.

Seven Priorities from the 1998 Plan:

1. Promote appreciation for our diverse cultures within the City
2. Develop and enhance opportunities for students
3. Build audiences & arts patronage
4. Encourage and safeguard artists' presence in the community
5. Improve civic support of arts and culture throughout the City
6. Apply arts and cultural solutions to the community's social issues
7. Strengthen neighborhood identity through cultural programming & connections between neighborhoods and the Arts District

A hired facilitator introduced the three initiatives that emerged out of the identified strategies mentioned above and leaders for the workgroups in progress,

A Q&A followed the three presentations, which was then followed by a call to action, asking attendees to sign up to take part in one (or more) of the three initiatives, as well as to fill out two ballots: 1) desire for an annual arts & culture summit and interest in participating on the steering committee to organize a summit, and 2) a brief assessment of Creative Portland's programs.

Summit ballot response recap:

1. Desire for developing an annual summit with workgroups and possible "best practice" presentations was unanimous among respondents, yet fewer were willing to commit to a steering committee.
2. On average, Creative Portland programs that were most highly valued by the community were First Friday Art Walk and Professional Development Workshops, closely followed

by Monday Morning Drop By and providing community showcases for marketing & branding Portland's cultural life.

Creative Portland Cultural Plan

Phase 1- Executive Summary

6/2/17

This executive summary of Phase 1 Tasks is intended to offer a snapshot of the needs and concerns of the arts, cultural, and creative economy organizations, businesses, and individuals in the City of Portland. As the first phase of the Cultural Plan initiative, these tasks also delve into the role and perception of the Cultural Planning process as well as of Creative Portland itself so that the organization can get feedback that will be helpful in moving forward. This summary is also meant as the first step in assessing how (and if) Creative Portland should move forward with the cultural planning process.

Cultural planning seeks to take advantage of alignments of missions, goals, and interests of arts and cultural organizations, city agencies, and individuals to make the best use of community assets and achieve ambitious goals for residents and businesses. Cultural plans have power in the information and data provided through the planning process (what do we have, where do we want to go, what is our impact?) as well as the collaborations that grow from planning (what can we do together?), and the attention put on endeavors (this is what we are doing, this is how we make positive impacts in our communities).

The context for this current cultural planning effort includes the recent comprehensive planning initiative for the city, the recent Maine Arts Commission plan (2015), and the 1998 Celebrating Community Portland Cultural Plan which is the last comprehensive arts and cultural plan produced for Portland.

Portland's Comprehensive Plan 2017 provides support for arts and culture by focusing on two primary strategies – leveraging a creative economy and creative placemaking.

The plan for the City of Portland, much like many cities across the US, is to take advantage of the Creative Economy movement. As stated in the plan, a creative economy is economic activity created by creative pursuits (see page 43). Portland has recognized that leveraging the synergies of entrepreneurial activities and artist expressions is beneficial to the local community. The other way that Portland is growing its art and culture is through creative placemaking. The placemaking program focuses on five goals:

1. arts and culture
2. community engagement
3. partnerships to rejuvenate open space
4. stewardship over parks
5. equity in access to all of the community initiatives

Arts and culture, however, are given very little space in the 2017 plan and are referenced in implicit rather than explicit ways. The arts and cultural community is keenly interested in how mention of arts and culture in the Comprehensive Plan will translate into action and support in the coming years.

The 2015 Maine Arts Commission Five Year Cultural Plan sets priorities (but no funding or detailed implementation plan) for:

1. Attract and leverage greater investment in Maine's arts, culture, and creative economy.
2. Increase awareness of creative opportunities and their value to communities and local economies
3. Build on and further strengthen PK-12 arts education and lifelong learning programs.
4. Build arts and tourism synergy.
5. Strengthen Maine Arts Commission's capacity and stewardship.

In 1998 the Celebrating Community Cultural Plan was completed and contained seven goals and 24 main action ideas. The Plan did not designate who would be specifically responsible for implementation of each of the action ideas but states that the Cultural Plan was incorporated into the City's Comprehensive Plan and indicates that PACA would take the lead in implementation. The goals are quite broad and the action steps are extensive, with each step having multiple possible initiatives. There are no prioritization of actions, specific responsibilities identified, nor funding resources identified or allocated. PACA is identified as the lead on implementation but was then incorporated into Creative Portland in 2008, leaving the Cultural Plan without its key "owner."

Of the 24 main action ideas, only a few were implemented.

Summary of Interviews and Focus Groups

CivicMoxie conducted focus groups with small arts organizations, entrepreneurs in the creative industries, and artists. One-on-one interviews were conducted with the leaders of larger arts organizations in the City, artists, creative professionals, and other organizations. CivicMoxie met with the City Manager and City of Portland Planning staff and also participated in Creative Portland board meetings. Questions were focused on three main areas:

1. The overall state of arts, culture, and creative economy in the city
2. The potential role of a cultural plan
3. The perception and role of Creative Portland

Answers are summarized below:

Arts, Culture, and the Creative Economy in Portland

Overall State of Arts and Culture and Creative Economy

- There is too much supply for the existing demand
- All individual pieces...no greater whole
- Arts and culture hasn't done a good job of articulating its value
- Need to measure/develop indicators for success
- Red tape burying everyone
- Community needs most:
 - Vision and direction
 - Affordable housing and resources...
 - Help in integrating into the economy

Challenges faced by arts and cultural organizations:

- A lot going on for a city of Portland's size. Don't create more!
- Organizations are cannibalizing themselves – need to figure out a way to share resources.
- Need one voice with which to lobby the city and advocate for arts and culture.
- Need a better relationship with the tourism industry...an untapped market for artists and organizations.
- This is not a culture that buys art.
- Difficult to get the city to say "yes" about anything.
- Arts are leaving...if you can't retain the artists and the vibe that go with it, it's really hard to attract the talent you need to support a creative economy.

Immigrant Populations -outreach and inclusion

- Schools program is best way of reaching them.
- Challenges include lack of support systems that help kids get to events...no rides, no support.
- This can't be superficial...this takes intentionality, patience and lots of time.

Cultural Plan

Questions to understand the need, concerns, and possibilities for a new cultural plan for the city.

What are your general thoughts about the Cultural Plan?

- Feel like there needs to be an accounting of implementation of previous cultural plan – what was accomplished?
- If there is no City buy-in it isn't worth it.
- A lot riding on this Plan...can Creative Portland pull this off? Should it pull this off?
- City touts arts as a recruitment tool but arts is really being used by the City without support in return.
- Really worried nothing will come of this. Creative Portland doesn't have resources.
- Figure out relationship between cultural plan, Creative Portland and City

Power/Usefulness of a Cultural Plan

- It would be great if Creative Portland would take on role of City liaison.
- City advocacy and solving nuts and bolts issues.
- Clarifying and supporting the arts district...it doesn't work as a visible entity now.
- Address affordability for artists.
- Can create a real eco-system for the arts.
- Bring the benefits of immigrant and refugee populations to light.
- Get all the creatives in the same room.
- Create City buy-in regarding streamlined permitting, shared rehearsal space, tax breaks for Arts District purchases, etc.
- Identify things that can be done that are larger than the stakeholders individually
- Focus on a few clear things that address challenges that everyone can work on together.

What should the Plan include?

- Tourism...is a big part of this.
- Identifying bold moves that everyone can get behind...lobby for it, make it happen.
- Creating opportunities for public-private and non-profit...fighting the fight together.

- Strategies for building a gallery economy and maker space economy.
- Affordable space
- A clear argument for the Arts District
- Articulate very clearly what sets Portland apart.
- Gallery space plan
- Cross-sector - People want to go to the museum, go to stage, eat food.
- Cultural tourism
- Parking strategies/solutions
- Thinking about experience design from the first to last encounter of every audience member, museum goer, perspective resident, or business.
- Clear plan for what Creative Portland and others will do
- Affirm that the arts are the soul and economic center of Portland
- Space for a serious conversation about why the City's policies aren't working for artists
- MOU between organizations to commit to working together
- Policies in place to bring artists/creatives in early on City projects instead of at the end
- Identify all City programs and initiatives where arts might be incorporated/introduced

Creative Portland

Summary of Findings Regarding Perception, Roles, and Potential Role in Cultural Plan and Arts, Culture, and the Creative Economy of the City

Creative Portland was formed in 2008 and PACA was merged into the organization. The Mission of the organization, as stated on its website, is as follows:

Creative Portland leverages, grows, and sustains Portland's creative industries, enterprises, and workforce. As the City's official local arts agency, we also support artists and cultural institutions that are central to Portland's identity, economy, and community.

The City of Portland website describes the role of The Creative Portland Corporation as follows:

The Creative Portland Corporation (CPC), established November 2008, is a nonprofit organization created to receive donations, grants, and contributions in support of the City of Portland's economic development efforts, which enhance and create business in the creative economy, arts district development, and employment opportunities.

According to the Creative Portland website (accessed May 2017), current programs include:

- First Friday Art Walk
- 2 Degrees Portland
- Creative Spaces data base
- Artist Professional Development Series

The following are the questions posed during interviews and focus groups, with aggregated answers.

What is your understanding of the mission and role of Creative Portland?

- No momentum in any direction

- Creative Portland is ALWAYS in the process of figuring out what it is.
- Unclear about mission...no sense of what Creative Portland does.
- Quasi municipal arts
- Elitist
- Serves downtown/Old Port – speaks for larger organizations
- Hasn't articulated how it adds value
- Was clear in the past, but not sure what policies are anymore. Seems like Creative Portland is trying to get a handle on what it is.

There was overwhelming consensus among all groups interviewed that Creative Portland's message and mission are not clear. It is also interesting to note that many acknowledge the impossible task of being all things to all people, particularly with limited resources:

- It's a Catch 22 – can't do it all with limited resources but Creative Portland can't get more resources until it proves its worth
- Creative Portland can't do both – advocate for artists and support economic development through creative economy. They are two very different tasks and constituencies...there needs to be two organizations.

What would you like Creative Portland to take on in the future? How do you think Creative Portland could support your organization?

Most stakeholders have very definite ideas of possible roles for Creative Portland which fit into the following categories:

- Advocate/Liaison with City Hall
- Resource
- Connector
- Program help/Programming leadership
- Marketing

The role of advocate was the one most often cited when stakeholders were asked about possible future roles of Creative Portland. Details of what that role entails include:

- Need a larger emissarial presence for creativity and arts and culture
- Convene everyone (City, organizations) to align efforts, make the most of limited resources
- Create the "space" to ensure that the missed opportunities everyone sees are addressed and that the most is made of this moment in time
- Build support from City Council
- Cheerleader for the arts; it's the only thing saving us from a tourism-based economy.
- Interpreter....City Hall and artists don't speak the same language
- Help the City say "yes" more often.
- Serve as one umbrella for all the arts.
- Be an advocate for affordable space:
- Creative Portland could act as a clearinghouse for regulatory issues/permitting for events, public art, space development.
- Be a strong advocate for shared space for performance/making.

A consistent message from most stakeholders, including the large arts and cultural organizations, is that Creative Portland take a strong leadership role in shaping policy at City Hall:

- Need to be more proactive to lead City officials, government, arts and culture, businesses...what Portland should look like in 10 years.
- The City doesn't have a plan and someone needs to be leader...it could be Creative Portland. Feel the City is in reactive planning mode and not looking at bigger picture things that can really pull everyone together and make a difference.

Key Takeaways

This cultural planning effort has uncovered two areas of concern for Creative Portland. The first area of concern is focused on the very idea of a cultural plan. Many see the issue of "ownership" as a question that must be answered before a cultural plan can be undertaken; who "owns the plan" in terms of a commitment and the necessary resources for implementation? The second concern is a strategic plan question, "What is Creative Portland and how can it have a positive impact on the city's arts, culture, and creative industries?"

These questions about Creative Portland's ability to lead the planning process to successful implementation, and City Hall's commitment to arts and culture are deep concerns for almost everyone interviewed as part of this Task 1 process.

Creative Portland

There is remarkable unanimity regarding perceptions of Creative Portland, wishes for its future role, and concerns about arts, culture, and creative enterprise in the city. Key takeaways from this stakeholder outreach include five major points:

Identity, focus, value, policy, and advocacy

1. Creative Portland must develop a strong identity that is easy to convey and that clearly defines its role and relationships with varied constituents and City Hall.
2. Creative Portland cannot be all things to all constituents. The reasons for this are varied and include:
 - a. Creative Portland doesn't have the resources (not enough staff and funding)
 - b. Advocating for artists and cultural organizations and recruiting creative economy workers and businesses are two very different things (with some overlap) with different tasks, skillsets, and resources needed.
3. Creative Portland must decide how it will add value to the city and identify ways to measure success so it can demonstrate its worth.
4. The organization should not focus on creating new things until it determines what its focus is but rather, should focus on being a leader in policy and City Hall advocacy.
5. There is a strong desire for Creative Portland to lead by gathering everyone together, setting an agenda, and advocating for this in City Hall.

Cultural Plan

A single question was posed by every stakeholder: "Who will be responsible for implementation of the

Cultural Plan and is City Hall really supportive of this effort?” Many stakeholders expressed reluctance to get involved with the planning process, and to commit time and resources to the cultural plan without understanding the level of the City’s commitment to implementation. Other comments included key elements that should be included in a plan. A summary of takeaways includes:

1. It is not worth embarking on a cultural planning process without complete buy-in from City Hall and a commitment to implementing plan elements. Many pointed to the 1998 Cultural Plan as an example of what happens when resources and clear responsibilities are absent.
2. Many organizations, businesses, and individuals will not devote additional time or resources to the cultural planning effort unless there is a real sense of commitment on the part of the City.
3. A Cultural Plan must address policy issues that include support of the Arts District, parking/transportation in the Arts District and beyond, permitting and tax policies, marketing and tourism links, and affordable space.
4. The City is at a critical time of opportunity and there is a general feeling that this is something that is not to be missed. Many feel a sense of urgency to get everything in alignment so that everyone can stop reacting and start planning in proactive ways for big, bold things.

Arts, Culture, and the Creative Economy in Portland

Things are rapidly changing in the city and stakeholders had a surprisingly unified message about what they need and what the stressors are:

1. Affordable space is desperately needed. Artists and creatives are leaving for Biddeford, Westbrook and other places and the city is in danger of losing enough of the arts and cultural scene to affect its uniqueness and “authenticity.” Everyone believes that losing these qualities will also affect the City’s ability to attract and retain businesses and skilled workers.
2. There are too many organizations, initiatives, events, and programs for a city the size of Portland. Groups need to find a way to share or everyone will cannibalize each other.
3. Everyone is competing for the same finite pot of money. Without growth in business and population, the audience/buyer base is stagnant.
4. Arts and cultural initiatives/organizations are not taking advantage of the tourism economy in the city and better marketing that connects these two sectors together would enhance the visitor experience and support arts and culture through increased audiences and a larger buyer pool.
5. It’s a struggle to get the City to collaborate on important issues and also frustrating when it often says “no.” There is a sense that because the City often acts alone, there are missed opportunities. There is also no sense that there is a bold plan...everything is approached piecemeal. Artists and creatives are problem solvers and want to be at the table (not at end of the discussions but at the beginning) to make a difference.

Recommendations

Two major issues have been uncovered during this first phase of the cultural planning process.

A strategic plan for Creative Portland?

The Cultural Planning process can inform the question of Creative Portland’s role. Stakeholders feel that the organization’s role is unclear and that it doesn’t have the resources to take on all projects at once. Some feel it can’t even begin to serve the varied constituencies it now represents—is it an economic

development arm of the City or an advocacy and programming organization for arts and culture? If the cultural planning effort moves forward, Creative Portland can listen carefully to determine what roles it most needs to play. It is therefore recommended that Creative Portland make no major changes in its organizational structure, programming, or spending until either the cultural planning process is complete, or absent a cultural plan, that it embarks on a strategic planning process to determine its future role and core stakeholders.

To plan or not to plan?

To embark on the extensive effort and resources needed to create a cultural plan and to expend political capital in that process would be foolhardy if there is not a commitment from City Hall for implementation of the plan nor participation and buy-in from major stakeholders. This seems, then, to be the very next step in the cultural planning process –determining what resources and support are present for plan implementation to ensure that this effort is not an abstract exercise, and ensuring that there is significant enough buy-in from major stakeholders to move forward.

A comparison of the major non-profit arts organizations' strategic plans and interviews with leaders of those organizations reveals that there are certainly common interests that can be addressed by a cultural plan. Of particular note are the areas of alignment around concerns regarding physical facilities, visitor/audience experience (from web site exploration to parking to walking city streets, to engagement with the arts), and parking/transportation. All three of these things can be effectively addressed in a cultural plan and can inform the City's planning initiatives.

In summary, it is recommended that:

1. Creative Portland expand the tent to ensure that everyone understands that this is NOT Creative Portland's Cultural Plan. Creative Portland will have to articulate that it has no agenda other than to support arts, culture, and the creative economy in the city, and that it is open to shaping its path forward after hearing Cultural Plan feedback.
2. It be very clear what this cultural plan should include:
 - a. Clear next steps
 - b. Prioritization of issues and actions
 - c. Clearly defined responsibilities and buy-in from parties that must be involved
 - d. Identification of funding and other resources
 - e. Identification of measures for success and built in evaluation schedules and methods
3. Creative Portland consider the cultural planning process as the foundation for its own strategic planning process that will potentially reset its direction and clarify its roles and goals.
4. A new cultural plan should be incorporated into the City's comprehensive plan. The arts and cultural component of the 2017 Comprehensive Plan is very small, with no specifics to help guide moving forward. A cultural plan can address this void and offer the detailed road map needed to ensure that a key characteristic of the city be supported.

It is recommended that the very next steps in this planning process involve gathering the major organizations to the table to discuss concerns and potential benefits, as identified in this Task 1 report and to address the outcome of this meeting with City Hall to determine the level of commitment to the cultural planning process and implementation.



PLANNING BOARD REPORT PORTLAND, MAINE

Text Amendments for Drive-Throughs in the B-2, B-2b and B-2c Zones
Zoning Text Amendments
City of Portland, Applicant

Submitted to: Portland Planning Board: Public Hearing Date: January 22, 2019	Prepared by: Jeff Levine, Director, Dept. of Planning and Urban Development and Barbara Barhydt, Development Review Services Manager Date: January 18, 2019
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I. INTRODUCTION

The Community Business Zone- B-2, includes the B-2b and B-2c as subdistricts. The B-2 zones are located along major transportation corridors and encompass larger commercial districts. It is a zone where a wider range of businesses and more intensive commercial uses, including drive-throughs, have been allowed.

Starting in 1999, the B-2 zone has been revised multiple times in order to refine the zone. The amendments are intended to better accommodate policy initiatives for the redevelopment of Portland's commercial districts by supporting denser urban infill and transit-oriented development. A detailed history of the evolution of the B-2 zone is contained in the March 22, 2016 Planning Board report (included in the packet as Attachment E) when the Board was considering a B-2b map amendment for a section along Forest Avenue. Please refer to Section III, Background and Existing R-2) of that report (page 3) for a detailed history of the evolution of the B-2 zone.

In 2016, the Board recommended (6-1, Whited opposed) a map amendment from B-2 to B-2b for the section of Forest Avenue near the intersection of Forest Avenue, Preble Street Ext and Baxter Boulevard. During the public hearing discussion, the Board suggested exploring options to link the creation of new housing with proposals for new drive-throughs. The recommendation for the map amendment was placed on hold and not forwarded to the Council. The City is now prepared to move forward with the proposed map amendment (see page 4 of this memo) and is seeking the Board's recommendations on B-2, B-2b, and B-2c zoning text amendments that address drive-throughs for pharmacies and banks to require upper floor residential units. The proposed text amendments are included as Attachment A.

II. DRIVE-THROUGHS AND CURRENT REGULATIONS

A. Definitions of Drive Throughs

Portland's zoning code includes definitions for drive-through facility and drive-through features, as follows:

Drive-through facility. A commercial facility which provides a service directly to a motor vehicle occupant and where the customer drives a motor vehicle onto the premises and to a window or mechanical device through or by which the customer is served with or without exiting the vehicle. Drive-throughs do not include major or minor auto service stations.

Drive-through features: Features associated with drive-throughs including but not limited to designated travel or stacking lanes, intercom systems, menu boards, service windows, kiosks, mechanical devices, etc.

At the December 11th workshop, the Planning Board asked how drive-throughs are treated in the other zones within Portland. [Attachment B](#) is a chart with the business zones and the regulations pertaining to drive-throughs. In summary, drive-throughs are permitted as an accessory use in the B-4 zone and in B-5 locations outside of the area between Forest Ave and Franklin St.

The zones in which drive-throughs are not permitted include the following:

- Neighborhood Business B-1
- Community Business – B-2b
- Airport Business A-B
- Island Business – IB
- Urban Mixed-Use B-5b
- India Street Form Based Code (ISFBC)

Drive-throughs are listed as conditional uses with specific design standards or in some cases are limited in where they can be located in the following zones:

- Community Business B-2 and B-2c – Currently, listed as a conditional use associated with permitted or conditional uses, which includes specific standards.
- Downtown Business B-3 – Drive-throughs with restaurants are not permitted and drive-up for a bank facility is a conditional use with specific standards.
- Urban Mixed-Use B-5- Drive-throughs are prohibited in the area between Forest Avenue and Franklin Street. Drive-throughs for a banking facility located between Forest Avenue and Franklin Street is a conditional use.
- Eastern Waterfront Mixed Use B-6 – Drive-up facilities for banks are a conditional use and must be located in the interior of parking structures.

B. Purpose Statement for B-2, B-2b and B-2c Districts

The purpose statements for each of the three (3) B-2 zones are excerpted below. The revisions to the B-2 zone, particularly with the dimensional standards, have made the B-2 and B-2b more similar and designed to support an urban form of redevelopment.

Sec. 14-181. Purpose.

(a) B-2 Community Business Zone

The purpose of the B-2 community business zone is:

1. To provide appropriate locations for the development and operation of community centers offering a mixture of commercial uses, housing and services serving the adjoining neighborhoods and the larger community.
2. The variety, sites and intensity of the permitted commercial uses in the B-2 zone are intended to be greater than those permitted in the B-1 neighborhood business zone.
3. The B-2 zone will provide a broad range of goods and services and general businesses with a mixture of large and small buildings such as grocery stores, shops and services located in major shopping centers and along arterial streets. Such establishments should be readily accessible by automobile, by pedestrians and by bicycle. Development in the B-2 zone should relate to the surrounding neighborhoods by design, orientation, and circulation patterns.
4. The B-2 and B-2b will provide locations for moderate to high density housing in urban neighborhoods along arterials.

(b) B-2b Community Business Zone

The B-2b zone is intended to provide neighborhood and community retail, business and service establishments that are oriented to and built close to the street. The B-2b zone is appropriate in areas where a more compact urban development pattern exists such as on-peninsula or in areas off-peninsula where a neighborhood compatible commercial district is established which exhibits a pedestrian scale and character. Such locations may include the peninsula and other arterials and intersections with an existing urban or neighborhood-oriented building pattern.

(c) B-2c Community Business Zone

To protect and enhance the quiet enjoyment of adjoining residential neighborhoods from the impacts of businesses that serve liquor and from other uses that are incompatible with adjoining neighborhoods due to noise.

C. Permitted and Conditional Use Provisions for Drive-throughs

Drive-throughs associated with a permitted or a conditional use are listed as an auto oriented use on the table of permitted uses (Use table included as Attachment A). Drive-throughs are not permitted in the B-2b zone and are listed as a conditional use associated with permitted or conditional uses in the B-2 and B-2c zones. In addition to the general conditional use standards contained in Section 14-474 of the Land Use Code, the specific conditional use standards of the B-2 zone for auto related uses are below with specific provisions for drive-throughs found under subsection 6:

Sec. 14-183. Conditional uses.

The following uses are permitted in the B-2, B-2b and B-2c zone, as provided in section 14-474 (conditional uses), if they meet the following requirements:

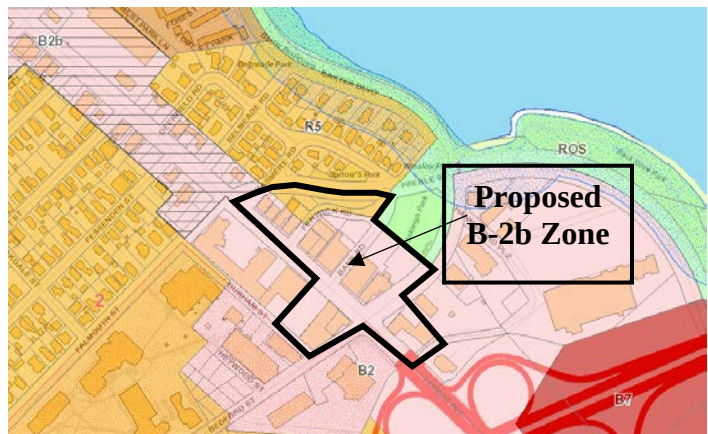
(a) "A" group conditional use. Notwithstanding section 14-474(a) of this article or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the reviewing authority and shall apply the following standards in addition to the provisions of section 14-474:

1. Signs: Signs shall not adversely affect visibility at intersections or access drives. Such signs shall be constructed, installed and maintained so as to ensure the safety of the public. Such signs shall advertise only services or goods available on the premises.
2. Circulation: No ingress and egress driveways shall be located within thirty (30) feet from an intersection. No entrance or exit for vehicles shall be in such proximity to a playground, school, church, other places of public assembly, or any residential zone that the nearness poses a threat or potential danger to the safety of the public.
3. Conditions specific to major or minor auto service stations, car washes and automobile dealerships:
 - a. A landscaped buffer, no less than 5 feet wide, shall be located along street frontages (excluding driveways). The buffer shall consist of a variety of plantings in accordance with the City of Portland Technical Manual; and
 - b. Car washes shall be designed to avoid the tracking of residual waters into the street.
4. Reserved.
5. Reserved.
6. Drive-throughs: Notwithstanding section 14-474(a) of this article or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the reviewing authority and shall apply the following standards in addition to the provisions of section 14-474:
 - a. Location of Drive-throughs: Features, such as windows, vacuum cleaners and menu/order boards, stacking lanes, must be placed, where practicable, to the side and rear of the principal building except where such placement will be detrimental to an adjacent residential zone or use, and shall be located no nearer than forty (40) feet from any adjoining property located in a residential zone. This distance shall be measured from the outermost edge of the outside drive-through feature to such property line. In addition, drive-through features shall not extend nearer than twenty-five (25) feet to the street line. The site must have adequate stacking capacity for vehicles waiting to use these service features without impeding vehicular circulation or creating hazards to vehicular circulation on adjoining streets.

- b. Noise: Any speakers, intercom systems, or other audible means of communication shall not play prerecorded messages. Any speakers, intercom systems, audible signals, computer prompts, or other noises generated by the drive-through services or fixtures shall not exceed 55 dB or shall be undetectable above the ambient noise level as measured by a noise meter at the property line, whichever is greater.
- c. Lighting: Drive-through facilities shall be designed so that site and vehicular light sources shall not unreasonably spill over or be directed onto adjacent residential properties and shall otherwise conform to the lighting standards set forth in 14-526.
- d. Screening and Enclosure: Where automobiles may queue, waiting for drive-through services, their impacts must be substantially mitigated to protect adjacent residential properties from headlight glare, exhaust fumes, noise, etc. As deemed necessary by the reviewing authority, mitigation measures shall consist of installation of solid fencing with landscaping along any residential property line which is exposed to the drive-through or the enclosure of the drive-through fixtures and lanes so as to buffer abutting residential properties and to further contain all associated impacts; and
- e. Pedestrian access: Drive-through lanes shall be designed and placed to minimize crossing principal pedestrian access-ways or otherwise impeding pedestrian access.
- f. Hours of Operation: The Board, as part of its review, may take into consideration the impact hours of operation may have on adjoining uses.

III. LOCATIONS OF B-2 ZONE

The B-2 zone is found throughout Portland. It is generally located along arterials, including along portions of Forest Avenue, and encompasses larger off-peninsula commercial areas, such as the North Deering commercial district at the intersection of Washington Avenue and Allen Ave. In addition, the B-2b zone is found on the peninsula along Washington Avenue, St. John Street and portions of lower Congress Street. The B-2b is located along the Forest Avenue corridor from I-295 to Woodfords Corner, with the exception of the B-2 zone that encompasses the Hannaford Shopping center, Oakhurst Dairy and other properties in that vicinity. The B-2c encompasses a portion of the westerly side of Forest Avenue between Saunders Street and Baxter Woods. There is also a second location along the southerly side of a portion of Bishop Street. Portland's zoning map is available on the city's web site:



<http://portlandme.maps.arcgis.com/apps/webappviewer/index.html?id=53778b868b5f4465a8931ebb4faae4c5>
Attachments C and D present excerpts from the zoning map showing the B-2 zones located off-peninsula and on-peninsula, respectively.

The Board's March 22, 2016 recommendation (6-1, Whited opposed) was to rezone a portion of this area to B-2b (see insert of map amendment). This map change is not directly related to this drive through proposal, but this recommendation will move forward to the City Council, as part of the same referral from the City Council.

IV. Proposed Text Amendments (full text in Attachment A)

A. Table of Use:

The proposal is to amend Section 14-182. Table of Uses, so a drive-through associated with a pharmacy or banking facility use is a conditional use in all three B-2 zones. This would add drive-throughs for banks and pharmacies into the B-2b zone and would narrow the option for drive-throughs in the B-2 and B-2c zones.

A	Drive-throughs associated with <u>a pharmacy or banking facility</u> use ⁴	C	<u>NC</u>	C
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The footnote related to the drive-through use cross references the standards for drive-throughs and clarifies that drive-throughs are not allowed with restaurants, bakeries, or other food or beverage service uses. The specific language is as follows:

4 See conditional use standards for drive throughs. Drive throughs are not permitted for restaurant, bakery, or other food or beverage service uses.

B. Conditional Uses.

The current standards for a conditional use review of a drive-through would be retained, with the first standard modified to only allow drive-throughs in buildings of 3 or more stories where the majority of the upper stories is devoted to a minimum of 3 or more dwellings units. The language would allow other upper floor uses, such as offices, subject to the majority of the upper floors being residential. The standards b through f would remain unchanged and are listed above on pages 3 and 4. Standard a is proposed as follows:

6. Drive-throughs: Notwithstanding section 14-474(a) of this article or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the reviewing authority and shall apply the following standards in addition to the provisions of section 14-474:

a. a.——Location of Drive-throughs: Features, such as windows, vacuum cleaners and menu/order boards, stacking lanes, must be placed, where practicable, to the side and rear of the principal building except where such placement will be detrimental to an adjacent residential zone or use, and shall be located no nearer than forty (40) feet from any adjoining property located in a residential zone. This distance shall be measured from the outermost edge of the outside drive-through feature to such property line. In addition, drive-through features shall not extend nearer than twenty-five (25) feet to the street line. The site must have adequate stacking capacity for vehicles waiting to use these service features without impeding vehicular circulation or creating hazards to vehicular circulation on adjoining streets.

Drive throughs are only permitting in buildings of 3 or more stories where a majority of the upper stories is devoted to 3 or more dwelling units. The drive through shall be screened as much as practical from the front of the building and shall be no closer than 40 feet from abutting residential zones and 25 feet from the street line. Adequate stacking capacity much be provided on site without impeding vehicular circulation or creating hazards to pedestrian or vehicle circulation on or off site.

V. Staff Analysis

Pharmacies and banks seek drive-through windows to serve their clientele. The intensity and impacts of the drive-throughs are generally less than those associated with fast food restaurants, coffee shops, bottle redemption centers,

and other uses. While pharmacy and bank drive-throughs are less intensive, the auto-oriented use does impact the pedestrian environment and Portland’s goal for a walkable city. In addition, Portland has a stated goal to provide for more housing on upper floors, particularly along major transit corridors. The proposal to require bank and pharmacy drive-throughs to provide housing supports economic development objectives of the Comprehensive plan and creates an incentive for more housing along transportation corridors.

At the Planning Board workshop in December, the Board discussed whether drive-throughs in the B-2 could be allowed for a broader range of uses with the same requirement for upper floor housing units. Housing above food related drive-throughs is less viable than over banks and pharmacies and food related drive-throughs generate the most traffic and impacts on the urban streetscape. Allowing drive throughs in projects that provide other significant policy and design benefits will also leverage well-funded and motivated retail users – such as pharmacies – to make major investments in City policy goals. By allowing a well-screened drive through on the first floor, there is much more likely to be such investment, which would include good urban design elements in a multistory building, and also produce housing. Limiting the drive through types to pharmacies and banks minimize the negative externalities of other drive through uses while leveraging this private investment that might not occur otherwise.

This proposal is an innovative approach to regulating drive-throughs in an urban area. Local examples, include the Bangor Savings Bank on Marginal Way, which has a drive-through facility at the rear of the 3-story structure meeting the conditional use standards for the B-5 zone. Bangor Savings also has a drive-through facility at their two-story building on Middle Street. While it does not have a drive-through facility, the c-Port Credit Union on the corner of India and Middle met the minimum height requirements of the India Street Form Based Code by including a third-floor residential unit over the retail and office facilities located on the first and second floors.

There are examples in other urban areas where drive-throughs are incorporated in larger scale developments. Here are examples from Edina, Indianapolis, and Milwaukee.

<https://finance-commerce.com/2015/08/semper-plans-apartments-atop-walgreens-store-in-edina/>

<https://www.ibj.com/blogs/3-property-lines-scott-olson/post/43955-update-drugstore-drive-through-gets-city-clearance>

<https://patch.com/wisconsin/shorewood/relocation-of-walgreens-a-key-part-of-plans-for-32-mi311b24c213>

VI. Comprehensive Plan

The central vision of Portland’s Plan 2030 is represented by the Venn diagram demonstrating the integral interrelation of the community’s core belief that Portland is equitable, sustainable, connected, dynamic, authentic and secure. The vision conveys the message of the City’s need to balance many competing needs to assure the advance of the vision as a unified concept. In this instance, that the City’s goals for job growth and transforming Portland through orderly growth and development be balanced with needs for connectivity of the street grid, sustainability of infrastructure and the ability to maintain that infrastructure, and security in the sense of public safety.



The comprehensive plan includes the following economic and housing goals that are relevant to the proposed text amendments:

- Create economic prosperity by growing Portland’s tax and employment base.
- Invest in, attract, and retain human capital to support a growing economy.
- Respect that our unique quality of place is key to our current and future economic success.

- 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.

VII. STAFF RECOMMENDATION

The Planning and Urban Development staff are recommending a positive recommendation for the proposed text amendments to allow only drive-throughs associated with banks and pharmacies with 3 or more stories where the majority of the upper stories is devoted to 3 or more dwelling units.

At the workshop, Planning Board members suggested retaining the option for drive-through restaurant and related uses in the B-2 zone, provided the same standards are met. That is a viable option that this proposal could be modified to accommodate. However, it seems very unlikely that such a drive through use would work in a multistory building with housing above. Externalities such as noise, odors and trash will make the location less attractive for tenants. It also seems unlikely that such users would be interested in investing in a mixed-use development. For these reasons, staff does not support this approach, but also does not find it to be entirely inconsistent with this amendment's intent.

The Board's recommendation for the zoning text amendments will be forwarded concurrently with the Board's March 22, 2016 zoning map amendment recommendation along Forest Avenue.

VIII. PROPOSED MOTION

On the basis of the material provided in this report, dated January 18, 2019, public testimony, a review of applicable policies, and other information, the Planning Board finds that the proposed text amendments to the Section 14-182, Permitted Uses, and Section 14-183- Conditional Uses of the B-2, B-2b, and B-2c zones of the Land Use Code **[are or are not]** consistent with the Comprehensive Plan and **[recommends or does not recommend]** adoption of the proposed amendments to the City Council.

Attachments:

- A. Proposed Ordinance Amendments
- B. Drive-through Chart for Business Zones
- C. B-2 Zone Locations- Off Peninsula
- D. B-2 Zone Locations- On Peninsula
- E. Planning Board Report, March 22, 2016, B-2b Zoning Map Amendment

DIVISION 10. B-2 AND B-2b COMMUNITY BUSINESS ZONES*

Sec. 14-181. Purpose.

(a) B-2 Community Business Zone

The purpose of the B-2 community business zone is:

1. To provide appropriate locations for the development and operation of community centers offering a mixture of commercial uses, housing and services serving the adjoining neighborhoods and the larger community.
2. The variety, sites and intensity of the permitted commercial uses in the B-2 zone are intended to be greater than those permitted in the B-1 neighborhood business zone.
3. The B-2 zone will provide a broad range of goods and services and general businesses with a mixture of large and small buildings such as grocery stores, shops and services located in major shopping centers and along arterial streets. Such establishments should be readily accessible by automobile, by pedestrians and by bicycle. Development in the B-2 zone should relate to the surrounding neighborhoods by design, orientation, and circulation patterns.
4. The B-2 and B-2b will provide locations for moderate to high density housing in urban neighborhoods along arterials.

(b) B-2b Community Business Zone

The B-2b zone is intended to provide neighborhood and community retail, business and service establishments that are oriented to and built close to the street. The B-2b zone is appropriate in areas where a more compact urban development pattern exists such as on-peninsula or in areas off-peninsula where a neighborhood compatible commercial district is established which exhibits a pedestrian scale and character. Such locations may include the peninsula and other arterials and intersections with an existing urban or neighborhood oriented building pattern.

(c) B-2c Community Business Zone

To protect and enhance the quiet enjoyment of adjoining residential neighborhoods from the impacts of businesses that serve liquor and from other uses that are incompatible with adjoining neighborhoods due to noise.

(Ord. No. 293-88, 4-4-88; Ord. No. 25, 7-07-99: emergency enactment of 120-day moratorium, effective 7/07/99 thru 11/04/99; Ord. No. 94A, 11-01-99: emergency enactment of 44-day extension of moratorium enacted on 7-07-99, effective date 11/01/99 thru 12/15/99; Ord. No. 94-99, 11-15-99; Substitute Ord. No. 189-00, §2, 4-24-00; Ord. No. 151-03/04, 02/23/04; Ord. No. 244-09/10, 6-21-10)

*Editor's Note: Order No. 25, adopted 7-07-99, enacted an emergency 120-day moratorium on drive-through facilities on lots in B-2 Zone adjacent to lots with residential uses effective 7-07-99 through 11-1-99; Ord. No. 94A, adopted 11-01-99 extended the moratorium on said drive-through facilities through December 15, 1999.

Sec. 14-182. Table of uses.

Group ¹	Use	B-2 ²	B-2b	B-2c
R	Single family home	Y	Y	Y
R	Two family home	Y	Y	Y
R	Three family home	Y	Y	Y
R	Multifamily housing	Y	Y	Y
R	Combined live/work spaces provided the living space is at least 33% of the total net floor area	Y	Y	Y
B	General business and professional offices, as defined in section 14-47, and offices of trades	Y	Y	Y
B	Personal services, as defined in section 14-47	Y	Y	Y
B	General retail establishments	Y	Y	Y
B	Pharmacies with retail sales	Y	Y	Y
B	Banking Facilities	Y	Y	Y
B	Restaurants, except that restaurants shall close for all purposes including the service of alcohol no later than 11:00 p.m. unless otherwise authorized by the City Council	Y	Y	Y
B	Drinking establishments, as defined in section 14-47	Y	Y	N
B	Billiard parlors	Y	Y	Y

Group ¹	Use	B-2 ²	B-2b	B-2c
B	Funeral homes	Y	Y	Y
B	Miscellaneous repair services, excluding motor vehicle repair services	Y	Y	Y
B	Communication studios or broadcast and receiving facilities	Y	Y	Y
B	Health clubs and gymnasiums	Y	Y	Y
B	Veterinary hospitals and clinics provided there is no outdoor kennel	Y	Y	Y
B	Theaters and performance halls	Y	Y	Y
B	Hotels, Motels and Inns	Y	Y	Y
B	Bakeries, breweries, distilleries, commercial kitchens and similar uses with a retail component and with a total floor area under 10,000 net sf.	Y	Y	Y
B	Bakeries, breweries, distilleries, commercial kitchens and similar uses with a retail component and with a total floor area of 10,000 net sf. or greater	Y	N	N
B	Expansion of existing dairies	Y	Y	Y
B	Registered medical marijuana dispensaries	Y	C	C
I	Long term, extended and intermediate care facility	Y	Y	Y
I	Clinics, as defined in section 14-47	Y	Y	Y
I	Places of assembly	Y	Y	Y
I	Kindergarten, elementary, middle and secondary schools	Y	Y	Y
I	College, university, trade schools	Y	Y	Y
I	Municipal buildings and uses	Y	Y	Y
O	Lodging houses	Y	Y	Y
O	Day care facilities	Y	Y	Y
O	Accessory uses, as provided in section 14-404 ³	Y	Y	Y
O	Bed and breakfast, subject to the standards of article V (site plan), sections 14-522 and 14-523 notwithstanding. A bed and breakfast may include a meeting facility if for weddings, seminars, receptions, business	Y	Y	Y

Group ¹	Use	B-2 ²	B-2b	B-2c
	meetings and the like and if the facility is less than 4,000 net sf.			
O	Studios for artists and craftspeople, less than 4,000 net sf. per space	Y	Y	Y
W	Wind energy systems, as defined and allowed in Article X, Alternative Energy	Y	Y	Y
U	Utility substations, as defined in section 14-47, subject to the requirements of article V (site plan), sections 14-522 and 14-523 notwithstanding	Y	Y	Y
A	Drive-throughs associated with a permitted or conditional <u>a pharmacy or banking facility</u> use ⁴	C	NC	C
A	Auto service stations	C	N	N
A	Expansion of auto service stations in existence as of November 15, 1999	C	C	C
A	Car washes	C	C	C
A	<u>Automobile dealerships</u>	C	C	C
M	Printing and publishing establishments of 10,000 gross sf. or less	C	C	C
M	Expansion of existing printing and publishing establishments of greater than 10,000 gross sf. in existence since April 4, 1988	C	C	C
M	Wholesale distribution establishments of 10,000 gross sf. or less	C	C	C
M	Research and development and related production establishments of 10,000 gross sf. or less	C	C	C

¹ Uses within the same group lettering may be substituted without being considered a change of use under zoning, provided all dimensional and other requirements of this

section are met. Other reviews may be required under City regulations, including but not limited to building permit, subdivision and site plan reviews. However, no additional parking shall be required for changes within the same use group for a change in total floor area up to 10,000 sf, except for the provision of additional housing units.

Use Groups include the following:

R = Residential
B = Business
I = Institutional
O = Other
U = Utility
A = Auto related
M = Manufacturing/Processing/and other Industrial

2 Y-Permitted N-Not Permitted

C-Conditional use, see section 14-183 for specific standards in addition to the general conditional use standards

3 Expansion of accessory uses into space used by a permitted use shall not be considered a change of use

4 See conditional use standards for drive throughs. Drive throughs are not permitted for restaurant, bakery, or other food or beverage service uses.

(Ord. No. 293-88, 4-4-88; Ord. No. 39-96, § 2, 10-7-96; Ord. No. 125-97, § 6, 3-3-97; Ord. No. 164-97, § 2, 12-1-97; Ord. No. 25, 7-07-99: emergency enactment of 120-day moratorium, effective 7/07/99 thru 11/04/99; Ord. No. 94A, 11-01-99: emergency enactment of 44-day extension of moratorium enacted on 7-07-99, effective date 11/01/99 thru 12/15/99; Ord. No. 94-99, 11-15-99; Ord. No. 118-00, 11-20-00; Ord. No. 151-03/04, 02/23/04; Ord. No. 127-09/10, 1-4-10 emergency passage; Ord. No. 244-09/10, 6-21-10; Ord. No. 283-09/10, 7-19-10 emergency passage; Ord. 10 10/11, 8-2-10; Ord. No. 279-09/10, 6-6-11; Ord. No. 33-11/12, 1-18-12; Ord. No. 113-11/12, 2-22-12; Ord. No. 41-12/13, 9-5-12; Ord. No. 263-13/14, 6-16-14; Ord. 90-14/15, 11-17-2014; Ord. 100-15/16, 11-16-2015; Ord. 159-16/17, 3-20-2017)

Sec. 14-183. Conditional uses.

The following uses are permitted in the B-2, B-2b and B-2c zone, as provided in section 14-474 (conditional uses), if they meet the following requirements:

...

6. Drive-throughs: Notwithstanding section 14-474(a) of this article or any other provision of this code, the Planning Board shall be substituted for the Board of Appeals as the reviewing authority and shall apply the following standards in addition to the provisions of section 14-474:

~~a. a. Location of Drive-throughs: Features, such as windows, vacuum cleaners and menu/order boards, stacking lanes, must be placed, where practicable, to the side and rear of the principal building except where such placement will be detrimental to an adjacent residential zone or use, and shall be located no nearer than forty (40) feet from any adjoining property located in a residential zone. This distance shall be measured from the outermost edge of the outside drive-through feature to such property line. In addition, drive-through features shall not extend nearer than twenty-five (25) feet to the street line. The site must have adequate stacking capacity for vehicles waiting to use these service features without impeding vehicular circulation or creating hazards to vehicular circulation on adjoining streets.~~

Drive throughs are only permitting in buildings of 3 or more stories where a majority of the upper stories is devoted to 3 or more dwelling units. The drive through shall be screened as much as practical from the front of the building and shall be no closer than 40 feet from abutting residential zones and 25 feet from the street line. Adequate stacking capacity much be provided on site without impeding vehicular circulation or creating hazards to

pedestrian or vehicle circulation on or off site.

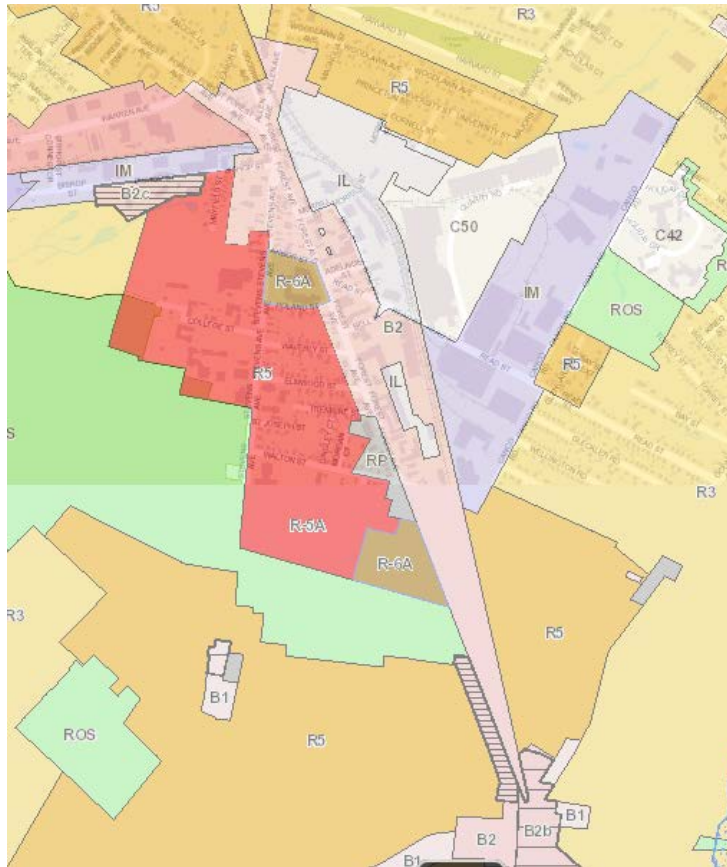
- b. Noise: Any speakers, intercom systems, or other audible means of communication shall not play prerecorded messages. Any speakers, intercom systems, audible signals, computer prompts, or other noises generated by the drive-through services or fixtures shall not exceed 55 dB or shall be undetectable above the ambient noise level as measured by a noise meter at the property line, whichever is greater.
- c. Lighting: Drive-through facilities shall be designed so that site and vehicular light sources shall not unreasonably spill over or be directed onto adjacent residential properties and shall otherwise conform to the lighting standards set forth in 14-526.
- d. Screening and Enclosure: Where automobiles may queue, waiting for drive-through services, their impacts must be substantially mitigated to protect adjacent residential properties from headlight glare, exhaust fumes, noise, etc. As deemed necessary by the reviewing authority, mitigation measures shall consist of installation of solid fencing with landscaping along any residential property line which is exposed to the drive-through or the enclosure of the drive-through fixtures and lanes so as to buffer abutting residential properties and to further contain all associated impacts; and
- e. Pedestrian access: Drive-through lanes shall be designed and placed to minimize crossing principal pedestrian access-ways or otherwise impeding pedestrian access.
- f. Hours of Operation: The Board, as part of its review, may take into consideration the impact hours of operation may have on adjoining uses.

Drive-Through Regulations for Portland's Business Zones				
Business Zones	Not Permitted	Permitted	Conditional Use	Regulatory Provisions
Neighborhood B-1	✓			
Community Business- B-2			✓	Drive-throughs associated with a permitted or conditional use - Conditional Use reviewed by Planning Board and zonespecific standards address, signs, circulation, location of drive-through features, noise, lighting, screening and enclosure, pedestrian access, and hours of operation. (see complete list of standards in report on pages 3 and 4)
B-2b	✓			
B-2c			✓	(same as B-2)
Airport Business	✓			
Downtown Business B-3, B-3b & B-3c	✓ Restaurants – no drive-through allowed			
			✓ Conditional use for banking facilities (only) by PB	Drive-up banking services, provided that drive-up features, such as automated teller machines and service windows, shall not extend nearer than twenty-five (25) feet to the street line. The site must have adequate stacking capacity for vehicles waiting to use these service features without impeding vehicular or pedestrian circulation or creating hazards to vehicular or pedestrian circulation on adjoining streets. Such uses shall also be in compliance with the applicable standards contained in the Downtown Urban Design Guidelines, a copy of which is on file in the department of planning and urban development. No other type of drive-up use shall be permitted.
Island Business	✓			
Commercial Corridor B-4		✓		Accessory uses, as provided in section 14-404; and

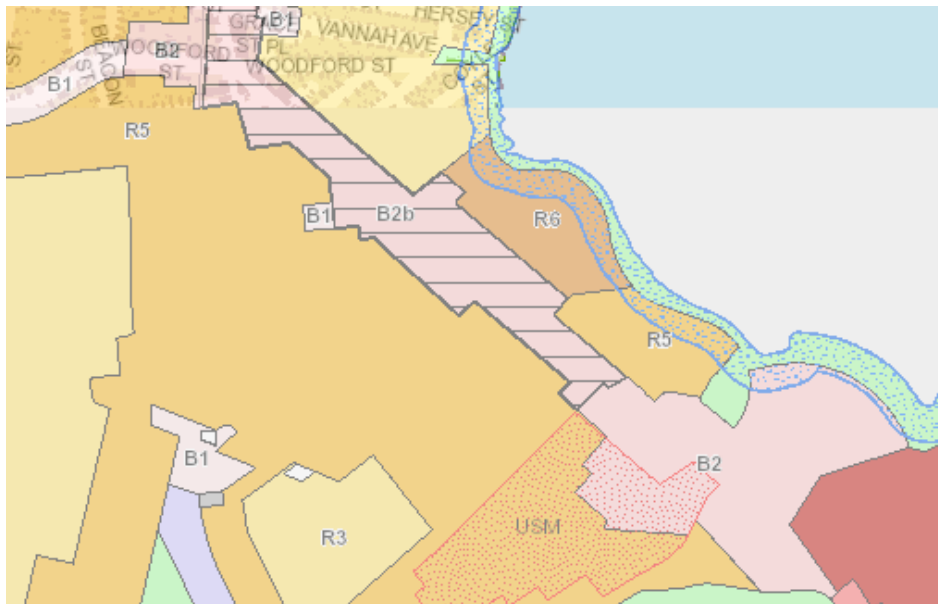
Urban Commercial Mixed Use- B-5	✓ Not permitted between Franklin and Forest	✓	✓ Banking Services	Accessory uses customarily incidental and subordinate to the location, function and operation of permitted uses, excluding in the B-5b all drive-up services for retail, banking, or automotive repair uses. In the B-5 zoning district between Forest Avenue and Franklin Street, all drive-up services for all retail or drive-up automotive repair uses are prohibited. In the B-5 zone between Forest Avenue and Franklin Street, surface parking lots shall be considered a conditional use subject to the conditional use section of the B-5 zone.
B-5b	✓			Excerpt - Accessory uses customarily incidental and subordinate to the location, function and operation of permitted uses, excluding in the B-5b all drive-up services for retail, banking, or automotive repair uses.
Eastern Waterfront Mixed B-6		✓ May allow as an accessory use	✓	Banking services, excluding vehicular drive-up services Drive-up banking facilities located in the interior of parking structures, subject to the following criteria: i. All drive-up features, such as automated teller machines and service windows, shall not extend nearer than twenty-five (25) feet to the street line; ii. The site must have adequate stacking capacity for vehicles waiting to use these service features without impeding vehicular or pedestrian circulation or creating hazards to vehicular or pedestrian circulation on adjoining streets; iii. Drive-up vehicle circulation shall not create an impediment for retail or mixed-use development for the first floor of the subject garages along any adjacent public streets.
ISFBC	✓			1 . Prohibited uses: Drive-through facilities;
Mixed Use- B-7	✓		✓	Banking services, excluding vehicular drive-up services (see also conditional use section, [c][3]; Accessory uses customarily incidental and subordinate to the location, function and operation of permitted uses. All drive-up services for all retail

				or drive-up repair facilities are prohibited except that bank drive-up services, where permitted, area conditional use. c. Drive-up banking provided that: i. The drive-up is accessory to a banking service occupying a minimum floor area of four thousand (4,000) square feet; and ii. The drive-up is attached to or included within a building with a minimum floor area of twenty thousand (20,000) square feet, except that for lots of less than 20,000 square feet and in existence as of March 9, 2005, a drive-up may be included in a building of less than 20,000 sq ft.; and iii. The drive-up facility is attached or included within a building and/or addition meeting the minimum height of four stores in the Bayside Height District A and three stories in the Bayside Height Districts B and C. For the purposes of this conditional use, the minimum height exceptions contained in Section 14-298 (h) 5, 7, and 8 shall not apply; and iv. The first floor of the building shall include banking or other retail storefront uses with storefront windows, entries, and interior public space oriented to and visible from the street, with front entry access facing the street and directly accessible from the public sidewalk; and v. All drive-up features, such as automated teller machines and service windows, shall not extend nearer than twenty-five (25) feet to the street right-of-way line; and vi. The site must have adequate stacking capacity for vehicles waiting to use these service features without impeding vehicular or pedestrian circulation or creating hazards to vehicular or pedestrian circulation on adjoining streets; and vii. Drive-up vehicle circulation shall not be located between the building and any adjacent public streets; and viii. The drive-up shall be limited to two vehicle drive-up lanes; and ix. The location of any drive-up shall be limited to the geographic area between Somerset/Kennebec Streets/ I-295/Franklin Street/Forest Avenue.
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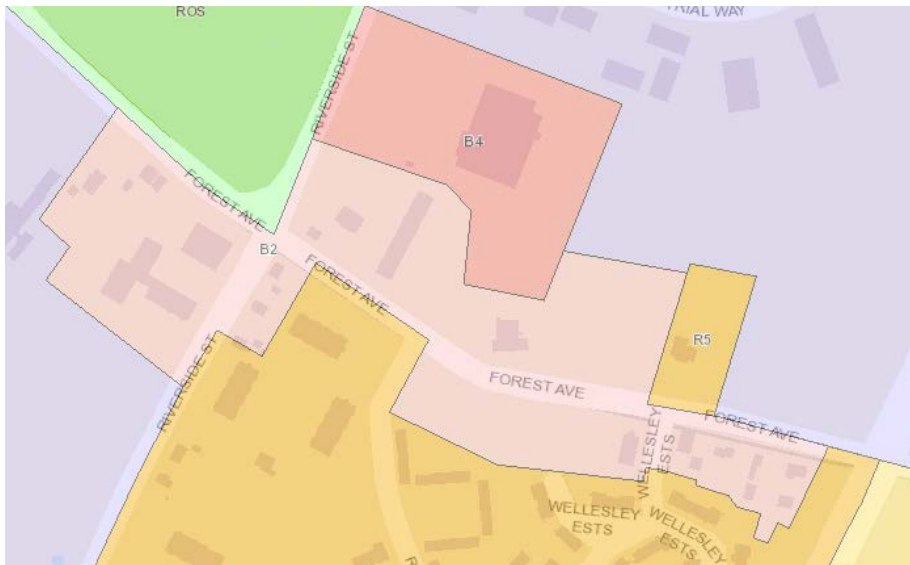
**Community Business B-2 Zones in Portland
Off- Peninsula Locations
Forest Avenue Corridor -Woodford to Morrill's Corner**



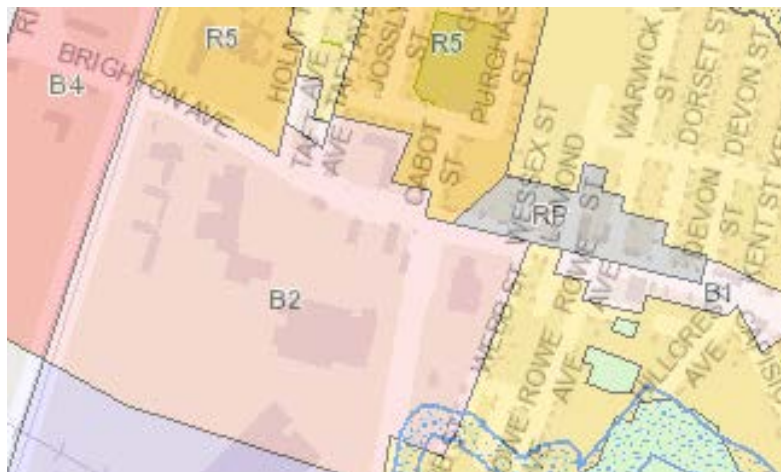
I-295 to Woodford



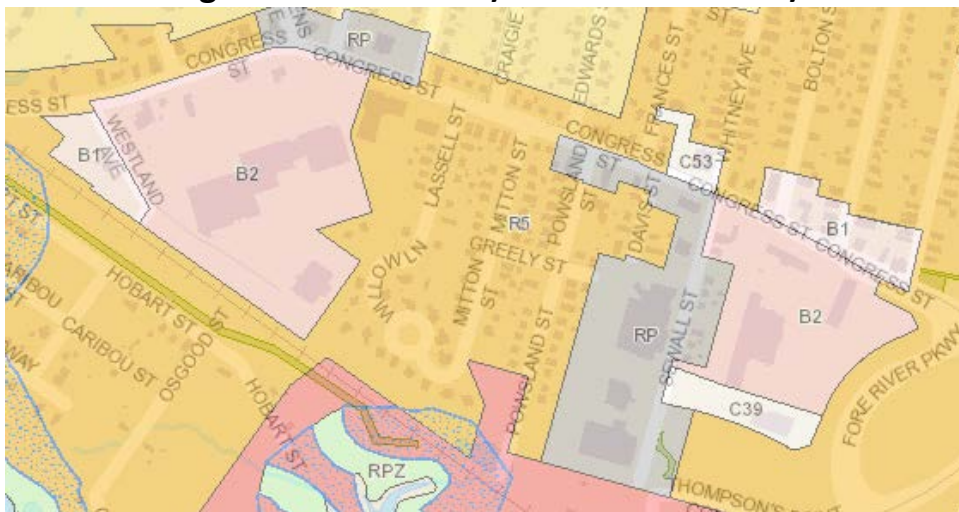
Outer Forest near Westbrook Line



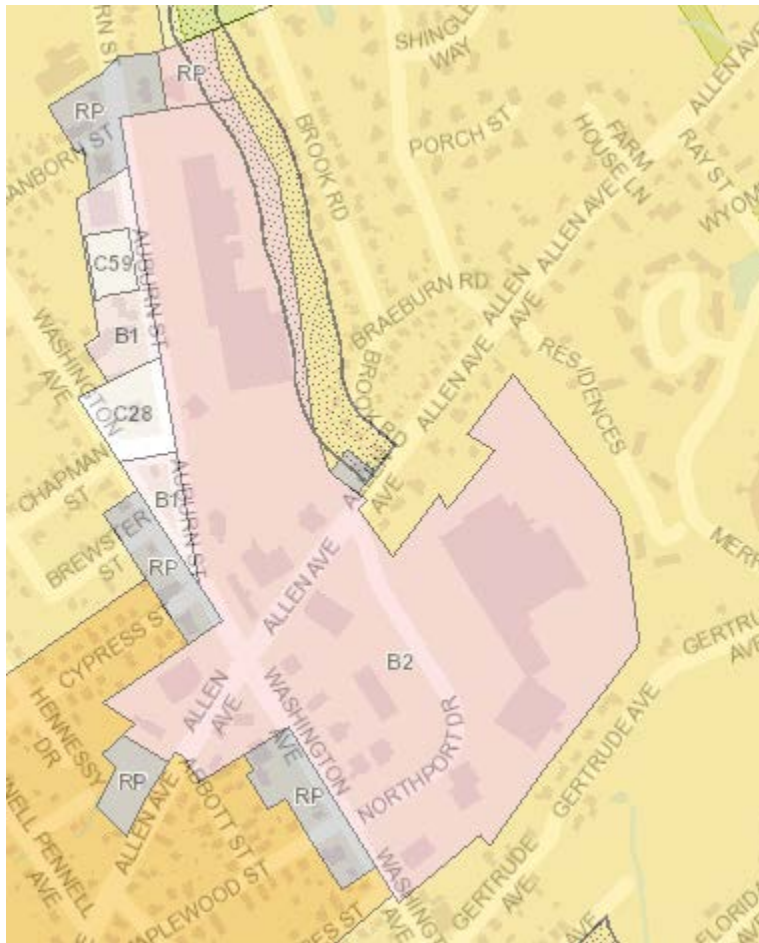
Brighton Avenue



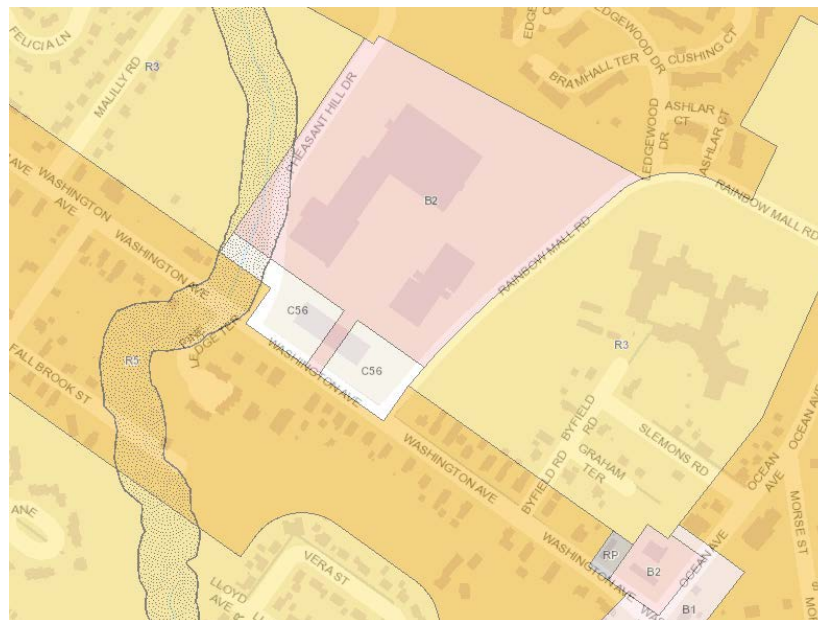
Off-Peninsula Congress Street Vicinity of Fore River Parkway and Stevens Avenue



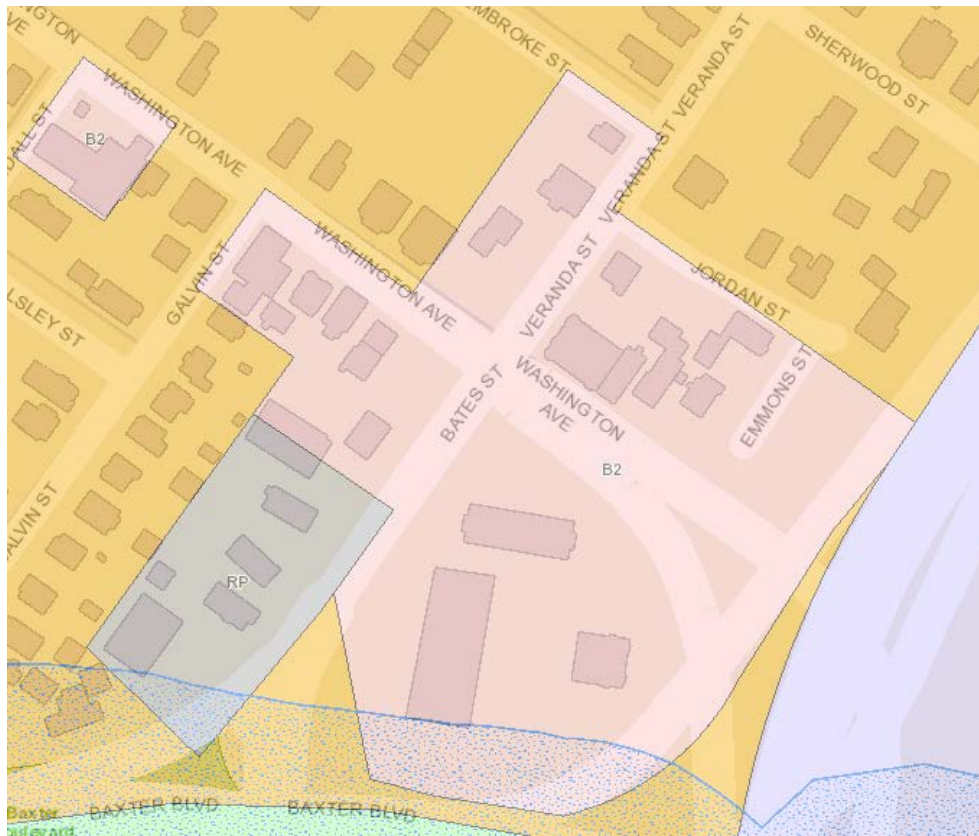
Washington Avenue Corridor - Washington, Allen Avenue, Northport and Northgate



Washington Ave at Rainbow Mall Road and Ocean Avenue

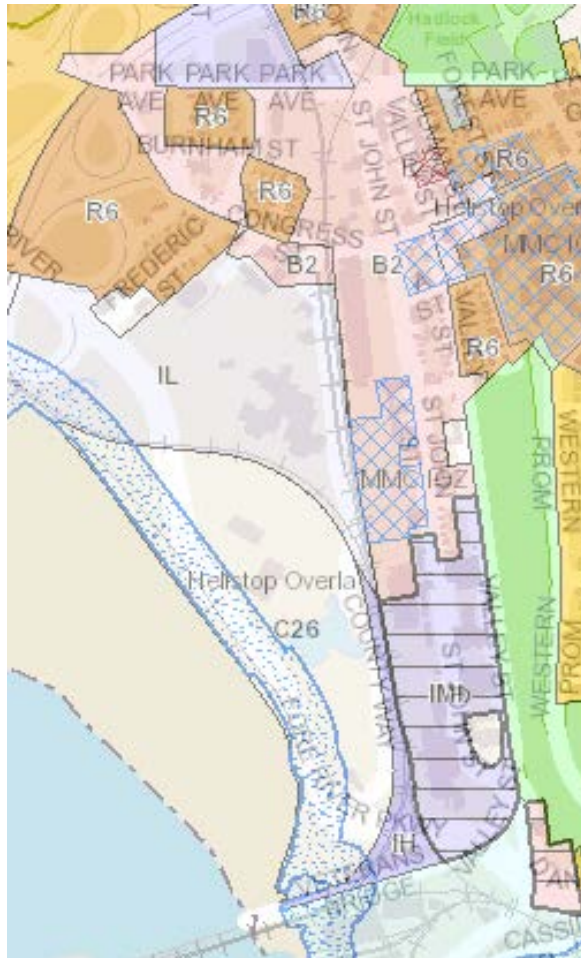


Washington Ave -Vicinity of Veranda Street

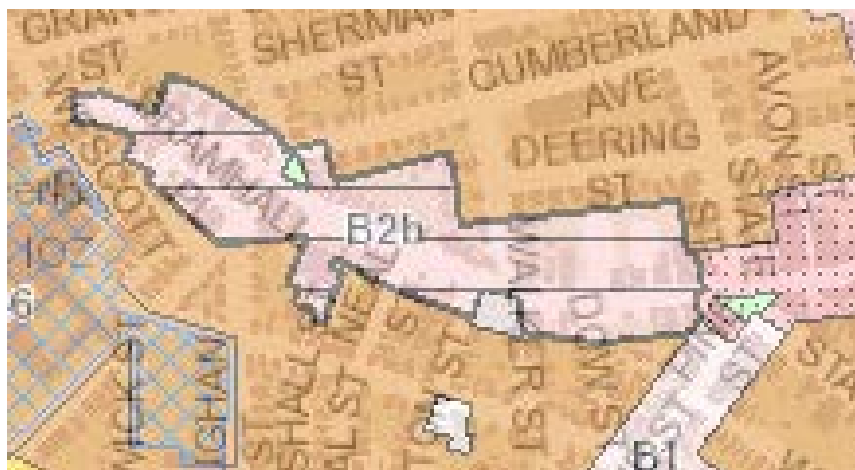


Community Business B-2 Zones in Portland Peninsula Locations

Libbytown - St. John , Congress and Park



Congress Street between Westcott and Park



Bayside – Forest, Park and Cumberland



Washington Avenue Corridor





PLANNING BOARD REPORT PORTLAND, MAINE

Zoning Map Amendment from B-2 and R-5 to Community Business B-2b

Map Amendment for Forest Avenue in the vicinity of Baxter Boulevard, Preble Street Extension and the northerly side of Forest Avenue, and at the intersection of Forest Avenue, Baxter Boulevard and Bedford Street.

City of Portland Applicant

Submitted to: Portland Planning Board: Public Hearing Date: March 22, 2016	Prepared by: Stuart O'Brien, Planning Division Director and Barbara Barhydt, Development Review Services Manager Date: March 18, 2016
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I. INTRODUCTION

On February 1, 2016, Councilor Ray moved to have the Planning Board consider a zoning map amendment from the current Community Business B-2 zone and the Residential R-5 zone to the Community Business B-2b zone. The City Council voted unanimously to refer this item to the Planning Board and for the Board to make a recommendation to the Council by April 1, 2016 (Council Order included as [Attachment 1](#)). The City Council is asking the Board to consider whether the B-2b, which promotes a more urban form and prohibits drive-throughs, is a more appropriate zone for this area.

There are no pending development review applications for the properties in this area; however, interest in potential redevelopment has been brought to the attention of the City. Concurrently, several of the buildings had been identified as potentially eligible for designation following a historic preservation analysis recently commissioned by Greater Portland Landmarks entitled *Forest Avenue and Stevens Avenue: Historic Context*. The Historic Preservation Board review and recommendations are included below in Section II.

In addition, the [Transforming Forest Avenue](#) report as discussed under the comprehensive plan analysis below, contemplates revisions to the zoning along the corridor to encourage possibilities for the future of land development around Forest Avenue to facilitate opportunities for transit supportive development.

Public notice of the public hearing appeared in the Portland Press Herald on March 7 and 14th and 105 notices were sent by mail and by e-mail to property owners and interested citizens. The neighborhood meeting was held on March 10, 2016 and the packet is included as [Attachment 4](#). There is one piece of written comment that was submitted at the neighborhood meeting. Public comment has also been submitted by Mary Costigan and Sandra Guay.

II. EXISTING CONDITIONS & SITE SELECTION

A. Existing Conditions

The section of Forest Avenue between Baxter Boulevard and Preble Street extension contains a range of uses. The development in this block faces Forest Avenue with parking in the rear, which can be seen from Preble Street Extension. There is one curb cut that serves the parking areas off Preble with all other access points off Forest Avenue. The city's zoning map lists the accessways as Bank and Fenwick Roads. The businesses along Forest Avenue include: office buildings, retail uses, a bar, personal service businesses, and 70 residential units above first floor commercial at 331-337 Forest Avenue.

Pedros Field is a public park and ballfield, which is located at the intersection of Preble Street extension and Baxter Boulevard. This portion of the block is not including within the proposed zone change.

The B-2 zone is located across Forest Avenue from the proposed area for rezoning. The uses include the Oakhurst Dairy and a multiple tenant retail building on the corner of Forest and Bedford (owned by Oakhurst Dairy). An aerial of the area obtained from Google is included as Figure 1. In general, office uses facing Baxter Boulevard are located across from this block, as is an entrance drive to the Hannaford plaza. A residential neighborhood is located on the opposite side of the Preble Street extension and the university credit union is located at the corner of Preble and Forest.

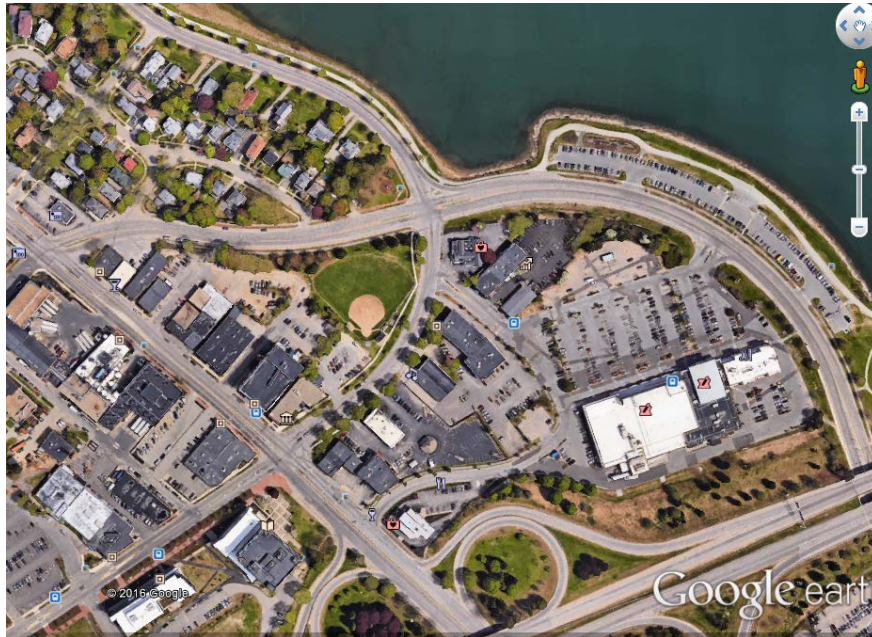


Figure 1: Aerial

On City maps, the block being considered for rezoning shows Fenwick Road and Bank Road, which appear to be former public streets. Fenwick Road was discontinued in 1991 with a public easement retained for the city sewer line; however, a street sign still is located on the corner. A portion of Bank Road was discontinued in 1991 and a section leading to Preble Street was accepted in 1920. It appears that this portion remains a public street. The status of the streets, as shown below (Figure 2), is based upon the City's records at the Department of Public Works. This is preliminary information that may be revised once a survey of the area is completed.



Figure 2: Street Status

B. Historic Preservation Board's Review of Potential Designation of Buildings

On February 3rd, the Historic Preservation Board held a public hearing on the question of eligibility of three Forest Avenue buildings for local landmark designation. The 3 buildings in question are 351-355, 369 and 371-371 Forest Avenue. The request for determination of eligibility was prompted by a letter from legal counsel for CVS indicating CVS' intent to demolish 5 contiguous structures near the intersection of Preble Street Extension. Consistent with the City's demolition permit review process, the letter of intent was reviewed by historic preservation staff to determine whether any or all of the subject structures were eligible for listing in the National Register of Historic Places and/or local historic designation. In this case, the buildings at 355 Forest and 369 Forest had been determined eligible for National Register listing by the Maine Historic Preservation Commission in 2011. As well, all three buildings had been included in a Forest Avenue Historic Resources survey conducted last summer. Accordingly, the question of eligibility was forwarded to the Historic Preservation Board for consideration. Following a lengthy public hearing, the Historic Preservation Board found that 355, 369 and 371-373 Forest meet the designation criteria for individual landmark designation under Portland's Historic Preservation ordinance. The determination of eligibility is expected to be followed by formal designation deliberations. As the buildings are proposed for designation as individual landmarks, the HP Board's recommendation would be forwarded directly to the City Council, as provided in the historic preservation ordinance. No date has yet been set for formal deliberations on the designation. The public hearing report to the Historic Preservation Board regarding the determination of eligibility and attachments A and B are included as Attachment 2 of this report.

III. BACKGROUND AND EXISTING ZONING

The current zoning in the block bounded by Baxter Boulevard, Preble Street Extension and Forest Avenue includes Community Business B-2, Residential R-5 and Recreation and Open Space (ROS) (refer to Figure 3). There is a mix of commercial and residential uses in this area including office buildings, retail uses, a bar, personal service businesses, and 70 residential units above first floor commercial at 331-337 Forest Avenue. Pedros Field is a public ballfield located within the block and is zoned Recreation and Open Space (ROS). This portion of the block is not part of the proposed zoning map amendment.



Figure 3: Existing Zoning

The Community Business Zone extends across Forest Avenue to incorporate the Oakhurst dairy and the retail building on the corner. The B-2 zone also extends up Bedford Street and includes a portion of the USM campus. Commercial uses were located in this area at one time, but the area is now owned and occupied by the University of Southern Maine. The USM overlay zone extends over these properties.

The B-2 zone is also located between Baxter Boulevard and I-295 where this is a mix of office and retail uses fronting on Baxter Boulevard. The Hannaford Shopping Center is situated to the rear of the Baxter Boulevard and Forest Avenue lots with frontage on the Preble Street extension. The Community Business B-2b zone runs along either side of Forest Avenue from the intersection of Preble and Forest Avenue through Woodford's Corner.

A portion of the block being studied includes the Residential R-5 Zone, which run along the Preble Street extension. The residential neighborhoods that flank either side of Forest Avenue are generally zone Residential R-5, with the exception of the multifamily complexes at the intersection of Dartmouth Street and Baxter Boulevard, which are zoned the R-6 zone. Per the Planning Board's suggestion, the commercial properties on the corner of Forest Avenue and Bedford Street and Baxter Boulevard as shown on the map insert were included in the notice.

The Forest Avenue Corridor between Preble Street Extension and through Woodford's Corner was zoned as Community Business B-2b in 1999. At that time, there was a comprehensive review of the B-2 zone and the B-2b zone was created. Previously, the entire corridor had been zoned B-2. The B-2b zone was considered for section of the corridor from the Preble Street Extension to I-295. A conversion to B-2b would have made Oakhurst Dairy and the auto related uses in this area non-conforming. Thus, the area between I-295 and the Preble Street extension remained within the B-2 zone due to the type and scale of uses in this area at that time.

The B-2b zone was created in 1999 as a result of the Nason's Corner/Outer Brighton Avenue Study, completed the previous year, which sought to increase the compatibility between commercial districts and residential neighborhoods. As described in Planning Board Report #50-99 dated October 18, 1999, the B-2b was instituted as a new zone "designed to preserve the more compact urban development of Portland". At the same time amendments were made to the B-2 to allow residential uses and to make major and minor offices uses conditional, allow dairies and bakeries as permitted uses if in existence before 1999, and limit new bakeries in the B-2b to no more than 7,000 s.f.

The 1999 changes also resulted in the creation of a conditional use designation for all drive-throughs in the B2, as opposed to merely for restaurants uses. Drive-throughs in the newly created B-2b were only allowed if accessory to a permitted principal use. Additional conditional use standards were added for drive-throughs relating to location, noise, screening, pedestrian access and hours. Finally, it should be noted that at this time auto uses became conditional uses in the B-2 and these auto uses were prohibited in the B-2b except for pre-existing minor auto uses which were proposed to become conditional uses. These amendments to the code were adopted on November 15, 1999.

Additional changes were adopted in early 2000, the map amendment proposed intended to create a B-2b zone along a portion of Forest Avenue. In addition, among other text changes as described in in the March 24, 2000 City Council Agenda Request the proposed B-2b text amendments for off peninsula locations would:

“allow new structures to be placed no further back than the average depth of the front yards of adjoining buildings. Currently, B-2b requires structures to meet a ten (10) foot build-to line and this would remain for on-peninsula locations. The proposed off-peninsula B-2b front yard setback is the same standard as found in the B-2 zone.”

These changes were adopted on April 24, 2000.

In 2005, the Council adopted the the B-2C zone which essentially mirrored the B-2 but excluded establishments that served liquor for a portion of Forest Avenue.

In 2010, changes were adopted increasing density of B-2 and B-2b zones on-peninsula to current levels, adding housing to the zones purpose statements and clarifying some language. As reflected in the Planning Report #02-10, dated January 22, 2010, the most significant change was establishing a lot area per dwelling unit of 435 s.f., which was equivalent to the R-7 density. At the time Avesta was proposing a project in the vicinity of 701 Congress St, which due to lot configuration could not meet the maximum front yard requirement, although the report states this was believed to not be a common occurrence, to encourage infill development on these “rear yards” the current footnote allowing relief for lots with less than 40 feet of frontage and depth of more than 100 feet and/or 20 feet of front yard and a remaining frontage of less than 40 feet was added.

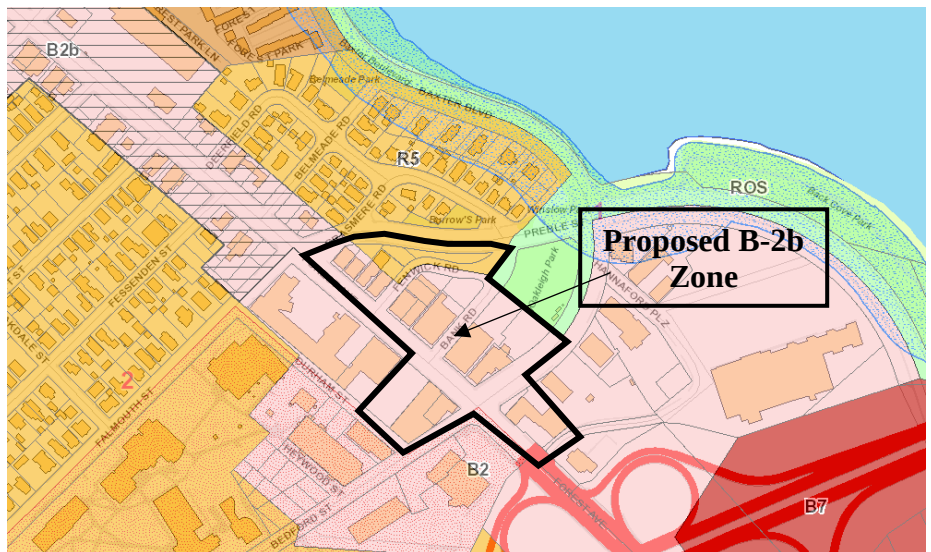
Changes were made in 2011 to clarify language concerning the proximity of drive-thrus to residential zones and to add language about wind energy facilities in 2013.

In July of 2014, the council adopted changes to the B-2, B-2b and B-2c resulting greater allowance of multi-family housing in all B-2 derivative zones with the previously existing qualification that multi-family was only allowed when abutting higher density residential zones (R-4 and up). A stronger prohibition on front yard parking was included for the same reasons. A table was added to simplify the dimensional requirements which also made significant changes to the zones dimensional requirements. These changes included reducing the maximum front yard setback to 10 feet, reducing street frontage, reducing lot area for projects off peninsula with active street frontages to 435 s.f.. Lastly, a new section, 14-188, was added under the premise that rather than mandating ground floor commercial uses active street frontage requirements would better accomplish the goals of vibrant street life and accordingly, a density bonus of 435 s.f. was added.

Finally, in November of 2014 drive-throughs were eliminated as an allowed use in the B-2b as incompatible with the purpose of the B-2b such as providing neighborhood and community retail built close to the street and written for area which a pedestrian scale and character and inconsistent with the Transforming Forest Avenue Study. A technical change to step backs was also made.

IV. PROPOSED MAP AMENDMENT

The proposed zoning map amendment is to rezone the B-2 zone and the R-5 zone to B-2b, as shown in the insert. Per the Planning Board's suggestion at the workshop, the area to be considered for rezoning was expanded to include the commercial building and parking at the corner of Bedford and Forest and the commercial building at the corner of Baxter Boulevard and Forest Avenue (to Hannaford Plaza lane). Please note that the property at the corner of Bedford and Forest is owned by Oakhurst Properties LLC (CBL 114A – F 3,7 and 8).



V. ZONING COMPARISON

A. Purpose Statements

The R-5 zone is a medium density residential area that is characterized by single family and low-intensity multi-family development. The B-2 Zone is intended to provide areas for a mix of commercial and residential uses, which have a greater intensity than the business uses permitted in the neighborhood business zone. The types of uses articulated in the purpose statement of the B-2 zone include “grocery stores, shops and services located in major shopping centers and along arterial streets.” The vision is that these uses would be readily accessible by all means of transportation (automobile, pedestrians and bicyclists). Generally, the B-2 zone is found along Portland's major transportation corridors with residential neighborhoods adjacent to the zone. Thus the intent of the zone states that development should relate to the surrounding neighborhoods by design, orientation, and circulation patterns. Both the B-2 and B-2b provide for moderate to high density housing development.

The B-2b is part of the B-2 zone and varies in some ways from the zone. The purpose statement highlights that the development should be close to the street and have a more compact urban development pattern. It is recommended for locations “on-peninsula or in areas off-peninsula where a neighborhood compatible commercial district is established which exhibits a pedestrian scale and character.” The purpose statements of the R-5 zone and the B-2, B-2b and B-2c are listed in Table 1 below.

Zone	Purpose
Residential R-5	To provide appropriate areas of the city for medium-density residential development characterized by single-family and low-intensity multifamily dwellings on individual lots; to ensure the stability of established medium-density neighborhoods by controlling residential conversions; and to provide for planned residential unit development on substantially sized parcels. Such PRUD

	development shall respond to the physical qualities of a site and complement the scale, character and style of the surrounding neighborhood.
Community Business B-2	1. To provide appropriate locations for the development and operation of community centers offering a mixture of commercial uses, housing and services serving the adjoining neighborhoods and the larger community. 2. The variety, sites and intensity of the permitted commercial uses in the B-2 zone are intended to be greater than those permitted in the B-1 neighborhood business zone. 3. The B-2 zone will provide a broad range of goods and services and general businesses with a mixture of large and small buildings such as grocery stores, shops and services located in major shopping centers and along arterial streets. Such establishments should be readily accessible by automobile, by pedestrians and by bicycle. Development in the B-2 zone should relate to the surrounding neighborhoods by design, orientation, and circulation patterns. 4. The B-2 and B-2b will provide locations for moderate to high density housing in urban neighborhoods along arterials.
Community Business B-2b	The B-2b zone is intended to provide neighborhood and community retail, business and service establishments that are oriented to and built close to the street. The B-2b zone is appropriate in areas where a more compact urban development pattern exists such as on-peninsula or in areas off-peninsula where a neighborhood compatible commercial district is established which exhibits a pedestrian scale and character. Such locations may include the peninsula and other arterials and intersections with an existing urban or neighborhood oriented building pattern.

B. Permitted and Conditional Uses

Following is a chart of the permitted uses for the R-5, B-2 and B-2b zones. Again, the R-5 zone is a moderate density residential zone, thus the permitted uses include single and two family homes, handicapped family units, planned residential unit developments and multiplexes. The permitted residential uses in the B-2 and B-2b zone allow for many of the same residential uses, but the zones also permits higher density housing, such as multifamily development, combined living/working spaces, and lodging houses.

In the R-5 zone most institutional uses, except for government or municipal uses, are listed as a conditional use. In the B-2 zones, institutional uses, including schools, universities, clinics, long-term or intermediate care facilities and others are listed as permitted uses.

The R-5 zone does not permit business uses. The B-2 and B-2b zones share most of the same permitted and conditional uses. A significant difference is that drive-throughs are not listed as permitted or conditional uses in the B-2b zone, which is a recent change that was adopted on November 17, 2014. Drive-throughs are listed as a permitted use in the B-2 and as a conditional use in the B-2 zone when the site is adjacent to a residential zone. Another differentiation between the two zones is that the B-2b establishes a size limit of 7,000 sf for commercial kitchens (must include a retail component or tasting room) and bakeries in order to encourage smaller scale establishments oriented to pedestrians. The proposed map amendment as suggested by the Planning Board includes the land at the corner of Bedford and Forest, which is owned by Oakhurst Properties. While the current use is a mixed use retail building, a map amendment to B-2b could limit the dairies ability to expand.

Table 2: Permitted and Conditional Uses

Permitted Uses				
Residential		R-5	B-2	B-2b
	Single-family and two-family dwellings	•	•	•
	Multi-family dwellings		•	•
	Handicapped family units	•	•	•
	Single-family single- or multiple-component manufactured housing	•		
	Combined living/working spaces		•	•
	Lodging houses		•	•
	PRUDs	•		
	Multiplex development	•		
Institutional		R-5	B-2	B-2b
	Schools		•	•
	Clinics		•	•
	Places of assembly		•	•
	Long term, extended and intermediate care facilities		•	•
	Governmental buildings and uses/municipal uses	•	•	•
	College, university or trade schools		•	•
	Nursery schools, kindergartens			
	Day care facilities		•	•
Business		R-5	B-2	B-2b
	General, business, & professional offices		•	•
	Personal services		•	•
	Business services			
	Offices of building tradespeople		•	•
	Retail establishments		•	•
	Restaurants (close at 11)		•	•
	Drinking establishments (not allowed in B-2c)		•	•
	Billiard parlors		•	•
	Mortuaries or funeral homes		•	•
	Miscellaneous repair services, excluding motor vehicle repair		•	•
	Communication studios or broadcast and receiving facilities		•	•
	Health clubs and gymnasiums		•	•
	Veterinary hospitals (excluding outside kennels)		•	•
	Theaters		•	•
	Hotels of less than 150 rooms		•	•
	Dairies and bakeries in existence as of Nov 15, 1999		•	•
	Bakeries after 1999, must have a retail component and bakeries in the B-2b shall be no greater than 7,000 sf in size		•	•
	Drive-throughs associated with a permitted use in the B-2 zone provided that such do not include drive-throughs on any lot adjacent to any residential use or zone. ..“adjacent to” shall include uses across a street if within 100 feet of the subject lot boundary;		•	
	Registered medical marijuana dispensaries		•	•
	Commercial kitchens provided it includes retail sales or tasting room. Commercial kitchens shall be no greater than 7,000 sf in B-2b		•	•
Other		R-5	B-2	B-2b
	Accessory uses	•	•	•
	Municipal uses	•		

	Parks	•		
	Home occupation	•	•	•
	Studios for artists and craftspeople – not to exceed 4000 sf studio space		•	•
	Special needs independent living units	•	•	•
	Bed and breakfasts		•	•
	Hostels		•	•
	Wind energy systems	•	•	•
	Utility substations		•	•
Conditional Uses				
Residential		R-5	B-2	B-2b
	Sheltered care group homes	•		
	Additional accessory dwelling units	•		
	Alteration of non-residential structure to 3+ dwelling units	•		
	Use space existing as of 9-3-08 to accommodate additional dwelling units	•		
	Conversion of multi-family structure to lodging house	•		
Institutional		R-5	B-2	B-2b
	Schools	•		
	Long-term and extended care facilities	•		
	Intermediate care facility	•		
	Places of assembly	•		
	Hospitals	•		
	Nursery schools and kindergartens			
	Day care facilities	•		
	College, university, trade schools	•		
Business		R-5	B-2	B-2b
	Major and minor auto service stations		•	
	Major and minor auto service stations if in existence as of 1999			•
	Car washes		•	•
	Drive-throughs adjacent to residential uses or zones		•	
	Automobile dealerships		•	•
Other		R-5	B-2	B-2b
	Utility substations	•		
	Professional offices			
	Chancellery			
	Off-street parking	•		
	Temporary wind anemometer towers	•	•	•
	Wind energy systems	•	•	
	Printing and publishing establishments		•	•
	Wholesale distribution establishments		•	
	Research and development and related production establishments		•	•

C. Dimensional Standards

The dimensional standards for the R-5 zone focus on the residential form for a moderate density area. The B-2 and B-2b zone are similar in their lists of permitted and conditional uses, as well as their dimensional standards. A comparison of the dimensional standards is contained in Table 3. Dimensional Standards.

Table 3. Dimensional Standards

Standard	R-5 ¹	B-2	B-2b
Minimum Lot area per dwelling unit	3,000 sf, except 3,600- 4,800 sf for special needs independent	none	none
Street Frontage	50 feet	20 ft	20 ft
Minimum Lot Width	60 feet, except 90 for multiplex	none	none
Minimum Front Yard	20, except average depth if less than 20		
Maximum Front Yard	N/A	10 ft, Bd may grant waiver for irregular lots with less than 40 ft of frontage (Building Additions do not have to meet this section)	10 ft, Bd may grant waiver for irregular lots with less than 40 ft of frontage (Building Additions do not have to meet this section)
Minimum Rear Yard	20 feet	10 ft, accessory structures, 5 ft	10 ft, accessory structures, 5 ft
Minimum Side Yard	8-15 feet, depending on building height and location	None, accessory structures, 5 ft	None, accessory structures, 5 ft
Minimum Side Yard on Side St		None	None
Structure Height	35 feet	45 ft, 50 ft if 1 st floor commercial is whole or partially commercial use	45 ft, 50 ft if 1 st floor commercial is whole or partially commercial use
Structure Stepbacks		Portions of a structure above 35 feet shall be no closer than 5 feet from the side property line and no closer than 15 feet from the rear property line when such property line abuts a residential zone.	Portions of a structure above 35 feet shall be no closer than 5 feet from the side property line and no closer than 15 feet from the rear property line when such property line abuts a residential zone.
Maximum Lot Coverage (building coverage)	40%		
Maximum Impervious Surface	N/A	Residential uses – none All permitted uses - 80%	Residential uses – none All permitted uses - 90%
Minimum Lot Area per Dwelling Unit		a. Off-peninsula locations, as defined in section 14-47: 1,500 SF, except as provided for in (b) below. b. On-peninsula locations (as per 14-47) and projects with active street frontages, as defined in section 14-188, below: 435 SF	a. Off-peninsula locations, as defined in section 14-47: 1,500 SF, except as provided for in (b) below. b. On-peninsula locations (as per 14-47) and projects with active street frontages, as defined in section 14-188, below: 435 SF.

¹ Additional restrictions on the number of dwelling units apply to the PRUD standards and separate requirements for small residential lot development may apply

The history of the B-2 zone outlines the text amendments that have occurred over time, which have brought the B-2 zone in alignment with the more urban based parameters of the B-2b zone. Currently, both B-2 and B-2b have a maximum front yard setback of 10 feet (does not apply to building additions), which was not the case before the B-2 update in 2014. Prior to that update, only the B-2b zone had a maximum front yard setback requirement. In both the B-2 and B-2b zones, there is a provision that allows the Planning Board to grant waivers of the maximum front yard setback for irregular lots with less than 40 feet of frontage. In such cases, no maximum setback is required, but where setbacks exceed 10 feet then a continuous, attractive, and pedestrian-scaled edge treatment shall be constructed along the street.

There is no maximum impervious surface ratio for residential uses, but for all other permitted uses the maximum coverage is 80% in the B-2 zone and it is 90% in B-2b. There is also a distinction between the allowable residential density for both B-2 and B-2b, which is tied to whether a site is on-peninsula or off-peninsula. The density is 1,500 sf per unit off-peninsula, unless the project has active street frontage as defined. The density is 435 sf per unit on-peninsula or for those projects with active street frontage. The B-2 zone is predominantly located off-peninsula and the B-2b is on-peninsula and along a portion of the Forest Avenue corridor.

VI. SITE PLAN STANDARDS AND DESIGN STANDARDS

Under the site plan standards of the Site Plan Ordinance (Section 14-526) there are zoning related design standards under subsection (d). The general provision states:

a. Development of certain types and/or proposed in certain zones, as specified below, are subject to design standards in addition to the provisions of Section 14-526 (a) in order to ensure designs that contribute to and enhance the goals and policies for specific districts of the City. The City of Portland Design Standards is listed in the City of Portland Design Manual, which is included by reference. If the development is located in a historic district or associated with a historic landmark, City of Portland Historic Preservation standards shall supersede:

Subparagraph iii relates to the B-1 and B-2 zones as follows:

(iii) B1, B1-b, B2, B2-b Zones: Development in the B1, B1-b, B2 and B2-b business zones shall provide an established street wall with entrances and public portions of the building oriented to and directly accessible from the public sidewalk and shall be designed and scaled to be compatible with surrounding residential and commercial development as demonstrated by compliance with all applicable design standards listed in the Design Manual.

The standard does state that development in the B-2 zones shall provide a street wall with entrances and public portions of the building oriented to the street and other provisions, as demonstrated by compliance with all applicable design standards listed in the Design Manual.

The Design Manual contains the design standards, which are presented in the chart below. The design standards for the urban street wall and building entrances are not required for projects within B-2; however, the standards cross reference the design guidelines and encourages development in the B-2 zone to meet both of these standards. The B-1 and B-2 Design guidelines are contained in Appendix 2 of the Design Manual, which are intended to illustrate how development may meet the

the specific standards. The guidelines are shown below the design standards. The sections pertaining to urban street wall and entrances are highlighted.

Portland Design Manual		
Design Standards	Applicability of Design Standards –	
	B-2	B-2b
<u>Urban Street Wall:</u> ...buildings shall be located to create and preserve an urban street wall.		Required
<u>Mixed Uses:</u> ...buildings shall be multi-storied with mixed uses. (B-1-only)		
<u>Building Entrances:</u> ...building entrances shall be oriented toward, located adjacent to, and directly accessible from a sidewalk in a public right-of-way.		Required
<u>Windows:</u> ... windows shall be required along the street frontage of a building. Windows shall be transparent (with a visible transmittance (VT) of 0.7 or greater) and installed at a height to allow views into the building by passerby.	Required	Required
<u>Facade Character:</u>active and public portions of buildings (e.g. doors, windows, entries, retail displays) <u>shall be oriented to and, where possible, be located adjacent to the public sidewalk</u> to create an active presence along the sidewalk. (1) Where building facades situated along a public way have no interactive use or function, such facades shall be designed to provide sufficient architectural and graphic amenities to provide visual interest along the street and relate the building, and its use to passerby.	Required	Required
<u>Building Design:</u> ... commercial buildings shall be designed to be compatible with their residential and commercial neighbors. In the B-1 and B-1b zones building scale, roof pitch, and fenestration shall be designed to complement surrounding residential structures.	Required	Required
<u>Building materials:</u> Façade materials of buildings located in the B-1, B-1b B-2, and B-2b zones shall be compatible with those materials of surrounding residential and commercial uses.	Required	Required
<u>Building Scale:</u> In the B-1 and B-1b zones building scale must relate and be compatible with surrounding residential structures.		
<u>Landscaping and buffers:</u> In the B-1, B-1b, B-2 and B-2b zones buildings and associated parking areas must be screened to buffer abutting properties. A densely planted landscape buffer and/or fencing will be required to protect neighboring properties from the impacts associated with the development, including lighting, parking, traffic, noise, odor, smoke, or other incompatible uses. Where buildings are setback from the street, a landscaped area must be planted along the front yard street line.	Required	Required
<u>Guidelines</u>		
Please refer to Appendix 2 of this manual, the B-1, B-1b, B-2, B-2b		

Design Guidelines, for applicable design guidelines for the B-1 and B-2 zones. In addition, the following design guidelines shall also apply.		
1. Buildings located in the B-2 zone are specifically <u>encouraged</u> to adhere to the design guidelines contained in the B-1, B-1b, B-2, B-2b Design Guidelines (Appendix 2) of this section concerning the creation and preservation of an <u>urban street wall</u> .		
2. In the B-1b and B-2 zones, buildings are specifically <u>encouraged</u> to adhere to the guidelines contained in the B-1, B-1b, B-2, B-2b Design Guidelines (Appendix 2) of this section concerning <u>building entrances</u> .		

Appendix 2 Guidelines
Development in the B-1, B-1b, B-2, B-2b shall meet the following guidelines in order to meet the Site Plan Standards
1. Building Location and Form
<u>Buildings shall be located near the street so as to create an urban street wall.</u> An urban street wall is created by a pattern of buildings which line the street in a consistent manner, thereby establishing a desirable spatial relationship between the building in the commercial district and the major object. Location is one of several related factors defining the street environment.
<u>Building Form, including height, bulk, and massing, contribute to the development of a street wall.</u> The desired condition is to have the building frame and enclose the street, which is achieved by providing building height that is proportionate to the width of the adjoining major street. A ratio of building height to street width of one-to-two creates a strong "room-like" street, while a one to-three ratio provides good street definition and proportion. Shorter buildings of one story facing broad streets will not achieve the desired relationship.
<u>In the B-2b zone, buildings adjacent to streets should approach 1:2 height to street width, with a minimum of 1:3.</u> For a fifty-foot street right-of-way, therefore, a minimum height of 15' is required, with 25' height preferred. An eighty-foot right-of-way requires about 27' to achieve the 1:3 proportion with 40'-height preferred. Obviously, buildings located as close as possible to the street right-of way will provide better definition and proportion than buildings set further back.
2. Building Function
<u>An urban street and business district requires a substantial intensity and variety of uses.</u> It is beneficial to have mixed uses within portions of buildings situated near the street. For example, a retail first floor might have office or residential on the second or third floors. This provides both the scale of building height desired, as well as the economic vitality of the business district.
3. Orientation of Buildings and their Entrances to the Street
<u>Major building entries shall be designed and located to provide the primary building access oriented to the public street and sidewalk.</u> Doorways should be prominent and obvious in appearance, so as to attract the users toward the entry. Major entry features should primarily address the street, with entry courts, display windows, signage, lights, walkways, and vestibules, as appropriate. Major entries should be adjacent to, or very close to, the street and public sidewalk.
4. Windows
<u>Windows shall be located in all building facades visible from the public way, especially on</u>

<u>building facades along the major public street.</u> Retail uses with store fronts are the most desirable feature for locations adjacent to the public sidewalk; and active, transparent (minimum visible transmittance (VT) of .7 or greater), and interesting windows contribute the maximum value. Limitations on transparency, such as dark or reflective glass, or interior coverings, should be avoided. Where uses (such as office) are not conducive to transparent viewing from the public way, windows can still convey a sense of activity and presence along the street. Even these more private windows can convey occupancy and habitation when lighted from within, as during evening hours, even if the interior is screened from view.
5. Building Character, Detail, Scale, and Graphic Qualities
<u>Building design will include various architectural and graphic amenities to provide a strong presence along a street and relate a building to its community.</u> <i>Awnings, canopies, and flags</i> may be utilized to highlight entryways and to further identify the activity and identity of a use. <i>Facade lighting</i> may be used to highlight entryways or to provide visual interest along an otherwise blank facade Building scale, roof pitch, architectural detail, and fenestration shall be designed to complement and be compatible with surrounding residential and commercial buildings.
6. Signage and Building Entrances
<u>Building entrances and building signage in the B-1, B-1b, and B-2b zones will be designed and constructed at the pedestrian scale.</u>
7. Development Relationship to Street
<u>Building facades and site amenities shall form a cohesive wall of enclosure along a street.</u> Where buildings are not located at the street line, site amenities, including masonry walls, fences, and landscaping, shall be placed along the street to provide a sense of enclosure or definition.
8. Parking Lots
<u>Parking Lots shall be screened from view of the public way.</u> Landscaping or fencing shall be used to screen parking lots from public ways and residential neighbors. Where parking is located within the front yard (or side yard of a corner lot), a landscaped buffer or fence shall be placed along the street line to distinguish the private space from the public space and to help define the street wall.
<u>Parking lots shall be screened from neighboring properties.</u> A densely planted landscape buffer or fencing shall be installed to protect neighboring properties from the impacts associated with the parking lot and the use it serves.

VII. COMPREHENSIVE PLAN AND ZONING ANALYSIS

The Planning Board will be asked to make a determination of whether the proposed map amendment is consistent with the Comprehensive Plan and make a recommendation to the City Council. A full analysis will be prepared for a public hearing. The Comprehensive Plan includes policies that support commercial nodes near residential areas and seeks to limit business expansion into residential zones. In addition, the housing element of the Comprehensive Plan includes many policies to support increasing the diversity and density of housing in the city and support a variety of neighborhood businesses and services to be located in proximity of residential areas. The B-2 and B-2b zone provides greater flexibility for housing development and a diverse mix of uses.

More recently, Portland conducted a corridor study of Forest Avenue from Park Avenue through Woodfords Corner. Transforming Forest Avenue was adopted by the City Council on June 4, 2012 and it included

recommendations for land use, transportation, and streetscape alternatives based upon a community process and best practices for transit supportive development. The report Transforming Forest Avenue is available on the City's web site: <http://www.portlandmaine.gov/documentcenter/view/3388>

Transforming Forest Avenue considered land use options for the corridor, including use based zoning, form based code and transit supportive development (TSD). Feedback from the community process indicated satisfaction with the current zoning with enhancements, adjustments and incentives considered to promote TSD principles. Encouraging vibrant and diverse land uses is an important principle of TSD development in order to provide multiple destinations in close proximity within an area. The report notes that while B-2 and B-2b currently support mixed uses, many of those uses have not located along the corridor. It is suggested that other incentives may be needed to encourage the type and density of uses envisioned, such as expedite reviews, financial incentives or other options. The report also points out that the transitions between the commercial and residential areas may require attention in order to achieve adequate buffers without limiting commercial activity. The development pattern should "provide for vibrant loci or activity at a pedestrian scale." Architectural quality, high quality parking, and public spaces are other land use components that are identified as components for creating a high quality transit corridor.

Compact development that increases the concentration of uses and structures in the built environment is identified as a strategy to support TSD. While the B-2 and B-2b zones have similar uses and dimensional standards, the design guidelines between the two zones do differ. The design standards for the B-2b zone are more urban and pedestrian oriented. For example, in B-2b the building entrances shall be oriented toward or directly accessible from a public sidewalk, transparent windows are required along street frontages, and street frontages should create an active presence along the sidewalk. The standards and accompanying guidelines are included as Attachment 3.

The Board will want to advise the staff on the extent of the area to be considered for rezoning. The Board can choose to expand the area for advertising and then refine the boundaries at the public hearing. Once the boundaries of a proposed map amendment are advertised, the boundaries cannot be expanded beyond the advertised area.

VIII. STAFF RECOMMENDATION

The staff suggests a positive recommendation on the proposed map amendment with the possible exception of excluding the property held by Oakhurst Properties LLC at the corner of Bedford and Forest Avenue.

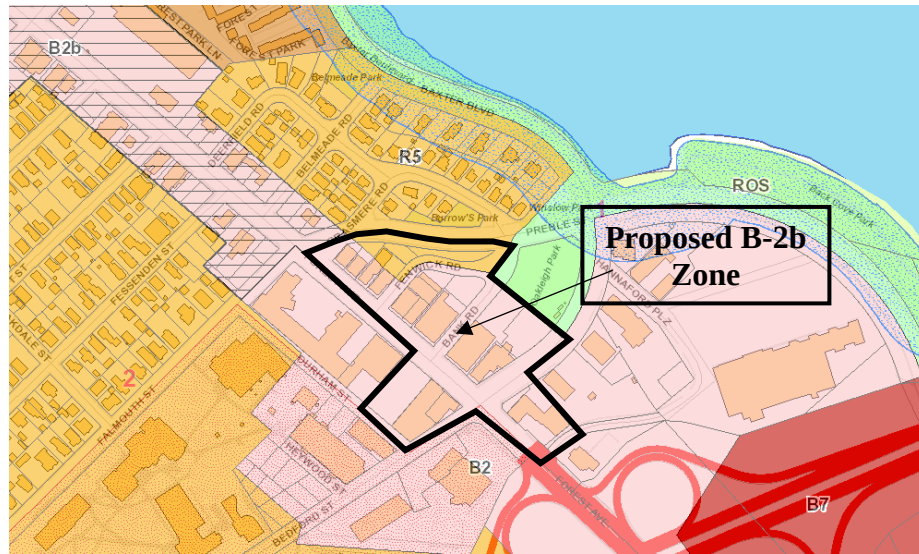
IX. PROPOSED MOTION

On the basis of plans and materials submitted by the City of Portland, the policies of the Residential R-5 Zone, the Community Business B-2 Zone and the Community Business B-2b zone, Portland's Comprehensive Plan, public comment, the information provided in public hearing on March 22, 2-16 for the Council's referral to the Planning Board to consider rezoning a portion of the Forest Avenue Corridor, and/or other findings as follows:

1. Map Amendment

The Planning Board finds that the proposed rezoning of the R-5 and B-2 zones to B-2 b as shown on the map below **[is or is not]** consistent with the Comprehensive Plan for the City of Portland; and

Therefore, the Planning Board [**recommends or does not recommend**] to the City Council approval of the zoning map amendment.



X. ATTACHMENTS

1. Council Order #157
2. Historic Preservation Memo and attachments
3. B-2 and B-2b Design Guidelines
4. Neighborhood Packet – March 10, 2016
5. Public Comment

October 30, 2018

Ms. Barbara Barhydt
Development Review Manager
City of Portland
389 Congress Street
Portland, ME 04101
bab@portlandmaine.gov

Re: Level III Site Plan Review Application | Plymouth REIT 56 Milliken Street, Portland, Maine

Dear Barbara:

CES, Inc. (CES) is submitting a Level III Site Plan Review application for a 72,000 square foot warehouse building at 56 Milliken Street off Riverside Industrial Parkway. The owner and applicant is Plymouth REIT with offices at 260 Franklin Street, 7th floor, Boston, Massachusetts. The site is the current home of Paradigm Windows and Advance Pierre. This building will provide additional warehouse space within the City of Portland. The new building and impervious area will add 2.98 acres to the exiting 11.4 acres of impervious area. The site was originally developed in 1966. Approximately 5.7 acres of impervious area (building and site impervious) was constructed prior to 1975. In 1994 a major expansion of the building and site impervious area was permitted by the City of Portland under Delegated Authority of Site Location of Development Act (SLODA). There have been revisions to the SLODA. The latest was in 2013 when the City permitted a new loading dock and 26,700 square feet of impervious area. That revision brought the total site impervious area to 11.4 acres. This proposed development will add 2.98 acres of new impervious. The Maine Department of Environmental Protection (MDEP) has not exerted jurisdiction over this project and is allowing the City of Portland to review this project.

The application is divided into Tabs to match the sections of the Level II and Level III Application Submission Checklist. Each Tab has a separate narrative addressing the respective section of the Land Use Ordinance and Technical Manual requirements. Tab 1 contains the basic project information including this cover letter, checklist, Right, Title and Interest, Zoning Assessment, Waiver Requests, Financial Capability, and Technical Capability. Tab 2 addresses Transportation, Tab 3 is Environmental and Landscape Features, Tab 4 is Environmental and Stormwater, Tab 5 is Public Infrastructure and Safety, Tab 6 is Site Design, and Tab 7 is the Construction Management Plan.

Drawings include the following:

- Architectural Plans P-T2.1 and P-T2.2 Code Review plans
- Architectural Plans P-A1.1 through A2.1 floor plans and elevations
- Cover Sheet
- C101 Existing Site Plan
- C102 Proposed Site Layout and Grading Plan
- C103 Proposed Utility Plan
- C104 Site Electrical Plan
- C501 through C503 Details
- C701 Pre-Development Hydrology Plan
- C702 Post Development Hydrology Plan
- C801 Construction Management Site Plan
- C802 Photometric Plan

We are also including a boundary and ALTA survey by SGC Engineering, LLC.

In Tab 1 we have included the Waiver Table to request a waiver from 15-526 (a) 2 c requiring sidewalks on all frontages. Neither Milliken Street nor Riverside Industrial Parkway have sidewalks along the public right-of-way. The area is industrial and not conducive to pedestrian traffic.

Please contact us if we can provide additional information.

Sincerely,
CES, Inc.



John D. Kuchinski, PE
Senior Project Engineer

JDK/gdr
Enc

cc: Jeff Witherell, Plymouth REIT



LEVEL II and LEVEL III APPLICATION SUBMISSION CHECKLIST

Submit each Tab as one PDF file and bookmark the items as noted below

Please confirm by electronically checking the boxes to the left

Tab 1 – General Application Documents

Checklist	Items to be Provided
Yes ☒ NA ☐ Plan ☐ ☒ ☐ ☐	PROJECT DESCRIPTION Cover Letter with detailed project description
Yes ☒ NA ☐ Plan ☐ ☒ ☐ ☐	COMPLETED CHECKLIST – LEVEL III APPLICATION
Yes ☒ NA ☐ Plan ☐ ☒ ☐ ☐	RIGHT, TITLE AND INTEREST Deeds, leases, or purchase and sales agreements
Yes ☒ NA ☐ Plan ☐ ☒ ☐ ☐	EVIDENCE OF STATE OR FEDERAL APPROVALS , if applicable Permits or letters of non-jurisdiction, if applicable
Yes ☒ NA ☐ Plan ☐ ☒ ☐ ☐	ZONING ASSESSMENT Table listing required and proposed uses and dimensional standards Zoning Assessment Table
Yes ☐ NA ☒ Plan ☐ ☐ ☒ ☐	EXISTING &/OR PROPOSED EASEMENTS OR COVENANTS , if applicable Evidence of existing easements and any proposed easements
Yes ☒ NA ☐ Plan ☐ ☒ ☐ ☐	WAIVER REQUESTS Written request for waiver describing request and reason. Waiver Table
Yes ☒ NA ☐ Plan ☐ ☒ ☐ ☐	FINANCIAL CAPABILITY Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
Yes ☒ NA ☐ Plan ☐ ☒ ☐ ☐	TECHNICAL CAPABILITY Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

LEVEL II AND LEVEL III SITE PLAN STANDARDS AND SUBMISSION CHECKLIST

Provide assessment of compliance with standards and include supplemental documentation, as applicable.

Submit each Tab as one PDF file and bookmark the items as noted below

Tab 2 - TRANSPORTATION

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

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

Tab 5 - PUBLIC INFRASTRUCTURE AND SAFETY			
Check list		Assess/Provide/Document:	
Yes	NA	Plan	Consistency with City Master Plans (14-526 (c) 1) - Identify consistency with master plans - Proposed easements, rights and improvements to connect or continue off-premises public infrastructure, as applicable
☒	☐	☐	
Yes	NA	Plan	Public Safety and Fire Prevention (14-526 (c)) - Address Crime Prevention through Environmental Design (CPTED) (Technical Manual, Section 3) - Emergency vehicle access - Address consistency with public safety standards (Technical Manual, Section 3) - Submit a code summary referring NFPA 1 and all Fire Department standards (Technical Manual, Section 3) – Fire Checklist
☒	☐	☐	
Yes	NA	Plan	Availability and Adequacy of Public Utilities (14-526 (c) 3) (Technical Manual, Sections 2 & 9) - Electrical services, including providing underground services - Identify existing and proposed connections for public utilities and required public utility upgrades - Sewer line connections are required, if there is a main within 200 feet - Proposed solid waste management facilities on-site and management for the site - Written evidence of the ability to serve from utility companies, as applicable
☒	☐	☐	
Tab 6 - SITE DESIGN			
Check list		Assess/Provide/Document:	
Yes	NA	Plan	Massing, Ventilations and Wind Impact (14-526 (d) 1) - Wind and ventilation impacts on adjoining structures and/or adjacent public spaces. Wind study, if applicable - Bulk, location or height impacts on adjoining structures - Identify and locate HVAC equipment and venting away from public spaces and residential properties - Identify screening and manufacturing specifications for noise, if applicable
☐	☒	☐	
Yes	NA	Plan	Shadows (14-526 (d) 2), if applicable Shadow analysis of impacts on publicly accessible open space (Technical Manual, Section 11)
☐	☒	☐	
Yes	NA	Plan	Snow and Ice Loading (14-526 (d) 3) Building design to prevent snow and ice from loading or falling onto adjacent properties or public ways
☐	☒	☐	
Yes	NA	Plan	View Corridors (14-526 (d) 4), if applicable Protection of designated view corridors (Portland Design Manual, Appendix 1)
☐	☒	☐	

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

Level II and Level III Site Plan Checklist Please upload the following drawings with the listed details into e-Plan	
☐	RECENT BOUNDARY SURVEY (stamped by Maine Licensed Surveyor)
Must be in compliance with Technical Manual, Section 13	
SITE PLAN(s) (stamped by Maine Licensed Engineer) including:	
☒	Existing Conditions • Approximate location of structures on abutting property • Topography • Locate water courses • Delineate wetlands • Zone lines
☒	Proposed Site Plan • Ground floor area, and grade elevations for all buildings
☒	Access, Circulation, and Parking • Streets and intersections adjacent to site , any proposed geometric modifications • Location, dimensions and materials of all existing and proposed driveways, vehicle, bicycle, & pedestrian access ways with corresponding curb lines • Engineered specifications/ cross-sections for proposed driveways, sidewalks & paved areas • Location and dimensions of proposed loading areas • Existing and proposed transit infrastructure with dimensions/ engineering specifications • Location of vehicle and bicycle parking with dimensions and engineering specifications
☒	Site Considerations • Identify snow storage areas • Location of fire hydrants • Location of solid waste management facilities
☒	UTILITY PLAN including:
	• Existing utilities on site and within public streets • Location, sizing, and directional flows of all existing and proposed utilities • Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site • Electric utility infrastructure

☒	GRADING and DRAINAGE PLAN including:
	• Existing grades and drainage • Proposed grades • Proposed stormwater management meeting Technical Manual (Section 5) standards • Location and proposed alteration of a water course • Preservation or alteration of wetlands
☒	EROSION CONTROL
	• Must be in compliance with Technical Manual, Section 5
☒	LANDSCAPE PLAN including:
	• Existing vegetation to be preserved and preservation measures • Proposed landscaping and buffers • Planting schedule
☐	RECORDING PLAT , if applicable
	• IF SUBDIVISION: Must be in compliance with requirements of Section 14-496 (b)
☒	ARCHITECTURAL PLANS & RENDERINGS including:
	• Exterior building elevations, color renderings, illustrations of all sides • Location and dimensions of all existing & proposed HVAC & mechanical equipment, all proposed screening • Provide context drawings, if applicable (Design Manual, page 1) • Floor plans

QUITCLAIM DEED WITH COVENANT

KNOW ALL BY THESE PRESENTS, that **Milliken Portland Partners, LLC**, a Massachusetts limited liability company with a mailing address of 40 South Street, Suite 305, Marblehead, MA 01945 (the “Grantor”), for consideration paid, grants to **Plymouth 56 Milliken LLC**, a Delaware limited liability company (the “Grantee”), with a mailing address of 260 Franklin Street, 19th Floor, Boston, MA 02110, with Quitclaim Covenant, the premises in the City of Portland, Cumberland County, State of Maine, described in **Exhibit A** attached hereto and made a part of hereof.

[Signature Page Follows]

IN WITNESS WHEREOF, the said Milliken Portland Partners, LLC has caused this instrument to be executed by J. Hilary Rockett, Jr., Manager of JHR Development, LLC, its Manager, hereunto duly authorized this 18TH of November, 2014.

Milliken Portland Partners, LLC, a
Massachusetts limited liability company

By: JHR Development, LLC, its Manager

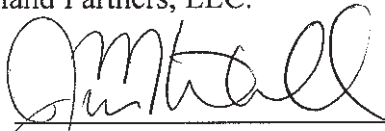
By: _____

J. Hilary Rockett, Jr., Manager

COMMONWEALTH OF MASSACHUSETTS

Suffolk, ss.

On this 18th day of November, 2014, before me, the undersigned notary public, personally appeared **J. Hilary Rockett, Jr.**, proved to me through satisfactory evidence of identification, which was ☐ photographic identification with signature issued by a federal or state governmental agency, ☒ personal knowledge of the undersigned, ☐ oath or affirmation of a credible witness, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily and for its stated purpose as Manager of JHR Development, LLC, Manager of Milliken Portland Partners, LLC.



Notary Public:
My commission expires:

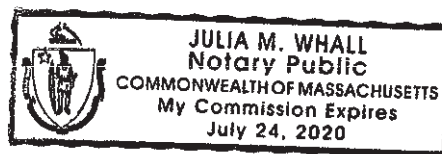


EXHIBIT A

(56 Milliken Street, Portland, Cumberland County, Maine)

TRACT I:

A certain lot or parcel of land with any buildings thereon situated easterly of Riverside Industrial Parkway and Northerly of Milliken Street in the City of Portland, County of Cumberland and State of Maine, to wit:

BEGINNING on the westerly side of land now or formerly of the Portland Terminal Company at a drill hole in a found stone at the northerly corner at land now or formerly owned by Portland Water District;

Thence, South 55°14'20" West, 71.28 feet along said Water District land to a point;

Thence, North 21°15'40" West, 17.82 feet along said Water District land to a point;

Thence, South 74°52'45" West, 31.62 feet along said Water District land to a point near an iron pipe;

Thence, South 55°51'08" West, 75.26 feet along land now or formerly owned by Milliken Street LLC to a point near a 5/8" rebar;

Thence, North 21°16'37" West, 555.77 feet along land now or formerly owned by Milliken Street LLC to a point near a 5/8" rebar;

Thence, South 68°44'47" West, 114.56 feet to a point near a 5/8" rebar;

Thence, North 14°55'55" West, 14.08 feet along said Milliken Street LLC land, passing over an iron pipe, said pipe being distant 1.2 feet from the terminus of said course, to a point;

Thence, South 75°08'46" West, 328.45 feet along said Milliken Street LLC land to a point;

Thence, South 13°13'08" West, 61.39 feet along said Milliken Street LLC land to a point;

Thence, South 68°44'47" West, 143.78 feet to a point in the easterly line of Milliken Street;

Thence, along easterly line North 56°10'30" West, 92.98 feet to a point;

Thence, North 56°04'53" West, 117.32 feet to a point;

Thence, leaving said easterly line North 34°51'20" East, 213.80 feet to a point;

Thence, North 35°56'16" West, 781.79 feet to a point in the easterly right-of-way of Riverside Industrial Parkway;

Thence, along said easterly right-of-way line North 18°39'48" East, 204.96 feet to a point;

Thence, leaving said easterly right-of-way North 68°40'30" East, 849.45 feet to a point in the westerly sideline of said Portland Terminal Company land;

Thence, along said westerly line along a curve deflecting to the left having a radius of 2,902.78 feet, an arc of 178.13 feet, a chord bearing of South 15°42'18" East, a chord of 178.10 feet to a point;

Thence, along a curve deflecting to the left having a radius of 6,422.46 feet, an arc of 427.82 feet, a chord bearing of South 19°21'10" East, a chord of 427.74 feet to a point;

Thence, South 21°15'40" East, 521.66 feet to a point;

Thence, South 57°03'20" West, 16.85 feet to a point;

Thence, South 21°15'40" East, 619.95 feet to the POINT OF BEGINNING, containing 25.75 acres.

Being the Tract I of the premises conveyed to Grantor by deed of C&S Logistics of Portland LLC, dated as of August 10, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21653, Page 272.

TRACT II:

A certain lot or parcel of land situated Easterly of Riverside Industrial Parkway & Northerly of Milliken Street in the City of Portland, County of Cumberland, Maine to wit:

COMMENCING at a point on the westerly side of land now or formerly of the Portland Terminal Company at the northerly corner of the land now or formerly owned by the Portland Water District;

Thence South 55°14'20" West, 71.28 feet along said Water District Land to a point;

Thence North 21°15'40" West, 17.82 feet along said Water District Land to a point;

Thence South 74°52'45" West, 31.62 feet along said Water District Land to a point near an iron pipe;

Thence South 55°51'08" West, 75.26 feet along land now or formerly owned by Milliken Street LLC to a point near a 5/8" rebar;

Thence North 21°16'37" West, 555.77 feet along said Milliken Street LLC land to a 5/8" rebar;

Thence South 68°44'47" West, 114.56 feet along said Milliken Street LLC land to a point near a 5/8" rebar;

Thence North $14^{\circ}55'55''$ West, 14.08 feet along said Milliken Street LLC land, passing over an iron pipe, said pipe being distant 1.2 feet from the terminus of said course, to a point;

Thence South $75^{\circ}08'46''$ West, 328.45 feet along said Milliken Street LLC land to a point;

Thence South $13^{\circ}13'08''$ West, 61.39 feet along said Milliken Street LLC land to a point;

Thence South $68^{\circ}44'47''$ West, 143.78 feet to a point in the easterly line of Milliken Street;

Thence along said easterly line North $56^{\circ}10'30''$ West, 92.98 feet to a point;

Thence North $56^{\circ}04'53''$ West, 117.32 feet to the true point of beginning;

Thence continuing along the easterly line of Milliken Street North $56^{\circ}04'53''$ West, 280.50 feet to a point;

Thence North $63^{\circ}50'00''$ West, 258.77 feet to a point at the Intersection of said easterly line and the southern line of land conveyed to ADC Building Fund Inc. by Davis-Greene Co. dated December 18, 1962, recorded in Book 2723, Page 182;

Thence leaving said easterly line along said southern line North $55^{\circ}47'03''$ West, 91.92 feet to a point at the intersection of said easterly line and said southern line;

Thence leaving said southern line along said easterly line of Milliken Street along a curve deflecting to the right having a radius of 50.00' and arc of 49.66', a chord bearing of North $06^{\circ}39'55''$ East, a chord of 47.64', to a point at the intersection of said easterly line of Milliken Street and the easterly line of Riverside Industrial Parkway;

Thence leaving said easterly line of Milliken Street along said easterly line of Riverside Industrial Parkway along a curve deflecting to the left having a radius of 1171.67', an arc of 336.46, a chord bearing of North $26^{\circ}53'24''$ East, a chord of 335.31' to a point;

Thence North $18^{\circ}39'48''$ East, 147.48 feet to a point;

Thence leaving said easterly line along a line between Tract I and II South $35^{\circ}56'16''$ East, 781.79 feet to a point;

Thence South $34^{\circ}51'20''$ West, 213.80 feet to the true POINT OF BEGINNING, containing 5.46 acres.

Being Tract II of the premises conveyed to Grantor by deed of C&S Logistics of Portland LLC, dated as of August 10, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21653, Page 272.

Tracts I and II are conveyed SUBJECT TO:

- a. Rights and easements granted to Central Maine Power Company and Verizon New England, Inc. in a certain utility easement dated January 21, 2005, recorded in the Cumberland County Registry of Deeds in Book 22575, Page 21.
- b. Current zoning restrictions.

Portland, Maine



Yes. Life's good here.

Planning & Urban Development Department

ZONING ANALYSIS Relevant Zone(s) I-M

All Projects:

	Required	Proposed
Lot Size	None	31.21 acres
Area Per Dwelling Unit	N/A	N/A
Minimum Street Frontage	60 Ft.	841.49 Ft.
Front Yard Minimum	1 Ft. per Bld Ht	458.9 Ft.
Front Yard Maximum	N/A	N/A
Rear Yard	25 Ft.	47.4 Ft.
Yard Right	25 Ft.	186.8 Ft.
Yard Left	25 Ft.	52 Ft.
Side Street Setback	N/A	N/A
Step Back	N/A	N/A
Maximum Lot Coverage	75 %	
Minimum Lot Coverage	N/A	N/A
Maximum Height	75 Ft.	
Open Space	N/A	N/A
Maximum Impervious Area	N/A	N/A
Pavement Setback	10 Ft.	
Floor Area Ratio	N/A	N/A
Off Street Parking Spaces		
Loading Bays		
Other 1		
Other 2		
Other 3		

Planned Residential Unit Developments (PRUD) Requirements

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

Affordable Housing Density Bonuses (if applicable)

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

Standard to be Waived: Cite Ordinance or Technical Manual Standard	Cite Standard Language: Cite specific language of applicable Ordinance or Technical Manual Standard	Waiver Being Sought: Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	Justification for Waiver: Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Technical Standard Section 14-526 (a)(2)(c)	All proposed developments shall provide sidewalks along all frontages in accordance with Sections 14-498 and 14-499 of the City Code, installed to City specifications as described in Section 1 of the Technical Manual.	We are requesting a waiver from the requirement to construct sidewalks on the public frontages.	Neither Milliken Street nor Riverside Industrial Parkway has pedestrian sidewalks, There are not any City sidewalks within 1000 feet or more of the site

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

Att. E

FORM 8-K

**CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934**

August 8, 2018
Date of Report (Date of earliest event reported)

PLYMOUTH INDUSTRIAL REIT, INC.

(Exact Name of Registrant as Specified in Its Charter)

MARYLAND
(State or Other Jurisdiction
of Incorporation)

001-38106
(Commission
File Number)

27-5466153
(IRS Employer
Identification No.)

260 Franklin Street, 7th Floor
Boston, MA 02110
(Address of Principal Executive Offices) (Zip Code)

(617) 340-3814
(Registrant's Telephone Number, Including Area Code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 2.02 Results of Operations and Financial Condition

On August 8, 2018, Plymouth Industrial REIT, Inc. (the “Company”) issued a press release (the “Earnings Release”) announcing, among other things, earnings for the quarter ended June 30, 2018. The text of the Earnings Release is included as Exhibit 99.1 to this Current Report.

The Earnings Release is furnished pursuant to Item 2.02 and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or subject to the liabilities of that Section. The information in this Current Report shall not be incorporated by reference in any filing under the Securities Act of 1933, as amended (the “Securities Act”), or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 7.01 Regulation FD Disclosure.

On August 8, 2018, the Company disclosed a supplemental analyst package in connection with its earnings conference call for the quarter ended June 30, 2018 which will take place on August 9, 2018. A copy of the supplemental analyst package is attached hereto as Exhibit 99.2.

The supplemental analyst package is furnished pursuant to Item 7.01 and shall not be deemed “filed” for purposes of Section 18 of the Exchange Act, or subject to the liabilities of that Section. The information in this Current Report shall not be incorporated by reference in any filing under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits:

Exhibit No.	Description
99.1	<u>Press Release dated August 8, 2018</u>
99.2	<u>Supplemental Analyst Package – Second Quarter 2018</u>

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

PLYMOUTH INDUSTRIAL REIT, INC.

Date: August 8, 2018

By: /s/ Jeffrey E. Witherell

Jeffrey E. Witherell

Chief Executive Officer

**Contact:**

Tripp Sullivan
 SCR Partners
 (615) 760-1104
 TSullivan@scr-ir.com

PLYMOUTH INDUSTRIAL REIT REPORTS SECOND QUARTER RESULTS AND AFFIRMS GUIDANCE

BOSTON, August 8, 2018 – Plymouth Industrial REIT, Inc. (NYSE America: PLYM) (the “Company”) today announced its consolidated financial results for the quarter ended June 30, 2018 and other recent developments. A comparison of the reported amounts per share for the second quarter of 2018 to prior-year periods has been affected by an increase in the common stock outstanding resulting from the completion of, and the use of proceeds from, the Company’s initial public offering (the “IPO”) in June 2017 and its preferred stock offering in October 2017, as discussed below.

Second Quarter and Subsequent Highlights

- Reported results for the second quarter of 2018 reflect a net loss attributable to common stockholders of \$7.7 million, or \$(2.27) per weighted average common share, including a loss on extinguishment of debt of \$3.6 million; net operating income (“NOI”) of \$8.2 million; Funds from Operations (“FFO”) of \$2.5 million; FFO attributable to common stockholders and unit holders of \$0.39 per weighted average common share and units; and Adjusted FFO (“AFFO”) of \$0.42 per weighted average common share and units.
- For the second quarter of 2018, declared a regular quarterly cash dividend of \$0.375 for the common stock and a regular quarterly cash dividend of \$0.46875 per share for the 7.50% Series A Cumulative Redeemable Preferred Stock (“the Preferred Stock”).
- On April 9, 2018, the Company acquired two Class B industrial properties totaling 270,000 square feet in the Chicago area for \$15.675 million in cash and a projected initial yield of 8.0%.
- From April to July 2018, the Company completed a series of financings totaling \$135 million that eliminated variable rate and higher interest rate debt, resulting in 80% of its total debt at fixed rates maturing over the next 5 to 10 years with a weighted average interest rate of 4.13%.
- On July 23, 2018, the Company completed an underwritten registered public offering of 1.1 million shares of common stock that resulted in net proceeds of approximately \$16.0 million.

Jeff Witherell, Chairman and Chief Executive Officer of Plymouth Industrial REIT, noted, “Our focus continues to be on improving our portfolio through re-leasing, asset management and acquisitions as well as enhancing our capital structure. We made major strides on all fronts as we had over 857,000 square feet of new and renewal leases commencing this quarter, bringing our occupancy to 93.4%. The reconciliation of the balance sheet was substantial as we completed over \$135 million of new financings that locked up 80% of our debt with low, long-term fixed rates and eliminated high interest rate mezzanine debt. The recent overnight follow-on offering also raised \$16 million in equity while enabling us to achieve shelf registration eligibility, which should improve our future ability to access capital when the market is appropriately rewarding the embedded value we have created in the portfolio.”

Financial Results for the Second Quarter of 2018

The completion of the IPO on June 14, 2017 and a preferred stock offering on October 25, 2017 provided the Company with a meaningfully different capital structure compared to the prior-year period. The Company believes the use of IPO proceeds and related higher share count, makes year-over-year comparisons less meaningful, particularly on a per share basis.

Net loss attributable to common stockholders for the quarter ended June 30, 2018 was \$7.7 million, or \$(2.27) per weighted average common share outstanding, compared with net loss attributable to common stockholders of \$1.2 million, or \$(1.26) per weighted average common share, for the same period in 2017. The increase in net loss for the second quarter of 2018 was primarily due to an increase in depreciation and amortization expense of \$3.7 million, a Loss on Debt Extinguishment of \$3.6 million related to the payoff of the prior mezzanine debt, and, increased general and administrative expense for professional fees related to public company requirements of approximately \$160,000.

Consolidated total revenues for the quarter ended June 30, 2018 were \$12.0 million, compared with \$5.0 million for the same period in 2017.

Net operating income (NOI) for the quarter ended June 30, 2018 was \$8.2 million compared with NOI of \$3.5 million for the same period in 2017. NOI in the current quarter included a one-time reduction in operating expenses for real estate tax accruals of \$520,000.

EBITDA for the quarter ended June 30, 2018 was \$6.7 million compared with \$2.2 million for the same period in 2017.

FFO for the quarter ended June 30, 2018 was \$2.5 million compared with \$(583,000) for the same period in 2017, primarily as a result of significantly higher NOI, the adjustment for loss on extinguishment of debt and the increase in weighted average shares following the IPO in June 2017. FFO attributable to common stockholders and unit holders for the quarter ended June 30, 2018 was \$1.6 million, or \$0.39 per weighted average common share and units, compared with \$(583,000), or \$(0.63) per weighted average common share, for the same period in 2017. The increase was due to the reasons noted above for FFO, offset by \$1.0 million of preferred stock dividends.

AFFO for the quarter ended June 30, 2018 was \$1.7 million, or \$0.42 per weighted average common share and units, compared with \$(399,000), or \$(0.43) per weighted average common share, for the same period in 2017, primarily driven by the change in FFO, an increase in deferred finance fees and non-cash interest of \$655,000 offset by increased straight line rent and above/below market rent adjustments and recurring capital expenditures and lease commissions of approximately \$813,000 incurred in the quarter and the increase in weighted average shares following the IPO in June 2017.

Investment Activity

As of June 30, 2018, the Company had real estate investments comprised of 51 industrial properties totaling 9.5 million square feet with occupancy of 93.4%. On April 9, 2018, the Company completed the acquisition of two single-tenant Class B industrial properties totaling 270,000 square feet in the greater Chicago area for \$15.675 million in total consideration. The purchase price is projected to provide an initial yield of 8.0%.

Leasing Activity

Leases commencing during the second quarter totaled an aggregate of 857,000 square feet, of which 812,000 square feet was for leases of at least six months. The leases six months or longer included 147,000 square feet of renewal leases and 665,000 square feet of new leases. The Company will experience an 8.4% increase in rental rates on a cash basis from these leases. The leasing activity for the quarter was heavily influenced by the 527,127-square-foot lease that commenced in April 2018 at the Company's property at 3500 Southwest Boulevard in Columbus, Ohio.

For the six months ended June 30, 2018, leases executed totaled 1,362,000 square feet, of which 1,121,000 square feet was for leases of at least six months. The leases six months or longer included 294,000 square feet of renewal leases and 827,000 square feet of new leases. The Company will experience a 7.7% increase in rental rates, on a cash basis, from all of the leases executed in the first six months of 2018 with a lease term of at least six months.

Capital Markets Activity

On April 30, 2018, the Company closed on a 10-year, \$21.5 million mortgage with a fixed interest rate of 3.78% that is secured by seven industrial properties. Proceeds from the new financing were used to pay down outstanding borrowings on the Company's senior secured revolving credit facility.

On May 24, 2018, the Company repaid in full its outstanding mezzanine debt, which was scheduled to mature in October 2023 and had an interest rate of 15.0%, with proceeds from a new \$35.7 million senior secured term loan that bears interest at LIBOR plus 700 basis points and matures in August 2021.

On July 10, 2018, the Company closed on a new 10-year \$78.0 million loan with a fixed interest rate of 4.35% and secured by 18 Chicago area properties. The proceeds, together with additional working capital, were used to repay in full the Company's \$79.8 million variable rate secured term loan that was scheduled to mature in December 2019 and had a floating interest rate of 310 basis points over LIBOR.

On July 23, 2018, the Company closed on an underwritten registered public offering of 1.1 million shares of its common stock, resulting in net proceeds to the Company of approximately \$16.2 million.

Quarterly Distributions to Stockholders

On June 1, 2018, the Company's Board of Directors declared a regular quarterly cash dividend of \$0.46875 per share for the Company's Preferred Stock for the second quarter of 2018. The dividend was paid on July 2, 2018 to stockholders of record on June 15, 2018.

On June 14, 2018, the Company's Board of Directors declared a regular quarterly cash dividend of \$0.375 per share for Company's common stock for the second quarter of 2018. The dividend was payable on July 31, 2018, to stockholders of record on June 29, 2018.

2018 Outlook

The Company affirmed its 2018 guidance for revenues and NOI previously issued on May 3, 2018. The information provided contains estimates based on the Company's anticipated results of operations for 2018. All estimates exclude any potential impact from additional acquisitions:

- Total revenues of \$44.8 million to \$45.6 million
- Net operating income of \$28.9 million to \$29.8 million
- General and administrative expenses of \$5.0 million to \$5.7 million, including non-cash expenses of \$0.8 million to \$1.0 million
- 5.1 million common shares and operating partnership units outstanding

Earnings Conference Call and Webcast

The Company will host a conference call and live audio webcast, both open for the general public to hear, on Thursday, August 9, 2018 at 10:00 a.m. Eastern Time. The number to call for this interactive teleconference is (412) 717-9587. A replay of the call will be available through August 16, 2018, by dialing (412) 317-0088 and entering the replay access code, 10122697.

The live audio webcast of the Company's quarterly conference call will be available online in the Investor Relations section of the Company's website at www.plymouthreit.com. The online replay will be available approximately one hour after the end of the call and archived for approximately 90 days.

About Plymouth

Plymouth Industrial REIT, Inc. is a vertically integrated and self-managed real estate investment trust focused on the acquisition and operation of single and multi-tenant industrial properties located in secondary and select primary markets across the United States. The Company seeks to acquire properties that provide income and growth that enable the Company to leverage its real estate operating expertise to enhance shareholder value through active asset management, prudent property re-positioning and disciplined capital deployment.

Forward-Looking Statements

This press release includes "forward-looking statements" that are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933 and of Section 21E of the Securities Exchange Act of 1934. The forward-looking statements in this release do not constitute guarantees of future performance. Investors are cautioned that statements in this press release, which are not strictly historical statements, including, without limitation, statements regarding management's plans, objectives and strategies, constitute forward-looking statements. Such forward-looking statements are subject to a number of known and unknown risks and uncertainties that could cause actual results to differ materially from those anticipated by the forward-looking statement, many of which may be beyond our control. Forward-looking statements generally can be identified by the use of forward-looking terminology such as "may," "plan," "seek," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue" or the negative thereof or variations thereon or similar terminology. Any forward-looking information presented herein is made only as of the date of this press release, and we do not undertake any obligation to update or revise any forward-looking information to reflect changes in assumptions, the occurrence of unanticipated events, or otherwise.

PLYMOUTH INDUSTRIAL REIT, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
UNAUDITED

(In thousands, except share and per share amounts)

	June 30, 2018	December 31, 2017
Assets		
Real estate properties	\$ 320,863	\$ 303,402
Less accumulated depreciation	(32,809)	(25,013)
Real estate properties, net	<u>288,054</u>	<u>278,389</u>
Cash	4,311	12,915
Cash held in escrow	6,221	5,074
Restricted cash	1,596	1,174
Deferred lease intangibles, net	25,020	27,619
Other assets	7,430	4,782
Total assets	<u><u>\$ 332,632</u></u>	<u><u>\$ 329,953</u></u>
Liabilities, Series A Preferred Stock and Equity		
Liabilities:		
Secured debt, net	251,919	195,431
Mezzanine debt, net	—	29,364
Borrowings under line of credit, net	18,678	20,837
Deferred interest	—	1,357
Accounts payable, accrued expenses and other liabilities	16,864	16,015
Deferred lease intangibles, net	6,657	6,807
Total Liabilities	<u>294,118</u>	<u>269,811</u>
Preferred stock, Series A; \$0.01 par value, 100,000,000 shares authorized; 2,040,000 shares issued and outstanding (aggregate liquidation preference of \$51,000)	48,868	48,931
Equity (Deficit):		
Common stock, \$0.01 par value; 900,000,000 shares authorized; 3,556,043 and 3,819,201 shares issued and outstanding at June 30, 2018 and December 31, 2017, respectively	36	39
Additional paid in capital	114,085	123,270
Accumulated deficit	(129,982)	(119,213)
Total stockholders' equity (deficit)	<u>(15,861)</u>	<u>4,096</u>
Non-controlling interest	<u>5,507</u>	<u>7,115</u>
Total equity (deficit)	<u>(10,354)</u>	<u>11,211</u>
Total liabilities, Series A preferred stock and equity	<u><u>\$ 332,632</u></u>	<u><u>\$ 329,953</u></u>

PLYMOUTH INDUSTRIAL REIT, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
UNAUDITED

(In thousands, except share and per share amounts)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2018	2017	2018	2017
Rental revenue	\$ 9,019	\$ 3,650	\$ 17,503	\$ 7,295
Tenant recoveries	2,957	1,376	5,903	2,669
Other revenue	71	1	521	1
Total revenues	<u>12,047</u>	<u>5,027</u>	<u>23,927</u>	<u>9,965</u>
Operating expenses:				
Property	3,787	1,517	8,240	2,925
Depreciation and amortization	6,444	2,785	12,986	5,557
General and administrative	1,533	1,209	2,905	1,933
Acquisition costs	—	82	—	82
Total operating expenses	<u>11,764</u>	<u>5,593</u>	<u>24,131</u>	<u>10,497</u>
Operating income/(loss)	283	(566)	(204)	(532)
Other expense:				
Interest expense	(4,216)	(2,802)	(8,202)	(5,743)
Loss on debt extinguishment	(3,601)	—	(3,601)	—
Total other expense	<u>(7,817)</u>	<u>(2,802)</u>	<u>(11,803)</u>	<u>(5,743)</u>
Net loss	\$ (7,534)	\$ (3,368)	\$ (12,007)	\$ (6,275)
Net loss attributable to non-controlling interest	<u>\$ (829)</u>	<u>\$ (2,209)</u>	<u>\$ (1,292)</u>	<u>\$ (4,674)</u>
Net loss attributable to Plymouth Industrial REIT, Inc.	\$ (6,705)	\$ (1,159)	\$ (10,715)	\$ (1,601)
Less: Series A preferred stock dividends	956	—	1912	—
Less: amount allocated to participating securities	46	—	107	—
Net loss attributable to common shareholders	<u>\$ (7,707)</u>	<u>\$ (1,159)</u>	<u>\$ (12,734)</u>	<u>\$ (1,601)</u>
Net loss per share attributable to Plymouth Industrial REIT, Inc. common stockholders	<u>\$ (2.27)</u>	<u>\$ (1.26)</u>	<u>\$ (3.61)</u>	<u>\$ (2.55)</u>
Weighted-average common shares outstanding basic and diluted	<u>3,400,012</u>	<u>922,885</u>	<u>3,522,959</u>	<u>629,057</u>

Non-GAAP Financial Measures Definitions

Net Operating Income (NOI): We consider net operating income, or NOI, to be an appropriate supplemental measure to net income because it helps both investors and management understand the core operations of our properties. We define NOI as total revenue (including rental revenue, tenant reimbursements, management, leasing and development services revenue and other income) less property-level operating expenses including allocated overhead. NOI excludes depreciation and amortization, general and administrative expenses, impairments, gain/loss on sale of real estate, interest expense, and other non-operating items.

EBITDA: We believe that earnings before interest, taxes, depreciation and amortization, or EBITDA, is helpful to investors as a supplemental measure of our operating performance as a real estate company because it is a direct measure of the actual operating results of our industrial properties. We also use this measure in ratios to compare our performance to that of our industry peers. EBITDA as presented herein is equal to EBITDA as defined by NAREIT.

Funds From Operations attributable to common stockholders ("FFO"): Funds from operations, or FFO, is a non-GAAP financial measure that is widely recognized as a measure of REIT operating performance. We consider FFO to be an appropriate supplemental measure of our operating performance as it is based on a net income analysis of property portfolio performance that excludes non-cash items such as depreciation. The historical accounting convention used for real estate assets requires straight-line depreciation of buildings and improvements, which implies that the value of real estate assets diminishes predictably over time. Since real estate values rise and fall with market conditions, presentations of operating results for a REIT, using historical accounting for depreciation, could be less informative. We define FFO, consistent with the National Association of Real Estate Investment Trusts, or NAREIT, definition, as net income, computed in accordance with GAAP, excluding: gains (or losses) from sales of property, depreciation and amortization of real estate assets, impairment losses, losses on extinguishment of debt and after adjustments for unconsolidated partnerships and joint ventures. Adjustments for unconsolidated partnerships and joint ventures will be calculated to reflect FFO on the same basis. Other equity REITs may not calculate FFO (in accordance with the NAREIT definition) as we do, and, accordingly, our FFO may not be comparable to such other REITs' FFO. FFO should not be used as a measure of our liquidity, and is not indicative of funds available for our cash needs, including our ability to pay dividends.

Adjusted Funds From Operations attributable to common stockholders ("AFFO"): Adjusted funds from operation, or AFFO, is presented in addition to FFO. AFFO is defined as FFO, excluding certain non-cash operating revenues and expenses, acquisition and transaction related costs for transactions not completed and recurring capitalized expenditures. Recurring capitalized expenditures includes expenditures required to maintain and re-tenant our properties, tenant improvements and leasing commissions. AFFO further adjusts FFO for certain other non-cash items, including the amortization or accretion of above or below market rents included in revenues, straight line rent adjustments, impairment losses, non-cash equity compensation and non-cash interest expense.

We believe AFFO provides a useful supplemental measure of our operating performance because it provides a consistent comparison of our operating performance across time periods that is comparable for each type of real estate investment and is consistent with management's analysis of the operating performance of our properties. As a result, we believe that the use of AFFO, together with the required GAAP presentations, provide a more complete understanding of our operating performance.

As with FFO, our reported AFFO may not be comparable to other REITs' AFFO, should not be used as a measure of our liquidity, and is not indicative of our funds available for our cash needs, including our ability to pay dividends.

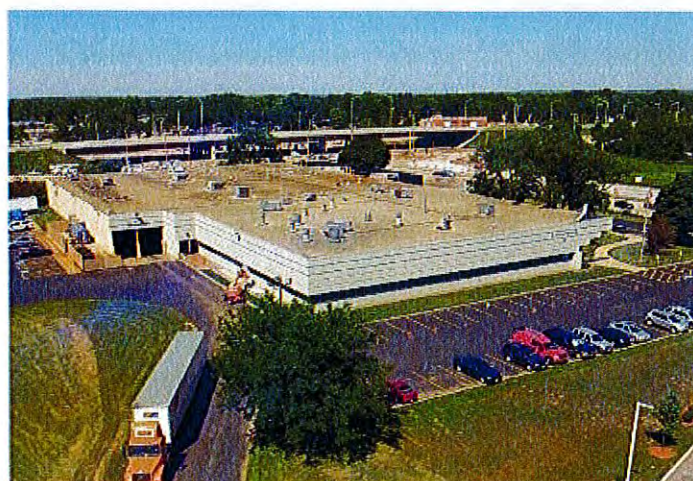
PLYMOUTH INDUSTRIAL REIT, INC.
SUPPLEMENTAL RECONCILIATION OF NON-GAAP DISCLOSURES
UNAUDITED

(In thousands, except share and per share amounts)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2018	2017	2018	2017
NOI:				
Net loss	\$ (7,534)	\$ (3,368)	\$ (12,007)	\$ (6,275)
General and administrative	1,533	1,209	2,905	1,933
Acquisition costs	—	82	—	82
Depreciation and amortization	6,444	2,785	12,986	5,557
Interest expense	4,216	2,802	8,202	5,743
Loss on debt extinguishment	3,601	—	3,601	—
Other expense (income)	(71)	(1)	(521)	(1)
NOI	\$ 8,189	\$ 3,509	\$ 15,166	\$ 7,039
	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2018	2017	2018	2017
EBITDA:				
Net loss	\$ (7,534)	\$ (3,368)	\$ (12,007)	\$ (6,275)
Depreciation and amortization	6,444	2,785	12,986	5,557
Interest expense	4,216	2,802	8,202	5,743
Loss on debt extinguishment	3,601	—	3,601	—
EBITDA	\$ 6,727	\$ 2,219	\$ 12,782	\$ 5,025
	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2018	2017	2018	2017
FFO:				
Net loss	\$ (7,534)	\$ (3,368)	\$ (12,007)	\$ (6,275)
Depreciation and amortization	6,444	2,785	12,986	5,557
Loss on debt extinguishment	3,601	—	3,601	—
FFO:	\$ 2,511	\$ (583)	\$ 4,580	\$ (718)
Preferred stock dividends	(956)	—	(1,912)	—
FFO attributable to common stockholders and unit holders	\$ 1,555	\$ (583)	\$ 2,668	\$ (718)
Weighted average common shares and units outstanding	3,977	923	4,104	629
FFO attributable to common stockholders and unit holders per share	\$ 0.39	\$ (0.63)	\$ 0.65	\$ (1.14)
	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2018	2017	2018	2017
AFFO:				
FFO attributable to common stockholders and unit holders	\$ 1,555	\$ (583)	\$ 2,668	\$ (718)
Deferred finance fee amortization	466	171	854	765
Non-cash interest expense	560	200	806	200
Acquisition costs	—	82	—	82
Stock compensation	200	35	400	35
Straight line rent	(461)	(32)	(818)	(76)
Above/below market lease rents	(306)	(83)	(717)	(166)
Recurring capital expenditure (1)	(350)	(189)	(1,342)	(232)
AFFO:	\$ 1,664	\$ (399)	\$ 1,851	\$ (110)
Weighted average common shares and units outstanding	3,977	923	4,104	629
AFFO per share	\$ 0.42	\$ (0.43)	\$ 0.45	\$ (0.17)

(1) Excludes non-recurring capital expenditures of \$874 and \$13 for the three months ended June 30, 2018 and 2017, respectively, and \$1,247 and \$13 for the six months ended June 30, 2018 and 2017, respectively.

Second Quarter 2018
Supplemental





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Forward looking statements: This supplemental package contains forward-looking statements within the meaning of the U.S. federal securities laws. We make statements in this supplemental package that are forward-looking statements, which are usually identified by the use of words such as “anticipates,” “believes,” “estimates,” “expects,” “intends,” “may,” “plans” “projects,” “seeks,” “should,” “will,” and variations of such words or similar expressions. Our forward-looking statements reflect our current views about our plans, intentions, expectations, strategies and prospects, which are based on the information currently available to us and on assumptions we have made. Although we believe that our plans, intentions, expectations, strategies and prospects as reflected in or suggested by our forward-looking statements are reasonable, we can give no assurance that our plans, intentions, expectations, strategies or prospects will be attained or achieved and you should not place undue reliance on these forward-looking statements. Furthermore, actual results may differ materially from those described in the forward-looking statements and may be affected by a variety of risks and factors. Any forward-looking statement speaks only as of the date on which it is made. New risks and uncertainties arise over time, and it is not possible for us to predict those events or how they may affect us. Except as required by law, we are not obligated to, and do not intend to, update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Definitions and reconciliations: For definitions of certain terms used throughout this supplemental, including certain non-GAAP financial measures, see the Glossary on pages 17. For reconciliations of the non-GAAP financial measures to the most directly comparable GAAP measures, see pages 9-11.

Plymouth Industrial REIT, Inc.

Management, Board of Directors & Investor Contacts

Corporate

260 Franklin Street, Suite 700
Boston, Massachusetts 02110
617.340.3814
www.plymouthreit.com

Executive and Senior Management

Jeffrey E. Witherell
Chief Executive Officer
and Chairman

Pendleton P. White, Jr.
President and Chief Investment
Officer

Daniel C. Wright
Executive Vice President
and Chief Financial Officer

Board of Directors

Martin Barber
Independent Director

Philip S. Cottone
Independent Director

Richard J. DeAgazio
Independent Director

David G. Gaw
Independent Director

Pendleton P. White, Jr.
President and Chief Investment
Officer

Jeffery E. Witherell
Chief Executive Officer
and Chairman

Transfer Agent

Continental Stock Transfer & Trust Company
1 State Street, 30th Floor
New York, New York 10004
212.509.4000

Investor Relations

Tripp Sullivan
SCR Partners
615.760.1104
TSullivan@scr-ir.com

Plymouth Industrial REIT, Inc.

Executive Summary

Company overview: Plymouth Industrial REIT, Inc. (NYSE American: PLYM) is a vertically integrated and self-managed real estate investment trust focused on the acquisition and operation of single and multi-tenant industrial properties located in secondary and select primary markets across the United States. The Company seeks to acquire properties that provide income and growth that enable the Company to leverage its real estate operating expertise to enhance shareholder value through active asset management, prudent property re-positioning and disciplined capital deployment.

Unaudited

As of 06/30/18

Select Portfolio Statistics

Number of Properties	51
Square Footage	9,484,117
Occupancy	93.4%
Weighted Average Lease Term Remaining	3.29

Balance Sheet (\$ in thousands)

Cash	\$	12,128
Gross Assets	\$	381,258
Total Debt	\$	276,150
Net Debt (Total Debt less Cash)	\$	264,022
Net Debt / Gross Assets		69.3%

For the three months ended June 30,

Operating results (\$ in thousands)

2018 2017

Total revenue	\$	12,047	\$	5,027
Net operating income	\$	8,189	\$	3,509

2018 Capital Activity (\$ in thousands)

Increased secured line of credit agreement with KeyBank National	3/8/2018	\$	45,000
Secured 10 year term loan with Minnesota Insurance	4/30/2018	\$	21,500
Secured term loan with KeyBank	5/23/2018	\$	35,700
Repaid Torchlight Mezzanine Loan	5/24/2018	\$	(35,000)

Subsequent Capital Activity:

Secured 10 year term loan with Aegon	7/10/2018	\$	78,000
Repaid MWG Portfolio Loan	7/10/2018	\$	(79,800)
Issued 1,102,464 common shares @ \$15.60 per share	7/23/2018	\$	16,253
Paid down KeyBank Term Loan	7/25/2018	\$	(4,064)

Plymouth Industrial REIT, Inc.

Transaction Activity Since IPO

Unaudited (\$ in thousands) (at 6/30/2018)

Acquisitions					
Location	Acquisition Date	# of Properties	Purchase Price (1)	Square Footage	Projected Initial Yield
Elgin/Arlington Heights, IL	4/9/2018	2	\$ 15,675	269,999	8.0%
Elgin, IL	12/22/2017	1	4,050	75,000	9.7%
Atlanta, GA	12/21/2017	3	11,425	330,361	8.3%
Multiple	11/30/2017	15	99,750	3,027,987	8.1%
Memphis, TN	9/8/2017	1	3,700	131,904	8.6%
Memphis, TN	8/16/2017	1	7,825	235,000	10.5%
Columbus, OH	8/16/2017	1	3,700	121,440	9.0%
Indianapolis, IN	8/11/2017	2	16,875	606,871	8.5%
Southbend, IN	7/20/2017	5	26,000	667,000	8.5%
Total - Acquisitions		31	\$ 189,000	5,465,562	

(1) Represents total consideration paid rather than GAAP cost basis.

Plymouth Industrial REIT, Inc.

Capitalization Analysis

Unaudited (in thousands except for per-share data and percentages)

	Three Months Ended			
	6/30/2018	3/31/2018	12/31/2017	9/30/2017
Common Stock Data				
Weighted-Average Shares Outstanding - Basic	3,400	3,647	3,656	3,636
Weighted-Average Shares Outstanding - Diluted	3,400	3,647	3,656	3,636
High Closing Price	\$ 17.91	\$ 18.52	\$ 18.98	\$ 19.00
Low Closing Price	\$ 15.09	\$ 16.25	\$ 17.22	\$ 16.50
Average Closing Price	\$ 16.99	\$ 17.46	\$ 18.15	\$ 17.90
Closing Price (as of period end)	\$ 16.00	\$ 17.18	\$ 18.48	\$ 18.21
Dividends / Share (annualized) (1)	\$ 1.50	\$ 1.50	\$ 1.50	\$ 1.50
Dividend Yield (annualized) (2)	9.4%	8.7%	8.1%	8.2%
Common Shares Outstanding (2)	3,556	3,556	3,819	3,813
Market Value of Common Shares (2)	\$ 56,896	\$ 61,092	\$ 70,579	\$ 69,433
Total Market Capitalization (2) (3)	\$ 333,046	\$ 314,217	\$ 321,704	\$ 243,258

Equity Research Coverage (4)

D.A. Davidson & Co.
Barry Oxford
646.885.5423

National Securities Corporation
John Benda
212.417.8127

Investor Conference Call and Webcast:

The Company will hold a conference call and live audio webcast, both open for the general public to hear, on August 9, 2018 at 10:00 a.m. Eastern Time. The number to call for this interactive teleconference is (412) 717-9587. A replay of the call will be available through August 16, 2018 by dialing (412) 317-0088 and entering the replay access code, 10122697.

(1) Based on annualized dividend declared for the quarter.

(2) Based on closing price and ending shares for the last trading day of the quarter.

(3) Market value of shares plus total debt as of quarter end.

(4) The analysts listed provide research coverage on the Company. Any opinions, estimates or forecasts regarding the Company's performance made by these analysts are theirs alone and do not represent opinions, estimates or forecasts by the Company or its management. The Company does not by reference above imply its endorsement of or concurrence with such information, conclusions or recommendations.

Plymouth Industrial REIT, Inc.

Consolidated Balance Sheets (unaudited)

(in thousands)

	6/30/2018	3/31/2018	12/31/2017 (1)	9/30/2017
Assets:				
Real estate properties:				
Land	\$ 63,688	\$ 59,799	\$ 59,797	\$ 25,069
Building and improvements	257,175	244,428	243,605	165,066
Less accumulated depreciation	(32,809)	(28,828)	(25,013)	(22,094)
Total real estate properties, net	\$ 288,054	\$ 275,399	\$ 278,389	\$ 168,041
Cash and cash equivalents	12,128	13,097	19,163	10,818
Deferred lease intangibles, net	25,020	25,297	27,619	16,446
Other assets	7,430	5,284	4,782	2,286
Total assets	\$ 332,632	\$ 319,077	\$ 329,953	\$ 197,591
Liabilities:				
Debt, net	\$ 270,597	\$ 247,753	\$ 245,632	\$ 169,196
Deferred interest	-	1,575	1,357	765
Accounts payable, accrued expenses and other liabilities	16,864	15,174	16,015	7,476
Deferred lease intangibles, net	6,657	6,261	6,807	1,911
Total liabilities	\$ 294,118	\$ 270,763	\$ 269,811	\$ 179,348
Preferred Stock - Series A	\$ 48,868	\$ 48,878	\$ 48,931	-
Equity:				
Common stock	\$ 36	\$ 36	\$ 39	\$ 39
Additional paid in capital	114,085	116,183	123,270	125,231
Accumulated deficit	(129,982)	(123,277)	(119,213)	(114,789)
Total Plymouth Industrial REIT, Inc. stockholders' equity	(15,861)	(7,058)	4,096	10,481
Noncontrolling interest	5,507	6,494	7,115	7,762
Total equity	\$ (10,354)	\$ (564)	\$ 11,211	\$ 18,243
Total liabilities, Series A preferred stock and equity	\$ 332,632	\$ 319,077	\$ 329,953	\$ 197,591

(1) Audited consolidated financial statements and notes for the year ended December 31, 2017 are available within our 2017 Annual Report on Form 10-K.

Plymouth Industrial REIT, Inc.

Consolidated Statements of Operations - GAAP (unaudited)

(in thousands, except per-share amounts)

	Three Months Ended			
	6/30/2018	3/31/2018	12/31/2017	9/30/2017
Revenues:				
Rental income	\$ 9,019	\$ 8,483	\$ 6,379	\$ 4,699
Tenant recoveries	2,957	2,946	2,031	1,743
Other revenue	71	450	1	1
Total revenues	\$ 12,047	\$ 11,879	\$ 8,411	\$ 6,443
Operating expenses:				
Property related	3,787	4,452	3,122	2,159
Depreciation and amortization	6,444	6,542	4,943	3,499
General and administrative	1,533	1,373	2,031	1,224
Acquisition costs	-	-	17	4
Total operating expenses	\$ 11,764	\$ 12,367	\$ 10,113	\$ 6,886
Operating income	\$ 283	\$ (488)	\$ (1,702)	\$ (443)
Other income (expense):				
Gain on disposition of equity investment	-	-	8	223
Interest expense	(4,216)	(3,985)	(3,219)	(2,619)
Loss on debt extinguishment	(3,601)	-	-	-
Total other income (expense)	\$ (7,817)	\$ (3,985)	\$ (3,211)	\$ (2,396)
Net loss	\$ (7,534)	\$ (4,473)	\$ (4,913)	\$ (2,839)
Less: Net income attributable to noncontrolling interest	(829)	(463)	(489)	(157)
Net loss attributable to Plymouth Industrial REIT, Inc.	\$ (6,705)	\$ (4,010)	\$ (4,424)	\$ (2,682)
Less: Series A preferred stock dividends (2)	956	956	723	-
Less: Amount allocated to participating securities	46	61	128	-
Net income (loss) attributable to common stockholders	\$ (7,707)	\$ (5,027)	\$ (5,275)	\$ (2,682)
Net income (loss) attributable to common stockholders per share - basic and diluted	\$ (2.27)	\$ (1.38)	\$ (1.44)	\$ (0.74)
Weighted-average shares outstanding - basic	3,400	3,647	3,656	3,636
Weighted-average shares outstanding - diluted	3,400	3,647	3,656	3,636

(1) Audited consolidated financial statements and notes for the year ended December 31, 2017 are available within our 2017 Annual Report on Form 10-K.

(2) Preferred stock dividend for the fourth quarter of 2017 of \$0.46875, which was pro-rated to \$0.3542 per share to reflect the period commencing October 25, 2017 (original issue date) and ending December 31, 2017, was declared in December 2017 and paid in January 2018.

Plymouth Industrial REIT, Inc.

Same Store Net Operating Income (NOI)

Unaudited (in thousands)

Trailing four quarter same store NOI		Three Months Ended			
	6/30/2018	3/31/2018	12/31/2017	9/30/2017	
Same store properties	20	20	20	20	
Revenues:					
Rental income	\$ 3,423	\$ 3,455	\$ 3,626	\$ 3,644	
Tenant recoveries	1,425	1,382	1,334	1,392	
Total operating revenues	\$ 4,848	\$ 4,837	\$ 4,960	\$ 5,036	
Property expenses	\$ 1,388	\$ 1,815	\$ 2,031	\$ 1,606	
Same store net operating income	\$ 3,460	\$ 3,022	\$ 2,929	\$ 3,430	
Trailing two quarter same store NOI		Three Months Ended			
	6/30/2018	3/31/2018			
Same store properties	49	49			
Revenues:					
Rental income	\$ 8,657	\$ 8,483			
Tenant recoveries	2,945	2,946			
Total operating revenues	\$ 11,602	\$ 11,429			
Property expenses	\$ 3,707	\$ 4,452			
Same store net operating income	\$ 7,895	\$ 6,977			

Plymouth Industrial REIT, Inc.

NOI

Unaudited (in thousands)

	Three Months Ended			
	6/30/2018	3/31/2018	12/31/2017	9/30/2017
Net loss	\$ (7,534)	\$ (4,473)	\$ (4,913)	\$ (2,839)
General and administrative	1,533	1,373	2,031	1,224
Acquisition expense	-	-	17	4
Interest expense	4,216	3,985	3,219	2,619
Depreciation and amortization	6,444	6,542	4,943	3,499
Loss on debt extinguishment	3,601	-	-	-
Other income	(71)	(450)	(9)	(224)
Net Operating Income	\$ 8,189	\$ 6,977	\$ 5,288	\$ 4,283

2Q 2018 Supplemental

Plymouth Industrial REIT, Inc.

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA)

Unaudited (in thousands)

	Three Months Ended			
	6/30/2018	3/31/2018	12/31/2017	9/30/2017
Net loss	\$ (7,534)	\$ (4,473)	\$ (4,913)	\$ (2,839)
Depreciation and amortization	6,444	6,542	4,943	3,499
Interest expense	4,216	3,985	3,219	2,619
Loss on debt extinguishment	3,601	-	-	-
EBITDA	\$ 6,727	\$ 6,054	\$ 3,249	\$ 3,279

2Q 2018 Supplemental

Plymouth Industrial REIT, Inc.

Funds from Operations (FFO) & Adjusted Funds from Operations (AFFO)

Unaudited (in thousands, except per-share amounts)

	Three Months Ended			
	6/30/2018	3/31/2018	12/31/2017	9/30/2017
Net loss	\$ (7,534)	\$ (4,473)	\$ (4,913)	\$ (2,839)
Depreciation and amortization	6,444	6,542	4,943	3,499
Loss on debt extinguishment	3,601	-	-	-
Gain on disposition of equity investment	-	-	(8)	(223)
FFO	\$ 2,511	\$ 2,069	\$ 22	\$ 437
Preferred stock dividend	(956)	(956)	(723)	-
FFO attributable to common stockholders and unit holders	\$ 1,555	\$ 1,113	\$ (701)	\$ 437
Deferred finance fee amortization	466	387	259	202
Acquisition costs	-	-	17	4
Non-cash interest expense	560	247	900	565
Stock compensation	200	200	192	208
Straight line rent	(461)	(357)	(82)	(32)
Above/below market lease rents	(306)	(411)	(168)	(89)
Recurring capital expenditures (1)	(350)	(992)	(227)	(63)
AFFO	\$ 1,664	\$ 187	\$ 190	\$ 1,232
Weighted average common shares and units outstanding	3,977	4,232	4,234	3,913
FFO attributable to common stockholders and unit holders per share	\$ 0.39	\$ 0.26	\$ (0.17)	\$ 0.11
AFFO attributable to common stockholders and unit holders per share	\$ 0.42	\$ 0.04	\$ 0.04	\$ 0.31

(1) Excludes non-recurring capital expenditures of \$874, \$373, \$819 and \$440 for the three months ending June 30, March 31, 2018, December 31, and September 30, 2017, respectively.

Plymouth Industrial REIT, Inc.

Debt Overview

Unaudited (\$ in thousands) at 6/30/2018

Debt Instrument - Secured Facility	Maturity	Rate	Rate Type	Properties Encumbered	Balance	% of Total Debt
\$45 million line of credit	August-21	4.75%(1)	Floating	9	\$ 19,150	6.9%
\$120 million AIG Loan	October-23	4.08%	Fixed	20	\$ 120,000	43.5%
\$79.8 million MWG Loan	November-19	5.08% (2)	Floating	15	\$ 79,800	28.9%
\$35.7 million KeyBank Term Loan (4)	August-21	9.09% (3)	Floating	-	\$ 35,700	12.9%
\$21.5 million Minnesota Life Loan	May-28	3.78%	Fixed	6	\$ 21,500	7.8%
				50	\$ 276,150	100.0%

Balance Sheet (\$ in thousands) at 6/30/2018

Cash	\$ 12,128
Gross Assets (5)	\$ 381,258
Total Debt	\$ 276,150
Net Debt	\$ 264,022

Subsequent Event

On July 10, 2018, we entered into a secured loan agreement with Aegon USA Realty Advisors, as agent for one of its affiliated life insurance companies, or the Aegon Lender, in the original principal amount of \$78,000. The Aegon Secured Term Loan bears interest at 4.35% per annum and has a ten-year term, maturing on August 1, 2028. The Aegon Secured Term Loan provides for monthly payments of interest only for the first year of the term and thereafter monthly principal and interest payments based on a 30-year amortization period. The borrowings under the Aegon Secured Term Loan are secured by first lien mortgages on eighteen of the Company's properties. Proceeds from the Aegon Secured Term Loan were used to retire the outstanding borrowings under the MWG Portfolio Secured Loan.

- (1) Interest rate paid for the month of June 30, 2018. Borrowings under the Line of Credit Agreement bear interest at either (1) the base rate (determined from the highest of (a) KeyBank's prime rate, (b) the federal funds rate plus 0.50% and (c) the one month LIBOR rate plus 1.0%) or (2) LIBOR, plus, in either case, a spread between 250 and 300 basis points depending on our total leverage ratio.
- (2) Interest rate paid for the month of June 30, 2018. Interest for the first year at a rate per annum equal to LIBOR plus 3.10% and for the second year at a rate per annum equal to LIBOR plus 3.35%.
- (3) Interest rate for the month of June 30, 2018. Borrowings under the KeyBank Term Loan bear interest at either (1) LIBOR plus 7% or (2) KeyBank's base rate plus 6%.
- (4) The KeyBank Term Loan is secured by Plymouth Industrial REIT's equity interest within the Plymouth 20 and each of its property owning subsidiaries.
- (5) The carrying amount of total assets plus accumulated depreciation and amortization, as reported in the Company's consolidated financial statements.

Plymouth Industrial REIT, Inc.

Property Overview - Square Feet & Occupancy

Unaudited (\$ in thousands) at 6/30/18

Property	Market	Rentable Square Feet	Leased Square Feet	Occupancy
32 Dart Road	Atlanta	194,800	194,800	100.0%
1665 Dogwood Drive SW	Atlanta	198,000	198,000	100.0%
1715 Dogwood Drive	Atlanta	100,000	100,000	100.0%
11236 Harland Drive	Atlanta	32,361	32,361	100.0%
Subtotal - Atlanta		525,161	525,161	100.0%
11351 W 183rd Street	Chicago	18,768	18,768	100.0%
11601 Central Avenue	Chicago	260,000	260,000	100.0%
13040 South Pulaski Avenue	Chicago	395,466	395,466	100.0%
1355 Holmes Road	Chicago	82,456	82,456	100.0%
13970 West Laurel Drive	Chicago	70,196	70,196	100.0%
1455-1645 Greenleaf Avenue	Chicago	150,000	150,000	100.0%
1600 Fleetwood Drive	Chicago	247,000	247,000	100.0%
1750 South Lincoln Drive	Chicago	499,200	499,200	100.0%
1796 Sherwin Avenue	Chicago	98,879	98,879	100.0%
1875 Holmes Road	Chicago	134,415	134,415	100.0%
189 Seegers Road	Chicago	25,000	25,000	100.0%
2401 Commerce Drive	Chicago	78,574	78,574	100.0%
28160 North Keith Drive	Chicago	77,924	77,924	100.0%
3 West College Drive	Chicago	33,263	33,263	100.0%
3841-3865 Swanson Court	Chicago	99,625	99,625	100.0%
3940 Stern Avenue	Chicago	146,798	146,798	100.0%
440 South McLean	Chicago	74,613	74,613	100.0%
6000 West 73rd Street	Chicago	148,091	148,091	100.0%
6510 West 73rd Street	Chicago	306,552	306,552	100.0%
6558 West 73rd Street	Chicago	301,000	301,000	100.0%
6751 Sayre Avenue	Chicago	242,690	242,690	100.0%
7200 Mason Ave	Chicago	207,345	207,345	100.0%
5110 South 6th Street	Milwaukee	58,500	58,500	100.0%
525 West Marquette Avenue	Milwaukee	112,144	40,000	35.7%
Subtotal - Chicago		3,868,499	3,796,355	98.1%
Mosteller Distribution Center	Cincinnati	358,386	358,386	100.0%
4115 Thunderbird Lane	Cincinnati	70,000	70,000	100.0%
Subtotal - Cincinnati		428,386	428,386	100.0%
3500 Southwest Boulevard	Columbus	527,127	527,127	100.0%
3100 Creekside Parkway	Columbus	340,000	-	0.0%
8288 Green Meadows Dr.	Columbus	300,000	300,000	100.0%
8273 Green Meadows Dr.	Columbus	77,271	77,271	100.0%
7001 American Pkwy	Columbus	54,100	54,100	100.0%
2120 - 2138 New World Drive	Columbus	121,200	121,200	100.0%
Subtotal - Columbus		1,419,698	1,079,698	76.1%
3035 North Shadeland Ave	Indianapolis	562,497	537,497	95.6%
3169 North Shadeland Ave	Indianapolis	44,374	41,960	94.6%
5861 W Cleveland Road	South Bend	62,550	62,550	100.0%
West Brick Road	South Bend	101,450	101,450	100.0%
4491 N Mayflower Road	South Bend	77,000	77,000	100.0%
5855 West Carbonmill Road	South Bend	198,000	198,000	100.0%
4955 Ameritech Drive	South Bend	228,000	228,000	100.0%
Subtotal - Indianapolis/South Bend		1,273,871	1,246,457	97.8%
6005, 6045 & 6075 Shelby Dr.	Memphis	202,303	167,018	82.6%
210 American Dr.	Jackson	638,400	638,400	100.0%
3635 Knight Road	Memphis	131,904	131,904	100.0%
Business Park Drive	Memphis	235,006	128,457	54.7%
Subtotal - Memphis/Jackson		1,207,613	1,065,779	88.3%
7585 Empire Drive	Florence, KY	148,415	148,415	100.0%

56 Milliken Road	Portland, ME	200,625	200,625	100.0%
4 East Stow Road	Marlton, NJ	156,279	134,959	86.4%
1755 Enterprise Parkway	Cleveland, OH	255,570	234,370	91.7%
Subtotal - Others		760,889	718,369	94.4%
Total - All Properties		9,484,117	8,860,205	93.4%

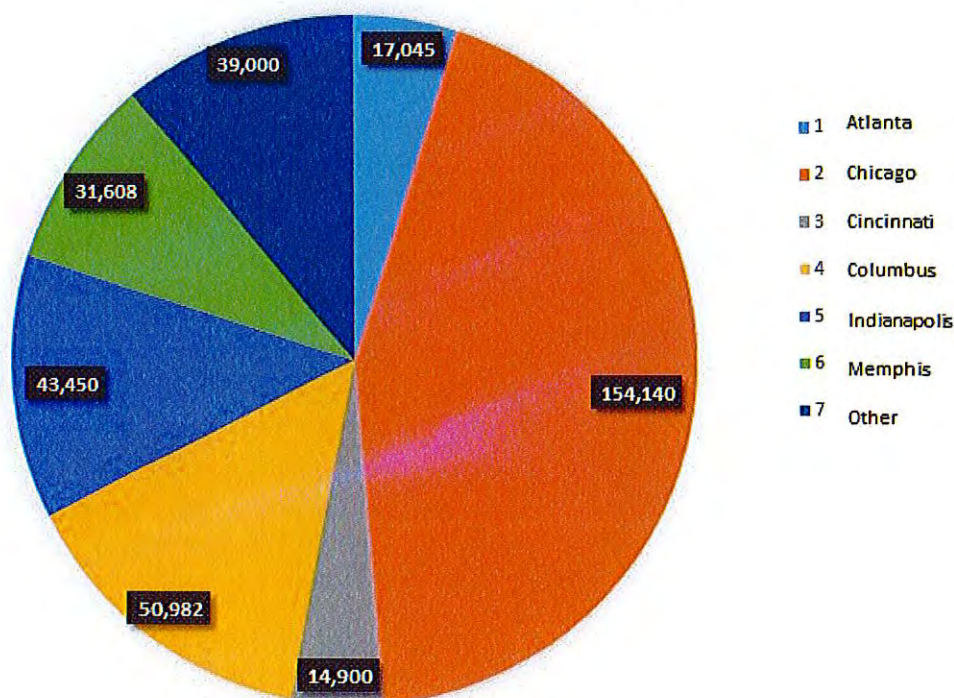
Plymouth Industrial REIT, Inc.

Market Summary

Unaudited (\$F and \$ in thousands) (at 6/30/2018)

Geography	State	Properties	Total Acquisition Cost (1)	Gross Real Estate Assets (2)	% Gross Real Estate Assets
Atlanta	GA	4	\$ 17,045	\$ 15,765	4.9%
Chicago	IL, WI	24	154,140	143,179	44.6%
Cincinnati	OH	2	14,900	13,349	4.2%
Columbus	OH	6	50,982	48,427	15.1%
Indianapolis/South Bend	IN	7	43,450	38,358	12.0%
Memphis/Jackson	TN	4	31,608	26,345	8.2%
Other	Various	4	39,000	35,163	11.0%
Total		51	\$ 351,125	\$ 320,586	100%

Total Acquisition cost by Geography



(1) Total acquisition cost prior to allocations per US GAAP.

(2) The gross book value of real estate assets as of June 30, 2018 excluding \$277 in leasehold improvements related to our Corporate office. Gross book value of real estate assets excludes depreciation and the allocation of the acquisition cost towards intangible asset and liabilities required by US GAAP.

Leasing Activity

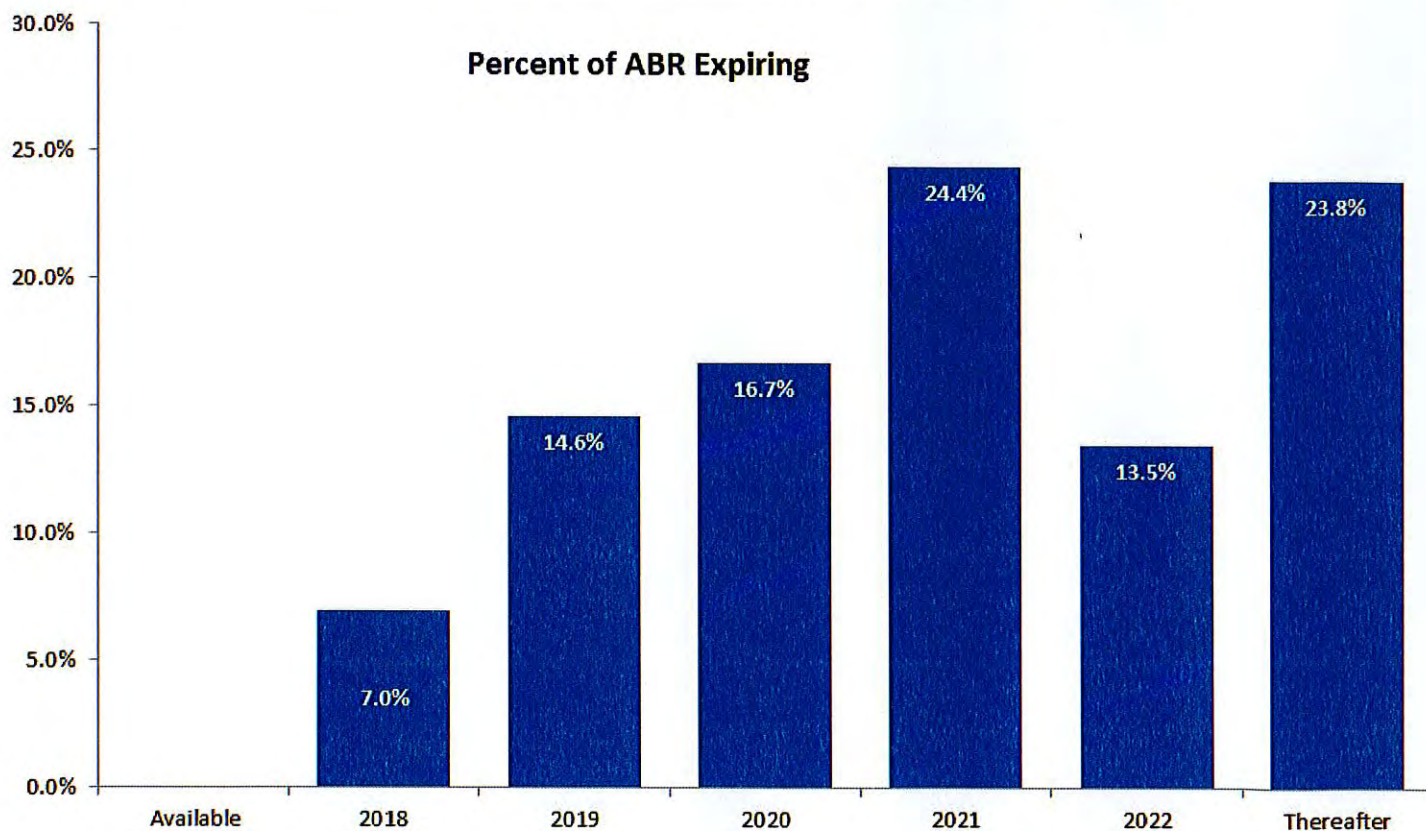
Year	Type	Square Footage	Percent	Expiring Rent	New Rent	% Change	Tenant Improvements \$/SF/YR	Lease Commissions \$/SF/YR
2017	Renewals	234,679	84.1%	\$ 4.25	\$ 4.51	6.2%	\$ 0.07	\$ 0.13
	New Leases	44,268	15.9%	\$ 2.16	\$ 3.00	38.7%	\$ 0.41	\$ 0.27
	Total	278,947	100.0%	\$ 3.92	\$ 4.27	9.1%	\$ 0.13	\$ 0.15
Q1 2018	Renewals	146,798	47.5%	\$ 4.25	\$ 4.30	1.2%	\$ -	\$ 0.11
	New Leases	162,119	52.5%	\$ 3.17	\$ 3.99	26.1%	\$ 0.09	\$ 0.04
	Total	308,917	100.0%	\$ 3.68	\$ 4.07	10.6%	\$ 0.05	\$ 0.07
Q2 2018	Renewals	146,874	13.1%	\$ 4.83	\$ 5.00	3.6%	\$ 0.14	\$ 0.13
	New Leases	664,828	59.3%	\$ 3.67	\$ 3.92	6.9%	\$ 0.42	\$ 0.25
	Total	811,702	100.0%	\$ 3.88	\$ 4.21	8.4%	\$ 0.37	\$ 0.23
2018	Renewals	293,672	26.2%	\$ 4.54	\$ 4.65	2.4%	\$ 0.07	\$ 0.11
	New Leases	826,947	73.8%	\$ 3.58	\$ 3.94	10.0%	\$ 0.35	\$ 0.21
	Total	1,120,619	100.0%	\$ 3.83	\$ 4.13	7.7%	\$ 0.28	\$ 0.18
Total	Renewals	528,351	37.8%	\$ 4.41	\$ 4.59	4.1%	\$ 0.07	\$ 0.12
	New Leases	871,215	62.2%	\$ 3.51	\$ 3.89	10.9%	\$ 0.36	\$ 0.22
	Total	1,399,566	100%	\$ 3.85	\$ 4.16	8.0%	\$ 0.25	\$ 0.18

Plymouth Industrial REIT, Inc.

Lease Expiration Schedule

Unaudited (\$ in thousands) (at 6/30/2018)

Year	Square Footage	Annualized Base Rent (ABR) (1)	% of ABR Expiring (2)
Available	623,911	\$ -	-
2018	439,676	2,345	7.0%
2019	1,480,835	4,897	14.6%
2020	1,613,610	5,596	16.7%
2021	2,173,308	8,190	24.4%
2022	963,685	4,510	13.5%
Thereafter	2,189,092	7,996	23.8%
Total	9,484,117	\$ 33,534	100.0%



(1) Annualized base rent is calculated as monthly contracted base rent per the terms of such lease, as of June 30, 2018, multiplied by 12. Excludes billboard and antenna revenue and rent abatements.

(2) Calculated as annualized base rent set forth in this table divided by total annualized base rent for the Company Portfolio as of June 30, 2018.

Non-GAAP Financial Measures Definitions:

Net Operating Income (NOI) : We consider net operating income, or NOI, to be an appropriate supplemental measure to net income because it helps both investors and management understand the core operations of our properties. We define NOI as total revenue (including rental revenue, tenant reimbursements, management, leasing and development services revenue and other income) less property-level operating expenses including allocated overhead. NOI excludes depreciation and amortization, general and administrative expenses, impairments, gain/loss on sale of real estate, interest expense, and other non-operating items.

EBITDA : We believe that earnings before interest, taxes, depreciation and amortization, or EBITDA, is helpful to investors as a supplemental measure of our operating performance as a real estate company because it is a direct measure of the actual operating results of our industrial properties. We also use this measure in ratios to compare our performance to that of our industry peers. EBITDA as presented herein is equal to EBITDA as defined by NAREIT.

Funds From Operations attributable to common stockholders ("FFO") : Funds from operations, or FFO, is a non-GAAP financial measure that is widely recognized as a measure of REIT operating performance. We consider FFO to be an appropriate supplemental measure of our operating performance as it is based on a net income analysis of property portfolio performance that excludes non-cash items such as depreciation. The historical accounting convention used for real estate assets requires straight-line depreciation of buildings and improvements, which implies that the value of real estate assets diminishes predictably over time. Since real estate values rise and fall with market conditions, presentations of operating results for a REIT, using historical accounting for depreciation, could be less informative. We define FFO, consistent with the National Association of Real Estate Investment Trusts, or NAREIT, definition, as net income, computed in accordance with GAAP, excluding gains (or losses) from sales of property, depreciation and amortization of real estate assets, impairment losses, loss on extinguishment of debt and after adjustments for unconsolidated partnerships and joint ventures. Adjustments for unconsolidated partnerships and joint ventures will be calculated to reflect FFO on the same basis. Other equity REITs may not calculate FFO (in accordance with the NAREIT definition) as we do, and, accordingly, our FFO may not be comparable to such other REITs' FFO. FFO should not be used as a measure of our liquidity, and is not indicative of funds available for our cash needs, including our ability to pay dividends.

Adjusted Funds From Operations attributable to common stockholders ("AFFO") : Adjusted funds from operation, or AFFO, is presented in addition to FFO. AFFO is defined as FFO, excluding certain non-cash operating revenues and expenses, acquisition and transaction related costs for transactions not completed and recurring capitalized expenditures. Recurring capitalized expenditures includes expenditures required to maintain and re-tenant our properties, tenant improvements and leasing commissions. AFFO further adjusts FFO for certain other non-cash items, including the amortization or accretion of above or below market rents included in revenues, straight line rent adjustments, impairment losses, non-cash equity compensation and non-cash interest expense. We believe AFFO provides a useful supplemental measure of our operating performance because it provides a consistent comparison of our operating performance across time periods that is comparable for each type of real estate investment and is consistent with management's analysis of the operating performance of our properties. As a result, we believe that the use of AFFO, together with the required GAAP presentations, provide a more complete understanding of our operating performance. As with FFO, our reported AFFO may not be comparable to other REITs' AFFO, should not be used as a measure of our liquidity, and is not indicative of our funds available for our cash needs, including our ability to pay dividends.

Other Definitions:

GAAP : U.S generally accepted accounting principles.

Gross Assets : the carrying amount of total assets plus accumulated depreciation and amortization, as reported in the Company's consolidated financial statements. For gross assets as of June 30, 2018 and December 31, 2017, the calculation is as follows:

	<u>6/30/2018</u>
Total Assets	\$332,632
Add back depreciation expense	32,809
Add back intangible asset amortization	<u>15,817</u>
Gross assets	\$381,258

Non-Recurring Capital Expenditures : Non-recurring capital expenditures include capital expenditures of long lived improvements required to upgrade/replace existing systems or items that previously did not exist.

Occupancy : We define occupancy as the percentage of total leasable square footage in which either the sooner of lease term commencement or revenue recognition in accordance to GAAP has commenced as of the close of the reporting period.

Recurring Capital Expenditures : Recurring capitalized expenditures includes capital expenditures required to maintain and re-tenant our properties, tenant improvements and leasing commissions.

Same Store Portfolio: Our Same Property Portfolio is a subset of our consolidated portfolio and includes properties that were wholly-owned by us for the entire period presented. The trailing 4 quarters same store portfolio includes properties owned as of April 1, 2017, and still owned by us as of June 30, 2018. Therefore, we excluded from our Same Store Portfolio any properties that were acquired or sold during the period from April 1, 2017 through June 30, 2018. The trailing 2 quarters same store portfolio includes properties owned as of January 1, 2018, and still owned by us as of June 30, 2018. Therefore, we excluded from our Same Store Portfolio any properties that were acquired or sold during the period from January 1, 2018 through June 30, 2018. The Company's computation of same store NOI may not be comparable to other REITs.

Weighted average lease term remaining : The average contractual lease term remaining as of the close of the reporting period (in years) weighted by square footage.



TECHNICAL ABILITY

CES, Inc. has prepared numerous Site Location of Development Applications, Amendments, and Modifications to existing permits. John Kuchinski, P.E. has overseen the preparation of this application. John has been involved in the preparation of many Site Location of Development Applications for various clients.

Some Site Location of Development Act (SLODA) Projects completed by John Kuchinski:

Saccarappa Elementary School, Westbrook, ME 2017

Mildred L. Day School Arundel, Maine 2016

Maine Maritime Academy, American Bureau of Shipping Engineering Center, Castine 2013

Wentworth Intermediate School, Scarborough 2012

JOHN KUCHINSKI
SENIOR PROJECT ENGINEER

John Kuchinski comes to CES, Inc. with over 30 years' experience in the design of large scale commercial, industrial, and residential land development projects. His responsibilities included the layout of roads, parking lots, site circulation and pedestrian ways in an integrated design. John was instrumental to the design process with obtaining environmental and land use permits. His work with the design team requires effective communication skills and project management expertise. John has worked with site design and the permitting for site development on projects, including grading, stormwater drainage, spill control, utilities, and erosion control. He also has experience with construction phase services.

**CORE
EXPERTISE**

Site Design

Project Engineer

Commercial/
Residential Land
Development

Professional History

2012 – 2018 | Harriman Associates, Auburn, Maine | Senior Civil Engineer
2005 – 2011 | Amec Foster Wheeler, Portland, Maine | Senior Civil Engineer/Project Manager
2001 – 2005 | BH2M Engineers, Gorham, Maine | Senior Civil Engineer
1998 – 2001 | JK Holmgren Engineering, Inc., Brockton, MA | Project Manager
1997 – 1998 | Gale Associates, Inc., Weymouth, MA | Project Engineer
1989 – 1997 | Town of Yarmouth, Yarmouth, MA | Civil Engineer

Education

BS in Civil Engineering | University of Massachusetts, Dartmouth, MA

Registrations

Professional Engineer License # ME #9759, NH #14498, MA #35862

Affiliations

American Society of Civil Engineers

Project Experience

Westbrook Saccarappa Elementary School | Westbrook, Maine

Designed site improvements for a 50,000 square foot addition to the elementary school including stormwater, grading, utilities and erosion control. Site design provide new play fields and a new parking lot to accommodate the increase in staff. Permitting required a modification of an existing SLODA permit.

Sanford Middle School and Sanford High School | Sanford, Maine

Developed site plans for the conversion of the existing Sanford High School to be a middle school and the Conversion of the Middle School to be an elementary school.

Mildred L. Day School | Arundel, Maine

Developed plans and specifications for site improvements for reconstruction of a portion of the Mildred L. Day School. This included modification to the SLODA permit under the 2015 version of Chapter 500 redevelopment rules. Provided separate bus loop, parent drop off and parking areas.

Kennebunkport Consolidated School | Kennebunkport, Maine

Site design for expansion of the school to include improving stormwater management, site circulation and pedestrian access to the building. An improved parking lot and separate parent drop off.

Wentworth Intermediate School | Scarborough, ME

Senior Civil Engineer for the site design and permitting of a new intermediate school for the Town of Scarborough, Maine. The new school contains 164,000 square feet of floor area. Design included stormwater management, grading, and utilities. This site also included a geothermal well field to provide heating and cooling of the building. Permitting involved a modification the Site Location of Development permit of the Scarborough Municipal Complex and a Natural Resource Protection permit to impact 1.3 acres of wooded wetlands.

Maine Army National Guard Reserve Center | Bangor, Maine

Civil Engineer to design reconstruction of the existing parking lot paving and Drainage. Prepared detailed site plans and bid specifications. Attended pre-bid meeting. Reviewed and processed Contractor submittals and requests for information. Conducted site observations during construction to verify work is in accordance with the design documents. Developed a comprehensive punch list at the completion of construction.

Maine Army National Guard Regional Training Institute | Bangor, Maine

While working for AMEC Foster Wheeler, John designed stormwater, grading utilities and erosion control for site development for a new Regional Training Institute located on Hildreth Road North in Bangor. Other duties included the preparation of bidding plans and specifications, as well as the construction phase oversight.

Maine Army National Guard Training Facility | Auburn, ME

Senior Civil Engineer that prepared the site plan for four proposed controlled humidity buildings for storage. This facility provides long term storage of unit equipment in a controlled atmosphere to reduce degradation of the equipment. Design also included a stormwater management plan and Site Location of Development Law permitting to the Maine DEP for the entire facility.

Presque Isle Community Center | Presque Isle, Maine

Designed site improvements to an existing brownfield site for a new community recreational facility. Stormwater permit and local permitting.

Old County Road | Scarborough, Maine

Reconstruction of Old County Road in Scarborough included full depth reconstruction of the pavement and new stormwater drainage. Design reconfigured the vertical alignment of the road

to facilitate runoff to drainage structures. Consideration given to revising road to accommodate existing driveways. Meeting with the neighbors and getting their feedback.

Maritime Village | Wiscasset, ME

Senior Civil Engineer participated in the civil engineering design of phase one of Maritime Village, a project involving the redevelopment of the decommissioned Mason Station electric power generating facility. The Mason Station was decommissioned and was a Brownfield industrial site. The redevelopment of the property was envisioned to include single family homes, condominiums, shops and restaurants, a 350-slip marina, the Hinckley Boat yard and possible cultural and educational uses. Phase one consisted of 80 single family homes and a 7,120 SF addition to the Mason Station for a Hinckley Boatyard. The first phase also included 52 marina slips.

Topsham Crossing | Topsham, ME

Senior Civil Engineer designer of a 68-lot residential subdivision which included 20 units reserved for affordable housing. This development is the first “Great American Neighborhood” development in Maine that emphasized small lots and dense development while preserving a significant area of land as open space. This project incorporated stormwater Best Management Practices to control stormwater quantity and quality. The design also included sewer collection with some lots requiring low pressure sewer collection system, roadway alignment, utilities and presentation to the local planning board.

Milton CAT Service Facility Expansion | Scarborough, ME

Civil Engineer for the master planning and permitting for this facility expansion, John developed the site layout for building expansion and outside equipment storage, grading, drainage and erosion control. This site was originally designed and permitted by OEST in 1983. A 1987 amendment to the permit greatly expanded the facility. This is yet another expansion to meet Milton CAT’s growing business needs.

Mashpee Medical Center | Mashpee, MA

Project Engineer for this design/build project working in conjunction with the general contractor on the project. The civil design included developing plans for the 30,000 SF medical office building. An essential element of this project included the design of a denitrifying onsite waste water treatment and disposal system to reduce the total nitrogen concentration of the wastewater below 10 PPM because it was in a zone of contribution to a public water supply well. Stormwater design included LID techniques including infiltration and bio-retention. Design also included site grading, layout, utilities, stormwater management and design of an on-site treatment and disposal system for the sanitary sewage. Landscaping consisted of plants that did not require irrigation.

New Well Pad and Infield Pipeline Planning, Design, and Permitting Confidential | Client North Central Region, PA

Senior Civil Engineer for the planning, design, and permitting of over 30 new well pad and associated infield gathering lines. The planning process involves an initial field review of potential pad locations and pipeline routes, including an assessment of engineering and environmental limitations and restrictions, and concept level development plans are prepared for further

evaluation and input from client land, geology/geophysics, and operational personnel. Once the concept plan has been refined, preliminary design plans are prepared for final client approval and subsequently developed into final design drawings, including access roads, well locations, production facilities, impoundments, as well as design narratives, and associated permit application packages, including Pennsylvania DEP's ESCGP-1. Most projects involve interagency coordination are fast-tracked such that they are completed within two weeks of confirmation of design.

Southwest Harbor Fire Station | Southwest Harbor, ME

Civil Engineer for the design site improvements for a new 10,000 SF fire station, urban stormwater management, site grading and utility connections for the building, new access road, parking, and utilities.

Town Engineering Review Services | Wells, ME

Civil Engineer responsible for multiple subdivision and site plan reviews for the Town of Wells. He was responsible for reviews of plans for compliance with zoning and subdivision regulations as well as good engineering practice.

Salt/Sand Storage Building | Town of Dayton, ME

Senior Project Engineer for the Town of Dayton on this project. His responsibilities included determining the best type of building to meet the Town's needs, providing engineering services for the site design, hiring sub-consultants for the structural and building design, completing the construction bid documents, providing construction management services, and submitting a reimbursement request to MDOT for a portion of the building costs through the Maine Sand/Salt Storage Building Program.

Solid Waste Management Facility | Town of Yarmouth, MA

As a civil engineer for the Town, Mr. Kuchinski provided a full range of services for the design and construction of a solid waste management facility to accommodate an increased demand of residential solid waste capacity, including a facility for yard waste, composting and commercial/residential construction debris. He served as supervisor of Town staff who provided the general construction services, and prepared and supervised the bidding and awarding of specialty construction items. He also provided overall construction management and budget control for the project.

**PLYMOUTH INDUSTRIAL REIT, INC.
56 MILLIKEN STREET, PORTLAND**

TAB 2 - TRANSPORTATION

Traffic Impact

Traffic impact from the proposed warehouse is minimal. The estimated peak hour AM trip generation from the use is estimated to be 41 and the PM trip generation is estimated to be 44. FAADT of Riverside Industrial Parkway is 2678 north of Milliken Street and it is 2848 south of Milliken Street, and the estimated peak hour AM and PM generation from the project will not have a significant impact to adjacent street traffic and will not cause traffic congestion which would reduce the level of service below the Level "D" as described in the 1985 Highway Capacity Manual.

Crash data for the area was requested and obtained from the Maine Department of Transportation (MaineDOT). Crash data for the last three years was provided by the MaineDOT for the intersections of Forest Avenue and Riverside Industrial Park, Milliken Street and Riverside Industrial Park, and Riverside Street and Riverside Industrial Park. The accident data output has been included with the application.

Access and Circulation

Site circulation is primarily designed for tractor trailer trucks servicing the proposed warehouse building. Cars and trucks will enter from the existing Milliken Street entrance and traverse the site to the new driveway off the existing site circulation. A new driveway is proposed for truck traffic to exit onto Riverside Industrial Parkway. No drive-up features are proposed with this project.

Loading and Servicing

The new warehouse will have four loading docks on the westerly side of the building for full size trucks with trailers. An additional four at-grade loading doors are proposed on the southerly side opposite loading docks on the existing building. These loading doors are designed for single unit box trucks and delivery van type vehicles.

Sidewalks

The project is located off Riverside Industrial Parkway and is not a pedestrian destination. The surrounding streets, including Riverside Industrial Parkway and Milliken Street do not have sidewalks. The applicant is requesting a waiver from providing a sidewalk along the frontage.

Public Transit

Riverside Industrial Parkway is not currently served by Portland Area public transit. The nearest public transportation stop is located at the intersection of Riverside Industrial Parkway and Route 302/Forrest Avenue. This is approximately 0.7 miles away from the site driveway. Riverside Industrial Parkway does not have sidewalks for pedestrian traffic.

Off-Street Parking

The site currently has 188 parking spaces, 49 trailer spaces, and 24 loading bays. Existing use of the site includes Paradigm Windows and Tyson /Advance Pierre. Paradigm Windows has approximately 100 employees. Not all employees drive their own car. Tyson/Advance Pierre has approximately 5 employees. A parking study was performed by CES, Inc. at 10:00 AM on October 3, 2018. The main parking lot utilized a total of 122 out of the 147 spaces available, while the side and rear of the existing building utilized 7 out of the total 13 spaces available. The existing site also provides trailer parking spaces, of which a total of 18 out of the 49 available were being used. Inside the fenced area four passenger vehicles and two truck cabs were utilizing the available 28 parking spaces. The available parking spaces within the fenced area were also being used for storage.

According to the Institute of Transportation Engineers, Parking Generation, 4th Edition, and based on the Land Use: 150 – Warehousing, the average peak parking demand for the proposed 72,000 square foot warehousing with office space is 37 spaces. The project proposes to use 37 spaces of the remaining 41 passenger vehicle parking spaces not currently being utilized. Under section 14-332.2(c), the planning board has the authority to establish the parking requirement for site plans over 50,000 square feet. The parking requirement is determined based on the analysis contained within this application and upon the recommendation of the city transportation engineer. As the proposed use is warehousing and based on the parking study performed, CES, Inc. believes that there is sufficient on-site parking and no additional parking spaces are required.

Bicycle Parking

Southwest of the proposed building, a bike rack for 10 bicycles is proposed. According to the ordinance two bicycle parking spaces are required for every 10 vehicle parking spaces for the first one hundred required parking spaces. For the proposed warehousing project 37 parking spaces are required, so a minimum of seven bicycle parking spaces is required.

Snow Storage

The existing site has lawn areas and open areas that are used for snow storage. Additional areas around the proposed warehouse expansion have been identified on the site plan as snow storage areas.

Transportation Demand Management

The site is located in an industrial area outside the multimodal transportation system for the City and other than the proposed bicycle parking spaces provided, other Transportation Demand Management measures would not be utilized.

2017 Maine Transportation Count Book

Cumberland TOWN	STA	ROAD-PN	LOCATION	GROUP	AADT12	AADT13	AADT14	AADT15	AADT16	AADT17
PORTLAND	29907	60583-6	PLEASANT AVE W/O SR 100/US 302 (FOREST)	I	-	-	-	-	1950 C	-
PORTLAND	30402	60584-6	PLEASANT ST NE/O SR 77 (HIGH ST)	I	-	-	-	-	1390 C	-
PORTLAND	30406	60584-6	PLEASANT ST SW/O SR 77 (HIGH ST)	I	-	-	-	-	650 C	-
PORTLAND	17107	60584-6	PLEASANT ST W/O YORK ST	I	-	1440 C	-	-	1210 C	-
PORTLAND	21107	60593-5	PORTLAND ST (OW) W/O PREBLE ST	I	-	2540 C	-	-	2320 C	-
PORTLAND	07908	60597-3	PREBLE ST (OW) NW/O CONGRESS ST	I	-	3030 C	-	-	3070 C	-
PORTLAND	13205	60597-3	PREBLE ST (OW) S/O MARGINAL WAY	I	-	-	-	-	3330 C	-
PORTLAND	13208	60818-3	PREBLE ST EXT NW/O MARGINAL WAY	I	-	17480 C	-	-	16730 C	-
PORTLAND	13403	60818-3	PREBLE ST EXT(NB) E/O SR100/US302(FOREST	I	-	6280 C	-	-	5120 C	-
PORTLAND	16101	60599-5	PRESUMPCOT ST N/O SR 26(WASHINGTON AVE)	I	-	-	-	-	7040 C	-
PORTLAND	11904	60599-5	PRESUMPCOT ST SE/O SR 9 (OCEAN AVE)	I	-	-	-	-	4400 C	-
PORTLAND	28703	60601-6	PROSPECT ST E/O HIGHLAND ST	I	-	-	-	-	970 C	-
PORTLAND	29203	60601-6	PROSPECT ST E/O SR 9 (STEVENS AVE)	I	-	-	-	-	790 C	-
PORTLAND	02007	60601-6	PROSPECT ST W/O DEERING AVE @ RR XING	I	-	980 C	-	-	990 C	-
PORTLAND	28707	60601-6	PROSPECT ST W/O HIGHLAND ST	I	-	-	-	-	1030 C	-
PORTLAND	11404	60605-6	PYA RD SE/O SR 9 (OCEAN AVE)	I	-	-	-	-	440 C	-
PORTLAND	26902	60606-6	QUEBEC ST NE/O MERRILL ST	I	-	-	-	-	400 C	-
PORTLAND	26906	60606-6	QUEBEC ST SW/O MERRILL ST	I	-	-	-	-	470 C	-
PORTLAND	16302	60612-6	RAY ST NE/O SR 26 (WASHINGTON AVE)	I	-	1720 C	-	-	1750 S	-
PORTLAND	20308	60612-6	RAY ST NW/O PENN AVE	I	-	-	-	-	1200 S	-
PORTLAND	05108	60614-5	READ ST NW/O SR 9 (OCEAN AVE)	I	-	6060 C	-	-	6090 C	-
PORTLAND	04904	60614-5	READ ST SE/O BELL ST @ RR XING	I	-	6200 C	-	-	-	-
PORTLAND	07404	60614-5	READ ST SE/O SR 100/US 302 (FOREST AVE)	I	-	4780 C	-	-	4640 C	-
PORTLAND	20406	60842-6	RIVERSIDE IND'L PKWY SW/O RIVERSIDE ST	I	-	-	-	-	2430 C	-
PORTLAND	12301	60842-6	RIVERSIDE INDUSTRIAL PKWY N/O US 302	I	-	-	-	-	2800 C	-
PORTLAND	19101	60621-2	RIVERSIDE ST N/O LARRABEE RD	I	-	25260 C	-	-	24950 S	-
PORTLAND	10901	60621-2	RIVERSIDE ST N/O RIVERSIDE CT	I	-	24720 C	-	-	-	-
PORTLAND	07601	60621-3	RIVERSIDE ST N/O SR 25B (BRIGHTON AVE)	I	-	11200 C	-	-	11520 C	-
PORTLAND	04401	60621-2	RIVERSIDE ST N/O WARREN AVE	I	-	16780 C	-	-	17350 S	-
PORTLAND	04502	60621-4	RIVERSIDE ST NE/O US 302 (FOREST AVE)	I	-	8130 C	-	-	8300 C	-
PORTLAND	05708	60621-4	RIVERSIDE ST NW/O WASHINGTON AVE	I	-	7010 C	-	-	6890 C	-
PORTLAND	04506	60621-2	RIVERSIDE ST SW/O US 302 (FOREST AVE)	I	-	15440 C	-	-	15940 C	-

2017 Maine Transportation Count Book

Cumberland TOWN	STA	ROAD-PN	LOCATION	GROUP	AADT12	AADT13	AADT14	AADT15	AADT16	AADT17
PORTLAND	04708	0302X-1	US 302 (FOREST AVE) NW/O SR 100 (ALLEN)	I	-	-	-	-	28910 C	-
PORTLAND	04608	0302X-1	US 302 (FOREST AVE) NW/O WARREN AVE	I	-	19820 C	-	-	18140 C	-
PORTLAND	12308	0302X-1	US 302 (FOREST) NW/O RIVERSIDE IND PKWY	I	-	-	-	-	14820 C	-
PORTLAND	02605	01019-3	VALLEY ST S/O "D" ST	I	-	-	-	-	3440 C	-
PORTLAND	03303	60748-5	VANNAH AVE E/O SR 9/100/US 302(FOREST)	I	-	2700 C	2650 T	-	2630 C	-
PORTLAND	16607	60748-5	VANNAH AVE W/O BAXTER BLVD	I	-	-	-	-	10830 C	-
PORTLAND	13701	60751-6	VAUGHAN ST N/O BRACKETT ST	I	-	4790 C	-	-	-	-
PORTLAND	15201	60751-6	VAUGHAN ST N/O CARROLL ST	I	-	1560 C	-	-	-	-
PORTLAND	15608	60751-6	VAUGHAN ST NW/O SPRING ST	I	-	1790 C	-	-	-	-
PORTLAND	00308	60751-6	VAUGHAN ST NW/O WESTERN PROM	I	-	2550 C	-	-	2510 C	-
PORTLAND	13705	60751-6	VAUGHAN ST S/O BRACKETT ST	I	-	3830 C	-	-	3460 C	-
PORTLAND	31602	00501-5	VERANDA ST (NB) NE/O OLYMPIA ST	I	-	-	-	-	990 T	-
PORTLAND	31606	00501-5	VERANDA ST (NB) SW/O OLYMPIA ST	I	-	-	-	-	1140 T	-
PORTLAND	05302	60753-5	VERANDA ST NE/O SR 26 (WASHINGTON AVE)	I	-	5740 C	-	-	5290 C	-
PORTLAND	22206	60753-5	VERANDA ST SW/O KENSINGTON ST @BR# 5052	I	-	3860 C	-	-	3960 C	-
PORTLAND	12216	1019S-1	VETERANS BR3945(WB) SW/O US 1A(FORE RV)	I	12750 C	12440 C	12052 C	-	11240 C	-
PORTLAND	06305	60763-6	WALDO ST S/O SR 9/22 (CONGRESS ST)	I	-	500 C	-	-	-	-
PORTLAND	09602	60766-6	WALNUT ST NE/O NORTH ST	I	-	-	-	-	680 C	-
PORTLAND	31102	60766-6	WALNUT ST NE/O SR 26 (WASHINGTON ST)	I	-	-	-	-	2270 C	-
PORTLAND	09606	60766-6	WALNUT ST SW/O NORTH ST	I	-	-	-	-	1860 C	-
PORTLAND	04204	00987-6	WALTON ST SE/O SR 100/US 302(FOREST AVE)	I	-	3790 C	-	-	3100 C	-
PORTLAND	04207	00987-6	WALTON ST W/O SR 100/US 302(FOREST AVE)	I	-	3120 C	-	-	2580 C	-
PORTLAND	04403	60767-3	WARREN AVE E/O RIVERSIDE ST	I	-	17290 C	-	-	17360 C	-
PORTLAND	04606	60767-3	WARREN AVE SW/O US 302 (FOREST AVE)	I	-	13130 C	-	-	11390 C	-
PORTLAND	04407	60767-3	WARREN AVE W/O RIVERSIDE ST	I	-	10330 C	-	-	9540 C	-
PORTLAND	07501	60768-6	WARWICK RD N/O SR 25 (BRIGHTON AVE)	I	-	-	-	-	1980 C	-
PORTLAND	09702	60768-6	WARWICK ST NE/O STARLIGHT RD	I	-	-	-	-	600 C	-
PORTLAND	09706	60768-6	WARWICK ST SW/O SUNSET LN	I	-	-	-	-	1510 C	-
PORTLAND	21807	61148-5	WASHINGTON AVE EXT W/O SR 26/100(AUBURN)	I	-	-	-	-	3190 C	-
PORTLAND	05701	60770-5	WASHINGTON AVE N/O RIVERSIDE ST	I	-	4360 C	-	-	4460 C	-
PORTLAND	21708	60770-4	WASHINGTON AVE NW/O SANBORN ST	I	-	5570 C	-	-	5710 C	-
PORTLAND	05705	60770-4	WASHINGTON AVE S/O RIVERSIDE ST	I	-	4480 C	-	-	4740 C	-

Set Search Criteria

Now that you have created a query and viewed the map results, simply modify the search criteria again to create a new set of crashes to map.

Step 1: Select a location (i.e. state-wide, city/town, county **OR** a police dept.)

State-Wide City/Town
County Police Dept.

Step 2: Select single year or multi-year.

Single Year Multi-Year

Step 3: Select Year(s).

2015 2018

Step 4: Select Type of Crash.

All Types of Crash

Step 5: Select what to view.

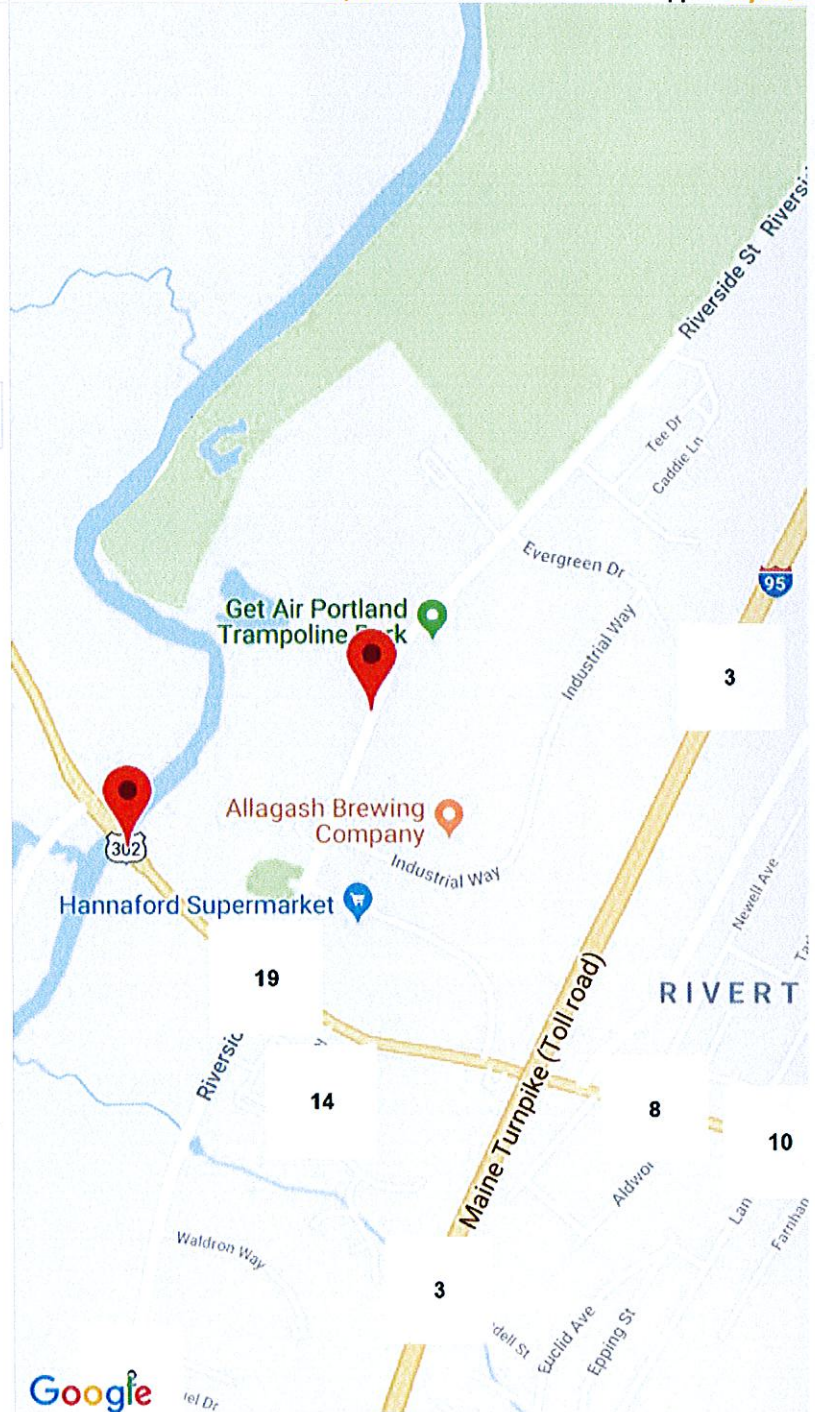
All Crashes
Fatal Crashes
Injury Crashes
Property Damage Only Crashes

Step 6: Submit Query. Press the button below to submit your query and view results.

Helpful
Tips

All/All Types of Crash Crashes - Year: 2015 City or Town: Portland

Number of crashes returned: **2,948** Number of crashes mapped: **2,944**



From: Daniel Heffernan
To: [John Kuchinski](#)
Cc: [Jeff Witherell](#); [Sean Thies](#)
Subject: Fwd: 56 Milliken Street Portland
Date: Tuesday, August 21, 2018 2:06:52 PM

Hi John - For your parking ratio calculation, I would estimate that there are approximately 105 persons on site during the day.

Paradigm Windows takes up the bulk of the auto parking, which we would guess as +/- 100 people. Not all of them bring a vehicle. For Tyson/Advance Pierre, there are usually 4-5 people at work.

I hope that helps. Feel free to contact me if I can assist.

Dan Heffernan
Vice President - Asset Management

Plymouth Industrial REIT, Inc.

260 Franklin Street
Suite 700
Boston, MA 02110
617-340-6539
dan.heffernan@plymouthREI.com

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

From: **Jeff Witherell** <jeff.witherell@plymouthrei.com>
Date: Tue, Aug 21, 2018 at 11:35 AM
Subject: Fwd: 56 Milliken Street Portland
To: Daniel Heffernan <dan.heffernan@plymouthrei.com>

As discussed.

Jeff Witherell, CEO
Plymouth Industrial REIT, Inc.
[260 Franklin Street, 7th Floor](#)
[Boston, MA 02110](#)
[617-340-3826 direct](#)

jeff.witherell@plymouthREI.com

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

From: **John Kuchinski** <jkuchinski@ces-maine.com>
Date: Tue, Aug 21, 2018 at 11:26 AM
Subject: [56 Milliken Street Portland](#)
To: "jeff.witherell@plymouthREI.com" <jeff.witherell@plymouthrei.com>
Cc: Sean Thies <sthies@ces-maine.com>

Jeff

As we discussed on the phone, I have had some follow up with the City of Portland. The current proposal would typically require Maine DEP review but there is a waiver process. I am in the process of requesting that the City continue review of the site through their delegated authority.

For the permit application with the City we will need a concept level floor plan and elevations. I understand you are working with Port City Architects on this.

We will also need information on number of employees on per shift for your tenants as part of a parking study. The intention is to demonstrate that the site has adequate parking for the existing uses and the proposed building.

Thank you,

John

John Kuchinski, P.E. ♦ Senior Project Engineer

P 207.283.9151 | F 207.283.9151 | C 207.899.5307

CESINC

Engineers ♦ Environmental Scientists ♦ Surveyors

146 Main Street, Suite 300, Saco, ME 04072 | www.ces-maine.com

This e-mail may be confidential and is intended solely for the use of the individual to whom it is addressed. Any views or opinions expressed are solely those of the author and do not necessarily represent those of CES, Inc. If you are not the intended recipient (or responsible for delivery of the message to such person), you may not use, copy, distribute or deliver to anyone this message (or any part of its contents) or take any action in reliance on it. In such case, you should delete this message, and notify us immediately at 207 989 4824 or by email brewer@ces-maine.com.

PLYMOUTH REIT
56 MILLIKEN STREET, PORTLAND, MAINE

TAB 3 - ENVIRONMENTAL AND LANDSCAPE FEATURES NARRATIVE

Preservation of Significant Natural Features

The site does not contain any significant or endangered wildlife or plant species. Letters requesting review were sent to both Maine Department of Inland Fisheries and Wildlife and the Maine Natural Areas Program. We have included the agency response to our request for review.

Maine Natural Areas Program responded to our request for information on significant plant species returned with no mapped species on the site. Inland Fisheries and Wildlife also responded with no known habitats or water fowl areas on the site.

We are enclosing a copy of the Sand and Gravel Aquifer Map for western Portland area. The site does not contain a significant aquifer.

CES, Inc. has performed an on-site wetland evaluation and mapping. The results of that mapping are shown on the site plan. A Tier 1 Natural Resources Protection Act application is being filed with the Maine Department of Environmental Protection for filling of approximately 7,391 square feet of forested wetland.

Landscaping and Landscape Preservation

Site landscaping will include preservation of existing trees and vegetation. Except for the clearing required for the new access driveway, existing trees and vegetation between Riverside Industrial Parkway and the proposed warehouse building will be preserved and maintained. Tree protection measures will be utilized during construction to minimize the possibility of damaging trees beyond the work limit. Approximately 8.5 acres of the site will remain wooded. Site impervious cover will be approximately 46 percent. The preserved wooded areas provide sufficient landscaping for the proposed development.

Site Landscaping

Landscaping is proposed at the main entrance of the building. This is an industrial building in an industrial zone. Abutter to the east is the railroad. Between the railroad and the residential area further to the east is an existing screen of dense native vegetation. Existing vegetation is being maintained in building set back areas to the extent practicable.

We are not proposing any additional passenger car parking (See Tab 2) because the site currently has adequate parking spaces for the existing uses and the proposed warehouse expansion. If parking does become an issue there is adequate space in the existing impervious surface to convert underutilized trailer parking into automobile parking. Most of the existing parking areas have adequate landscaping to with the requirements of Zoning.

We are not proposing any additional street trees because we will preserve and protect existing vegetation along Riverside Industrial Parkway to the extent practicable. Disturbance along Riverside Industrial Parkway will be limited to what is needed for the exit drive way and stormwater treatment systems.

August 21, 2018

Ms. Lisa St. Hilaire, Information Manager
Maine Natural Areas Program
93 State House Station
Augusta, ME 04333-0093
Lisa.St.Hilaire@maine.gov

Re: Plymouth Industrial REIT | 56 Milliken Road | Portland, Maine

Ms. St. Hilaire,

Plymouth Industrial REIT is currently in the process of preparing a Site Location of Development Permit Amendment Application for the construction of a 72,000 square foot building at 56 Milliken Drive in Portland, Maine. The facility is an addition to an existing industrial manufacturing facility at 56 Milliken Road, Portland.

As required for permitting requirements, we are submitting this request to your office to determine if there are any potential impacts to fisheries or wildlife habitats located at the site or in the immediate surroundings. Any response can be forwarded to our office located at 146 Main Street, Saco, ME 04072 or by email at jkuchinski@ces-maine.com.

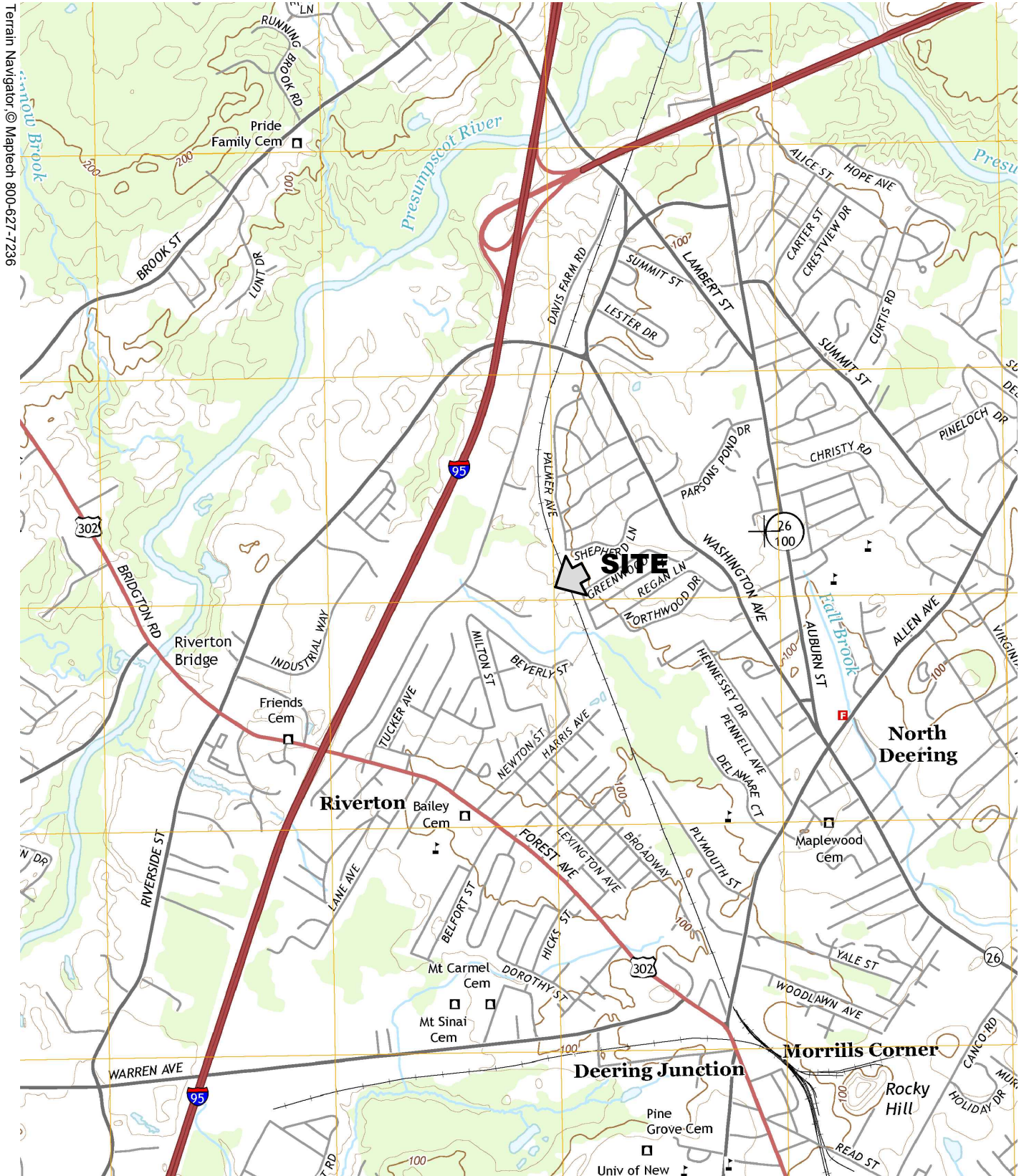
Thank you for your assistance in this matter.

Sincerely,
CES, Inc.

A handwritten signature in blue ink, appearing to read "John D. Kuchinski".

John D. Kuchinski, PE
Senior Project Engineer

JDK/cmc
Encl.



Terrain Navigator, © Maptech 800-627-7236

SOURCE:
U.S.G.S. TOPOGRAPHIC QUADRANGLE
PORTLAND WEST
@ 1:24,000



PLYMOUTH INDUSTRIAL REIT, INC.
56 MILLIKEN STREET, PORTLAND, MAINE
LOCATION MAP

2018-07-06
12254.003



PAUL R. LePAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
93 STATE HOUSE STATION
AUGUSTA, MAINE 04333

WALTER E. WHITCOMB
COMMISSIONER

August 21, 2018

John Kuchinski
CES
146 Main Street, Suite 300
Saco, ME 04072

Via email: jkuchinski@ces-maine.com

Re: Rare and exemplary botanical features in proximity to: Job #1254.003, Plymouth Industrial REIT, 56 Milliken Road, Portland, Maine

Dear Mr. Kuchinski:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request received August 21, 2018 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Portland, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. Based on the information in our files and the landscape context of this project, there is a low probability that rare or significant botanical features occur at this project location.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM



PHONE: (207) 287-8044
FAX: (207) 287-8040
WWW.MAINE.GOV/DACF/MNAP

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kristi Puryear".

Kristen Puryear | Ecologist | Maine Natural Areas Program
207-287-8043 | kristen.puryear@maine.gov



Engineers ♦ Environmental Scientists ♦ Surveyors

August 21, 2018

Mr. Scott Lindsey
Maine Department of Inland Fisheries and Wildlife
15 Game Farm Road
Gray, ME 04039
Scott.Lindsay@maine.gov

Re: Plymouth Industrial REIT | 56 Milliken Road | Portland, Maine

Dear Mr. Lindsey,

Plymouth Industrial REIT is currently in the process of preparing a Site Location of Development Permit Amendment Application for the construction of a 72,000 square foot building at 56 Milliken Drive in Portland, Maine. The facility is an addition to an existing industrial manufacturing facility at 56 Milliken Road, Portland.

As required for permitting requirements, we are submitting this request to your office to determine if there are any potential impacts to fisheries or wildlife habitats located at the site or in the immediate surroundings. Any response can be forwarded to our office located at 146 Main Street, Saco, ME 04072 or by email at jkuchinski@ces-maine.com.

Thank you for your assistance in this matter.

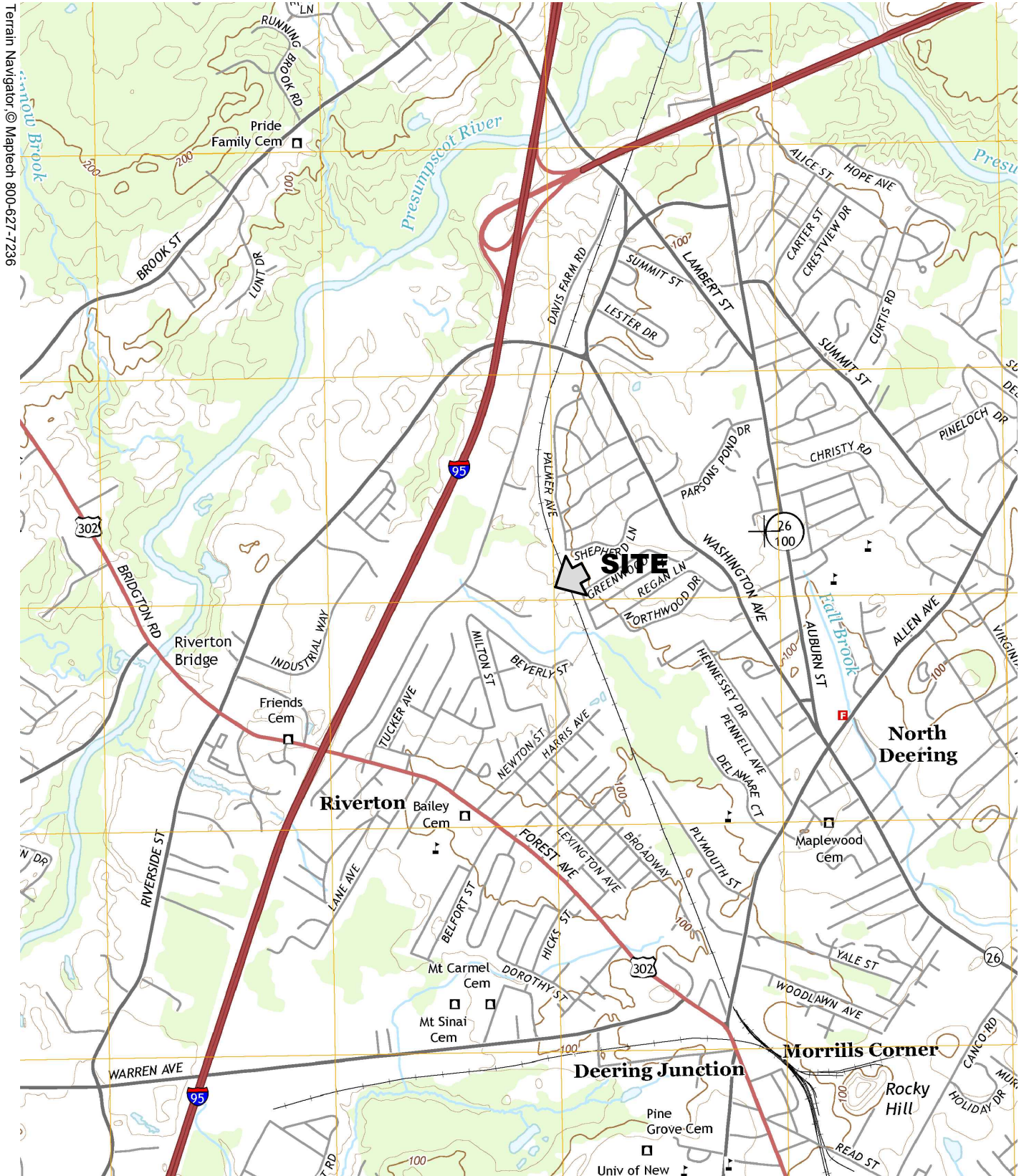
Sincerely,
CES, Inc.

A handwritten signature in blue ink, appearing to read 'John D. Kuchinski', is written over the typed name.

John D. Kuchinski, PE
Senior Project Engineer

JDK/cmc
Encl.

Mr. Scott Lindsey | 08.21.2018 | 12554.003 Page 1



Terrain Navigator, © Maptech 800-627-7236

SOURCE:
U.S.G.S. TOPOGRAPHIC QUADRANGLE
PORTLAND WEST
@ 1:24,000



PLYMOUTH INDUSTRIAL REIT, INC.
56 MILLIKEN STREET, PORTLAND, MAINE
LOCATION MAP

2018-07-06
12254.003



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
284 STATE STREET
41 STATE HOUSE STATION
AUGUSTA, ME 04333-0041
TEL: 207-287-8000

CHANDLER E. WOODCOCK
COMMISSIONER

Wildlife Division – Region A
15 Game Farm Rd.
Gray, ME 04039
Phone: (207) – 657-5745
Fax: (207) – 657-2980
Scott.Lindsay@maine.gov

October 4, 2018

John Kuchinski
CES, Inc.
146 Main St., Suite 300
Saco, ME 04072

Dear John,

You have contacted this office requesting information on any known wildlife habitat of management concern occurring at the site of a proposed addition to an existing commercial development located at 56 Milliken Rd. in Portland.

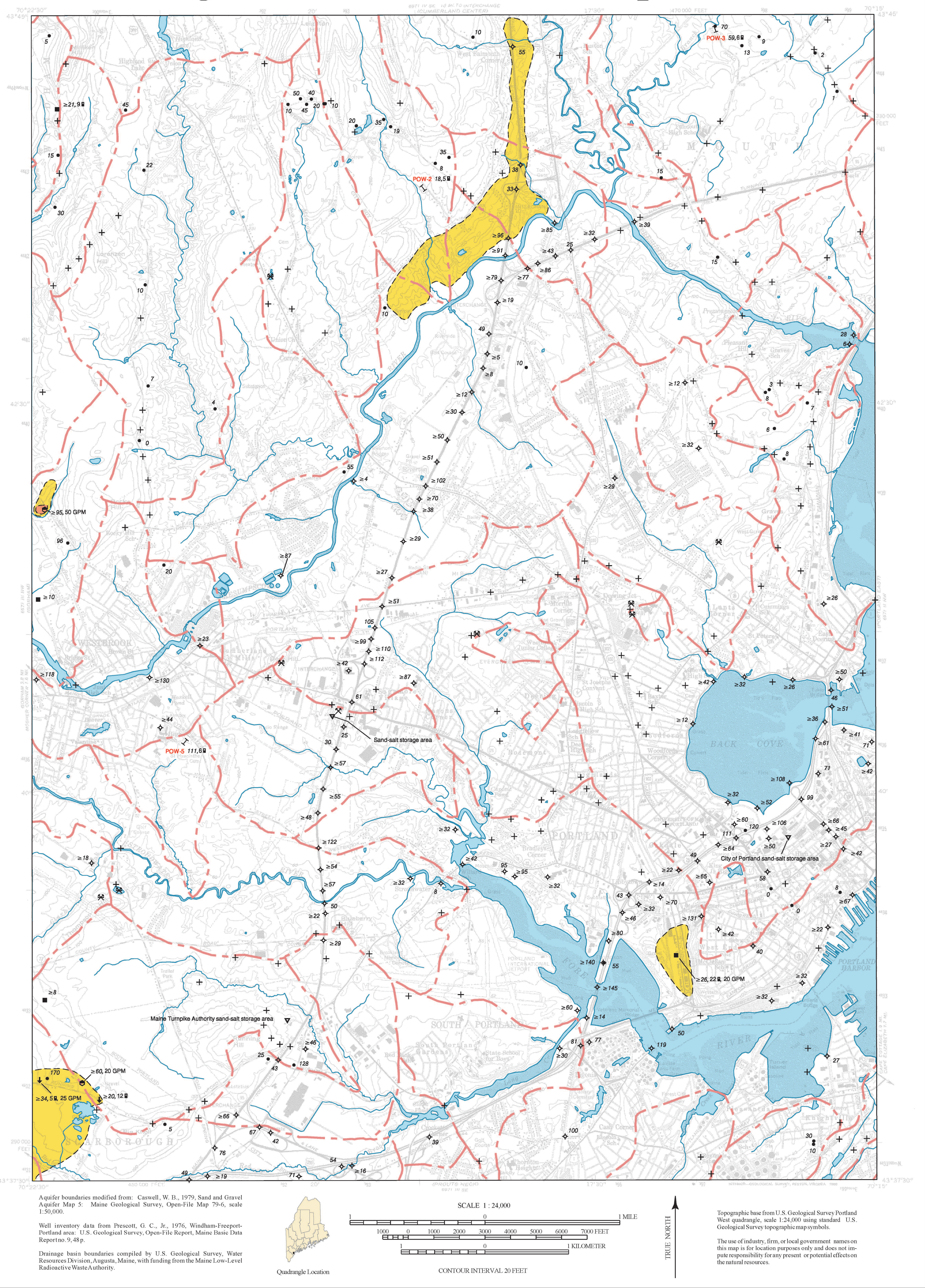
Based upon a review of the most current data available, there are no known essential or significant wildlife habitats, nor any documented occurrences of rare, threatened or endangered species at or adjacent to this property.

Sincerely,

Scott Lindsay

Scott Lindsay
Regional Wildlife Biologist

Significant Sand and Gravel Aquifers

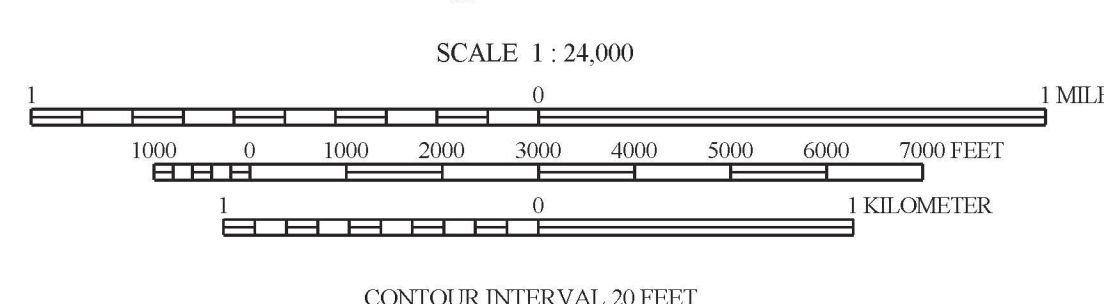


Aquifer boundaries modified from: Caswell, W. B., 1979, Sand and Gravel Aquifer Map 5: Maine Geological Survey, Open-File Map 79-6, scale 1:50,000.

Well inventory data from Prescott, G. C., Jr., 1976, Windham-Freeport-Portland area: U.S. Geological Survey, Open-File Report, Maine Basic Data Report 9-48p.

Drainage basin boundaries compiled by U.S. Geological Survey, Water Resources Division, Augusta, Maine, with funding from the Maine Low-Level Radioactive Waste Authority.

Quadrangle Location



Topographic base from U.S. Geological Survey Portland West quadrangle, scale 1:24,000 using standard U.S. Geological Survey topographic map symbols.

The use of industry, firm, or local government names on this map is for location purposes only and does not impure responsibility for any present or potential effects on the natural resources.

SIGNIFICANT SAND AND GRAVEL AQUIFERS (yields greater than 10 gallons per minute)

- Approximate boundary of surficial deposits with significant saturated thickness where potential ground-water yield is moderate to excellent.
- Surficial deposits with good to excellent potential ground-water yield; yields generally greater than 50 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel, but can include areas of sandy till and alluvium; yield zones are based on subsurface data where available, and may vary from mapped extent in areas where data are unavailable.
- Surficial deposits with moderate to good potential ground-water yield; yields generally greater than 10 gallons per minute to a properly constructed well. Deposits consist primarily of glacial sand and gravel, but can include areas of sandy till and alluvium; yields may exceed 50 gallons per minute in deposits hydraulically connected with surface-water bodies, or in extensive deposits where subsurface data are available.

SURFICIAL DEPOSITS WITH LESS FAVORABLE AQUIFER CHARACTERISTICS (yields less than 10 gallons per minute)

- Areas with moderate to low or no potential ground-water yield (includes areas underlain by till, marine deposits, collan deposits, alluvium, swamps, thin glacial sand and gravel deposits, or bedrock); yields in surficial deposits generally less than 10 gallons per minute to a properly constructed well.

SEISMIC-LINE INFORMATION

Profiles for 12-channel seismic lines may be viewed at the Maine Geological Survey. Length of 12-channel seismic lines as shown on the map is to scale. All single-channel lines ranged from 80 to 300 feet long and are not shown to scale.

- Depth to bedrock, in feet below land surface.
- Depth to bedrock exceeds depth shown (based on calculations).
- Depth to water level, in feet below land surface.
- Twelve-channel seismic line, with depth to bedrock and depth to water shown at the midpoint of the line, in feet below land surface.
- Single-channel seismic line, with depth to bedrock and depth to water shown at each end of the line, in feet below land surface. Unless otherwise indicated, data shown above the line-identifier box refers to the northern end of the seismic line.

The 3-letter identifier for a line is an abbreviation for the topographic quadrangle. If the 3-letter identifier for the line is followed by a number (ex: MAP - 7, MAP - 4), the line is a 12-channel line. If the identifier is followed by a letter (ex: MAP - E, MAP - P), the line is a single-channel line. Twelve-channel seismic interpretations by C. D. Neil.

OTHER SOURCES OF INFORMATION

- Thompson, W. B., 1999, Surficial materials of the Portland West quadrangle, Maine: Maine Geological Survey Open-File Map 99-38.
- Thompson, W. B., 1997, Surficial geology of the Portland West quadrangle, Maine: Maine Geological Survey, Open-File Map 97-51.
- Caswell, W. B., 1987, Ground water handbook for the state of Maine, Second Edition: Maine Geological Survey, Bulletin 39, 135 p.
- Thompson, W. B., 1979, Surficial geology handbook for coastal Maine: Maine Geological Survey, 68 p. (out of print).
- Kendall, D. L., 1987, Glaciers and granite: A guide to Maine's landscape and geology: DownEast Books, Camden, Maine, 240 p.
- Thompson, W. B., and Borns, H. W., Jr., 1985, Surficial geologic map of Maine: Maine Geological Survey, scale 1:500,000.

GEOLOGIC AND WELL INFORMATION

- Depth to bedrock, in feet below land surface
- Penetration depth of boring; $\geq$ symbol refers to minimum depth to bedrock based on boring depth or refusal
- Depth to water level in feet below land surface (observed in well, spring, test boring, pit, or seismic line)
- Gravel pit (overburden thickness noted in feet, e.g. 5-12')
- Quarry
- Yield (flow) of well or spring in gallons per minute (GPM)
- Spring, with general direction of flow
- Drilled overburden well
- Dug well
- Observation well (project well if labeled, nonproject well if unlabeled)
- Test boring (project boring if labeled; nonproject boring if unlabeled)
- Driven point
- Test pit
- Drilled bedrock well
- Potential point source of ground-water contamination
- Bedrock outcrop
- Surface-water drainage-basin boundary; surface-water divides generally correspond to ground-water divides. Horizontal direction of ground-water flow generally is away from divides and toward surface-water bodies.

Portland West Quadrangle, Maine

Compiled by:

Craig D. Neil

Preliminary aquifer boundaries mapped by:

Daniel B. Locke

Digital cartography by:

Michael E. Foley

Robert G. Marvinney

State Geologist

Cartographic design and editing by:

Robert D. Tucker

Bennett J. Wilson, Jr.

Funding for the preparation of this map was provided in part by the Maine Department of Environmental Protection.



Maine Geological Survey

Address: 22 State House Station, Augusta, Maine 04333

Telephone: 207-287-2801 E-mail: mgs@maine.gov

Home page: <http://www.maine.gov/dnr/mc/nrmc.htm>

Open-File No. 99-11
1999

WHAT IS AN AQUIFER?

Ground water, as the name implies, is water found below the land surface in the pore spaces between sand grains and in fractures in the bedrock (see diagrams below). An aquifer is a water-bearing geologic formation capable of yielding a usable amount of ground water to a well. In Maine there are two types of aquifers: loose soil materials (such as sand, gravel, and other sediments) and fractured bedrock. A sand and gravel deposit is considered a significant aquifer when a well in that deposit is capable of being continuously pumped at a rate of 10 gallons per minute (gpm) or more. To sustain a yield of 10 gpm or more, a deposit must be permeable enough for water to flow readily into the well as it is pumped (see section on porosity and permeability below), and there must be a sufficient depth of water in the well so that it will not be pumped dry.

The diagram below shows a schematic cross section of a sand and gravel aquifer in Maine. The symbols above the diagram correspond to the well symbols shown on the map at left. Information typically shown for these wells includes type of well, depth to bedrock, depth to water, and well yield. The blue line in the diagram is the water table. The area below the water table is called the saturated zone, where all pore spaces between the sediment particles are filled with water. In order to yield water, a well must extend below the water table into the saturated zone. Notice that the water table corresponds to the water level in most wells and in the stream.

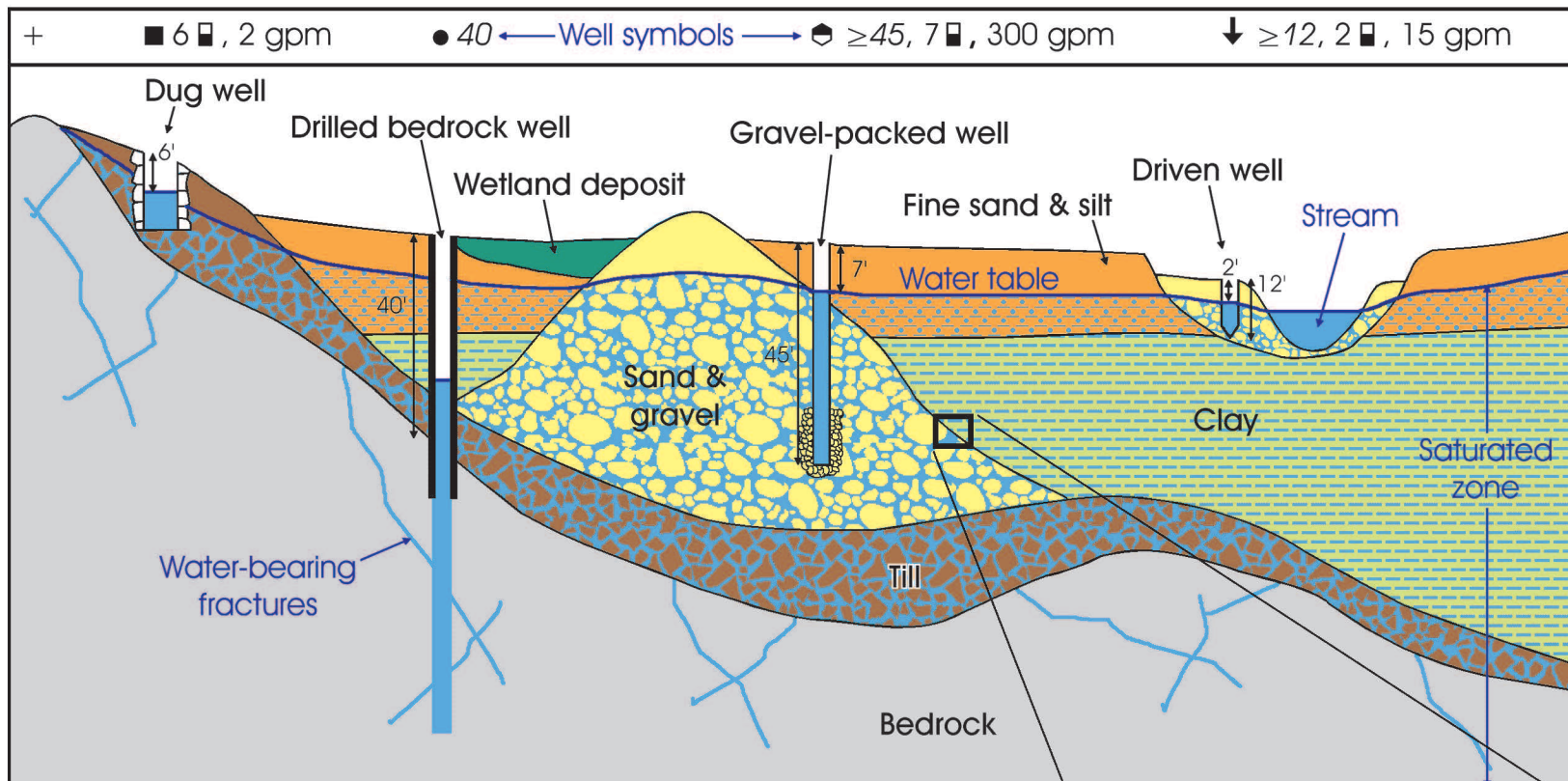
Several types of wells, common in Maine, are shown in the diagram. A dug well is a large diameter hole excavated by hand or backhoe. The hole is kept from caving in by installing a lining that may be stone, tile, or cement blocks. The hole must be deep enough to extend below the water table. The shallow dug well in the diagram has a yield of 2 gpm. Although the yield is often low, dug wells generally supply enough ground water for a household because of the large amount of water stored in the well.

A gravel-packed well is usually installed into coarse-grained sediment and is drilled with a much larger diameter than the final casing and screen diameter. To increase the yield and pumping efficiency of the well, the space around the well screen is filled with selected gravel that increases the permeability in the immediate vicinity of the well. The gravel-packed well in the diagram has a high yield of 300 gpm. Such high-yielding gravel-packed wells are commonly drilled for municipal or industrial water systems.

A driven well or well point can be installed into sand and gravel where the water table is within about 20 feet of the ground surface. A 2 to 3 inch diameter pipe, equipped with a well screen at its lower end, is driven into the deposit until the screen is below the water table. This pipe acts as a casing, and water is pumped directly from the aquifer. The driven well in the diagram has a significant yield of 15 gpm. Although the yield is relatively high, driven wells generally only supply a single household because very little water is stored in the well casing.

Wells of any type constructed in the other sediments shown in the diagram (clay or fine sand and silt) would yield some water, but yields would be lower than for wells in coarse-grained sand and gravel deposits.

Another type of well common in Maine is the drilled bedrock well. This well is drilled into the underlying rock with steel casing to isolate the well from potential surface-water contamination. In this type of well, water is found when the well hole intersects water-bearing fractures in the bedrock. Notice how the water level in this well is not the same level as the water table. The well casing isolates the bedrock well from the overlying sediments. The water level is controlled by water pressure in the fractures in the bedrock and is not related to the water table in the overlying materials.

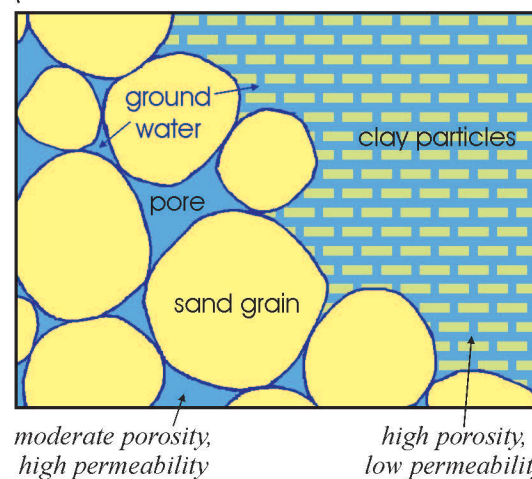


POROSITY AND PERMEABILITY

The diagram at right is an enlarged view of a section of the diagram above. Note that the section shown is below the water table and that ground water completely fills the pore spaces between the sediment grains. In an aquifer, the more pore space there is, the more water the aquifer can hold. This is called the porosity of a deposit. Permeability refers to the ability of a surficial deposit to transmit water. Permeability depends on the size of the spaces between the sediment grains.

Permeability is related to porosity, but is not the same. Porosity determines the capacity of the material to hold water. Permeability determines its ability to yield water. For example, clay is made of tiny particles with a large amount of pore space between them. However, the pore spaces are so small that they create a resistance to flow which reduces ground water permeability. Sand and gravel may not be as porous as clay, but the pore spaces are larger and better connected and the materials are much more permeable.

Permeability is an important characteristic since it determines whether ground water can actually be drawn into a pumping well.



HOW ARE AQUIFERS MAPPED?



Operating a twelve-channel seismicograph, Piscataquis County, Maine.

When mapping sand and gravel aquifers, geologists visit gravel pits, stream banks, road cuts, and other surface exposures to describe materials and identify deposits. This surficial geologic mapping is supplemented with seismic-refraction studies and the installation of observation wells and test borings. In addition, much information about an aquifer may already be available from water-company exploration, large construction projects, town well inventories, and other sources. This information, along with aerial photography and previously published maps, allows the geologist to define the boundaries of favorable surficial deposits and estimate how well the deposits will yield water to a well.

The boundaries of favorable surficial deposits do not necessarily coincide with the aquifer boundaries. In some areas, a thin cover of favorable coarse-grained material may overlie fine-grained sediments, till, or bedrock. A well in that material would not be able to sustain a yield of 10 gpm, so the area would not be mapped as an aquifer. In other areas, fine-grained sediments or till may overlie favorable coarse-grained sediments and the subsurface deposit may not be recognized as an aquifer.

Single- and 12-channel seismic-refraction studies are conducted to determine the saturated thickness of a deposit by establishing the depth to water table and bedrock surface. The 12-channel seismic survey has the additional advantage of providing the topography of the buried bedrock surface at a site.

Installing monitoring wells and drilling test borings provide direct information about the aquifer characteristics of a deposit. This work provides information on the depth to water table and bedrock surface, water quality, and how easily the sediment transmits water.

GROUND-WATER FLOW AND CONTAMINATION

Ground water is replenished or recharged by rainwater and melting snow that soak into the soil. This water percolates downward and eventually reaches the water table. When recharge is high during spring snowmelt and fall rains, the amount of ground water increases and the water table rises. When recharge is low during the late summer or when the ground is frozen during the winter, the water table becomes lower.

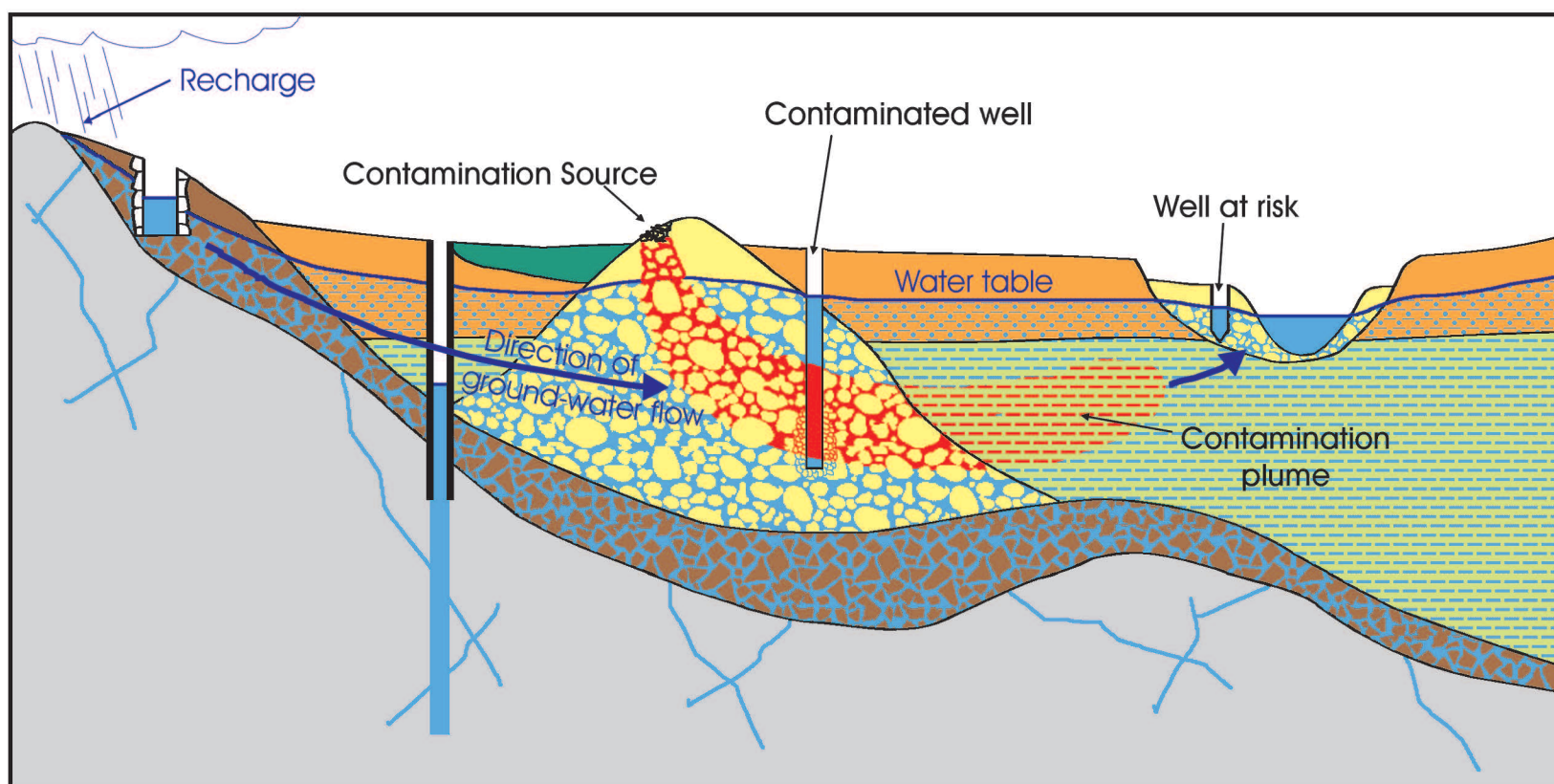
Notice in the diagram below that ground water is not static; it flows. This concept is very important, especially when ground water becomes contaminated. Once in the ground-water system, contaminants usually travel along the paths followed by ground water and are sometimes able to migrate considerable distances over time.

In the diagram below, a plume of contamination originates at the source in the sand and gravel deposit. This source could be a landfill, a leaking fuel storage tank, or an accidental spill. As the contaminant seeps into the subsurface system and enters the aquifer, it flows with the ground water. In the diagram, the plume contaminated the gravel-packed well as it passed by. The driven well near the stream is not contaminated, but is at risk since the plume is flowing in that direction. The dug well on the hillside, however, is not affected because it is upgradient of the source, hence the contaminated ground water flows away from this well.

Once ground water is contaminated, it is very difficult and expensive to correct. To design a clean-up plan, monitoring wells are installed under the direction of a hydrogeologist or other specialist. These wells define the three-dimensional extent of the affected area. Sometimes it is possible to pump contaminants to the surface using remediation wells within the plume. Often the only solution for a homeowner is to install filtering devices or to abandon the well and find an alternative water supply.



Installing a monitoring well, Washington County, Maine.



HOW TO USE THIS MAP

Types of Information Shown on this Map: The yellow and red colored areas on the map indicate significant aquifers, zones where ground-water yield is estimated to be 10 gpm or greater. The boundaries of the aquifers are drawn by a geologist based, in part, on the well data shown on the map. Areas not mapped as aquifer may be thin or unsaturated sand and gravel deposits, surficial deposits other than sand and gravel, or bedrock.

The well data on the map provide information about the type of well, depth to water table, depth to bedrock, and yield of the wells in the area. This information is useful when making decisions about water supply, a drainage plan, or the need for blasting.

Information from seismic refraction studies also is shown on the map. Seismic studies give detailed information about depth to water table and depth to and shape of the bedrock surface. Geologic cross sections generated from seismic information are shown in associated reports listed in the references below the map at left.

Surface-water drainage-basin boundaries are also shown on the map. Horizontal direction of ground-water flow generally is away from drainage divides and toward surface-water bodies.

Uses of this Map: Sand and gravel aquifer maps are useful in two major categories of decision-making: ground-water supply and ground-water protection. For ground-water supply, these maps are useful in locating areas favorable for developing water supplies for municipal, industrial, or residential use. Information on the map, such as depth to bedrock and well yield, indicate the potential for ground-water production.

Ground-water protection is another important function of these maps. Knowledge of the location and extent of sand and gravel aquifers is critical when siting potential contamination sites such as landfills and salt storage facilities. When used in conjunction with other geologic information, this map can help planners and municipal officials make much more informed decisions to guide industrial growth or residential development.

If ground-water contamination occurs, the general trend of the plume migration can be deduced from these maps by analyzing the drainage basin boundaries and the local surface water bodies. For further assistance in interpreting this map, contact a geologist at the Maine Geological Survey.

PLYMOUTH REIT
56 MILLIKEN STREET, PORTLAND, MAINE

TAB 4 - ENVIRONMENTAL AND STORMWATER NARRATIVE

A. NARRATIVE

The intent of this Stormwater Management Plan is to comply with the requirements of the City of Portland Stormwater Management Technical Manual and the Maine Department of Environmental Protection (MDEP) Chapter 500 regulations. The MDEP has delegated review authority to the City of Portland, as discussed in the enclosed correspondence between the MDEP and CES, Inc. This project involves the development of approximately five acres for the construction of a 72,000 square foot (SF) warehousing facility. Additional impervious area includes approximately 57,600 SF of new driveway and maneuvering areas and 26,700 SF of existing impervious area to be conveyed to a new stormwater treatment structure. The stormwater management plan proposes treatment for 100% of the impervious area and 100% of the 178,897 SF of developed area in this project.

The Project is located on an existing developed site consisting of Tax Map parcels 334 A014001 and 354A A006. Total site area is approximately 31.21 acres. The site was originally developed in 1966. In 1995 an expansion of the building and expansion of the truck and car parking areas triggered a Site Location of Development Act (SLODA) permit (L-18722-26-B-D). Since 1975 approximately 5.7 acres of impervious area (Structure) was added to the site. The proposed development will add approximately 2.98 acres of impervious area bring the total impervious area since 1975 to 9.29 acres. MDEP has not asserted jurisdiction. Total existing impervious areas is approximately 11.40 acres. The proposed project will bring the total site impervious area to 14.38 acres.

Erosion control measures will be in place prior to the start of any construction. Temporary and permanent measures will be installed in accordance with Section 4C of this application. Upon completion of the construction and stabilization of all disturbed areas, the temporary erosion control measures will be removed.

Development within Urban Impaired Stream Watersheds: The proposed development is within the watershed of urban impaired stream Dole Brook. The compensation fee for the proposed impact to Dole Brook is \$42,775, in accordance with Chapter 501.

Basic Erosion and Sedimentation Control Standards for all Development: Information is provided as required in Section 4C – Basic Standard Submission.

Flooding Standard Submission: The following information is provided in accordance with the Flooding Standard Submission, as required by the City of Portland Stormwater Management Technical Manual – Stormwater Management Plans for New Development.

1. Control of Peak Flows: The project is required to meet Flooding Standards in accordance with Chapter 500 requirements. The Pre and Post-Development Hydrology models and narrative are located in Section 4B.
2. Details, Design, and Specifications: The model runoff calculations are performed using a HydroCAD model. Sizing of the required stormwater treatment methods are included in Section 4A.

General Standards Submission: The following Information is provided as required in the General Standard Submission.

1. Narrative: The proposed project will occupy approximately 5 acres of the 31.21-ac site. Most of the remaining land to the East has been developed. The driveway, parking area and vehicular maneuvering areas account for approximately 84,300 SF of new impervious area. The facility's roof system accounts for 72,000 SF of new impervious area. Treatment methods also account for 26,700 SF of existing impervious area, as the current treatment is in the location of the proposed building. Proposed treatment methods include a roof drip edge and three underdrained soil filters adjacent to the proposed impervious areas.
2. Drainage Plans: A plan set is provided as part of Section 4 requirements and Pre- and Post-Development Hydrology Plans are provided in Section 4B under the Stormwater Management Quantity Report portion of this Application. The plan set includes the locations of BMP's used to treat the stormwater from this development, and a site detail sheet is included in Section 4B that provides detail information on the grassed underdrained soil filters.
3. Calculations: Underdrained soil filter sizes were determined in accordance with Chapter 500 and the MDEP Stormwater BMP Technical Design Manual, Volume III.
4. Details, Designs, and Specifications: The project is currently proposing to control runoff quality issues using a roof drip edge and three grassed underdrained soil filters (GUSF).
5. Phosphorus Standards Submission: The proposed development is not in a lake watershed, and is therefore not required to meet the Phosphorus Standards Submission.

SECTION 4A

STORMWATER QUALITY CONTROL NARRATIVE

The proposed Plymouth REIT is being developed for the construction of a warehousing facility in Portland, Maine. The site will be accessed by a 400-foot driveway off of Riverside Industrial Parkway. The approximately 5-acre development will involve the installation of about 129,600 SF of new impervious area. The development also proposes the removal of an existing underdrained soil filter as it interferes with the new building footprint. The filter treated runoff from approximately 26,700 SF of existing impervious area. Stormwater from the area will be conveyed through catch basins to a new underdrained soil filter. As a result of these improvements, the project is required to comply with the City of Portland Stormwater Management Technical Manual – Stormwater Management Plans for New Development. According to Maine DEP Chapter 500 regulations, 95% of proposed impervious surfaces and 80% of the developed area must be treated.

To treat stormwater associated with the proposed development, Plymouth REIT is proposing the construction of a roof drip edge and three grassed underdrained soil filters (GUSF) to meet stormwater quality standards. The GUSFs will be located in the south edge of the facility entrance to maximize the treatment of runoff. The locations of these BMP's are shown on the plan set.

The following tables summarize the impervious and developed area created by the project as well as the treatment structure, area treated, and relationship with the total developed and impervious areas for the project.

PROJECT SITE AREA

PROJECT AREA	IMPERVIOUS AREA	DEVELOPED AREA
New Site Area	129,596 SF	152,197 SF
Existing Site Area	26,700 SF	26,700 SF
TOTAL	156,296 SF	178,897 SF

STORMWATER TREATMENT SYSTEMS

TREATMENT METHOD	SITE AREA TREATED	
	IMPERVIOUS	DEVELOPED
GUSF 1	58,335 SF	69,830 SF
GUSF 2	3,232 SF	7,431 SF
GUSF 3	6,529 SF	13,436 SF
Roof Drip Edge	88,200	88,200
TOTAL	156,296 SF	178,897 SF
PERCENT OF TOTAL AREA TREATED	100.0 %	100.0 %

A description of the treatment type is as follows:

1. **Grass Underdrained Soil Filter (GUSF):** Three GUSF's have been proposed to treat stormwater runoff from the site. Runoff from paved areas will be conveyed through ditches along proposed pavements to the corresponding GUSF along the driveway. The proposed stormwater quality control devices have been designed according to the standards outlined in the Stormwater Management for Maine, Volume III BMP Manual, January 2006 and revised May 2016. Construction and maintenance will be according to standards outlined in this manual.

GUSF 1:

Impervious Area: 58,335 SF

Landscape Area: 5,244 SF

Chapter 500 sizing is based on 1" of the impervious area + 0.4" of the landscaped area.

$58,335 \text{ SF} \times 1" = 4,861 \text{ CF}$ or Required Storage

$11,495 \text{ SF} \times 0.4" = 383 \text{ CF}$ of Required Storage

5,244 CF of Required Storage @ 18" Deep = 3,496 SF of Filter Area.

3,900 SF was provided by design.

GUSF 2:

Impervious Area: 3,232 SF

Landscape Area: 4,199 SF

Chapter 500 sizing is based on 1" of the impervious area + 0.4" of the landscaped area.

$3,232 \text{ SF} \times 1" = 269 \text{ CF}$ or Required Storage

$4,199 \text{ SF} \times 0.4" = 140 \text{ CF}$ of Required Storage

409 CF of Required Storage @ 18" Deep = 273 SF of Filter Area.

370 SF was provided by design.

GUSF 3:

Impervious Area: 6,529 SF

Landscape Area: 6,907 SF

Chapter 500 sizing is based on 1" of the impervious area + 0.4" of the landscaped area.

$6,529 \text{ SF} \times 1" = 544 \text{ CF}$ or Required Storage

$6,907 \text{ SF} \times 0.4" = 230 \text{ CF}$ of Required Storage

774 CF of Required Storage @ 18" Deep = 516 SF of Filter Area.

620 SF was provided by design.

2. **Roof Drip Edge:** A roof drip edge has been proposed to treat impervious area from Subarea 5. The drip edge has been sized in accordance with the BMP Manual. The stone's porosity of 0.4 will allow enough runoff to be stored to meet the flooding standard, as presented in the HydroCAD model. The proposed stormwater quality control device has been designed according to the standards outlined in the Stormwater Management for Maine, Volume III BMP Manual, January 2006 and revised May 2016. Construction and maintenance will be according to standards outlined in this manual.

Roof Area: 72,000 SF

Chapter 500 sizing is based on 1" of the roof area

72,000 SF x 1" = 6,000 CF of Required Storage

6,000 CF of Required Storage @ Porosity of 0.4 = 15,000 CF Stone Required

Drip Edge Stone Volume Provided to Meet Flooding Standard = 28,500 CF

SECTION 4B

STORMWATER MANAGEMENT QUANTITY NARRATIVE

As previously stated, the project is required to meet the flooding standard under Chapter 500 Section 4.E(2)(a). To meet the flooding standard, HydroCAD calculations were performed to compare pre-development and post-development conditions to determine curve numbers and peak runoff flows.

The undeveloped portion of the property is primarily forested with a mix of softwoods and hardwoods. Terrain is relatively flat, but two streams bisect the area, one entirely on the property and the other primarily on the adjacent property to the North. Both streams are located within steep-sided gullies. There is an additional low area near the north end of the property. Soils on the site are classified by the USDA web soil survey as cut and fill material in the existing development and a combination of Type C and D in the undeveloped portion of the property. A majority of the area proposed for development drains to the stream inside the property boundary. The overall runoff from the site drains south to Dole Brook. The post-development hydrology plan was broken into eight subareas encompassing the same footprint as pre-development hydrology plan. Runoff from the rooftop of the proposed warehouse is stored in the voids of a crushed stone drip edge with an underdrain. This stormwater is conveyed through a storm drainage pipe before outletting to the on-site stream. The existing turnaround is currently treated by an underdrained soil filter to be removed upon construction of the warehouse. To replace this treatment method, stormwater is captured by two catch basins and conveyed through piping to GUSF 1. A majority of new pavements will be contained and treated by a combination of the three proposed underdrained soil filter. These structures will outlet controlled and treated stormwater to the adjacent stream.

A summation point was chosen in the same location between pre-development and post-development to compare peak flow runoff for the 2-year, 10-year, and 25-year storm events. The summation point is located to the South of the site. Based on results of the HydroCAD, it is expected that stormwater runoff from the site will be similar or lessened in post-development conditions as in pre-development conditions. The drip edge and GUSFs detain stormwater runoff to allow a controlled flow before exiting the project site. A comparison of each of the watershed areas in both Pre- and Post-Development is organized in the table below.

		2 Year (cfs)	10 Year (cfs)	25 Year (cfs)	25 Year Net Change	25 Year % Change
Summation Point	Pre	45.70	78.68	105.67	-3.89	-3.65
	Post	42.65	77.47	101.78		

PRE-DEVELOPMENT HYDROCAD RESULTS
POST-DEVELOPMENT HYDROCAD RESULTS
PRE-DEVELOPMENT HYDROLOGY PLAN
POST-DEVELOPMENT HYDROLOGY PLAN
STORMWATER TREATMENT PLAN
DETAIL SHEETS

SECTION 4C

BASIC STANDARDS SUBMISSION

An Erosion and Sedimentation Plan was prepared for Plymouth REIT. The erosion control notes address permanent stabilization measures, seeding, and mulching rates, as well as the timing of installation. Construction and installation details are also provided for the project. Additional descriptions and specifications are provided in Erosion and Sedimentation Control.

An Inspection and Maintenance Plan has been included in this Section. This plan includes a list of measures to be inspected and maintained. It also includes the frequency and responsible parties to implement the plan. A Housekeeping Plan has also been included in this Section. This plan provides controls to address spill prevention and possible contamination of the site.

EROSION AND SEDIMENTATION CONTROL

The proposed construction will require the implementation of temporary and permanent erosion control measures. These measures will be implemented in accordance with the Maine Erosion and Sediment Control Best Management Practices (BMPs) Manual, prior to removal of any on-site vegetation or disturbance of any on-site soil. The general erosion and sediment control specifications and details, as provided within this section, are intended to describe measures to be used by contractors working on the site to maintain compliance with the standards established in the BMPs.

The proposed location and use of erosion control measures on-site are shown on the plan located in Section 4 of this application. There are no known existing erosion control concerns with the site. Implementation of proper erosion control measures will be required by site contractors to confine sediment and debris within the limit of soil disturbance. Proper use and maintenance of erosion control measures provide protection against off-site transport of sediment and discharge of sediment to undisturbed areas of the development.

EROSION AND SEDIMENTATION CONTROL PLAN

1. Pollution Prevention: The proposed project includes the construction of a warehousing facility in Portland, Maine. The facility will be approximately 72,000 square feet (SF), with associated roads and parking lots totaling approximately 84,300 SF. All disturbed areas, with the exception of the building and parking/maneuvering areas, will be stabilized with vegetation or riprap. Proposed down-gradient wooded areas and streams will be protected with the use of silt fence or additional control devices if necessary during construction.

2. Sediment Barriers: Prior to construction, sediment barriers will be installed downgradient of all disturbed areas. Sediment barriers will include silt fence, bark mulch berms, hay bales or additional measures which may become necessary.

Sediment barriers will also be installed adjacent to any significant natural drainage channel, not otherwise protected. All installed sediment barriers will be maintained until disturbed areas are permanently stabilized.

3. Temporary Stabilization: Disturbed areas, which have lost natural vegetation cover, and will not be worked for more than seven days, will be temporarily stabilized. Areas within 75 feet of a wetland or waterbody will be stabilized within 48 hours of the initial disturbance or prior to any significant storm event, whichever comes first.

Temporary stabilization will include mulch or other non-erodible material such as erosion control mesh mats. In some instances, temporary stabilization may include temporary mulch and seeding, based on the time until the area will be worked or permanently stabilized.

4. Removal of Temporary Sediment Control Measures: After permanent stabilization of disturbed areas has been completed, temporary measures, such as silt fence, will be removed within 30 days. Any accumulated sediments will be removed and any disturbed areas permanently stabilized.

5. Permanent Stabilization: Once proposed construction is completed all disturbed areas, not otherwise permanently stabilized, will be permanently stabilized with vegetation, seeding, or permanent mulch.

Vegetation plantings and seeding will include species which are suitable for the light, soil, and moisture conditions of the area. Seeded areas will be protected with temporary mulch or erosion control blankets.

Concentrated flows will not be allowed on newly seeded areas until an adequate catch of vegetation is established. It may be necessary to reseed and mulch again if germination is sparse, plant coverage is spotty, or topsoil erosion is evident. For seeded areas, permanent stabilization means a 90% cover of healthy plants with no evidence of washing or rilling of the topsoil.

Other permanent measures associated with the project include the following:

- A. **Permanent Mulch:** Permanent mulching means total coverage of exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.
- B. **Permanent Riprap:** Permanent riprap means that slopes and ditches stabilized with riprap have an appropriate backing of well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Properly sized angular stones will be utilized.
- C. **Permanent Ditches, Channels, and Swales:** Permanent stabilization means the channel is stabilized with a 90% cover of healthy vegetation or with a well-graded riprap lining. There must be no evidence of slumping of the channel lining, undercutting of the channel banks, or down-cutting of the channel.

6. Winter Construction: Winter construction is not anticipated at this time. If Winter construction occurs, additional provision will be made to protect disturbed areas from runoff. Winter construction includes the time between November 1 and April 15.

7. Stormwater Channels: Ditches, swales, and open stormwater channels are planned as part of this project. They will be stabilized with either vegetation or rip rap depending on the situation to prevent soil erosion.

8. Roads: The proposed roadways will vary in width, cross section and surface. These roads will be graded to collect water in various proposed BMP's. Some sections of roadway will be super-elevated to send runoff to the desired BMP.

9. Culverts: Culverts utilized in this project will be protected on both ends and the outlet pool to prevent scour.

10. Parking Areas: The proposed project includes parking areas graded to collect runoff in the various proposed BMP's.

11. Additional Requirements: No additional requirements are proposed at this time.

INSPECTION AND MAINTENANCE

The Owner and their Contractor will be responsible for maintenance during construction. The Owner will be responsible for post construction maintenance of the site and the devices that provide treatment for the stormwater from the site.

A Pre- and Post-Construction Maintenance Plan for the stormwater management system is included in this section. Any questions regarding the design and maintenance of the Stormwater Management and Erosion and Sedimentation Control Systems should be directed to:

John Kuchinski, P.E.
CES, Inc.
146 Main Street, Suite 300
Saco, ME 04072

MAINTENANCE PLAN OF STORMWATER MANAGEMENT SYSTEM

The Maine Department of Environmental Protection's (MDEP) Stormwater Management for Maine: Best Management Practices latest edition and the MDEP's Chapter 500: Stormwater Management were used as guidelines in the development of this Maintenance Plan. General maintenance requirements are listed below.

A. DURING CONSTRUCTION

The general contractor will be responsible for the inspection and maintenance of all stormwater management system components during construction.

Inspection: Inspection of disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site will be performed at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. Inspections shall be conducted by a person with knowledge of erosion and stormwater control, including the standards and conditions in the permit.

Maintenance: All erosion control measures will be kept in effective operating condition until areas are permanently stabilized. If BMPs need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation will be completed within 7 calendar days and prior to any rainfall event.

Documentation: A log shall be kept summarizing the inspections and any corrective action taken. A copy of the log is provided at the end of this section, and is titled, Log of Inspections During Construction.

B. POST-CONSTRUCTION

The Owner will be responsible for the inspection and maintenance of all stormwater management system components associated with the proposed project. A list of corrective actions titled Inspection and Maintenance Plan for Stormwater Management Structures (BMPs) is provided at the end of this section.

Inspection and Corrective Action

- 1. Vegetated Areas:** Inspections and maintenance of vegetated areas will be performed early in the growing season or after significant rainfall to identify any erosion problems. Areas where erosion is evident will be covered with an appropriate lining, or erosive flows will be diverted to an area able to handle the flows. Any bare areas or areas with sparse growth will be replanted.

2. **Ditches, Swales, and Culverts:** Inspections and maintenance of ditches, culverts, and swales will be performed in the Spring, late Fall, and after rain events greater than 1-inch in depth to remove any obstructions to flow, to remove any accumulated sediments within the structures, and to repair any erosion of channel linings, check dams, inlet protection, or outlet protection. Vegetated ditches and swales must be mowed no more than twice per year and cut no less than 6-inch in height.
3. **Grassed Underdrained Soil Filter (GUSF):** Inspections and maintenance of GUSF's will be performed annually in the spring and late fall to clean the basins of debris, sediment and hydrocarbons. Accumulated sediments within the basin shall be removed and disposed of, and basin media shall be renewed if it fails to drain within 72 hours after a one-inch rainfall event. GUSF's are to be tilled, seeded and mulched if vegetation is sparse. Repair all riprap where underlying filter fabric or gravel is showing or where stones have dislodged.
4. **Roof Drip Edge:** Inspections and maintenance of the roof drip edge will be performed annually in the spring and late fall to clean the basins of debris, sediment and hydrocarbons. Accumulated sediments within the filtration system shall be removed and disposed of, and basin media shall be renewed if it fails to drain within 72 hours after a one-inch rainfall event. Repair all stone where underlying filter fabric or gravel is showing or where stones have dislodged.

C. DOCUMENTATION

A log shall be kept summarizing the inspections, maintenance, and any corrective action taken. A copy of the log is provided at the end of this section, and is titled, BMP Inspection Log

HOUSEKEEPING

1. **Spill Prevention** - During construction, controls will be used to prevent pollutants from being discharged from materials on site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
2. **Groundwater Protection**- During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater will not be stored or handled in areas of the site draining to an infiltration area. 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.
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 will not be used for dust control. Water will be used for dust control during construction. Operations during wet months that cause mud to be tracked off the site onto public roads will provide sweeping of the road areas at least once per week and prior to significant storm events.
4. **Debris and Other Materials** - Litter, construction debris, and chemicals exposed to stormwater will be prevented from becoming a pollutant source.
5. **Trench or Foundation De-Watering** - If de-watering is necessary, the collected water will be removed from the ponded area and spread through natural wooded buffers or discharged into a construction sedimentation basin. The water will not be allowed to flow over disturbed areas to the site.
6. **Non Stormwater Discharges** – Identify and prevent contamination by non-stormwater discharges.
7. **Additional Requirements** – Additional requirements may be applied on a site-specific basis.

PLYMOUTH REIT
LOG OF INSPECTIONS DURING CONSTRUCTION

Inspection Date	Inspector (Name and Qualifications)	Major Observations	Work Performed

Notes

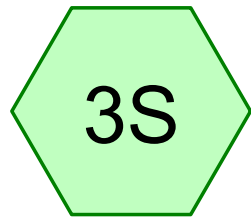
- 1) Major Observations include the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicle access points to the parcel. Major Observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.
- 2) Work Performed will include a description of the corrective action taken, the date the corrective action was taken, and the name and qualifications of the person taking the corrective actions
- 3) The log must be made accessible to MDEP staff and a copy must be provided upon request.
- 4) The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

[illegible]

Notes

- 1) If a maintenance task requires the clean-out of any sediments or debris, indicate where the sediment and debris was disposed after removal.
- 2) BMP structures shall be numbered sequentially and located on attached site map.
- 3) The log must be made accessible to MDEP staff and a copy must be provided upon request.
- 4) The permittee shall retain a copy of the log for a period of at least five years from the completion of permanent stabilization.

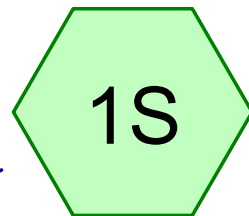
INSPECTION AND MAINTENANCE PLAN FOR STORMWATER MANAGEMENT STRUCTURES (BMPS)		
	INSPECTION SCHEDULE	CORRECTIVE ACTIONS
VEGETATED AREAS	Annually early spring and after heavy rains	Inspect all slopes and embankments and replant areas of bare soil or with sparse growth
		Armor rill erosion areas with riprap or divert the runoff to a stable area
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Mow vegetation as specified for the area
DITCHES, SWALES AND OPEN STORMWATER CHANNELS	Annually spring and late fall and after heavy rains	Remove obstructions, sediments or debris from ditches, swales and other open channels
		Repair any erosion of the ditch lining
		Mow vegetated ditches
		Remove woody vegetation growing through riprap
		Repair any slumping side slopes
CULVERTS	Spring and late fall and after heavy rains	Repair riprap where underlying filter fabric or gravel is showing or if stones have dislodged
		Remove accumulated sediments and debris at the inlet, outlet, or within the conduit
		Remove any obstruction to flow
CATCHBASINS	Annually in the spring	Repair any erosion damage at the culvert's inlet and outlet
		Remove sediments and debris from the bottom of the basin and inlet grates
ROADWAYS AND PARKING AREAS	Annually in the spring or as needed	Remove floating debris and oils (using oil absorptive pads) from any trap
		Clear and remove accumulated winter sand in parking lots and along roadways
		Sweep pavement to remove sediment
		Grade road shoulders and remove accumulated winter sand
		Grade gravel roads and gravel shoulders
		Clean-out the sediment within water bars or open-top culverts
RESOURCE AND TREATMENT BUFFERS	Annually in the spring	Ensure that stormwater runoff is not impeded by false ditches of sediment in the shoulder
		Inspect buffers for evidence of erosion, concentrated flow, or encroachment by development
		Manage the buffer's vegetation with the requirements in any deed restrictions
		Repair any sign of erosion within a buffer
		Inspect and repair down-slope of all spreaders and turn-outs for erosion
		Install more level spreaders, or ditch turn-outs if needed for a better distribution of flow
WETPONDS AND DETENTION BASINS	Annually in fall and after heavy rains	Clean-out any accumulation of sediment within the spreader bays or turnout pools
		Mow non-wooded buffers no shorter than six inches and less than three times per year
		Inspect the embankments for settlement, slope erosion, piping, and slumping
		Mow the embankment to control woody vegetation
		Inspect the outlet structure for broken seals, obstructed orifices, and plugged trash racks
		Remove and dispose of sediments and debris within the control structure
FILTRATION AND INFILTRATION BASINS	Annually in the spring and late fall	Repair any damage to trash racks or debris guards
		Replace any dislodged stone in riprap spillways
		Remove and dispose of accumulated sediments within the impoundment and forebay
		Clean the basin of debris, sediment and hydrocarbons
		Provide for the removal and disposal of accumulated sediments within the basin
PROPRIETARY DEVICES	Annually in the spring and late fall	Renew the basin media if it fails to drain within 72 hours after a one inch rainfall event
		Till, seed and mulch the basin if vegetation is sparse
		Repair riprap where underlying filter fabric or gravel is showing or where stones have dislodged
OTHER PRACTICES	As specified by manufacturer	Contract with a third-party for inspection and maintenance
		Follow the manufacturer's plan for cleaning of devices
	As specified for devices	Contact the department for appropriate inspection and maintenance requirements for other drainage control and runoff treatment measures.



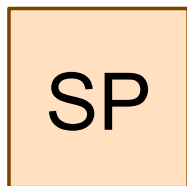
Subarea 3



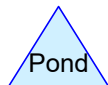
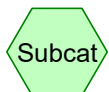
Subarea 2



Subarea 1



Summation Point



Routing Diagram for 12254.003 Pre-Development

Prepared by CES, Inc., Printed 10/29/2018

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12254.003 Pre-Development*Type II 24-hr 2-yr Rainfall=3.10"*

Prepared by CES, Inc.

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Page 2

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

Subcatchment 1S: Subarea 1

Runoff Area=665,147 sf 36.39% Impervious Runoff Depth>1.47"
Flow Length=1,215' Tc=11.7 min CN=84 Runoff=35.00 cfs 1.872 af

Subcatchment 2S: Subarea 2

Runoff Area=173,753 sf 100.00% Impervious Runoff Depth>2.65"
Flow Length=785' Slope=0.0100 '/' Tc=3.1 min CN=98 Runoff=18.58 cfs 0.882 af

Subcatchment 3S: Subarea 3

Runoff Area=15,247 sf 100.00% Impervious Runoff Depth>2.65"
Flow Length=385' Slope=0.0100 '/' Tc=2.9 min CN=98 Runoff=1.63 cfs 0.077 af

Reach SP: Summation Point

Inflow=45.70 cfs 2.832 af
Outflow=45.70 cfs 2.832 af

Total Runoff Area = 19.609 ac Runoff Volume = 2.832 af Average Runoff Depth = 1.73"
49.53% Pervious = 9.713 ac 50.47% Impervious = 9.896 ac

12254.003 Pre-Development

Prepared by CES, Inc.

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Type II 24-hr 2-yr Rainfall=3.10"

Printed 10/29/2018

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Summary for Subcatchment 1S: Subarea 1

Runoff = 35.00 cfs @ 12.04 hrs, Volume= 1.872 af, Depth> 1.47"

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

Area (sf)	CN	Description
30,736	78	Meadow, non-grazed, HSG D
111,998	82	Woods/grass comb., Fair, HSG D
11,049	98	Roofs, HSG C
230,999	98	Paved parking, HSG C
123,625	76	Woods/grass comb., Fair, HSG C
156,740	71	Meadow, non-grazed, HSG C
665,147	84	Weighted Average
423,099		63.61% Pervious Area
242,048		36.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0210	1.38		Sheet Flow, SF 1-1
					Smooth surfaces n= 0.011 P2= 3.10"
2.9	520	0.0210	2.94		Shallow Concentrated Flow, SCF 1-1
					Paved Kv= 20.3 fps
7.6	595	0.0350	1.31		Shallow Concentrated Flow, SCF 1-2
					Short Grass Pasture Kv= 7.0 fps
11.7	1,215	Total			

Summary for Subcatchment 2S: Subarea 2

Runoff = 18.58 cfs @ 11.93 hrs, Volume= 0.882 af, Depth> 2.65"

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

Area (sf)	CN	Description
173,753	98	Roofs, HSG C
173,753		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.03		Sheet Flow, SF 2-1
					Smooth surfaces n= 0.011 P2= 3.10"
1.5	685	0.0100	7.73	13.66	Pipe Channel, PC 2-1
					18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38'
					n= 0.010 PVC, smooth interior
3.1	785	Total			

12254.003 Pre-Development

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Type II 24-hr 2-yr Rainfall=3.10"

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Summary for Subcatchment 3S: Subarea 3

Runoff = 1.63 cfs @ 11.93 hrs, Volume= 0.077 af, Depth> 2.65"

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

Area (sf)	CN	Description
15,247	98	Roofs, HSG C
15,247		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.0100	0.89		Sheet Flow, SF 3-1 Smooth surfaces n= 0.011 P2= 3.10"
2.0	335	0.0100	2.84	0.25	Pipe Channel, PC 3-1 4.0" Round Area= 0.1 sf Perim= 1.0' r= 0.08' n= 0.010 PVC, smooth interior
2.9	385	Total			

Summary for Reach SP: Summation Point

Inflow Area = 19.609 ac, 50.47% Impervious, Inflow Depth > 1.73" for 2-yr event
 Inflow = 45.70 cfs @ 11.98 hrs, Volume= 2.832 af
 Outflow = 45.70 cfs @ 11.98 hrs, Volume= 2.832 af, Atten= 0%, Lag= 0.0 min

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

12254.003 Pre-Development*Type II 24-hr 10-yr Rainfall=4.60"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

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

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

Subcatchment 1S: Subarea 1Runoff Area=665,147 sf 36.39% Impervious Runoff Depth>2.70"
Flow Length=1,215' Tc=11.7 min CN=84 Runoff=62.86 cfs 3.435 af**Subcatchment 2S: Subarea 2**Runoff Area=173,753 sf 100.00% Impervious Runoff Depth>4.01"
Flow Length=785' Slope=0.0100 '/' Tc=3.1 min CN=98 Runoff=27.74 cfs 1.333 af**Subcatchment 3S: Subarea 3**Runoff Area=15,247 sf 100.00% Impervious Runoff Depth>4.01"
Flow Length=385' Slope=0.0100 '/' Tc=2.9 min CN=98 Runoff=2.44 cfs 0.117 af**Reach SP: Summation Point**Inflow=78.68 cfs 4.885 af
Outflow=78.68 cfs 4.885 af**Total Runoff Area = 19.609 ac Runoff Volume = 4.885 af Average Runoff Depth = 2.99"**
49.53% Pervious = 9.713 ac 50.47% Impervious = 9.896 ac

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Type II 24-hr 10-yr Rainfall=4.60"

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Summary for Subcatchment 1S: Subarea 1

Runoff = 62.86 cfs @ 12.03 hrs, Volume= 3.435 af, Depth> 2.70"

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

Area (sf)	CN	Description
30,736	78	Meadow, non-grazed, HSG D
111,998	82	Woods/grass comb., Fair, HSG D
11,049	98	Roofs, HSG C
230,999	98	Paved parking, HSG C
123,625	76	Woods/grass comb., Fair, HSG C
156,740	71	Meadow, non-grazed, HSG C
665,147	84	Weighted Average
423,099		63.61% Pervious Area
242,048		36.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0210	1.38		Sheet Flow, SF 1-1
					Smooth surfaces n= 0.011 P2= 3.10"
2.9	520	0.0210	2.94		Shallow Concentrated Flow, SCF 1-1
					Paved Kv= 20.3 fps
7.6	595	0.0350	1.31		Shallow Concentrated Flow, SCF 1-2
					Short Grass Pasture Kv= 7.0 fps
11.7	1,215	Total			

Summary for Subcatchment 2S: Subarea 2

Runoff = 27.74 cfs @ 11.93 hrs, Volume= 1.333 af, Depth> 4.01"

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

Area (sf)	CN	Description
173,753	98	Roofs, HSG C
173,753		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.03		Sheet Flow, SF 2-1
					Smooth surfaces n= 0.011 P2= 3.10"
1.5	685	0.0100	7.73	13.66	Pipe Channel, PC 2-1
					18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38'
					n= 0.010 PVC, smooth interior
3.1	785	Total			

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Type II 24-hr 10-yr Rainfall=4.60"

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Summary for Subcatchment 3S: Subarea 3

Runoff = 2.44 cfs @ 11.93 hrs, Volume= 0.117 af, Depth> 4.01"

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

Area (sf)	CN	Description
15,247	98	Roofs, HSG C
15,247		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.0100	0.89		Sheet Flow, SF 3-1 Smooth surfaces n= 0.011 P2= 3.10"
2.0	335	0.0100	2.84	0.25	Pipe Channel, PC 3-1 4.0" Round Area= 0.1 sf Perim= 1.0' r= 0.08' n= 0.010 PVC, smooth interior
2.9	385	Total			

Summary for Reach SP: Summation Point

Inflow Area = 19.609 ac, 50.47% Impervious, Inflow Depth > 2.99" for 10-yr event

Inflow = 78.68 cfs @ 11.98 hrs, Volume= 4.885 af

Outflow = 78.68 cfs @ 11.98 hrs, Volume= 4.885 af, Atten= 0%, Lag= 0.0 min

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

12254.003 Pre-Development*Type II 24-hr 25-yr Rainfall=5.80"*

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

Subcatchment 1S: Subarea 1

Runoff Area=665,147 sf 36.39% Impervious Runoff Depth>3.74"
Flow Length=1,215' Tc=11.7 min CN=84 Runoff=85.64 cfs 4.759 af

Subcatchment 2S: Subarea 2

Runoff Area=173,753 sf 100.00% Impervious Runoff Depth>5.09"
Flow Length=785' Slope=0.0100 '/' Tc=3.1 min CN=98 Runoff=35.05 cfs 1.692 af

Subcatchment 3S: Subarea 3

Runoff Area=15,247 sf 100.00% Impervious Runoff Depth>5.09"
Flow Length=385' Slope=0.0100 '/' Tc=2.9 min CN=98 Runoff=3.08 cfs 0.148 af

Reach SP: Summation Point

Inflow=105.67 cfs 6.599 af
Outflow=105.67 cfs 6.599 af

Total Runoff Area = 19.609 ac Runoff Volume = 6.599 af Average Runoff Depth = 4.04"
49.53% Pervious = 9.713 ac 50.47% Impervious = 9.896 ac

12254.003 Pre-Development

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

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Summary for Subcatchment 1S: Subarea 1

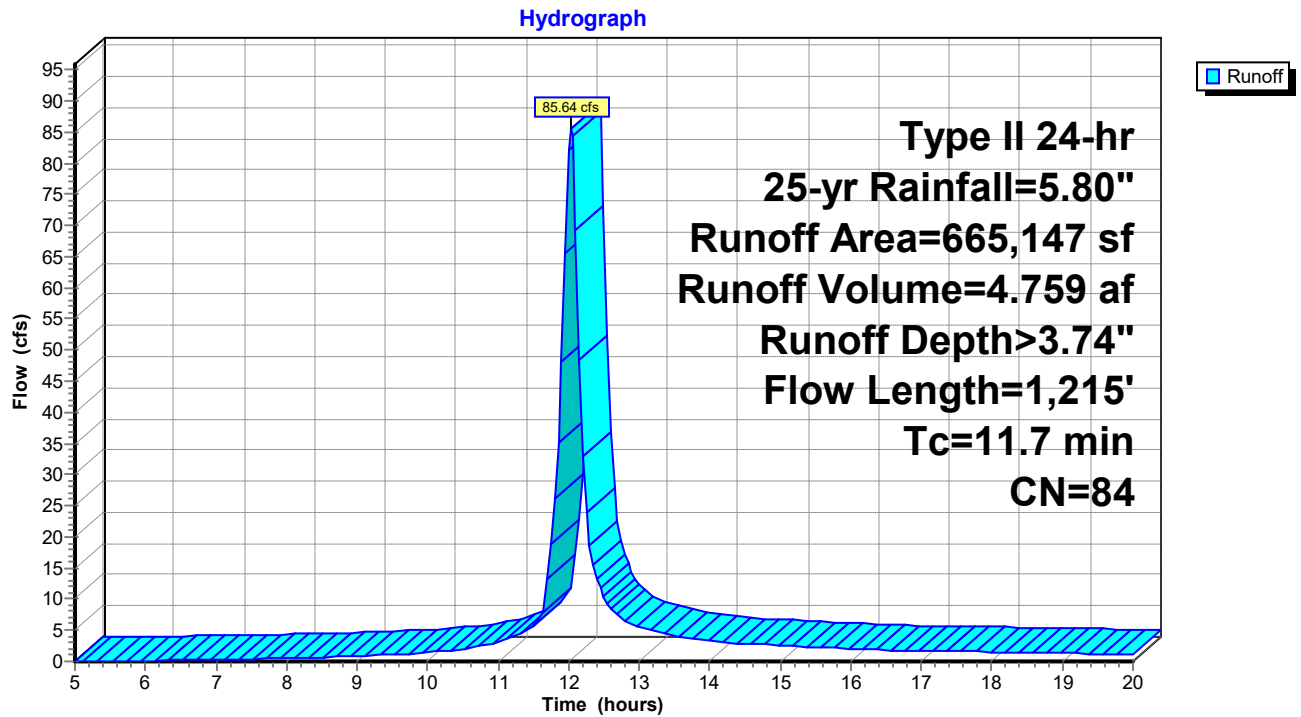
Runoff = 85.64 cfs @ 12.03 hrs, Volume= 4.759 af, Depth> 3.74"

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

Area (sf)	CN	Description
30,736	78	Meadow, non-grazed, HSG D
111,998	82	Woods/grass comb., Fair, HSG D
11,049	98	Roofs, HSG C
230,999	98	Paved parking, HSG C
123,625	76	Woods/grass comb., Fair, HSG C
156,740	71	Meadow, non-grazed, HSG C
665,147	84	Weighted Average
423,099		63.61% Pervious Area
242,048		36.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0210	1.38		Sheet Flow, SF 1-1 Smooth surfaces n= 0.011 P2= 3.10"
2.9	520	0.0210	2.94		Shallow Concentrated Flow, SCF 1-1 Paved Kv= 20.3 fps
7.6	595	0.0350	1.31		Shallow Concentrated Flow, SCF 1-2 Short Grass Pasture Kv= 7.0 fps
11.7	1,215	Total			

Subcatchment 1S: Subarea 1



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

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Summary for Subcatchment 2S: Subarea 2

Runoff = 35.05 cfs @ 11.93 hrs, Volume= 1.692 af, Depth> 5.09"

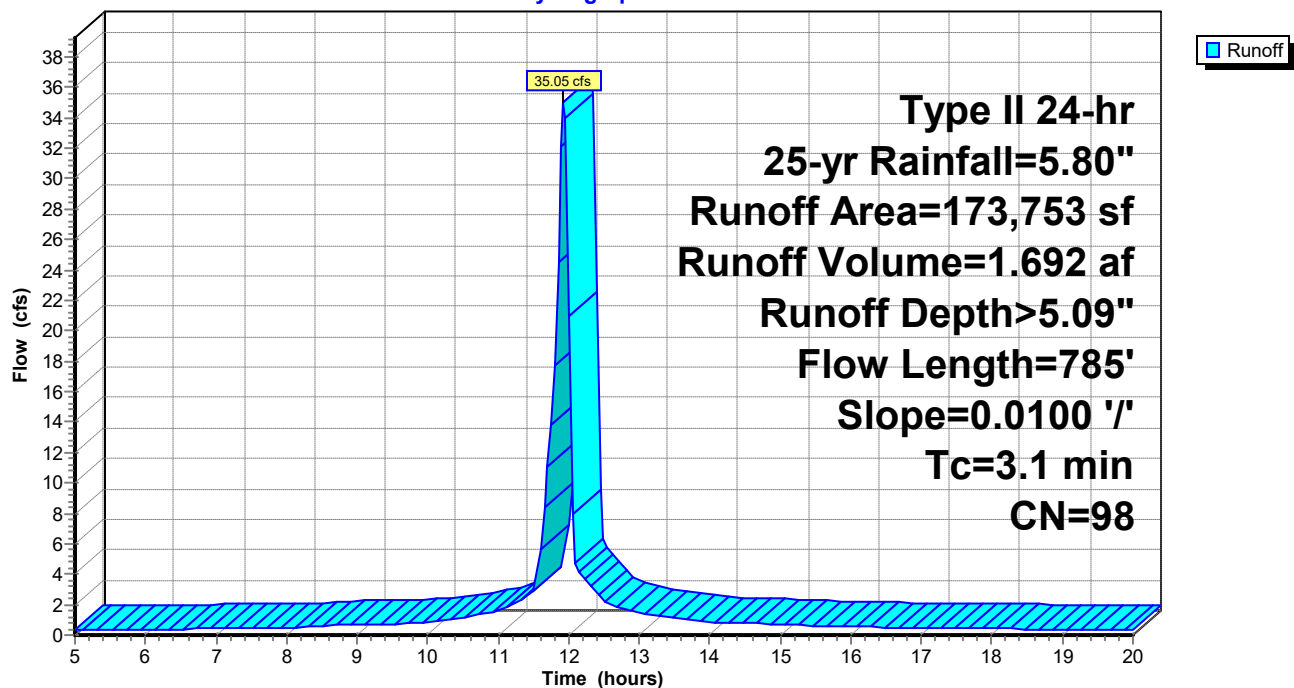
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
173,753	98	Roofs, HSG C
173,753		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.03		Sheet Flow, SF 2-1 Smooth surfaces n= 0.011 P2= 3.10"
1.5	685	0.0100	7.73	13.66	Pipe Channel, PC 2-1 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010 PVC, smooth interior
3.1	785	Total			

Subcatchment 2S: Subarea 2

Hydrograph



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

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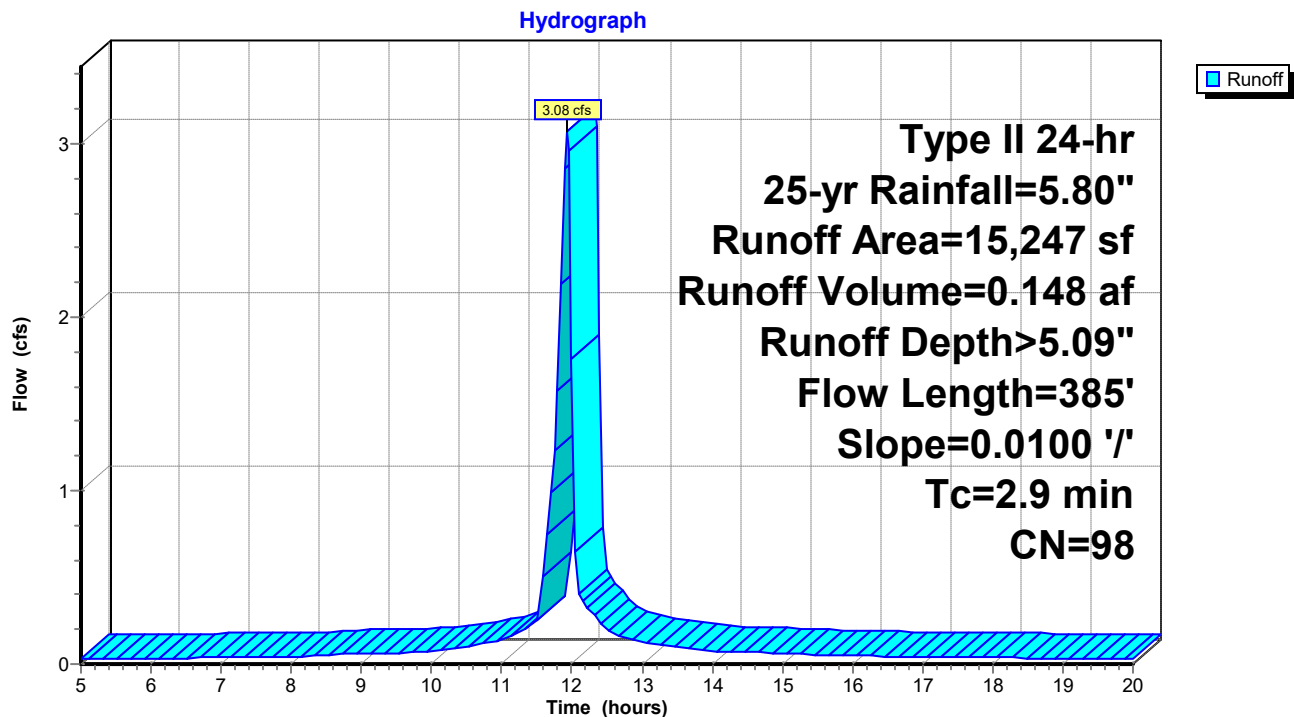
Summary for Subcatchment 3S: Subarea 3

Runoff = 3.08 cfs @ 11.93 hrs, Volume= 0.148 af, Depth> 5.09"

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

Area (sf)	CN	Description
15,247	98	Roofs, HSG C
15,247		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.0100	0.89		Sheet Flow, SF 3-1 Smooth surfaces n= 0.011 P2= 3.10"
2.0	335	0.0100	2.84	0.25	Pipe Channel, PC 3-1 4.0" Round Area= 0.1 sf Perim= 1.0' r= 0.08' n= 0.010 PVC, smooth interior
2.9	385	Total			

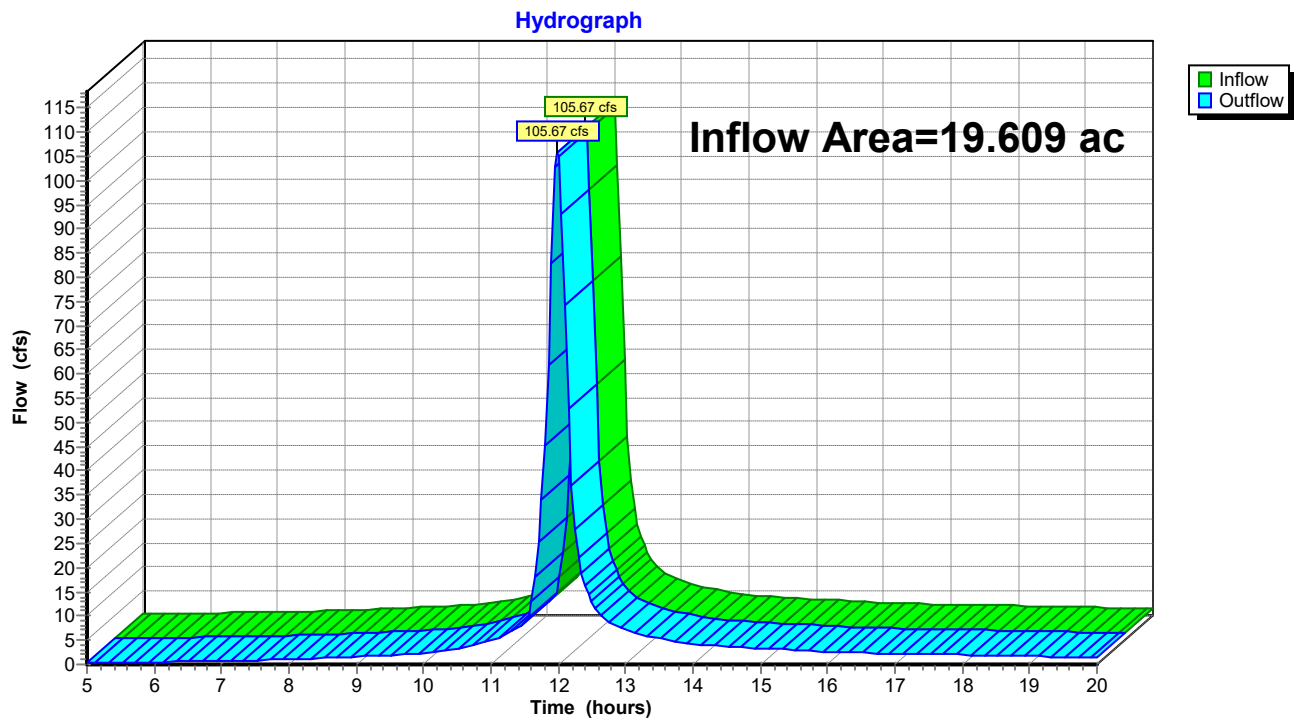
Subcatchment 3S: Subarea 3

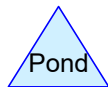
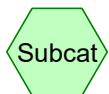
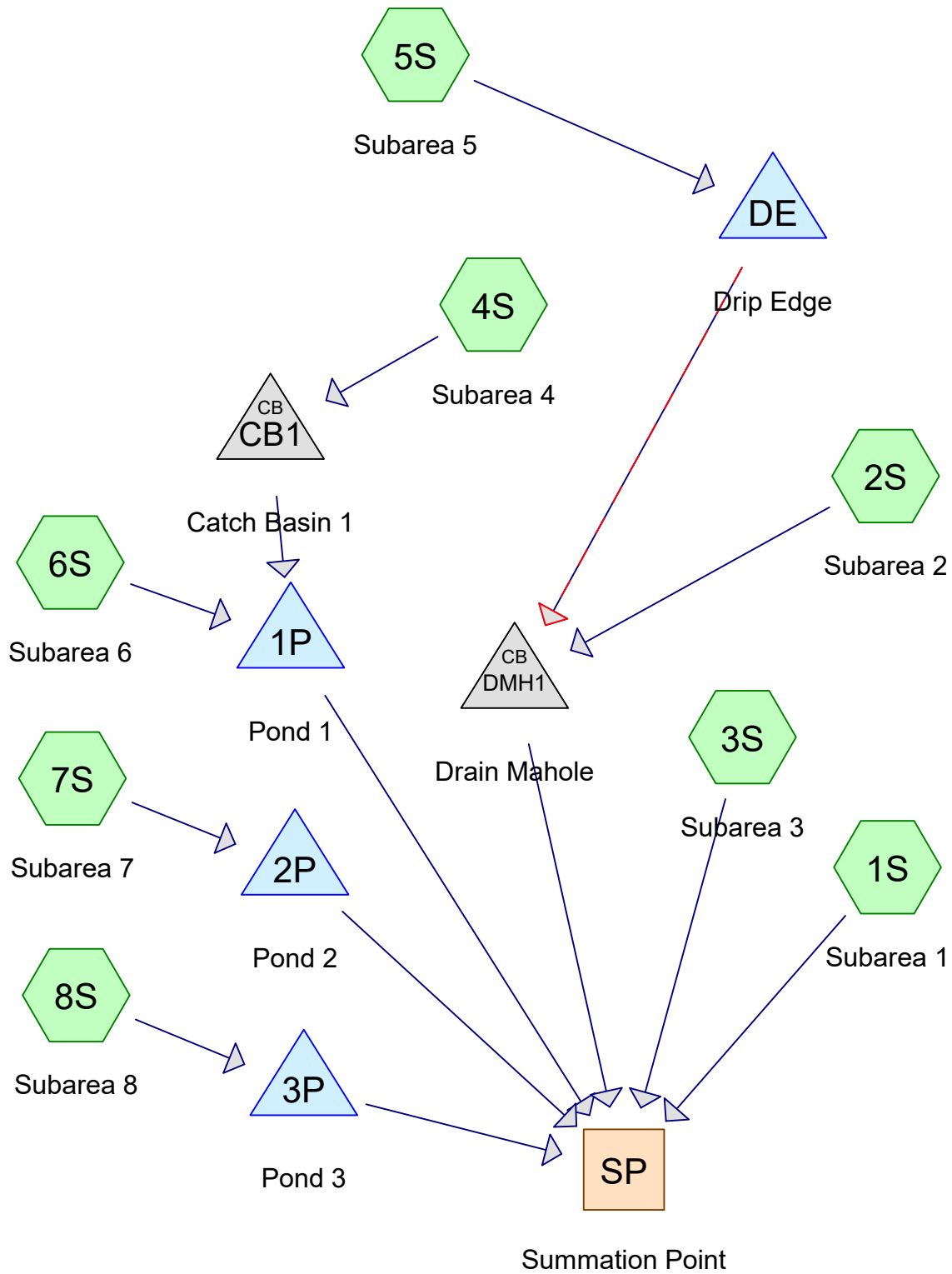
Summary for Reach SP: Summation Point

Inflow Area = 19.609 ac, 50.47% Impervious, Inflow Depth > 4.04" for 25-yr event
 Inflow = 105.67 cfs @ 11.98 hrs, Volume= 6.599 af
 Outflow = 105.67 cfs @ 11.98 hrs, Volume= 6.599 af, Atten= 0%, Lag= 0.0 min

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

Reach SP: Summation Point





Routing Diagram for 12254.003 Post-Development - Copy

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Type II 24-hr 2-yr Rainfall=3.10"

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

Subcatchment 1S: Subarea 1 Runoff Area=448,435 sf 48.10% Impervious Runoff Depth>1.54"
 Flow Length=1,215' Tc=11.7 min CN=85 Runoff=24.65 cfs 1.323 af

Subcatchment 2S: Subarea 2 Runoff Area=173,753 sf 100.00% Impervious Runoff Depth>2.65"
 Flow Length=785' Slope=0.0100 '/' Tc=3.1 min CN=98 Runoff=18.58 cfs 0.882 af

Subcatchment 3S: Subarea 3 Runoff Area=15,247 sf 100.00% Impervious Runoff Depth>2.65"
 Flow Length=380' Slope=0.0100 '/' Tc=2.8 min CN=98 Runoff=1.63 cfs 0.077 af

Subcatchment 4S: Subarea 4 Runoff Area=44,955 sf 62.82% Impervious Runoff Depth>1.85"
 Flow Length=217' Slope=0.0220 '/' Tc=12.3 min CN=89 Runoff=2.85 cfs 0.159 af

Subcatchment 5S: Subarea 5 Runoff Area=93,335 sf 94.50% Impervious Runoff Depth>2.57"
 Flow Length=230' Slope=0.0200 '/' Tc=2.2 min CN=97 Runoff=9.72 cfs 0.459 af

Subcatchment 6S: Subarea 6 Runoff Area=45,394 sf 66.29% Impervious Runoff Depth>1.86"
 Flow Length=461' Tc=2.9 min CN=89 Runoff=3.88 cfs 0.161 af

Subcatchment 7S: Subarea 7 Runoff Area=10,526 sf 30.70% Impervious Runoff Depth>1.21"
 Flow Length=160' Tc=1.8 min CN=80 Runoff=0.62 cfs 0.024 af

Subcatchment 8S: Subarea 8 Runoff Area=22,538 sf 28.97% Impervious Runoff Depth>1.21"
 Flow Length=137' Tc=1.4 min CN=80 Runoff=1.34 cfs 0.052 af

Reach SP: Summation Point Inflow=43.03 cfs 2.732 af
 Outflow=43.03 cfs 2.732 af

Pond 1P: Pond 1 Peak Elev=67.40' Storage=0.320 af Inflow=5.88 cfs 0.320 af
 Outflow=0.00 cfs 0.000 af

Pond 2P: Pond 2 Peak Elev=59.40' Storage=0.024 af Inflow=0.62 cfs 0.024 af
 Outflow=0.00 cfs 0.000 af

Pond 3P: Pond 3 Peak Elev=55.40' Storage=0.052 af Inflow=1.34 cfs 0.052 af
 Outflow=0.00 cfs 0.000 af

Pond CB1: Catch Basin 1 Peak Elev=76.04' Inflow=2.85 cfs 0.159 af
 15.0" Round Culvert n=0.013 L=100.0' S=0.0050 '/' Outflow=2.85 cfs 0.159 af

Pond DE: Drip Edge Peak Elev=78.91' Storage=5,115 cf Inflow=9.72 cfs 0.459 af
 15.0" Round Culvert n=0.013 L=100.0' S=0.0100 '/' Outflow=5.29 cfs 0.449 af

Pond DMH1: Drain Mahole Peak Elev=75.80' Inflow=23.43 cfs 1.332 af
 24.0" Round Culvert n=0.013 L=150.0' S=0.0033 '/' Outflow=23.43 cfs 1.332 af

Total Runoff Area = 19.609 ac Runoff Volume = 3.139 af Average Runoff Depth = 1.92"
34.32% Pervious = 6.730 ac 65.68% Impervious = 12.879 ac

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Type II 24-hr 2-yr Rainfall=3.10"

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Summary for Subcatchment 1S: Subarea 1

Runoff = 24.65 cfs @ 12.04 hrs, Volume= 1.323 af, Depth> 1.54"

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

Area (sf)	CN	Description
11,049	98	Roofs, HSG C
204,658	98	Paved parking, HSG C
15,335	82	Woods/grass comb., Fair, HSG D
92,772	73	Woods, Fair, HSG C
7,805	78	Meadow, non-grazed, HSG D
116,816	71	Meadow, non-grazed, HSG C
448,435	85	Weighted Average
232,728		51.90% Pervious Area
215,707		48.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0210	1.38		Sheet Flow, SF 1-1 Smooth surfaces n= 0.011 P2= 3.10"
2.9	520	0.0210	2.94		Shallow Concentrated Flow, SCF 1-1 Paved Kv= 20.3 fps
7.6	595	0.0350	1.31		Shallow Concentrated Flow, SCF 1-2 Short Grass Pasture Kv= 7.0 fps
11.7	1,215	Total			

Summary for Subcatchment 2S: Subarea 2

Runoff = 18.58 cfs @ 11.93 hrs, Volume= 0.882 af, Depth> 2.65"

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

Area (sf)	CN	Description
173,753	98	Roofs, HSG C
173,753		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.03		Sheet Flow, SF 2-1 Smooth surfaces n= 0.011 P2= 3.10"
1.5	685	0.0100	7.73	13.66	Pipe Channel, PC 2-1 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010 PVC, smooth interior
3.1	785	Total			

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Type II 24-hr 2-yr Rainfall=3.10"

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Summary for Subcatchment 3S: Subarea 3

Runoff = 1.63 cfs @ 11.93 hrs, Volume= 0.077 af, Depth> 2.65"

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

Area (sf)	CN	Description
15,247	98	Roofs, HSG C
15,247		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.0100	0.89		Sheet Flow, SF 3-1 Smooth surfaces n= 0.011 P2= 3.10"
1.9	330	0.0100	2.84	0.25	Pipe Channel, PC 3-1 4.0" Round Area= 0.1 sf Perim= 1.0' r= 0.08' n= 0.010 PVC, smooth interior
2.8	380	Total			

Summary for Subcatchment 4S: Subarea 4

Runoff = 2.85 cfs @ 12.04 hrs, Volume= 0.159 af, Depth> 1.85"

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

Area (sf)	CN	Description
23,905	98	Paved parking, HSG C
4,337	98	Paved parking, HSG D
3,033	82	Woods/grass comb., Fair, HSG D
8,788	71	Meadow, non-grazed, HSG C
4,892	78	Meadow, non-grazed, HSG D
44,955	89	Weighted Average
16,713		37.18% Pervious Area
28,242		62.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	65	0.0220	0.11		Sheet Flow, SF 4-1 Grass: Dense n= 0.240 P2= 3.10"
0.5	35	0.0220	1.14		Sheet Flow, SF 4-2 Smooth surfaces n= 0.011 P2= 3.10"
1.9	117	0.0220	1.04		Shallow Concentrated Flow, SCF 4-1 Short Grass Pasture Kv= 7.0 fps
12.3	217	Total			

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Type II 24-hr 2-yr Rainfall=3.10"

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Summary for Subcatchment 5S: Subarea 5

Runoff = 9.72 cfs @ 11.92 hrs, Volume= 0.459 af, Depth> 2.57"

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

Area (sf)	CN	Description
72,000	98	Roofs, HSG D
16,200	98	Paved parking, HSG D
3,478	79	Woods, Fair, HSG D
1,657	78	Meadow, non-grazed, HSG D
93,335	97	Weighted Average
5,135		5.50% Pervious Area
88,200		94.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0200	1.35		Sheet Flow, SF 5-1
					Smooth surfaces n= 0.011 P2= 3.10"
1.0	130	0.0200	2.28		Shallow Concentrated Flow, SCF 5-1
					Unpaved Kv= 16.1 fps
2.2	230	Total			

Summary for Subcatchment 6S: Subarea 6

Runoff = 3.88 cfs @ 11.93 hrs, Volume= 0.161 af, Depth> 1.86"

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

Area (sf)	CN	Description
13,298	98	Paved parking, HSG D
16,795	98	Paved parking, HSG C
708	78	Meadow, non-grazed, HSG D
14,593	71	Meadow, non-grazed, HSG C
45,394	89	Weighted Average
15,301		33.71% Pervious Area
30,093		66.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	100	0.0400	1.79		Sheet Flow, SF 6-1
					Smooth surfaces n= 0.011 P2= 3.10"
2.0	361	0.0220	3.01		Shallow Concentrated Flow, SCF 6-1
					Paved Kv= 20.3 fps
2.9	461	Total			

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Type II 24-hr 2-yr Rainfall=3.10"

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Summary for Subcatchment 7S: Subarea 7

Runoff = 0.62 cfs @ 11.92 hrs, Volume= 0.024 af, Depth> 1.21"

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

Area (sf)	CN	Description
551	76	Woods/grass comb., Fair, HSG C
3,232	98	Paved parking, HSG C
6,743	71	Meadow, non-grazed, HSG C
10,526	80	Weighted Average
7,294		69.30% Pervious Area
3,232		30.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	60	0.0330	1.49		Sheet Flow, SF 7-1
					Smooth surfaces n= 0.011 P2= 3.10"
1.1	100	0.0480	1.53		Shallow Concentrated Flow, SCF 7-1
					Short Grass Pasture Kv= 7.0 fps
1.8	160	Total			

Summary for Subcatchment 8S: Subarea 8

Runoff = 1.34 cfs @ 11.91 hrs, Volume= 0.052 af, Depth> 1.21"

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

Area (sf)	CN	Description
6,529	98	Paved parking, HSG C
4,143	76	Woods/grass comb., Fair, HSG C
11,866	71	Meadow, non-grazed, HSG C
22,538	80	Weighted Average
16,009		71.03% Pervious Area
6,529		28.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	100	0.0360	1.71		Sheet Flow, SF 8-1
					Smooth surfaces n= 0.011 P2= 3.10"
0.4	37	0.0530	1.61		Shallow Concentrated Flow, SCF 8-1
					Short Grass Pasture Kv= 7.0 fps
1.4	137	Total			

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Type II 24-hr 2-yr Rainfall=3.10"

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Summary for Reach SP: Summation Point

Inflow Area = 19.609 ac, 65.68% Impervious, Inflow Depth > 1.67" for 2-yr event
 Inflow = 43.03 cfs @ 11.96 hrs, Volume= 2.732 af
 Outflow = 43.03 cfs @ 11.96 hrs, Volume= 2.732 af, Atten= 0%, Lag= 0.0 min

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

Summary for Pond 1P: Pond 1

Inflow Area = 2.074 ac, 64.57% Impervious, Inflow Depth > 1.85" for 2-yr event
 Inflow = 5.88 cfs @ 11.95 hrs, Volume= 0.320 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

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

Peak Elev= 67.40' @ 20.00 hrs Surf.Area= 3,899.039 ac Storage= 0.320 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	67.40'	11,938.500 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
67.40	3,899.000	0.000	0.000
68.00	4,181.000	2,424.000	2,424.000
69.00	4,573.000	4,377.000	6,801.000
70.00	5,702.000	5,137.500	11,938.500

Device	Routing	Invert	Outlet Devices
#1	Primary	68.90'	10.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=67.40' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 2P: Pond 2

Inflow Area = 0.242 ac, 30.70% Impervious, Inflow Depth > 1.21" for 2-yr event
 Inflow = 0.62 cfs @ 11.92 hrs, Volume= 0.024 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

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

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Peak Elev= 59.40' @ 20.00 hrs Surf.Area= 368.013 ac Storage= 0.024 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	59.40'	1,675.800 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
59.40	368.000	0.000	0.000
60.00	483.000	255.300	255.300
61.00	696.000	589.500	844.800
62.00	966.000	831.000	1,675.800

Device	Routing	Invert	Outlet Devices
#1	Primary	60.90'	7.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=59.40' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 3P: Pond 3

Inflow Area = 0.517 ac, 28.97% Impervious, Inflow Depth > 1.21" for 2-yr event
 Inflow = 1.34 cfs @ 11.91 hrs, Volume= 0.052 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

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

Peak Elev= 55.40' @ 20.00 hrs Surf.Area= 619.010 ac Storage= 0.052 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	55.40'	2,102.100 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
55.40	619.000	0.000	0.000
57.00	803.000	1,137.600	1,137.600
57.50	963.000	441.500	1,579.100
58.00	1,129.000	523.000	2,102.100

Device	Routing	Invert	Outlet Devices
#1	Primary	56.90'	9.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00

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2.50 3.00 3.50

Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88

2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=55.40' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond CB1: Catch Basin 1

Inflow Area = 1.032 ac, 62.82% Impervious, Inflow Depth > 1.85" for 2-yr event
 Inflow = 2.85 cfs @ 12.04 hrs, Volume= 0.159 af
 Outflow = 2.85 cfs @ 12.04 hrs, Volume= 0.159 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.85 cfs @ 12.04 hrs, Volume= 0.159 af

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

Peak Elev= 76.04' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	75.00'	15.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 75.00' / 74.50' S= 0.0050 ' / Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.80 cfs @ 12.04 hrs HW=76.03' (Free Discharge)

↑1=Culvert (Barrel Controls 2.80 cfs @ 3.54 fps)

Summary for Pond DE: Drip Edge

Inflow Area = 2.143 ac, 94.50% Impervious, Inflow Depth > 2.57" for 2-yr event
 Inflow = 9.72 cfs @ 11.92 hrs, Volume= 0.459 af
 Outflow = 5.29 cfs @ 12.00 hrs, Volume= 0.449 af, Atten= 46%, Lag= 4.9 min
 Primary = 5.29 cfs @ 12.00 hrs, Volume= 0.449 af

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

Peak Elev= 78.91' @ 12.00 hrs Surf.Area= 6,696 sf Storage= 5,115 cf

Plug-Flow detention time= 31.6 min calculated for 0.449 af (98% of inflow)

Center-of-Mass det. time= 22.2 min (757.6 - 735.4)

Volume	Invert	Avail.Storage	Storage Description
#1	77.00'	10,714 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 26,784 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
77.00	6,696	0	0
78.00	6,696	6,696	6,696
79.00	6,696	6,696	13,392
80.00	6,696	6,696	20,088
81.00	6,696	6,696	26,784

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Type II 24-hr 2-yr Rainfall=3.10"

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Device	Routing	Invert	Outlet Devices
#1	Primary	77.00'	15.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 77.00' / 76.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=5.28 cfs @ 12.00 hrs HW=78.91' (Free Discharge)↑**1=Culvert** (Inlet Controls 5.28 cfs @ 4.30 fps)**Summary for Pond DMH1: Drain Mahole**

Inflow Area = 6.131 ac, 98.08% Impervious, Inflow Depth > 2.61" for 2-yr event
Inflow = 23.43 cfs @ 11.94 hrs, Volume= 1.332 af
Outflow = 23.43 cfs @ 11.94 hrs, Volume= 1.332 af, Atten= 0%, Lag= 0.0 min
Primary = 23.43 cfs @ 11.94 hrs, Volume= 1.332 af

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

Peak Elev= 75.80' @ 11.94 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	71.00'	24.0" Round Culvert L= 150.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 71.00' / 70.50' S= 0.0033 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=22.59 cfs @ 11.94 hrs HW=75.58' (Free Discharge)↑**1=Culvert** (Inlet Controls 22.59 cfs @ 7.19 fps)

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Type II 24-hr 10-yr Rainfall=4.60"

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

Subcatchment 1S: Subarea 1 Runoff Area=448,435 sf 48.10% Impervious Runoff Depth>2.79"
 Flow Length=1,215' Tc=11.7 min CN=85 Runoff=43.58 cfs 2.394 af

Subcatchment 2S: Subarea 2 Runoff Area=173,753 sf 100.00% Impervious Runoff Depth>4.01"
 Flow Length=785' Slope=0.0100 '/' Tc=3.1 min CN=98 Runoff=27.74 cfs 1.333 af

Subcatchment 3S: Subarea 3 Runoff Area=15,247 sf 100.00% Impervious Runoff Depth>4.01"
 Flow Length=380' Slope=0.0100 '/' Tc=2.8 min CN=98 Runoff=2.44 cfs 0.117 af

Subcatchment 4S: Subarea 4 Runoff Area=44,955 sf 62.82% Impervious Runoff Depth>3.17"
 Flow Length=217' Slope=0.0220 '/' Tc=12.3 min CN=89 Runoff=4.75 cfs 0.273 af

Subcatchment 5S: Subarea 5 Runoff Area=93,335 sf 94.50% Impervious Runoff Depth>3.93"
 Flow Length=230' Slope=0.0200 '/' Tc=2.2 min CN=97 Runoff=14.62 cfs 0.703 af

Subcatchment 6S: Subarea 6 Runoff Area=45,394 sf 66.29% Impervious Runoff Depth>3.18"
 Flow Length=461' Tc=2.9 min CN=89 Runoff=6.39 cfs 0.276 af

Subcatchment 7S: Subarea 7 Runoff Area=10,526 sf 30.70% Impervious Runoff Depth>2.36"
 Flow Length=160' Tc=1.8 min CN=80 Runoff=1.17 cfs 0.047 af

Subcatchment 8S: Subarea 8 Runoff Area=22,538 sf 28.97% Impervious Runoff Depth>2.36"
 Flow Length=137' Tc=1.4 min CN=80 Runoff=2.55 cfs 0.102 af

Reach SP: Summation Point Inflow=69.80 cfs 4.535 af
 Outflow=69.80 cfs 4.535 af

Pond 1P: Pond 1 Peak Elev=67.40' Storage=0.548 af Inflow=9.78 cfs 0.549 af
 Outflow=0.00 cfs 0.000 af

Pond 2P: Pond 2 Peak Elev=59.40' Storage=0.047 af Inflow=1.17 cfs 0.047 af
 Outflow=0.00 cfs 0.000 af

Pond 3P: Pond 3 Peak Elev=55.40' Storage=0.101 af Inflow=2.55 cfs 0.102 af
 Outflow=0.00 cfs 0.000 af

Pond CB1: Catch Basin 1 Peak Elev=76.73' Inflow=4.75 cfs 0.273 af
 15.0" Round Culvert n=0.013 L=100.0' S=0.0050 '/' Outflow=4.75 cfs 0.273 af

Pond DE: Drip Edge Peak Elev=79.93' Storage=7,856 cf Inflow=14.62 cfs 0.703 af
 15.0" Round Culvert n=0.013 L=100.0' S=0.0100 '/' Outflow=7.09 cfs 0.691 af

Pond DMH1: Drain Mahole Peak Elev=80.14' Inflow=34.21 cfs 2.023 af
 24.0" Round Culvert n=0.013 L=150.0' S=0.0033 '/' Outflow=34.21 cfs 2.023 af

Total Runoff Area = 19.609 ac Runoff Volume = 5.244 af Average Runoff Depth = 3.21"
34.32% Pervious = 6.730 ac 65.68% Impervious = 12.879 ac

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Summary for Subcatchment 1S: Subarea 1

Runoff = 43.58 cfs @ 12.03 hrs, Volume= 2.394 af, Depth> 2.79"

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

Area (sf)	CN	Description
11,049	98	Roofs, HSG C
204,658	98	Paved parking, HSG C
15,335	82	Woods/grass comb., Fair, HSG D
92,772	73	Woods, Fair, HSG C
7,805	78	Meadow, non-grazed, HSG D
116,816	71	Meadow, non-grazed, HSG C
448,435	85	Weighted Average
232,728		51.90% Pervious Area
215,707		48.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0210	1.38		Sheet Flow, SF 1-1 Smooth surfaces n= 0.011 P2= 3.10"
2.9	520	0.0210	2.94		Shallow Concentrated Flow, SCF 1-1 Paved Kv= 20.3 fps
7.6	595	0.0350	1.31		Shallow Concentrated Flow, SCF 1-2 Short Grass Pasture Kv= 7.0 fps
11.7	1,215	Total			

Summary for Subcatchment 2S: Subarea 2

Runoff = 27.74 cfs @ 11.93 hrs, Volume= 1.333 af, Depth> 4.01"

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

Area (sf)	CN	Description
173,753	98	Roofs, HSG C
173,753		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.03		Sheet Flow, SF 2-1 Smooth surfaces n= 0.011 P2= 3.10"
1.5	685	0.0100	7.73	13.66	Pipe Channel, PC 2-1 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010 PVC, smooth interior
3.1	785	Total			

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Type II 24-hr 10-yr Rainfall=4.60"

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Summary for Subcatchment 3S: Subarea 3

Runoff = 2.44 cfs @ 11.93 hrs, Volume= 0.117 af, Depth> 4.01"

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

Area (sf)	CN	Description
15,247	98	Roofs, HSG C
15,247		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.0100	0.89		Sheet Flow, SF 3-1 Smooth surfaces n= 0.011 P2= 3.10"
1.9	330	0.0100	2.84	0.25	Pipe Channel, PC 3-1 4.0" Round Area= 0.1 sf Perim= 1.0' r= 0.08' n= 0.010 PVC, smooth interior
2.8	380	Total			

Summary for Subcatchment 4S: Subarea 4

Runoff = 4.75 cfs @ 12.04 hrs, Volume= 0.273 af, Depth> 3.17"

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

Area (sf)	CN	Description
23,905	98	Paved parking, HSG C
4,337	98	Paved parking, HSG D
3,033	82	Woods/grass comb., Fair, HSG D
8,788	71	Meadow, non-grazed, HSG C
4,892	78	Meadow, non-grazed, HSG D
44,955	89	Weighted Average
16,713		37.18% Pervious Area
28,242		62.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	65	0.0220	0.11		Sheet Flow, SF 4-1 Grass: Dense n= 0.240 P2= 3.10"
0.5	35	0.0220	1.14		Sheet Flow, SF 4-2 Smooth surfaces n= 0.011 P2= 3.10"
1.9	117	0.0220	1.04		Shallow Concentrated Flow, SCF 4-1 Short Grass Pasture Kv= 7.0 fps
12.3	217	Total			

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Summary for Subcatchment 5S: Subarea 5

Runoff = 14.62 cfs @ 11.92 hrs, Volume= 0.703 af, Depth> 3.93"

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

Area (sf)	CN	Description
72,000	98	Roofs, HSG D
16,200	98	Paved parking, HSG D
3,478	79	Woods, Fair, HSG D
1,657	78	Meadow, non-grazed, HSG D
93,335	97	Weighted Average
5,135		5.50% Pervious Area
88,200		94.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0200	1.35		Sheet Flow, SF 5-1
					Smooth surfaces n= 0.011 P2= 3.10"
1.0	130	0.0200	2.28		Shallow Concentrated Flow, SCF 5-1
					Unpaved Kv= 16.1 fps
2.2	230	Total			

Summary for Subcatchment 6S: Subarea 6

Runoff = 6.39 cfs @ 11.93 hrs, Volume= 0.276 af, Depth> 3.18"

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

Area (sf)	CN	Description
13,298	98	Paved parking, HSG D
16,795	98	Paved parking, HSG C
708	78	Meadow, non-grazed, HSG D
14,593	71	Meadow, non-grazed, HSG C
45,394	89	Weighted Average
15,301		33.71% Pervious Area
30,093		66.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	100	0.0400	1.79		Sheet Flow, SF 6-1
					Smooth surfaces n= 0.011 P2= 3.10"
2.0	361	0.0220	3.01		Shallow Concentrated Flow, SCF 6-1
					Paved Kv= 20.3 fps
2.9	461	Total			

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Type II 24-hr 10-yr Rainfall=4.60"

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Summary for Subcatchment 7S: Subarea 7

Runoff = 1.17 cfs @ 11.92 hrs, Volume= 0.047 af, Depth> 2.36"

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

Area (sf)	CN	Description
551	76	Woods/grass comb., Fair, HSG C
3,232	98	Paved parking, HSG C
6,743	71	Meadow, non-grazed, HSG C
10,526	80	Weighted Average
7,294		69.30% Pervious Area
3,232		30.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	60	0.0330	1.49		Sheet Flow, SF 7-1
					Smooth surfaces n= 0.011 P2= 3.10"
1.1	100	0.0480	1.53		Shallow Concentrated Flow, SCF 7-1
					Short Grass Pasture Kv= 7.0 fps
1.8	160	Total			

Summary for Subcatchment 8S: Subarea 8

Runoff = 2.55 cfs @ 11.91 hrs, Volume= 0.102 af, Depth> 2.36"

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

Area (sf)	CN	Description
6,529	98	Paved parking, HSG C
4,143	76	Woods/grass comb., Fair, HSG C
11,866	71	Meadow, non-grazed, HSG C
22,538	80	Weighted Average
16,009		71.03% Pervious Area
6,529		28.97% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	100	0.0360	1.71		Sheet Flow, SF 8-1
					Smooth surfaces n= 0.011 P2= 3.10"
0.4	37	0.0530	1.61		Shallow Concentrated Flow, SCF 8-1
					Short Grass Pasture Kv= 7.0 fps
1.4	137	Total			

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Type II 24-hr 10-yr Rainfall=4.60"

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Summary for Reach SP: Summation Point

Inflow Area = 19.609 ac, 65.68% Impervious, Inflow Depth > 2.77" for 10-yr event
 Inflow = 69.80 cfs @ 11.97 hrs, Volume= 4.535 af
 Outflow = 69.80 cfs @ 11.97 hrs, Volume= 4.535 af, Atten= 0%, Lag= 0.0 min

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

Summary for Pond 1P: Pond 1

Inflow Area = 2.074 ac, 64.57% Impervious, Inflow Depth > 3.17" for 10-yr event
 Inflow = 9.78 cfs @ 11.95 hrs, Volume= 0.549 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

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

Peak Elev= 67.40' @ 20.00 hrs Surf.Area= 3,899.066 ac Storage= 0.548 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	67.40'	11,938.500 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
67.40	3,899.000	0.000	0.000
68.00	4,181.000	2,424.000	2,424.000
69.00	4,573.000	4,377.000	6,801.000
70.00	5,702.000	5,137.500	11,938.500

Device	Routing	Invert	Outlet Devices
#1	Primary	68.90'	10.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=67.40' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 2P: Pond 2

Inflow Area = 0.242 ac, 30.70% Impervious, Inflow Depth > 2.36" for 10-yr event
 Inflow = 1.17 cfs @ 11.92 hrs, Volume= 0.047 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

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

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Peak Elev= 59.40' @ 20.00 hrs Surf.Area= 368.025 ac Storage= 0.047 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	59.40'	1,675.800 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
59.40	368.000	0.000	0.000
60.00	483.000	255.300	255.300
61.00	696.000	589.500	844.800
62.00	966.000	831.000	1,675.800

Device	Routing	Invert	Outlet Devices
#1	Primary	60.90'	7.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=59.40' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 3P: Pond 3

Inflow Area = 0.517 ac, 28.97% Impervious, Inflow Depth > 2.36" for 10-yr event
 Inflow = 2.55 cfs @ 11.91 hrs, Volume= 0.102 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

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

Peak Elev= 55.40' @ 20.00 hrs Surf.Area= 619.019 ac Storage= 0.101 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	55.40'	2,102.100 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
55.40	619.000	0.000	0.000
57.00	803.000	1,137.600	1,137.600
57.50	963.000	441.500	1,579.100
58.00	1,129.000	523.000	2,102.100

Device	Routing	Invert	Outlet Devices
#1	Primary	56.90'	9.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00

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2.50 3.00 3.50

Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88

2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=55.40' (Free Discharge)

↑1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond CB1: Catch Basin 1

Inflow Area = 1.032 ac, 62.82% Impervious, Inflow Depth > 3.17" for 10-yr event
 Inflow = 4.75 cfs @ 12.04 hrs, Volume= 0.273 af
 Outflow = 4.75 cfs @ 12.04 hrs, Volume= 0.273 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.75 cfs @ 12.04 hrs, Volume= 0.273 af

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

Peak Elev= 76.73' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	75.00'	15.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 75.00' / 74.50' S= 0.0050 ' / Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.61 cfs @ 12.04 hrs HW=76.68' (Free Discharge)

↑1=Culvert (Barrel Controls 4.61 cfs @ 3.76 fps)

Summary for Pond DE: Drip Edge

Inflow Area = 2.143 ac, 94.50% Impervious, Inflow Depth > 3.93" for 10-yr event
 Inflow = 14.62 cfs @ 11.92 hrs, Volume= 0.703 af
 Outflow = 7.09 cfs @ 12.01 hrs, Volume= 0.691 af, Atten= 52%, Lag= 5.4 min
 Primary = 7.09 cfs @ 12.01 hrs, Volume= 0.691 af

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

Peak Elev= 79.93' @ 12.01 hrs Surf.Area= 6,696 sf Storage= 7,856 cf

Plug-Flow detention time= 27.9 min calculated for 0.690 af (98% of inflow)

Center-of-Mass det. time= 20.1 min (751.0 - 730.9)

Volume	Invert	Avail.Storage	Storage Description
#1	77.00'	10,714 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 26,784 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
77.00	6,696	0	0
78.00	6,696	6,696	6,696
79.00	6,696	6,696	13,392
80.00	6,696	6,696	20,088
81.00	6,696	6,696	26,784

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Device	Routing	Invert	Outlet Devices
#1	Primary	77.00'	15.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 77.00' / 76.00' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=7.06 cfs @ 12.01 hrs HW=79.91' (Free Discharge)↑**1=Culvert** (Inlet Controls 7.06 cfs @ 5.75 fps)**Summary for Pond DMH1: Drain Mahole**

Inflow Area = 6.131 ac, 98.08% Impervious, Inflow Depth > 3.96" for 10-yr event
Inflow = 34.21 cfs @ 11.93 hrs, Volume= 2.023 af
Outflow = 34.21 cfs @ 11.93 hrs, Volume= 2.023 af, Atten= 0%, Lag= 0.0 min
Primary = 34.21 cfs @ 11.93 hrs, Volume= 2.023 af

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

Peak Elev= 80.14' @ 11.94 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	71.00'	24.0" Round Culvert L= 150.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 71.00' / 70.50' S= 0.0033 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=32.92 cfs @ 11.93 hrs HW=79.60' (Free Discharge)↑**1=Culvert** (Inlet Controls 32.92 cfs @ 10.48 fps)

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

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

Subcatchment 1S: Subarea 1 Runoff Area=448,435 sf 48.10% Impervious Runoff Depth>3.84"
 Flow Length=1,215' Tc=11.7 min CN=85 Runoff=58.96 cfs 3.296 af

Subcatchment 2S: Subarea 2 Runoff Area=173,753 sf 100.00% Impervious Runoff Depth>5.09"
 Flow Length=785' Slope=0.0100 '/' Tc=3.1 min CN=98 Runoff=35.05 cfs 1.692 af

Subcatchment 3S: Subarea 3 Runoff Area=15,247 sf 100.00% Impervious Runoff Depth>5.09"
 Flow Length=380' Slope=0.0100 '/' Tc=2.8 min CN=98 Runoff=3.08 cfs 0.148 af

Subcatchment 4S: Subarea 4 Runoff Area=44,955 sf 62.82% Impervious Runoff Depth>4.25"
 Flow Length=217' Slope=0.0220 '/' Tc=12.3 min CN=89 Runoff=6.26 cfs 0.366 af

Subcatchment 5S: Subarea 5 Runoff Area=93,335 sf 94.50% Impervious Runoff Depth>5.02"
 Flow Length=230' Slope=0.0200 '/' Tc=2.2 min CN=97 Runoff=18.52 cfs 0.896 af

Subcatchment 6S: Subarea 6 Runoff Area=45,394 sf 66.29% Impervious Runoff Depth>4.26"
 Flow Length=461' Tc=2.9 min CN=89 Runoff=8.39 cfs 0.370 af

Subcatchment 7S: Subarea 7 Runoff Area=10,526 sf 30.70% Impervious Runoff Depth>3.35"
 Flow Length=160' Tc=1.8 min CN=80 Runoff=1.63 cfs 0.068 af

Subcatchment 8S: Subarea 8 Runoff Area=22,538 sf 28.97% Impervious Runoff Depth>3.35"
 Flow Length=137' Tc=1.4 min CN=80 Runoff=3.56 cfs 0.145 af

Reach SP: Summation Point Inflow=91.34 cfs 6.019 af
 Outflow=91.34 cfs 6.019 af

Pond 1P: Pond 1 Peak Elev=67.40' Storage=0.735 af Inflow=12.90 cfs 0.736 af
 Outflow=0.00 cfs 0.000 af

Pond 2P: Pond 2 Peak Elev=59.40' Storage=0.067 af Inflow=1.63 cfs 0.068 af
 Outflow=0.00 cfs 0.000 af

Pond 3P: Pond 3 Peak Elev=55.40' Storage=0.144 af Inflow=3.56 cfs 0.145 af
 Outflow=0.00 cfs 0.000 af

Pond CB1: Catch Basin 1 Peak Elev=77.46' Inflow=6.26 cfs 0.366 af
 15.0" Round Culvert n=0.013 L=100.0' S=0.0050 '/' Outflow=6.26 cfs 0.366 af

Pond DE: Drip Edge Peak Elev=80.81' Storage=10,212 cf Inflow=18.52 cfs 0.896 af
 15.0" Round Culvert n=0.013 L=100.0' S=0.0100 '/' Outflow=8.33 cfs 0.883 af

Pond DMH1: Drain Mahole Peak Elev=84.63' Inflow=42.63 cfs 2.575 af
 24.0" Round Culvert n=0.013 L=150.0' S=0.0033 '/' Outflow=42.63 cfs 2.575 af

Total Runoff Area = 19.609 ac Runoff Volume = 6.980 af Average Runoff Depth = 4.27"
34.32% Pervious = 6.730 ac 65.68% Impervious = 12.879 ac

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

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Summary for Subcatchment 1S: Subarea 1

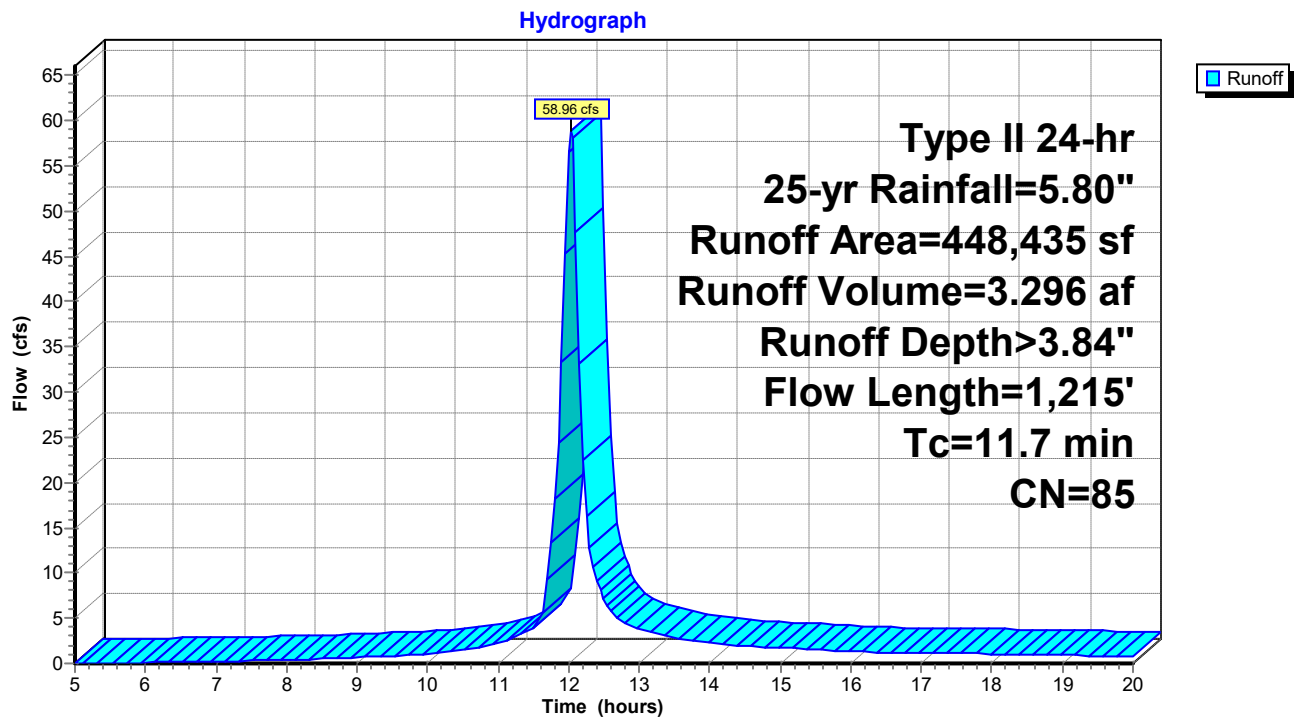
Runoff = 58.96 cfs @ 12.03 hrs, Volume= 3.296 af, Depth> 3.84"

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

Area (sf)	CN	Description
11,049	98	Roofs, HSG C
204,658	98	Paved parking, HSG C
15,335	82	Woods/grass comb., Fair, HSG D
92,772	73	Woods, Fair, HSG C
7,805	78	Meadow, non-grazed, HSG D
116,816	71	Meadow, non-grazed, HSG C
448,435	85	Weighted Average
232,728		51.90% Pervious Area
215,707		48.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0210	1.38		Sheet Flow, SF 1-1 Smooth surfaces n= 0.011 P2= 3.10"
2.9	520	0.0210	2.94		Shallow Concentrated Flow, SCF 1-1 Paved Kv= 20.3 fps
7.6	595	0.0350	1.31		Shallow Concentrated Flow, SCF 1-2 Short Grass Pasture Kv= 7.0 fps
11.7	1,215	Total			

Subcatchment 1S: Subarea 1



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

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Summary for Subcatchment 2S: Subarea 2

Runoff = 35.05 cfs @ 11.93 hrs, Volume= 1.692 af, Depth> 5.09"

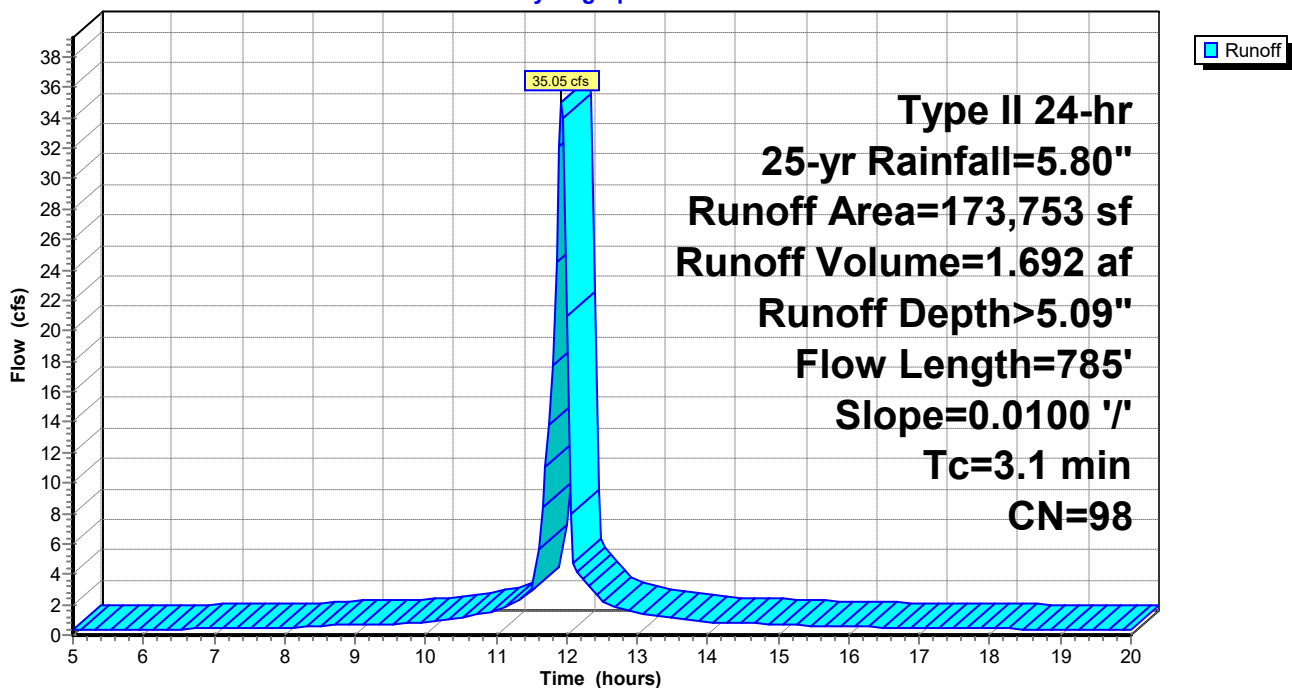
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
173,753	98	Roofs, HSG C
173,753		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.03		Sheet Flow, SF 2-1 Smooth surfaces n= 0.011 P2= 3.10"
1.5	685	0.0100	7.73	13.66	Pipe Channel, PC 2-1 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.010 PVC, smooth interior
3.1	785	Total			

Subcatchment 2S: Subarea 2

Hydrograph



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

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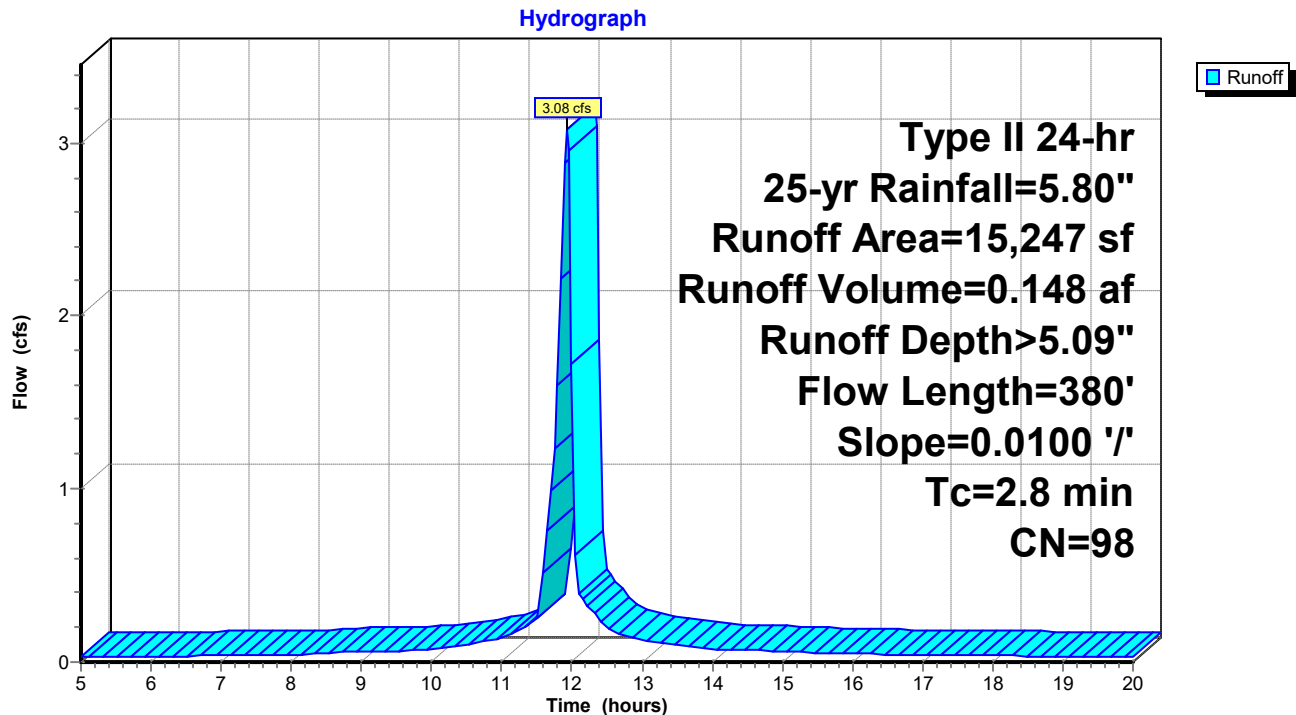
Summary for Subcatchment 3S: Subarea 3

Runoff = 3.08 cfs @ 11.93 hrs, Volume= 0.148 af, Depth> 5.09"

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

Area (sf)	CN	Description
15,247	98	Roofs, HSG C
15,247		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.0100	0.89		Sheet Flow, SF 3-1 Smooth surfaces n= 0.011 P2= 3.10"
1.9	330	0.0100	2.84	0.25	Pipe Channel, PC 3-1 4.0" Round Area= 0.1 sf Perim= 1.0' r= 0.08' n= 0.010 PVC, smooth interior
2.8	380	Total			

Subcatchment 3S: Subarea 3

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

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Summary for Subcatchment 4S: Subarea 4

Runoff = 6.26 cfs @ 12.04 hrs, Volume= 0.366 af, Depth> 4.25"

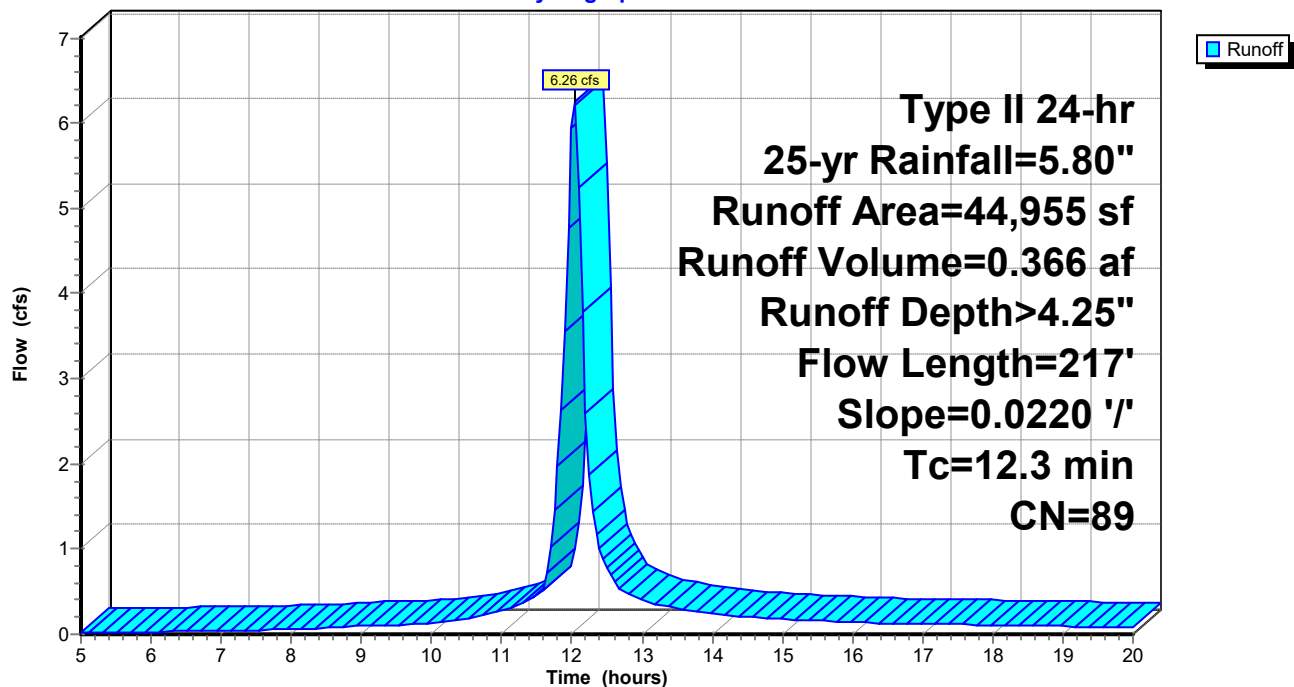
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
23,905	98	Paved parking, HSG C
4,337	98	Paved parking, HSG D
3,033	82	Woods/grass comb., Fair, HSG D
8,788	71	Meadow, non-grazed, HSG C
4,892	78	Meadow, non-grazed, HSG D
44,955	89	Weighted Average
16,713		37.18% Pervious Area
28,242		62.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	65	0.0220	0.11		Sheet Flow, SF 4-1 Grass: Dense n= 0.240 P2= 3.10"
0.5	35	0.0220	1.14		Sheet Flow, SF 4-2 Smooth surfaces n= 0.011 P2= 3.10"
1.9	117	0.0220	1.04		Shallow Concentrated Flow, SCF 4-1 Short Grass Pasture Kv= 7.0 fps
12.3	217	Total			

Subcatchment 4S: Subarea 4

Hydrograph



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

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Summary for Subcatchment 5S: Subarea 5

Runoff = 18.52 cfs @ 11.92 hrs, Volume= 0.896 af, Depth> 5.02"

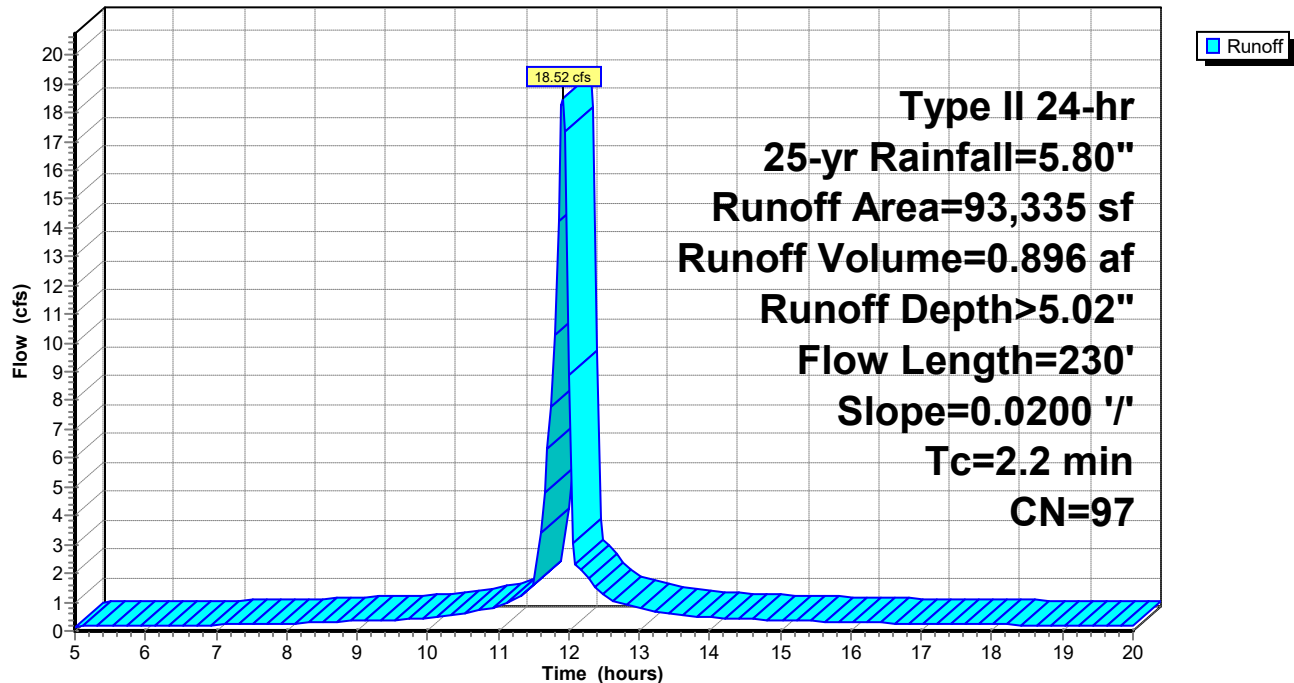
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
72,000	98	Roofs, HSG D
16,200	98	Paved parking, HSG D
3,478	79	Woods, Fair, HSG D
1,657	78	Meadow, non-grazed, HSG D
93,335	97	Weighted Average
5,135		5.50% Pervious Area
88,200		94.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	100	0.0200	1.35		Sheet Flow, SF 5-1
					Smooth surfaces n= 0.011 P2= 3.10"
1.0	130	0.0200	2.28		Shallow Concentrated Flow, SCF 5-1
					Unpaved Kv= 16.1 fps
2.2	230	Total			

Subcatchment 5S: Subarea 5

Hydrograph



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

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Summary for Subcatchment 6S: Subarea 6

Runoff = 8.39 cfs @ 11.93 hrs, Volume= 0.370 af, Depth> 4.26"

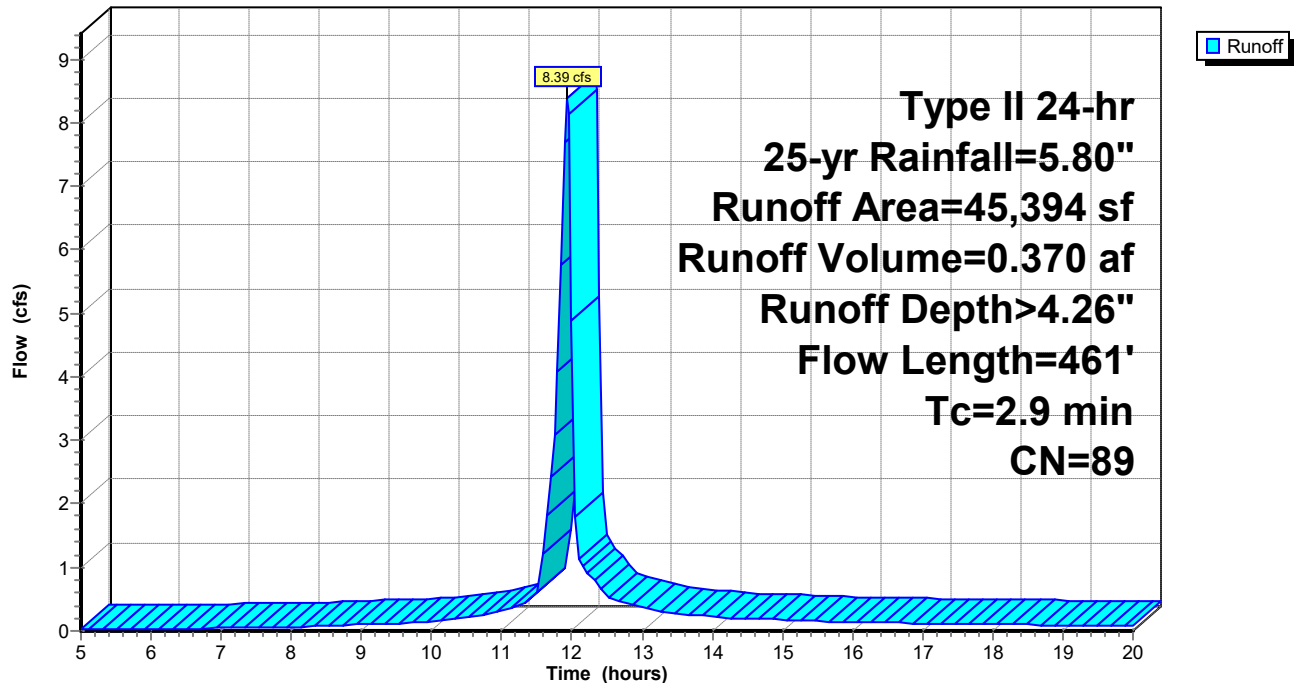
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
13,298	98	Paved parking, HSG D
16,795	98	Paved parking, HSG C
708	78	Meadow, non-grazed, HSG D
14,593	71	Meadow, non-grazed, HSG C
45,394	89	Weighted Average
15,301		33.71% Pervious Area
30,093		66.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	100	0.0400	1.79		Sheet Flow, SF 6-1
					Smooth surfaces n= 0.011 P2= 3.10"
2.0	361	0.0220	3.01		Shallow Concentrated Flow, SCF 6-1
					Paved Kv= 20.3 fps
2.9	461	Total			

Subcatchment 6S: Subarea 6

Hydrograph



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

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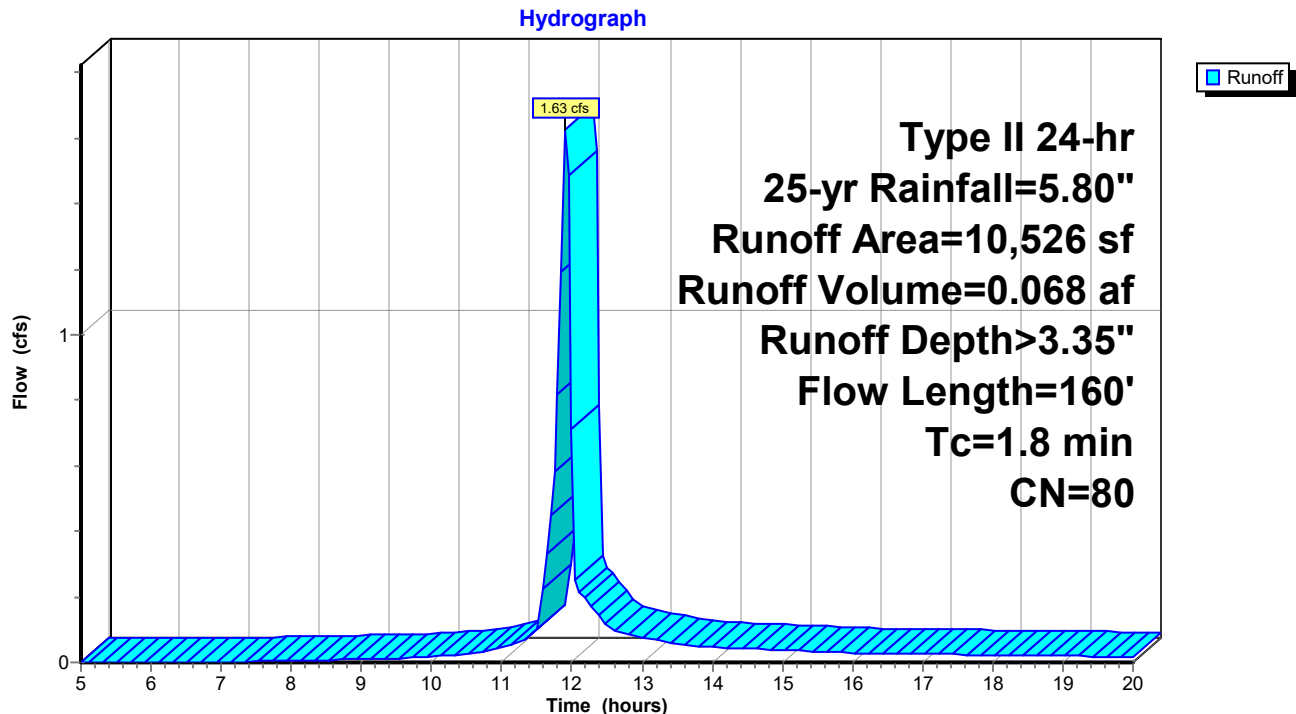
Summary for Subcatchment 7S: Subarea 7

Runoff = 1.63 cfs @ 11.91 hrs, Volume= 0.068 af, Depth> 3.35"

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

Area (sf)	CN	Description
551	76	Woods/grass comb., Fair, HSG C
3,232	98	Paved parking, HSG C
6,743	71	Meadow, non-grazed, HSG C
10,526	80	Weighted Average
7,294		69.30% Pervious Area
3,232		30.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	60	0.0330	1.49		Sheet Flow, SF 7-1
					Smooth surfaces n= 0.011 P2= 3.10"
1.1	100	0.0480	1.53		Shallow Concentrated Flow, SCF 7-1
					Short Grass Pasture Kv= 7.0 fps
1.8	160	Total			

Subcatchment 7S: Subarea 7

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

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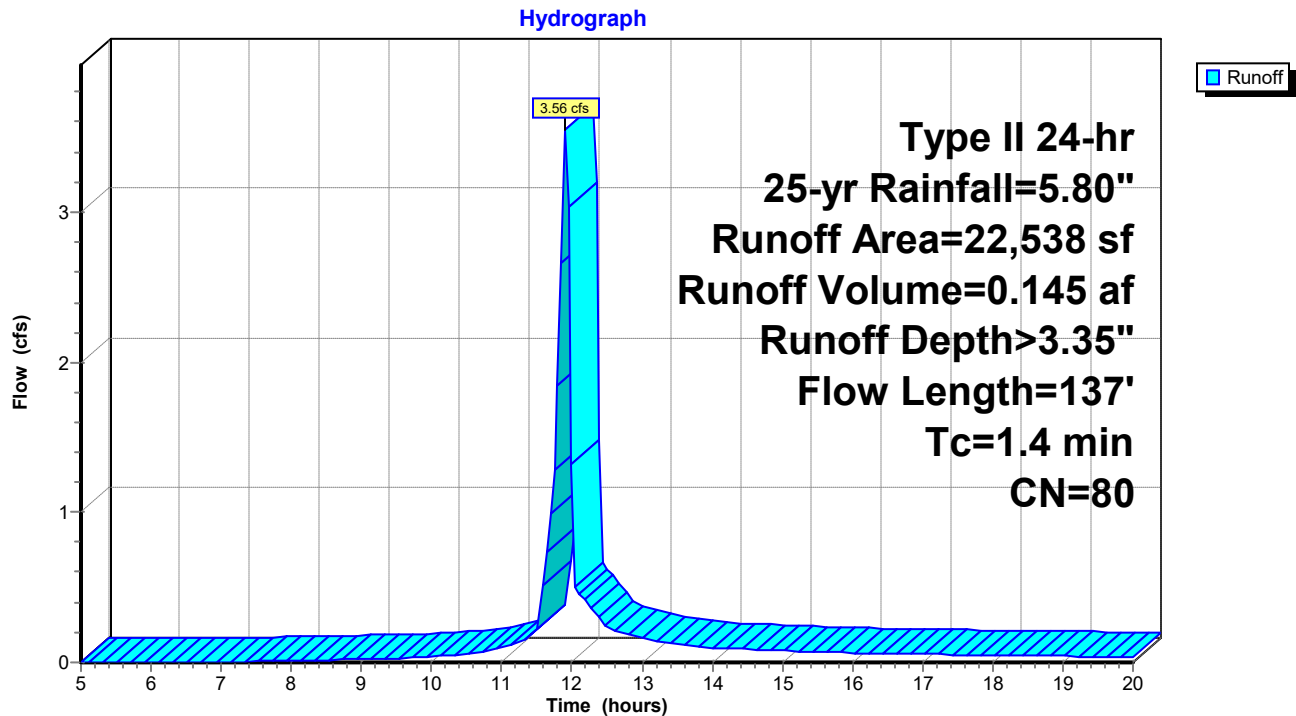
Summary for Subcatchment 8S: Subarea 8

Runoff = 3.56 cfs @ 11.91 hrs, Volume= 0.145 af, Depth> 3.35"

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

Area (sf)	CN	Description
6,529	98	Paved parking, HSG C
4,143	76	Woods/grass comb., Fair, HSG C
11,866	71	Meadow, non-grazed, HSG C
22,538	80	Weighted Average
16,009		71.03% Pervious Area
6,529		28.97% Impervious Area

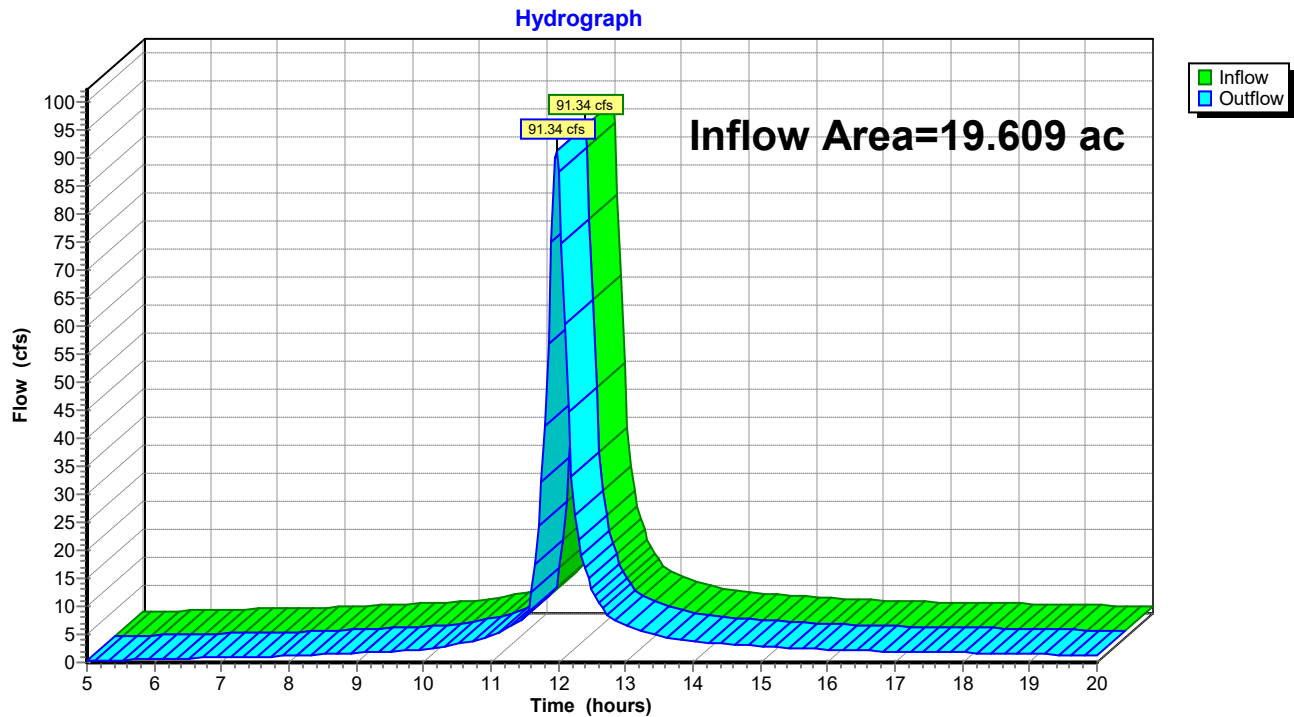
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	100	0.0360	1.71		Sheet Flow, SF 8-1
					Smooth surfaces n= 0.011 P2= 3.10"
0.4	37	0.0530	1.61		Shallow Concentrated Flow, SCF 8-1
					Short Grass Pasture Kv= 7.0 fps
1.4	137	Total			

Subcatchment 8S: Subarea 8

Summary for Reach SP: Summation Point

Inflow Area = 19.609 ac, 65.68% Impervious, Inflow Depth > 3.68" for 25-yr event
Inflow = 91.34 cfs @ 11.97 hrs, Volume= 6.019 af
Outflow = 91.34 cfs @ 11.97 hrs, Volume= 6.019 af, Atten= 0%, Lag= 0.0 min

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

Reach SP: Summation Point

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Summary for Pond 1P: Pond 1

Inflow Area = 2.074 ac, 64.57% Impervious, Inflow Depth > 4.26" for 25-yr event
 Inflow = 12.90 cfs @ 11.95 hrs, Volume= 0.736 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 67.40' @ 20.00 hrs Surf.Area= 3,899.089 ac Storage= 0.735 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	67.40'	11,938.500 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
67.40	3,899.000	0.000	0.000
68.00	4,181.000	2,424.000	2,424.000
69.00	4,573.000	4,377.000	6,801.000
70.00	5,702.000	5,137.500	11,938.500

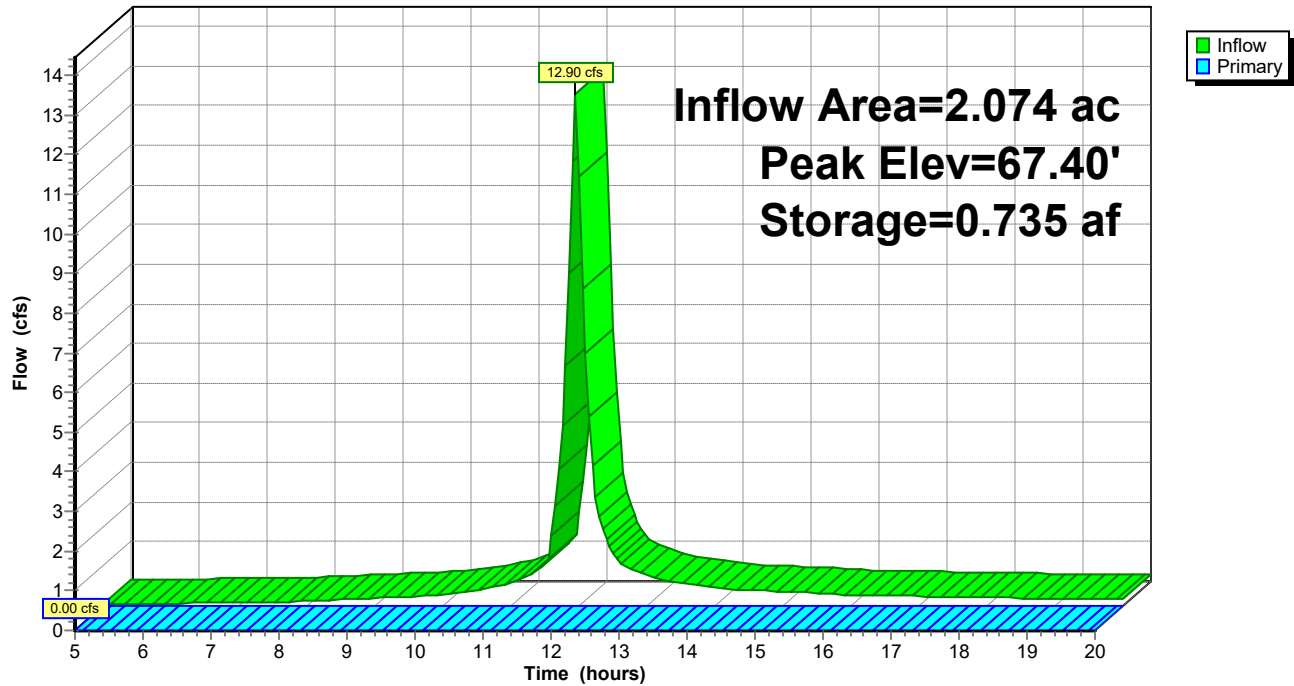
Device	Routing	Invert	Outlet Devices
#1	Primary	68.90'	10.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=67.40' (Free Discharge)

↑ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Pond 1

Hydrograph



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

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Summary for Pond 2P: Pond 2

Inflow Area = 0.242 ac, 30.70% Impervious, Inflow Depth > 3.35" for 25-yr event
 Inflow = 1.63 cfs @ 11.91 hrs, Volume= 0.068 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 59.40' @ 20.00 hrs Surf.Area= 368.035 ac Storage= 0.067 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	59.40'	1,675.800 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
59.40	368.000	0.000	0.000
60.00	483.000	255.300	255.300
61.00	696.000	589.500	844.800
62.00	966.000	831.000	1,675.800

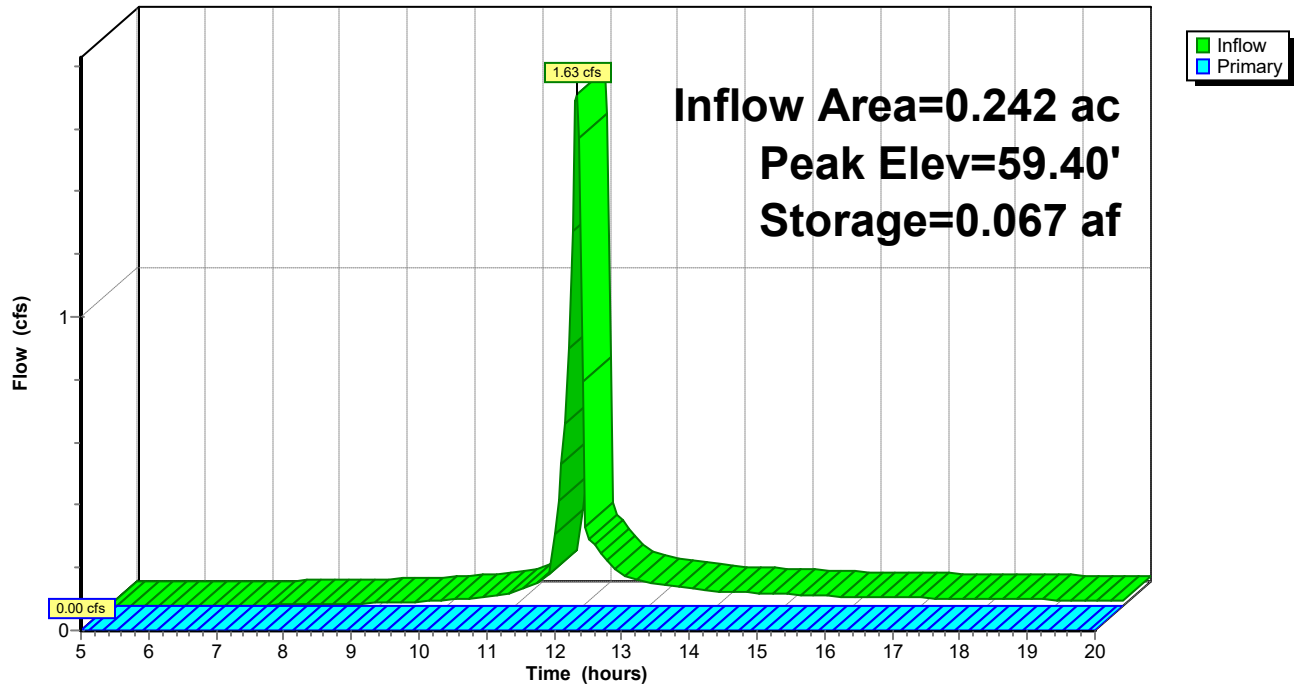
Device	Routing	Invert	Outlet Devices
#1	Primary	60.90'	7.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=59.40' (Free Discharge)

↑1=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2P: Pond 2

Hydrograph



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Summary for Pond 3P: Pond 3

Inflow Area = 0.517 ac, 28.97% Impervious, Inflow Depth > 3.35" for 25-yr event
 Inflow = 3.56 cfs @ 11.91 hrs, Volume= 0.145 af
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 55.40' @ 20.00 hrs Surf.Area= 619.027 ac Storage= 0.144 af

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	55.40'	2,102.100 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
55.40	619.000	0.000	0.000
57.00	803.000	1,137.600	1,137.600
57.50	963.000	441.500	1,579.100
58.00	1,129.000	523.000	2,102.100

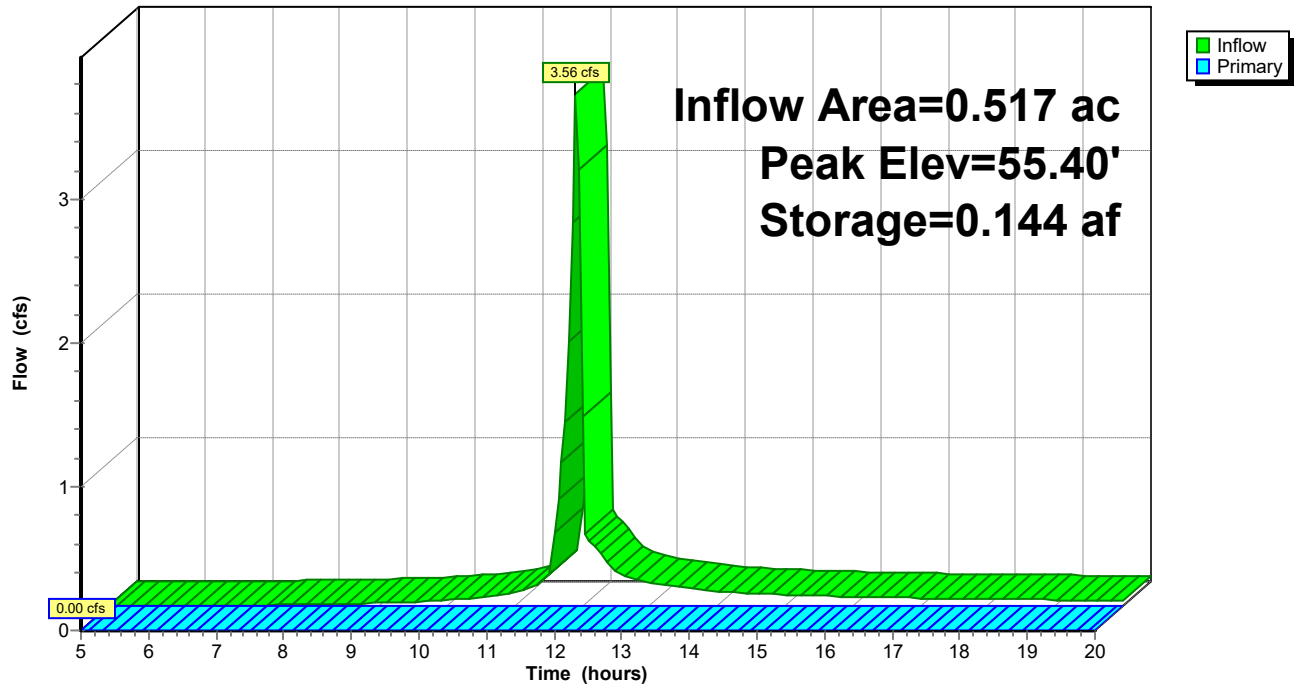
Device	Routing	Invert	Outlet Devices
#1	Primary	56.90'	9.0' long x 2.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=55.40' (Free Discharge)

↑ **1=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: Pond 3

Hydrograph



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

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Summary for Pond CB1: Catch Basin 1

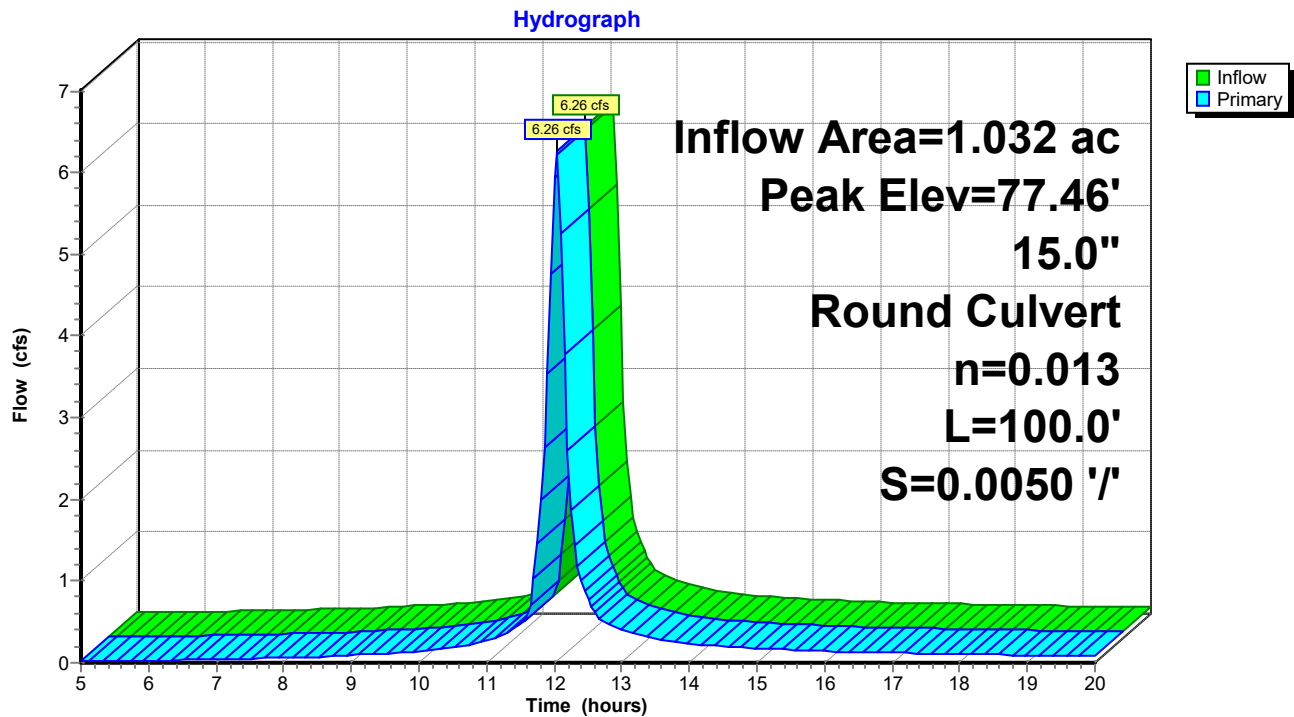
Inflow Area = 1.032 ac, 62.82% Impervious, Inflow Depth > 4.25" for 25-yr event
Inflow = 6.26 cfs @ 12.04 hrs, Volume= 0.366 af
Outflow = 6.26 cfs @ 12.04 hrs, Volume= 0.366 af, Atten= 0%, Lag= 0.0 min
Primary = 6.26 cfs @ 12.04 hrs, Volume= 0.366 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 77.46' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	75.00'	15.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 75.00' / 74.50' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.14 cfs @ 12.04 hrs HW=77.39' (Free Discharge)
↑1=Culvert (Barrel Controls 6.14 cfs @ 5.00 fps)

Pond CB1: Catch Basin 1



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

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Summary for Pond DE: Drip Edge

Inflow Area = 2.143 ac, 94.50% Impervious, Inflow Depth > 5.02" for 25-yr event
 Inflow = 18.52 cfs @ 11.92 hrs, Volume= 0.896 af
 Outflow = 8.33 cfs @ 12.01 hrs, Volume= 0.883 af, Atten= 55%, Lag= 5.6 min
 Primary = 8.33 cfs @ 12.01 hrs, Volume= 0.883 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 80.81' @ 12.01 hrs Surf.Area= 6,696 sf Storage= 10,212 cf

Plug-Flow detention time= 26.3 min calculated for 0.883 af (98% of inflow)
 Center-of-Mass det. time= 19.4 min (748.4 - 729.0)

Volume	Invert	Avail.Storage	Storage Description
#1	77.00'	10,714 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 26,784 cf Overall x 40.0% Voids

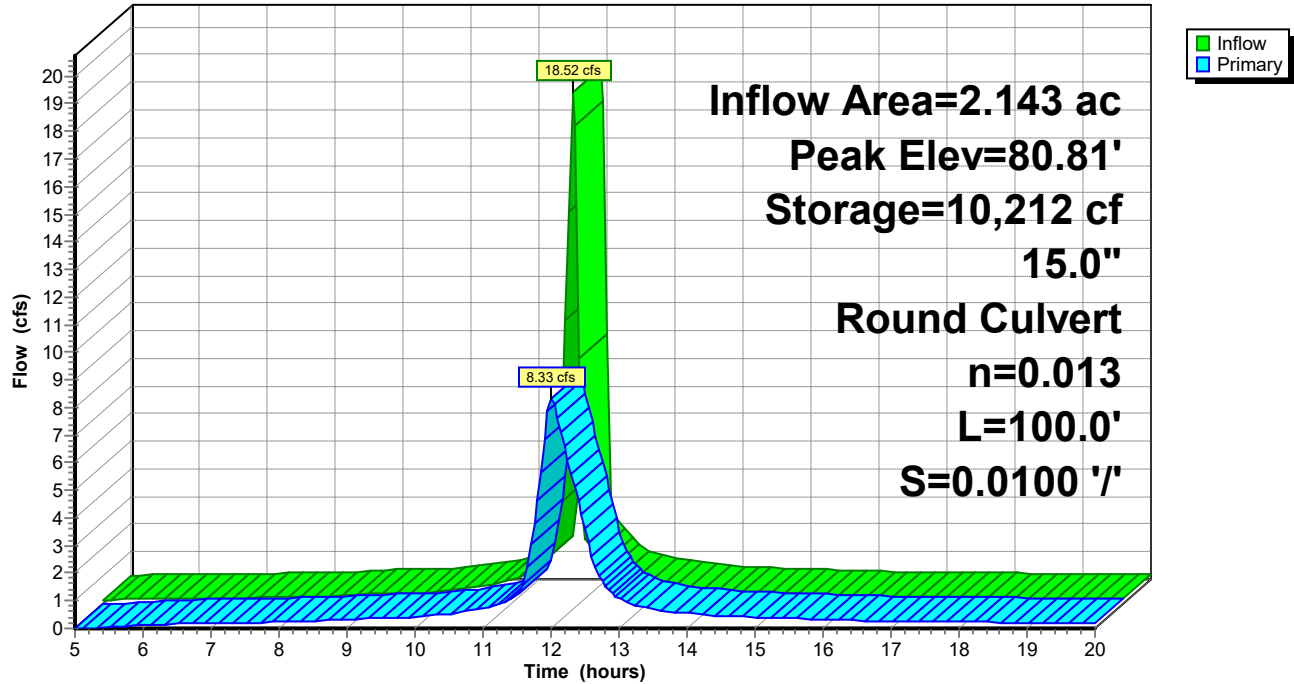
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
77.00	6,696	0	0
78.00	6,696	6,696	6,696
79.00	6,696	6,696	13,392
80.00	6,696	6,696	20,088
81.00	6,696	6,696	26,784

Device	Routing	Invert	Outlet Devices
#1	Primary	77.00'	15.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 77.00' / 76.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=8.28 cfs @ 12.01 hrs HW=80.77' (Free Discharge)
 ↑ **1=Culvert** (Inlet Controls 8.28 cfs @ 6.75 fps)

Pond DE: Drip Edge

Hydrograph



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

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Summary for Pond DMH1: Drain Mahole

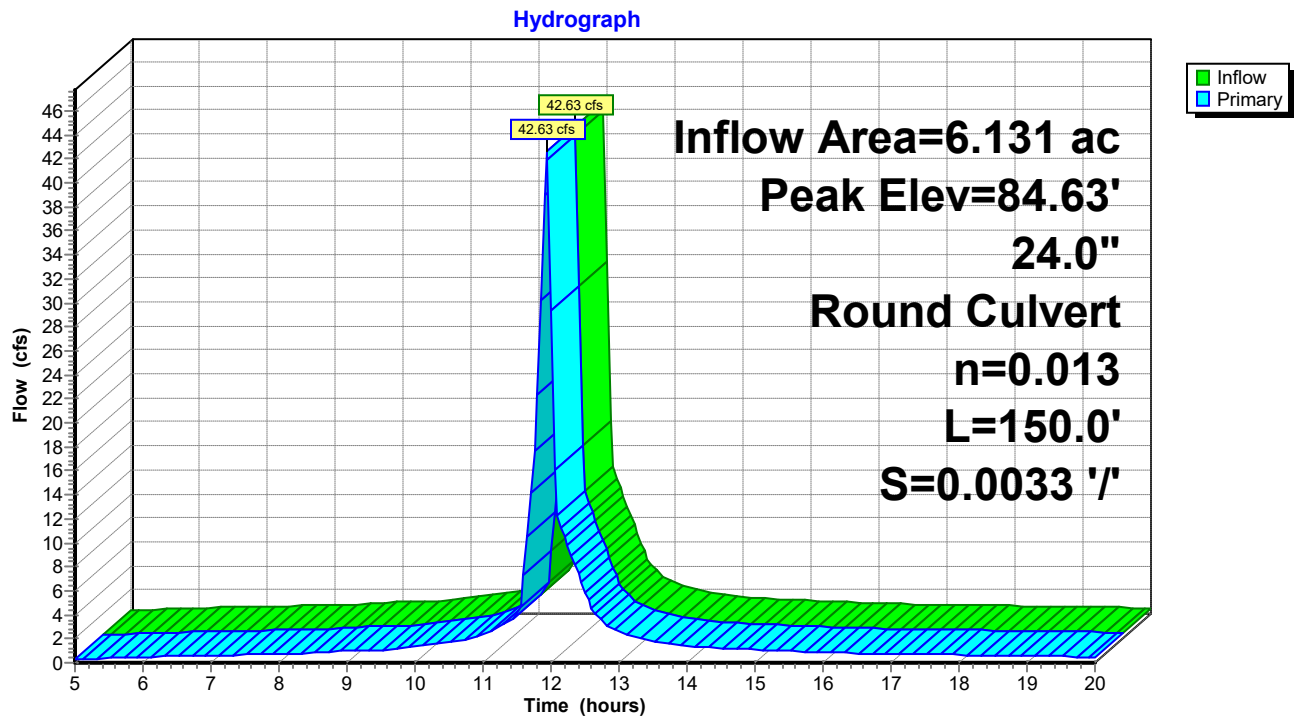
Inflow Area = 6.131 ac, 98.08% Impervious, Inflow Depth > 5.04" for 25-yr event
Inflow = 42.63 cfs @ 11.93 hrs, Volume= 2.575 af
Outflow = 42.63 cfs @ 11.93 hrs, Volume= 2.575 af, Atten= 0%, Lag= 0.0 min
Primary = 42.63 cfs @ 11.93 hrs, Volume= 2.575 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 84.63' @ 11.94 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	71.00'	24.0" Round Culvert L= 150.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 71.00' / 70.50' S= 0.0033 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=40.99 cfs @ 11.93 hrs HW=83.78' (Free Discharge)
↑1=Culvert (Inlet Controls 40.99 cfs @ 13.05 fps)

Pond DMH1: Drain Mahole



From: [Sirois, Alison](#)
To: [John Kuchinski](#)
Cc: [Sean Thies](#); [Barbara Barhydt](#)
Subject: RE: 56 Milliken Street, Portland
Date: Wednesday, August 22, 2018 9:56:21 AM

Hello John

Based on the information provided and acknowledgement from the City of Portland, the Department is waiving state jurisdiction and delegating review to the City of Portland as the municipality pursuant to §489-A. Municipal review of development (1-A) (B). The City is required to submit a copy of the project to the Department under delegated review and if there are any questions the Department will work with the City to discuss it.

Alison Sirois

Regional Licensing and Compliance Manager, Southern Maine
Bureau of Land Resources, Maine Department of Environmental Protection
Phone (207)699-7028 Office (207)822-6300
www.maine.gov/dep

From: John Kuchinski [mailto:jkuchinski@ces-maine.com]
Sent: Monday, August 20, 2018 7:05 AM
To: Sirois, Alison <Alison.Sirois@maine.gov>
Cc: Sean Thies <sthies@ces-maine.com>; Barbara Barhydt <bab@portlandmaine.gov>
Subject: RE: 56 Milliken Street, Portland

Alison

As a follow up to our phone conversation on Friday the following is the summary of the development history at 56 Milliken St:

The original structure and site was constructed in 1966. By 1975 the site contained approximately 5.7 acres of impervious area. In 1993 the City of Portland issued a SLODA permit for expansion of the building and parking. There have been several small amendments until the last permit issued by the City of Portland in 2013. The total impervious area on the site is currently 11.4 acres. The amount of "structure" under Site Law is approximately 5.7 acres. Our proposal will add approximately 2.8 acres of "Structure" to bring the total area to 8.5 acres.

We are requesting that DEP grant a waiver of the 7 acre threshold to allow the City of Portland to continue to review and permit the site.

John Kuchinski, P.E. ♦ Senior Project Engineer
P 207.283.9151 | F 207.283.9151 | C 207.899.5307 | www.ces-maine.com

From: Sirois, Alison <Alison.Sirois@maine.gov>

Sent: Monday, August 6, 2018 4:22 PM
To: John Kuchinski <jkuchinski@ces-maine.com>
Cc: Sean Thies <sthies@ces-maine.com>; Barbara Barhydt <bab@portlandmaine.gov>
Subject: RE: 56 Milliken Street, Portland

Hi John,

Does the proposed project with the combination of previous projects for this location, exceed 7 acres of structure? If it does, the Department generally takes jurisdiction over that review but can waive it under certain circumstances. Let me know if you have any further questions.

Alison Sirois
Regional Licensing and Compliance Manager, Southern Maine
Bureau of Land Resources, Maine Department of Environmental Protection
Phone (207)699-7028 Office (207)822-6300
www.maine.gov/dep

From: John Kuchinski [<mailto:jkuchinski@ces-maine.com>]
Sent: Monday, July 30, 2018 9:55 AM
To: Sirois, Alison <Alison.Sirois@maine.gov>
Cc: Sean Thies <sthies@ces-maine.com>; Barbara Barhydt <bab@portlandmaine.gov>
Subject: 56 Milliken Street, Portland

Allison

I met with the City staff last week on this project. It is a new 72,000 square foot warehouse/industrial building at 56 Milliken Street. I has a SLODA permit from the City and several modifications to the SLODA under delegated review authority. Will this proposal continue to be permitted by the City of Portland under delegated review?

Thank you,

John Kuchinski, P.E. ♦ Senior Project Engineer
P 207.283.9151 | F 207.283.9151 | C 207.899.5307

CES_{INC}

Engineers ♦ Environmental Scientists ♦ Surveyors
146 Main Street, Suite 300, Saco, ME 04072 | www.ces-maine.com

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PLYMOUTH REIT
56 MILLIKEN STREET, PORTLAND, MAINE

TAB 5 - PUBLIC INFRASTRUCTURE AND SAFETY NARRATIVE

Consistency with City Master Plans

The proposed warehouse expansion at 56 Milliken Street is consistent with current City of Portland Master Plans. This development supports economic expansion in an outlying area close to major transportation corridors. The building is an infill development in existing Industrial zoned land with adequate provision for water and wastewater. A warehouse expansion will have minimal traffic impact.

All existing easements are shown on the site survey by SGC. No new easements are proposed.

Public Safety and Fire Prevention

The proposed warehouse building has fire access on all four sides of the building more than 90-percent of the exterior building walls accessible to fire fighting apparatus. In addition, the building will have a sprinkler system. A code study is included on the architectural plans including building construction type and egress.

The site has adequate water supply mains and fire hydrants to aid in firefighting activities. Existing hydrants are located throughout the site. A new hydrant is proposed near the front entrance of the warehouse.

Site lighting is proposed as shown on the photometric plan. Cut sheets of LED fixtures are attached.

Adequacy of Public Utilities

Underground electric service will be provided to the new warehouse from Riverside Industrial Parkway as shown on the site plan.

Sanitary sewer connection is proposed at an existing sanitary manhole located at the Milliken Street entrance to the site. An application for capacity to serve was submitted to the City of Portland Public Works via email. A copy of the application is attached.

An Ability to Serve letter has been received from Portland Water District and is attached. Solid waste will be disposed in an on-site dumpster. Another dumpster will be for recycled materials.

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Portland Dept. of Public Works -
Water Resources
55 Portland Street,
Portland, Maine 04101-2991



Bradley Roland, P.E.
Water Resources Division
Department of Public Works
55 Portland Street
Portland, ME 04103

Date: 10/2/2018

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: 56 Milliken Street

Chart Block Lot Number: 334 A014001

Proposed Use: Warehouse

Previous Use: _____

Existing Sanitary Flows: 7,100 GPD

Existing Process Flows: _____ GPD

Description and location of City sewer that is to
receive the proposed building sewer lateral.

Connection to sanitary sewer in Milliken St

Site Category | Commercial (see part 4 below) ☒
Industrial (complete part 5 below) ☐
Governmental ☐
Residential ☐
Other (specify) ☐

Clearly, indicate the proposed connections, on the submitted plans.

2. Please, Submit Contact Information.

City Planner's Name: Barbara Barhydt Phone: _____

Owner/Developer Name: Plymouth Industrial REIT

Owner/Developer Address: 260 Franklin St., 7th Floor, Boston, MA 02110

Phone: 617 340-3826 Fax: _____ E-mail: jeff.witherell@plymouthrei.com

Engineering Consultant Name: CES, Inc., John Kuchinski

Engineering Consultant Address: 146 Main Street, Saco ME 04072

Phone: 207 283-9151 Fax: _____ E-mail: jkuchinski@ces-maine.com

Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review.

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: 100 GPD

Peaking Factor/ Peak Times: 20 gpm

Specify the source of design guidelines: (i.e. "Handbook of Subsurface Wastewater Disposal in Maine,"
"Plumbers and Pipe Fitters Calculation Manual," Portland Water District Records, Other (specify)

Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet.

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values:	N/A
Size of External Grease Interceptor:	N/A
Retention Time:	
Peaking Factor/ Peak Times:	

Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet.

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated:	0	GPD
Do you currently hold Federal or State discharge permits?	Yes	No <u>X</u>
Is the process wastewater termed categorical under CFR 40?	Yes	No <u>X</u>
OSHA Standard Industrial Code (SIC):	<i>(http://www.osha.gov/oshstats/sicser.html)</i>	
Peaking Factor/Peak Process Times:		

Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps.

Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided, or attached, as a separate sheet.

Domestic use for office in the warehouse. see attached PWD fixture calculation worksheet.



Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

October 5, 2018

John Kuchinski
CES Inc.
465 Main Street
Brewer, ME 04412

Re: 56 Milliken Street, PO
Ability to Serve with PWD Water

Dear Mr. Kuchinski:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on August 23, 2018. Based on the information provided per Progress Print plans dated October 5, 2018, we can confirm that the District will be able to serve the proposed project as further described in this letter. **Please note that this letter constitutes approval of the water system as currently designed. Any changes affecting the approved water system will require further review and approval by PWD.**

Conditions of Service

The following conditions of service apply:

- A new 6-inch fire service and 1-inch domestic service may be installed from the water main in Riverside Industrial Parkway. The service should enter through the properties frontage on Riverside Industrial Parkway at least 10-feet from any side property lines.
- The Portland Water District does not have record of any other existing infrastructure in public roads and recommends a survey and test pitting be performed by the development team prior to construction. Any conflicts that arise during construction are at the risk of the developer and may result in job shutdown until new plans are submitted by the developer and reviewed and approved by PWD.
- An approved backflow prevention device must be installed on each service line directly after the meter or a the service entrance for the fire sprinkler system prior to service activation. Please refer to the PWD website for more information on cross-connection control policies.

Prior to construction, the owner or contractor will need to make an appointment to complete a service application form and pay all necessary fees. The appointment shall be requested through MEANS@pwd.org or by calling 207-774-5961 ext. 3199. Please allow (3) business days to process the service application paperwork. PWD will guide the applicant through the new development process during the appointment.



Existing Site Service

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

Water System Characteristics

According to District records, there is an 16-inch diameter cement lined cast iron water main in Riverside Industrial Parkway and a public fire hydrant located approximately 800 feet from the site. The most recent static pressure reading was 82 psi on June 18, 2018.

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

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

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

PLYMOUTH REIT
56 MILLIKEN STREET, PORTLAND, MAINE

Tab 6 - SITE DESIGN NARRATIVE

Massing, Ventilation, and Wind Impact

The proposed building height is less than 30 feet along most of the front (westerly) and less than 25 feet in the rear. The exposed height at the loading docks is less than 35 feet. The roof slopes from front to rear. There is an entrance canopy on the front. The height of the building will not result in health or safety problems or cause a reduction in ventilation to abutting structures. The building will not cause a change in the wind climate that will result in unsafe wind conditions for users of the site or adjacent public spaces.

The bulk, location, and height of the proposed building will not result any substantial diminution in value or utility of neighboring structures.

All heating, ventilation or air conditioning mechanical equipment will be designed to prevent direct exhaust into public spaces.

Shadows

The building height will not cause significant shadows on any public open space.

Snow and Ice Loading

The building roof is sloped from front to back. A stormwater roof drip line filter is designed along the rear wall of the proposed building. In winter time, snow and ice will accumulate in the stormwater Best Management Practice and not accumulate on adjacent properties or public ways.

View Corridors

No public views will be impacted by the proposed building.

Historic Resources

The site is not a historic site. The existing warehouse building was constructed in 1966. We have also contacted the Maine Historic Preservation Commission regarding this site and have received a letter from them indicating that there are no known historic resources on this site.

Exterior Lighting

The site design includes a photometric plan with light intensities. All light fixtures will be LED with full cut off fixtures. Light limits comply with the City of Portland Technical Manual.

Noise and Vibration

The proposed use is warehousing. Noise and vibration will be minimal. The building is also located away from the public road and will be screened by native vegetation. The only appreciable noise will be truck traffic to and from the site.

Mechanical equipment will either be roof top units or ground units that are screened from public view. Mechanical equipment will comply with state and federal requirements.

Signage and Wayfinding

The site plan shows signage for the new driveway to include “DO NOT ENTER” facing the Riverside Industrial Parkway and “STOP” for traffic exiting the site. Any business sign will be located on Milliken Road and will comply with applicable City of Portland sign codes.



Engineers ♦ Environmental Scientists ♦ Surveyors

August 21, 2018

Mr. Kirk Mohny, Director
Maine Historic Preservation Commission
55 Capitol Street
Augusta, ME 04333-0065

Re: Plymouth Industrial REIT | 56 Milliken Road | Portland, Maine

Dear Mr. Mohny,

Plymouth Industrial REIT is currently in the process of preparing a Site Location of Development Permit Amendment Application for the construction of a 72,000 square foot building at 56 Milliken Drive in Portland, Maine. The facility is an addition to and existing industrial manufacturing facility at 56 Milliken Road, Portland.

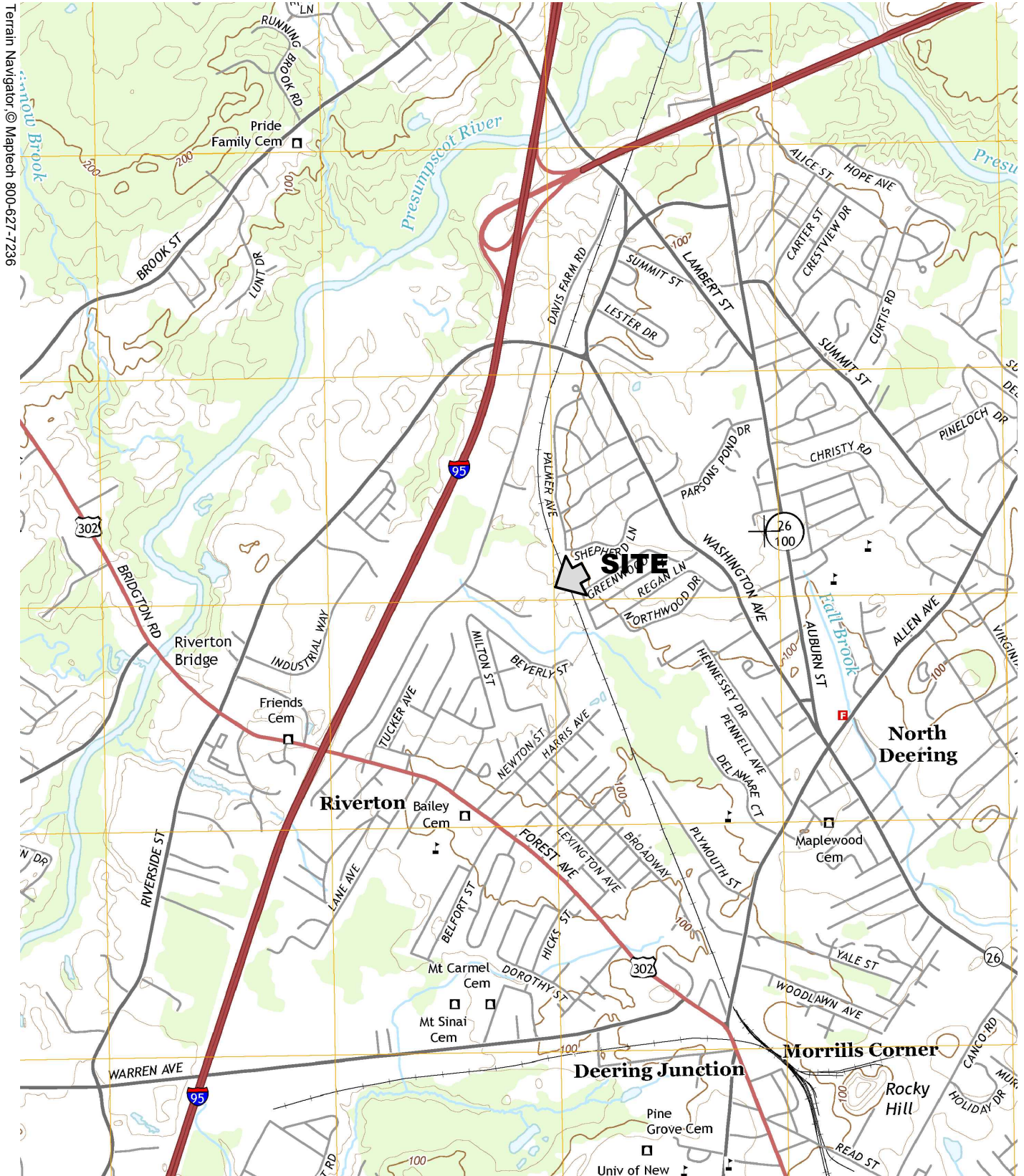
As required for permitting requirements, we are submitting this request to your office to determine if there are any potential impacts to fisheries or wildlife habitats located at the site or in the immediate surroundings. Any response can be forwarded to our office located at 146 Main Street, Saco, ME 04072 or by email at jkuchinski@ces-maine.com.

Thank you for your assistance in this matter.

Sincerely,
CES, Inc.

John D. Kuchinski, PE
Senior Project Engineer

JDK/cmc
Encl.



SOURCE:
U.S.G.S. TOPOGRAPHIC QUADRANGLE
PORTLAND WEST
@ 1:24,000



PLYMOUTH INDUSTRIAL REIT, INC.
56 MILLIKEN STREET, PORTLAND, MAINE
LOCATION MAP

2018-07-06
12254.003



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333



PAUL R. LEPAGE
GOVERNOR

KIRK F. MOHNEY
DIRECTOR

August 29, 2018

Mr. John D. Kuchinski
CES Inc
146 Main St, Suite 300
Saco, ME 04072

Project: MHPC #1141-18 Plymouth Industrial Reit; 56 Milliken Rd
Construction of a 72,000 Sq Ft Building
Town: Portland, ME

Dear Mr. Kuchinski:

In response to your recent request, I have reviewed the information received August 23, 2018 to initiate consultation on the above referenced project in accordance with the requirements of the Maine Department of Environmental Protection.

Based on the information submitted, I have concluded that there will be no historic properties (archaeological or architectural) affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act.

Please contact Megan Rideout at (207) 287-2992 or megan.m.rideout@maine.gov if we can be of further assistance in this matter.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer

VP-S OPTICS STRIKE

Viper (Small)

TYPE A

12254.003

PLYMOUTH REIT - 56 MILLIKEN ST

SITE/ROADWAY



FEATURES

- The Beacon Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS and with 4 different mounting options for application in a wide variety of new and existing installations.
- Each Viper luminaire is supplied with an one piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- A thermal circuit, LIFESHIELD™, shall protect the luminaire from excessive temperature by interfacing with the 0-10V dimmable drivers to reduce drive current as necessary.
- Aluminum thermal clad board with 0.062" thick aluminum base layer, thermally conductive dielectric layer, 0.0014" thick copper circuit layer circuit layer designed with copper pours to minimize thermal impedance across dielectric.

ORDERING INFORMATION

VPS		48L-110		4K7		4				UNV		A		DBT		7PR-TL			
SERIES		LED ENGINE		CCT/CRI		ROTATION		VOLTAGE		COLOR		OPTIONS							
VPS Viper		24L-55 55W, LED array		3K7 3000K, 70 CRI		Leave blank for no rotation		UNV 120-277V		DBT Dark Bronze Textured		F Fusing							
		36L-65 65W, LED array		4K7 4000K, 70 CRI		L ⁵ Optic rotation left		120 120V		BMT Black Matte Textured		BSP Bird Spikes							
		36L-80 80W, LED array		5K7 5000K, 70 CRI		R ⁵ Optic rotation right		208 208V		PS Platinum Silver Smooth		BC Backlight control (limited to Type 4W only)							
		48L-110 110W, LED array						240 240V		WHT White Textured									
		60L-136 136W, LED array						277 277V		CC Custom Color (RAL#)									
								347 347V											
								480 480V											
										</									

HOUSE SIDE SHIELD ACCESSORIES

HSS/VP-S/90-FB/XXX 90° shield front or back
HSS/VP-S/90-LR/XXX 90° shield left or right
HSS/VP-S/180-FB/XXX 180° shield front or back
HSS/VP-S/180-LR/XXX 180° shield left or right
HSS/VP-S/270-FB/XXX 270° shield front or back
HSS/VP-S/270-LR/XXX 270° shield left or right
HSS/VP-S/360/XXX Full shield

(Replace XXX with notation for desired finish color)
 (Refer to page 5 for shield images)

¹ Not available with other wireless control or sensor options

² Specify mounting height: 8'-8" or less, 40'-9" to 40'

³ Specify routine setting code (example GENI-04). See ENERGENI brochure and instructions for setting table and options. Not available with sensor or SiteSync options.

⁴ Specify group and zone at time of order. See www.hubbellighting.com/sitesync for further details. Order at least one SiteSync interface Accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node

⁵ Only available with 1A, 2, 3, 4, 4W and 5R distributions

⁶ Order at least one SCP-REMOTE per project location to program and control

DesignLights Consortium qualified. Consult
 DLC website for more details: <http://www.designlights.org/QPL>

Accessories and Services (Ordered Separately)

Catalog Number	Description
SWUSB*	SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node.
SWTAB*	Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node.
SWBRG*	SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.

* When ordering SiteSync at least one of these two interface options must be ordered per project.

+ If needed, an additional Bridge Node can be ordered.

Visit www.beaconproducts.com for up-to-date availability information

VP-S OPTICS STRIKE

Viper (Small)

TYPE B
12254.003
PLYMOUTH REIT - 56 MILLIKEN ST



FEATURES

- The Beacon Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS and with 4 different mounting options for application in a wide variety of new and existing installations.
- Each Viper luminaire is supplied with an one piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- A thermal circuit, LIFESHIELD™, shall protect the luminaire from excessive temperature by interfacing with the 0-10V dimmable drivers to reduce drive current as necessary.
- Aluminum thermal clad board with 0.062" thick aluminum base layer, thermally conductive dielectric layer, 0.0014" thick copper circuit layer circuit layer designed with copper pours to minimize thermal impedance across dielectric.

ORDERING INFORMATION

VPS	24L-55		4K7	3		UNV	A	DBT	7PR-TL	HSS/VP-S
SERIES	LED ENGINE		CCT/CRI		ROTATION	VOLTAGE		COLOR		OPTIONS
VPS Viper	24L-55	55W, LED array	3K7	3000K, 70 CRI	Leave blank for no rotation L ⁵ Optic rotation left R ⁵ Optic rotation right	UNV	120-277V	DBT	Dark Bronze Textured	F Fusing
	36L-65	65W, LED array	4K7	4000K, 70 CRI		120	120V	BMT	Black Matte Textured	BSP Bird Spikes
	36L-80	80W, LED array	5K7	5000K, 70 CRI		208	208V	PS	Platinum Silver Smooth	BC Backlight control (limited to Type 4W only)
	48L-110	110W, LED array				240	240V	WHT	White Textured	
	60L-136	136W, LED array				277	277V	CC	Custom Color (RAL#)	
DISTRIBUTION										
			FR	Type 1/Front Row						
			2	Type 2						
			3	Type 3						
			4	Type 4						
			4W	Type 4 Wide						
			5QM	Type 5QM						
			5R	Type 5R (rectangular)						
			5W	Type 5W (round wide)						
					MOUNTING					
					A	Rectangular Arm (formerly RA)				
					MAF	Mast Arm Fitter (formerly SF2)				
					K	Knuckle (formerly PK2) limit to 45° tilt				
					WB	Wall Bracket				
					ADSQ	Universal Arm for square pole				
					AD34	Universal Arm for 2.4"-4.1" round pole				
					AD45	Universal Arm for 4.2" to 5.3" round pole				
					AD56	Universal Arm for 5.5" to 6.5" round pole				
CONTROL OPTIONS										
7PR 7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others)										
7PR-SC 7-Pin Receptacle w/Shorting Cap										
7PR-TL 7-Pin Receptacle w/Twist Lock photo control										
SCP/_F ^{1,2,6} Programmable Occupancy Sensor w/ daylight control (120-277 volts only)										
GENI-XX ³ ENERGENI										
SWF ¹ SiteSync Field Commission										
SWFM ^{1,2} SiteSync Field Commission w/ Sensor										
SWP ^{1,4} SiteSync Pre-Commission										
SWPM ^{1,2,4} SiteSync Pre-Comm w/ Sensor										
HOUSE SIDE SHIELD ACCESSORIES										
HSS/VP-S/90-FB/XXX 90° shield front or back										
HSS/VP-S/90-LR/XXX 90° shield left or right										
HSS/VP-S/180-FB/XXX 180° shield front or back										
HSS/VP-S/180-LR/XXX 180° shield left or right										
HSS/VP-S/270-FB/XXX 270° shield front or back										
HSS/VP-S/270-LR/XXX 270° shield left or right										

HOUSE SIDE SHIELD ACCESSORIES

HSS/VP-S/90-FB/XXX 90° shield front or back
HSS/VP-S/90-LR/XXX 90° shield left or right
HSS/VP-S/180-FB/XXX 180° shield front or back
HSS/VP-S/180-LR/XXX 180° shield left or right
HSS/VP-S/270-FB/XXX 270° shield front or back
HSS/VP-S/270-LR/XXX 270° shield left or right
HSS/VP-S/360/XXX Full shield

(Replace XXX with notation for desired finish color)
(Refer to page 5 for shield images)

¹ Not available with other wireless control or sensor options

² Specify mounting height: 8-8' or less, 40-9' to 40'

³ Specify routine setting code (example GENI-04). See ENERGENI brochure and instructions for setting table and options. Not available with sensor or SiteSync options.

⁴ Specify group and zone at time of order. See www.hubbellighting.com/sitesync for further details. Order at least one SiteSync interface Accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node

⁵ Only available with 1A, 2, 3, 4, 4W and 5R distributions

⁶ Order at least one SCP-REMOTE per project location to program and control

DesignLights Consortium qualified. Consult
DLC website for more details: <http://www.designlights.org/QPL>

Accessories and Services (Ordered Separately)

Catalog Number	Description
SWUSB*	SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node.
SWTAB*	Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node.
SWBRG*	SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.

* When ordering SiteSync at least one of these two interface options must be ordered per project.
+ If needed, an additional Bridge Node can be ordered.

Visit www.beaconproducts.com for up-to-date availability information

TYPE C
12254.003

PLYMOUTH REIT - 56 MILLIKEN ST



Large LED Wallpack – Zero Uplight

Largest in the Litepak product family, the LNC4 is designed for perimeter illumination for safety, security and identity. Replaces up to 400w HID luminaires one-for-one replacement covering existing installation footprint. No uplight and lower glare lenses offer neighbor friendly lighting at typical mounting heights of 15-25'. Units have protective polyester powder coat finish for long lasting appearance. Ideal for schools, factories, hospitals, warehouses and retail applications. Energy efficient LEDs provide 70%+ energy savings with little to no maintenance when compared to traditional light sources.

Die-cast aluminum housing protects components and provides an architectural appearance. Casting thermally conducts LED heat to optimize performance and long life.

- 120-277, 347 and 480 voltage, 50/60Hz, 0-10V dimming driver
- Electronic driver
- Surge protection – 10KA
- 3000K, 4000K and 5000K CCT nominal with 70 CRI
- 36 and 44 LED configurations available
- Zero uplight distributions using individual acrylic LED optics provide IES type II, III and IV distributions
- Features long-life with L96 of 25,000 hours (Projected per IESNA TM-21-11)
- Optional frosted acrylic diffuser for reduced glare or inverted up mounting
- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org



Optional Motion Sensor



*3000K and warmer CCTs only

LED WALLPACKS

STOCK

ORDERING INFORMATION

Catalog Number	Description	Distribution	Wattage	Lumens	LPW	Voltage	# of Drivers @ Drive Current	Wgt lbs. (Kg)	PKG. CODE
LNC4-36L-4K	36 LED Configuration, 4000K, Dark Bronze	Type IV	124.6	10,754	86.3	120-277	2 @ 1050mA	27.0 (12.2)	FCC
LNC4-44L-4K	44 LED Configuration, 4000K, Dark Bronze		152.6	13,477	88.3			27.0 (12.2)	FCC
LNC4-44L-5K	44 LED Configuration, 5000K, Dark Bronze		152.1	13,342	87.7			27.0 (12.2)	FCC
LNC4-44L-4K-7PR	44 LED Configuration, 4000K, Dark Bronze, 7 Pin		152.6	13,477	88.3			27.0 (12.2)	FCC
LNC4-44L-4K-SCP	44 LED Config., 4000K, Dark Bronze, Occ. Sensor		152.6	13,477	88.3			27.0 (12.2)	FCC

MADE-TO-ORDER

ORDERING INFORMATION - CONFIGURABLE (SEE SPEC SHEET FOR PERFORMANCE INFORMATION AND DETAILS)

LNC4		-	44L		-	4K		-	1050		-	4		-	U		-	DB		-	PCU		-	CS	
FAMILY		NUMBER OF LEDS		CCT		DRIVE CURRENT		IES DISTRIBUTION		VOLTAGE		FINISH		CONTROL OPTIONS		OPTIONS									
LNC4 Large Litepak Wallpack		36L 36LED 44L 44LED		3K 3000K 4K 4000K 5K 5000K		035 350mA 065 650mA 1050 1050mA		2 Type II 3 Type III 4 Type IV		U 120V-277V 1 120V ¹ 2 208V ¹ 3 240V ¹ 4 277V ¹ 5 480V ¹ F 347V ¹		DB Bronze BL Black WH White GR Gray PS Platinum FG Forest Green RD Red CC Custom Color		PCU Universal Button PC 7PR ⁵ NEMA 7-Pin twistlock receptacle SCP ^{3,4} Programmable occupancy sensor SWP ^{1,7} SiteSync wireless pre-commissioned SWPM ^{1,4,7,8} SiteSync wireless pre-commissioned w/ occupancy sensor		F ¹ Fusing (must specify voltage per footnote) CS Frosted acrylic diffuser CSU ² Frosted acrylic diffuser required for inverted fixture installations (Factory install only) F ^{1,6} Integral battery									

¹ Must specify voltage (battery backup 120 or 277V only, SiteSync 120, 277 or 347V only)

² Factory install only. Not available with SCP or SWPM sensor/control options

³ Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120-277V only.

⁴ PC option not applicable, included in sensor. Must specify sensor height (8F = up to 8ft, 20F = up to 20ft)

¹ Must specify voltage (battery backup 120 or 277V only, SiteSync 120, 277 or 347V only)

² Factory install only. Not available with SCP or SWPM sensor/control options

³ Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120-277V only.

⁴ PC option not applicable, included in sensor. Must specify sensor height (8F = up to 8ft, 20F = up to 20ft)

⁵ Accepts standard 3, 5, and 7-Pin ANSI controls (by others). Not available with PCU, SWP or SWPM control options

⁶ 36L-650mA version only. Not available with SWP or SWPM control options.

⁷ Must specify group and zone information at time or order. See www.hubbelllighting.com/products/sitesync for further details.

⁸ Specify time delay; dimming level and mounting height

CATALOG NUMBER	DESCRIPTION
LNC4-CS	Frosted acrylic diffuser reduces surface brightness and glare with a roughly 20% lumen reduction
SCP-REMOTE2*	Remote control for SCP option. Order at least one per project to program and control
SWUSB**	SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node.
SWTAB**	Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node.
SWBRG*	SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.

* Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120V or 277V only

** When ordering SiteSync at least one of these two interface options must be ordered per project.

+ If needed, an additional Bridge Node can be ordered.

SPEC SCP/SCO & SWPM MOUNT HEIGHT

-8F Up to 8ft mount height

-20F Up to 20ft mount height



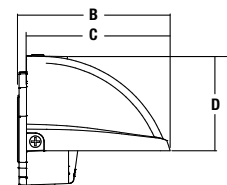
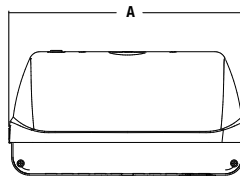
WITHOUT DIFFUSER



WITH DIFFUSER

DIMENSIONS

A	B	C	D	E	Weight
17.2"	10.5"	9.9"	6.5"	8.9"	27 lbs.
436 mm	266 mm	251 mm	165 mm	226 mm	12.3 kg



HUBBELL
Outdoor Lighting

**PLYMOUTH REIT
56 MILLIKEN STREET, PORTLAND, MAINE**

TAB 7 - CONSTRUCTION MANAGEMENT PLAN NARRATIVE

Construction Management Principles

This Construction Management Plan depicts the overall planning, coordination and control of construction activities related to the new 72,000 square foot warehouse facility and related site construction located at 56 Milliken Street in Portland, Maine. The goal of this Construction Management Plan is to support a safe construction site and protect public safety. Impacts of the proposed construction activities shall be minimized in their duration and magnitude to the surrounding area.

Development Review of Construction Management Plan

This Construction Management Plan shall be reviewed and approved by the City of Portland Planning Authority and the Portland Department of Public Works.

Performance Guarantees, Inspection Fees, Preconstruction Meeting, and Permits

Prior to the start of construction, the contractor and the applicant shall provide the City of Portland performance guarantees as stated in the Planning Authority approval and shall meet the requirements of Section 15-530, Development Review Fees and Post Approval Requirements and Section 14-532, General Requirements and Enforcement of Portland's Land Use Code.

A preconstruction meeting shall be coordinated by the contractor with the City of Portland staff to review this Construction Management Plan, approval requirements and to establish communication contacts for the contractor and the owner.

Contractor shall obtain a Street Opening Permit from the City of Portland prior to the start of any construction in Riverside Industrial Parkway or Milliken Street.

Blasting is not anticipated for this site and building construction. If ledge is encountered during construction and blasting is necessary, then the contractor shall prepare a blasting plan in accordance with the City of Portland Technical Manual and applicable State and Federal regulations.

Contractor shall employ the best practices, as applicable, of Chapter 33 Safeguards during Construction, from the 2009 International Building Code.

Construction Schedule

Contractor shall submit a construction schedule to the City of Portland at the preconstruction meeting. Hours of construction shall occur in Monday through Friday between 7:00 am and 7:00 pm. If a construction activity is required to be conducted outside these hours, then the contractor shall notify the City and provide a written explanation of the activity and state the reasons for work

outside the allowable window. The contractor shall receive written approval from the City prior to construction activities outside the allowable window. Exception shall be made for an emergency activity necessary by an unforeseen event.

Contractor to submit a Fire Safety Program at the preconstruction meeting. The Fire Safety Program shall include:

- ◆ Good Housekeeping
- ◆ On-site security
- ◆ Installation of new fire protection systems as construction progresses
- ◆ Preservation of existing systems during demolition
- ◆ Organization and training of an on-site fire brigade
- ◆ Development of a pre-fire plan with the local fire department
- ◆ Rapid communication
- ◆ Protection of existing structures and equipment from exposure fires resulting from construction, alteration, and demolition operations

Contractor shall provide temporary lighting where necessary. Temporary lighting shall be full cut-off fixtures.

Security and Public Safety

Refer to the Construction Management Site Plan for temporary construction fencing to separate pedestrian and vehicle circulation from the construction site.

Construction Permitting and Traffic Control

Construction Activity in Public Streets: Construction activity in the public right-of-way is controlled by Chapter 25 Article VII of the City Code of Ordinances. Required licenses and permits, restrictions on activity, and fees & area are outlined in that Chapter. Rules and Regulations for Excavation Activity are available through the Street Opening Clerk at the Department of Public Works. At no time can construction activity including delivery vehicles close or block streets or affect public safety access without prior notice and approval of the Department of Public Works.

Construction traffic shall be restricted to the new access driveway during construction. Contractor to maintain adequate access during construction for emergency vehicles to the site.

Site Management Controls

Contractor to implement Site Management Controls as outlined below:

1. Regular trash and debris removal at the end of each work day. Contractor shall not allow construction debris to migrate from the site into neighboring sites or onto public ways.
2. Contractor shall maintain a construction entrance/exist for all construction vehicles and shall provide street sweeping on adjacent public ways.
3. Dust controls- The construction shall comply with Portland's requirements under Section 25-129 on Noise, dust and debris
4. Noise: The construction shall comply with Portland's requirements under Section 17- 18 of the City Code and Section 25-129 on Noise, dust and debris.
5. Rodent Control will be provided, if applicable, by a professional exterminator and consistent with Chapter 22 of the City Code.

6. Snow Removal: Pursuant to Section 25-173 Contractors to ensure a safe means of travel within the work zone.

Erosion Control and Preservation of Trees

Contractor shall install all erosion and sedimentation controls as depicted on the approved erosion and sedimentation control plan prior to the pre-construction meeting for inspection by the City. The contractor shall regularly inspect the control measures, no less than weekly and after significant storm events, and maintain any installed temporary or permanent stormwater management systems in working order. The contractor shall document all inspection activities and corrective actions and be prepared to provide these documents for inspection by the City, Maine Department of Environmental Protection or the U.S. Environmental Protection Agency upon request.

Contractor shall maintain all tree and landscaping preservation measures as depicted on the site plan within the area of construction.

The storage of materials shall not be located under/near trees.

Construction Staging Area

Construction staging shall be the area in front of the proposed building as shown on the Construction Management Site Plan. All construction deliveries shall be by the new access drive from Riverside Industrial Parkway. Contractor shall identify any offsite staging, storage or delivery truck holding areas at the preconstruction meeting.

Parking During Construction

Parking of construction vehicles and construction employee shall be located on site as shown on the Construction Management Site Plan.

Special Measures as Necessary

No special measures are foreseen at this time.



PLYMOUTH REIT
56 MILLIKEN STREET, PORTLAND, MAINE

TAB 5 - PUBLIC INFRASTRUCTURE AND SAFETY NARRATIVE

Consistency with City Master Plans

The proposed warehouse expansion at 56 Milliken Street is consistent with current City of Portland Master Plans. This development supports economic expansion in an outlying area close to major transportation corridors. The building is an infill development in existing Industrial zoned land with adequate provision for water and wastewater. A warehouse expansion will have minimal traffic impact.

All existing easements are shown on the site survey by SGC. No new easements are proposed.

Public Safety and Fire Prevention

The proposed warehouse building has fire access on all four sides of the building more than 90-percent of the exterior building walls accessible to fire fighting apparatus. In addition, the building will have a sprinkler system. A code study is included on the architectural plans including building construction type and egress.

The site has adequate water supply mains and fire hydrants to aid in firefighting activities. Existing hydrants are located throughout the site. A new hydrant is proposed near the front entrance of the warehouse.

Site lighting is proposed as shown on the photometric plan. Cut sheets of LED fixtures are attached.

Adequacy of Public Utilities

Underground electric service will be provided to the new warehouse from Riverside Industrial Parkway as shown on the site plan.

Sanitary sewer connection is proposed at an existing sanitary manhole located at the Milliken Street entrance to the site. An application for capacity to serve was submitted to the City of Portland Public Works via email. A copy of the application is attached.

An Ability to Serve letter has been received from Portland Water District and is attached. Solid waste will be disposed in an on-site dumpster. Another dumpster will be for recycled materials.

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Portland Dept. of Public Works -
Water Resources
55 Portland Street,
Portland, Maine 04101-2991



Bradley Roland, P.E.
Water Resources Division
Department of Public Works
55 Portland Street
Portland, ME 04103

Date: 10/2/2018

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: 56 Milliken Street

Chart Block Lot Number: 334 A014001

Proposed Use: Warehouse

Previous Use: _____

Existing Sanitary Flows: 7,100 GPD

Existing Process Flows: _____ GPD

Description and location of City sewer that is to
receive the proposed building sewer lateral.

Connection to sanitary sewer in Milliken St

Site Category | Commercial (see part 4 below) ☒
Industrial (complete part 5 below) ☐
Governmental ☐
Residential ☐
Other (specify) ☐

Clearly, indicate the proposed connections, on the submitted plans.

2. Please, Submit Contact Information.

City Planner's Name: Barbara Barhydt Phone: _____

Owner/Developer Name: Plymouth Industrial REIT

Owner/Developer Address: 260 Franklin St., 7th Floor, Boston, MA 02110

Phone: 617 340-3826 Fax: _____ E-mail: jeff.witherell@plymouthrei.com

Engineering Consultant Name: CES, Inc., John Kuchinski

Engineering Consultant Address: 146 Main Street, Saco ME 04072

Phone: 207 283-9151 Fax: _____ E-mail: jkuchinski@ces-maine.com

Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review.

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: 100 GPD

Peaking Factor/ Peak Times: 20 gpm

Specify the source of design guidelines: (i.e. "Handbook of Subsurface Wastewater Disposal in Maine,"
"Plumbers and Pipe Fitters Calculation Manual," Portland Water District Records, Other (specify)

Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet.

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values:	N/A
Size of External Grease Interceptor:	N/A
Retention Time:	
Peaking Factor/ Peak Times:	

Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet.

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated:	0	GPD
Do you currently hold Federal or State discharge permits?	Yes	No <u>X</u>
Is the process wastewater termed categorical under CFR 40?	Yes	No <u>X</u>
OSHA Standard Industrial Code (SIC):		
Peaking Factor/Peak Process Times:		

(<http://www.osha.gov/oshstats/sicser.html>)

Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps.

Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided, or attached, as a separate sheet.

Domestic use for office in the warehouse. see attached PWD fixture calculation worksheet.



Christopher C. Branch, P.E.
Director of Public Works

Date: December 12, 2018

Re: Wastewater Capacity Authorization

Address: 56 Milliken Street

Applicant: Plymouth Industrial REIT

Planner: Jean Fraser

Anticipated Wastewater Flow:

Estimate of Anticipated Design Flows				
Development	Unit Size	Number of Units	Gallons per Day per Unit	Total Gallons per Day
Existing flow to be removed				
Vacant				0
Proposed flow				
Warehouse	Lump Sum or # Employees	1	100 GPD or 12 GPD/Employee	100
Net Change				+ 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.

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

Keith Gray, City Engineer/Engineering Manager, Portland Department of Public Works

Nancy Gallinaro, Water Resources Manager, Portland Department of Public Works
Ben Pearson, Compliance 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
Charlene Poulin, Wastewater Chief Operator – Systems



Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

October 5, 2018

John Kuchinski
CES Inc.
465 Main Street
Brewer, ME 04412

Re: 56 Milliken Street, PO
Ability to Serve with PWD Water

Dear Mr. Kuchinski:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on August 23, 2018. Based on the information provided per Progress Print plans dated October 5, 2018, we can confirm that the District will be able to serve the proposed project as further described in this letter. **Please note that this letter constitutes approval of the water system as currently designed. Any changes affecting the approved water system will require further review and approval by PWD.**

Conditions of Service

The following conditions of service apply:

- A new 6-inch fire service and 1-inch domestic service may be installed from the water main in Riverside Industrial Parkway. The service should enter through the properties frontage on Riverside Industrial Parkway at least 10-feet from any side property lines.
- The Portland Water District does not have record of any other existing infrastructure in public roads and recommends a survey and test pitting be performed by the development team prior to construction. Any conflicts that arise during construction are at the risk of the developer and may result in job shutdown until new plans are submitted by the developer and reviewed and approved by PWD.
- An approved backflow prevention device must be installed on each service line directly after the meter or a the service entrance for the fire sprinkler system prior to service activation. Please refer to the PWD website for more information on cross-connection control policies.

Prior to construction, the owner or contractor will need to make an appointment to complete a service application form and pay all necessary fees. The appointment shall be requested through MEANS@pwd.org or by calling 207-774-5961 ext. 3199. Please allow (3) business days to process the service application paperwork. PWD will guide the applicant through the new development process during the appointment.



Existing Site Service

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

Water System Characteristics

According to District records, there is an 16-inch diameter cement lined cast iron water main in Riverside Industrial Parkway and a public fire hydrant located approximately 800 feet from the site. The most recent static pressure reading was 82 psi on June 18, 2018.

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

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

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



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

Att. O

DEPARTMENT ORDER

IN THE MATTER OF

PLYMOUTH 56 MILLIKEN, LLC	) NATURAL RESOURCES PROTECTION ACT
Portland, Cumberland County	) FRESHWATER WETLAND ALTERATION
WAREHOUSE AND DRIVEWAY	) WATER QUALITY CERTIFICATION
L-18722-TB-E-N (approval)	) FINDINGS OF FACT AND ORDER

Project History: On July 8, 1994, the Department accepted an after-the-fact Site Location of Development (Site Law) Application L-18722-26-A-D pursuant to 38 M.R.S.A. § 489-A (delegated authority) by the City of Portland for a 100,000 square-foot addition to an existing warehouse building and associated truck parking area. The original warehouse was constructed in 1966. On May 10, 1995, the Department accepted Site Law Application L-18722-26-B-D under delegated authority by the City of Portland for 19,000 additional square feet of truck parking. On January 1, 1996, the Department accepted Site Law Application L-18722-26-C-D under delegated authority by the City of Portland for an addition to the warehouse. On August 1, 2013, the Department accepted Site Law Application L-18722-26-D-D under delegated authority by the City of Portland for an addition to the truck loading area.

Project Description: The applicant proposes to alter 8,034 square feet of forested freshwater wetlands to construct a 72,000 square-foot warehouse with an associated access drive, truck maneuvering area and stormwater infrastructure. The project is shown on a set of plans, Sheet C102 is titled "Proposed Site Layout & Grading Plan," which was prepared by CES, Inc. and dated October 26, 2018, with a most recent revision date of December 17, 2018. The applicant has avoided and minimized wetland impacts to the greatest extent practicable by proposing the smallest warehouse practicable and by reducing side slopes to 2H:1V for the proposed stream crossing. According to the Department's Geographic Information System (GIS), there are no mapped essential or significant wildlife habitats associated within the project site. The proposed project is located at 56 Milliken Street in the City of Portland.

The Department accepted Site Law Application L-18722-26-F-D under delegated authority by the City of Portland on December 13, 2018 for the proposed project.

The Department accepted a Natural Resources Protection Act (NRPA) Permit by Rule Notification Form (PBR #67074) on December 19, 2018 for activities adjacent to a protected natural resource, namely a stream, that will be constructed in accordance with Chapter 305, Section 2 of PBR Standards; for stormwater outfall pipes that will be constructed in accordance with Chapter 305, Section 7 of PBR Standards; and for a stream crossing that will be constructed in accordance with Chapter 305, Section 10 of PBR Standards.

Permit for:	☒ Tier 1
DEP Decision:	☒ Approved ☐ Denied (see attached letter)

CORPS Action: ☒ The Corps has been notified of your application. The following are subject to Federal screening: (1) projects with previously authorized or unauthorized work, in combination with a Tier 1 permit for a single and complete project, which total more than 15,000 square feet of altered area; (2) projects with multiple state permits and/or state exemptions which apply to a single and complete project that total more than 15,000 square feet of altered area; and (3) projects that may impact a vernal pool, as determined by the State of Maine or the Corps. If your activity is listed above, *Corps approval is required for your project*. For information regarding the status of your application contact the Corps' Maine Project Office at (207) 623-8367.

Standard Conditions:

- 1) If construction or operation of the activity is not begun within four (4) years from the date signed, this permit shall lapse and the applicant shall reapply to the Department for a new permit. This permit is transferable only with prior approval from the Department. If the activity is associated with a larger project, starting any aspect of that project constitutes start of construction.
- 2) The project shall be completed according to the plans in the application. Any change in the project plans must be reviewed and approved by the Department.
- 3) Properly installed erosion control measures shall be installed prior to beginning the project, and all disturbed soil should be stabilized immediately upon project completion.
- 4) A copy of this approval will be sent to the City of Portland. Department approval of your activity does not supersede or substitute the need for any necessary local approvals.

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

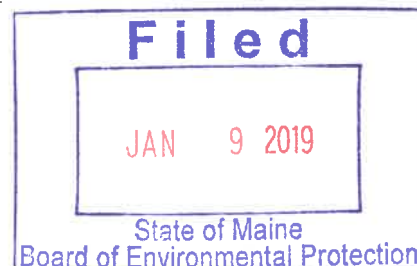
DONE AND DATED IN AUGUSTA, MAINE, THIS 8TH DAY OF JANUARY, 2019.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:



For: Melanie Loyzim, Acting Commissioner



PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

JM/L18722EN/ATS#83737



Natural Resources Protection Act (NRPA) Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCES PROTECTION ACT, 38 M.R.S. § 480-A ET SEQ., UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. Time frame for approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

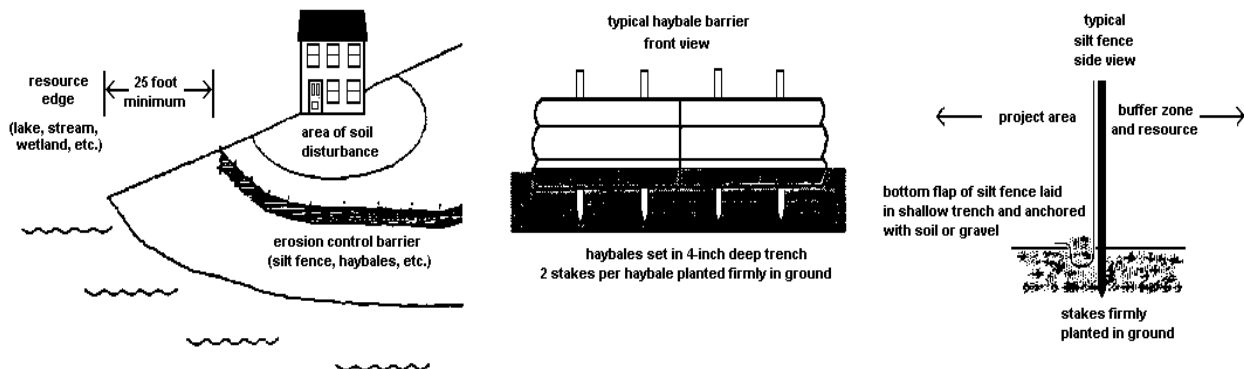


STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
 17 STATE HOUSE STATION, AUGUSTA, MAINE 04333

Erosion Control for Homeowners

Before Construction

1. If you have hired a contractor, make sure you discuss your permit with them. Talk about what measures they plan to take to control erosion. Everybody involved should understand what the resource is, and where it is located. Most people can identify the edge of a lake or river. However, the edges of wetlands are often not so obvious. Your contractor may be the person actually pushing dirt around, but you are both responsible for complying with the permit.
2. Call around to find where erosion control materials are available. Chances are your contractor has these materials already on hand. You probably will need silt fence, hay bales, wooden stakes, grass seed (or conservation mix), and perhaps filter fabric. Places to check for these items include farm & feed supply stores, garden & lawn suppliers, and landscaping companies. It is not always easy to find hay or straw during late winter and early spring. It also may be more expensive during those times of year. Plan ahead -- buy a supply early and keep it under a tarp.
3. Before any soil is disturbed, make sure an erosion control barrier has been installed. The barrier can be either a silt fence, a row of staked hay bales, or both. Use the drawings below as a guide for correct installation and placement. The barrier should be placed as close as possible to the soil-disturbance activity.
4. If a contractor is installing the erosion control barrier, double check it as a precaution. Erosion control barriers should be installed "on the contour", meaning at the same level or elevation across the land slope, whenever possible. This keeps stormwater from flowing to the lowest point along the barrier where it can build up and overflow or destroy the barrier.



During Construction

1. Use lots of hay or straw mulch on disturbed soil. The idea behind mulch is to prevent rain from striking the soil directly. It is the force of raindrops hitting the bare ground that makes the soil begin to move downslope with the runoff water, and cause erosion. More than 90% of erosion is prevented by keeping the soil covered.
2. Inspect your erosion control barriers frequently. This is especially important after a rainfall. If there is muddy water leaving the project site, then your erosion controls are not working as intended. You or your contractor then need to figure out what can be done to prevent more soil from getting past the barrier.

3. Keep your erosion control barrier up and maintained until you get a good and healthy growth of grass and the area is permanently stabilized.

After Construction

1. After your project is finished, seed the area. Note that all ground covers are not equal. For example, a mix of creeping red fescue and Kentucky bluegrass is a good choice for lawns and other high-maintenance areas. But this same seed mix is a poor selection for stabilizing a road shoulder or a cut bank that you don't intend to mow. Your contractor may have experience with different seed mixes, or you might contact a seed supplier for advice.
2. Do not spread grass seed after September 15. There is the likelihood that germinating seedlings could be killed by a frost before they have a chance to become established. Instead, mulch the area with a thick layer of hay or straw. In the spring, rake off the mulch and then seed the area. Don't forget to mulch again to hold in moisture and prevent the seed from washing away or being eaten by birds or other animals.
3. Keep your erosion control barrier up and maintained until you get a good and healthy growth of grass and the area is permanently stabilized.

Why Control Erosion?

To Protect Water Quality

When soil erodes into protected resources such as streams, rivers, wetlands, and lakes, it has many bad effects. Eroding soil particles carry phosphorus to the water. An excess of phosphorus can lead to explosions of algae growth in lakes and ponds called blooms. The water will look green and can have green slime in it. If you are near a lake or pond, this is not pleasant for swimming, and when the soil settles out on the bottom, it smothers fish eggs and small animals eaten by fish. There many other effects as well, which are all bad.

To Protect the Soil

It has taken thousands of years for our soil to develop. Its usefulness is evident all around us, from sustaining forests and growing our garden vegetables, to even treating our septic wastewater! We cannot afford to waste this valuable resource.

To Save Money (\$\$)

Replacing topsoil or gravel washed off your property can be expensive. You end up paying twice because State and local governments wind up spending your tax dollars to dig out ditches and storm drains that have become choked with sediment from soil erosion.



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: November 2018

Contact: (207) 287-2452

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) an administrative process before the Board of Environmental Protection (Board); or (2) a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This information sheet, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S. §§ 341-D(4) & 346; the *Maine Administrative Procedure Act*, 5 M.R.S. § 11001; and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 C.M.R. ch. 2.

DEADLINE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed more than 30 calendar days after the date on which the Commissioner's decision was filed with the Board will be dismissed unless notice of the Commissioner's license decision was required to be given to the person filing an appeal (appellant) and the notice was not given as required.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017. An appeal may be submitted by fax or e-mail if it contains a scanned original signature. It is recommended that a faxed or e-mailed appeal be followed by the submittal of mailed original paper documents. The complete appeal, including any attachments, must be received at DEP's offices in Augusta on or before 5:00 PM on the due date; materials received after 5:00 pm are not considered received until the following day. The risk of material not being received in a timely manner is on the sender, regardless of the method used. The appellant must also send a copy of the appeal documents to the Commissioner of the DEP; the applicant (if the appellant is not the applicant in the license proceeding at issue); and if a hearing was held on the application, any intervenor in that

hearing process. All of the information listed in the next section of this information sheet must be submitted at the time the appeal is filed.

INFORMATION APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time the appeal is submitted:

1. *Aggrieved Status.* The appeal must explain how the appellant has standing to maintain an appeal. This requires an explanation of how the appellant may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions, or conditions objected to or believed to be in error.* The appeal must identify the specific findings of fact, conclusions regarding compliance with the law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
3. *The basis of the objections or challenge.* For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing requirements that the appellant believes were not properly considered or fully addressed.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those matters specifically raised in the written notice of appeal.
6. *Request for hearing.* If the appellant wishes the Board to hold a public hearing on the appeal, a request for public hearing must be filed as part of the notice of appeal, and must include an offer of proof in accordance with Chapter 2. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
7. *New or additional evidence to be offered.* If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed evidence must be submitted with the appeal. The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered in an appeal only under very limited circumstances. The proposed evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Specific requirements for supplemental evidence are found in Chapter 2 § 24.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, and is made easily accessible by the DEP. Upon request, the DEP will make application materials available during normal working hours, provide space to review the file, and provide an opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer general questions regarding the appeal process.

3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed, the license normally remains in effect pending the processing of the appeal. Unless a stay of the decision is requested and granted, a license holder may proceed with a project pending the outcome of an appeal, but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, and will provide the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, any materials submitted in response to the appeal, and relevant excerpts from the DEP's application review file will be sent to Board members with a recommended decision from DEP staff. The appellant, the license holder if different from the appellant, and any interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. The appellant and the license holder will have an opportunity to address the Board at the Board meeting. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, the license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court (see 38 M.R.S. § 346(1); 06-096 C.M.R. ch. 2; 5 M.R.S. § 11001; and M.R. Civ. P. 80C). A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452, or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

MAINE GENERAL PERMIT (GP)
AUTHORIZATION LETTER AND SCREENING SUMMARY

PLYMOUTH REIT
260 FRANKLIN STREET, 7TH FLOOR
BOSTON, MA 02110

CORPS PERMIT # NAE-2018-02817
CORPS GP ID# 18-692
STATE ID# L-28053-TB-A-N

DESCRIPTION OF WORK:

Place temporary and permanent fill below the ordinary high mark of an unnamed stream and in adjacent freshwater wetlands off Riverside Industrial Parkway at Portland, Maine in order to construct a 72,000 sf warehouse and associated infrastructure. The project will result in approximately 130 sf of permanent and 20 sf of temporary stream bed impact, and 8,034 sf of permanent wetland impact. This work is shown on the attached plans entitled "Site Location Map" in one sheet undated, "PROPOSED SITE PLAN" in one sheet dated "2018-12-17" and "PROPOSED UTILITY PLAN" also dated "2018-12-17". See ADDITIONAL CONDITIONS attached.

LAT/LONG COORDINATES: 43.707972° N -70.304786° W USGS QUAD: PORTLAND WEST, ME

I. CORPS DETERMINATION:

Based on our review of the information you provided, we have determined that your project will have only minimal individual and cumulative impacts on waters and wetlands of the United States. Your work is therefore authorized by the U.S. Army Corps of Engineers under the Federal Permit, the Maine General Permit which can be found at:

www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/ME/Maine_General_Permits_2015.pdf Accordingly, we do not plan to take any further action on this project.

You must perform the activity authorized herein in compliance with all the terms and conditions of the GP [including any attached Additional Conditions and any conditions placed on the State 401 Water Quality Certification including any required mitigation]. Please review the enclosed GP carefully, including the GP conditions beginning on page 5, to familiarize yourself with its contents. You are responsible for complying with all of the GP requirements; therefore you should be certain that whoever does the work fully understands all of the conditions. You may wish to discuss the conditions of this authorization with your contractor to ensure the contractor can accomplish the work in a manner that conforms to all requirements.

If you change the plans or construction methods for work within our jurisdiction, please contact us immediately to discuss modification of this authorization. This office must approve any changes before you undertake them.

Condition 37 of the GP (page 16) provides one year for completion of work that has commenced or is under contract to commence prior to the expiration of the GP on October 13, 2020. You will need to apply for reauthorization for any work within Corps jurisdiction that is not completed by October 13, 2021.

This authorization presumes the work shown on your plans noted above is in waters of the U.S. Should you desire to appeal our jurisdiction, please submit a request for an approved jurisdictional determination in writing to the undersigned.

No work may be started unless and until all other required local, State and Federal licenses and permits have been obtained. This includes but is not limited to a Flood Hazard Development Permit issued by the town if necessary.

II. STATE ACTIONS: PENDING [☒], ISSUED [☐], DENIED [☐] DATE _____

APPLICATION TYPE: PBR: ☐ TIER 1: ☒ TIER 2: ☐ TIER 3: ☐ LURC: ☐ DMR LEASE: ☐ NA: ☐

III. FEDERAL ACTIONS:

JOINT PROCESSING MEETING: 12/13/2018 LEVEL OF REVIEW: CATEGORY 1: ☐ CATEGORY 2: ☒

AUTHORITY (Based on a review of plans and/or State/Federal applications): SEC 10 ☐ 404 ☒ 10/404 ☐ 103 ☐

EXCLUSIONS: The exclusionary criteria identified in the general permit do not apply to this project.

FEDERAL RESOURCE AGENCY OBJECTIONS: EPA NO, USF&WS NO, NMFS NO

If you have any questions on this matter, please contact my staff at 978-318-8676 at our Augusta, Maine Project Office. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Colin M. Greenan
COLIN M. GREENAN
PROJECT MANAGER
MAINE PROJECT OFFICE

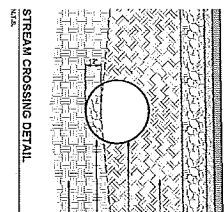
Frank J. Del Giudice 1/4/19
FRANK J. DEL GIUDICE
CHIEF, PERMITS & ENFORCEMENT BRANCH
REGULATORY DIVISION



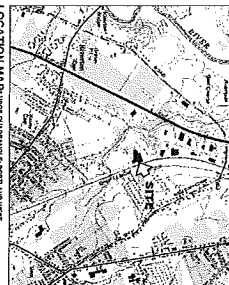
**US Army Corps
of Engineers®**
New England District

**PLEASE NOTE THE FOLLOWING ADDITIONAL CONDITIONS FOR
DEPARTMENT OF THE ARMY
GENERAL PERMIT
NO. NAE-2018-02817**

1. The permittee shall assure that a copy of this permit is at the work site whenever work is being performed and that all personnel performing work at the site of the work authorized by this permit are fully aware of the terms and conditions of the permit. This permit, including its drawings and any appendices and other attachments, shall be made a part of any and all contracts and sub-contracts for work which affects areas of Corps of Engineers' jurisdiction at the site of the work authorized by this permit. This shall be done by including the entire permit in the specifications for the work. If the permit is issued after construction specifications but before receipt of bids or quotes, the entire permit shall be included as an addendum to the specifications. The term "entire permit" includes permit amendments. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions of the entire permit, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps of Engineers jurisdiction.
2. This authorization requires you to 1) notify us before beginning work so we may inspect the project, and 2) submit a Compliance Certification Form. You must complete and return the enclosed Work Start Notification Form to this office at least two weeks before the anticipated starting date. You must complete and return the enclosed Compliance Certification Form within one month following the completion of the authorized work and any required mitigation (but not mitigation monitoring, which requires separate submittals).
3. Adequate sedimentation and erosion control devices, such as geotextile silt fences or other devices capable of filtering the fines involved, shall be installed and properly maintained to minimize impacts during construction. These devices must be removed upon completion of work and stabilization of disturbed areas. The sediment collected by these devices shall be removed and placed upland, in a manner that will prevent its later erosion and transport to a waterway or wetland.
4. All exposed soils resulting from the construction will be promptly seeded and mulched in order to achieve vegetative stabilization.
5. All areas of temporary fill shall be restored to their original contour and character upon completion of the work.
6. In-stream construction work shall be conducted "in the dry" using cofferdams, temporary flume pipes, culverts, etc. and downstream flows shall be maintained during in-stream construction in order to minimize potential impacts to aquatic resources and local water quality.
7. No tree cutting shall occur between June 1st and July 31st of any year and to the maximum extent practicable, tree cutting shall occur between October 16th and April 9th of any year in order to minimize potential impacts to federally threatened northern long-eared bats.



ZONING INFORMATION: L41 ZONE		ALLOWED	PROPOSED
MINIMUM LOT SIZE	7,500 SQ. FT.	7,500 SQ. FT.	7,500 SQ. FT.
MINIMUM BUILDING HEIGHT	15 FEET	15 FEET	15 FEET
MINIMUM LOT YARDS	25 FEET	25 FEET	40 FEET
MINIMUM FRONT YARDS	25 FEET	25 FEET	35 FEET
MINIMUM STREET FRONTAGE	60 FEET	60 FEET	60 FEET
MINIMUM SETBACK	10 FEET	10 FEET	10 FEET



Ennet 455 South Main Street PO Box 638 Ennet, ME T 207-880-8204 F 207-880-4381	Parquet Isle 545 Main Street PO Box 627 Parquet Isle, ME T 207-764-5414 F 207-764-5414	Vidette 44 Main Street Suite 204 Vidette, ME T 207-680-2202 F 207-680-2204
Matties 111 Oslen Street Matties, ME T 207-265-3270 F 207-265-4367	Bar Harbor 1368 State Hwy 132 Bar Harbor, ME T 207-268-5667 F 207-268-0689	Lewiston 640 Main Street Lewiston, ME T 207-795-6000 F 207-796-4128

LOCAL IN MAP: URS USDA/ARWALL FOR LAND WET
SCALE: 1"=200'
MAITTECH US&S TOPOGRAFC SERIES™
©MAITTECH, INC. 8/4/03/060
WWW.MAITTECH.COM/TOPO

INTERPOL	7	7	7
INT. LAMT		DU	
BRUNNEN MONUMENT			
CATHEDRAL	10	10	10
ACROBAT	10		
PROPERTY LINE			
EDGE OF PLACEMENT			
EDGE OF DRIVEWAY			
BLACK TOP CURBLINE			
BLACK TOP CURBLINE			
BLACK TOP CURBLINE			
WATER LINE			
MARKING WHITE LINE			
CONCRETE DRIVEWAY			
CONCRETE DRIVEWAY			
STREETLIGHT FINISH			
UNDERPAINT			
HOV LANE			
REVERSE			
ORANGE SURFACE			
PAVED SURFACE			

[illegible]

THIS IS TO CERTIFY THAT AFTER REVIEWING THE SITE PLAN SUBMISSION

EACH OF THE CRITERIA SET FORTH IN THE CITY OF PORTLAND'S ORDINANCES AND IN ACCORDANCE WITH THE APPLICATION REGULATED BY THE CITY OF PORTLAND, THE UNDER SIGNED HAVE MADE FINDINGS OF FACT AND CONCLUSIONS THAT THE PROPOSED PROJECT WILL BE BENEFICIAL TO THE CITY OF PORTLAND AND THE COMMUNITY.

APPROVED BY THE CITY OF PORTLAND PLANNING BOARD ON:

CONDITIONS: _____

PLANNING BOARD SIGNED ON: _____

[illegible]

QUESTION

ANSWER

PROPOSED SITE PLAN

RECORD OWNER
L IKEN BOBTI AND BARTNIE

ADDRESSES OF RECORD OWNERS: 11040 VALLEY VIEW ROAD, EDDY, N.M. 88401
F004

SITE EXPANSION PROJECT

ACCORDING TO MILLIKEN STREET, PORTLAND, MAINE

IN FEET)
1 inch = 30 ft.

Fig. 4.4 — *Continued*

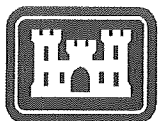
CES  **INC**
Engineers • Environmental Scientists • Surveyors

PLYMOUTH INDUSTRIAL REIT, INC. SITE EXPANSION PROJECT
56 MILLIKEN STREET

5-417 0-2

**PROPOSED SITE LAYOUT
& GRADING PLAN**

[illegible]



**US Army Corps
of Engineers®**
New England District

**GENERAL PERMIT
WORK-START NOTIFICATION FORM**
(Minimum Notice: Two weeks before work begins)

MAIL TO: Colin M. Greenan
U.S. Army Corps of Engineers, New England District
Maine Project Office
442 Civic Center Drive, Suite 350
Augusta, Maine 04330

A Corps of Engineers Permit (No. NAE-2018-02817) was issued to Plymouth REIT. The permit authorized the permittees to place temporary and permanent fill below the ordinary high water mark of an unnamed stream and in adjacent freshwater wetlands off Riverside Industrial Parkway at Portland, Maine in order to construct a 72,000 sf warehouse and associated infrastructure.

The people (e.g., contractor) listed below will do the work, and they understand the permit's conditions and limitations.

PLEASE PRINT OR TYPE

Name of Person/Firm: _____

Business Address: _____

Telephone: () _____ () _____

Proposed Work Dates: Start: _____

Finish: _____

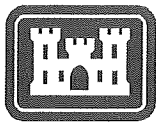
PERMITTEE'S SIGNATURE: _____ DATE: _____

PRINTED NAME: _____ TITLE: _____

FOR USE BY THE CORPS OF ENGINEERS

Project Manager: GREENAN Submittals Required: No

Inspection Recommendation: random Maine General Permit compliance



**US Army Corps
of Engineers®**
New England District

(Minimum Notice: Permittee must sign and return notification
within one month of the completion of work.)

COMPLIANCE CERTIFICATION FORM

Corps of Engineers Permit No: NAE-2018-02817

Name of Permittees: Plymouth REIT

Permit Issuance Date: 1/4/2019

Please sign this certification and return it to the following address upon completion of the activity and any mitigation required by the permit. You must submit this after the mitigation is complete, but not the mitigation monitoring, which requires separate submittals.

* MAIL TO: U.S. Army Corps of Engineers, New England District *
* Policy & Technical Support Branch *
* Regulatory Division *
* 696 Virginia Road *
* Concord, Massachusetts 01742-2751 *

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the above referenced permit, and any required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

Printed Name

Date of Work Completion

() _____
Telephone Number

() _____
Telephone Number

➔ PLEASE TYPE OR PRINT IN *BLACK INK ONLY*

CERTIFICATIONS AND SIGNATURES LOCATED ON PAGE 2

IMPORTANT: IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.

By signing below the applicant (or authorized agent), certifies that he or she has read and understood the following:

DEP SIGNATORY REQUIREMENT

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor a permit be issued.

CORPS SIGNATORY REQUIREMENT

USC Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry shall be fined not more than \$10,000 or imprisoned not more than five years or both. I authorize the Corps to enter the property that is subject to this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

DEP SIGNATORY REQUIREMENT

"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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Further, I hereby authorize the DEP to send me an electronically signed decision on the license I am applying for with this application by emailing the decision to the address located on the front page of this application (see #4 for the applicant and #8 for the agent)."

 JEFF WILBARK CEA Date: 10-29-18
SIGNATURE OF AGENT/APPLICANT

NOTE: Any changes in activity plans must be submitted to the DEP and the Corps in writing and must be approved by both agencies prior to implementation. Failure to do so may result in enforcement action and/or the removal of the unapproved changes to the activity.

DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERMIT BY RULE NOTIFICATION FORM
 (For use with DEP Regulation, Natural Resources Protection Act- Permit by Rule Standards, Chapter 305)

PLEASE TYPE OR PRINT IN BLACK INK ONLY

APPLICANT INFORMATION (Owner)				AGENT INFORMATION (If Applying on Behalf of Owner)			
Name:	Plymouth REIT			Name:	CES, Inc. (John Kuchinski)		
Mailing Address:	260 Franklin Street, 7 th Floor			Mailing Address:	146 Main Street		
Town:	Boston			Town:	Saco		
State and Zip Code:	MA 02110			State and Zip Code:	ME 04072		
Daytime Phone #:	617-340-3826			Daytime Phone #:	207-283-9151		
Email Address:	Jeff.Witherell@PlymouthREI.com			Email Address:	jkuchinski@cesincusa.com		
PROJECT INFORMATION							
Part of a larger project? (check one):	☒ Yes ☐ No	After the Fact? (check one):	☐ Yes ☒ No	Project involves work below mean low water? (check one):	☐ Yes ☒ No	Name of waterbody:	N/A
Project Town:	Portland		Project Location (Address):	56 Milliken Street		Map & Lot Number:	354A & A001
Brief Project Description:	Construction of 72,000 square foot warehouse building, access drive, and loading docks.						
Brief Directions to Site:	Forrest Avenue west to Riverside Industrial Parkway. Approximately 0.6 mile to Milliken Street. Turn onto Milliken Street, site is on the left.						

PERMIT BY RULE (PBR) SECTIONS (Check at least one): I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Rules, Chapter 305. I and my agents, if any, have read and will comply with all of the standards in the Sections checked below.

- | | | |
|---|---|--|
| ☐ Sec. (2) Act. Adj. to Protected Natural Res. | ☒ Sec. (10) Stream Crossing | ☐ Sec. (17) Transfers/Permit Extension |
| ☐ Sec. (3) Intake Pipes | ☐ Sec. (11) State Transportation Facil. | ☐ Sec. (18) Maintenance Dredging |
| ☐ Sec. (4) Replacement of Structures | ☐ Sec. (12) Restoration of Natural Areas | ☐ Sec. (19) Activities in/on/over significant vernal pool habitat |
| ☐ Sec. (5) REPEALED | ☐ Sec. (13) F&W Creation/Enhance/Water Quality Improvement | ☐ Sec. (20) Activities located in/on/over high or moderate value inland waterfowl & wading bird habitat or shorebird feeding & roosting areas |
| ☐ Sec. (6) Movement of Rocks or Vegetation | ☐ Sec. (14) REPEALED | |
| ☐ Sec. (7) Outfall Pipes | ☐ Sec. (15) Public Boat Ramps | |
| ☐ Sec. (8) Shoreline stabilization | ☐ Sec. (16) Coastal Sand Dune Projects | |
| ☐ Sec. (9) Utility Crossing | | |

NOTE: Municipal permits may also be required. Contact your local code enforcement office for more information. Federal permits may be required for stream crossings and for projects involving wetland fill. Contact the Army Corps of Engineers at the Maine Project Office for more information.

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS

- **Attach** all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.
- **Attach** a check for the correct fee made payable to: "Treasurer, State of Maine". The current fee for NRPA PBR Notifications can be found at the Department's website: <http://www.maine.gov/dep/feesched.pdf>
- **Attach** location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).
- **Attach Proof of Legal Name** if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at <http://licrs.informe.org/nei-sos-licrs/ICRS?MainPage=x>) Individuals and municipalities are not required to provide any proof of identity.

I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules.

I also understand that this PBR becomes effective 14 calendar days after receipt by the Department *unless the Department approves or denies the PBR prior to that date.*

By signing this Notification Form, I represent that the project meets all applicability requirements and standards in the rule and that the applicant has sufficient title, right, or interest in the property where the activity takes place.

Signature of Agent or Applicant:	 JEFF WITHERELL CEO	Date:	10-29-18
----------------------------------	---------------------------	-------	----------

Keep a copy as a record of permit. Send the form with attachments via certified mail or hand deliver to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. Work carried out in violation of any standard is subject to enforcement action.

AUGUSTA DEP
 17 STATE HOUSE STATION
 AUGUSTA, ME 04333-0017
 (207)287-7688

PORTLAND DEP
 312 CANCO ROAD
 PORTLAND, ME 04103
 (207)822-6300

BANGOR DEP
 106 HOGAN ROAD
 BANGOR, ME 04401
 (207)941-4570

PRESQUE ISLE DEP
 1235 CENTRAL DRIVE
 PRESQUE ISLE, ME 04769
 (207)764-0477

OFFICE USE ONLY	Ck.#		Staff	Staff	
PBR #	FP	Date	Acc. Date	Def. Date	After Photos

QUITCLAIM DEED WITH COVENANT

KNOW ALL BY THESE PRESENTS, that **Milliken Portland Partners, LLC**, a Massachusetts limited liability company with a mailing address of 40 South Street, Suite 305, Marblehead, MA 01945 (the “Grantor”), for consideration paid, grants to **Plymouth 56 Milliken LLC**, a Delaware limited liability company (the “Grantee”), with a mailing address of 260 Franklin Street, 19th Floor, Boston, MA 02110, with Quitclaim Covenant, the premises in the City of Portland, Cumberland County, State of Maine, described in **Exhibit A** attached hereto and made a part of hereof.

[Signature Page Follows]

IN WITNESS WHEREOF, the said Milliken Portland Partners, LLC has caused this instrument to be executed by J. Hilary Rockett, Jr., Manager of JHR Development, LLC, its Manager, hereunto duly authorized this 18TH of November, 2014.

Milliken Portland Partners, LLC, a
Massachusetts limited liability company

By: JHR Development, LLC, its Manager

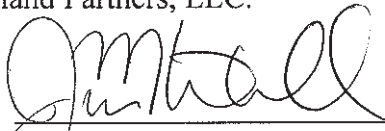
By: _____

J. Hilary Rockett, Jr., Manager

COMMONWEALTH OF MASSACHUSETTS

Suffolk, ss.

On this 18th day of November, 2014, before me, the undersigned notary public, personally appeared **J. Hilary Rockett, Jr.**, proved to me through satisfactory evidence of identification, which was ☐ photographic identification with signature issued by a federal or state governmental agency, ☒ personal knowledge of the undersigned, ☐ oath or affirmation of a credible witness, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily and for its stated purpose as Manager of JHR Development, LLC, Manager of Milliken Portland Partners, LLC.



Notary Public:
My commission expires:

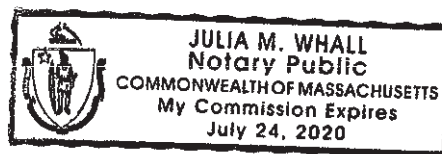


EXHIBIT A

(56 Milliken Street, Portland, Cumberland County, Maine)

TRACT I:

A certain lot or parcel of land with any buildings thereon situated easterly of Riverside Industrial Parkway and Northerly of Milliken Street in the City of Portland, County of Cumberland and State of Maine, to wit:

BEGINNING on the westerly side of land now or formerly of the Portland Terminal Company at a drill hole in a found stone at the northerly corner at land now or formerly owned by Portland Water District;

Thence, South 55°14'20" West, 71.28 feet along said Water District land to a point;

Thence, North 21°15'40" West, 17.82 feet along said Water District land to a point;

Thence, South 74°52'45" West, 31.62 feet along said Water District land to a point near an iron pipe;

Thence, South 55°51'08" West, 75.26 feet along land now or formerly owned by Milliken Street LLC to a point near a 5/8" rebar;

Thence, North 21°16'37" West, 555.77 feet along land now or formerly owned by Milliken Street LLC to a point near a 5/8" rebar;

Thence, South 68°44'47" West, 114.56 feet to a point near a 5/8" rebar;

Thence, North 14°55'55" West, 14.08 feet along said Milliken Street LLC land, passing over an iron pipe, said pipe being distant 1.2 feet from the terminus of said course, to a point;

Thence, South 75°08'46" West, 328.45 feet along said Milliken Street LLC land to a point;

Thence, South 13°13'08" West, 61.39 feet along said Milliken Street LLC land to a point;

Thence, South 68°44'47" West, 143.78 feet to a point in the easterly line of Milliken Street;

Thence, along easterly line North 56°10'30" West, 92.98 feet to a point;

Thence, North 56°04'53" West, 117.32 feet to a point;

Thence, leaving said easterly line North 34°51'20" East, 213.80 feet to a point;

Thence, North 35°56'16" West, 781.79 feet to a point in the easterly right-of-way of Riverside Industrial Parkway;

Thence, along said easterly right-of-way line North 18°39'48" East, 204.96 feet to a point;

Thence, leaving said easterly right-of-way North 68°40'30" East, 849.45 feet to a point in the westerly sideline of said Portland Terminal Company land;

Thence, along said westerly line along a curve deflecting to the left having a radius of 2,902.78 feet, an arc of 178.13 feet, a chord bearing of South 15°42'18" East, a chord of 178.10 feet to a point;

Thence, along a curve deflecting to the left having a radius of 6,422.46 feet, an arc of 427.82 feet, a chord bearing of South 19°21'10" East, a chord of 427.74 feet to a point;

Thence, South 21°15'40" East, 521.66 feet to a point;

Thence, South 57°03'20" West, 16.85 feet to a point;

Thence, South 21°15'40" East, 619.95 feet to the POINT OF BEGINNING, containing 25.75 acres.

Being the Tract I of the premises conveyed to Grantor by deed of C&S Logistics of Portland LLC, dated as of August 10, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21653, Page 272.

TRACT II:

A certain lot or parcel of land situated Easterly of Riverside Industrial Parkway & Northerly of Milliken Street in the City of Portland, County of Cumberland, Maine to wit:

COMMENCING at a point on the westerly side of land now or formerly of the Portland Terminal Company at the northerly corner of the land now or formerly owned by the Portland Water District;

Thence South 55°14'20" West, 71.28 feet along said Water District Land to a point;

Thence North 21°15'40" West, 17.82 feet along said Water District Land to a point;

Thence South 74°52'45" West, 31.62 feet along said Water District Land to a point near an iron pipe;

Thence South 55°51'08" West, 75.26 feet along land now or formerly owned by Milliken Street LLC to a point near a 5/8" rebar;

Thence North 21°16'37" West, 555.77 feet along said Milliken Street LLC land to a 5/8" rebar;

Thence South 68°44'47" West, 114.56 feet along said Milliken Street LLC land to a point near a 5/8" rebar;

Thence North $14^{\circ}55'55''$ West, 14.08 feet along said Milliken Street LLC land, passing over an iron pipe, said pipe being distant 1.2 feet from the terminus of said course, to a point;

Thence South $75^{\circ}08'46''$ West, 328.45 feet along said Milliken Street LLC land to a point;

Thence South $13^{\circ}13'08''$ West, 61.39 feet along said Milliken Street LLC land to a point;

Thence South $68^{\circ}44'47''$ West, 143.78 feet to a point in the easterly line of Milliken Street;

Thence along said easterly line North $56^{\circ}10'30''$ West, 92.98 feet to a point;

Thence North $56^{\circ}04'53''$ West, 117.32 feet to the true point of beginning;

Thence continuing along the easterly line of Milliken Street North $56^{\circ}04'53''$ West, 280.50 feet to a point;

Thence North $63^{\circ}50'00''$ West, 258.77 feet to a point at the Intersection of said easterly line and the southern line of land conveyed to ADC Building Fund Inc. by Davis-Greene Co. dated December 18, 1962, recorded in Book 2723, Page 182;

Thence leaving said easterly line along said southern line North $55^{\circ}47'03''$ West, 91.92 feet to a point at the intersection of said easterly line and said southern line;

Thence leaving said southern line along said easterly line of Milliken Street along a curve deflecting to the right having a radius of 50.00' and arc of 49.66', a chord bearing of North $06^{\circ}39'55''$ East, a chord of 47.64', to a point at the intersection of said easterly line of Milliken Street and the easterly line of Riverside Industrial Parkway;

Thence leaving said easterly line of Milliken Street along said easterly line of Riverside Industrial Parkway along a curve deflecting to the left having a radius of 1171.67', an arc of 336.46, a chord bearing of North $26^{\circ}53'24''$ East, a chord of 335.31' to a point;

Thence North $18^{\circ}39'48''$ East, 147.48 feet to a point;

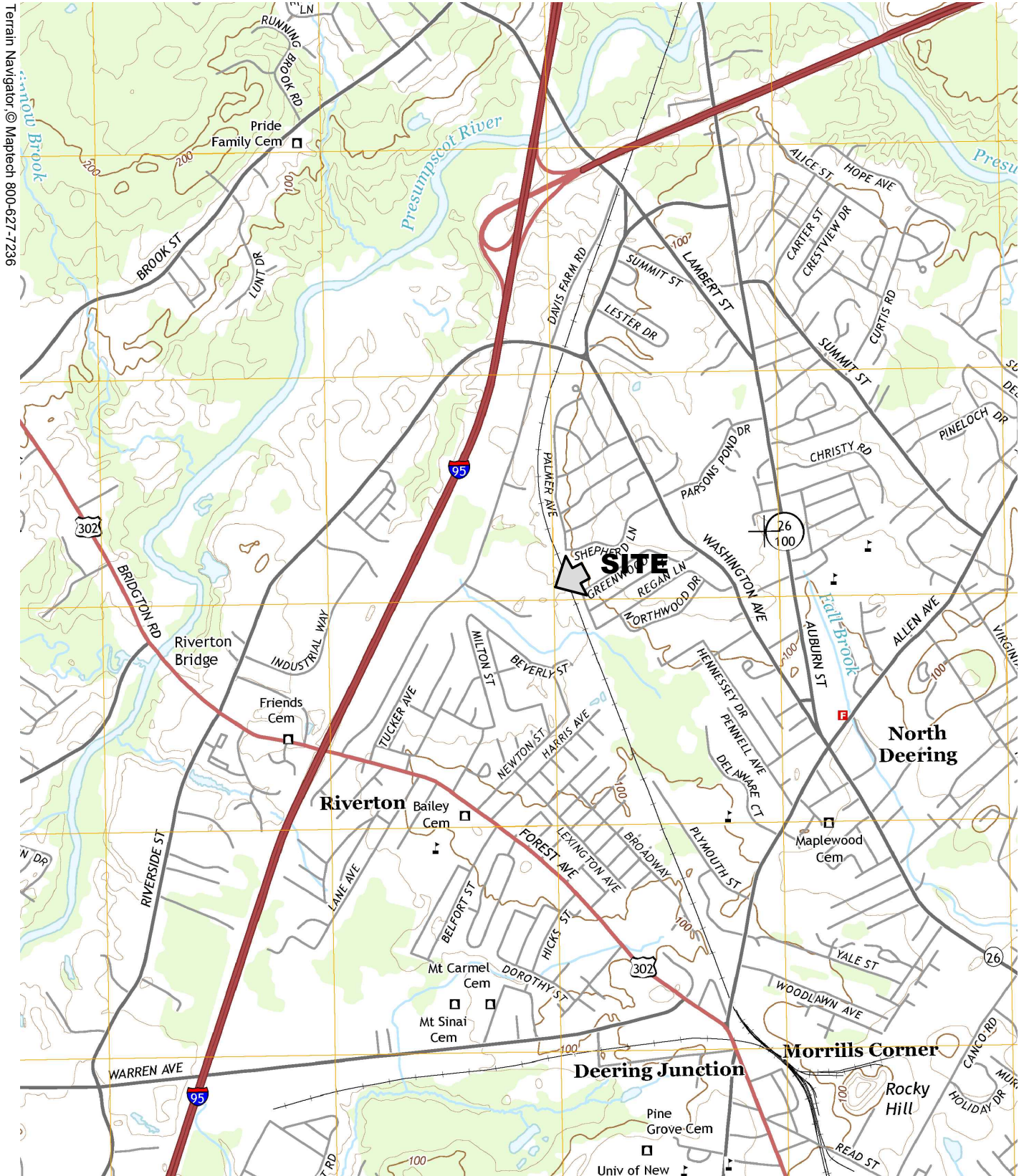
Thence leaving said easterly line along a line between Tract I and II South $35^{\circ}56'16''$ East, 781.79 feet to a point;

Thence South $34^{\circ}51'20''$ West, 213.80 feet to the true POINT OF BEGINNING, containing 5.46 acres.

Being Tract II of the premises conveyed to Grantor by deed of C&S Logistics of Portland LLC, dated as of August 10, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21653, Page 272.

Tracts I and II are conveyed SUBJECT TO:

- a. Rights and easements granted to Central Maine Power Company and Verizon New England, Inc. in a certain utility easement dated January 21, 2005, recorded in the Cumberland County Registry of Deeds in Book 22575, Page 21.
- b. Current zoning restrictions.



SOURCE:
U.S.G.S. TOPOGRAPHIC QUADRANGLE
PORTLAND WEST
@ 1:24,000



PLYMOUTH INDUSTRIAL REIT, INC.
56 MILLIKEN STREET, PORTLAND, MAINE
LOCATION MAP

2018-07-06
12254.003

**PLYMOUTH INDUSTRIAL REIT, INC.
56 MILLIKEN STREET, PORTLAND
NRPA TIER 1 NARRATIVE**

Project Description

Plymouth REIT is proposing a 72,000 square foot warehouse building on an existing developed site located at 56 Milliken Street in Portland. The site is currently occupied by an existing 200,000 square foot building where Paradigm Windows and Advance Pierre both have manufacturing and warehousing facilities. The new building will allow the owner to lease additional warehouse space within the City of Portland.

Development of the site includes a new access drive from the new building onto Riverside Industrial Parkway. This driveway will be a one-way exit. Additional impervious area along the front of the building allows for truck maneuvering for the proposed loading bays.

Avoidance

The new building has been located to the westerly side of the lot to avoid to the extent practicable wetland disturbance and still have a viable project. In addition, the building placement does not directly impact a portion of the wetland identified as an intermittent stream.

Minimization

Wetland disturbance is limited to the extent necessary for the development of the warehouse. A retaining wall is included in the design along the front walkway to limit and minimize the extent of wetland fill. Wetland fill will be limited to the minimum amount necessary to construct the project. Building placement allows for minimum access to the rear for fire fighting equipment.

**PLYMOUTH REIT
PROPOSED WAREHOUSE CONSTRUCTION**



Photo No. 1

Photo Date:
July 2, 2018

Site Location:
Milliken Street
Portland, Maine

Description:
Looking west at
wetland and stream at
approximate crossing
location.

Photo By: JES



Photo No. 2

Photo Date:
July 2, 2018

Site Location:
Milliken Street
Portland, Maine

Description:
View of stream at
approximate crossing
location.

Photo By: JES



**PLYMOUTH REIT
PROPOSED WAREHOUSE CONSTRUCTION**



Photo No. 3

Photo Date:
July 2, 2018

Site Location:
Milliken Street
Portland, Maine

Description:
Looking east at scrub-shrub wetland within proposed warehouse alteration area.

Photo By: JES



Photo No. 4

Photo Date:
July 2, 2018

Site Location:
Milliken Street
Portland, Maine

Description:
Looking west at wetland, outside of alteration areas, in western portion of the site.

Photo By: JES





Engineers ♦ Environmental Scientists ♦ Surveyors

August 21, 2018

Mr. Kirk Mohny, Director
Maine Historic Preservation Commission
55 Capitol Street
Augusta, ME 04333-0065

Re: Plymouth Industrial REIT | 56 Milliken Road | Portland, Maine

Dear Mr. Mohny,

Plymouth Industrial REIT is currently in the process of preparing a Site Location of Development Permit Amendment Application for the construction of a 72,000 square foot building at 56 Milliken Drive in Portland, Maine. The facility is an addition to an existing industrial manufacturing facility at 56 Milliken Road, Portland.

As required for permitting requirements, we are submitting this request to your office to determine if there are any potential impacts to fisheries or wildlife habitats located at the site or in the immediate surroundings. Any response can be forwarded to our office located at 146 Main Street, Saco, ME 04072 or by email at jkuchinski@ces-maine.com.

Thank you for your assistance in this matter.

Sincerely,
CES, Inc.

John D. Kuchinski, PE
Senior Project Engineer

JDK/cmc
Encl.





MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333



PAUL R. LEPAGE
GOVERNOR

KIRK F. MOHNEY
DIRECTOR

August 29, 2018

Mr. John D. Kuchinski
CES Inc
146 Main St, Suite 300
Saco, ME 04072

Project: MHPC #1141-18 Plymouth Industrial Reit; 56 Milliken Rd
Construction of a 72,000 Sq Ft Building
Town: Portland, ME

Dear Mr. Kuchinski:

In response to your recent request, I have reviewed the information received August 23, 2018 to initiate consultation on the above referenced project in accordance with the requirements of the Maine Department of Environmental Protection.

Based on the information submitted, I have concluded that there will be no historic properties (archaeological or architectural) affected by the proposed undertaking, as defined by Section 106 of the National Historic Preservation Act.

Please contact Megan Rideout at (207) 287-2992 or megan.m.rideout@maine.gov if we can be of further assistance in this matter.

Sincerely,

Kirk F. Mohney
State Historic Preservation Officer

APPLICATION FOR A NATURAL RESOURCES PROTECTION ACT PERMIT

→ PLEASE TYPE OR PRINT IN BLACK INK ONLY

1. Name of Applicant:		Plymouth REIT		5 Name of Agent: (If applicable)		CES, Inc. (John Kuchinski)	
2. Applicant's Mailing Address:		260 Franklin Street, 7 th Floor Boston, MA 02110		6 Agent's Mailing Address:		146 Main Street Saco, ME 04072	
3. Applicant's Daytime Phone #:		617-340-3826		7 Agent's Daytime Phone #:		207-283-9151	
4 Applicant's Email Address Required from <i>either</i> applicant or agent:		Jeff.Witherell@PlymouthREI.com		8. Agent's Email Address:		jkuchinski@cesincusa.com	
9. Location of Activity: (Nearest Road, Street, Rt.#)		56 Milliken Street		10. Town:		Portland	
				11. County:		Cumberland	
12. Type of Resource: (Check all that apply)		☒ River, stream or brook ☐ Great Pond ☐ Coastal Wetland ☒ Freshwater Wetland ☐ Wetland Special Significance ☐ Significant Wildlife Habitat ☐ Fragile Mountain		13. Name of Resource:		NONE	
				14. Amount of Impact: (Sq.Ft.)		Fill: 7,391	
						Dredging/Veg Removal/Other:	
15. Type of Wetland: (Check all that apply)		☒ Forested ☐ Scrub Shrub ☐ Emergent ☐ Wet Meadow ☐ Peatland ☐ Open Water ☐ Other _____		FOR FRESHWATER WETLANDS <i>Tier 1</i> ☐ 0 - 4,999 sq ft. ☒ 5,000-9,999 sq ft ☐ 10,000-14,999 sq ft. <i>Tier 2</i> ☐ 15,000 – 43,560 sq. ft. <i>Tier 3</i> ☐ > 43,560 sq. ft. or ☐ smaller than 43,560 sq ft., not eligible for Tier 1			
16. Brief Activity Description		Construction of 72,000 square foot warehouse building, access drive, and loading docks.					
17. Size of Lot or Parcel:		☐ square feet, or ☒ 31.21 acres		UTM Northing: 394981.8 UTM Easting: 4840144.0			
18. Title, Right or Interest:		☒ own ☐ lease ☐ purchase option ☐ written agreement					
19. Deed Reference Numbers:		Book#: 31943 Page: 229		20. Map and Lot Numbers:		Map #: 254A Lot #: A001	
21. DEP Staff Previously Contacted:		N/A		22. Part of a larger project:		☐ Yes ☒ No	
23. Resubmission of Application?		☐ Yes → ☒ No		If yes, previous application # N/A		After-the-Fact: ☐ Yes ☒ No	
24. Written Notice of Violation?		☐ Yes → ☒ No		If yes, name of DEP enforcement staff involved: N/A		25. Previous Wetland Alteration: ☐ Yes ☒ No	
26. Detailed Directions to the Project Site:		Forrest Avenue west to Riverside Industrial Parkway. Approximately 0.6 mile to Milliken Street. Turn onto Milliken Street, site is on the left.					
27. TIER 1		TIER 2/3 AND INDIVIDUAL PERMITS					
☒ Title, right or interest documentation ☒ Topographic Map ☒ Narrative Project Description ☒ Plan or Drawing (8 1/2" x 11") ☒ Photos of Area ☒ Statement of Avoidance & Minimization ☒ Statement/Copy of cover letter to MHPC		☐ Title, right or interest documentation ☐ Topographic Map ☐ Copy of Public Notice/Public Information Meeting Documentation ☐ Wetlands Delineation Report (Attachment 1) that contains the Information listed under Site Conditions ☐ Alternatives Analysis (Attachment 2) including description of how wetland impacts were Avoided/Minimized		☐ Erosion Control/Construction Plan ☐ Functional Assessment (Attachment 3), if required ☐ Compensation Plan (Attachment 4), if required ☐ Appendix A and others, if required ☐ Statement/Copy of cover letter to MHPC ☐ Description of Previously Mined Peatland, if required			
28. FEES, Amount Enclosed:		\$75.00					

CERTIFICATIONS AND SIGNATURES LOCATED ON PAGE 2

IMPORTANT: IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.

By signing below the applicant (or authorized agent), certifies that he or she has read and understood the following:

DEP SIGNATORY REQUIREMENT

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor a permit be issued.

CORPS SIGNATORY REQUIREMENT

USC Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry shall be fined not more than \$10,000 or imprisoned not more than five years or both. I authorize the Corps to enter the property that is subject to this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

DEP SIGNATORY REQUIREMENT

"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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Further, I hereby authorize the DEP to send me an electronically signed decision on the license I am applying for with this application by emailing the decision to the address located on the front page of this application (see #4 for the applicant and #8 for the agent)."

 JEFF WILBARK CEA Date: 10-29-18
SIGNATURE OF AGENT/APPLICANT

NOTE: Any changes in activity plans must be submitted to the DEP and the Corps in writing and must be approved by both agencies prior to implementation. Failure to do so may result in enforcement action and/or the removal of the unapproved changes to the activity.

DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERMIT BY RULE NOTIFICATION FORM
 (For use with DEP Regulation, Natural Resources Protection Act- Permit by Rule Standards, Chapter 305)

PLEASE TYPE OR PRINT IN BLACK INK ONLY

APPLICANT INFORMATION (Owner)				AGENT INFORMATION (If Applying on Behalf of Owner)			
Name:	Plymouth REIT			Name:	CES, Inc. (John Kuchinski)		
Mailing Address:	260 Franklin Street, 7 th Floor			Mailing Address:	146 Main Street		
Town:	Boston			Town:	Saco		
State and Zip Code:	MA 02110			State and Zip Code:	ME 04072		
Daytime Phone #:	617-340-3826			Daytime Phone #:	207-283-9151		
Email Address:	Jeff.Witherell@PlymouthREI.com			Email Address:	jkuchinski@cesincusa.com		

PROJECT INFORMATION							
Part of a larger project? (check one):	☒ Yes ☐ No	After the Fact? (check one):	☐ Yes ☒ No	Project involves work below mean low water? (check one):	☐ Yes ☒ No	Name of waterbody:	N/A
Project Town:	Portland	Project Location (Address):	56 Milliken Street			Map & Lot Number:	354A & A001
Brief Project Description:	Construction of 72,000 square foot warehouse building, access drive, and loading docks.						
Brief Directions to Site:	Forrest Avenue west to Riverside Industrial Parkway. Approximately 0.6 mile to Milliken Street. Turn onto Milliken Street, site is on the left.						

PERMIT BY RULE (PBR) SECTIONS (Check at least one): I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Rules, Chapter 305. I and my agents, if any, have read and will comply with all of the standards in the Sections checked below.

- | | | |
|---|---|--|
| ☐ Sec. (2) Act. Adj. to Protected Natural Res. | ☒ Sec. (10) Stream Crossing | ☐ Sec. (17) Transfers/Permit Extension |
| ☐ Sec. (3) Intake Pipes | ☐ Sec. (11) State Transportation Facil. | ☐ Sec. (18) Maintenance Dredging |
| ☐ Sec. (4) Replacement of Structures | ☐ Sec. (12) Restoration of Natural Areas | ☐ Sec. (19) Activities in/on/over significant vernal pool habitat |
| ☐ Sec. (5) REPEALED | ☐ Sec. (13) F&W Creation/Enhance/Water Quality Improvement | ☐ Sec. (20) Activities located in/on/over high or moderate value inland waterfowl & wading bird habitat or shorebird feeding & roosting areas |
| ☐ Sec. (6) Movement of Rocks or Vegetation | ☐ Sec. (14) REPEALED | |
| ☐ Sec. (7) Outfall Pipes | ☐ Sec. (15) Public Boat Ramps | |
| ☐ Sec. (8) Shoreline stabilization | ☐ Sec. (16) Coastal Sand Dune Projects | |
| ☐ Sec. (9) Utility Crossing | | |

NOTE: Municipal permits may also be required. Contact your local code enforcement office for more information. Federal permits may be required for stream crossings and for projects involving wetland fill. Contact the Army Corps of Engineers at the Maine Project Office for more information.

NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS

- **Attach** all required submissions for the PBR Section(s) checked above. The required submissions for each PBR Section are outlined in Chapter 305 and may differ depending on the Section you are submitting under.
- **Attach** a check for the correct fee made payable to: "Treasurer, State of Maine". The current fee for NRPA PBR Notifications can be found at the Department's website: <http://www.maine.gov/dep/feesched.pdf>
- **Attach** location map that clearly identifies the site (U.S.G.S. topo map, Maine Atlas & Gazetteer, or similar).
- **Attach Proof of Legal Name** if applicant is a corporation, LLC, or other legal entity. Provide a copy of Secretary of State's registration information (available at <http://licrs.informe.org/nei-sos-licrs/ICRS?MainPage=x>) Individuals and municipalities are not required to provide any proof of identity.

I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules.

I also understand that this PBR becomes effective 14 calendar days after receipt by the Department *unless the Department approves or denies the PBR prior to that date.*

By signing this Notification Form, I represent that the project meets all applicability requirements and standards in the rule and that the applicant has sufficient title, right, or interest in the property where the activity takes place.

Signature of Agent or Applicant:	 JEFF WITHERELL CEO	Date:	10-29-18
----------------------------------	---------------------------	-------	----------

Keep a copy as a record of permit. Send the form with attachments via certified mail or hand deliver to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. Work carried out in violation of any standard is subject to enforcement action.

AUGUSTA DEP
 17 STATE HOUSE STATION
 AUGUSTA, ME 04333-0017
 (207)287-7688

PORTLAND DEP
 312 CANCO ROAD
 PORTLAND, ME 04103
 (207)822-6300

BANGOR DEP
 106 HOGAN ROAD
 BANGOR, ME 04401
 (207)941-4570

PRESQUE ISLE DEP
 1235 CENTRAL DRIVE
 PRESQUE ISLE, ME 04769
 (207)764-0477

OFFICE USE ONLY	Ck.#		Staff	Staff	
PBR #	FP	Date	Acc. Date	Def. Date	After Photos

**MAINE**

Department of the Secretary of State

Bureau of Corporations, Elections and Commissions

[Corporate Name Search](#)

Information Summary

[Subscriber activity report](#)

This record contains information from the CEC database and is accurate as of: Wed Oct 17 2018 10:04:42. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
PLYMOUTH 56 MILLIKEN LLC	20150380FC	LIMITED LIABILITY COMPANY (FOREIGN)	GOOD STANDING
Filing Date	Expiration Date	Jurisdiction	
11/13/2014	N/A	DELAWARE	
Other Names		(A=Assumed ; F=Former)	

NONE

Clerk/Registered Agent

C T CORPORATION SYSTEM
128 STATE ST #3
AUGUSTA, ME 04330

[Back to previous screen](#)[New Search](#)**Click on a link to obtain additional information.**[List of Filings](#)[View list of filings](#)**Obtain additional information:**[Certificate of Existence](#) [\(more info\)](#)[Short Form without amendments
\(\\$30.00\)](#)

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files.
If you encounter problems, visit the [troubleshooting page](#).



PLYMOUTH REIT PROPOSED WAREHOUSE CONSTRUCTION



Photo No. 1

Photo Date:
July 2, 2018

Site Location:
Milliken Street
Portland, Maine

Description:
Looking west at
wetland and stream at
approximate crossing
location.

Photo By: JES



Photo No. 2

Photo Date:
July 2, 2018

Site Location:
Milliken Street
Portland, Maine

Description:
View of stream at
approximate crossing
location.

Photo By: JES



PLYMOUTH REIT
PROPOSED WAREHOUSE CONSTRUCTION



Photo No. 3

Photo Date:
July 2, 2018

Site Location:
Milliken Street
Portland, Maine

Description:
Looking east at scrub-shrub wetland within proposed warehouse alteration area.

Photo By: JES



Photo No. 4

Photo Date:
July 2, 2018

Site Location:
Milliken Street
Portland, Maine

Description:
Looking west at wetland, outside of alteration areas, in western portion of the site.

Photo By: JES





Jean Fraser <jf@portlandmaine.gov>

RE: 56 Milliken street, Portland

1 message

John Kuchinski <jkuchinski@cesincusa.com>
To: Jean Fraser <jf@portlandmaine.gov>

Mon, Dec 17, 2018 at 12:03 PM

Jean

See my responses below:

John Kuchinski, P.E. ♦ Senior Project EngineerP 207.283.9151 | F 207.283.9151 | C 207.899.5307 | www.ces-maine.com**From:** Jean Fraser <jf@portlandmaine.gov>
Sent: Thursday, December 13, 2018 4:52 PM
To: John Kuchinski <jkuchinski@cesincusa.com>
Subject: Re: 56 Milliken street, Portland

Hello John

I am waiting for the reviewers to send me detailed comments but some of them have requested additional information or raised issues as outlined below in order to complete their reviews:

- What is the relationship of the new building to the ones on the site ie will the existing businesses be using the new building or is it for some other user?
Response: The owner has not determined the future occupant of the proposed building. They are seeking to provide additional warehouse space with the City. This space may serve the current occupants of the site or be rented to another entity for warehousing space.
- Traffic generation - as part of the SLOD we need to determine if a TMP is required. Please send the history of the trip generation data for the last 10 years for the entire site (the transportation info submitted only relates to the new warehouse).
Response: The traffic generation for the proposed building represents the total trip generation within the past ten years. The previous modification to the site

consisted of a loading dock modification approved by the City on August 27, 2013. This change did not have any impacts on traffic demand. Development prior to that occurred in 2005 according to City Building Permit records.

- Why do you need two curb-cuts; the city aims to reduce rather than increase the number of curbcuts?

Response: The second driveway is allowed in the zone. This was discussed in our pre-application meeting in July of This year. The second drive is an exit only for trucks. The reason for the driveway is to eliminate additional wetland impacts and stream crossing to allow large trucks to reenter the southerly portion of the site and exit onto Milliken Street.

- The Fire Department requires access to the full length of two sides of the building.
Response: Access is provided on almost all 4 sides. The southerly and westerly sides provide access for emergency vehicles. Gravel access lanes are provide on 90 percent of the easterly and northerly sides of the proposed building.

- Please show the entire site on all of the civil plans.

Response: Our intent with the proposed site plans at a scale of 1" = 50' was to make the proposed plan more readable for the reviewers while maintaining a 24"x36" sheet size. Is it acceptable to have all of the site plans at 1" = 60'? this can be done fairly easily if required.

- The sidewalk waiver request needs to address the sidewalk and curbing waiver criteria, which are listed below. Please note that current developments on Riverside Industrial Parkway include sidewalks in their proposals.

Response: We would like to add to our waiver request the waiver of curbing criteria. Placing a sidewalk along the street frontage on Riverside Industrial Parkway has several technical and environmental challenges. First as stated in our original waiver request, there are no sidewalks or curbs along either side of Riverside Industrial Parkway. The nature of Riverside Industrial Parkway is industrial which does not lend itself to pedestrian traffic. On a technical nature is the large grade difference between the road surface and the stream crossing under Riverside Industrial Parkway. To place a sidewalk will require additional impact to the stream and extending the City of Portland Culvert under the road to accommodate a sidewalk.

While writing I attach the wastewater capacity letter from DPW.

thank you

Jean



Engineers ♦ Environmental Scientists ♦ Surveyors

January 9, 2019

Jean Fraser, Planner
Portland Planning and Urban Development Department
389 Congress Street
Portland, Maine, 04101
jf@portlandmaine.gov

Re: Neighborhood Meeting Certification | Plymouth REIT 56 Milliken Street

Dear Jean

I, John D. Kuchinski, PE of CES, Inc. hereby certify that a neighborhood meeting was held on Thursday, January 3, 2019 at Riverton Elementary School Community Room at 6:00 PM for the proposed project located at 56 Milliken Street.

I also certify that on December 18, 2018 invitations to the meeting 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 or within 1,000 feet of a subdivision within an industrial zone or industrial zone change.
2. Residents on the "interested parties" list.

Sincerely,
CES, Inc.

A handwritten signature in blue ink, appearing to read "John D. Kuchinski", is written over the printed name.

John D. Kuchinski, PE
Senior Project Engineer

JDK/gdr

Enc: 1. Copy of the Invitation Sent
2. Sign-in Sheet
3. Meeting Minutes
cc: Jeff Witherell, Plymouth REIT

NEIGHBORHOOD MEETING INVITATION

December 18, 2018

Dear Neighbor:

Please join us for a neighborhood meeting to discuss plans for a 72,000 square foot warehouse and associated site construction located at 56 Milliken Street in Portland, Maine.

Meeting Location: Riverton Elementary School Community Room

Meeting Date: Thursday, January 3, 2019

Meeting Time: 6:00 PM

(The City code requires that property owners within 500 feet (1,000 feet for proposed industrial subdivisions and industrial zone changes) of the proposed development and residents on an "interested parties list", be invited to participate in a neighborhood meeting. A sign-in sheet will be circulated, and minutes of the meeting will be taken. Both the sign-in sheet and minutes will be submitted to the Planning Board.)

If you have any questions, please contact John Kuchinski at 207-283-9151 or at jkuchinski@cesincusa.com.

Note:

Under Section 14-32(C) and 14-524(a)d of the City Code of Ordinances, an applicant for a Level III development, subdivision of over five lots/units, or zone change is required to hold a neighborhood meeting within 30 days of submitting a preliminary application or 21 days of submitting a final site plan application, if a preliminary plan was not submitted. The neighborhood meeting must be held at least seven days prior to the Planning Board public hearing on the proposal. Should you wish to offer additional comments on this proposed development, you may contact the Planning Division at 874-8721 or send written correspondence to the Planning and Urban Development Department Planning Division, 4th Floor, 389 Congress Street, Portland, ME 04101 or by email to: bab@portlandmaine.gov

NEIGHBORHOOD MEETING SIGN-IN

Date: January 3, 2019 Time: 6:00 PM Location: Community Room, Riverton Elementary School, Portland

Project: Plymouth REIT 56 Milliken St, Portland

Consultant:

John Kuchinski, CES, Inc.

146 Main St., Suite 300 Saco ME 04072

(207) 283-9151

jkuchinski@cesincusa.com

NAME	ADDRESS	TELEPHONE	EMAIL
Margaret Rodriguez	107 Primrose Ln.	209-559-2411	margretr@yahoo.com
Naren Szalajski	99 Primrose Lane	(207) 450-2133	Kahn135@aol.com
Steve Keyser	156 Greenwood LN	603-289-4051	elmpond@gmail.com

MEMO

To: Jean Fraser, Planner
City of Portland Planning & Urban Development Department

From: John D. Kuchinski, PE

Re: Meeting Minutes of Neighborhood Meeting
56 Milliken Street for Plymouth REIT

Date: January 9, 2019

The January 3, 2019 meeting was opened at 6:00 PM at the Riverton Elementary School Community Room. Three abutters were in attendance in addition to Mr. Kuchinski who is representing Plymouth REIT.

John Kuchinski provided a brief presentation of the proposed project that consists of a 72,000 square foot warehouse, two sets of loading bays, and an access exit driveway onto Riverside Industrial Parkway.

Abutters stated that they had received a postcard from the City of Portland Planning Department stating that this project was a marijuana growing and processing facility. An abutter stated that the address on the postcard, 66 Milliken Street, was crossed off and 56 Milliken was written in. Mr. Kuchinski stated that the proposed project is not a marijuana facility but a simple warehouse. Mr. Kuchinski passed around a printed copy of the application materials submitted to the City of Portland and stated that marijuana is not mentioned anywhere in the application. A discussion of this continued for a period of time. The abutters present stated that they oppose a marijuana facility and that was the reason for their attendance.

Mr. Kuchinski stated that he would contact the City and inquire about the confusing post card notice.

The meeting was adjourned at 6:30 PM.

PLYMOUTH INDUSTRIAL REIT, INC.

SITE EXPANSION PROJECT

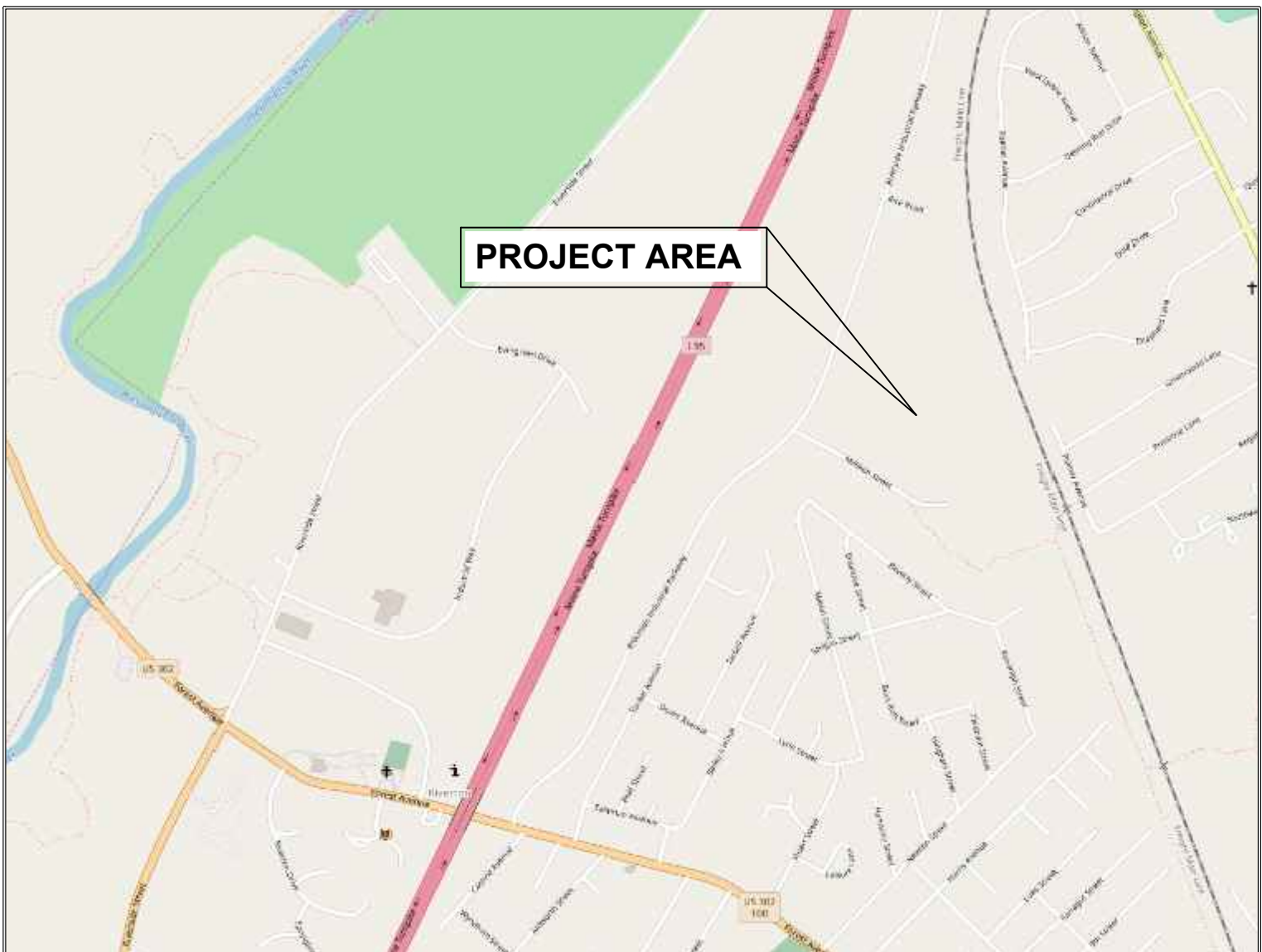
56 MILLIKEN STREET
PORTLAND, MAINE



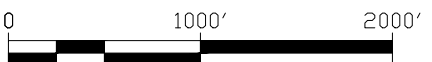
STATE OF MAINE

INDEX OF DRAWINGS

C101	EXISTING SITE PLAN
C102	PROPOSED SITE LAYOUT & GRADING PLAN
C103	PROPOSED UTILITY PLAN
C104	SITE ELECTRICAL
C501	DETAILS
C502	DETAILS
C503	DETAILS
C701	PRE DEVELOPMENT HYDROLOGY PLAN
C702	POST DEVELOPMENT HYDROLOGY PLAN
C801	CONSTRUCTION MANAGEMENT SITE PLAN
C802	PHOTOMETRIC PLAN



PROJECT LOCATION



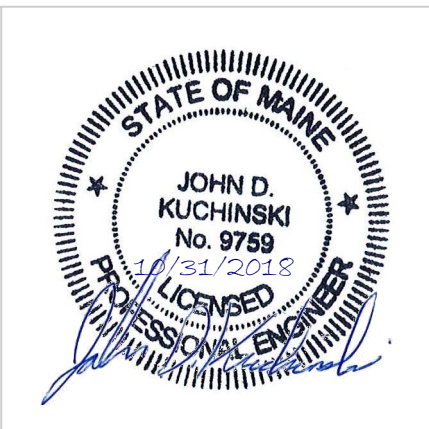
ISSUED FOR REVIEW
2018-10-26



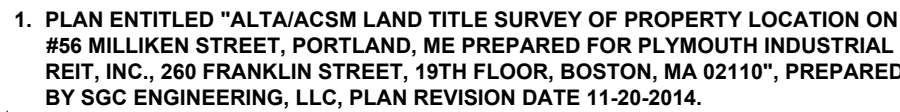
ENGINEERS • ENVIRONMENTAL SCIENTISTS • SURVEYORS

465 So. Main Street P.O. Box 639 Brewer, ME 04412 T: 207-989-4824 F: 207-989-4881	1366 State Highway 102 Bar Harbor, ME 04609 T: 207-288-0587 F: 207-288-0588	640 Main Street Lewiston, ME 04240 T: 207-795-6009 F: 207-795-6128	61 Dublin Street P.O. Box 587 Mechanic, ME 04654 T: 207-255-3270 F: 207-255-8367	549 Main Street P.O. Box 827 Presque Isle, ME 04769 T: 207-764-8412 F: 207-764-8414	146 Main Street Suite 300 Saco, ME 04072 T: 207-283-9151 F: 207-283-9136	44 Main Street Suite 204 Waterville, ME 04903 Tel: 207-680-2202 Fax: 207-680-2204	BWLK, a division of CES, Inc. 13041 McGregor Boulevard Fort Myers, FL 33919 T: 239-481-1331 F: 239-481-1073
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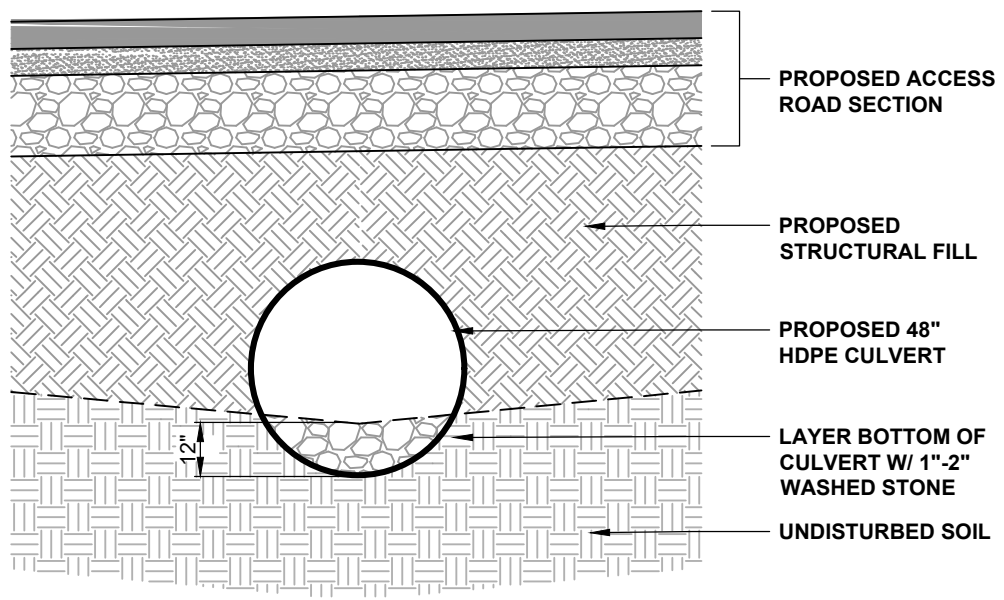
APPROVED:



JOHN KUCHINSKI, P.E.



CES **INC**
Engineers • Environmental Scientists • Surveyors



STREAM CROSSING DETAIL

N.T.S.

WETLAND IMPACT TABULATION

5,344 SF	WETLAND FILL
1,102 SF	INDIRECT WETLAND IMPACT (NO FILL)
1,588 SF	STREAM CROSSING WETLAND FILL

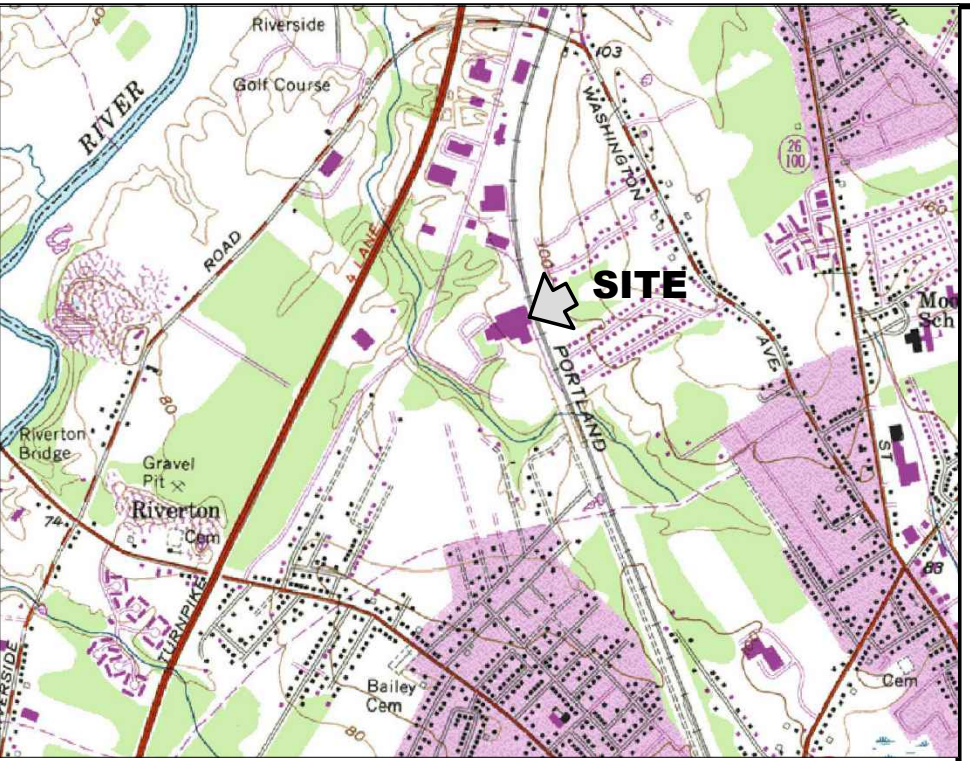
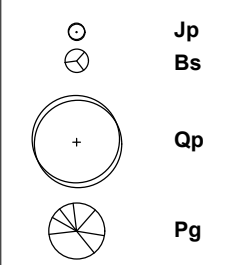
STATE OF MAINE
CUMBERLAND COUNTY
REGISTRY OF DEEDS
RECEIVED AND FILED

Received _____ 20____
At _____ h m M____
Recorded in Plan Book _____ Page _____
Altd _____ Register _____

SITE DATA:		
CITY OF PORTLAND TAX MAP 334 / BLOCK A / LOT 14		
ZONING INFORMATION: I-M ZONE		
ALLOWED	PROPOSED	
MINIMUM LOT SIZE	10,000 SF	1,359,508 SF
MAXIMUM IMPERVIOUS SURFACE RATION	75%	46%
MINIMUM BUILDING HEIGHT	75 FEET	128.6 FEET
MINIMUM SIDE YARDS	25 FEET	53.5 FEET
MINIMUM REAR YARDS	25 FEET	45.2 FEET
MINIMUM FRONT YARDS	25 FEET	551.25 FEET
MINIMUM STREET FRONTAGE	60 FEET	1,580 FEET
PAVEMENT SETBACK	10 FT FROM PL	33.4 FT

PLANTING SCHEDULE				
I.D.	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
Op	2	QUERCUS PALUSTRIS	PIN OAK	1.5" CAL B&B
Jp	60	JUNIPERUS PROCEMBENS	DWARF JARGARDEN JUNIPER	1 GAL / 8" O.C.
Bs	16	BOXUS SEMPERVIRENS	DWARF BOXWOOD	1 GAL / 5" O.C.
Pg	6	PICEA GLAUCA	WHITE SPRUCE	4'-6" B&B

PLANTING KEY:



LOCATION MAP: USGS QUADRANGLE: PORTLAND WEST
SCALE: 1"=2000'
MAPTECH® USGS TOPOGRAPHIC SERIES™
©MAPTECH®, INC. 978-933-3000
WWW.MAPTECH.COM/TOPO

LEGEND:

DESCRIPTION	EXISTING	PROPOSED
UTILITY POLE		
POWER BANK		NA
SITE LIGHT		NA
DRAINAGE MANHOLE		
CATCH BASIN		
HYDRANT	NA	
PROPERTY LINE	---	---
EDGE OF PAVEMENT	---	---
EDGE OF GRAVEL	---	---
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
WATER LINE	WL	W
SANITARY SEWER LINE	SS	SS
OVERHEAD UTILITY	OHD	NA
UNDERGROUND UTILITY	NA	UGU
STORMDRAIN	SD	SD
UNDERDRAIN	UD	UD
ROOF DRAIN	RD	RD
SILT FENCE	NA	SF
GRAVEL SURFACE	NA	
PAVED SURFACE	NA	

GENERAL NOTES

- TOPOGRAPHY SHOWN REPRESENTS RESULTS FROM TOPOGRAPHIC SURVEY PERFORMED BY CES, INC. ON AUGUST 23, 2018 AND MERGED WITH 2' LIDAR CONTOURS PROVIDED BY THE MAINE OFFICE OF GIS.
- EXISTING CONDITIONS FROM DIGITAL RECORD DRAWING PROVIDED BY THE OWNER, FILE NAME MillikenSt_Base.dwg.
- THE DIRECTION OF LINES AND UNDERLYING HORIZONTAL COORDINATE SYSTEM IS MAINE STATE PLANE WEST ZONE, US SURVEY FOOT, NAD 83, WITH NAVD 88 VERTICAL DATUM. A VERTICAL ADJUSTMENT OF 0.686 FEET IS TO BE APPLIED FOR CONVERSION TO THE CITY OF PORTLAND'S VERTICAL DATUM OF NGVD29.
- WETLAND BOUNDARY SHOWN IS THE RESULT OF A WETLAND DELINEATION PERFORMED BY CES, INC.

PLAN REFERENCE

- PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY OF PROPERTY LOCATION ON #56 MILLIKEN STREET, PORTLAND, ME PREPARED FOR PLYMOUTH INDUSTRIAL REIT, INC., 260 FRANKLIN STREET, 19TH FLOOR, BOSTON, MA 02110", PREPARED BY SGC ENGINEERING, LLC, PLAN REVISION DATE 11-20-2014.

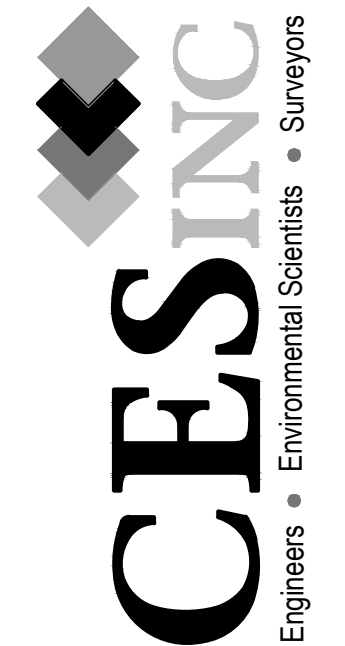
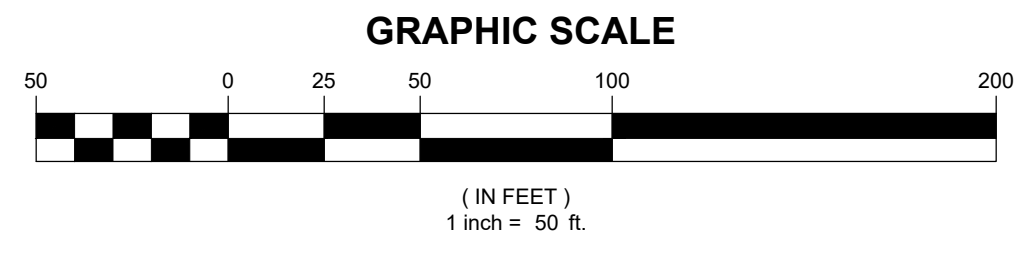
THIS IS TO CERTIFY THAT AFTER REVIEWING THE SITE PLAN SUBMISSION INFORMATION FOR THE PROJECT SHOWN ON THIS PLAN AND CONSIDERING EACH OF THE CRITERIA SET FORTH IN THE CITY OF PORTLAND'S CODE OF ORDINANCES AND IN ACCORDANCE WITH THE APPLICATION REQUIREMENTS, THE UNDERSIGNED HAVE MADE FINDINGS OF FACT ESTABLISHING THAT THIS PLAN ALONG WITH ITS ADDITIONAL SUBMISSION INFORMATION (IF APPLICABLE) HAS MET ALL THE CRITERIA SET FORTH AND THEREFORE THE SITE PLAN IS APPROVED.

APPROVED BY THE CITY OF PORTLAND PLANNING BOARD ON:

CONDITIONS:

PLANNING BOARD SIGNED ON:

PROPOSED SITE PLAN
RECORD OWNER
MILLIKEN PORTLAND PARTNERS, LLC
ADDRESS OF RECORD OWNER: 11840 VALLEY VIEW ROAD, EDEN PRAIRIE, MN 53443
FOR
PLYMOUTH INDUSTRIAL REIT, INC.
SITE EXPANSION PROJECT
ADDRESS: 56 MILLIKEN STREET, PORTLAND, MAINE

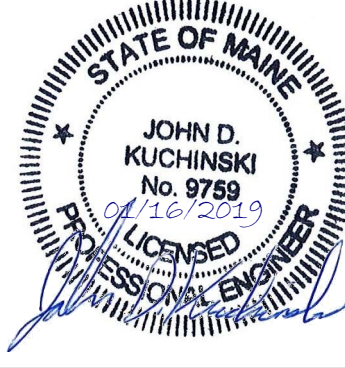


PLYMOUTH INDUSTRIAL REIT, INC. SITE EXPANSION PROJECT
56 MILLIKEN STREET

PROPOSED SITE LAYOUT
& GRADING PLAN

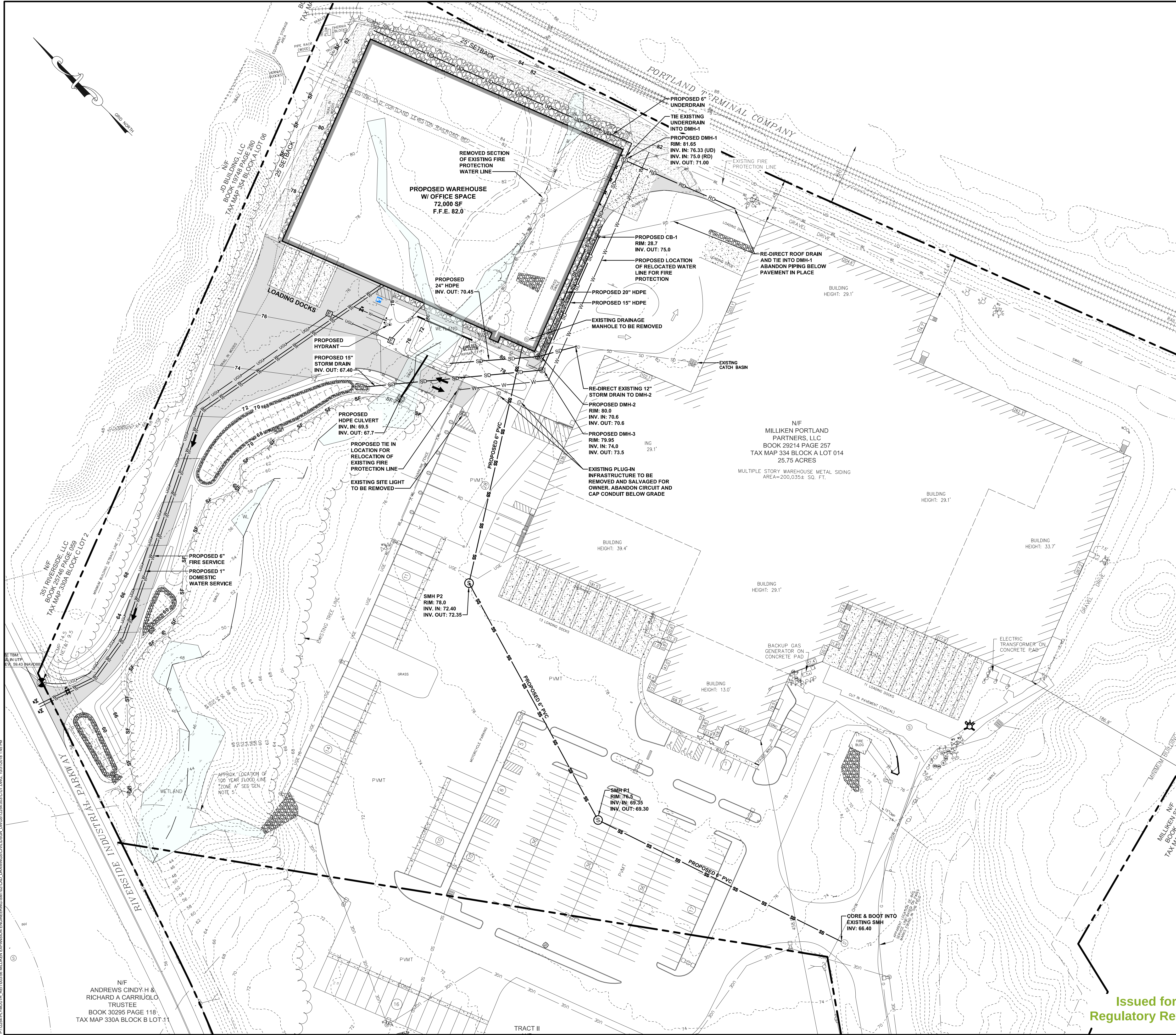
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1	2018-10-26	BLO	JDK		2018-10-26	BLO	JDK	

NOT FOR CONSTRUCTION



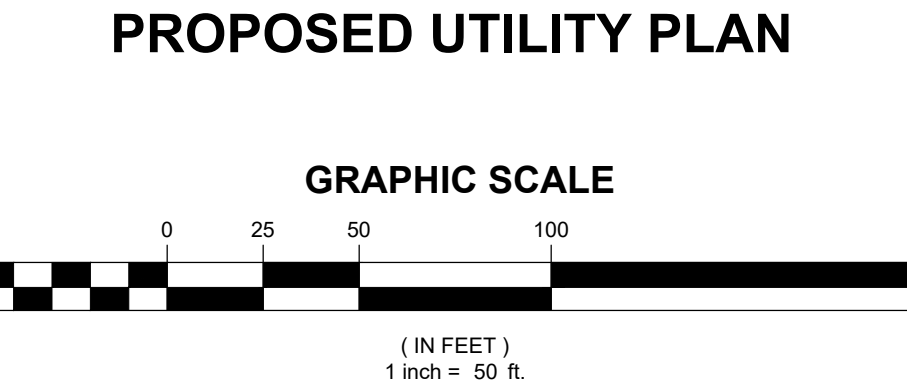
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DATE	2018-10-26
DRAWN BY	BLO
CHECKED BY	JDK
DESIGNED BY	BLO
APPROVED BY	SMT
JOB NUMBER	12254 003
DRAWING NUMBER	

C102



DESCRIPTION	EXISTING	PROPOSED
UTILITY POLE		
POWER BANK		NA
SITE LIGHT		NA
DRAINAGE MANHOLE		
CATCH BASIN		
ELECTRICAL MANHOLE	NA	
HYDRANT	NA	
PROPERTY LINE	---	---
EDGE OF PAVEMENT	---	---
EDGE OF GRAVEL	---	---
MAJOR FOOT CONTOUR	100	100
MINOR FOOT CONTOUR	98	98
WATER LINE	WL	WL
SANITARY SEWER LINE	SS	SS
OVERHEAD UTILITY	OHD	NA
UNDERGROUND UTILITY	NA	UGU
STORMDRAIN	SD	SD
UNDERDRAIN	UD	UD
ROOF DRAIN	RD	RD
SILT FENCE	NA	
GRAVEL SURFACE	NA	
PAVED SURFACE	NA	

- GENERAL NOTES**
- TOPOGRAPHY SHOWN REPRESENTS RESULTS FROM TOPOGRAPHIC SURVEY PERFORMED BY CES, INC. ON AUGUST 23, 2018 AND MERGED WITH 2' LIDAR CONTOURS PROVIDED BY THE MAINE OFFICE OF GIS.
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PROJECT TITLE
PLYMOUTH INDUSTRIAL REIT, INC. SITE EXPANSION PROJECT
56 MILLIKEN STREET

DATE
2018-10-26

DRAWN BY
BLO

CHECKED BY
JDK

DESIGNED BY
BLO

APPROVED BY
SMT

JOB NUMBER
12254 003

DRAWING NUMBER
C103

PROPOSED UTILITY PLAN

NOT FOR CONSTRUCTION

SCALE
1"=50'

DATE
2018-10-26

DRAWN BY
BLO

CHECKED BY
JDK

DESIGNED BY
BLO

APPROVED BY
SMT

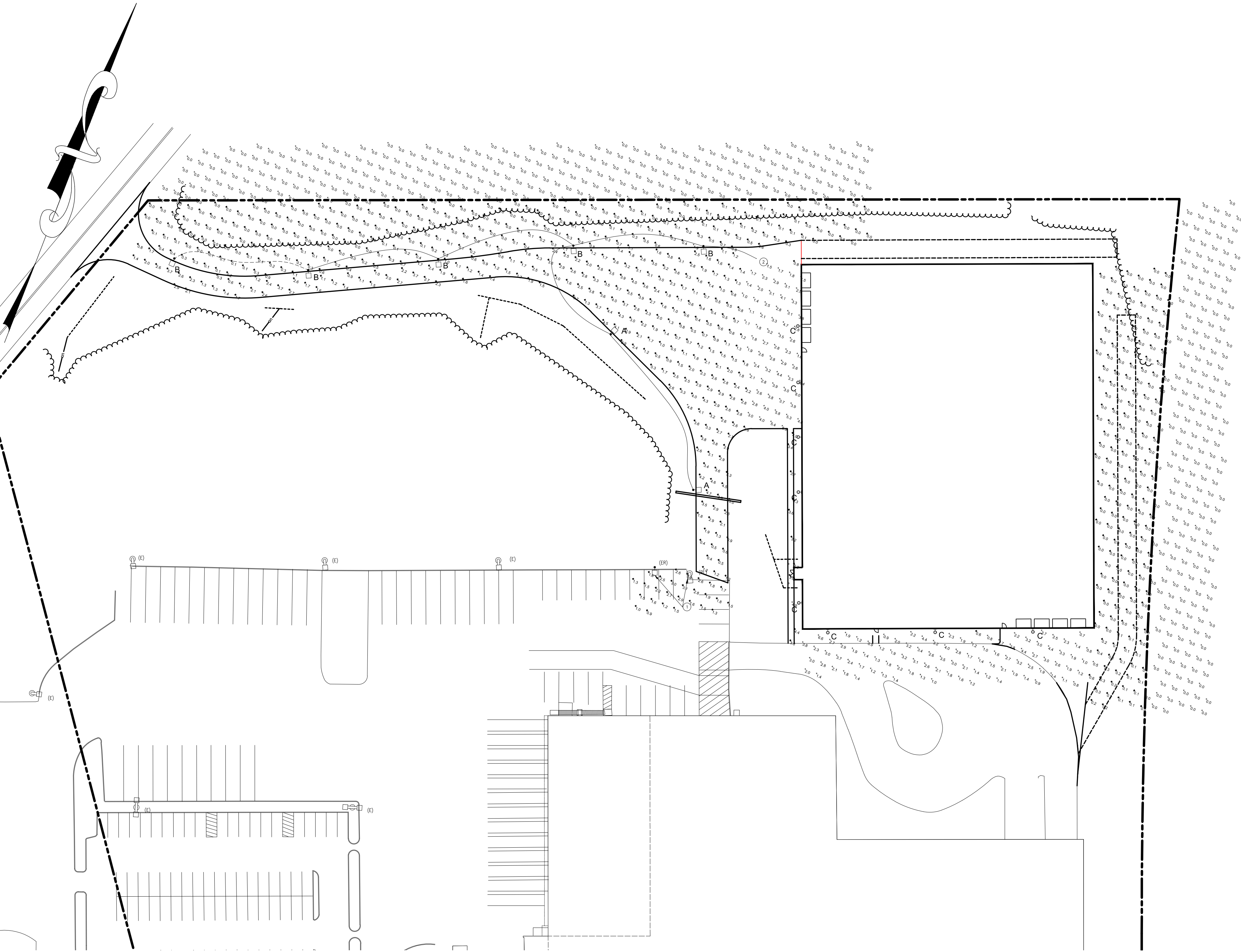
JOB NUMBER
12254 003

DRAWING NUMBER
C103

CES INC

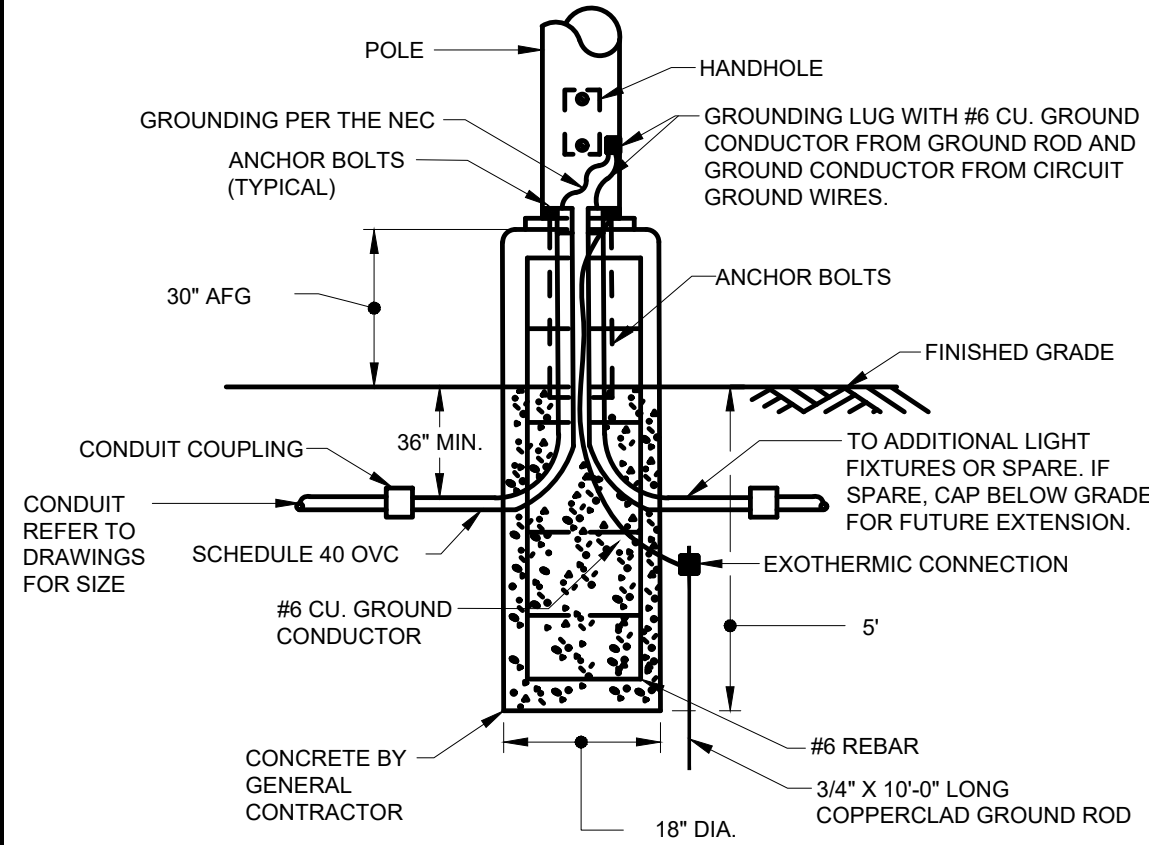
Engineers • Environmental Scientists • Surveyors

P:\12254\A\WORTH, BETH\03-24 MILLIKEN EXPANSION ENGINEERING\S-CAD DRAWINGS\ELECTRICAL\BURNALU WAREHOUSE SITE EXPANSION PROJECT\BETH\12254-003-E101 SITE ELECTRICAL.DWG, 10/26/2018 9:18 AM

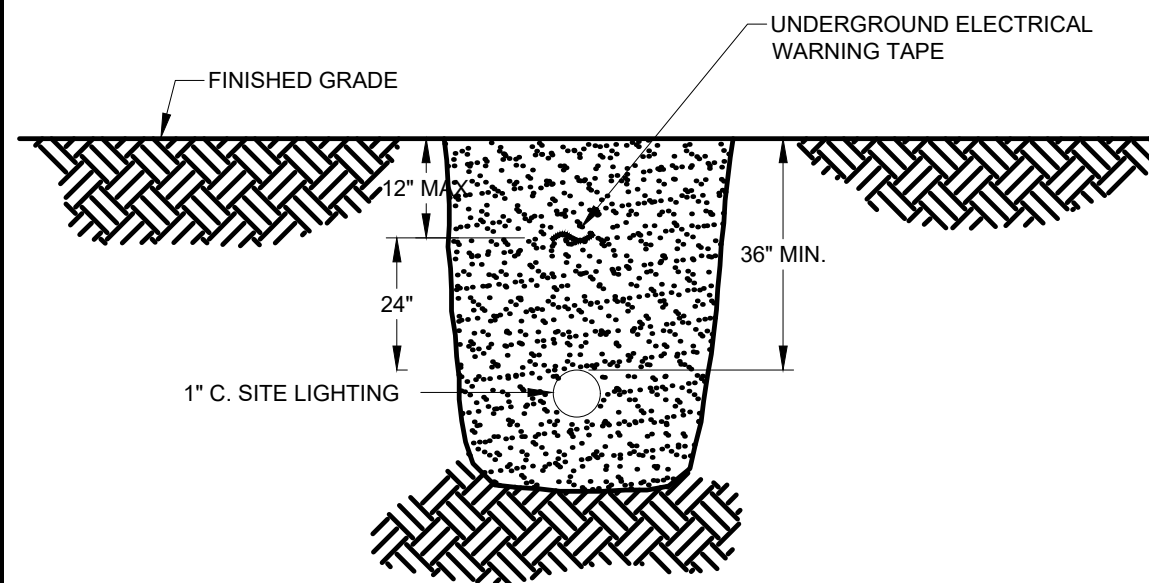


SITE ELECTRICAL PLAN
SCALE: 1"=50'

LIGHTING FIXTURE SCHEDULE							
FIXTURE LETTER	DESCRIPTION	MANUFACTURER & CATALOG NUMBER	MOUNTING	LAMPS			REMARKS
				TYPE	WATTS	QUANTITY	
A	LED SINGLE HEAD POLE MOUNTED AREA FIXTURE, DARK SKY COMPLIANT, DARK BRONZE DIE CAST ALUMINUM HOUSING, 4000K COLOR TEMPERATURE, TYPE IV DISTRIBUTION OPTICS, MINIMUM OF 12,000 LUMENS, WITH A STANDARD DRIVER AND BUTTON PHOTOCONTROL, MOUNTED ON A 18" SQUARE STEEL DARK BRONZE POLE	BEACON VPS-48L-110-4K7-4-UNV-A-DB-7PR-TL	POLE	LED	110	N/A	UNIVERSAL PROVIDE WITH A TWIST LOCK PHOTO CONTROL, 18" SQUARE STEEL POLE AND CONCRETE POLE BASE
B	LED SINGLE HEAD POLE MOUNTED AREA FIXTURE, DARK BRONZE DIE CAST ALUMINUM HOUSING, 4000K COLOR TEMPERATURE, MEDIUM TYPE III DISTRIBUTION OPTICS, WITH HOUSE SIDE SHIELD ON THE BACK OF THE LENS, MINIMUM OF 800 LUMENS, WITH A STANDARD DRIVER AND BUTTON PHOTOCONTROL, MOUNTED ON A 18" SQUARE STEEL DARK BRONZE POLE	BEACON VPS-36L-80-4K7-3-UNV-A-DB-7PR-TL-HSS/VP-S/80-FB/DB	POLE	LED	87	N/A	UNIVERSAL PROVIDE WITH A TWIST LOCK PHOTO CONTROL, HOUSE SIDE SHIELD, 18" SQUARE STEEL POLE AND CONCRETE POLE BASE
C	LED WALL PACK, DARK BRONZE DIE CAST ALUMINUM HOUSING, FROSTED ACRYLIC DIFFUSER LENS, 4000K COLOR TEMPERATURE, TYPE IV DISTRIBUTION OPTICS, MINIMUM OF 13,000 LUMENS, WITH A STANDARD DRIVER WITH BUTTON PHOTOCONTROL	HUBBELL LNC4-36L-4K-105-4-U-DB-PCU-CS	SURFACE	LED	140	N/A	UNIVERSAL PROVIDE WITH UNIVERSAL VOLTAGE PHOTO BUTTON CONTROL



A1 TYPICAL LIGHT POLE BASE DETAIL



A2 TYPICAL DIRECT BURIED CONDUIT DETAIL

LIGHTING LEVEL STATISTICS						
LOCATION DESCRIPTION	SYMBOL	LIGHTING LEVELS IN FOOT-CANDLES (fc)				
		AVERAGE	MAXIMUM	MINIMUM	MAX/MIN	AVG/MIN
BEYOND PROPERTY LINE - EAST	+	0.0	0.0	0.0	N/A	N/A
BEYOND PROPERTY LINE - NORTH	+	0.0	0.0	0.0	N/A	N/A
BOUNDARY TO PROPERTY LINE - EAST	+	0.0	0.6	0.0	N/A	N/A
BOUNDARY TO PROPERTY LINE - NORTH	+	0.1	1.6	0.0	N/A	N/A
ENTRANCE DRIVE	+	2.2	4.8	0.6	8.0	3.7
EXISTING TURN AROUND WITHIN 25' OF BUILDING	+	2.6	10.2	0.6	17.0	4.3
EXIT DRIVE	+	1.6	2.7	0.4	6.8	4.0
CONNECTING DRIVE	+	2.3	4.9	0.3	16.3	7.7
LOADING DOCK AREA WITHIN 25' OF THE BUILDING	+	3.4	12.7	0.7	18.1	4.9
WALKWAY	+	4.4	10.1	2.7	3.7	1.6

DRAWING E101
NUMBERED NOTES

- ALL SITE LIGHTING SHALL MEET THE LATEST REQUIREMENTS OF THE CITY OF PORTLAND SITE LIGHTING STANDARDS.

DRAWING E101
NUMBERED NOTES

- CONTRACTOR SHALL REMOVE AND RELOCATE THE EXISTING POLE LIGHT FIXTURE TO THE NEW LOCATION AS SHOWN, CUT BACK THE EXISTING CONDUITS AND PROVIDE NEW BRANCH CIRCUITS FROM THE LAST EXISTING POLE TO THE RELOCATED POLE. CONDUCTORS SHALL MATCH THE EXISTING CONDUCTORS.
- EXTEND THE UNDERGROUND ELECTRICAL SITE LIGHTING CIRCUITS TO THE BUILDING ELECTRICAL ROOM AND CONNECT TO THE LIGHTING PANEL AS REQUIRED.

PROJECT TITLE
SUPERVALU WAREHOUSE SITE EXPANSION PROJECT

SHEET TITLE
PORTLAND MAINE

SHEET TITLE
SITE ELECTRICAL

NOT FOR
CONSTRUCTION



SCALE	1"=50'
DATE	2018-10-26
DRAWN BY	BTH
CHECKED BY	PEB
DESIGNED BY	PEB
APPROVED BY	JDK
JOB NUMBER	12254-003
DRAWING NUMBER	

Issued for
Regulatory Review

C104

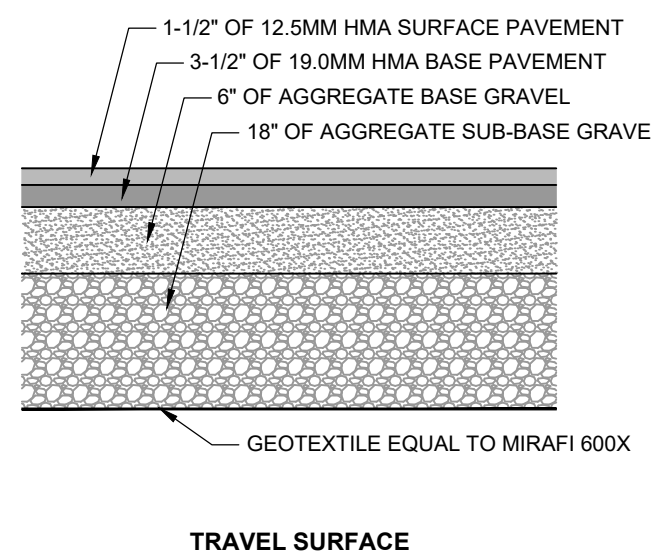


Portland, ME
100 Commercial Street
Portland, ME 04101
P: 207.764.8411
F: 207.764.8412

Portland, ME
100 Commercial Street
Portland, ME 04101
P: 207.764.8411
F: 207.764.8412

Portland, ME
100 Commercial Street
Portland, ME 04101
P: 207.764.8411
F: 207.764.8412

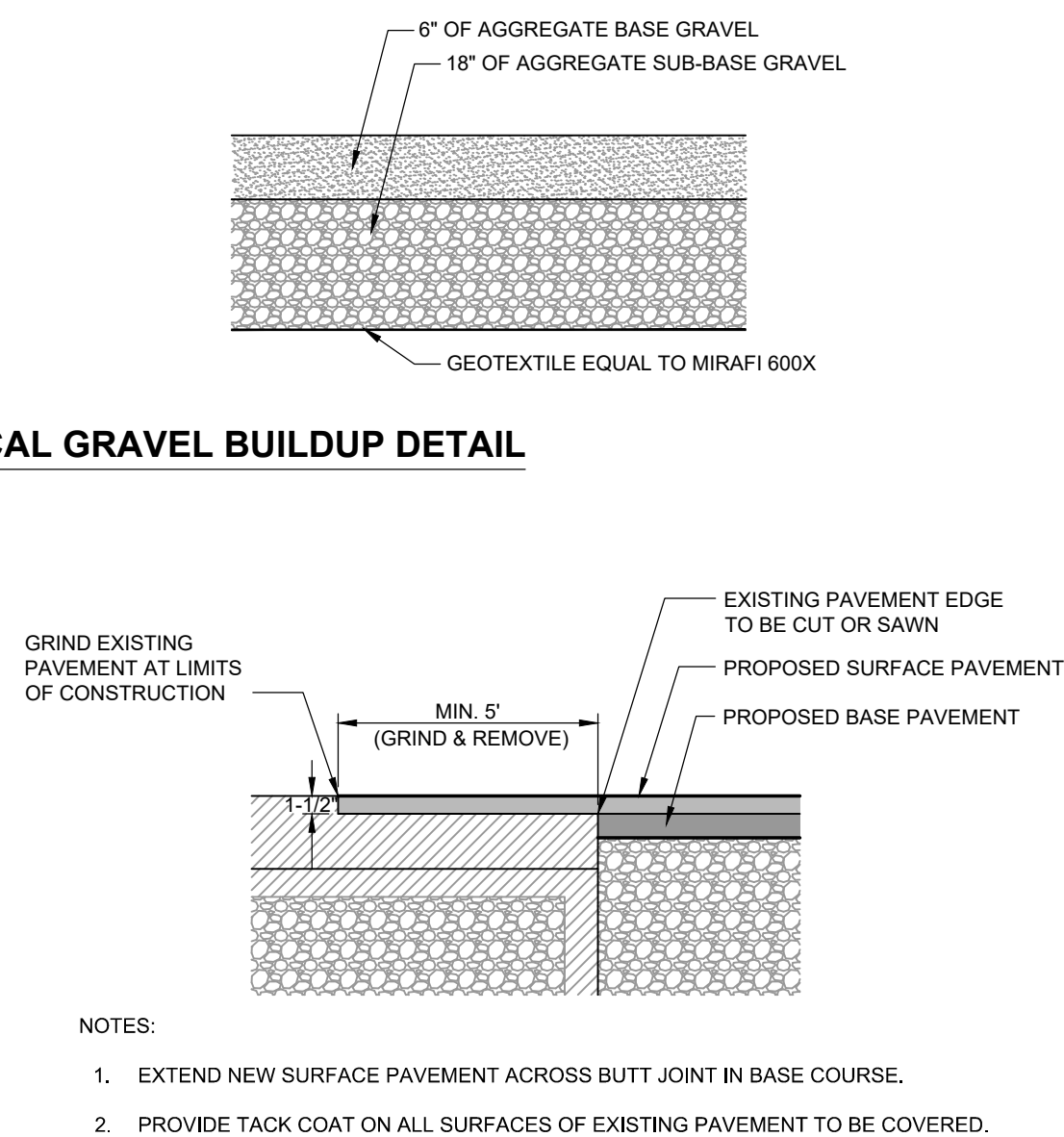
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100 Commercial Street
Portland, ME 04101
P: 207.764.8411
F: 207.764.8412



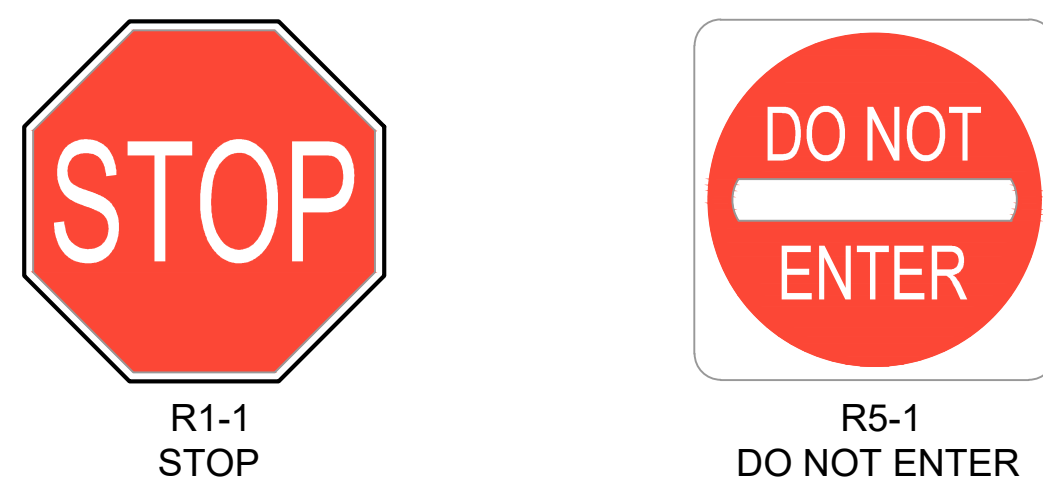
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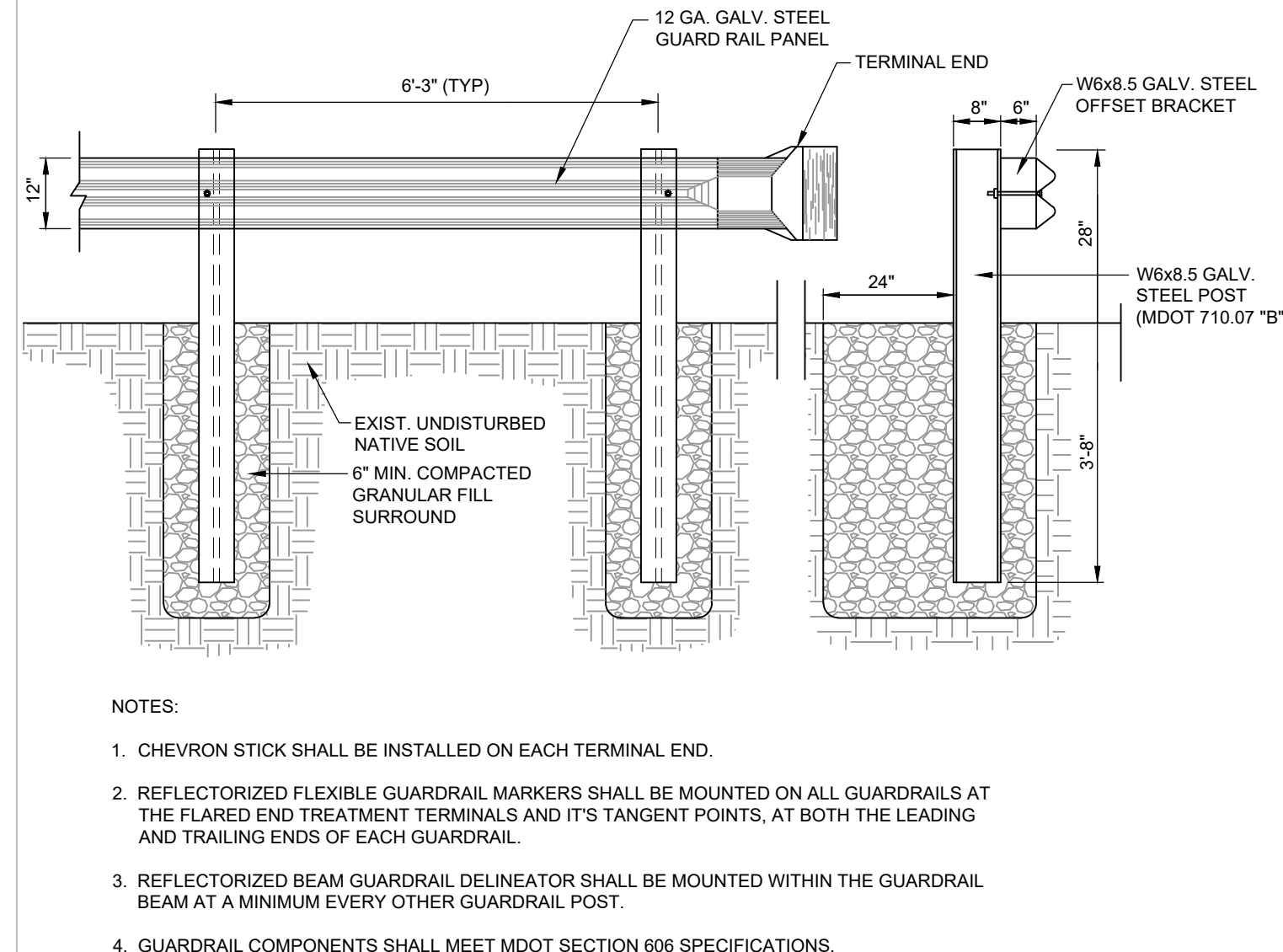
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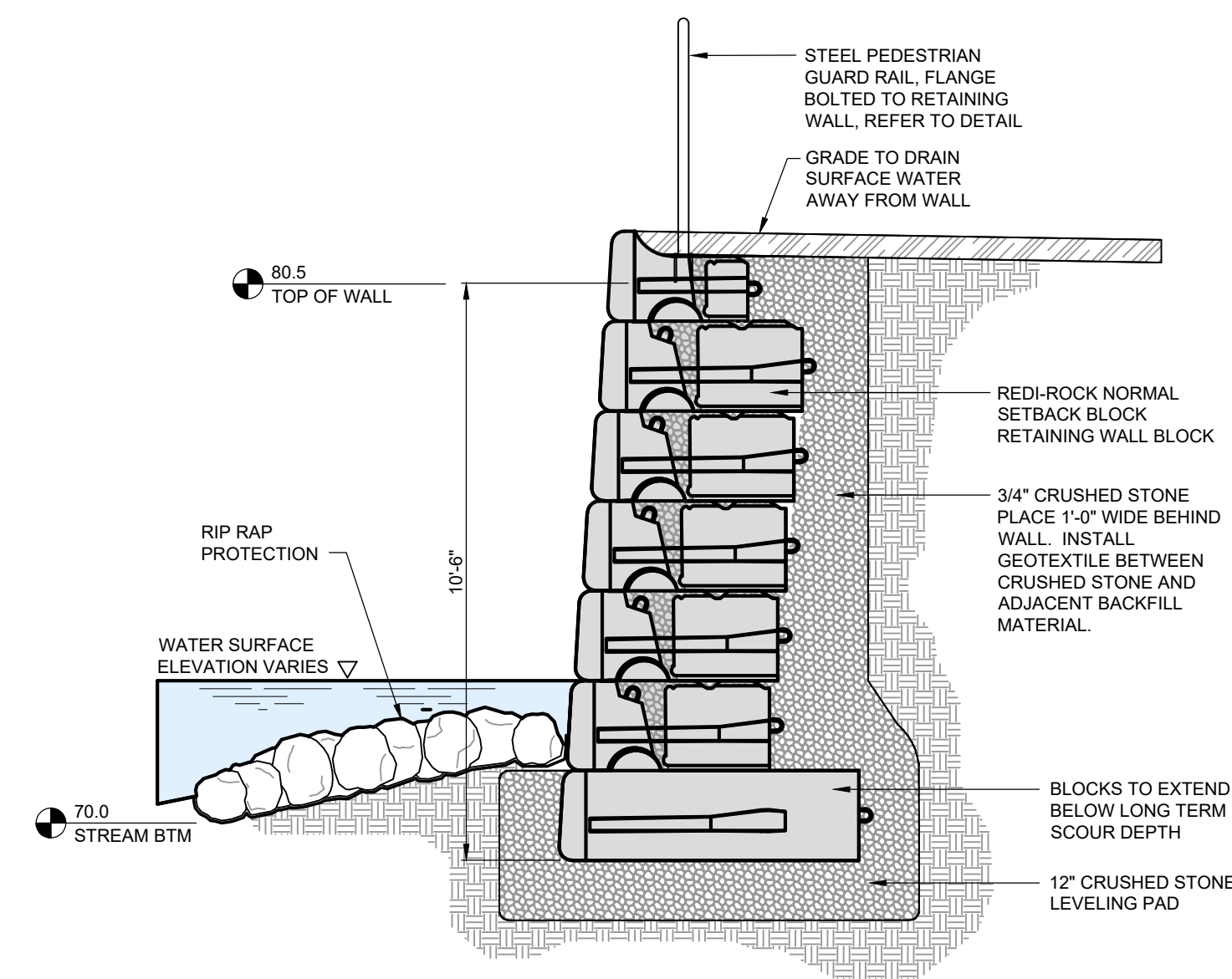
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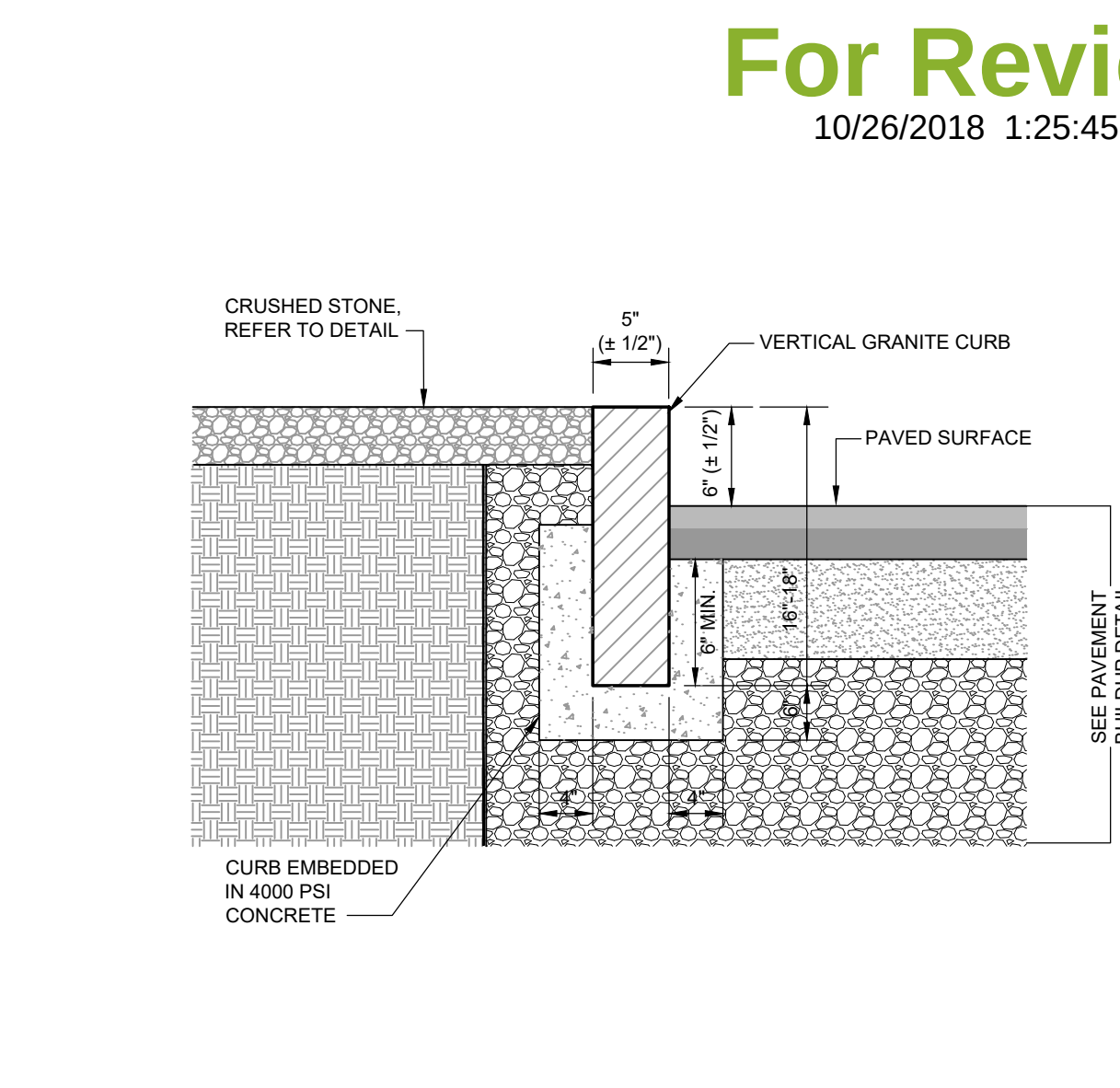
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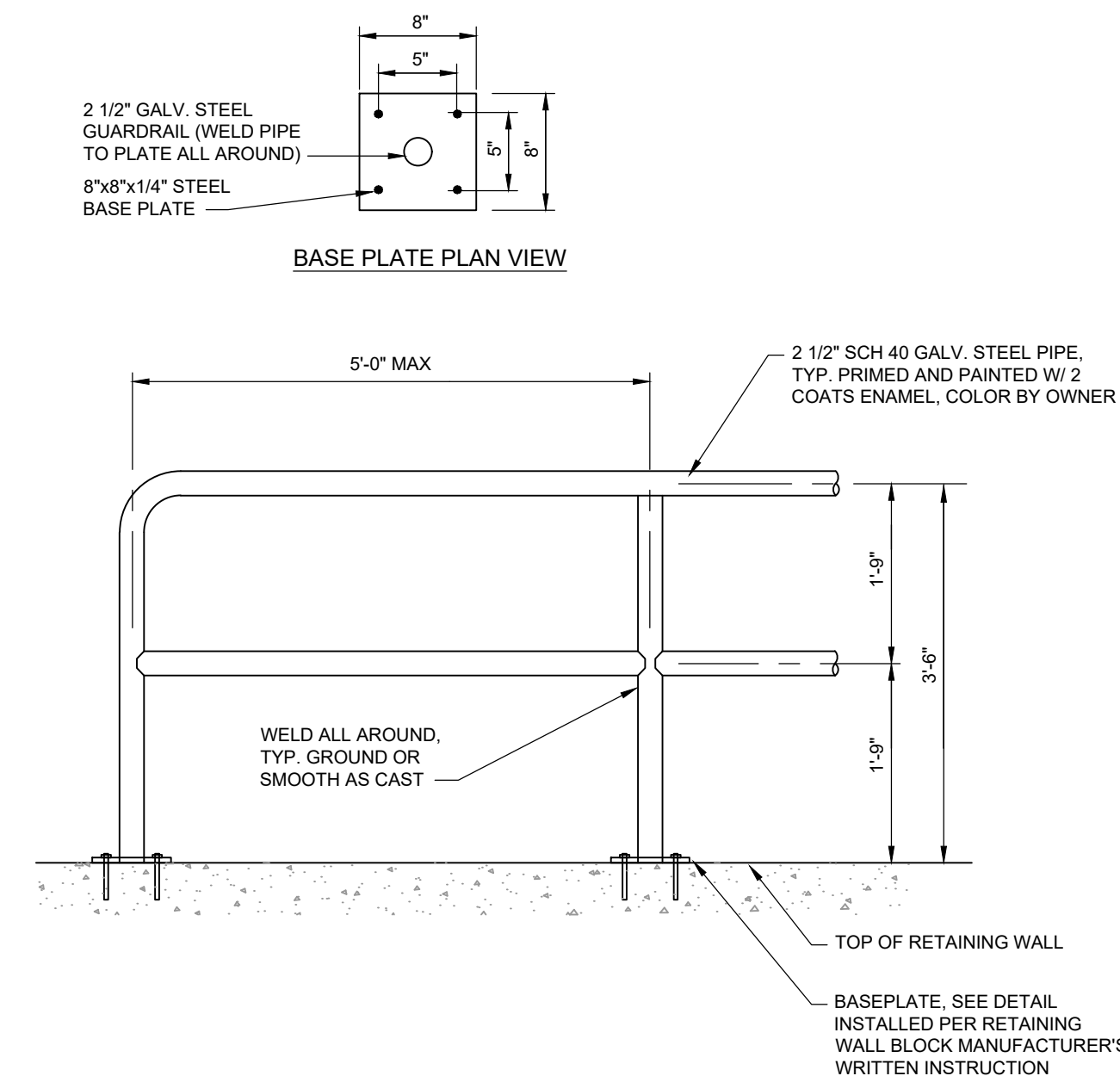
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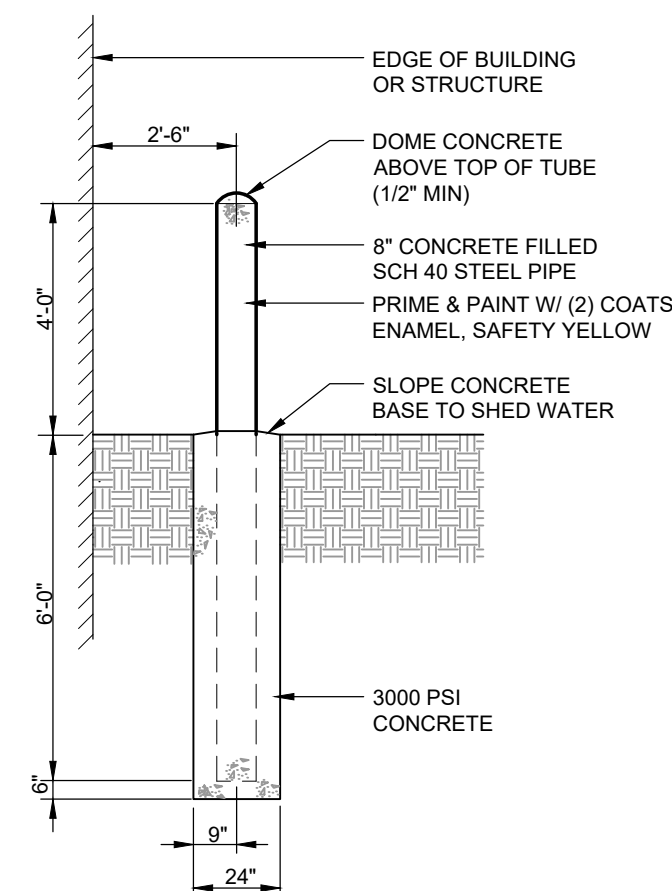
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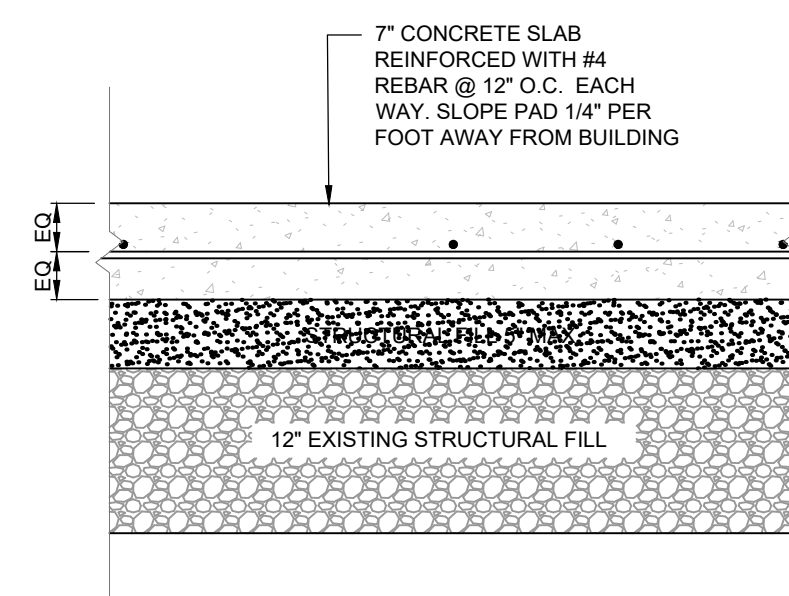
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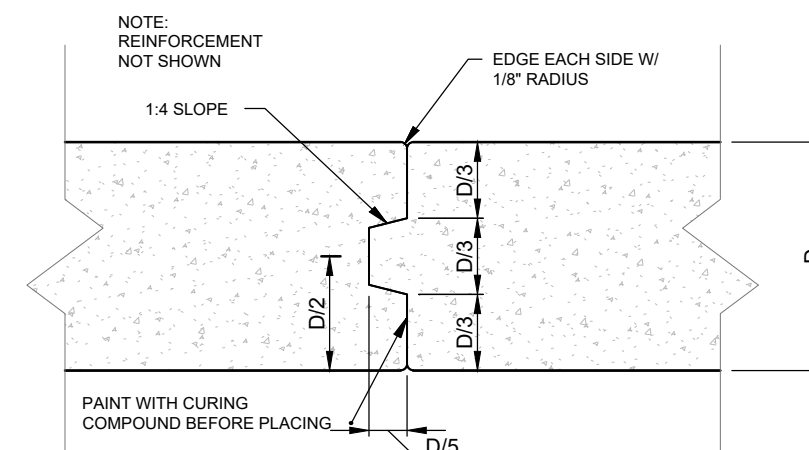
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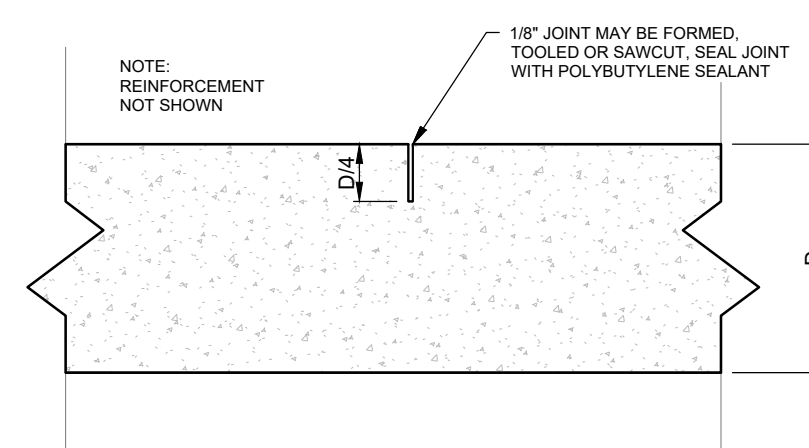
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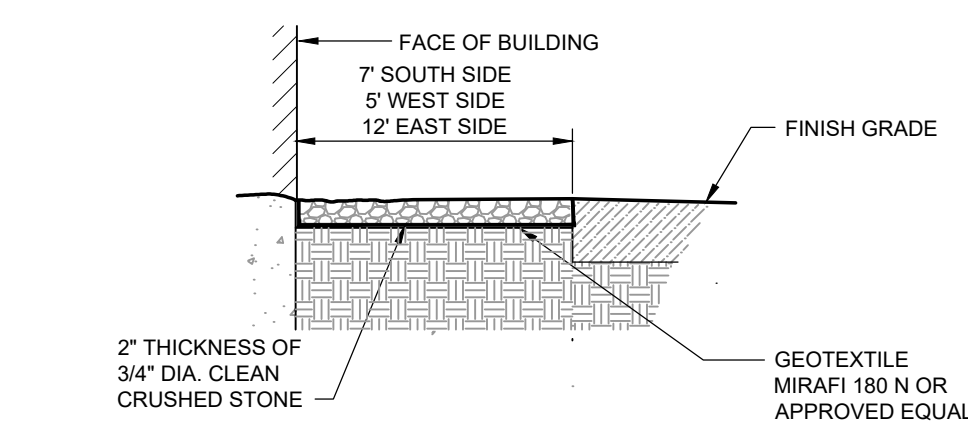
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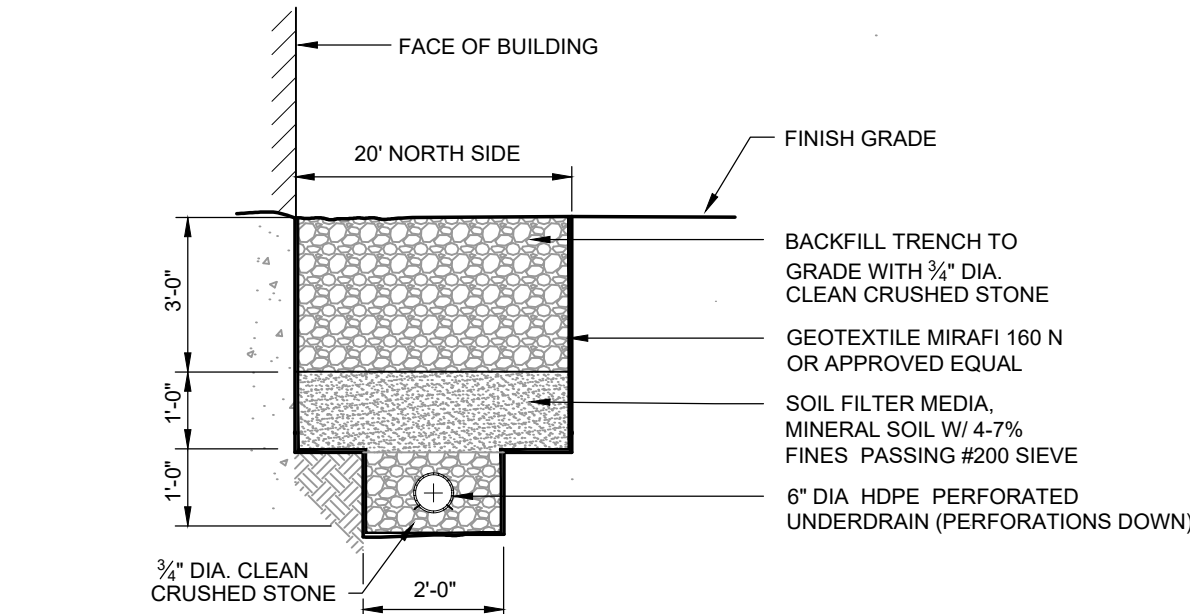
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NTS



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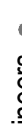
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**RAIN) Issued for
Regulatory Review**

PLYMOUTH INDUSTRIAL REIT, INC. SITE EXPANSION PROJECT
56 MILLIKEN STREET

DETAILS

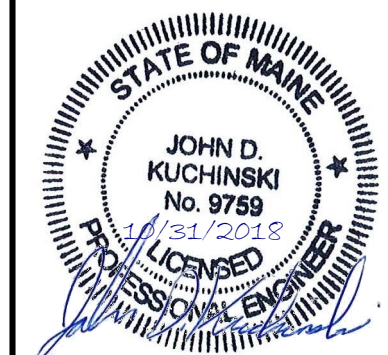
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F. 207-764-8114	Suite 204
Presque Isle, ME	Waterville, ME
F. 207-764-8414	F. 207-680-2202
	F. 207-480-2204
Bar Harbor	Levenson
1386 State Hwy 102	440 Main Street
Bar Harbor, ME	Levenson, ME
F. 207-285-0587	F. 207-795-6009
F. 207-288-0588	F. 207-795-6128
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F. 207-288-0588	



CES INC
Engineers • Environmental Scientists • Surveyors

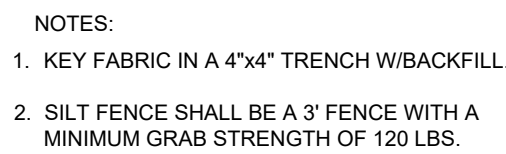
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R100				

**NOT FOR
CONSTRUCTION**



SCALE	N.T.S.	
DATE	2018-10-26	
DRAWN BY	BLQ	CHECKED BY
DESIGNED BY	BLQ	JDK
APPROVED BY		
JOB NUMBER	12254.003	
DRAWING NUMBER		

C501



N.T.S.



USF NO.	EXISTING ELEVATION (+/-) (FT)	EMERGENCY SPILLWAY ELEVATION (FT)	OUTLET CONTROL STRUCTURE ELEVATION (FT)	PROPOSED TOP OF SOIL FILTER (FT)	PROPOSED BOTTOM OF SOIL FILTER / TOP OF COARSE GRAVEL (FT)	PROPOSED ELEVATION OF PIPE BENT (FT)	PROPOSED BOTTOM OF COARSE GRAVEL (FT)	OVERFLOW OUTLET STRUCTURE COARSE GRAVEL ELEVATION (FT)	TOP OF BERM (FT)	TREATMENT AREA REQ'D/PROVIDED	STORAGE VOLUME
1	70.0	68.9	N/A	67.4	65.9	65.07	64.73	N/A	70.0	3,496 SF/3,900 SF	7,906 CF
2	62.0	60.9	N/A	59.4	57.9	57.07	56.73	N/A	62.0	273 SF/359 SF	842 CF
3	58.0	56.9	N/A	55.4	53.9	53.07	52.73	N/A	58.0	516 SF/606 SF	1,395 CF

* NOTE: ALL PONDS ARE LINED

N.T.S.



N.T.S.



NOTE: CONTRACTOR SHALL ADD
STONE TO ENTRANCE AS MUD/SILT
MATERIAL ACCUMULATES



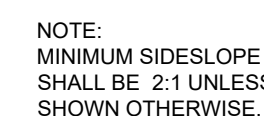
N.T.S.



1. **STATIONARY SILTSTACKS SHALL BE MAINTAINED AS "SILTSTACK" BY ACF ENVIRONMENTAL OR APPROVED EQUAL.**
2. **INSPECT INSERT AFTER EACH RAINFALL EVENT, MAINTAIN AS REQUIRED.**
3. **SEDIMENT WITHIN INSERT SHALL BE EMPTIED WHEN 1/2 FULL.**

N.T.S.

(MAY BE USED AS AN ALTERNATE TO HAY BALES)



ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENTATION CONTROL BMPs, PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION

2. SITE FENCE WILL BE INSTALLED, REPLACED AND/OR REPAIRED IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR LOSS OF SERVICEABILITY DUE TO SEDIMENT ACCUMULATION. AT A MINIMUM, ALL EROSION CONTROL DEVICES WILL BE OBSERVED WEEKLY.

3. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO CONSTRUCTION SITE.

4. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY A SUITABLE GROWTH OF GRASS. ONCE A SUITABLE GROWTH OF GRASS HAS BEEN OBTAINED, ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED BY THE CONTRACTOR. ANY SEDIMENT DEPOSITED DURING THE CONSTRUCTION PHASE SHALL BE REMOVED. SEDIMENT SHALL BE DISPOSED TO CONFORM WITH THE EXISTING GRADE, PREPARED, SEEDED, AND MULCHED IMMEDIATELY.

5. ALL DISTURBED AREAS WILL BE SEEDED WITH 2.5 LBS. RED FESCUE AND 0.5 LBS. RYE GRASS PER 1,000 SQUARE FEET AND MULCHED AT A RATE OF 90 LBS. PER 1,000 SQUARE FEET OR EQUIVALENT APPLICATION OF SEED AND MULCH.

6. A SUITABLE BINDER SUCH AS CURASOL OR TERRACRET WILL BE USED ON THE HAY MULCH FOR WIND CONTROL.

7. IF FINAL SEEDING OF DISTURBED AREAS IS NOT COMPLETED BY SEPTEMBER 15th OF THE YEAR OF CONSTRUCTION, THEN ON THAT DATE THESE AREAS WILL BE GRADED AND SEEDED WITH WINTER RYE AT THE RATE OF 12 POUNDS PER 1,000 SQUARE FEET. AFTER SEEDING, THE RYE SEEDING WILL BE PRECIPITATED BY AN APPLICATION OF 3 TONS OF LIME AND 800 LBS. OF 10-20-20 FERTILIZER OR ITS EQUIVALENT. MULCH WILL BE APPLIED AT A RATE OF 90 POUNDS PER 1,000 SQUARE FEET.

8. IF THE RYE SEEDING CANNOT BE COMPLETED BY OCTOBER 1st OR IF THE RYE DOES NOT MAKE ADEQUATE GROWTH BY DECEMBER 1st, THEN ON THOSE DATES, HAY MULCH WILL BE APPLIED AT 150 POUNDS PER 1,000 SQUARE FEET.

9. ALL CATCH BASINS ARE TO BE PROTECTED BY STRAW BALE OR SILTFENCE IN ACCORDANCE WITH SECTION 8-3 STORM DRAIN INLET PROTECTION OF THE MAINE BMP HANDBOOK. SURROUNDING AREAS CAN BE EXCAVATED OR LEFT LOW AS A SEDIMENT TRAP. CURB INLETS SHALL BE PROTECTED BY GUTTERGRASSES, OR APPROVED EQUIVALENT.

10. INTERIOR SILT FENCES ALONG CONTOUR DIVIDING FLAT AND STEEP SLOPES, AREAS WITH DIFFERENT DISTURBANCE SCHEDULES, AROUND TEMPORARY STOCKPILES OR IN OTHER UNSPECIFIED POSSIBLE CIRCUMSTANCES SHOULD BE CONSIDERED BY THE CONTRACTOR. THE INTENT OF SUCH INTERIOR SILT FENCES IS TO LIMIT SEDIMENT TRANSPORT WITHIN THE SITE TOWARD THE PROTECTED CATCH BASIN INLETS TO MINIMIZE SEDIMENT REMOVAL REQUIRED BY THE EROSION CONTROL NOTE 9 PROTECTIONS AND EXTEND LIFE OF SUCH DEVICES.

11. THE CONTRACTOR SHALL PROVIDE A SEDIMENT BASIN FOR ALL WATER PUMPED FROM EXCAVATIONS. BASIN SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES". THE CONTRACTOR SHALL SUBMIT FOR REVIEW/APPROVAL PRIOR TO BEGINNING ANY PROJECT WORK.

12. CONSTRUCTION OVERSIGHT:
THE OWNER WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO INSPECT THE CONSTRUCTION AND STABILIZATION OF ALL UNDERGROUND WATER MANAGEMENT STRUCTURES. IF NECESSARY, THE INSPECTING ENGINEER WILL INTERPRET THE POND'S CONSTRUCTION PLAN FOR THE CONTRACTOR. ONCE ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABILIZED, THE INSPECTING ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS TO SCHEDULE THE WORK. WORK SHALL BE COMPLETED BY THE DATE OF THE ENGINEER'S NOTIFICATION MUST BE TO THE SATISFACTION OF THE ENGINEER'S INSPECTIONS. GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT, AND INCLUDE ANY TESTING DATA AND SIEVE ANALYSIS DATA OF EVERY MINERAL SOIL AND SOIL MEDIA SPECIFIED IN THE PLANS AND USED ON SITE.

13. UNDERGRAINED FILTER BEDS:
CONSTRUCTION SEQUENCE: THE SOIL, FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINAGE TO BE STABILIZED HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.
COMPACTION OF SOIL FILTER: FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 95% AND 98% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.

CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM:

- AFTER THE PRELIMINARY PROTECTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
- AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
- AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED. BIO-RETENTION CELLS MUST BE STABILIZED PER THE PROVIDE PLANTING SPECIFICATIONS.
- AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS, AND
- ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE TESTING ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING PER SPECIFICATIONS.

TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:

- SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND
- THE SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES SHALL BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRASS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
- PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL/FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
- PERFORM A PERMEABILITY TESTING OF THE FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.

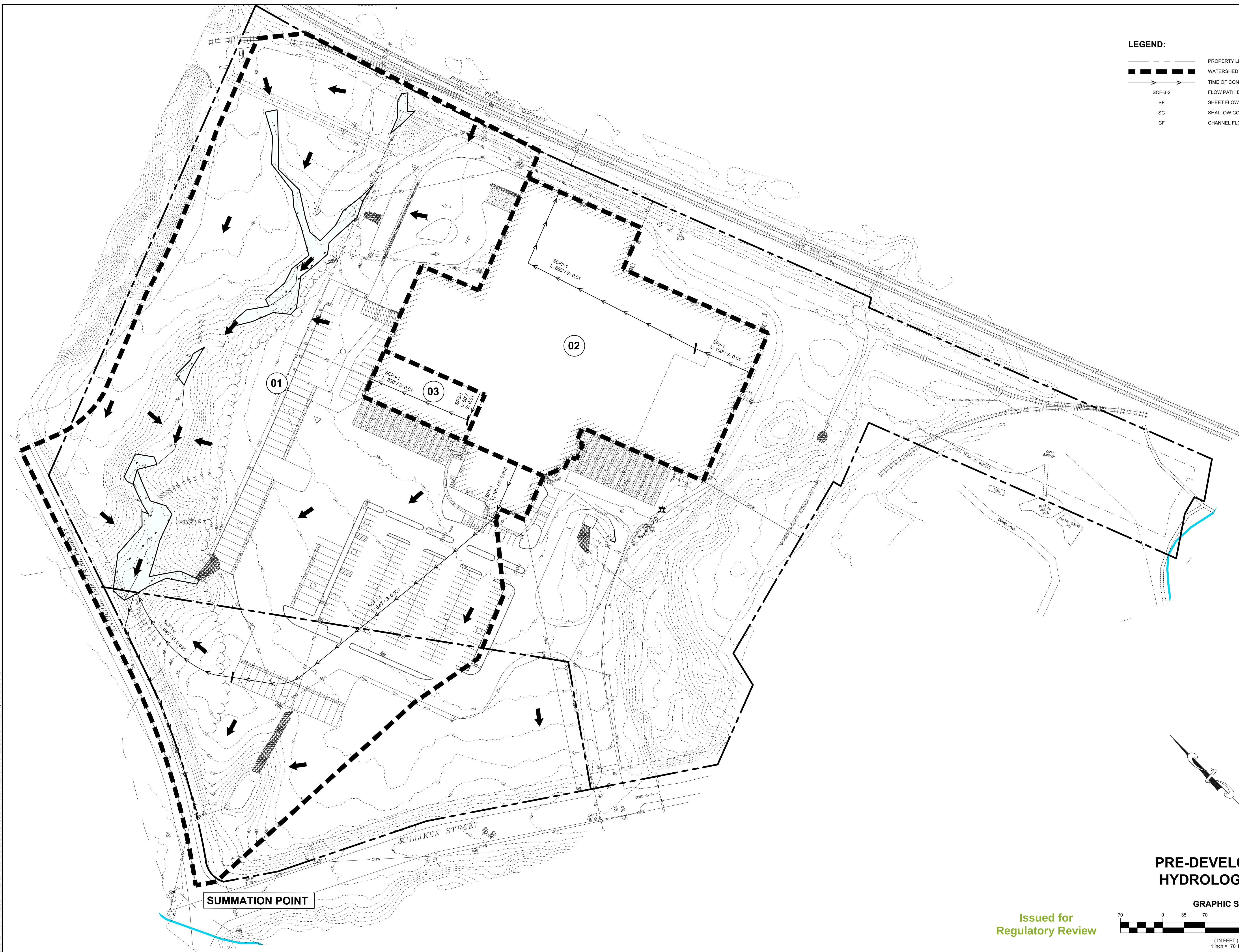
14. ROOF DRIP EDGE FILTERS
INSPECTIONS BY A PROFESSIONAL ENGINEER SHALL CONDUCT WEEKLY VISITS TO THE SITE TO INSPECT EACH ROOF DRIP EDGE FILTER'S UNDERDRAIN CONSTRUCTION, FILTER MATERIAL PLACEMENT, AND OVERFLOW FROM INITIAL GRADUAL DISTURBANCE TO FINAL STABILIZATION OF THE FILTER.

15. DEWATERING
A DEWATERING PLAN WILL BE REQUIRED TO ADDRESS EXCAVATION DEWATERING FOLLOWING HEAVY RAINFALL EVENTS OR AFTER THE EXCAVATION HAS BEEN STABILIZED. THE PLAN SHALL INCLUDE DRAINAGE DIRECTION, THE COLLECTIONS, WATER NEEDED TREATMENT AND A DISCHARGE POINT THAT WILL NOT CAUSE DOWNGRADIENT EROSION AND OFFSITE SEDIMENTATION OR WITHIN A RESOURCE. PLEASE FOLLOW THE DETAILS OF SUCH A PLAN.

16. BASIC STANDARDS - EROSION CONTROL MEASURES
MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON THE CONSTRUCTION CONDITIONS, ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR PERMANENT STABILIZATION IS COMPLETED. CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE.



N.T.S.



LEGEND:

	PROPERTY LINE
	WATERSHED BOUNDARY LINE
	TIME OF CONCENTRATION FLOW PATH
SCF-3-2	FLOW PATH DESCRIPTION
SF	SHEET FLOW
SC	SHALLOW CONCENTRATED FLOW
CF	CHANNEL FLOW

CES **INC**

Engineers • Environmental Scientists • Surveyors

Brewer	Presque Isle	Waterville
545 South Main Street	545 Main Street	
Brewer, ME	Presque Isle, ME	Waterville, ME
T 207/884-3844	F 207/884-3844	F 207/860-2204
T 207/889-4831		
Orono	Bar Harbor	Lewiston
61 DuRoi Street	1986 State Hwy 102	640 Main Street
Orono, ME	Bar Harbor, ME	T 207/795-6009
T 207/255-3270	T 207/256-0587	F 207/795-4128
F 207/255-3270	T 207/256-0588	
F 207/256-3270		

PROJECT TITLE

PLYMOUTH INDUSTRIAL REIT, INC. SITE EXPANSION PROJECT

SHEET TITLE

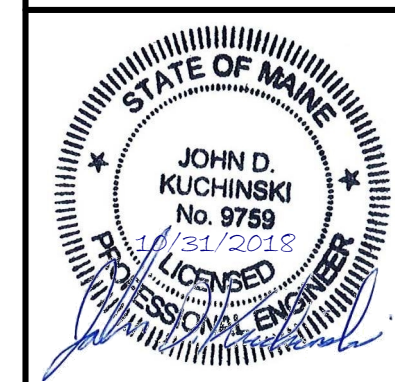
PRE-DEVELOPMENT
HYDROLOGY PLAN

56 MILLIKEN STREET

RT					
RR					
RS					
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RD					
RE					
REMARKS					
DATE					
CHECKED BY					

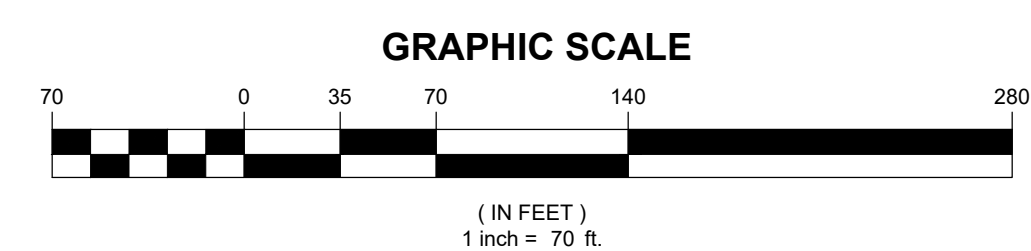
ISSUE STATUS

**NOT FOR
CONSTRUCTION**

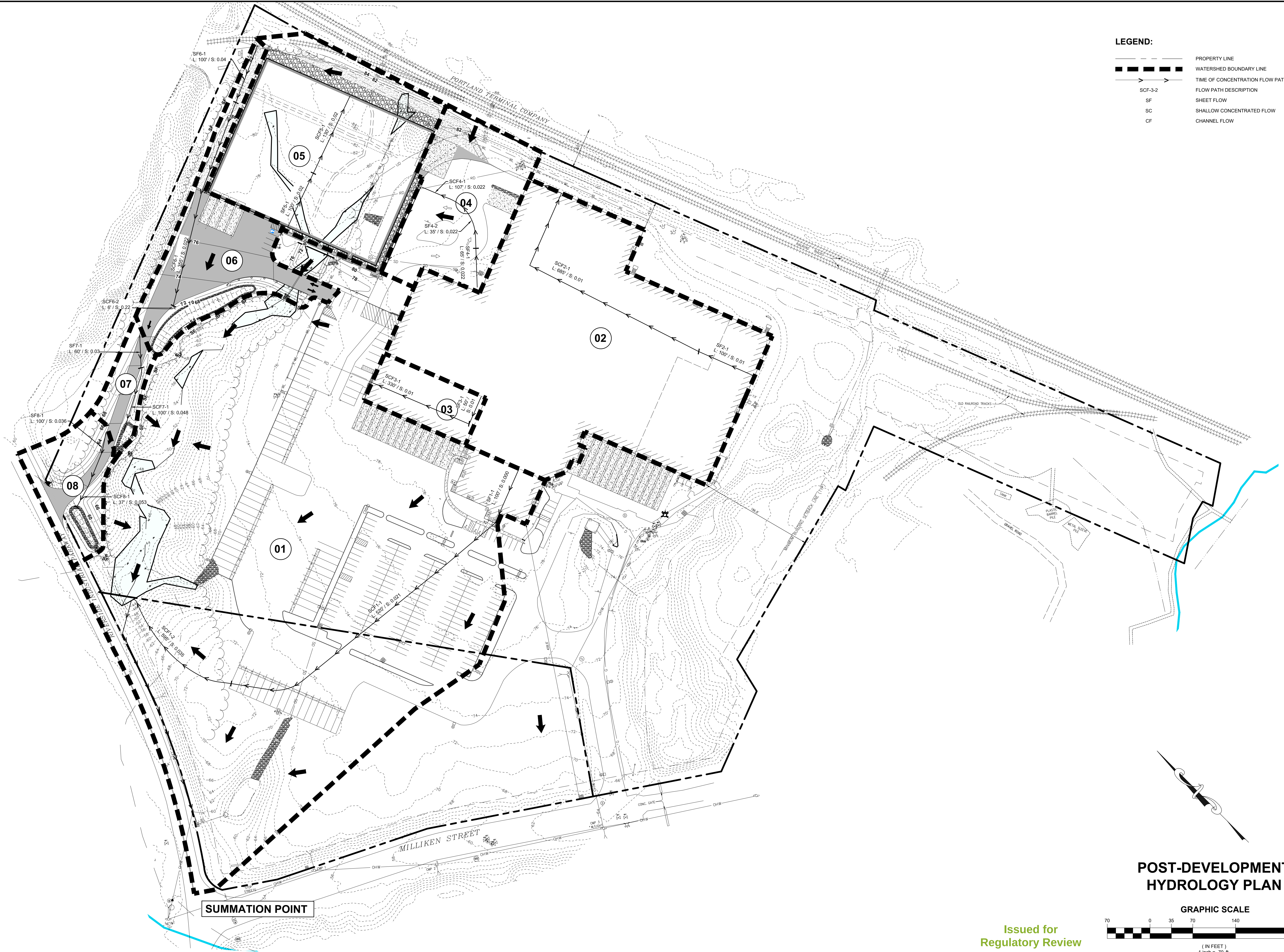


SCALE	1"=70'		
DATE	2018-10-26		
DRAWN BY	BLQ	CHECKED BY	JDM
DESIGNED BY	JED	APPROVED BY	SMT
JOB NUMBER	12254.003		
DRAWING NUMBER			

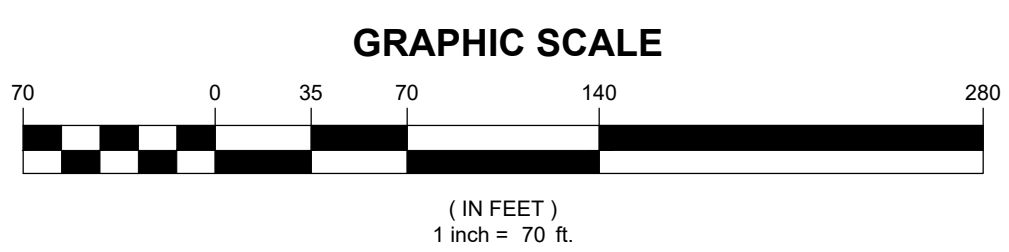
**Issued for
Regulatory Review**



P:\12254\1\W00TH_12254\1\MILLIKEN_EXPANSION\ENGINEERING\SMTC-CAD_DRAWINGS\CIVIL\ORDN_DRAWING\12254-003-POST-HYDRO.DWG 10/26/2018 2:52 PM



- LEGEND:**
- PROPERTY LINE
 - WATERSHED BOUNDARY LINE
 - TIME OF CONCENTRATION FLOW PATH
 - SCF-3-2 FLOW PATH DESCRIPTION
 - SF SHEET FLOW
 - SC SHALLOW CONCENTRATED FLOW
 - CF CHANNEL FLOW



Issued for
Regulatory Review

PROJECT TITLE

PLYMOUTH INDUSTRIAL REIT, INC. SITE EXPANSION PROJECT

56 MILLIKEN STREET

POST-DEVELOPMENT HYDROLOGY PLAN

DATE

2018-10-26

DRAWN BY

BLO

CHECKED BY

SMT

DESIGNED BY

BLO

APPROVED BY

SMT

JOB NUMBER

12254-003

DRAWING NUMBER

C702

STATE OF MAINE

JOHN D. KUCHINSKI

No. 9759

REGISTERED PROFESSIONAL ENGINEER

NOT FOR CONSTRUCTION

SCALE

1"=70'

DATE

2018-10-26

DRAWN BY

BLO

CHECKED BY

SMT

DESIGNED BY

BLO

APPROVED BY

SMT

JOB NUMBER

12254-003

DRAWING NUMBER

C702

CES INC

Engineers • Environmental Scientists • Surveyors

Presque Isle

44 Main Street

Presque Isle, ME 04969

F. 207-580-2302

F. 207-794-8412

F. 207-794-8412

F. 207-794-8412

Waterville

500 Main Street

Waterville, ME 04901

F. 207-580-2302

F. 207-794-8412

F. 207-794-8412

F. 207-794-8412

Lebanon

1366 State Hwy 102

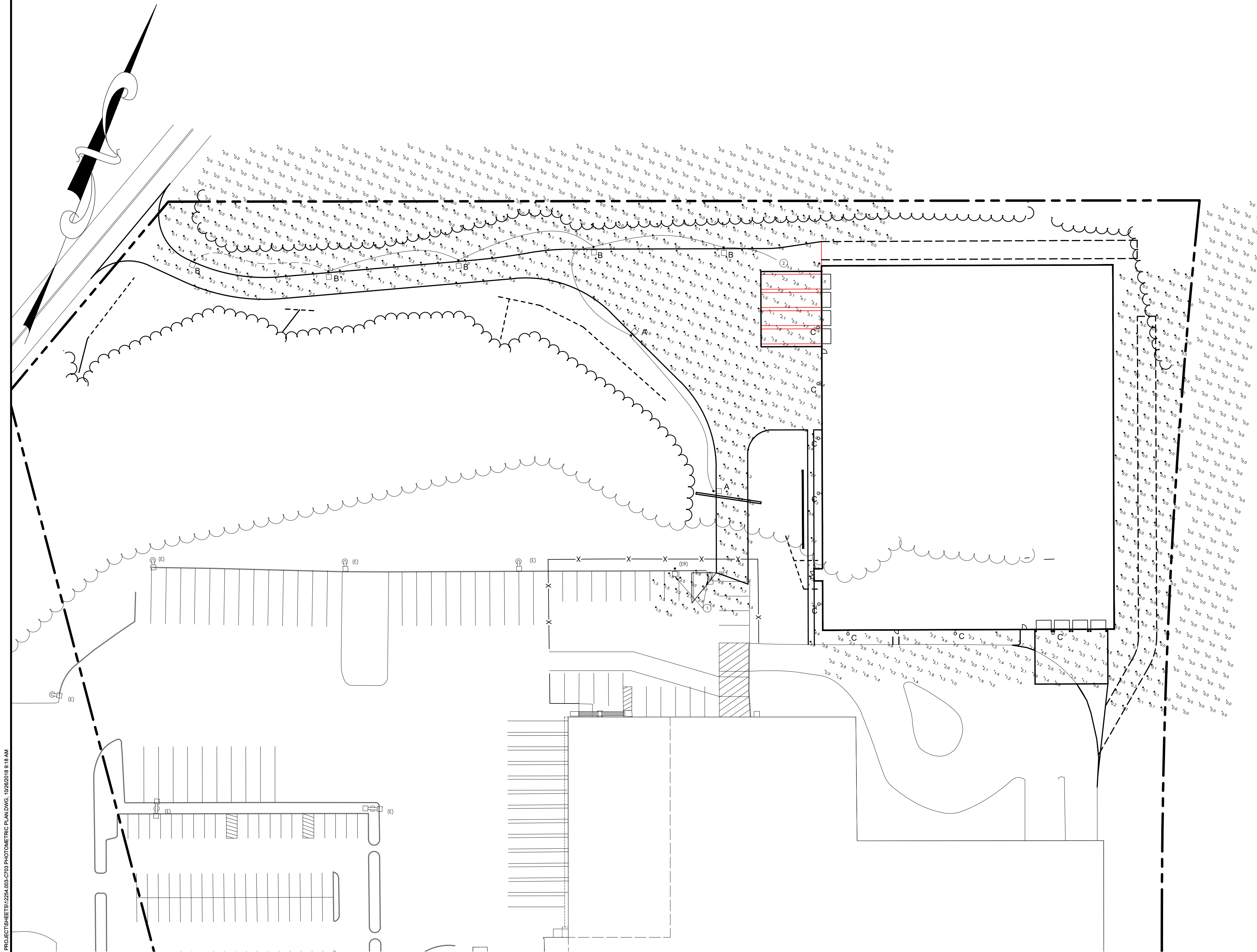
Lebanon, ME 04457

F. 207-285-5588

F. 207-285-5588

F. 207-285-5588

F. 207-285-5588



SITE ELECTRICAL PLAN

SCALE: 1"=50'

Blower	Marshall
PO Box 639	PO Box 457
Blower, ME	Natchez, ME
F. 207-764-8414	F. 207-255-1307
PO Box 4881	
Bar Harbor	Waterville
PO Box 192	Suite 204
Bar Harbor, ME	Waterville, ME
T. 207-288-0087	F. 207-860-2204
T. 207-288-0588	F. 207-860-2204
Presque Isle	Waterville
PO Box 627	Suite 204
Presque Isle, ME	Waterville, ME
F. 207-764-8414	F. 207-860-2204
	F. 207-860-2204

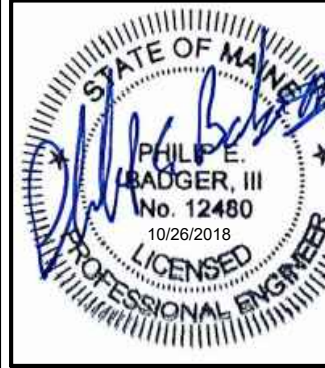


PROJECT TITLE
SUPERVALU WAREHOUSE SITE EXPANSION PROJECT
PORTLAND MAINE

PHOTOMETRIC PLAN

37			
36			
35			
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33			
32			
31			

**NOT FOR
CONSTRUCTION**



SCALE	1"=50'		
DATE	2018-10-26		
DRAWN BY	BTH	CHECKED BY	F
DESIGNED BY	PEB	APPROVED BY	J
JOB NUMBER	12254.003		
DRAWING NUMBER			

**Issued for
Regulatory Review**

TRACT I

A certain lot or parcel of land situated easterly of Riverside Industrial Parkway and Northerly of Milliken Street in the City of Portland, County of Cumberland, State of Maine, to wit:

Beginning at a point on the westerly side of land now or formerly of the Portland Terminal Company at a drill hole found in a stone at the northerly corner of the land now or formerly owned by the Portland Water District;

Thence, South 52° 14' 20" West, 71.28 feet along said Water District Land to a point; Thence, North 21° 15' 40" West, 17.82 feet along said Water District Land to a point; Thence, South 74° 52' 43" West, 31.62 feet along said Water District Land to a point near an iron pipe; Thence, South 52° 51' 08" West, 75.26 feet along land now or formerly owned by Milliken Street LLC to a point near a 50" meter; Thence, North 21° 16' 37" West, 557.77 feet along land said Milliken Street LLC land to a point near a 50" meter; Thence, North 14° 55' 59" West, 14.08 feet along said Milliken Street LLC land, passing over an iron pipe, said pipe being distant 1.2' from the terminus of said course, to a point; Thence, South 72° 08' 48" West, 328.45 feet along said Milliken Street LLC land to a point; Thence, South 12° 13' 08" West, 61.39 feet along said Milliken Street LLC land to a point; Thence, South 68° 44' 47" West, 143.78 feet to a point in the easterly line of Milliken Street; Thence, along said easterly line North 52° 10' 30" West, 52.28 feet to a point; Thence, North 56° 04' 53" West, 117.32 feet to a point; Thence, leaving said easterly line North 54° 52' 20" East, 213.80 feet to a point; Thence, North 32° 56' 16" West, 781.79 feet to a point in the easterly right-of-way of Riverside Industrial Parkway; Thence, along said easterly right-of-way North 10° 19' 52" East, 204.96 feet to a point; Thence, leaving said easterly right-of-way North 03° 40' 30" East, 548.45 feet to a point in the westerly side of land said Portland Terminal Company land; Thence, along said westerly line along a curve deflecting to the left having a radius of 2,902.78 feet, an arc of 178.13 feet, a chord bearing of South 19° 12' 42" East, a chord of 178.10 feet to a point; Thence, along a curve deflecting to the left having a radius of 6,422.48 feet, an arc of 427.82 feet, a chord bearing of South 19° 21' 10" East, a chord of 427.74 feet to a point; Thence, South 21° 15' 40" East, 621.68 feet, to a point; Thence, South 21° 03' 20" East, 619.95 feet to the POINT OF BEGINNING.

Being Tract I of the premises conveyed to KJUS Partners, LLC by deed of C&S Logistics of Portland LLC, dated August 10, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21653, Page 272.

TRACT II

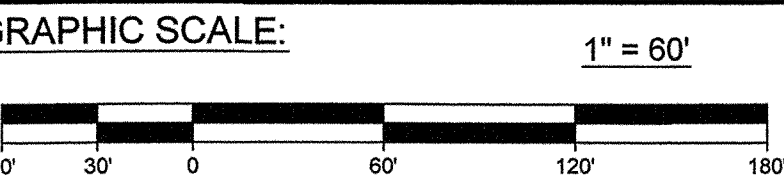
A certain lot or parcel of land situated Easterly of Riverside Industrial Parkway & Northerly of Milliken Street in the City of Portland, County of Cumberland, Maine, to wit:

Thence, South 55° 14' 20" West, 71.28 feet along said Water District Land to a point; Thence, North 21° 15' 40" West, 17.82 feet along said Water District Land to a point; Thence, South 74° 52' 43" West, 31.62 feet along said Water District Land to a point near an iron pipe; Thence, South 52° 51' 08" West, 75.26 feet along land now or formerly owned by Milliken Street LLC to a point near a 50" meter; Thence, North 21° 16' 37" West, 557.77 feet along land said Milliken Street LLC land to a point near a 50" meter; Thence, North 14° 55' 59" West, 14.08 feet along said Milliken Street LLC land to a point near a 50" meter; Thence, North 56° 04' 53" West, 117.32 feet to a point; Thence, leaving said easterly line North 54° 52' 20" East, 213.80 feet to a point; Thence, North 32° 56' 16" West, 781.79 feet to a point in the easterly right-of-way of Riverside Industrial Parkway; Thence, along said easterly right-of-way North 10° 19' 52" East, 204.96 feet to a point; Thence, leaving said easterly right-of-way North 03° 40' 30" East, 548.45 feet to a point in the westerly side of land conveyed to ADC Building Fund Inc. by Davis-Greene Co. dated December 18, 1962, recorded in Book 2723, Page 182; Thence, leaving said easterly line along said southern line, North 03° 47' 03" West, 91.92 feet to a point in the intersection of said easterly line and said southern line; Thence, leaving said southern line along said easterly line of Milliken Street along a curve deflecting to the right having a radius of 50.00' and an arc of 49.66', a chord bearing of North 06° 33' 55" East, a chord of 47.64', to a point at the intersection of said easterly line of Milliken Street and the easterly line of Riverside Industrial Parkway; Thence, leaving said easterly line of Milliken Street along said easterly line of Riverside Industrial Parkway along a curve deflecting to the left having a radius of 1171.27', an arc of 335.31', a chord bearing of North 20° 52' 24" East, a chord of 335.31' to a point; Thence, North 19° 39' 48" East, 147.48 feet to a point; Thence, leaving said easterly line along a line between Tract I & II South 56° 58' 10" East, 781.79 feet to a point; Thence, South 34° 51' 20" West, 213.80 feet to the TRUE POINT OF BEGINNING.

Being Tract II of the premises conveyed to KJUS Partners, LLC by deed of C&S Logistics of Portland LLC, dated as of August 10, 2004 and recorded in the Cumberland County Registry of Deeds in Book 21653, Page 272.

N/F
351 RIVERSIDE, LLC
BOOK 22748 PAGE 059
TAX MAP 330A BLOCK C LOT 2

N/F
ANDREWS, CINDY H. &
RICHARD A. CARRIUOLO
TRUSTEE
BOOK 30293 PAGE 118
TAX MAP 330A BLOCK B LOT 11



MAP REFERENCES:

- 1) A PLAN ENTITLED "STANDARD BOUNDARY SURVEY WETTERAU, PORTLAND DIVISION, PORTLAND, CUMBERLAND CO., MAINE" BY RAYMOND H. FRANKENBURG DATED MARCH 1989.
- 2) A PLAN ENTITLED "PLAN OF PROPERTY IN PORTLAND, MAINE MADE FOR DAVIS-GREENE CO." BY H.I. & E.C. JORDAN - SURVEYORS DATED NOV. 26, 1962 RECORDED IN THE REGISTRY AS PLAN BOOK 61, PAGE 68.
- 3) A PLAN ENTITLED "PLAN OF PROPERTY IN PORTLAND, MAINE MADE FOR MILLIKEN-TOMLINSON COMPANY" BY H.I. & E.C. JORDAN SURVEYORS DATED FEB. 5, 1980.
- 4) A PLAN ENTITLED "EXISTING CONDITIONS AND DEMOLITION PLAN, MEQUIGER HILL FARM 66 MILLIKEN STREET, PORTLAND, MAINE" BY MITCHELL & ASSOCIATES DATED FEBRUARY 3, 2000.
- 5) A PLAN ENTITLED "CITY OF PORTLAND, MAINE DEPARTMENT OF PUBLIC WORKS PRESUMPCOOT NO. MAIN INTERCEPTOR RIGHT-OF-WAY ME. TPK. TO NEAR RANDOLPH ST."

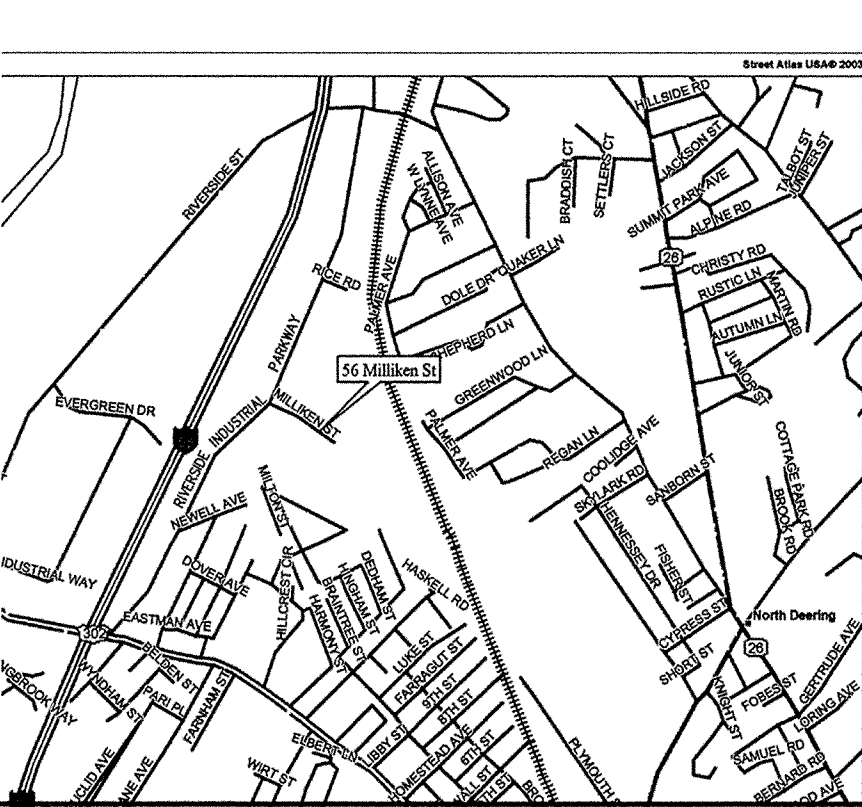
SCHEDULE B2:

COMMONWEALTH TITLE INSURANCE COMPANY
POLICY NUMBER 1403014
EFFECTIVE DATE JULY 20, 2014 AT 4:30 PM (revised 9/3/14)

SCHEDULE B, SECTION 2

- 1-10) NOT PLOTTABLE
- 11) NOT PLOTTABLE
- 12) RIGHTS AND EASEMENTS TO ADC BUILDING FUND, INC. FOR RIGHT-OF-WAY AND USE OF RAILROAD SPUR AS CONTAINED IN DEED FROM ADC BUILDING FUND, INC. TO DAVIS-GREENE CO. DATED DECEMBER 18, 1962 AND RECORDED IN SAID REGISTRY OF DEEDS IN BOOK 2723, PAGE 182 (TRACT I). PLOTTED HEREON.
- 13) INTENTIONALLY DELETED.
- 14) THE LOCUS PARCEL IS SUBJECT TO RIGHTS AND EASEMENT OF CENTRAL MAINE POWER AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY AS SET FORTH IN DEED BOOK 2837, PAGE 381 (TRACT I) PLOTTED HEREON.
- 15) RIGHTS AND EASEMENTS GRANTED TO JAMES A. SKILLINGS AND GREATER PORTLAND BUILDING FUND, INC. BY DAVIS-GREENE CO. FOR RAILROAD GRADING BY INSTRUMENT DATED SEPTEMBER 10, 1970 AND RECORDED IN SAID REGISTRY OF DEEDS IN BOOK 3143, PAGE 126, AND THE CONDITIONS AND RESERVATIONS SET FORTH THEREIN (TRACT I). PLOTTED HEREON.
- 16) RIGHTS AND EASEMENTS GRANTED TO THEODORE H. BRODIE AND GLENN A. BRODIE AS TRUSTEES OF BRODIE REALTY TRUST DATED DECEMBER 13, 1976 AND RIVERSIDE BUILDING CO. BY MILLIKEN, TOMLINSON COMPANY BY INSTRUMENT DATED DECEMBER 13, 1976 AND RECORDED IN REGISTRY OF DEEDS IN BOOK 3892, PAGE 103, AND THE CONDITIONS AND RESERVATIONS SET FORTH THEREIN (TRACT I). PLOTTED HEREON.
- 17) TERMS AND CONDITIONS SET FORTH IN AGREEMENT BY AND BETWEEN MILLIKEN, TOMLINSON COMPANY AND DMC METALS, INC. DATED NOVEMBER 1, 1979 AND RECORDED IN SAID REGISTRY OF DEEDS IN BOOK 4534, PAGE 205 (TRACT I). PLOTTED HEREON.
- 18) THE LOCUS PARCEL IS SUBJECT TO THE RIGHTS AND EASEMENT GRANTED TO CENTRAL MAINE POWER AND VERIZON NEW ENGLAND, INC. AS SET FORTH IN DEED 22575, PAGE 21 (TRACT I & II). PLOTTED HEREON.
- 19) NOT PLOTTABLE
- 20) NOT PLOTTABLE
- 21) SUCH STATE OF FACTS AS SET FORTH ON THIS SURVEY.

VICINITY MAP: (NOT TO SCALE)



GENERAL NOTES:

- 1) THIS PLAN AND ALL WORK ASSOCIATED WITH IT WAS PERFORMED BY SGC ENGINEERING, LLC PURSUANT TO A PROFESSIONAL SERVICES AGREEMENT BETWEEN PLYMOUTH INDUSTRIAL REIT, INC. AND SGC ENGINEERING, LLC DATED 8/19/2014
- 2) NORTH AS SHOWN HEREON IS BASED ON LOCUS DEED OF RECORD DEED BOOK 11458, PAGE 221.
- 3) BOUNDARY AND PLANIMETRIC INFORMATION AS SHOWN HEREON IS THE RESULT OF AN ON-THE-GROUND FIELD SURVEY PERFORMED BY SGC ENGINEERING, LLC BETWEEN SEPTEMBER 3, 2003 AND SEPTEMBER 9, 2003 AND VISUAL FIELD INSPECTIONS PERFORMED ON MARCH 12, 2004, MARCH 22, 2004, OCTOBER 12, 2011, AND AGAIN ON AUGUST 15, 2014.
- 4) NO SUBSURFACE INVESTIGATION HAS BEEN PERFORMED. DIG SAFE 811 SHOULD BE CALLED PRIOR TO ANY EXCAVATION.
- 5) 100 YEAR FLOOD LINE "ZONE A" AS SHOWN HEREON IS APPROXIMATE ONLY AS SCALED FROM NATIONAL FLOOD INSURANCE PROGRAM MAP ENTITLED "FIRM FLOOD INSURANCE RATE MAP: CITY OF PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBERS 230051 0001 B, EFFECTIVE DATE: JULY 17, 1986" PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. AT THE TIME OF THE SURVEY NO EXISTING IMPROVEMENTS ARE LOCATED WITHIN ZONE A.
- 6) IDENTIFYING PROPERTY OWNER INFORMATION AS SHOWN HEREON WAS OBTAINED FROM TOWN OF PORTLAND RECORDS AND REGISTRY RECORD INFORMATION AS OF THE DATE OF THE SURVEY.
- 7) THE LOCUS PARCEL MAY BE SUBJECT TO A SIGN EASEMENT AS DESCRIBED ON MAP REFERENCE NO.1 AND AS SHOWN HEREON. NO RECORD DOCUMENTS WERE RECOVERED BY SGC ENGINEERING, LLC OR RECEIVED AS PART OF TITLE PACKAGE DESCRIBING SAID EASEMENT.
- 8) THE LOCUS PARCEL MAY BE SUBJECT TO A SEWER EASEMENT ENCUMBERING SAID PARCEL AT ITS EXTREME SOUTHEASTERLY BOUNDARY AS SHOWN ON MAP REFERENCE NO.4 AND AS SHOWN HEREON.
- 9) THE LOCUS PARCEL PARKING AREA OF HAS 238 TOTAL PARKING SPACES.
- 10) THE SUBJECT PROPERTY IS LOCATED AT 56 MILLIKEN STREET, PORTLAND MAINE.

PRELIMINARY SUBMITTAL
FOR REVIEW AND APPROVAL
REVISIONS FOR ATTORNEY REVIEW

NO.	DATE	REVISIONS
0	08-18-2014	1
1	11-20-2014	2

REVISIONS:

NO.	DATE	REVISIONS
0	08-18-2014	1
1	11-20-2014	2

SGC ENGINEERING, LLC
Civil Design & Survey Engineering
Environmental & Regulatory Permitting
Electrical Power Systems Engineering

SERVING OUR CLIENTS IN THE U.S.A. & CANADA

501 County Road
Portland, Maine 04103
Tel: 207-766-8801
Fax: 207-766-8801

1900 East 225 Street
Farmington, MA 02601
Tel: 508-882-1718
Fax: 508-882-1718

DATE: 08-16-2014
SCALE: 1" = 60'
SHEET 1 OF 1

ALTAACSM LAND TITLE SURVEY
OF PROPERTY LOCATED ON
#56 MILLIKEN STREET
PORTLAND, ME
PREPARED FOR:
PLYMOUTH INDUSTRIAL
REIT, INC.

260 FRANKLIN STREET, 19TH FLOOR, BOSTON, MA 02110

TRACT I

OWNER OF RECORD
MILLIKEN PORTLAND
PARTNERS, LLC
BOOK 22214 PAGE 257
TAX MAP 334 BLOCK A LOT 014
25.75 ACRES
MULTIPLE STORY WAREHOUSE
METAL SIDING
AREA=200,035± SQ. FT.

TRACT II

OWNER OF RECORD
MILLIKEN PORTLAND
PARTNERS, LLC
BOOK 22214 PAGE 257
TAX MAP 334 BLOCK A LOT 014
5.46± ACRES

ZONING INFORMATION "I-M ZONE"

MINIMUM LOT SIZE	NONE (10,000 FOR CORRECTIONAL PRERELEASE FACILITIES)
MAXIMUM IMPERVIOUS SURFACE RATIO	75%
MAXIMUM BUILDING HEIGHT	75 FEET
MINIMUM REAR YARDS	1 FOOT FOR EVERY FOOT OF BUILDING HEIGHT, UP TO 25 FEET
MINIMUM FRONT YARDS	1 FOOT FOR EVERY FOOT OF BUILDING HEIGHT, UP TO 25 FEET
MINIMUM STREET FRONTAGE	60 FEET
PAVEMENT SETBACK FROM LOT BOUNDARIES	10 FEET

CERTIFICATION

TO: "U.S. BANK NATIONAL ASSOCIATION, IN ITS CAPACITY AS COLLATERAL AGENT FOR THE BENEFIT OF THE LENDERS PURSUANT TO A COLLATERAL AGENCY AGREEMENT, TOGETHER WITH ITS SUCCESSORS AND/OR ASSIGNS IN SUCH CAPACITY AS THEIR INTERESTS MAY APPEAR"
"PLYMOUTH INDUSTRIAL REIT, INC. A MARYLAND CORPORATION"
"PLYMOUTH 56 MILLIKEN LLC, A DELAWARE LIMITED LIABILITY COMPANY"
"COMMONWEALTH LAND TITLE INSURANCE COMPANY"

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTAACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2.3.4 (a)(1), (7)(b)(1), (7)(c)(1), (10)(b)(1), (10)(c)(1), (10)(d)(1), (10)(e)(1), (10)(f)(1), (10)(g)(1), (10)(h)(1), (10)(i)(1), (10)(j)(1), (10)(k)(1), (10)(l)(1), (10)(m)(1), (10)(n)(1), (10)(o)(1), (10)(p)(1), (10)(q)(1), (10)(r)(1), (10)(s)(1), (10)(t)(1), (10)(u)(1), (10)(v)(1), (10)(w)(1), (10)(x)(1), (10)(y)(1), (10)(z)(1), (10)(aa)(1), (10)(ab)(1), (10)(ac)(1), (10)(ad)(1), (10)(ae)(1), (10)(af)(1), (10)(ag)(1), (10)(ah)(1), (10)(ai)(1), (10)(aj)(1), (10)(ak)(1), (10)(al)(1), (10)(am)(1), (10)(an)(1), (10)(ao)(1), (10)(ap)(1), (10)(aq)(1), (10)(ar)(1), (10)(as)(1), (10)(at)(1), (10)(au)(1), (10)(av)(1), (10)(aw)(1), (10)(ax)(1), (10)(ay)(1), (10)(az)(1), (10)(ba)(1), (10)(bb)(1), (10)(bc)(1), (10)(bd)(1), (10)(be)(1), (10)(bf)(1), (10)(bg)(1), (10)(bh)(1), (10)(bi)(1), (10)(bj)(1), (10)(bk)(1), (10)(bl)(1), (10)(bm)(1), (10)(bn)(1), (10)(bo)(1), (10)(bp)(1), (10)(bq)(1), (10)(br)(1), (10)(bs)(1), (10)(bt)(1), (10)(bu)(1), (10)(bv)(1), (10)(bw)(1), (10)(bx)(1), (10)(by)(1), (10)(bz)(1), (10)(ca)(1), (10)(cb)(1), (10)(cc)(1), (10)(cd)(1), (10)(ce)(1), (10)(cf)(1), (10)(cg)(1), (10)(ch)(1), (10)(ci)(1), (10)(cj)(1), (10)(ck)(1), (10)(cl)(1), (10)(cm)(1), (10)(cn)(1), (10)(co)(1), (10)(cp)(1), (10)(cq)(1), (10)(cr)(1), (10)(cs)(1), (10)(ct)(1), (10)(cu)(1), (10)(cv)(1), (10)(cw)(1), (10)(cx)(1), (10)(cy)(1), (10)(cz)(1), (10)(da)(1), (10)(db)(1), (10)(dc)(1), (10)(dd)(1), (10)(de)(1), (10)(df)(1), (10)(dg)(1), (10)(dh)(1), (10)(di)(1), (10)(dj)(1), (10)(dk)(1), (10)(dl)(1), (10)(dm)(1), (10)(dn)(1), (10)(do)(1), (10)(dp)(1), (10)(dq)(1), (10)(dr)(1), (10)(ds)(1), (10)(dt)(1), (10)(du)(1), (10)(dv)(1), (10)(dw)(1), (10)(dx)(1), (10)(dy)(1), (10)(dz)(1), (10)(ea)(1), (10)(eb)(1), (10)(ec)(1), (10)(ed)(1), (10)(ee)(1), (10)(ef)(1), (10)(eg)(1), (10)(eh)(1), (10)(ei)(1), (10)(ej)(1), (10)(ek)(1), (10)(el)(1), (10)(em)(1), (10)(en)(1), (10)(eo)(1), (10)(ep)(1), (10)(eq)(1), (10)(er)(1), (10)(es)(1), (10)(et)(1), (10)(eu)(1), (10)(ev)(1), (10)(ew)(1), (10)(ex)(1), (10)(ey)(1), (10)(ez)(1), (10)(fa)(1), (10)(fb)(1), (10)(fc)(1), (10)(fd)(1), (10)(fe)(1), (10)(ff)(1), (10)(fg)(1), (10)(fh)(1), (10)(fi)(1), (10)(fj)(1), (10)(fk)(1), (10)(fl)(1), (10)(fm)(1), (10)(fn)(1), (10)(fo)(1), (10)(fp)(1), (10)(fq)(1), (10)(fr)(1), (10)(fs)(1), (10)(ft)(1), (10)(fu)(1), (10)(fv)(1), (10)(fw)(1), (10)(fx)(1), (10)(fy)(1), (10)(fz)(1), (10)(ga)(1), (10)(gb)(1), (10)(gc)(1), (10)(gd)(1), (10)(ge)(1), (10)(gf)(1), (10)(gg)(1), (10)(gh)(1), (10)(gi)(1), (10)(gj)(1), (10)(gk)(1), (10)(gl)(1), (10)(gm)(1), (10)(gn)(1), (10)(go)(1), (10)(gp)(1), (10)(gq)(1), (10)(gr)(1), (10)(gs)(1), (10)(gt)(1), (10)(gu)(1), (10)(gv)(1), (10)(gw)(1), (10)(gx)(1), (10)(gy)(1), (10)(gz)(1), (10)(ha)(1), (10)(hb)(1), (10)(hc)(1), (10)(hd)(1), (10)(he)(1), (10)(hf)(1), (10)(hg)(1), (10)(hi)(1), (10)(hj)(1), (10)(hk)(1), (10)(hl)(1), (10)(hm)(1), (10)(hn)(1), (10)(ho)(1), (10)(hp)(1), (10)(hq)(1), (10)(hr)(1), (10)(hs)(1), (10)(ht)(1), (10)(hu)(1), (10)(hv)(1), (10)(hw)(1), (10)(hx)(1), (10)(hy)(1), (10)(hz)(1), (10)(ia)(1), (10)(ib)(1), (10)(ic)(1), (10)(id)(1), (10)(ie)(1), (10)(if)(1), (10)(ig)(1), (10)(ih)(1), (10)(ii)(1), (10)(ij)(1), (10)(ik)(1), (10)(il)(1), (10)(im)(1), (10)(in)(1), (10)(io)(1), (10)(ip)(1), (10)(iq)(1), (10)(ir)(1), (10)(is)(1), (10)(it)(1), (10)(iu)(1), (10)(iv)(1), (10)(iw)(1), (10)(ix)(1), (10)(iy)(1), (10)(iz)(1), (10)(ja)(1), (10)(jb)(1), (10)(jc)(1), (10)(jd)(1), (10)(je)(1), (10)(jf)(1), (10)(jg)(1), (10)(jh)(1), (10)(ji)(1), (10)(jj)(1), (10)(jk)(1), (10)(jl)(1), (10)(jm)(1), (10)(jn)(1), (10)(jo)(1), (10)(jp)(1), (10)(jq)(1), (10)(jr)(1), (10)(js)(1), (10)(jt)(1), (10)(ju)(1), (10)(jv)(1), (10)(jw)(1), (10)(jx)(1), (10)(jy)(1), (10)(jz)(1), (10)(ka)(1), (10)(kb)(1), (10)(kc)(1), (10)(kd)(1), (10)(ke)(1), (10)(kf)(1), (10)(kg)(1), (10)(kh)(1), (10)(ki)(1), (10)(kj)(1), (10)(kl)(1), (10)(km)(1), (10)(kn)(1), (10)(ko)(1), (10)(kp)(1), (10)(kq)(1), (10)(kr)(1), (10)(ks)(1), (10)(kt)(1), (10)(ku)(1), (10)(kv)(1), (10)(kw)(1), (10)(kx)(1), (10)(ky)(1), (10)(kz)(1), (10)(la)(1), (10)(lb)(1), (10)(lc)(1), (10)(ld)(1), (10)(le)(1), (10)(lf)(1), (10)(lg)(1), (10)(lh)(1), (10)(li)(1), (10)(lj)(1), (10)(lk)(1), (10)(ll)(1), (10)(lm)(1), (10)(ln)(1), (10)(lo)(1), (10)(lp)(1), (10)(lq)(1), (10)(lr)(1), (10)(ls)(1), (10)(lt)(1), (10)(lu)(1), (10)(lv)(1), (10)(lw)(1), (10)(lx)(1), (10)(ly)(1), (10)(lz)(1), (10)(ma)(1), (10)(mb)(1), (10)(mc)(1), (10)(md)(1), (10)(me)(1), (10)(mf)(1), (10)(mg)(1), (10)(mh)(1), (10)(mi)(1), (10)(mj)(1), (10)(mk)(1), (10)(ml)(1), (10)(mn)(1), (10)(mo)(1), (10)(mp)(1), (10)(mq)(1), (10)(mr)(1), (10)(ms)(1), (10)(mt)(1), (10)(mu)(1), (10)(mv)(1), (10)(mw)(1), (10)(mx)(1), (10)(my)(1), (10)(mz)(1), (10)(na)(1), (10)(nb)(1), (10)(nc)(1), (10)(nd)(1), (10)(ne)(1), (10)(nf)(1), (10)(ng)(1), (10)(nh)(1), (10)(ni)(1), (10)(nj)(1), (10)(nk)(1), (10)(nl)(1), (10)(nm)(1), (10)(no)(1), (10)(np)(1), (10)(nq)(1), (10)(nr)(1), (10)(ns)(1), (10)(nt)(1), (10)(nu)(1), (10)(nv)(1), (10)(nw)(1), (10)(nx)(1), (10)(ny)(1), (10)(nz)(1), (10)(oa)(1), (10)(ob)(1), (10)(oc)(1), (10)(od)(1), (10)(oe)(1), (10)(of)(1), (10)(og)(1), (10)(oh)(1), (10)(oi)(1), (10)(oj)(1), (10)(ok)(1), (10)(ol)(1), (10)(om)(1), (10)(on)(1), (10)(oo)(1), (10)(op)(1), (10)(oq)(1), (10)(or)(1), (10)(os)(1), (10)(ot)(1), (10)(ou)(1), (10)(ov)(1), (10)(ow)(1), (10)(ox)(1), (10)(oy)(1), (10)(oz)(1), (10)(pa)(1), (10)(pb)(1), (10)(pc)(1), (10)(pd)(1), (10)(pe)(1), (10)(pf)(1), (10)(pg)(1), (10)(ph)(1), (10)(pi)(1), (10)(pj)(1), (10)(pk)(1), (10)(pl)(1), (10)(pm)(1), (10)(pn)(1), (10)(po)(1), (10)(pp)(1), (10)(pq)(1), (10)(pr)(1), (10)(ps)(1), (10)(pt)(1), (10)(pu)(1), (10)(pv)(1), (10)(pw)(1), (10)(px)(1), (10)(py)(1), (10)(pz)(1), (10)(qa)(1), (10)(qb)(1), (10)(qc)(1), (10)(qd)(1), 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(10)(td)(1), (10)(te)(1), (10)(tf)(1), (10)(tg)(1), (10)(th)(1), (10)(ti)(1), (10)(tj)(1), (10)(tk)(1), (10)(tl)(1), (10)(tm)(1), (10)(tn)(1), (10)(to)(1), (10)(tp)(1), (10)(tq)(1), (10)(tr)(1), (10)(ts)(1), (10)(tu)(1), (10)(tv)(1), (10)(tw)(1), (10)(tx)(1), (10)(ty)(1), (10)(tz)(1), (10)(ua)(1), (10)(ub)(1), (10)(uc)(1), (10)(ud)(1), (10)(ue)(1), (10)(uf)(1), (10)(ug)(1), (10)(uh)(1), (10)(ui)(1), (10)(uj)(1), (10)(uk)(1), (10)(ul)(1), (10)(um)(1), (10)(un)(1), (10)(uo)(1), (10)(up)(1), (10)(uq)(1), (10)(ur)(1), (10)(us)(1), (10)(ut)(1), (10)(uu)(1), (10)(uv)(1), (10)(uw)(1), (10)(ux)(1), (10)(uy)(1), (10)(uz)(1), (10)(va)(1), (10)(vb)(1), (10)(vc)(1), (10)(vd)(1), (10)(ve)(1), (10)(vf)(1), (10)(vg)(1), (10)(vh)(1), (10)(vi)(1), (10)(vj)(1), (10)(vk)(1), (10)(vl)(1), (10)(vm)(1), (10)(vn)(1), (10)(vo)(1), (10)(vp)(1), (10)(vq)(1), (10)(vr)(1), (10)(vs)(1), (10)(vt)(1), (10)(vu)(1), (10)(vv)(1), (10)(vw)(1), (10)(vx)(1), (10)(vy)(1), (10)(vz)(1), (10)(wa)(1), (10)(wb)(1), (10)(wc)(1), 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(10)(zd)(1), (10)(ze)(1), (10)(zf)(1), (10)(zg)(1), (10)(zh)(1), (10)(zi)(1), (10)(zj)(1), (10)(zk)(1), (10)(zl)(1), (10)(zm)(1), (10)(zn)(1), (10)(zo)(1), (10)(zp)(1), (10)(zq)(1), (10)(zr)(1), (10)(zs)(1), (10)(zt)(1), (10)(zu)(1), (10)(zv)(1), (10)(zw)(1), (10)(zx)(1), (10)(zy)(1), (10)(zz)(1)

LEGEND

LOCUS BOUNDARY LINE	RECORD EASEMENT	STORM SEWER CATCH BASIN	UTILITY POLE	CONCRETE	CONC.
INTERIOR (LOCUS) BOUNDARY LINE	LIMIT OF PRIOR CONVEYANCE (WITH REFERENCE)	STORM SEWER MANHOLE	SIGN	PAVEMENT	PWMT
ADJACENT RIGHT OF WAY LINE	SCHEDULE B2 ITEM	SANITARY SEWER MANHOLE	LIGHT POLE SINGLE HEAD	REINFORCED CONCRETE PIPE	RCP
ZONING SET BACK LINE	EDGE OF PAVEMENT	ELECTRIC MANHOLE	LIGHT POLE DOUBLE HEAD	HIGH DENSITY POLYETHYLENE PIPE	HDPE
WATER COURSE	EDGE OF ITEM	WATERLINE VALVE	BOLLARD	POLYVINYL CHLORIDE PIPE	PVC
FEMA FLOOD ZONE BOUNDARY	EDGE OF CONCRETE	WATERLINE MANHOLE	FLAG POLE	CORRUGATED METAL PIPE	CMP
OVERHEAD WIRES	DRAIN LINE	JERSEY BARRIER	MONUMENT (CONCRETE BLOCK)	CONCRETE	F&P
TREE LINE		WATERLINE MARKER	MONUMENT (IRON PIPE)	INVERT	INV
		WATERLINE POST INDICATOR VALVE		P.O.B.	P.O.B.
		WATERLINE SERVICE SHUT-OFF		POINT OF BEGINNING	P.O.B.
		WATERLINE HYDRANT		WITH NUMBER INDICATES	
		WATERLINE HOSE BIB		# OF PARKING SPACES	



65 NEWBURY STREET
PORTLAND, ME 04101
207.761.9000

Consultants:

Proposed Plan

Riverside Industrial
Parkway

Portland, Maine

[illegible]

Project Number	18112
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Date Aug 20, 2018

Drawn by DVS

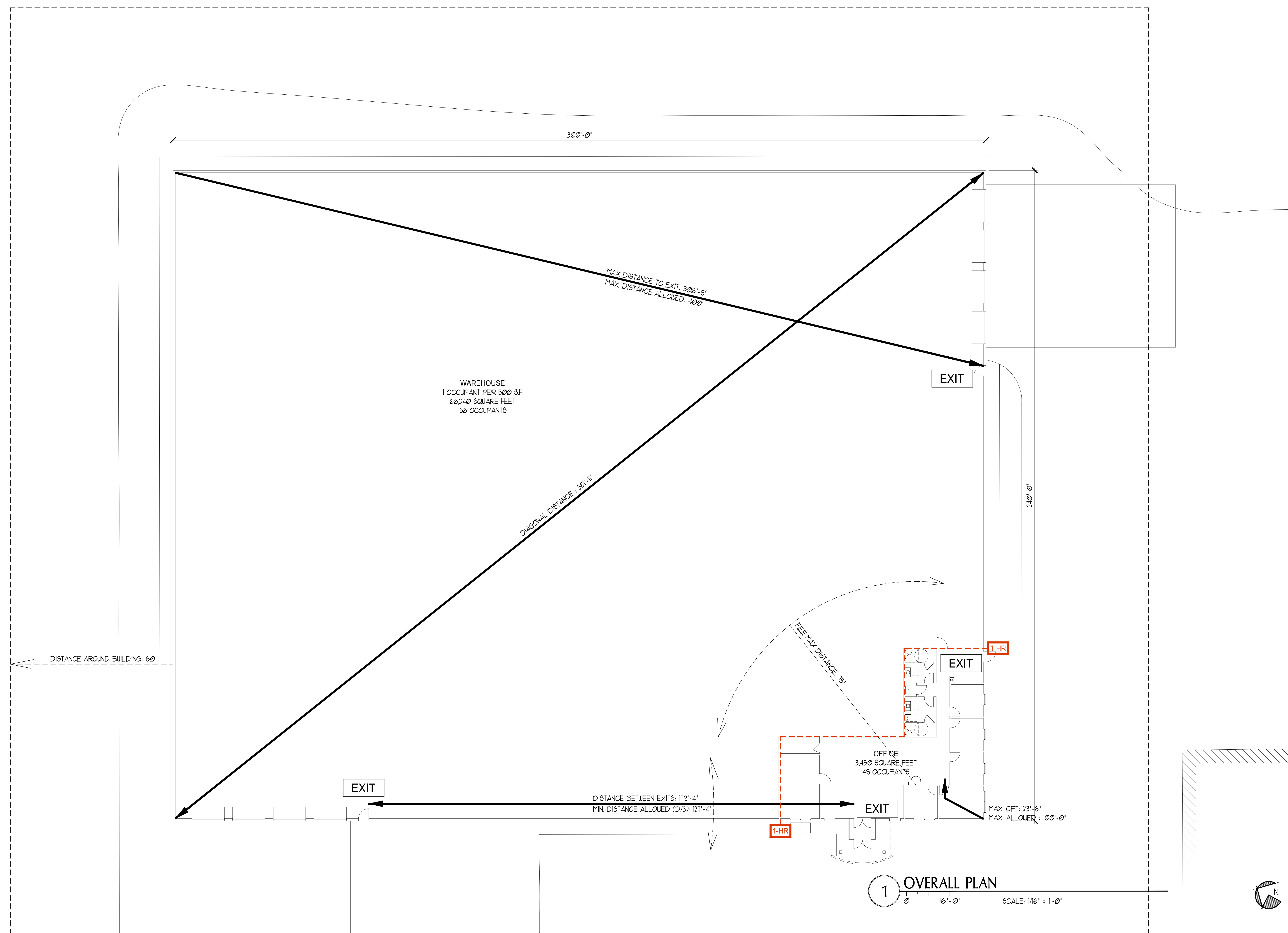
Checked by	ACH
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	SHEET NAME
--	------------

CODE REVIEW OVERALL PLAN

Drawn By	
DVS	

Checked By	P-T2.1
ACH	



Code Review - IBC 2015

Chapter 3 - Use and Occupancy Classification

This building shall be classified as:

Section 311.1 - Storage - Group S-1

Section 509.3 - Office - Incidental use

Chapter 5 - Building Heights and Areas

Section 507.4 - The building area shall not be limited.

Section 509.4 - A automatic sprinkler system is required.

Section 509.4.1 - A fire-resistance-rated is not required. A 1 hour rated will be provided.

Table 509.3 - The office area not occupy more than 10% of the building area. The office area shall be classified as Incidental.

Chapter 6 - Types of Construction

Table 601 - The building is assumed to be Type II-B construction and is not required to have fire ratings for the building elements listed in this Table.

Chapter 9 - Fire Protection Systems

Figure 903.2 - A fire alarm system is required.

Section 906.1 - Portable fire extinguishers shall be installed (see Life Safety Plan for locations).

Section 907.2.2 - A manual fire alarm system is not required.

Chapter 10 - Means of Egress

Table 1004.1.2 - See Life Safety Plan for occupant load.

Office areas: 1 person per 100 sf

Conference/Lounge/Meeting rooms: 1 person per 15 sf

Warehouse: 1 person per 500 sf

Section 1005.1- See Life Safety plan for width at exits and front corridor note.

Section 1006.1 - Means of egress lighting is required. This should be included in the Electrical drawings.

Section 1006.3.1 - 2 means of egress is required at minimum 1/3 the diagonal distance, (section 1007.1.1).

Section 1006.3.2 - Maximum common path of travel is 75 feet.

Section 1008.1.1 - See Life Safety plan for size of exit doors and egress allowed.

Section 1013.1 - Exit signs are required. See Life Safety plan for locations.

Code Review - NFPA 101 (Life Safety) 2018

Chapter 6 - Classification of Occupancy

Section 6.1.13 - This building shall be classified as Storage.

Section A.6.1.14.1.3 - The office area shall be classified as Incidental, and shall be subject to the provisions of the Code that apply to the predominant occupancy.

Table 6.1.14.4.1 - A fire-resistance-rated is not required. A 1 hour rated will be provided.

Section 6.2.2.3 - This building shall be classified as Ordinary Hazard of Contents.

Chapter 7 - Means of Egress

Table 7.3.1.2 -

Business: 150 ft2/person 49 occupants. (less than 50)

Storage: N/A

Chapter 42 - Storage Occupancy

Section A.42.1.7 - There is no Occupant Load Factor specify; however a 500 sf2/person will be used.

Section 42.2.4 - The number of means of egress shall be not less than two. (section 7.4.1 - less than 500 occupants)

Table 42.2.5/42.2.6 -

Dead End Limit 100'

Common Path of Travel 100'

Travel Distance Limit 400'

Section 42.2.4 - Emergency lighting shall be provided.

Section 42.3.4.1.1 - A fire alarm system is not required; however, a fire alarm system will be provided.

Section 42.3.5 - Portable Fire Extinguisher is not required.

CLASSIFICATION

CONSTRUCTION TYPE: TYPE IIB

USE GROUP CLASSIFICATIONS (IBC):

STORAGE (S-1)

INCIDENTAL (OFFICE)

USE GROUP CLASSIFICATIONS (NFPA):

STORAGE

INCIDENTAL (OFFICE)

ORDINARY HAZARD

SPRINKLERED: YES

FIRE ALARM SYSTEM: YES

PROJECT INFORMATION

BUILDING AREA:

INCIDENTAL = 3,450 SF

STORAGE = 6,850 SF

TOTAL = 10,300 SF

OCCUPANT LOAD (IBC):

INCIDENTAL = 49 OCCUPANTS

STORAGE = 138 OCCUPANTS

TOTAL = 187 OCCUPANTS

OCCUPANT LOAD (NFPA):

INCIDENTAL = 49 OCCUPANTS

STORAGE = 138 OCCUPANTS

TOTAL = 179 OCCUPANTS

DISTANCE REQUIREMENTS

DEAD END LIMIT 100'

COMMON PATH OF TRAVEL 100'

TRAVEL DISTANCE LIMIT 400'

MIN. DISTANCE BETWEEN EXITS D/3

GENERAL NOTES

1. EXITS ARE ALLOWED TO BE 1/3 OF THE DIAGONAL DISTANCE DUE TO THE SPRINKLER SYSTEM.
2. ALL NEW RESTROOM FIXTURES TO BE ADA COMPLIANT.
3. ALL NEW DOOR HARDWARE TO BE ADA COMPLIANT.
4. THE WAREHOUSE AND THE OFFICE AREAS ARE SEPARATED WITH A 1-HOUR FULL-HEIGHT WALL ASSEMBLY.

MAINE PLUMBING CODE

STORAGE:
181 OCCUPANTS: 93 MEN + 94 WOMEN

1 DRINKING FOUNTAIN REQUIRED OR A KITCHENETTE WITH CUP.

1 SERVICE SINK OR LAUNDRY TRAY.

MEN

(1) TOILETS

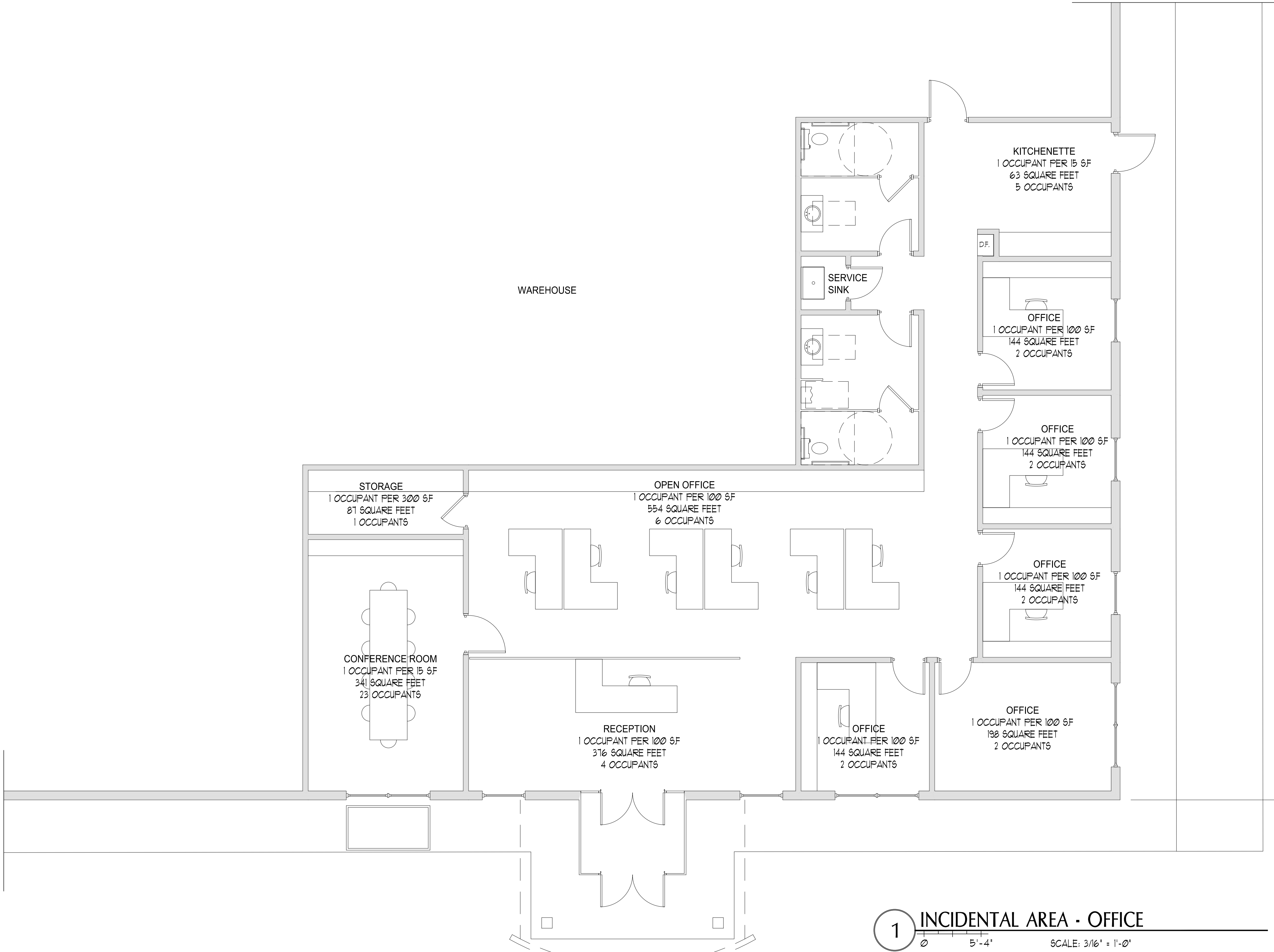
(1) LAVATORY

(NO) URINAL

WOMEN

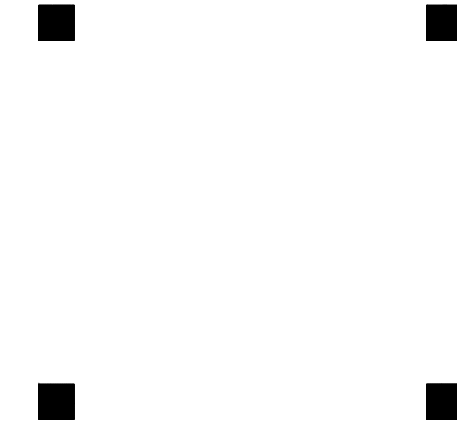
(1) TOILETS

(1) LAVATORY



PORT CITY
ARCHITECTURE

65 NEWBURY STREET
PORTLAND, ME 04101
207.761.9000



Consultants:

Proposed Plan

Riverside Industrial
Parkway

Portland, Maine

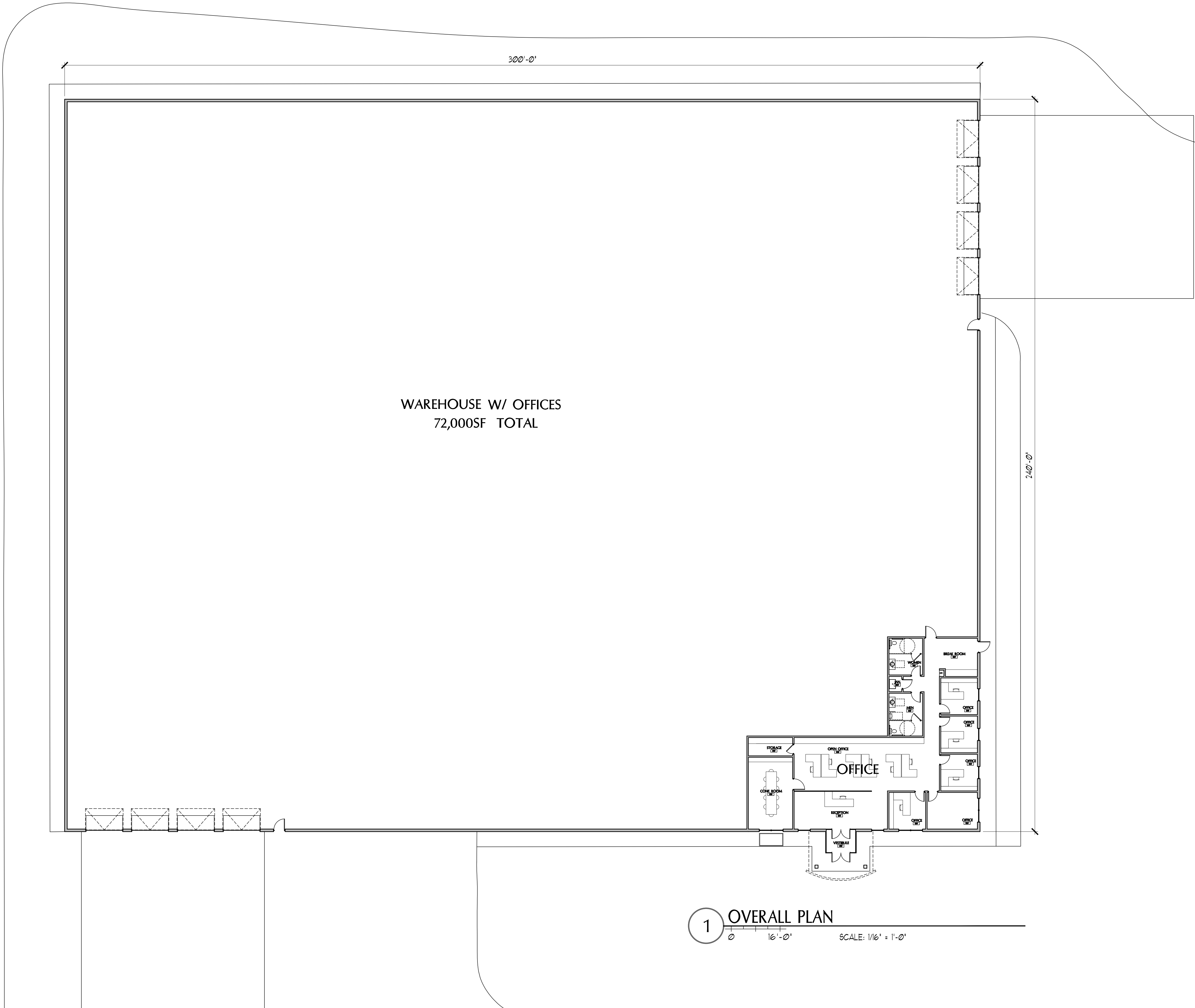
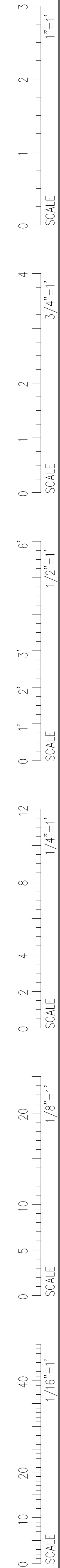
#	DATE	DESCRIPTION

Project Number	18112
Date	Aug 20, 2018
Drawn by	DVS
Checked by	ACH

SHEET NAME

CODE REVIEW
INCIDENTAL

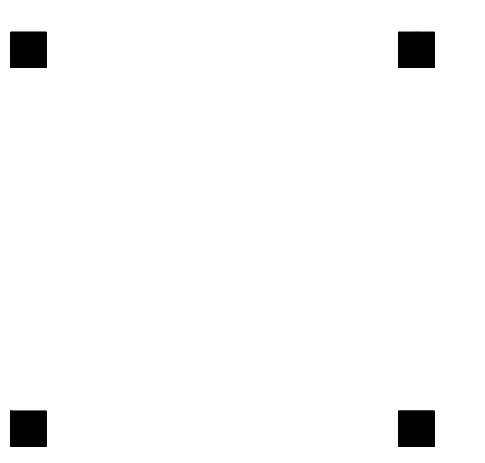
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Checked By ACH	



1 OVERALL PLAN
SCALE: 1/16" = 1'-0"



65 NEWBURY STREET
PORTLAND, ME 04101
207.761.9000



Consultants:

Proposed Plan

Riverside Industrial
Parkway

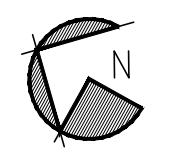
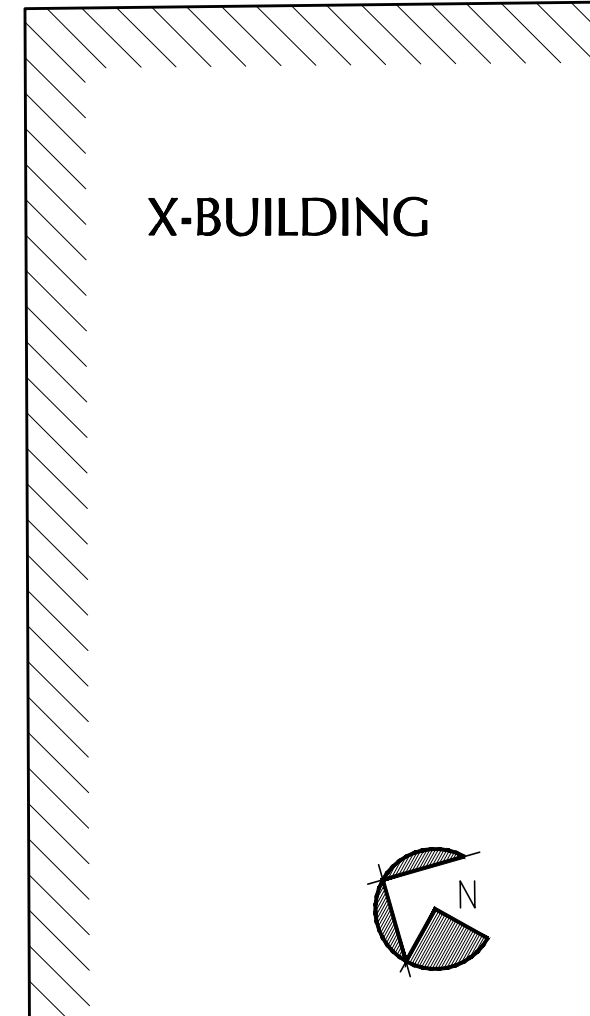
Portland, Maine

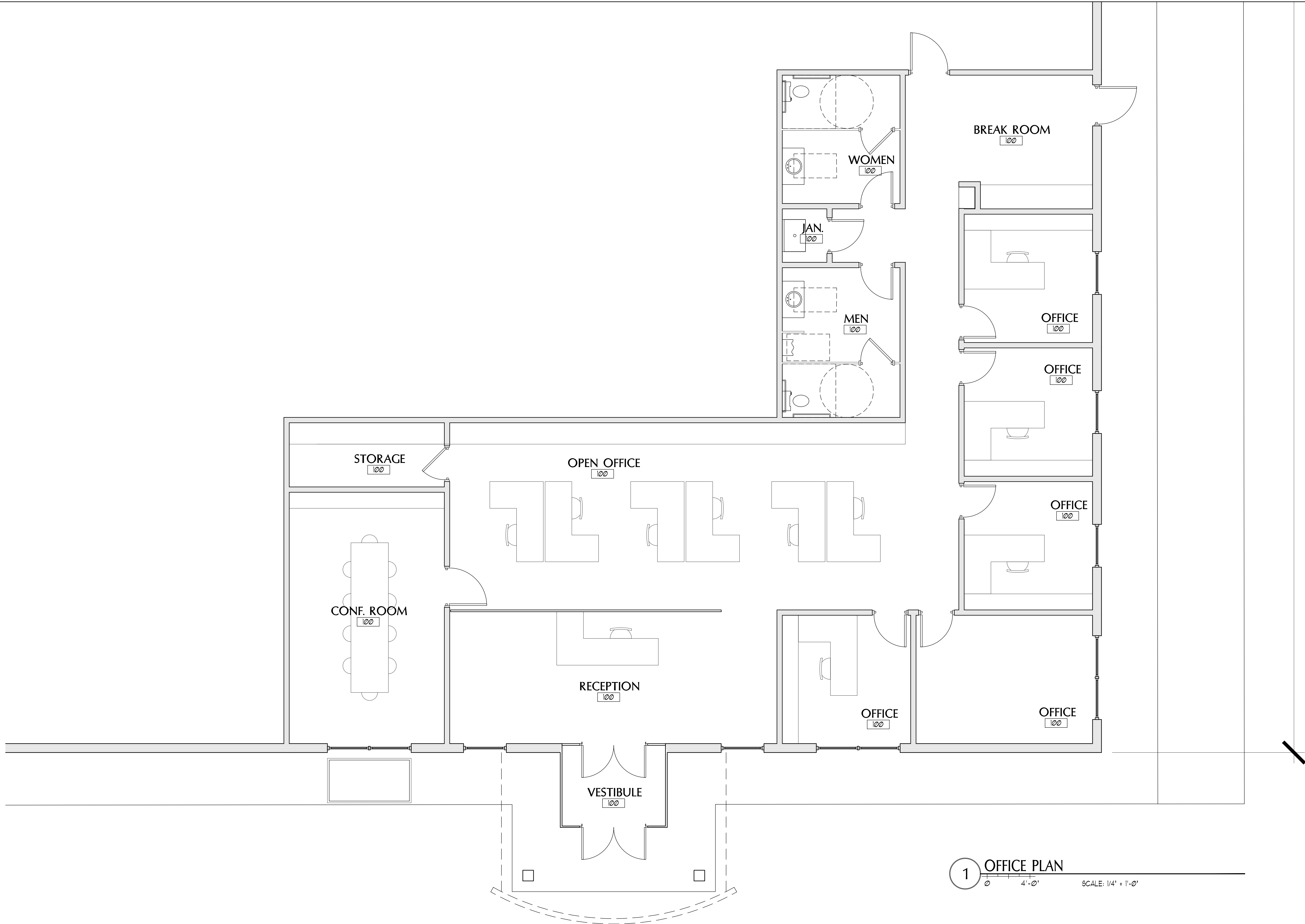
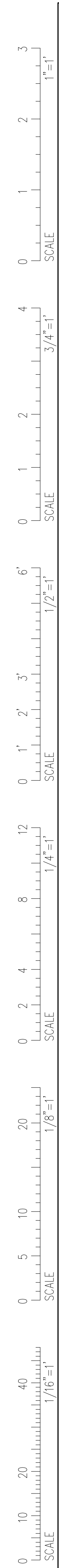
#	DATE	DESCRIPTION

Project Number	18112
Date	Aug 20, 2018
Drawn by	DVS
Checked by	ACH

SHEET NAME
**OVERALL
PLAN**

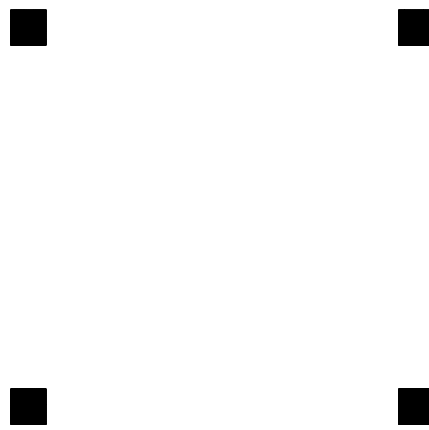
Drawn By DVS	P-A1.1
Checked By ACH	





PORT CITY
ARCHITECTURE

65 NEWBURY STREET
PORTLAND, ME 04101
207.761.9000



Consultants:

Proposed Plan

Riverside Industrial
Parkway

Portland, Maine

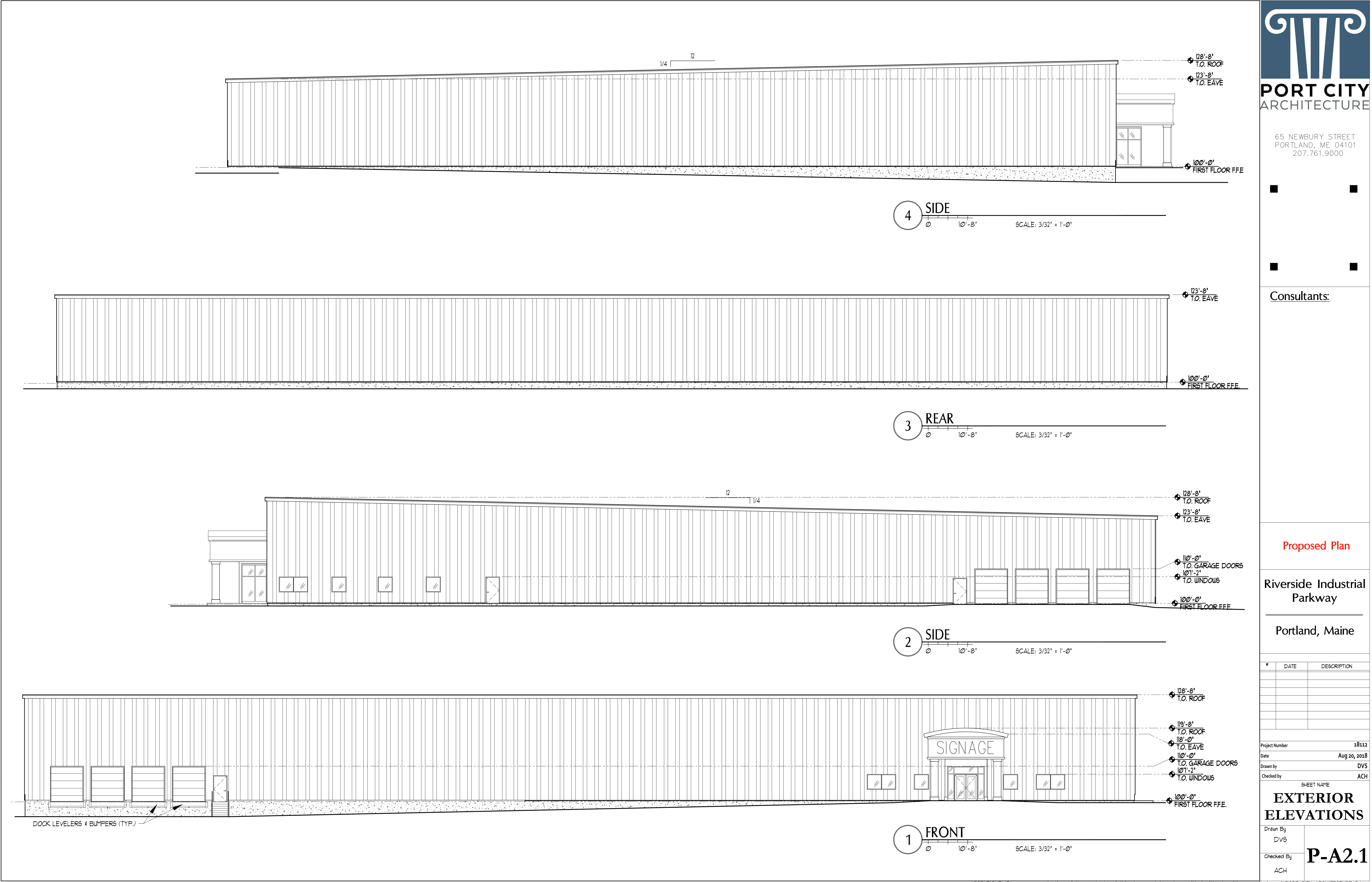
#	DATE	DESCRIPTION

Project Number	18112
Date	Aug 20, 2018
Drawn by	DVS
Checked by	ACH

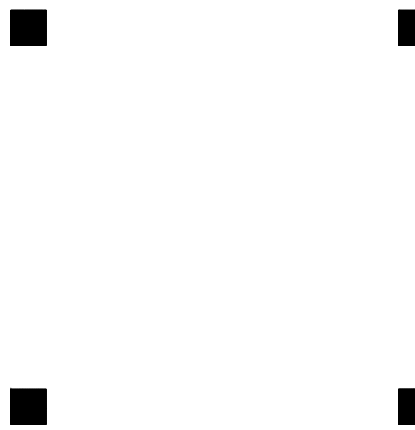
SHEET NAME

OFFICE PLAN

Drawn By	DVS
Checked By	ACH
P-A1.2	



65 NEWBURY STREET
PORTLAND, ME 04101
207.761.9000



Consultants:

Proposed Plan

Riverside Industrial
Parkway

Portland, Maine

#	DATE	DESCRIPTION

Project Number	18112
Date	Aug 20, 2018
Drawn by	DVS
Checked by	ACH

SHEET NAME

EXTERIOR
ELEVATIONS

Drawn By DVS	P-A2.1
Checked By ACH	

Riverside Industrial Parkway and Milliken St.

1 message

Jaime Parker <jaime@trails.org>

Tue, Jan 8, 2019 at 3:27 PM

To: Jean Fraser <jf@portlandmaine.gov>, Kara Wooldrik <kara@trails.org>, Mark Arienti <mtarienti@gmail.com>

Hi Jean,

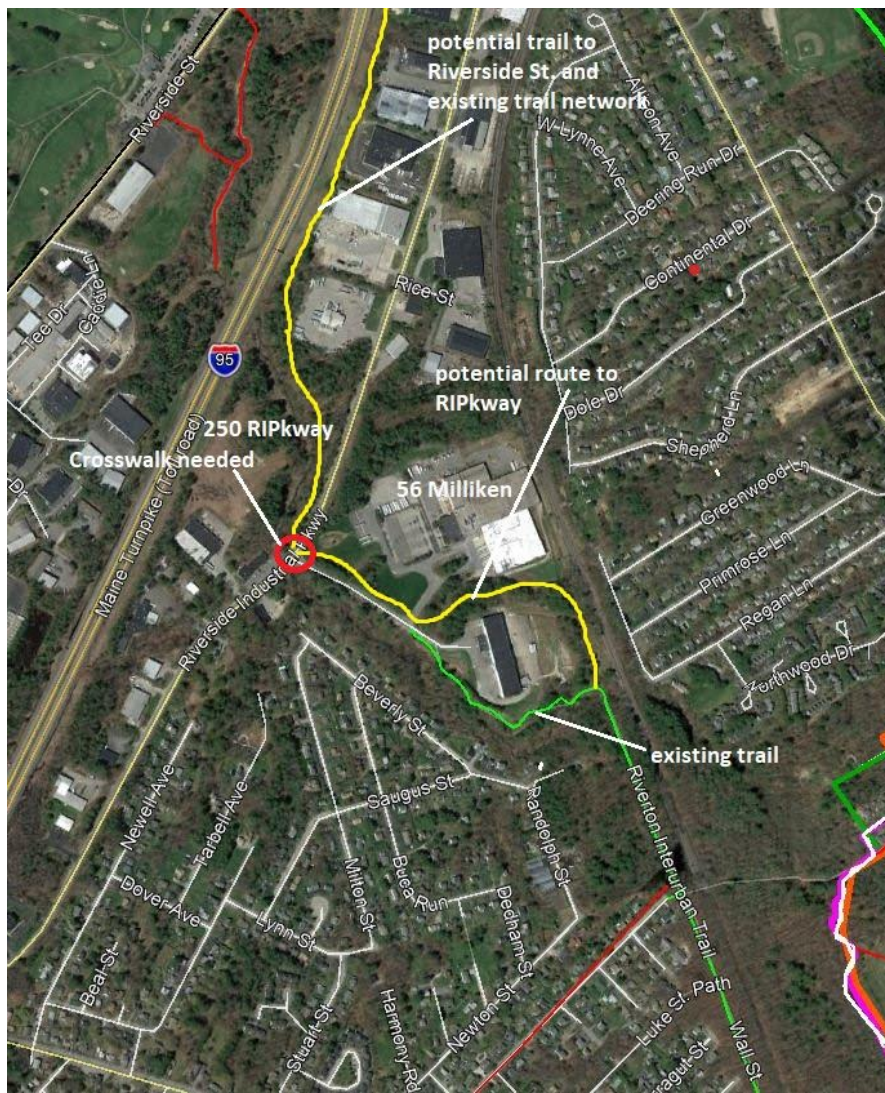
Regarding Portland Trails request for trail and connection improvements near Riverside Industrial Parkway and Milliken Street, I wanted to offer the following thoughts;

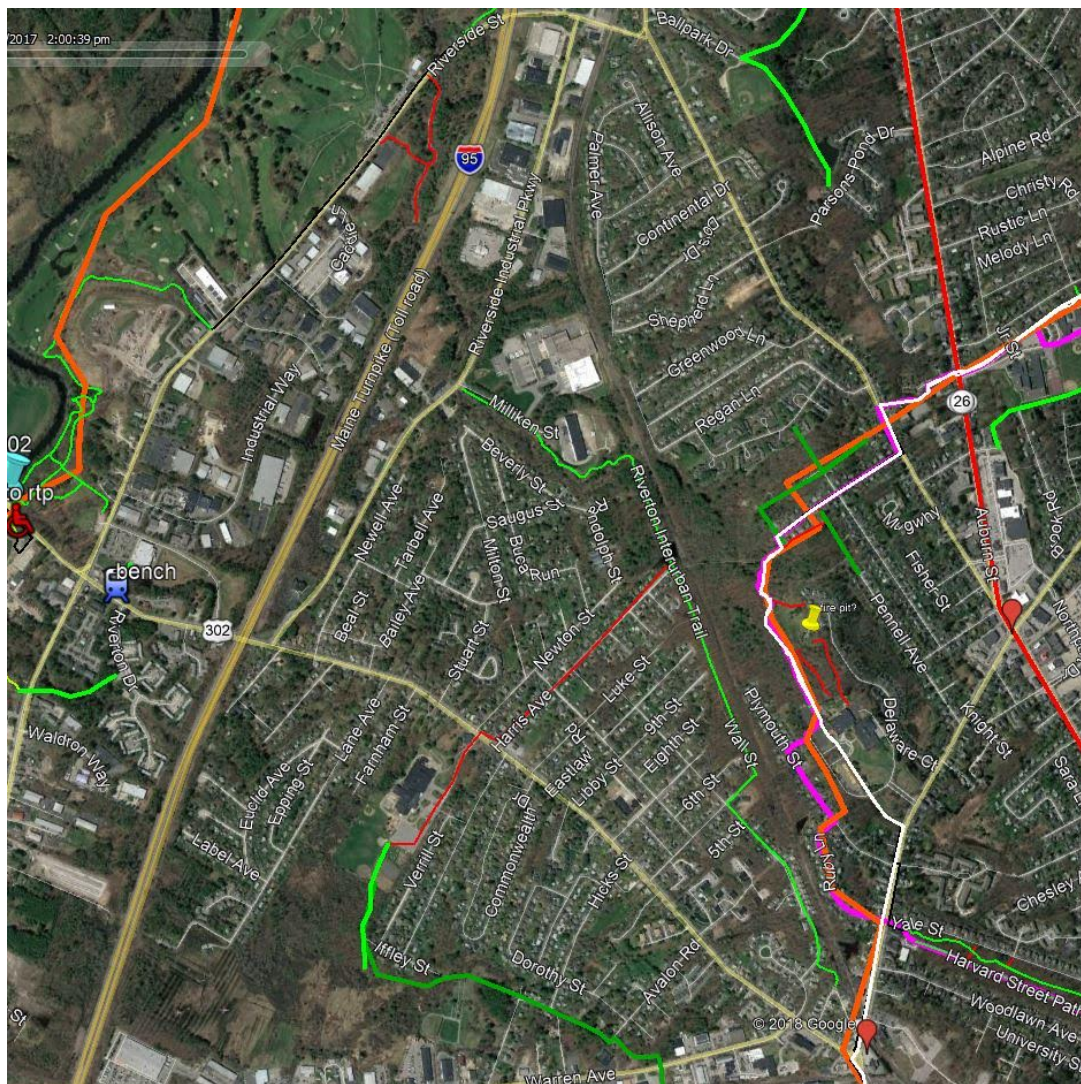
- Currently the Riverton Rail Trail connects Morril's Corner to Milliken St.
- Currently there is no "trail" along Milliken St. to access Riverside Ind. Pkway
- It would be desirable to add a connection either along Milliken, or parallel to Milliken through the [56 Milliken St.](#) property, to allow access to the Parkway.
- A crosswalk on the Parkway to the new sidewalk being constructed by 250 Riverside Pkway, and the future trail to the north would be desirable.

I've attached a sketch of the immediate area (with potential connections in yellow), and the greater network with existing trails only. I would be happy to discuss option for trail routing with any interested parties.

Thank you,

Jaime





Jaime Parker
Trails and Transportation Manager
Portland Trails
jaime@trails.org
329.6180

Non Sibi, Sed Omnibus

56 Milliken Street - Status Traffic Comments

1 message

Tom Errico <thomas.errico@tylin.com>

Fri, Jan 18, 2019 at 10:05 AM

To: Jean Fraser <jf@portlandmaine.gov>

Cc: "Hyman, Bruce" <bhyman@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, Keith Gray <kgray@portlandmaine.gov>, "Jeff Tarling (JST@portlandmaine.gov)" <JST@portlandmaine.gov>

Hi Jean – I have reviewed the application materials and offer the following status traffic comments.

- The applicant has conducted a trip generation analysis and the project is not expected to have a significant impact on traffic and safety conditions in the study area. A Traffic Movement Permit is not required.
- A sidewalk shall be constructed on Milliken Street from the project driveway to Riverside Industrial Parkway. A fully compliant ADA crosswalk shall be installed to the proposed sidewalk located on the north side of Riverside Industrial Parkway (to be constructed by others).
- I support a waiver for the construction of a sidewalk along the site frontage on Riverside Industrial Parkway given a sidewalk is provided on the other side of the street and pedestrian demand is expected to be primarily destined to the proposed sidewalk on Milliken Street.
- It is my understanding that the egress driveway will be widened to 20 feet for emergency vehicle access purposes. It is recommended that the applicant paint a 4-foot area for pedestrians delineated by a 6" white line with painted pedestrian symbols every 75 feet.
- A sidewalk connection shall be provided between Milliken Street and the entrance to the existing building.
- Given low traffic volumes, I find the one-way entry and exit circulation pattern to be acceptable.
- The applicant has conducted a parking analysis documenting existing and future parking conditions. The analysis documented existing parking demand at the site. According to a survey conducted in October 2018, there were 41 available parking spaces. Based upon a parking demand estimate of 37 parking spaces for the proposed site (estimated from the ITE Parking Generation Manual) the site will have sufficient parking conditions. I concur with this analysis that adequate parking will be provided.
- The applicant shall provide a parking management plan that documents the allocation of parking spaces, with a desire to locate parking in proximity to building entrances.
- The applicant shall provide greater detail on the site plan in the area to the north of the existing building (where vehicles will travel to access to new site). This shall include dimensioning parking spaces and aisle widths. Additionally, an auto-turn graphic shall be provided that illustrates adequate circulation for trucks entering the new site.

If you have any questions, please contact me.

Best regards.

Thomas A. Errico, PE

Senior Associate

Traffic Engineering Director

TYLIN INTERNATIONAL

12 Northbrook Drive

Falmouth, ME 04105

+1.207.781.4721 main

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+1.207.400.0719 mobile

+1.207.781.4753 fax



PLAN CORRECTIONS REPORT PL-000392-2018 FOR CITY OF PORTLAND

PLAN ADDRESS:	56 Milliken St Portland, Maine 04103	PARCEL:	334 A014001
APPLICATION DATE:	10/31/2018	SQUARE FEET:	0.00
EXPIRATION DATE:		VALUATION:	\$0.00
		DESCRIPTION:	Construction of a 72,000 square foot warehouse at 56 Milliken Street with 8 loading bays and an exit drive onto Riverside Industrial Parkway

CONTACTS	Name	Company	Address
Agent/Representative	John Kuchinski	CES, Inc.	146 Main Saco, ME 04072

Comments & Corrections Required

City Arborist Jeff Tarling

Civil Engineering - Third Party Reviewer Lauren Swett

Comment(s)/ Recommendation(s):

An area of undisturbed wetlands has been left to the west of the building. It is immediately adjacent to a retaining wall and areas to be graded. If the area is to remain as undisturbed, additional erosion and sedimentation control should be provided to protect the area.

In accordance with the Maine DEP Chapter 500 Regulations and Section 5 of the City's Technical Manual, the Applicant is required to meet the Basic, General, and Flooding Standards for Stormwater Management. The Applicant has proposed erosion and sedimentation control features to meet the Basic Standard and grassed underdrained soil filters to help meet the General and Flooding Standards. The following comments should be addressed on the proposed stormwater management plan:

-Please review the time of concentration (TC) numbers that are utilized in the HydroCAD model. It is noted that Post-Development Subcatchment 4 has a larger TC than was utilized for the larger Pre-Development Subcatchment 1 that it is a part of. Also, the general practice is that a minimum TC of 5 or 6 minutes is typically utilized on small subcatchments due to the limitations of the HydroCAD software calculations. This would increase TC values utilized in both the pre-development and post-development models, so it is acknowledged that this likely would have minimal impact on the final model results.

-Please review the HydroCAD input for the proposed underdrained soil filter ponds. It appears based on the review of the output that the model is taking into consideration infiltration at each filter location, but that is not clear from the information shown in the output. Please evaluate why there is zero outflow from each filter.

-Per the DEP standards, a grassed underdrained soil filter should not have a filter area greater than 3,000 SF. The largest proposed filter has a filter area of 3,900 SF. The DEP standard notes that the size restriction is provided due to the difficulty of maintaining large filters. Please adjust the size, or provide justification of a waiver of the size based on the ability to complete adequate maintenance.

-Please provide sediment pre-treatment (forebays) for all grassed underdrained soil filters in accordance with the standards outlined in the Maine DEP's stormwater BMP. A forebay has been provided for the largest filter, but it does not appear to be positioned to receive the runoff from most of the paved area draining to the filter. The Applicant is providing riprap slopes around the perimeter of the filters, which will provide for sediment removal; if this feature is to be used for sediment pre-treatment, specific considerations on how the rip rap slopes can be cleared of sediment should be provided.

-The soil filters are proposed with rip rap side slopes. Please change the detail for the gravel underdrained soil filters to reflect this design.

-A stormwater maintenance agreement will be required for the project.

The applicant should review the utility crossings to the west of the building. It appears that stormdrain pipes may be in close vertical proximity to the proposed culvert crossing and the sewer line. The size of the culvert crossing and the invert of the sewer services have not been provided on the plans. Please provide this additional information and confirm that the crossings may be adequately made.

DPW Engineering Keith Gray

Fire Robert Thompson

Comment(s)/ Recommendation(s):

The main entrance to the building must be the address for the property. Street addresses shall be marked on the structure and shall be as approved by the City E-911 Addressing Officer.

The proposed new access road shall have a minimum width of twenty feet (20 ft).

Parking John Peverada

Planning

Stuart O'Brien

Traffic - Third Party Reviewer

Tom Errico

Transportation/Planning

Bruce Hyman

Zoning

Jean Fraser

Conditions Required

Fwd: Revised plan going to PB workshop 1.2.19

1 message

Jean Fraser <jf@portlandmaine.gov>
To: "Fraser, Jean" <jf@portlandmaine.gov>

Fri, Jan 18, 2019 at 10:04 AM

CITY ARBORIST COMMENTS

From: **Jeff Tarling** <jst@portlandmaine.gov>
Date: Thu, Jan 17, 2019 at 3:48 PM
Subject: Re: Revised plan going to PB workshop 1.2.19
To: Jean Fraser <jf@portlandmaine.gov>

Jean -

Tree & landscape review for the proposed Milleken project off Riverside Industrial Parkway.

The proposed development is a large warehouse addition to a long existing complex off Riverside Industrial Parkway. As part of this project a pretty significant section of woodland will be removed and a drainage-way filled to complete the necessary site work. While this impact does not trigger local Site Plan regulations or limitations we wanted to at least acknowledge this value.

Our tree & landscape recommendations for this site would be to improve the tree and plant selections to native plant types given the surrounding 'rural' feel to this commercial site.

a) Tree & Landscape Recommendations :

Pin Oak - change to Swamp White Oak

Japanese Juniper - change to 'Blueberry Delight' Common Juniper

Dwarf Boxwood - change to Viburnum or Gro-Low Sumac

White Spruce is native and a good selection for this site.

b) Tree Save delineation & Tree Protection Measures:

Tree save and tree protection measures shall be in place prior to the start of Site Work and noted at the pre-construction conference.

C) Additional tree parking lot tree planting:

Recommend the planting of 5 additional trees near the parking lot edge, acknowledge space for snow storage. These trees can be White Pine or White Spruce conifers 5-6' height or Red Maple shade trees and 1 parking lot shade tree on the parking lot island of choice.

Along the project frontage on Riverside Industrial parkway replacing 3 Taxus shrubs, updating them with native trees of the types mentioned above. We feel that the suggested landscape improvements are cost effective and help the project, new and old better blend into the surrounding environment.

Thanks,

Jeff



Jeff Tarling
 City Arborist - City of Portland Maine
 Parks, Recreation & Facilities Department
 Forestry & Horticulture
 212 Canco Road
 Portland, ME. 04103
 (207) 808-5446
jst@portlandmaine.gov



Memorandum

Planning and Urban Development Department

Planning Division

To: Chair Dundon and Members of the Portland Planning Board
From: Jean Fraser, Planner
Date: January 18, 2019
Re: **Level III Site Plan and Site Location of Development (SLODA) amendment:**
New 72,000 sf warehouse
56 Milliken Street
Project: # PL000392-2018 CBL: 334 A 014
Applicant: Plymouth Industrial REIT, Inc
Meeting Date: January 22nd 2019

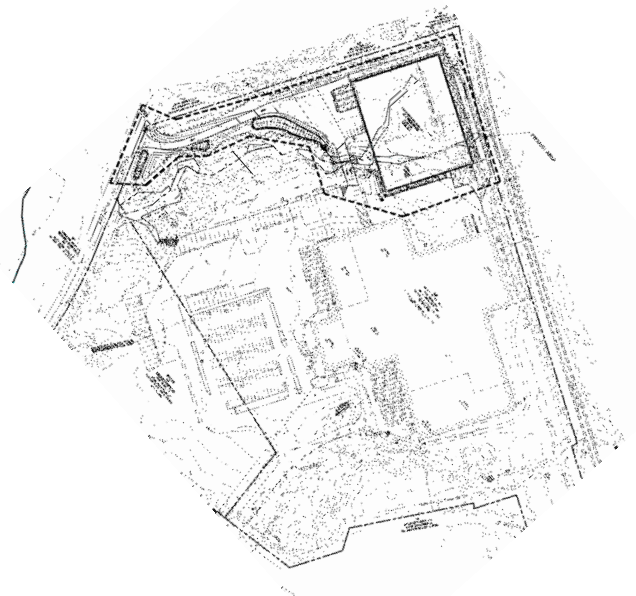
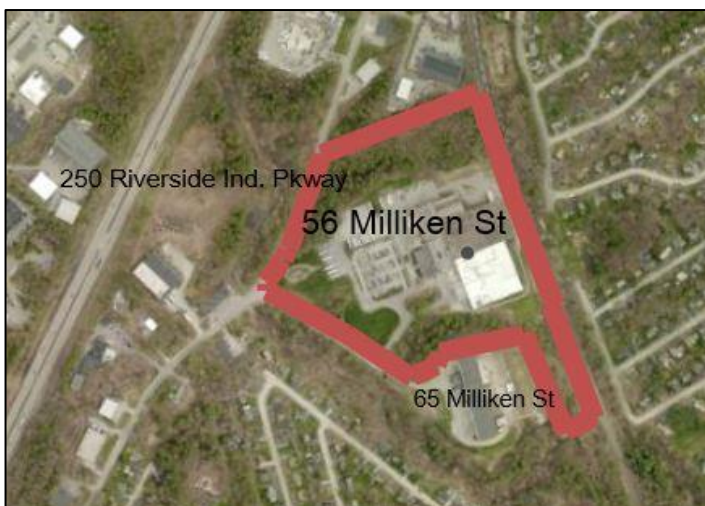
I. INTRODUCTION

CES, Inc has submitted a Level III Site Plan and Site Location of Development (SLODA) amendment application on behalf of Plymouth Industrial REIT, Inc. for a 31.2 acre site at the intersection of Milliken Street and Riverside Industrial Parkway. The proposal comprises a new 72,000 sq ft single story warehouse building with a new one way egress drive to Riverside Industrial Parkway of approximately 500 linear feet.

The proposed development would be located to the north of the existing 1966 industrial building (200,325 sq ft) and the associated 237 trailer and parking spaces. The site is located in the IM (Moderate Impact Industrial) Zone.

SITE BELOW:

PROPOSAL TO RIGHT:



The site is currently wetland and woodland, located between existing development and the railway to the east. The proposal would add 2.98 acres of impervious surface to the existing 11.4 acres of impervious surface, and results in the filling of 8,034 sq ft of wetland.

The new drive exits onto Riverside Industrial Parkway opposite the recently approved Seabreeze project at 250 Riverside Industrial Parkway. The site is also served by an existing access from Milliken Street. The user of the new warehouse building has not yet been determined. The occupants of the large existing building are Paradigm Windows and Advance Pierre foods.

A total of 225 notices were sent to property owners within 500 feet of the site, and a legal ad ran in the January 11th and 12th, 2019 editions of the *Portland Press Herald*. The applicant held a Neighborhood Meeting on December 18, 2018 attended by three neighbors, though confusion over the noticing meant that neighbors thought this proposal was for the marijuana facility that was recently approved as a Level II site plan for 65 Milliken Street. One public comment (PC1) has been received from Jaime Parker of Portland Trails, setting out a potential trail extension over the applicants site to complete the wider trail network in this area.

Applicant: Plymouth Industrial REIT, Inc. (Jeff Witherell)

Consultants: Engineering: CES, Inc (John Kuchinski, PE)
Building Design: Port City Architecture

II. REQUIRED REVIEWS

Review	Applicable Standards
Site Plan	Section 14-526 City's Land Use Code
Site Location of Development (delegated from State) - amendment to 1994 permit	Section 14-Technical Manual and State Regulations
(the project also requires MDEP NRPA and Army Corps Permits for the proposed wetland fill)	

III. REQUESTED WAIVERS (See submitted Waiver Table and justification in Attachment 06)

Waiver Request	Applicable Standards
Sidewalks: Waiver requested for the sidewalks along both the Riverside Industrial Parkway and Milliken Street frontages (both of which are long), based on the fact there is no expectation of pedestrian usage, there is no existing or expected sidewalk within 1000 feet, and there are technical challenges.	Site Plan 14-526 (a)2ci <i>Sidewalks</i> requires that “ <i>all developments shall provide sidewalks along all frontages</i> ” and refers to waiver criteria for sidewalks and associated curbing in 14-498 and 14-499. Reviewers do not support a waiver from the sidewalk requirement in Milliken Street- see discussion in Section VIIC.
Curbing: Waiver requested for the curbing associated with any required sidewalks.	(curbing waiver will depend on sidewalk design)

IV PROJECT DATA

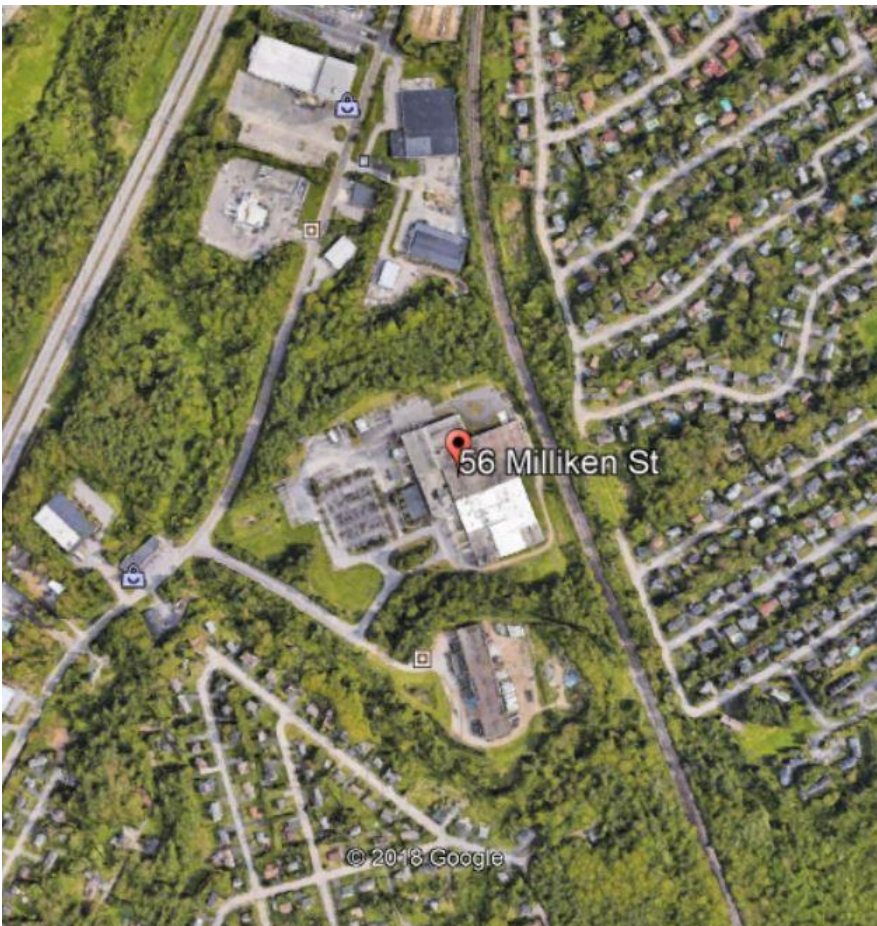
Existing Zoning	IM		
Existing Use	Industrial with undeveloped areas		
Proposed Use	Warehouse		
New disturbed area	Approximately 5 acres		
Parcel Size	31.2 acres		
	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Wetlands			8034 sq ft
Impervious Surface Area	11.4 acres	14.38 acres	2.98
Building area	200,325 sq ft	272,325 sq ft	72,000 sq ft
Parking Spaces (on site)	188 car parking spaces; 49 trailer parking spaces	0 (could convert trailer spaces to car spaces to increase no. of spaces nearer to the proposed new building)	0 (Applicant requests the Planning Board approve 188 parking spaces, as demand is below the zoning requirement of 273)
Bicycle Parking Spaces	0	10	10 (24-29 required)
Est. Cost of Project	Not provided		

V. EXISTING CONDITIONS

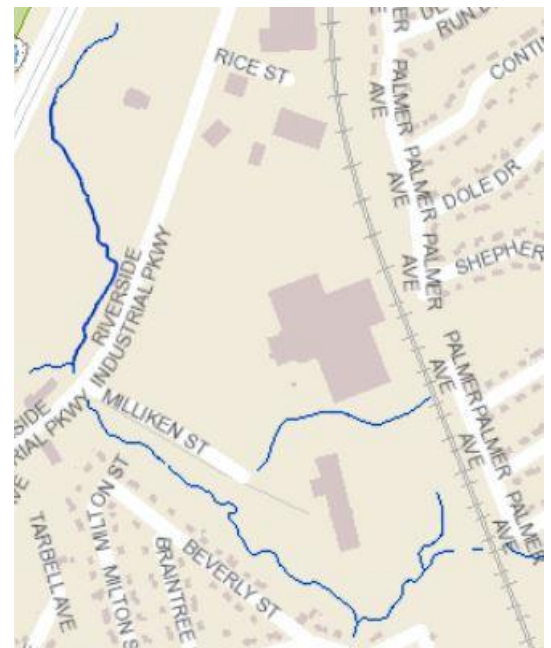
The proposed site for the new development is mostly wooded with wetland areas and lies between existing industrial buildings. The wetlands are characterised as being associated with a stream although it is not recognized on the City's GIS maps (see below). The development is located at the edge of the parking and circulation area for the existing large industrial building (over 200,000 sq ft) and associated parking lot to the south. The site comprises two lots, both in the same ownership.

The site is located opposite the recently approved Seabreeze Facility at 250 Riverside Industrial Parkway, which is required to install a sidewalk along the west side of Riverside Industrial Parkway (which is longer than the 56 Milliken frontage).

As noted on the Zoning Map (see below) and visible in the aerial photograph, this site is located on the eastern boundary of a large I-M zone, and R2 and R3 residential is located on the other side of the railway that bounds the site.



STREAMS (city GIS map)

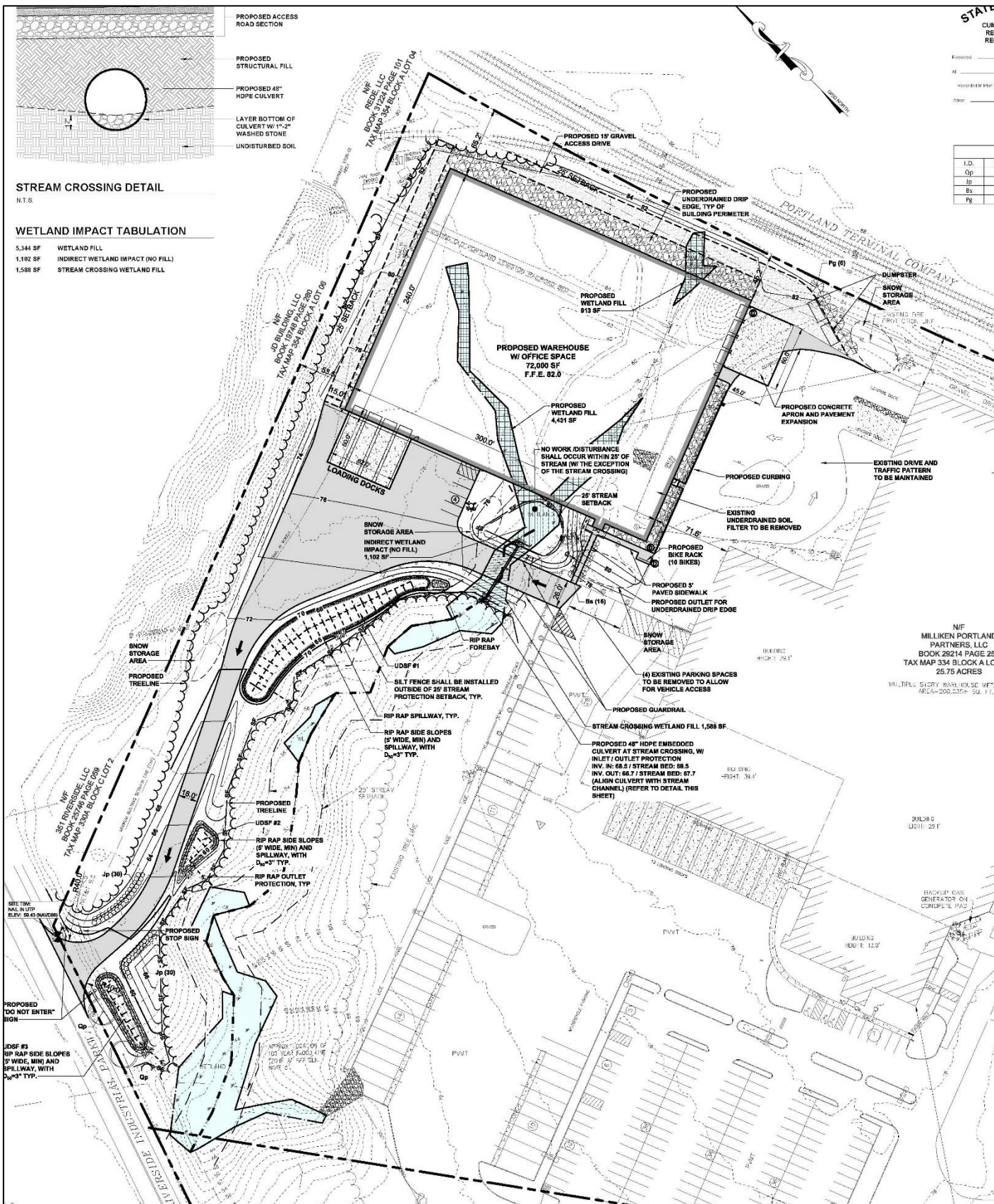


VI. PROPOSED DEVELOPMENT - (see Site Plan below and at [Plan 02](#))

The proposals include:

- New single story building of 72,000 sq ft for warehouse with small area of reception and offices (Floorplan in [Plan 13](#))
- New 20 foot wide access drive from Riverside Industrial Parkway to the new building (approx. 600 feet in length)
- Filling of 8034 sq ft of wetlands
- Three underdrained soil filters
- Short section of internal sidewalk with some planting
- Planting at entrance of the new access drive
- Retention of existing parking with minor layout changes

Proposed Site Plan (see Plan 02)

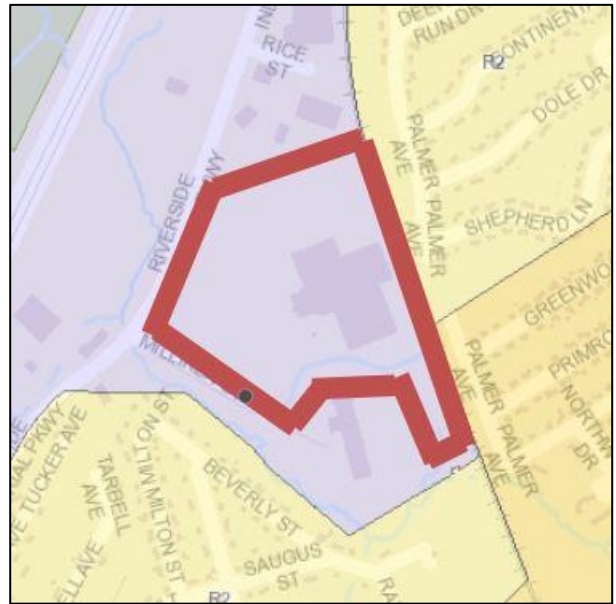


VII. STAFF REVIEW

A. ZONING ANALYSIS

The proposed development meets the dimensional standards of the I-M zone, and remains below the maximum impervious surface ratio.

The parking requirements under Zoning would be 72 vehicle parking spaces for the proposed building and 201 spaces for the existing building, giving a total of 273. The Site Plan ordinance allows the applicant to request that the Planning Board make the parking requirement determination, and the applicant has requested that the 188 existing spaces on the site be considered the overall requirement to avoid the introduction of additional impervious surface. This request is discussed in detail in section VII c below.



B. SITE LOCATION OF DEVELOPMENT ACT (SLODA) REVIEW (Technical Manual Sec. 14.3. Standards

(Note- All of the applicants submittal A through N comprise the SLOD application)

This SLOD application is the fourth amendment to the original 1994 City of Portland delegated approval to a 100,000 sq ft addition to an existing warehouse building and truck parking area (Attachment O)

a. Financial and technical capacity.

Standard: That developer has the financial capacity and technical ability to develop the project in a manner consistent with state environmental standards and with the provisions of Portland's Code of Ordinances. The Planning Board may issue a permit that conditions any site alterations upon a developer providing the Planning Board with evidence that the developer has been granted a line of credit or a loan by a financial institution authorized to do business in this State or with evidence of any other form of financial assurance the Planning Board determines to be adequate.

Proposal: The applicant has submitted the August 2018 SEC Report to meet this requirement (Att. E.).

b. Traffic movement – The TMP standards relate to trip generation during the peak hours.

Proposal: The applicant has submitted a Transportation Analysis (Attachment G) and further information in Attachment P to support their view that a TMP is not required. The City's Traffic Engineering reviewer Tom Errico has confirmed that a TMP is not required (Attachment 1).

c. No adverse effect on the natural environment

Standard: That the developer has made adequate provision for fitting the development harmoniously into the existing natural environment and that the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities. In making a determination under this subsection, the Planning Board shall apply the standards set forth in Chapter 375 of the Maine Department of Environmental Protection Site Law Regulations, as may be amended from time to time.

Proposal:

- Wetlands: A Tier I NRPA Permit has been issued for the filling of 8034 sq ft of freshwater forested wetland for the project. The MDEP and Army Corps Permits and NRPA application are included in Attachment O. It is noted that the wetland delineation was carried out by CES Inc (see Plan 01) and the applicant should submit documentation of the delineation to support the SLOD application. Measures to identify and protect the remaining wetland should be included in the final proposals.
- Stream and Water Quality: The stream impacted by the development is mainly a drainage swale, which has been channelized in the vicinity of the new building. Three underdrained filters have been introduced in the swale for treatment, with rip rap used around the filters. The Peer Engineer has raised concerns regarding the size of the filters and how the rip rap slopes will function (Attachment 2) and these issues should be addressed in the final proposals.

The project is within the watershed of the Dole Brook urban impaired stream, and the applicant has proposed paying the \$42,775 compensation fee.

- Wooded areas: the proposal results in the loss of several acres of existing woodland remaining on this site. The proposals have minimized the loss of trees as far as possible. The plans should be revised to identify treesave areas and clarify the measures to be taken to protect these areas in the future.

d. Soil types

Standard: – That the applicant to provide a map and analysis indicating the location of various soil types on-site, and suitability of such soils and ledge to support the proposed site improvements.

Proposal: This does not appear to have been submitted, but may not be relevant given the single story nature of the new building.

- e. Ground Water - In making a determination under this subsection, the Planning Board shall apply the standards set forth in Chapter 500 and 502 of the Maine Department of Environmental Stormwater Management and Direct Watersheds of Waterbodies Most at Risk from New Development Rules as may be amended from time to time. *Proposal:* See g. below.

f. Infrastructure.

Standard: That the developer has made adequate provision of utilities, including water supplies, sewerage facilities, solid waste disposal and roadways required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities and roadways in the municipality or area served by those services.

Proposal: Although the new structure is large, the proposed warehouse use would not be expected to have a significant effect on existing or proposed infrastructure. Under the site plan review a sidewalk along Milliken Street, with a crossing at Riverside Industrial Parkway, is recommended as a requirement. The Peer Engineer has requested further information regarding the utility crossings (Attachment 2).

g. Flooding and Storm water management, erosion, and sedimentation control.

Standards:

- The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure. In making a determination under this subsection, the Planning Board shall apply the standards set forth in Chapter 500 and 502 of the Maine Department of Environmental Stormwater Management and Direct Watersheds of Waterbodies Most at Risk from New Development Rules as may be amended from time to time.
- The proposed development meets the standards for storm water management in 38 MRSA §420-D as amended from time to time (See Exhibit 1) and the standard for erosion and sedimentation control in 38 MRSA §420-C as amended from time to time. In making a determination under this subsection, the Planning Board shall apply the standards set forth in Chapter 500 and 502 of the Maine Department of Environmental Stormwater Management and Direct Watersheds of Waterbodies Most at Risk from New Development Rules, as may be amended from time to time.

Proposals: The Peer Engineer has raised several concerns regarding erosion control, the HydroCAD model, and whether the design meets the MDEP Chapter 500 standards (Attachment 2). The final submissions should address these concerns.

C. SITE PLAN REVIEW

The proposals were reviewed by staff for conformance with the relevant review standards of the City of Portland's site plan ordinance.

1. Transportation Standards

a. Impact on Surrounding Street Systems (see above under SLOD Review, **b**)

b. Access and Circulation and c. Loading and Servicing

The proposal includes a second drive (egress only) onto Riverside Industrial Parkway so that large trucks are provided with a one-way system entering from Milliken Street (see Attachment P). Staff consider this acceptable given the low traffic volumes (Attachment 1); this may also reduce the truck maneuvers around the parking lot. The one-way drive allows the width to be reduced and minimize impervious surface.

The interface of the proposed development with the existing circulation and parking areas is not clear on the site plan. The Traffic Engineering Reviewer has requested (Attachment 1):

The applicant shall provide greater detail on the site plan in the area to the north of the existing building (where vehicles will travel to access to new site). This shall include dimensioning parking spaces and aisle widths. Additionally, an auto-turn graphic shall be provided that illustrates adequate circulation for trucks entering the new site.

c. Sidewalks along public streets and connecting to building entrances

The 31+acre site is located at the corner of two public streets, with about 900 feet of frontage on Riverside Industrial Parkway and 650 feet of frontage on Milliken Street. The site plan ordinance requires the provision of sidewalks on both frontages, and in addition requires internal connections from the sidewalks to the entrances of buildings.

The applicant has not proposed any internal sidewalks, and has requested a waiver from providing frontage sidewalks based on the fact there are no sidewalks within 1000 feet, there is no expectation of pedestrian usage and there are site challenges (Attachment D). The applicant has also requested a waiver from the provision of curbing (Att. P).

For reference, below are the ordinance waiver criteria:

Sidewalks-

- 1. There is no reasonable expectation for pedestrian usage coming from, going to and traversing the site.*
- 2. There is no sidewalk in existence or expected within 1000 feet and the construction of sidewalks does not contribute to the development of a pedestrian oriented infrastructure.*
- 3. A safe alternative-walking route is reasonably and safely available, for example, by way of a sidewalk on the other side of the street that is lightly traveled.*
- 4. The reconstruction of the street is specifically identified and approved in the first or second year of the current Capital Improvement Program or has been funded through an earlier CIP or through other sources.*
- 5. The street has been constructed or reconstructed without sidewalks within the last 24 months.*
- 6. Strict adherence to the sidewalk requirement would result in the loss of significant site features related to landscaping or topography that are deemed to be of a greater public value.*

Curbing-

- 1. The cost to construct the curbing, including any applicable street opening fees, is in excess of 5% of the overall project cost.*
- 2. The reconstruction of the street is specifically identified and approved in the first or second year of the current Capital Improvement Program or has been funded through an earlier CIP or through other sources.*
- 3. The street has been rehabilitated without curbing in the last 60 months.*
- 4. Strict adherence to the curb requirement would result in the loss of significant site features related to landscaping or topography that are deemed to be of a greater public value.*
- 5. Runoff from the development site or within the street does not require curbing for stormwater management.*

Staff consider that a network of sidewalks along the ROW is gradually being developed in this and other industrial areas, and potentially would meet a need because industrial areas may include offices and uses that require public access. In this area a sidewalk on one side of the street is considered adequate at this time.

Staff note that the existing building has at least 100 employees and therefore the provision of internal sidewalks (linked to the ROW sidewalks) is warranted even if the new building is warehousing.

The City's Traffic Engineering Reviewer Tom Errico has set out the staff recommendation below, which is considered to represent a reasonable interpretation of the ordinance requirements given the particular factors at this location (Att. 1):

- A sidewalk shall be constructed on Milliken Street from the project driveway to Riverside Industrial Parkway. A fully compliant ADA crosswalk shall be installed to the proposed sidewalk located on the north side of Riverside Industrial Parkway (to be constructed by others).*
- I support a waiver for the construction of a sidewalk along the site frontage on Riverside Industrial Parkway given a sidewalk is provided on the other side of the street and pedestrian demand is expected to be primarily destined to the proposed sidewalk on Milliken Street.*
- It is my understanding that the egress driveway will be widened to 20 feet for emergency vehicle access purposes. It is recommended that the applicant paint a 4-foot area for pedestrians delineated by a 6" white line and pedestrian symbols every 75 feet.*

- *A sidewalk connection shall be provided between Milliken Street and the entrance to the existing building.*

The consideration of the curbing waiver would depend on the design of the required sidewalk.

d. Public Transit Access - this standard does not apply

e. Parking

The existing parking on the site comprises 188 vehicle spaces and 39 trailer spaces. As noted above under Zoning, the parking requirement would be 273 spaces under the ordinance. The applicant is not proposing any additional parking spaces, though some have been relocated. The applicant has requested approval to retain the existing number as this would meet the demand (indicated as 37 for the new building) as substantiated in the submission (Attachment G.) The Traffic Engineering Reviewer concurs with the applicant's assessment and considers the existing parking provision is adequate for both the existing and proposed developments (Attachment 1).

Of the 188 vehicle spaces, there are approximately 24 near to the new building (although abutting the existing building) and the rest are 400-500 feet away from the entrance. Given that the walking route from the more distant spaces is across the truck circulation route, staff consider that the allocation of the spaces should be clarified. The Traffic Engineering Reviewer has requested:

- *The applicant shall provide a parking management plan that documents the allocation of parking spaces, with a desire to locate parking in proximity to building entrances.*

f. Bicycle parking

The ordinance requires 2 bicycle parking spaces for every 10 required parking spaces up to 100, and 1 per 20 required spaces above 100. Therefore for the entire site the requirement would be 29 spaces based on the zoning requirements. If the Board were to approve the requirement of 188 vehicle parking spaces, a total of 24 bicycle parking spaces would be required. The proposals currently show 10 spaces near the new building, and staff recommend that the ordinance requirement should be met, with the bulk of the spaces provided near the entrance of the existing building.

g. TDM - this standard does not apply

h. Construction Management Plan - reviewers have not completed this review.

2. Environmental Quality Standards

a. Preservation of Significant Natural Features - covered by the SLODA review above.

b. Landscaping and Landscape Preservation, including parking lot landscaping and street trees

The proposed Site Plan (Plan 02) includes landscaping near the new building and along the new drive where it meets Riverside Industrial Parkway.

The City Arborist, Jeff Tarling, has provided recommendations to improve the tree and plant selections to native plant types given the surrounding 'rural' feel to this commercial site (Attachment 3). His comments recommend that:

(a) The proposed species be changed to more native choices (listed in his comments);

b) Tree Save delineation & Tree Protection Measures:

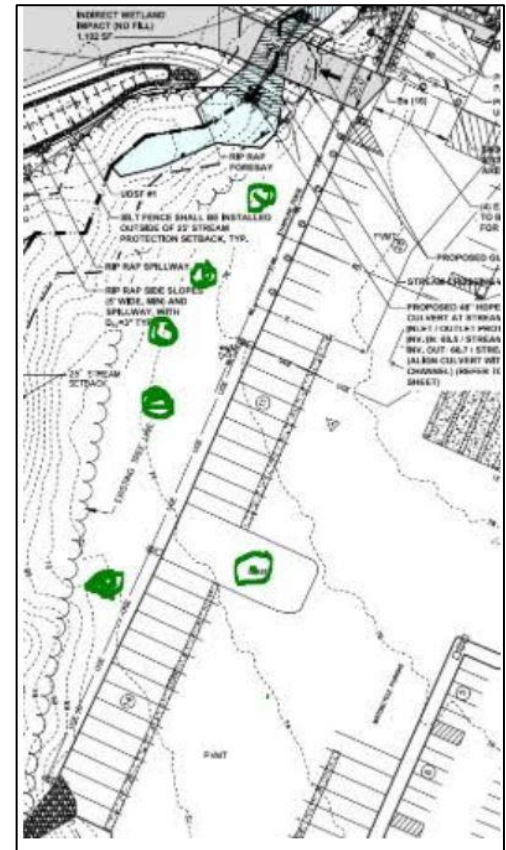
Tree save and tree protection measures shall be in place prior to the start of Site Work and noted at the pre-construction conference.

(As noted above in the SLODA review, the Site Plan should identify the remaining woodland areas as “treesaves” and confirm the measures to be taken for their protection both during construction and into the future).

c) Additional tree parking lot tree planting:

Recommend the planting of 5 additional trees near the parking lot edge, acknowledge space for snow storage. These trees can be White Pine or White Spruce conifers 5-6' height or Red Maple shade trees and 1 parking lot shade tree on the parking lot island of choice. (see sketch right)

Along the project frontage on Riverside Industrial parkway (see below) replacing 3 Taxus shrubs, updating them with native trees of the types mentioned above. We feel that the suggested landscape improvements are cost effective and help the project, new and old better blend into the surrounding environment



Left: Northeast corner of Riverside Industrial Parkway/Milliken Street intersection

c. Buffering

The large new building is about 50 feet from the eastern boundary with the residential zone and railway tracks, and incorporates a required fire access immediately next to the building. Although the aerial shows there is existing buffer vegetation between this new industrial building and the existing residential area on the other side of the railway tracks, this area is not part of the site and could be developed in the future. The project should include buffer planting between the proposed building and the railway tracks.

d. Water Quality/Storm Water Management/Erosion Control – covered by SLODA review above.

3. Public Infrastructure and Community Safety Standards

a. Consistency with City Master Plans

Portland Trails (PC1) has requested consideration of pedestrian links to extend the Riverton Rail Trail that comes up from Morrills Corner to the northwest, and to link into a potential trail along the stream in the Seabreeze site on the opposite side of Riverside Industrial Parkway.

The recommended sidewalk along Milliken Street, with a crossing to the required (of others) sidewalk along Riverside Industrial Parkway, would provide key links in this network. In addition, there is an opportunity for an improved trail connection along the stream in the southern part of the site which should be considered, as the existing trail (further south) is in poor condition. It should be noted that the provision of this trail would count as a credit against the Impact Fee that would be charged at the Building Permit stage.

b. Public Safety (CPTED) and Fire Prevention

The applicant has provided lighting in the immediate vicinity of the building but has not clarified what lighting levels exist or will be provided to the parking areas that serve the new building and the walking routes to those areas. Once the parking allocation has been clarified, the final submissions should extend the lighting/photometric plan to include the parking areas and associated pedestrian links.

The Fire Department (in preliminary comments, see Attachment P) requested fire access around the “back” 2 sides of the proposed building, and in Attachment 2 requested the drive between the building and Riverside Industrial Parkway be 20 feet wide. The plans have incorporated these requirements.

c. Availability and Adequate Capacity of Public Utilities

Capacity letters from both the Portland Water District and Department of Public Works (re Wastewater) have been received for this project (Attachment N).

4. Site Design Standards

The applicant has addressed all of the standards in Attachment K. The only issue identified by staff at this time is that the submitted Photometric Plan (Plan 10) and proposed light fixtures meet the Technical Standards, but the extent of the lighting needs further consideration to ensure public safety objectives are addressed.

VIII NEXT STEPS - the final submissions should include the following:

- Sidewalks (internal and along/across the ROW) as outlined in the Traffic Engineer review comments (sidewalk along Milliken Street ROW; ADA pedestrian crossing at Riverside Industrial Parkway; pedestrian ways along both access drives)
- Parking Management Plan, and additional information regarding the area between the existing and proposed buildings, as requested by the Traffic Engineering reviewer
- Revised Landscape Plan to identify tree save areas, specify measures to protect tree save areas and remaining wetlands, add buffer planting and address the City Arborist comments
- Information and revisions to address the Peer Engineer comments, including regarding stormwater system design, treatment functions and dimensions for utility crossings
- Increased bicycle parking provision to meet the ordinance requirements and serve the entire site
- Reconsideration of lighting to ensure parking areas and pedestrian links are adequately lit
- Consideration of the Portland Trails request to provide improved trail link(s) through the site
- Draft Stormwater Maintenance Agreement
- Submit Wetland Delineation report
- Revisions or information to address Planning Board comments.

ATTACHMENTS:

PB MEMO ATTACHMENTS

1. Traffic Engineer Preliminary comments
2. Peer Engineer comments
3. City Arborist comments

PUBLIC COMMENT

PC1 Jaime Parker of Portland Trails

APPLICANT'S SUBMITTALS

- A. Cover Letter & Application
- B. Right, title & Interest
- C. Zoning analysis
- D. Waiver Table
- E. Financial Capability
- F. Technical Capability
- G. Transportation Analysis incl Parking
- H. Environmental & Landscape Narrative
- I. SLODA State correspondence
- J. Stormwater Management
- K. Site Design Narrative
- L. Light Fixture Cut Sheets
- M. Construction Management Narrative
- N. Public Infrastructure & Safety Narrative
- O. State Permits and Applications
- P. Response to comments Dec 2018
- Q. Neighborhood meeting Cert. & Notes

PLANS

- 00-CoverSheet
- 001-Overall Site Plan
- 01-Existing Site Plan
- 02-Proposed Site Plan updated
- 03-Proposed Utility Plan
- 04-Site Electrical
- 05-Details
- 06-Details
- 07-Details
- 08-Pre-Development Hydrology
- 09-Post-Development Hydrology
- 10-Photometric Plan
- 11-Construction Management Site Plan
- 12- Boundary Survey 56MillikenSt_Signed
- 13- Floorplans & Elevations