#### Section 14-526. Site Plan Standards

The following statements are provided in accordance with the submission checklist Tab 5 and Section 14-526 of the ordinance.

(c) Public Infrastructure and Community Safety Standards.

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

- Identify consistency with master plans
- Proposed easements, rights and improvements to connect or continue offpremises public infrastructure, as applicable
- 1. Consistency with City Master Plans:
  - a. The project has been designed to be consistent with the City's Zoning Ordinance and off-site infrastructure plans.
  - b. The Applicant will coordinate with utility representatives for the continuation of easements related to utility infrastructure crossing the site.

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

- 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
- 2. Public Safety and Fire Prevention:
  - a. The site has been designed to promote a safe and inviting customer access. The MaineDOT has previously constructed the two rail crossings as shown on the plans.
  - b. No changes to emergency access conditions within the surrounding streets is proposed.
  - c. Fire hydrants are located within the adjacent street system. Additional fire hydrants have been installed within the site.

# 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
- 3. Availability and Adequate Capacity of Public Utilities:
  - a. The Applicant has previously secured letters from all applicable utilities stating their ability to serve the site and systems have been previously installed that are available to serve Building E.
  - b. All on site electrical lines will be underground.
  - c. All new utility infrastructures will meet the provisions of the Technical Manual.
  - d. The project will use an existing force main sewer and gravity connection to the interceptor sewer located along the property frontage.
  - e. The sanitary sewer collection system will be designed to meet all applicable sections of the Technical Manual.
  - f. Not applicable.



Stantec Consulting Services Inc. 482 Payne Road Scarborough Court, Scarborough ME 04074-8929

June 26, 2018

Captain Chris Pirone City of Portland Fire Department 380 Congress Street Portland, ME 04101

#### Subject: Canal Landing New Yard – Phase IV – Building E 400 West Commercial Street Applicant: Canal Landing, LLC NFPA 1 Review to Access and Other Fire Department Issues

Dear Captain Pirone:

In accordance with instructions in the City's Site Plan Review packet, please find enclosed the drawing necessary for your review of the Canal Landing site at 400 West Commercial Street project. We are submitting a Level III Site Plan Application associated with a proposed 12,000 SF metal Maintenance Building to be located on the shorefront side of the development. We have listed each item in your checklist below, followed by our response:

#### > Fire Department Checklist:

1. Name, address, telephone number of applicant:

Canal Landing, LLC 400 West Commercial Street Portland, Maine 04101 Cell: 207-653-1414 phin@portlandyacht.com

2. Name address, telephone number of architect:

David Lloyd Archetype PA 48 Union Wharf Portland, ME 04101 Phone: 207-772-6022 Lloyd@archetypepa.com

3. Proposed uses of any structures [NFPA and IBC classification]:

The following IBC and NFPA classifications will apply to the Phase IV development:

IBC	NFPA Classification
2B	II (000)
5B	∨ (000)



4. Square footage of all structures [total and per story]:

BUILDING PROGRAM				
Structure	Total (SF)	Per Story ±		
Marine Maintenance (Building E)	12,000	same		

5. Elevation of all structures:

Building elevations accompany this letter.

6. Proposed fire protection of all structures:

All of the structures are proposed to have a sprinkler system. Fire protection is currently provided by several onsite hydrants and hydrants within Commercial Street in the vicinity of the site.

7. Hydrant locations:

Multiple new hydrants have been installed onsite. The Fire Department should review and provide any additional information necessary regarding placement and locations of future fire hydrants on the site. All hydrants installed comply with the Portland Water District and Portland Fire Department standards pertaining to manufacturer, style, and installation specifications.

8. Water main[s] size and location:

The site will be served by an 8" water main that will extend off the 12" main in Commercial along the east end of the site. There is an existing fire line supply meter serving the property. Below the meter pit, the project water main size will be a minimum of 6" to serve the development site.

9. Access to all structures [min. 2 sides]:

The accompanying site plan depicts the site's access conditions that include access to two or more sides of the buildings.

10. A Code Summary shall be included referencing NFPA 1 and all Fire Department Technical Standards.



### > NFPA 1 – Chapter 18 Fire Department Access and Water Supply

#### 18.2 Fire Department Access

The project access conditions for east to west include an entrance at the eastern side of the site generally in the location of an existing graveled lot opposite the Star Match Building. A primary access will be available from the existing driveway in the middle of the property. A third, secondary driveway is proposed at the west end of the site off Commercial Street. The separation between all driveways will be at least 700 feet. The driveways will be greater than 24 feet in width which satisfies NFPA 1 18.2.3.4.1.1 that requires a minimum width of 20 ft.

Per NFPA 1 Chapter 18.2.3.2.1 the interior site access conditions will extend to within 50 ft. of at least one exterior door of all structures. This is satisfied on the site plan.

Per NFPA 1 Chapter 18.2.3.2.2 all first story floors shall be located not more than 150 ft. from the Fire Department access road. This is satisfied on the site plan.

NFPA 1 18.2.3.3 pertains to the number of access roads required and states that this determination is subject to the Authority Having Jurisdiction (AHJ).

#### 69. 3.3.4 Minimum Separation Distances

Stantec reviewed NFPA 1 pertaining to separation distances between LP gas storage containers and buildings. NGL has removed all of their tank storage in the nearby parcel, therefore separation to LP tank storage no longer applies.

#### > <u>City of Portland Technical Manual Section 3 – Public Safety</u>

#### Part 3.4 Site Access Standards

3.4.1. Every dead-end roadway more than one hundred fifty (150') feet in length shall provide a turnaround at the closed end. Turnarounds shall be designed to facilitate future street connectivity and shall always be designed to the right (refer to Figures I-5).

Supporting evidence: The development site is located along Commercial Street which is accessible from either direction. A minimum of two points of access will be provided into the Building E site.

3.4.2. Where possible, developments shall provide access for Fire Department vehicles to at least two sides of all structures. Access may be from streets, access roads, emergency access lanes, or parking areas.



Supporting evidence: As depicted on the site plans, the proposed building layout provides for a minimum two-sided access to all structures.

3.4.3. Building setbacks, where required by zoning, shall be adequate to allow for emergency vehicle access and related emergency response activities and shall be evaluated based on the following factors:

- Building Height.
- Building Occupancy.
- Construction Type.
- Impediments to the Structures.
- Safety Features Provided.

Supporting Evidence: The proposed development layout has contemplated emergency access conditions and provided for safe and efficient access for emergency vehicles.

3.4.4. Fire Dept. access roads shall extend to within 50' of an exterior door providing access to the interior of the structure.

Supporting Evidence: All buildings will be provided with an exterior entrance door that will be within 50' of a Fire Department access route.

3.4.5. Site access shall provide a minimum of nine (9) feet clearance height to accommodate ambulance access.

Supporting Evidence: A minimum 9 ft. vertical clearance will be provided below any overhead signage or utilities entering the site. Generally speaking, all utilities will be underground.

3.4.6. Elevators shall be sized to accommodate an 80 x 24 inch stretcher.

Supporting evidence: There are no elevators proposed for the project.

3.4.7. All structures are required to display the assigned street number. Numbers shall be clearly visible from the public right of way.

Supporting Evidence: The applicant will work with the City's Public Services Division to assign street addresses and numbering to meet City standards.



If you have any questions regarding the materials being submitted, please contact this office.

Sincerely,

#### STANTEC CONSULTING SERVICES INC.

Stephen R. Bushey, P.E. Associate Phone: (207) 887-3406 Fax: (207) 883-3376 stephen.bushey@stantec.com

Attachments – Amended Fire Protection Plan

c: Phineas Sprague, Jr. – New Yard LLC Clint Marshall

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UTILITY ABILITY TO SERVE REQUESTS



Stantec Consulting Services Inc. 482 Payne Road Scarborough Court, Scarborough ME 04074-8929

June 20, 2018

MEANS GROUP Portland Water District 225 Douglass Street P.O. Box 3553 Portland, ME 04104-3553

#### Subject: Canal Landing New Yard – Phase IV 400 West Commercial Street, Portland, Maine Ability to Serve Project with Water Supply & Wastewater Collection/Treatment

Dear Coordinator:

On behalf of Canal Landing, LLC, we would like to verify the Portland Water District's ability to provide domestic and fire supply water and wastewater capacity for their project at 400 West Commercial Street in Portland. This Phase IV project consists of a proposed 12,000 SF metal maintenance building that will include sprinkler service and domestic water supply. The building will be served from the existing supply main that crosses the rail tracks and serves the two existing buildings. The existing fire line supply meter is part of this service system. The project site is located on all or a portion of Map 59, Block A Lots 3 & 4; Map 60, Block F, Lots 1, 2, 3 & 4; Map 71, Block F, Lots 2, 4, 5 & 6.

Water demand for domestic consumption is expected to be similar to wastewater demands or as observed at the PYS center on Fore Street, water consumption will be slightly more than wastewater flow. We do not anticipate the use of irrigation at this time.

We are in the process of completing the Level III Site Plan Application for a submission to the City of Portland Planning Staff and would appreciate your response to the Planning Department.

Specifically, our office is interested in a letter from you indicating the following:

- The continued ability of the Portland Water District's facilities to serve the project.
- Any other factors which may affect the water and sewer service to this site.
- The ability of the collection system to accept this flow.
- Any connection service or impact fees.
- The ability of the Portland Water District to provide domestic and fire water supply to the new Phase IV 12,000 SF Maintenance Building.



MEANS Group June 20, 2018 Page 2

If you have any questions with regards to the information submitted, please contact our office.

Regards,

## STANTEC CONSULTING SERVICES INC.

Stephen R. Bushey, P.E. Associate Phone: (207) 887-3478 Fax: (207) 883-3376 Stephen.bushey@stantec.com

Attachment

c: Phin Sprague, Portland Yacht Services

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Stantec Consulting Services Inc. 482 Payne Road Scarborough Court, Scarborough ME 04074-8929

June 20, 2018

Mr. Brad Roland, PE City of Portland Public Works 55 Portland Street Portland, Maine 04104-3553

#### Subject: Canal Landing New Yard – Phase IV 400 West Commercial Street Applicant: Canal Landing, LLC Wastewater Capacity Application

Dear Mr. Roland:

Our office is working as a consultant to Canal Landing, LLC on the site planning and permitting associated with the proposed Phase IV of the Canal Landing New Yard Development. This Phase IV project consists of a proposed 12,000 SF metal maintenance building. The project site is located on all or a portion of Map 59, Block A Lots 3 & 4; Map 60, Block F, Lots 1, 2, 3 & 4; Map 71, Block F, Lots 2, 4, 5 & 6.

Water demand for domestic consumption is expected to be similar to wastewater demands or as observed at the former PYS center on Fore Street, water consumption will be slightly more than wastewater flow. We do not anticipate the use of irrigation at this time. Based on this modest amount of domestic flow, we trust that the City's wastewater collection and treatment system has adequate capacity to serve this project.

We are in the process of completing the Level III Site Plan Application for for a submission to the City Planning Staff and would appreciate your response to the Planning Department. If you have any questions regarding the materials being submitted, please contact this office.

Sincerely,

#### STANTEC CONSULTING SERVICES INC.

Stephen R. Bushey, P.E. Associate Phone: (207) 887-3406 Fax: (207) 883-3376 stephen.bushey@stantec.com

Enclosure

c: Phineas Sprague, Jr. – Canal Landing, LLC Clint Marshall

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# CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services, 55 Portland Street, Portland, Maine 04101-2991



Bradley Roland, P.E. Water Resources Division

Date: June 20, 2018

#### 1. Please, Submit Utility, Site, and Locus Plans.

Site Address:	400 West Commercial Street	59-A-3, 4
Proposed Use:	(Building E) 12,000 SF Boat Maintenance/Marine	Chart Block Lot Number: 60-F-1, 2, 3, 4 71-F-2, 4, 5, 6
<b>^</b>	•	Commercial (see part 4 below)XIndustrial (complete part 5 below)GovernmentalGovernmentalIndustrial (complete part 5 below)Other (specify)Industrial (complete part 5 below)

Clearly, indicate the proposed connections, on the submitted plans.

#### 2. Please, Submit Contact Information.

City Planner's Name: Matthew Gro	oms Phone: 207-874-8725
Owner/Developer Name:	Canal Landing LLC
Owner/Developer Address:	400 West Commercial Street
Phone: 207-774-1067	Fax: E-mail: phin@portlandyacht.com
Engineering Consultant Name:	Stephen Bushey, P.E.
Engineering Consultant Address:	Stantec, 482 Payne Rd, Scarborough, ME 04074
Phone: 207-887-3478	Fax: 207-883-3376 E-mail: stephen.bushey@stantec.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: \_\_\_\_\_20 employees at 15 gpd = 300 GPD Peaking Factor/ Peak Times: \_\_\_\_\_Not Applicable 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:	Not Applicable
Size of External Grease Interceptor:	
Retention Time:	
Peaking Factor/ Peak Times:	

Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet.

# 5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated:	Not Applicable	GPD
Do you currently hold Federal or State discharge permits?	Yes	No
Is the process wastewater termed categorical under CFR 40?	Yes	No
OSHA Standard Industrial Code (SIC):	(http://www.osha.gov/oshstats/sicser.html)	
Peaking Factor/Peak Process Times:		

Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps.

Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided, or attached, as a separate sheet.