

MEMORANDUM



TO: Bill Needelman, Planner
FROM: David Senus, P.E. & Ashley Auger, E.I.T.
DATE: November 27, 2012
RE: 40 West Commercial Street, Final Level III Site Plan Application

Woodard & Curran has reviewed the Final Level III Site Plan Application for Phase I of the Canal Landing Development at 40 West Commercial Street in Portland, Maine. The project proposes to construct a boat repair and maintenance yard, along with related marine uses over the course of multiple phases. Phase I will include construction of a 19,200 Square-Foot tension fabric building and associated utilities, concrete boat ramps along the shorefront, establishment of yard areas, and marine improvements.

Documents Provided By Applicant

- Final Level III Site Plan Application with cover letter and attachments dated October 31, 2012, prepared by DeLuca-Hoffman Associates, Inc., on behalf of New Yard, LLC.
- Conditional Use Application, dated November 2, 2012, prepared by DeLuca-Hoffman Associates, Inc., on behalf of New Yard, LLC.
- Engineering Plans, Sheets C-1.0 through C-1.4, C-2.0, C-2.1, C-3.1, C-4.1, C-6.1 through C-6.6, C-7.0, C-8.0 through C-8.5, C-9.0, C-10.0, & L-1.0, revised October 31, 2012, prepared by DeLuca-Hoffman Associates, Inc., on behalf of New Yard, LLC.

Comments

- 1) The Applicant has noted that the project is subject to review under the City's delegated review authority for Site Location of Development. Site Location of Development projects are required to meet the MaineDEP Chapter 500 Standards, including conformance with the Basic, General and Flooding Standards. In addition, Section 5 of the City of Portland Technical Manual requires that Level III development projects prepare and submit a stormwater management plan pursuant to the regulations of Maine DEP Chapter 500 Stormwater Management Rules, including conformance with the Basic, General, and Flooding Standards:
 - a) Basic Standards: Plans, notes and details have been provided to address erosion and sediment control requirements, inspection and maintenance requirements, and good housekeeping practices in accordance with Appendix A, B, & C of MaineDEP Chapter 500. As noted in the Site Plan application and the Erosion and Sedimentation Control Report, the project site has environmental considerations associated with a Voluntary Response Action Plan (VRAP). As part of the VRAP compliance, MaineDEP may require additional, specialized erosion & sediment controls associated with earth removal or remediation activities performed by the Applicant or by existing landowners. In addition, the MaineDEP and USACOE are reviewing the project for impacts associate with work within and in proximity to tidal wetlands as part of the Natural Resources Protection Act permit. We recommend including a condition of approval that acknowledges that state and federal review processes may require modifications to the plans, and that any modifications shall be identified and submitted for final review as part of the condition of approval compliance.
 - b) General Standards:
 - i) It is unclear how much new impervious surface is proposed for Phase I of this project from the "Project Data" sheet submitted as part of the Site Plan Application form, please clarify. Also, the Applicant references a water quality summary chart on Sheet C-9.0, however no chart indicating these values has been provided at this time.
 - ii) The Applicant is proposing a manmade pervious surface for much of the improved area of the site to meet the General Standard. The proposed manmade pervious surface does not comply



with the guidance provided in the MaineDEP BMP Manual (Section 7.7 of Volume III of the MaineDEP Stormwater BMP Manual). The pervious surface proposed by the Applicant includes a 3" to 6" surface layer of ¾" crushed stone over a layer of gravel. The surface layer of ¾" crushed stone is proposed to act as both the reservoir layer for the water quality storm event (1" storm) and the wearing surface for vehicle traffic. Without a means of retaining the stone at the surface, the stone material will shift from vehicle traffic and will vary in depth over time. MaineDEP does allow for the use of plastic grid pavers that can be infilled with crushed stone to limit the displacement of the stone surface. The Applicant should consider the use of the plastic grid paver or propose an alternate permeable manmade surface design that complies with the General Standards. In addition, the Boat Yard Surface Section detail on Sheet C-8.1 notes the use of geo-net between the crushed stone and the gravel. This detail includes a note stating "To Be Verified Appropriate by the Geotechnical Engineer of Record". We agree with the use of a geo-net in this application to limit the intermixing of crushed stone with the gravel base, and request that the note require a geonet at this interface.

- iii) The proposed manmade pervious surface detail indicates that the compacted subgrade will be prepared in accordance with the geotechnical report; however, it does not appear that a geotechnical report has been submitted at this time. Please include any geotechnical information that relates to preparation of the subgrade.
 - iv) Please provide additional details identifying surface preparation, materials of construction, and surface vegetation for the "Stormwater Management Areas" noted on C3.1.
 - v) Three "Washdown Collection" areas with "Washdown Collection Inlets" are proposed in proximity to the marine access ramps. Please provide additional information on these collection areas, including detailed grading for the washdown areas associated with inlet "G1" and inlet "F1", and information on the function and design of the inlets (Where do they discharge to? If they store water, what is their capacity and how frequently will they be cleaned/drained?).
- c) Flooding Standard: The Applicant is requesting a waiver from the flooding standard due to stormwater discharge to a tidal waterbody. Projects that discharge to the ocean are eligible for a waiver from the Flooding Standard. We are supportive of a waiver from the flooding standard for this project.
- 2) The Applicant proposes to manage stormwater through infiltration technologies such as manmade pervious surfaces and a vegetated depression/swale, with overflows for high storm events. Infiltration through the means of a manmade pervious surface does not result in any localized increase in infiltration to the subsurface beyond the existing site condition. Infiltration within the vegetated depression/swale, however, will result in an increased groundwater loading in a localized area of the site. Because portions of the site are regulated under the State's VRAP program, we request that the Applicant verify that infiltration of stormwater in these areas is acceptable to MaineDEP.
 - 3) The Stormwater Management Plan should include a stormwater inspection and maintenance plan developed in accordance with and in reference to Chapter 32 of the City of Portland Code of Ordinances, including reference to annual reporting requirements.
 - 4) The plans should include notes related to the size, slope, elevation and material for all stormwater drain pipes proposed on the project.
 - 5) The proposed 12"x24"x24" tee connection from "Overflow Structure D1" to the 24" RCP sewer on sheet C3.1 is not an acceptable means of connecting to the City's sewer/drain infrastructure. A connection of this size will require a manhole.