

## MEMORANDUM



**TO:** Jean Fraser, Planner  
**FROM:** David Senus, P.E. & Ashley Auger, E.I.T.  
**DATE:** October 9, 2013  
**RE:** Munjoy Heights, Preliminary Level III Site Plan Application

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Woodard & Curran has reviewed the Preliminary Level III Site Plan Application for the proposed infill residential development located at 79 Walnut Street in Portland, Maine. The project consists of the demolition of two structures and the development of 29 townhouse style residences. The project site is situated on a steep cross slope and will require significant earth work, grading, and retaining wall systems to construct the development as proposed.

### **Documents Reviewed by W&C**

- Preliminary Level III Site Plan Application and attachments dated September 27, 2013, prepared by Redfern Properties, LLC.
- Preliminary Boundary Survey, dated August 9, 2013, prepared by Nadeau Land Surveys on behalf of Redfern Properties, LLC.
- Engineering Plans, Sheets C-01, C-02, C-10, C-20, C-30, C-31, C-32, and C-33, dated September 24, 2013, prepared by Acorn Engineering, Inc. on behalf of Redfern Properties, LLC.

### **Comments**

- 1) The application is preliminary. As such, we anticipate that additional documents will be submitted with the final application, including design details and a Construction Management Plan. Woodard & Curran will perform a review of the Final Application upon receipt of those documents.
- 2) In accordance with Section 5 of the City of Portland Technical Manual, a Level III development project is required to 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. Future submittals should address the following:
  - a) Basic Standards: The Applicant should provide notes and details to address erosion and sediment control requirements, inspection and maintenance requirements, and good housekeeping practices in general accordance with Appendix A, B, & C of MaineDEP Chapter 500.
  - b) General Standards: The project will result in a net increase in impervious area of approximately 32,879 square feet. As such, the project is required to provide stormwater management features for stormwater quality treatment. The Applicant has noted that the intent is to provide an Underdrained Subsurface Sand Filter BMP to provide treatment for no less than 95% of the new impervious area, and 80% of the developed area. We anticipated that additional notes, details and calculations will be provided to allow us to review the design of this system. In addition, the subsurface stormwater management system is proposed on a steep fill slope; as such, the geotechnical engineer should provide a review of the system design relative to potential impacts on slope stability, foundation drainage, and potential for break-out of infiltrated stormwater on the downhill side of the system.
  - c) Flooding Standard: The project will result in a net increase in impervious area of approximately 32,879 square feet. As such, the project is required to provide stormwater management features to control the rate of stormwater runoff from the site, such that the peak rate of runoff from the post-development site will not exceed that from the pre-development site.
- 3) The Stormwater Management Plan will need to include a stormwater inspection and maintenance plan developed in accordance with and in reference to MaineDEP Chapter 500 guidelines and Chapter 32 of the City of Portland Code of Ordinances.
- 4) The Portland Water District has noted several Conditions of Service regarding the development's connection to the Public water main; at this time additional information regarding these conditions (i.e.



easements for the water main extension) has not been provided. This information, along with updates on other utility coordination, should be included as part of future submittals.

- 5) Final plans must be stamped by a professional engineer (Section 14-527, sub-section (e) of the City of Portland Land Use Ordinance).
- 6) Per Section 13 of the City's Technical Manual, the Applicant is required to submit a Boundary Survey that has been Stamped by a Maine Licensed Professional Surveyor. At this time, only a preliminary boundary survey has been received. Additionally, the existing conditions plan, Sheet C-02 has not been received at this time.
- 7) The Preliminary Geotechnical Report has noted that the proposed grading at the site will require the construction of retaining walls near both the east and west property lines, and that the walls are estimated to be up to 25-feet high. The final submission should include specific details for these proposed walls, in addition to any associated assumptions and geotechnical design criteria.
- 8) The Applicant has noted on the Preliminary Site Plan Checklist that state and/or federal approvals are "Not Applicable"; however, the Project Data Sheet indicates that the proposed project will disturb over one acre. Disturbances over one acre require filing a Notice of Intent to Comply with the Maine Construction General Permit with the MaineDEP. Copies of this notification submittal should be forwarded to the City for the project record.