

MEMORANDUM



TO: Jean Fraser, Planner
FROM: David Senus, P.E.
DATE: May 5, 2014
RE: 97 Cumberland Ave Multi-family, Level III Site Plan Application

Woodard & Curran has reviewed the Preliminary Level III Site Plan Application for the proposed multi-family building located at 97 Cumberland Ave in Portland, Maine. The project consists of creating a “high-performance” 5 unit multi-family building on an infill redevelopment lot along Cumberland Ave in Portland.

Documents Reviewed by W&C

- Level III Preliminary Site Plan Application and attachments submitted to the City Planning Office in April 2014, prepared by GO Logic Architecture and Construction on behalf of Peter Dugas.
- Engineering Plans, Sheets 1-5, dated March 28th and April 1st, 2014, prepared by Sebago Technics on behalf of Peter Dugas.

Comments

- 1) The application is preliminary. As such, we anticipate that additional documents will be submitted with the final application, including confirmation of capacity to serve the development from utilities and a Construction Management Plan. Woodard & Curran will perform a review of the Final Application upon receipt of those documents.
- 2) The Applicant should clarify whether the project will result in an increase of approximately 2,900 square feet of impervious area, as stated in the application form and the text of the stormwater management plan, or approximately 2,300 square feet as noted in the treatment calculations.
- 3) In accordance with Section 5 of the City of Portland Technical Manual, a Level III Site Plan project is required to submit a stormwater management plan pursuant to the regulations of MaineDEP Chapter 500 Stormwater Management Rules, including conformance with the Basic, General, and Flooding Standards. We offer the following comments:
 - a) Basic Standards: The Applicant has provided a plan, 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. In addition to the notes and details provided in the application, the plan should include a location for the stabilized construction entrance and a note stating that the street Right-of-Way shall be kept clean from dust, tracked soil/mud, and construction debris and swept as necessary or as requested by the City of Portland to minimize dust and sediment originating from the site.
 - b) General Standards: The project will result in an increase in impervious area of approximately 2,300 square feet (Applicant to confirm). As such, the project is required to include stormwater management features for stormwater quality control. The Applicant has proposed to treat stormwater runoff via an infiltration basin at the rear of the property. The proposed approach provides an acceptable means of meeting the General Standards, pending response to the remaining comments contained herein.
 - c) Flooding Standards: The project will result in an increase in impervious area of approximately 2,300 square feet (Applicant to confirm). As such, the project is required to include stormwater management features to control the rate of stormwater runoff from the site. The Applicant has proposed to manage the rate of stormwater runoff via an infiltration basin at the rear of the property. The proposed approach provides an acceptable means of meeting the Flooding Standard, pending response to the remaining comments contained herein.
- 4) The stormwater inspection and maintenance plan for the proposed stormwater management system should reference the annual inspection and reporting requirements contained in Chapter 32 of the City



of Portland Code of Ordinances, and should include an inspection checklist developed for the stormwater system(s) including a maintenance schedule and inspection criteria.

- 5) The proposed infiltration basin is located partially within the footprint of the former house structure. Has the building foundation been fully demolished and removed. What are the drainage characteristics of the fill materials that have or will be utilized in this area? Has the Applicant performed a test pit or boring to evaluate the soil characteristics or infiltration capacity? How deep is bedrock at this location?
- 6) The Applicant proposes a rip-rap spillway to manage overflow from the proposed infiltration basin. Overflow from this spillway will drain west, below a stockade fence, across a fenced dumpster area on the 7-Eleven property, and across the 7-Eleven parking lot to the Washington Avenue drainage collection system. The applicant notes that this route is similar to the pre-development drainage pattern (existing condition); however, a review of the HydroCAD model indicates that more area will be directed to this location in the post-development condition, and although the infiltration basin will provide minor detention, the model predicts an increase in runoff rate at this location (from the spillway) in the post-development 10- and 25-year storm events. The drainage design should be revisited to eliminate directing overflow onto the neighboring property, unless the Applicant obtains drainage easements from N/F Ginn Portland LLC and modifies the adjacent fence and dumpster/parking area to accommodate drainage from the site. The Applicant should propose an alternative means of managing overflows from the infiltration basin.
- 7) How will roof drainage be managed from the proposed building?
- 8) The existing site includes a utility pole that provides overhead service (presumably both electrical and telecommunications) to buildings on three adjacent properties. The plan calls for eliminating this pole and the associated existing overhead services; however, it does not address how new services will be provided to all adjacent properties, specifically the 7-Eleven store.
- 9) The Grading and Utility Plan (Sheet 3 of 5) proposes grading well onto the lot that is N/F Kristine McCarthy (93-95 Cumberland); however, no finish surface is specified and it is unclear if the Applicant has rights to perform this work.