Attachment L.1

Stormwater Management Report
133 York Street
Portland, Maine

June 19, 2013

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STORMWATER MANAGEMENT REPORT
133 YORK STREET
PORTLAND, MAINE

June 19, 2013

Project Description:

This project is the development of a 7,483 sq. ft. property located off York Street to support a 6 unit residential structure. This structure will consist of three floors of living space over an open floor for parking. The development will remove the existing two family structure.

The approvals required include site plan and subdivision approvals from the City of Portland.

Surface Water:

The site is in the Casco Bay Water Shed. It drains to the York Street stormdrain system.

Flooding:

The site is not in a FEMA Mapped Flood Zone.

Ground Cover Topography and Soils:

The site slopes from the north side at elevation 53 down to York Street at elevation 38. This is approximately a 10% slope.

This has been fully developed for many years. The underlying soils are mapped as HIB on the Cumberland County Medium Intensity Soil Map. The soils are moderately well drained.

There are no soil considerations on site that can not be overcome by standard engineering and construction techniques.

Methodology:

This stormwater analysis was performed using HydroCad Software based on TR-55 modeling conditions. This model requires assumptions as to the land cover, slopes and soils. These are enhanced by the topography mapping, soils mapping, and on-site observations. The flows were determined using a Type III

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coastal storm and rainfall totals for the 24 hour period of 3" for a 2 year storm, 4.7 for a 10 year storm, 5.5" for a 25 year storm and 6.7 " for a 100 year storm. These data are published in the manual for Stormwater Management for Maine: Best Management Practices, published by the Maine Department of Environmental Protection.

Proposed BMPs:

This project will be constructed in the fall of 2013 and winter of 2014. It will require wintertime erosion control methods. All disturbed areas will be stabilized with landscaping or paving at the completion of the project.

Water Quality:

This project will create a small amount of additional impervious surface. To treat the stormwater from this area the project will utilize a tree filter system. The water from the roof and paved area will be directed to the tree filter located adjacent York Street. The discharge from the tree filter will be to the York Street stormdrain system.

Stormwater Quantity:

This project is located at the base of the hill on York Street. A visual review of the area above the site indicated an area that drains through this site. The drainage flow paths have been modified by the buildings, fences, and driveways. D1.1 shows the approximate boundaries of those drainage areas.

Currently the building at 127-129 York Street has water issues in the basement and bares the brunt of the surface water off this site and from above. The plan for the redevelopment is to minimize the flow going in that direction.

The project will capture the flow in the roof drains and a catch basin on the east side and convey it to York Street. The surface water flow from the parking area will be directed via a curb to the tree filter near York Street.

This should improve the surface drainage impacting our neighbors.

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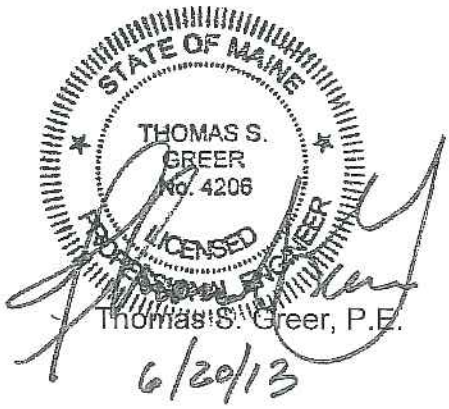
Conclusions:

The stormwater flow from this site will be treated in a tree filter system and collected in a stormdrain system connected to the York Street stormdrain, improving the drainage leaving the site. This project will not have an adverse impact on downstream properties or environmental system as a result of stormwater runoff.



Thomas S. Greer, P.E.

6/20/13

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APPENDIX A

PRECIPITATION VALUES, ROUGHNESS COEFFICIENTS

Submitted + available for reference at the P.B. Meeting