
150 Riverside Street - Preliminary Traffic Comments

Tom Errico <thomas.errico@tylin.com>

Thu, Oct 18, 2018 at 1:57 PM

To: Christian Roadman <croadman@portlandmaine.gov>

Cc: Keith Gray <kgray@portlandmaine.gov>, Bruce Hyman <bhyman@portlandmaine.gov>, Jeremiah Bartlett <JBartlett@portlandmaine.gov>, "Jeff Tarling (JST@portlandmaine.gov)" <JST@portlandmaine.gov>

Hi Christian – I have reviewed the application materials and offer the following preliminary traffic comments.

- The Applicant has conducted a trip generation estimate and the project is not expected to generate a significant number of new vehicle trips. I concur that the project will not have a significant impact on area vehicle traffic operations. A traffic impact study is not required.
- Given traffic conditions on Riverside Street, the Applicant is proposing to restrict site movements to right in/out only. I am concerned about the geometric layout of the driveway and making illegal movements difficult. It is recommended that the driveway configuration be modified to achieve the objective of restricted movements.
- A sidewalk connection to the building from the Riverside Street sidewalk should be provided.
- An esplanade separating the sidewalk from the roadway (similar condition exist to the north), should be considered.
- The Applicant has noted pavement moratorium restrictions and this issue will need to be coordinated with DPW.
- The Applicant has provided a Construction Management Plan. Greater detail is required as it related to lane closures on Riverside Street and sidewalk closure.
- It is my understanding that the parking lot design will be revised. I would note that parking stall size and aisle width under the current layout requires formal waiver requests.

If you have any questions, please contact me.

Best regards,

Thomas A. Errico, PE

Senior Associate

Traffic Engineering Director

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"One Vision, One Company"



Comments

The Applicant submitted a Wastewater Capacity Application in March of 2018; the response confirming ability to serve the proposed development should be submitted upon receipt.

The Applicant should note that the new sidewalk proposed along Riverside Street should comply with the City's Standard Bituminous Sidewalk detail (Figure I-12 of the City's Technical Manual). The details should be revised accordingly for work within the Right-of-Way.

The Applicant has indicated on the submission checklist that evidence of state or federal approvals do not apply to the project; however, the project will disturb over an acre and as such will require a Construction General Permit from the MaineDEP. A copy of the authorization to proceed under the Construction General Permit should be provided to the City upon receipt.

The existing conditions plan shows a sewer line along the northern portion of the parcel; however, this sewer line is not shown on the proposed grading and utility plan and it is not specified for removal or abandonment. The Applicant should clarify the intent for the existing sewer line and verify whether it will conflict with proposed storm drain infrastructure.

The plans indicate that several existing drainage structures will be abandoned or reused as part of the project, but it is unclear where existing drainage structures flow to or from and what purpose they serve or whether they will conflict with the proposed infrastructure. The Applicant should clarify and field verify components of the system as necessary. We note the following specific structures: (1) Existing DMH 1241 is shown with only one pipe inlet/outlet, and it is unclear whether the existing drainage system associated with the structure will conflict with the proposed drainage system; (2) There is an existing catch basin that has not been field verified and does not show any inlets or outlets; it is unclear whether this catch basin will be abandoned or demolished or whether the existing drainage system associated with the structure will conflict with the proposed drainage system; (3) CB 1086 will be modified by plugging the existing inlet and installing new inlets and outlets, with the new outlet connecting to an existing storm drain that is also not shown on the plans; (4) The Grading and Utility Plan indicates that existing CB 1435 should be abandoned; however, the catch basin is located within the proposed parking lot area, which will be re-graded. The Applicant should clarify how this structure will be abandoned.

Several storm drains are proposed with less than 1.5-feet of cover; precast drainage structures typically require at least 1.5-feet of cover in order to drill the holes for the storm drain inlets/outlets. The Applicant should verify that the precast drainage structures can be constructed as designed. Additionally, the Applicant should clarify what provisions have been made for frost conditions for storm drain pipes with less than three feet of cover.

The Applicant is proposing to connect to existing CB 1433, which appears to be located within the City Right-of-Way. Storm drain pipes are not permitted to be connected into City of Portland catch basins per the City of Portland Technical Manual, Section 2.7.8. The Applicant should propose an alternate means of storm drain connection or work with DPS to determine if the proposed approach is acceptable.

The plans should specify proposed locations and details for catch basin inlet protection measures.

The HydroCAD model indicates that the roof runoff from the new building will discharge directly to the Riverside Street drainage system, but the plans do not appear to specify a roof drain system; the Applicant should clarify how roof runoff from the new building will be collected and discharged from the site.



The “decorative stone spreader” detail refers to a “focal point inlet structure”; the Applicant should clarify where this “decorative stone spreader” detail applies and what is meant by the “focal point inlet structure”.

The HydroCAD model should be revised as necessary to address the following comments to confirm that the Flooding Standard will be met: (1) The Pre-Development Watershed Map shows the Time of Concentration Path for Subcatchment 2S going through the existing building; the Time of Concentration should be adjusted to go around the building; (2) The dimensions and elevations utilized to model the storage, the elevations of the outlets, and the size of the overflow drains associated with the FocalPoint systems do not appear to agree with the dimensional data provided on the plan detail sheet; the Applicant should revise as necessary to ensure that the model and the plans are consistent; (3) It appears that the HydroCAD model is accounting for storage within the FocalPoint filter media; this is not typical and should be removed.

The Applicant is proposing a buffer to provide stormwater treatment; per Chapter 5 of Volume III of the MaineDEP Stormwater BMP Manual. Based on NRCS web soil survey data, the proposed buffer is located within Hydrologic Soil Group C/D; soils that in their natural condition are in group D are assigned to dual classes. Meadow buffers are not allowed on Hydrologic Soil Group D soils. A forested buffer is allowed if the D soils in a buffer are not wetland soils. In addition, the buffer sizing calculations indicate that insufficient berm length will be provided. The proposed meadow buffer is not suitable for use unless the Applicant has a soil investigation completed to provide verification that soil conditions are adequate to meet DEP requirements, or provides documentation that the DEP finds the location to be suitable. If a buffer is to be used, it must be protected from disturbance by deed restrictions and covenants, and the Inspection, Maintenance, and Housekeeping Plan should include provisions for the maintenance criteria specified in the BMP manual.

The Applicant is proposing several FocalPoint systems to provide stormwater treatment; per the MaineDEP Approval Letter for FocalPoint systems dated February 2, 2017, the following comments should be addressed:

- (1) A HydroCAD model must demonstrate that the entire volume of a 0.95 inch Type III 24-hr storm is treated prior to activation of the bypass/overflow; a HydroCAD report demonstrating this should be provided. A HydroCAD report should also be provided demonstrating that the Cultech chamber system has been appropriately sized for the 1-year storm event.
- (2) The ratio of the surface area of the filter media bed in square feet to the ponding volume in cubic feet must be no less than 1 to 5.
- (3) The FocalPoint system must be placed in-line with a subsurface chamber-based treatment row approved by the Department such that both the treated discharge and the bypass discharge from the FocalPoint system drain to the treatment row; FocalPoint-1 drains to FocalPoint-2 rather than its own treatment row.
- (4) It does not appear that sufficient storage will be provided for the required water quality volume downstream of the FocalPoint and treatment row.

The project is located within the Capisic Brook Watershed, which is identified as an Urban Impaired Stream by the Maine DEP. Section 5 of the City of Portland Technical Manual requires that all development within the Capisic Brook watershed, except single and two family homes, comply with the Urban Impaired Stream Standard pursuant to MaineDEP Chapter 500 Rules. To meet the Urban Impaired Stream standard, the Applicant must either pay a compensation fee or mitigate project impacts by treating, reducing, or eliminating an off-site or on-site pre-development impervious stormwater source.

The Inspection, Maintenance, and Housekeeping Plan should include provisions for the requirements of Chapter 32 of the City of Portland Code of Ordinances and maintenance requirements associated with the Cultech chamber system.

A stormwater maintenance agreement with the City of Portland will be required.



PLAN CORRECTIONS REPORT PL-000310-2018 FOR CITY OF PORTLAND

PLAN ADDRESS: 150 Riverside St
Portland, Maine 04103

PARCEL: 267 A006001

APPLICATION DATE: 08/31/2018

SQUARE FEET: 0.00

DESCRIPTION: The proposed project consists of the redevelopment of a 1.37-acre parcel at 142 Riverside Street and a 2.23-acre parcel at 150 Riverside Street. The 150 Riverside Street parcel is currently the site of used furniture store. The existing building will be removed to allow for the construction of a three-story, climate controlled, self-storage facility. The remaining portion of this parcel and the parcel at 142 Riverside Street will be used to provide parking and roadway areas to service the self-storage building.

EXPIRATION DATE:

VALUATION: \$0.00

CONTACTS	Name	Company	Address
Agent/Representative	James Seymour	Sebago Technics Inc.	75 John Roberts Rd., Suite 1A South Portland, ME 04106

Comments & Corrections Required

City Arborist Jeff Tarling

Comment(s)/ Recommendation(s):

The proposed landscape plan contains a well thought out design with a good selection of plant material. Overall the proposed landscape improves the site. Parking lot islands benefit from having curbing to protect the plant material.

Civil Engineering - Third Party Reviewer Lauren Swett

v.1.00 - Not Resolved

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Fire

Pool Fire

Planning

Christian Roadman

Traffic - Third Party Reviewer

Tom Errico

Transportation/Planning

Bruce Hyman

