# 24: Water Quality, Stormwater Management and Erosion Control (14-526 (b) 3 a)

Please refer to the Stormwater Management Plan by Sebago Technics, Inc. included in this section. As this amendment proposes roof top to replace existing pavement, no change to the stormwater management system is required.

## STORMWATER MANAGEMENT PLAN

# Pack Edge Freezer Addition Portland, Maine

## I. Introduction

This Stormwater Management Plan has been prepared to address the potential impacts associated with this project due to the proposed modification in stormwater runoff characteristics. The stormwater management controls that are outlined in this plan have been designed to best suit the proposed development and to comply with applicable regulatory requirements.

## II. Existing Conditions

The proposed site is located on 1.61 acres of land at 340 Presumpscot Street in the City of Portland. The existing Pack Edge Facility occupies the site with associated parking and loading dock areas. Landscaped areas occupy the perimeter of the property.

# Land Cover

The site is currently developed and consists of an impervious building, parking and loading dock areas and associated landscaping.

- A. Site Topography: Slopes on the site are moderate except along the northwest property line. The site generally drains easterly to a series of catch basins which outlet to a stream which crosses Presumpscot Street just to the south of the site.
- B. Surface Water Features: A small stream runs just southerly of the project site.
- C. Soils: Soil characteristics were obtained from the NRCS Web Soil Survey for Cumberland County. Soils identified on the site (or within close proximity) are identified as Hollis, which has a hydrologic soil group of "C".

#### III. Proposed Development

Pack Edge proposes to construct a 4,536 square foot addition to the rear of the facility for freezer space. The building addition is proposed within an area of existing pavement such the same amount of impervious area will occupy the site after development. The existing stormwater infrastructure will be modified to relocate an existing catch basin from the proposed building footprint.

The roof of the proposed addition will slope to the west such that the runoff will flow off the roof, onto the pavement and into the catch basins. AS the roof is replacing existing pavement, no additional treatment is warranted.

A. Alterations to Land Cover: The proposed redevelopment of the site will consist of the building addition within existing paved areas.

### IV. Downstream Ponds and Waterbodies

Surface runoff from the site outlets to a small stream that runs just southerly of the property and crosses Presumpscot Street

# V. Regulatory Requirements

A. City of Portland, Maine: The proposed development is classified as a Level II Development and must comply with Section 5 of the City of Portland's Technical Manual stating that this development "shall be required to submit a stormwater management plan pursuant to the regulations of Maine DEP Chapter 500 Stormwater Management Rules, including Basic, General and Flooding Standards". The Maine Department of Environmental Protection (Maine DEP) Chapter 500 rules describe stormwater management requirements for new development projects.

As the proposal development leads to no increase in impervious area, and as roof is proposed to replace pavement, no additional stormwater management is required.

# VI. Stormwater Management BMPS

No additional stormwater management BMPs are proposed.

# VII. Peak Flow Analysis

This section has been prepared to discuss the proposed modifications to peak flow rates as a result of the development.

- A. Pre-development: The entire site drains to a series of catch basins on the property which convey runoff to the stream crossing at Presumpscot Street.
- B. Post-development: In the post-development condition, the general drainage pattern on the site remains the same. As the same amount of impervious area will occur after development, no increase in peak rates of run-off should occur.

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# VIII. Conclusions

The redevelopment of the site will consist of constructing a freezer addition within an area of existing pavement. The proposed improvements will result in no change to the amount of impervious area on the site

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