# Long Term Operation & Maintenance Plan

It is the intent of this Operation and Maintenance Plan to identify the areas of this site that need special attention and consideration, as well as implementing a plan to assure routine maintenance. By identifying the areas of concern as well as implementing a frequent and routine maintenance schedule the site will maintain a high quality of stormwater runoff.

**Annual Reporting Requirements**

The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, provide a completed and signed certification to City of Portland Department of Public Services (DPS) in a form provided by DPS, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they require maintenance or repair, including the record of the deficiency and corrective action(s) taken.

## Contact/Responsible Party

72 Munjoy Street Condominium Association

72 Munjoy Street

Portland, ME 04101

(Note: The contact information for the Contact/Responsible Party shall be kept current. If ownership changes, the Operation and Maintenance Plan must be transferred to the new party.)

## Maintenance Items

Maintenance of the following items shall be recorded:

* Litter/Debris Removal
* Landscaping
* Catch basin/Yard drain Cleaning
* Porous Pavement Vacuum/Sweeping
* Underdrained Soil Filter Cleaning and Maintenance

The following maintenance items and schedule represent the minimum action required. Periodic site inspections shall be conducted and all measures must be maintained in effective operating condition. The following items shall be observed during site inspection and maintenance:

* Inspect vegetated areas, particularly slopes and embankments for areas of erosion. Replant and restore as necessary
* Inspect catch basins for sediment buildup
* Inspect site for trash and debris

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| Overall Site Operation and Maintenance Schedule | | |
| **Maintenance Item** | **Frequency of Maintenance** | **Operation** |
| Litter/Debris Removal | Weekly | Management Company |
| Landscaping  - Landscaped islands to be maintained and mulched. | Maintained as required and mulched each Spring | Management Company |

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| **Porous Concrete Inspection/Maintenance Requirements** | | |
| **Inspection/**  **Maintenance** | **Frequency** | **Action** | |
| Inspect for Signs of Deterioration and Spalling | Annually | - Repair as required | |
| Monitor for proper Infiltration | Periodically | - Inspect the area for infiltration rate.  - If required: hire qualified professional to assess the condition of the facility to determine measures required to restore the filtration function, including but not limited to removal of accumulated sediments or reconstruction of the filter. | |
| Clean Porous Asphalt | 2 times annually | - Vacuum Sweeper to clean entire porous concrete driveway area (Note: power washing may be required on heavily soiled areas to dislodge particles prior to sweeping/vacuuming). | |

### Disposal Requirements

Disposal of debris, trash, sediment and other waste material should be done at suitable disposal/recycling sites and in compliance with all applicable local, state and federal waste regulations.

### Snow & Ice Management for Standard Concrete and Sidewalks

Snow storage areas shall be located such that no direct untreated discharges are possible to receiving waters from the storage site (snow storage areas have been shown on the Site Plan). Curb cuts shown on the plan shall remain free of snow and ice buildup. Salt storage areas shall be covered or located such that no direct untreated discharges are possible to receiving waters from the storage site.

### Snow & Ice Management for Porous Concrete

* Maintenance personnel shall meet with UNHSC for the latest guidance on snow and ice management for porous concrete areas.
* Maintenance personnel shall be properly trained as to the locations of porous concrete and operations and maintenance requirements for the porous concrete.
* The porous concrete areas shall be plowed after every storm in accordance with standard plowing operations for standard pavement and as required to maintain safe conditions. Special plow blades may be used to prevent scarring but are not necessary (raised blade plowing is not recommended).
* The UNHSC has documented up to a 75% net salt reduction for de-icing measures over the course of a winter season. However, salt reduction is site dependent due to pavement shading, hours of operation, storm intensities, temperatures, etc. Salt/de-icing chemicals shall be applied as needed to maintain a safe and accessible site at all times. The following recommendations for salt/de-icing chemical application may be applicable:
  + Additional salt/de-icing chemical application may be needed during challenging storm events, particularly mixed precipitation events.
  + Salt/de-icing chemical application prior to storm events may be required to maintain a safe and accessible site during the first part of a storm.
  + Salt/de-icing chemical application during and after storm events may be required to control compact snow and ice not removed by plowing.
  + Salt/de-icing chemical reduction may be realized between storm events depending on black ice formation.
* Sand application is not recommended for porous concrete areas or areas that drain to porous concrete areas due to an increased maintenance burden.

### Annual Updates and Log Requirements

The Owner and/or Contact/Responsible Party shall review this Operation and Maintenance Plan once per year for its effectiveness and adjust the plan and deed as necessary.

A log of all preventative and corrective measures for the stormwater system shall be kept on-site and be made available upon request by any public entity with administrative, health environmental or safety authority over the site.

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| **Stormwater Management Report** | | | | | | |
| **Project Name** | | **72 Munjoy St, Portland, ME** | | | | |
| **BMP Description** | **Date of Inspection** | **Inspector** | **BMP Installed and Operating Properly?** | **Cleaning / Corrective**  **Action Needed** | **Date of**  **Cleaning / Repair** | **Performed By** |
|  |  |  | ❑Yes ❑No |  |  |  |
|  |  |  | ❑Yes ❑No |  |  |  |
|  |  |  | ❑Yes ❑No |  |  |  |
|  |  |  | ❑Yes ❑No |  |  |  |
|  |  |  | ❑Yes ❑No |  |  |  |
|  |  |  | ❑Yes ❑No |  |  |  |
|  |  |  | ❑Yes ❑No |  |  |  |
|  |  |  | ❑Yes ❑No |  |  |  |
|  |  |  | ❑Yes ❑No |  |  |  |
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|  |  |  | ❑Yes ❑No |  |  |  |