

# **STORMWATER MANAGEMENT OPERATION & MAINTENANCE PLAN**

## **Parties Responsible for Operation and Maintenance**

The OWNER will be responsible for the operation and maintenance of the on-site SWM system including the storm drainage collection and conveyance system, infiltrating swales, and the infiltration chambers. The OWNER will sweep the paved areas on an annual basis and will clean all catch basins, infiltration swales, and infiltration chambers bi-annually as part of its normal maintenance schedule.

## **Inspection and Maintenance Schedule**

The attached table outlines a typical inspection and maintenance schedule for the various elements of the SWM System. Note: specialized systems may have additional requirements. The OWNER is responsible to ensure all applicable maintenance requirements are met.

## **Routine and Non-Routine Maintenance Tasks**

Routine inspection and maintenance tasks to be undertaken are described on inspection and maintenance schedule. These tasks are described in more detail below.

1. Sweeping: Sweeping with mechanized cleaning equipment on an annual basis.
2. Catch Basin Cleaning: Catch basins and Infiltration Chambers shall be cleaned on a bi-annual basis.
3. Infiltration Swale Inspection and Maintenance: The infiltration swales have been designed to minimize maintenance requirements. The most important maintenance will take place during the first year after construction, to ensure proper establishment of vegetation. The swale embankments and side slopes must be properly maintained to ensure long term stability. The embankments, side slopes, and swale bottoms must establish a healthy ground cover to avoid erosion and to promote infiltration. The embankments and side slopes should be inspected annually for adequate ground cover and presence of shrubs and saplings. Bare spots should be repaired and planted with suitable ground cover material. Saplings and shrubs should be removed.

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4. Detention Basin and Pocket Wetland Inspection and Maintenance: Wet Retention Ponds and Detention Basins shall be inspected annually to insure clear passage of both inlet and outlet. The outlet structures should also be inspected for potential settlement, erosion, cracking, tree growth, damage to the emergency spillway, sediment accumulation around the outlet, inadequacy of the inlet/outlet erosion control measures, and erosion within the pond and banks. The upper-stage, side-slopes, embankment, and emergency spillway of each Detention Basin should be mowed annually. Any tree saplings should also be removed. Accumulated sediment in both the Wetlands and Splash Pad should be removed as necessary and at least once every 10 years. Disturbance of Pocket Wetlands should be avoided and should be replanted in the event that they are. Materials shall be removed by a licensed contractor, who shall be responsible for removing the material and disposing of the material off-site in a manner consistent with all local, state and federal regulations.
5. Sediment Trap / Separator Inspection and Maintenance: The sediment traps should be inspected annually for sediment accumulation. Any sediment accumulations in excess of half the unit's depth shall be removed. Material shall be removed by a licensed contractor, who shall be responsible for removing the material and disposing of the material off-site in a manner consistent with all local, state and federal regulations.
6. Sub-Surface Infiltration System: Inspection and Maintenance: Sub-surface infiltration systems should be inspected annually for proper function and sediment accumulation. Accumulations of sediment and/or materials that negatively impact the infiltration capacity of the system shall be removed and disposed of by a licensed contractor, in a manner consistent with all local, state and federal regulations.
7. Emergency Spill Response Preparedness: A Hazardous Materials Spill Response or Spill Prevention Control and Countermeasure (SPCC) Plan is required and must be kept on-site at all times as per 974 CMR 4.08(7). The OWNER is responsible to ensure the plan is reviewed by all maintenance personnel and updated as necessary. Emergency spill kits must also be maintained (monitor shelf life of items in kit) on-site and readily available at all times.

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## **SWM Inspection Maintenance Tasks**

<b>SWM System Element</b>	<b>Inspection/Maintenance Task</b>	<b>Frequency</b>
Sweeping	Paved areas to be swept with mechanized sweeping equipment.	Annually Or as Necessary
Catch-basin and Infiltration Chamber Cleaning	Accumulated sediment to be removed from catch basins sumps and infiltration chambers.	Annually Inspect Clean as Necessary
Infiltration Swales	Inspect embankments, side slopes and swale bottoms for adequate ground cover. Remove tree saplings and shrubs Remove accumulated sediments at entrance to forebays as necessary.	Annually
Detention Basins / Pocket Wetlands	Inspect Outlet Structure for accumulated debris or blockage. Remove as necessary	Annually
	Inspect side slopes for adequate ground cover. Remove Unwanted saplings & shrubs.	Annually
Sediment Traps / Separator	Traps to be inspected.	Annually
	Accumulated sediment to be removed.	Whenever sediment has collected to a depth of one half the unit's depth.