

Consulting Engineers and Scientists

Bishop Street Stormwater Inspection and Maintenance Plan

Inspection and Maintenance Contract:

Long-term inspection and maintenance by a DEP approved stormwater maintenance inspector shall be regularly provided under a five-year binding inspection and maintenance contract that must be renewed prior to contract expiration. A legal agreement shall be established with responsibility for inspection and maintenance and should list specific maintenance responsibilities (including timetables) as well as provide for funding for the long-term inspection and maintenance. Debris and sediment buildup shall be removed from the forebay, basin, stone filter, or paver system as needed.

Inspection schedule:

During the first year of operation, filtration BMPs shall be inspected twice annually and following major storm events. Thereafter, the filter should be inspected every six months to ensure that it is draining within 48 hours following a 1-inch storm. Additionally, a storm that fills the system to overflow should be monitored to confirm in drains in no less than 36 hours and within 60 hours.

Vegetated Soil Filter:

Maintenance criteria for the vegetated soil filter are as follows:

- Debris and sediment buildup shall be removed from the vegetated soil filter system as needed. The removed sediments should be disposed in an appropriate manner.
- Mowing of the grassed basin can occur semi-annually to a height of no less than 6 inches. If mowing is desired only hand-held or push-mowers shall be used (no tractors).
- Any bare areas or erosion rills shall be repaired with new media filter or sandy loam then seeded and mulched. Fertilization of the filter area should be avoided unless absolutely necessary to establish vegetation.
- Harvesting and pruning of excessive growth will need to be done occasionally. Weeding
 to control unwanted or invasive plants may also be necessary. Add new mulch only as
 necessary.

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- Maintaining good grass cover will minimize clogging with fine sediments and if ponding exceeds 48 hours, the top of the filter bed must be tilled to reestablish the soil's filtration capacity.
- Should water pond on the surface of the filter bed for longer than 72 hours, the top several inches of the filter shall be replaced with fresh material. The removed material shall be disposed properly.

R-Tank Stormwater Detention:

Inspection and Maintenance of the R-Tank shall be in accordance with the manufacturer's recommended practices to provide the performance required by the design. The R-Tank system includes inspection ports and maintenance ports, each of which has a cover at the surface. A visual inspection of all ports should be used to determine the depth of sediments deposited in the R-Tank system. The system should be back-flushed once the sediment accumulation has reached the manufacturer's limits. Once removed, sediment-laden water must be disposed of properly.

Roof Dripline Filter:

The roof dripline filter bed is part of the stormwater management plan and requires maintenance similar to the vegetated soil filter basin. Debris and sediment buildup shall be removed from the stone filter bed system as needed and shall be properly disposed. The filter bed must not be paved over or altered in any way.

Manmade Pervious Surfaces:

Long-term inspection and maintenance by a DEP approved stormwater maintenance inspector shall be regularly provided under a five-year binding inspection and maintenance contract that must be renewed prior to contract expiration. Maintenance criteria for manmade pervious surfaces are as follows:

- Debris and sediment buildup shall be removed from the paver system using a vac truck as needed and shall be disposed properly.
- Remove sediment when the surface infiltration rates of more than 75% of the surface area fall below 10% of the post-installation verified surface infiltration rate.
- Remove sediment when surface ponding remains for more than 24 hours after the storm event in an area larger than 10 square feet.
- Restrain vehicles with muddy wheels from accessing pervious pavement areas.
- Limit salt use for deicing and do not use sand.

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- Remove leaves and organic debris in the fall.
- Sweep, vacuum and/or pressure wash pavement twice annually at a minimum.

Inline Roof Drain Filter:

The maintenance of inline roof drain filters shall be in accordance with the manufacturer's recommended requirements to ensure the performance requirements are met. At a minimum, it is recommended that the filters are inspected and cleaned twice per year. Replace the filter cartridge annually. All debris and spent filter material shall be properly disposed.