

Site 12 – Terraced Bioretention
Operation and Maintenance Checklist
 Roger Williams Park - Providence, RI

Date:

Time:

Inspector:

Maintenance Item	Description	Maintenance Required? (Y/N)
1. Drainage Structures (Flume Inlet/Sidewalk Trench Grate, Underdrains, Overflow Structure, Inline Drain, and Drainage Pipes) – Inspect annually and after major storm events (1-yr storm or greater)		
Debris Cleanout	Remove all trash, debris, and sediment from all structures annually or when sediment buildup is half the depth from the invert to the bottom, as applicable.*	
Manholes/Diversion Structures/Outlets	Remove sediment from flume inlet regularly or when a build-up is noticed that impacts inflow. If inlet becomes blocked, the bioretention area will not receive the proper flow.	
Emergency Spillways	Check for settling gulling or erosion. Ensure spillway is level. Repair as necessary if damaged or settling. Return to design grades.	
2. Stone-lined Swale and Sediment Forebay– Inspect annually and after major storm events (1-yr storm or greater)		
Debris Cleanout	Remove all trash and debris from the swale and forebay.	
Sediment/Organic Debris Removal	Sediment build-up shall be removed and properly disposed of when build-up is greater than or equal to 3 inches.*	
Side Slopes	Repair as necessary if signs of erosion gullies, animal burrowing, or slumping are observed.	
River Stone	Look for areas of erosion in the swale, particularly near the sidewalk trench grate. Repair/replace stone as necessary.	
Boulder Walls	Ensure that walls have not settled. Check for areas of erosion or water seepage. Repair as necessary	

Maintenance Item	Description	Maintenance Required? (Y/N)
Vegetation Maintenance	Ill-established, dead or severely diseased plants will be removed and replaced annually. See Sheet LA-1 of Construction Plans for appropriate species.	
ADS Water Quality Unit	Per manufacturers recommendations. See Appendix D.	
3. Bioretention System – Inspect at least bi-annually and after major storm events the first year; then annually and after major storm events (1-yr storm or greater)		
Debris Cleanout	Remove all trash and debris from the surface of the bioretention system.	
Side Slopes	Repair as necessary if signs of erosion gullies, animal burrowing, or slumping are observed.	
Sediment/Organic Debris Removal	If standing water is observed in the bioretention area 48 hours after a storm event, the bottom 6 inches shall be rototilled or cultivated to breakup any hard-packed sediment, and replenished with mulch.*	
Vegetation Maintenance / Replacement	Monitor the bioretention soil for proper pH, erosion, and aeration. Well-aged (minimum 6 months), shredded hardwood mulch shall be replaced bi-annually as needed, and ill-established, dead or severely diseased plants will be removed and replaced annually. See Sheet LA-1 of Construction Plans for appropriate species. Grasses, sedges, and rushes should be cut back annually in the spring.	
Water Draining properly	Ensure standing no standing water for more than 48 hours. If standing water check cleanouts for clogging or aerate.	
4. Routine Grounds Maintenance – Inspect annually		
Debris Removal	Remove trash from perimeter areas.	
Pavement Sweeping	Sweep parking lot minimum once a year after spring thaw.	
Contributing drainage area	Contributing drainage area stabilized	
Drainage Network	Ensure proper operation.	

*Sediment shall be disposed of offsite in a pre-approved location.

Comments:

Actions to be Taken:
