

LONG TERM SOURCE CONTROL/POLLUTION PREVENTION PLAN AND OPERATION AND MAINTENANCE PLAN

**1093 Main Street
Weymouth, MA**

Owner:

John O'Brien
1150 Turnpike Street
Stoughton, MA 02072

Party Responsible for Operation and Maintenance:

John O'Brien
1150 Turnpike Street
Stoughton, MA 02072

**1.0 Requirements for Routine Inspections and Maintenance of
Stormwater Best Management Practices**

Bio-Retention/Rain Garden Area

After construction, the parking area should be periodically swept to remove any accumulated leaves, debris or accumulated sediment. Inspect pretreatment stone apron/grass slope and bio-retention area regularly for sediment build-up, structural damage, and standing water.

Replace stone on an "as needed" basis when showing signs of clogging and bound with sediment.

Inspect soil and repair eroded areas monthly. Re-mulch void areas as needed. Remove litter and debris monthly. Treat diseased vegetation as needed. Remove and replace dead vegetation twice per year (spring and fall.)

Proper selection of plant species and support during establishment of vegetation should minimize-if not eliminate-the need for fertilizers and pesticides. Remove invasive species as needed to prevent these species from spreading into the bioretention area. Replace mulch every two years, in the early spring. Upon failure, excavate bioretention area, scarify bottom and sides, replace the soil, replant, and mulch.

The soil medium filters contaminants from runoff; the cation exchange capacity of the soil media will eventually be exhausted. When the cation exchange capacity of the soil media decreases, change the soil media to prevent contaminants from migrating to the ground water, or from being discharged via an underdrain outlet. Using small shrubs and plants instead of larger trees will make it easier to replace the media with clean material when needed.

Plant maintenance is critical. Concentrated salts in roadway runoff may kill plants, necessitating removal of dead vegetation each spring and replanting.

Never store snow in bioretention areas.

Japanese Knotweed Removal

Japanese Knotweed a non-native invasive plant species is located within the wetland resource area on the westerly abutting property. To help prevent migration of the Japanese Knotweed into the bio retention/rain garden area, the area will be monitored during yearly inspections for any new growth of the invasive species and spot removal treatment will be provided as needed.

The bio retention/rain garden area shall be inspected at the end of each fall for growth of new non-native invasive plant growth and if found, would be hand pulled and disposed of offsite. Care should be taken to remove the plant growth including the root systems.

Subsurface Infiltration Systems For Roof Runoff

After construction, the stormwater subsurface infiltration systems for roof runoff shall be inspected for proper function after every major storm event until the site is completely developed and stabilized. After the site has been stabilized the stormwater infiltration system shall be inspected via the inspection ports at least twice per year or if lack of performance is observed and perform necessary corrective measures to maintain infiltration capacity.

The systems shall have inspection ports for proper inspections. Inspections shall include checking the water level in the system after a major storm event, and performing necessary corrective action if water is observed 72 hours following the storm. The owner shall retain a qualified stormwater professional to assess the cause of this condition and develop a corrective action plan for restoring the infiltration function. The owner shall immediately implement the corrective action to restore the infiltration function. Documentation of these actions shall be maintained in the inspection and maintenance records.

Inspection & Maintenance Steps

Accumulated sediment must be removed from the bottom of the chambers. Material removed from the systems shall be disposed of in accordance with all applicable local, state, and federal regulations.

Step 1. Inspect chamber rows for sediment and water levels

Inspection Ports

- a. Remove/open lid on inspection port
- b. Using a flashlight and stadia rod, measure depth of sediment or water level and record on maintenance log

- c. Lower camera into chamber row for visual inspection of sediment or water levels (optional)
- d. If sediment is at, or above 3" proceed to Step 2, If not, proceed to Step 4
- e. If water is observed 72 hours following a storm event, proceed to Step 3. If not, proceed to Step 4

Step 2. Clean out chambers using the jetvac process if sediment build up is observed

- a. A fixed culvert cleaning nozzle with rear facing spread of 45" or more is preferred
- b. Apply multiple passes of jetvac until backflush water is clean
- c. Vacuum sediment build up as required

Step 3. Repair chamber system when water levels do not infiltrate after 72 hours. A corrective action plan shall be prepared by a qualified stormwater professional and immediately implemented.

Step 4. Replace all covers, grates, filters, and lids; record observations and actions.

Step 5. Inspect and clean roof leaders upstream of the chamber system.

Please refer to the attached manufacturer's maintenance manual for additional detail on proper inspection and maintenance of the Cultec chamber systems.

Inspections

Biannual inspections of the stormwater management system shall be performed. The inspection shall review the project with respect to the following:

- Proper installation and performance of the Stormwater Management System.
- Review of the controls to determine any damaged or ineffective controls.
- Corrective actions.

2.0 Illicit Discharge Statement

To the best of our knowledge, there are no current illicit discharges present on the site. No new discharges from the site are proposed, illicit or otherwise.



Deborah W. Keller, P.E.

STORMWATER MANAGEMENT
BEST MANAGEMENT PRACTICES
INSPECTION SCHEDULE AND EVALUATION CHECKLIST – POST CONSTRUCTION PHASE

PROJECT LOCATION: **1093 Main Street, Weymouth, MA**

Latest Revision: _____

Best Management Practice	Inspection Frequency (1)	Date Inspected	Inspector	Minimum Maintenance and Key Items to Check	Cleaning/Repair needed yes/no List items	Date of Cleaning/Repair	Performed By	Water Level in Detention System
Roof Runoff Subsurface Chambers	Twice a Year			-Sediment build-up -Trash and debris - Water levels				
Bio-Retention /Rain Garden Area	Monthly for Erosion & Debris and Twice a Year for Plant Health			-Sediment buildup -Plant Health/Mulch -Standing water greater than 48 hours -Non-native Invasive plant growth				
Outlet Protection at Bio Retention /Rain Garden	Twice a Year			-Check for clogging -Remove sediment buildup -Inspect for signs of settlement or erosion				

(1) Refer to the Massachusetts Stormwater Management, Volume Two: Stormwater Technical Handbook (2008) for recommendations regarding frequency for inspection and maintenance of specific BMPs.

Limited or no use of sodium chloride salts, fertilizers or pesticides recommended. Slow release fertilizer recommended.
Other notes:(Include deviations from: Con Com Order of Conditions, PB Approval, Construction Sequence and Approved Plan)

Stormwater Control Manager: _____

Stamp