

Operation and Maintenance Plan and Long-Term Pollution Prevention Plan

Project: Kings Highway Improvements

Location: Kings Highway, New Bedford, Mass.

Owner/Responsible Party: City of New Bedford

This document describes the post-construction operation and maintenance activities for the proposed stormwater best management practices (BMPs) constructed as part of the Kings Highway Improvements project. As shown on the attached figure, these BMPs include:

- Water quality swale at the northwest corner of Tarkiln Hill Road and Kings Highway (Stormwater BMP 1)
- Bioretention basin at the northwest corner of Tarkiln Hill Road and Kings Highway (Stormwater BMP 2)
- Bioretention basin at the eastern corner of Tarkiln Hill Road and Park Avenue (Stormwater BMP 3)
- Deep sump catch basins within Kings Highway and Tarkiln Hill Road from Entrance to Stop and Shop/Kings Plaza Drive to Oliver Street and Park Avenue from Tarkiln Hill Road to Church Street.

The construction period pollution prevention and erosion and sedimentation control plan is a separate document and will be submitted to the Conservation Commission prior to the start of land disturbance during the construction period.

Owner/Responsible Party

As the owner/responsible part of the stormwater management system, the City of New Bedford is responsible for operation and maintenance. Following construction, the system will be incorporated into the city's mapping and maintenance system to ensure future operations and maintenance is performed.

Routine Maintenance Practices

- Deep Sump Catch Basins:
 - Inspect all catch basins a minimum of once annually for depth of sediment and physical condition of the catch basin, including the hood.
 - Clean all catch basins at a frequency to ensure that no catch basin at any time will be more than 50 percent full. This may result in more frequent cleanings at particular catch basins.
 - Where possible, clean from upstream to downstream if catch basins are tributary to the same system.
 - Repair or replace damaged catch basin hoods.

- Dispose of catch basin cleanings in accordance with state and federal law.
- Street Sweeping
 - Street sweeping will be performed a minimum of once per year following winter activities following sanding and once in the fall following leaf fall.
 - Do not conduct street sweeping during or immediately after wet weather.
 - Do not wash down streets. Fine water spray for dust control is acceptable, but should use as little water as possible.
 - Dispose of street sweeping cleanings in accordance with state and federal law.
- Stormwater BMPs
 - Inspect the BMPs monthly and after major storm events within the first year, and twice a year thereafter (spring and fall).
 - *Inspect the BMPs to make sure vegetation is adequate and for signs of erosion and formation of rills and gullies. All areas of exhibiting erosion should be re-vegetated immediately after inspection to prevent additional erosion.*
 - *Inspect the BMPs for signs of compaction and/or ponding.*
 - *Inspect the BMPs for signs of sedimentation and debris buildup. Remove sediment and debris from the swales at least once a year. Hand methods (i.e., a person with a shovel or hands) should be used when cleaning the swales to minimize disturbance to vegetation and underlying soils.*
 - *Eradicate invasive species, if identified, by environmentally acceptable means at the time and replace with suitable plant material. Do not dump removed vegetation back into the BMP.*
 - *Remove accumulated sediment from the BMP. Light equipment should be used to remove the top layer so as to not compact the underlying soil. The remaining soil should be deeply tilled and revegetated with suitable plant material as soon as possible.*
 - Protect the BMPs from snow removal and disposal practices.
 - Inspect check dams after every significant rainfall event. Repair damage as needed.
 - Mow the BMPs once at least twice per year, or as needed. The grass height should be no greater than 6-inches and no lower than 3- to 4-inches. Remove grass clippings, accumulated organic matter, and trash and debris at the time of mowing.
- Overall Site
 - All hazardous materials used by city workers shall be stored under cover when not in use. If in use, all hazardous materials will be used in accordance with manufacturer's instructions and state and federal law.

- Any spills that occur at the site shall be contained and cleaned up in a timely manner to prevent the spilled product from entering the stormwater BMPs.
- Personnel shall follow the procedures related to identifying, removing, and preventing illicit discharges as found in the latest version of the Department of Public Infrastructure's Illicit Discharge Detection and Elimination (IDDE) Plan, as well as provisions related to illicit discharges as outlined in Article VIII – Stormwater Management of the City of New Bedford Ordinances.
- Nearby public waste containers shall be emptied regularly and in a manner to prevent trash from being swept into the stormwater system.

Note that the Department of Public Infrastructure is currently reviewing draft Standard Operating Procedures (SOPs) related to stormwater good housekeeping operations and maintenance procedures. Maintenance related to the stormwater BMPs on this project shall adhere to both the practices outlined above and those within the upcoming city SOPs. If there is conflict between the two sets of practices, the more conservative will be adhered to.

It is estimated that this operation and maintenance will require approximately 20-30 manhours per year. All personnel who provide regular maintenance of the stormwater or wastewater system shall be trained annually on the pollution prevention measures described above.

Maintenance Records

A record of maintenance and inspections at each BMP will be maintained. Records will be maintained for a minimum of three years. Inspection forms may be completed on paper or as part of the City's CMMS system, but must contain the following:

- Date of Inspection/Maintenance
- Name of Inspector
- Status of the BMP
- Maintenance Actions Taken

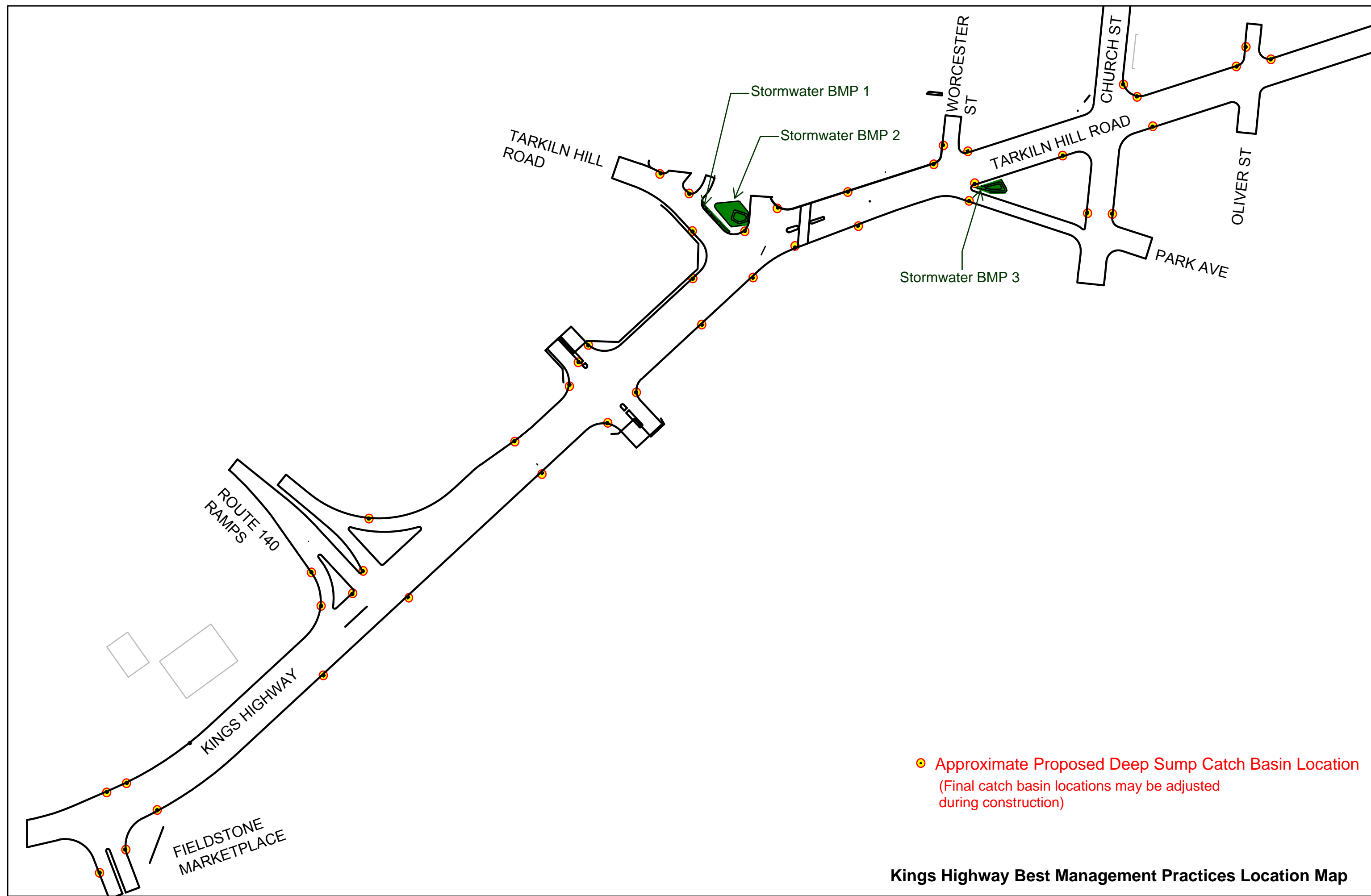
An example paper form is provided below.

Kings Highway - BMP Inspection Form

Date of Inspection: _____

Name of Inspector: _____

Best Management Practice (BMP)	Status of BMP	Maintenance Actions Taken
Bioretention basin at the northwest corner of Tarkiln Hill Road and Kings Highway		
Water quality swale at the northwest corner of Tarkiln Hill Road and Kings Highway		
Bioretention basin at the eastern corner of Tarkiln Hill Road and Park Avenue		
Deep sump catch basins <ul style="list-style-type: none">• Kings Highway and Tarkiln Hill Road from Entrance to Stop and Shop/Kings Plaza Drive to Oliver Street• Park Avenue from Tarkiln Hill Road to Church Street.		



Kings Highway Best Management Practices Location Map