

STORMWATER MANAGEMENT OPERATION AND MAINTENANCE MANUAL

Prepared for:

**PPM Fremont Holding, LLC
Tax Map 3, Lot 37-3 & 37-1
Spalding Road
Fremont, NH 03044**

**October 6, 2021
Rev. 1: November 15, 2021
JBE Project No. 20631**

Inspection and Maintenance of Facilities and Property

A. Maintenance of Common Facilities or Property

1. The PPM Fremont Holding LLC, future owners and assigns are responsible to perform the maintenance obligations or hire a Professional Engineer to review the site on an annual basis for maintenance and certification of the stormwater system. The owner shall keep receipts and records of all maintenance companies hired throughout the year to submit along with the following form. The annual report and certification shall be submitted with three copies to the Town Planner by December 31st of each year.

B. General Inspection and Maintenance Requirements

- a. Permanent stormwater and sediment and erosion control facilities to be maintained on the site include, but are not limited to, the following:
 - a. Swales & Plunge Pools
 - b. Vegetation and landscaping
 - c. Parking lots and roadways
 - d. Riprap inlet and outlet protection aprons
 - e. Infiltration Basin
- b. Maintenance of permanent measures shall follow the following schedule:
 - a. Normal winter roadway and parking lot maintenance including plowing and snow removal.
 - b. Road and parking lot sweeping at the end of every winter, preferably at the start of the spring rain season.
 - c. **Inspection** of culvert inlets and outlets at least **once per month** during the rainy season (March to November). Any debris is to be removed and disposed of properly by residents or contractor.
 - d. **Annual inspection** of the site for erosion, destabilization, settling, and sloughing. Any needed repairs are to be conducted immediately.
 - e. **Annual inspection** of site's vegetation and landscaping. Any areas that are bare shall be reseeded and mulched with hay or, if the case is extreme, loamed and seeded or sodded to ensure adequate vegetative cover. Landscape specimens shall be replaced in kind, if they are found to be dead or dying.
 - f. Permanent stone check dams should be **inspected annually** in order to ensure that they are in good condition. Any sediment accumulated behind them shall be removed if it is deeper than six inches.
 - g. Rock riprap should be **inspected annually** in order to ensure that it has not been displaced, undermined, or otherwise damaged. Displaced rock should be replaced, or additional rock added in order to maintain the structure(s) in their undamaged state. Woody vegetation should not be allowed to become established in riprap areas, and/or any debris removed from the void spaces

between the rocks. If the riprap is adjacent to a stream or other waterbody, the water should be kept clear of obstructions, debris, and sediment deposits.

h. Treatment Swales:

Inspect annually for erosion, sediment accumulation, vegetation loss, and presence of invasive species. Perform periodic mowing; frequency depends on location and type of grass. Do not cut shorter than Water Quality Flow depth (maximum 4-inches). Remove debris and accumulated sediment, based on inspection. Repair eroded areas, remove invasive species and dead vegetation, and reseed with applicable grass mix as warranted by inspection.

i. Vegetated Buffers:

Inspect buffer at least annually for signs of erosion, sediment buildup, or vegetation loss. If a meadow buffer, provide periodic mowing as needed to maintain a healthy stand of herbaceous vegetation. If a forested buffer, then the buffer should be maintained in an undisturbed condition, unless erosion occurs. If erosion of the buffer (forested or meadow) occurs, eroded areas should be repaired and replanted with vegetation similar to the remaining buffer. Corrective action should include eliminating the source of the erosion problem, and may require retrofit with a level spreader. Remove debris and accumulated sediment, based on inspection.

n. Infiltration Basin:

- a. Removal of debris from inlet and outlet structures
- b. Removal of accumulated sediment
- c. Inspection and repair of outlet structures and appurtenances
- d. Inspection of infiltration components at least twice annually, and following any rainfall event exceeding 2.5 inches in a 24-hour period, with maintenance or rehabilitation conducted as warranted by such inspection.
- e. Inspection of pretreatment measures at least twice annually, and removal of accumulated sediment as warranted by inspection, but no less than once annually.
- f. Periodic mowing of embankments
- g. Removal of woody vegetation from embankments
- h. Inspection and repair of embankments and spillways
- i. If an infiltration system does not drain within 72-hours following a rainfall event, then a qualified professional should assess the condition of the facility to determine measures required to restore infiltration function, including but not limited to removal of accumulated sediments or reconstruction of the infiltration trench.

See attached sample forms as a guideline.

Any inquiries in regards to the design, function, and/or maintenance of any one of the above mentioned facilities or tasks shall be directed to the project engineer:

Jones & Beach Engineers, Inc.
85 Portsmouth Avenue
P.O. Box 219
Stratham, NH 03885
T#: (603) 772-4746
F#: (603) 772-0227

Commitment to maintenance requirements

I agree to complete and/or observe all of the required maintenance practices and their respective schedules as outlined above.

Signature

Print Name

Title

Date

Annual Operations and Maintenance Report

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Construction Activity	Date of Inspection	Who Inspected	Findings of Inspector
Catch basins and drain manholes			
Culverts			
Swales & Plunge Pools			
Vegetation and landscaping			
Parking lots and roadways			