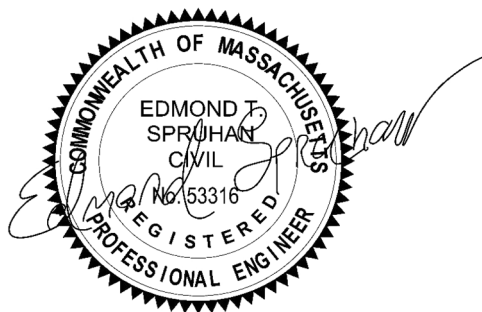


SPRUHAN ENGINEERING, P.C.  
OPERATIONS &  
MAINTENANCE PLAN

122-124 CABOT STREET,  
NEWTON, MA.



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April 25, 2025

# Operations & Maintenance Plan

## Introduction

The following Stormwater Operations & Maintenance plan is for **122-124 Cabot Street, Newton, Massachusetts**. All erosion and sediment control measures to be used are to be constructed and installed according to the ‘Massachusetts Erosion and Sediment Control Guidelines for Urban and Sub-Urban Areas.’

The plan consists of the following elements:

- Owners’ information
- Operation and maintenance guidance – Pre and Post Construction
- Landscape installation and maintenance guidance
- Proposed inspection log

All erosion and sediment control measures must be installed prior to the commencement of any work. All sediment and erosion control measures shall remain in place until the entire site has been stabilized. The site is deemed stabilized when all landscaped areas have been loamed and seeded with vegetation having had the chance to establish itself. Any proposed paved areas shall have their binder course of pavement installed prior to the removal of these control measures.

The long-term operation and maintenance of a stormwater management system is as critical to its performance as its design and construction. Proper operation and maintenance ensure that the BMP will continue to remove pollutants effectively over the long-term, decreases the risk of re-suspending sediment; and therefore, improves water quality. Without proper maintenance, BMPs are likely to fail and no longer provide the necessary stormwater treatment.

The maintenance of the Drainage System is the exclusive responsibility of the Property Owner. Annual reports (example below) shall be submitted to the City Engineer every January for the prior year.

## Owner and/or Manager contact information:

**Owner/Manager:** \_\_\_\_\_  
**Address:** \_\_\_\_\_  
**Contact info:** \_\_\_\_\_

**Change on ownership:** The owner(s) of the stormwater management systems, with the exception of those associated with two-family dwellings, shall notify the Department of Public Works and Conservation Commission of changes in ownership or assignment of financial responsibility.

This plan is valid in perpetuity and any future property owners are solely responsible for the management of the stormwater system on-site in accordance with this O&M Plan.

## Operations & Maintenance

The following operations and maintenance plan has been developed in order to preserve the drainage infrastructure that will be constructed and to ensure the drainage and infiltration system continues to function as designed.

- **Before & During Construction Operation and Maintenance Plan:**

- Significant efforts shall be made to only disturb the minimum amount of area necessary to reduce potential erosion and sediment runoff. The control of dust in disturbed areas shall consist of at the least, wetting of disturbed soil or application of calcium chloride as required to minimize airborne dust.
- A stabilized construction entrance shall be installed to reduce the tracking of material onto the main road, &, if necessary, a wheel wash station put in place.
- Hay wattles shall be installed per the site plan to prevent sediment from being washed off site.
- All drainage structures shall be protected by filter fabric (or approved equal) to prevent sedimentation from entering the drainage system during the construction period.
- Driveway, pavement, and roadway (if required) areas shall be swept to remove sediments prior to introduction into the storm water management system.
- Drainage structures shall be inspected daily and cleaned as necessary of all sedimentation and construction materials during the construction period.
- The contractor is required to contact the engineer of record for drainage system inspection at least 72 hours prior to backfilling in order to receive inspection signoff.

- **Post Construction Operation and Maintenance Plan**

Once the construction is completed, it is the owner's responsibility to maintain the items outlined below to ensure the efficiency and integrity of the drainage systems. The post construction inspections shall take place at a minimum of once during the Spring (March-May), and a minimum of once during the fall (September – November) and after every major storm.

- **Pipes** shall be inspected on a minimum on a semi-annual basis. These inspections shall take place during the spring and fall months of the year. The inspector shall take note of any debris/sediment/clogging and shall document the condition of each structure. Based upon the observed condition, the inspector shall make recommendations if any further action is required.
- **All drainage structures, including manholes trench drains, area drains, cleanouts and catch basins**, shall be inspected four times per year and shall be cleaned of all sand, debris, and sediment four times per year or whenever the depth of deposits is greater than or equal to one half the depth from the bottom of the invert of the lowest pipe in the basin.
- **Roof Gutters** shall be inspected annually and after major rain events. Remove leaves and sediment as necessary to allow rainwater to flow to system.

- **Cultec R 330 Maintenance procedures:**
  - The Cultec system shall be inspected at a minimum on a semi-annual basis, or after a major storm event.
  - Remove lid and cap from inspection ports which must be brought to finished grade.
  - Using a flashlight and stadia rod, measure the depth of sediment
  - If sediment is above 3” depth, then cleaning is required
  - A licensed professional shall provide cleanout/ flushing services of all sediment and debris via cleanouts and catch basins located per plans.
  - All caps and covers shall be replaced

**Other Activities:**

**Pavement Sweeping:** The paved areas shall be swept every quarter, so four (4) times per year.

**Lawn and Landscape Repairs:** The lawn and landscaped areas on the site shall be inspected in the spring and fall of each year and the areas shall be restabilized as needed by seeding as lawn or mulching landscaped areas.

An INSPECTION LOG example format is shown below on Table B.1. This must be filled every time an inspection or maintenance activity is performed on any element of the stormwater management on site, included but not limited to:

- Pretreatment devices.
- Vegetation or filter media.
- Control structures.
- Embankments and slopes.
- Inlet and outlet channels and structures.
- Underground drainage.
- Sediment and debris accumulation in storage and forebay areas (including catch basins).
- Any nonstructural practices.
- Any other item that could affect the proper function of the stormwater management system

**FINAL IMPORTANT NOTES:**

- **PROVISIONS MUST EXIST ALLOWING THE CITY OF NEWTON OR ITS DESIGNEE TO ENTER THE PROPERTY AT REASONABLE TIMES AND IN A REASONABLE MANNER FOR THE PURPOSE OF INSPECTION.**
- **ANNUAL INSPECTION LOGS SHALL BE SUBMITTED TO THE DPW ENGINEERING DIVISION AS REQUIRED TO MAINTAIN CERTIFICATION OF COMPLIANCE UNDER NEWTON’S NPDES MS4 PERMIT.**

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PROPERTY OWNER OR MANAGER

## **ATTACHMENT A. LOG SHEET AND TABLES**

**OPERATION & MAINTENANCE PLAN  
LOG SHEET  
122-124 CABOT STREET, NEWTON, MA  
INSPECTION REPORT:**

Inspection Firm: \_\_\_\_\_

Inspector's Name: \_\_\_\_\_ Date: \_\_\_\_\_

Components Inspected: \_\_\_\_\_

Signed: \_\_\_\_\_

**SYSTEM MAINTENANCE:**

Maintenance Firm: \_\_\_\_\_ Date: \_\_\_\_\_

Catch Basin Cleaned: Yes \_\_\_\_\_ No \_\_\_\_\_ Comments: \_\_\_\_\_

Manhole & Sumps Cleaned: Yes \_\_\_\_\_ No \_\_\_\_\_ Comments: \_\_\_\_\_

Trench Drain Cleaned: Yes \_\_\_\_\_ No \_\_\_\_\_ Comments: \_\_\_\_\_

Drain Lines Inspected: Yes \_\_\_\_\_ No \_\_\_\_\_ Comments: \_\_\_\_\_

Stormwater unit System Cleaned: Yes \_\_\_\_\_ No \_\_\_\_\_ Comments: \_\_\_\_\_

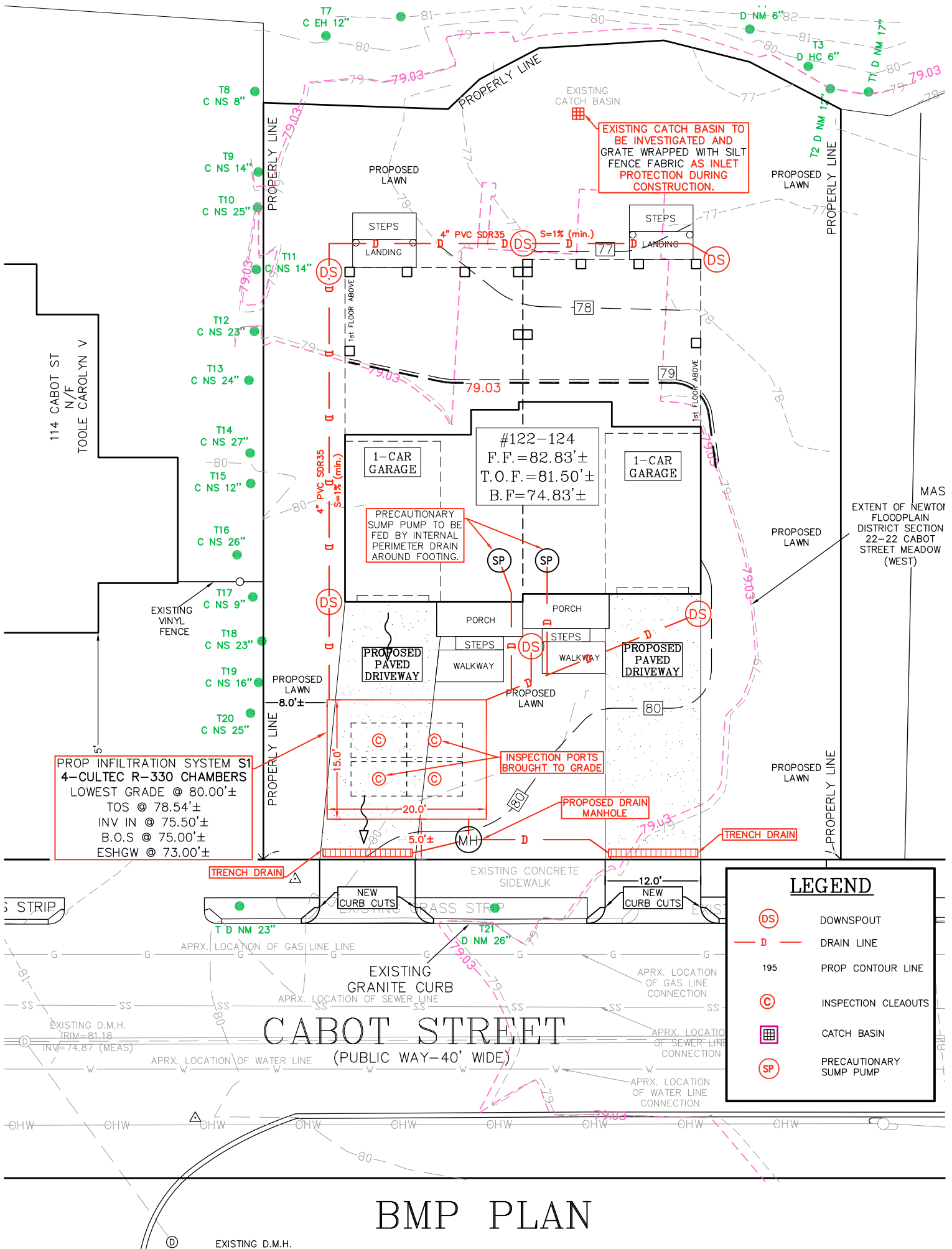
Estimate of Material Removed: \_\_\_\_\_

Other Comments: \_\_\_\_\_

Signed: \_\_\_\_\_



**ATTACHMENT B. BMP MAP**



EXISTING CATCH BASIN TO BE INVESTIGATED AND GRATE WRAPPED WITH SILT FENCE FABRIC AS INLET PROTECTION DURING CONSTRUCTION.

PRECAUTIONARY SUMP PUMP TO BE FED BY INTERNAL PERIMETER DRAIN AROUND FOOTING.

PROP INFILTRATION SYSTEM S1  
4-CULTEC R-330 CHAMBERS  
LOWEST GRADE @ 80.00'±  
TOS @ 78.54'±  
INV IN @ 75.50'±  
B.O.S @ 75.00'±  
ESHGW @ 73.00'±

LEGEND	
(DS)	DOWNSPOUT
— D —	DRAIN LINE
195	PROP CONTOUR LINE
(C)	INSPECTION CLEAOUTS
[Grid Symbol]	CATCH BASIN
(SP)	PRECAUTIONARY SUMP PUMP

# BMP PLAN

EXISTING D.M.H.