

Long Term Operation and Maintenance Plan

for

Site Plan Modification 124-126 Grove Street Franklin, MA

Date: November 5, 2024

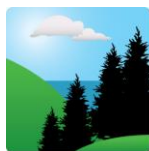
Revised: 3/27/2025

Prepared By:

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55 West Central Street
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Prepared for:

*Key Boston, Inc.
126 Grove Street
Franklin, MA 02038*



**Guerriere &
Halnon, Inc.**
ENGINEERING & LAND SURVEYING

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Franklin, MA 02038

Standard 9: A Long –Term Operation and Maintenance (O&M) Plan shall be developed and implemented to ensure that storm water management systems function as designed.

The following shall serve as the (O&M) Plan required by Standard 9, as well as the Long-Term Pollution Prevention Plan required by Standard 4.

A. Names of Persons or Entities Responsible for Plan Compliance:

Key Boston, Inc.
126 Grove Street
Franklin, MA 02038
Tel: 508-298-7402

Signature_____

Amendments to the maintenance schedule must be made by Mutual Agreement of the Franklin DPW Director and the responsible parties.

B. Stormwater Management System Owner

Key Boston, Inc.
126 Grove Street
Franklin, MA 02038
Tel: 508-298-7402

Owner Signature_____

The property owner must notify the Franklin DPW Director of any changes in ownership or assignment of financial responsibility to a new entity. Notification must be provided to future property owners of the presence of the stormwater management system, as well as its Operation and Maintenance requirements. A copy of this Long Term O&M Plan must be provided to new owners, and a disclosure notice included within the Deed notifying the new owner of their responsibility for the Stormwater Management System and the requirements of this O&M Plan.

C. Good housekeeping practices

1. Maintain site, landscaping and vegetation.
2. Sweep and pick up litter on pavements and grounds.
3. Deliveries shall be monitored by owners or representative to ensure that if any spillage occurs, it shall be contained and cleaned up immediately.
4. Maintain pavement and curbing in good repair.

D. Requirements for routine inspections and maintenance of stormwater BMPs

1. Plans: The stormwater Operation and Maintenance Plan shall consist of all Plans, documents and all local state and federal approvals as required for the subject property.
2. Record Keeping:
 - a. Maintain a log of all operation and maintenance activities for at least three years following construction, including inspections, repairs, replacement and disposal (for disposal, the log shall indicate the type of material and the disposal location).
 - b. Make this log available to MassDEP and the Conservation Commission upon request; and
 - c. Allow MassDEP and the Conservation Commission to inspect each BMP to determine whether the responsible party is implementing the Operation and Maintenance Plan.
3. Descriptions and Designs: The Best Management Practices (BMP) incorporated into the design include the following.

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- a. Street Sweeping – Stipulated within the Construction Period Pollution Prevention Plan, the Long-Term Pollution Prevention Plan, and the Operation and Maintenance Plan. As the amount of TSS removal is discretionary, no credit was taken within the calculations for this BMP.
 - b. Deep Sump Catch Basins with Hoods - Installed to promote TSS Removal of solids and control floatable pollutants. This BMP has a design rate of 25% TSS Removal.
 - c. Contech Cascade Hydrodynamic Separators - installed to promote TSS Removal of solids. These proprietary BMPs have a variable rate of TSS removal, see manufacturer calculations in attachment section of this report. For purposes of documentation of meeting required removal rates, these BMPs have an assigned removal rate of 50%.
 - d. Cultec Subsurface Infiltration System – the subsurface detention BMP provides additional detention, treatment, and infiltration for the purpose of mitigating offsite stormwater impacts. This BMP has an assigned TSS Removal Rate of 80% Refer to TSS Removal Worksheet included in the Attachments.
 - e. Infiltration Basin - provided to promote groundwater recharge, detention, and the required 80% TSS Removal. Refer to TSS Removal Worksheet in Standard 4 for treatment train.
 - f. Safety Fencing - Provide 6-FT high chain link fence with lockable gates around detention basin for public safety.
 - g. Spill Containment Kit to contain and clean-up spills that could occur on site.
4. BMP Maintenance: After construction it is the responsibility of the owner to perform maintenance. The cleaning of the components of the stormwater management system shall generally be as follows:
 - a. Roadway: The owner shall keep the roadway swept with a mechanical sweeper or hand swept semi-annually at a minimum.
 - b. Catch Basins: Shall be cleaned by excavating, pumping or vacuuming four times per year and at the end of foliage and snow removal seasons. The sediment shall be disposed of off-site by the Owner. Inspect quarterly, remove silt when $\frac{1}{4}$ full.
 - c. Water Quality Manholes: Inspect twice a year. Clean structure when sediment accumulation reaches a depth of 2.0ft. Cleaning is generally done with the combination of a high pressure spray jet and vacuum truck and is the most effective and convenient method. A maintenance log shall be kept for all maintenance activities
 - d. Cultec Subsurface Infiltration System: Inspect after 1 years of commission using the inspection port or manhole via a CCTV and inspect every year thereafter or as needed depending on rainfall and site conditions. Cleaning with high pressure water through culvert cleaning nozzle when sediment accumulation reaches a depth of 3 inches or more. A maintenance log shall be kept for all maintenance activities. Follow manufacturer maintenance guide included in appendix of this report.
 - e. Infiltration Basins: Preventative maintenance shall be performed at least twice per year. Inspection shall be performed after every major storm for the first three months and twice a year thereafter and when there are discharges through the high outlet orifice. Mowing of the buffer area, and bottom of basin; removal of trash and debris; removal of grass clippings and organic matter to be performed at least twice per year. Pretreatment devices shall be inspected every other month and a least twice a year and after every major storm event.
 - f. Rip-rap Aprons/Outfalls: Preventative maintenance shall be performed at least twice per year, in concurrence with the inspection of the corresponding Infiltration Basin. Inspection shall be performed after every major storm for the first three months and twice a year thereafter and when there are discharges through the high outlet orifice. Remove debris, leaf litter, and any accumulated sediment. Remove this material from the site, do not dispose adjacent to the outlets or within wetland resource areas and their associated buffers.

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5. Access Provisions: All of the components of the storm water system shall be accessible by the Owner

E. Spill prevention and response plans

1. Inventory materials to be present on-site during construction.
2. Train employees and subcontractors in prevention and clean up procedures.
3. All materials stored on site will be stored in their appropriate containers under a roof.
4. Follow manufacturers recommendation for disposal of used containers.
5. Store only enough product on site to do the job.
6. On site equipment, fueling and maintenance measures:
 - a. Inspect on-site vehicles and equipment daily for leaks.
 - b. Conduct all vehicle and equipment maintenance and refueling in one location, away from storm drains.
 - c. Perform major repairs and maintenance off site.
 - d. Use drip pans, drip cloths or absorbent pads when replacing spent fuels.
 - e. Collect spent fuels and remove from site.
7. Clean up spills.
 - a. Spill Containment Kit to contain and clean-up spills that could occur on site
 - b. Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry clean up methods (sawdust, cat litter and/or rags and absorbent pads).
 - c. Sweep up dry materials immediately. Never wash them away or bury them.
 - d. Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
 - e. Report significant spills to the Fire Department, Conservation Commission and Board of Health.

F. Provisions for maintenance of lawns, gardens, and other landscaped areas

Use only organic fertilizer. Dispose of clippings outside of the 100-foot buffer zone to the adjacent wetland.

G. Requirements for storage and use of herbicides, and pesticides

The application of herbicides or pesticides will be done by professional certified contractor.

H. Provisions for operation and management of septic system

Site to be serviced by town sewer.

I. Requirements for handling of pet waste

Pet waste should never be dumped or washed into the local storm drain system. Waste shall be picked up immediately and placed in bags and properly disposed of in the garbage to be collected and taken to a landfill.

J. Provisions for washing of vehicles

Washing of vehicles shall be done in an area away from sensitive areas and drainage inlets, so as to eliminate wash water from being directly discharged to the local storm drain system. Vehicles should be washed in areas where wash water can be held prior to discharging to the sanitary sewer system or in areas where infiltration precludes runoff to storm drains. Avoid using detergents whenever possible.

K. Provisions for solid waste management

1. Waste Management Plan

- a. Recycle materials whenever possible (paper, plaster cardboard, metal cans). Separate containers for material are recommended.
- b. Do not bury waste and debris on site.

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- c. Certified haulers will be hired to remove the dumpster container waste as needed. Recycling products will also be removed off site weekly.

L. Snow disposal and plowing plans relative to Wetland Resource Areas

Snow storage is adequate around the site for large storm events. Storage of snow shall not be placed directly near areas adjacent to the proposed infiltration basin.

M. Winter Road Salt and/or Sand Use and Storage restrictions

No sand, salt, or chemicals for de-icing will be stored outside.

N. Street sweeping schedules

Sweeping, the act of cleaning pavement can be done by mechanical sweepers, vacuum sweeper or hand sweeper. The quantity of sand is a direct correlation with the treatment of ice and snow and the types of chemicals and spreaders that are being used on site to manage snow. If a liquid de-icer such as calcium chloride is used as a pretreatment to new events the amount of sand is minimized. Sweeping for this site should be done semi-annually at a minimum. Collecting the particulate before it enters the catch basins is cheaper and more environmentally friendly than in a catch basin mixing with oils and greases in the surface water runoff in catch basins.

O. Easements

Existing utility and other easements are identified on the Site Plans: "Site Plan Modification, 124/126 Grove Street, Franklin, Massachusetts" prepared by Guerriere & Halnon, Inc. Dated 11/05/24 and revised 3/27/2025

P. Provisions for prevention of illicit discharges to the stormwater management system

The discharge into the stormwater system is not being violated, see attachment for illicit discharges compliance.

Q. Training the staff or personnel involved with implementing Long-Term Pollution Prevention Plan

The owner shall develop policies and procedures for containing the illicit spilling of oils, soda, beer, paper and litter. These wastes provide a degrading of the water quality. The placement of signs and trash barrels with lids around the site would contribute to a clean water quality site condition.

R. List of Emergency contacts for implementing Long-Term Pollution Prevention Plan:

Key Boston, Inc.
126 Grove Street
Franklin, MA 02038
Tel: 508-298-7402

Owner Signature_____

This shall be the contact until such time as the project is sold.

S. Estimated BMP Maintenance Costs

The following prices are estimates of the costs associated with maintenance of the proposed site BMPs. Costs provided are only estimates and may not reflect actual costs to perform the work. Actual costs may vary depending on company/personnel performing the work. Actual costs may increase over time.

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BMP

Pavement sweeping
Catch basin & WQMH cleaning
Subsurface Infiltration System
Infiltration Basin
Spill Containment Kit

Estimated Maintenance Cost

\$ 400 per year
\$ 200 per catch basin per cleaning
\$ 1,000 per cleaning
\$ 200 per cleaning
\$ 750 purchase price