

Construction Period Erosion, Sedimentation, and Pollution Prevention Plan

Proposed Residential Development "Northside Farm"

Northside Farm Subdivision – New Bedford, MA 02045

Stormwater Management System's Owner: New Bedford Cousins LLC

System Owner's Address: P.O. Box 36, Scituate, MA 02066

Party responsible for Operations and Maintenance: Owners of Northside Farm

It is most important for a drainage system to be maintained in order for it to work properly. The following is an Operation and Maintenance plan to upkeep the existing non-structural and structural best performance practices as outlined in the Massachusetts Department of Environmental Protection's Stormwater Management Policy.

Construction Sequencing:

The following section provides construction details and highlights the construction sequence and timing of earth moving activities.

1 Installation of Erosion Controls

Erosion and sedimentation controls (silt fence and hay bales) will be installed where needed and inspected at the limits of the work area prior to the commencement of earth moving activities.

2 Clearing

The project area will be cleared of debris and boulders. Materials removed from the site will be transported to an appropriate facility or will be disposed of properly. No large boulders will be buried on the site. All cleared vegetation will be removed from the project site or mulched and stockpiled for future use on the site.

3 Rough Grading

During this phase of construction, rough grades will be established for the project site. If suitable topsoil is found, it will be removed and stockpiled in an upland area outside of the 100-foot buffer zone of identified wetlands. The stockpiled topsoil will be stored until ready for re-use on site.

4 Drainage System Construction

After rough grading is complete, the drainage collection, conveyance and discharge areas will be installed. The drainage system design and structures for the proposed development will follow the Department of Environmental Protection's Best Management Practice standards.

5 Utility Installation

In this phase of construction, underground utilities including water, sewer, gas, power, telecommunications, etc. will be installed.

6 Roadway Paving

During this phase of construction, the entrance and exit roadways for the development will be paved to binder course only. Final paving will be done after most of the home sites are developed at the discretion of the developer.

7 Foundation and Structure Construction

This phase of construction consists of installation of the foundations and construction of the buildings. The home sites will be made available for construction and occupancy in phases. The phasing will be designed primarily to control construction impacts to the site and also consider current market demand for home sales.

8 Installation of Amenities

Amenities such as signage and landscaping will be installed or completed as required for safety and as the homes become occupied.

9 Site Stabilization

The final phase of the project is the restoration and stabilization of all exposed surfaces. Disturbed areas will be landscaped or seeded as necessary with an erosion control seed mix. Much of the disturbed area is to be rough graded with topsoil and allowed to revegetate with indigenous species and kept thereafter in a natural state as habitat. Permanent restoration and revegetation measures serve to provide additional habitat and to control erosion and sedimentation by establishing a vegetative cover. In the event that weather conditions prevent final restoration, temporary erosion and sedimentation measures will be employed until the weather is suitable for final cleanup. A final inspection will ensure that the project site is cleared of all project debris and that erosion and sedimentation controls are functioning properly. Haybales and silt fencing will not be removed until the site is stabilized and the final inspection is complete.

Operation and Maintenance Plan during Construction:

Sediment and Erosion Control

- Siltation barriers shall be inspected at least once a week and after each rainfall event. Make any required repairs immediately. Repair scoured areas on the back side of fence at this time to prevent future problems.
- Should the fabric of the silt fence tear, decompose or otherwise become ineffective, replace it within 24 hours of discovery.
- Remove silt deposits once they reach 15-30 percent of the height of the silt fence to provide adequate storage volume for the next rain event and to reduce pressure on the fence. Care should be taken to avoid undermining the fence during cleanout process.

- Siltation barriers are to be removed upon stabilization of the contributing drainage area. Accumulated sediment may be spread to form a surface for turf or other vegetation establishment, or disposed of elsewhere. The area should be reshaped to permit natural drainage.
- Crushed stone construction entrances shall be inspected and maintained on a daily basis. Any buildup of material within the apron shall be removed offsite and replaced with clean crushed stone as needed.
- Also at the Construction entrances any sediment tracked onto the public road during the construction process shall be removed immediately and any adjustment of the entrance to prevent additional sediment tracking.
- Catch Basin inlet protection shall be used for all proposed and existing catch basins as shown on the detail sheet. All catch basins adjacent to the project and down stream of the project shall be provided with inlet protection. Inlet protection must be inspected and repaired after each rain event.

Infiltration Systems: Subsurface Infiltration System and Infiltration Basin

All infiltration areas shall be excavated and installed after the construction of the foundation. No heavy equipment shall traverse the proposed infiltration areas after installation.

Per MA DEP Stormwater Guidelines the following work shall be done to stabilize the site prior to installing the infiltration systems:

- Do not allow runoff from any disturbed areas on the site to flow to the proposed location of the infiltration systems.
- Rope off the area where the infiltration systems are to be placed.
- Accomplish any required excavation with equipment placed just outside the area. If the size of the area intended for exfiltration is too large to accommodate this approach, use trucks with low-pressure tires to minimize compaction. Do not allow any other vehicles within the area to be excavated.
- Keep the area above and immediately surrounding the infiltration systems roped off to all construction vehicles until the final top surface is installed.
- At no time shall the area for the infiltration systems be used as a temporary sediment basin. Stockpiles shall be placed away from the infiltration systems and sedimentation fences shall be placed around the perimeter of the infiltration area to prevent the accumulation of sediment within the native soils.

Dust Control: Sprinkle water as necessary to control dust during construction.

Material Stockpiling: Stockpiles of material must be placed outside all wetland resource areas and their buffer zones. If left overnight, material stockpiling must be protected from the weather.

Good housekeeping:

The following good housekeeping BMP's will be implemented in order to prevent pollution during construction:

- Petroleum products will be stored in tightly sealed containers which are clearly labeled.
- Any asphalt substances used onsite will be applied according to the manufacturer's specifications.
- If portable sanitary units are used, sanitary waste will be removed as necessary to avoid overfilling.
- All paint and other hazardous waste materials will be tightly sealed and stored when not in use. Excess material will not be discharged into the public stormwater system, but will be properly disposed of according to the manufacturer's specifications.
- If spray guns are used, they will be cleaned on a removable tarp.

Temporary Sediment Traps & Basins

- Sediment traps and/or basins shall be constructed as shown on the approved plans and as necessitated by field conditions. Sediment traps/basins should be readily accessible for maintenance and sediment removal, and should remain in operation and be properly maintained until the site area is permanently stabilized by vegetation and/or when permanent structures are in place. Remove basin after drainage area has been permanently stabilized, inspected, and approved. Before removing dam, drain water and remove sediment; place waste material in designated disposal areas. Smooth site to blend with surrounding area and stabilize.

Track out controls at Construction Entrance

A stabilized stone apron construction entrance shall be at all construction entrances to help prevent vehicle tracking of sediments. All vehicles shall enter and exit the site via the stabilized construction entrance. The contractor shall inspect the construction entrance daily and after heavy use. If mud and soil clogs the voids in the crushed stone reducing the effectiveness, the pad shall be top dressed with new, clean stone. If the pad becomes completely clogged, replacement of the entire pad may be necessary. Dump trucks hauling material from the construction site will be covered with a tarpaulin.