



**CITY OF NORTHAMPTON, MASSACHUSETTS
DEPARTMENT OF PUBLIC WORKS**

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**Department of Public Works (DPW) Policy
On
Erosion & Sediment Control for Small Construction Sites (<1 acre)**

Erosion and Sediment Control Plan

Small construction projects (less than one acre) that include land disturbance activities should implement practices to control construction-related erosion, sedimentation and stormwater pollution. Guidance for recommended erosion and sediment control measures can be found in the most recent version of the *Massachusetts Stormwater Handbook* and the *Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas* both available on the Mass DEP website. A written erosion and sediment control plan should be prepared prior to the start of construction by the owner/developer of the site with assistance from a professional engineer, landscape architect, erosion control professional and/or site contractor as necessary to complete the plan. The erosion and sediment control measures should be installed at the start of construction and inspected and maintained in good condition throughout the project until the disturbed areas have been permanently stabilized. The erosion and sediment control plan should include the following information at a minimum:

- Completed Erosion and Sediment Control Plan for Small Construction Sites Form (see form on DPW website that includes name of owner, developer and person(s) responsible for erosion and sediment control; list of erosion and sediment control measures; and owner's certification)
- Brief description of the project site and the proposed work
- Construction schedule including major excavation and site work
- Description of all measures to control erosion and sediment on site (see list and description below)
- Inspection schedule (erosion and sediment control measures must be inspected once every 7 days and before and after rain events at a minimum)
- Drawing or sketch of the site showing proposed site work, grading, area of disturbance and proposed erosion and sediment control measures including details/typicals of sediment barriers, tracking pads and other erosion and sediment control structures on and adjacent to the site

Erosion and Sediment Control Measures

Natural Resource Protection: Before commencing land disturbance activities, the limits of permitted disturbance areas shall be marked with high-visibility flagging, fencing, and/or signage. Areas designated for revegetation and/or infiltration based stormwater practices shall be marked with flagging, fencing, and/or signage to restrict use of heavy vehicles and equipment in these areas to avoid soil compaction. Tree protection shall be installed around the dripline for all trees to be preserved. Buffers and other restricted areas shall be maintained as required in a wetlands protection authorization from the Northampton Conservation Commission or Massachusetts Department of Environmental Protection.

Area of Disturbance: Clearing and grading shall only be performed within areas needed to build the project, including structures, utilities, roads, recreational amenities, post-construction stormwater management facilities, and related infrastructure. Construction activities shall be phased to minimize the area of disturbed soil at any one time.

Soil Stabilization: The time that soil is exposed shall be minimized by stabilizing dormant areas as work progresses. Exposed areas shall be vegetated, hydromulched, protected with erosion control blankets, mulch or otherwise stabilized within 14 days after land disturbance activities have permanently ceased or will be temporarily inactive for 14 or more days. Vegetative cover shall be prepared in the fall to ensure that exposed areas have cover before the first freeze. Additional soil stabilization controls such as erosion control blankets should be installed on steep slopes as necessary (recommended for slopes of 12% or greater).

Stockpiles: Materials shall not be stored or stockpiled near a storm drain or a wetland resource area. Stockpiled erodible materials that will be unused for 14 or more days shall be covered with a roof, tarp, or temporary seeding (of soil stockpiles). Perimeter controls shall be installed around stockpiles and staging areas.

Perimeter Controls: Perimeter sediment controls, such as silt fencing, filter tubes and straw bales/wattles shall be installed around down-gradient boundaries, along all resource areas, and around stockpile and staging areas. Compost tubes and straw bale shall be free of invasive species. Perimeter controls shall be installed at the start of land disturbance and shall not be removed until the disturbed areas have been permanently stabilized.

Stabilized Construction Entrance: Track-out controls (e.g., 2"-3" stone apron) shall be installed and maintained at each construction entrance of a gradation and thickness to remove sediment from vehicles and prevent tracking onto public roads. Where sediment has been tracked-out from the site on paved roads, sidewalks, or other paved areas, it shall be swept or vacuumed at the end of the workday. Sediment shall not be swept or hosed into any stormwater conveyance, storm drain inlet, or waterbody.

Inlet Protection: Filter bags, filter tubes, or other inlet protection controls shall be installed to prevent sediment from entering down-gradient storm drains. Inlet controls

shall be monitored and maintained to ensure functionality and not be removed until the drainage areas have been permanently stabilized.

Runoff Diversion: Runoff shall be intercepted and diverted away from disturbed areas with berms, swales, or pipes toward stabilized outlets. Conveyances shall be stabilized with vegetation, erosion control blankets, check dams, or similar practices to slow velocities and prevent erosion.

Sediment Removal: Sediment traps and basins shall be used to remove suspended solids from runoff before it discharges from the site. Traps and basins shall be designed to use baffles, multiple cells, and other practices to maximize the flow path and settling time. Sediment controls shall not be removed until the drainage areas have been permanently stabilized.

Dewatering: Dewatering activities shall use tanks, filter bags, or other practices to remove sediment before discharge. Treated water shall not be discharged in a manner that causes erosion or flooding.

Outlet Protection: Pipe outlets shall have stone aprons, level spreaders, or other energy dissipation practices installed to prevent erosion.

Construction Waste Management: Trash, debris, and sanitary wastes shall be removed on a regular basis. Dumpsters shall be covered at the end of every workday and before rain events. Concrete mixers shall be washed out only in designated areas with liners. Demolition debris, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes may not be discharged to the roadway, the municipal drain system or regulated resource areas and shall be legally disposed of.

Post-Construction Best Management Practices (BMPs): Stormwater management facilities to be used after construction shall not be used to collect sediment during construction unless otherwise approved by the Department of Public Works. Many structures and technologies are not designed to handle the high concentrations of sediments typically found in construction runoff, and thus must be protected from construction-related sediment loadings.

Dust Control: Dust control shall be used during grading operations. Dust control methods may consist of grading fine soils on calm days only or dampening the ground with water.

Inspection and Maintenance: Erosion and sediment controls shall be inspected as needed and at a minimum once every 7 days and before and after rain events. Accumulated sediments shall be removed, and erosion and sediment controls shall be repaired or replaced as needed to ensure they perform as intended.