

M O H R & S E R E D I N
Landscape Architects, Inc.

EROSION AND SEDIMENTATION CONTROL PLAN

For:
Hannigan's Market Site
76 Island Avenue-Peaks Island
Portland, Maine

April 24, 2015

INTRODUCTION

The following plan for controlling sedimentation and erosion in this project is based on conservation practices found in the Maine Erosion & Sediment Control BMPS Manual, Maine Department of Environmental Protection (DEP), March 2003, or latest edition. The contractor who implements this plan shall be familiar with this publication and adhere to it and the practices presented herein.

The project work area is limited to ± 800 SF \pm of a 0.22 acres lot locally known as Hannigan's Market located on Peaks Island in Portland, Maine. The proposed site work consists of the construction of 75 LF stone-filled and vegetated gabion retaining wall, relocation of an existing fence gate and landscaping at the rear of the property. The site is located within the Shoreland Zone inland from the 75' resource setback and is not located in a floodway. The site slopes toward Casco Bay and the grade will be matched at the top of the gabion to the existing lawn grade. There is no evidence of severe erosion evident within the proposed work area.

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES

The following is a list of general erosion control practices that are used to prevent erosion and sedimentation before, during and after the construction of this project. In addition, special care shall be used at all times to:

1. Limit disturbance and, hence, erosion,
2. Correct any erosion problems immediately,
3. Regularly monitor the implemented practices, especially after every rainfall,
4. Revegetate disturbed areas as soon as possible after construction,
5. Topsoil shall not be removed from the site.

Haybales and/or Silt Fence and Erosion Control Mix Sediment Barriers:

As noted on plans, haybales and/or silt fencing is installed at the toe of slope/edge of construction activities.

Construction Entrance

The existing access way over Boathouse Way off Island Avenue will serve as the construction entrance to the rear of the property. The site contractor(s) shall monitor site conditions and shall pay close attention that construction-related vehicles do not track mud onto Island Avenue. Island Avenue shall be swept daily should mud or debris be tracked onto the pavement.

CONSTRUCTION PHASE

The following general practices will be implemented to prevent erosion during construction on this project:

1. Only those areas under active construction will be left in an untreated or unvegetated condition. Once construction of an area is complete, final grading, loaming and seeding shall occur immediately. If final grading, loaming and seeding cannot occur immediately, it shall be done prior to any storm event and within 15 days of completing construction in the area. If final grading, loaming and seeding cannot occur within 15 days, or if the area is not under active construction for a period longer than 15 days, see Item No. 5 below.
2. Prior to the start of construction, silt fencing, haybales or erosion control mix sediment barriers will be installed at the toe of slope and in areas as located on the plans to protect against any construction related erosion.
3. Topsoil will not be removed from the site.
4. All disturbed areas expected to remain longer than 15 days shall be:
 - A. Treated with straw at a rate of 70-90 lbs. per 1000 square feet from 4/14 to 10/1, or at a rate of 150-200 lbs. per 1000 square feet from 10/1 to 4/15.
 - B. Seeded with conservation mix of perennial rye grass (1.0 lbs/1000 sq.ft.) and mulched immediately. From 10/1 to 4/15, follow the seeding rates as outlined below in sub-section 4.D. of the "Post Construction Revegetation" section.
 - C. Monitored every two weeks until seeding can occur and remulched as needed to protect slopes.
5. All grading of soil will be held to a maximum 3:1 slope where practical. Greater slopes may be used where the banks are protected with soft armour matting, erosion control matting, or erosion control mix. All slopes will be stabilized with permanent seeding immediately after final grading is complete. (It is understood that immediately means within 5 days of the completion of work. See Post-Construction revegetation for seeding specification.)
6. Construction traffic will be directed over the aforementioned construction entrance into the site area. Any areas subject to rutting will be stabilized immediately by application of a layer of crushed stone. Island Avenue shall be swept daily should mud or debris be tracked onto the pavement.

POST CONSTRUCTION REVEGETATION

The following general practices will be implemented to prevent erosion as soon as an area is ready to undergo final grading:

1. A minimum of 4" of loam will be spread over disturbed areas and graded to a uniform depth and natural appearance.

2. An area shall be mulched immediately after it has been graded. Mulching shall consist of hay mulch, hydro-mulch or any suitable substitute deemed acceptable by the site Design Professional.
3. Construction shall be planned to eliminate the need for seeding between October 1st and April 15th. Should seeding be necessary between these dates, the following procedure shall be followed:
 - A. Only unfrozen loam shall be used.
 - B. Loaming, seeding and mulching will not be done over snow or ice cover. If snow exists, it must be removed prior to placement of seed.
 - C. Where permanent seeding is necessary, Annual Winter Rye (1.2 lbs/1000 s.f.) shall be sown instead of the previously noted seeding rate.
 - D. Where temporary seeding is required, Annual Winter Rye (2.5 lbs/1000 s.f.) shall be sown instead of the previously noted seeding rate.
 - E. Fertilizing, seeding and mulching shall be done on loam the day the loam is spread.
 - F. Hay mulch shall be secured with photodegradable/biodegradable netting. Tracking by machinery alone will not suffice. Winter mulching rates, as specified above in subsection 5.A. of the "Construction Phase" section, should be applied during this period.
4. Following final seeding, the site will be inspected every 30 days until 80% cover has been established. Reseeding will be carried out by the contractor within 10 days of notification by the design professional that the existing catch is inadequate.

MONITORING SCHEDULE

The site contractor shall be responsible for installing, monitoring, maintaining, repairing, replacing and removing all of the erosion and sedimentation controls or appointing a qualified subcontractor to do so. Maintenance measures will be applied as needed during the entire construction cycle. Immediately following any significant rain fall, and at least once a week, a visual inspection will be made of all erosion and sedimentation controls as follow:

1. Haybale barriers, silt fence and erosion control mix sediment barriers shall be inspected and repaired. Sediment trapped behind these barriers shall be excavated when it reaches a depth of 6" and redistributed to areas undergoing final grading. Should haybale barriers prove to be ineffective, the contractor shall install silt fence behind the haybales.
2. Construction entrance shall be visually inspected daily. Island Avenue shall be swept should mud or debris be deposited/tracked onto it.

EROSION CONTROL REMOVAL

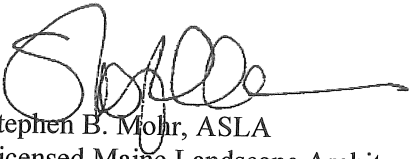
An area is considered stable if it is paved or if 80% growth of planted seeds are established. Once an area is considered stable, the erosion control measures can be removed as follows:

1. Haybales and Silt Fence

The haybales and silt fence shall be disposed of legally and properly off-site. All sediment trapped behind these controls shall be distributed to an area undergoing final grading or removed and relocated off-site.

2. Erosion Control Mix Sedimentation Barrier: Any sediment deposits remaining in place after barrier is no longer required should be spread to conform to the existing grade and be seeded and mulched in accordance with the Landscaping Plan. When the barrier is removed, it can be spread out into the landscape in an area selected by the Landscape Architect.

The above erosion controls must be removed within 30 days of final stabilization of the site. Conformance with this plan, and following these practices will result in a project that complies with the State Regulations and the Standards of the Natural Resources Protection Act (NRPA), and will protect water quality in areas downstream from the project.



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