

SECTION 02270

**SLOPE PROTECTION AND EROSION CONTROL
(SPECIFICATION WRITER SHOULD EDIT THIS SECTION
TO REFLECT PROJECT AND PERMIT SPECIFICATIONS)**

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SLOPE PROTECTION AND EROSION CONTROL (SPECIFICATION WRITER SHOULD EDIT THIS SECTION TO REFLECT PROJECT AND PERMIT SPECIFICATIONS)

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Temporary and permanent erosion control systems.
- B. Slope Protection Systems.

1.02 RELATED SECTIONS

- A. Section 02000 - Site Location of Development Permit
- B. Section 02100 - Site Preparation
- C. Section 02200 - Earthwork
- D. Section 02900 – Seeding and Miscellaneous Site Work
- E. Erosion and Sedimentation Control Report (To be appended to this Specification Section)
- F. Construction Requirements

1.03 ENVIRONMENTAL REQUIREMENTS

- A. The Contractor shall protect adjacent properties and water resources from erosion and sediment damage throughout the life of the contract in accordance with the Erosion and Sediment Control Report prepared for this project. The Erosion and Sediment Control Report and Site Permits have specific restrictions on seasonal work limits, the amount of area which can be exposed at a given time, the general sequence of construction, and contractor monitoring. All drawings referenced in the Erosion Control Report can be found in the plan set.
- B. The general contractor will be required to designate, by name, a Registered Professional Engineer or equivalent person responsible for implementation of all erosion control measures for this project. Specific responsibilities will include:
 - 1. Assuring and certifying the contractor's construction sequence is in conformance with the specified schedule. In addition, a weekly certification stating compliance, any deviations, and corrective measures shall be filed with the owner by this person. A copy of the certification form is contained the Erosion and Sedimentation Control Report which is appended to this Specification Section.
 - 2. Inspection of the project work site on a weekly basis, with the installation of added erosion control measures in areas which appear vulnerable to erosion.
 - 3. Inspection of all erosion control measures and drainage inlets after any significant rainfall. Accumulated silt/sediment should be removed when the depth of sediment reaches 50 percent of the barrier height. Accumulated silt/sediment should be removed from behind silt

fencing when the depth of the sediment reaches 6 inches. A significant rainfall shall be defined as over 1/4 inch of precipitation in any consecutive 24 hour period.

4. Inspect areas for catch of grass. A minimum catch of 75 percent is required prior to removal of erosion control measures.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Quick growing grasses for temporary seeding (see seed mixes contained in Erosion and Sedimentation Report).
- B. Hay or straw bales.
- C. Fencing for siltation control as specified on the plans.
- D. Curlex blankets by American Excelsior Company or approved equal.
- E. Bale stakes shall be a minimum of 4 feet in length and 1" in width.
- F. Temporary mulches such as loose hay, straw, netting, wood cellulose or agricultural siltage.
- G. Fence stakes shall be metal stakes a minimum of 8 feet in length.
- H. Stone check dams shall be spaced according to the Erosion Control Detail Plan.
- I. Stone Sediment Barriers or SiltSacks™, or approved equal for inlet protection.
- J. A stabilized construction entrance shall be constructed temporarily.
- K. Riprap for slopes, culvert, storm drain inlet, and outlet aprons.
- L. Sand blankets, of native material, to protect clay subgrades.
- M. Reinforced turf. (***SPECIFICATION WRITER TO PROVIDE TYPE OF REINFORCED TURF***)
- N. Inlet risers for ponds.
- O. Wood mulch.
- P. Calcium chloride and water for dust control.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Review site erosion control plan attached to this section of the specifications.
- B. Deficiencies or changes in the erosion control plan as it is applied to current conditions will be brought to the attention of the Engineer for remedial action.

3.02 EROSION CONTROL AND SLOPE PROTECTION IMPLEMENTATION

- A. Provide catalog cuts and information concerning the erosion control products which will be used for construction for review by the Owner.
- B. Provide information concerning the installation of the erosion sedimentation control including anchorage trench provisions and anchorage devices and spacing for review by the Owner.

- C. Place erosion control systems in accordance with the erosion control plan and in accordance with approved installation procedures.
- D. The Engineer has the authority to limit the surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations. The Owner has the authority to direct the Contractor to provide immediate permanent or temporary pollution control measures. The Contractor will be required to incorporate all permanent erosion control features into the project at the earliest practical time to minimize the need for temporary controls. Cut slopes shall be permanently seeded and mulched as the excavation proceeds to the extent considered desirable and practical.
- E. The temporary erosion control systems installed by the Contractor shall be maintained as directed by the Engineer to control siltation at all times during the life of the Contract. The Contractor must respond to any maintenance or additional work ordered by the Engineer within a 48 hour period.
- F. Any additional material work required beyond the extent of the erosion control plan shall be paid for by the Owner except where such measures are required to correct deficiencies caused by the failure of the Contractor to construct the work in accordance with the erosion sediment control plan.
- G. Slopes that erode easily shall be temporarily seeded as the work progresses with a cereal grain of wheat, rye or oats.

---END OF SECTION 02270---

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ATTACHMENT A

EROSION AND SEDIMENTATION CONTROL REPORT

**(This attachment shall be prepared on a project specific basis, if applicable,
and shall be made a part of the Contract Documents)**