

SECTION 01560
ENVIRONMENTAL PROTECTION AND SPECIAL CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section addresses minimizing the pollution of air, water, or land; control of noise, and the disposal of solid waste materials.

1.2 QUALITY ASSURANCE

- A. Referenced Standards:
 - 1. Virginia Department of Environmental Quality (VDEQ):
 - a. Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.

1.3 SUBMITTALS

- A. Shop Drawings: Submit a detailed proposal of all methods of control and preventive measures to be utilized for environmental protection.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Specifications for materials associated with the erosion and sediment control measures detailed in the drawings can be found in the Virginia Erosion and Sediment Control Handbook. A downloadable PDF copy of the Handbook can be obtained at the web site for the VDEQ at <https://www.deq.virginia.gov/home/showpublisheddocument/2462>

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Employ and utilize environmental protection methods, obtain all necessary permits, and fully observe all local, state, and federal regulations.
- B. The implementation of environmental protection methods for the Project shall be coordinated with Owner and its contractors completing work on the site. Refer to Paragraph 1.3 of Section 01040 - Coordination for additional information and points of contact for other projects being constructed at the site.
- C. Land Protection:
 - 1. Except for any work or storage area and access routes specifically assigned for the use of the Contractor, the land areas outside the limits of construction activity shall be preserved in their present condition. Contractor shall confine his construction activities to areas defined for work within the Contract Documents.
 - 2. Manage and control all borrow areas, work or storage areas, stockpile areas, access routes and embankments to prevent sediment from entering nearby water or land adjacent to the work site.
 - 3. Restore all disturbed areas and establish permanent type of locally adaptable vegetative cover.
 - 4. Plan and execute earthwork in a manner to minimize duration of exposure of unprotected soils.
 - 5. The Contractor shall not deface, injure or destroy trees and vegetation, nor remove, cut, or disturb them without approval of the Engineer. Any damage caused by the Contractor's equipment or operations shall be restored to its original condition at the Contractor's expense.

- D. Surface Water Protection:
1. Utilize erosion control methods to minimize the discharge of sediment to the surface water leaving the construction site. These controls shall be maintained until the site is ready for final pavement and landscaping or until they are no longer warranted and concurrence is received from the Engineer. The Contractor is responsible for obtaining all required permits from the Locality and the VDEQ and having them readily available for inspection upon request.
 - a. Install inlet protection prior to commencing excavation.
 - b. Maintain erosion and sediment control measures.
 - 1) Inspect regularly especially after rainstorms.
 - 2) Promptly repair or replace damaged or missing items.
 - 3) Remove sediment from inlet protection to prevent overtopping.
 - c. Provide storage and staging areas with graveled or rockered access entrance and exit drives and parking areas to reduce the tracking of sediment onto public or private roads.
 2. Physically retard the rate and volume of run-on and runoff by:
 - a. Implementing structural practices such as diversion swales, terraces, straw bales, silt fences, berms, storm drain inlet protection, rockered outlet protection, sediment traps and temporary basins.
 - b. Implementing vegetative practices such as temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffers, hydroseeding, anchored erosion control blankets, sodding, vegetated swales or a combination of these methods.
 - c. Providing construction sites with graveled or rockered access entrance and exit drives and parking areas to reduce the tracking of sediment onto public and private roads.
- E. Solid Waste Disposal:
1. Collect and remove solid waste from the site on a weekly basis at a minimum.
 2. No building materials wastes or unused building materials shall be buried, dumped, or disposed of on the site.
- F. Fuel and Chemical Handling:
1. Store and dispose of chemical wastes in a manner approved by regulatory agencies.
 2. Take special measures to prevent chemicals, fuels, oils, and greases from entering drainage ways.
 3. Do not allow water used in onsite material processing, concrete curing, cleanup, and other waste waters to enter a drainage way(s) or stream.
 4. The Contractor shall provide containment around fueling and chemical storage areas to ensure that spills in these areas do not reach waters of the state.
- G. Control of Dust:
1. The control of dust shall mean that no construction activity shall take place without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne so that it remains visible beyond the limits of construction. Reasonable measures may include paving, frequent road cleaning, or application of water. The use of chemical agents will not be allowed.
 2. Utilize methods and practices of construction to eliminate dust in full observance of locality regulations and permit requirements.
 3. The Engineer will determine the effectiveness of the dust control program and may require the Contractor to provide additional measures, at no additional cost to Owner.
- H. Burning: Burning of material on the site is prohibited.
- I. Control of Noise: Control noise by fitting equipment with appropriate mufflers and sound enclosures to meet noise ordinances of locality where work is being performed.
- J. Completion of Work:
1. Upon completion of work, leave area in a clean, natural looking condition.
 2. Ensure all signs of temporary construction and activities incidental to construction of required permanent work are removed. Grade, fill and seed all disturbed areas.

END OF SECTION