

SECTION 312500 - EROSION, SILTATION AND DUST CONTROL

1.1 RELATED SECTIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Front End Specification Sections, apply to this section.

1.2 SCOPE

- A. This work shall consist of control measures during construction until final acceptance to control water run off, erosion, siltation, and unreasonable amounts of dust. Permanent measures, which will remain in place after completion, are shown on plans. Temporary measures are also shown on plans or required by notes on plans or project specifications. Measures to adequately control erosion and siltation throughout project construction, at different stages of construction, are required whether or not shown on the plans. This control shall be accomplished through the use of berms, dikes, sediment basins, sediment barriers, sediment traps, slope drains, grasses, and other devices.

1.3 GENERAL

- A. Comply with all applicable federal, state (GA Erosion & Sedimentation Control Act) & local ordinances.
- B. In general, the work required to accomplish the planned facilities will be performed in a way which will minimize even temporary increase in suspended matter or pollutants in local streams or storm drains.
- C. Clearing and grubbing operations shall be so scheduled and performed that grading operations and permanent erosion control features can follow immediately thereafter, if the Project conditions permit; otherwise temporary erosion control measures will be required between successive construction stages, as described in Specification Section "Site Clearing."
- D. During construction the Contractor shall maintain careful scheduling and performance to ensure that land stripped of its natural ground cover is exposed only in small quantities and for durations not exceeding 14 days. Areas left exposed for periods greater than 14 days shall be seeded with temporary grass and/or mulched.
- E. The erosion control measures described herein shall be continued until the permanent drainage facilities have been constructed and until grass on planted slopes is sufficiently established to be an effective erosion deterrent.
- F. The Contractor shall be responsible for maintenance of erosion control measures until final stabilization of the site, and the Contractor shall remove and dispose of erosion control devices after maintenance responsibilities are concluded.

1.4 SEDIMENT BARRIERS

- A. Temporary sediment barriers shall be installed where shown on the plans or directed by the Engineer. Sediment barriers shall be fabric fence. Sediment shall be removed periodically during construction to ensure continued satisfactory performance as intended.

1.5 TEMPORARY GRASSING AND MULCHING

- A. Where staged construction or other conditions prohibit the completion of the project in a continuous manner the Contractor shall temporary grass and/or temporary mulch all areas disturbed.

- B. Temporary grass shall consist of sowing a quick growing species of grass suitable to the area and season. Seeding shall be done in accordance with the Landscape Work Section and the Drawings.
- C. Temporary mulch shall be applied to deter surface erosion. The mulched areas may be placed on slopes as steep as 2:1 using a tractor to imbed the mulch into the slope.

1.6 RUN OFF, EROSION AND SEDIMENTATION CONTROLS

- A. During construction, route run off through sedimentation barriers, check dams and sediment basins.
- B. The Contractor shall maintain sedimentation devices in functional condition. Temporary sediment storage areas, sediment barriers, sediment traps, and check dams shall be cleaned out when these devices are at last 50 percent of their capacity. Defective materials shall be replaced.
- C. Silts and deposits removed from control barriers shall be placed in eroded areas, compacted and stabilized with vegetation.
- D. The Contractor shall establish sediment barriers at the toe of slopes under construction. These barriers may be relocated and reused after permanent slope stabilization becomes established. As they are relocated, any defective material in the barrier shall be replaced. In addition, all debris and silt at the previous location shall be removed.

1.7 DUST CONTROL

- A. Dust shall be controlled by keeping dry areas damp by sprinkling with water, or other means.

1.8 EROSION CONTROL BLANKETS

- A. 4:1 – 3:1 Slopes: Use straw fiber blankets sewn between two biodegradable, jute/scrim nets. Blankets shall be BioNet S150BN as manufactured by North American Green, Curlex II FibreNet as manufactured by American Excelsior Company, or Biodegradable Landlok S2 as manufactured by SI Geosolutions.
- B. 2½:1 and Steeper Slopes: Use erosion control fabric intended for permanent installation on slopes. Fabric shall have (2) U.V. stable nets. Top net shall be 5 lb. black and bottom net shall be 3 lb. black. Nets shall be stitched on 1½" centers. Fabric shall be P300P as manufactured by North American Green or pre-approved equal.
- C. Waterways and Swales: Use blankets of curled wood or coconut fiber matrix sewn between two heavy-weight, UV stabilized nets. Blankets shall be C125 as manufactured by North American Green, Curlex III as manufactured by American Excelsior Company, or Landlok C2 as manufactured by SI Geosolutions.

1.9 FILTER FABRIC

- A. All filter fabric to be placed under rip-rap aprons shall be Georgia Department of Transportation Class 'C' fabric. Fabric shall be 180-N as manufactured by Mirati, 4552 as manufactured by Amoco, N07 as manufactured by Geolon or FX-70S as manufactured by Carthage. Fabric shall be secured to ground per manufacturer's recommendations.

1.10 RIP-RAP STONE

- A. All rip-rap stone shall meet Georgia Department of Transportation Specifications.

END OF SECTION 312500