

Section 01579

TRAPPING SEDIMENT DURING SITE DEWATERING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Installation of erosion and sediment control sediment tanks and sediment sump pits used during construction and prior to final development of site.

1.02 UNIT PRICES

- A. Measure and pay for sediment tanks is on a unit price basis for each completed and accepted sediment tank.
- B. Measure and pay for sediment sump pits is on a unit price basis for each completed and accepted sediment sump pit.

1.03 REFERENCE STANDARDS

- A. ASTM D 698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
- B. Storm Water Quality Management Guidance Manual prepared by City of Tomball and Montgomery County.

PART 2 PRODUCTS

2.01 ROCK AND STONE

- A. Use open graded rock with most fines removed.
- B. Use rock 2-inches in diameter unless otherwise approved by City Engineer.
- C. Use clean hard rocks free from adherent coatings, salt, alkali, dirt, clay, loam, shale, soft or flaky materials, or organic and injurious matter.

PART 3 EXECUTION

3.01 PREPARATION AND INSTALLATION

- A. Provide erosion and sediment control systems at locations shown on Drawings. Construct in accordance with requirements shown on Drawings and of type indicated as specified in this Section.
- B. No clearing, grubbing or rough cutting permitted until erosion and sediment control systems are in place, other than site work specifically directed by City Engineer to allow soil testing and surveying.
- C. Maintain existing erosion and sediment control systems located within project site until acceptance of Project or until directed by City Engineer to remove and discard existing system.
- D. Regularly inspect and repair or replace damaged components of erosion and sediment control systems as specified in this Section. Unless otherwise directed, maintain erosion and sediment control systems until project area stabilization is accepted by City. Remove erosion and sediment control systems promptly when directed by City Engineer. Discard removed materials off site.
- E. Remove and dispose sediment deposits at designated spoil site for Project. If a project spoil site is not designated on Drawings, dispose of sediment off site at location not in or adjacent to stream or flood plain. Assume responsibility for off-site disposal. Spread sediment evenly throughout site, compacted and stabilized. Prevent sediment from flushing into a stream or drainage way. If sediment has been contaminated, dispose of in accordance with existing federal, state, and local rules and regulations.
- F. Prohibit equipment and vehicles from maneuvering on areas outside of dedicated rights-of-way and easements for construction. Immediately repair damage caused by construction traffic to erosion and sediment control.
- G. Unless otherwise indicated, compact embankments, excavations, and trenches by mechanically blading, tamping, and rolling soil in maximum of 8-inch layers. Compaction density shall be at a minimum of 90 percent Standard Proctor ASTM D698-78 density. Make at least one test per 500 cubic yards of embankment.
- H. Conduct all construction operations under this Contract in conformance with erosion control practices described in Section 01572- Source Controls for Erosion and Sedimentation.

3.02 SEDIMENT TANK CONSTRUCTION METHODS

- A. Install sediment tank as shown on Drawings.
- B. Steel drums or other type of tanks may be used, providing that volume requirements are met. When recycled steel drums are used, they must be free of chemical contamination.

- C. Inspect after each pumping and clean out tank when one-third of sediment tank is filled with silt.
- D. Dispose of sediment collected in tank at approved site in a manner that will not contribute to additional siltation.
- E. Remove sediment tank when construction is complete.

3.03 SEDIMENT SUMP PIT CONSTRUCTION METHODS

- A. Install sediment sump pits as shown on Drawings.
- B. Construct standpipe by perforating 12-inch to 24-inch diameter corrugated or PVC pipe.
- C. Extend standpipe 12-inches to 18-inches above lip of pit.
- D. Convey discharge of water pumped from standpipe to sediment trapping device.
- E. Fill sites of sump pits, compact to density of surrounding soil and stabilize surface when construction is complete.

END OF SECTION