

SECTION 270 PORTABLE SEDIMENT TANK

270.01 Description. This work consists of constructing, installing, maintaining, and ultimately removing portable sediment tanks to trap and retain sediment prior to pumping water back to the watercourse. Construction of the portable sediment tanks shall be as shown on Standard Construction Detail, Portable Sediment Tank, or an approved alternate design, at the locations shown on the Plans, and as directed by the Engineer.

270.02 Alternate Design. If the storage volume is adequate and approval is obtained from the Stormwater Engineer, the Contractor may use an alternate design for the portable sediment tank.

270.03 Submittal. Prior to the actual use of the portable sediment tank, the Contractor shall submit the hydraulic design of the portable sediment tank to the Engineer for approval.

MATERIALS.

270.04 Materials for Standard Construction Detail, Portable Sediment Tank. The materials that follow are specific to the portable sediment tank design shown on Standard Construction Detail, Portable Sediment Tank.

- a. *Wire Mesh.* Wire mesh shall be steel or galvanized welded wire reinforcement with openings 3 by 3"(6 by 6 mm) and wire diameter of 23 gage (655 im).
- b. *Pipe.* Pipes shall be corrugated metal, either steel or aluminum, conforming to the requirements of Section 614 or 615, respectively.
- c. *Fasteners.* Eye bolts conforming to the requirements of ASTM F 541, Type 1 or Type 2, and shall be of sufficient strength to lift the portable sediment tank filled with sediment to a depth of 24" (600 mm).
- d. *Metal Plate.* Metal plate shall conform to the same material requirements as the pipe.
- e. *Geotextile.* Geotextile shall conform to the requirements of [Section 827](#).
- f. **270.05 Materials for an Alternate Design.** The Contractor shall submit a detailed list of materials to the Engineer. All materials shall not contribute to any contamination of the outflow. The materials list shall be submitted with the hydraulic design submittal required in [Subsection 270.03](#).

270.06 Seed. Seed shall conform to the requirements of [Section 734](#).

270.07 Mulch. Mulch shall conform to the requirements of [Section 735](#).

CONSTRUCTION METHODS.

270.08 General. With approval from the Engineer, the Contractor may install the portable sediment tank at a different location than is shown on the Plans. The portable sediment tank shall be located for ease of clean-out and disposal of the trapped sediment and to minimize the interference with the construction activities and pedestrian traffic.

270.09 Construction of Portable Sediment Tank According to Standard Construction Detail, Portable Sediment Tank. All welds shall be watertight. The Contractor shall line the inside of the perforated pipe with a layer of wire mesh first, and then with a layer of geotextile. The wire mesh and geotextile shall be securely fastened to the pipe.

270.10 Construction of Portable Sediment Tank According to an Alternate Design. The Contractor shall submit a detailed sketch of the alternate design with notes describing the planned construction methods. The detailed sketch shall be submitted with the hydraulic design submittal in [Subsection 270.03](#).

270.11 Maintenance of Portable Sediment Tank. The Contractor shall make any required repairs to the portable sediment tank to ensure that the portable sediment tank functions as intended.

270.12 Sediment Removal. The Contractor shall remove the sediment when it accumulates to a depth of 24" (600 mm) in a tank designed according to Standard Construction Detail, Portable Sediment Tank, and when it accumulates to one-third of the portable sediment tank height for an alternate design. All sediment collected in the portable sediment tank shall be disposed of in an approved disposal area or as approved by the Engineer.

270.13 Removal of Portable Sediment Tank. The portable sediment tank and all materials incidental to the construction of the portable sediment tank shall be removed and all areas affected by the portable sediment tank shall be restored to the original or plan contours and stabilized with seed and mulch.

270.14 Method of Measurement. The quantity of portable sediment tanks will be measured as the actual number of each portable sediment tank placed and accepted. Sediment removal will be measured according to [Section 250](#).

270.15 Basis of Payment. The quantity of portable sediment tanks will be paid for at the Contract unit price per each. Price and payment will constitute full compensation for furnishing, fabricating, and installing the portable sediment tank; for maintaining the portable sediment tank; relocating within project limits; for disposing of the portable sediment tank and all incidental materials; for restoring the portable sediment tank area; for seeding and mulching; and for all labor, equipment, tools, and incidentals required to complete the work.

The quantity of sediment removal will be paid for according to [Section 250](#).

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