

**Section 01561****REINFORCED FILTER FABRIC BARRIER****1.0 GENERAL****1.01 SECTION INCLUDES**

- A Installation of reinforced filter fabric barrier to control erosion and contain sediments and pollutants in channelized flow areas.
- B References to Technical Specifications:
  - 1. Section 01200 – Measurement & Payment Procedures
  - 2. Section 01350 – Submittals
  - 3. Section 01566 – Source Controls for Erosion & Sedimentation
- C Referenced Standards:
  - 1. American Society for Testing and Materials (ASTM)
    - a. ASTM D 3786, “Standard Test Method for Hydraulic Bursting strength of Textile Fabrics”
    - b. ASTM D 4632, Standard Test Method for Grab Breaking Load and Elongation of Geotextiles”

**1.02 MEASUREMENT AND PAYMENT**

- A Measurement for reinforced filter fabric barrier is on a linear foot basis between the limits of the beginning and ending fence posts, measured, accepted, and complete in place.
- B Payment for filter fabric barrier will include and be full compensation for all labor, equipment, materials, supervision, and incidental expenses for construction of these items, complete in place, including, but not limited to protection of trees, maintenance requirements, repair and replacement of damaged sections, removal of sediment deposits, and removal of erosion and sediment control systems at the end of construction..
- C Refer to Section 01200 – Measurement & Payment Procedures.

**1.03 SUBMITTALS**

- A Make Submittals required by this Section under the provisions of Section 01350 – Submittals.
- B Manufacturer’s catalog sheets and other product data on geotextile fabric.

**2.0 PRODUCTS****2.01 FILTER FABRIC**

- A Provide woven or nonwoven geotextile filter fabric made of either polypropylene, polyethylene, ethylene, or polyamide material.
- B By ASTM - D4632, geotextile fabric shall have a grab strength of 100 psi in any principal direction, a Mullen burst strength exceeding 200psi by ASTM - D3786, and the equivalent opening size between 50 and 140.
- C Filter fabric shall contain ultraviolet inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 degrees F to 120 degrees F.
- D Representative Manufacturer: Mirafi, Inc., or equal.

**2.02 FILTER FABRIC REINFORCEMENT**

- A Provide woven galvanized steel wire fence with minimum thickness of 14 gauge and a maximum mesh spacing of 6 inches.
- B Welded wire shall be galvanized, 2-inch by 4-inch, welded wire fabric, 12 ½ gauge.

**2.03 EXECUTION****2.04 PREPARATION**

- A Provide erosion and sediment control systems at the locations shown on Plans. Such systems shall be of the type indicated and shall be constructed in accordance with the requirements shown on the Plans and specified in this Section.
- B Erosion and sediment control measures shall be in place prior to the start of any Work that exposes the soil, other than as specifically directed by the Engineer to allow soil testing and surveying.
- C Regularly inspect and repair or replace damaged components of filter fabric barrier. Unless otherwise directed, maintain the erosion and sediment control systems until the Work is accepted by the Owner. Remove erosion and sediment control systems promptly when directed by the Engineer. Discard removed materials in accordance with Section 1562 – Waste Material Disposal.
- D Conduct all construction operations under this Contract in conformance with the erosion control practices described in Section 01566 – Source Controls for Erosion & Sedimentation.

**2.05 INSTALLATION**

- A Install reinforced filter fabric barriers for erosion and sediment control used during construction and until the final development of the Project Site. Reinforced filter fabric barriers are used to retain sedimentation in channelized flow areas.
- B Provide reinforced filter fabric barrier in accordance with the Plan detail for Reinforced Filter Fabric Barrier. Reinforced filter fabric barrier systems shall be installed in such a manner that runoff will percolate through the system and allow sediment to be retained and accumulated.
- C Trench in the toe of the reinforced filter fabric barrier with a spade or mechanical trencher as shown on the Plans. Lay filter fabric along the edges of the trench. Backfill and compact trench.
- D Reinforced filter fabric barrier shall have a height of 18 inches.
- E Securely fasten the filter fabric to the wire with tie wires.
- F Provide the filter fabric in continuous rolls and cut to the length of the fence to minimize the use of joints. When joints are necessary, splice the fabric together only at a support post with a minimum 6-inch overlap and seal securely.
- G Inspect the reinforced filter fabric barrier systems after each rainfall, daily during periods of prolonged rainfall, and at a minimum once each week. Repair or replace damaged sections immediately. Remove sediment deposits when silt reaches a depth one-third the height of the barrier or 6 inches, whichever is less.

END OF SECTION