Section 01560

FILTER FABRIC FENCE

1.0 GENERAL

1.01 SECTION INCLUDES

- A Installation of filter fabric fence to control erosion and contain sediments and pollutants from overland flow. Filter fabric fence is not for use in channelized flow areas. Filter fabric fence may be reinforced.
- B References to Technical Specifications:
 - 1. Section 01200 Measurement & Payment Procedures
 - 2. Section 01350 Submittals
 - 3. Section 01562 Waste Material Disposal
 - 4. 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 MEASURMENT AND PAYMENT

- A Filter fabric fence will be measured by the linear foot between the limits of the beginning and ending of wooden stakes.
- B Payment for filter fabric fence will include and be full compensation for all labor, equipment, materials, supervision, and all 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 D 4632, 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.

$3.0 \qquad E X E C U T I O N$

3.01 PREPARATION AND INSTALLATION

- 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 fence as specified in this Section, 3.02F. 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 01562 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.

3.02 CONSTRUCTION METHODS

- A Provide filter fabric fence systems in accordance with the Plan detail for Filter fabric fence. Filter fabric fence shall be installed in such a manner that surface runoff will percolate through the system in sheet flow fashion and allow sediment to be retained and accumulated.
- B Attach the filter fabric to 2-inch by 2-inch wooden stakes spaced a maximum of 3 feet apart and embedded a minimum of 8 inches. If filter fabric is factory preassembled

with support netting, then maximum spacing allowable is 8 feet. Install wooden stakes at a slight angle toward the source of anticipated runoff.

- C Trench in the toe of the filter fabric fence 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 Filter fabric fence shall have a minimum height of 18 inches and a maximum height of 36 inches above natural ground.
- E 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.
- F Inspect filter fabric fence 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 fence or 6 inches, whichever is less.

END OF SECTION