

# TECHNICAL SPECIFICATIONS

## ITEM NO. 00717A SEDIMENT BASIN WITH STONE OUTLET

### PART 1 GENERAL

#### 1.01 DESCRIPTION

This Item describes the installation of sediment basins with stone outlets utilized during construction and prior to the final development of the site.

#### 1.02 RELATED WORK

Related work as called for on PLANS or specified elsewhere in this or other TECHNICAL SPECIFICATIONS.

#### 1.03 SUBMITTALS

Manufacturers' catalogue sheets and other pertinent information on filter fabrics showing that they meet or exceed requirements of this item.

### PART 2 PRODUCTS

#### 2.01 GEOTEXTILE FABRIC WRAP

Provide woven or nonwoven geotextile filter fabric made of either polypropylene, polyethylene, ethylene, or polyamide material. Geotextile shall have a grab strength exceeding 270 psi (ASTM D6832) and equivalent opening size specified on PLANS. Both the geotextile and threads shall be resistant to chemical attack, mildew and rot. Representative manufacturer: Marifi, Inc. or equal.

#### 2.02 ROCK AND STONE

Use open-graded rock with most of the fines removed. Rock shall be a minimum of 3 inches in diameter and less than 1/2 cubic foot in volume, unless otherwise specified on PLANS and drawings with this item. Use only clean, hard rocks free from adherent coatings, salt, alkalis, dirt, clay, loam, shale, soft or flaky materials, or organic and injurious matter. Crushed concrete in the size range specified be used for this purpose.

### PART 3 EXECUTION

#### 3.01 GENERAL

- A. Provide erosion and sedimentation 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 PLANS and set out in this Item.
- B. No clearing and grubbing or rough cutting, other than as specifically directed by the Owner to allow soil testing and surveying, shall be permitted until erosion and sedimentation control systems are in place.

- C. Maintain existing erosion and sedimentation control systems located within the project site installed by others prior to start of construction under this contract until acceptance of the project or until directed by the Owner to remove and discard the existing systems.
- D. Inspect and repair or replace components of all erosion and sedimentation control systems as specified for each type of system. Unless otherwise directed, maintain the erosion and sedimentation control systems until the project is accepted by the Owner. Remove erosion and sedimentation control systems promptly when directed by the Owner. Discard removed materials offsite.
- E. Remove and dispose sediment deposits at the project spoil site. If a project spoil site is not designated on PLANS, dispose of sediment offsite at location not in or adjacent to stream or floodplain. Off-site disposal will be the responsibility of the Contractor. Sediment to be placed at the project site should be spread, compacted and stabilized in accordance with the Owner's directions. Sediment shall not be allowed to flush into stream or drainage way. If sediment has been contaminated, it needs to be disposed of in accordance with existing federal, state and local regulations.
- F. Unless otherwise indicated, compact embankments, excavations, and trenches by mechanically blading, tamping, and rolling soil in a 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.
- G. Equipment and vehicles shall be prohibited by the Contractor from maneuvering on areas outside of dedicated rights-of-way and easements for construction. Damages caused by construction traffic to erosion and sedimentation control systems shall be repaired immediately.
- H. Contractor shall employ protective measures described in Item General Source Controls to avoid damage to existing trees to be retained on the project site. Conduct all construction operation under this Contract in conformance with the erosion control practices described in this Item.

### **3.02 CONSTRUCTION METHODS**

- A. Provide sediment basins at locations specified on PLANS. Sediment basin shall be constructed in accordance with construction drawings shown on PLANS.
- B. Installation of sediment basins shall not be started until permits from governmental agencies, where required, have been obtained.
- C. Install stone outlet for sediment basin at location specified on plans and in accordance with enclosed drawing.
- D. Inspect sediment basin after each rainfall, daily during periods of prolonged rainfall, and a minimum once a week. Maintain basin dimensions necessary to obtain the required basin volume as shown on PLANS. Repair and replace damaged components of the basin.
- E. Remove sediment deposits when design basin volume is reduced by one-third or sediment level is one foot below the principal spillway crest, whichever is less.

### **3.03 MEASUREMENT AND PAYMENT**

- A. Unless indicated in the PROPOSAL FORMS as a pay item, no separate payment for work performed under this Item, including testing. Include cost of work performed under this Item in Contract prices bid for items of which this work is a component. When indicated in

PROPOSAL FORMS as pay item, measure and pay for sediment basin by the square yard of completed and accepted sediment basin. Sediment basin, measured as stated, will be paid for at the unit price bid for "**Sediment Basin, Complete In Place.**"

- B.** Payment for sediment basin 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, embankment and excavation, protection of trees, maintenance requirements, repair and replacement of damaged sections, removal of sediment deposits, and removal of erosion and sedimentation control systems at the end of construction.