

CONSTRUCTION SPECIFICATION

403. FLUME

1. SCOPE

The work shall consist of furnishing and installing a flume(s) for measurement of water flow rates as outlined in this specification and on the drawings.

2. MATERIALS

The flume shall be an H-style (H-flume), obtained from a manufacturer specializing in the fabrication of flow monitoring devices. Flume shall be constructed of PVC and provide direct readings in gallons per minute.

3. INSTALLATION

The flume shall be located in a section of channel with a slight gradient to allow free flow (non-submergence) of the outlet. The flume bottom should be installed at the same elevation as the channel flow line.

The flume shall be installed so it is level in both the longitudinal and transverse directions. All flow shall be directed to the flume and seepage around or under the flume must be prevented by grouting or similar sealant materials.

4. MEASUREMENT AND PAYMENT

For items of work, for which unit prices are established in the contract, payment for flume(s) will be made at the contract unit price. Such payment shall constitute full compensation for all excavation, labor, equipment, tools and all other items necessary and incidental to the completion of the work.

Compensation for any item of work described in the contract but not listed in the bid schedule will be included in the payment for the item of work to which it is made subsidiary. Such items and the items to which they are made subsidiary are identified in Section 5 of this specification.

5. ITEMS OF WORK AND CONSTRUCTION DETAILS

Items of work to be performed in conformance with this specification and the construction details therefore are:

A. **Bid Item 21; Flume**

- (1) This item consists of furnishing and installing an H-style flume in waterway #3, including the concrete sill in which the flume is embedded, as shown on the drawings.
- (2) The flume shall be a Tarco Model 50H as distributed by EES Consultants, Inc., Washington Avenue and Graham Street, PO Box 490, Hyde, PA, 16843 (phone no. 814-765-4320) or an equivalent unit. It shall have the ability to measure flow rates up to 140 gallons per minute.
- (3) Exact location shall be determined during construction by the NRCS Representative.
- (4) The flume shall be installed according to the manufacturer's recommendations. A concrete sill shall be installed to level and seal the flume in place.