



Triangular Silt Dike

- 1. Description.** Furnish, install, maintain, and remove Triangular Silt Dike as shown on the plans. This item will be used temporarily during construction to control erosion and sedimentation. Use these control devices as shown on the plans or as directed.

2. Materials.

(A) Core Material

Urethane Foam (CVC Free)

<u>Property</u>	<u>Test Method</u>	<u>Value</u>
Color		Any
Density	ASTM D-3574-95	1.00+/1.5 lbs/cu.ft min or>
Indent. Force Deflection @25% deflection	ASTM D-3574-95 (4" specimen)	30 +/- lbs / 50 sq. in.
Tensile Strength	ASTM D-3547-95	10psi min
Elongation	ASTM D-3547-95	125% min
Tear resistance	ASTM D-3547-95	1.25 lbs/lin. Inch.
Comp. Set @ 50% comp.	ASTM D-3547-95	10 % max.

(B) Containment Mesh – Geotextile Woven Fabric (Thrace Linq GTF190 or Equivalent)

<u>Fabric Properties</u>	<u>Test Method</u>	<u>Average (English)</u>
Grab Tensile Strength	ASTM D-4623	124/101 lbs.
Grab Elongation	ASTM D-4623	15/15 %
Trapezoid Tear	ASTM D-4533	50 lbs.
CBR Puncture	ASTM D-6241	250 lbs.
Permittivity	ASTM D-4491	0.15 sec –1
A.O.S.	ASTM D-4751	30 U.S. Sieve
UV Resistance (500 hrs.)	ASTM D-4355	80+%

(E) Size

Center Height	10"
Base Width	20"
Section Length	7'
Front Apron	18"
Back Apron	18"

Furnish Triangular Silt Dike as shown in the plans or as directed by the Engineer.

- 3. Construction.** Use Triangular Silt Dike near the downstream perimeter of a disturbed area to intercept sediment from sheet flow. Incorporate the Triangular Silt Dike into the erosion control

measures used to control sediment in areas of higher flow. Install, align, and locate the Triangular Silt Dike as specified below, as shown on the plans, or as directed. Use recycled Triangular Silt Dike when allowed by the Engineer.

(A) Anchoring

Secure Triangular Silt Dike by burying the first 6 inches of the leading edge apron in a two to three inch trench. Additionally, approximately 8 to 10 tuff staples should be driven into the front and rear apron. This method will adequately prevent displacement as a result of normal rain events and to the satisfaction of the Engineer and such that flow is not allowed under the dike.

- 4. Maintenance.** Routinely inspect and maintain the Triangular Silt Dike in good condition (including staking, anchoring, etc.). Maintain the integrity of the control, including keeping the Triangular Silt Dike free of accumulated silt, debris, etc., until earthwork construction and permanent erosion control features are in place, and/or the disturbed area has been adequately stabilized. Stabilize as described in Subarticle 4.C. of the Special Specification, "Temporary Erosion, Sedimentation, and Water Pollution Prevention and Control." Stabilize the areas damaged by the removal process using appropriate methods as approved.

Repair or entirely replace torn or punctured Triangular Silt Dike as required and as directed by the Engineer. Temporarily remove and replace Triangular Silt Dike as required to facilitate construction operations.

Remove the accumulated sediment deposit when it reaches a depth of approximately 8-10 inches and dispose of it at an approved site in a manner that will not contribute to additional siltation. During removal of sediment the operator must be careful not to go too deep within the range of the front apron. The range of the apron is approx. 21" – 26" from the base of the barrier.

- 5. Removal.** Remove Triangular Silt Dike when directed by the Engineer.
- 6. Measurement.** This item will be measured by the linear foot, complete in place, measurement being made along the centerline of the top of the controls.
- 7. Payment.** The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Triangular Silt Dike." This price shall be full compensation for furnishing, placing, maintenance, temporarily removing and replacing as required to facilitate construction operations, and removal of the Triangular Silt Dike and for all other materials, labor, tools, equipment, and incidentals necessary to complete the work.

The removal of accumulated sediment deposits, as described under "Maintenance," will be measured and paid for under the pertinent bid items of the Special Specification "Earthwork for Erosion Control."

Stabilization (as described under "Maintenance") will be measured and paid for under the various pertinent bid items.