

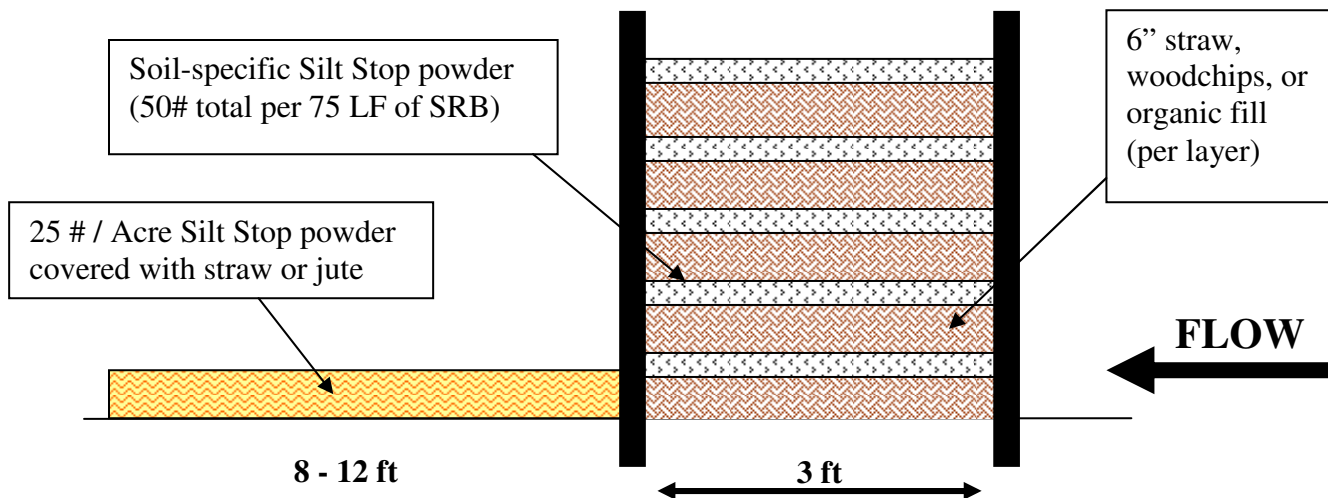
## Sediment Control

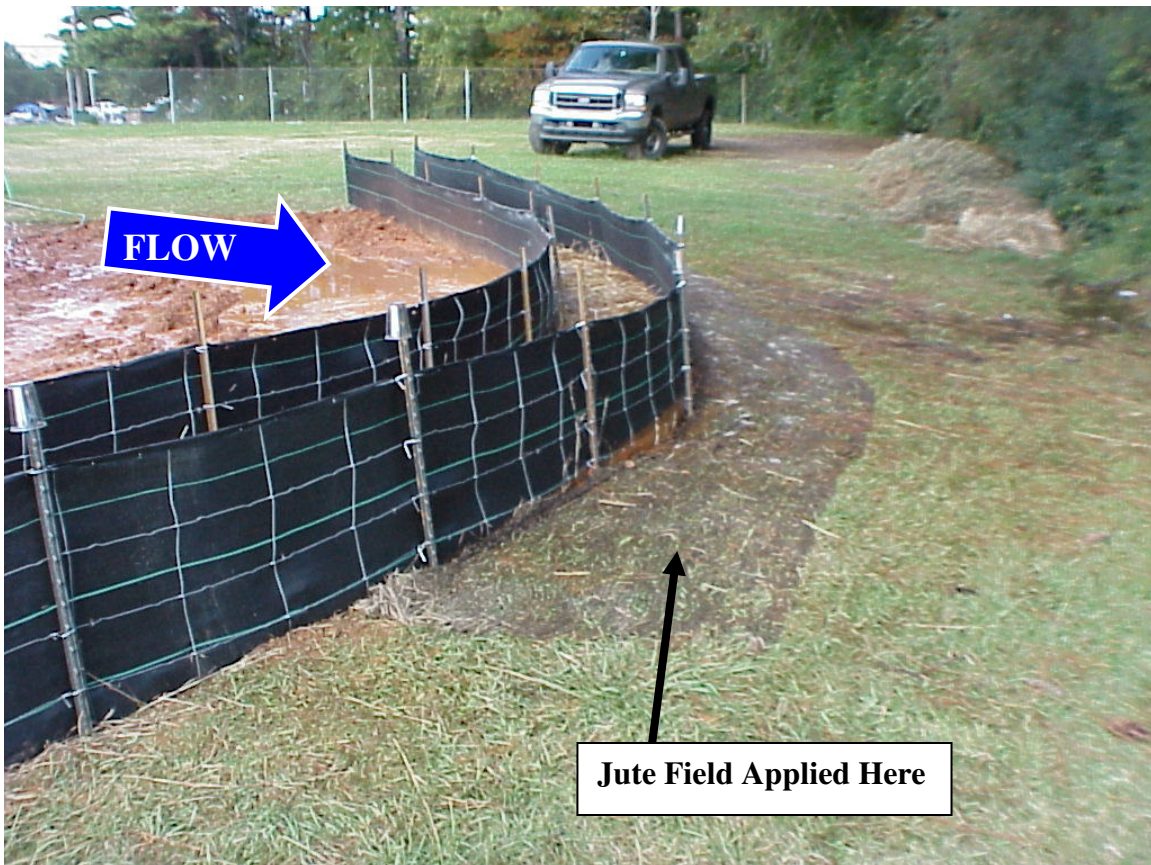
### Sediment Retention Barriers (SRB)

The Sediment Retention Barrier (SRB) is a double row of silt fence, standing about 4-6 feet apart, filled with loose mulch, straw, woodchips, or other organic matter mixed or blended with the site-specific Silt Stop polymer. It is used on graded sites to trap the fine sediment and clays that flow through the silt fence barrier. With the use of the site-specific Silt Stop polymer, stormwater clarity can be greatly improved while utilizing the function of the silt fence.

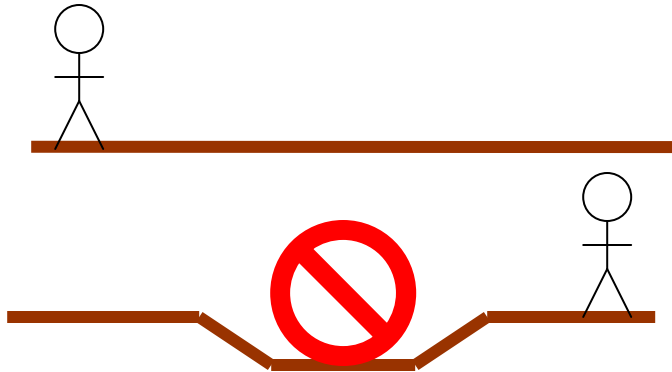
- i. Install in areas where stormwater will exit a site, keeping the installation as level as possible; fill low spots as necessary.
- ii. Place the barrier perpendicular to flow.
- iii. The silt fence should be designed to allow water to pass through it. The silt fence shall allow water to pass at a rate of 70 GPM/ft<sup>2</sup> or greater.
- iv. Place 2 parallel rows silt fence 4-6 feet apart. Place loose straw or mulch 3 feet deep between the silt fences (do not compact).
- v. Dry site-specific Silt Stop powder should be spread throughout the organic fill material, mixed evenly or spread in small layers. **Application rates should be around 50# powder / 75 linear feet of SRB.**
- vi. Stabilizing the soil behind the SRB with Silt Stop powder and straw or jute matting provides final clarification of the stormwater. It should be used where water clarity is extremely important.

#### Cross section of a Sediment Retention Barrier:



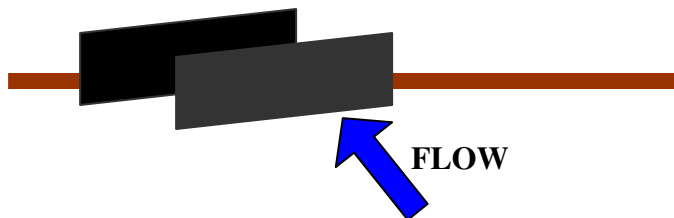


## Step-by-Step Sediment Retention Barriers



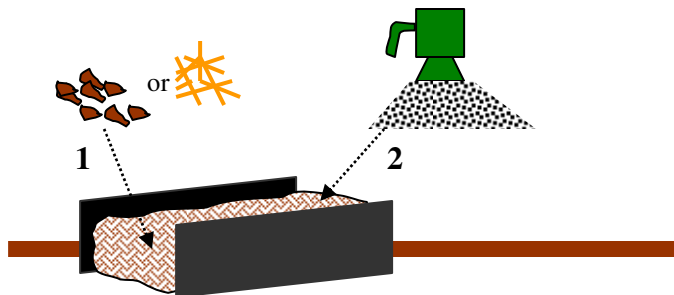
### Step 1: Grade Site.

Fill low spots to ensure the installation of the silt fence is as level as possible perpendicular to the flow.



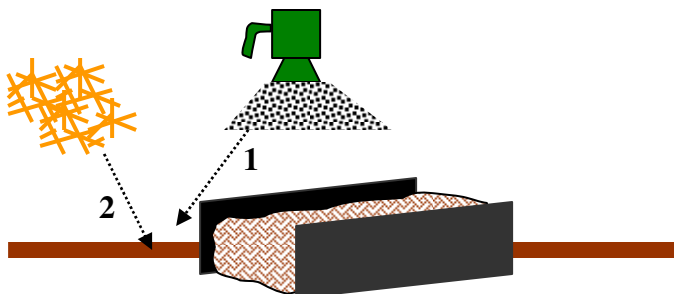
### Step 2: Install Silt Fence.

Place a double row of silt fence perpendicular to the direction of flow. The two lines of silt fence should be 3 to 4 feet apart.



### Step 3: Fill with layers of woodchips/ straw and Silt Stop powder.

Loosely fill the area between the silt fences with woodchips or straw and the site-specific Silt Stop powder in **layers**.



### Step 4: Apply Silt Stop behind SRB and cover with straw or matting.

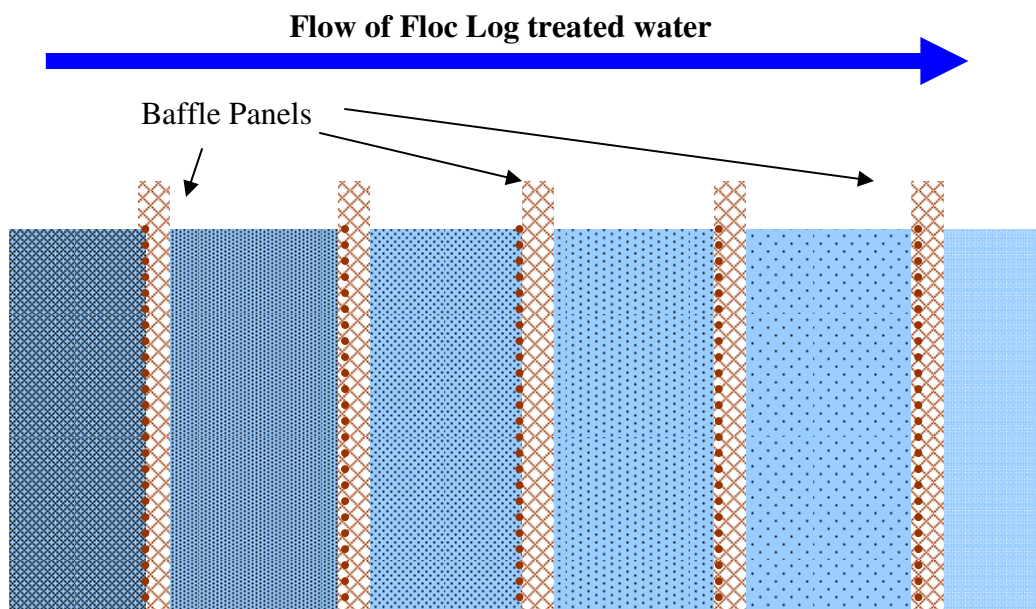
Apply the appropriate Silt Stop powder at the rate of 25 #/acre to a distance of 8-12 feet, and cover with straw or jute matting.

## Particle Collection

### Baffle Grid

A polymer enhanced baffle grid system is a series of panels made of jute or similar fabric, used to collect fine particles from turbid water after polymer reaction. The panels can be treated with a site-specific polymer for short term increased performance and to aid in further water clarification. The baffle grid is for use in conjunction with a stormwater treatment system to flocculate the suspended particles, making larger particulate that can easily be removed from suspension using the baffle grid system.

- i. This BMP is intended for particle collection only. It is not intended to be a stand-alone BMP, as it is not adequate sediment control by itself. The baffle grid system is intended for use as a final clarifier or polisher. This BMP should be used with one of the stormwater treatment systems as outlined in the previous section.
- ii. Ensure only turbid water is entering the storm drain system. The turbidity of the water flowing through the system should not exceed 4% solids. Adequate protection of the inlets should ensure that the sediment load of stormwater is not over this limit.
- iii. Baffle Grids are designed for the specific flow conditions of the site they are installed on. Alterations to the flow conditions of the site may result in compromised performance or failure. Discuss proposed changes to the flow conditions with a qualified professional before implementing them to ensure they will not detrimentally affect the baffle grid or stormwater quality.

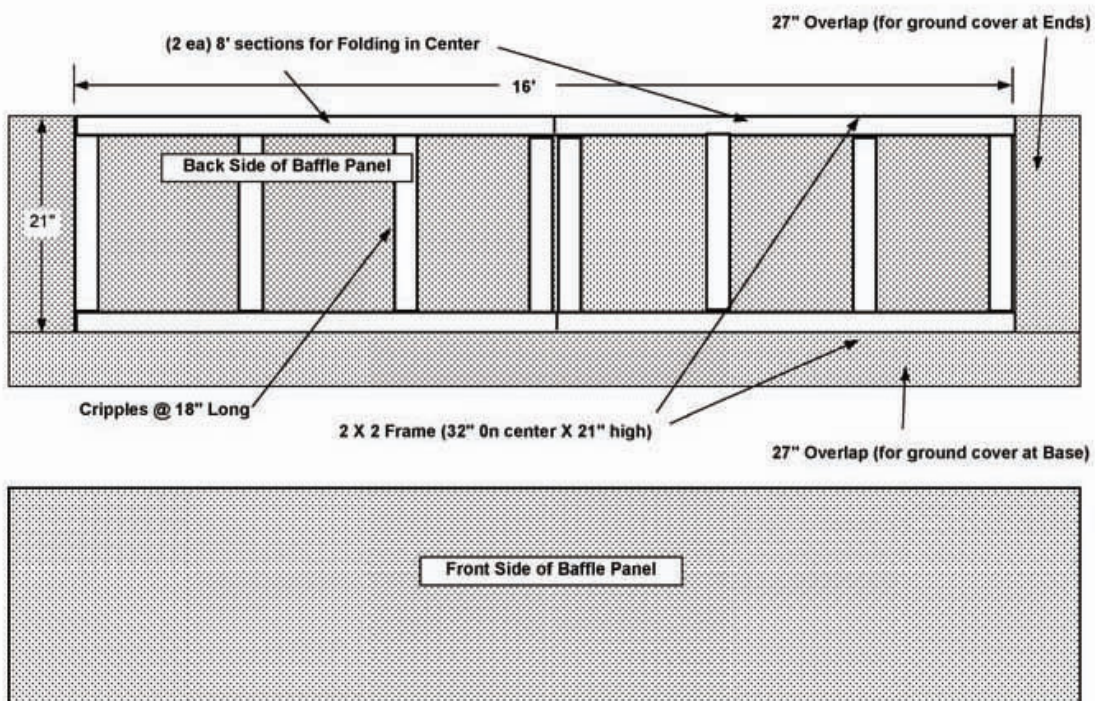


# Polymer Enhanced BMP Application Guide



**Example Only, measurements need to fit site conditions!**

**Baffle Grid Panel Detail**



C-125 Fabric with 3 ea. Jute Facing (4 layers-total) will pass 95% of water through the panel