

Sediment Barrier (Silt Fence) – The Layout Path

Passers-by often view sediment barriers as the most common BMP. In many cases, sediment barriers are no more than cosmetic placebos, especially if installed incorrectly. Although the designer specifies the properties of the materials, the design specifics for installation are often vague

The efforts of the installer will determine the success of a sediment barrier. This issue of TechNotes identifies terrain conditions that will require you to reconsider the path of installation.



Figure 1 – Example of a Poor Installation

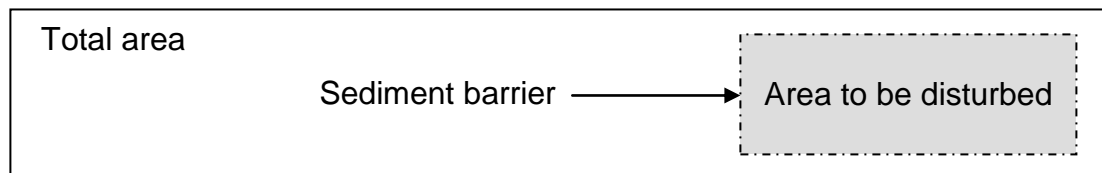
Installation Problems

Figure 1 shows several problems:

- Water and sediment concentrate at a single (low) point on each sediment barrier
- Water passes beneath the barrier
- Water passes around ends of sediment barriers
- Posts do not support the weight of the sediment

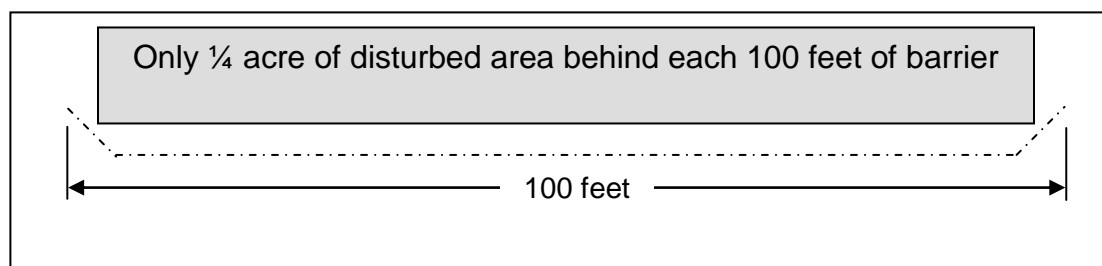
Solutions to typical installation questions:

Question 1: How much of the total area should be “fenced”?

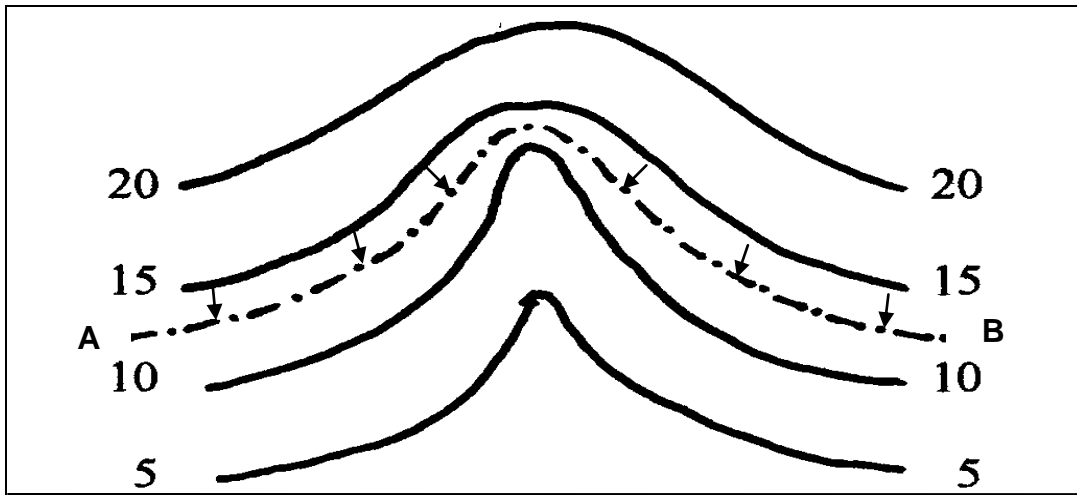


Answer: Sediment barriers should “encapsulate” only the area to be disturbed. If you enlarge the ‘fenced’ area, that much more area will be disturbed.

Question 2: How much area should drain toward each 100 feet of the barrier?

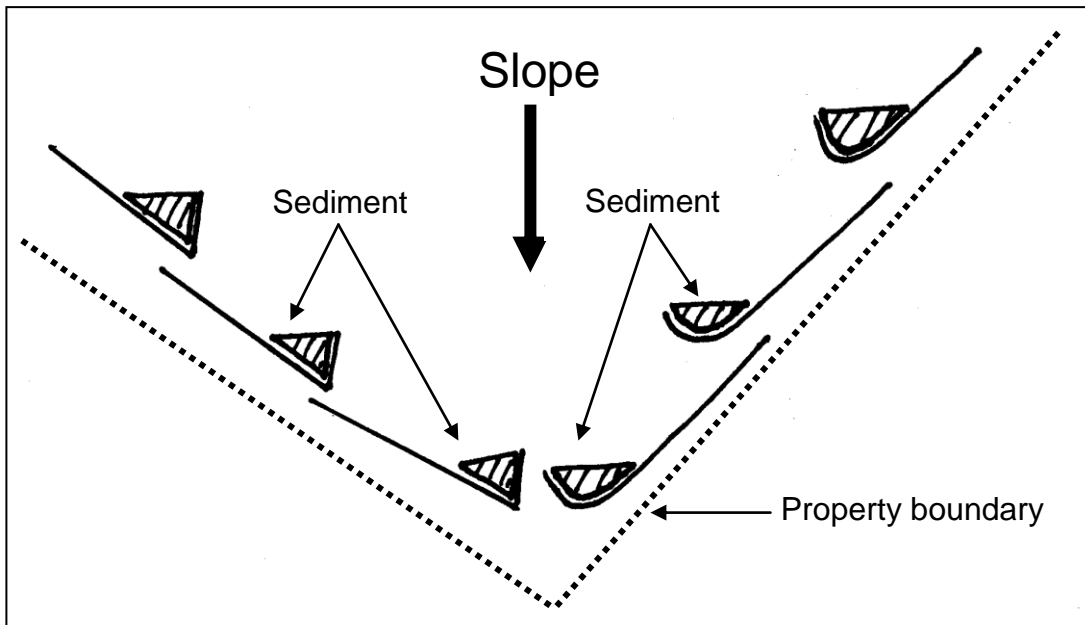


Question 3: How do I lay out the line of installation on rolling terrain?



Answer: Follow the terrain from Point A to Point B. Sediment will be retained along the entire length of the barrier (A-B) and not concentrate at a single place.

Question 4: How do I trap sediment along a length that is not “on the contour”?



Answer: V's or J's should be installed to trap sediment at the lower end of the sediment barriers that are on steep slopes.