

PRIMARY USE: A useful alternative for treating storm water on sites where location of an infiltration pond is not possible.

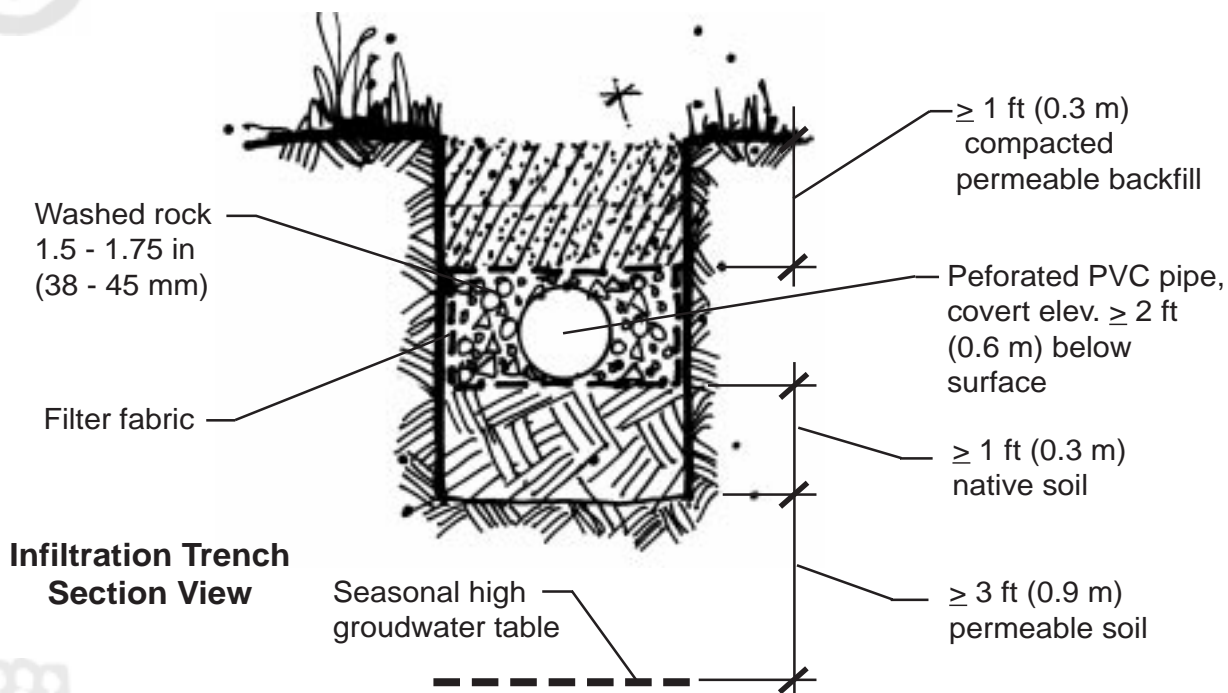
ADDITIONAL USES:

INFILTRATION TRENCH

What is it? This is a trench filled with 1.5 - 1.75 in (38 - 45 mm) washed rock and perforated drain pipe. Trenches may be placed beneath parking areas, along site perimeters, or in other suitable linear areas to detain and treat runoff.

Purpose

This is a method for allowing runoff to soak into the ground where an infiltration pond is not possible due to site constraints.



Limitations

Infiltration trenches should not be used on slopes greater than 25%.

Materials

Filter fabric; 1.5 - 1.75 in (38 - 45 mm) washed rock; 4 or 6 in (101 or 152 mm) flexible or rigid perforated distribution pipe.

Installation

Trench bottoms must be a minimum of three feet (approximately one meter) above seasonal high groundwater level and three feet (approximately one meter) below finished grade. A minimum of three feet (approximately one meter) of permeable soil is required below the trench bottom. The trench bottom must be native soil at least one foot (305 mm) deep. Trenches must be at least two feet (610 mm) wide. Washed rock must be completely wrapped with filter fabric and covered with a minimum of one foot (305 mm) of compacted backfill. Level four or six in (101 or 152 mm) flexible perforated distribution pipes are required for the length of the trench. Distribution pipe inverts are to be a minimum of 24 in (610 mm) below finished grade. Trenches must be setback a minimum of 100 ft (30 m) from septic drainfields except where local conditions allow for a shorter setback. Trenches must be at least 50 ft (15 m) from sensitive slope situations. Structures must have setbacks of at least 20 ft (6 m) from trenches except where local soil conditions permit a lesser distance.

Source: Surface Water Design Manual, King County Washington.