Soakage Trench BMP

Reduce Runoff from Landscape and Hardscape Areas

Overview

Evacuated trenches filled with coarse stone and wrapped in geotextiles that receive runoff via a pipe and store it in the rock voids until it is able to infiltrate into surrounding soils.

The primary difference between a soakage trench and a vegetated facility is that water is injected underground via a pipe, rather than infiltrating through the soil surface.

Siting

Runoff from any surface may be directed to a soakage trench, as long as hazardous materials, toxic substances, petroleum products are not used, stored, or handled in the area drained by the soakage trench.
Usually a soakage trench is shallow enough that it is not considered an underground injection control, but your soakage trench may require DEQ approval.

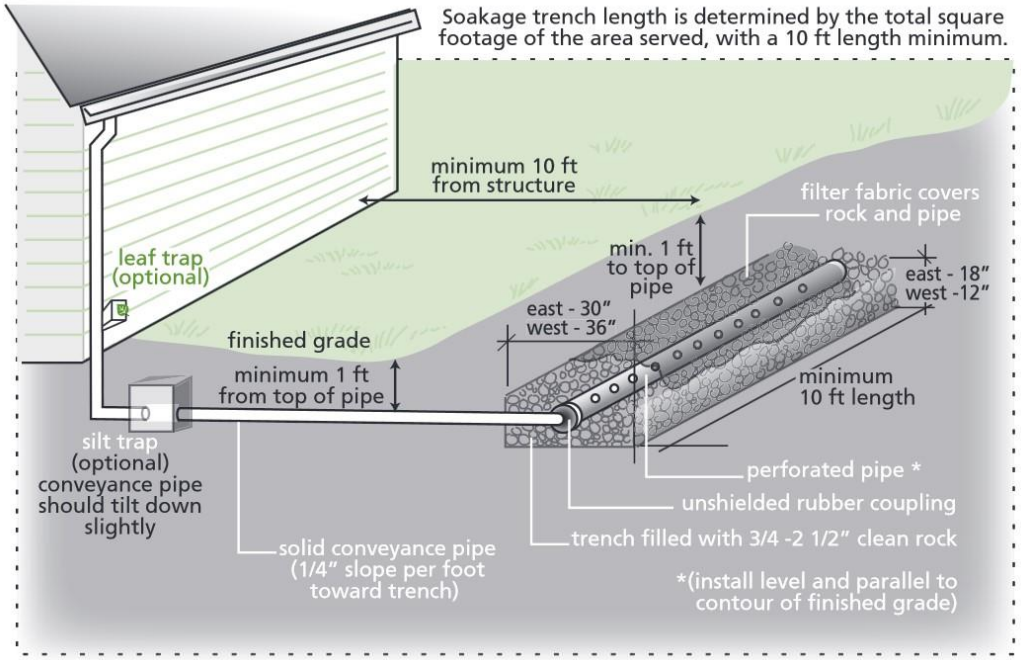
An example of a soakage trench in a multi-family residential project

Cost

Medium/high cost, but very cost effective, particularly for small spaces.

Maintenance

Maintain structures like silt basins, confirm proper infiltration, remove debris from pipe, and replace broken parts.



Design

There are four types:

Soakage trench at the surface - Rock all the way to the existing grades
Soakage Trench Beneath Landscaped Areas – cover of soil or vegetation
Soakage Trench Beneath Porous Pavement – Additional rock under porous pavement
Soakage Trench Beneath Impervious surface – must be installed as though it were porous pavement.