

4.9 Extra Drainrock Trench

Revision: December 10, 2014

Installer registration permit: Property owner or standard and basic

Licensed professional engineer required: No

4.9.1 Description

An extra drainrock trench is an aggregate-filled trench (1 to 6 feet wide) with more than 6 inches of aggregate under the perforated pipe. Figure 4-18 shows a typical cross section of a standard trench using extra drainrock. Figure 4-19 shows a typical cross section of an above-grade capping fill trench using extra drainrock. When more than 6 inches of aggregate is installed under the perforated pipe in a drainfield, the required drainfield length may be reduced. This section explains the conditions and calculations involved.

4.9.2 Approval Conditions

1. The site must meet the requirements for site suitability (IDAPA 58.01.03.008.02, section 8.1) except that
 - a. The site may have a slope between 21% and 46% if the system is constructed according to the steep slope system requirements (section 4.26), and more than 12 inches of aggregate is installed under the perforated pipe in the drainfield, 12 inches of which is not used in determining the multiplication factor.
 - b. The site slope may not exceed 20% if the top of the drainfield is less than 24 inches below the ground surface and 12% if the drainfield aggregate extends above the ground surface. The drainfield must be constructed according to the capping fill system requirements (section 4.3) except that the drainfield may not exceed 6 feet in width.
2. The bottom of the drainfield may be no deeper than 48 inches below the ground surface.
3. Multiplying factors cannot be used in addition to alternative soil application rates allowed by ETPSs, recirculating gravel filters, or intermittent sand filters.
4. Extra drainrock trenches may not be used to reduce trench length in sand mounds.
5. Multiplication factors less than 0.50 are not allowed.
6. Gravelless drainfield components may not be substituted for aggregate.