Curtain Drains/Perimeter Drains

**Standard:** To meet current State Code.

**Purpose:** To put into place a standard set of guidelines regarding the construction of curtain drains/perimeter drains. These drains are to be used to create 2 to 3 feet of vertical separation between the subsurface seepage system and the limiting layer.

**Drains:** A perimeter drain is most widely used and is four sided, completely surrounding the seepage field. A one to three sided curtain drain can also be used with the downhill side of the field left open.

- The top of the drain pipe in the perimeter/curtain drain must be at least 2 feet lower than the bottom of the septic trench. For example, if the bottom of the septic system is 36 inches below the surface, the perimeter/curtain drain trench bottom must be at least 64 inches below the surface. (24 inches for the 2 foot separation and 4 inches for the diameter of the pipe.)

- The width of the perimeter/curtain drain trench is usually 12 or 18 inches depending on the equipment used to dig the trench. The width of the trench is not as important as the depth of the trench.

- The edge of the perimeter/curtain drain trench must be at least 10 feet from the edge of the nearest seepage field trench. It is preferable to dig the perimeter/curtain drain trench at least 12 - 15 feet from the edge of the nearest seepage field trench to eliminate the potential for inadequately treated effluent from entering the perimeter/curtain drain.

- The perimeter/curtain drain should be constructed in the following way: A small amount of gravel should be added to the bottom of the trench. On top of this should be a perforated drain field pipe/plastic pipe, at least 4 inches in diameter. The trench then should be filled with gravel to within 12 inches of the ground surface. Soil should be put on top of the gravel to fill the trench. Please see diagram.

- The presence of a gravity flow outlet draining to a drainage way or ravine is necessary for a perimeter/curtain drain to be practically feasible.
Typical Curtain Drains/Perimeter Drains

Cross Section

Overview

- Soil Backfill
- Undisturbed Soil
- Septic System Absorption Trench
- 4" of Straw or Filter Fabric
- Filter Material (Gravel)
- Minimum 4" diameter perforated drain field pipe/plastic pipe
- 15' minimum
- Trench Sidewall
- 2 layers 6mil plastic waterproof barrier
- 6" minimum
- 2" gravel under pipe
- 12" minimum
- 36" maximum
- 12" minimum