

Subsurface and Surface Drains for Protection of Groundwater and Septic Systems

Subsurface Drains

A subsurface drain, commonly referred to as a French or curtain drain, is a tool used to protect groundwater and subsurface septic systems. A subsurface drain may be considered if groundwater is impacting your subsurface absorption field.

To construct a subsurface drain:

- The slope of the perforated pipe must be one-tenth of a foot (0.1') per 100 feet. The drainpipe must exit the ground to allow the groundwater to flow out.
- Subsurface drains should be a minimum of fifteen feet (15') upgradient of the lateral field.
- The bottom of the subsurface drain should be a minimum of twelve inches (12") below the lateral field trench depth.
- In the trench, perforated pipe must be set with the holes upward to catch the groundwater. The pipe must be surrounded with enough broken stone, tire chips, or gravel to fill the trench eight inches (8") from the top. Backfill for the trench must be of good loamy soil.

Surface Drains

Surface drains, or diversion drains, are used as a tool to divert surface water off a lateral field. A surface drain should be:

- Installed in the area that the surface water is collecting, and
- Piped to a natural drainage way.

Note:

Some situations may require construction of both types of drains to protect the groundwater and/or the lateral field of a septic system.

