

Protecting Your Drainfield

FIVE CRAZY THINGS PEOPLE HAVE DONE WITH THEIR DRAINFIELDS



1. Built a driveway (patio, deck, tennis court) over it.

Covering over the drainfield limits the availability of oxygen needed by bacteria in the soil and makes inspecting the drainfield impossible. Any vehicle traffic or heavy equipment used to construct the driveway, patio, deck or tennis court could crush the drainfield pipes.

2. Built an aboveground pool on it.

The weight of an above ground pool could crush the drainfield pipe, or compress the soil and make the soil less permeable (less absorbent). Further, any water leakage from the pool could saturate the soil and the drainfield beneath the pool and overload it hydraulically.

3. Flooded it so the kids could have a skating rink.

Drainfields are carefully built to accept water -- even if it is an excess amount coming from a hose sprayed in the middle of winter. This family managed to freeze their entire drainfield solid, and ended up with water backing up into the house.

4. Rototilled it for a vegetable garden.

Although conventional drainfield pipes are buried at a depth of about 800 mm, older drainfields may not have been installed to that standard and could be much shallower. Pipes can be as little as 375 mm below the ground surface and can easily get damaged.

5. Made it look pretty with trees and nice landscaping.

Perforated pipes don't stand a chance against roots from trees and shrubs. They get clogged or crushed. Either way, the septic system doesn't work properly.

Raised Drainfields

When there is insufficient native soil depth (e.g. shallow soil above an impermeable layer or rock, or high groundwater level) to put in a conventional drainfield, in certain circumstances the soil depth can be built up using sand. Creating a mound not only increases the depth of soil for treatment to occur, but it can also increase the area for water to flow into the shallow native soil.

MORE CRAZY THINGS PEOPLE HAVE DONE WITH THEIR RAISED DRAINFIELDS

“That huge mound was really ugly, so we brought the rest of the ground up to match.”

Often, the reason the builder installed a raised bed or mound is because the site has a very shallow layer of permeable soil over impermeable clay or rock. If a raised bed is surrounded with clay soil, the wastewater discharged into the drainfield may be trapped, filling the drainfield area like a pool. The only material that should be used to level the rest of the area is sand.

“It was in the way so we cut it off and built a nice-looking retaining wall.”

This family didn't understand that the whole mound area is used for filtering wastewater. When they cut it off by building a wall, the partially treated wastewater was diverted and discharged it into the nearby drainage ditch.