

Septic System Owners Manual



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Brownies Water Solutions has provided quality service for Central Florida since 1948. We started out with one truck, and now we have an entire fleet of pump trucks, industrial cleaners, and plumbers to handle any emergency. Brownie's takes pride in every job, from major septic installations to the smallest residential pipe leak. We provide prompt, professional service to our customers 24 hours a day, seven days a week.

Welcome to the world of septic systems! Also called cesspools, leach fields, or onsite sewage disposal systems; a septic systems purpose is to treat waste water from a home or business. Typically, these systems will have a tank for waste solids retention, and a drainfield for water percolation.

Septic Tanks



A fiberglass septic tank.

A concrete septic tank.

A septic tanks primary function is to provide an area for the waste water to separate. The septic tank will always remain full, with usually 8-10 inches of airspace from the lid of the tank to the water surface. Solids and bacteria waste will settle, while grease and lighter particles will float or remain near the surface.

Drainfields



A plastic chamber drainfield.

A multi-pipe drainfield.

As water is used in the home, partially treated waste water is displaced into the drainfield. The drainfield is an airspace underground which allows the water to percolate into the soil for final treatment, eventually making its way back to the water table. A drainfield can be made of many things, including: terra cotta pipe, PVC or corrugated pipe, gravel, and plastic “chambers”.

Mounded or Elevated Drainfields

In high water table areas, or locations with poor soils, the Health Department may require a drainfield to be raised higher than the grade of the existing ground. The Health Department or soils engineer will measure the percolation and/or the depth of the water table and dictate the height of the drainfield. In these applications it is common for a separate tank to be installed with a pump and alarm setup to make up the difference in elevation. These types of systems may require more maintenance since they rely on mechanical items to move the water from the septic tank to the drainfield.

Some Septic System Advice:

- Never plant any large trees or plants near your drainfield. Roots are a leading cause of premature failure in a drainfield. Keep in mind that the roots can travel **at least** as far out as the canopy of the tree.

- Never drive over the drainfield with anything larger than a medium sized lawn tractor. Compaction can easily damage your system.

- A drainfield is sized based on the size of your home, and typically not the amount of water that is consumed. Make sure that your system is able to accommodate the amount of water you consume to avoid problems. Frequently check for leaky flappers in toilets, leaky faucets, or even water softener discharges. ANY excessive amount of water can devastate a drainfield.

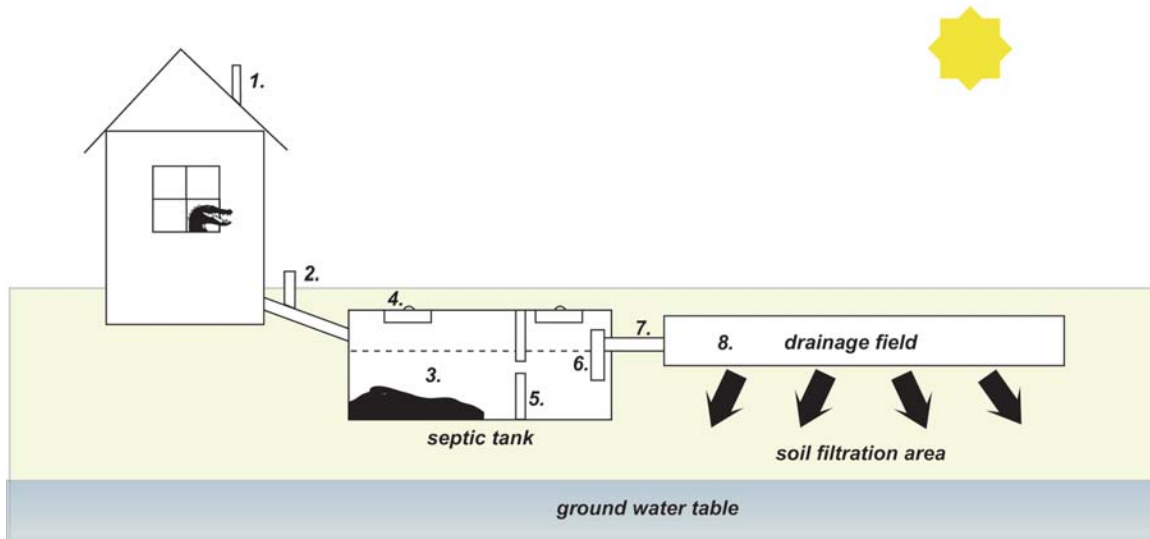
- Try to space out laundry machine usage. Excessive laundry water discharge will cause turbulence in the septic tank and more solids can pass out to the drainfield.

- No part of the drainfield can be repaired without approval of the Health Department.

- The state of Florida Department of Health recommends that the septic tank be serviced every 3-5 years.



Diagram of a basic Septic System



1. **The plumbing roof vent.** This vent allows gasses generated by the septic and sewer system to vent into the atmosphere.
2. **A mainline clean-out.** A clean-out is an access to view plumbing operation and to clear blockages with a plumbing snake.
3. **The septic tank.** As water enters the tank from the building it separates. (note the sludge accumulation in the bottom of the tank) The dotted line illustrates the typical water level in the tank.
4. **The septic tank lid.** Usually there will be a plug or sectional lid to facilitate periodic cleaning of the tank. Newer style tanks will have plugs on both ends while older tanks may have sectional lids.
5. **A septic tank baffle.** Newer tanks (constructed after 1985) may contain a baffle. This baffle will prevent excessive solids from entering the area near the outlet of the tank, theoretically preventing solids from contaminating the drainfield.
6. **An Outlet Baffle or Solids Deflection device.** This pipe blocks any floating solids from entering the drainfield.
7. **The distribution system.** This is the area where the water from the tank is divided to flow to different areas of the drainfield. This can typically be referred to as a “distribution box” or “header pipe”.
8. **The drainfield.** This is the area where the wastewater is further treated by bacteria and sand filtration. The treated water then percolates and eventually returns to the water table.

My System

Permit # _____

Date Issued _____

Address _____

Septic tank size (gallons) _____ Filter ? Yes / No

Dosing tank size (gallons / pump hp) _____ / _____

Drainfield size _____ Dimensions _____

Type _____

Date installed _____

Where is the system located? _____

My Septic System Maintenance Log			
Date	Work Done	Company	Cost