County of Santa Cruz
Health Services Agency ♦ Environmental Health Service

County Service Area #12

A GUIDE TO GREYWATER SUMPS

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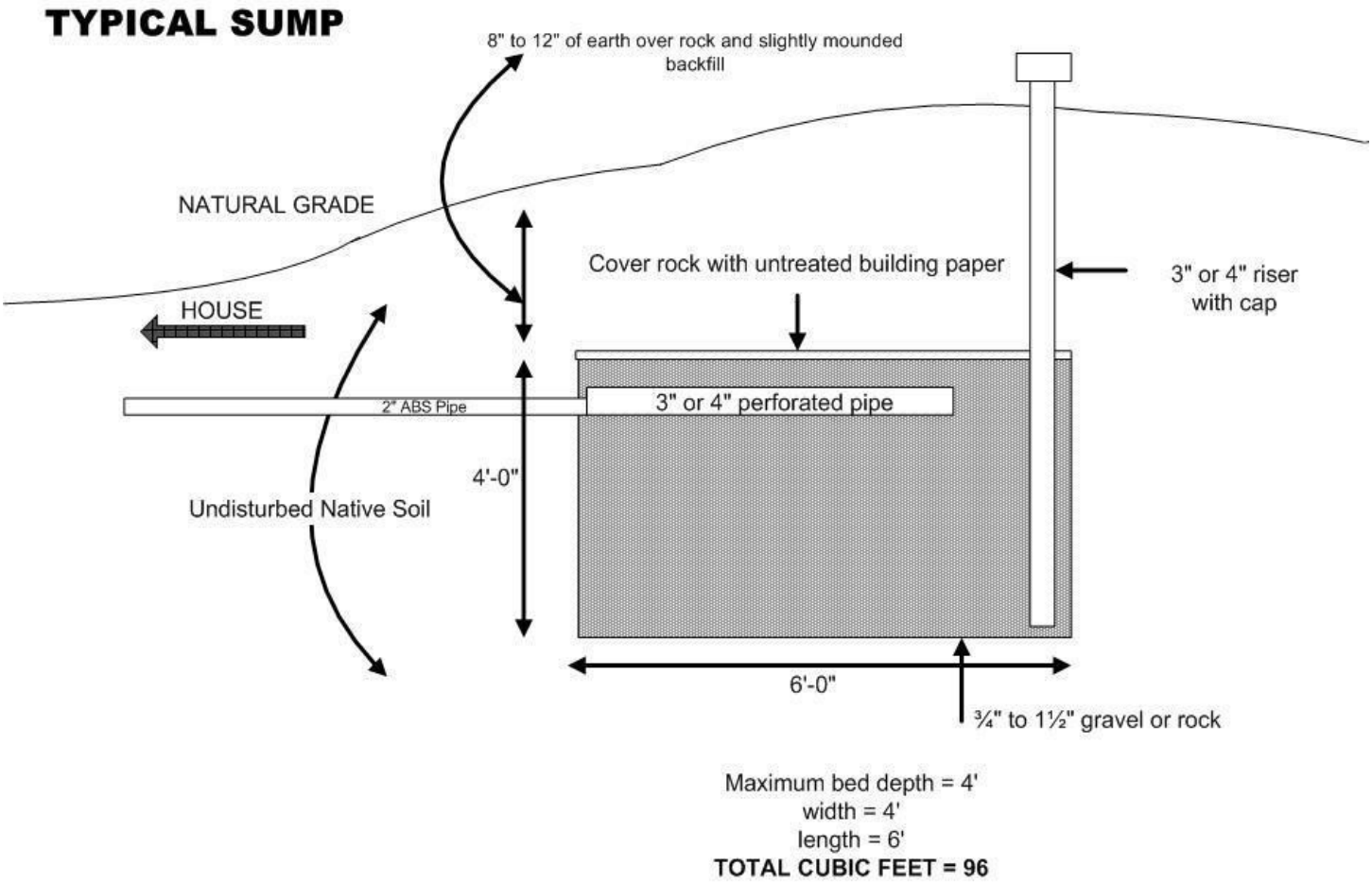
Greywater Sumps

Greywater is defined as used water (effluent) from clothes washers, bathtubs, showers, and bathroom sinks. Although greywater does not contain toilet waste, it does contain viruses and bacteria and must be properly disposed underground to prevent health hazards.

A greywater sump is a rock filled trench that collects and disposes of effluent from the washing machine, shower, bathtubs and/or bathroom sink. Toilet waste MUST remain in the septic tank. Greywater from the kitchen sink MUST also remain in the septic tank because of the large amounts of organic material it contains. A greywater sump can be used to reduce the loading on a septic system that has inadequate leaching capacity.



The diagram above shows a typical sump sized for two wash loads a day and is the minimum size for a greywater sump (96 cubic feet) - see figure below. These dimensions can be altered as needed as long as the total trench depth below the ground surface shall not exceed 5 feet. Shallow narrow trenches are preferred.

Three steps to a Greywater Sump

There are three steps to properly completing a greywater sump:

1. Determine the location and size.
2. Apply for and obtain an approved permit from our office.
3. Install the sump and obtain a final inspection by our office.

1. Location and Sizing the Sump

The size of the sump depends on the amount of effluent and the ability of the of the soil to absorb water. County wastewater disposal standards requires that a sump have (for washing machine effluent only) a minimum volume of 96 cubic feet. The sump size for other sources of wastewater must be calculated based on the amount of daily water use of the household. For average draining soils allow one square foot of combined sidewall and trench bottom per gallon of wastewater loading per day.

When determining the proper location for the sump, the following minimum setbacks and standards must be met:

Distance from:

Septic tank: 3 to 5 feet
Leach field: 10 feet
Property line: 5 feet
Building foundation: 8 feet
Water line: 10 feet
Well: 100 feet
Embankment: twice the height of the embankment up to 25 feet
Water courses, streams, creeks or lakes: 50-100 feet
Groundwater: 3 feet

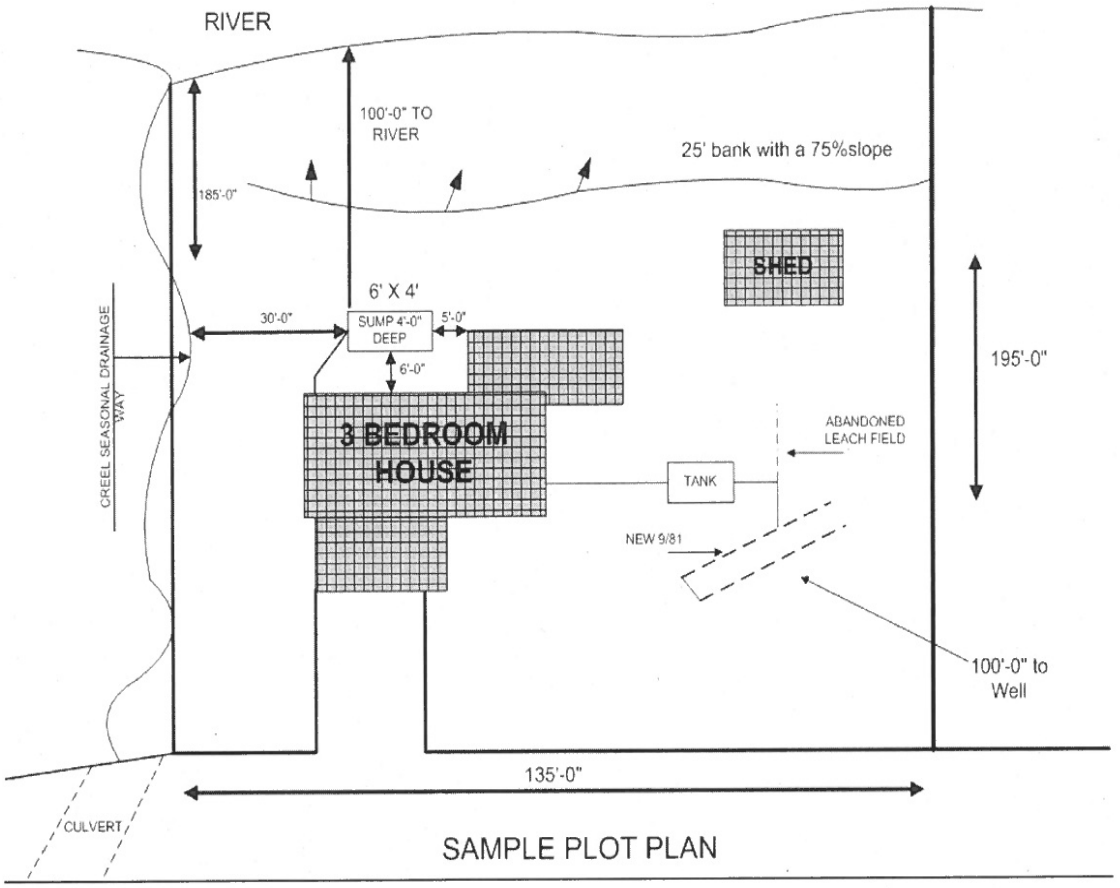
Minimum cover over sump: 1 foot
Maximum depth of sump: 5 feet

Do not place a greywater sump in a area where in may contribute to geologic instability.

2. Submitting an Application and Obtaining a Permit

Submit a permit application . This application must include a site plan and applicable fees. The following information shall be included on the site plan:

- Assessor's Parcel Number, street address, and name of the property owner
- Property lines and adjacent streets, footprint of the house, garage and all structures
- Existing septic system
- Large trees, rocks, fences, etc.
- Wells, streams, drainage ways, springs
- Indicate all setback distances as described above on the plot plan.



3. Installation and Approval

Once the application has been approved and the permit issued, work may begin on the sump. You must notify the REHS 24 hours prior to beginning the work. When the sump has been installed, and prior to cover, call your Registered Environmental Health Specialist for inspection. Inspections must be scheduled one working day in advance.