



LEWIS COUNTY CONVENTIONAL (GRAVITY) SEPTIC SYSTEM CONSTRUCTION REQUIREMENTS

Lewis County Public Health and Social Services Environmental Health Division
2025 NE Kresky Ave Chehalis, WA 98532

GENERAL GUIDANCE

- All state and local setback requirements must be recognized (LCC 8.4.150 Table IV).
- New system installation require water availability conditions be met prior to beginning the installation.
- Lines crossing under driveways and roads must be double sleeved and packed in sand.

SEPTIC TANK

- Schedule 40 (or equivalent) pipe must be used between the house and septic tank. For more information regarding the building sewer, please contact the Building Department.
- The septic tank must be watertight.
- The tank shall be set so that the inlet hole (closest to the top of the tank) receives schedule 40 (or equivalent) pipe from the residence. Fiberglass, Polyurethane, or other non-concrete tanks must be approved by the Washington State Department of Health and installed per the manufacturer's recommendations.
- Septic tanks shall be level and utilize inlet baffles with an effluent filter placed on the outlet line to the drainfield (Figure 1).
- Septic tanks shall include watertight risers to grade with lids.

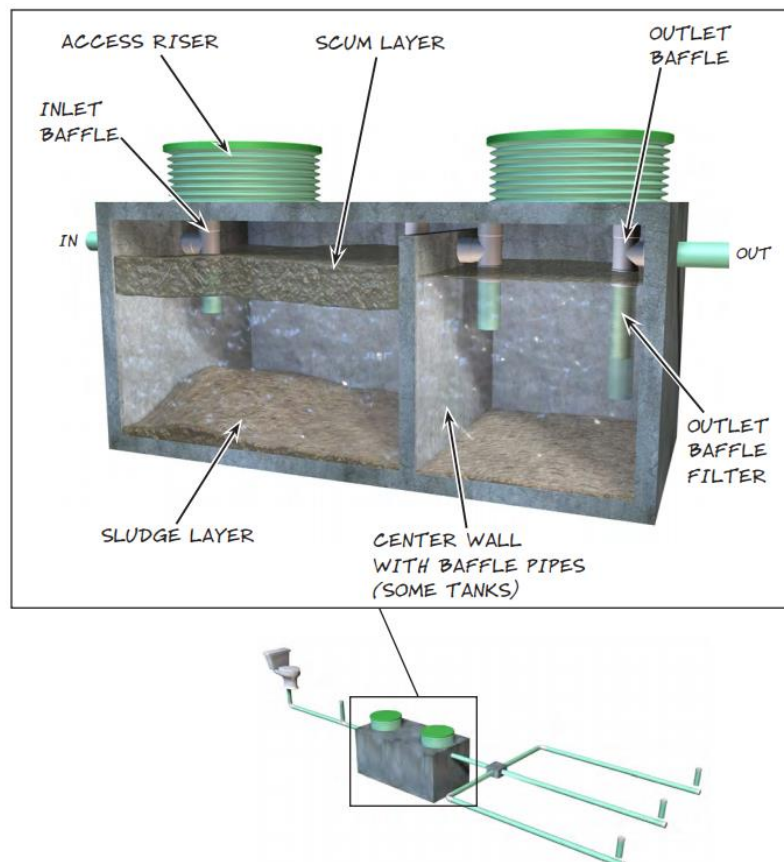


Figure 1: Septic Tank Detail (Source: <https://www.doh.wa.gov/Portals/1/Documents/Pubs/337-122.pdf>)

DISTRIBUTION BOX

- There should be a minimum of 5' of tight line between the septic tank and the distribution box or tee. There should also be a minimum of 5' of tight line between the distribution box/tee and the beginning of the individual drain line.
- The tee/distribution box must be level and encased in cement with a cement platform. The distribution box should be accessible at grade or a maximum of 6" below grade with a marker.
- The exit port of the distribution box opposite the entry port shall not be utilized unless an internal baffle is utilized (Figure 2).

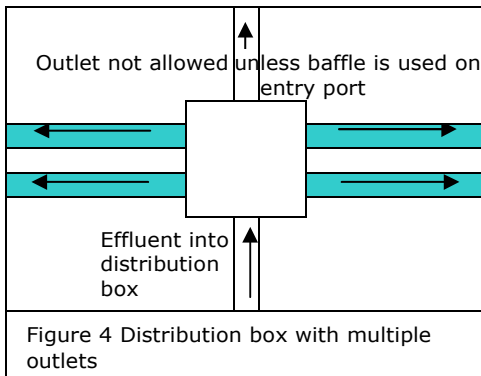


Figure 2: Distribution Box (D-Box) Detail (Source: <https://www.doh.wa.gov/Portals/1/Documents/Pubs/337-122.pdf>)

DRAINFIELD

- The maximum trench depth listed on the permit must not be exceeded on any part of the system for any reason. The minimum trench depth is 6".
- Drain line construction will utilize approved smooth wall, perforated plastic pipe.
- Utilization of gravelless chamber technologies and appropriate drainfield area reductions shall be approved only by the local Health official.
- A minimum of 2 lines per drainfield shall exist. Systems that require more than 2 lines must use a distribution box or other approved methods of distribution. The maximum length of individual drainfield lines is not to exceed 100'.
- All drainlines in the drainfield are required to be of equal length.
- Drainlines shall be installed on contour and must be level from front to back and side to side.
- Drainfield lines shall be a minimum of 7.5' from center-to-center, measuring from the center of each drain line.
- All trenches must be 18"-36" wide; trenches must be of equal width.
- The perforated holes in the drain lines must be placed with holes in the 4 and 8 o'clock position (Figure 4).
- A minimum of 6" of clean gravel must be located beneath the drainfield pipe and a minimum of 2" of clean gravel must be placed over the drainfield pipe. Gravel must be washed drainrock 1/2"-2-1/2" diameter. Dirty rock will be rejected for use of installation.
- Gravel in the trench/bed shall be covered with geo-textile prior to covering.
- The ends of drainlines must be capped and glued.
- Monitoring ports should be included on every drainline within 10' from the end (Figure 3 & Figure 4).

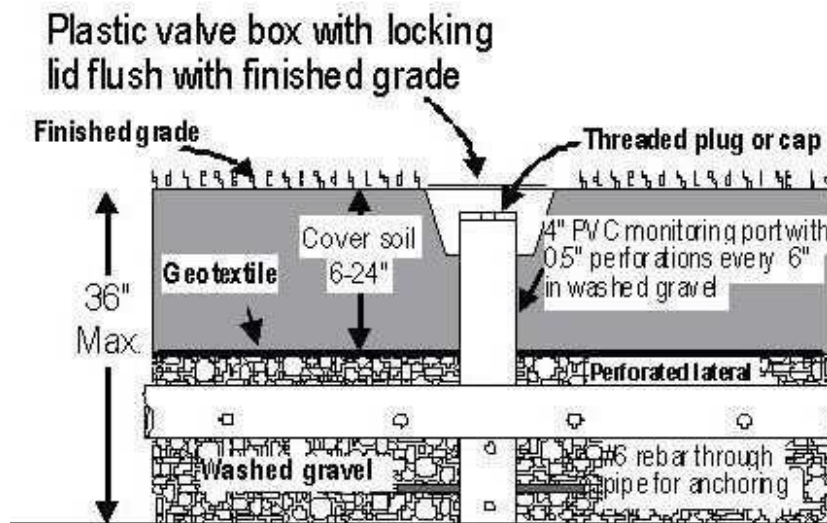


Figure 3: Monitoring Port Detail (Source: <http://www.doh.wa.gov/ehp/ts/ww/pubs-ww-rsg.htm>)

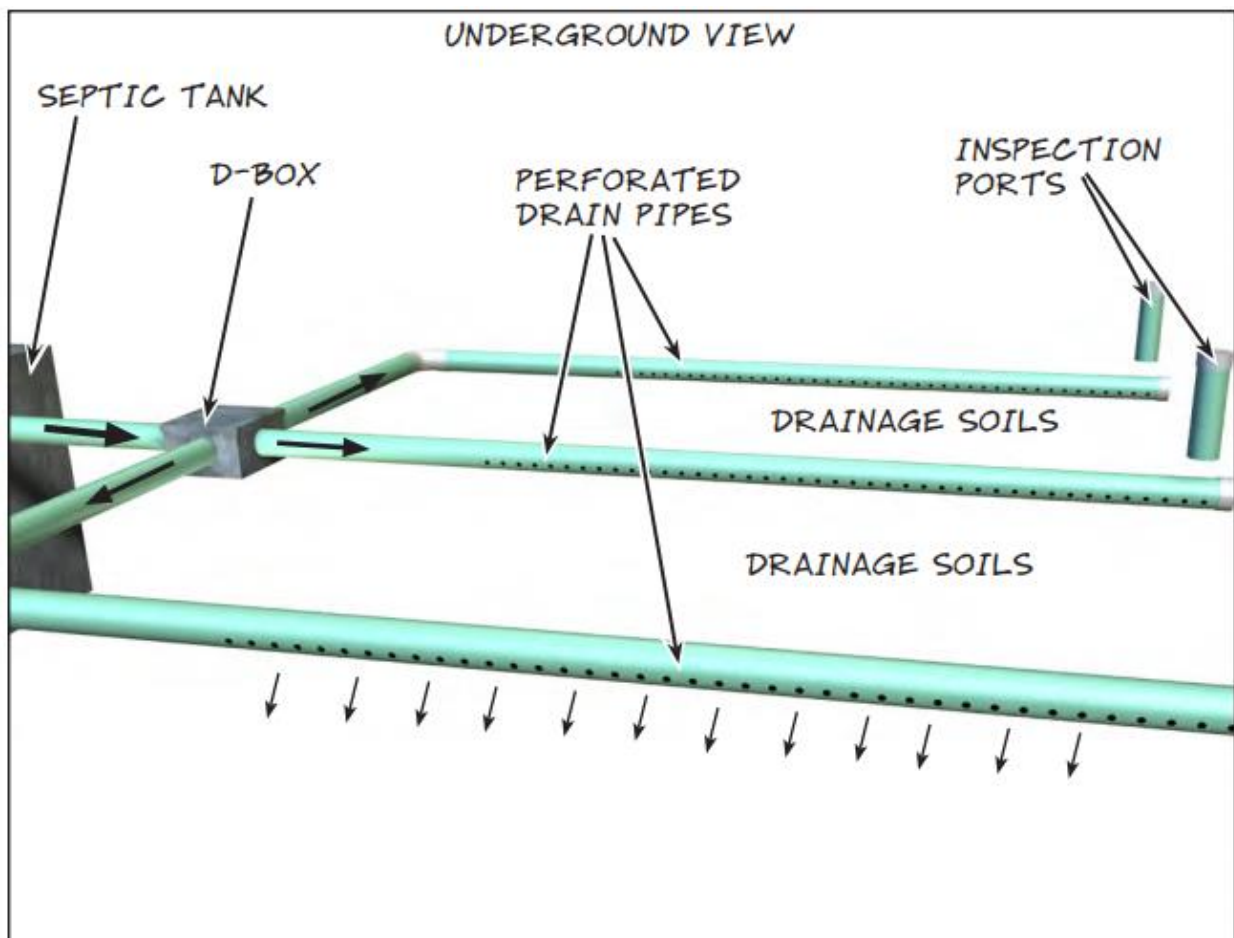


Figure 4: Drainfield Detail (Source: <https://www.doh.wa.gov/Portals/1/Documents/Pubs/337-122.pdf>)

POST INSTALLATION

- The County Health Department must be contacted to schedule a final inspection prior to backfilling the system.
- An Installer Checklist must be submitted prior to final approval of the system.
- Upon final approval by the County Health Department, a track vehicle or other low-impact vehicle shall be used to cover the system (ground pressure not to exceed 7 P.S.I.).
- Fill materials used for covering drainfield components should have sufficient porosity to allow for aerobic exchange. Cover material should not consist of clayey soils without sufficient sand content. The minimum fill material required is 6".

EXAMPLE

Permit Conditions:

900 sf Drainfield

300 ft. Distribution Line Total

24" Maximum Trench Depth

Drainfield Layout Example:

900 sf Drainfield / 3 ft. Trench Width = 300 ft. Distribution Line Total

300 ft. Distribution Line Total / 3 Lines = 100 ft. Per Line

