



## LEWIS COUNTY CONVENTIONAL (GRAVITY) SEPTIC SYSTEM CONSTRUCTION REQUIREMENTS

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

### GENERAL GUIDANCE

- All state and local setback and location requirements must be met ([LCC 8.40.150](#) Table IV).
- New System installations require water availability conditions to be met prior to permit approval.
- Lines crossing under driveways and roads must be double sleeved and packed in sand.
- Any deviations from standard conventional gravity system, **must be** approved by Environmental Health Department prior to install.
- **Drainfield installation and capping must not be done in wet or frozen conditions.**

### 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 water tight.
- 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 on the Washington State Department of Health's list of Registered Approved Sewage Tanks 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.

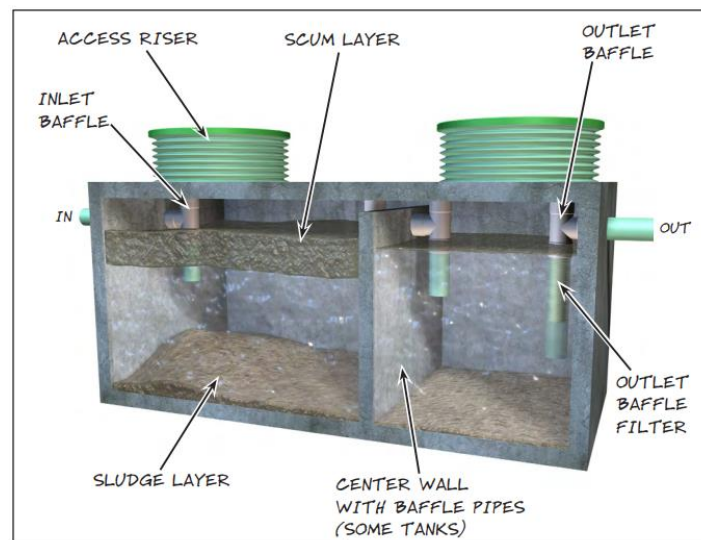


Figure 1: Septic Tank Detail (Source: [WADOH](#))

## DISTRIBUTION BOX

- Systems **must use** a tee, distribution box, or other approved method to ensure equal effluent distribution to laterals.
- There should be a **minimum of 5'** of tight line between the septic tank and the distribution box/ tee.
- There should also be a **minimum of 5'** of tight line between the distribution box/tee and the beginning of the individual laterals.
- 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).

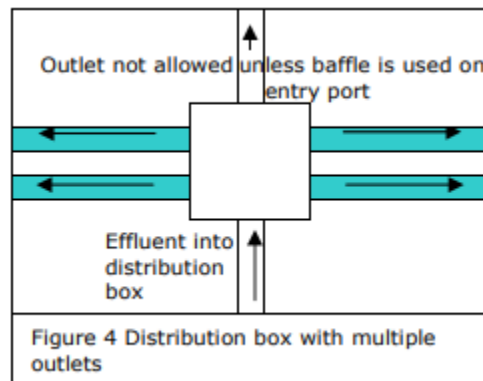


Figure 2: Distribution Box (D-Box) Detail (source: [WADOH](#))

## DRAINFIELD

- **Utilization of gravelless chamber technologies and appropriate drainfield area reductions must be approved by Environmental Health Officer prior to implementation.**
- 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.
- A minimum of 2 lines per drainfield shall exist. The maximum length of individual laterals is not to exceed 100'.
- All laterals in the drainfield are required to be of equal length.
- Laterals shall be installed on contour and must be level from front to back and side to side.
- Laterals shall be a **minimum of 7.5' from center-to-center**, measuring from the center of each lateral.
- 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 3).

- 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 and should be accessible at grade (Figure 3 & Figure 4).

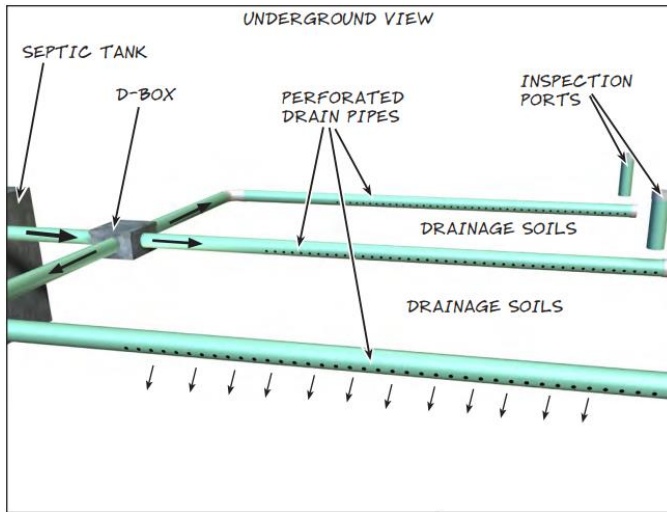


Figure 3: Drainfield Details (source: [WADOH](#))

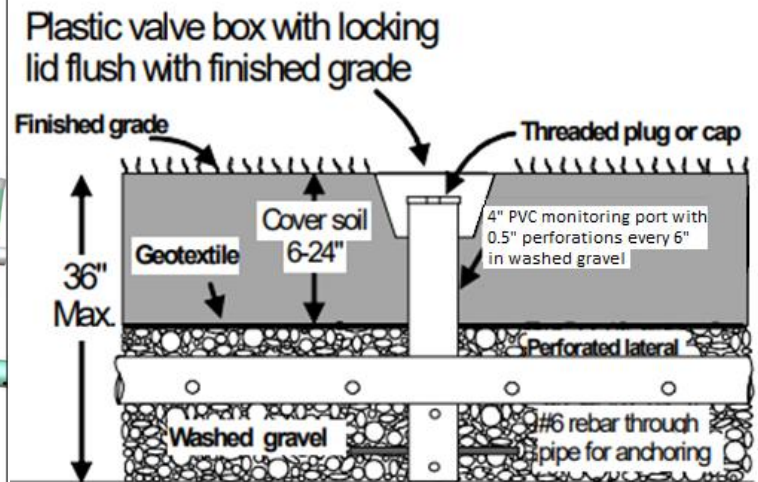


Figure 4: Monitoring Port Example (source: [WADOH](#))

## POST INSTALLATION

- Lewis County Environmental Health 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.).
- Capping 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 linear feet per lateral

