



# Residential Sewer Installation Procedures

## Permit Required

- Permits are required before beginning installation and inspections are required before covering the work.
- All plumbing work must be performed by a licensed Plumbing or Sewer Excavating Contractor, or the owner of the property (up to and including a duplex).
- A licensed contractor is recommended unless you have some knowledge or experience in sewer installations.

## Piping Materials Allowed - 4" Only

Glue must be approved for type of pipe used

- A. ABS, Schedule 40, D 2661-94a
- B. PVC, Schedule 40, ASTM 3034-SDR 35
- C. Cast Iron, "No Hub" or "Bell and Spigot"
- D. Asbestos Cement - A.C. ASTM C 428-92
- E. Concrete, ASTM C 14-92
- F. Vitified Clay, ASTM C 700-91

## Grade

Minimum pipe grade should be ¼-inch to the foot (2%), unless otherwise agreed to by the Plumbing Inspector. Additionally, sewer should be laid with at least 12-inches of cover to protect from freezing and physical damage, unless otherwise approved by the Plumbing Inspector.

## Clean Outs

"Clean outs" provides access to your main sewer line and is located outside of your home. They are to be installed approx. 2-feet outside of the building and at each 135-degrees horizontal change of direction and shall not exceed 100-feet of distance between clean outs.

## Test

A 5 PSI Air Test or Water Test to the top of upper cleanout is mandatory.

## Direction Change

A 90-degree change of direction (horizontal to horizontal) will be accomplished with Wye (a Y-shaped fitting which allows one pipe to be joined to another at a 45° angle) and 45-degree bend or (2) 45-degree bends with nipple (a short piece of pipe with threads at both end or at one end) between them.

## Bedding

Bedding is the material placed in the bottom of the trench on which the pipe is laid. The pipe must be properly bedded under and around the pipe. Imported bedding material must be used in rocky soil.

## Septic Tanks

Septic tanks shall be pumped and filled with sand or gravel. Access pipes must also be filled or removed.

## Scheduling Inspections

The City of Boise must inspect all sewer lines before they are covered. 12 - 24 hours' notice must be given before an inspection can be made. To schedule an inspection, call the **PDS Permit Desk**.

## Contacts

---

- **Planning and Development Services (PDS):** 208-608-7100
- **PDS Permits Desk:** 208-608-7070
- **West Boise Sewer District:** 208-375-8521
- **Public Works (PW):** 208-608-7150
- **PW Inspections:** 208-608-7549
- **Dig-Line:** 811 or 208-342-1585

## Sanitary Sewer Service Line Connection to City of Boise Sewer

---

1. Prior to connecting to sewer, assessments and/or connection fees must be paid to City of Boise. These fees provide for capital cost of neighborhood sewers, trunk sewers, and treatment plant capacity.  
The fees can be determined by calling **Public Works (PW)** asking for the Sewer Rating. If your property is located in **West Boise Sewer District**, you must contact that district for locations and fees.
2. Prior to beginning construction for connection onto the sanitary sewer line, a plumbing permit must be acquired. If your property is located within the City of Boise limits, take out a plumbing permit at **Planning & Development Services (PDS)**. Any sewer being installed in the public right-of-way requires a PW Sewer Tap Permit.

If your property is outside of the City of Boise limits, a sewer connection is not allowed unless preapproved by PW. Contact PW for information as a plumbing permit must be obtained through the other authority's jurisdiction.

The plumbing inspectors for the City of Boise will map the location of the service line. These maps will be retained by the PW Department and will be available to property owners for purposes of service line locations. Read the information given out with the permit regarding acceptable pipeline materials, installation procedures and inspection requirements for more information.

3. Before beginning excavation for connecting onto the sewer system, submit a Public Records Request (PRR) to get a copy of the record drawing information outlining the approximate location and depth of the existing sewer service stub to your property. If a service stub does not exist, contact PW to advise you on the procedures for tapping the sewer line and extending the service line.
4. Utilizing the record drawing information, physically measure in the field to determine the location of the service line stub.
5. At least forty-eight (48) hours prior to excavation, contact Dig-line to have existing utilities marked in the field to avoid potential damage.
6. Excavate at the location established, carefully looking for any evidence of the sewer service line. Typically, the service lines have been marked with a 2' x 4' wooden marker with a metal finder wire. The wooden marker will rot out over time; however, the wire should be visible if the excavation procedures are carefully done. We suggest that the excavation proceed to a depth of 2-or 3-feet at a radius of 6-feet surrounding the measured location to try and find evidence of the sewer service connection markers.
7. If evidence of the sewer service line is not found, double check the measurements.
8. If the measurements are correct, continue excavating to the depth shown on the plans. In high ground or water areas, pumps should be utilized to limit the excavation width and to

remove water and mud that may cover the markers or the pipe. The sewer lines cannot be used for dewatering of the trench. It is illegal to use the sewer pipe for dewatering purposes.

9. If the sewer service stub is still not found, contact PW for assistance. PW will send personnel to the site, verify that your measurements of the sewer service line are correct, may ask you to do some additional excavation if they believe the sewer service is in the close proximity, and may send a sewer line television crew to televise the sanitary sewer line to verify that there physically is a sewer line stub as shown on the drawings.
10. If the service line still cannot be located, PW will initiate a contract to have this service line located. This may take up to 2-weeks' time.
11. Once the sewer service line is found, we suggest determining the elevation of both the service line and the elevation of the line leaving the house to ensure that adequate slope exists for the proper operation of the sewer service line. A 4" service line must have a minimum grade of 2% unless otherwise approved (1/4 inch fall per 1-foot distance). If adequate slope does not exist, contact PW for further assistance.
12. If adequate slope exists, we suggest laying the pipe from the downstream end to the upstream end. Do not remove the existing service connection end cap on the service line until proper dewatering of the trench has been satisfactorily accomplished. \* It is recommended that the service line be checked for debris and stoppages after the plug is removed.  
*\*Failure to do so will make you liable for cleaning rocks, debris, and potentially the treatment cost for the estimated flow of ground water entering the line. In accordance with the City of Boise Code, prosecution and fines may accrue.*
13. Once the line has been laid and properly bedded under and around the pipe, but not backfilled (covered), contact the applicable plumbing department (PW, PDS or other authority's jurisdiction) for inspection.