

POLICIES & PROCEDURES



**City of Wilsonville
Building Division**
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Plumbing Service Connections

BPP 116

Adopted: January 2020

Last Reviewed: TBD

Next Review: January 2023

Summary

Provides staff guidance on verification of sanitary sewer, storm sewer, and water service laterals.

Background

Building division staff are responsible to ensure plumbing installations comply with the adopted state codes (Oregon Plumbing Specialty Code (OPSC) and Oregon Residential Specialty Code (ORSC)) and city standards. While the codes do not specifically require validation of sewer connections, such as through a dye test or video inspection, it is the City's intention to ensure new sewer service laterals are properly connected and validated.

The private property line is the point of delineation between new public and private installations. The OPSC and ORSC regulate private service laterals from the property line inward to the building. These installations are inspected by Building inspection staff. Laterals from the property line outward to the main lines in the public right-of-way are considered public, and inspected by the Engineering inspection staff. Once complete, the private property owners' maintenance and ownership of laterals extends from the building to the mainline in the street.

Public Laterals (Public Sewer Mainline to Property Line) – Engineering

A site plan template/worksheet is provided to the builder to complete as part of the Engineering review under the Building permit. Engineering staff make sure the lateral services are shown on the site plan of each individual lot during the Building permit plan review and they utilize a checklist to ensure all requirements are met.

City Engineering Standards require that utility service installations must be marked clearly using a tracer wire, curb stamp, and 2x4 marker at the location of the utility termination at the property line. The storm and sanitary 2x4 markers are colored differently to distinguish the laterals for future private sewer connections. A white 2x4 marker represents storm sewer. A green 2x4 marker represents sanitary sewer. These items (from the main to the property line) are inspected and approved by Engineering staff prior to the acceptance of a development project. "Engineering Acceptance" is the trigger for the next step in development that allows Building permits to be reviewed and approved for construction.

Private Laterals (Private Property Line to Building) – Building

Because of state laws, Building staff do not perform plumbing plan reviews of plumbing installations for 1 & 2 Family dwellings. The inspector performs an informal review confirming code compliance during the inspection process. At this time, Building staff attempt to validate that sanitary sewer, storm sewer, and water service lines are sized correctly and properly installed. Although rare, there have been instances where a contractor cross-connects the sanitary sewer lateral to the storm sewer lateral. The effects of a cross-connection result in an unacceptable illicit discharge to the community's natural drainage systems, and jeopardize the NPDES permits the city has with the state DEQ. In addition, an illicit discharge often results in significant fines to the city from DEQ.

The primary goal of this policy is to provide the framework for Building staff to ensure code compliant installations, and to prevent installers from making cross-connections.

Discussion

Sanitary laterals and storm laterals are typically installed in the same trench and are usually the same type of piping material and same color. The ORSC and OPSC requires that sanitary laterals and storm laterals are both installed with a green tracer wire. A common non-code required installation practice is the cleanout caps on the cleanout riser at the property line are generally colored black for sanitary, and white for storm. Aside from these features, it is very difficult for an inspector to readily distinguish between the two laterals. Consequently, there is risk for the contractor to cause a cross-connection of the private sanitary lateral with improper connection to the public storm lateral.

Normally the public portion of the lateral from the property line to the main in the street is installed, inspected, and buried prior to connecting the private lateral. This work is reviewed and inspected at the time of initial subdivision development by Engineering staff, well ahead of the building permit phase. Once building permits are issued, the private laterals are then installed and connected to the public lateral at the property line. Excavation contractors install most private laterals. Experience dictates that while installations may be code compliant, the degree of care and familiarity with the ORSC and OPSC is generally not high with sewer installers. Therefore, additional measures must be taken in accordance with the procedure noted below to ensure installations are correctly made.

Policy

OPSC Section 105.4 Connection to Service Utilities, states that no person shall connect to a sewer system regulated by this code and for which a permit is required, until approved by the Building Official. The following procedure will apply in reviewing, inspecting and approving storm sewer, sanitary sewer, and water service laterals.

Procedure

The following measures are necessary for Building staff to approve storm sewer, sanitary sewer, and water service laterals:

- 1) Site Plans Required - During the building permit plan review, Engineering staff will require that the applicant submit a site plan that delineates all public and private lateral connection locations.
- 2) Inspections - During Building Sewer (storm and sanitary) inspections, inspection staff will:
 - confirm that both of the sanitary and storm sewer installations have a green tracer wire, and
 - confirm the installation of a black cleanout cap on the sanitary lateral and white cleanout cap on the storm lateral, and
 - require that the installer provide an as-built site plan that shows the lateral locations, and
 - field verify that the as-built plans, drawn by the installer, show that the Building Sewers are connected to the correct Public Lateral as shown on the approved site plan, and
 - witness a water test on the sanitary sewer lateral (OPSC 723.1 Building Sewer Tests), and
 - witness the release and discharge of the water test, and verify that the sanitary piping drains to the first sanitary manhole located downstream (OPSC 105.3 Testing of Systems), and
 - will withhold the inspection approval to cover until the required as-built drawings are field validated.
- 3) Alternatives
 - If conditions do not permit a water test, upon approval by the Building Official, a low-pressure air test may be approved.
 - Alternatively, a video inspection or other proposed alternate method that is approved by the Building Official may be permitted in order to verify that the private building sewer lateral is connected to the correct public lateral.
- 4) As-built Drawings
 - For all storm sewer, sanitary sewer, and water service laterals, the inspector will ensure the as-built plans and any other verification provided, is submitted, approved, and filed in the permit records.
 - The inspector will make notes in the permit indicating these actions have occurred.