



## CITY OF West Linn

### Technical Notes

#### ***“Working in the Right-of-Way”***

*Disclaimer: This is a simplified listing of information on common Public Works Permit construction issues and is, by no means, an exhaustive list of City requirements. Please refer to the City of West Linn Public Works Construction Standards, APWA Standard Specifications for Public Works Construction, Federal ADA standards, City Municipal Code, and City Community Development code for in-depth and complete information.*

#### **GENERAL**

1. A “Public Works Permit” is required for any work taking place within the public right-of-way or public City easements.
2. All work shall conform to the current City of West Linn Public Works Construction Standards manual, American Public Works Association (APWA) Standard Specifications for Public Works Construction, City Municipal Code, City Community Development Code, and all ADA regulations, in addition to all applicable federal, state, and regional laws.
3. Street closures are typically not permitted. City Manager approval is required for street closures. One lane of traffic must remain open at all times and traffic shall be guided by certified flaggers and appropriate signage per the Manual on Uniform Traffic Control (MUTCD).
4. An 18 month warranty on all work in the right-of-way is required of all Public Work permit contractors.

#### **CONCRETE WORK (SIDEWALKS/DRIVEWAYS/APPROACHES/CURB)**

1. Ensure both your driveway approach and driveway slab inspection are approved prior to pouring either-- elevation changes in one will affect the other.
2. Compliance with current ADA requirements is required whenever replacement of sidewalks and approaches occurs. Generally, this means that the sidewalk cross slope (slope towards to the street) cannot exceed 2% (even through the approach area). Pedestrian curb ramps may also need to be redesigned to comply with new ADA standards.
3. Approach maximum width is 36', minimum width is 16' measured from top of full depth curb to top of full depth curb. Driveway wings to be 3' wide.
4. Sidewalk shall have 6" concrete depth in areas subject to automobile traffic, 4" depth in areas only subject to pedestrian traffic. A minimum depth of 2" of clean, well compacted ¾"-0 gravel is required on a firm subgrade beneath all forms.
5. Sidewalk and driveway concrete panels shall be removed and replaced in whole-- No partial repairs. If damage occurs to edge of adjacent panel the panel must be removed and replaced.
6. Removed and replaced curb sections cannot be smaller than 3' and must have straight sawcut connections. Rebar doweling and reinforcement may be required



## CITY OF West Linn

- by the inspector. Perpendicular and parallel rebar doweling is always required when a curb face is removed in situations where only a planter strip is behind the curb being removed.
- Concrete shall have a broom finish perpendicular to pedestrian travel and an edge shine to match surrounding panels (a standard 3" shine is typical for new construction). Contraction joints are required, but expansion joints/boards/felt are not permitted in the right-of-way. Concrete shall be standard grey, commercially mixed, and be a minimum of 3300 psi after 28 days.
  - Driveway approaches are assessed a street cut deposit for the width of the approach due to possible damage caused to the street during removal of the existing approach/curb. If street is damaged, contractor must sawcut a straight and uniform patch with sufficient width to allow compaction in lifts (minimum width of a plate whacker) and restore with the appropriate depth of hot mix asphalt and sand seal joints.

### **SEWER/STORM PIPE REPAIR AND TAPS**

- Whenever a sewer lateral is to be installed or repaired in a public right-of-way or public City easement, a Public Works Permit must be obtained. A City Building Permit is required for sewer work on private property.
- All fees, SDC charges, deposits, bonds, and other charges established by City code shall be paid or provided prior to the issuance of a Public Works Permit to install a sewer lateral.
- No roof, surface, foundation, footing or other ground water drains shall be connected to the City Sanitary Sewer System.
- Shared sewer laterals (i.e. "party line sewers") are not permitted per Plumbing Code. If a shared sewer lateral is encountered during repair of an existing system, the sewer laterals shall be separated and each lateral shall be run in its entirety from the home to the main independently. The cost of separation shall be paid by the property owners. Cost sharing shall be determined by the affected property owners.
- No new main taps are allowed if the property currently has a sewer connection; the existing tap shall be used. In the event that in the City Engineer's opinion the existing tap is unusable the City Engineer may allow a new tap after proper decommissioning of the existing tap is completed.
- Main tap shall be located a minimum of 12" from existing pipe joints and 12" from other taps.
- New taps shall be core drilled and installed at a 45 degree angle to the main and per WL-303 (retain core drilled "coupon" for inspection).
- Taps shall be done with an "Insert-a-Tee" fitting (requests to use comparable materials must be approved by the City in writing prior to installation). Inserta tee shall match lateral pipe type/size and main pipe type/size. Tap shall be installed water tight, without protrusion or damage to existing main pipe. Provide inspector insert-a-tee packaging showing type of insert-a-tee installed.



## CITY OF West Linn

9. Install a test tee on private lateral within 3 feet of main, water test will be conducted by Plumbing Inspector.
10. Run pipe at 2% min. slope to property, install green tracer wire on lateral pipe.
11. Cleanouts are required every 100' of pipe or 135 degrees of bends per the Plumbing code. Bends greater than 45 degrees are not permitted.
12. Use of hard fittings is required whenever possible. When hard fittings are not available and a flexible fitting (i.e. Fernco) is needed, it shall be supplied with a stainless steel shear band when possible.
13. A backwater valve may be required by the Plumbing Inspector depending on site circumstances (e.g. if nearest downstream manhole cover is above elevation of home)
14. Inspection and approval by City personnel is required prior to backfill.
15. Recorded video inspection is often required of repairs/installations following backfill. Video camera shall be on showing running water into pipe, then stop water flow and allow a few minutes for all water to flow from pipe. Run video camera SLOWLY down and up pipe once all water is out of pipe to ensure no standing water/offset joints.
16. Tightly compact 6" of ¾" rock under the pipe.
17. Backfill trench with clean, well-graded ¾"-0 angular gravel compacted in lifts to min. 95% density per AASHTO T-180. Compaction testing by a certified testing firm will be required. Alternately, controlled density fill (CDF) may be used in lieu of compaction tested gravel.
18. Contractor to provide detailed as-built site plan showing dimensions, depths, and bends.
19. See "Street Cut" section for trench restoration requirements.

### **WATER LINES**

1. The water line from the main to the meter (and the meter itself) is maintained by the City Water Department in most cases. Please contact the Water Dept. at (503)656-6081 if you have concerns about your water lateral on the street side of the meter.
2. The water line behind the meter is privately maintained by the homeowner. A Building Dept. permit is required for this work and a licensed plumber must typically perform this work.

### **STREET CUTS/TRENCHES**

1. All trenches in street asphalt areas must be backfilled with ¾"-0" gravel compacted in 12" maximum lifts and tested at multiple depths by a certified testing company to minimum 95% per AASHTO T-180. The compaction tested gravel area must extend a minimum of 4 feet outside of street edge (or as specified onsite by City personnel depending on trench depth and condition).
  - a. Alternately, Controlled density fill (CDF) may be specified. Pipe shall be bedded in 6" and covered with 12" of ¾"-0 gravel prior to filling trench



## CITY OF West Linn

with CDF. CDF may also be specifically required by the onsite inspector in some instances due to site conditions.

2. All street cuts must have a 6" T-cut as shown in West Linn Standard Drawing WL-203. Asphalt edges shall be sawcut back an additional 6" beyond undisturbed base. The T-cut should be done after trench is backfilled.
3. Hot mix asphalt shall be used to top off the trench. Depth of asphalt depends on street classification and shall be installed in equal lifts as specified in the Public Works Standards. 4" depth for local streets, 5" for collectors, and 6" for arterials.
4. Tack all vertical edges prior to paving.
5. Sand seal all seams thoroughly with an approved sealant. Lack of adequate sealer or premature cracking of joints is one of the most common warranty call-backs.

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