



City of El Segundo Water Division Installation Steps

1. Notify Water Division 24 hours prior to construction.
2. All water lines must be installed 5' from other utilities and kept out of driveways.
3. Materials must be inspected by Water Inspector. **(See attached list)**
4. Saddle or tapping tee must be witnessed by Water Inspector.
5. Main tapping must be witnessed by Water Inspector.
6. Thrust block placement must be witnessed by Water Inspector.
7. Bacteriological sampling must be witnessed by Water Inspector.
 - **You must arrange for coliform and plate count tests with a laboratory**
 - The Water service line shall be flushed 24 hours before a bacteriological sample is taken and the chlorine residual shall be consistent with the distribution system
8. Hydrostatic pressure test must be witnessed by Water Inspector.
 - **Test the new water line a minimum of 150 psi for 1 hour**
 - Do **not** test old city water mains or valves
9. Backflow device must be inspected by the Water Inspector.
 - **If required, backflow device shall be USC Approved and tested by a certified tester**
10. No installation will be complete and no water service will be turned on until the Water Division is in possession of bacteriological test results, passing backflow test report and a water service request form.



WATER UTILITY SPECIFICATIONS, STANDARDS, AND PROCEDURES

1. All water services are to be sized by the Building and Safety Division and all fire services verified by the Fire Department before a permit will be issued. (Plans approved by the Building and Safety Division and Fire Department shall be submitted to the Water Division before a permit will be issued.)
2. Domestic meters up to and including 2 inches in size shall be installed in a meter box.
 - ❖ Domestic Meters 3 inches and above and all fire services shall be installed above ground with backflow protection.
 - ❖ All service connections will be installed by and at the cost of the developer or property owner.
3. The developer or property owner shall:
 - a. Submit to the Water Division for approval, the original plan view on an 8 1/2" x 11" page. This plan will contain, the installation location stationed from the nearest street intersection, the meter lateral and all appurtenances. **WATER METERS WILL NOT BE INSTALLED IN EXISTING OR FUTURE DRIVEWAYS OR APPROACHES**
 - b. Obtain a Public Works permit from the Engineering Division when working in the Public Right of Way or for Encroachment work. Obtain an encroachment permit from Cal-Trans if the installation is within the right-of-way of Pacific Coast Highway. The Cal-Trans permit shall be submitted to the city prior to receiving the Public Works permit. Copies of the approved plan and the completed Water Installation Invoice from the Water Division will be required for the Public Works permit. Before a permit will be issued, the applicant will pay the City an amount which will include permit fee, inspection fee, cost of equipment supplied by the city if any, and a security deposit to insure that existing improvements are replaced and any changes to public or private property is corrected to the satisfaction of the city.
 - c. Following receipt of appropriate fees and deposits – Notify the Water Division at least one week prior to beginning the construction to arrange for inspection of materials. In addition, it will be the responsibility of the person or company who obtained the "Permit for work in the Public Streets" to notify the Water Division so that a water inspector can be on site for the following procedures:

Saddle or tapping tee installation, **hydrostatic** pressure test, main tapping lateral line installation, thrust block placement, backfill and compaction, **hydrostatic** pressure test, bacteriological sampling, and other procedures deemed necessary by the water inspector.

****24 HOUR NOTICE REQUIRED BEFORE INSPECTION****

Water Division (310) 524-2745



WATER UTILITY SPECIFICATIONS, STANDARDS, AND PROCEDURES

- d. Disinfect per AWWA 651. Arrange for bacteriological tests with a laboratory certified by the State of California Health Department. Water line shall be flushed a minimum of 24 hours before a bacteriological sample is taken and the disinfectant residual shall be checked to ensure that the residual in the lateral is consistent with the distribution system residual when flushing is completed.
- e. **Hydrostatic** pressure test the new water line a minimum of 150 psi for a one hour period. **Do not test old city water mains or valves.**
- f. All work accomplished in public streets or roadways including permanent pavement restoration shall be completed within 45 days from the date the permit is issued.
- g. **Notify the Public Works Inspector at least 24 hours prior to permanent street resurfacing (310) 524-2360.**

Road surfaces not permanently replaced within the 45 day period may be replaced by city forces resulting in a forfeiture of deposit.

- h. Standard methods, material and compaction requirements will be utilized for all excavations in the public street, unless adjusted by city inspectors to meet varying soil or load conditions.
- i. Trenches in the public roadway will not remain open overnight unless special approval is obtained from the City Engineer. Trenches shall be filled or plated as directed by the Public Works Inspector.
- j. If the Water Division determines that a backflow prevention device is required it must be installed and tested by a certified tester before the job is complete.

No installation will be complete and no water service will be turned on until the Water Division is in possession of bacteriological test results and a completed passing backflow test report

- 4. After final inspection the Water Inspector will notify the Water Division of a completed service installation. Before the service can become active (turned on) the owner or tenant shall complete a Water Service Request form and submit it to h2oinquiries@elsegundo.org or drop off at the Public Works counter at City Hall (350 Main St). The Water Division will then issue a notice to turn-on water service to the Meter staff.

Water Division	400 Lomita St. El Segundo, CA 90245	(310) 524-2745
Engineering	350 Main St. El Segundo, CA 90245	(310) 524-2360
Street Maintenance	150 Illinois St. El Segundo, CA 90245	(310) 524-2709



WATER UTILITY SPECIFICATIONS, STANDARDS, AND PROCEDURES

SPECIFICATIONS:

1. All backflow preventers shall be USC FCCC & HR approved. Fire service detector meters to be cubic foot reading
2. Hot tap and lateral line installations greater than 2 inches shall be a minimum of 4 inches.
3. Pipe (3-inches or larger) to be Class 350 ductile iron cement lined. Fittings to be cement lined ductile iron minimum 250 psi pressure class. Joints to be mechanical joint, push on or flanged class 125
 - **All joints will be restrained**
 - i. Restrained joints shall be mega lug or equivalent as determined by inspector
 - ii. All flange bolts and nuts underground shall be field coated with NO-OX-ID or food grade oil to the satisfaction of the inspector
4. Plastic sheeting shall be placed between concrete thrust blocks and all metallic materials
5. Tapping sleeves shall be **all stainless** Muller H-304 SS or equal
6. Gate Valves shall be resilient seated gate valve AWWA C-509, Clow 6100 or equal
7. Fire hydrants shall be wet barrel Clow 2000 series (See spec #WT-7)
8. Water Services:
 - A. Services 3/4 inch – 1 inch shall use 1 inch copper type K tubing with lead-free soldered joints and a low-lead brass angle curb stop 360 degree turn copper flair nut x meter swivel nut and a low-lead brass corporation stop copper flair x MIP
 - B. Services 1 ½ inch or 2 inch shall use 2 inch copper type K tubing with lead-free soldered joints and a brass coupling on the corporation stop. All adapters will be MIP thread. A combination angle curb stop shall be used that will accept both 1 ½ inch and 2 inch meters.
9. Saddles shall be double strap brass Mueller BR 2 B AWWA I.P.T. or equal
10. Meter boxes will be per spec WT-3
11. Corporation stops shall be Mueller series 300 ball lock wing 360 degree travel angel meter valves or equal
 - 1" B-24255-3 flare x meter swivel nut
 - 2" B-24286-3 F.I.P. x flange

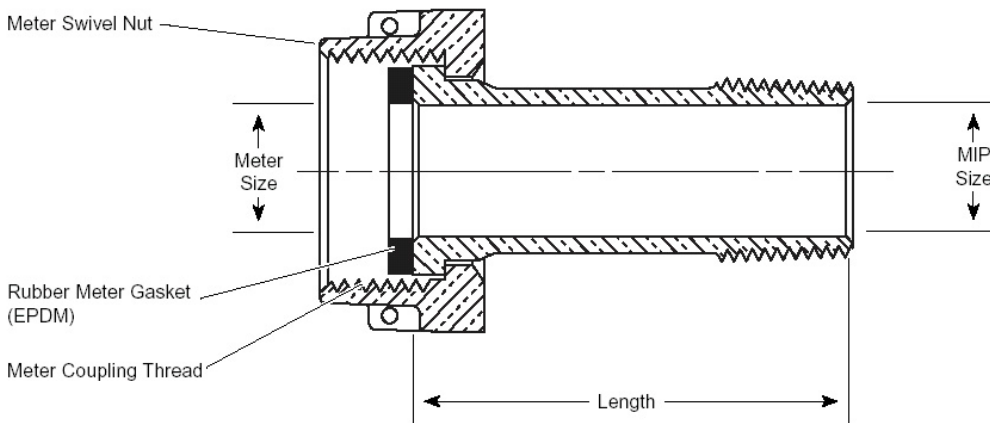


GUIDE TO REPLACING OR INSTALLING A WATER SERVICE LINE BETWEEN THE CITY WATER METER AND A HOUSE OR BUILDING

1. Obtain a plumbing permit from the Building and Safety Department for work that will be performed on private property.
2. Obtain a Public Works Encroachment permit from the Public Works Engineering Division for any work that is performed in the public right of way including work on all water service lines.
3. Contact the Water Division to have the water meter shut off before you begin work and to turn the water back on after work is performed. (Turning the meter on and off yourself will result in a fine)

Parts required for $\frac{3}{4}$ " or 1" Connections:

- **Meter Coupling made of Lo-Lead Brass**
- **Rubber Meter Gasket**



Parts required for 1 1/2" and 2" Connections:

- **Meter Flange made of Brass**
- **Rubber Meter Gasket**

