

Regulations For Main Line Extensions



Monroeville Water Works

Re-Approved: January 8, 2008

Regulations For Main Line Extensions

1. Plans for water main extensions shall be submitted to the Board for written approval prior to any construction. Plans and specifications shall be prepared and submitted by a registered professional engineer. All pipe, valves, fire hydrants, and other construction materials shall be in accordance with Board specifications. The plan shall show all pertinent details, including the size of adjacent existing mains, proposed connection points, ground elevations based on USGS datum, typical installation drawing, and other details as appropriate. There is a \$600.00 connection fee for main line connections on pipe sizes of six inches or larger.
2. When setting a meter for a dwelling, business, or industry, the meter shall be set on the right-of-way.
3. All water main extensions in the city limits of Monroeville shall be a minimum 8" diameter pipe. All water main extensions outside the city limits of Monroeville shall be a minimum of 6" diameter pipe. The Board also reserves the right to require installation of larger mains in certain locations and will discuss this with the developer.
4. All taps, service connections, meters, and other connections shall be made by Board personnel. When connections, meters, and other connections are made by Board personnel, the standard tapping fee and/or connection charge shall be paid to the Board.
5. All connections from ¾" and up shall be made by wet tap method. No cut-in connections will be allowed.
6. Prior to completion of the extensions, it shall be the responsibility of the developer to flush and disinfect all new mains under the

supervision of the General Manager, and collect and deliver to the State Health Department laboratory, an adequate number of samples to verify the disinfection process. The developer shall be responsible for collecting the samples, transporting them to the lab, and having the test results mailed to the Board prior to requesting the final inspection and approval.

7. There shall be placed at each end run of pipe a tap from which a bacteriological sample may be pulled. On an eight inch line or larger, this sampling port shall consist of a ¾' tapping saddle by pipe size, ¾" corporation, length of ¾" copper, ¾" curb stop, and meter box. On a two-inch line, the sampling port shall use 1" appurtenances.
8. All water used in the flushing of said lines, shall be metered and the developer shall pay the Board at the current water rates.
9. Under no circumstances shall new construction be covered without prior inspection and approval of Water Board Personnel. If pipe is covered without an inspection, the contractor shall re-excavate for an inspection by Board Personnel at the contractor's expense.
10. Upon completion of the extensions, the developer shall request a final inspection by the Board. **Inspections will only be conducted during regular business hours.** Included with the written inspection shall be a certificate issued by the registered engineer who designed the extensions that all work and material were installed in accordance with the plans and specifications as approved by the Board, together with *two sets of as-built drawings on which are shown detailed measurements to all valves, fittings, plugs and dead- end lines, and other important features.* Upon receipt of this information, the Board will make a final inspection of the extensions and formally accept ownership of the improvements in writing. Contractor/owner maintains the lines for one year from date line is put into service. All Board specifications

shall be followed. There shall be no private lines attached to the mains of the Monroeville Water Works. **Should the final as-built drawings not be provided to the Board within one year from the completion date, the extension will remain the maintenance responsibility of the contractor/developer until said drawings are provided, but ownership of the Monroeville Water Works**

11. The developer shall provide the Board with 100% guaranty bond to replace or repair any defects in materials or workmanship that develops or are detected within one (1) year from the date of final acceptance by the Board

MATERIALS

Pipe

12. Where ground elevations (USGS datum) are elevation 345 or higher, water mains shall be constructed of 7.0 rigid bell and spigot type rubber gasket joint SDR 26 Class 200 PVC meeting all NSF requirements. The pipe shall comply with ASTM D-2241-67, Type 1, Grade 1 (PVC 1 120) ASTM D- 1 784-65 T,
13. Where pipe is to be installed in areas where ground elevations (USGS datum) are below elevation 345, all pipe shall be minimum SDR 21 Class 200 PVC meeting all other specifications outlined above. This includes 2 “ pipe also. **NO GLUE-JOINT PIPE ALLOWED.**
14. All pipe installed beneath creeks, streams, or other waterways, shall be constructed of ductile iron designed in accordance with AWWA C151-76, with appropriate joints as approved by the Board.
15. All PVC pipe shall have #14 **solid** wire installed along the entire length of the pipeline. This shall be readily located with the use of

electronic detection devices as normally used for locating pipelines.

16. All pipe shall be installed with 30 inches minimum cover, not to exceed 60 inches cover.

Fittings

17. Fittings for use with PVC shall be ductile iron or cast iron. **NO PVC FITTINGS WILL BE ALLOWED.**
18. All fire hydrant tees shall be provided with mechanical joints and high strength cast iron nuts and bolts. They should also be secured with all thread rod from hydrant to valve to tee.
19. All fittings shall be provided with adequate thrust blocking consisting of 2500 pounds of concrete.
20. Gate valves shall be provided at all line intersections or at maximum intervals of 1,000 feet. All valves shall be provided with a valve box and cover constructed of cast iron, 5 ¼" I.D. , screwed type. Said boxes shall be encased in a 14" by 14" concrete pad not more than 6" thick.
21. Gate valves shall be iron body, brass mounted, and be of wedge gate or double disc parallel seat type. Gate valves shall have a non-rising stem, "O ring" stem seal, a square operation nut and shall open by turning to the left. Gate valves shall be manufactured in accordance with AWWA C500-61, Mueller. Gate valves shall be suitable for a working pressure of 200 psig and shall be tested to 400 psig.

Fire Hydrants

22. Fire hydrants shall be manufactured in accordance with AWWA C500-64 and shall be Mueller Improved, A423, and shall be spaced as directed by the Fire Chief of Monroeville.
23. Hydrants shall have a main valve opening of not less than 5 ¼", two 2 ½" hose connections and one 4 ½" pumper connection. Hydrants shall be of the traffic model type provided with a breakaway feature on the barrel and stem. Hydrants shall be provided with a permanent lubricating device and "O ring" packing seals. Hydrants shall open by turning to the left. Operating nuts shall be of the National Standard Pentagon Type, 1 ½" point to flat. Hydrants shall be provided with a 6" mechanical joint shoe and shall be equipped with two strapping lugs. Hose and pumper connections shall be furnished with UNS threads.
24. All fire hydrants shall be provided with a 6" gate valve between the main and the hydrant. The hydrant tee, cut off valve and hydrant shall be strapped together by at least two ½" diameter threaded steel rods and nuts.
25. Each hydrant shall be installed truly plumb on a pre-cast concrete block, 12" square and 3" thick and not less than three cubic feet of gravel about 1" in size shall be placed around the hydrant base before backfilling.
26. All piping between the hydrant tee on the main, the cut off valve, and the hydrant shall be constructed of the 6" Class 50 ductile iron pipe, having a wall thickness of 0.35

Service Pipe

27. All copper service tubing shall be ¾" diameter, and shall be compression type.

28. Copper tubing shall conform to the Federal Specification WW-T799, Type K, and shall be suitable for a working pressure of 160 psig.
29. Service pipes shall be laid with 24" minimum cover.

Brass Goods and Meters

30. Corporation cocks shall be ¾" size unless otherwise noted, Mueller H-15000, for copper tubing.
31. Curb stops shall be full ¾" opening size, Mueller H-15174, for use with copper tubing.
32. Service clamps shall be used when connecting to PVC mains; "Mueller Bronze Service Clamps" especially designed for use on PVC pipe and provided with a corporation cock thread.
33. Back Flow Prevention devices shall be installed on every meter and shall be Mueller H-14242.
34. All meters shall be Sensus SR with cubic foot reader.

Potable Water Lines

35. No water meter shall be set on a dead-end line which is 6 inch or larger unless this line is looped. If the larger line is not looped, a separate 2 inch potable water line must be installed from a point on a looped system.
36. The Monroeville Water Works will not install water lines on private property.
37. All road bores for pipe sizes greater than 2" shall be contracted out to a reputable contractor at the owner/developer's expense. Should

a 2" road bore need to be contracted out, the owner/developer shall bear the expense. **The bore shall be supervised and approved by Water Works Personnel.**

**** Note: Top of tank overflow is 536.30 Mean Sea Level**

In addition, if the owner excavates the line and furnishes all equipment; i.e. Tapping saddle and valve, the tapping fee will be \$100.00 per inch for all pipe. Should the owner wish for the Water Works to excavate the line and supply all materials and labor, the cost will be the above mentioned per inch tapping price, in addition to the price of materials at that time, and the cost of labor and equipment