

DEL-CO WATER COMPANY
GENERAL NOTES FOR WATER LINE CONSTRUCTION

1. General Notes as modified by Del-Co and shown on the approved Construction Drawings shall supersede the requirements of the Subdivision Construction Standards Manual wherever discrepancies occur.
2. Standard General Notes:
 - a. Water line materials and installation methods shall conform to The Del-Co Water Subdivision Construction Standards Manual, latest revision. Contractor shall obtain a copy of the standards and have in his possession at all times during construction. Coordinate work with Del-Co Water (740) 548-7746.
 - b. Water mains shall become the ownership of Del-Co Water upon final acceptance.
 - c. Water line construction plans are approved for a period of one year from the date of the approval letter or signed plans. If construction has not started within one year of the date of approval, plans shall be resubmitted to Del-Co Water Company for approval.
3. Water Line Construction:
 - a. Use the following type and class of pipe unless otherwise indicated on the drawings:
 - i. 2-inch water line pipe: Class 200 SDR 21 Yelomine PVC (restrained joint).
 - ii. 4-inch water line pipe: Class 200 SDR 21 PVC.
 - iii. 6-inch to 12-inch water line pipe: Class 160 SDR 26 PVC.
 - iv. 16-inch and larger water line pipe: AWWA Class 52 DIP.
 - v. 4-inch pipe and larger used for fire service: AWWA C900 DR 18 (150 PSI) PVC.
 - vi. All sizes of Del-Co-owned water lines used on master meter projects: Class 200 SDR 21 PVC.
 - b. All fittings shall be mechanical joint conforming to AWWA.
 - c. All valves shall be mechanical joint conforming to AWWA with AISI 304 stainless steel external hardware. Valves 12-inch and smaller shall be gate valves, and valves 16-inch and larger shall be Pratt Groundhog butterfly valves.
 - d. Provide heavy-duty valve boxes on all hot-taps and at valves located under gravel or pavement surfaces.
 - e. Top of valve box shall be flush with finished grade in paved areas, and 4 inches above finished grade in non-paved areas.
 - f. Crosses shall not be used without approval of Del-Co Water Company.
 - g. Maintain a minimum 10-foot horizontal and 1.5-foot vertical separation between water lines and sanitary and storm sewers.
 - h. Water lines shall be NSF 61 approved.
 - i. Provide concrete thrust blocking for all fittings, valves, anchor tees, and hydrants.
 - j. Bury water lines a minimum depth of 48-inches to the top of pipe.
 - k. Place a 5-foot steel fence post or 4"x4" wood post at valves and the ends of lines. Paint blue.
 - l. Install 14-gauge high strength 30 mil HDPE jacket, copper-clad, steel reinforced tracer wire on all water main and service lines. Fasten wire to pipe in two places per pipe section. Extend tracer wire to ground surface at all valves as shown in the Del-Co standard detail. Splice wires using, Ideal Model 63 or equal weatherproof underground wire connectors.
4. Water Service Construction (between main line and meter pit):
 - a. For meters 1-inch and smaller, use 1-inch Class 200 SDR 7 iron pipe size (IPS) polyethylene pipe.
 - b. Connections to PVC pipe shall be made with approved tapping saddle and corporation stop per Del-Co Subdivision Construction Standards Manual.
 - c. Connections to DIP shall be by direct tap or saddle and approved corporation stop per Del-Co Subdivision Construction Standards Manual.

- d. Provide a curb stop with 1-inch female iron pipe threads on the customer side at the end of service lines. Locate at ROW, but a minimum of five feet from edge of sidewalk.
 - e. All service line valves 1½-inch and larger shall be mechanical joint gate valves, restrained with Duct-Lugs and galvanized all thread rod or anchor tees where applicable.
 - f. Minimum depth of cover shall be 36 inches.
 - g. Place a 5-foot steel fence posts or 4"x4" wood post at the ends of all service lines.
 - h. Contractor shall be responsible for providing special backfill material for all lines, including those installed by Del-Co Water Co. Inc., where required by the County or City Engineer.
5. Fire Hydrants:
- a. Fire hydrants shall conform to AWWA C502 for dry barrel hydrants.
 - b. Main valve: 5.25-inch compression.
 - c. Nozzles:
 - i. Threading: Conform to NFPA National Standard fire hose threads.
 - ii. 4.5-inch steamer, except in the following locations provide an integral storz connection; Harrington HHS50 or equal: Berkshire, Berlin, Concord, Genoa, Kingston, Liberty, Orange, Porter, Trenton, and Scioto Townships; City of Powell; and the Villages of Sunbury and Galena.
 - iii. Two 2.5-inch hose connections.
 - d. Inlet Connection: 6-inch mechanical joint.
 - e. Operating Nut: 1.5-inch pentagon, turn counterclockwise to open.
 - f. Extensions and parts: Shall be manufactured by the original equipment manufacturer.
 - g. Approved Manufacturers: Mueller Super Centurion 200, American Flow Control B-84-B, Clow Medallion, M&H Model 129M, AVK Nostalgic 2780, or Kennedy Guardian K81D.
 - h. Painting: Repaint all hydrants after installation per Del-Co Subdivision Construction Standards Manual Section 02731, Part 2.06.
 - i. Liberty Township, Powell, and Village of Sunbury: Safety Red.
 - ii. Other Townships: Safety Yellow
 - iii. Fire hydrants located on private water lines shall be painted Industrial Green.
6. Disinfect all water lines in accordance with AWWA C651 and Del-Co specifications.
7. Pressure testing:
- a. Pressure-test all water lines in accordance with AWWA C600 for ductile iron pipe and C605 for plastic pipe, and Del-Co Specifications.
 - b. Contractor shall provide all equipment necessary to perform test.
 - c. Schedule test between 8:00 AM and 2:00 PM weekdays. Notify Del-Co 24 hours prior to test.
8. Obtain written approval of material and manufacturers list from Del-Co Water prior to beginning construction.
9. Provide casing pipe for all road crossings unless otherwise approved by Del-Co. Casing pipe shall be steel pipe with 0.375-inch wall thickness, or PVC SDR 21 Class 200. Casings larger than 12-inch may be AWWA C905 DR25.
10. Easements shall be provided to Del-Co Water before permission will be given to make new service line connections.
11. Connections to existing water lines will be made by Del-Co Water at the contractor's expense, or performed by contractors who are approved for making connections. Notify all property owners, and Del-Co Water, in writing 48 hours before starting construction.
12. Do not fill new water lines until approved by Del-Co Water Co.
13. Booster pumps are not allowed on individual services.
14. Normal working pressure shall not be less than 35 PSI.