

Watermain Materials:

1) Corporation Stops:

- a. Compression fittings.
 - a. A. Y. McDonald 4701-BQ (1", 1-1/2", 2")

2) Curb Stops:

- a. Compression fittings.
 - a. A. Y. McDonald 6104-Q (1", 1-1/2", 2")

3) Valve Box: Minneapolis pattern, lid marked "WATER"

- a. For 1" thru 2", Mueller H-10300 Copper service
- b. A. Y. McDonald, 5615 1-1/4"

4) Fire Hydrant:

- a. Waterous Pacer Model WB-67-250 or approved equivalent.
- b. All hydrants shall have:
 - 1. 6" mechanical joint connection
 - 2. 5-1/4" valve opening
 - 3. 5.5' cover over hydrant lateral
 - 4. 6" valve on lateral
 - 5. Valve box shall have a valve box stabilizer installed *
*(Valve box adaptor #2 type A, as made by Adaptor, Inc. or approved equivalent)
 - 6. Painted red

5) Bolts: All factory installed bolts and fasteners shall be 304-grade stainless steel.

6) Valves: Valves 4" through 16" diameter shall be right-hand closing resilient wedge gate valves, conforming to AWWA Standard C-515. All factory installed bolts and fasteners shall be 304-grade stainless steel.

7) Valve Vaults: Refer to City detail.

8) Watermain Pipes:

- a. Ductile Iron Class 52, conforming to AWWA Standard C-151.
 - a. Cement Lining, conforming to AWWA Standard C-104.
 - b. Mechanical or push-on joints shall conform to AWWA Standard C-111.
 - c. At minimum, Type 3 laying conditions shall be provided, conforming to AWWA C-600.
- b. All watermains shall be encased in a high density polyethylene encasement, following material specifications and installation in accordance with ANSI.AWWA C105/A21.5, ASTM A674, using "Method A" installation.
- c. All side yard and rear yard water mains not directly adjacent to public roadways or paved surfaces shall be Ductile Iron Pipe, Class 55 with a Type 5 laying condition.
- d. Brass Wedges shall be installed to provide electrical conductivity.

9) Copper Service Lines:

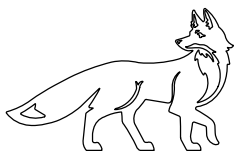
- a. One-inch diameter minimum.
- b. Type K copper tubing.
- c. Compression fittings only.
One-inch service connections may be connected utilizing direct tap methods to six-inch mains and larger. If there is insufficient diameter water main to install a direct tap, then a tapping saddle shall be utilized. Service taps of 1-1/4", 1-1/2" & 2" require the use of a tapping saddle. Saddles shall be full circle, 304-grade stainless steel, with nylon washers and Nitrile gasket, as manufactured by Smith-Blair; Model #372, or approved equivalent.

10) Tapping Sleeves:

- a. 4" through 8" diameter:
 - a. Romac SST-945 stainless steel;
 - b. Smith- Blair 665 stainless steel or approved equivalent.
 - c. Mueller stainless steel or approved equivalent.
- b. 10" and larger diameter:
 - a. Mueller H-615 cast iron or approved equivalent.
 - b. Flange fasteners shall be 304-grade stainless steel.

11) Ductile Service Lines:

- a. Fire/Domestic:
 - a. The first O.S. & Y. valve on the inside of the building must be in place for pressure testing, chlorination and sampling.
- b. Testing against flanges will not be allowed.



CITY OF ST. CHARLES
ILLINOIS • SINCE 1834
Pride of the Fox

WATER MAIN MATERIALS

DATE: 1-28-2022

NOT TO SCALE

REVISED:

DRAWING NO. B-10