

SECTION 02605 – WATER SERVICES

PART 1 – GENERAL

1.1 DESCRIPTION

- A. The WORK under this Section includes providing all labor, materials, tools and equipment necessary for furnishing and installing water services, including trenching, backfill, service saddles, corporation stops, service pipe, curb stops, curb boxes, thaw wire, warning tape, and marker posts; and for furnishing and installing blow-off hydrants, as shown on the Drawings and Standard Details.

1.2 SUBMITTALS

- A. Service Saddles: Catalogue cut.
- B. Corporation Stops: Catalogue cut.
- C. Curb Stops: Catalogue cut.
- D. Service Boxes: Catalogue cut.
- E. Blow-Off Hydrant: Catalogue cut.

PART 2 – PRODUCTS

2.1 WATER SERVICES

- A. Service Saddles shall be designed for a minimum 250 psi working pressure and shall conform to the following requirements:

PIPE SIZE	SERVICE SIZE	SERVICE SADDLE
6" and 8"	1"	Single Strap, Iron, I.P. Thread Rockwell 311 or approved equal
6" and 8"	1½" and 2"	Double Strap, Iron, I.P. Thread Rockwell 313 or approved equal
10" thru 18"	¾" thru 2"	Double Strap, Iron, I.P. Thread Rockwell 313 or approved equal

- B. Corporation stops shall be Mueller No. B-25025, McDonald Brass 4704B, or approved equal. Corporation stops shall be attached to the water pipe with cast iron service saddles.
- C. Service pipe and fittings shall be cold drawn, seamless annealed Type K Copper. Fittings shall be flared bronze fittings.
- D. Curb stops shall be Mueller No. H-15201, McDonald Brass 6100, or approved equal.
- E. Service boxes for curb stops shall be of cast iron and be not less than four (4) inch diameter with the extension piece adjustable for elevation and with cover marked "Water" or "W." The service box shall be of sufficient length to be adjusted an equal amount above and below the finished grade as shown on the Standard Details. Boxes

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shall be dipped in coal tar pitch. Service boxes shall be Tyler Pipe 6870 Series, 4¼-inch ID, Kejriwal Pacific 145R 49-62, or approved equal. Wood foundation components shall be treated in accordance with AWWA Standards.

- F. Thaw wires shall be No. 2 copper wire, stranded, with THW insulation, or approved equal. Thaw wires shall be connected to the service saddle take-up with a solderless lug, Stak-On, or approved equal.
- G. Underground marking tape shall be blue, six inch wide, four mil thick, polyethylene tape with black lettering with the following wording: “Caution: Waterline Buried Below.” Marking tape shall be installed 12 inches above the top of the water service pipe and blow-off lines.

PART 3 – EXECUTION

3.1 CONSTRUCTION

- A. The corporation stop shall be installed directly to the service saddle. Water services shall be installed in conformance with the Standard Details. All water services shall be completely exposed and inspected for leakage by the ENGINEER prior to covering, and shall be pressure tested as approved in Section 02601 – Water Pipe.
- B. Service pipe shall be cut using a tool specifically designed to leave a smooth, even and square end on the pipe material. Cut ends shall be reamed to the full inside diameter of the pipe.
- C. All service pipe and appurtenances shall be disinfected and flushed at the time of installation. The service line shall be activated at the corporation stop prior to backfilling and flushed through the curb stop. Electrical continuity tests shall be performed in accordance with Section 02601 – Water Pipe after backfilling, compaction, and final grading are completed. If electrical continuity is not obtained, the CONTRACTOR shall excavate the service and re-establish continuity. Retesting will continue until continuity is established. All WORK associated with electrical conductivity testing, retesting and performance is incidental to other items in this Section.
- D. Relocate Existing Water Service is a contingency item. If relocation of the service pipe is required, as determined by the ENGINEER, the existing pipe shall be cut or disconnected at one point only, so the coupling is not located within two feet of the crossing or other conflicting structures.

END OF SECTION