

SECTION 026411
GATE VALVES FOR WATERLINES

1. DESCRIPTION

This specification shall govern all work necessary to provide and install all gate valves and valve boxes required to complete the project.

2. MATERIALS

Gate Valves

All valves shall meet the following requirements. Gate valves shall conform to AWWA Standard C515.

- 1) The gate valves shall be ductile iron resilient wedge (C515) with non-rising stems.
- 2) Valve ends shall be flanged or mechanical joint type or a combination of these as indicated or specified. A complete set of joint materials shall be furnished with each valve, except for bell ends and flanges.
- 3) Valves 16 inches and larger shall be furnished for horizontal installation – lay over.
- 4) Stem seals shall be the O-ring type on valves through 12-inch size. Valves 16 inches and larger may be equipped with stuffing boxes.
- 5) Valves shall open left (counter clockwise). Valves over 18 inches shall have the main valve stem furnished with a combination hand wheel and operating nut.
- 6) Tapping valves to be used with tapping saddles shall have one end mechanical joint.
- 7) No position indicator will be required.
- 8) Within 30 days after award of contract, the Contractor shall submit in triplicate, for approval, the following:
 - a) Certified drawings of each size and type of valve 16 inches and larger showing principal dimensions, construction details, and materials used.
 - b) On all size valves, the composition of bronze to be offered for various parts of the valve, complete with minimum tensile strength in psi, the minimum yield strength in psi, and the minimum elongation in 2" per cent.

3. CONSTRUCTION METHODS

Gate Valves

Gate valves shall be installed as indicated on the drawings.

Cast Iron Valve Boxes

Valve boxes shall be installed as indicated on the drawings. When valves are in the street right-of-way, the top of box shall be set flush with the pavement or surrounding ground. In cultivated areas, the top of box shall be set twelve inches (12") below natural ground and long enough to be raised to natural ground at a future date.

4. MEASUREMENT AND PAYMENT

Unless otherwise specified on the Bid Form, gate valves for waterlines will be measured as a unit for each gate valve and valve box installed. Payment shall include, but not be limited to, furnishing and installing the valves complete in-place including joint materials, cast iron valve box, box extension, cover, concrete collar, and all other related items such as bolting, wrapping, cement-stabilized sand encasing, backfilling and compacting; and shall be full compensation for all labor, material, tools, equipment and incidentals required to properly install the valves as indicated and specified.