

SECTION 02627

WATER METERS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Water meters for customer service, including submeters (i.e., cooling tower meters, sewer credit meters, etc.), for fire service in sizes 5/8 inch through 10 inches.

1.2 UNIT PRICES

- A. Measurement for water meters is on a lump sum basis for installation of each meter type and size. Contractor will furnish all water meters.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Contractor furnishes all water meters. Water meters are to be Orion meters from Badger Meter, Inc., Milwaukee, WI.

B. CONNECTIONS AND FITTINGS

1. Connections: Provide pipe in accordance with Section 02610 and Section 02620; restrained joints only.
2. Fittings: Restrained ductile iron; push-on bell joints or mechanical joint fittings outside of meter vault installations; Class 125 flanged inside meter vaults; cement mortar lined and sealed.

2.2 LAYING LENGTHS

- A. The minimum length (with 1 inch tolerance) for meter and standard strainer shall be shown as indicated on the detail drawing for water meters.

PART 3 - EXECUTION

3.1 TAPPING AND SERVICE LINE INSTALLATION

- A. Refer to Section 02626 for tapping requirements.

B. Service Line:

1. Use pipe and fittings which conform to the requirements of Section 02610 - Ductile-Iron Pipe and Fittings, or Section 02620 - PVC Pipe.
2. Only pull or deflect joints to limits recommended by manufacturer.

3. Make vertical adjustments with offset bends where room will permit. Minimize number of bends.
4. Ten pipe diameters minimum of straight pipe length upstream and downstream of meter vault.

3.2 METER FITTING HOOKUP

- A. Support meter piping; level and plumb meter during and after installation. Meters 3 inches and larger: support at minimum two locations with concrete.
- B. Use round flanged fittings inside meter box or vault except for mechanical joint to flange adapter. Provide full-face 1/8-inch black neoprene or red rubber gasket material on flanged joints. Provide bolts and nuts made from approved corrosion-resistant material.
- C. Tighten all bolts in proper sequence and to correct torque.
- D. Visually check for leaks under normal operating pressure following installation. Repair or replace any leaking components.

END OF SECTION