

CONSTRUCTION SPECIFICATION

NV-72. VALVES AND METERS

1. SCOPE

The work shall consist of furnishing and installing valves and/or meters as shown on the drawings.

2. MATERIALS

The material used in manufacturing valves and meters shall conform to the following requirements:

- a. Gate Valves: AWWA Standard C500 or Federal Specification WW-V-58.
- b. Butterfly Valves: AWWA Standard C504 for Rubber Seated Butterfly Valves.
- c. Air-Release, Air-Vacuum Relief Valves, Combination air and Vacuum Relief Valves, Check Valves, Pressure Reducing Valves, and Pressure Relief Valves:

<u>Material</u>	<u>Specification</u>
Cast Iron	ASTM A-48, Class 30, or ASTM A-126, Class B
Bronze	ASTM B-61, or ASTM B-62, Grade 1
Brass	Federal Specification QQ-B-626
Stainless Steel	ASTM A-167, A-276, A-582, Type 302, 303, 304 or 304L
Cast Aluminum	ASTM B-179, C-356 or E 96

- d. Meters: AWWA Standard C-704
- e. Connections: The connections may have internal or external ANSI threads or flanges conforming to AWWA C-207, or plain ends. Bolts for flanged connections may be either steel, stainless steel, or galvanized.

The Manufacturer identification and model shall be clearly identifiable. The performance rating shall be in the manufacturer's literature and may be stamped or painted on the valve or meter.

3. INSTALLATION

Valves and/or meters shall be installed according to the manufacturer's recommendations with no leakage at the maximum operating pressure. Align the valve or meter to the adjoining pipe to prevent damage to the threads or flanges during installation. All sealing materials or gaskets shall be in accordance with the manufacturer's recommendations.

The Contractor shall take all necessary precaution to protect the factory applied coatings on valves and meters so that no damage will occur during storage, handling and/or installation. All necessary repairs to coatings shall be made.

Anchor Bolts and other items embedded in concrete shall be held in alignment and secured in true position during concrete placement.

4. OPERATIONAL TESTS

Valves, meters, and appurtenances that have been installed shall be cleaned, lubricated, and serviced in accordance with the manufacturer's instructions. The equipment shall be tested throughout its full range of operation and adjusted as necessary for pressure and flow prior to use. Handwheel stops on valves shall be set after all adjustments are completed.