San Antonio Water System Material Standard Specifications

SPECIFICATIONS FOR J [FTCWNÆ'EQPVTQN'XCNXGU'4'ÆEJ GU'VJ TQWI J '58'ÆEJ GU ANSI/AWWA CLASS 150 AND DRILLED TO ANSI B16.42

REVISED DECEMBER 2011

1. SCOPE

This specification covers Hydraulic Control Valves with water tight Globe/Angle style bodies with Flanged end connections in sizes 2 inch through 36 inch. Valves shall be either of the flat or rolling diaphragm design and shall provide smooth frictionless motion of the inner valve assembly. All valves shall be ANSI/NSF-61 certified.

2. **DEFINITIONS**

- a) Valves shall be hydraulically operated. The inner valve assembly shall be top and bottom guided by means of bearing bushings. The inner valve assembly shall be the only moving part and shall be securely mounted on an ANSI 316 Stainless Steel stem.
- b) All pressure containing components shall be constructed from ASTM A536-65/45/12 Ductile iron. The flanges shall be designed to ANSI Class 150 standards. Flange drilling to ANSI shall be standard.
- c) Valves shall have a protective Fusion Bond epoxy coating internally and externally. The Fusion Bond epoxy coating shall conform to the ANSI/AWWA C116/A21.16 specification. No machining of any external parts after final coating will be acceptable.
- d) Valves shall have an integral ANSI 316 Stainless Steel seat held in place with Stainless Steel screws.
- e) Valves shall have a Bronze or 316 Stainless Steel top and bottom guide bushings. Material selection based on operating conditions.
- f) The valve shall form a drip tight seal between the stationary Stainless Steel seat ring and a rectangular cross sectioned resilient disc. This Resilient disc shall clamp on 3 1/2 sides and shall be constructed of Buna N or EPDM.

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- g) All external fasteners shall be ANSI 18-8 Stainless Steel with 18-8 Stainless Steel washers.
- h) Diaphragms shall be constructed of either Buna N or EPDM and shall Constructed of Nylon fabric with bonded synthetic rubber.
- All repairs and maintenance shall be possible without removing the Valve from the line. Valve stems should be vertical when mounted in a horizontal line.
- j) Valves shall be either pilot or solenoid controlled.
- k) All valves shall have stem mounted Stainless Steel position indicators, Stainless steel isolation valves at all pilot tubing connections to the valve main body, Stainless Steel pilot strainer, Braided Stainless Steel pilot tubing and Stainless Steel speed control. Pilots and/or Solenoid controls shall be either Bronze or Stainless Steel as per specific application conditions and as noted on project plans or purchase orders.

Previous Specification DECEMBER 2011