SECTION 15100

State Project No. 737-92-0035

STB 21027.00

Federal Aid Project No. ITS-3602 (521)

VALVES

PART 1 - GENERAL

1.1 Provide valves of same manufacturer where possible. Provide valve suitable to connect to adjoining piping as specified for pipe joints. Use upstream pipe size valves. Pipe sizes 2 inches and smaller, use threaded or soldered end connections, except threaded only for heating or steam lines. For pipe sizes 2-1/2 inches and larger, use flanged connections. Use grooved body valves with technical grooved jointed piping. Provide valves with extended stem when used in insulated lines.

PART 2 - PRODUCTS

- 2.1 BALL VALVES 2" AND SMALLER: Rated for 400 PSI WOG, 2-piece construction, bronze body conforming to ASTM B 62, standard port, chrome plated brass ball, replaceable "Teflon" or "TFE" seats and seals, blow cut proof stem, extended stem for insulated pipe, solder or threaded ends except threaded ends only for heating or steam lines, lever handle with balancing stops. Valves shall be equal to Conbraco 70-100-200 or Nibco S or T 580 series.
- 2.2 BUTTERFLY VALVES 2-1/2" AND LARGER: MSS SP-67 200 PSI, lug-wafer type cast iron body conforming to ASTM A126, class B with field replaceable EDPM sleeve, nickel plated ductile iron disc (except aluminum bronze disc for condenser water), stainless steel stem, EPDM o-ring. stem seal, lever handle with indicator stop and position lock. Valves shall be equal to Conbraco 6L-l3X-0l or Nibco LD 20103.
- 2.3 GATE VALVES 2" AND SMALLER: MSS SP-80 Class 125; body and bonnet of ASTM B 62 cast bronze, threaded or soldered ends, solid disc, copper-silicone alloy stem, brass packing gland, "Teflon" impregnated packing, and malleable iron hand wheel. Use class 150 where pressure requires. Valves shall be equal to Nibco T-111 or Stockham B-l00.
- 2.4 GATE VALVES 2-1/2" AND LARGER: MSS SP-70 Class 125 iron body, bronze mounted, with body and bonnet conforming to ASTM A 126 Class B, flanged ends, "Teflon" impregnated packing and two-piece packing gland assembly. Valves shall be equal to Nibco 617-0 or Stockham G-623.

<u>Check Valves 2" and Smaller</u>: MSS SS 80 - Class 125, cast bronze body and cap conforming to ASTM B62, horizontal swing, Y pattern, with bronze disc and threaded or soldered end connections. Valves shall he equal to Nibco T or S 413 or Stockham B 3190-309.

<u>Check valves 2-1/2" and Larger:</u> Wafer type (non-slam), class 125, cast iron body, replaceable lapped bronze seat, lapped and balanced twin bronze flappers and stainless steel trim. Maximum differential pressure between open and close shall not exceed one foot. Valves shall be equal to Bell and Gossett NS or Stockham WG 970.

Installation: Install valves with stems upright or above pipe centerline.

END OF SECTION

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