

9. Gate valves shall be manufactured by American Flow Control, U.S. Pipe & Foundry Co., A.P. Smith Valve & Hydrant Div., Mueller Co., or equal.

10. Valves shall be equipped with overtorque protectors. Overtorque protector - Aunspach, St. Louis, MO. Model Number D86MWR-400. **THIS IS A PROPRIETARY ITEM. SUBSTITUTION OF PRODUCTS FROM OTHER MANUFACTURERS WILL NOT BE PERMITTED.**

### 2.03 BUTTERFLY VALVES

A. General. Butterfly valves shall be of the rubber-seated tight-closing type, conforming to AWWA C504. Butterfly valves shall be rated 250 psi.

1. Suppliers shall have a minimum of five years experience within the last five years in the manufacture of butterfly valves for the type of service specified herein, and in the manufacture of butterfly valves per AWWA C504 standards. Butterfly valves shall be manufactured by Henry Pratt Co., DeZurik; Mueller, or equal.

2. The valve body shall be ASTM-A48, Class 40 or A126, Class B cast iron. Body shall have integral hubs for housing shaft bearings and seals. Body ends shall be:

a. Valves for buried service shall have mechanical joints per AWWA/ANSI C111/A21.11 Standard.

b. Joints for butterfly valves shall be SBR gaskets, except in contaminated areas. Gaskets for butterfly valves for use in contaminated areas shall be nitrile gaskets designed to resist degradation from volatile organic compounds, conforming to AWWA/ANSI Standard C111/A21.11. Contaminated areas where nitrile gaskets are to be used are shown on the plans.

3. The butterfly valve disc shall be of the "off-set" design to provide a full 360° seating surface uninterrupted by shaft holes. Disc shall be constructed of cast iron ASTM A-48 Class 40 or ductile iron ASTM A536. There shall be no external ribs transverse to the flow. Non-metallic discs are not acceptable to the Authority.

4. The resilient seat shall be Buna-N rubber designed to provide tight shut-off at the specified pressures. The rubber seat can be on the disc edge or in the valve body but in either case, must be retained by positive mechanical means with corrosion-resistant hardware. Seats must be capable of mechanical adjustment in either direction without the use of the special tools. They should also be capable of complete replacement in the field without chipping, grinding, or burning out of the old seat or its retaining substance. The rubber mating surface in all cases must be 316 stainless steel.

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