



Public Works and Transportation Department - Water and Wastewater Services

**WATER AND WASTEWATER ENGINEERING DIVISION**

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## MATERIALS REVIEW LIST

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This document approved by the Broward County Water & Wastewater Services Technical Standards Committee.

A handwritten signature in blue ink, appearing to read "S. Uhrick".

Steven W. Uhrick, P.E

1. The following manufacturers' products have been found to be acceptable and/or desirable in their respective groups. Shop drawings need not be submitted for Broward County Water and Wastewater Services (BCWWS) approval if the CONTRACTOR uses products on this list. Any manufacturer's product that is not on this list must be approved in advance by the BCWWS Engineer, also called BCWWS Project Manager and the BCWWS Technical Standards Committee. Such approval requires the submission of a shop drawing (six copies) for each product. Shop drawings will also be required for all group products that are not listed.
2. Materials Review List is to be used in conjunction with the BCWWS MINIMUM DESIGN AND CONSTRUCTION STANDARDS for all County projects.
3. All materials, fittings, pipe and equipment shall be new and unused.
4. All products coming into contact with potable water must be ANSI/NSF 61 compliant.
5. Materials Review List does not supersede any of the Broward County Purchasing Department's rules or regulations, the Standard Form Construction Document's latest revisions, or the Contract's Technical Specifications. If there is any conflict with any of the preceding documents, the contractor shall consult the BCWWS Engineer or Project Manager to resolve the issue.
6. Materials manufactured overseas should have affidavit and certification as to quality control and design criteria and that the materials meet the standards listed in the "Minimum Standards" and elsewhere for the products being supplied by the developer, or contractor. In other words "overseas manufacturers" should meet the same criteria as "domestic" manufacturers. Defective materials shall always be cause for rejection.
7. Any questions on these products should be directed to the Water and Wastewater Engineering Division, Phone No. (954) 831-0910.

### **AIR RELEASE VALVES (Specification 02502)**

Provide appropriate valve for size and service intended.

1. Valmatic (202C for Water)
2. Valmatic (48A & 301A for Wastewater)
4. Valmatic (801A & 802A for Wastewater)
5. Golden-Anderson #945 for Water
6. Golden-Anderson #959 for Wastewater
7. Crispin (UL20.1 for Water)
8. Crispin (S10AS/S20S for Wastewater)

### **AUTOMATIC BLOWOFFS (Specification 02510)**

1. Hydro-Guard Standard Unit
2. Kupferle Foundry Co. #9400 – WC Eclipse

### **BACKFLOW PREVENTORS (Specification 02515)**

Cross connection control, 1” and 2” water services.

1. Ford HS11-444 - 1” service
2. Ford HS11-777 – 2 “ service

### **BUTTERFLY VALVES, 14-INCH AND LARGER (Specification 02502)**

AWWA - Water Mains Only

1. Mueller (Lineseal III)
2. Pratt – Groundhog
3. M & H/Clow (4500)
4. Dezurik (BAW)
5. Milliken/ US Pipe
6. Val-Matic

### **CASING SPACERS (Specifications 02510 &02531)**

1. PSI (S8G-2 & S12G-2)
2. Cascade (CCS)
3. Advanced Products and Systems Stainless Steel Band Casing Spacer Model SS18

**CHECK VALVES** (Specification 02502)

Full opening. Resilient seats.

1. Val-Matic (Swing Flex)
2. Mueller (Flexible Disc)
3. American Flow Control (Resilient Seated) – Potable Water Only
4. Flo-Flex Model 745 – Potable Water Only
5. Ken-Flex (Rubber Faced) – Potable Water Only
6. American AVK

**CHECK VALVES – LIFT STATIONS ONLY**

Lever and weight only, Full opening. Bronze metal to metal seats. Bronze, brass or stainless steel internal working parts. 175 psi for 2"-12" and 150 psi for larger than 12". Must have signal switch indicating open/closed positions.

1. M & H Style 159-02
2. Mueller 2600-6-01
3. Kennedy
4. Clow 5380 Series
5. American Darling "50" Line
6. GA (Golden Anderson) Figure 220

**CLEAN OUT BOX** (Specification 02530)

With hexagonal cover, 11 ¾" I.D. x 15". Cast Iron or ductile iron or PE or FRRP or GRPC construction. Cover is marked "S"

1. U.S. Foundry (Model No. USF 7635 with FJ cover.)
2. U.S. Foundry (Model No. USF 7636 with MJ cover)
3. CDR (WA00-1300-15-HEX with DI cover.)
4. Mid-States Plastics, Inc. (Sewer clean out with D.I. cover.)

**CORPORATION STOPS** (Specification 02515)

Ball Valve type

1. Ford (FB-500 and FB-1100)
2. Mueller (B-25008) (B-25028)
3. Cambridge Brass Model 301

**COUPLINGS** (Specification 02530)

For use on existing facilities (VCP, etc.)

1. Fernco
2. Mission Coupling

## **COUPLINGS AND ADAPTORS, 2 INCH AND UNDER**

1. Cambridge Brass Model 105
2. Cambridge Brass Model 117
3. Cambridge Brass Model 119
4. Cambridge Brass Model 417

## **CURB STOPS / METER VALVES (Specification 02515)**

Ball Valve type-T-top only - Must be full port with locking wing

1. Ford Straight Ball Valves
2. Mueller
3. Cambridge Brass Model 210
4. Cambridge Brass Model 212
5. Cambridge Brass Model 292

## **DRAINAGE FABRIC MATERIALS (Specification 02631)**

1. Webtec, Inc

## **DUCTILE IRON PIPE AND FITTINGS (Specifications 02510, 02530 & 02531)**

Ductile Iron Pipe and fittings meets pressure classification 350 for 4"-24" sizes and 250 for 30" and larger sizes. Ductile Iron Pipe shall be supplied with Mechanical Joint follower glands and accessories as necessary. Water main pipe and fittings shall be cement lined. The interiors of pipe and fittings for sewer force mains and gravity mains/laterals shall be coated with Protecto 401 (40 mils).

1. American
2. U.S. Pipe
3. Tyler
4. Clow
5. Star Pipe Products (fittings only)
6. Griffin Pipe
7. Sigma (fittings only)
8. Mc Wane

## **FIRE HYDRANTS (Specification 02510)**

AWWA & UL/FM; traffic breakaway-flange, no cut bolts; non-rising stem; dry barrel; 5-1/4 inches main valve opening; bronze to bronze seating.

1. Mueller (Super Centurion 250/HS/ A-423)
2. American Darling B-84B
3. Clow Medallion
4. US Pipe Metropolitan M-94
5. American AVK (classic style)

**FLANGED ADAPTERS, DUCTILE IRON** (Specifications 02501, 02510 & 02531)

1. Ebaa (Series 2100 Restrained Flange Adapter)

**GATE VALVES, RESILIENT SEAT** (Specification 02502)

Specified for all available sizes, AWWA & UL/FM. UL/FM required on shut-off RSGV for Private Fire Protection.

1. Mueller (A-2360, A-2361)
2. American Flow Control (AFC 2500)
3. Clow/Kennedy/M&H
4. US Pipe
5. American AVK

**GRADE RINGS** (Specification 0235)

1. LADTEC Rings - use in conjunction with Wrapid Seal

**JOINT RESTRAINT, DUCTILE IRON** (Specifications 02510 & 02531)

1. Ebaa (Mega Lug 1100 Series for DIP)
2. Romac (Grip Ring or Roma Grip)
3. Ford (Series 1400)
4. Tyler (MJ Field Lok Gasket and Gland)
5. Star Pipe Products (Stargrip Series 3000)
6. U.S. Pipe (MJ Field Lok Gasket)
7. Sigma

**JOINT RESTRAINT, PVC** (Specifications 02510 & 02531)

1. Romac (Grip Ring)
2. Ford
  - Series 1390
  - Series 1500
3. Ebba Mega Lug
  - Series 2000 PV
  - Series 1600 PV
  - Series 1500 PV
4. Star Pipe Products (Stargrip Series 4000)
5. Sigma
  - PV Lok
  - One Lok SLC

**MAINTENANCE ACCESS STRUCTURE, WETWELL AND VALVE PIT COATINGS**

(Specifications 02530 & 02532)

1. Protecto 401
2. ChemRex ThoRoc
3. SewperCoat
4. Carboline (Koppers) 300M

**MAINTENANCE ACCESS STRUCTURE, WETWELL AND VALVE PIT LINERS**

(Specifications 02530 & 02532)

1. AGRU Sure-Grip
2. GU Florida, Inc.

**MAINTENANCE ACCESS STRUCTURE RING AND COVER (Specification 02535)**

1. U.S. Foundry (420-DX-WT [Broward County Logo & Water Tight])  
(520-DX-WT or 540-DX-WT)
2. U.S. Foundry (690-AG-M)

**MAINTENANCE ACCESS STRUCTURES (SANITARY SEWER AND STORM DRAINAGE); WETWELLS AND VALVE PITS (Specifications 02532,02535 & 02536)**

1. Any manufacturer who meets ASTM, FDOT and Broward County Specifications.

**Note:** Shop Drawings must be provided for wetwells installed by the Tremie Seal method.

**MANHOLE RISERS**

1. RELL Type 1
2. RELL Type 2

**MECHANICAL JOINT FITTINGS AND FLANGED FITTINGS (Specifications 02510 & 02531)**

AWWA C153; C111; ANSI, Cement Lining, or Protecto 401 [sewer] Ductile Iron.

1. Tyler
2. U.S. Pipe
3. American
4. One Bolt, Inc. Restrained Fittings
5. Star Pipe Products
6. Sigma

**METER BOXES AND COVERS (Specification 02515)**

1. Okie Dokie Ductile Iron Covers (required for vehicle traffic loads)
2. Carson Industries Composite Covers with CI Reader Doors (For AMR Meters)
3. Mid-States Plastics, Inc.
4. Old Castle/ East Jordan Iron Works (ductile iron cover only)

## **METER FLANGE**

1. Cambridge Brass Model 421
1. Cambridge Brass Model 424

## **PLUG VALVES** (Specification 02502)

1. Clow (Eccentric)
2. Dezurik (PEC)
3. Pratt Ballcentric (EWG)
4. Val-Matic (Cam-Centric)
5. Pratt/ Milliken/ US Pipe

## **POLYETHYLENE TUBING** (Specification 02515)

Polyethylene compound shall comply with ASTM D 3350, ASTM D 3408 and ASTM D 1248 and AWWA C-901 (Water Service – 200 psi)

1. Driscopipe 1" and 2"
2. Endot Endopoly PE 3408 HDPE 1" and 2"

## **POLYVINYL CHLORIDE GRAVITY SEWER PIPE AND/OR FITTINGS, 6" AND ABOVE** (Specification 02530)

Gravity Sewer Pipe and/or fittings (ASTM-3034, SDR-26).

1. Vanguard Pipe (Pipe only)
2. JM Eagle (Pipe only)
3. Harco (Fittings only)
4. Vasallo (Fittings only)
5. Plastic Trends (Fittings only)
6. Diamond Plastics
7. Freedom Plastics

## **POLYVINYL CHLORIDE PRESSURE PIPE, 6" AND ABOVE** (Specification 02530)

Pressure Pipe (AWWA C- 900, SDR-18, 150 PSI) Water Service (Gravity Sewer use only)

1. JM Eagle
2. Certain Teed
3. Diamond Plastics

**PVC SDR-26 SEWER PIPE/DUCTILE IRON PIPE ADAPTER (Specification 02530)**

For use with all new construction. Cast Iron and Ductile Iron fittings with mechanical or push on joints conforming to AWWA C-153 or C-110 shall be allowed as alternative when PVC sizes are not available.

1. Harco
2. Flow Control
3. Quail

**REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY (Specifications 02515 & 02532)**

1" and 2 1/2"

1. Ames (4001, 4000SS)
2. Febco (825Y)
3. Watts (909, 909M1)

**SERVICE SADDLES (Specification 02515)**

Stainless Steel - Double strap saddles only with Fusion bonded body

1. JCM (406)
2. Smith-Blair (317)
3. Romac (202N)
4. Ford (FC 202)
5. Cascade (CNS2)

**TAPPING SLEEVE, DUCTILE IRON AND WITH MECHANICAL JOINTS ONLY (Specifications 02510 & 02531)**

1. American Flow Control (2800 Series)
2. Mueller (H-615 Series)
3. Tyler
4. U.S. Pipe (Type 9)

**TAPPING SLEEVE, STAINLESS STEEL (Specifications 02510 & 02531)**

1. JCM (432 and 452)
2. Smith Blair (663)
3. Romac (Series SST III)
4. Ford (Style FTSS)
5. Cascade (CST-EX)
6. Mueller (H-304)

**TAPPING VALVE** (Specifications 02510 & 02531)

Resilient seat gate valves to be used up to 48" sizes.

1. American Flow Control (2500 Series)
2. Clow/Kennedy/M&H
3. Mueller (T-2360, T-2361)

**VALVE BOX, WATER OR SEWER** (Specifications 02510 & 02531)

Adjustable screw type with locking cover, 5 ¼" shaft, 18" and 24" extensions, cover to be marked for water or sewer service, Cast Iron ASTM-A48 Class 30.

1. Tyler
2. Star Pipe Products
3. USF 7636 and MJ cover (drawing A6418)

**WATER METERS, PRIVATE FIRE PROTECTION** (Specification 02515)

1. Sensus Compact Fire Line - Fire Service Assemblies
2. Sensus SR Water Meter (1")

**YOKES** (Specification 02515)

1. Ford
2. Mueller (Iron meter yokes, H-5020)