#### ST MARY'S COUNTY METROPOLITAN COMMISSION

### LIST OF APPROVED MATERIALS & MANUFACTURERS FOR WATER & SEWER CONSTRUCTION

The Commission shall maintain an approved materials and manufacturers list. The amendment of the list shall be the result of an evaluation and recommendation of a committee of operations, maintenance and engineering staff periodically designated by the Chief Engineer. The list shall be utilized by contractors, suppliers, designers, and staff when identifying materials which have been approved for use in the water and sewer systems. This list shall be utilized in construction or maintenance when the project specifications do not contain enough detail to identify every item. This list is to be used or referenced in designs unless a material not contained in the list is otherwise approved for use in a specification package.

The Manufacturer of a material not on the list may request inclusion of a product by pursuing the following evaluation procedures:

- 1. Materials must be presented with a request for inclusion in the approved materials list. The request may initially be for an individual or limited number of projects.
- 2. Five (5) copies of fact sheets, specifications, laboratory test results, drawings and significant information on applicability of use of the product must be presented before a request will be considered.
- 3. Documentation of approval for use for the proposed application by other local, state or federal water and sewer operations and construction agencies must be presented.
- 4. Depending on the nature of the product, factory visits and on-site visits to locations where the material or product is being utilized in construction and/or operation may be required as part of the evaluation process.
- 5. If evaluation of the aforementioned information is acceptable, the product may be approved for use on a trial basis in a developer-funded or Capital Improvement project. NOTE: Large quantities or extensive use in the trial installation will normally not be allowed.
- 6. The Commission reserves the right to have the product tested by an independent agency to assure that it meets the minimum requirements established in the Standard Specifications. In the event that the product does not meet the minimum requirements, the manufacturer will be responsible for all associated cost including, but not limited to, the test performed and any additional testing by the Commission.
- 7. If the trial installation produces satisfactory results then after an appropriate time for observation, the material or product may be utilized on a limited basis.
- 8. Pending continued satisfactory performance and evaluation during the trial installation and limited use periods, the material or product may be added to the List of Approved Materials and Manufacturers.

#### List of Approved Materials Manufacturers General

	Spec. Sec.	<u>Standard</u>	Approved / Manufacturer
Metallic Warning Tape (water / gravity, & FM sewer)	Sec. 02551, 02553, 02561, 02563, 02566		All Manufacturers
Tracer Wire (12 ga. solid)	Sec. 02553		All Manufacturers
Tracer Wire: (#8 AWG)	Sec. 02310		All Manufacturers
Standard Valve Box (screw type)	Sec. 02553	W-1, W-2	Sigma, Bingham & Taylor, Capitol Foundry, Tyler Union
	Sec. 02566	P-1, P-2, P-3	Sigma, Bingham & Taylor, Capitol Foundry, Tyler Union
Curb Valve Box (screw type) with Water Lid	Sec. 02552	W-9	Sigma, Bingham & Taylor, Capitol Foundry, Tyler Union

## List of Approved Materials Manufacturers Water Main Construction

	Spec. Sec.	<u>Standard</u>	Approved / Manufacturer
(DIP) CL-52 / Slip Joint / Restrained Joint (cement Lined)	Sec. 02551		US Pipe, Griffin, American, Atlantic States, Clow
(PVC) C-900 DR-18 CLASS 150	Sec. 02551		JM, National, Diamond, North American
(PVC) SDR-21 B&S (bell gasket) 200 psi	Sec. 02551		JM, National, Diamond, North American
(HDPE) High Density Polyethylene DR-11	Chap 2 Design		Pressure Rated to Match System Piping
Mechanical Joint Fittings (cement Lined)	Sec. 02551		Tyler, Union, Sigma, Star Pipe
Ductile Iron (sleeves, bends, tees, reducers, end cap, plugs)			
MJ Accessory Kits	Sec. 02551		EBAA, Sigma, US Pipe, Star Pipe
HDPE Fittings (fusion type)			Pressure Rated to Match System Piping
Resilient Seat Wedge (Gate) Valves / (MJ)	Sec. 02552	W-1, W-2	Mueller, US Pipe, Clow, Kennedy, American, M&H
Fire Hydrants (5-1/4" main valve x MJ)	Sec. 02554	W-1	Mueller, US Pipe, Clow, Kennedy, American, M&H
MJ x Swivel Tee (Req. for hydrant service valve)	Sec. 02551	W-1	Griffin, Tyler, Clow, Union, Sigma
2.0" Hydrant Blow Off (connected with 2" brass pipe)		W-3	Kupferle, Mainguard
2.0" Brass Hardware			Merit Brass or approved equal
2.0" Air Release Valve (stainless body)	Sec. 02552		Crispin, ARI
Air/Vacuum Release Valve	Sec. 02552		Crispin, Apco, ARI or approved equal
Double Strap Service Saddles	Sec. 02553	W-4A,W-4B, W-5, W-9	Ford, Mueller, McDonald, JCM Industries
Corporation Stop / Bronze Curb Stop (assembly)	Sec. 02553	W-9	Ford, Mueller, McDonald
K Copper Tubing (soft / rolled) 1" dia. and greater	Sec. 02553	W-5	Mueller, Reading, Cambridge-Lee Industries
Copper Setter Flared (with dual cartridge check valve)	Sec. 02553		Ford, Mueller, McDonald
(Single or Shared Domestic / Sprinkler Connection)		W-4A, W-4B	Ford, Mueller, McDonald
Meter Vault (plastic pit setter)	Sec. 02553	W-4A, W-4B, W-5	DFW Plastics, Mid States
Blow Off Vault		W-3	DFW Plastics, Mid States
Frame & Cover (cast iron with locking mechanism)		W-8, W-10	Capitol Foundry, Ford, AY McDonald, Sigma, East Jordan
Lid Labeled (water meter designed for ECR sensor)	Sec. 02553	W-8, W-10	Capitol Foundry, Ford
Fireman Post Indicator & Valve	Sec. 02553	W-15	Kennedy, Mueller
Water Meters	Sec. 02553	W-6, W-8, W-10, W-11	Neptune Automatic Meter Read (AMR) Meter
Joint Restraint for PVC Pipe			EBAA Iron Series 1600 and 2000PV
Joint Restraint for Ductile Iron Pipe			EBAA Iron Series 1100 Megalug
Leak Joint Clamps (reduced clearance)	Special Exceptions		Style 516 by Romac Industries, Inc. JCM 143 Bell Joint Leak Clamp by JCM Industries Smith-Blair 274 by Smith

### List of Approved Materials Manufacturers Gravity Sewer Construction

	Spec. Sec.	<u>Standard</u>	Approved / Manufacturer
Sewer Pipe (Mains / Services)			
(PVC) SDR-35 / C-900 - DR 14	Sec. 02561		JM, National, Diamond, North American
(DIP) CI-52 Fiberglass or Ceramic Epoxy lined	Sec. 02561		US Pipe, Griffin, American, Atlantic States, Clow (approved applicators)
(RCP) Reinforced Concrete Pipe	Sec. 02561		Hydro Conduit, Concrete Pipes & Products
(HDPE) High Density Polyethylene	Sec. 02561		Pressure Rated to Match System Piping
Service Connections / Fittings (Wyes / Bends)			
(DIP) Fiberglass, Ceramic Epoxy, Dbl. Cement Lined	Sec. 02561		Griffin, American, Atlantic States, Clow (approved applicators)
(PVC) SDR-35 / C-900	Sec. 02561	S-3, S-4, S-10, S-11, S-12	Harco, Multi Fittings, GPK, Plastic Trends
Pipe Strap Saddle (tee or wye gasketed)	Sec. 02561	S-13, S-14	Geneco, Romac or approved equal
Core Drilled and Inserted Main Tap	Sec. 02561	S-15, S-16	Insert-A-Tee
Cored Manhole Gasket	Sec. 02561		Kor-N-Seal
Pinella Cover	Sec. 02561	S-17	Jumbo, Pinella Industries
Lamphole Cover (with expansion plug)	Sec. 02561	S-18	Capitol Foundry
3" and 4" Collar	Sec. 02561		Rectorseal
6" Collar	Sec. 02561		Rectorseal
Backwater Valve	Sec. 02561		Rectorseal Clean Check
Flapper	Sec. 02561		Rectorseal
Riser Assembly	Sec. 02561		Rectorseal
3", 4", and 6" Valve Body	Sec. 02561		Rectorseal
Precast Concrete Structures			
Sewer Manholes	Sec 02562	S-1, S-2	Frederick, Superior, Terre Hill, Americast, Hanson
Drop Connections	Sec 02562	S-3, S-4	Precast or Cast in Place
Manhole Built over Existing (doghouse)	Sec 02562	S-5	Frederick, Superior, Terre Hill, Americast, Hanson
Cast in Place Channels	Sec 02562	S-6	Submit manufacturers shop drawings
Brick Masonry	Sec 04200	S-6	Type SM / ASTM C32

### List of Approved Materials Manufacturers Gravity Sewer Construction

	Spec. Sec.	Standard	Approved / Manufacturer
Manhole Frames and Covers			
Standard Heavy Traffic	Sec 02562	S-7	Capitol Foundry, East Jordan, Chesapeake Foundry, US Foundry
Watertight	Sec 02562	S-8	Capitol Foundry, East Jordan, Chesapeake Foundry, US Foundry
Insert with Strap	Sec 02562		Flow in Flow, East Jordan
<u>Miscellaneous</u>			
Epoxy Lining			Protecto 401 Ceramic Epoxy Lining

### List of Approved Materials Manufacturers Low Pressure Forced Main Sewer Construction

	Spec. Sec.	Standard	Approved / Manufacturer
Mains and Services			
(PVC) SDR-21 B&S (bell gasket) 200 psi	Sec. 02563		JM, National, Diamond, North American
(PVC) C-900 DR-18 Class 150 B&S (bell gasket)	Sec. 02563		JM, National, Diamond, North American
(PVC) Schedule-80 pipe (plain end) Solvent Weld Joints	Sec. 02566	P-1	
(DIP) CL-52 (glass or epoxy lined) B&S (flex joint)	Sec. 02563		US Pipe, Griffin, American, Atlantic States, Clow (approved applicators)
(HDPE) / DR-11 (fused joints)	Sec. 02563		Pressure Rated to Match System Piping
Pressure Rated Fittings			
Service Tee (PVC, DIP) Threaded Outlet	Sec. 02566	P-1	Harco or approved equal
Horizontal / Vertical bends (PVC, DIP)	Sec. 02566		Harco, Multi Fittings, GPK, Plastic Trends
PVC Schedule-80 (solvent weld joints)	Sec. 02566	P-1, P-2, P-3, P-4, P-5, P-6	National, Charlotte, Crestline, Lasco
HDPE (fusion type)	Sec. 02566	1 -5, 1 -0	Central Plastics or approved equal
	000. 02000		Contract Fraction of approved equal
Valves			
Resilient Seat Wedge (MJ) Gate Valve (flanged interior use)	Sec. 02552		US Pipe, Mueller, Kennedy, M&H, Clow
Plug Valve (MJ or Flanged)	Sec. 02566		Dezurik or approved equal
Bronze Ball Valve (fipt x fipt w' 2" sq. oper. nut)	Sec. 02566	P-1, P-2, P-3, P-4, P-5, P-6	Ford, Mueller, McDonald
Bronze Check Valve (fipt x fipt)	Sec. 02566	P-9	Ford, Mueller, McDonald
Grinder and Chopper Pumps			Barnes (SGV Series or Razor) , Myers WGL 20 Series (Grinder), Myers VR2 Series (Chopper), HOMA GRP19/1FSISMC
<u>Miscellaneous</u>			
Brass (nipples, tees, bushings, plug)	Sec. 02566	P-3, P-4, P-5, P-6	Merit or approved equal
Couplings, Saddles (@ trans. connection to gravity sewer)	Sec. 02566	P-10, P-11	Geneco, Romac, Harco
Comb. Air Release / Air / Vacuum Valve (stainless body)	Sec. 02563	P-8	ARI, Crispin, Apco or approved equal
Sewage Grinder Pumping Unit (simplex / duplex units)	Sec. 11307	P-9, P-9A	Myers or Barnes

### List of Approved Materials Manufacturers Wastewater Pump Station

	Spec. Sec.	<u>Standard</u>	Approved / Manufacturer
Components			
Flowmeter			(ABB) Process Master for submergence in water I P68 with start up, Flexim Ultrasonic
Transducer (submersible)			KPSI Series 750 (Non-Fouling), Mercoid PBLT2
Solar Controller for Solar Backup (WWPS with a Godwin pump)			Morning Star Pro Star 30
Magnetic Contactors and Starters			Square D Class 8536, Eaton, Siemens (Starters shall have adjustable overloads)
Automatic Transfer Switch			ASCO 300
Generator Sets			Kohler, MTU
Macerator			Franklin Miller Taskmaster 8500, JWC Environmental Muffin Monster
Odor Control System			Calgon Carbon Ventsorb, ESD Purafil Drum Scrubber, ESD Purafil Vent Scrubber
Pumps			Barnes, Flygt, Homa, Myers (Vortex or Chopper ONLY)
SCADA			
Tower			Rohn 25G
Telemetry Control Unit			DFS TCU800 Pump Controller
Yagi Antenna			Kathrein Scala Division CA5-300
Input/Output Device			RIO032, RIO128
TCU Enclosure			Stahlin Enclosures RJ1816HPL

# List of Approved Materials Manufacturers Water Pump Station

Spec. Sec.	<u>Standard</u>	Approved / Manufacturer
Chlorine Injection Pump		Stenner (parastolic)
Chlorine Analyzer		Hach CL-17
Chart Recorder		Honeywell DR 4300
Eyewash		Pedestal Mounted with Potable Water