



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Piping	Pressurized PVC AWWA C900-16	Standard Push-On Joint	4" and Larger		✓	✓	✓	JM Eagle	Blue Brute (C900)	Pipe size 14" shall only be used with prior written approval by Manatee County All PVC pipe shall be color-coded per service application  <b>Potable/Reclaimed Water:</b> <b>Pipe sizes 4" - 12"</b> Pressure Class 235, DR 18, Ductile Iron Pipe Size (DIPS), AWWA C900-16 Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed or etched into the gasket Pipe and gaskets for potable water shall be NSF61 certified  <b>Wastewater:</b> <b>Pipe sizes 4" - 36"</b> Pressure Class 235, DR 18, DIPS, AWWA C900-16  <b>Self-Restrained Push-On Joint:</b> All self-restrained push-on joint pipe shall be field checked for proper engagement per manufacturer's recommendations Pipe shall have weather-resistant, min. 6 mil thick, 4" wide, solid red PVC marking tape around bell  <b>RieberLok:</b> Gaskets shall only be used on PVC C900-16 pipe <b>Bulldog Restraint:</b> Gaskets shall only be factory applied to Diamond Plastic "Lok 21" and JM Eagle "Eagle Loc 900" Pipe
					✓	✓	✓	Diamond Plastics Corp.	C900/Trans-21	
					✓	✓	✓	Westlake Pipe & Fittings (fka_NAPCO)	C900/IB	
					✓	✓	✓	National Pipe & Plastics	Dura-Blue C900	
					✓	✓	✓	Sanderson Pipe	C900	
		Self-Restrained Push-On Joint	4" - 24"		✓	✓	✓	Bulldog Restraint	Bulldog Gasket	
			4" - 12"		✓	✓	✓	RieberLok	RieberLok Gasket	
	Gravity Sewer PVC	4" - 15"					✓	JM Eagle	Ring-Tite Gravity Sewer	Pipe size 14" shall only be used with prior written approval by Manatee County  Push-on joints using elastomeric gaskets shall be in accordance with ASTM D3212 Pipe shall be color coded green for sewer applications  <b>Pipe sizes 4" - 15":</b> Pipe Stiffness 115, SDR 26, ASTM D3034
							✓	Diamond Plastics Corp.	Sani-21	
							✓	Westlake Pipe & Fittings (fka_NAPCO)	ASTM D3034/IB	
							✓	National Pipe & Plastics	Sewer ASTM D3034/F679	
							✓	Sanderson Pipe	ASTM D3034/IB	
		18" - 54"					✓	JM Eagle	Blue Brute (C900)	Pipe shall be color coded green for sewer applications  <b>Pipe sizes 18" - 54":</b> Pressure Class 165, DR 25, Ductile Iron Pipe Size (DIPS), AWWA C900-16
							✓	Diamond Plastics Corp.	C900/Trans-21	
							✓	Westlake Pipe & Fittings (fka_NAPCO)	C900/IB	
							✓	National Pipe & Plastics	Dura-Blue C900	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Piping	HDPE	For Mains	4" and Larger		✓	✓	✓	JM Eagle	HDPE (DIPS) Pressure Pipe	Pressure Class 200, PE4710, Ductile Iron Pipe Size (DIPS), DR 11, AWWA C906 Min. Cell Classification per ASTM D3350 shall be 445574  Pipe sizes 3" and 14" shall only be used with prior written approval by Manatee County All HDPE pipe must have color coded striping on 3-sides (120 degree apart) per service application  <b>Potable/Reclaimed Water:</b> <b>For pipe sizes 4" - 12"</b> Pipe sizes 16" and larger shall only be used with prior written approval by Manatee County Pipe for potable water shall be NSF61 certified  <b>Wastewater:</b> <b>For pipe sizes 4" - 36"</b>
					✓	✓	✓	WL Plastics	PE 4710 (DIPS)	
					✓	✓	✓	GF Central Plastics	Design-Flow PE100/PE4710	
					✓	✓	✓	Performance Pipe	DriscoPlex 4000	
					✓	✓	✓	Endot	PE 4710 (DIPS)	
	PE	For Services	2" and Smaller		✓	✓		Endot	Endopure	Minimum Pressure Class 200, PE4710, Copper Tube Size (CTS), SDR 9, AWWA C901 Min. Cell Classification per ASTM D2737 shall be 445574 Tubing shall be fully color coded blue for potable water or purple for reclaimed water services Tubing for potable water shall be NSF61 certified CTS brass connections shall be used
					✓	✓		ADS	Polyflex	
					✓			WL Plastics (fka Charter Plastics)	4710 - CTS Tubing	
	PEX				✓	✓		Rehau	Municipex	Pressure Class 200, PEXa 3306, Copper Tube Size (CTS), SDR 9, AWWA C904 Tubing shall be fully color coded blue for potable water or purple for reclaimed water services Tubing for potable water shall be NSF61 certified CTS brass connections shall be used



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Piping	Ductile Iron AWWA C150/C151	Flanged Joint	4" and Larger		✓	✓	✓	American Cast Iron Pipe Company	Flanged Joint	<p><b>Pipe Ratings:</b> <b>Aboveground Installation:</b> Flanged Joint, 250 PSI, Special Class 53 <b>Buried Installation:</b> Mechanical Joint, 350 PSI for 4" - 16", 250 PSI for 18" and larger</p> <p>Pipe size 14" shall only be used with prior written approval by Manatee County</p> <p><b>Potable/Reclaimed Water:</b> For pipe sizes 4" and larger</p> <p><b>Interior Coating:</b> Std. thickness cement lining per AWWA C104 <b>Exterior Coating:</b> Buried pipe shall have a std. 1-mil asphaltic coating per AWWA C151; aboveground pipe shall have a factory-applied epoxy primer <b>For uncontaminated soils:</b> Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed and/or etched into gasket <b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details Pipe and gaskets for potable water shall be NSF61 certified</p> <p><b>Wastewater:</b> <b>For force mains:</b> Pipe sizes 36" and larger <b>For lift station aboveground valve and metering assemblies:</b> Pipe sizes 4" and larger Holiday-free factory certification per ASTM G62, Method B (High-Voltage) shall be provided for the interior coating at the point of delivery <b>Interior Coating:</b> Green, factory applied dry film thickness 40-mil Tnemec Series 431 Perma-Shield PL or Permox CTF coating <b>Exterior Coating:</b> Buried pipe shall have a std. 1-mil asphaltic coating per AWWA C151; aboveground pipe shall have a factory-applied epoxy primer</p> <p><b>Self-Restrained Push-On Joint:</b> All self-restrained push-on joint pipe shall have weather-resistant, min. 6 mil thick, 4" wide, solid red PVC marking tape around bell</p>
					✓	✓	✓	McWane Ductile	Flanged Joint	
					✓	✓	✓	U.S. Pipe	Flanged Joint	
		Standard Push-On Joint			✓	✓	✓	American Cast Iron Pipe Company	Fastite Joint	
					✓	✓	✓	McWane Ductile	Tyton Joint	
					✓	✓	✓	U.S. Pipe	Tyton Joint	
		Self-Restrained Push-On Joint			✓	✓	✓	American Cast Iron Pipe Company	Fastite Joint w/ Amarillo Fast-Grip Gasket (4" - 24")	
					✓	✓	✓		Lok-Ring Joint (54" - 64")	
					✓	✓	✓		Flex-Ring Joint (4" - 54")	
					✓	✓	✓	McWane Ductile	Tyton Joint w/ Sure Stop 350 Gasket (4" - 24")	
					✓	✓	✓		TR Flex Joint (4" - 36")	
					✓	✓	✓	U.S. Pipe	Tyton Joint w/ Field Lok 350 Gasket (4" - 16")	
					✓	✓	✓		HP Lok Joint (30" - 64")	
					✓	✓	✓		TR Flex Joint (4" - 36")	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Piping	Pressurized PVC ASTM D2241	3" and Smaller		✓	✓		JM Eagle	Ring-Tite	<b>Shall only be used for potable/reclaimed water service casings under pavement</b>  Casing shall be color-coded per service application Pressure Class 200, SDR 21, Iron Pipe Size (IPS), ASTM D2241
				✓	✓		Diamond Plastics Corp.	D2241	
				✓	✓		Westlake Pipe & Fittings (fka NAPCO)	ASTM D2241/IB	
				✓	✓		National Pipe & Plastics	Dura-Flow SDR Series	
	Pressurized Sch. 80 PVC ASTM D1785	2" and Smaller				✓	Westlake Pipe & Fittings (fka NAPCO)	-	<b>Shall only be used for grinder pump stations</b>  Iron Pipe Size (IPS), ASTM D1785 Only for working pressures up to 125 psi
						✓	JM Eagle Products	-	
						✓	GF Central Plastics Products	-	
						✓	Charlotte Pipe Products	-	
						✓	Harrison Plastic Products	-	
	Fiberglass	Centrifugally Cast				✓	Hobas Products	-	<b>Shall only be used for slip lining existing gravity sewer main</b>  Bell and Spigot shall meet requirements of ASTM D3262 O-ring or profile type elastomeric gasket shall meet requirements of ASTM F477
		Filament Wound				✓	Flowtite Products	-	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Fittings	Ductile Iron AWWA C110/C153	For Pressurized PVC C900-16 and DI Pipe		✓	✓	✓	Sigma Corp. Products	-	<p><b>Mechanical Joint Fittings (Buried Installations Only):</b> 4" - 16": 350 psi pressure rating 18" and larger: 250 psi pressure rating</p> <p><b>Flanged Fittings (Aboveground Installations Only):</b> All sizes: 250 psi pressure rating</p> <p><b>For buried installations:</b> T-bolts, bolts, tie rods, nuts, washers, etc. shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242. Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1 or AFT-PTFE-Blue). Alternatively, buried fittings: the hardware shall be 304 SS.</p> <p><b>For aboveground installations:</b> Sewer: T-bolts, bolts, tie rods, nuts, washers, etc. shall be 316 SS. Water: T-bolts, bolts, tie rods, nuts, washers, etc. shall be 304 SS; unless at lifts station sites then hardware shall be 316 SS.</p> <p><b>Potable/Reclaimed Water:</b> <b>Interior Coating:</b> Double the std. thickness cement lining per AWWA C104 <b>Exterior Coating:</b> Buried fittings shall have a std. 1-mil asphaltic coating per AWWA C110/C153; aboveground fittings shall have a factory-applied epoxy primer</p> <p><b>For uncontaminated soils:</b> Shall have EPDM rubber gaskets with the letters "EPDM" embossed and/or etched into gasket <b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details Fittings and gaskets for potable water shall be NSF61 certified</p> <p><b>Wastewater:</b> Holiday-free factory certification per ASTM G62, Method B (High-Voltage) shall be provided for the interior coating at the point of delivery</p> <p><b>Interior Coating:</b> Green, factory applied dry film thickness 40-mil Tnemec Series 431 Perma-Shield PL or Permox CTF coating <b>Exterior Coating:</b> Buried fittings shall have a std. 1-mil asphaltic coating per AWWA C110/C153; aboveground fittings shall have a factory-applied epoxy primer</p>
				✓	✓	✓	Star Pipe Products	-	
				✓	✓	✓	Infact Corp.	Flex T-2/T-3	
				✓	✓	✓	SIP Industries Products	-	
				✓	✓	✓	Tyler/Union Products	-	





# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Fittings	Molded HDPE	For HDPE AWWA C906 Pipe				✓	GF Central Plastics Products	-	<b>Shall only be used in lift stations</b>  Pressure Class 200, PE4710, Ductile Iron Pipe Size (DIPS), DR 11, AWWA C906 Min. Cell Classification per ASTM D3350 shall be 445574 Fittings shall be fused per manufacturer's recommendations
						✓	WL Plastics (fka Charter Plastics)	-	
						✓	Performance Pipe Products	-	
						✓	Specified Fittings Products	-	
						✓	Integrity Fusion Products	-	
	Molded PVC	For Pressurized PVC AWWA C900-16 Pipe				✓	NACO	Pressure Gasketed Fittings	<b>Shall only be used for P-traps and drop manholes</b>  All fittings shall be connected via water-tight push-on joints using elastomeric gaskets per ASTM D3139 rated for pressurized PVC pipe  DR 18, AWWA C900-16/C907
						✓	Harrington Corp	C900 Fittings	
						✓	Multi Fittings Corp.	C900/C905 Fittings	
						✓	Westlake Pipe & Fittings (fka NAPCO)	C-Series	
						✓	Specified Fittings	C900 Fittings	
		For Gravity Sewer PVC ASTM D3034 Pipe (4" - 15")				✓	Harrington Corp.	SDR 26 Fittings	<b>Shall only be used for sewer laterals and drop manholes</b>  All fittings shall be connected via water-tight push-on joints using elastomeric gaskets per ASTM D3212 rated for gravity sewer PVC pipe  SDR 26, ASTM D3034
						✓	Multi Fittings Corp.	Trench Tough Plus	
						✓	Tigre-ADS USA	SDR 26 Gasketed	
						✓	Westlake Pipe & Fittings (fka NAPCO)	G-Series	
						✓	GPK Products, Inc.	Gasketed Heavy Wall Sewer Fittings	
		For Gravity Sewer PVC AWWA C900-16 Pipe (18" and Larger)				✓	Harrington Corp	C900 Fittings	<b>Shall only be used for drop manholes</b>  All fittings shall be connected via water-tight push-on joints using elastomeric gaskets per ASTM D3212 rated for gravity sewer PVC pipe  DR 25, AWWA C900-16/C907
						✓	Multi-Fittings Corp.	C900/C907 Fittings	
						✓	Westlake Pipe & Fittings (fka NAPCO)	N-Series	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
External Thrust Restraint Devices	PVC AWWA C900-16 (4" - 12")	Pipe to Pipe Connectors	Split-Casing Restraint		✓	✓	✓	Ford Meter Box Co.	Series UFR1390-C-x-RB-x style (PVC) (4" - 12")	<p><b>All sizes:</b> 235 psi rating</p> <p><b>For buried installations:</b> T-bolts, tie rods, nuts, washers, etc. shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242. Side clamping bolts shall be medium carbon steel per SAE J429 Grade 5/ASTM A449 Side clamping nuts shall be medium carbon steel per SAE J995 Grade 2/ASTM A449 Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1, or AFT-PTFE-Blue). Alternatively, hardware shall be 304 SS.</p> <p><b>For aboveground installations:</b> T-bolts, tie rods, nuts, washers, etc. shall be 304 SS, except at lift station sites 316 SS is required. Side clamping bolts shall be min. 316 SS per ASTM A193 Grade B8M, Class 2 Side clamping nuts shall be min. 316 SS per ASTM A194 Grade 8M, Class 1</p> <p><b>Restraint devices shall have the following factory applied high performance coatings:</b> Star Pipe Products: Starbond System Sigma Corp.: CORRSafe System EBAA Iron: MEGA-BOND System Ford Meter Box Co.: Armorguard E-Coat System SIP Industries: EZ Shield System</p> <p><b>Potable/Reclaimed Water:</b> <b>For uncontaminated soils:</b> Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed and/or etched into gasket <b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details</p>
					✓	✓	✓	EBAA Iron	Series 1900 (4" - 12")	
					✓	✓	✓	Star Pipe Products	PVC Series 1100G2C (4" - 12")	
					✓	✓	✓	Sigma Corp.	PV-LOK Series D-PWP (DI, PVC) (4" - 12")	
			Wedge-Action Restraint		✓	✓	✓	Star Pipe Products	PVC Stargrip Series 4100P (4" - 12")	
					✓	✓	✓	Sigma Corp.	ONE-LOK Series SLCEH (4" - 12")	
		Pipe to MJ Fittings Connectors	Split-Casing Restraint		✓	✓	✓	Star Pipe Products	PVC Series 1000G2 (DI, PVC) (4" - 12")	
					✓	✓	✓	Sigma Corp.	PV-LOK Series PWM-C (4" - 12")	
			Wedge-Action Restraint		✓	✓	✓	EBAA Iron	Series 2000PV (4" - 12")	
					✓	✓	✓	Star Pipe Products	PVC Stargrip Series 4000 (HDPE, PVC) (4" - 12")	
					✓	✓	✓	SIP Industries	EZ Grip Series EZPVCP (4" - 12")	
					✓	✓	✓	Ford Meter Box Co.	Series UFR1500 (4" - 12")	
					✓	✓	✓	Sigma Corp.	ONE-LOK Series D-SLCE (4" - 12")	
					✓	✓	✓	EBAA Iron	Series 2600 (4" - 12")	
		Pipe to PVC Fittings Connectors	Split-Casing Restraint		✓	✓	✓	Star Pipe Products	Series 1200G2C (4" - 12")	
					✓	✓	✓	SIP Industries	Series PTPFC (4" - 12")	
					✓	✓	✓	Sigma Corp.	PV-LOK Series PWPF (4" - 12")	
				J87	✓	✓	✓	Sigma Corp.	PV-LOK Series PWPF (4" - 12")	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
External Thrust Restraint Devices	PVC AWWA C900-16 (14" - 36")	<u>Pipe to Pipe</u> Connectors	Split-Casing Restraint		✓	✓	✓	Star Pipe Products	Series 1100C (14" - 36")	<p><b>All sizes:</b> 235 psi rating</p> <p><b>For buried installations:</b> T-bolts, tie rods, nuts, washers, etc. shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242.</p> <p>Side clamping bolts shall be medium carbon steel per SAE J429 Grade 5/ASTM A449</p> <p>Side clamping nut shall be medium carbon steel per SAE J995 Grade 2/ASTM A449</p> <p>Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1, or AFT-PTFE-Blue).</p> <p>Alternatively, hardware shall be 304 SS.</p> <p><b>For aboveground installations:</b> T-bolts, tie rods, nuts, washers, etc. shall be 304 SS, except at lift station sites 316 SS is required.</p> <p>Side clamping bolts shall be min. 316 SS per ASTM A193 Grade B8M, Class 2</p> <p>Side clamping nuts shall be min. 316 SS per ASTM A194 Grade 8M, Class 1</p> <p><b>Restraint devices shall have the following factory applied high performance coatings:</b></p> <p>Star Pipe Products: Starbond System</p> <p>Sigma Corp.: CORRSafe System</p> <p>EBAA Iron: MEGA-BOND System</p> <p>Ford Meter Box Co.: Armorguard E-Coat System</p> <p>SIP Industries: EZ Shield System</p> <p><b>Potable/Reclaimed Water:</b></p> <p><b>For uncontaminated soils:</b> Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed and/or etched into gasket</p> <p><b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket</p> <p>Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details</p>
					✓	✓	✓	Ford Meter Box Co.	Series UFR1390-C-xx-RB-x Style (DI, PVC) (14" - 36")	
					✓	✓	✓	Sigma Corp.	PV-LOK Series D-PWP (DI, PVC) (14" - 36")	
			Wedge-Action Restraint		✓	✓	✓	EBAA Iron	Megalug Series 2800 (14" - 16")	
					✓	✓	✓	Star Pipe Products	PVC Stargrip Series 4400 (14" - 20")	
		<u>Pipe to MJ Fittings</u> Connectors	Split-Casing Restraint		✓	✓	✓	Star Pipe Products	Series 1000C (14" - 36")	
					✓	✓	✓	Sigma Corp.	PV-LOK Series PWM (14" - 24")	
			Wedge-Action Restraint		✓	✓	✓	EBAA Iron	Series 2000PV (HDPE, PVC) (14" - 16", 24")	
					✓	✓	✓	Star Pipe Products	PVC Stargrip Series 4000 (HDPE, PVC) (14" - 24")	
					✓	✓	✓	SIP Industries	EZ Grip Series EZPVCP (14" - 24")	
					✓	✓	✓	Ford Meter Box Co.	Series UFR1500-C-x-RB-X Style (14" - 24")	
					✓	✓	✓	Sigma Corp.	ONE-LOK Series D-SLCE (HDPE, PVC) (24" - 36")	
			Split-Casing Restraint		✓	✓	✓	Sigma Corp.	PV-LOK Series PWPF (14" - 36")	





# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
External Thrust Restraint Devices	HDPE AWWA C906	<u>Pipe to MJ/Flanged Fittings</u> Connectors	Flanged Back-Up Rings		✓	✓	✓	Integrity Fusion Products	-	All restrained joints shall be designed for HDPE Pipe conforming to AWWA C906 and Ductile Iron Pipe Size (DIPS) Dimensions  <b>For aboveground installations:</b> Back-up rings shall be 316 stainless steel Shall have 200 PSI pressure rating T-bolts, tie rods, nuts, washers, etc. shall be 316 SS  <b>For buried installations:</b> Mechanical joint solid glands shall be ductile iron ASTM A536, Grade 65-45-12 Shall be Pressure Class 350 per AWWA C153 T-bolts, tie rods, nuts, washers, etc. shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242. Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1, or AFT-PTFE-Blue). Alternatively, hardware shall be 304 SS.  <b>Restraint devices shall have the following factory applied high performance coatings:</b> Sigma Corp.: CORRSafe System SIP Industries: EZ Shield System Integrity Fusion Products: Manufacturer's Fusion Bonded Epoxy System <b>Potable/Reclaimed Water:</b> <b>For uncontaminated soils:</b> Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed and/or etched into gasket <b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details
					✓	✓	✓	Improved Piping Products	Model SS-SDR	
					✓	✓	✓	Specified Fittings Products	-	
			Mechanical Joint Glands		✓	✓	✓	Sigma Corp. Products	-	
					✓	✓	✓	Integrity Fusion Products	-	
					✓	✓	✓	SIP Industries Products	-	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
External Thrust Restraint Devices	Ductile Iron Pipe AWWA C150 & C151	<u>Pipe to Pipe</u> Connectors	Split-Casing Restraint		✓	✓	✓	EBAA Iron	Series 1500TD (4" - 12")	<p><b>Pipe sizes 3" - 16":</b> 350 psi rating <b>Pipe sizes 18" and larger:</b> 250 psi rating</p> <p><b>For buried installations:</b> T-bolts, tie rods, nuts, washers, etc. shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242. Side clamping bolts shall be medium carbon steel per SAE J429 Grade 5/ASTM A449 Side clamping nuts shall be medium carbon steel per SAE J995 Grade 2/ASTM A449 Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1, or AFT-PTFE-Blue). Alternatively, hardware shall be 304 SS.</p> <p><b>For aboveground installations:</b> T-bolts, tie rods, nuts, washers, etc. shall be 304 SS, except at lift station sites 316 SS is required. Side clamping bolts shall be min. 316 SS per ASTM A193 Grade B8M, Class 2 Side clamping nuts shall be min. 316 SS per ASTM A194 Grade 8M, Class 1</p> <p><b>Restraint devices shall have the following factory applied high performance coatings:</b> Star Pipe Products: Starbond System Sigma Corp.: CORRSAFE System EBAA Iron: MEGA-BOND System Ford Meter Box Co.: Armorguard E-Coat System SIP Industries: EZ Shield System</p> <p><b>Potable/Reclaimed Water:</b> <b>For uncontaminated soils:</b> Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed and/or etched into gasket <b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details</p> <p><b>MJ Fitting to MJ Fitting Connectors in Potable/Reclaimed Water:</b> <b>Interior Coating:</b> Std. thickness cement lining per AWWA C104 <b>Exterior Coating:</b> Std. 1-mil asphaltic coating per AWWA C110/C153</p> <p><b>MJ Fitting to MJ Fitting Connectors in Wastewater:</b> Holiday-free factory certification per ASTM G62, Method A (Low-Voltage) shall be provided for the interior coating at the point of delivery <b>Interior Coating:</b> Green, factory applied dry film thickness 40-mil Tnemec Series 431 Perma-Shield PL or Permox CTF coating <b>Exterior Coating:</b> Std. 1-mil asphaltic coating per AWWA C151</p>
					✓	✓	✓	Star Pipe Products	Stargrip Series 3100S (3" - 48")	
					✓	✓	✓	Sigma Corp.	ONE-LOK Series SSLDH (4" - 36")	
			Wedge-Action Restraint		✓	✓	✓	EBAA Iron	Series 1700 (4" - 48")	
					✓	✓	✓	Star Pipe Products	Stargrip Series 3100P (4" - 48")	
					✓	✓	✓	Sigma Corp.	ONE-LOK Series SLDEH (4" - 36")	
		<u>Pipe to MJ Fittings</u> Connectors	Split-Casing Restraint		✓	✓	✓	EBAA Iron	Series 1100SD (4" - 48")	
					✓	✓	✓	Star Pipe Products	Split Stargrip Series 3000S (4" - 48")	
					✓	✓	✓	Sigma Corp.	ONE-LOK Series SSLDH (4" - 36")	
			Wedge-Action Restraint		✓	✓	✓	EBAA Iron	Series 1100 (4" - 48")	
					✓	✓	✓	Star Pipe Products	Stargrip Series 3000 (4" - 48")	
					✓	✓	✓	SIP Industries	EZ Grip Series EZDP (DI, PVC) (3" - 48")	
	<u>MJ Fitting to MJ Fitting</u> Connectors		✓	✓	✓	Ford Meter Box Co.	UFR1400-DA-x-RB-I (3" -36")			
			✓	✓	✓	Sigma Corp.	ONE-LOK Series D-SLDE (4" - 48")			
			✓	✓	✓	Star Pipe Products	Series 100 (3" - 36")			
			✓	✓	✓	SIP Industries	MJ x MJ Adapter (3" - 12")			
			✓	✓	✓	Sigma Corp	Sigma MJ Connector (3" - 36")			
			✓	✓	✓	Infact Corp.	Foster Adaptor (3" - 36")			
						<p>Bolt-thru MJ restraint - Epoxy Adaptors shall be used. T-bolts, tie rods, nuts, washers, etc. shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242. Hardware referenced above shall be coated with a blue fluoropolymer coating.</p> <p>Alternatively, the hardware shall be 304 SS. <b>Water/Reclaim:</b> Use EPDM gaskets.</p> <p><b>Sewer:</b> Use SBR gaskets.</p>				

Contractor shall check/mark which product is intended to be used in the submittal box. If multiple manufacturers are to be used, each manufacturer shall be marked.



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Plain End Couplings	Gravity Sewer PVC ASTM D3034 Plain End to Plain End Couplings	4" - 12"				✓	Fernco Products	Series 5000 RC	Shall be reinforced with 316 SS clamp band, bolts, and nuts Shear band shall be min. 304 SS
	Dissimilar Pipe Materials Plain End to Plain End Couplings	2" - 12"		✓	✓		Romac	Macro	<b>For buried installations:</b> T-bolts, bolts, tie rods, nuts, washers, etc. shall be High Strength, Low Alloy Steel conforming to AWWA C111/ANSI A21.11-17 or ASTM A242. Hardware referenced above shall be coated with a blue fluoropolymer coating (Xylan 1424, FluoroKote #1, or AFT-PTFE-Blue). Alternatively, hardware shall be 304 SS.  <b>For aboveground installations:</b> T-bolts, tie rods, nuts, washers, etc. shall be 304 SS, except at lift station sites 316 SS is required.  <b>Couplings shall have the following factory applied high performance coatings:</b> Romac: Romacoat System Krausz: Factory std. min. 14 mil fusion bonded epoxy  Holiday-free factory certification per ASTM G62, Method A (Low-Voltage) shall be provided for the interior coating at the point of delivery  <b>Potable/Reclaimed Water:</b> Couplings and gaskets for potable water shall be NSF61 certified <b>For uncontaminated soils:</b> Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed and/or etched into gasket  <b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details
		2" - 12"		✓	✓		Krausz	Hymax 2 Coupling (Series 860)	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Flange and Mechanical Joint Adapters	HDPE AWWA C906 Flange and Mechanical Joint Adapters			✓	✓	✓	WL Plastics (fka Charter Plastics)	-	Pressure Class 200, PE4710, Ductile Iron Pipe Size (DIPS), DR 11, AWWA C906 Min. Cell Classification per ASTM D3350 shall be 445574 Adapters shall be thermal butt fused per manufacturer's recommendations Flange adapters shall use 316 SS back-up rings Mechanical joint adapters shall use ductile iron glands  <b>Potable/Reclaimed Water:</b> <b>For uncontaminated soils:</b> Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed and/or etched into gasket <b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details
				✓	✓	✓	Improved Piping Products	-	
		4"-12" FLG 4"-24" MJ		✓	✓	✓	Integrity Fusion Products	-	
				✓	✓	✓	Performance Pipe Products	-	
	Pressurized PVC AWWA C900-16 Flange Adapters	4" - 20"		✓	✓	✓	EBAA Iron	Megaflange Series 2100 (PVC)	<b>PVC Flange Adapter:</b> <b>Pipe sizes 4"-36":</b> 235 psi rating  <b>DIP Flange Adapter:</b> <b>Pipe sizes 2"-16":</b> 350 psi rating <b>Pipe sizes 18" and larger:</b> 250 psi rating  T-bolts, bolts, tie rods, nuts, washers, etc.; buried hardware shall be 304 SS. Aboveground hardware at lift stations shall be 316 SS, and for aboveground water hardware (not at lift station sites), the hardware shall be 304 SS.  <b>Flange adapters shall have the following factory applied high performance coatings:</b> Star Pipe Products: Starbond System Sigma Corp.: CORRSafe System EBAA Iron: MEGA-BOND System Ford Meter Box Co.: Armorguard E-Coat System  <b>Potable/Reclaimed Water:</b> Flange adapters and gaskets for potable water shall be NSF61 certified Shall have EPDM rubber gaskets with the letters "EPDM" factory embossed and/or etched into gasket
		4" - 36"		✓	✓	✓	Sigma Corp.	Sigmaflange SFA Series CP	
		4" - 20"		✓	✓	✓	Star Pipe Products	Super Flange Series 7200 (PVC)	
		4" - 36"		✓	✓	✓		Starflange Series 4200	
	DIP AWWA C110 Flange Adapters	2" - 12"		✓	✓	✓	Ford Meter Box Co.	Series 420-C-x-E-SS	
		3" -20"		✓	✓	✓	EBAA Iron	Megaflange Series 2100 (DI)	
				✓	✓	✓	Star Pipe Products	Super Flange Series 7200 (DI)	
		3"-36"		✓	✓	✓		Starflange Series 3200	
		3"-36"		✓	✓	✓	Sigma Corp.	Sigmaflange SFA Series DP	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes	
Valves	Air Release Valves					✓	GA Industries	Fig-929	<b>Not approved for over waterway or canal use.</b> Min. inlet size shall be 2" Shall have manufacturer's anti-corrosion option Orifice, float, linkage, and hardware shall be 316 SS The seal shall be made of Buna N elastomer Shall have internal and external NSF-61 certified 2-part epoxy, min. 6 mils DFT <b>For waterway and canal crossings only; may be used generally in sewer applications.</b> Min. inlet size shall be 2" Body, bolts, nuts, and washers shall be 316 SS	
			✓	✓		GA Industries	Fig-920			
			✓	✓	✓	H-TEC	Model 986-SS			
	Backflow Prevention Assembly	Privately-Owned			✓			-	-	Any privately-owned backflow prevention assembly that is approved by the most current version of the University of Southern California (USC), with the exception of Wilkins 375XL (3/4" and 1"), Watts LF009QT (3/4" and 1"), and Ames LF4000B (3/4" and 1"), will be accepted by Manatee County  County-Owned approved models are also acceptable
		County-Owned	2-1/2" - 12"		✓			Wilkins (Zurn)	350ASTDAST	Double Check Valve Assembly w/ Meter - DCDA
					✓				375ASTDAST	Reduced Pressure Zone Assembly w/ Meter - RPDA
					✓				375ASTOSYST	Reduced Pressure Zone Assembly (OS&Y)
					✓			Ames (Watts)	2000SS	Double Check Valve Assembly
					✓				3000SS	Double Check Valve Assembly w/ Meter
					✓				4000SS	Reduced Pressure Zone Assembly
					✓				5000SS	Reduced Pressure Zone Assembly w/ Meter
			1/2" - 2"		✓		✓	Apollo Valves	RPLF-4A Series	Reduced Pressure Zone Assembly
					✓		✓	Wilkins (Zurn)	975XL2	Reduced Pressure Zone Assembly
					✓			Watts	Model LF007 Series	Double Check Valve Assembly
				✓			Model 909-QT Series		Reduced Pressure Zone Assembly	
		Pressure Relief Valves			✓			Apollo Valves	16LF-202	For use with backflow prevention assemblies; set to 75 psi.
		Ball Valves			✓	✓	✓	FNW	Fig. 200A	<b>For use with ARV</b> Body, cap, stem, and ball shall be 316 SS/CF8M Min. Cold-Working Pressure shall be 1000 PSI
				✓	✓	✓	Apollo Valves	Model 76F		
	Automatic Flushing Systems	On Ground Discharge			✓			Mueller	Hydro-Guard 100 Series Warm (HG-1)	<b>Shall only be used with prior written approval from Manatee County</b> Design considerations shall minimally include site drainage patterns, cross connection prevention, grounding, dechlorination requirements, and discharge permits
		Pipe Discharge			✓				Hydro-Guard 200 Series Warm (HG-2)	





# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Valves	Corporation Stops	For Copper Pipe and HDPE Tubing	All joints made to CTS size HDPE tubing shall use 304 SS insert stiffeners		✓	✓		Ford Meter Box Co.	FB1000-x-NL	Pack Joint x AWWA Taper Thread (3/4" - 2")
					✓	✓			FB1000-x-G-NL	Grip Joint Compression x AWWA Taper Thread (3/4" - 2")
					✓	✓			FB1000-x-Q-NL	Quick Joint Compression x AWWA Taper Thread (3/4" - 2")
					✓	✓			FB1100-x-NL	Pack Joint x MIP Thread (3/4" - 2")
					✓	✓			FB1100-x-G-NL	Grip Joint Compression x MIP Thread (3/4" - 2")
					✓	✓		A.Y. McDonald	74704B-22	Pack Joint x MIP Thread (3/4" - 2")
					✓	✓			74701B-22	Pack Joint x AWWA Taper Thread (3/4" - 2")
					✓	✓			74701BQ	Quick Joint Compression x AWWA Taper Thread (3/4" - 2")
					✓	✓			74704BQ	Quick Joint Compression x MIP Thread (3/4" - 2")
					✓	✓			74701BG	Grip Joint Compression x AWWA Taper Thread (3/4" - 2")
					✓	✓			74704BG	Grip Joint Compression x MIP Thread (3/4" - 2")
		For Copper Pipe Only			✓	✓		Ford Meter Box Co.	FB600-x-NL	Flare x AWWA Taper Thread (3/4" - 2")
					✓	✓			FB700-x-NL	Flare x MIP Thread (3/4" - 2")
					✓	✓		A.Y. McDonald	74704B	Flare x MIP Thread (3/4" - 2")
					✓	✓			74701B	Flare x AWWA Taper Thread (3/4" - 2")
		For Stainless Steel Pipe Only			✓	✓		Ford Meter Box Co.	FB1600-x-NL	FIP Thread x AWWA Taper Thread (3/4" - 2")
					✓	✓			FB1700-x-NL	FIP Thread x MIP Thread (3/4" - 2")
					✓	✓		A.Y. McDonald	73149B	FIP Thread x MIP Thread (3/4" - 2")
					✓	✓			73148B	FIP Thread x AWWA Taper Thread (3/4" - 2")
	Curb Stops	For Copper Pipe and HDPE Tubing	All joints made to CTS size HDPE tubing shall use 304 SS insert stiffeners		✓	✓		Mueller	P25170N	Pack Joint x FIP Thread (3/4" - 2")
					✓	✓			G25170N	Grip Joint Compression x FIP Thread (3/4" - 2")
					✓	✓		Ford Meter Box Co.	B41-xxxW-NL	Pack Joint x FIP Thread (3/4" - 2")
					✓	✓			B41-xxxW-G-NL	Grip Joint Compression x FIP Thread (3/4" - 2")
					✓	✓		A.Y. McDonald	76100W-22	Compression x Compression (3/4" - 2")
					✓	✓			76100WQ	Pack Joint x Pack Joint (3/4" - 2")
					✓	✓			76107Q	Compression x MIP Thread (3/4" - 2")
					✓	✓			76107-22	Pack Joint x MIP Thread (3/4" - 2")
		For Stainless Steel Pipe Only			✓	✓		Mueller	P25170N	Pack Joint x FIP Thread (1/2" - 2")
					✓	✓			B20200N	FIP Thread x FIP Thread (1/2" - 2")
					✓	✓			B20242N	MIP Thread x FIP Thread (1/2" - 2")
					✓	✓		Ford Meter Box Co.	B51-xxxW-NL	Pack Joint x FIP Thread (1/2" - 2")
					✓	✓			B11-xxxW-NL	FIP Thread x FIP Thread (1/2" - 2"); acceptable for above-ground use in water meter assembly-FIPxIP (3/4"-2")
					✓	✓			B81-xxxW-NL	MIP Thread x FIP Thread (1/2" - 2")
					✓	✓		A.Y. McDonald	76107	FIP Thread x MIP Thread (3/4" - 2")
					✓	✓			76107WP	MIP Thread x MIP Thread (3/4" - 2")
					✓	✓			76102W-44	PVC (DIOD) Compression x FIP Thread (3/4" - 2")
					✓	✓			76101W	FIP Thread x FIP Thread (3/4" - 2")



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Valves	Gate Valves	Flange x Flange (NRS)	3" - 54"		✓	✓	✓	American Flow Control	Series 2500 FL x FL	<p><b>All sizes:</b> min. 250 psi rating</p> <p><b>Gate Valves larger than 2":</b> Shall be resilient seated valves conforming to AWWA C515</p> <p><b>2" Gate Valves:</b> Shall be resilient seated valves conforming to applicable requirements of AWWA C509 or C515</p> <p>Body and bonnet shall be ductile iron</p> <p>Buried valves shall have external nuts, bolts, washers, etc. be min. 304 SS</p> <p>Buried valves shall have min. 304 SS stems</p> <p>Aboveground valves shall have external nuts, bolts, washers, etc. be 316 SS</p> <p>Aboveground valves shall have 316 SS stems</p> <p>Stem nut shall be bronze/copper</p> <p>Wedge shall be ductile iron fully encapsulated in EPDM rubber with the letters "EPDM" factory embossed and/or etched into the wedge</p> <p>Valves shall have factory applied, min. 8 mils DFT fusion bonded epoxy coating on the interior and exterior</p> <p>Holiday-free factory certification per ASTM G62, Method A (Low-Voltage) shall be provided for the interior coating at the point of delivery</p> <p>Valves 16" and larger shall be equipped with manufacturer-standard heavy duty gear type actuators with 2" square AWWA operating nut or handwheel</p> <p>Gearbox shall be externally adjustable, totally enclosed to prevent water infiltration, and conform to ISO 9001 standards</p> <p>Vertical installation shall use spur-type gear</p> <p>Horizontal installation shall use bevel-type gear</p> <p>All horizontally-installed gate valves shall require flush line with valving</p> <p><b>Potable/Reclaimed Water:</b></p> <p>Aboveground gate valves shall be Outside Stem &amp; Yoke (OS&amp;Y) type</p> <p><b>Wastewater:</b></p> <p>Valves shall only be installed vertically</p> <p><b>For Force Mains:</b> Gate valves only allowed for sizes 24" and larger</p> <p>Refer to Plug Valve Section for Force Mains sizes 20" and smaller</p> <p><b>For Lift Stations:</b> Gate valves allowed for sizes 3" and larger</p> <p>Aboveground valve assembly gate valves shall be Non-Rising Stem (NRS) type</p> <p><b>Force Main Use Only; valves 24" and larger shall come with torque-limiting device with torque trip limits preset at factory:</b></p> <p><b>Kennedy Valves:</b></p> <p>24" - 54": 450 lb-ft</p> <p><b>American Flow Control Valves:</b></p> <p>24": 300 lb-ft, 30" - 54": 500 lb-ft</p> <p><b>Clow Valves:</b></p> <p>24" - 54": 450 lb-ft</p> <p><b>Mueller Valves:</b></p> <p>24": 100 lb-ft, 30" - 36": 200 lb-ft, 42" - 54": 350 lb-ft</p>
			4" - 54"		✓	✓	✓	Kennedy	Model KS-RW/2638 FL x FL	
			4" - 54"		✓	✓	✓	Mueller	Model A-2361 FL x FL	
			4" - 48"		✓	✓	✓	Clow	Model 2638 FL x FL	
		Flange x Flange (OS & Y)	3" - 54"		✓	✓		American Flow Control	Series 2500 FL x FL (OS & Y)	
			4" - 54"		✓	✓		Kennedy	Model KS-RW/2638 FL x FL (OS & Y)	
			4" - 54"		✓	✓		Mueller	Model A-2361 FL x FL (OS & Y)	
			4" - 24"		✓	✓		Clow	Model 2638 FL x FL (OS & Y)	
		Mechanical Joint x Mechanical Joint	4" - 48"		✓	✓	✓	American Flow Control	Series 2500 MJ x MJ	
					✓	✓	✓	Mueller	Model A-2361 MJ x MJ	
					✓	✓	✓	Kennedy	Model KS-RW/2638 MJ x MJ	
					✓	✓	✓	Clow	Model 2638 MJ x MJ	
		Threaded x Threaded	2"		✓	✓	✓	American Flow Control	Series 2500 FIP x FIP	
					✓	✓	✓	Clow	Model 2639	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Valves	Hydrants			✓	✓		AVK	Series 2780	<p>Shall be nostalgic-style, dry barrel conforming to AWWA C502 and be UL/FM certified Main valve shall be faced or covered with EPDM elastomer with the letters "EPDM" factory embossed and/or etched into the rubber Shall have one 5-inch Storz connection and two 2-1/2 inch hose nozzles All external nuts, bolts, washers, etc. shall be 316 SS Upper and lower stem rod shall be min. 304 SS <b>Hydrant Elbow:</b> Shall have a fusion bonded epoxy coating on the interior and exterior <b>Stand Pipe:</b> Shall have std. thickness cement lining on the interior and 1 mil asphaltic coating on the exterior; Alternatively it shall have a fusion bonded epoxy coating on the interior and exterior</p> <p><b>Aboveground parts shall have an external UV-resistant top coat of min. 4 mils DFT as follows:</b> Kennedy: Ken-Guard TGIC Polyester Mueller: Amercoat 370 AVK: Sherwin Williams Acrolon 218 HS Polyurethane Clow: TGIC Polyester Super Coat American Flow Control: Axalta Imron 3.5 HG+ Polyurethane</p>
				✓	✓		Mueller	Super Centurion 250	
				✓	✓		Kennedy	K81D Guardian	
				✓	✓		Clow	Medallion	
				✓	✓		American Flow Control	Darling B-84-B-5	
	Insertion Valves			✓	✓		TEAM	InsertValve	<p>Shall be resilient seated valves conforming to AWWA C515 All nuts, bolts, washers, etc. and non-rising stem shall be min. 304 SS Wedge shall be ductile iron fully encapsulated in EPDM rubber with the letters "EPDM" factory embossed and/or etched into the wedge Valves shall have factory applied, min. 8 mils DFT fusion bonded epoxy coating on the interior and exterior</p>
	Check Valves	Flapper Disk		✓	✓		Valmatic	Series 500ABF	<p><b>All sizes:</b> min. 250 psi rating Check valve shall be lead free, ductile iron construction conforming to NSF 61 Shall be equipped with min. 17-4 SS seat position indicator and bronze backflow actuator Disk shall be fully encapsulated in EPDM rubber with the letters "EPDM" factory embossed and/or etched into the disk All external bolts, nuts, washers, etc. shall be min. 304 SS All aboveground bolts, nuts, washers, etc. shall be 316 SS Valve shall have factory-applied, min. 8 mils DFT fusion bonded epoxy coating on the interior and exterior Holiday-free factory certification per ASTM G62, Method A (Low-Voltage) shall be provided for the interior coating at the point of delivery</p>
				✓	✓		Pratt	RD Series	
				✓	✓		American Cast Iron Pipe Company	Series 2100	
		Lever & Weight				✓	AVK	Series 41	<p><b>2" - 12":</b> min. 175 psi rating <b>14" - 30":</b> min. 150 psi rating</p> <p>Check valve shall be flanged with ductile iron/cast iron body and bronze mounted single disk conforming to AWWA C508 Shall have bronze seat and body rings Hinge pins shall be extended bronze or 316 SS All aboveground bolts, nuts, washers, etc. shall be 316 SS Valves shall have factory applied, min. 12 mils DFT fusion bonded epoxy coating on the interior and exterior Holiday-free factory certification per ASTM G62, Method A (Low-Voltage) shall be provided for the interior coating at the point of delivery</p>
						✓	American Flow Control	Series 52	
						✓	Kennedy	106 LW	
						✓		1106 LW	
						✓	Mueller	Series 8001	
						✓		No. A-2600-6-01	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category		Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Valves	Combination Pressure Reducing and Pressure Sustaining		✓	✓		Cla-Val Company	8" Model 52-01	Pressure sustaining and check valve shall be pilot operated diaphragm actuated valve with cast iron body, bronze trim, and 125-lb flanges Pilot system shall consist of two direct acting, adjustable, spring loaded diaphragm valves Pilot control valves shall be cast brass with min. 304 SS trim
			✓	✓		Singer	8" Model A106-RPS	
			✓	✓		Watts	8" Model LFF116-52	
	Plug Valves	2"			✓	Pratt	Series 611A/613A	Plug valves shall be 100% circular port, non-lubricated, eccentric type Shall be installed with the shaft laying horizontally so that the seat rests on the top portion of body when open Shall shut off bubble tight bidirectionally when pressure tested at 175 PSI for 3"-12" and 150 PSI for 14" and larger Valve body, bonnet, and gland shall be ASTM A126 cast iron or ASTM A526 Grade 65-45-12 ductile iron per AWWA C517 Plug shall be ASTM A-526 Grade 65-45-12 ductile iron per AWWA C517 Plug shall be fully vulcanized with nitrile (Buna N) rubber with a min. peel strength of 75 PSI per ASTM D429, method B Top and bottom bearings shall be 316 SS All external nuts, bolts, washers, etc. shall be min. 304 SS Valve shall be equipped with manufacturer-standard worm gear type actuators with 2" square AWWA operating nut Gearbox shall be externally adjustable, totally enclosed to prevent water infiltration, and conform to ISO 9001 standards Gearbox bearings shall be oil impregnated bronze or hardened steel Gearbox worm gear shall be hardened steel or ductile iron ASTM A536 Class 65-45-12 Gearbox shaft shall be hardened steel  <b>2":</b> Valve seat shall have an overlay of min. 16 mils DFT high solids epoxy Shall only be allowed at grinder pump stations <b>3" and larger:</b> Valve seat shall have a welded-in overlay of at least 95% pure nickel  <b>Refer to Gate Valve Section for applications larger than 20"</b>  <b>Valves shall come with torque-limiting device with torque trip limits preset at factory:</b> 3" - 6": 150 ft-lb 8" - 20": 180 ft-lb  All valves shall have internal and external min. 16 mils DFT high solids epoxy coating Holiday-free factory certification per ASTM G62, Method A (Low-Voltage) shall be provided for the interior coating at the point of delivery
		3" - 12"			✓		Series 600FP/601FP	
		2"			✓	Milliken	Series 611A/613A	
		3" - 12"			✓		Series 600F/601F	
		2"			✓	GA Industries	Figure 517-T	
		3" - 20"			✓		Figure B517 Eco-Centric	
	Torque Limiting Device	Trip Torque Limit: 25-250 lb-ft			✓	Aunspach Controls	Model D86-250	Torque limits shall be preset at factory (See gate/plug valve section for torque limits) Permanently mount overtorque protector on the valve operating nut All hardware shall be min. 304 SS Shall have min. 8 mils DFT fusion bonded epoxy on the interior and exterior Torque set point shall be engraved on the torque limiting device
		Trip Torque Limit: 251-500 lb-ft			✓		Model D86-500	
	Valve Extension Stem		✓	✓	✓	Mueller Co.	-	Extension stems and hardware shall be min. 304 stainless steel and shall be securely fastened to the valve operating nut with a 304 stainless steel 3/8 dia. bolt.
			✓	✓	✓	CS3 Waterworks	-	
			✓	✓	✓	GPM Fab	-	





# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Valves	Tapping Valves			✓	✓	✓	American Flow Control	Series 2500 FL x MJ	Shall be resilient seated valves conforming to AWWA C515 Shall be furnished with an alignment lip All external nuts, bolts, washers, etc. and non-rising stem shall be min. 304 SS Wedge shall be ductile iron fully encapsulated in EPDM rubber with the letters "EPDM" factory embossed and/or etched into the wedge  Valves shall have factory applied min. 8 mils DFT fusion bonded epoxy coating on the interior and exterior Holiday-free factory certification per ASTM G62, Method A (Low-Voltage) shall be provided for the interior coating at the point of delivery Valve 16" and larger shall be equipped with manufacturer-standard heavy duty gear type actuators with 2" square AWWA operating nut Gearbox shall be externally adjustable, totally enclosed to prevent water infiltration, and conform to ISO 9001 standards Vertical installation shall use spur-type gear Horizontal installation shall use bevel-type gear  <b>Wastewater:</b> Valves shall only be installed vertically  <b>Tapping valves 24" and larger shall come with torque-limiting device with torque trip limits preset at factory (force main use only):</b> Refer to Gate Valve section for trip limits
				✓	✓	✓	Kennedy	Model KS-RW/2638 FL x MJ	
				✓	✓	✓	Mueller	Model T-2361 FL X MJ	
				✓	✓	✓	Clow	Series 2638 FL x MJ	
Tapping Sleeves	HDPE	4" - 30"		✓	✓	✓	JCM Industries	Model 6452/6459 (HDPE)	Water/Reclaim: Sleeve and straps shall be steel with epoxy coating or 316 SS Sewer: Sleeve shall be 316 SS Water/Reclaim: T-bolts, bolts, tie rods, nuts, washers, etc. shall be fluoropolymer coating or 304 SS hardware Sewer: T-bolts, bolts, tie rods, nuts, washers, etc. shall be 316 SS Shall have 3/4" 316 SS test plug  <b>Potable/Reclaimed Water:</b> Must hold 180 PSI for one hour Tapping sleeve and gaskets for potable water shall be NSF61 certified <b>For uncontaminated soils:</b> Shall have min. 1/8" thick EPDM full face gasket Shall have EPDM gaskets. Wrap around gaskets shall not be allowed. The letters "EPDM" and company logo shall be factory stamped with white ink on full face gasket The letters "EPDM" and company logo shall be factory stamped with white ink on the gaskets. Alternatively, the letters "EPDM" shall be factory embossed and/or etched on the exterior shell of the tapping sleeve if gaskets does not have the EPDM designation <b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details  <b>Wastewater:</b> Must hold 150 PSI for one hour Shall have min. 1/8" thick full face gasket
		4" - 24"		✓	✓	✓	Ford Meter Box Co.	FTSSP-xxx-x-MAN	
		4" - 12"				✓	Romac	STS423-H	
	PVC, Ductile Iron, Steel, AC	6" - 42"				✓		STS420 (316 SS)	
		6" - 12"		✓	✓			STS420 (316 SS)	
		4" - 12"				✓	Ford Meter Box Co.	FTSS-xxxx-x-MAN	
		4" - 16"		✓	✓			FTSC-xxx-x style	
		16" - 30"		✓	✓			FTSC-xxxx-x-Z style	
		36" - 48"		✓	✓			FTSC-xxx-x-AH style	
		4" - 24"				✓	Cascade Waterworks	Series CST-EX (316 SS)	
						✓	PowerSeal	Series 3490 (316 SS)	
		4" - 30"		✓	✓	✓	JCM Industries	Model 6452/6459	
		6" - 30"		✓	✓			Model 412	





# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Service Saddles	HDPE	4" - 12"		✓	✓	✓	Romac	STS423T-H	<p><b>Potable/Reclaimed Water:</b> Must hold 180 PSI for one hour Saddle body shall be made of red brass, alloy 85-5-5-5 or min. 304 SS Saddle strap shall be made of silicon bronze or min. 304 SS T-bolts, bolts, tie rods, nuts, washers, etc. shall be red brass, alloy 85-5-5-5 or min. 304 SS Service saddle and gasket shall be NSF61 certified for potable water</p> <p><b>For uncontaminated soils:</b> Shall have EPDM rubber gasket The letters "EPDM" and company logo shall be factory stamped with white ink on gasket Alternatively, the letters "EPDM" shall be factory embossed and/or etched on the exterior saddle body</p> <p><b>For contaminated soils:</b> Shall have NBR or FKM rubber gasket Refer to Manatee County Public Works Utility Standards Section 1.4.2.F for gasket material details</p> <p><b>Wastewater:</b> Must hold 150 PSI for one hour Saddle body and extra wide strap shall be 316 SS T-bolts, bolts, tie rods, nuts, washers, etc. shall be 316 SS</p> <p>***Ford 202BS for AC and Iron Pipe may be used on C900 PVC pipe.</p>
		2" - 12"				✓	Ford Meter Box Co.	FSP313-xxx-TAP-EPDM	
		10" - 18"		✓	✓	✓		FSP323-xxx-TAP-EPDM	
		20" - 34"		✓	✓	✓		FSP333-xxx-TAP-EPDM	
		2" - 3"		✓	✓			FS313W-xxx-TAP-EPDM	
	PVC, Ductile Iron, Steel, AC	4" - 16"		✓	✓		Romac	202BS (Double Bolt)	
		6" - 12"		✓	✓			Model STS420T	
		6" - 42"				✓		Model STS420T (316 SS)	
		3" - 54"		✓	✓	✓	JCM Industries	Model 6438	
		3" - 54"		✓	✓			Model 438	
		1"-2"		✓	✓			Model 502	
		4" - 12"		✓	✓		Ford Meter Box Co.	202B (DI and AC only)	
		4" - 12"		✓	✓			202BS ***	
		4" - 30"		✓	✓			202BSD	
		2" - 12"				✓		FS313-xxx-TAP-MAN	
		4" - 18"		✓	✓	✓		FS323-xxx-TAP-MAN	
		20" - 30"				✓		FS333-xxx-TAP-MAN	
		4" - 18"		✓	✓			FS323-xxx-TAP-EPDM	
		20" - 30"		✓	✓			FS333-xxx-TAP-EPDM	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Jack and Bore Devices	Casing Spacers	Metallic		✓	✓	✓	BWM Company	Model BWM-SS-8	<b>Metallic Casing Spacers:</b> Bolts, nuts, washers, etc. shall be 316 SS Shell/band shall be min. 14 gauge 304 SS Risers shall be min. 10 gauge 304 SS Each shell section shall have a hardness of Durometer "A" 85-90 and be lined with a min. thickness of 0.090" of ribbed PVC extrusion, EPDM, glass reinforced polymer, or ultra high molecular weight polyethylene.
				✓	✓	✓		Model BWM-SS-12	
				✓	✓	✓	Advanced Products & Systems, Inc.	Model SSI8	
				✓	✓	✓		Model SSI12	
				✓	✓	✓	CCI Pipeline Systems	Model CSS-8	
				✓	✓	✓		Model CSS-12	
				✓	✓	✓	Cascade Waterworks	Series CCS 8"	
				✓	✓	✓		Series CCS 12"	
		Non-Metallic		✓	✓	✓	RACI Products	-	<b>Non-Metallic Casing Spacers:</b> Shall be constructed of non-metallic virgin polypropylene or HDPE Shall be sized/spaced per manufacturer's recommendations
				✓	✓	✓	GPT Industries	Ranger II	
	End Seals			✓	✓	✓	BWM Company	Model BWM-PO	Shell/band shall be min. 14 gauge 304 SS
				✓	✓	✓		Model BWM-WR	
				✓	✓	✓	Advanced Products & Systems, Inc.	Model AC	
				✓	✓	✓		Model AM	
				✓	✓	✓		Model AZ	
				✓	✓	✓		Model AW	
				✓	✓	✓	CCI Pipeline Systems	Model ESC	
				✓	✓	✓		Model ESW	
				✓	✓	✓	Cascade Waterworks	Model CCES	
				✓	✓	✓	GPT Industries Products	-	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category		Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Asset Protection/Locators	Tracer Wire		✓	✓	✓	Proline Safety	Pro-Trace HF-CSS	To be used for <b>open cut installations</b> Solid #10 gauge, high strength, copper clad steel wire (Min. 448 PSI break load) Min. 30-mils polyethylene insulation Color coded blue for water, purple for reclaimed water, or green for sanitary sewer
			✓	✓	✓	Copperhead Industries	1030-HS	
			✓	✓	✓	Proline Safety	Pro-Trace HDD-CSS	To be used for <b>horizontal directional drilling installations</b> Solid #10 gauge, extra high strength, copper clad steel wire (Min. 1,940 PSI break load) Min. 45-mils polyethylene insulation Color coded blue for water, purple for reclaimed water, or green for sanitary sewer
			✓	✓	✓	Copperhead Industries	1045-EHS	
	Tracer Wire Connection		✓	✓	✓	Dryconn	King 6 Blue	King 6 Blue - shall only be used at the open end (dead-end) of the tracer wire. Direct Bury Lug Aqua - shall be used to join two separate tracer wires together.
			✓	✓	✓		Direct Bury Lug Aqua	
	Tracer Wire Boxes	Non-traffic rated	✓	✓	✓	Copperhead Industries	SnakePit CD14*TP	* indicates color - light traffic Shaft size shall be min. 2-1/2" I.D. and 15" length Rim shall be ABS plastic with cast iron lid. Tracer wire station boxes shall have a flush mount lid.
			✓	✓	✓	Bingham & Taylor	Model P202CNG	
		Traffic-rated	✓	✓	✓	Copperhead Industries	Model RB14*TP	Tracer wire box shall be encased in a 6" concrete square, 6" in depth Shaft size shall be min. 2-1/2" I.D. and 14-1/2" length Rim and lid shall be cast iron. Tracer wire station boxes shall have a flush mount lid.
			✓	✓	✓	Bingham & Taylor	Model P2B202CNGHVY15SPB	
	Path Marking Tape (pressurized pipe)		✓			3M	Part#: 7903-EMS Freq: 73.5 kHz	All pressurized underground pipe shall have electronically detectable path marking tape made of polyethylene, minimum 6" wide and 11 mils thick The tape shall have embedded detectable markers spaced every 8 feet along the warning tape The tape shall be color coded blue for potable water, purple for reclaimed water, or green for force main sanitary sewer. See Detectable Underground Tape for gravity sewer applications. Shall be marked "CAUTION _____ LINE BURIED BELOW"
				✓			Part#: 7908-EMS Freq: 44.9 kHz	
					✓		Part#: 7904-EMS Freq: 41.4 kHz	
	Detectable Underground Tape (gravity sewer mains)				✓			min. 4.5 mil detectable overall thickness with sold aluminum core; 3" wide 12" below finished grade or 6" wide between 12" and 24 " below finished grade. Shall be marked "CAUTION SEWER LINE BURIED BELOW"
	Polyethylene Encasement Tubing		✓	✓	✓	T. Christy's Enterprises	-	Shall be min. 8 mil thick, low density polyethylene tubing conforming to AWWA C105 Shall be color coded blue for potable water, purple for reclaimed water, and green for sanitary sewer
			✓	✓	✓	AA Thread	-	
			✓	✓	✓	Trumbull	-	
	Root Barrier		✓	✓	✓	DeepRoot	UB36-2/UB 48-2	black, extruded panels 0.80" wall thickness of homopolymer polyethylene



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category		Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Valve Boxes	Valve Boxes and Lid Assembly		✓		✓	Pro Select	Series PSVB 461 - 664	Assembly shall be cast iron screw type boxes & lids Alternatively, HDPE boxes shall be two-piece adjustable, min. 1/4-inch thick wall, w/ cast iron lid Bottom Barrel shall be 5-1/4 inches inside diameter, with a flanged bottom Lids shall have color coded tops with the lettering "WATER" or "SEWER"  <b>Roadway Applications:</b> Shall use heavy duty, min. 24 lbs cast iron drop-type lid  <b>Reclaimed Water:</b> Shall have square 9" x 9" lid labeled "Reclaimed Water" Shall be colored purple
			✓		✓	Tyler Union	Series 6500/6850/6860	
			✓		✓	East Jordan Company Products	Series 8550	
			✓				6800045 (Roadway)	
					✓		6800073 (Roadway)	
			✓		✓	Sigma Corp./Russell Pipe Company Products	Series VB261 - VB268	
			✓		✓		Series VB630	
			✓		✓	Star Pipe Products	Series VB-0001/VB-0002	
			✓		✓		Series VB-0005/VB-0006	
				✓			Series VB-0023	
	Box Alignment Rings		✓	✓	✓	Boxlok Products	Model 3 & 4	Contractor is responsible for verifying alignment ring model number will properly fit valve model
	Valve Key Wrench		✓	✓	✓	Pipeline Products	Part# SW-510	
Air Release Valve Enclosure			✓	✓		Allied Molded Products	ARVC-2224	Water/Reclaim: 22" square by 24" tall Sewer: 24" square by 39" tall All enclosures shall comply with Manatee County standard detail for shape, size, and <u>fiberglass</u> enclosure with a hasp for a padlock
					✓		ARVC-2439	
Sewer Service Lateral Clean Out Lid					✓	US Foundry	USF 7621	Clean out lid shall have the letter "S" engraved and pick holes
Meter Boxes			✓			SIP Industries	6423-WNL	Non-locking, colored blue for potable water
			✓				6423-WL	Locking, colored blue for potable water
				✓			6423-RWNL	Non-locking, colored purple for reclaimed water
				✓			6423-RWL	Locking, colored purple for reclaimed water
			✓			Sigma	MB282	Non-locking, colored blue for potable water
			✓				MB382BW-LK	Locking, colored blue for potable water
				✓			MB282RW	Non-locking, colored purple for reclaimed water
				✓			MB382RW-LK	Locking, colored purple for reclaimed water
Meter Resetters			✓	✓		Ford Meter Box Co.	VB 42-7W (5/8" X 3/4")	Shall conform to AWWA C800 Meter resetters shall have padlock wing on angle ball valve Riser Height shall typically be 7 inch.
			✓	✓			VB 43-8W (3/4")	
			✓	✓			VB 44-10W (1")	
			✓	✓		A.Y. McDonald	718-207WX (5/8" X 3/4")	
			✓	✓		Mueller Co.	B-24118	
Water Sample Stations			✓			Safety Guard	Model B.O.S.S.	Bacteriological sample station with built in flush system Shall be installed with UV-protected enclosure



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category		Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Manholes	Precast Polymer Concrete Manholes				✓	US Composite Pipe	-	<b>Manholes shall be made of precast polymer concrete in the following applications:</b> <ul style="list-style-type: none"><li>• Manholes receiving force main flow and the next two (2) downstream manholes</li><li>• Manholes upstream of a lift station (Refer to Manatee County Public Works Utility Standards detail US-17A)</li><li>• Manholes that have turbulent opposing flows (Refer to Manatee County Public Works Utility Standards detail US-3)<ul style="list-style-type: none"><li>• Manholes with 12-inch and greater gravity sewer pipes</li><li>• Outside drop manholes</li></ul></li></ul> <p>Refer to Manatee County Public Works Utility Standards Section 1.13 for details</p> <p>Manholes shall be furnished with an approved heavy duty composite frame &amp; lid Frame &amp; lid shall have min. three (3) 316 SS locking bolts Refer to Frame &amp; Lids section of this Approved Product List for approved manufacturers</p>
					✓	Armorock	-	
	Precast Portland Concrete Manholes				✓	-	-	Precast portland concrete manholes shall be installed for all applications <u>except</u> where a polymer concrete manhole is required as identified in the Precast Polymer Concrete Manholes section
	Flexible Pipe Connectors	Cast-In Boot (New Construction Only)			✓	A-Lok Products	Z-Lok	Must meet ASTM C923
					✓	Trelleborg	Kor-n-Seal Series 706	
					✓	Press-Seal Corp.	Cast-A-Seal Series	
		Jack-In Boot (Existing Construction Only)			✓	Trelleborg	Kor-N-Seal Series 106/206/406	
					✓	Press-Seal Corp.	PSX Direct Drive	
					✓	Hamilton Kent	Tylox MIB Series	
					✓			
	Rainwater Inserts	Stainless Steel			✓	SSI Sealing Systems	304 SS	Rainwater insert shall be min. 18 gauge 304 SS or 1/8-inch thick thermoplastic polyolefin
					✓	Rowland	InflowShield	
		Plastic			✓	USSI	TPO Inflow Defender Max	





# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Manholes	Frame & Lids	Standard				✓	U.S. Foundry	USF 170-CE-1	Shall be used for <b>precast concrete manholes</b> Lids be marked with the letters: "MANATEE COUNTY", "SANITARY SEWER", AND "YEAR"
		Rim Elevation below Floodplain				✓	U.S. Foundry	USF 170-CE-1-BWT	Shall be used for <b>precast portland concrete manholes with lids that are located at less than the flood plain elevations</b> as specified in the Manatee County Public Works Utility Standards Section 1.12.12 Shall have gasketed seals Shall have min. three (3) 316 SS locking bolts
						✓	Pamrex	Pamtight	
		ARV Manholes with < 44" From Top of Pipe to Cover	✓	✓	✓	Pamrex	Pamrex 32"	Shall be used for <b>ARV hinged manholes with less than 44" from top of pipe to cover</b> In roadways, the lid shall open in the direction opposite of incoming traffic	
			✓	✓	✓	U.S. Foundry	USF 324-UT-LOC		
		Heavy Duty Composite				✓	Composite Access Products	CAP ONE A-1BK24S4-MCUDMDSY-H1	Shall be used with all <b>precast polymer concrete manholes</b> Must have "MANATEE COUNTY", "SANITARY SEWER", AND "YEAR" formed/molded Shall have min. three (3) 316 SS locking bolts <b>**NOTICE:</b> Trumbull heavy duty composite lids may not be used within a roadway application.
						✓	Composite Access Products	CAP ONE A-1BK24S4-MCUDMDSY-H2	
						✓	Trumbull**	24"-Frame: 367-5468; Cover: 4511 30"- Frame: 367-5794; Cover: 7195	
						✓	Aquatechnology Group	ATG-2400	
		Manhole Adjustment Rings	Standard Concrete				✓	-	-
	Polymer Concrete					✓	-	-	Refer to Polymer Concrete Manhole Suppliers
	Composite					✓	Cretex	Pro-Ring	Manhole grade adjustment system made from Expanded Polypropylene (EPP). Installation shall be per manufacturer installation, i.e. M-1 structural adhesive/sealant.
	Grade Adjustment Ring Adhesives					✓	Henry	Ram-Nek RN101	Butyl rubber sealant strips shall be used to seal standard concrete and polymer concrete grade adjustment rings to manhole cone Min. 3" wide x 1/2" thick
						✓	Martin Asphalt	Evergrip 990	
	External Joint Wrap	Heat Shrink-Wrap				✓	GPT Industries	Riser-Wrap	To be used on <b>Bell and Spigot or Tongue and Groove Smooth Wall Manhole Joints:</b> A min. of eighteen (18) inches wide heat shrinkable joint wrap shall be centered over all new manhole joints including chimney to manhole frame section
						✓	CCI Pipeline Systems	WrapidSeal	
		Non-Shrink Wrap				✓	GPT Industries	Boa-Tape	To be used on <b>all Tongue and Groove Smooth Wall Manhole Joints:</b> A min. of twelve (12) inches wide elastomeric plastic joint wrap shall be centered over all new and existing manhole joints including chimney to manhole frame section
						✓	Henry	Rubr-Nek RU116	
	Polymer Grout					✓	Armorock	ArmorRock Grout	Non-shrink, polymer grout shall be used for grouting applications in precast polymer concrete manholes including wall penetrations and adjusting benches
						✓	Sauereisen	No. 165	
						✓	Sikadur	No. 42	
	Grout					✓	Avanti	Multi-Grout AV-202/AV-118	Shall be used for grouting applications in precast concrete manholes including wall penetrations and adjusting benches
	Internal Joint Sealants	Bell and Spigot Manhole Joints				✓	Henry	Ram-Nek RN101	Butyl rubber sealant strips shall be applied to the interior of bell and spigot manhole joints per manufacturer's recommendations Precast Concrete Manhole: Min. 3" wide x 1/2" thick Precast Polymer Manholes: Min. 1-1/2" wide x 1/2 thick
						✓	Martin Asphalt	Evergrip 990	
						✓	Press-Seal Corp.	Crete-Stik	
						✓	ConSeal	CS102	
		Tongue and Groove Smooth Wall Manhole Joints				✓	Chemlink	M-1	A bead of sealant shall be applied to the interior of tongue and groove smooth wall manhole joints per manufacturer's recommendations Min. 3/4" wide x 1/2" thick
						✓	Adeka	UltraSeal P-201	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category				Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
	Protective Liners (Rehabilitation)						✓	Raven Lining Systems	Raven 405	Liners shall only be used with written approval from Manatee County to rehabilitate existing manhole concrete surfaces Liners shall be installed per manufacturer's recommendations
							✓	GML Coatings	Green Monster	
Lift Stations	Electrical	Site Lighting					✓	Enoy	EMPAL-7L-KFS4000K-YKL	Min. 6000 lumens LED, Color Temp: 4000K; Yoke mounted
		Level Switches and Sensors					✓	MDI Products	GF-10W4000 W GF-10W5000 W	Float switch, mercury free
								Anchor Scientific	GSIS0NO	
							✓	Data Flow Systems (DFS)	TCU Bubbler Unit (RPT-001)	Bubbler transducer unit mounted shall be mounted inside the control panel Shall have 1/2" Sch. 80 PVC bubbler pipe routed to the wet well Bottom elevation of bubbler pipe shall be 6" above the pump's volute center Installation is required to be done by Data Flow Systems
		Flow Meters					✓	McCrometer	Ultra Mag Model UM06	Shall be used for lift stations that re-pump sewage flows (directly or indirectly) from other lift stations
	Mechanical	Submersible Pumps	Satellite				✓	KSB	-	Refer to Manatee County Public Works Utility Standards Section 1.14 for details Pumps shall have oil-filled cooling system
							✓	WILO	-	
							✓	Barnes	-	
							✓	Crane	Sithe Series	
							✓	Hydromatic	-	
			Master				✓	KSB	-	
							✓	WILO	-	
							✓	Hydromatic		
							✓	Flygt	-	
		Diesel Backup Generator	Generators				✓	Kohler, Caterpillar, Blue Star, Cummins, or Generac	-	Refer to Manatee County Public Works Utility Standards Section 1.14 for details; Generator set shall be diesel powered only and shall have a subbase fuel tank.
			Cooling System Fluid				✓	Prestone Products	-	
							✓	Zerex Products	-	
			Protective Coating				✓	Carboline	Bitumastic 300M	Pump/Engine enclosures shall have a coal tar epoxy coating, min. 16 mils DFT, for all metal surfaces coming in contact with concrete or grout
							✓	Tnemec	46H-413	Alternatively, a 1/32-inch neoprene gasket between any metal surface and the concrete or masonry shall be used. Gasket shall be installed along the entire perimeter of the metallic surface, not just the fastening hardware.
							✓	Sherwin Williams	SherGlass FF	Fuel tank/skid base shall have haze grey, two coats of min. 12-15 mils DFT on top of a stripe coat over all welds, crevices, edges and sharp angles
		Automatic Transfer Switch	Power				✓	ASCO	7000 Series	Rack-mounted NEMA 4X 304 SS secure (double door) enclosure with a rain shield. The enclosure shall be constructed of at least 14 gauge 304 stainless steel. The enclosure shall be powder coated white.



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Lift Stations	Structural	Lift Station Wetwell				✓	US Composite Pipe	-	All lift station wetwells shall be made of precast polymer concrete Refer to Manatee County Public Works Utility Standards Section 1.13 for details
						✓	Armorock	-	
		Drop Bowl				✓	Reliner/Duran Products	-	316 SS hardware required. Optional Force Line Hood is not required, unless noted on plans.
		Horizontal Support Channels (For Control Panels Only)				✓	Unistrut Products	-	Min. 1-5/8", 12 gauge solid min. 316 SS channels, attached with 3/8" min. 316 SS all thread rod with min. 316 SS flat washers and nuts Refer to Manatee County Public Works Utility Standards details
						✓	BLine Products	-	
		U-Bolt Clamps				✓	-	-	Riser pipes shall be attached to riser pipe brackets by 316 stainless steel 3/8" dia. U-bolt clamps and nylon insert locknuts
		Pump Mounting Systems				✓	Barney's Pumps	-	All systems shall be of the front loading slide rail type BPIU All rail and mounting hardware shall be 316 SS
		Lift Station Towers				✓	Rohn	Series RG-25	For heights under 20 feet
						✓		Series RG-45	For heights 20 feet or above
		Aluminum Access Covers				✓	U.S. Foundry Products	-	Shall be aluminum have min. load rating of 300 PSF All hardware, hinges, and locking hasp shall be 316 SS Covers shall be equipped with a locking staple or bar for use with a padlock Edges in contact with concrete shall have 2 coats of bitumastic epoxy, 16 mils total DFT  <b>For Duplex Stations:</b> 4" Base Elbow Wetwell: hatch shall be minimum 36" x 48" 6" Base Elbow Wetwell (8' Dia. Wetwell): hatch shall be minimum 42" x 60"
						✓	Bilco Products	-	
						✓	Halliday Products	-	



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Lift Stations	Surface Protection	Protective Insert Liners				✓	GU Florida	FRP GU Liner	Liners shall only be used with written approval from Manatee County Liners shall be installed per manufacturer's recommendations  Sealant, adhesive, and bonding agent products shall be compatible with liner material  FRP liners shall be fabricated with premium grade isophthalic polyester resin, fiberglass chopped strand, woven roving and continuous reinforcements Sand filler shall not be permitted in the FRP laminate
		Protective Spray Liners (Rehabilitation)				✓	Raven Lining Systems	Raven 405	Liners shall only be used with prior written approval from Manatee County to rehabilitate existing lift station concrete surfaces Liners shall be installed per manufacturer's recommendations
						✓	GML Coatings	Green Monster	
						✓	CCI Spectrum	SpectraShield	
						✓	Sauereisen Products	210T & 210GL (MC Light Brown Formula)	
		Polymer Grout / Epoxy				✓	Armorock	Armorock Grout	Non-shrink, polymer grout shall be used for grouting applications in polymer concrete lift stations including wall penetrations  <u>To be Used w/ Armorock</u>
						✓	Euclid Chemical	Dural 452 Gel	
						✓	Sikadur	31 High Mod Gel	
						✓	Green Mountain	MG03	
						✓	Five Star	Splash Zone (wet applications)	
						✓	Five Star	DP Epoxy Kit (rehab inverts)	
						✓	Sauereisen	No. 165	
						✓	Sikadur	No. 42	
		Grout Leak Stop Applications				✓	Avanti	Multi-Grout AV-202/AV-118	For prevention of water infiltration. Shall be used for grouting applications in precast concrete lift stations including wall penetrations.
		Coating	Valve Vault Interior			✓	Tnemec	Series 69 Hi-Build Epoxy Coating	Interior surfaces of existing vaults shall have two (2) coats of min. 8 mils DFT each
			Exposed Concrete			✓	FLR Paints, Inc.	H&C Silicone Acrylic Concrete Stain, Patio Green	Exterior surfaces of valve vaults, wetwells, and valve assembly pads exposed above grade shall have at least two (2) coats of min. 8 mils DFT each
			Exposed Valve Assembly			✓	Rustoleum	Series 7538	Aboveground valve assembly & piping shall be painted Hunter Green per manufacturer's recommendations



# UTILITIES APPROVED PRODUCT LIST

September 2023

Category			Submittal	Potable Water	Reclaimed Water	Wastewater	Manufacturer	Model Number	Notes
Lift Stations	Internal Joint Sealants	Bell and Spigot Wetwell Joints				✓	Henry	Ram-Nek RN101	Butyl rubber sealant strips shall be applied to the interior of bell and spigot wetwell joints per manufacturer's recommendations Precast Concrete Wetwell: Min. 3" wide x 1/2" thick Precast Polymer Wetwell: Min. 1-1/2" wide x 1/2 thick
						✓	Martin Asphalt	Evergrip 990	
						✓	Press-Seal Corp.	Crete-Stik	
						✓	ConSeal	CS102	
		Tongue and Groove Smooth Wall Wetwell Joints				✓	Chemlink	M-1	A bead of sealant shall be applied to the interior of tongue and groove smooth wall wetwell joints per manufacturer's recommendations Min. 3/4" wide x 1/2" thick
						✓	Adeka	UltraSeal P-201	
	External Joint Wrap	Heat Shrink-Wrap				✓	GPT Industries	Riser-Wrap	<b>To be used on Bell and Spigot or Tongue and Groove Smooth Wall Lift Station Joints:</b> A min. of eighteen (18) inches wide heat shrinkable joint wrap shall be centered over all new lift station joints
						✓	CCI Pipeline Systems	WrapidSeal	
		Non-Shrink Wrap				✓	GPT Industries	Boa-Tape	<b>To be used on all Tongue and Groove Smooth Wall Lift Station Joints:</b> A min. of twelve (12) inches wide elastomeric plastic joint wrap shall be centered over all new and existing lift station joints
						✓	Henry	Rubr-Nek RU116	