Item	Description	Manufacturer	Selection	Comments
ACTUATOR	Electric Valve Actuators used for Valve Control on Motor Operated Valves. Full Submittal Required.	Auma SG Series EIM Rotork Flo-Loc FloPak		
ADAPTER, CAM AND GROOVE FITTING	316 Stainless Steel Adapter, MIP x Male Cam and Groove Fitting, 50mm (2"), 100mm (4") or 150mm (6") with 6mm (1/4") 316 Stainless Steel Street Ell and Pet Cock Tapped into the Side of the Fitting.	OPW Kamlock 600-F-SS Dixon "Andrews"/"Boss-Lock" Type F-SS		
ADAPTER, FLANGE COUPLING	150mm (6") and Larger, Comp x Flg. Steel or Ductile-Iron Construction without Anchor Pins, Epoxy Coated, 316 Stainless Steel Bolts and Nuts.	Hymax 2100 series		
AIR/VACUUM VALVE ENCLOSURE				NOT USED BY DISTRICT
AIR/VACUUM VALVE SUCTION SCREEN	For use on 25mm (1") and 50mm (2") Air/Vacuum Installations. FIP Nylon Nut Style with 20 Mesh Stainless Steel Screen.	McMaster-Carr 9877K521 McMaster-Carr 9877K651		
ANODE, MAGNESIUM	High or Standard Potential Anode with a Galvanized Steel Core Encased in a Square Magnesium Alloy Ingot Pre-packaged in a Permeable Cotton Cloth Bag Filled with a 75% Gypsum, 20% Bentonite, 5% Sodium Sulfate Mixture. Provide Ingot Weight as Specified on the Approved Plans. See Standard Drawing WC-12. Full Submittal Required.	Calpico Corpro Protection Engineering		0960-32-00 32#
ANODE, ZINC	Pre-Packaged (4lb & 12lb) Sacrificial Anode, #12 THHN Lead Wire, for the Protection of Copper Tubing. See NMWD Std. #15	Calpico Corpro Protection Engineering		0960-09-00 12# Zinc 0960-19-00 4# Zinc
ANTI-SEIZE COMPOUND	For use on Stainless Steel Bolts and Nuts.	Rectorseal (food grade) Winzer		
BACKFLOW PREVENTER	3/4" thru 2' DCDA or RPP 3" thru 8" DCDA or RPP Approved by the State of California, Department of Health Services.	Wilkins 350		0733-13-13, 0733-14-14, 0733-15- 15, 0733-16-16
BOLTS AND NUTS, 304 SS				NOT USED BY DISTRICT

Item	Description	Manufacturer	Selection	Comments
BOLTS AND NUTS,	Hex-Head Machine, ASTM A193, Grade B8M	Groeniger & Co.		
316 SS	Bolts and ASTM A194, Grade 8M Nuts. Full			
	Submittal Required.	Winzer Corp.		
BOLTS, EXPANSION,	13mm (1/2") x 75mm (3") 316 Stainless Steel	Hilti HSLG-R Series		
DROP-IN ANCHOR	Heavy Duty Anchor System with Anchor Assembly with Hex Head Threaded Rod and Washer, Drop-in Sleeve and Epoxy Resin Adhesive Capsule. For use on Air Valve and Water Test Station Enclosures.	U.S. Anchor W Series		
BONDING AGENT,	Epoxy Resin Based Bonding Agent for Bonding	Sika Sikadur 32 Hi-Mod		
EPOXY	New Mortar or Concrete to Existing Concrete.	Sika Sikauui 32 Mi-iviou		
BUSHING,	Nylon, 31mm x 25mm (1-1/4" x 1"), 38mm x	Calpico		
INSULATING	25mm (1-1/2" x 1"), 63mm x 50mm (2-1/2" x 2").	Corrosion Control Products		
		F.H. Mahoney		
CASING END SEAL	6.25mm (1/4") Thick Styrene Butadiene Rubber	Advance Products & Systems		
	Sheet End Seal. Use 25mm (1") Wide Stainless	Cascade		
	Steel Bands. Zippered End Seals with Stainless	Calpico		
	Steel Bands May Also be Used. Full Submittal	Pipeline Seal & Insulator		
	Required.	Powerseal		
		Raychem		
CASING SPACER	316 Stainless Steel Casing Spacer, Center	Advance Products & Systems		
	Restrained, Position Type with PVC Liner and	Cascade		
	Non-metallic Anti-friction Runners. Full	Calpico		
	Submittal Required.	Pipeline Seal & Insulator		
		Powerseal		
CATHODIC TEST	25.4 Kg (54 lbs) Concrete Body with 5.4 Kg (12	Raychem Brooks 1-RT series		
STATION BOX	lbs) Ductile Iron Lid and Lid Ring. "CP TEST"	Christy F08		
STATION BOX	Shall Be Cast into the Lid in 25mm (1") Letters.	Farwest Type 1-RT		
	For Cathodic Protection Test Stations, Anode	l alwest type 1-101		
	Ground Beds and Insulated Flange Test			
	Stations.			
CATHODIC TEST	"CP TEST" PROTECTION MATERIALS &	COTT BIG FINK		
STATION	CIRCUIT COMPONENTS.	COTT LITTLE FINK		
APPURTENANCES		COTT SHUNTS		
CATHODIC WELDING	For Welding Cathodic Bond Wires to Steel	Cadweld		0990-00-50
OATHODIO WEEDING	Pipelines.	Jaawola		0000 00 00
	1 POII.100.			

Item	Description	Manufacturer	Selection	Comments
CLAMP, REPAIR	Stainless Steel, Full circle, Double Lug. For ACP, PVC, DI or CI Pipe, Sizes 100mm (4") thru 55mm (20").	Hymax 4000 Series Smith Blair 250 or 260 Series		0060 Accounting sequence
COATING, INTERNAL PIPE	For Coating the Internal Pipe Lining for an Insulated Flange.	Aquatapoxy A-6 Hydro-Pox		
COATING, MASTIC	Cold-Applied Coal Tar- or Epoxy-Based Single Component, Self-Priming, Heavy Duty Protective Exterior Coating for Buried Concrete.	Carboline Bitumastic 50 Devoe Devtar 5A Polykem 938 Tnemec HB Tnemecol 46-465 Tnemec HB Tneme-Tar 46H- 413		
COATING, WATERPROOF	Epoxy Resin-Based Cementitious Trowel Grade Protective Waterproofing for Concrete.	Sika Top Seal 107 Sto CR 241		
CAP, BRASS	For Plugging Corporation Stops When a Service is to be Abandoned.	Mueller H-15540 (3/4",1", 2")		0059-04-00 (3/4") 0059-05-00 (1") 0059-06-00 (2")
CORPORATION STOP, CC x COMPRESSION	Brass Ground Key Corporation Valve Inlet AWWA Taper, CC Thread, Outlet (Mueller II) Conductive Compression Connection For CTS O.D. Tubing, ¾", 1" & 2".	Mueller H-15013 (2") Mueller H-15008 (3/4", 1")		0200-08-08 (2") 0200-04-04 (3/4") 0200-05-05 (1")
CORPORATION STOP, MIP x COMPRESSION	Brass Ground Key Corporation Valve Inlet AWWA I.P. Thread, Outlet (Mueller II0 Conductive Compression Connection For CTS O.D. Tubing, 3/4", & 1".	Mueller H-15028 (3/4", 1")		0201-04-04 (3/4") 0201-05-05 (1")
CORPORATION STOP, MIP x COMPRESSION	Brass ORI-CORP Corporation Valve Inlet AWWA I.P. Thread, Outlet (Mueller II0 Conductive Compression Connection For CTS O.D. Tubing 2" Only.	Mueller H-15023 (2")		0201-08-08 (2")
CORPORATION STOP, MIP x MIP	Brass ORI-CORP Corporation Valve (2") Inlet AWWA I.P. Thread, Outlet M.I.P Thread & Brass Ground Key Corporation Valve Inlet AWWA I.P. Thread, Outlet M.I.P. Thread.	Mueller H-9969 (2") Mueller H-10013 (¾",1")		0202-08-08 (2") 0202-04-04 (3/4") 0202-05-05 (1")

Item	Description	Manufacturer	Selection	Comments
COUPLING, COMPRESSION x	Straight Three Part Union 110 Conductive Compression Connection For CTS O.D, Tubing	Mueller H-15403		0240-04-04 (3/4") 0240-05-05 (1")
COMPRESSION	both Ends. (SPLICE) 3/4",1",1-1/2",2"			0240-06-06 (1-1/2")
	Sour Ender (Gr Eroz) /4 ; 1 ; 1 1/2 ; 2			0240-07-07 (2"0
COUPLING, C900 PVC	100mm (4") thru 300mm (12") Solid PVC for	Certainteed Vinyl Iron HD		0167-50-12 (4")
DEFLECTION	Obtaining Deflection Only. Provides 5 Degree	,		0167-50-16 (6")
	Maximum Deflection.			0167-50-18 (8")
				0167-50-22 (12 ["])
COUPLING, C900 PVC	100mm (4") through 300mm (12") Solid PVC for	Certainteed Vinyl Iron HD		0167-77-12 (4")
CLOSURE OR	Closure or Repair.	•		0167-77-16 (6")
REPAIR				0167-77-18 (8")
				0167-77-20 (10")
				0167-77-22 (12")
COUPLING, C905 PVC	400mm (16") thru 900mm (36") Solid PVC for	IPEX		0167-77-24 (16")
CLOSURE,	Closure, Deflection or Repair.	Nyloplast America		, ,
DEFLECTION OR		Scepter		
REPAIR		Specified Fittings		
COUPLING,	150mm (6") Long PVC Flexible Coupling with	Calder		
FLEXIBLE	Stainless Steel Bands. Use for Securing Gate	DFW/HPI		
	Valve Cap and Can Assembly to 200mm (8") Class 200 PVC C900 Gate Well.	Fernco		
COUPLING,	Use for Aboveground DI or Steel Pipe 100mm	Grinnell #7001		
GROOVED	(4") or Larger.	Tyler 500		
		Victaulic Style 44		
		Victaulic Style 77		
COUPLING, HALF, STEEL	Forged Steel Half Coupling, ASTM A105, 3000#, NPT Threads.	Bonney Forge		
COUPLING,	Three-Part Compression Insulated Coupling	A.Y. McDonald 4755DBT		
INSULATED, COMPRESSION x COMPRESSION	(Both Ends) for 25mm (1") Copper Pipe.	Mueller N-35403		
COUPLING,	100mm (4") and Larger, Steel or Ductile-Iron	Hymax 2000 Series		
STRAIGHT FLEXIBLE	Construction, Comp x Comp, Slip x Slip, Epoxy-Coated with 304 or 316 Stainless Steel Bolts and Nuts. For use on AC, PVC, DI, or Steel Pipe.			
COUPLING,	100mm (4") and Larger, Steel or Ductile-Iron	Hymax 2000 Series		0081-12-12 (4")
TRANSITION	Construction, Comp x Comp, Slip x Slip, Epoxy			0081-16-17 (6")
FLEXIBLE	Coated with 304 or 316 Stainless Steel Bolts and			0081-18-17 (8")
	Nuts. For use on AC, PVC, DI, or Steel Pipe.			0081-22-26,27,28,29. (12")
	1.13.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.			0081-24-24,25,26. (C905 16")

Item	Description	Manufacturer	Selection	Comments
DEFLECTION BEND, PVC C900 AND C905	5 Degree Deflection Bend Manufactured from C900 and C905 PVC Pipe.	Ipex Specified Fittings		
DUST CAP, CAM AND GROOVE FITTING, LOCKING	316 Stainless Steel Cam and Groove Fitting Dust Cap, 50mm (2"), 100mm (4") or 150mm (6").	OPW Kamlock 700 Type DC-SS Dixon "Andrews" Type DC		
ELL, BURY, DUCTILE IRON, FUSION-BOND POWDER COATING	6" x (Various) Lengths Ductile Iron Bury Ells, Short Radius, Flg x FLG/PO Wet Barrel, (Use of long Radius Bury Ells with District Engineer Approval Only).	Clow		0130-16-28 (6X24) FXPO 0130-16-29 (6X30) FXPO 0130-16-30 (6X36) FXPO 0131-16-29 (6X30) FLGXFLG 0131-16-30 (6X36) FLGXFLG
ELL, FIP x COMP, 45 Deg 1/8 BEND	25mm (1") and 50mm (2") Bronze Ell, FIP x Compression for Copper Pipe.	A.Y. McDonald 4747Q Mueller H-15534		
ELL, FIP x COMP, 90 Deg 1/4 BEND	25mm (1") and 50mm (2") Bronze Ell, FIP x Compression for Copper Pipe.	A.Y. McDonald 4779Q Mueller H-15533		
ELL, STREET, MIP x FIP STAINLESS STEEL	6mm (1/4") 304 SS Street Ell for Blowoff Dust Cap. Full Submittal Required.			
ELL, SUPER GRIP TYPE	25mm (1") and 50mm (2") Bronze Ell Compression x Compression for Copper Pipe.	Mueller H-15526		
EPOXY ADHESIVE	High-Modulus, Low-Viscosity, Epoxy Resin- Based Adhesive Suitable for Grouting Bolts or Dowels.	Sika Sikadur 31 Sika Sikadur 35		
EXPANSION JOINT	For Water Pipeline Bridge Crossings.			SEE SEISMIC COUPLINGS
EXPANSION JOINT, RUBBER	Expansion Joints at Reservoir and Pump Station Inlet/Outlet Piping to Allow Lateral Movement and Isolate Vibration. Full Submittal Required.	General Rubber 1050 General Rubber 1075 Holz CSM Holz CR Holz C11R Mercer 500-700 Metraflex Metra Red Valve Redflex		
FIRE HYDRANT CAP	Screwed Brass or Ductile-Iron Cap for Fire Hydrant Hose Ports, 63mm (2-1/2") and 100mm (4"-1/2").	AVK Jones Long Beach Iron US Pipe		

Item	Description	Manufacturer	Selection	Comments
FIRE HYDRANT SPOOL, DUCTILE OR CAST IRON, FLANGED	Ductile- or Cast-Iron Spool with Integrally Cast Flanges and Machined or Cast Exterior Grooves. Spools (12") or Longer Shall Have Grooves 75mm (3") from Each Flange. Spools Shorter than 300mm (12") Shall Have One Groove Centered Between the Flanges. Grooves Shall be 5mm (3/16") Deep, ± 2mm (1/16") and 6mm (1/4") Wide, ± 2mm (1/16").	Clow Southbay Foundry		0135-XX-XX Item Number Series
FIRE HYDRANT, 1.03 MPa (150 PSI)	150mm (6") Standard 1.03 MPa (150 PSI) Wet Barrel Ductile-Iron (DI) or Bronze Fire Hydrants with Six-Hole Bolt Pattern. Color shall be Safety Yellow.	Clow 70 series		0122-09-13 (Commercial, Yellow) 0123-09-13 (Residential, Yellow)
FITTING, DUCTILE IRON	Flanged, Mechanical Joint or Push-on Tees, Bends, Crosses, Reducers, Adapters, etc., for Water Lines 100mm (4") and Larger. Manufactured per AWWA C110, C111 and C153.	Sigma Tyler Union		
FITTING, GROOVED	Grooved Ductile-Iron Fittings for Grooved End Pipes, 100mm (4") through 600mm (24").	Grinnell Tyler G-B Victaulic		
GASKET	3.125mm (1/8") Thick Full Face Aramid Fiber Bound with Nitrile. No Asbestos Content.	Calpico Garlock 3000 Tripac 5000		
GASKET, RUBBER, GASOLINE- RESISTANT	Gasoline-Resistant Pipe Gaskets for Water Mains.	Newby		
GATE WELL 150mm (6")	For Valve Installations (4") and Larger, (6") PVC SDR 26 Class 160, White for Potable Water, Purple for Recycle Water.	Refer to PIPE, PVC SDR 26 CLASS 160		0165-16-00 (6")
GATE WELL LID- 150mm (6")	Ductile- or Cast-Iron Lid used for Valve Access, 150mm (6") Nominal Diameter.	South Bay Foundry B50		0033-16-00 (6")
GREASE	For Bolt Corrosion Protection on Buried Bolts.	Sanchem NO-OX-ID Dearborn Chemical		
GROUT	Non-Shrink Cementitious Construction Grout for Crack Repair, Flooring Mortar, Dowel Grouting, Crack Sealing and General Binding.	Sika Sikagrout 212 Sto Epoxy Binder CR633 Sto Epoxy Gel CR635 Sto N-S Grout CR732		

Item	Description	Manufacturer	Selection	Comments
INSULATING	Insulating Couplings for Corrosion Protection of	Romac IC400		
COUPLINGS	Pipelines.	Romac IC501		
		Lochinvar		
INSULATING GASKET	Insulating Gasket Kits for Corrosion Protection of	Advance Products & Systems		
KIT	Pipelines.	Calpico		
		Pipeline Seal & Insulator GasketSeal		
		Pipeline Seal & Insulator LineBacker		
		Farwest		
ISOLATOR, VIBRATION	Wire Rope Seismic Support for Pipelines for Isolating Vibrations and Shocks.	Enidine Steelpaw		
JOINT RESTRAINT	360-Degree Wedge-Type Restraint System for	Ford Uni-Flange 1300 Series		
ASSEMBLY	Ductile-Iron, PVC, and Steel Pipe, Sizes 150 mm	Ford Uni-Flange 1500 Series		
	(6") thru 750 mm (30"). Prior Approval of District Engineer is Required and Full Submittal Required .	Sigma PV-Lok		
JOINT RESTRAINT SYSTEM	360-Degree Single Ring with Radial Screws and Gripping Wedge Style Restraint System and	EBAA Iron Series 2000PV (Red/PVC, Black/DIP)		
01012111	Restraint Harness for Ductile-Iron and PVC Pipe,	EBAA Series 1100		
	Sizes 100 mm (4") through 750 mm (30"). Prior Approval of District Engineer is Required and	Tyler Union TUF Grip 1500 Series		
	Full Submittal Required.	EBAA Iron 1600 Series		
JOINT SEALING COMPOUND, PLASTIC ROPE	For use on Precast Vault and Manhole in Grooved Joints Between Sections.	Quickset Joint Sealing Compound		
LUBRICANT, PIPE	Rubber Gasket Pipe Lubricant for Use on PVC or	Christy Pro-Lube		
GASKET	Ductile-Iron Pipe Joints, NSF-61 Listing	Seacord Ease-On		
	Required.	Whitlam Blue Lube		
MARKER, UTILITY	Flexible Reinforced Polymer Glass Fiber	Carsonite CUM-375		
,	Composite Strip Identification Marker. Branded or Customized Identification Markings for Pipelines and Appurtenances May Be Required.	Christy's		
METER ADAPTER	For Replacing Large Meters with Smaller Meters.	Ford A Series		0238-05-04
		Mueller H10889 & H10879		

Item	Description	Manufacturer	Selection	Comments
METER BOX H-20 TRAFFIC RATED	For Potable Water use, Purple for Recycled Water use.	Christy B1017, B1324, & B1730		
METER BOX LID H-20 TRAFFIC RATED	Steel Checker Plate Screw Down Lid with Available "8" Reader, For Potable Water use, Purple for Recycled Water use.	Christy B1017-61, B1324-61 & B-1730-51		
METER BOX	Boxes ¾" thru 4" For Potable Water use. Purple for Recycled Water. Concrete Reinforced, Round CPS ¾" F8	Christy B9, B16, B24, B30, B36 Round ¾" F8 For (CPS)		0030-XX-XX Item Number Series
METER BOX LIDS	Box Lids ¾" thru 4" For Potable Water use. Purple for Recycled Water. Fiberlyte, Steel, Available With Reader or Locking Lids. *Neptune offset probe required.	*Christy FLX09P001 FX16P, B24 (CONC)* FL30P FL36P		0031-XX-XX Item Number Series 0032-XX-XX Item Number Series
METER STOP, ANGLE COMPRESSION X METER	Ground Key or Ball Angle Meter Valve (1-1/2") and (2") Meters with Slotted Holes. Inlet 110 Style Compression.	Mueller H-14277 Mueller 300 Ball Ford BFA43-777W-Q		0212-08-08 (2")
METER STOP, ANGLE F.I.P. x METER	Ground Key or Ball Angle Meter Valve (1-1/2") and (2") Meters with Slotted Holes. F.I.P. Inlet NSF 61 and Lead Free	Mueller H-14286 Mueller 300 Ball Ford BFA13-777W-NL		0215-08-08 (2")
METER STOP, ANGLE COMPRESSION x METER	(3/4" & 1") Ground Key Angle Meter Stop, Inlet 110 Style Compression x Outlet Swivel Meter Nut 180 Deg. turn Check, Lock Wing. NSF 61 and Lead Free	Mueller H-14258 Mueller H-14286N		0212-04-04 (3/4") 0212-05-05 (1")
METER STOP, ANGLE F.I.P x METER	(3/4" & 1") Ground Key Angle Meter Stop, x Inlet F.I.P. X Outlet Swivel Meter Nut 180 Deg. turn Check, Lock Wing. NSF 61 and Lead Free	Mueller H-14265 Mueller H-14286N		0214-04-04 (3/4") 0214-05-05 (1")
METER, WATER	5/8" X 3/4" thru 2" Water Meter with Bronze Body, Bronze Bonnet, Thermoplastic Chamber, and Register Odometer at the Bottom of the Register Face. Odometer and Sweep Hand Read in Cubic Feet (Badger), Gallons (Neptune). AMI Compatible	Badger Model 35 or Neptune T10 Badger Model 70 or Neptune T10 Badger Model 120 or Neptune T10 Badger Model 170 or Neptune T10 Submittal required for compound meters		5000-XX-XX Item Number Series

Item	Description	Manufacturer	Selection	Comments
MORTAR, REPAIR	Two-Component, Low Shrinkage, Cementitious	Sika Sika Top 122		
	Mortar with High Compressive and Bonding	Sika Sika Top 123		
	Strength.	Sto CR 735		
NO.771 E W.E. D. O.V.	Will No Will Direct Dir	Sto CR 740		
NOZZLE, WELD-ON	Weld-on Nozzle with Reinforcing Pad or Collar for Connection to CMC&L Steel Pipe. ASTM A-			
	53B 6mm (1/4") Minimum Thickness Seamless			
	Pipe, Mortar Lined and Coated with AWWA C207			
	Flange. Full Submittal Required.			
PAINT, POLYESTER	TGIC Polyester Powder for Air Valve and Water	Tiger Dylac Series 49		
POWDER	Test Station Enclosures.	Porter Paint J-Series		
		Fuller O'Brien PF Series		
PAINT, SILICONE	One-Component, Minimum 46% Solids (by	Amteco SA-3 Silicone Poly Plus		
ALKYD ENAMEL	Volume), 30% Silicone Content (by Volume),	Carboline Carbocoat 30		
	High Gloss, VOC Compliant Industrial Grade	Devoe Devshield 475		
	Paint. See Section 09910 for Color and	Dunn-Edwards 42-53		
	Application Requirements.	Pittsburgh Paints 97-480		
		Porter Paint Porter Guard 2200		
		Sherwin-Williams Steel		
		Master 9500		
PAINT,	One-Component, Rapid Dry 100% Acrylic Latex	TMT-Pathway Waterborne		
WATERBORNE	Waterborne Marking Paint Meeting Caltrans	Traffic Paint #2343A9		
ACRYLIC LATEX	Specification #8010-21C-30. See Section 09910			
	for Color and Application Requirements.			
PENETRATION	Mechanical Link Type Interlocking Vault, Casing	Advance Products & Systems		
SEALS,	and Building Penetration Seals.	Interlynx		
INTERLOCKING		Link Seal		
PIPE, COPPER	25mm (1") Type K Soft Seamless Rolled Tubing,	Cerro		0163-04-00 (3/4")
TUBING	50mm (2") Type K Soft Seamless Straight	Halstead		0163-05-00 (1")
	Lengths, 25mm (1") and 50mm (2") Type K Rigid	Lee		0163-06-00 (1-1/4")
	Seamless Straight Lengths.	Mueller Dealer Dealer		0163-07-00 (1-1/2")
		Phelps-Dodge		0163-08-00 (2") MATERIAL CUT-SHEETS
				IVIATERIAL CUT-SHEETS
PIPE, DUCTILE IRON	For Water Lines 100mm (4") and Larger	American Pipe		NOT USED BY DISTRICT
2, 5001122 11.014	Manufactured per AWWA C111, C115, C150,	Griffin		
	and C151.	Pacific States		
		U.S. Pipe		

Item	Description	Manufacturer	Selection	Comments
PIPE, PVC C900	For Water Lines 100mm (4") thru 300mm (12") Manufactured per AWWA C900 DR-14 Only.	Certainteed Diamond Plastics IPEX VinylTech		0167-12-00 (4") 0167-16-00 (6") 0167-18-00 (8") 0167-20-00 (10') 0167-22-00 (12") 0167-22-05 (12') certa-lock
PIPE, PVC C905	For Water Lines 400mm (16") and 500mm (20") thru 900mm (36"). Manufactured per AWWA C905, DR 18 ONLY.	Certainteed Diamond Plactics IPEX Vinyltech		0167-24-00
PIPE, STEEL, CEMENT-MORTAR LINED AND COATED (CML&C)	Steel Cylinder (CML&TW), per AWWA M11 and Section 15061. 6mm (1/4") Minimum Wall Thickness. Steel Pipes Used for Recycled Water Installation are to be Identified Per District Requirements. Full Submittal Required.	Ameron Pipe Northwest Pipe		0160-XX-XX Item Number Series
PLASTIC ENCASEMENT	12-mil Thick Polyethylene Encasement Sleeve for Ductile Iron Pipe (DIP) per AWWA C105 and Recycled PVC, CMC/L, or DIP Non-Purple Water Pipe. Clear Sleeve for Potable Water, Purple Sleeve for Recycled Water.			
PLASTIC WRAP	8-mil Thick Polyethylene Encasement for Buried Fittings and Valves. Clear Sleeve for Potable Water, Purple Sleeve for Recycled Water.			
PRIMER, WAX TAPE	Surface Primer for Underground Application of Petrolatum Wax Tape.	Carboline Denso Paste Trenton Tem-Coat		
PROTECTOR POST, STEEL	100mm (4") Diameter, 6.25mm (0.250") Wall Galvanized A-120 Steel Pipe, Concrete Filled with 100mm (4") Galvanized Fence Post Cap.			

Item	Description	Manufacturer	Selection	Comments
REFERENCE ELECTRODE, COPPER SULFATE	High or Standard Potential Electrode with PVC Pipe Housing Pre-Packaged in a Permeable Cotton Cloth Bag Filled with a 50% Gypsum/50% Powered Bentonite Mixture. Electrode Shall have a Design Life of 15 Years with a Stability of +/- 5 Millivolts under a 3.0 Microampere Load. Provide Electrode with Integrally Attached #10 AWG HMW/PE Insulated Wire. Full Submittal Required.			
SEALANT	Chemical Grout for Joint Sealing.	3M Scotch Seal		
SEISMIC COUPLING	Flexible Expansion Joints for Pipelines, Reservoirs and Pump Stations. Full Submittal Required.	EBAA Iron Flex-Tend Romac FlexiJoint Star Pipe Starflex 5000		
SERVICE SADDLE FOR ACP AND CI PIPE	Ductile Iron Body, Covered by Black Nylon Fused Coated 10-12 Mil Thick, W/2" Wide Stainless Steel Band, Type 304 (18-8), With 5/8" N.C. Rolled Thread Teflon Coated Bolts, Nuts, & Washers, For 4" Thru 24". F.I.P. Thread and CC Thread Outlets.	Romac 101N Romac 202N		0062-XX-XX Item Number Series
SERVICE SADDLE FOR PVC C900 PIPE	Ductile Iron Body, Covered By Black Nylon Fused Coated 10-12 Mil Thick, W/2" Wide Stainless Steel Band, Type 304 (18-8), With 5/8" N.C. Rolled Thread Teflon Coated Bolts, Nuts, & Washers, For 4" Thru 24". F.I.P. Thread and CC Thread Outlets.	Romac 101N Romac 202N		0062-XX-XX Item Number Series
SERVICE SADDLE FOR PVC C905 PIPE	Ductile Iron Body, Covered by Black Nylon Fused Coated 10-12 Mil Thick, W/2" Wide Stainless Steel Band, Type 304 (18-8), With 5/8" N.C. Rolled Thread Teflon Coated Bolts, Nuts, & Washers, For 4" Thru 24". F.I.P. Thread and CC Thread Outlets.	Romac 101N Romac 202N		0062-XX-XX Item Number Series
TAG, BRASS IDENTIFICATION	25mm (1") Diameter, 18 Gauge Brass with 4.76mm (3/16") Die-Stamped Letters and Numbers, Suitable for Attachment to Cathodic Protection Wires using a Nylon Zip Tie.			

Item	Description	Manufacturer	Selection	Comments
TAPE, OUTER WRAP	Adhesive Plastic Outer Wrap for Wax Petrolatum Tape in Underground Applications.	Denso products or equal		
TAPE, UTILITY	10 to 50 Mil x 50mm (2") Wide General Utility	3M Scotchwrap 50		
	Tape for Corrosion Protection of Aboveground	3M Scotchwrap 51		
	and Underground Pipes and Fittings.	Calpico		
		Christy		
		Northtown		
		Polyken 900		
TAPE, WARNING/	150mm (6") wide, Warning/Identification (Non-	Calpico Type 1		
IDENTIFICATION	Metallic) Marking Tape for Buried Facilities.	Christy Type 1		
	See Section 15000 for Required Colors and	Line-Tec Type B		
	Markings.	Terra Tape Standard 250		
		Thor Elast Tec		
		Northtown		
TAPE, WARNING/	75mm (3") wide, Warning/Identification (Non-	Calpico Type 1		
IDENTIFICATION FOR	Metallic) Marking Tape for Buried Irrigation	Christy Type 1		
RECYCLED	Pipelines, Purple Color with continuous warning	Line-Tec Type B		
IRRIGATION	"CAUTION RECLAIMED WATER MAIN BURIED	Terra Tape Standard 250		
	BELOW."	Thor Elast Tec		
		Northtown		
TAPE, WAX ABOVEGROUND	Petrolatum-Saturated Synthetic Fabric Tape for use on Aboveground Couplings, Flanges, Fittings, etc.	Trenton #2 Wax-Tape		
TAPE, WAX	Petrolatum-Saturated Synthetic Fabric Tape for	Carboline Densyl Tape		
UNDERGROUND	use on Underground Couplings, Flanges, Fittings, etc. Primer and Outer Wrap Required.	Trenton #1 Wax-Tape		
TAPPING SLEEVE FOR AC, CI, DI, AND PVC PIPE	Fabricated Steel Tapping Sleeve for 100mm (4") Through 300mm (12") Wet Taps. Epoxy Coated or Stainless Steel body with Stainless Steel Bolts and Nuts.	JCM 432 & 462 Ford fittings		0302-XX-XX Item Number Series
THREDOLET	Forged Steel Fitting, ASTM A105. 3000#, NPT Threads.	Bonney Forge		
VALVE STEM	Three-Part Fiberglass Valve Extension Kit. Use	Pipeline Products FPU-210		
EXTENSION,	for Extensions 2.4m (8') Long or Shorter.	Pipeline Products FPT-200		
FIBERGLASS	()	Pipeline Products FPL-220		
		Christy's		

VALVE, AIR RELEASE, 1.03 MPa (150 PSI) Rod, Welder Galvanized with 50mm (2") Open Use for Extens Pressure Air R Stainless Steet Required. 25 100mm (4") Flat VALVE, BALL 25mm (1") at	are 37mm (1-1/2") Diameter Steel d Construction, Hot Dipped th Top Centering Ring and AWWA erating Nuts Top and Bottom. Sions Longer Than 2.4m (8'). Release Valve, Cast-Iron Body with the Internal Parts. Suction Screens 5mm (1") thru 75mm (3") NPT, anged. Full Submittal Required. Ind 50mm (2") Bronze, Straight, a Compression.	Pipeline Products SX-900 South Bay Foundry E4160 Christy's Crispin PL10 Crispin PL20 Crispin PL30 Crispin PL41 Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	0700-05-05 Item Number Series 0700-08-08 Item Number Series
Galvanized wit 50mm (2") Ope Use for Extens VALVE, AIR Pressure Air R Stainless Stee Required. 25 100mm (4") Flat VALVE, BALL 25mm (1") at	th Top Centering Ring and AWWA erating Nuts Top and Bottom. sions Longer Than 2.4m (8'). Release Valve, Cast-Iron Body with let Internal Parts. Suction Screens 5mm (1") thru 75mm (3") NPT, anged. Full Submittal Required. Ind 50mm (2") Bronze, Straight,	Crispin PL10 Crispin PL20 Crispin PL30 Crispin PL41 Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	
VALVE, AIR RELEASE, 1.03 MPa (150 PSI) VALVE, BALL Pressure Air R Stainless Stee Required. 25 100mm (4") Fla	erating Nuts Top and Bottom. sions Longer Than 2.4m (8'). Release Valve, Cast-Iron Body with el Internal Parts. Suction Screens 5mm (1") thru 75mm (3") NPT, anged. Full Submittal Required. nd 50mm (2") Bronze, Straight,	Crispin PL10 Crispin PL20 Crispin PL30 Crispin PL41 Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	
VALVE, AIR RELEASE, 1.03 MPa (150 PSI) Pressure Air R Stainless Stee Required. 29 100mm (4") Fla VALVE, BALL 25mm (1") air	Release Valve, Cast-Iron Body with line Internal Parts. Suction Screens 5mm (1") thru 75mm (3") NPT, anged. Full Submittal Required.	Crispin PL20 Crispin PL30 Crispin PL41 Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	
VALVE, AIR RELEASE, 1.03 MPa (150 PSI) VALVE, BALL Pressure Air R Stainless Stee Required. 29 100mm (4") Fla	Release Valve, Cast-Iron Body with let Internal Parts. Suction Screens 5mm (1") thru 75mm (3") NPT, anged. Full Submittal Required.	Crispin PL20 Crispin PL30 Crispin PL41 Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	
RELEASE, 1.03 MPa (150 PSI) Stainless Stee Required. 25 100mm (4") Fla VALVE, BALL 25mm (1") al	el Internal Parts. Suction Screens 5mm (1") thru 75mm (3") NPT, anged. Full Submittal Required. nd 50mm (2") Bronze, Straight,	Crispin PL20 Crispin PL30 Crispin PL41 Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	
1.03 MPa (150 PSI) Required. 25 100mm (4") Fla VALVE, BALL 25mm (1") al	5mm (1") thru 75mm (3") NPT, anged. Full Submittal Required. nd 50mm (2") Bronze, Straight,	Crispin PL30 Crispin PL41 Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	0700-08-08 Item Number Series
100mm (4") Fla VALVE, BALL 25mm (1") al	anged. Full Submittal Required. nd 50mm (2") Bronze, Straight,	Crispin PL41 Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	
VALVE, BALL 25mm (1") a	nd 50mm (2") Bronze, Straight,	Cambridge 1" 202-H4H4 Cambridge 2" 202 H7H7	
		Cambridge 2" 202 H7H7	
Compression	x Compression.		I and the second
Compression		E D44 444 O	
		Ford B44-444-Q	
		Ford B44-777-Q	
		Jones J-1949SG	
		A.Y. McDonald 6100Q	
		Mueller B-25209	
	Bronze, Straight, Compression x	Cambridge 212-H7H7H	
	with Locking Tabs and Brass	Ford B44-777-QW	
Handle.		Jones J-1949SGW	
		A.Y. McDonald 6100WQ	
		Mueller B-25146	
	nd 25mm (1") Bronze, Straight, FIP	Cambridge ¾" 212-F3T3H	
	el with Locking Tabs and Purple	Cambridge 1" 212-F4F4H	
Handle.		Ford B13-332W	
		Jones J-1908W	
		A.Y. McDonald 6100M	
VALVE DALL 4.02 Cooper (A/A") 45	ru 50 mm (0") FID Threadsth	Mueller B-24351-1	
	ru 50 mm (2"), FIP Threads with	Apollo 70-100 Series Milwaukee BA-1005	
MPa (150 PSI) Handle.		Nibco 560 Series	
		Stockham S-214	
		Watts WBV-3	
		Watts WEBS-3	
VALVE, BALL, 1.03 100mm (4") ar	nd Larger, Rubber Seated, AWWA	Pratt	
	osetting or Fusion Bonded Epoxy	Tau	
	Submittal Required.		
	r for Corp and Meter Stops in High	Mueller 300	
(300 PSI) Pressure Zone	es/Services		

Item	Description	Manufacturer	Selection	Comments
VALVE, BUTTERFLY	400mm (16") and Larger, AWWA C504, Class	M & H 1450		
1.03 MPa (150 PSI)	150B with Ductile-Iron Body. Thermosetting or	M & H 4500		
,	Fusion Bonded Epoxy Coated and Lined. Class	Mueller Lineseal III		
	D or E Flange x Flange Ends. Full Submittal	Pratt Groundhog		
	Required.	Val-Matic Series 2000		
	7	Dezurik		
VALVE, BUTTERFLY	100mm (4") thru 300mm (12"), AWWA C504,	M & H 4500		0720-XX-XX Item Number Series
1.03 MPa (150 PSI)	Class 150B with Ductile-Iron Body.	Mueller Lineseal III		
,	Thermosetting or Fusion Bonded Epoxy Coated	Val-Matic Series 2000		
	and Lined. Class D or E Flange x Flange Ends.	Dezurik		
	Full Submittal Required.			
	- un cusqucu.			
VALVE, BUTTERFLY,	400mm (16") and Larger, Thermosetting or	Pratt MKII		
WAFER 1.03 MPa	Fusion Bonded Epoxy Coated and Lined.			
(150 PSI)	District Approval and Full Submittal			
(1331 31)	Required.			
	- roquirou:			
VALVE, CHECK	1.03 & 2.07 MPa (150 & 300 PSI), Slanting Disc	APCO Series 800		
,	Check Valve 100mm (4") and Larger. Full	Crispin TD Series		
	Submittal Required.	Val-Matic Series 9000		
VALVE,	Single Body Style Combination Air Release and	Crispin UL20		
COMBINATION AIR	Air/Vacuum Valve. Stainless Steel Internal	5sp 5.115		
RELEASE AND	Parts, BUNA-N seats per AWWA C512, and			
AIR/VACUUM, 50mm	Epoxy Coated Interior per AWWA C550. N.P.T.			
(2")	Threaded Inlet and Outlet. Suction Screen			
(- /	Required, 2.04 Mpa (300 PSI) Rated Body and			
	Internals. Full Submittal Required.			
	internals. Tan Gasimta Required.			
VALVE,	Single-Body Style Combination Air Release and	Crispin UL Series		
COMBINATION AIR	Air/Vacuum Valve. Stainless Steel Internal	(for 100 mm (4") size)	_	
RELEASE AND	Parts, BUNA-N seats per AWWA C512, with	Crispin C Series		
AIR/VACUUM, 100mm	Protection Hood, Suction Screen Required, and	(for 150mm (6") and larger)		
(4") AND LARGER	Epoxy Coated Interior per AWWA C550.	(101 100111111 (0) dila larger)		
(+) AIND LANGER	Flanged 125# or 250# Inlet. 2.04 MPa (300 PSI)			
	Rated Body and Internals. Full Submittal			
	Required.			
	required.			
				I .

Item	Description	Manufacturer	Selection	Comments
VALVE, GATE, RESILIENT WEDGE (RWGV)	100mm (2") thru 300mm (12"), Non-Rising Low Zinc Bronze or Stainless Steel Stem, Ductile-Iron Body and Bonnet, Stainless Steel Trim Bolts, Encapsulated Wedge per AWWA C509 or C515 with Epoxy Coated Interior. Manufactured to AWWA C509 or C515, with 1.72 MPa (250 PSI) Rating.	American FC, Series 2500 AVK 03 Series (2") Only Clow 2639 F6100 Series Mueller 2360 M&H 4067 M&H 7067		0764-XX-XX Item Number Flange 0765-XX-XX Item Number PoxPo 0766-XX-XX Item Number FlgxPo
VALVE, GATE, RESILIENT WEDGE, 400mm (16") AND LARGER	400mm (16") thru 600mm (24"), per AWWA C509, Ductile Iron Body, Stainless Steel Trim Bolts, Encapsulated Wedge, Non-Rising Stem, Epoxy Coated Interior per AWWA C550, Minimum 1.36 MPa (200 PSI) Rating. District Approval and Full Submittal Required.	Clow F-6100 Series M&H 4067 Mueller A-2361		
VALVE, INSULATED BALL	25mm (1") Bronze, Straight, Compression x Compression, Insulated Type.	Mueller N-35209		
VALVE, PET COCK	6mm (1/4") 304 SS Pet Cock Valve for Use on Blowoff Cam and Groove Adapter.			
VALVE, PRESSURE REDUCING	For Water Main Pressure Reducing, 100mm (4") thru 400mm (16"). Full Submittal Required.	Cla-Val 90G-01		
VALVE, PRESSURE REGULATING 1.03 MPa to 1.72 MPa (150 TO 249 PSI)	19mm (3/4") thru 50mm (2").	Cash Acme E55 Watts 223, LF25AUB Wilkins 600 XL		
VALVE, PRESSURE RELIEF	For Service Connections, 19mm (3/4").	Cash Acme FWC		
VALVE, PRESSURE RELIEF AND SUSTAINING	For Water Main Pressure Reducing and Sustaining, 100mm (4") thru 400mm (16"). Full Submittal Required.	Cla-Val 50-01 Cla-Val 650-01		
VAULT ACCESS DOOR, ALUMINUM	Aluminum Vault Access Door, Dual Door Configuration, Spring Loaded and Counter Balanced, with Inset for Padlock. H-10 Parkway or H-20 Street Loading Required. Full Submittal Required.	Bilco Type JD-AL USF Fabrication THS, THD Halliday Products		
VAULT LADDER EXTENSION	Vault Ladder Extension, Retractable, 1,200mm (48") Extension. Full Submittal Required.	Bilco Ladder-Up Pipeline Products VL-100 Halliday Products		

Item	Description	Manufacturer	Selection	Comments
VAULT LADDER, ALUMINUM	High Strength 6061-T6 Aluminum Alloy, 25mm (1") Diameter Solid Rungs and 450mm (18") Between Side Rails. Ladder to Exceed Requirements of CAL/OSHA Standards.	Alaco Model 560 Halliday Products		
VAULT LADDER, FIBERGLASS	Fiberglass Reinforced Plastic, 25mm (1") Solid Square Rungs with Grit Safety Surface, Ultraviolet Inhibitors. 42 KPa (30,000 PSI) Tensile Strength with a 3 to 1 Safety Factor per OSHA Requirements. Full Submittal Required.			NOT USED BY DISTRICT
VAULT, FIBERGLASS REINFORCED PLASTIC (FRP)	For Meter Sizes 75mm (3") and Larger. 1.82m Long x 1.2m Wide x 1.5m Deep (6' x 4' x 5'). FRP Construction, Minimum H-10 Parkway Loading with Reinforced Plastic Concrete or Aluminum Access Door. See Section 06620. Full Submittal Required.	Armorcast A6001506AMTF		NOT USED BY DISTRICT
VAULT, PRECAST CONCRETE	For Pressure Reducing Stations, Reservoir Altitude Valves, etc. Various Sizes. Precast Base, Sections and Top with Aluminum Two Leaf Access Door. See Section 03462. Full Submittal Required.	Brooks J & R San Diego Precast Utility Vault Christy		
WATER TEST STATION ENCLOSURE	12 Gauge Steel, 200mm (8") x 1200mm (48"), Single Lockable Door, Powder Polyester Coated. Potable Water Color: beige, and green Recycled Water Color: OSHA Safety Purple.	Pipeline Products WTS-1200		0933-XX-XX Item Number Series
WIRE, CATHODIC	Stranded Copper, 600 Volt Rated Insulation, 2.08mm (7/64") Thick High Molecular Weight Polyethylene (HMW/PE) Insulation Jacket. Use the Wire Sizes and Insulation Jacket Colors of Wire as Required in Section 13110 and on the Standard Drawings.			
WIRE, TRACER	#10 AWG Solid Copper UF Type Wire, with Cross Linked Polyethylene Insulation. White or Yellow in Color.	Cosberg Industries Paige Baron		

Item	Description	Manufacturer	Selection	Comments
WIRE, TRACER	Direct Bury Silicone-Filled Capsule Tube with	3M DBR-6		
CONNECTOR	Standard Wire Nut or Silicone-Filled Wire Nut	King 4		
	Connectors for Tracer Wire Connections.	King 5		
		King 6		