

VALLEY CENTER MUNICIPAL WATER DISTRICT
APPROVED MATERIALS LIST

Last Update August 2022

Alternatives not listed will be considered upon request

SIZE	DESCRIPTION	MANUFACTURER & MODEL NUMBER	NOTES
CORPORATION STOPS			
¾" and 1"	MIP x COMP Comp ball corp stop	Ford: FB 1100-Q-NL Series AY McDonald: 74704-BQ Jones E-1935SG Mueller B-25028-N	Lead Free
1 ½" and 2"	MIP x FIP	Ford: FB 1700-7 AY McDonald: 73149-B	Lead Free
ANGLE METER STOPS			
1"	CTS ball angle meter stop	Ford: BA43-444WQ AY McDonald: 74602-BQ	Lead Free
1.5"	FIP x flg. ball angle meter stop*	Ford: BFA13-77W AY McDonald: 76101-MW	With elongated holes Lead Free
2"	FIP x flg. ball angle meter stop*	Ford: BFA13-77W AY McDonald: 76101-MW	With elongated holes Lead Free
STRAIGHT METER STOPS			
1" and ¾"	FNPT x ball straight meter stop	Ford: B13-xxxW-NL AY McDonald: 76101MW Mueller: B24351N	Lead Free
¾"	FNPT x ball straight meter stop	Jones: E2021WSG	Lead Free
ADAPTERS			
¾" and 1"	MIP x COMP adapter	Ford: C84-44QNL & C84-77QNL McDonald: 74753Q Jones E-2605SG	Lead Free
1 ½", 2", 3"	MIP x SWT		Lead Free provide Lead free Ceretificaiton Information
3" and up	Companion Flg x FIP		
4" and up	FLG x Push on adapter or MJ	Star Tyler	Transition from flange to plain end DIP or PVC

SADDLES			
1", 2", 3" IPT outlet	ACP, DIP	Jones: J-979 McDonald: 3826	Bronze body w/bronze double straps, 250 psi rating
1", 2", 3" IPT outlet	PVC C900 & C909	250psi rating: Ford: 202BS, AY McDonald: 3846 150psi or less rating: Jones J-969	Saddle used based on design pressure of system.
COUPLINGS			
1" & below	COMP x COMP	Ford Jones AY McDonald	Used on copper tubing where shown or approved by District only
1 1/2" & 2"	SWT X SWT	EPC	Used on copper where shown or approved by District only
1 1/2" & 2"	FIP x FIP	Ford Jones AY McDonald	Used on brass nipples where shown or approved by District only
4" & above	MJ x MJ barrel	Star Tyler	Join plain end DIP and PVC, using MJ glands, restrained where req'd
4" & above	Closure/repair/transition*	Romac: XR501 Macro HP	ACP/DIP/PVC/Steel To be used only where shown or approved by district
4" & above	Deflection coupling	North American Specialty Product	Use at 80% of manufactures recommendation limits
* Submittal Required			
COPPER TUBING			
1" & above	Type "K" soft	Cerro Cambridge-Lee Mueller	1" rolled tubing, 2" and above seamless straight. Provide lead free certification information
SMALL FITTINGS			
1" & below	45 & 90 ELL FIP X COMP		
1" & below	45 & 90 ELL COMP X COMP		

1", 1½", 2", 3"	45 & 90 ELL SWT X SWT	EPC	Provide lead free information certification
1"- 3"	Brass nipples	Varying lengths	As shown/ Provide lead free information certification

PLUG VALVES			
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3"	3" water service plug valve	Flowserve Nordstrom two bolt cover type	200psi rating
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GATE VALVES*			
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1" – 3"	Non rising stem, 125lb threads, single wedge, bronz hand wheel	Nibco T-113-LF	300psi rating No Lead
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4" - 14"	All ductile iron body and bonnet, resilient wedge with factory epoxy with 316 SS or bronze stem, flanged ends. Holiday free.	AVK, Clow, Mueller, AFC	* AWWA C-515 * Mfr date within one year of installation 250PSI rating
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*Submittal required

BUTTERFLY VALVES*			
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16" and larger	All flanged, ductile iron body, rubber in the body, with factory epoxy inside. Flanged ends. Holiday free	Pratt, Dezurik	* AWWA C-504 * Mfr date within one year of installation
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*Submittal Required

COMBINATION AIR AND VACUUM VALVES			
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1" and 2"	**	Dezurik - 9542898 & 9625863 Apco – 143C.2 & 145C.2 Cla Val Series 33A	Encl: Pipeline Prod. #VCAS 1830 TN w/Blue or Purple 1" wide Band
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Submittal Required

AUTOMATIC CONTROL VALVES			
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		Cla-Val	
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DETECTOR CHECK VALVES*			
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2" - 10"	Valves to be OS&Y	Cla-Val, Febco, Wilkins, Watts, Ames, Conbraco (bypass meter by District)	Double Check Detector Assembly (DCDA)
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*Submittal Required

FIRE HYDRANTS			
Residential Areas	(1) 2 ½" outlet & (1) 4" outlet One piece casting	AVK 24-150-70 & 24062X Clow: 2050 Series	Bronze or cast body, 8 hole, 7/8" drilling, DI or plastic caps and chains, factory fusion bonded epoxy coated
Commercial Areas	(2) 2 ½" outlets & (1) 4" outlet	Clow AVK	Bronze, 8 hole, 7/8" drilling, DI or plastic caps and chains
Industrial Areas	(1) 2 ½" outlet & (2) 4" outlets	Clow AVK	Bronze, 8 hole, 7/8" drilling, DI or plastic caps and chains
All	Fire Hydrant Check Valve	AVK: Flowguard II	Required on all hydrants
All	DI Bury Ells, Flg(8 hole) Push on or MJ (Push on Preferred)	Clow Sigma South Bay Foundry	Long radius
All	Fire Hydrant Spools, 8 hole, no break off score, Ductile Iron	Clow Sigma South Bay Foundry Custom Pipe & Coupling Inc.	Length TBD in field
METER BOXES			
1" and 3/4" Meter	Plastic #4 ½ 12"x20"x12"	Carson 1220, T lid Black Lid for potable Purple Lid for Recycled	In landscaped areas, outside of traffic areas
	Polymer Concrete #5 ¼ 13" x 24" x 12"	Armorcast B-30 Flared Wall	In traffic areas
2" Meter	Plastic #6B (20K) 17"x30"x12"	Carson 1730 / RPM Cover W / 2 Touch Read Holes and Magnets	In landscaped areas, outside of traffic areas
	Polymer Concrete #6B (20K) 17"x30"x12"	Armorcast B-36	In traffic areas
TAPPING CONNECTIONS			
Reducing Taps on 6" and above, ACP, PVC, DIP	Fabricated steel with fusion epoxy or stainless steel. S.S. nuts and bolts.	Smith-Blair: #622 Mueller MJ: H-619 – ACP Mueller MJ: H615 (Size on Size) Romac: FTS420 <200psi FTS421 > 200psi Smith-Blair: #665 Powerseal: #3490AS	SS plug for test port, used in hot tap applications

Reducing Taps on 6" and above, STEEL	Fabricated full wrap nozzles	ASTM A-53B ¼" minimum thickness, mortar lined and coated with AWWA C207 flange	150lb Flange face w/test port, used in hot tap application
Service Connections on 6" and above, Steel	Half couplings	ASTM A105, 3000# NPT Threads	1"-3" service connections.

FITTINGS

PVC/DIP Size as specified	Ductile Iron, double-cement lined, C110* or C153* Push on Preferred	Star, Union Foundry, Sigma	Use restrained glands where specified on plan.
	Joint Restraints* Split Serrated Type Preferred	Star Pipe Products Romac Sigma EBAA IRON	FBE coating, zinc-plated bolts. Bolts no-oxide greased.
PVC	Bell/Spigot Restraints* Split Serrated Type Preferred	Star 1100G2C serrated clamps/bars EBAA Series 1900	For bells/spigots where joints restraints req'd per plans

* Submittal Required

WATER DISTRIBUTION PIPE

	Ductile Iron Pipe (DIP)*	American Pipe US Pipe	Pressure class and type per approved plans/submittals
	Polyvinyl Chloride (PVC)*	Diamond Plastics JM Eagle North American Pipe (Westlakepipe) VinylTech	Pressure class and type per approved plans/submittals

* Submittal Required

MISCELLANEOUS

	Water Valve Lid & Frame	Southbay Foundry 1208N PIP SDR 41 C1100 risers	Lids coated per color code in W-25
	Sewer Cleanout	Southbay Foundry 1257, marked VCMWD Sewer, 14" Dia SCH 40 riser	
	Pipe assembly lube	Phoenix 505 Duck butter	NSF 61 certified

	Tracer wire and 3M DBY-6 Direct Bury Splice Kit (600 Volts)	Use solid single strand wire	12 ga. Blue for water White for Sewer
	Bolts	Flanged conn: A307-A zinc coated and A307 nuts Mech Joint bolts/nuts: factory steel	Coated with No Ox Grease
	Anti – Seize Compound	Loctite Never Seize	Used on all SS bolts and Carbon Steel Bolts
	Gaskets	Tripac, ITP, Pacific Coast Bolts	Ring – under 200psi Full face – above 200psi
	Valve Stem Extensions	Pipeline Products SX-906 or equal	Galvanized
	Pipe Encasement Wrap	12mil polyethylene sleeve w/10mil tape 8mil thick polyethylene w/10mil tape	Used on buried valves, fittings, pipe Potable: Clear Purple Recycled Sewer Green
	Buried Protectant	NO-OX Grease Henry’s 208	Used on underground fitting, valves, etc.
	Warning Tape	6” metallic, detectable Northtown Hytech	Use appropriate markings for fluid type(potable, recycled, sewer)
	Air Vac/Blowoff Enclosures	Pipeline Prod. #VCAS 1830 TN w/Blue or Purple 1” wide Band	TN w/Blue or Purple or Yellow 1” wide Band
	Blowoff wharf head	Jones J342	Size per plans
	Water Sampling Enclosure	Armorcast P6002010-Hinged	
	Paint	Fire Hydrant: Sunburst yellow Bollards: Sunburst yellow Valve can lids: See W-25 Air Vac head: Aluminum Blowoff: Sunburst yellow	Rustoleum
	Concrete	Superior, Robertsons, Mar-Con	
	Pipe Hanger and Pipe Support	KUMAR	
	Casing Spacers and End Seals	Advanced Products and Systems SSI8- 030616 CCI Pipeline Systems Model CSS8 CALPICO Model M-Series	

NOTES:

1. All materials listed shall be installed in accordance with Project Plans and Specification.
2. All materials shall be approved and inspected prior to installation.
3. All materials shall be utilized only within the pressure rating of the device.
4. Multiple manufacturers for one type of material can be submitted and will be reviewed as equals. Once chosen, manufacturer must stay consistent throughout the project.
5. All valves shall have factory applied fusion bonded epoxy as follows: gate valves, inside and out; BFV, inside; plug valves, inside.
6. 1" shall be the minimum size water service installed, unless otherwise noted.
7. All brass fittings shall be labeled lead free.
8. All nuts and bolts for service saddles shall be brass, except for PVC saddles, use SS.
9. All corporation stops and angle meter stops shall be full port ball, regardless of pressure class.
10. For PVC pipe, deflection shall be no more than 80% of manufacturer's recommendation.