9. Construction Activities

DIABLO WATER DISTRICT STANDARD SPECIFICATIONS AND DRAWINGS

CONSTRUCTION ACTIVITIES

- I. Construction Sequence and Requirements
- II. Construction Submittal Checklist

DIABLO WATER DISTRICT (925) 625-2112

Sequence and Specifications to Work on DWD Facilities but Not Limited to the Following:

- 1. Before the start of a Job or Subdivision:
 - a) Agreement in place.
 - b) Insurance in place.
 - c) Contractor to be approved by DWD.
 - d) 4 sets fully signed plans.
 - e) Phone Numbers day time & emergency (after hours):
 - 1) Foreman and/or Superintendent
 - 2) Safety Officer
 - 3) Any other needed to complete job.
 - f) Safety officer is on location at all times.
 - g) Cathodic soils test results.
 - h) Cathodic plans and design if needed.
 - i) All submittals complete.
 - j) All materials checked on location by the contractor.
 - After materials have been received and checked by the contractor, the contractor shall notify DWD representative that the proper materials have been delivered. DWD representative will inspect the same at earliest convenience.
 - k) Spec book, plans, and approved submittals shall be on location at all times.
 - I) All services hand tapped (no power drills).
 - m) Joint Trench under or re-routed around water utilities, inform Inspector of any problems.

- n) Diablo Water District must receive written request to work outside of Diablo Water District's regular work hours Monday Friday, 8:00 a.m. 4:30 p.m. Requests will be received no later than Wednesday @ 4:30 p.m. for work on Saturday no holiday work or 3 day weekend work is allowed. Please fax your request to Wayne Weaver at 925-625-1803 and 925-625-0814.
- 2. Testing sequence after jumper is installed and tested.
 - a) 1st pressure test before rock and after sufficient backfill (as determined by DWD employee).
 - b) 2nd pressure test after rock (90%), curb & gutter & sidewalks poured, services cut down, boxes installed (on 2 x 4 redwood).
 - c) Final lift of paving shall occur after 2nd pressure test.
 - Bacteria testing (no coliforms and < 50 background). See Section 02675 of DWD Standard Specifications.
 - 1) Cl2 (50 ppm) in system min. of 24 hours (best 48+ hours).
 - 2) Flush (min. 24 hours set time after flush).
 - 3) Bacteria samples taken (approx. 24 hours before results are available).
- 3. After bacteria test passes:
 - a) Install meter(s) before any tie-ins are made or be in the process of installation.
 - b) Jumper and/or plates to be pulled within 14 days or new bacteria samples to be taken.
 - c) House services can now be connected.
 - d) Tamper tags to be installed by Contractor/Developer.
 - e) Tie-in bacteria test will be taken.
- 4. Before job acceptance:
 - a) Job must be completed.
 - b) Submit GIS location records of all new water line features, including cathodic protection features, per DWD General Requirements Section 1.06.

Sequence and Specifications to Work on DWD Facilities Page 3

- c) As-built plan Mylars to DWD (suggest blue line as-builts first).
- d) Cathodic protection (if needed):
 - 1) Tested and certified by registered engineer.
 - 2) As-built Mylars (suggest blue lines first).
- DWD will asses a time frame for <u>all</u> punch list items to be completed. If not
 completed at designated time, the District will do so or have done by others after
 contacting the bonding company.

DWD will increase the deposit to cover the estimated punch list items. The deposit shall be refunded if the punch list is completed to the District's satisfaction within the stated time frame.



DIABLO WATER DISTRICT

87 Carol Lane, P. O. Box 127 Oakley, CA 94561 925-625-3798 Phone 925-625-0814 Fax

SUBMITTAL LOG TRANSMITTAL

To be completed by Contractor and sent to Diablo Water District with Submittals			
	DATE:		
SUBDIVISION OR PROJECT:			
CONTRACTOR SUBMITTING	:		
CONTACT:	PHONE NUMBER:		
Please choose one of the following	ng options:		
☐ First Submittal – Please top right corner of each pa	put the corresponding Submittal Number in the age for identification.		
☐ Second Submittal — Please Number being re-submitted	se add a letter "A" extension to each Submittal ed.		
☐ Third Submittal — Please Number being re-submitte	e add a letter "B" extension to each Submittal ed.		
☐ Fourth Submittal — Please Number being re-submitted	se add a letter "C" extension to each Submittal ed.		
☐ Fifth Submittal — Please Number being re-submitte	add a letter "D" extension to each Submittal ed.		
**Please submit two hard copic	es of the submittals to our office.		
_			
]	To be completed by DWD		
Diablo Water District's Commer	nts: (see attached DWD Master Submittal Log)		
	DWD's Return Date:		
☐ Submittals Approved			
☐ See Attached for Corre	ections Needed		

SUBDIVISION OR PROJECT:	
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ACTION SUMMARY:

- A: No exceptions taken. OK to use product.
- B: Make corrections noted. Can use product provided comments are followed.C: Revise and Resubmit. Do not use product until further information is provided.
- D: Rejected. Do not use product. Submit on different product.
- E: Submittal required but not received from Contractor.

1 02231-2.01.A 2 02231-2.01.D 3 02512	DWD 5	Bore and Jack Casing Bore and Jack Insulators: Calpico Model W / Williamson M-2, stainless steel bands and hardware Double Offset: Minimum I.D. shall be nominal	BY DWD	CONTRACTOR	ACTION
2 02231-2.01.D 3 02512	DWD 5	Bore and Jack Insulators: Calpico Model W / Williamson M-2, stainless steel bands and hardware Double Offset:			
3 02512	DWD 6	Calpico Model W / Williamson M-2, stainless steel bands and hardware Double Offset:			
3 02512	DWD 6	Calpico Model W / Williamson M-2, stainless steel bands and hardware Double Offset:			
		steel bands and hardware Double Offset:			
		Double Offset:			
	DWD 7	Minimum I.D. shall be nominal			
	DWD 7				
4 02512	וטאט	Include Size Single Offset:			
4 02312		Minimum I.D. shall be nominal			
		Include Size			
5 02610-2.01.A		Ductile Iron Pipe:			
		U.S. Pipe / American Cast Iron / Clow			
6 02610-2.01.B		Pacific States or Approved Equal Flanged Coupling Adapters:		+	
0 02010-2.01.B		Smith-Blair Type 913 with EPDM gaskets			
		or Approved Equal			
7 02610-2.01.B		Sleeve/Mechanical Couplings for Ductile Iron Pipe:			
		Dresser 38 or 138, EPDM gaskets			
8 02610-2.01.B&C		Push on Ductile Iron Pipe Fittings:			
02620-2.02.E		Sigma / Tyler / Star			
9 02610-2.01.B&C 02620-2.02.E		MJ Ductile Iron Pipe Fittings: Star / Sigma / Tyler			
02620-2.02.E		Star / Sigma / Tyler			
10 02610-2.01.B&C		Flanged Ductile Iron Pipe Fittings:			
02620-2.02.E		Sigma / Tyler / Star			
44 00040 0 04 0		Leaking lainte for Duetile less Dine.			
11 02610-2.01.C		Locking Joints for Ductile Iron Pipe: Field Lok 350 by U.S. Pipe Fitting			
		Tiold Lok odd by O.O. Tipe Titting			
12 02620-2.02.D		C900 PVC Pipe:			
		Vinyl Tech / Diamond / Royal Group			
13 02620-2.03.A	DWD 1	or North American No. 12 Copper Detection Wire:			
13 02020-2.03.A	ו טייט	Solid with blue insulation			
14 02620-2.03.B	DWD 1	Plastic Warning Tape:			
		Blue, minimum 2-inch			
15 02620-2.03.C		Sleeve/Mechanical Couplings for PVC Pipe:		-	
32323 2.30.0		Dresser 253, long style, EPDM gaskets			
16 02675		Disinfection Test Plan			
17 02830-Part 2 D	DWD 14	Fence Materials			

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SUBMITTAL NUMBER	SPECIFICATION	DRAWING	DESCRIPTION	RECEIVED BY DWD	RETURNED TO CONTRACTOR	ACTION
18	15100-2.03.E	DWD 15 DWD 17	Gate Valves: Mueller with stainless steel trim and hardware			
19	15100-2.04. H & J	DWD 19	Butterfly Valves: Mueller Lineseal III Class 150B, no equal certified with serial number, Interior with EPDM rubber seat			
20	15100-2.05.C		Ball Valves: Watts Series B-6000/Mueller B20200 Must be Lead Free			
21	15100-2.06.A		Insulating Fittings: Watts Regulator Co.			
22	15100-2.07.A	DWD 15	Fire Hydrants: Clow 960			
23	15100-2.07.B	DWD 15	Hydrant Check Valve and Break Off Spool: Clow LB400			
24	15100-2.07.C	DWD 15	Ductile Iron Hydrant Bury: Sigma or South Bay			
25	15100-2.08.B	DWD 23	ARV: Crispin UL10 / Apco 143C			
26	15100-2.08.B	DWD 23	ARV Screen: Christy 1" FPT #10 or DWD approved equal			
27	15100-2.08.B	DWD 23	Angle Valve for ARV: Mueller B-24258			
28	15100-2.08.B	DWD 23	ARV Concrete Box and Lid: Christy B36 with extension			
29	15100-2.09	DWD 21	Blowoff Piping and Fittings: Brass for 2"			
30	15100-2.09.D	DWD 21	Angle Valve for Blowoff: Mueller B-24286 for 2"			
31	15100-2.10.A		Dielectric Unions and Flange Unions: Epco Inc.			
32	15100-2.10.D		Flanged Coupling Adapters: Dresser Style 127 or 128 / ITT / Baker, stainless steel hardware			
33	15100-2.10.E.4		MJ Joint Restraint: EBAA Iron Megalug			

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NUMBER SPECIFICATION DRAWING DESCRIPTION 34 15100-2.10.E.2 Pipe Restraining Clamp Assemblies:	BY DWD	CONTRACTOR	ACTION
34 15100-2.10.E.2 Pipe Restraining Clamp Assemblies:			ACTION
Stellar Corporation			
35 15100-2.10.F Flange Gaskets:			
or Garlock 3760-U			
02610-2.01.B			
Stainless Steel Boils and Nuts			
37 15100-2.10.F Protective Tape Wrap: 10 Mil Tape			
38 15100-2.10.G DWD 17 G5 Valve Boxes:			
Christy			
Include "Water" on lid 39			
Christy			
Include "CP Test" on lid			
40 15100-2.10.H Tapping Sleeves:			
Up to 18" - JCM 432, all stainless materials and hardware			
Over 18" - Contact DWD			
41 15400-2.01.A&B DWD 8 Up to 1" Copper Service Piping:			
Type K Soft, Polycoated Mueller Streamline			
Over 1" Type K Soft Mueller Streamline 42 Above 1" Copper Service Line Poly Wrap:			
42 Above 1" Copper Service Line Poly Wrap: Blue			
43 15400-2.01.C DWD 8 Service Saddles for PVC Pipe:			
Mueller, cc thread, bronze, wide band			
44 15400-2.01.C DWD 8 Service Saddles for Ductile Iron Pipe: Mueller, cc thread, full circle stainless steel			
45 15400-2.02.A DWD 8 5/8" - 1" Flow Meter:			
Sensus SRII Low Lead flow meter (CF) with			
520M-FlexNet MTX Unit			
45A 15400-2.02.A DWD 8 1-1/2" - 2" Flow Meter:			
Sensus Omni R-2 flow meter (CF) with 520M-FlexNet MTX Unit			
46 15400-2.02.B DWD 8 3" & 4" Flow Meter			
Sensus Omni C2 or T2 meter (CF)			
with 520R-MXU (single port per meter)			
47 DWD 8 Straight Meter Coupling:			
Mueller H-10892 Meter coupling: H1089ON			
48 15400-2.03 DWD 8 Meter Boxes: Lid must read "WATER"			
DWD 9 Christy B-12, B-16, B-30, B-40, or B-44			
Lid for B-12 Box: B12P001-F (FlexNet)			
DWD 10 Lid must incorporate FlexNet 520M			

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SUBMITTAL				RECEIVED RETURNED TO		
NUMBER	SPECIFICATION	DRAWING	DESCRIPTION	BY DWD	CONTRACTOR	ACTION
49	15400-2.03.B	DWD 8 DWD 20	1" Angle Meter Stops: Mueller B-24258			
50	15400-2.03.B	DWD 8	1-1/2" - 2" Angle Meter Stops: Mueller B-24276			
51	15400-2.04 or 16640-1.04.D	DWD 8 DWD C24	1" - 2" Corporation Stops: Mueller B-25008 Metalic water main-Muller insulated corp P# N35008			
52	15400-2.05.B	DWD 10	3/4" - 2" Double Check Valve: Febco 850U Must be Lead Free			
53	15400-2.05.C	DWD 11	3/4" - 2" Reduced Pressure Backflow Preventer: Febco 825YA RP with ball valves			
54	15400-2.05.C		Reduced Pressure Backflow Fittings: Lead Free Brass			
55	15400-2.05.C	DWD 11	Backflow Cage & Freeze Cover sized for device & cage BPDI Guardshack two-piece enclosure hinged, similar to Cage #GSM1 modified per DWD drawing on file with BPDI, powder coated Stainless Steel, Forest Green			
56	15400-2.05.C	DWD 12	2-1/2" - 10" Reduced Pressure Backflow Preventer: Febco 880V N-shape w/Setter			
57	15400-2.05.D	DWD 13	2 1/2" - 10" Double Check Detector Valve: Febco LF876V N-shape w/Setter			
58	16640-1.03 to 1.05		Corrosion Control Design After Rough Grading			
59	16640-Part 2	DWD C1- DWD C29	Corrosion Control Products			
60			Bitumastic			