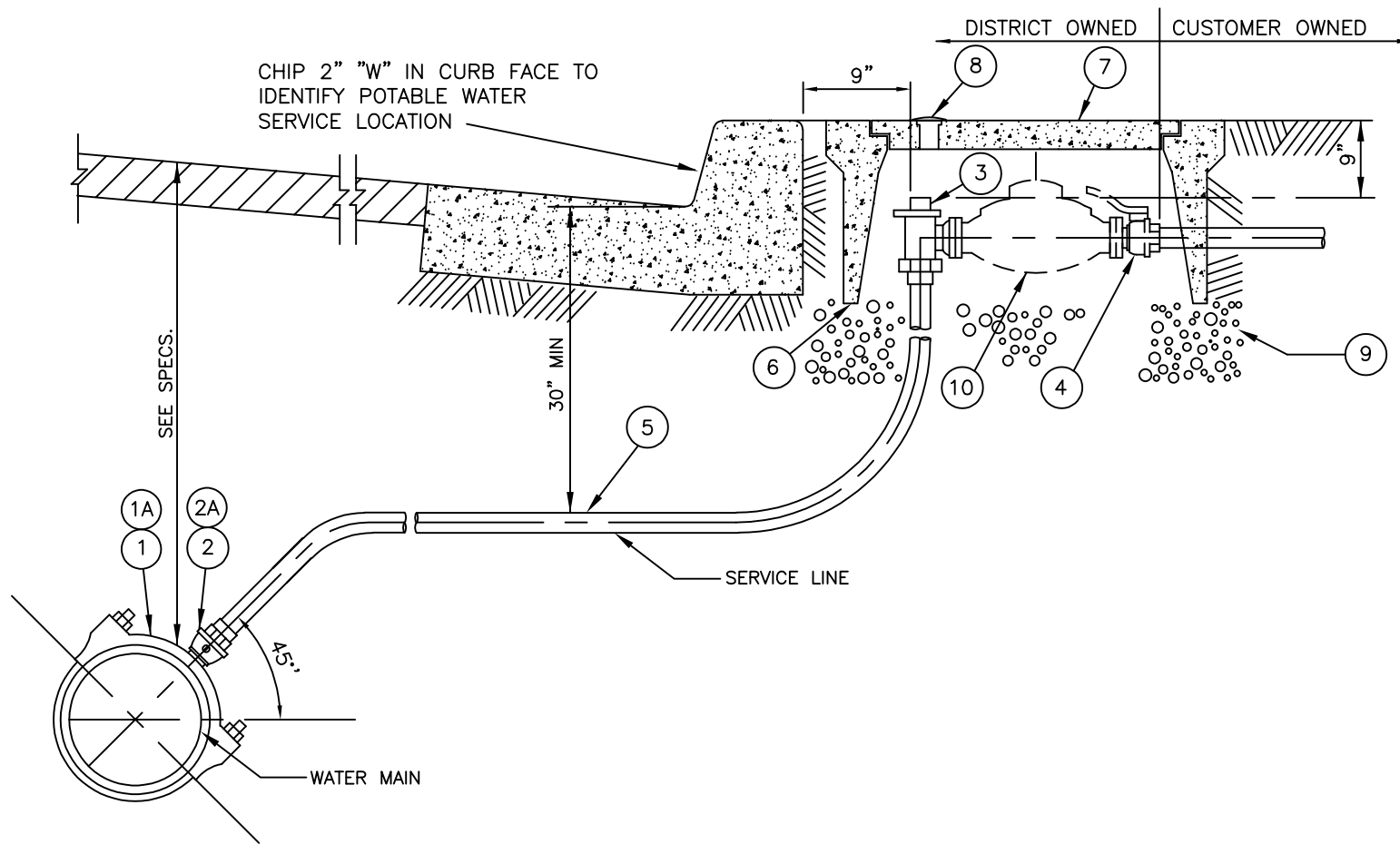


**WATER STANDARD DRAWINGS
TABLE OF CONTENTS**

<u>DRAWING NO.</u>	<u>DESCRIPTION</u>	<u>DATE</u>
W-1	1" COPPER SERVICE INSTALLATION	10/2025
W-1A	1½" COPPER SERVICE INSTALLATION WITH 1" METER	10/2025
W-2	2" COPPER SERVICE INSTALLATION WITH 1½" OR 2" METER	10/2025
W-3	MANIFOLD ASSEMBLY FOR 4 TO 10 1-INCH SERVICES	7/2016
W-4	3" AND 4" TURBINE METER INSTALLATION	10/2024
W-5	6", 8" AND 10" TURBINE METER INSTALLATION	7/2016
W-6	HOT TAP FOR 6", 8", 10", AND 12" MAINS	10/2022
W-7	HOT TAPS FOR MORTAR LINED STEEL CYLINDER	10/2025
W-8	VALVE AND VALVE BOX INSTALLATION	10/2024
W-9	VALVE STEM EXTENSION	10/2025
W-10	1" AND 2" COMBINATION AIR VACUUM – AIR RELEASE VALVE ASSEMBLY	10/2024
W-10A	COMBINATION AIR VACUUM – AIR RELEASE VALVE ASSEMBLY FOR STEEL PIPE	10/2024
W-11	WATER LINE TRENCH SECTION AND BEDDING DETAILS	8/2021
W-12	THRUST BLOCK DETAILS	7/2016
W-13	STEEL CASING PIPE	3/2019
W-14	NOT USED	
W-15	NOT USED	
W-16	DOUBLE CHECK DETECTOR ASSEMBLY WITH BY-PASS METER	7/2022
W-16A	DOUBLE CHECK DETECTOR ASSEMBLY (N-PATTERN) WITH BY-PASS METER	7/2022
W-16B	DOUBLE CHECK DETECTOR ASSEMBLY (VERTICAL) WITH BY-PASS METER	7/2022
W-17	AIR-GAP SEPARATION	7/2016
W-18	REDUCED PRESSURE PRINCIPLE ASSEMBLY	10/2022
W-19	DOUBLE CHECK VALVE ASSEMBLY FOR RESIDENTIAL FIRE PROTECTION SYSTEM	10/2022
W-20	ADJUSTABLE STEEL PIPE SUPPORT	7/2016
W-21	FIRE HYDRANT INSTALLATION	10/2025
W-22	FIRE HYDRANT GUARD POST	7/2016
W-23	REFLECTOR LOCATIONS FOR FIRE HYDRANTS	7/2016
W-24	MORTAR LINED AND COATED STEEL PIPE JOINT DETAILS	7/2016

W-25	MORTAR LINED AND COATED STEEL PIPE CLOSURE AND HANDHOLE DETAILS	7/2016
W-26	WATER QUALITY SAMPLING STATION	12/2022
W-27	DRAIN BLOW-OFF ASSEMBLY	10/2024
W-27A	TEMPORARY DEAD END BLOW-OFF ASSEMBLY	7/2016
W-27B	DEAD END MAIN BLOW-OFF ASSEMBLY	3/2019
W-28	DOOR HATCH ENTRY SWITCH AND INTRUSION SWITCH INSTALLATION DETAIL/PRESSURE TRANSMITTER INSTALLATION DETAIL	7/2016
W-29	VAULT SUMPS	7/2016
W-30	VAULT VENTING	4/2020
W-31	UNDERGROUND UTILITY SUPPORT DETAILS	7/2016
W-32	YLWD STANDARD WATER NOTES	4/2026



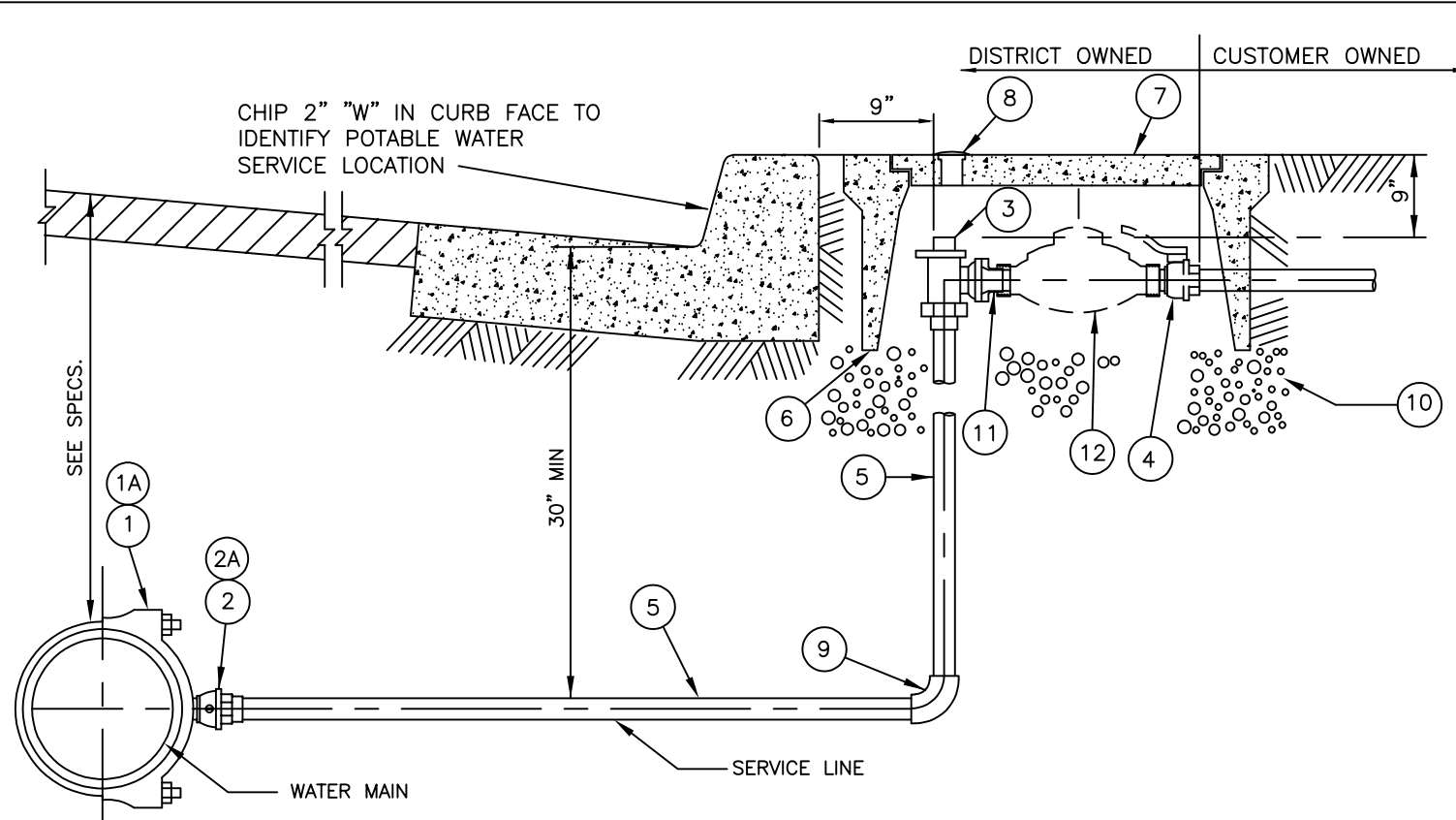
MATERIALS

ITEM NO.	DESCRIPTION	MANUFACTURER	MODEL NO.
①	DOUBLE STRAP SERVICE SADDLE WITH F.I.P. OUTLET (FOR DUCTILE IRON OR ASBESTOS CEMENT PIPE MAINS)	JONES MUELLER FORD	J-979 IP (DI) OR J-969 IP (ACP) BR2B-IP (DI) OR BR2S-IP (ACP) 202B
①A	SERVICE SADDLE WITH F.I.P. OUTLET (FOR C900 PVC PIPE MAIN)	JONES MUELLER FORD	J-969 I.P. H-13490 TO H-13494 S91
②	INSULATED CORPORATION STOP M.I.P. THREAD X COMPRESSION (FOR DUCTILE IRON PIPE MAIN)	MUELLER JONES FORD	P-35028N E-1991 SI-FB1100-4-AWT-Q-NL
②A	CORPORATION STOP M.I.P. THREAD X COMPRESSION (FOR C900 PVC MAIN)	JONES MUELLER FORD	E-1935, E-3403 P-25028 FB1100-4-NL
③	ANGLE METER STOP W/LOCKWING (COMPRESSION TYPE)	JONES MUELLER FORD	E-4201 P-14258 KV43-444W-NL
FOR SYSTEMS OVER 100 PSI WORKING PRESSURE			
		JONES MUELLER FORD	E-1963W P-24258 BA43-444W-NL
④	BRONZE OR BRASS SERVICE VALVE BALL TYPE WITH LEVER HANDLE, METER SWIVEL NUT X F.I.P.	JONES FORD	E-1908W B-13-44W-NL WITH HB-34S HANDLE
⑤	1" COPPER TUBING. SEE NOTE 2.	MUELLER HALSTEAD	COPPER TYPE "K" SOFT
⑥	METER BOX	OLD CASTLE ARMORCAST	FL30D BOX 12" 02006040 A6001946PCX12
⑦	METER BOX LID	OLD CASTLE ARMORCAST	FL30P-SENSUS (20K) LID "WATER" WITH 5/16" PROBE RECESS 02001487 A6001969-H7 FOR USE WITH SENSUS AMR ANTENNA
⑧	SENSUS FLEX NET PROBE (SUPPLIED BY YLWD)	SENSUS	520M
⑨	6" BASE OF 3/4" ROCK		
⑩	1" METER (SUPPLIED BY YLWD)		

NOTES:

- SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 24" OF VALVE, COUPLING, JOINT OR FITTING. DIRECT TAP IS NOT PERMITTED.
- SERVICE SADDLE SHALL BE WRAPPED WITH MIN. 8 MIL P.E. ENCASMENT AND COPPER TUBING SHALL BE ENCASED WITH MIN. 6 MIL P.E. SLEEVE OR TAPE WRAPPED. SEE YLWD STD. SPEC. SECTION 15057.
- INSTALL CORPORATION STOP WITH KEY SIDEWAYS IN OPEN POSITION.
- SET TOP OF METER BOX FLUSH WITH SIDEWALK OR CURB AS SHOWN.
- THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
- NO SPLICES ARE ALLOWED ON NEW OR EXISTING SERVICES.
- SERVICE VALVE IS REQUIRED ON DOWNSTREAM SIDE OF METER. METER IS INSTALLED BY THE DISTRICT.
- BORINGS ARE NOT ALLOWED FOR SERVICE INSTALLATIONS.
- ALL BRASS MATERIAL SHALL CONFORM TO ANSI/AWWA C800 WITH A MAX. LEAD CONTENT OF 0.25% BY AVERAGE WEIGHT.
- METER SHALL BE SAME SIZE AS SERVICE LINE.
- SERVICE SHALL BE BACKFILLED WITH SAND PER YLWD STD. SPEC. SECTION 02223, MIN. 6" BELOW AND ABOVE SERVICE. MIN. TRENCH WIDTH SHALL BE 24".
- WATER SERVICES SHALL BE INSTALLED A MIN. 3' APART WHEN ON THE SAME SIDE OF THE WATER MAIN AND 1.5' WHEN ON THE OPPOSITE SIDE OF THE WATER MAIN.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE:10/2025		1" COPPER SERVICE INSTALLATION	W-1
			SHEET 1 OF 1

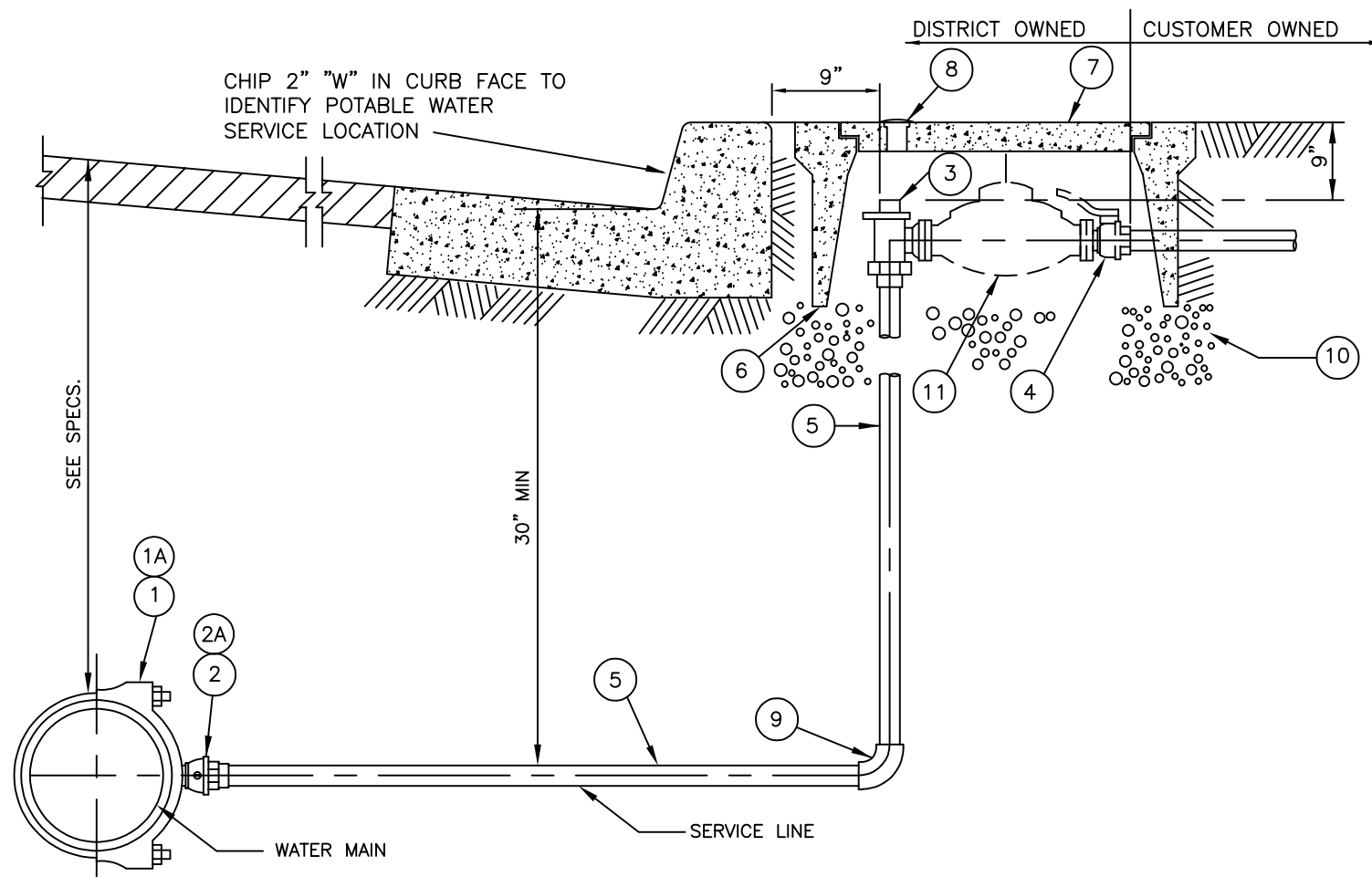


NOTES:

1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 24" OF VALVE, COUPLING, JOINT OR FITTING. DIRECT TAP IS NOT PERMITTED.
2. SERVICE SADDLE SHALL BE WRAPPED WITH MIN. 8 MIL P.E. ENCASEMENT AND COPPER TUBING SHALL BE ENCASED WITH MIN. 6 MIL P.E. SLEEVE OR TAPE WRAPPED. SEE YLWD STD. SPEC. SECTION 15057.
3. INSTALL CORPORATION STOP WITH KEY SIDEWAYS IN OPEN POSITION.
4. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR CURB AS SHOWN.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
6. NO SPLICES ARE ALLOWED ON NEW OR EXISTING SERVICES EXCEPT WHEN SERVICE LENGTH EXCEEDS 20 FEET.
7. SERVICE VALVE IS REQUIRED ON DOWNSTREAM SIDE OF METER. METER IS INSTALLED BY THE DISTRICT.
8. BORINGS ARE NOT ALLOWED FOR SERVICE INSTALLATIONS.
9. ALL BRASS MATERIAL SHALL CONFORM TO ANSI/AWWA C800 WITH A MAX. LEAD CONTENT OF 0.25% BY AVERAGE WEIGHT.
10. ALL COMPRESSION FITTINGS SHALL BE PACK JOINT TYPE WITH SET SCREW.
11. ALTERNATIVE PARTS AND MEANS OF CONNECTION ARE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEERING MANAGER.
12. REPAIR SADDLE MAY BE USED FOR ASBESTOS CEMENT PIPE WHEN UPSIZING AN EXISTING SERVICE LINE.
13. SERVICE SHALL BE BACKFILLED WITH SAND PER YLWD STD. SPEC. SECTION 02223, MIN. 6" BELOW AND ABOVE SERVICE. MIN. TRENCH WIDTH SHALL BE 24".
14. WATER SERVICES SHALL BE INSTALLED A MIN. 3' APART WHEN ON THE SAME SIDE OF THE WATER MAIN AND 1.5' WHEN ON THE OPPOSITE SIDE OF THE WATER MAIN.


ITEM NO.	DESCRIPTION	MATERIALS	MANUFACTURER	MODEL. NO.
①	DOUBLE STRAP SERVICE SADDLE WITH 1-1/2" F.I.P. OUTLET (FOR DUCTILE IRON OR ASBESTOS CEMENT PIPE MAINS)		JONES MUELLER FORD	J-979 IP (DI) OR J-969 IP (ACP) BR2B-IP (DI) OR BR2S-IP (ACP) 202B
①A	SERVICE SADDLE WITH 1-1/2" F.I.P. OUTLET (FOR C900 PVC PIPE MAIN)		JONES MUELLER FORD	J-996 IP H-13490 TO H-13494 S91
②	1-1/2" INSULATED CORPORATION STOP M.I.P. THREAD X COMPRESSION (FOR DUCTILE IRON, CAST IRON, AND STEEL PIPE MAINS)		FORD	SI-FB1100-6-AWT-Q-NL
②A	1-1/2" CORPORATION STOP M.I.P. THREAD X COMPRESSION (FOR C900 PVC AND ASBESTOS CEMENT PIPE MAINS)		JONES MUELLER FORD	E-1935 P-25028N FB-1100-6-NL
③	1-1/2" ANGLE METER STOP W/ LOCKWING (COMPRESSION TYPE)		JONES MUELLER FORD	E-4205 P-14277N FV43-666W-NL
④	1" BRONZE OR BRASS SERVICE VALVE BALL TYPE WITH LEVER HANDLE, METER FLANGE X F.I.P.		JONES FORD MUELLER	E-1908W WITH J-2813 HANDLE B13-444W-NL WITH HB-34S HANDLE B-24351N WITH B-20298-99000 HANDLE
⑤	1-1/2" COPPER PIPE. SEE NOTE 2.		MUELLER HALSTEAD	COPPER TYPE "K"
⑥	METER BOX		OLD CASTLE ARMORCAST	FL30 BOX 12" 02006040 A6001946PCX12
⑦	METER BOX LID		OLD CASTLE ARMORCAST	FL30P-SENSUS (20K) LID "WATER" WITH 5/16" PROBE RECESS 02001487 A6001969T-H7 FOR USE WITH SENSUS AMR ANTENNA
⑧	SENSUS FLEX NET PROBE (SUPPLIED BY YLWD)		SENSUS	520M
⑨	90° COMPRESSION BRASS FITTING W/ M.I.P. X COMPRESSION ADAPTERS			
⑩	6" BASE OF 3/4" ROCK			
⑪	1-1/2" X 1" METER ADAPTER METER FLANGE X METER SWIVEL NUT		A.Y. MCDONALD MUELLER FORD	710J46 H-10879 336N A46-NL
⑫	1" METER (SUPPLIED BY YLWD)			

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT		STD. DWG.
DATE: 10/2025		1-1/2" COPPER SERVICE INSTALLATION WITH 1" METER		W-1A
				SHEET 1 OF 1




NOTES:

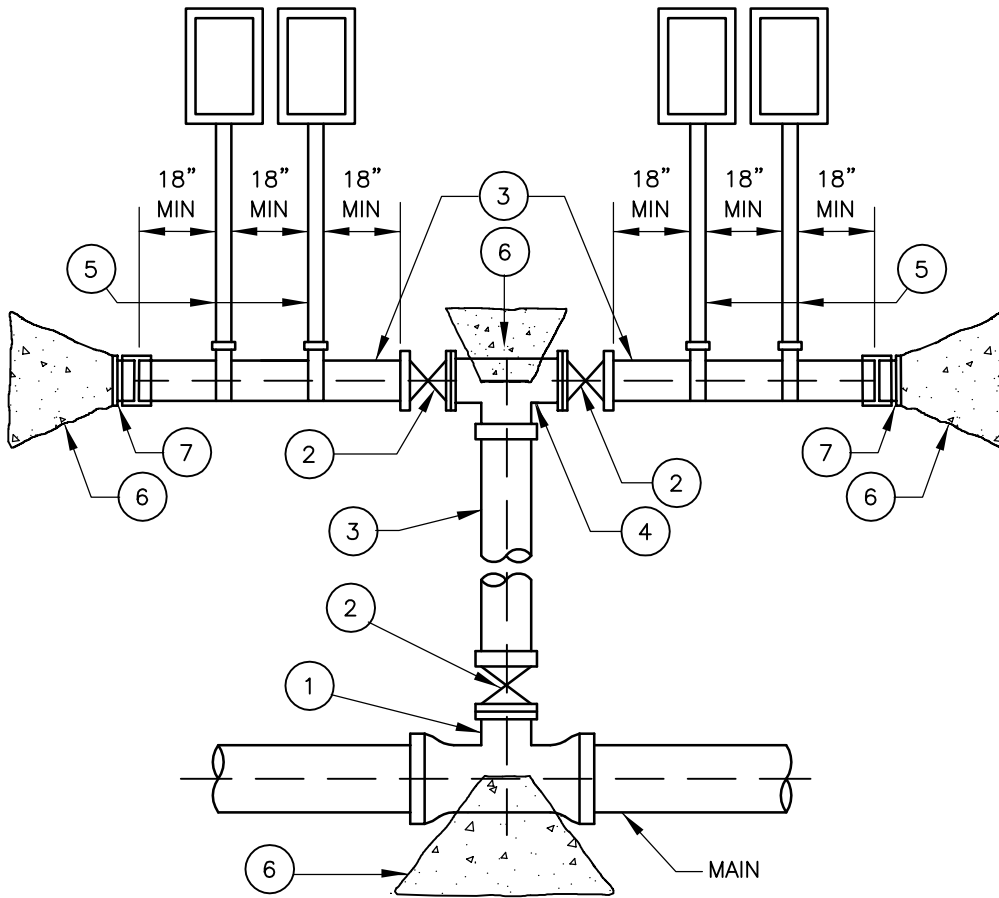
1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 24" OF VALVE, COUPLING, JOINT OR FITTING. DIRECT TAP IS NOT PERMITTED.
2. SERVICE SADDLE SHALL BE WRAPPED WITH MIN. 8 MIL P.E. ENCASUREMENT AND COPPER TUBING SHALL BE ENCASED WITH MIN. 6 MIL P.E. SLEEVE OR TAPE WRAPPED. SEE YLWD STD. SPEC. SECTION 15057.
3. INSTALL CORPORATION STOP WITH KEY SIDEWAYS IN OPEN POSITION.
4. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR CURB AS SHOWN.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
6. NO SPLICES ARE ALLOWED ON NEW OR EXISTING SERVICES EXCEPT WHEN SERVICE LENGTH EXCEEDS 20 FEET.
7. SERVICE VALVE IS REQUIRED ON DOWNSTREAM SIDE OF METER. METER IS INSTALLED BY THE DISTRICT.
8. BORINGS ARE NOT ALLOWED FOR SERVICE INSTALLATIONS.
9. ALL BRASS MATERIAL SHALL CONFORM TO ANSI/AWWA C800 WITH A MAX. LEAD CONTENT OF 0.25% BY AVERAGE WEIGHT.
10. ALL COMPRESSION FITTINGS SHALL BE PACK JOINT TYPE WITH SET SCREW.
11. ANGLE METER STOP SHALL BE SAME SIZE AS METER.
12. ALTERNATIVE PARTS AND MEANS OF CONNECTION ARE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEERING MANAGER.
13. REPAIR SADDLE MAY BE USED FOR ASBESTOS CEMENT PIPE WHEN UPSIZING AN EXISTING SERVICE LINE.
14. SERVICE SHALL BE BACKFILLED WITH SAND PER YLWD STD. SPEC. SECTION 02223, MIN. 6" BELOW AND ABOVE SERVICE. MIN. TRENCH WIDTH SHALL BE 24".
15. WATER SERVICES SHALL BE INSTALLED A MIN. 3' APART WHEN ON THE SAME SIDE OF THE WATER MAIN AND 1.5' WHEN ON THE OPPOSITE SIDE OF THE WATER MAIN.
16. SEE SHEET 2 FOR CONSTRUCTION NOTE LIST AND MATERIALS

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 10/2025		2" COPPER SERVICE INSTALLATION WITH 1-1/2" OR 2" METER	W-2
			SHEET 1 OF 2

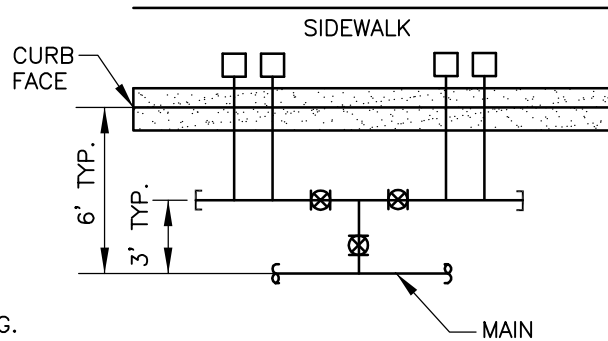
ITEM NO.	DESCRIPTION	MATERIALS	MANUFACTURER	MODEL. NO.
①	DOUBLE STRAP SERVICE SADDLE WITH 2" F.I.P. OUTLET (FOR DUCTILE IRON OR ASBESTOS CEMENT PIPE MAINS)		JONES MUELLER FORD	J-979 IP (DI) OR J-969 IP (ACP) BR2B-IP (DI) OR BR2S-IP (ACP) 202B
①A	SERVICE SADDLE WITH 2" F.I.P. OUTLET (FOR C900 PVC PIPE MAIN)		JONES MUELLER FORD	J-996 IP H-13490 TO H-13494 S91
②	2" INSULATED CORPORATION STOP M.I.P. THREAD X COMPRESSION (FOR DUCTILE IRON, CAST IRON, AND STEEL PIPE MAINS)		MUELLER FORD	N-30046N (2" M.I.P. X F.I.P.) WITH STRAIGHT COUPLING (M.I.P. X P.J.) SI-FB1100-7-AWT-Q-NL
②A	2" CORPORATION STOP M.I.P. THREAD X COMPRESSION (FOR C900 PVC AND ASBESTOS CEMENT PIPE MAINS)		JONES MUELLER FORD	E-1935 P-25028N FB-1100-7-NL
③	1-1/2" OR 2" ANGLE METER STOP W/ LOCKWING (COMPRESSION TYPE) SEE NOTE 12.	FOR 1-1/2" METER	FORD	FV13-676W-NL WITH 2" STRAIGHT COUPLING C84-77-NL (P.J. X M.I.P.)
		JONES		E-1527F WITH MUELLER P-15428N COUPLING (2" P.J. X 1.5" M.I.P.)
		MUELLER		H-14286 WITH MUELLER P-15428N COUPLING (2" P.J. X 1.5" M.I.P.)
		FOR SYSTEMS OVER 100 PSI WORKING PRESSURE	JONES	E-1974W WITH MUELLER P-15428N COUPLING (2" P.J. X 1.5" M.I.P.)
		FORD		BFA13-666W-NL WITH FORD C84-67-NL COUPLING (2" P.J. X 1.5" M.I.P.)
		FOR 2" METER	JONES	E-4205
		MUELLER		P-14277N
		FORD		FV43-777W-NL
		FOR SYSTEMS OVER 100 PSI WORKING PRESSURE	JONES	E-1975W
		MUELLER		P-15428N
		FORD		BFA43-777W-NL
④	BRONZE OR BRASS SERVICE VALVE BALL TYPE WITH LEVER HANDLE, METER FLANGE X F.I.P.		JONES FORD	E-1913WJ BF13-777W-NL BF13-666W-NL WITH HB-67S HANDLE
		MUELLER		B-24337N WITH B-20298-99000 HANDLE
⑤	2" COPPER PIPE. SEE NOTE 2.		MUELLER HALSTEAD	COPPER TYPE "K"
⑥	METER BOX		OLD CASTLE ARMORCAST EISEL ENTERPRISES	FL36 BOX 12" 02006095 A6001640PCX12 666B

ITEM NO.	DESCRIPTION	MATERIALS	MANUFACTURER	MODEL. NO.
⑦	METER BOX LID		OLD CASTLE	FL36P-SENSUS (20K) LID "WATER" WITH 5/16" PROBE RECESS 02001573
			ARMORCAST	A6001947T-H7 FOR USE WITH SENSUS AMR ANTENNA
⑧	SENSUS FLEX NET PROBE (SUPPLIED BY YLWD)		SENSUS	520M
⑨	2" 90° P.J. COMPRESSION BRASS FITTING		JONES MUELLER FORD	E-2611 P-15526N L44-77-NL
⑩	6" BASE OF 3/4" ROCK			
⑪	1-1/2" OR 2" METER (SUPPLIED BY YLWD)			

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 10/2025		2" COPPER SERVICE INSTALLATION WITH 1-1/2" OR 2" METER	W-2
			SHEET 2 OF 2



PLAN



MATERIALS

- ① — D.I. TEE, BELL X BELL X FLG.
- ② — 4" FLG X BELL GATE VALVE
- ③ — 4" PVC
- ④ — D.I. TEE, FLG X FLG X BELL (SHORT BODY MAY BE USED)
- ⑤ — 1" SERVICE INSTALLATION — SEE YLWD STD. DWG. W-1
- ⑥ — THRUST BLOCK — SEE YLWD STD. DWG. W-12
- ⑦ — 4" D.I. END CAP

APPROVED BY
ENGINEERING
MANAGER

DATE
7/2016



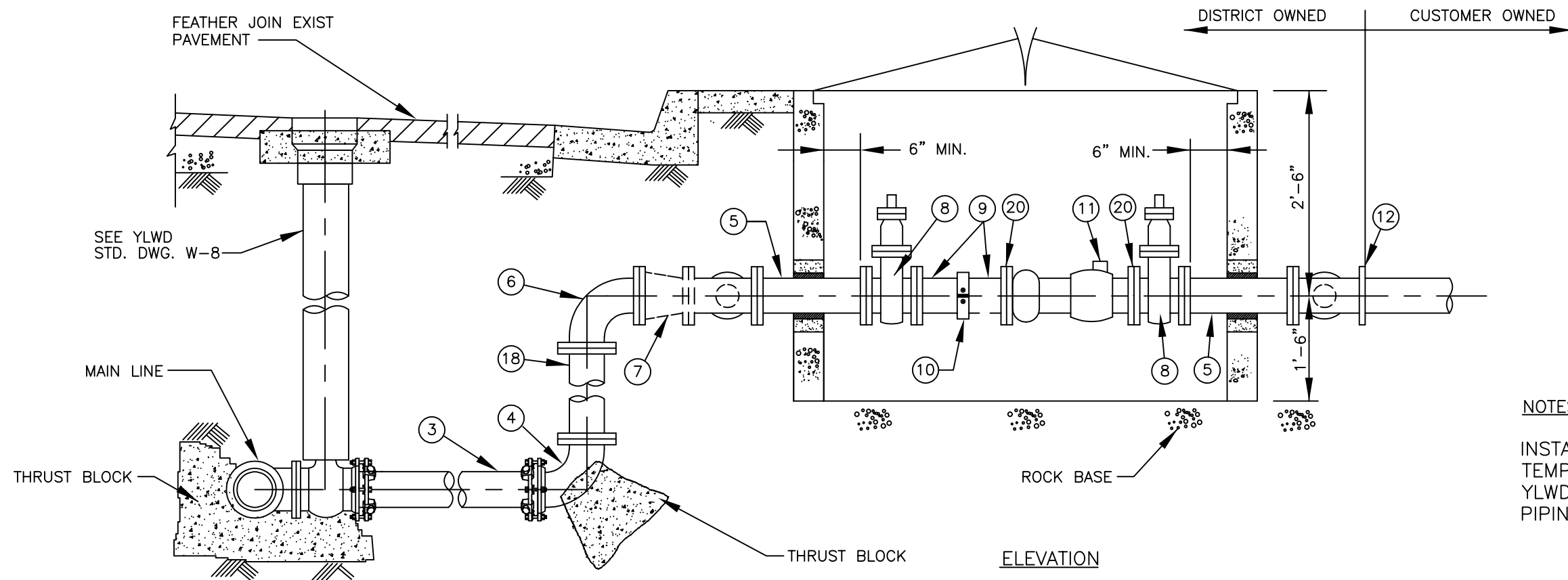
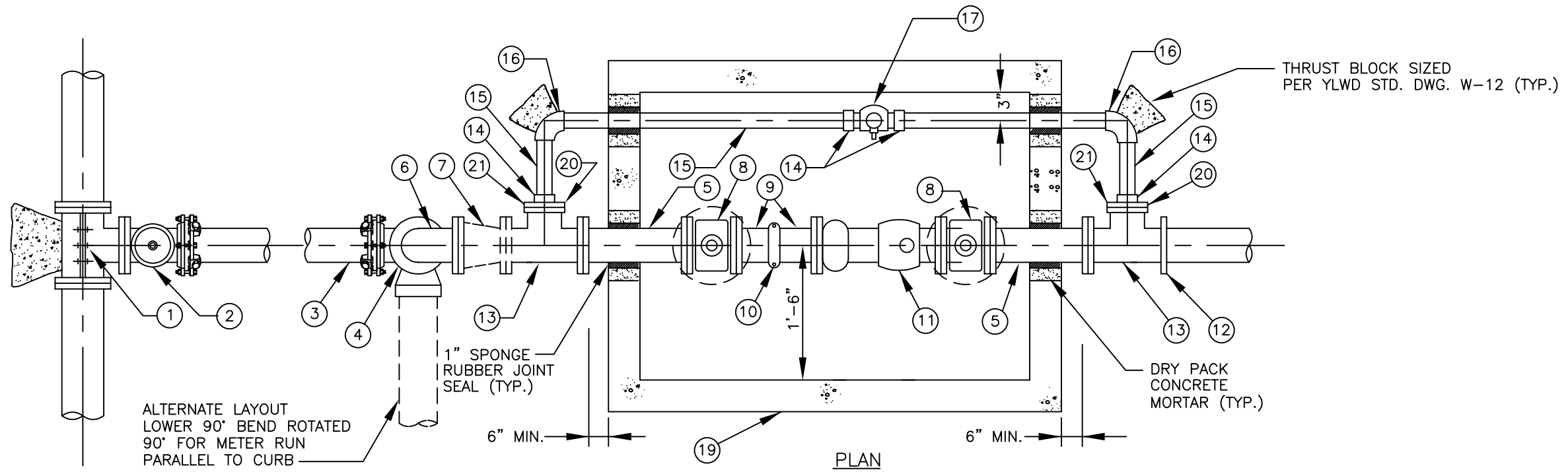
YORBA LINDA WATER DISTRICT

MANIFOLD ASSEMBLY FOR
4 TO 10 1-INCH SERVICES

STD. DWG.

W-3

SHEET 1 OF 1



NOTES:
 INSTALL BLIND FLANGE AND TEMPORARY THRUST BLOCK PER YLWD STD. DWG. W-12 IF ON-SITE PIPING IS NOT CONNECTED

APPROVED BY
 ENGINEERING
 MANAGER
 DATE:10/2024



YORBA LINDA WATER DISTRICT
 3" & 4" TURBINE METER INSTALLATION


STD. DWG.
 W-4
 SHEET 1 OF 2

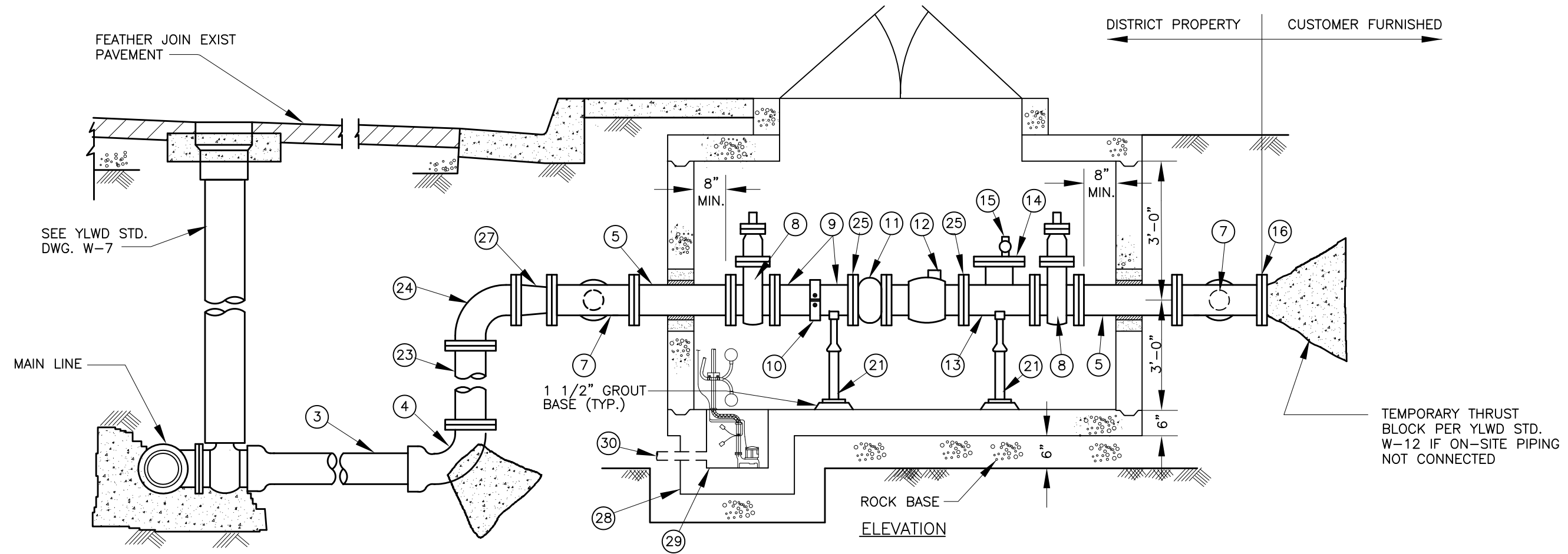
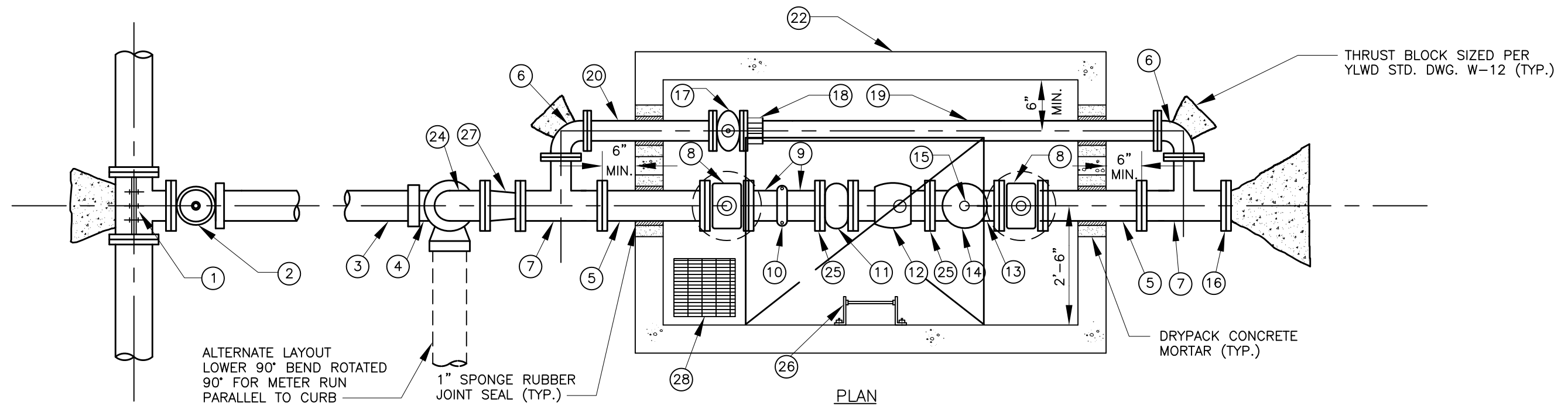
MATERIALS

<u>ITEM</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
①	— 1 EACH	— SIZE X 4" FLANGED TAPPING SLEEVE
②	— 1 EACH	— 4" FLG. X MJ TAPPING VALVE
③	— AS REQ'D	— 4" C-900 PVC PIPE OR D.I. PIPE LATERAL
④	— 1 EACH	— 4" D.I. 90° ELL, MJ X FLG.
⑤	— 2 EACH	— FLG X FLG. D.I. SPOOL — METER SIZE X 2'-6"
⑥	— 1 EACH	— 4" D.I. 90° ELL FLG. X FLG.
⑦	— 1 EACH	— 4" X 3" D.I. REDUCER FLG. X FLG. (FOR 3" SERVICE ONLY)
⑧	— 2 EACH	— RW GATE VALVE FLG. X FLG.
⑨	— 2 EACH	— FLG. X GROOVED END D.I. SPOOL, 4" MIN. LENGTH
⑩	— 1 EACH	— GROOVED-END COUPLING
⑪	— 1 EACH	— TURBINE METER WITH STRAINER (INSTALLED BY DISTRICT)
⑫	— 1 EACH	— D.I. BLIND FLANGE (IF REQUIRED)
⑬	— 2 EACH	— METER SIZE FLANGED D.I. TEE (IF REQUIRED)
⑭	— 4 EACH	— 2" BRASS ADAPTER — MIP X COMPRESSION (IF REQUIRED)
⑮	— AS REQ'D	— 2" COPPER TUBING (IF REQUIRED)
⑯	— 2 EACH	— 2" BRASS COMPRESSION 90° ELBOW (IF REQUIRED)
⑰	— 1 EACH	— 2" TEFLON SEATED BRONZE BALL VALVE WITH LOCKING WING — F.I.P. X F.I.P.
⑱	— 1 EACH	— 4" D.I. SPOOL — FLG. X FLG. (IF REQUIRED)
⑲	— 1 EACH	— PRECAST CONCRETE VAULT (3'-0" WIDE X 5'-0" LONG X 4'-0" HIGH) WITH SPRING ASSIST HINGED DIAMOND PLATE ALUMINUM COVER AND RECESSED LOCKING HASP. PROVIDE 6" X 12" HINGED READING LID INSTALLED OVER METER REGISTER.
⑳	— 4 EACH	— BOLT AND FLANGE INSULATING KIT
㉑	— 2 EACH	— METER SIZE BRONZE COMPANION FLANGE WITH 2" THREADED I.P. OUTLET

NOTES:

1. VAULT SHOWN IS FOR PARKWAY USE ONLY. FOR TRAFFIC LOADING AND OTHER REQUIREMENTS, CONTACT DISTRICT REPRESENTATIVE.
2. VAULT COVER TO BE SET TO CONFORM TO PARKWAY GRADE.
3. ALL DUCTILE IRON PIPE WITHIN THE VAULT SHALL BE PAINTED PER YLWD STD. SPEC. SECTION 09900.
4. ALL TRENCH AND BEDDING RESTORATION SHALL COMPLY WITH YLWD STD. DWG. W-11.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 10/2024		3" & 4" TURBINE METER INSTALLATION DESIGNATIONS	W-4
SCALE: NTS			SHEET 2 OF 2



APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 7/2016		6", 8", AND 10" TURBINE METER INSTALLATION	W-5
			SHEET 1 OF 2


MATERIALS

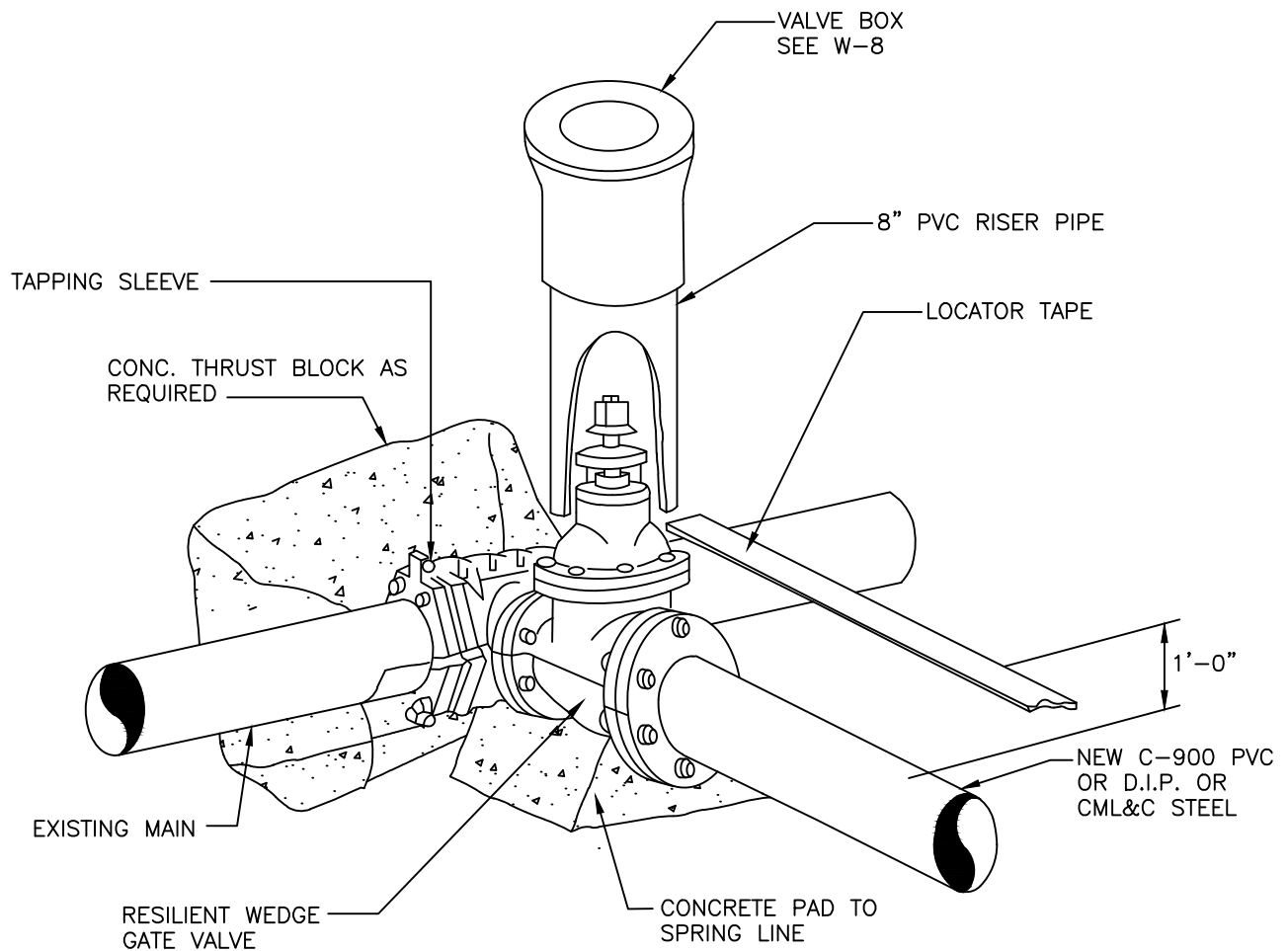
<u>ITEM</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
①	1 EACH	—SIZE X SIZE TAPPING SLEEVE (USE PUSH-ON X FLG. TEE IF HOT TAP IS NOT REQUIRED). FULL SIZE HOT TAPS ARE NOT ALLOWED.
②	1 EACH	—PUSH-ON X FLG. TAPPING VALVE (USE RW GATE VALVE IF HOT TAP IS NOT REQUIRED).
③	AS REQ'D	—PVC PIPE OR D.I. PIPE LATERAL
④	1 EACH	—D.I. 90° ELL FLG. X PUSH-ON
⑤	2 EACH	—FLG x FLG. D.I. SPOOL - METER SIZE X 1'-6"
⑥	2 EACH	—4" D.I. 90° ELL FLG. X FLG.
⑦	2 EACH	—METER SIZE X 4" FLANGED D.I. TEE
⑧	2 EACH	—RW GATE VALVE FLG. X FLG.
⑨	2 EACH	—FLG. X GROOVED END D.I. SPOOL. FOR 6" DIA. PIPE USE 9" LENGTH; FOR 8" DIA. PIPE USE 6" LENGTH; FOR 10" DIA. PIPE USE 9" LENGTH.
⑩	1 EACH	—GROOVED-END COUPLING
⑪	1 EACH	—METER STRAINER
⑫	1 EACH	—TURBINE METER (INSTALLED BY DISTRICT)
⑬	1 EACH	—METER SIZE X 6" D.I. TEE - FLANGED
⑭	1 EACH	—6" D.I. COMPANION FLANGE TAPPED FOR 2.5" I.P.
⑮	1 EACH	—2" CORPORATION STOP - MIP X MIP
⑯	1 EACH	—D.I. BLIND FLANGE
⑰	1 EACH	—4" RW OR GATE VALVE - FLANGED O.S. & Y.
⑱	1 EACH	—4" FLANGED COUPLING ADAPTER
⑲	1 EACH	—4" D.I. SPOOL - FLG. X P.E.
⑳	1 EACH	—4" X 2"- 6" D.I. SPOOL - FLG. X FLG.
㉑	2 EACH	—ADJUSTABLE GALV. PIPE SUPPORT. SEE YLWD STD. DWG. W-20.
㉒	1 EACH	—PRECAST CONCRETE VAULT WITH 4' X 4' HATCH. PROVIDE DIAMOND PLATE ALUMINUM ACCESS DOORS WITH RECESSED PADLOCKING HASP. PROVIDE 6" X 12" HINGED READING LID OVER METER REGISTER.
㉓	1 EACH	—FLG. X FLG. D.I. SPOOL (IF REQUIRED)
㉔	1 EACH	—FLG. X FLG. 90° D.I. ELL
㉕	2 EACH	—BOLT AND FLANGE INSULATING KIT
㉖	1 EACH	—SS LADDER - (ALHAMBRA FOUNDRY A3400), W/ LADDER-UP SAFETY POST AND SS ANCHOR BOLTS.
㉗	1 EACH	—D.I. REDUCER (AS REQUIRED), FLG. X FLG.
㉘	1 EACH	—12" X 12" X 24" RECESSED SUMP WITH 1" THICK FIBERGLASS GRATE INLET
㉙	1 EACH	—VAULT SUMP PER YLWD STD. DWG. W-29
㉚	1 EACH	—4" SCH. 80 PVC DRAIN PIPE OR SUMP PUMP AS DIRECTED PER DISTRICT REPRESENTATIVE

METER SIZE	PRECAST VAULT INSIDE DIMENSIONS
6"	6'- 0" X 8'-0" X 6'- 0"
8"	6'- 0" X 8'-0" X 6'- 0"
10"	6'- 0" X 10'-0" X 6'- 0"

NOTES:


1. VAULT SHOWN IS FOR PARKWAY USE ONLY. FOR TRAFFIC LOADING AND OTHER REQUIREMENTS, CONTACT DISTRICT REPRESENTATIVE.
2. VAULT COVER TO BE SET TO CONFORM TO PARKWAY GRADE.
3. WHEN A BY-PASS LINE IS NOT REQUIRED PER SECTION 15150, DELETE ITEMS 6, 17, 18, 19, & 20.
4. PROVIDE TWO 8-INCH SCH. 80 PVC GRAVITY VENTS, ONE HIGH/ONE LOW LOCATED AT SAME SIDE OF THE VAULT. SEE YLWD STD. DWG. W-30.
5. ALL DUCTILE IRON PIPE WITHING THE VAULT SHALL BE PAINTED PER YLWD STANDARD SPECIFICATION 09900, PAINTING AND COATING.

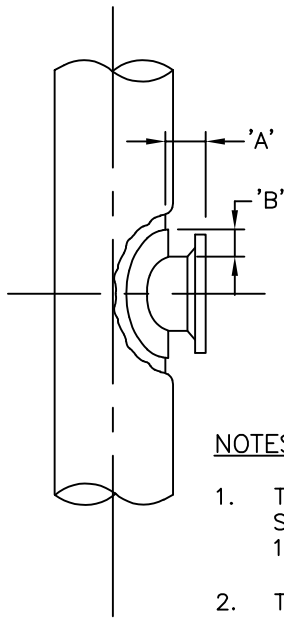
APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE:7/2016		6", 8" AND 10" TURBINE INSTALLATION DESIGNATIONS	W-5
SCALE: NTS			SHEET 2 OF 2



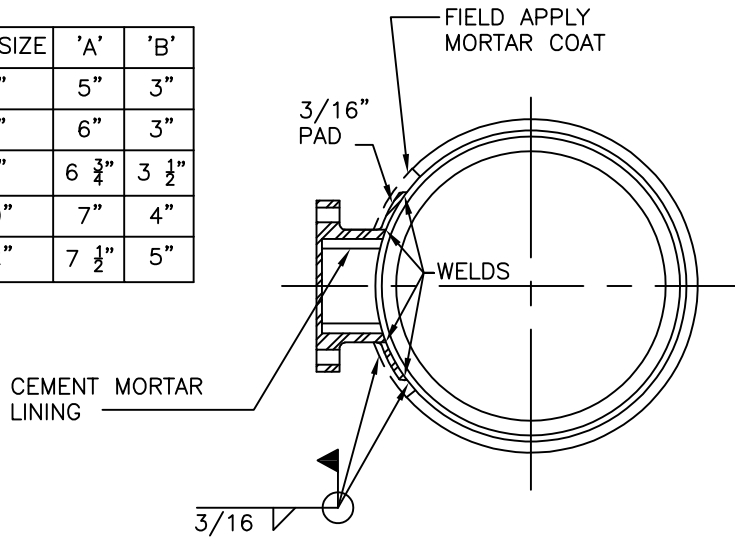
NOTES:

1. APPROVED TAPPING SLEEVES:
 - A. JCM 432, MUELLER H-304SS, ROMAC SST 111
 - B. FOR SIZE ON SIZE-JCM 414, MUELLER H-615 (FOR CIP, DIP, PVC) OR H-619 (FOR ACP)
2. APPROVED TAPPING VALVES SHALL BE RESILIENT SEATED WEDGE-TYPE GATE VALVES. SEE YLWD STD. SPEC. SECTION 15100.
3. THE DISTRICT RESERVES THE RIGHT TO REVIEW AND APPROVE ALL HOT TAP INSTALLATIONS.
4. DETECTABLE LOCATOR TAPE SHALL BE PLACED 1'-0" ABOVE PIPELINE PRIOR TO BACKFILL. TAPE SHALL BE TERRA TAPE, CHRISTY'S OR APPROVED EQUAL.
5. TAPPING SLEEVE SHALL HAVE A MINIMUM PIPE CLEARANCE OF 18 INCHES FROM OTHER APPURTENANCES, INCLUDING PIPE BELLS OR COLLARS.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 10/2022		HOT TAP FOR 6", 8", 10", AND 12" MAINS	W-6
SCALE: NTS		SHEET 1 OF 1	



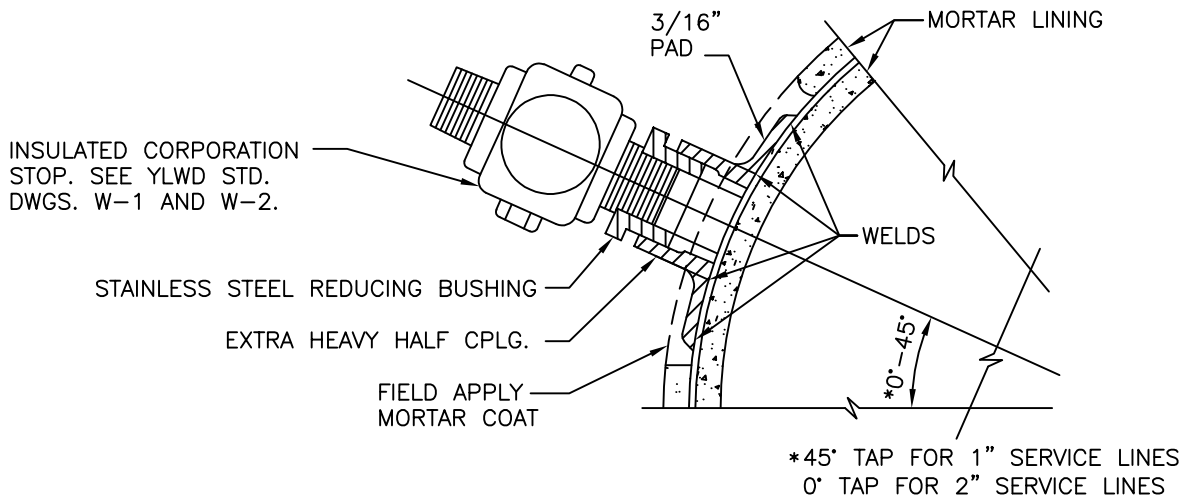
TAP SIZE	'A'	'B'
4"	5"	3"
6"	6"	3"
8"	6 3/4"	3 1/2"
10"	7"	4"
12"	7 1/2"	5"



NOTES:

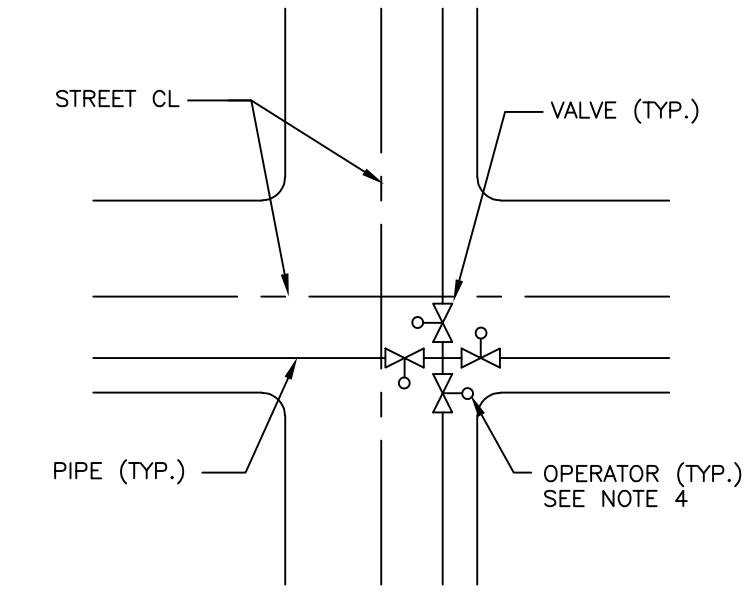
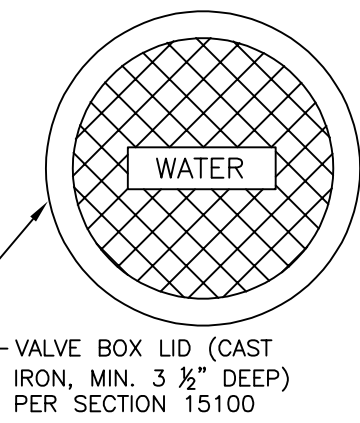
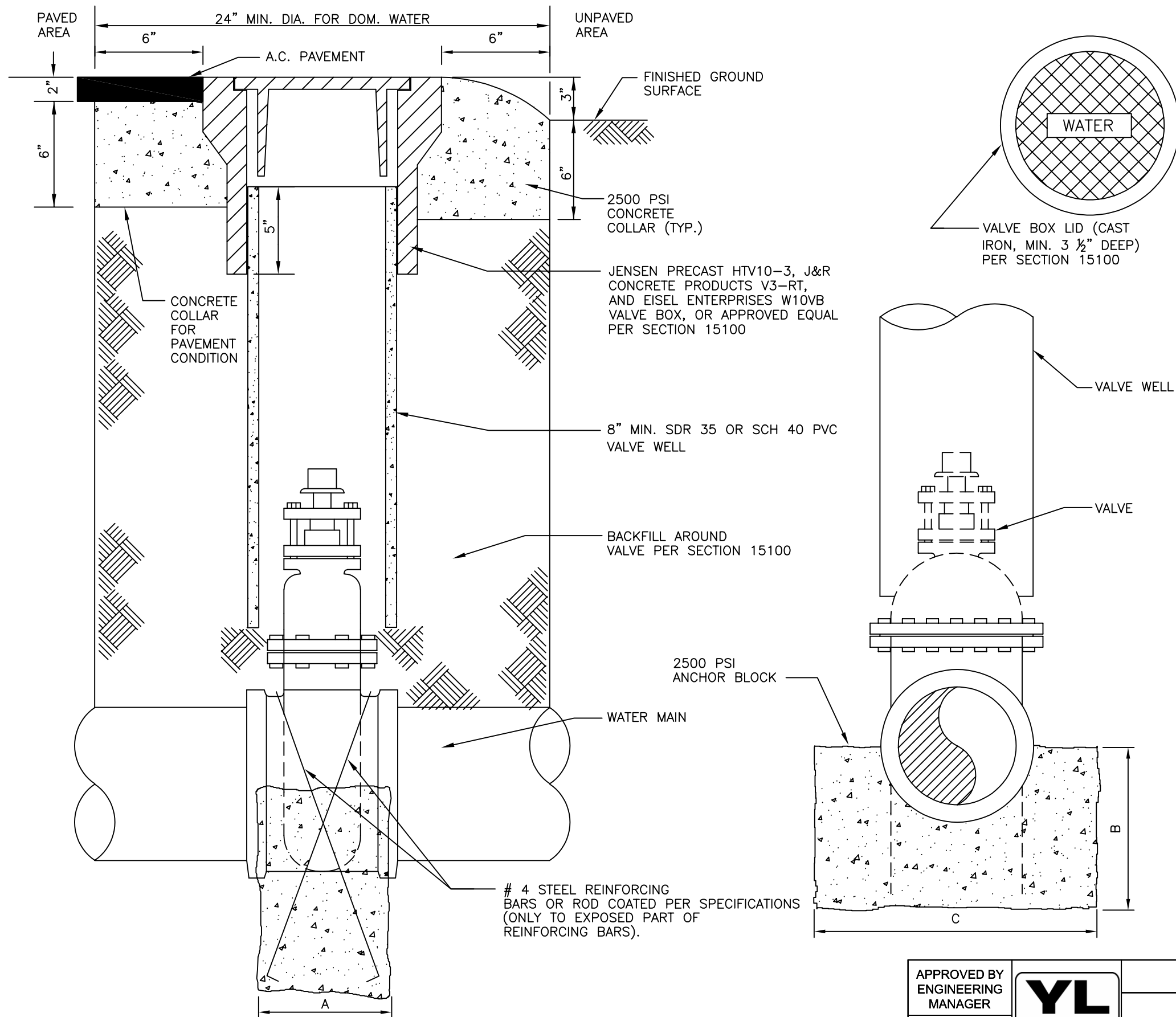
1. THE CEMENT LINED FLANGED NOZZLE IS CUSTOM FABRICATED TO FIT O.D. OF INSIDE STEEL CYLINDER AND CAN BE USED WHEN THE ENCLOSED STEEL CYLINDER PIPE IS 12 OR 10 GAUGE OR MORE IN THICKNESS.
2. THE CONNECTION CONSISTS OF A CEMENT LINED FLANGED NOZZLE (LINING 1/2" OR MORE) WITH CURVED PAD (TO FIT AGAINST STEEL LINER).
3. AFTER CONCRETE HAS BEEN ALL CHIPPED OFF (JUST LARGE ENOUGH FOR PAD) THE NOZZLE IS WELDED TO LINE FIRST, THEN PAD IS WELDED TO THE NOZZLE AND PIPE TO PREVENT FLUID FROM GETTING BETWEEN THE PAD AND THE PIPE. BOLT ON VALVE, COVER ALL EXPOSED AREAS WITH CEMENT AND COMPLETE TAP-IN.
4. THIS CONNECTION CAN ALSO BE USED ON STEEL PIPE AS WELL AS CONCRETE CYLINDER PIPE.

CLASS 150 4" TO 12" HOT TAP



1" TO 2" HOT TAP

APPROVED BY ENGINEERING MANAGER DATE: 10/2025 SCALE: NTS		YORBA LINDA WATER DISTRICT	STD. DWG. W-7
		HOT TAPS FOR MORTAR LINED STEEL CYLINDER	



TYPICAL BUTTERFLY VALVE OPERATOR POSITION

NOTES:

1. PROVIDE VALVE STEM EXTENSION IF DEPTH TO VALVE NUT EXCEEDS 4 FEET. SEE YLWD STD. DWG. W-9.
2. IN NEW TRACT DEVELOPMENTS, EXTEND VALVE WELL PIPE 2' ABOVE GROUND ON "KEY VALVES" FOR EMERGENCY SHUTOFFS.
3. BUTTERFLY VALVE OPERATORS SHALL BE LOCATED ON THE LEFT-HAND SIDE OF THE VALVE (AT THE TEE OR CROSS), LOOKING THROUGH THE VALVE TOWARD THE PIPE END.
4. WHERE CONCRETE CROSS GUTTERS AT STREET INTERSECTIONS WILL INTERFERE WITH VALVE BOXES, THE PIPELINE SHALL BE MOVED TO A POSITION 7 FEET OFF THE CURB FACE TO CLEAR THE CROSS GUTTER.
5. VALVES TO BE LOCATED ADJACENT TO FITTINGS WHEREVER POSSIBLE.
6. WRAP EXTERIOR OF VALVE AND ACTUATOR WITH 8 MIL P.E. SHEETING AND TAPE PER YLWD SPECIFICATIONS.
7. VALVE ANCHOR BLOCKS SHALL BE PROVIDED AS FOLLOWS:

VALVE SIZE	ANCHOR BLOCK DIMENSION	
	A	B
6" OR SMALLER	12"	12"
8"	13"	14"
10"	14"	16"
12"	14"	18"

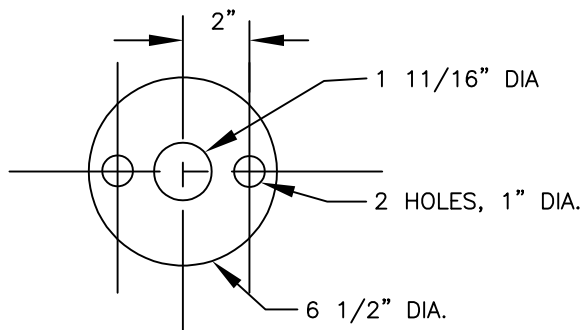
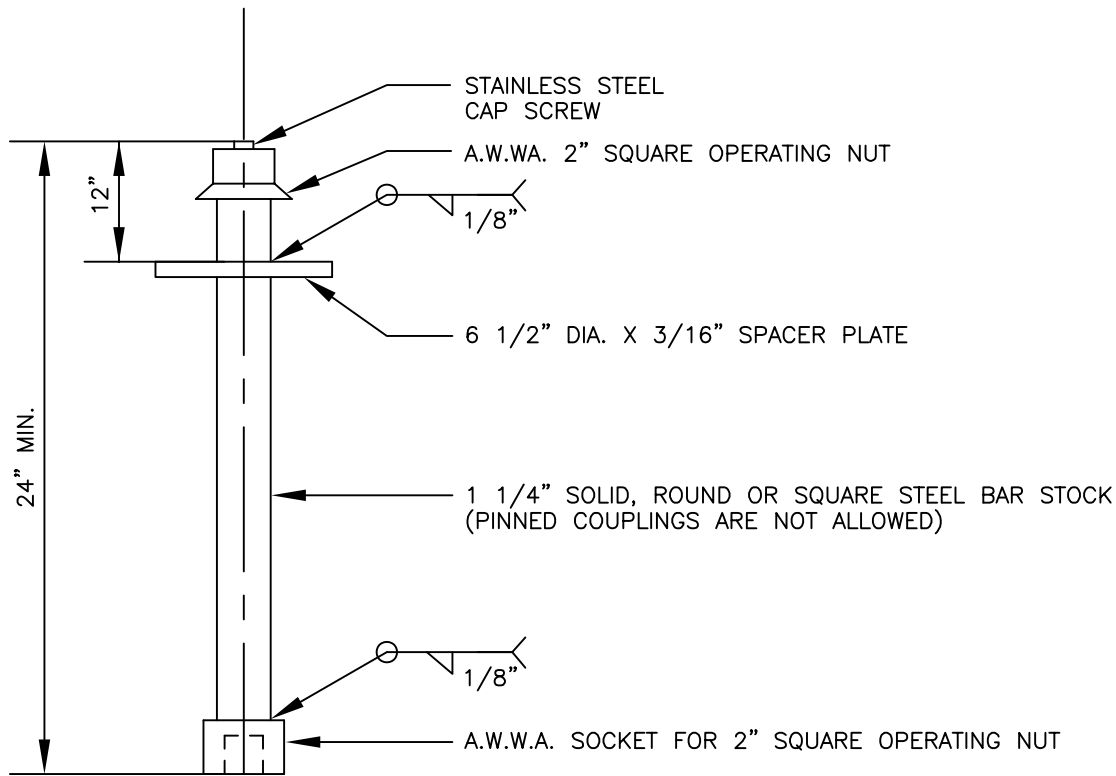
DIMENSION "C" = TRENCH WIDTH PLUS 2X PIPE DIAMETER

APPROVED BY
ENGINEERING
MANAGER
DATE:10/2024



YORBA LINDA WATER DISTRICT
VALVE & VALVE BOX INSTALLATION

STD. DWG.
W-8
SHEET 1 OF 1



SPACER PLATE

PLAN

NOTES:

1. PROVIDE VALVE STEM EXTENSION WHEN DEPTH TO OPERATING NUT EXCEEDS 84" (FABRICATE EXTENSION TO FIELD MEASUREMENT - SEE NOTE 2).
2. NO VALVE STEM EXTENSION SHALL BE LESS THAN 2 FEET IN LENGTH. TERMINATE EXTENSION 12" FROM FINISHED GRADE.
3. PROVIDE ADDITIONAL SPACER PLATE WHEN DISTANCE TO BOTTOM SOCKET EXCEEDS 5 FEET.

APPROVED BY
ENGINEERING
MANAGER

DATE: 10/2025

SCALE: NTS



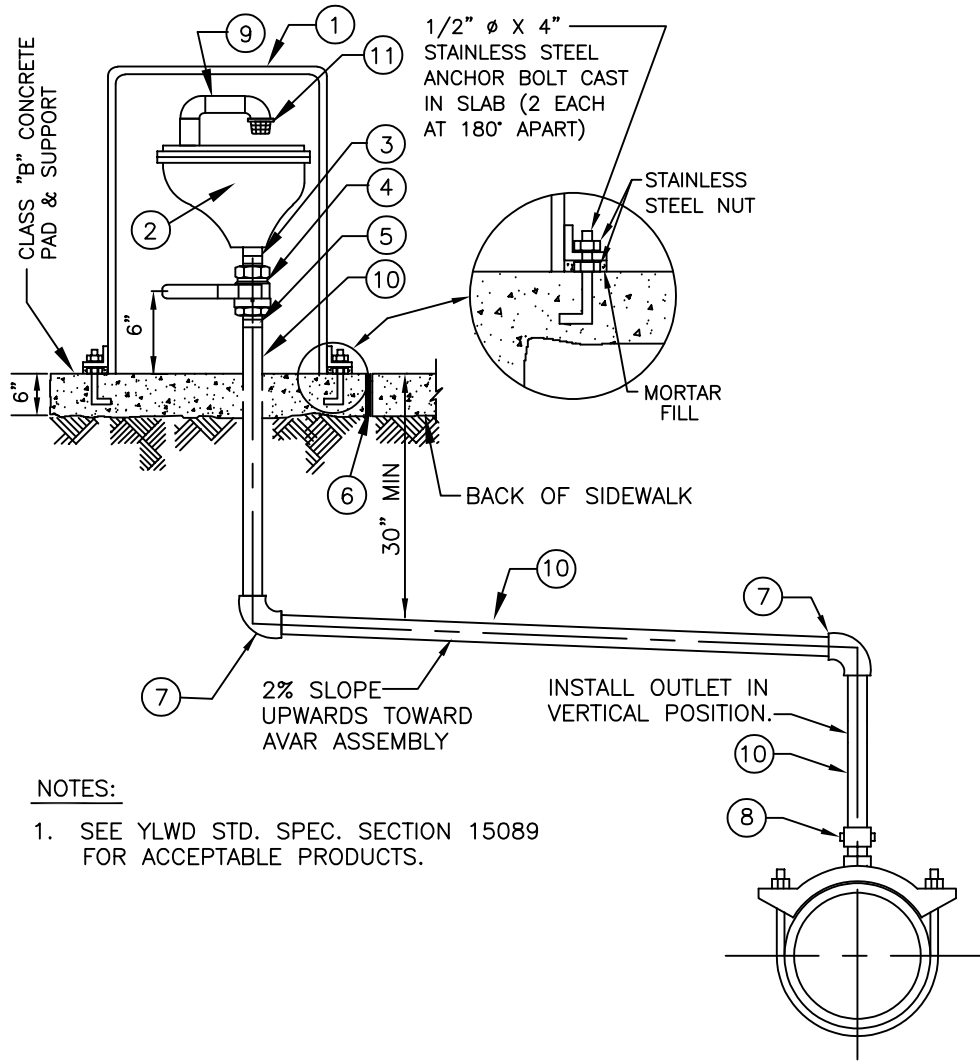
YORBA LINDA WATER DISTRICT

VALVE STEM EXTENSION

STD. DWG.

W-9

SHEET 1 OF 1

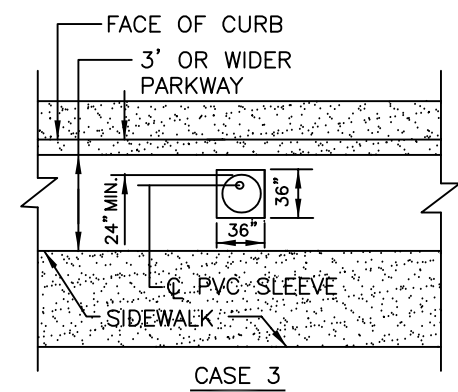
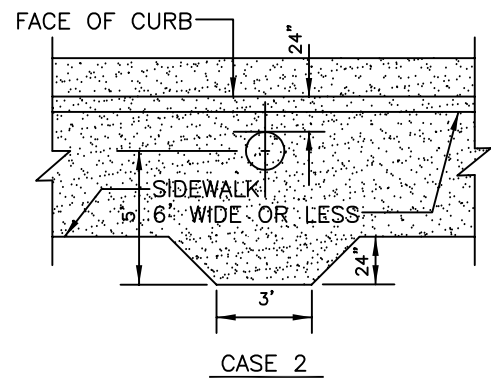
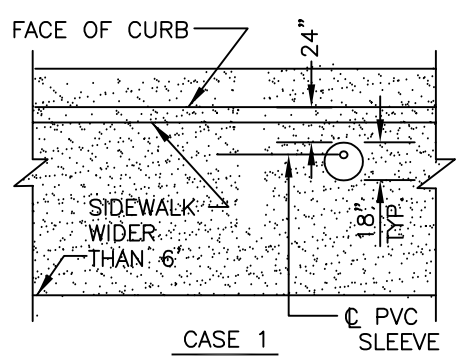


- MATERIALS**
- ① POLYETHYLENE VALVE ENCLOSURE. SEE NOTE 1
 - ② COMBINATION AIR VAC-AIR RELEASE VALVE ASSEMBLY. SEE NOTE 1
 - ③ BRASS CLOSE NIPPLE
 - ④ BRONZE BALL VALVE F.I.P. X F.I.P.
 - ⑤ BRASS M.I.P. THREAD X COMPRESSION ADAPTER
 - ⑥ COLD JOINT STRIP WHEN ADJACENT TO SIDEWALK
 - ⑦ 90° COMPRESSION BRASS BEND (FOR 2" SERVICE)
 - ⑧ SERVICE SADDLE AND CORP. STOP PER YLWD STD. DWG. W-1 OR W-2. FOR DISTRIBUTION STEEL MAIN, INSTALL HALF COUPLING PER YLWD STD. DWG. W-7.
 - ⑨ SCH. 80 PVC CLOSE NIPPLES AND 90° BENDS
 - ⑩ COPPER TUBING WITH 6 MIL P.E. SLEEVE (TYPE K RIGID FOR 2" SERVICE). SEE TABLE FOR SIZING
 - ⑪ THREADED PRE-FAB PVC SCREEN OUTLET WITH RIGID STAINLESS STEEL SCREEN.

MAIN SIZE	SIZE OF SERVICE LINE & AVAR ASSEMBLY
≤ 12"	1"
>12"	2"

NOTES:
 1. SEE YLWD STD. SPEC. SECTION 15089 FOR ACCEPTABLE PRODUCTS.

VALVE ASSEMBLY LOCATION PLANS



SIDEWALK ADJACENT TO CURB

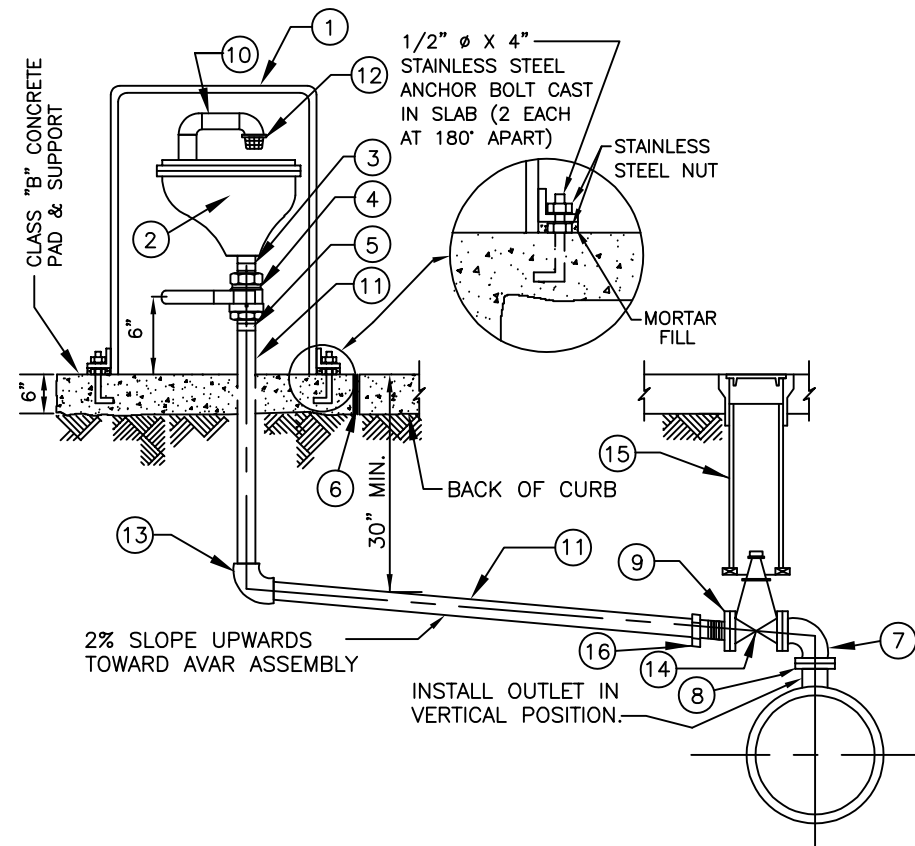
SIDEWALK NOT ADJACENT TO CURB

APPROVED BY
 ENGINEERING
 MANAGER
 DATE:10/2024



YORBA LINDA WATER DISTRICT
 1" AND 2" COMBINATION AIR VACUUM-AIR RELEASE VALVE ASSEMBLY

STD. DWG.
W-10
 SHEET 1 OF 1

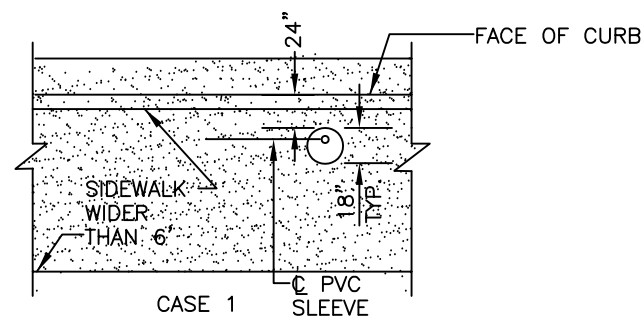


MATERIALS

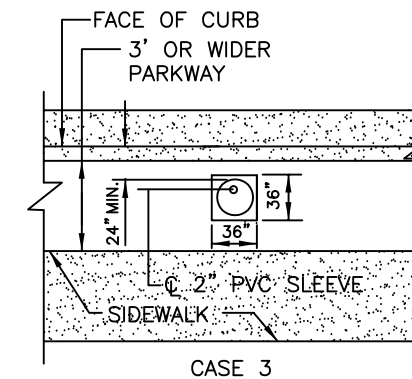
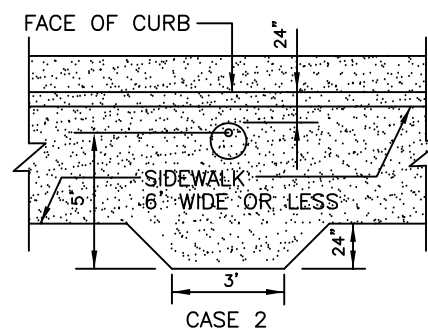
- ① VALVE ENCLOSURE. SEE TABLE
- ② COMBINATION AIR VACUUM-AIR RELEASE VALVE ASSEMBLY. SEE YLWD SPEC SECTION 15089 FOR ACCEPTABLE PRODUCTS.
- ③ BRASS CLOSE NIPPLE.
- ④ VALVE. SEE TABLE
- ⑤ BRASS M.I.P. THREAD X COMPRESSION ADAPTER
- ⑥ COLD JOINT STRIP
- ⑦ 90° FLANGED ELBOW (SAME MATERIAL AS MAIN)
- ⑧ WELDED FLANGED OUTLET (SAME MATERIAL AS MAIN)
- ⑨ TAPPED COMPANION FLANGE. SEE TABLE
- ⑩ SCH. 80 PVC CLOSE NIPPLES AND 90° BENDS
- ⑪ SERVICE LINE. SAME SIZE AS AVAR ASSEMBLY SEE TABLE.
- ⑫ THREADED PRE-FAB PVC SCREEN OUTLET WITH RIGID STAINLESS STEEL SCREEN
- ⑬ 90° BEND. SEE TABLE
- ⑭ FLANGED RESILIENT WEDGE GATE VALVE W/ INSULATING FLANGE KIT PER YLWD STD. DWG. CP-13, IF STEEL MAIN
- ⑮ VALVE BOX INSTALLATION PER YLWD STD. DWG. W-8
- ⑯ STRAIGHT SERVICE COUPLING

AVAR ASSEMBLY SIZE	1" FOR MAINS ≤ 12" 2" FOR MAINS >12"	3" OR GREATER FOR MAINS >24"
ITEM 1 ENCLOSURE MATERIAL. SEE YLWD SPEC SECTION 15089 FOR ACCEPTABLE PRODUCTS	POLYETHYLENE	UP TO 3" AVAR ASSEMBLY, POLYETHYLENE 4" OR GREATER AVAR ASSEMBLY, STEEL VENTED PIPE COVER
ITEM 4 VALVE TYPE	BRONZE BALL F.I.P. X F.I.P.	BUTTERFLY
ITEM 9 TAPPED COMPANION FLANGE MATERIAL	4" BRONZE, W/ F.I.P. TAP, AND INSULATING FLANGE KIT PER YLWD STD DWG. CP-13	INSTALL DI REDUCER AS NEEDED
ITEM 11 SERVICE MATERIAL	COPPER TUBING W/ 6 MIL P.E. SLEEVE	DI PIPE W/ PE ENCASEMENT
ITEM 13 90° BEND	BRASS COMPRESSION	DUCTILE IRON
ITEM 14 RW GATE VALVE SIZE	4"	IF AVAR IS 3", INSTALL 4" GATE VALVE. IF AVAR IS 4" TO 6", INSTALL 6" GATE VALVE.
ITEM 16 STRAIGHT SERVICE COUPLING	BRASS M.I.P. THREAD X COMPRESSION	DI REDUCER

VALVE ASSEMBLY LOCATION PLANS



SIDEWALK ADJACENT TO CURB



SIDEWALK NOT ADJACENT TO CURB

APPROVED BY
ENGINEERING
MANAGER

DATE: 10/2024



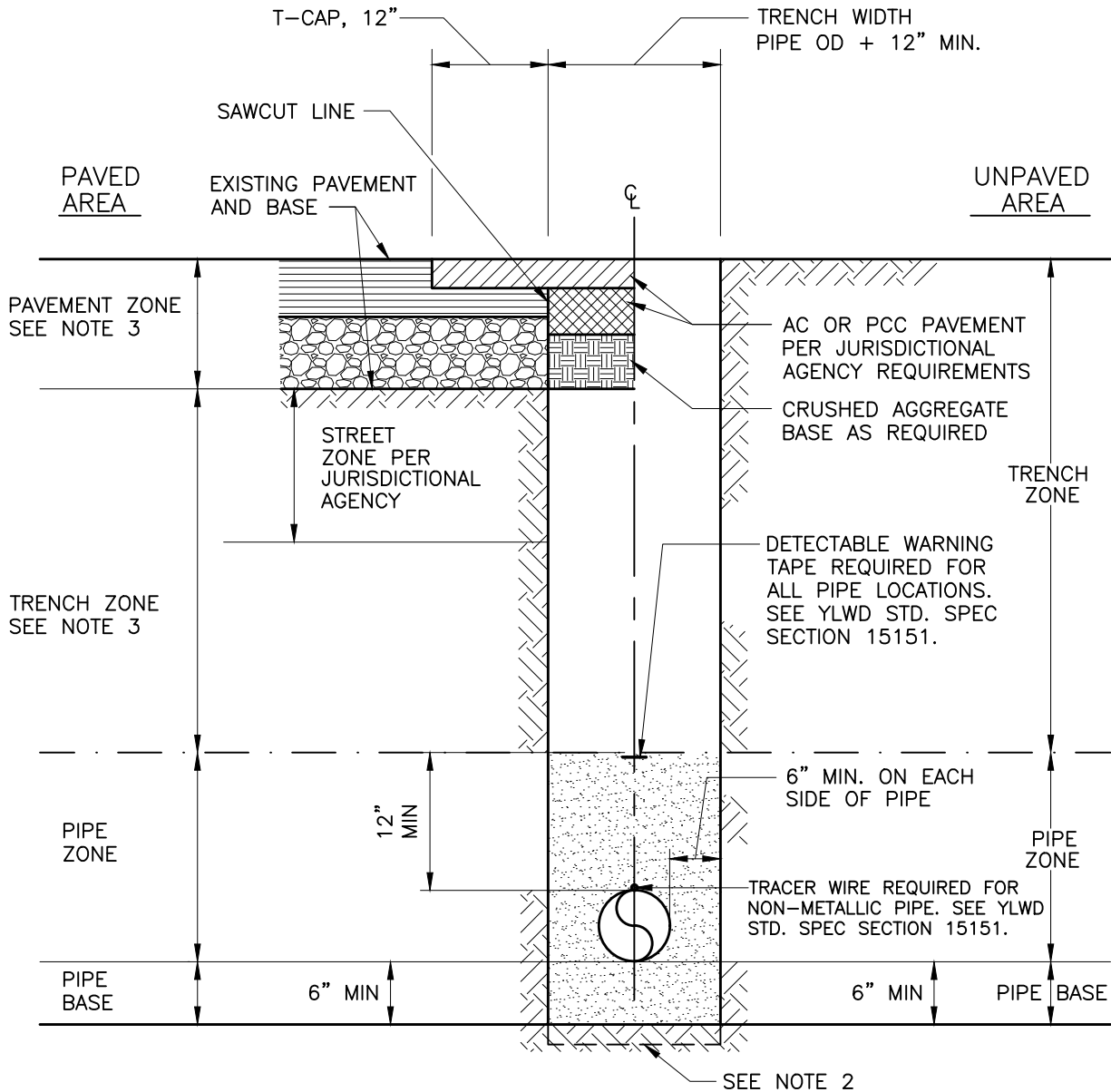
YORBA LINDA WATER DISTRICT

COMBINATION AIR VACUUM - AIR RELEASE VALVE
ASSEMBLY FOR STEEL OR LARGE DIAMETER METAL PIPE

STD. DWG.


W-10A

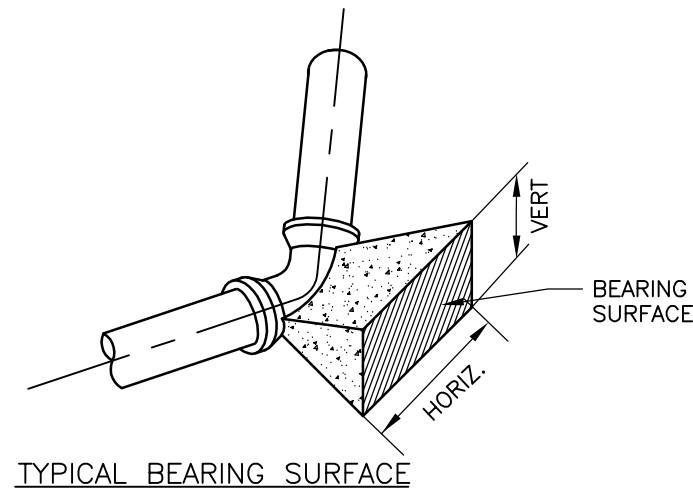
SHEET 1 OF 1



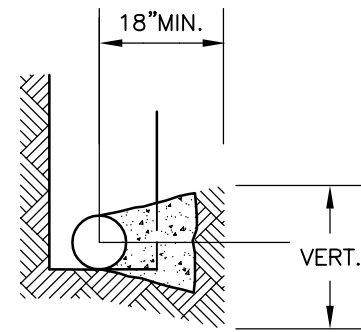
NOTES:

1. WORK SHALL BE IN ACCORDANCE WITH YLWD SPEC. SECTION 02223, 02578, AND AS REQUIRED BY PERMIT CONDITIONS.
2. PIPE SHALL BE PLACED ON A FOUNDATION ACCEPTABLE TO GEOTECHNICAL ENGINEER. REMOVE AND RECOMPACT WITH PIPE BASE MATERIAL TO DEPTH ACCEPTABLE TO GEOTECHNICAL ENGINEER.
3. TRENCH ZONE AND PAVEMENT ZONE RESTORATION SHALL BE PER JURISDICTIONAL AGENCY REQUIREMENTS OR PER YLWD REQUIREMENTS FOR PRIVATE STREETS.

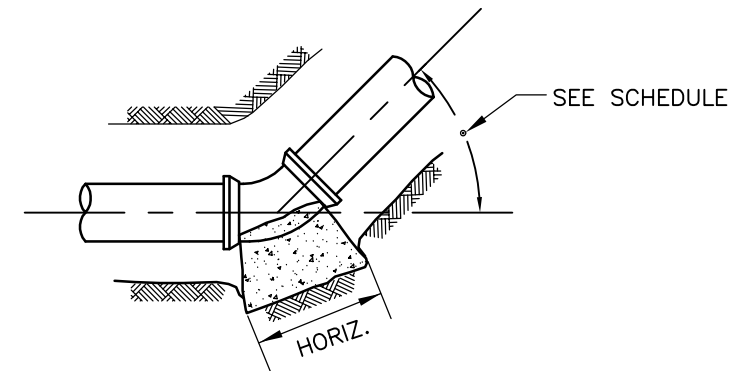
APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 8/2021		WATER LINE TRENCH SECTION & BEDDING DETAILS	W-11
SCALE: NTS			SHEET 1 OF 1



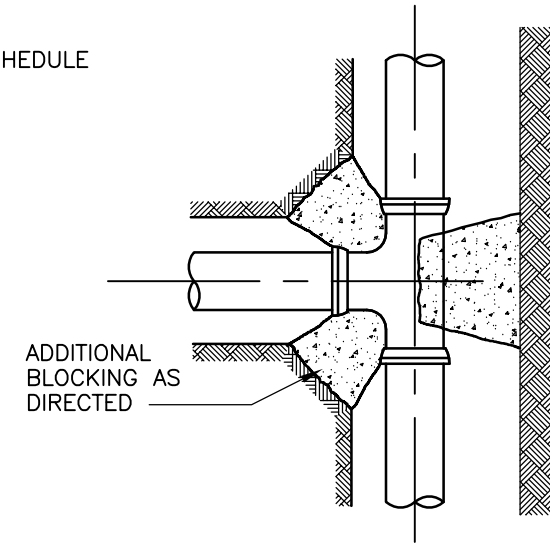
TYPICAL BEARING SURFACE



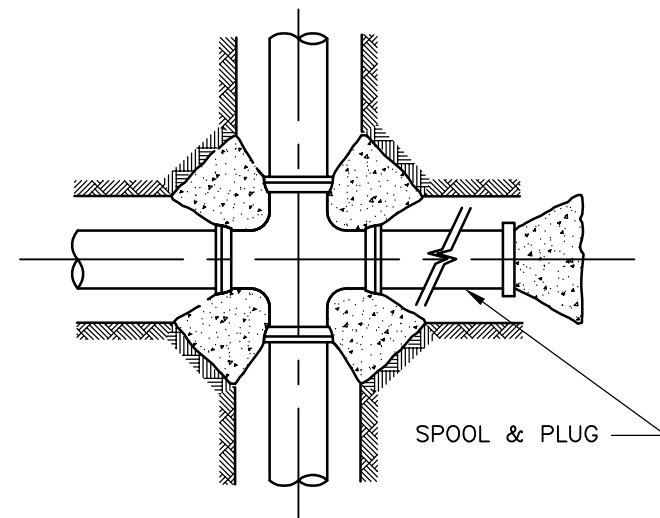
TYPICAL PROFILE



TYPICAL BEND

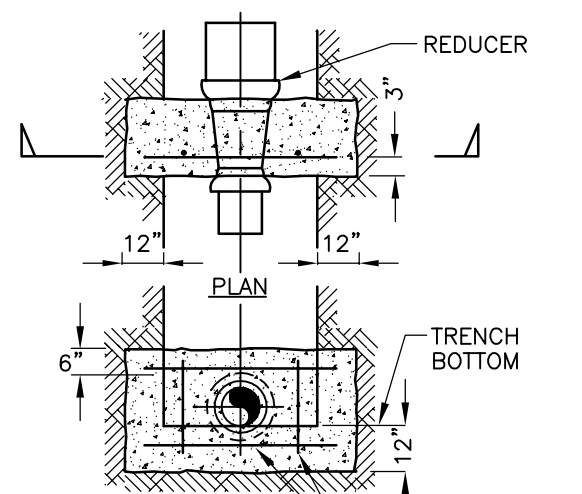


TEE OR VALVE



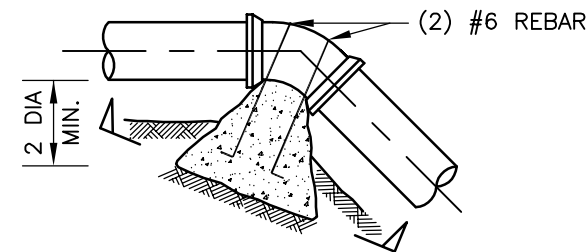
CROSS

SEE NOTE 3

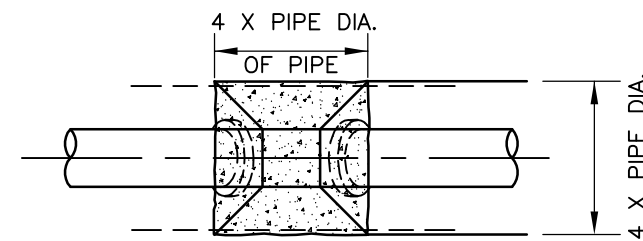


SECTION

REDUCER

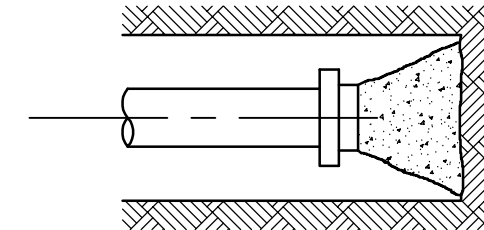


ELEVATION



SECTION

VERTICAL BEND



END CAP

MINIMUM SIZE OF THRUST BLOCK BEARING SURFACE

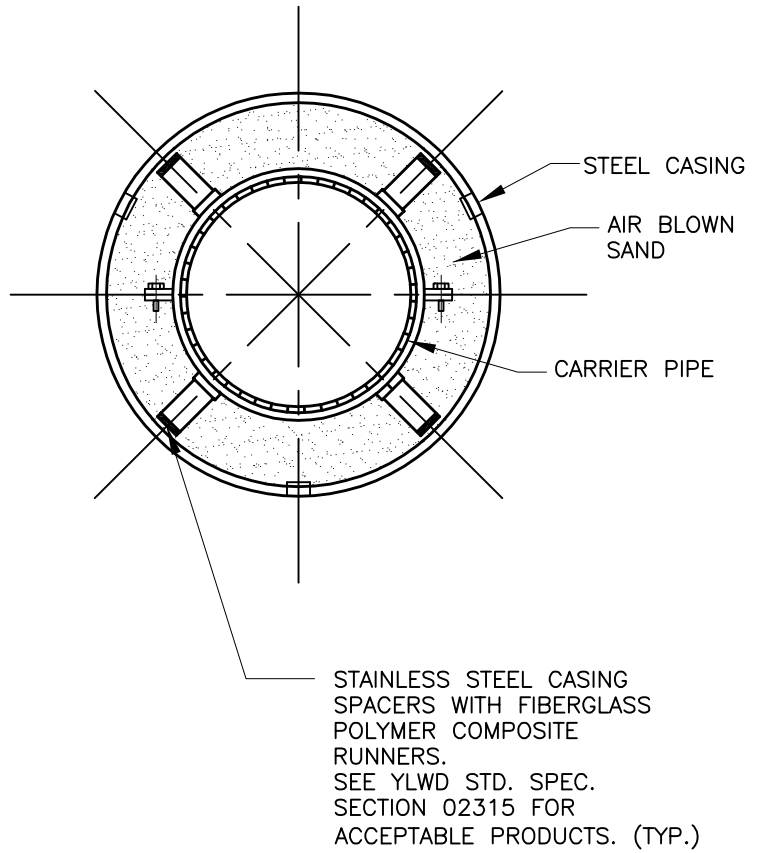
PIPE SIZE	11 1/4" BEND		22 1/2" BEND		45° BEND		90° BEND		TEE		END CAP	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
4"	1'-6"	0'-9"	1'-6"	0'-9"	1'-6"	1'-0"	2'-3"	1'-3"	1'-6"	1'-0"	1'-6"	1'-6"
6"	2'-6"	1'-0"	2'-6"	1'-0"	3'-6"	1'-6"	4'-6"	2'-3"	4'-0"	2'-0"	2'-6"	1'-9"
8"	3'-0"	1'-6"	3'-0"	1'-6"	4'-3"	2'-3"	5'-6"	3'-0"	5'-0"	2'-6"	3'-9"	2'-0"
10"	3'-9"	1'-9"	3'-9"	1'-9"	5'-0"	2'-9"	7'-0"	3'-6"	5'-6"	3'-3"	4'-6"	2'-6"
12"	4'-3"	2'-3"	4'-3"	2'-3"	5'-6"	3'-6"	8'-3"	4'-0"	7'-0"	3'-6"	5'-3"	3'-0"

NOTES:

- THRUST BLOCK BEARING AREA BASED ON ALLOWABLE SOIL BEARING VALUE OF 1500 psf PRESSURE AND 225 psi LINE PRESSURE WITH 3'-0" COVER MINIMUM.
FOR BEARING = 1000 psf, 1.5 X AREA SHOWN
FOR BEARING = 500 psf, 3.0 X AREA SHOWN
- ALL THRUST BLOCKS SHALL BE 2500 PSI CONCRETE AND PLACED AGAINST UNDISTURBED SOIL. DESIGN ENGINEER SHALL DETERMINE SIZES NOT SHOWN.
- THRUST BLOCKS ON CROSSES SHALL BE USED ONLY WHEN THERE IS A STUB-OUT ON ONE OR MORE SIDES.
- REINFORCING STEEL SHALL BE GRADE 60.
- CONCRETE SHALL NOT EXTEND ONTO FLANGE OR ADJOINING PIPE.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE 7/2016		THRUST BLOCK DETAILS	W-12
			SHEET 1 OF 1

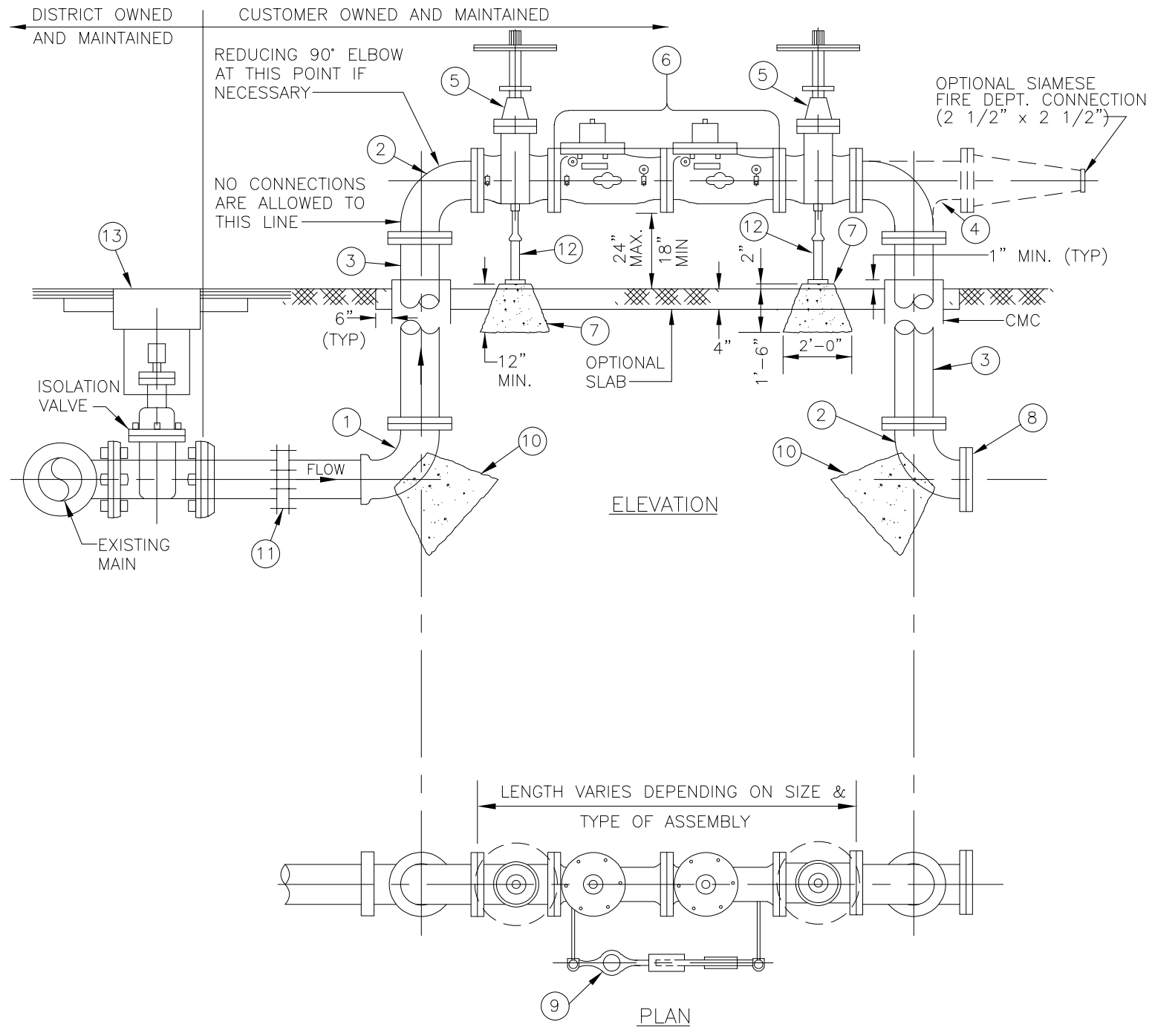
STEEL CASING SCHEDULE		
NOMINAL CARRIER PIPE SIZE	MINIMUM CASING SIZE I.D.	MIN. WALL THICK.
4"	12"	1/4"
6"	16"	5/16"
8"	16"	5/16"
10"	18"	5/16"
12"	20"	3/8"
16"	24"	3/8"
18"	30"	1/2"
24"	42"	1/2"
36"	48"	1/2"



NOTES:

1. JACKED CASING SHALL BE INSTALLED PER YLWD STD. SPEC. SECTION 02315.
2. SIZE AND THICKNESS OF CASING SHALL BE AS SHOWN IN SCHEDULE. FOR LONG BORES OR SPECIAL SITUATIONS, GREATER WALL THICKNESS THAN SHOWN IN THE SCHEDULE MAY BE REQUIRED.
3. ALL STEEL CASING PIPE FIELD JOINTS SHALL BE WELDED FULL-CIRCUMFERENCE PER YLWD STD. SPEC. SECTIONS 02315 AND 05120.
4. CARRIER PIPE SHALL BE PRESSURE TESTED PRIOR TO FILLING CASING.
5. EACH END OF CASING SHALL BE SEALED WITH APPROVED RUBBER CASING END SEALS.
6. CONTRACTOR SHALL FURNISH ALL NECESSARY THRUST RESTRAINT DEVICES.
7. BACKFILL FOR CASING IN OPEN CUT TRENCH SHALL BE IN ACCORDANCE WITH YLWD STD. DWG. W-11.
8. PROVIDE GROUT CONNECTIONS PER YLWD STD. SPEC. SECTION 02315.

APPROVED BY ENGINEERING MANAGER DATE: 3/2019 SCALE: NTS		YORBA LINDA WATER DISTRICT	STD. DWG.
		STEEL CASING PIPE	W-13
			SHEET 1 OF 1



MATERIALS

- ① — 90° D.I. OR STL ELL FLG x PO
- ② — 90° D.I. OR STL ELL FLG x FLG
- ③ — D.I. (CL) OR STL SPOOL FLG x FLG (SEE NOTE 6)
- ④ — 90° D.I. (CL) ELL FLG x FLG OR OPTIONAL D.I. (CL) TEE AND SIAMESE FIRE DEPT. CONNECTION (2 1/2" x 2 1/2")
- ⑤ — RW/OS & Y VALVE (ONLY)
- ⑥ — APPROVED DOUBLE CHECK VALVES (SIZE DEPENDS UPON REQUIREMENT)
- ⑦ — CONCRETE FOOTING 12" SQUARE TO BE LOCATED UNDER SHUT-OFF VALVES
- ⑧ — BLIND FLANGE
- ⑨ — FACTORY INSTALLED BY-PASS METER ASSEMBLY CONSISTING OF APPROVED POSITIVE DISPLACEMENT METER WITH CUBIC FEET REGISTER, ASSOCIATED PIPING AND FITTINGS, AND A DOUBLE CHECK VALVE ASSEMBLY (FOR TYPE I ASSEMBLIES) OR A SINGLE CHECK VALVE ASSEMBLY (FOR TYPE II ASSEMBLIES)
- ⑩ — THRUST BLOCK PER YLWD STD. DWG. W-12.
- ⑪ — COUPLING ADAPTER (MFR. PER YLWD STD. SPEC. SECTION 15162) IF DIFFERENT INLET PIPE MATERIAL
- ⑫ — GALVANIZED ADJUSTABLE PIPE SUPPORT. SEE YLWD STD.DWG. W-20.
- ⑬ — VALVE & VALVE BOX. SEE YLWD STD DWG W-8.

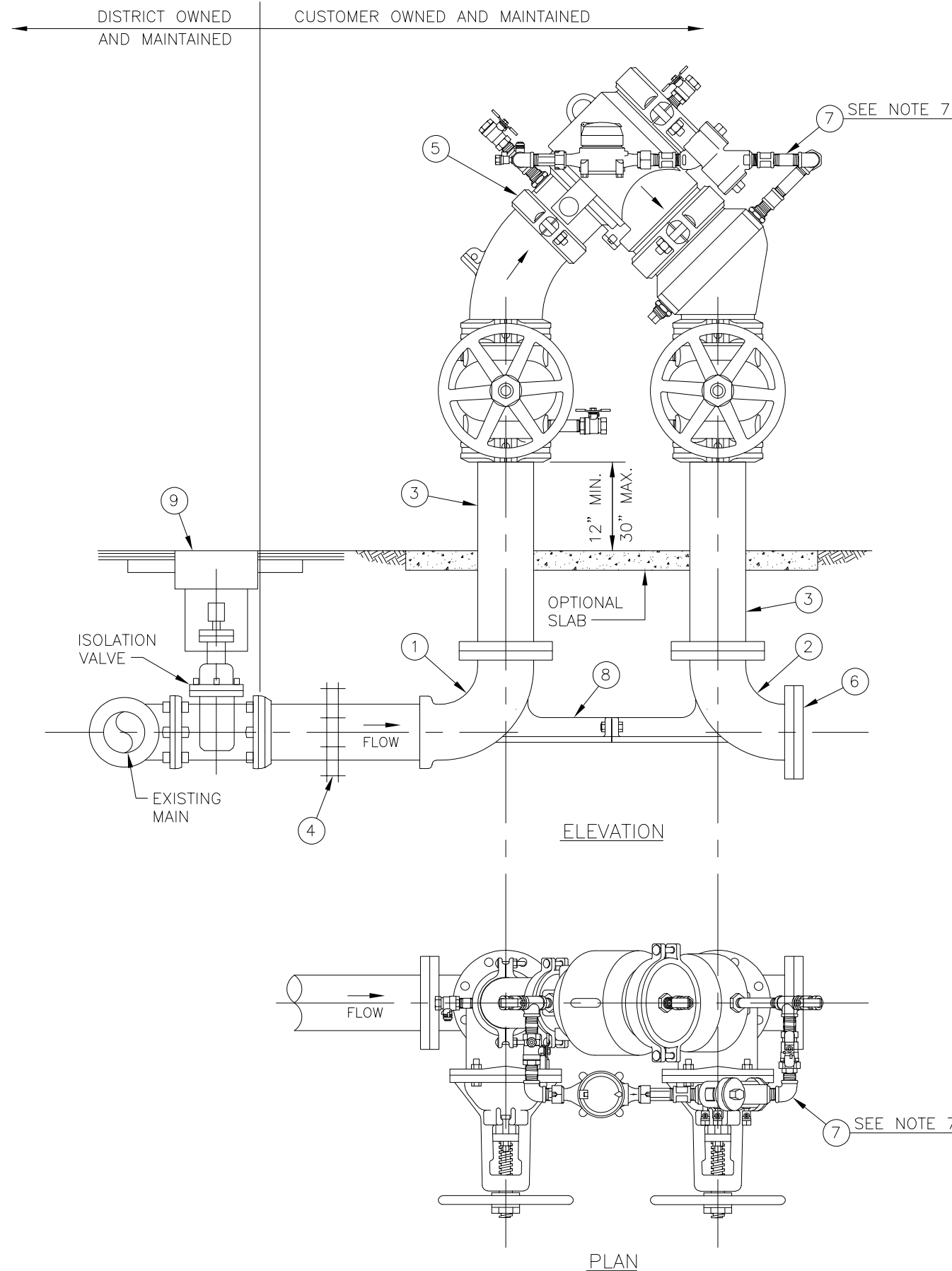
ISOLATION VALVE SIZING

DCDA SIZE	ISOLATION VALVE SIZE (RW GATE TYP.)
LESS THAN 4"	4"
4"-6"	6"
8" OR GREATER	8" MIN.

NOTES:

1. THE APPROPRIATE EASEMENTS MUST BE DEDICATED TO THE DISTRICT PRIOR TO PLAN APPROVAL.
2. NOTIFY YLWD PRIOR TO INSTALLATION OF UNIT.
3. INSTALLATION SHALL COMPLY WITH THE LATEST PLUMBING CODES AND APPLICABLE LOCAL AGENCY REQUIREMENTS.
4. THRUST BLOCKS SHALL BE SIZED AND INSTALLED PER YLWD STD. DWG. W-12.
5. SEE SPECIFICATION SECTION 09900 FOR ALL PAINTING REQUIREMENTS.
6. ALL PIPE AND FITTINGS TO BE FLANGED STEEL OR DUCTILE IRON. CML ABOVE GRADE AND CML&C BELOW GRADE UNLESS OTHERWISE DIRECTED BY THE DISTRICT. HOLD CMC 1" MIN. ABOVE GRADE.
7. BY-PASS METER TO BE USED FOR FIRE SYSTEMS ONLY. DO NOT INSTALL A BY-PASS METER WHERE WATER SUPPLY TO THE DEVICE IS ALREADY METERED.
8. THE BACKFLOW DEVICE SHALL BE TESTED IMMEDIATELY AFTER INSTALLATION AND ANNUALLY THEREAFTER BY A CERTIFIED TESTER APPROVED BY THE ORANGE COUNTY HEALTH CARE AGENCY.
9. BACKFLOW DEVICES SHALL BE ON THE MOST CURRENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AND SHALL BE APPROVED BY THE DISTRICT.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG. W-16
DATE: 7/2022		DOUBLE CHECK DETECTOR ASSEMBLY WITH BY-PASS METER	SHEET 1 OF 1



MATERIALS

- ① — 90° D.I. OR STL ELL FLG x PO
- ② — 90° D.I. OR STL ELL FLG x FLG
- ③ — D.I. (CL) OR STL SPOOL FLG x FLG (SEE NOTE 6)
- ④ — COUPLING ADAPTER (MFR. PER YLWD STD. SPEC. SECTION 15162) IF DIFFERENT INLET PIPE MATERIAL
- ⑤ — APPROVED N-PATTERN DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY WITH RISING STEM RESILIENT WEDGE GATE VALVES
- ⑥ — BLIND FLANGE
- ⑦ — FACTORY INSTALLED BY-PASS METER ASSEMBLY CONSISTING OF APPROVED POSITIVE DISPLACEMENT METER WITH CUBIC FEET REGISTER, ASSOCIATED PIPING AND FITTINGS, AND A DOUBLE CHECK VALVE ASSEMBLY (FOR TYPE I ASSEMBLIES) OR A SINGLE CHECK VALVE ASSEMBLY (FOR TYPE II ASSEMBLIES)
- ⑧ — VALVE SETTER
- ⑨ — VALVE AND VALVE BOX PER YLWD STD. DWG. W-8

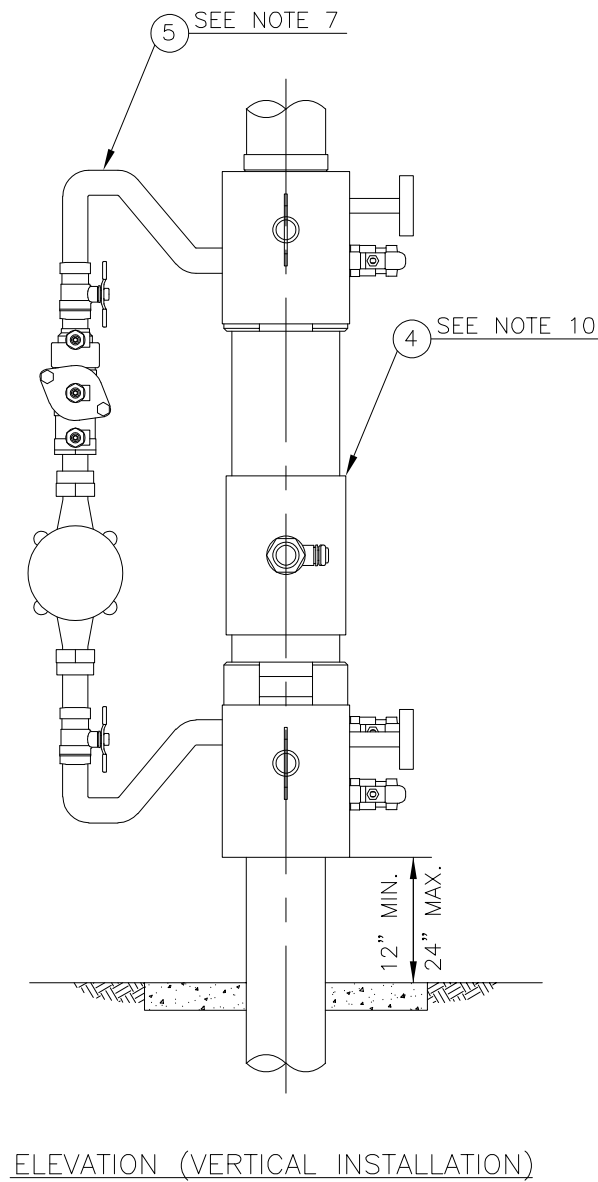
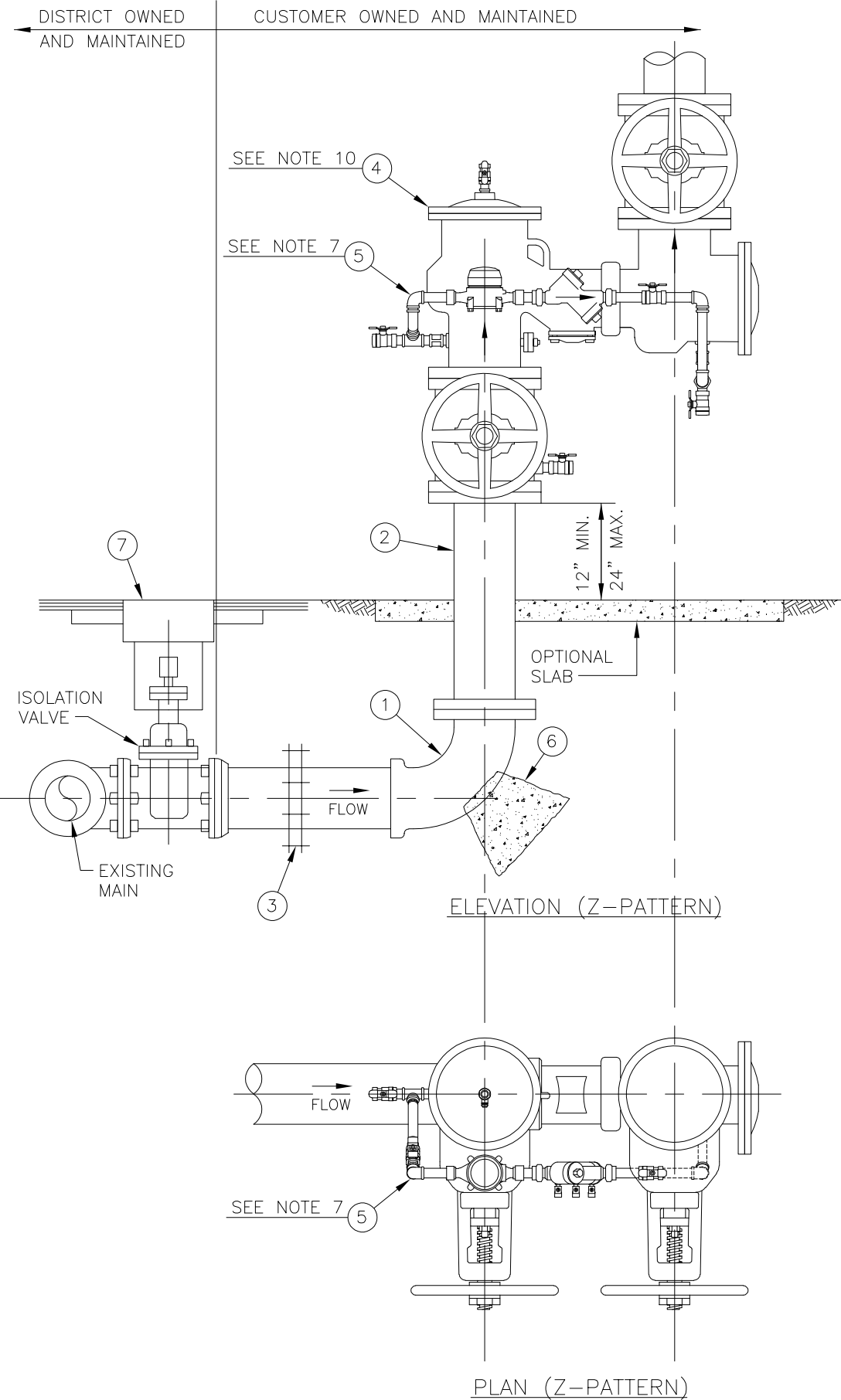
ISOLATION VALVE SIZING

DCDA SIZE	ISOLATION VALVE SIZE (RW GATE TYP.)
LESS THAN 4"	4"
4"-6"	6"
8" OR GREATER	8" MIN.

NOTES:

1. THE APPROPRIATE EASEMENTS MUST BE DEDICATED TO THE DISTRICT PRIOR TO PLAN APPROVAL.
2. NOTIFY YLWD PRIOR TO INSTALLATION OF UNIT.
3. INSTALLATION SHALL COMPLY WITH THE LATEST PLUMBING CODES AND APPLICABLE LOCAL AGENCY REQUIREMENTS.
4. THRUST BLOCK MAY BE INSTALLED IN LIEU OF VALVE SETTER WITH DISTRICT APPROVAL ONLY.
5. SEE SPECIFICATION SECTION 09900 FOR ALL PAINTING REQUIREMENTS.
6. ALL PIPE AND FITTINGS TO BE FLANGED STEEL OR DUCTILE IRON. CML ABOVE GRADE AND CML&C BELOW GRADE UNLESS OTHERWISE DIRECTED BY THE DISTRICT. HOLD CMC 1" MIN. ABOVE GRADE.
7. BY-PASS METER TO BE USED FOR FIRE SYSTEMS ONLY. DO NOT INSTALL A BY-PASS METER WHERE WATER SUPPLY TO THE DEVICE IS ALREADY METERED.
8. THE BACKFLOW DEVICE SHALL BE TESTED IMMEDIATELY AFTER INSTALLATION AND ANNUALLY THEREAFTER BY A CERTIFIED TESTER APPROVED BY THE ORANGE COUNTY HEALTH CARE AGENCY.
9. BACKFLOW DEVICES SHALL BE ON THE MOST CURRENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AND SHALL BE APPROVED BY THE DISTRICT.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG. W-16A
DATE: 7/2022		DOUBLE CHECK DETECTOR ASSEMBLY (N-PATTERN) WITH BY-PASS METER	SHEET 1 OF 1



MATERIALS

- ① — 90° D.I. OR STL ELL FLG x PO
- ② — D.I. (CL) OR STL SPOOL FLG x FLG (SEE NOTE 6)
- ③ — COUPLING ADAPTER (MFR. PER YLWD STD. SPEC. SECTION 15162) IF DIFFERENT INLET PIPE MATERIAL
- ④ — APPROVED DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY WITH RISING STEM RESILIENT WEDGE GATE VALVES
- ⑤ — FACTORY INSTALLED BY-PASS METER ASSEMBLY CONSISTING OF APPROVED POSITIVE DISPLACEMENT METER WITH CUBIC FEET REGISTER, ASSOCIATED PIPING AND FITTINGS, AND DOUBLE CHECK VALVE ASSEMBLY (FOR TYPE I ASSEMBLIES) OR A SINGLE CHECK VALVE ASSEMBLY (FOR TYPE II ASSEMBLIES)
- ⑥ — THRUST BLOCK PER YLWD STD. DWG. W-12. SEE NOTE 4.
- ⑦ — VALVE AND VALVE BOX PER YLWD STD. DWG. W-8

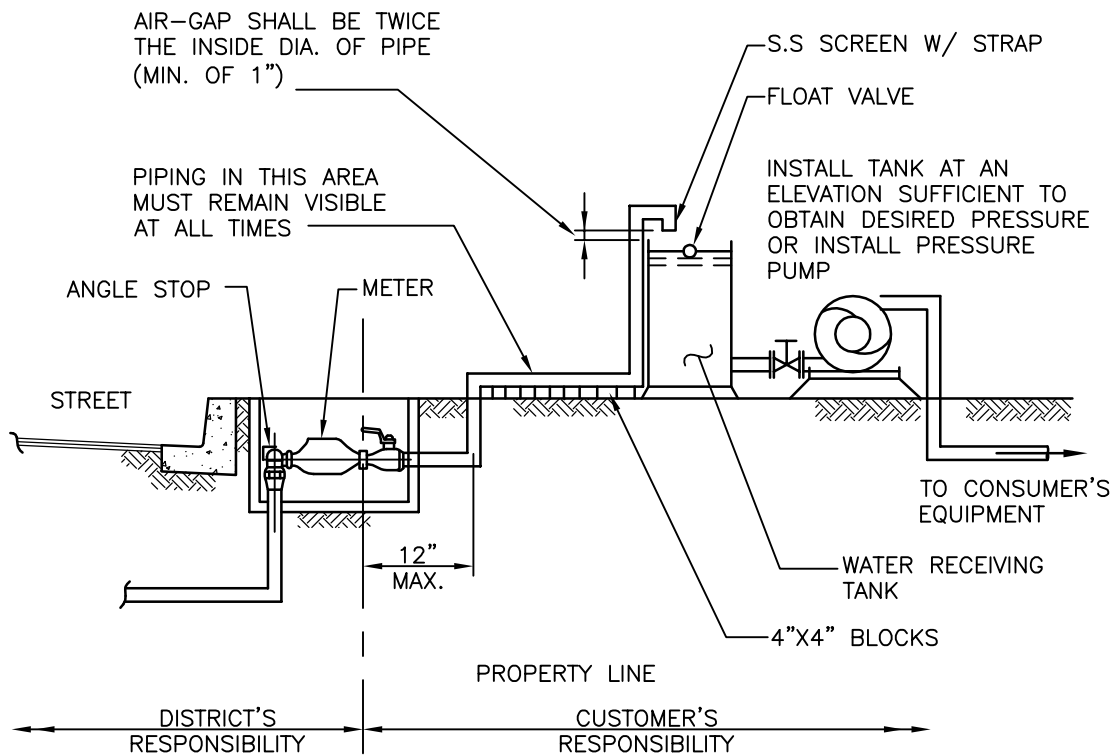
ISOLATION VALVE SIZING

DCDA SIZE	ISOLATION VALVE SIZE (RW GATE TYP.)
LESS THAN 4"	4"
4"-6"	6"
8" OR GREATER	8" MIN.

NOTES:


1. THE APPROPRIATE EASEMENTS MUST BE DEDICATED TO THE DISTRICT PRIOR TO PLAN APPROVAL.
2. NOTIFY YLWD PRIOR TO INSTALLATION OF UNIT.
3. INSTALLATION SHALL COMPLY WITH THE LATEST PLUMBING CODES AND APPLICABLE LOCAL AGENCY REQUIREMENTS.
4. THRUST BLOCKS SHALL BE SIZED AND INSTALLED PER YLWD STD. DWG. W-12.
5. SEE SPECIFICATION SECTION 09900 FOR ALL PAINTING REQUIREMENTS.
6. ALL PIPE AND FITTINGS TO BE FLANGED STEEL OR DUCTILE IRON. CML ABOVE GRADE AND CML&C BELOW GRADE UNLESS OTHERWISE DIRECTED BY THE DISTRICT. HOLD CMC 1" MIN. ABOVE GRADE.
7. BY-PASS METER TO BE USED FOR FIRE SYSTEMS ONLY. DO NOT INSTALL A BY-PASS METER WHERE WATER SUPPLY TO THE DEVICE IS ALREADY METERED.
8. THE BACKFLOW DEVICE SHALL BE TESTED IMMEDIATELY AFTER INSTALLATION AND ANNUALLY THEREAFTER BY A CERTIFIED TESTER APPROVED BY THE ORANGE COUNTY HEALTH CARE AGENCY.
9. BACKFLOW DEVICES SHALL BE ON THE MOST CURRENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AND SHALL BE APPROVED BY THE DISTRICT.
10. VERTICAL INSTALLATION OF Z-PATTERN BACKFLOW DEVICES AND ALL OTHER BACKFLOW DEVICES, INCLUDING SLEEVE STYLE, SHALL BE ALLOWED IF APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH. BUTTERFLY VALVES MAY BE INSTALLED IN LIEU OF GATE VALVES WITH DISTRICT APPROVAL ONLY.

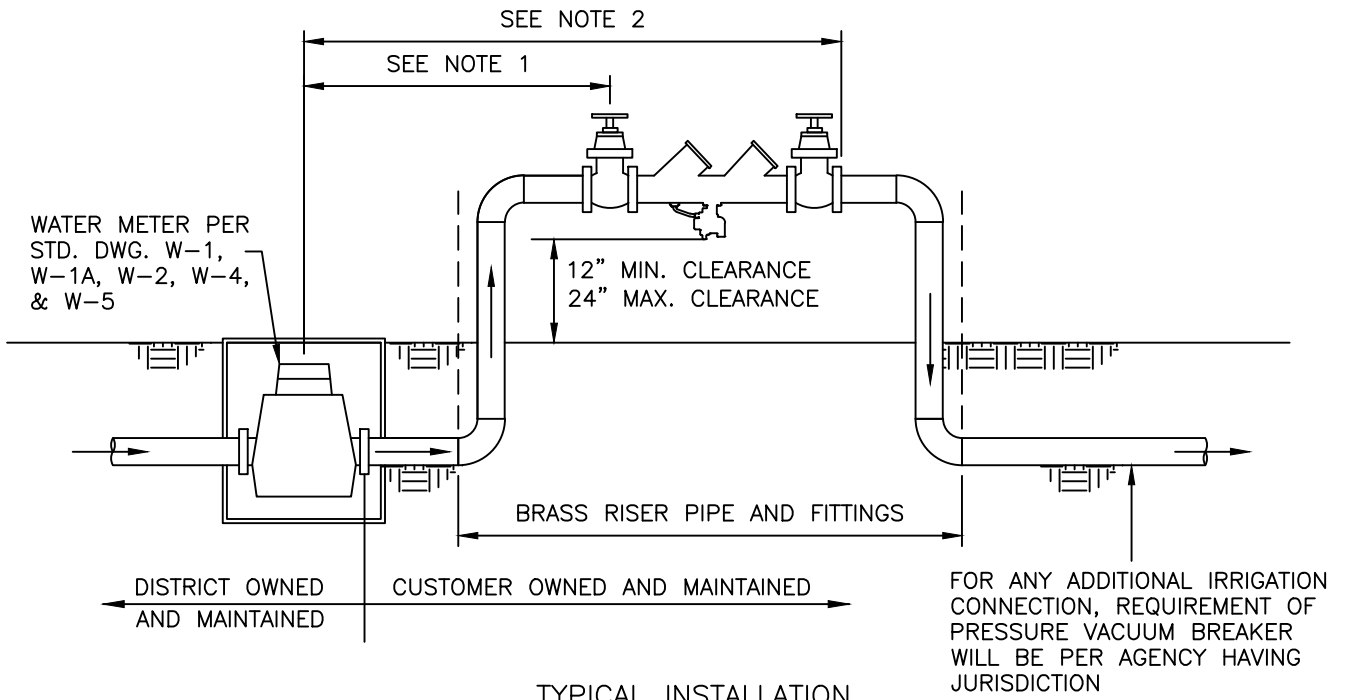
APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG. W-16B
DATE: 7/2022		DOUBLE CHECK DETECTOR ASSEMBLY (VERTICAL) WITH BY-PASS METER	SHEET 1 OF 1



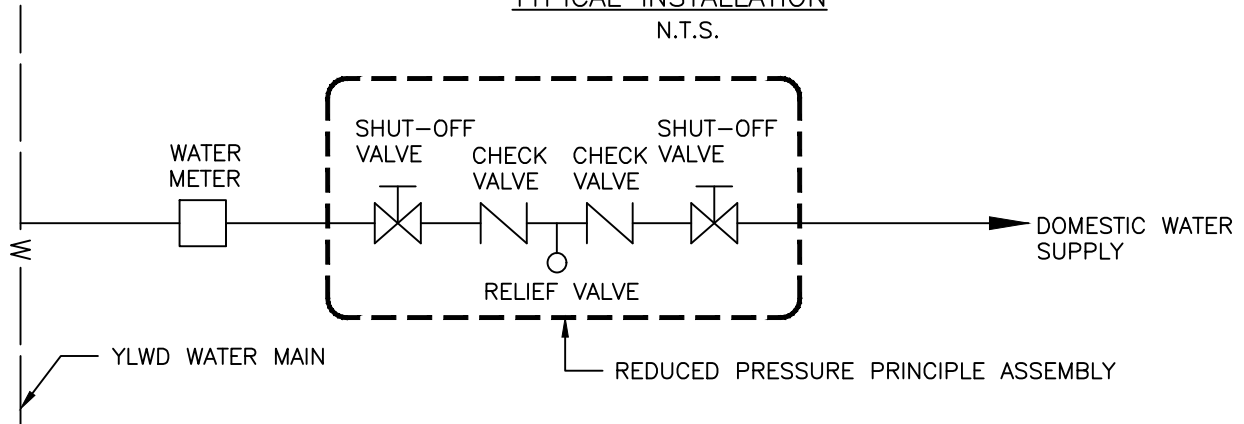
NOTES:

1. TANK SHOULD BE OF SUBSTANTIAL CONSTRUCTION AND OF A KIND AND SIZE TO SUIT CONSUMER'S NEEDS. TANK MAY BE SITUATED AT GROUND LEVEL (WITH A PUMP TO PROVIDE ADEQUATE PRESSURE HEAD) OR BE ELEVATED ABOVE THE GROUND.
2. THE AIR-GAP SEPARATION SHALL BE INSTALLED AS SHOWN ABOVE AND SHALL BE SUBJECT TO THE APPROVAL OF THE DISTRICT'S ENGINEER. ANY DEVIATION FROM THE METHODS DESCRIBED ABOVE MUST BE APPROVED PRIOR TO INSTALLATION.
3. NO CONNECTION BETWEEN METER AND AIR-GAP WILL BE ALLOWED.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE 7/2016		AIR-GAP SEPARATION	W-17
			SHEET 1 OF 1




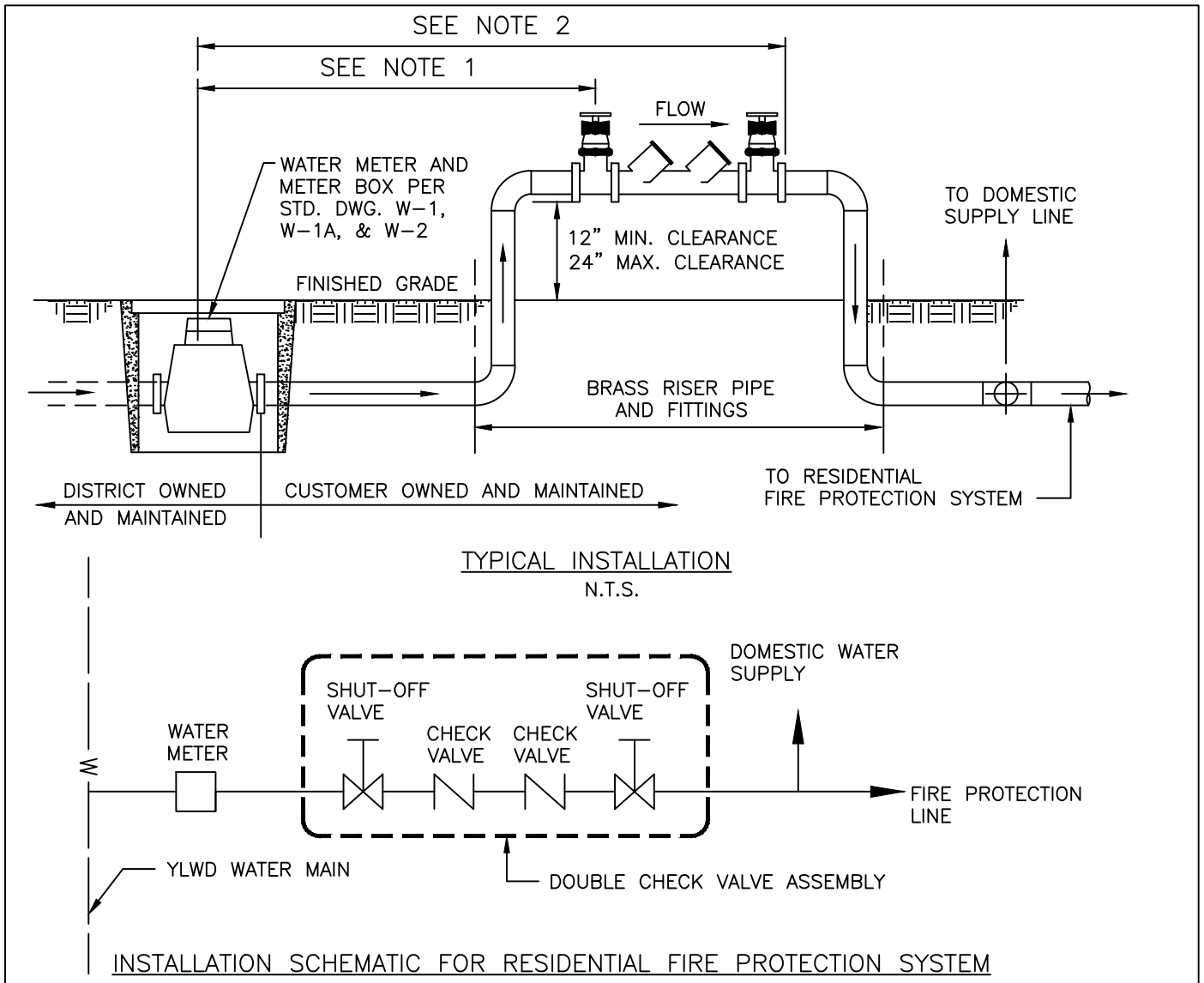
TYPICAL INSTALLATION
N.T.S.



NOTES:


1. NO CONNECTIONS ALLOWED IN THIS AREA.
2. NO HOSE BIBS ALLOWED.
3. BACKFLOW ASSEMBLY IS CUSTOMER OWNED AND MAINTAINED.
4. THE BACKFLOW DEVICE SHALL BE TESTED IMMEDIATELY AFTER INSTALLATION AND ANNUALLY THEREAFTER BY A CERTIFIED TESTER APPROVED BY THE ORANGE COUNTY HEALTH CARE AGENCY.
5. BACKFLOW DEVICES SHALL BE LEAD FREE AND SHALL BE ON THE MOST CURRENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AND SHALL BE APPROVED BY THE DISTRICT.
6. THERE SHALL BE A MINIMUM 1-FOOT CLEARANCE WHEN THE BACKFLOW DEVICE IS ADJACENT TO A STRUCTURE. THE DEVICE'S TEST COCKS SHALL FACE AWAY FROM THE STRUCTURE, IF POSSIBLE.
7. THE BACKFLOW DEVICE SHALL BE SIZED, AT A MINIMUM, THE SAME AS THE WATER METER.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 10/2022			REDUCED PRESSURE PRINCIPLE ASSEMBLY
SCALE: NTS		SHEET 1 OF 1	

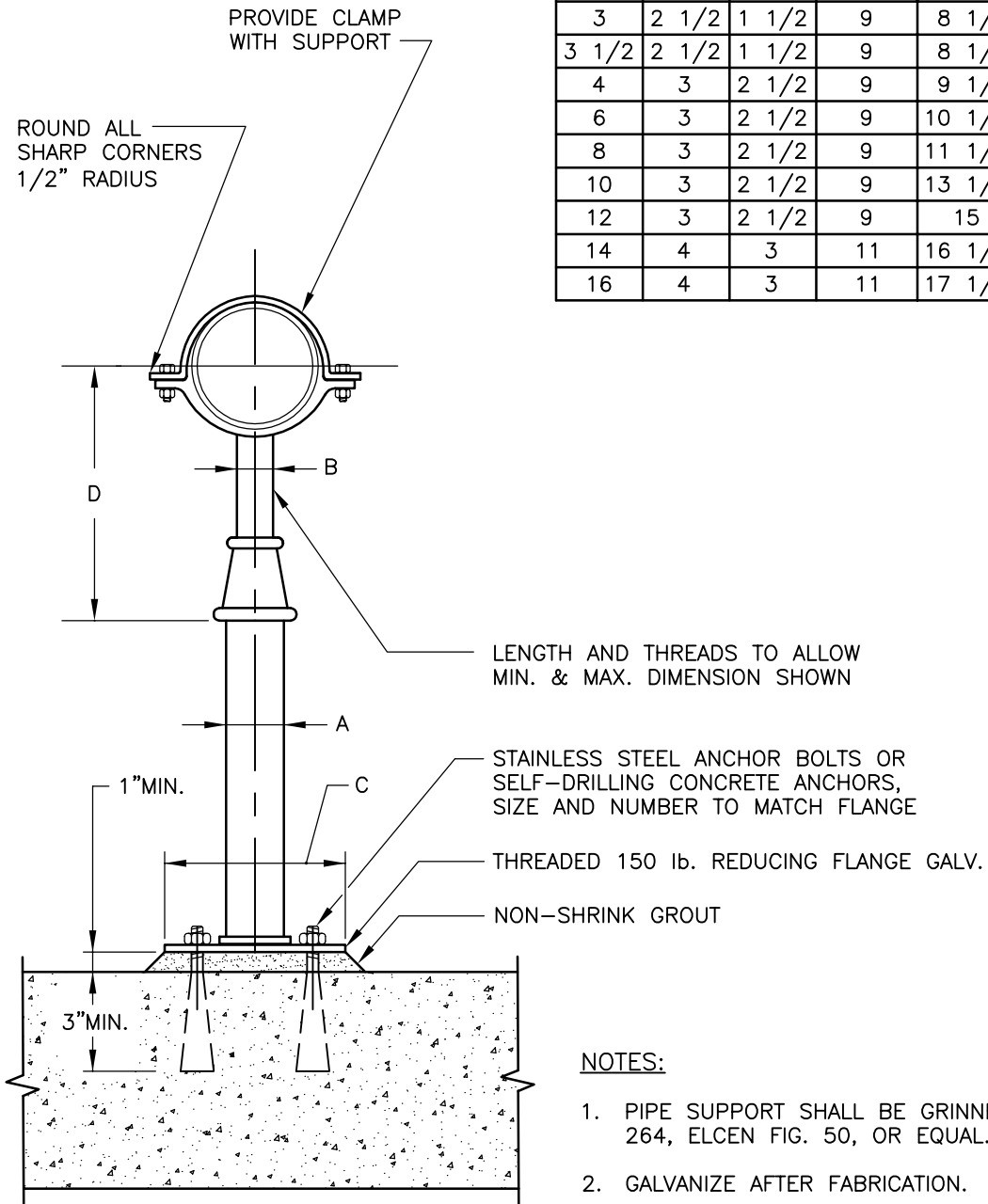


NOTES:

1. NO CONNECTIONS ALLOWED IN THIS AREA.
2. NO HOSE BIBS ALLOWED.
3. BACKFLOW ASSEMBLY IS CUSTOMER OWNED AND MAINTAINED.
4. THE BACKFLOW DEVICE SHALL BE TESTED IMMEDIATELY AFTER INSTALLATION AND ANNUALLY THEREAFTER BY A CERTIFIED TESTER APPROVED BY THE ORANGE COUNTY HEALTH CARE AGENCY.
5. BACKFLOW DEVICES SHALL BE LEAD FREE AND SHALL BE ON THE MOST CURRENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AND SHALL BE APPROVED BY THE DISTRICT.
6. THERE SHALL BE A MINIMUM 1-FOOT CLEARANCE WHEN THE BACKFLOW DEVICE IS ADJACENT TO A STRUCTURE. THE DEVICE'S TEST COCKS SHALL FACE AWAY FROM THE STRUCTURE, IF POSSIBLE.
7. THE BACKFLOW DEVICE SHALL BE SIZED, AT A MINIMUM, THE SAME AS THE WATER METER.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 10/2022		DOUBLE CHECK VALVE ASSEMBLY FOR RESIDENTIAL FIRE PROTECTION SYSTEM	W-19
SCALE: NTS			SHEET 1 OF 1

ADJUSTABLE PIPE SADDLE SUPPORT SCHEDULE DIMENSIONS IN INCHES					
PIPE SIZE	A	B	C	D	
				MINIMUM	MAXIMUM
2 1/2	2 1/2	1 1/2	9	8	13
3	2 1/2	1 1/2	9	8 1/2	13 1/2
3 1/2	2 1/2	1 1/2	9	8 1/2	13 1/2
4	3	2 1/2	9	9 1/2	14
6	3	2 1/2	9	10 1/2	15 1/2
8	3	2 1/2	9	11 1/2	16 1/2
10	3	2 1/2	9	13 1/2	18 1/2
12	3	2 1/2	9	15	19 1/2
14	4	3	11	16 1/2	20 1/2
16	4	3	11	17 1/2	22 1/2



APPROVED BY
ENGINEERING
MANAGER

DATE
7/2016



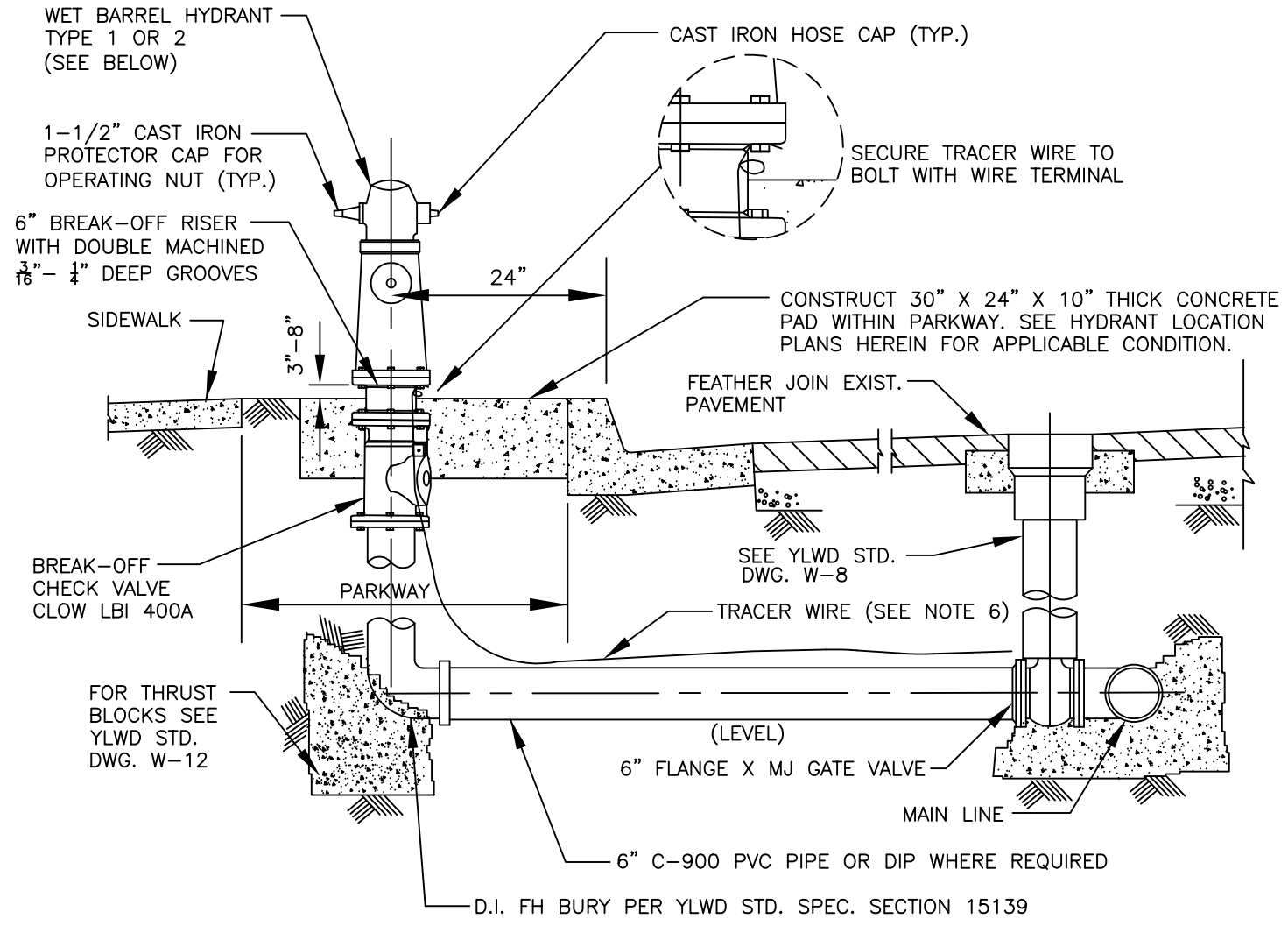
YORBA LINDA WATER DISTRICT

ADJUSTABLE STEEL PIPE SUPPORT

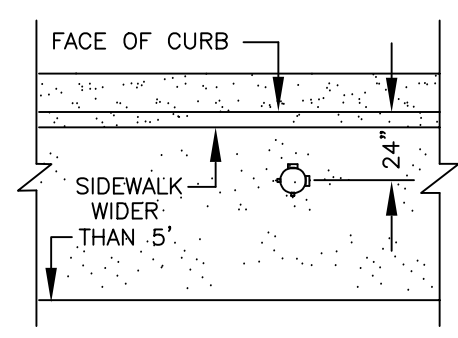
STD. DWG.

W-20

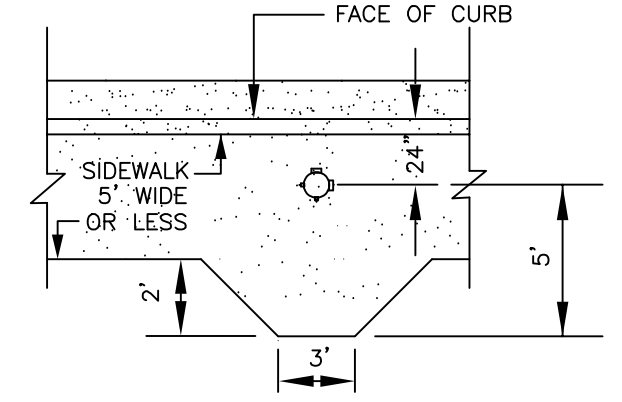
SHEET 1 OF 1



HYDRANT LOCATION PLANS

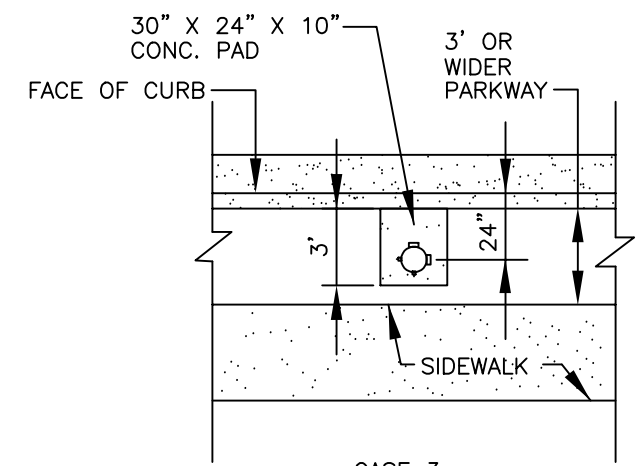


CASE 1



CASE 2

SIDEWALK ADJACENT TO CURB



CASE 3

SIDEWALK NOT ADJACENT TO CURB

TYPE 1: LOW DENSITY RESIDENTIAL HYDRANT - (1) 4" & (1) 2-1/2" FIRE HOSE OUTLETS. ALIGN BOTH OUTLETS TOWARD CURB LINE.

TYPE 2: HIGH DENSITY RESIDENTIAL AND COMMERCIAL HYDRANT - (1) 4" & (2) 2-1/2" FIRE HOSE OUTLETS. ALIGN 4" OUTLET PERPENDICULAR TO CURB LINE.

NOTES:

1. FOR APPROVED TYPES OF FIRE HYDRANTS, SEE YLWD STD. SPEC. SECTION 15139.
2. HYDRANTS SHALL BE PAINTED PER YLWD STD. SPEC. SECTION 09900.
3. HYDRANT FLANGE GASKET SHALL BE "FULL FACE" AND OF RUBBER COMPOSITION 1/8" THICK.
4. PROVIDE 5' MINIMUM RADIUS CLEARANCE BETWEEN FIRE HYDRANT AND ALL OTHER ABOVE GROUND IMPROVEMENTS.
5. FOR FIRE HYDRANT GUARD POST DETAIL, SEE YLWD STD. DWG. W-22.
6. INSTALL TRACER WIRE PER YLWD STD. SPEC. SECTION 15151 WHEN THE MAIN LINE OR LATERAL IS CONSTRUCTED WITH PVC PIPE. TRACER WIRE SHALL BE EXTENDED THROUGH THE CONCRETE PAD IMMEDIATELY ADJACENT TO THE BREAK OFF RISER.

APPROVED BY
ENGINEERING
MANAGER

DATE:10/2025

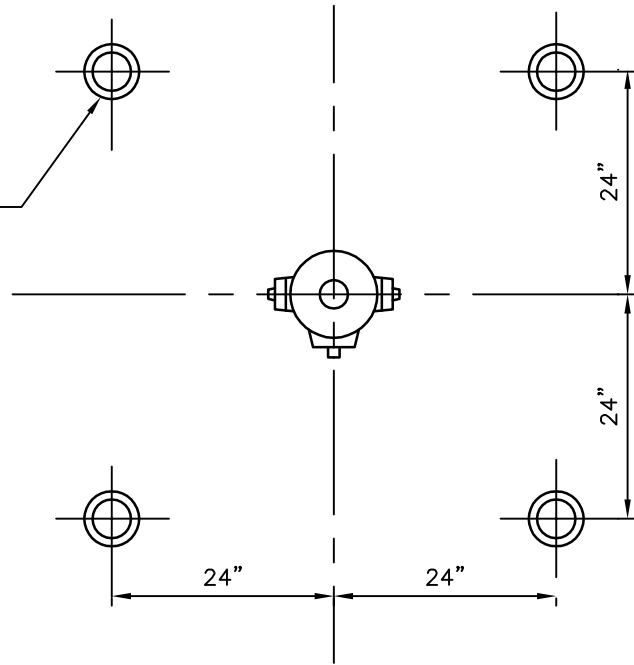


YORBA LINDA WATER DISTRICT

FIRE HYDRANT INSTALLATION

STD. DWG.
W-21
SHEET 1 OF 1

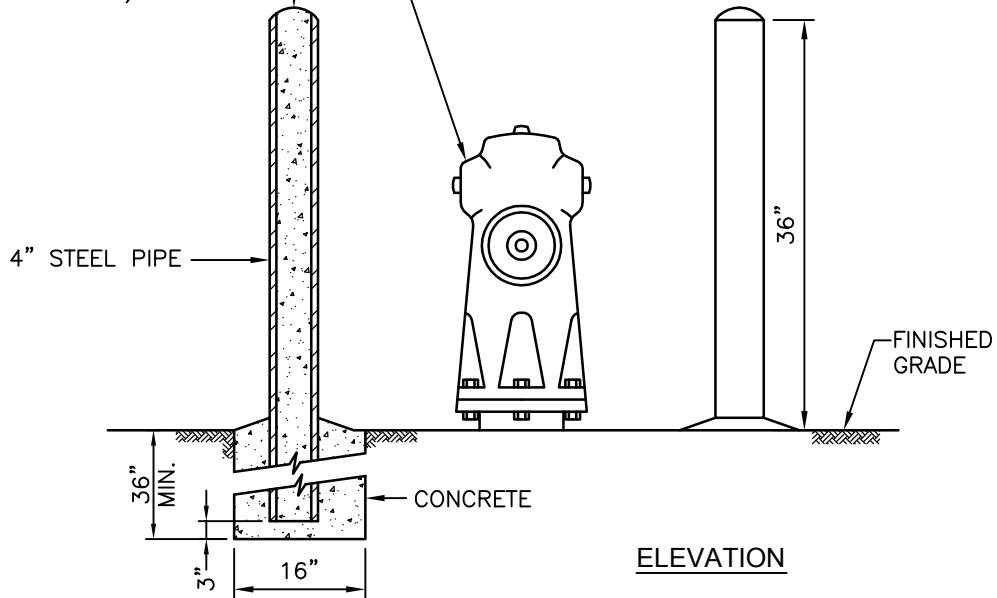
OMIT REAR GUARD POSTS
ON INSTALLATIONS NOT
REQUIRING PROTECTION
FROM REAR



PLAN

FILL POST WITH CONCRETE
(ROUNDED ON TOP)

FIRE HYDRANT
SEE STD. PLAN W-21



ELEVATION

NOTE:

1. GUARD POSTS SHALL BE PAINTED HY-LUX 3119 CATERPILLAR YELLOW. SEE YLWD STD. SPEC. SECTION 09900.

APPROVED BY
ENGINEERING
MANAGER



DATE
7/2016

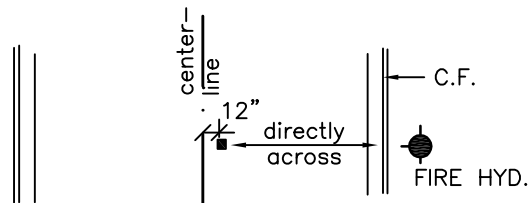
YORBA LINDA WATER DISTRICT

FIRE HYDRANT GUARD POST

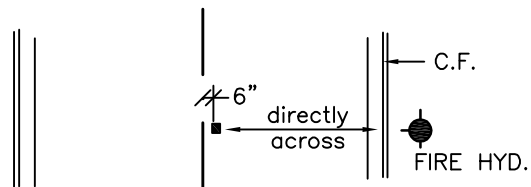
STD. DWG.

W-22

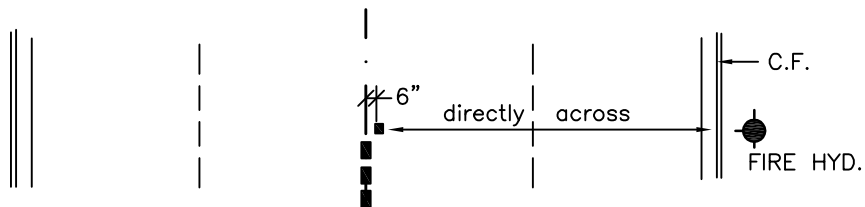
SHEET 1 OF 1



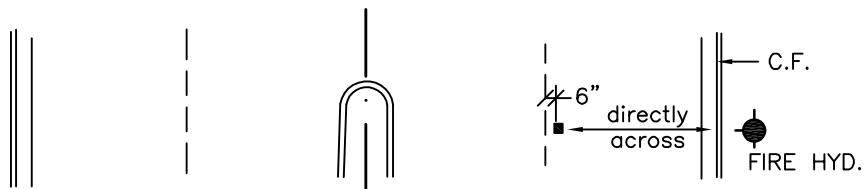
(UNMARKED STREET)
CASE 1



(WHITE CENTER DIVIDER)
CASE 2



(YELLOW CENTER DIVIDER)
CASE 3



(ISLAND)
CASE 4

- CASE 1 BLUE REFLECTOR TO BE SET 12" FROM CENTERLINE, DIRECTLY ACROSS FIRE HYDRANT.
- CASE 2 BLUE REFLECTOR TO BE SET 6" FROM WHITE CENTER DIVIDER, DIRECTLY ACROSS FIRE HYDRANT.
- CASE 3 BLUE REFLECTOR TO BE SET 6" FROM YELLOW CENTER DIVIDER.
- CASE 4 BLUE REFLECTOR TO BE SET 6" FROM NEAREST WHITE LINE TO FIRE HYDRANT.

NOTE:

1. BLUE DOTS AS MANUFACTURED BY STIMSONITE—MODEL 88 "A" OR APPROVED EQUAL.

APPROVED BY
ENGINEERING
MANAGER

DATE
7/2016



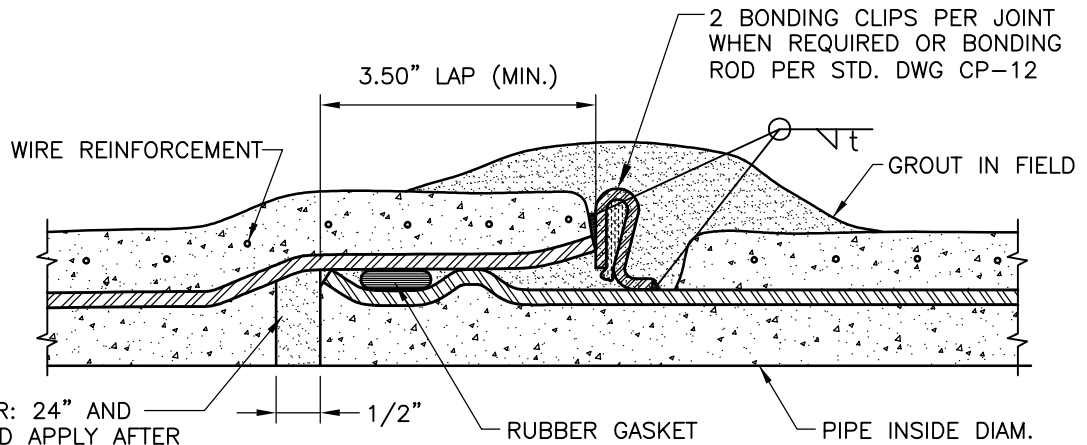
YORBA LINDA WATER DISTRICT

REFLECTOR LOCATIONS FOR FIRE HYDRANTS

STD. DWG.

W-23

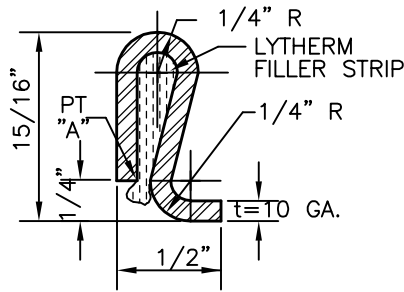
SHEET 1 OF 1



FIELD MORTAR: 24" AND LARGER, FIELD APPLY AFTER BACKFILL. FOR 20" PIPE AND SMALLER, USE GS-79 EXTRUDED BUTYL RUBBER PIPE SEALANT.

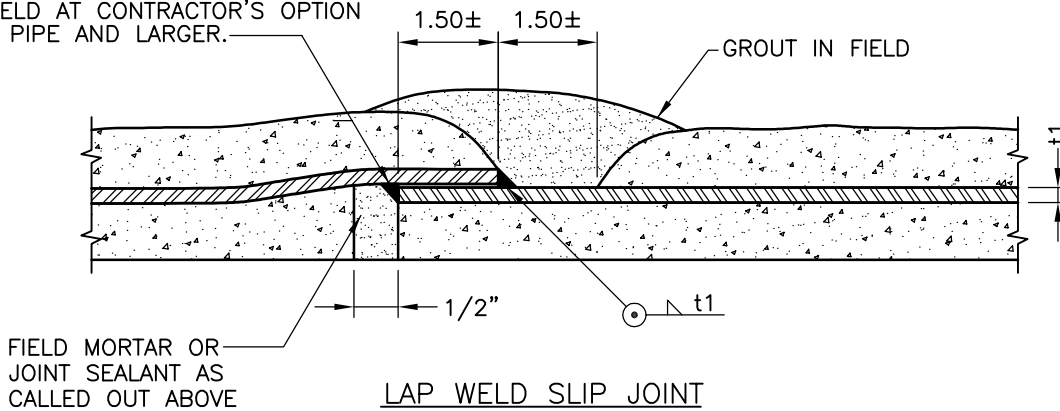
BONDING CLIP NOTES

1. BONDING CLIPS SHALL BE LOCATED AT THE SPRING LINE OF THE PIPE.
2. BONDING CLIPS SHALL BE MADE OF ASTM A366 STEEL WITH A CUT LENGTH OF 2-1/2-INCHES AND WIDTH OF 1-1/4-INCH.
3. LYTHERM FILLER STRIP SHALL BE 1-INCH X 1-1/2-INCH WIDE TO OVERLAP SIDES OF CLIP CONTRACTOR SHALL CRIMP BONDING CLIP OVER FILLER AT PT. "A" TO COMPRESS FILLER.



BELL AND SPIGOT RUBBER GASKET JOINT

INSIDE WELD AT CONTRACTOR'S OPTION FOR 24" PIPE AND LARGER.



LAP WELD SLIP JOINT

NOTE:

1. SEE SPECIFICATION SECTION 15076 FOR STEEL PIPE SHELL THICKNESS, MORTAR LINING AND COATING THICKNESS, AND INSTALLATION REQUIREMENTS.

APPROVED BY
ENGINEERING
MANAGER

DATE
7/2016



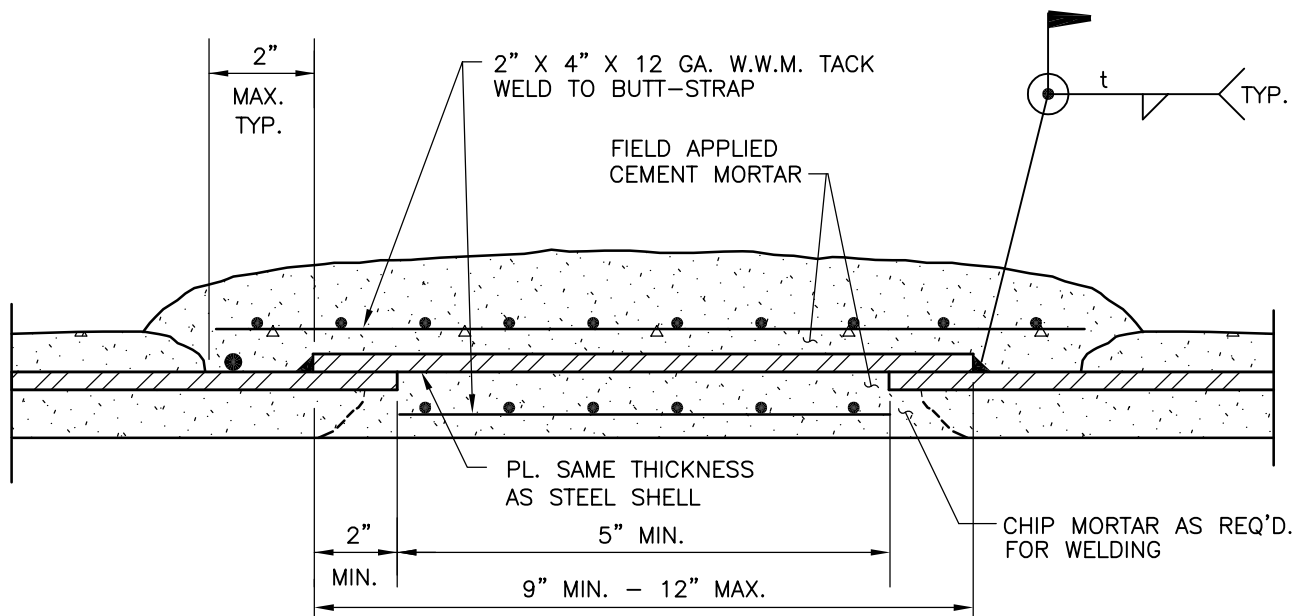
YORBA LINDA WATER DISTRICT

MORTAR LINED AND COATED STEEL PIPE
JOINT DETAILS

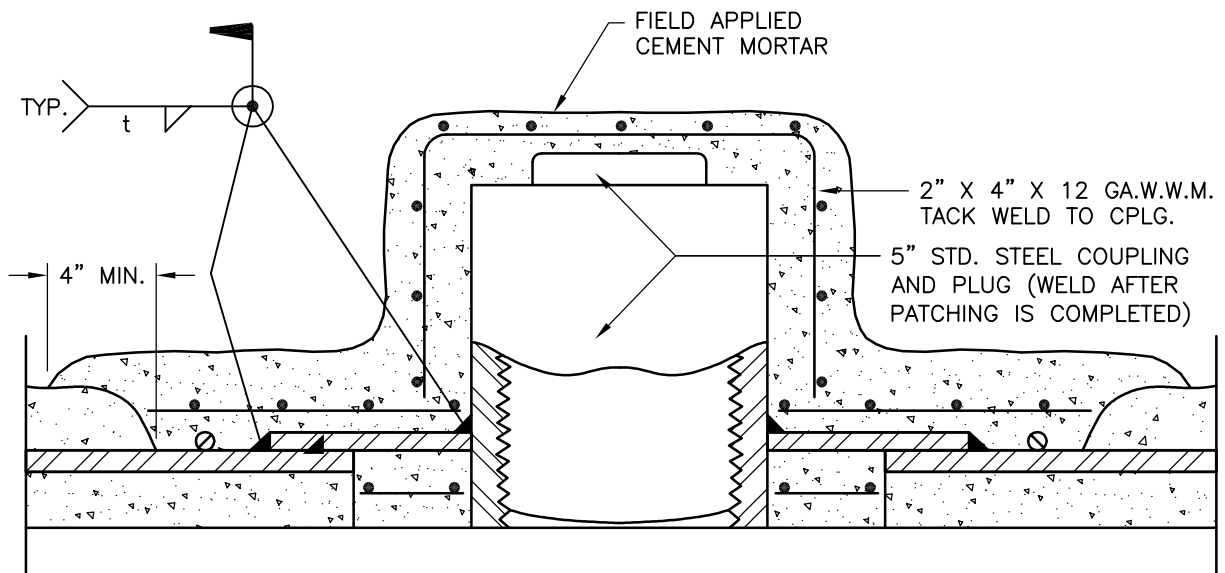
STD. DWG.

W-24

SHEET 1 OF 1



BUTTSTRAP CLOSURE



TYPICAL HANDHOLE
(REQUIRED ON PIPE SMALLER THAN 24" DIAMETER)

NOTE:

1. SEE SPECIFICATION SECTION 15076 FOR STEEL PIPE SHELL THICKNESS, MORTAR LINING AND COATING THICKNESS, AND INSTALLATION REQUIREMENTS.

APPROVED BY
ENGINEERING
MANAGER

DATE
7/2016



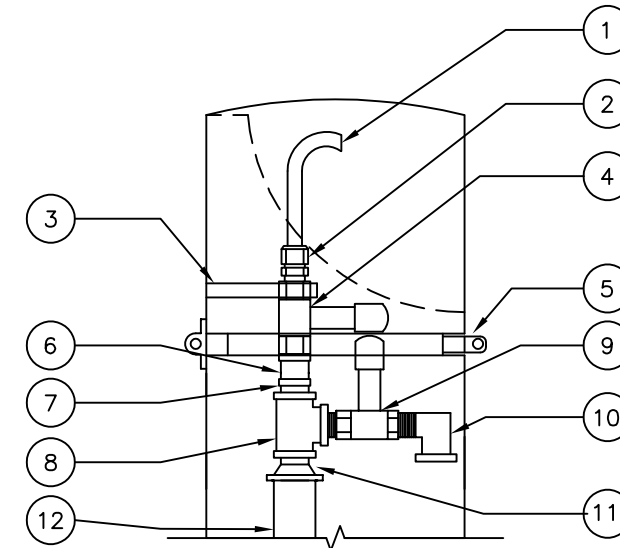
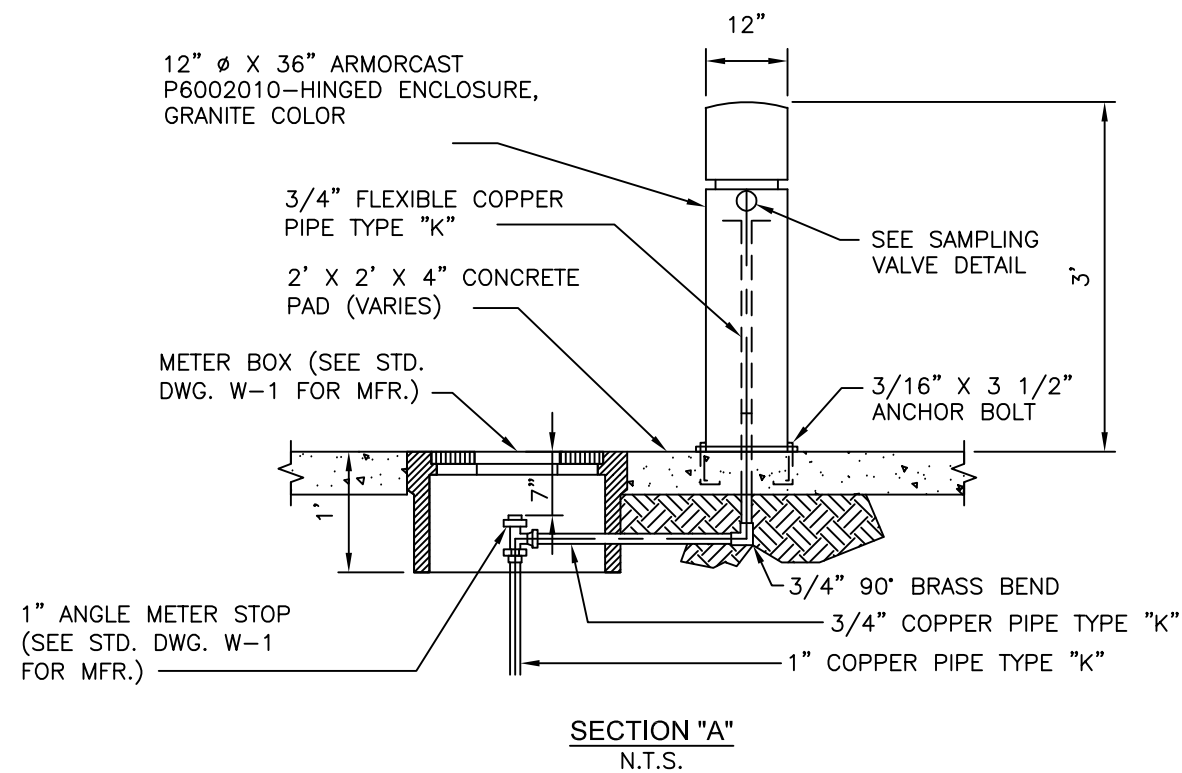
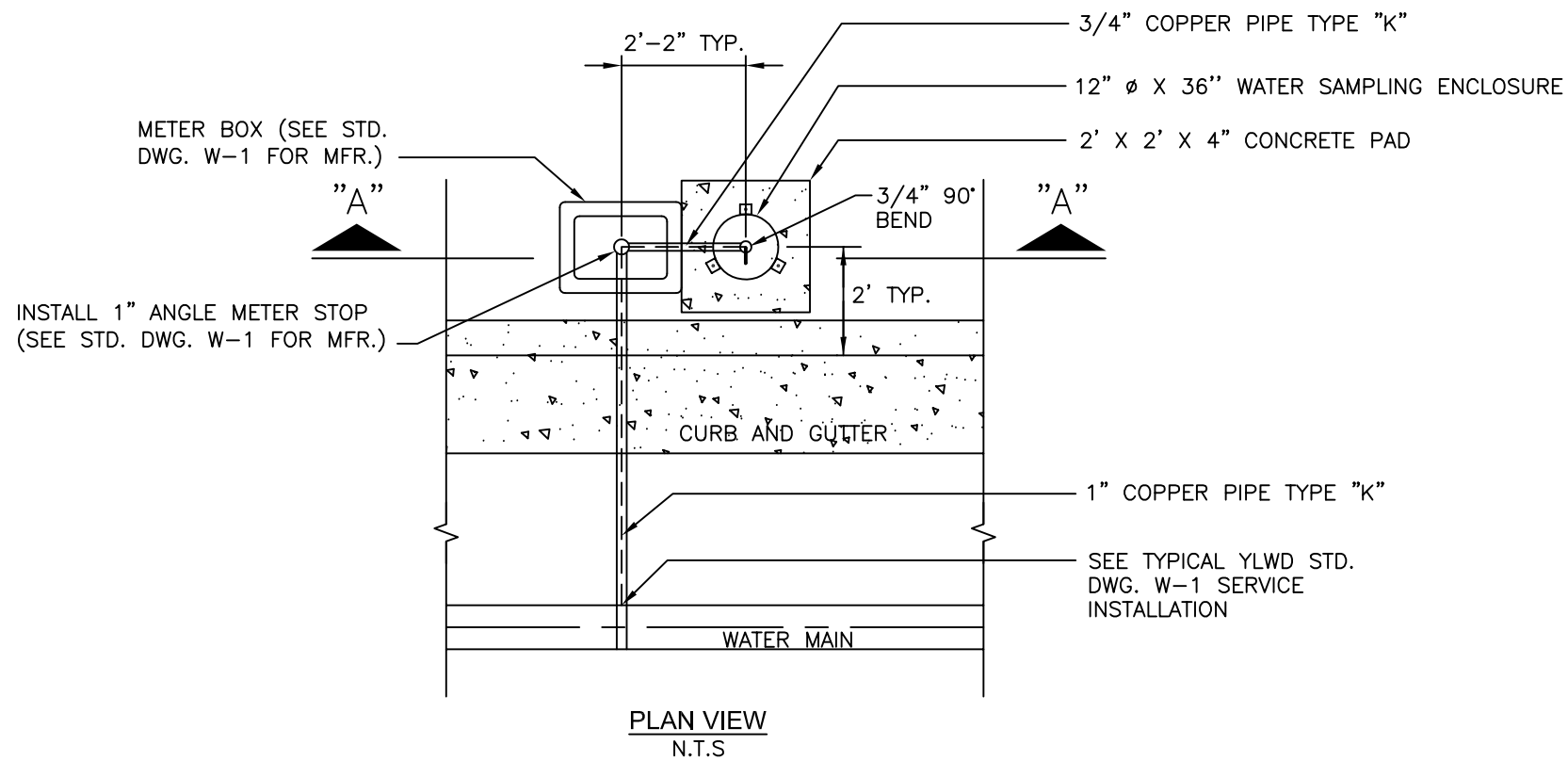
YORBA LINDA WATER DISTRICT

MORTAR LINED AND COATED STEEL PIPE
CLOSURE AND HANDHOLE DETAILS

STD. DWG.

W-25

SHEET 1 OF 1



MATERIAL

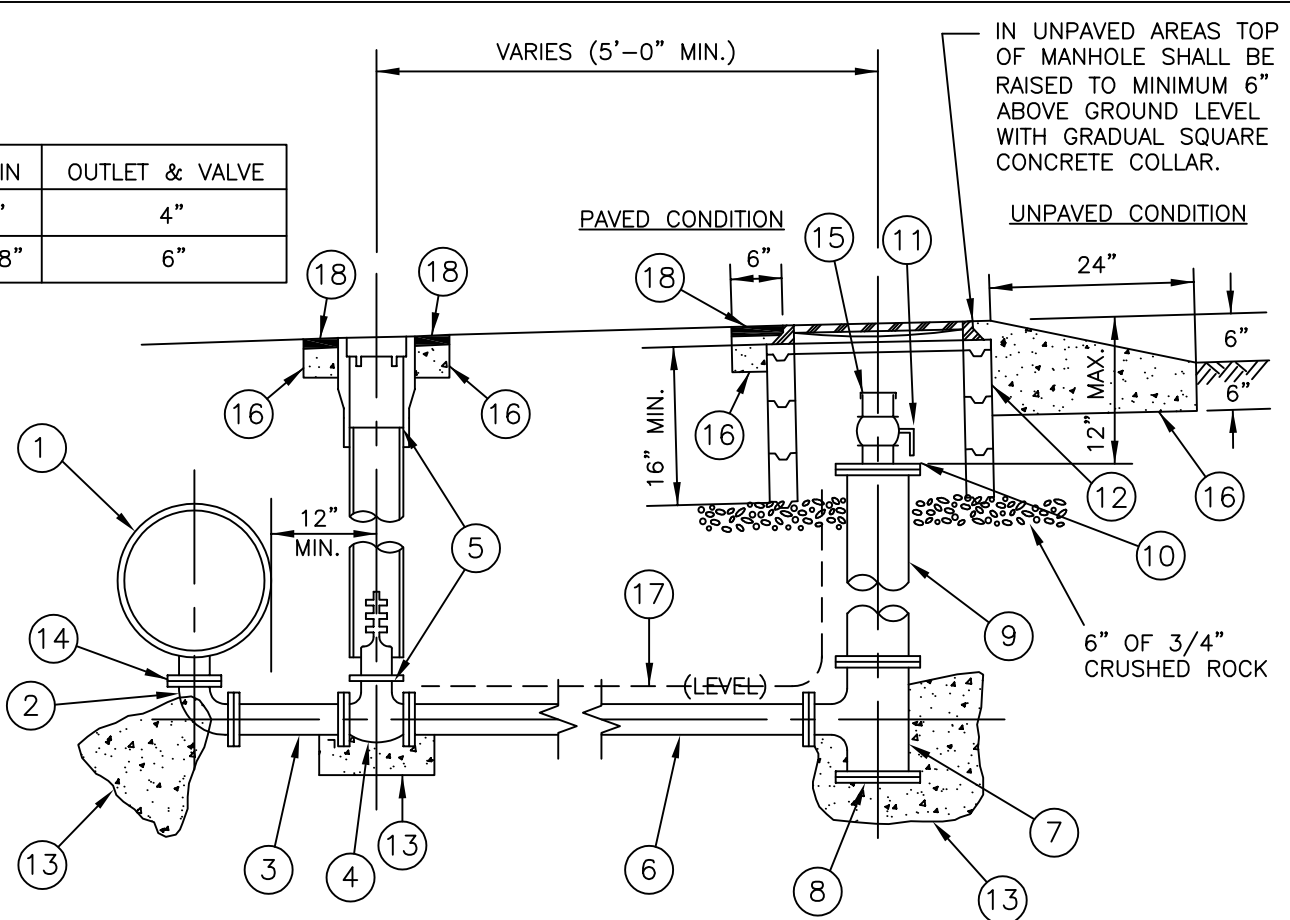
- ① 3/8" TUBING
- ② 3/8" COMPRESSION FITTINGS
- ③ PIPE BRACKET (DRILLED TO ENCLOSURE)
- ④ 3/8" QUARTER TURN BRASS BALL VALVE (RESILIENT SEAT)
- ⑤ PADLOCK HASP
- ⑥ 3/8" CLOSE NIPPLE
- ⑦ 1/2" X 3/8" BUSHING REDUCER
- ⑧ 1/2" X 1/2" BRASS TEE
- ⑨ 1/2" QUARTER TURN BRASS BALL VALVE (RESILIENT SEAT FLUSHING VALVE)
- ⑩ 1/2" 90° THREADED ELBOW
- ⑪ 1/2" X 3/4" REDUCER
- ⑫ 3/4" FLEXIBLE COPPER PIPE TYPE "K"

NOTES:

1. IF INSTALLATION IS WITHIN THE SIDEWALK, THE THICKNESS OF THE FOOTING WILL BE THE SAME AS THE SIDEWALK. IF NO CONCRETE SIDEWALK EXISTS, CONSTRUCT A 2' X 2' X 4" CONCRETE PAD.
2. ALIGN FLUSH VALVE ASSEMBLY TOWARDS CURB AND GUTTER.

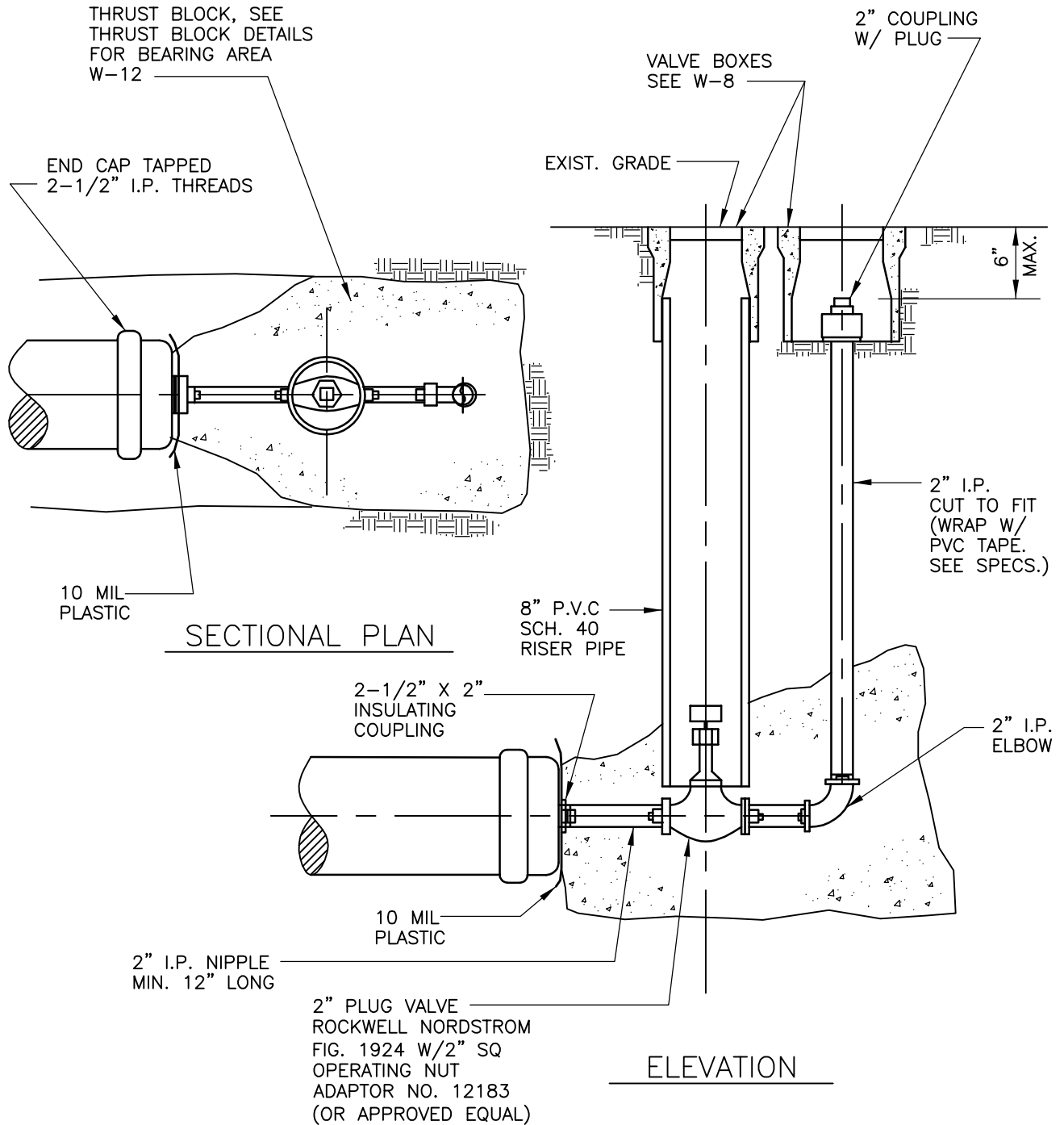
APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT		STD. DWG.
DATE: 12/2022		WATER QUALITY SAMPLING STATION		W-26
				SHEET 1 OF 1

MAIN	OUTLET & VALVE
8"	4"
>8"	6"




MATERIALS

- ① PIPE DIA. x D.I. OR WSP TEE, FLANGED
- ② D.I. 90° ELL, FLG. x FLG.
- ③ D.I. SPOOL
- ④ RW GATE VALVE, FLG. x FLG.
- ⑤ VALVE AND VALVE BOX INSTALLATION PER YLWD STD. DWG. W-8
- ⑥ FLG. D.I. PIPE
- ⑦ 8" X OUTLET SIZE D.I. TEE, FLG.
- ⑧ 8" D.I. BLIND FLANGE
- ⑨ 8" D.I. PIPE, FLANGED
- ⑩ 8" D.I. COMPANION FLANGE WITH 2" F.I.P TAP
- ⑪ 2" STAINLESS STEEL CLOSE NIPPLE, M.I.P. 2" STAINLESS STEEL BALL VALVE WITH LEVER HANDLE, F.I.P
- ⑫ 24" MANHOLE FRAME AND COVER WITH GRADE RINGS PER YLWD DWG. S-1, WITH COVER MARKED "YLWD WATER"
- ⑬ THRUST BLOCKS PER YLWD STD. DWG. W-12
- ⑭ IF MAIN LINE IS WSP, PROVIDE BOLT AND FLANGE INSULATING KIT PER YLWD STD. DWG. CP-13
- ⑮ STAINLESS STEEL ADAPTER, 2" M.I.P. X 2 1/2" M.F.H THREAD, WITH PROTECTIVE CAP
- ⑯ 6" THICK 2500 PSI CONCRETE COLLAR
- ⑰ DETECTABLE LOCATOR TAPE
- ⑱ 2" AC PAVEMENT

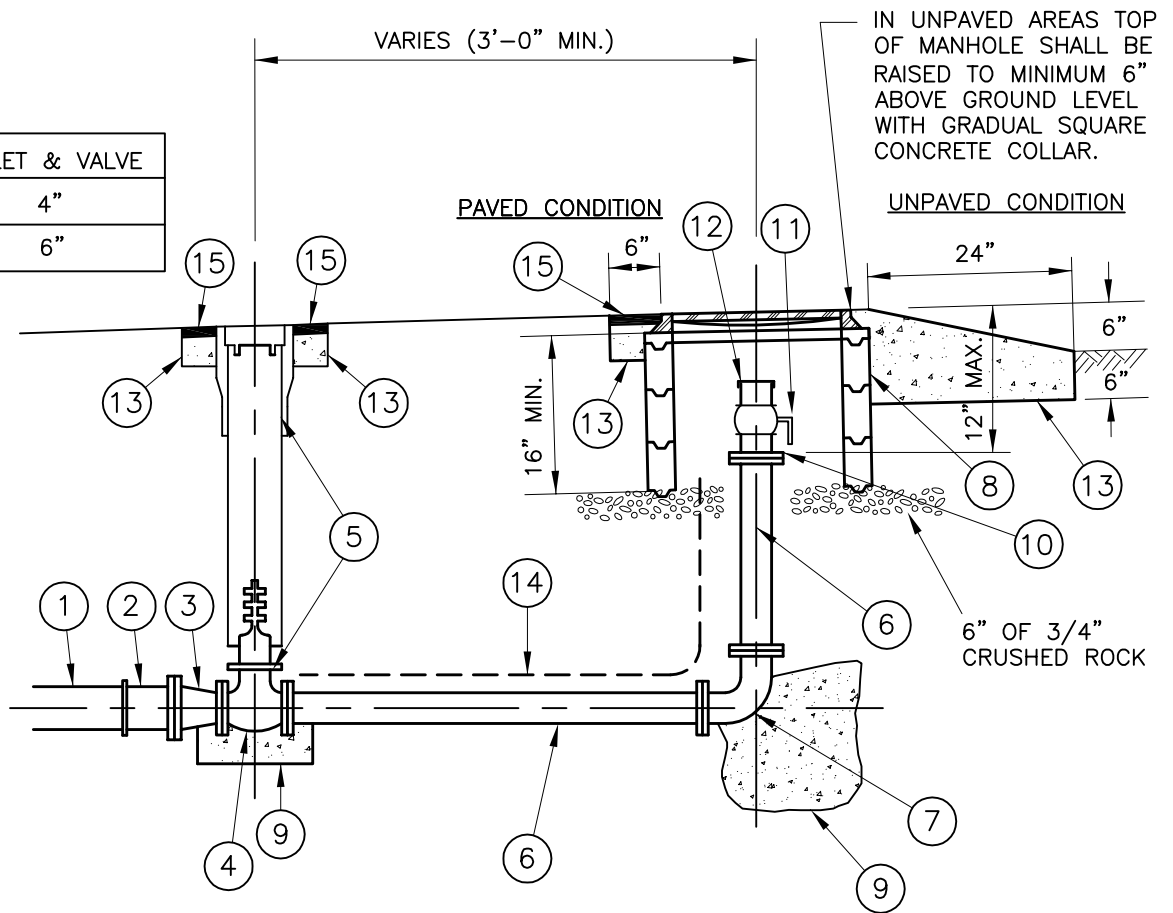


DETECTABLE LOCATOR TAPE SHALL BE PLACED 1'-0" ABOVE PIPELINE PRIOR TO BACKFILL. TAPE SHALL BE TERRA TAPE, CHRISTY'S OR APPROVED EQUAL.

NOTE: ALL I.P. SHALL BE GALVANIZED AND COATED AS PER SECTION 09900 - PAINTING AND COATING SPECIFICATION.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE 7/2016		TEMPORARY DEAD END BLOW-OFF ASSEMBLY	W-27A
			SHEET 1 OF 1

MAIN	OUTLET & VALVE
8"	4"
>8"	6"



MATERIALS

- | | |
|--|--|
| ① MAIN LINE | ⑨ THRUST BLOCKS PER YLWD
STD. DWG. W-12 |
| ② P.O. X FLG. ADAPTER | ⑩ BLIND FLANGE WITH 2-1/2" TAP |
| ③ D.I. REDUCER, FLG. x FLG. | ⑪ 2 1/2" BRASS NIPPLE AND 2 1/2"
BALL VALVE, IP THREAD |
| ④ RW GATE VALVE, FLG. x FLG. | ⑫ 2 1/2" BRASS NIPPLE, I.P. THREAD
X FH THREAD, WITH PROTECTIVE CAP |
| ⑤ VALVE AND VALVE BOX INSTALLATION
PER YLWD STD. DWG. W-8 | ⑬ 6" THICK 2500 PSI CONCRETE COLLAR |
| ⑥ FLG. D.I. PIPE | ⑭ DETECTABLE LOCATOR TAPE |
| ⑦ D.I. 90° ELL, FLG. x FLG. | ⑮ 2" AC PAVEMENT |
| ⑧ 24" MANHOLE FRAME AND COVER
WITH GRADE RINGS PER YLWD DWG.
S-1, WITH COVER MARKED "YLWD WATER" | |

APPROVED BY
ENGINEERING
MANAGER

DATE: 3/2019

SCALE: NTS



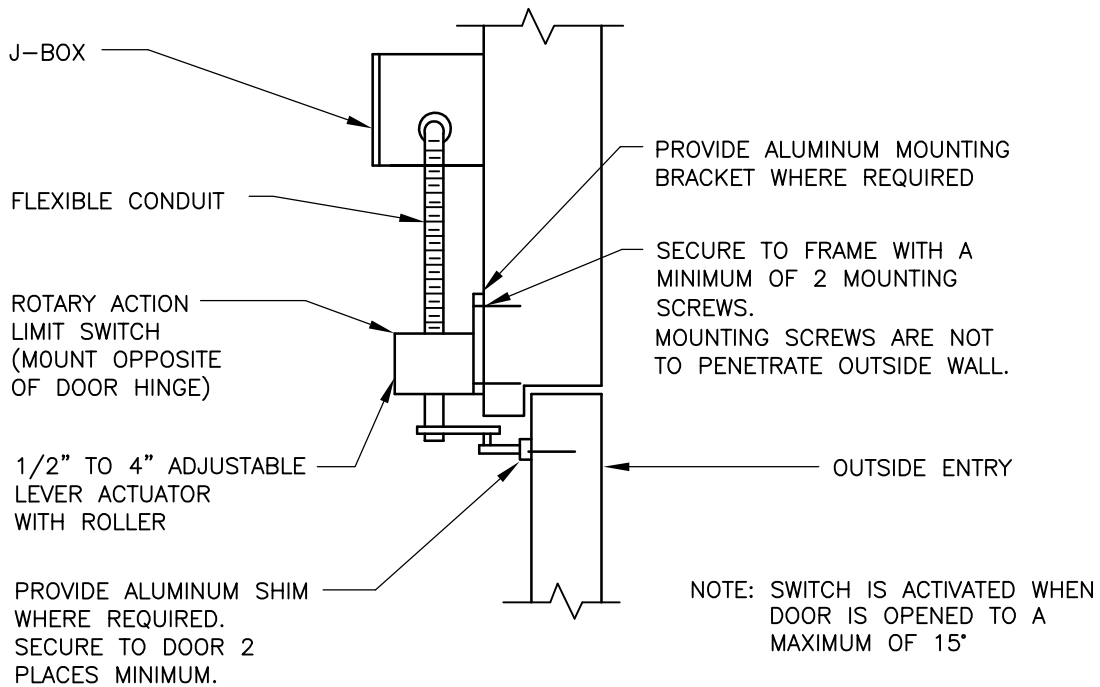
YORBA LINDA WATER DISTRICT

DEAD END MAIN BLOW-OFF ASSEMBLY

STD. DWG.

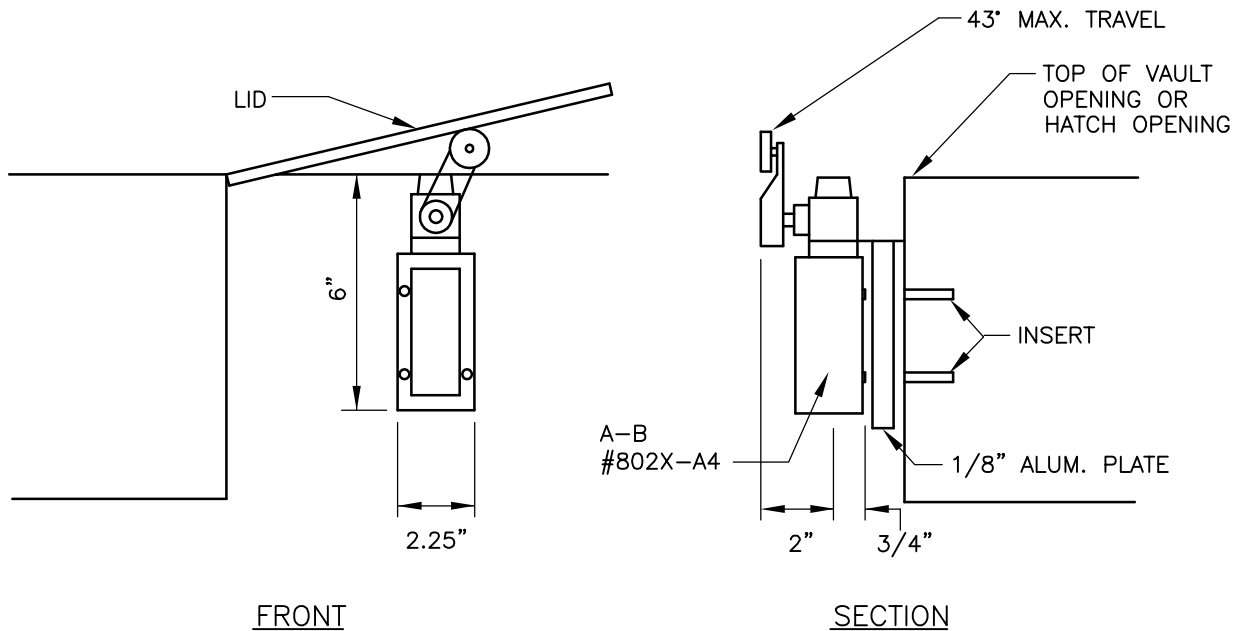
W-27B

SHEET 1 OF 1



DOOR HATCH ENTRY SWITCH

N.T.S.



INTRUSION SWITCH DETAIL

N.T.S.

APPROVED BY
ENGINEERING
MANAGER

DATE
7/2016



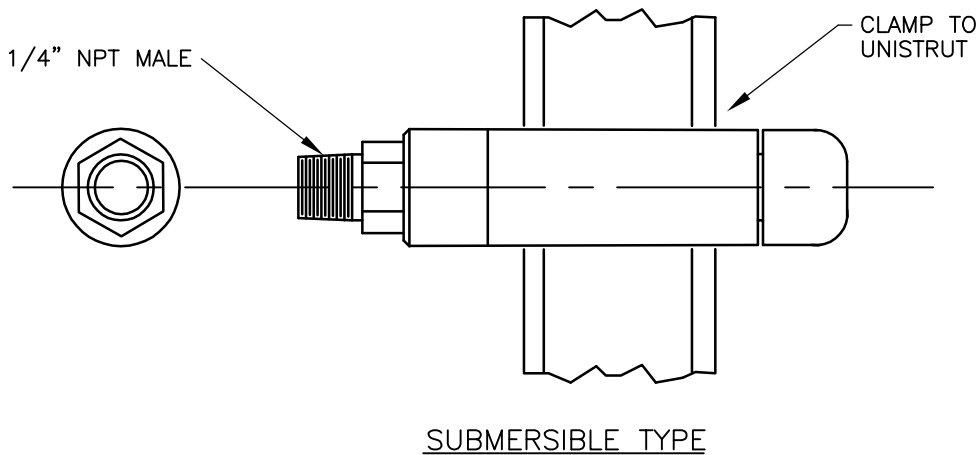
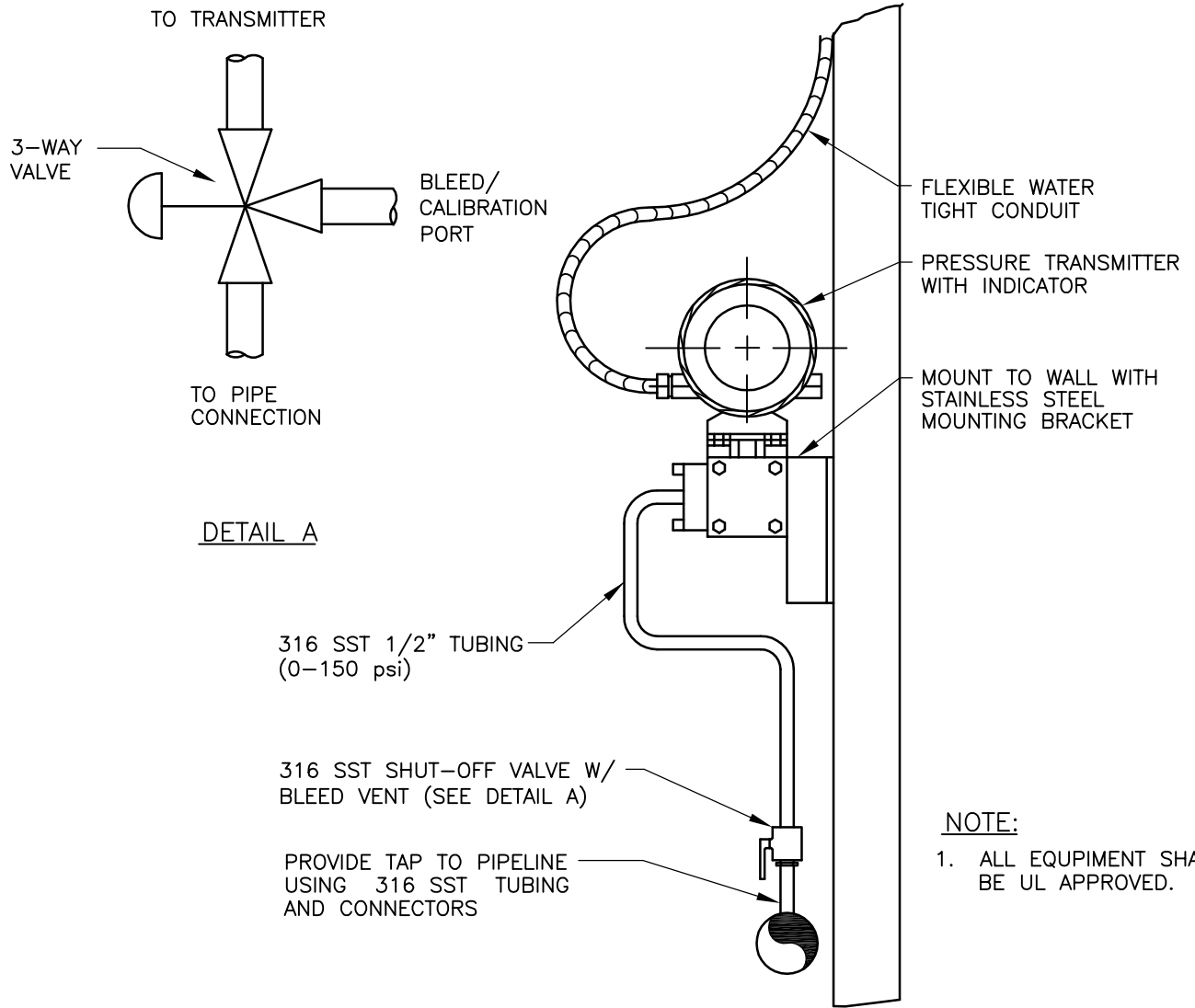
YORBA LINDA WATER DISTRICT


DOOR HATCH ENTRY SWITCH AND
INTRUSION SWITCH INSTALLATION DETAIL

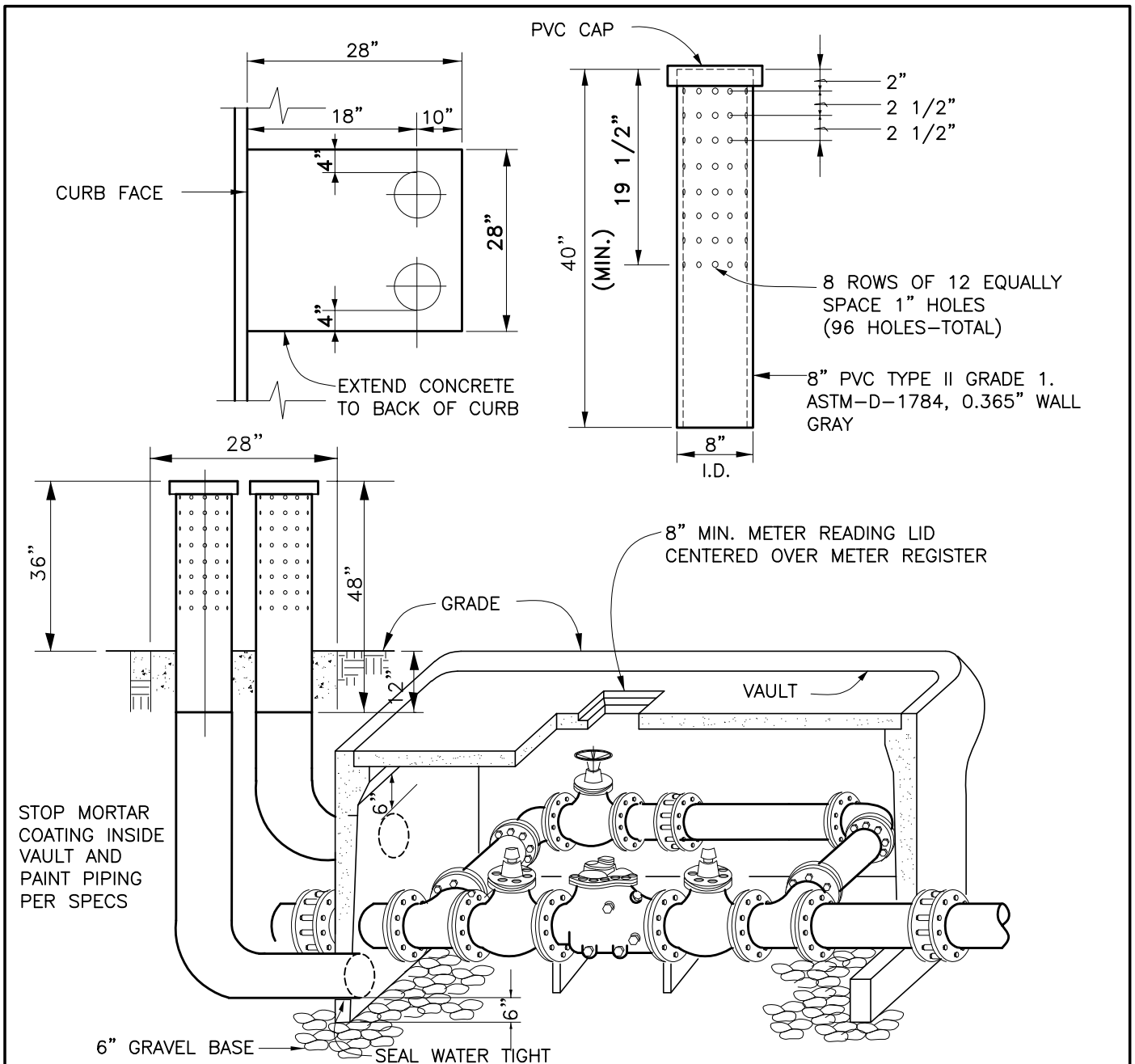
STD. DWG.

W-28

SHEET 1 OF 2




APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE 7/2016		PRESSURE TRANSMITTER INSTALLATION DETAIL	W-28
			SHEET 2 OF 2

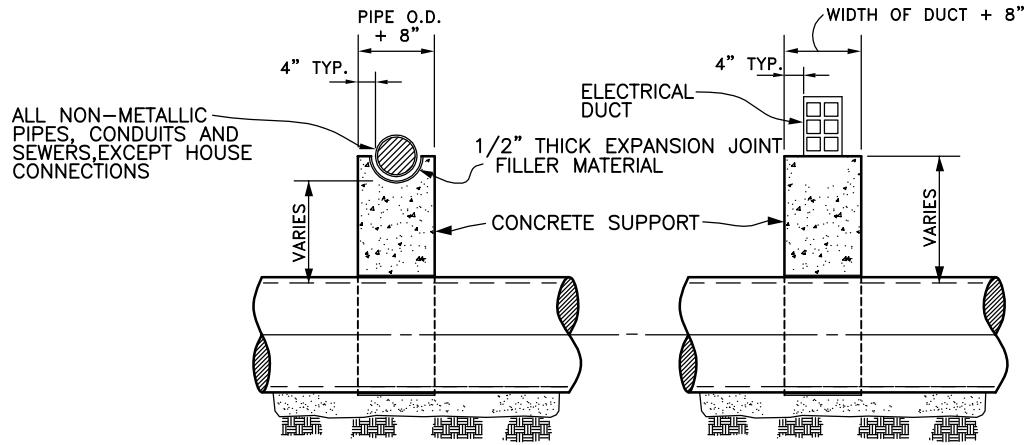


STOP MORTAR COATING INSIDE VAULT AND PAINT PIPING PER SPECS

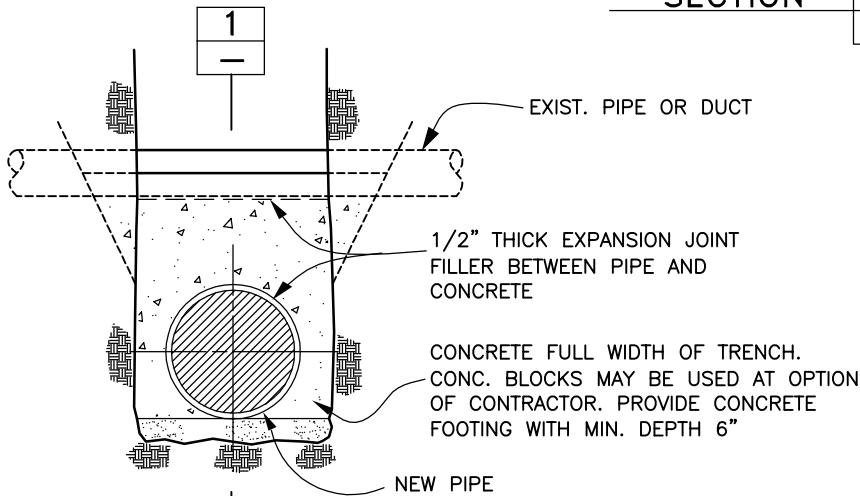
NOTES:

1. MATERIAL: SHALL BE 8" POLYVINYL CHLORIDE (PVC) TYPE II, GRADE 1, ASTM D-1784, 0.365" WALL WITH GOODRICH GRAY NO. 260 FINISH. ALL JOINTS MUST BE SEALED AGAINST WATER INFILTRATION IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATION.
2. LOCATION: VENT PIPES SHALL BE PLACED A MIN. OF 5' FROM DRIVEWAYS, FIRE HYDRANTS OR OTHER STRUCTURES.
3. VAULT VENTING: ONE PIPE SHALL ENTER THE VAULT WITHIN 6" OF THE TOP AND BOTTOM.
4. VENT PIPES: SHALL BE SEALED AGAINST WATER INFILTRATION WHERE THEY ENTER VAULT.
5. ANY VAULT GREATER THAN 5'-0" IN DEPTH SHALL BE VENTED. DIMENSIONS TYPICAL-LOCATION OF VENTS IN SIDEWALK REQUIRE REVIEW & APPROVAL.

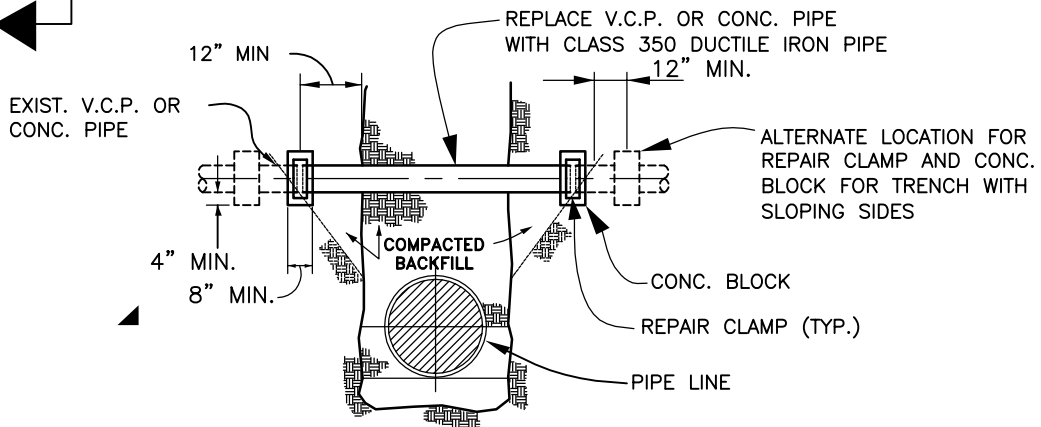
APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG.
DATE: 4/2020		VAULT VENTING	W-30
SCALE: NTS			SHEET 1 OF 1



SECTION 1



NOTE:
 BACKFILL TO BE BROUGHT UP UNIFORMLY ON BOTH SIDES OF CONC. SUPPORT.



**HOUSE SEWER CONNECTION
 ACROSS PIPE TRENCH**

NOTES:

1. UNDERGROUND UTILITY SUPPORTS ARE TO BE PROVIDED WHERE SHOWN ON PLAN OR PROFILE.
2. EXISTING PIPE OR DUCT SHALL BE FIRMLY SUPPORTED DURING INSTALLATION OF NEW PIPE AND SUPPORT.

APPROVED BY
 ENGINEERING
 MANAGER

DATE
 7/2016



YORBA LINDA WATER DISTRICT

UNDERGROUND UTILITY SUPPORT DETAILS


STD. DWG.

W-31

SHEET 1 OF 1

STANDARD WATER NOTES

1. THE WATER SYSTEM AS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH YORBA LINDA WATER DISTRICT'S STANDARD SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION OF DOMESTIC WATER AND SEWER FACILITIES, LATEST EDITION. CONTRACTOR SHALL KEEP A COPY OF THE STANDARD SPECIFICATIONS AND DRAWINGS ON THE JOBSITE AT ALL TIMES.
2. THE DISTRICT SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO COMMENCING WORK AND FOR SCHEDULING INSPECTIONS ON THE WATER IMPROVEMENTS. PHONE: (714) 701-3100, FOR INSPECTION. NO FACILITY SHALL BE BACKFILLED UNTIL INSPECTED BY THE DISTRICT.
3. A PRECONSTRUCTION MEETING CONFERENCE OF REPRESENTATIVES FROM AFFECTED AGENCIES AND THE CONTRACTOR SHALL BE HELD ON THE JOB SITE AT LEAST 48 HOURS PRIOR TO START OF WORK.
4. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (DIG ALERT) AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION AT 811 OR 1-800-422-4133.
5. TO REPORT A WATER OR SEWER MAIN BREAK, LEAK, OR OTHER DAMAGE TO DISTRICT FACILITIES, CALL (714) 701-3000.
6. APPROVAL OF THIS PLAN BY YORBA LINDA WATER DISTRICT DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF THE LOCATION OR EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL DUE PRECAUTIONARY MEANS TO PROTECT THE UTILITY LINES NOT OF RECORD OR NOT SHOWN IN THIS PLAN. CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL BECOME FAMILIAR WITH THIS SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY FROM CONSTRUCTION OPERATIONS.
7. IN ACCORDANCE WITH CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTION 341 (PERMIT REQUIREMENTS) THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO ANY TRENCH EXCAVATION. A COPY OF SAID PERMIT SHALL BE KEPT AT THE JOB SITE AND AVAILABLE TO THE DISTRICT REPRESENTATIVE UPON REQUEST.
8. CONTRACTOR SHALL REPLACE IN KIND ALL IMPROVEMENTS REMOVED OR DISTURBED DURING CONSTRUCTION UNLESS OTHERWISE NOTED.
9. THE WATER SYSTEM SHALL BE INSTALLED A MINIMUM OF 1 WEEK AFTER ALL CURBS HAVE BEEN INSTALLED. IF THERE ARE NO CURBS PLANNED, THEN THE WATER SYSTEM SHALL BE STAKED BY THE DEVELOPER'S ENGINEER AT MINIMUM 50-FOOT STATIONING AT NO COST TO THE DISTRICT.
10. ANY WATER SERVICE FOUND TO BE WITHIN A DRIVEWAY SHALL BE REMOVED COMPLETELY FROM THE CORPORATION STOP AND REINSTALLED AT THE PROPER LOCATION, AT NO COST TO THE DISTRICT.
11. ALL MAIN LINE VALVES SHALL BE MAINTAINED SO AS TO BE ACCESSIBLE DURING TRACT DEVELOPMENT, AND ALL VALVES STEM TOPS HAVING OVER 84 INCHES OF COVER WILL REQUIRE AN EXTENSION. SEE STANDARD DRAWING W-9.
12. IN RESIDENTIAL STREETS, THE TOP OF THE PIPE 12 INCHES AND SMALLER SHALL BE A MINIMUM OF 36 INCHES BELOW THE FINISHED STREET SURFACE AND 48 INCHES BELOW FINISHED STREET SURFACE FOR PIPE GREATER THAN 12".
13. ALL WET-BARREL FIRE HYDRANTS SHALL BE SET WITH THE BOTTOM OF THE TOP FLANGE OF THE BREAK-OFF RISER 3 INCHES ABOVE THE CONCRETE PAD OR SIDEWALK. SEE STANDARD DRAWING W-21.
14. BLUE REFLECTOR DOTS SHALL BE INSTALLED IN STREETS ADJACENT TO ALL FIRE HYDRANT INSTALLATIONS, PER STANDARD DRAWING W-23.
15. ACTUAL FIRE HYDRANT INSTALLATION LOCATION SHALL HAVE A MINIMUM OF 5 FEET RADIUS UNOBSTRUCTED CLEARANCE ALL AROUND.
16. EXISTING DRY-BARREL FIRE HYDRANTS THAT REQUIRE RELOCATION OR REPLACEMENT SHALL BE REPLACED WITH WET-BARREL FIRE HYDRANTS. SEE STANDARD DRAWING W-21.
17. ALL WATER MAINS 6 INCH THROUGH 12 INCH DIAMETER SHALL BE PVC C900 CL 305, UNLESS OTHERWISE NOTED. LARGER THAN 12 INCH SHALL BE STEEL CYLINDER CML & C, UNLESS OTHERWISE NOTED. PVC MAY BE USED FOR PIPES UP TO 16-INCHES IN DIAMETER WITH USE OF AN EXTERNAL RESTRAINT SYSTEM AND ENGINEERING MANAGER APPROVAL.
18. NO TAPS OR OTHER CONNECTIONS SHALL BE MADE TO EXISTING DISTRICT WATER MAINS PRIOR TO CONDUCTING AN APPROVED PRESSURE TEST AND BACTERIA TEST ON THE NEW WATER DISTRIBUTION SYSTEM. TAPPING SLEEVES SHALL BE PRESSURE TESTED IN AN APPROVED MANNER IN THE FIELD IN THE PRESENCE OF THE DISTRICT INSPECTOR, PRIOR TO TAPPING THE MAIN LINE. TAPPING OF THE MAIN SHALL NOT PROCEED UNLESS A DISTRICT INSPECTOR IS PRESENT.
19. ALL FITTINGS SHALL BE MINIMUM 200 PSI RATING.
20. WHERE METERS AND METER BOXES ARE LOCATED WITHIN SLOPES, THE ANGLE METER STOPS SHALL BE SO LOCATED THAT THE METERS AND BOXES WILL BE PARALLEL AND FLUSH, RESPECTIVELY, WITH THE FINISHED SURFACE.
21. CURBS SHALL BE INSCRIBED WITH A "W" INDICATING LOCATIONS OF ALL DOMESTIC WATER SERVICES.
22. AFTER NEW POTABLE WATER IMPROVEMENTS ARE INSTALLED AND APPROVED BY THE DISTRICT, THESE IMPROVEMENTS ARE CONSIDERED TO BE CONNECTED TO THE EXISTING WATER SYSTEM. THEREFORE, ALL NEWLY INSTALLED VALVES, INCLUDING EXISTING VALVES, SHALL BE OPERATED BY AUTHORIZED DISTRICT EMPLOYEES ONLY. CONTRACTOR SHALL NOTIFY THE DISTRICT AT LEAST TWO (2) WORKING DAYS PRIOR TO VALVE OPERATION AT (714) 701-3100.
23. ALL BURIED NUTS AND BOLTS SHALL BE TYPE 316 STAINLESS STEEL.
24. AFTER INSTALLATION, ALL BURIED NUTS, BOLTS AND FLANGES SHALL BE COATED WITH TWO COATS OF 10 MILS EACH OF NO-OX-ID SOFT GREASE BY SANCHEM, INC., WAX TAPE MATERIAL OR APPROVED EQUAL.
25. DISINFECTING OF PIPE SHALL BE IN ACCORDANCE WITH YLWD STANDARD SPECIFICATION 15041, CHLORINATION OF WATER MAINS FOR DISINFECTION.
26. PIPELINE SHALL BE PRESSURE TESTED IN ACCORDANCE WITH YLWD STANDARD SPECIFICATION 15042, HYDROSTATIC TESTING OF PRESSURE PIPELINES.
27. STATIONS SHOWN ARE ALONG THE HORIZONTAL CENTERLINE OF THE PIPE.
28. INDIVIDUAL PRESSURE REGULATORS SHALL BE REQUIRED BY JURISDICTIONAL AGENCY IF AVERAGE STATIC PRESSURE IS 80 PSI OR GREATER.
29. ALL VALVES SHALL BE INSTALLED CLEAR OF ALL SPANDRELS AND GUTTERS WITHIN STREETS.
30. WHERE VALVES ARE LOCATED, CURBS SHALL BE INSCRIBED WITH A "V" AND THE DISTANCE TO THE VALVE IN TWO (2) LOCATIONS.
31. ALL WATER SERVICES FOR LANDSCAPING, AGRICULTURE, COMMERCIAL AND INDUSTRIAL BUILDINGS SHALL HAVE A REDUCED PRESSURE PRINCIPLE BACKFLOW ASSEMBLY, PER STANDARD DRAWING W-18.
32. ALL RESIDENTIAL BUILDINGS REQUIRED BY THE ORANGE COUNTY FIRE AUTHORITY TO INSTALL A FIRE SPRINKLER SYSTEM, SHALL HAVE A DOUBLE CHECK VALVE BACKFLOW ASSEMBLY. SEE STANDARD DRAWING W-19.
33. ALL FIRE DETECTOR ASSEMBLIES AND BACKFLOW DEVICES SHALL BE TESTED AFTER INSTALLATION BY A CERTIFIED TESTER LICENSED TO OPERATE IN ORANGE COUNTY.
34. ALL WATER MAIN CROSSINGS OF SEWER LINES SHALL CONFORM TO THE REQUIREMENTS OF THE STATE WATER RESOURCES CONTROL BOARD, DIVISION OF DRINKING WATER.
35. BEFORE FINAL ACCEPTANCE OF THE WORK BY THE DISTRICT, THE CONTRACTOR SHALL FURNISH "AS-BUILT" REDLINE PLANS TO THE DISTRICT AT THE COMPLETION OF THE WORK.
36. THE CONTRACTOR SHALL NOTIFY THE DISTRICT ONE (1) WEEK PRIOR TO ANY PROPOSED SHUT DOWN OF EXISTING MAINS OR SERVICES. CONTRACTOR SHALL EXPOSE PIPELINE A DAY PRIOR TO CUT-IN. CONTRACTOR SHALL COMPLETE ALL WORK WITHIN AN EIGHT (8) HOUR PERIOD FOR THE SCHEDULED SHUT DOWN.
37. ABANDONMENT OF WATER FACILITIES SHALL BE IN ACCORDANCE WITH YLWD STANDARD SPECIFICATION 01045, EXISTING FACILITIES.
38. THE CONTRACTOR SHALL COMPLETE AND SUBMIT DISTRICT FORM R8-2009-0003, DE MINIMUS WASTE DISCHARGE REPORT TO THE DISTRICT ENGINEERING DEPARTMENT WITHIN 24-HOURS OF DISCHARGING WASTE WATER TO THE STORM DRAIN SYSTEM FOR WATER-RELATED CONSTRUCTION. THE FORM IS AVAILABLE AT THE DISTRICT WEBSITE, YLWD.COM.
39. IN ACCORDANCE WITH THE LATEST DISTRICT RULES AND REGULATIONS FOR WATER SERVICE, JUMPERS ARE NOT PERMITTED. AFTER ONSITE ROUGH GRADING, WATER MAIN, SERVICES, CURB, GUTTER AND BASE PAVING ARE COMPLETE, THE METER SHALL BE SET BY THE DISTRICT.

APPROVED BY ENGINEERING MANAGER		YORBA LINDA WATER DISTRICT	STD. DWG. W-32
DATE: 4/2026		YLWD STANDARD WATER NOTES	SHEET 1 OF 1