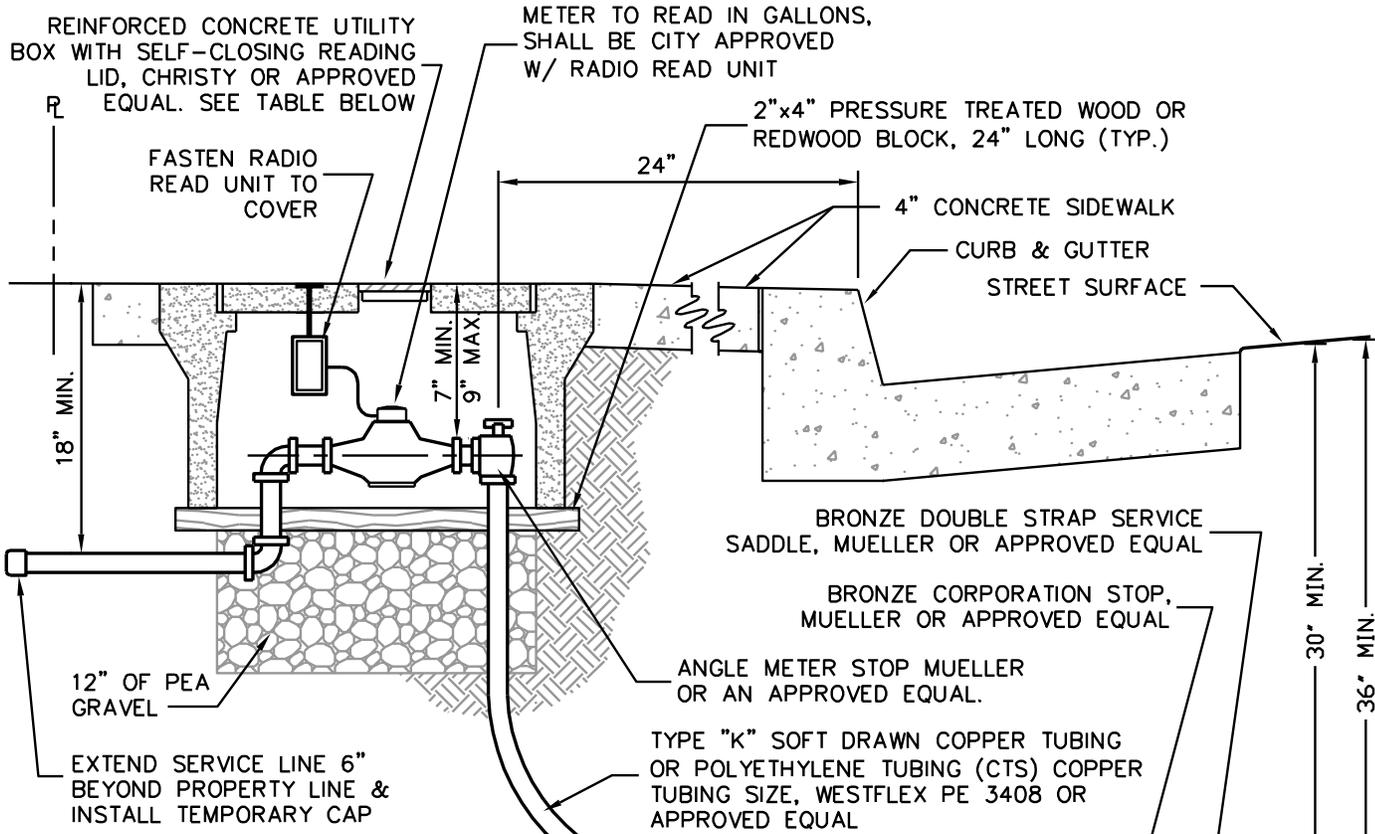


<u>Drawing No.</u>	<u>Drawing Title</u>
W-1	SERVICE CONNECTION
W-2	FIRE HYDRANT INSTALLATION & LOCATION
W-3	VALVE BOX & COVER DETAIL
W-4	WATER MAIN BLOW-OFF SPECIAL CONDITIONS ONLY
W-5	THRUST BLOCK DETAILS
W-6	THRUST BLOCK BEARING AREA
W-7	WELL DISCHARGE SAMPLE TAP
W-8	3/4 " WATER SAMPLE STATION (2 Sheets)
W-9	AIR GAP DETAIL
W-10	VACUUM BREAK ASSEMBLY (2 Sheets)
W-11	FIRE SYSTEM BACKFLOW PREVENTER
W-12	REDUCED PRESSURE BACKFLOW INSTALLATION (2 Sheets)
W-13	LANDSCAPE IRRIGATION CONTROLLER
W-14	WATER MAIN CONNECTION PROCEDURE (3 Sheets)
W-15	FIRE PROTECTION SYSTEM SIAMESE PUMPER CONNECTION
W-16	AIR RELEASE VALVE

REVISION DATE	CITY OF FOWLER	STD.DWG.
	WATER INDEX	W
		INDEX



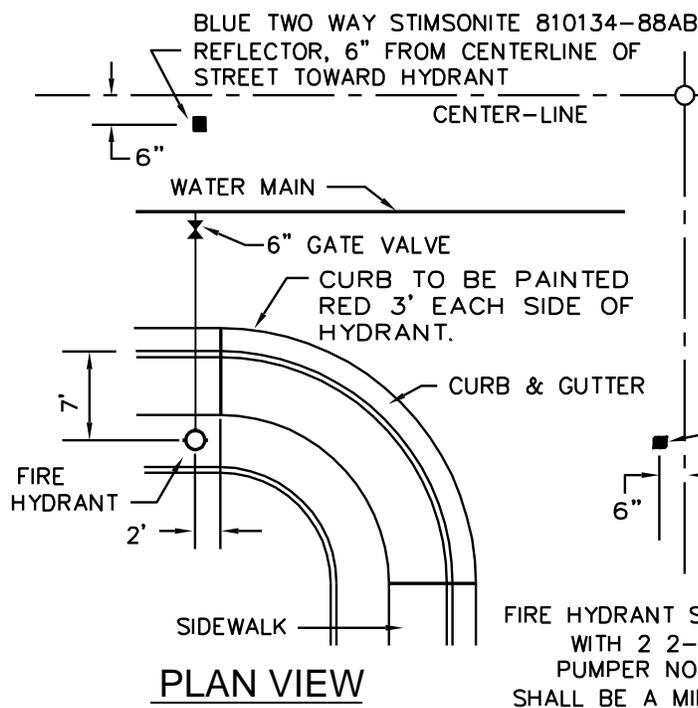
NOTES:

1. 3-INCH HIGH LETTER "W" SHALL BE INSCRIBED ON FACE OF CURB ABOVE SERVICE LINE.
2. NEW SERVICE ADDITIONS TO EXISTING MAINS SHALL BE HOT-TAPPED.
3. SERVICE SHALL BE PLACED TWO FEET FROM INTERIOR PROPERTY LINES.
4. TRAFFIC RATED LID TO BE USED IF SERVICE IS LOCATED IN DRIVEWAY.

* MUELLER OR APPROVED EQUAL.
1" SERVICE MINIMUM SIZE ALLOWED.

ITEM	* 1" SERVICE	* 1-1/2" SERVICE	* 2" SERVICE
SERVICE SADDLE	BRONZE DOUBLE STRAP	BRONZE DOUBLE STRAP	BRONZE DOUBLE STRAP
CORPORATION STOP	BRONZE	BRONZE	BRONZE
ANGLE METER STOP	BRONZE-LOCKABLE	BRONZE-LOCKABLE	BRONZE-LOCKABLE
WATER METER	SEE NOTE ABOVE	SEE NOTE ABOVE	SEE NOTE ABOVE
UTILITY BOX	B16	B36	B36
UTILITY BOX COVER	B16-GP	B36-GP	B36-GP
SERVICE TUBING (CTS)	PE-3408/SDR-7	PE-3408/SDR-7	PE-3408/SDR-7

REVISION DATE		CITY OF FOWLER SERVICE CONNECTION	Std. Dwg.
4/10/01			W-1
6/19/07			
1/6/09			



PLAN VIEW

NOZZLES AND CAPS SHALL HAVE NATIONAL STANDARD PIPE THREADS.

HYDRANTS TO BE PAINTED WITH RUSTOLEUM 7744, COLOR TO BE APPROVED BY THE CITY ENGINEER.

HYDRANTS IN AN AREA WITH NO CURBS OR EXPOSED TO BACK SIDE DAMAGE SHALL HAVE GUARD POSTS INSTALLED TO PROTECT FROM VEHICLE DAMAGE. (SEE STD. M-8)

BLUE TWO WAY STIMSONITE 810134-88AB REFLECTOR, 6" FROM CENTERLINE OF STREET TOWARD HYDRANT

FIRE HYDRANT SHALL BE THREE-WAY TYPE WITH 2 2-1/2" NOZZLES & 1-4 1/2" PUMPER NOZZLE. MAIN VALVE OPENING SHALL BE A MINIMUM OF 5-1/4" MUELLER SUPER CENTURION A-423, OR APPROVED EQUAL, DRY BARREL TYPE COMPLETE WITH 36" MIN. BURY. DRAIN HOLE TO BE PLUGGED.

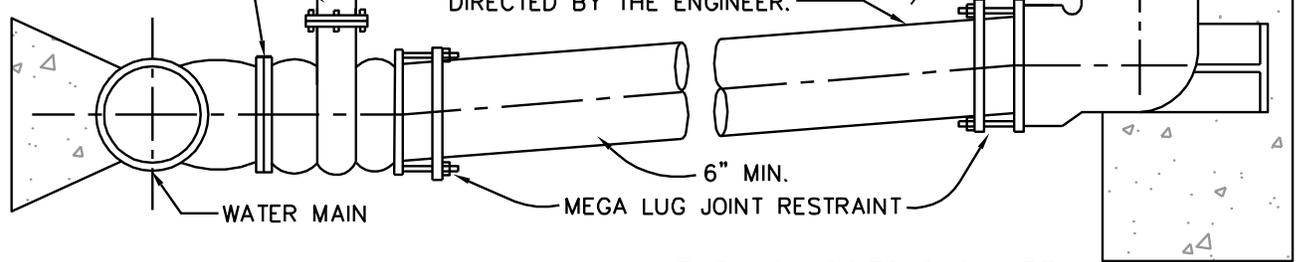
NOTES:

1. DISTANCE BETWEEN FIRE HYDRANTS SHALL NOT EXCEED 300 FT.
2. * FOR COMMERCIAL & SET BACK SIDEWALK CENTER OF HYDRANT SHALL BE LOCATED 2'-9" FROM FACE OF CURB.

BOX & COVER SEE STD. W-3

VALVE SHALL BE AWWA APPROVED RESILIENT WEDGE GATE VALVE WITH NON-RISING STEM AND "O" RING SEALS MUELLER OR APPROVED EQUAL.

FLANGED CONNECTION



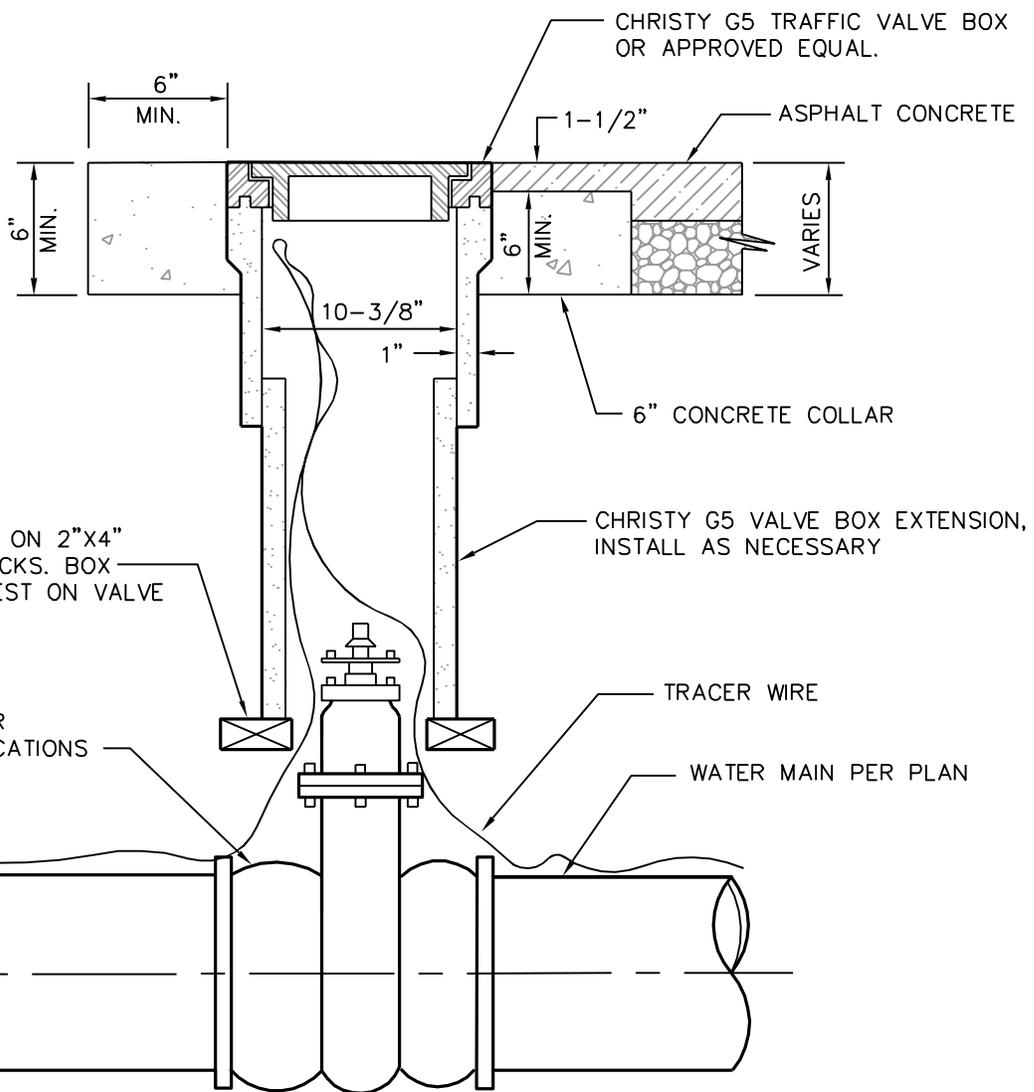
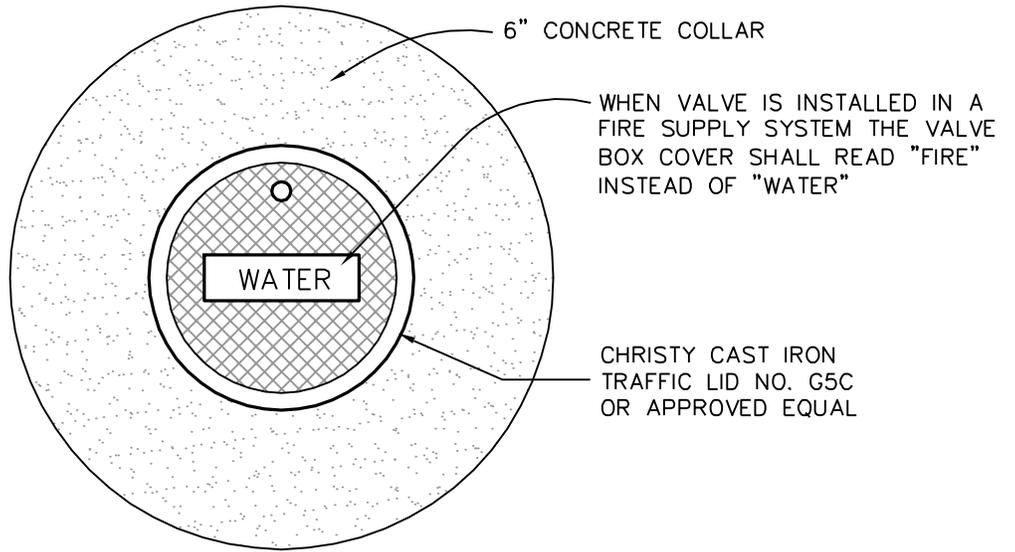
HYDRANT RUN BETWEEN GATE VALVE AND 90 DEGREE BEND SHALL RISE NOT MORE THAN 1/4" PER FOOT SO AS TO ADJUST ELEVATION OF HYDRANT RISER FLANGE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

DISTANCES INDICATED SHALL BE USED, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

BURY & JOINTS SHALL BE WRAPPED WITH 10 MIL PLASTIC SHEET PRIOR TO POURING CONCRETE THRUST BLOCK.

PROPERTY LINE

REVISION DATE		CITY OF FOWLER FIRE HYDRANT INSTALLATION & LOCATION	Std. Dwg.
4/10/01			W-2
6/19/07			
1/6/09			



SUPPORT BOX ON 2"x4" REDWOOD BLOCKS. BOX SHALL NOT REST ON VALVE

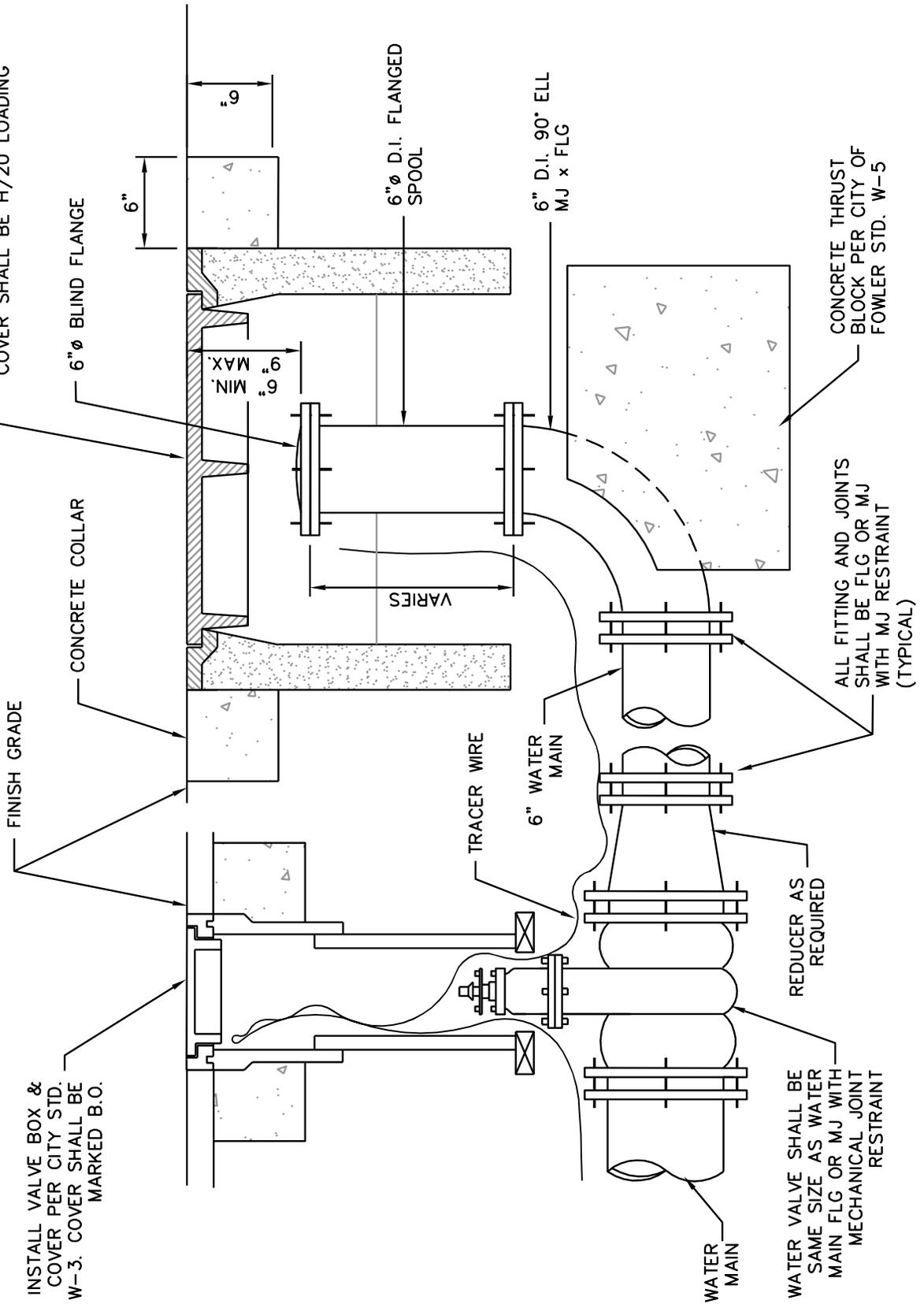
INSTALL VALVE PER PLAN AND SPECIFICATIONS

TRACER WIRE

WATER MAIN PER PLAN

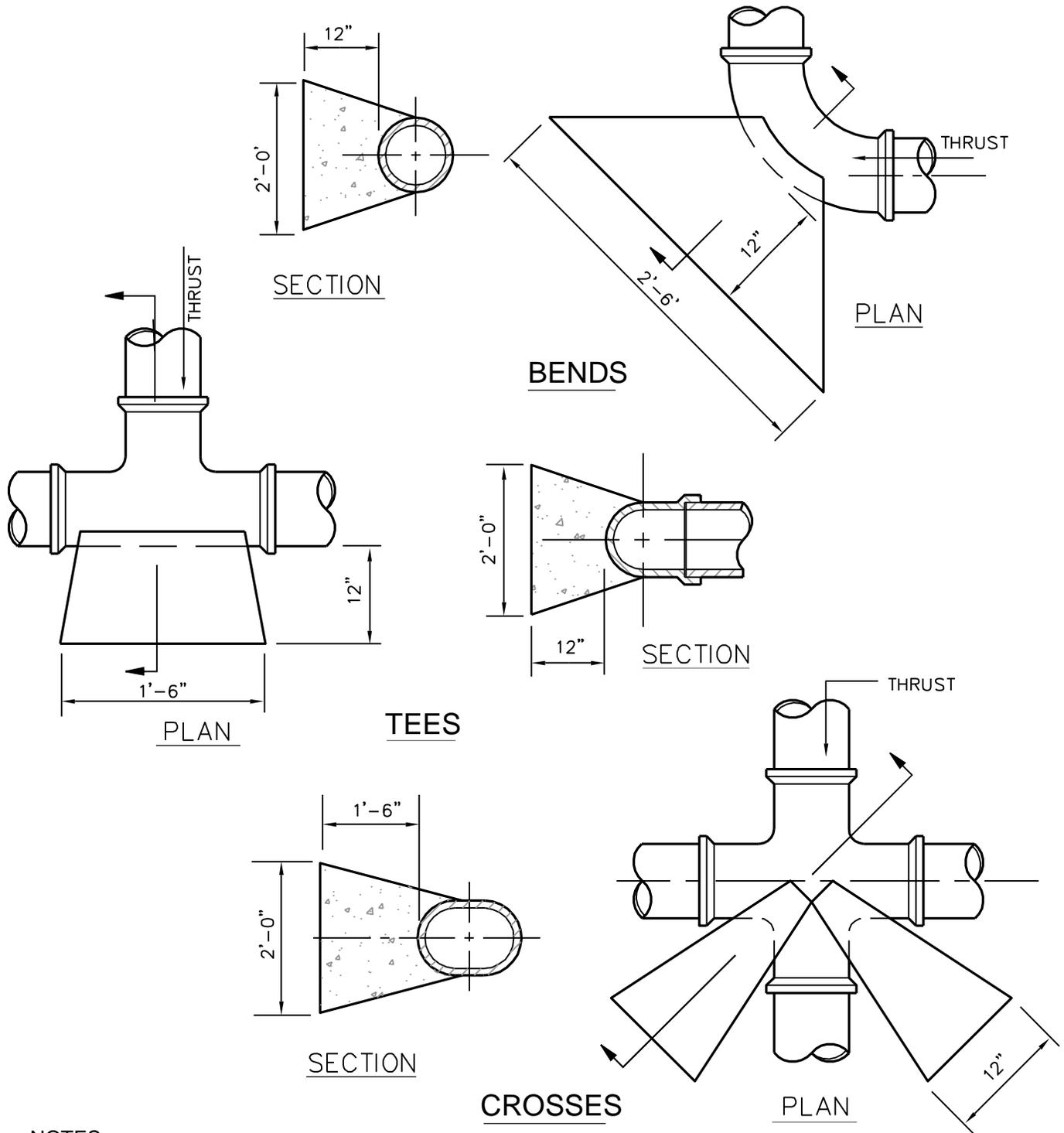
REVISION DATE		CITY OF FOWLER	Std. Dwg.
4/10/01			VALVE BOX & COVER DETAIL
		W-3	

CHRISTY T21V OPEN BOTTOM VAULT,
WITH BOLT DOWN COVER, OR APPROVED
EQUAL. INSTALLATION IN TRAFFIC AREAS
COVER SHALL BE H/20 LOADING



INSTALL VALVE BOX &
COVER PER CITY STD.
W-3. COVER SHALL BE
MARKED B.O.

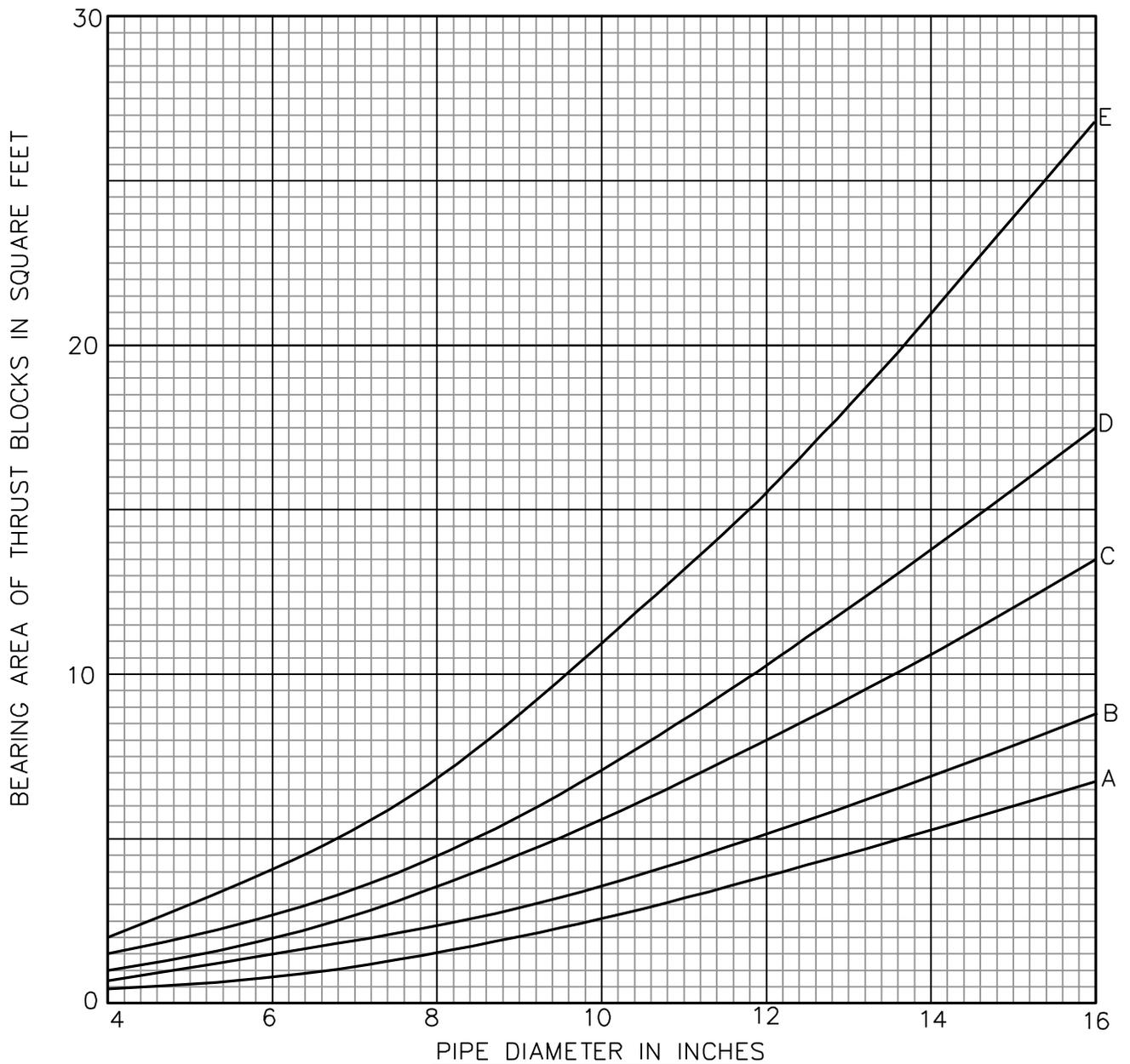
REVISION DATE	CITY OF FOWLER		Std. Dwg.
4/10/01	WATER MAIN BLOW-OFF ASSEMBLY SPECIAL CONDITIONS ONLY		W-4
6/19/07			
1/6/09			



NOTES:

1. ALL THRUST BLOCKS TO BE POURED AGAINST UNDISTURBED SOIL WITH A MINIMUM THICKNESS OF 12 INCHES BETWEEN FITTINGS AND SOIL.
2. ALL DIMENSIONS SHOWN ARE MINIMUM, SEE THRUST BLOCK BEARING AREA CHART.
3. ALL THRUST BLOCKS SHALL BE POURED WITH A MIN. OF 5 SACK CONCRETE.
4. SUPPORT AND PROTECT ALL PIPE. CONCRETE SHALL NOT BEAR AGAINST PIPES.
5. ALL FITTINGS INCLUDING JOINTS SHALL BE WRAPPED WITH 10 MIL PLASTIC SHEET PRIOR TO POURING CONCRETE THRUST BLOCK.

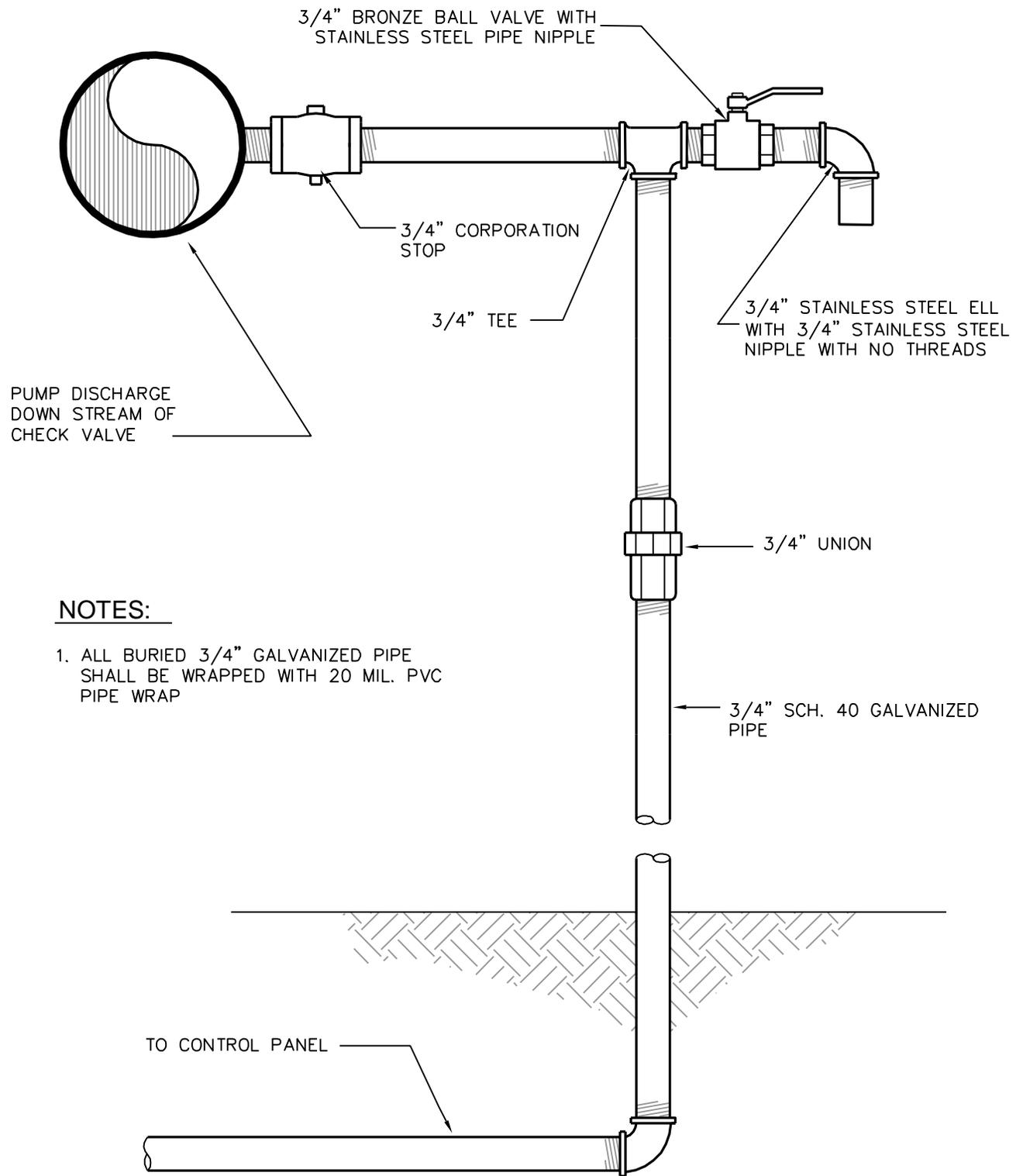
REVISION DATE		city of fowler	Std. Dwg.
4/10/01		THRUST BLOCK DETAILS	W-5



NOTES:

- HORIZONTAL THRUST AT FITTINGS IS BASED ON 150 PSI WATER PRESSURE.
- VALUES FROM CURVES ARE FOR TEES AND DEAD ENDS, i.e. STRAIGHT LINE THRUST. FOR OTHER FITTINGS, MULTIPLY THE BEARING AREA OBTAINED FROM CURVES BY THE FOLLOWING FACTORS: (FOR 90° BEND, 1.4) (FOR 45° BEND, 0.8) (FOR 22-1/2° BEND, 0.4).
- SAFE BEARING LOADS ON UNDISTURBED SOIL ARE AS FOLLOWS:
 CURVE A = 4000 PSF, MASSIVE CRYSTALLINE BEDROCK.
 CURVE B = 3000 PSF, SEDIMENTARY AND FOLIATED BEDROCK.
 CURVE C = 2000 PSF, SANDY GRAVEL AND / OR GRAVEL.
 CURVE D = 1500 PSF, SANDY, SILTY SAND OR GRAVEL AND CLAYEY SAND OR GRAVEL.
 CURVE E = 1000 PSF, CLAY, SANDY CLAY, SILTY CLAY, AND CLAYEY SILT.
- THRUST BLOCKS FOR CONDITIONS NOT COVERED BY CURVES SHALL BE APPROVED BY THE CITY ENGINEER.

REVISION DATE		CITY OF FOWLER		Std. Dwg.
4/10/01		THRUST BLOCK BEARING AREA		W-6



NOTES:

1. ALL BURIED 3/4" GALVANIZED PIPE SHALL BE WRAPPED WITH 20 MIL. PVC PIPE WRAP

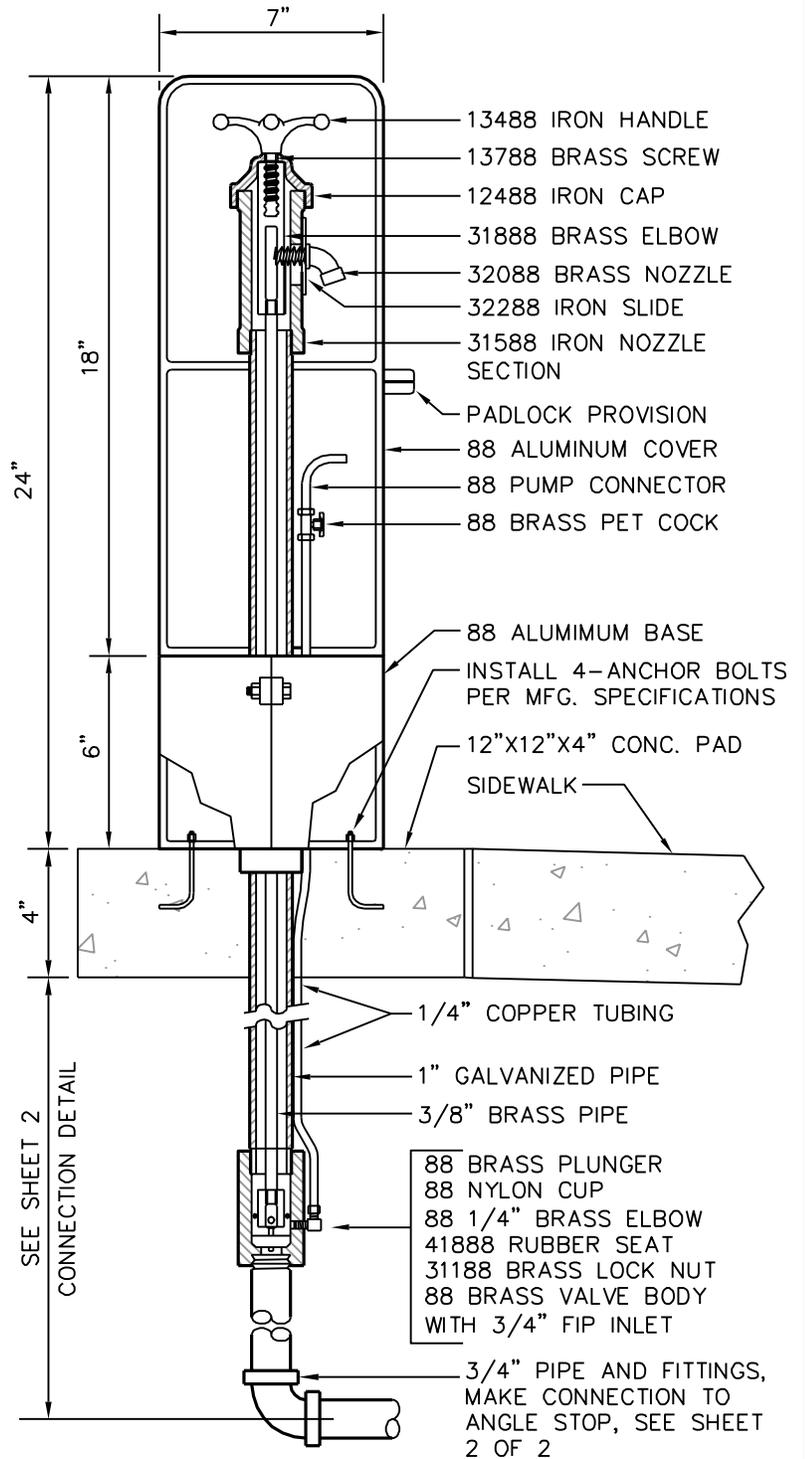
REVISION DATE		CITY OF FOWLER	Std. Dwg.
4/10/01			
6/19/07		WELL DISCHARGE SAMPLE TAP	W-7

STANDARD SPECIFICATIONS:

SAMPLING STATIONS SHALL HAVE A MINIMUM 3/4" FIP INLET, AND A 3/4" HOSE OR UNTHREADED NOZZLE. ALL STATIONS SHALL BE ENCLOSED IN A LOCKABLE, NONREMOVABLE, ALUMINUM-CAST HOUSING. WHEN OPENED THE STATION SHALL REQUIRE NO KEY FOR OPERATION, AND THE WATER WILL FLOW IN AN ALL-BRASS WATERWAY. ALL WORKING PARTS WILL ALSO BE BRASS AND BE REMOVABLE FROM ABOVE GROUND WITH NO DIGGING. A COPPER VENT TUBE WILL ENABLE EACH STATION TO BE PUMPED FREE OF STANDING WATER TO PREVENT FREEZING AND TO MINIMIZE BACTERIAL GROWTH. THE EXTERIOR PIPING WILL BE GALVANIZED, AS MANUFACTURED BY KUPFERLE FOUNDRY, ST. LOUIS, MO. 63102.

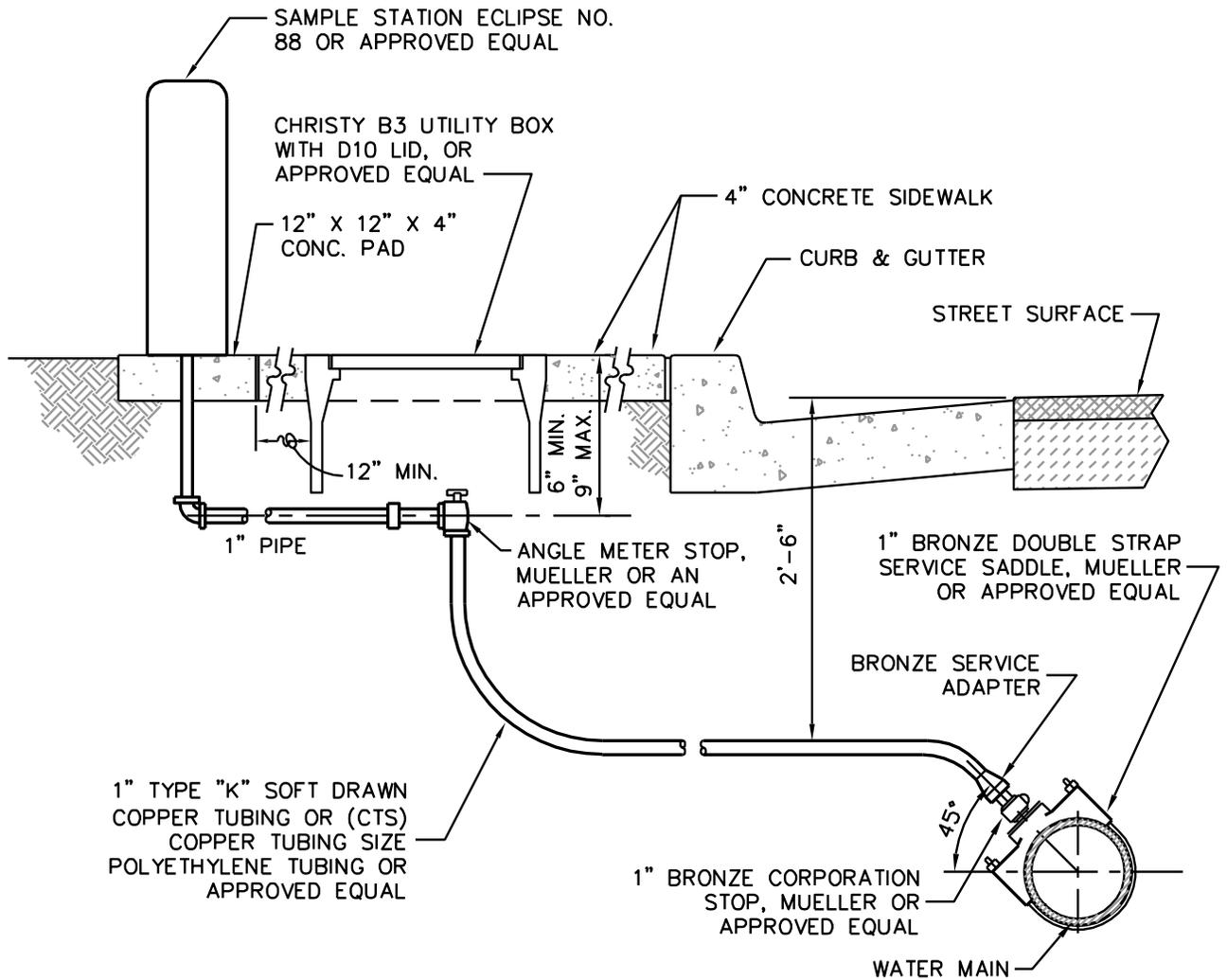
NOTES:

1. LOCATION OF WATER SAMPLE STATIONS SHALL BE DETERMINED BY THE SUPERINTENDENT OF PUBLIC WORKS AND APPROVED BY THE CITY ENGINEER.
2. WATER SAMPLE STATIONS SHALL BE LOCATED WITHIN EACH WELL SUPPLY AND DISTRIBUTION AREA TO PROVIDE THE MINIMUM NUMBER OF SAMPLES REQUIRED BY THE STATE HEALTH DEPARTMENT.

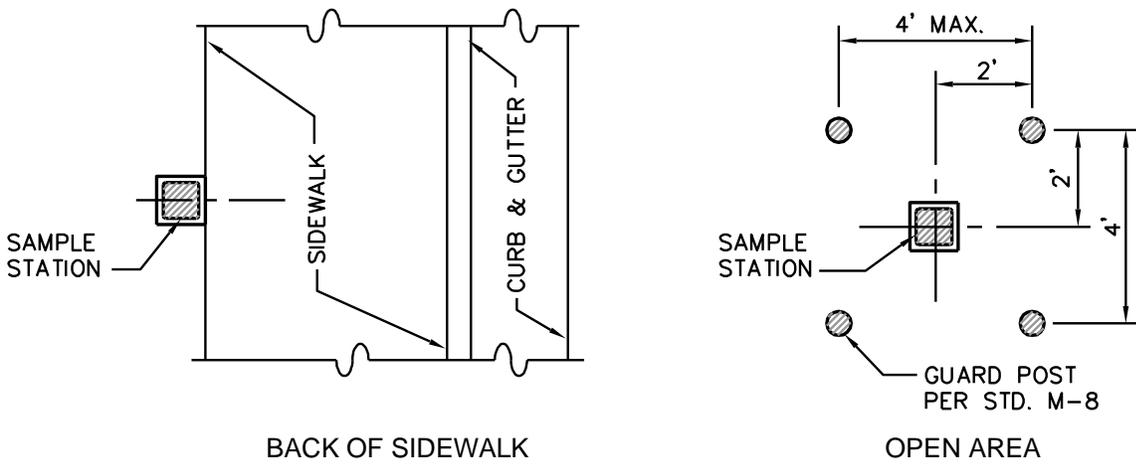


**ECLIPSE NO. 88
SAMPLING STATION**

REVISION DATE		CITY OF FOWLER	Std. Dwg.
4/10/01			
		3/4" WATER SAMPLE STATION	W-8 1 OF 2

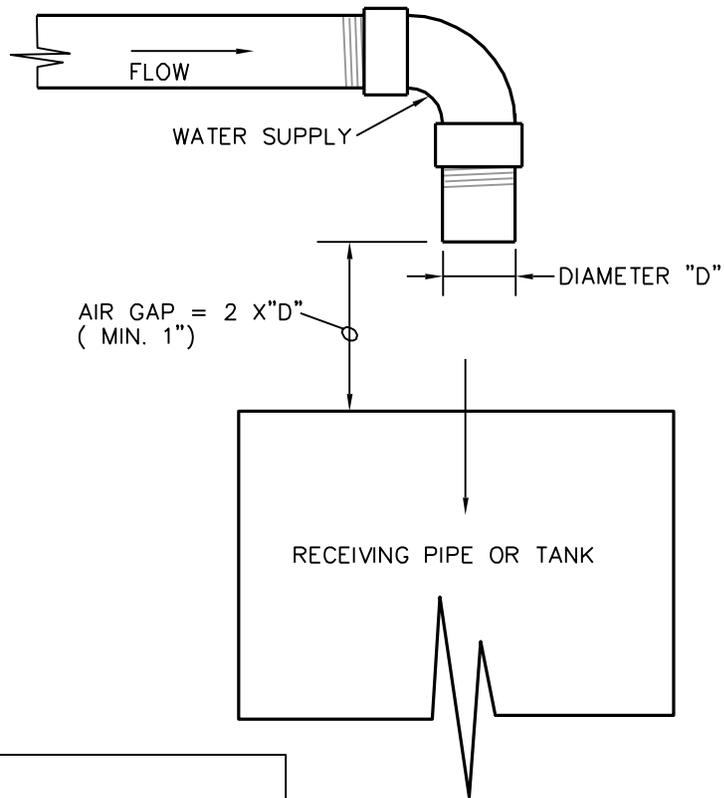


SAMPLE STATION CONNECTION DETAIL



PLAN VIEW

REVISION DATE	CITY OF FOWLER		Std. Dwg.
4/10/01	3/4" WATER SAMPLE STATION		W-8 2 OF 2
6/19/07			
1/6/09			



EXAMPLE

PIPE DIAMETER: 3"
 AIR GAP: 2 X 3-INCHES = 6-INCHES

SPECIFICATIONS

THIS BACKFLOW PREVENTER MUST CONFORM TO THE MOST RECENT SPECIFICATIONS OF THE STATE OF CALIFORNIA APPROVED BACKFLOW PREVENTION ASSEMBLIES FOR SERVICE ISOLATION

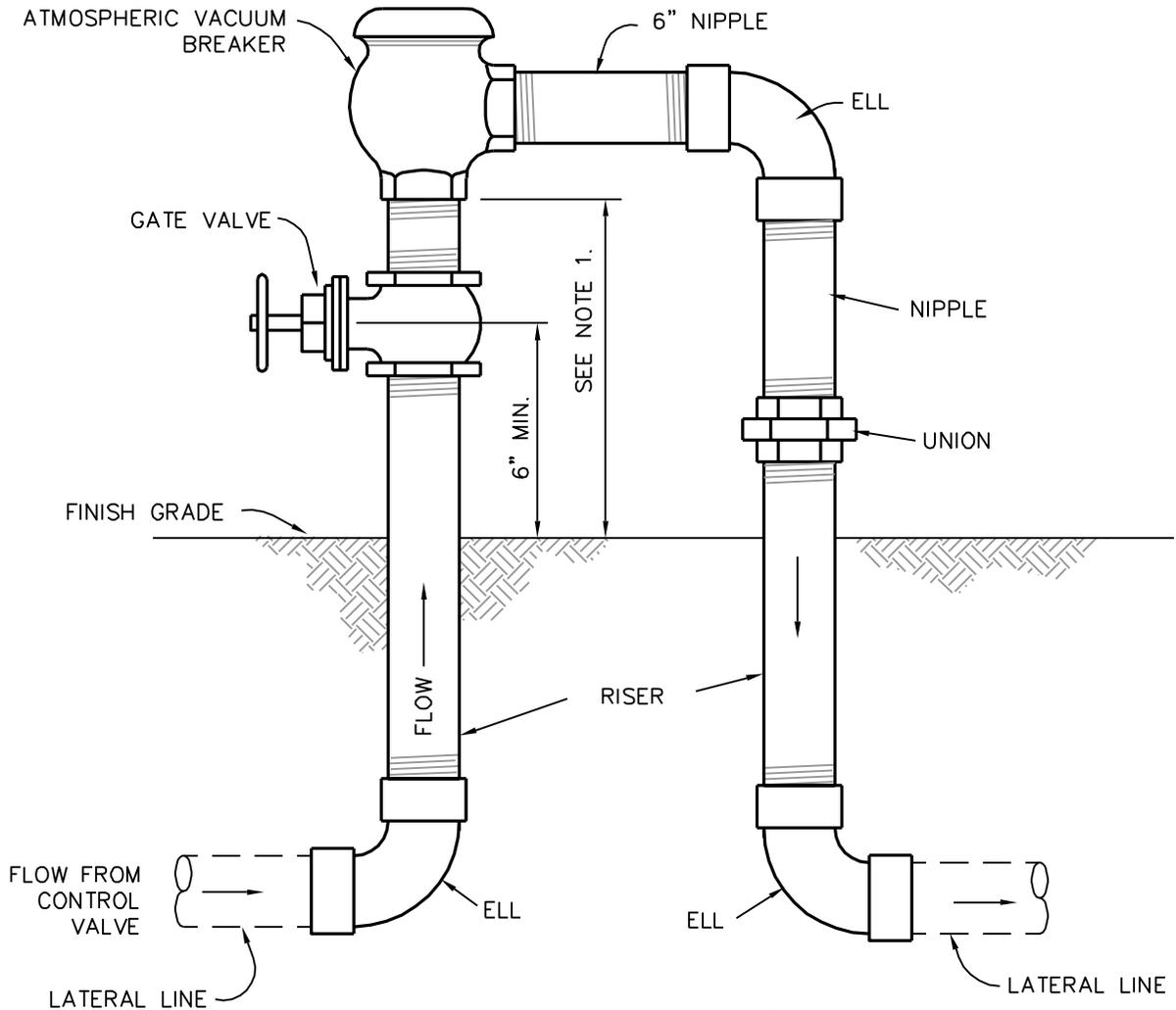
NOTES:

1. DEVICES AND INSTALLATION SHALL MEET FRESNO COUNTY DEPARTMENT OF HEALTH AND CITY OF FOWLER DEPARTMENT OF PUBLIC WORKS REGULATIONS AND REQUIREMENTS.
2. CLOSE NIPPLES SHALL NOT BE USED.
3. APPROVED PLASTIC TAPE (1/2") WIDE SHALL BE USED ON ALL THREADED CONNECTIONS.
4. ALL PIPE SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE UNLESS OTHERWISE SPECIFIED.
5. COAT ALL EXPOSED THREADS WITH AN APPROVED RUST INHIBITING SEALANT.
6. ALL VALVES SHALL BE PROVIDED WITH RESILIENT SEATS.

REVISION DATE		CITY OF FOWLER	Std. Dwg.
4/10/01		AIR GAP DETAIL	W-9

SPECIFICATIONS

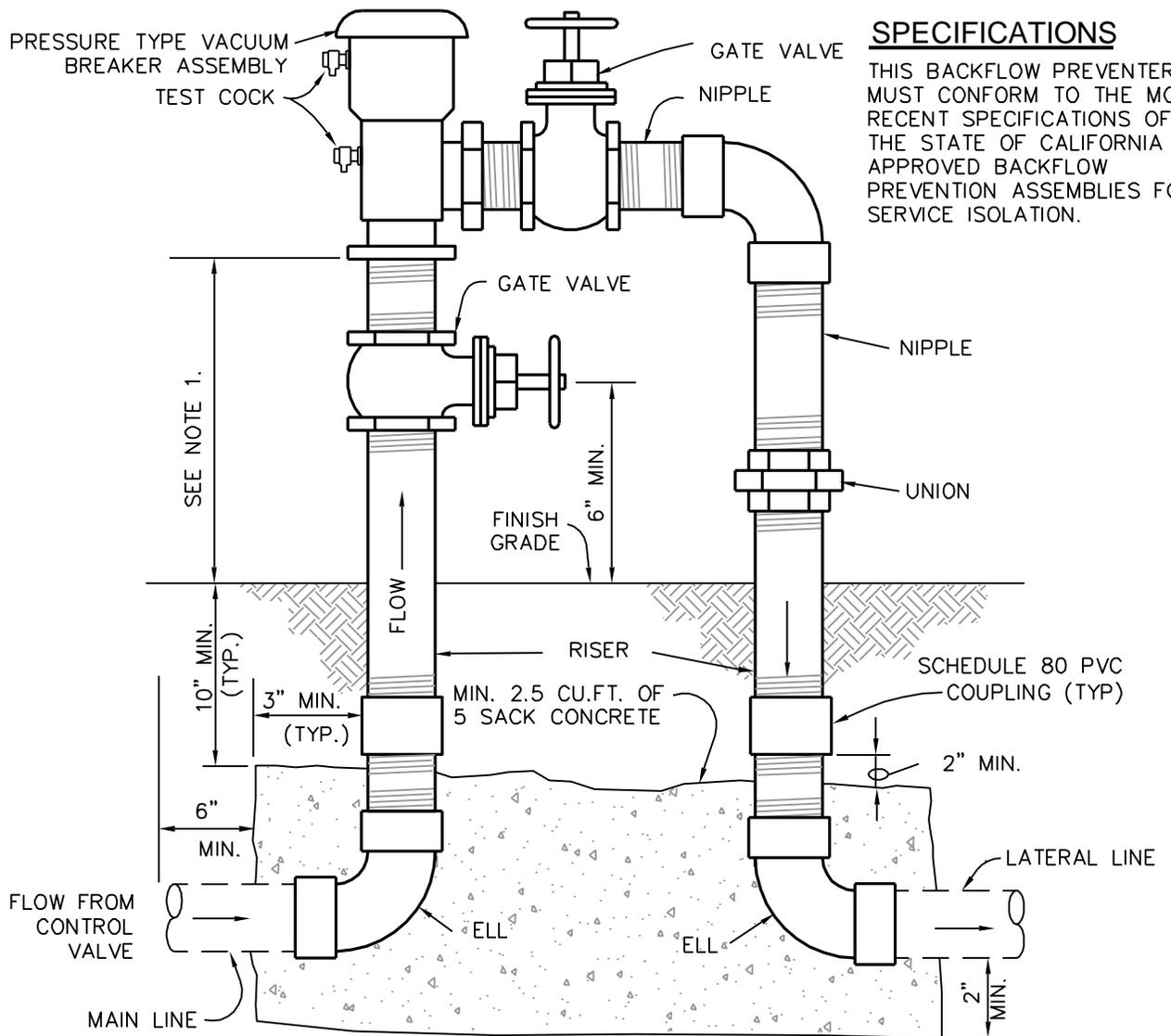
THIS BACKFLOW PREVENTER MUST CONFORM TO THE MOST RECENT SPECIFICATIONS OF THE STATE OF CALIFORNIA APPROVED BACKFLOW PREVENTION ASSEMBLIES FOR SERVICE ISOLATION.



ATMOSPHERIC TYPE 2" AND SMALLER

1. ATMOSPHERIC TYPE VACUUM BREAKERS SHALL BE INSTALLED A MINIMUM OF 6" ABOVE THE HIGHEST OUTLET OR FLOOD LINE, WHICHEVER IS HIGHER AND ON THE DOWNSTREAM SIDE OF VALVE ONLY.
2. DEVICES AND INSTALLATION SHALL MEET FRESNO COUNTY DEPARTMENT OF HEALTH AND CITY OF FOWLER DEPARTMENT OF PUBLIC WORKS REGULATIONS AND REQUIREMENTS.
3. CLOSE NIPPLES SHALL NOT BE USED.
4. APPROVED PLASTIC TAPE (1/2") WIDE SHALL BE USED ON ALL THREADED CONNECTIONS.
5. ALL PIPE SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE UNLESS OTHERWISE SPECIFIED. ALL BURIED GALVANIZED PIPE SHALL BE WRAPPED WITH 20 MIL PVC PIPE WRAP.
6. COAT ALL EXPOSED THREADS WITH AN APPROVED RUST INHIBITING SEALANT.
7. ALL VALVES SHALL BE PROVIDED WITH RESILIENT SEATS AND LOCKABLE.
8. BACKFLOW ASSEMBLY SHALL BE COVERED WITH A PROTECTIVE ENCLOSURE.

REVISION DATE		CITY OF FOWLER	Std. Dwg.
4/10/01		VACUUM BREAKER ASSEMBLY INTERNAL PROTECTION ONLY	W-10
6/19/07			1 OF 2



SPECIFICATIONS

THIS BACKFLOW PREVENTER MUST CONFORM TO THE MOST RECENT SPECIFICATIONS OF THE STATE OF CALIFORNIA APPROVED BACKFLOW PREVENTION ASSEMBLIES FOR SERVICE ISOLATION.

PRESSURE TYPE 2" AND SMALLER

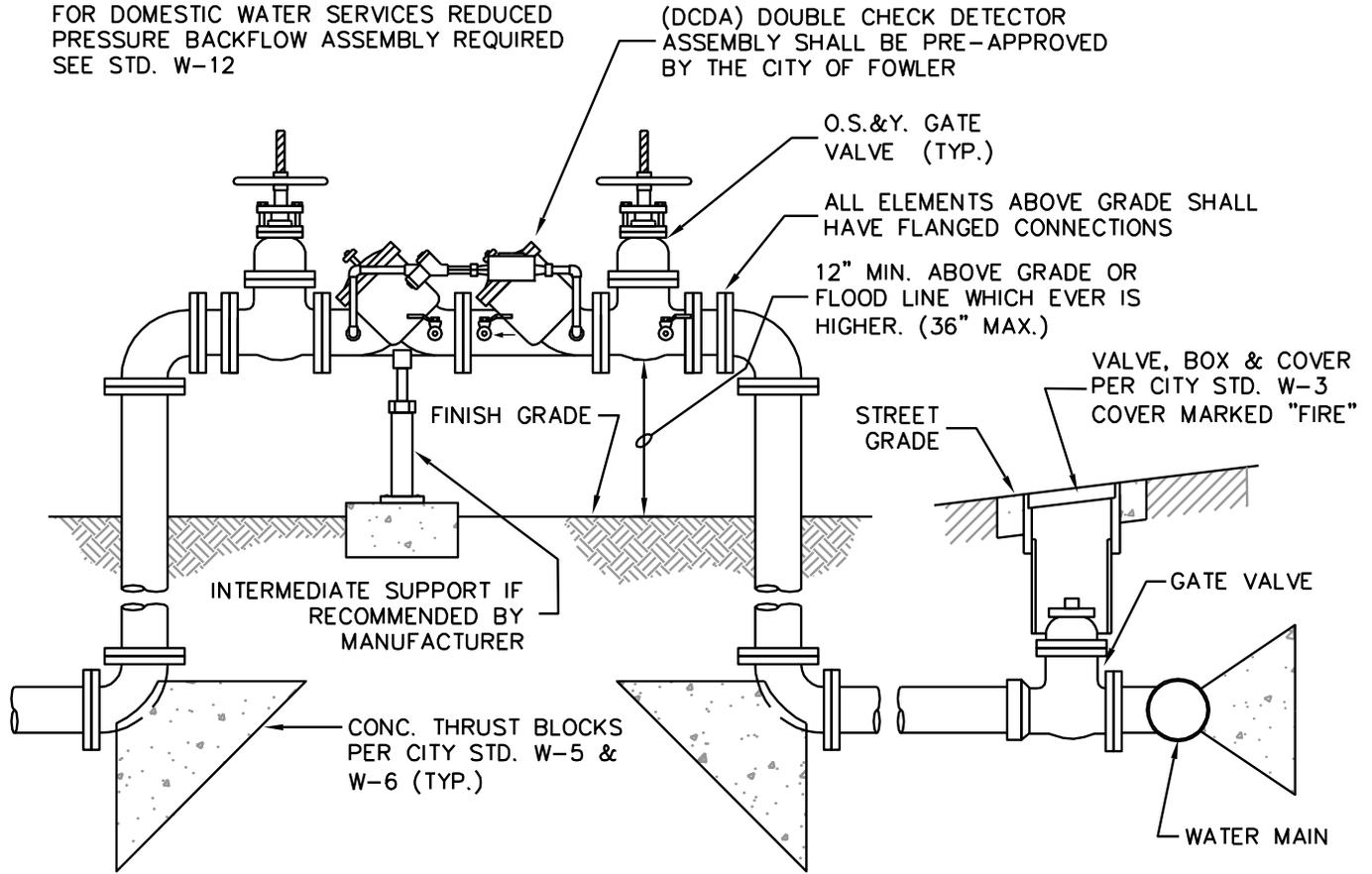
NOTES:

1. PRESSURE TYPE VACUUM BREAKERS SHALL BE INSTALLED A MINIMUM OF 12" ABOVE THE HIGHEST OUTLET OR FLOOR LINE, WHICHEVER IS HIGHER.
2. PRESSURE TYPE VACUUM BREAKERS SHALL NOT BE SUBJECTED TO BACK PRESSURE OR DRAINAGE.
3. DEVICES AND INSTALLATION SHALL MEET FRESNO COUNTY DEPARTMENT OF HEALTH AND CITY OF FOWLER DEPARTMENT OF PUBLIC WORKS REGULATIONS AND REQUIREMENTS.
4. CLOSE NIPPLES SHALL NOT BE USED.
5. DISSIMILAR METALS SHALL BE SEPARATED BY AN APPROVED DIELECTRIC COUPLING.
6. PLASTIC PIPE SHALL NOT BE USED ABOVE FINISHED GRADE.
7. ALL PIPE SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE UNLESS OTHERWISE SPECIFIED. ALL BURIED GALVANIZED PIPE SHALL BE WRAPPED WITH 20 MIL PVC PIPE WRAP.
8. COAT ALL EXPOSED THREADS WITH AN APPROVED RUST INHIBITING SEALANT.
9. ALL VALVES SHALL BE PROVIDED WITH RESILIENT SEATS AND LOCKABLE.
10. BACKFLOW ASSEMBLY SHALL BE COVERED WITH A PROTECTIVE ENCLOSURE.

REVISION DATE		CITY OF FOWLER	Std. Dwg.
4/10/01			
6/19/07		VACUUM BREAKER ASSEMBLY INTERNAL PROTECTION ONLY	W-10 2 OF 2

NOTE:

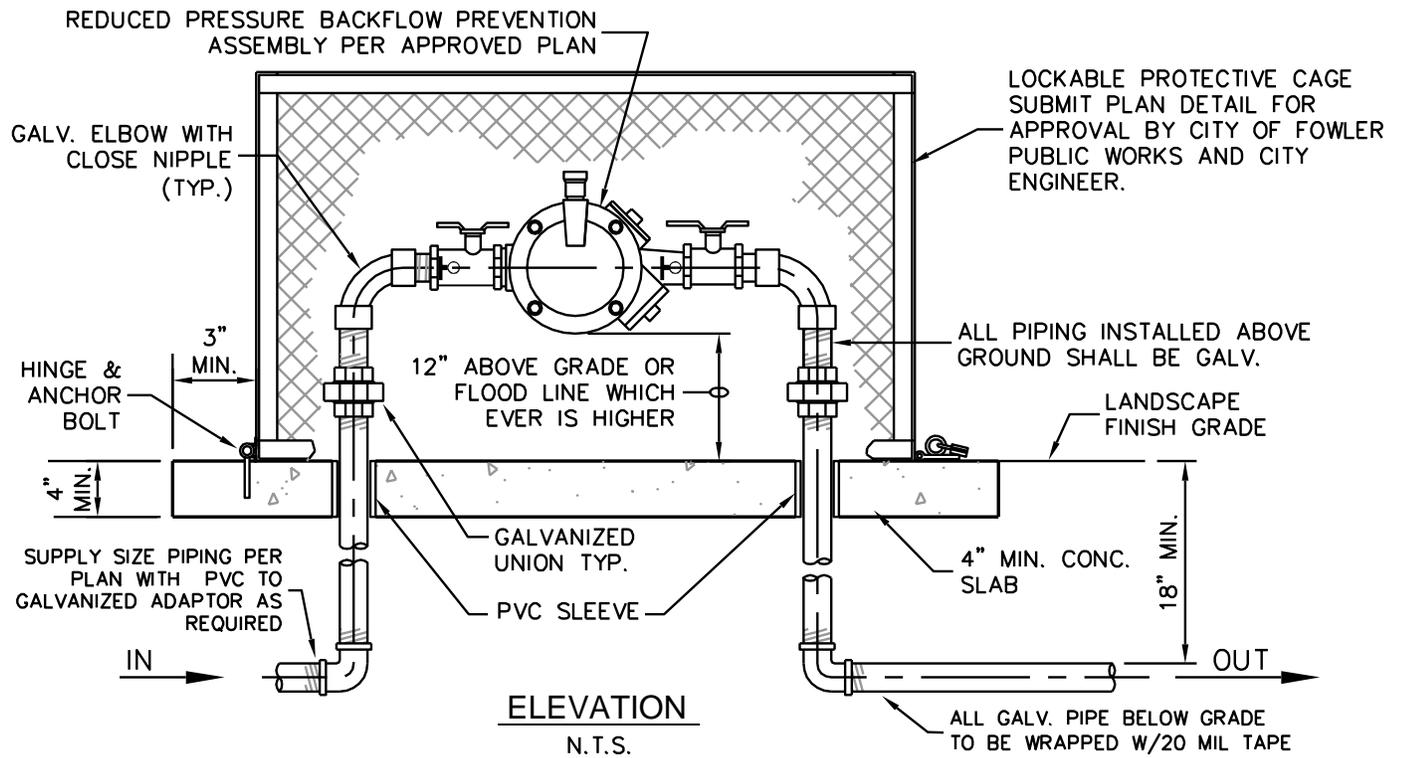
FOR DOMESTIC WATER SERVICES REDUCED PRESSURE BACKFLOW ASSEMBLY REQUIRED SEE STD. W-12



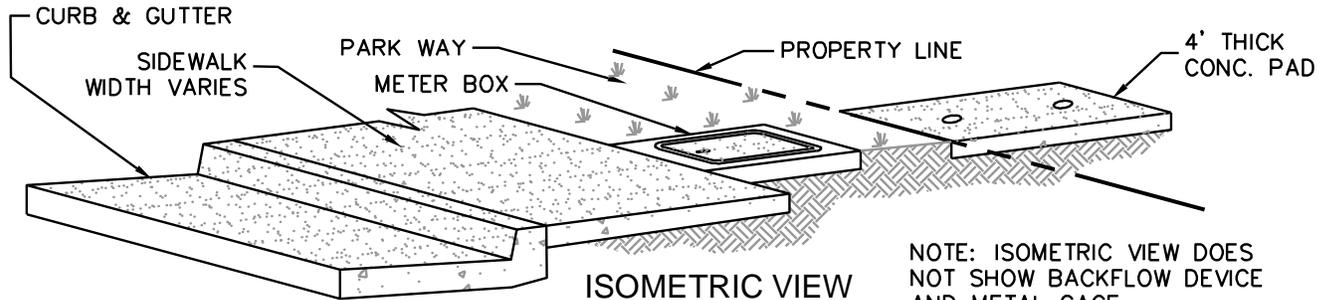
NOTES:

1. ALL PIPE FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL UNLESS OTHERWISE SPECIFIED. ALL BURIED GALVANIZED PIPE SHALL BE WRAPPED WITH 20 MIL PVC PIPE WRAP.
2. CONCRETE SHALL BE 5 SACK.
3. THE BACKFLOW PREVENTER DEVICES AND INSTALLATIONS SHALL BE APPROVED BY CITY OF FOWLER DEPARTMENT OF PUBLIC WORKS.
4. VALVE ASSEMBLIES MAY HAVE SCREWED FITTINGS OR FLANGED. IF SCREWED FITTINGS ARE USED UNIONS SHALL BE INSTALLED ON EACH SIDE OF ASSEMBLY ABOVE GROUND.
5. COAT ALL EXPOSED THREADS WITH AN APPROVED RUST INHIBITING SEALANT.
6. APPROVED PLASTIC TAPE, 1/2" WIDE, SHALL BE USED ON ALL THREADED CONNECTIONS.
7. DISSIMILAR METALS SHALL BE SEPARATED BY AN APPROVED DIELECTRIC COUPLING.
8. PLASTIC PIPE SHALL NOT BE USED ABOVE FINISHED GRADE.
9. BACKFLOW ASSEMBLIES 2" OR SMALLER SHALL BE COVERED WITH A APPROVED PROTECTIVE ENCLOSURE AND COVERED WITH A PROTECTIVE FREEZE BLANKET APPROVED BY CITY OF FOWLER PUBLIC WORKS.
10. UNDERGROUND PIPING FOR FIRE LINES SHALL BE TESTED HYDRAULICALLY AT 200 PSI FOR 2 HOURS AS PER NFPA 13 UNDERGROUND. PIPE SHALL NOT BE BURIED, BUT MAY BE CENTERED LOAD BURIED DURING 200 PSI TEST.

REVISION DATE		CITY OF FOWLER	STD.DWG.
4/10/01		FIRE SYSTEM BACKFLOW PREVENTER	W-11
6/19/07			
1/6/09			



ELEVATION
N.T.S.

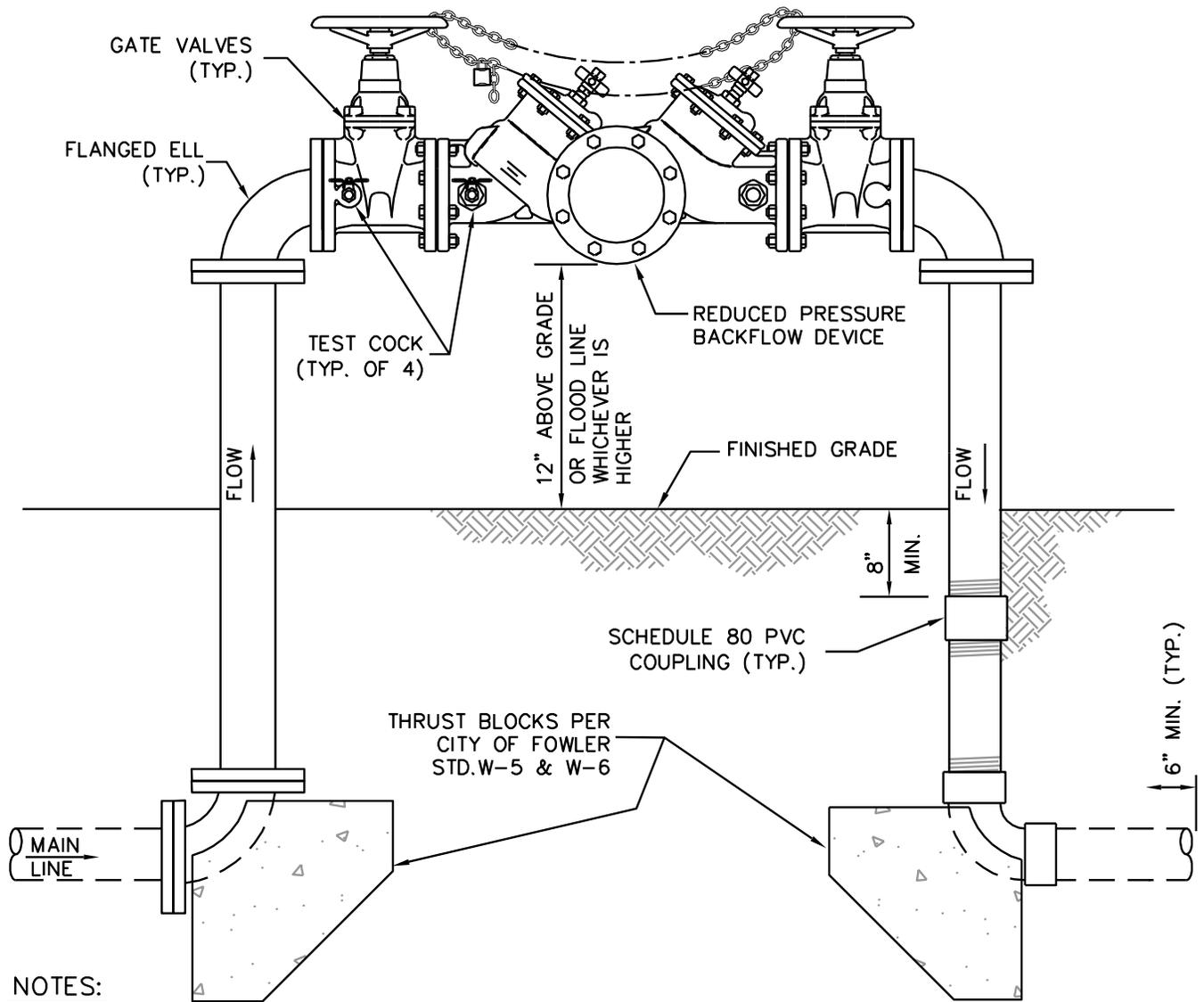


ISOMETRIC VIEW
N.T.S.

NOTES:

1. ALL PIPE FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL UNLESS OTHERWISE SPECIFIED. ALL BURIED GALVANIZED PIPE SHALL BE WRAPPED WITH 20 MIL PVC PIPE WRAP.
2. CONCRETE SHALL BE 5 SACK.
3. THE BACKFLOW PREVENTER DEVICES AND INSTALLATIONS SHALL BE APPROVED BY THE CITY OF FOWLER DEPARTMENT OF PUBLIC WORKS.
4. VALVE ASSEMBLIES MAY HAVE SCREWED OR FLANGED FITTINGS. IF SCREWED FITTINGS ARE USED UNIONS SHALL BE INSTALLED ON EACH SIDE OF ASSEMBLY ABOVE GROUND. ALL VALVES SHALL BE APPROVED WITH RESILIENT SEATS AND LOCKED BY CHAIN FROM HAND WHEEL TO HAND WHEEL.
5. COAT ALL EXPOSED THREADS WITH AN APPROVED RUST INHIBITING SEALANT.
6. APPROVED PLASTIC TAPE 1/2" WIDE, SHALL BE USED ON ALL THREADED CONNECTIONS.
7. DISSIMILAR METALS SHALL BE SEPARATED BY AN APPROVED DIELECTRIC COUPLING.
8. PLASTIC PIPE SHALL NOT BE USED ABOVE FINISHED GRADE.
9. BACKFLOW DEVICES 2" OR SMALLER SHALL BE INSTALLED WITH A HUNTER GREEN PROTECTIVE ENCLOSURE AND FREEZE BLANKET APPROVED BY CITY OF FOWLER PUBLIC WORKS.
10. BACKFLOW DEVICE SHALL BE COVERED WITH AN INSULATION BLANKET (WEATHERGUARD OR APPROVED EQUAL). PROTECTIVE BLANKET SHALL BE APPROVED BY CITY OF FOWLER PUBLIC WORKS.

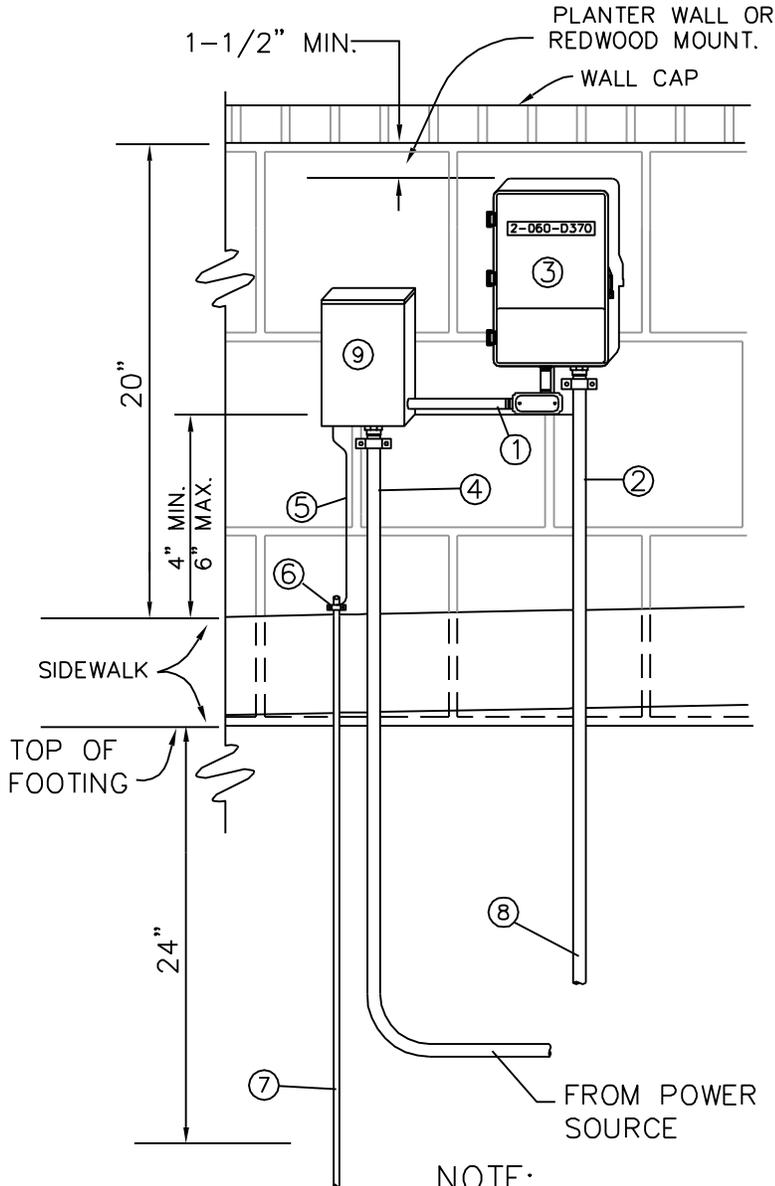
REVISION DATE		CITY OF FOWLER	STD.DWG.
4/10/01		2" & SMALLER REDUCED PRESSURE BACKFLOW INSTALLATION	W-12 SHT. 1 OF 2
6/19/07			
1/6/09			



NOTES:

1. ALL PIPE FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL UNLESS OTHERWISE SPECIFIED. ALL BURIED GALVANIZED PIPE SHALL BE WRAPPED WITH 20 MIL PVC PIPE WRAP.
2. CONCRETE SHALL BE 5 SACK.
3. THE BACKFLOW PREVENTER DEVICES AND INSTALLATIONS SHALL BE APPROVED BY THE CITY OF FOWLER DEPARTMENT OF PUBLIC WORKS.
4. VALVE ASSEMBLIES MAY HAVE SCREWED OR FLANGED FITTINGS. IF SCREWED FITTINGS ARE USED INSTALL TAPPED FLANGE FOR CONNECTION TO THE REDUCED PRESSURE BACKFLOW DEVICE. ALL VALVES SHALL BE APPROVED WITH RESILIENT SEATS AND LOCKED BY CHAIN FROM HAND WHEEL TO HAND WHEEL.
5. COAT ALL EXPOSED THREADS WITH AN APPROVED RUST INHIBITING SEALANT.
6. APPROVED PLASTIC TAPE, 1/2" WIDE SHALL BE USED ON ALL THREADED CONNECTIONS.
7. DISSIMILAR METALS SHALL BE SEPARATED BY AN APPROVED DIELECTRIC COUPLING.
8. PLASTIC PIPE SHALL NOT BE USED ABOVE FINISHED GRADE.
9. BACKFLOW DEVICE SHALL BE COVERED WITH AN INSULATION BLANKET (WEATHERGUARD OR APPROVED EQUAL). PROTECTIVE BLANKET SHALL BE APPROVED BY CITY OF FOWLER PUBLIC WORKS.

REVISION DATE		CITY OF FOWLER	STD.DWG.
6/19/07			LARGER THAN 2" REDUCED PRESSURE BACKFLOW INSTALLATION
1/6/09		W-12	
			SHT. 2 OF 2



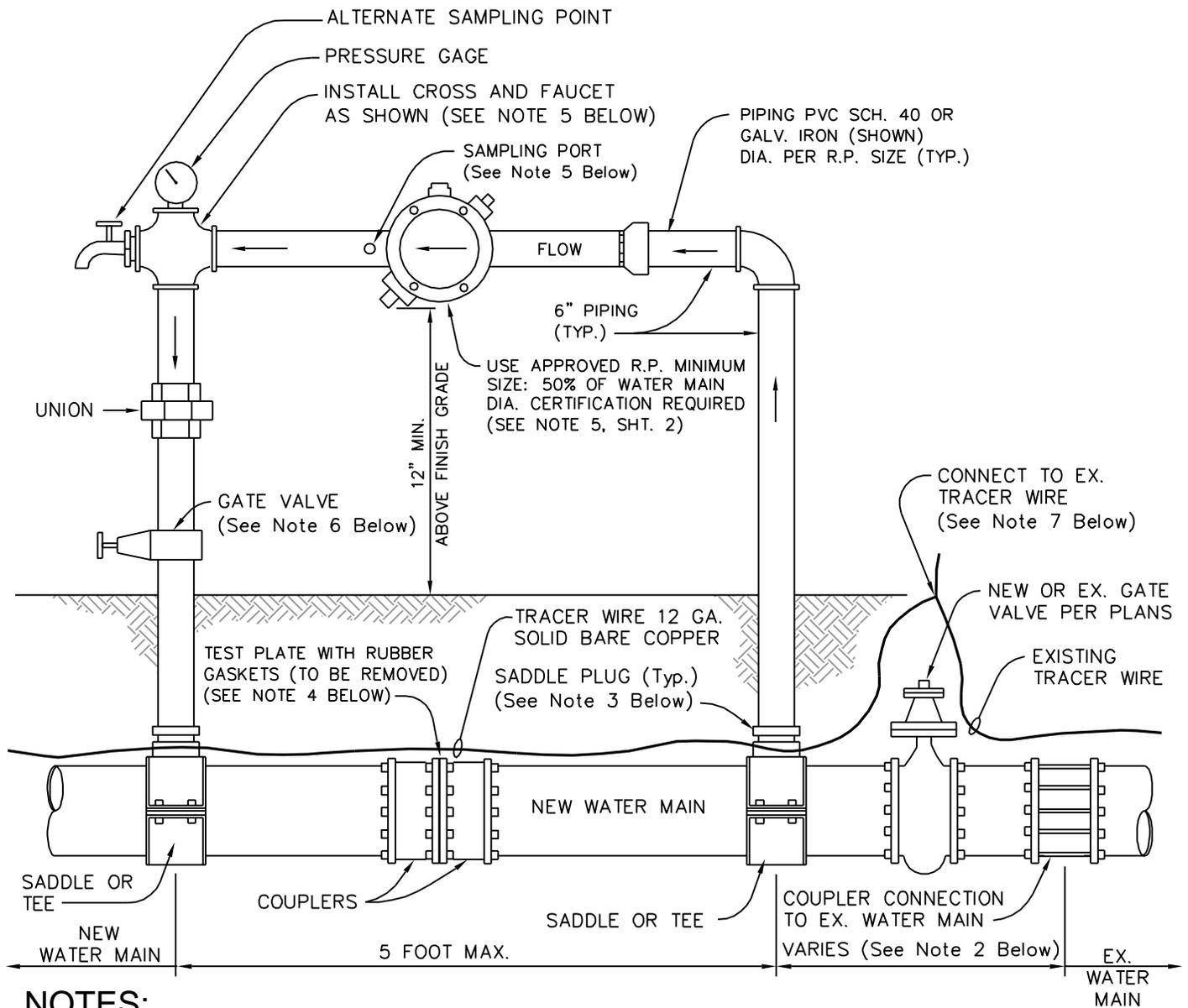
- ① ONE 1/2" O.L.R. CONDUIT AS REQUIRED (KILLARK OLR-1 OR EQUAL). FLEX CONDUIT NOT ACCEPTABLE.
- ② 1-1/4" P.V.C. SCH. 80 CONDUIT AND LOW VOLTAGE CONTROL CONDUCTORS AS REQUIRED.
- ③ IRRIGATION CONTROLLER AS REQUIRED, IDENTIFICATION NUMBERS TO BE ASSIGNED BY THE CITY OF FOWLER CITY ENGINEER. IDENTIFICATION NUMBERS TO BE PROVIDED AND INSTALLED BY CONTRACTOR. BOX MUST BE LOCKABLE.
- ④ 1-1/4" P.V.C. SCH. 80 CONDUIT W/ 2#8-1#8 THWN COPPER CONDUCTORS SHALL BE IDENTIFIED AS PER NEC 210-5 (A) & (B). A PVC CONDUIT IS PREFERRED.
- ⑤ #8 SOLID COPPER ARMORED GROUND PER NEC 250-91.
- ⑥ ARMORED GROUND CLAMP PER NEC 250-115.
- ⑦ 5/8" x 8' GALV. GROUND ROD PER NEC 250-83.
- ⑧ TO SPRINKLER CONTROL VALVE.
- ⑨ 30 AMP SINGLE PHASE NEMA/3R WITH TWO CIRCUIT DISTRIBUTION PANELS WITH (2) 20-AMP CIRCUIT BREAKERS (SQUARE D OR EQUAL). SUBMIT SPECIFICATIONS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. BOX MUST BE LOCKABLE.

NOTE:
 WALL MOUNT CONTROLLER AND BREAKER BOX TO PLANTER WALL OR MOUNT PANEL PER MANUFACTURERS RECOMMENDATIONS.

IRRITROL MC - 4 PLUS-B IRRIGATION CONTROLLER
IRRIGATION CONTROLLER DETAIL

N.T.S.

REVISION DATE	CITY OF FOWLER	STD.DWG.
4/10/01	LANDSCAPE IRRIGATION CONTROLLER	W-13



NOTES:

1. WATER MAIN CONNECTION AND REDUCED PRESSURE PRINCIPAL (R.P.) BACK-FLOW PREVENTION ASSEMBLY AS SHOWN ABOVE SHALL BE UTILIZED FOR CONNECTION TO THE EXISTING MAIN AS SHOWN ON PLANS.
2. DISTANCE VARIES PER INSTALLATION, DISTANCE REQUIRES CITY ENGINEER'S PRIOR APPROVAL. ALL PIPING BETWEEN EXISTING WATER MAIN SHALL BE SWABBED PER NOTE #3, SHT. 2 OF 3, W-14.
3. INSTALL SADDLE PLUGS WITH TEFLON TAPE WHEN R.P. ASSEMBLY IS REMOVED AND NEW WATER MAIN HAS PASSED THE BACTERIA TEST.
4. REMOVE TEST PLATE AFTER NEW WATER MAIN HAS PASSED THE BACTERIA TEST. BOLT COUPLERS TOGETHER USING ONLY ONE RUBBER GASKET BETWEEN FLANGES, AND PROCEED PER NOTE #13, SHT. 3 OF 3, W-14.
5. SAMPLING PORT TO BE USED ON R.P. SHALL BE DOWN-STREAM SIDE OF R.P. OR SHALL BE ALTERNATE SAMPLING POINT AS SHOWN.
6. MAY BE DELETED WITH CITY ENGINEERS APPROVAL IF NEW WATER MAIN IS COMPLETELY INSTALLED.
7. SPLICING OF FINDER WIRE SHALL BE ACCOMPLISHED BY WRAPPING THE BARE ENDS OF THE WIRE TOGETHER, SOLDERING THE CONNECTION, AND WRAPPING THE SOLDERED CONNECTION WITH ELECTRICAL TAPE.

REVISION DATE		CITY OF FOWLER WATER MAIN CONNECTION PROCEDURE	STD.DWG.
4-10-01			W-14
			SHT. 1 OF 3

Water Main Installation and Connection Procedure

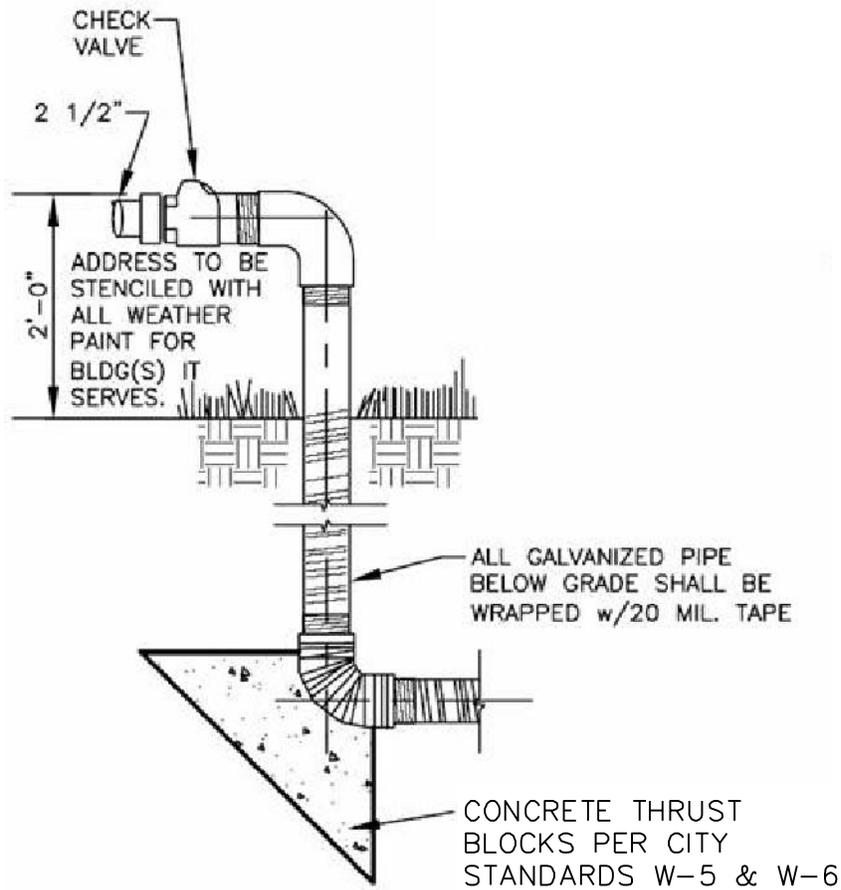
1. CONTRACTOR SHALL SECURE THE END OF ALL WATER MAIN PIPES BEING INSTALLED IN TRENCH EACH AND EVERY TIME THE WORK SITE IS LEFT UNATTENDED, i.e. LUNCH BREAKS, OVERNIGHT, ETC. ONLY WATER TIGHT PLUGS WILL BE ALLOWED.
2. ALL CHLORINATION DISINFECTION PROCEDURES SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF A.W.W.A. STANDARD, C-651, FOR DISINFECTING WATER MAINS.
3. ALL CONNECTIONS TO EXISTING CITY WATER MAINS, WHERE FEASIBLE, SHALL BE HOT TAP FITTINGS. GATE VALVE, TEMPORARY PLUMBING AND R.P. VALVE SHALL BE DISINFECTED BY SWABBING WITH 1% HYPOCHLORITE SOLUTION TO THE SATISFACTION OF THE CITY INSPECTOR PRIOR TO INSTALLATION. WHERE HOT TAP IS NOT POSSIBLE AS DETERMINED BY THE CITY INSPECTOR, ALL NECESSARY PRECAUTIONS, INCLUDING OVER EXCAVATION AND PUMPING, SHALL BE TAKEN TO PREVENT CONTAMINATION OF THE EXISTING MAIN. CONTRACTOR SHALL NOTIFY ALL AFFECTED WATER CUSTOMERS A MINIMUM OF 48 HOURS PRIOR TO DISRUPTION OF WATER SERVICE.
4. CONTRACTOR SHALL NOTIFY CITY ENGINEERING DIVISION 48 HOURS PRIOR TO COMMENCING INSTALLATION OF WATER MAIN.
5. CONTRACTOR SHALL USE APPROVED REDUCED PRESSURE PRINCIPAL (R.P.) BACKFLOW PREVENTER ASSEMBLY BETWEEN NEW WATER MAIN AND EXISTING CITY WATER MAIN. CITY INSPECTOR SHALL BE PRESENT DURING THE TIME OF CONNECTION. THE R.P. SHALL BE CHECKED, APPROVED BY AN A.W.W.A. CERTIFIED TESTER AND WRITTEN CERTIFICATION SUBMITTED TO THE CITY INSPECTOR AFTER INSTALLATION AND PRIOR TO ANY CONNECTION TO A NEWLY INSTALLED WATER MAIN.
6. CITY INSPECTOR SHALL TEST AFTER 24 HOURS TO VERIFY RESIDUAL OF 10 ppm MINIMUM CHLORINE.
7. AFTER 48 HOURS, IF CHLORINE RESIDUAL LEVEL IS APPROVED, CONTRACTOR SHALL FLUSH NEW MAIN THROUGH R.P. VALVE UNTIL CHLORINE RESIDUAL IS ZERO (0) AS TESTED AND VERIFIED BY THE CITY INSPECTOR. GATE VALVE SHALL THEN BE CLOSED TO MAINTAIN ISOLATION.
8. AFTER 48 HOURS OF ISOLATION, CITY WILL SAMPLE FOR BACTERIOLOGICAL ANALYSIS.
9. UPON APPROVAL OF BACTERIOLOGICAL TEST, CONTRACTOR SHALL REMOVE R.P. VALVE AND BLOW-OFF ASSEMBLY, THEN MAKE CONNECTION TO THE EXISTING WATER MAIN. CITY ENGINEERING DIVISION SHALL BE NOTIFIED 24 HOURS IN ADVANCE AND THE CITY INSPECTOR SHALL BE PRESENT DURING THE CONNECTION PROCEDURE.
10. CONTRACTOR SHALL PREVENT EXCESS WATER WHICH IS FLOWING FROM DISCONNECTED PIPES FROM COMING IN CONTACT WITH EXISTING AND NEW WATER MAIN BY OVER EXCAVATION OF CONNECTION SITE. WATER SHALL BE PUMPED OUT OF WORK AREA TO PREVENT CONTACT WITH AND INFILTRATION INTO THE WATER MAINS.
11. FINAL CONNECTION PIPING AND FITTINGS SHALL BE SWABBED WITH A 1% HYPOCHLORITE SOLUTION IN ACCORDANCE WITH PARAGRAPH 3 ABOVE.
12. THE CONTRACTOR SHALL SUBMIT A CONNECTION SEQUENCE AND PLAN INCLUDING LOCATION OF R.P. VALVE FOR APPROVAL BY THE CITY. IN THOSE CASES WHERE THE POINT OF CONNECTION AND/OR R.P. VALVE ARE LOCATED IN A TRAFFIC AREA, REMOTE LOCATION OF R.P. VALVE MAY BE SUBMITTED FOR APPROVAL.

REVISION DATE	CITY OF FOWLER	STD.DWG.
4/10/01	WATER MAIN CONNECTION PROCEDURE	W-14
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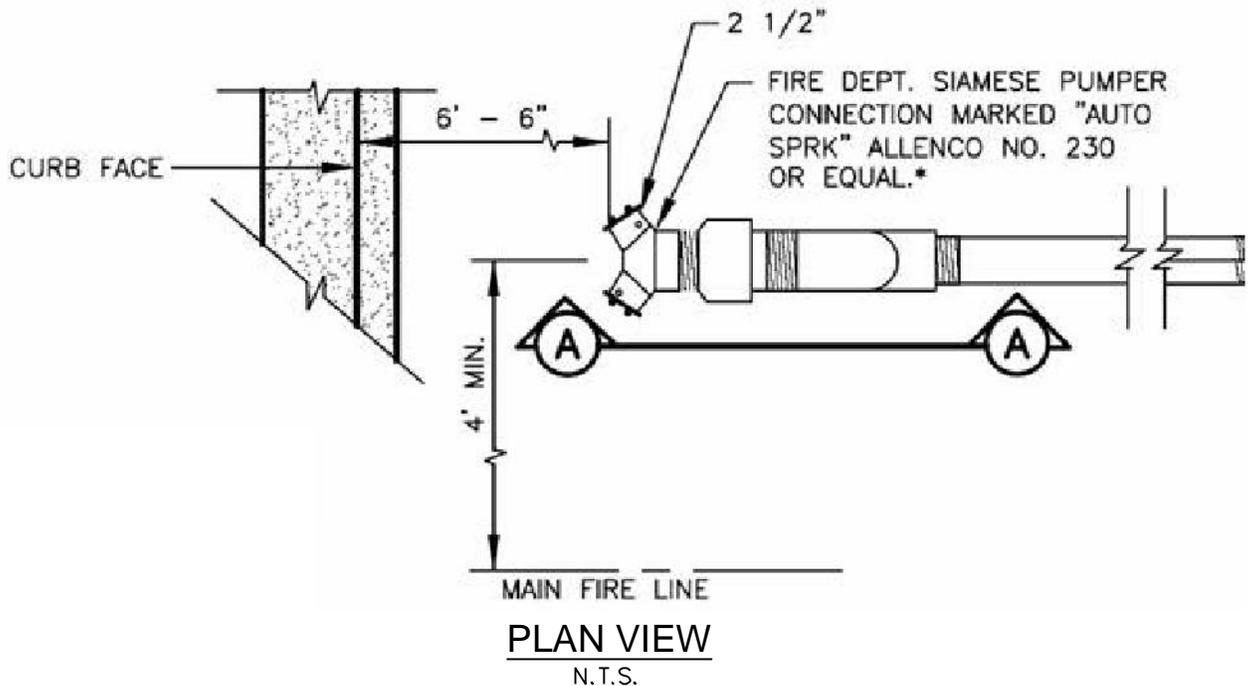
Water Main Installation and Connection Procedure Continued

13. CONTRACTOR SHALL FLUSH NEW WATER MAIN (BOTH WAYS IF POSSIBLE) THROUGH FIRE HYDRANT AND/OR BLOW-OFF ASSEMBLY IMMEDIATELY AFTER ALL CONNECTIONS HAVE BEEN MADE TO THE EXISTING WATER MAINS. THIS IS TO REMOVE CHLORINE SWABBING RESIDUE. THE CITY INSPECTOR WILL THEN VERIFY (0) RESIDUAL. THE CONTRACTOR SHALL THEN CLOSE ALL VALVES, IN THE PRESENCE OF THE INSPECTOR, TO ACHIEVE ISOLATION OF THE NEWLY INSTALLED WATER SYSTEM.
14. CITY WILL SAMPLE FOR BACTERIOLOGICAL ANALYSIS. IF ANY BACTERIA ARE FOUND IN ANY SAMPLES TAKEN THE CONTRACTOR SHALL IMMEDIATELY SUBMIT TO CITY ENGINEERING DIVISION CORRECTIVE ACTION PLANS FOR RECHLORINATION AND RETESTING.
15. CONTRACTOR SHALL REIMBURSE THE CITY FOR ALL COSTS INCURRED BY THE CITY FOR BACTERIOLOGICAL RETESTING PRIOR TO FINAL PROJECT APPROVAL.
16. UPON APPROVAL, CONTRACTOR SHALL FULLY OPEN ALL NEW MAINLINE VALVES AND FIRE HYDRANT VALVES. THE CITY INSPECTOR MUST VERIFY AND APPROVE THIS PROCEDURE PRIOR TO FINAL PROJECT APPROVAL.
17. WATER DISCHARGE FROM FLUSHING OPERATIONS SHALL NOT BE DISCHARGED TO A SANITARY SEWER SYSTEM.

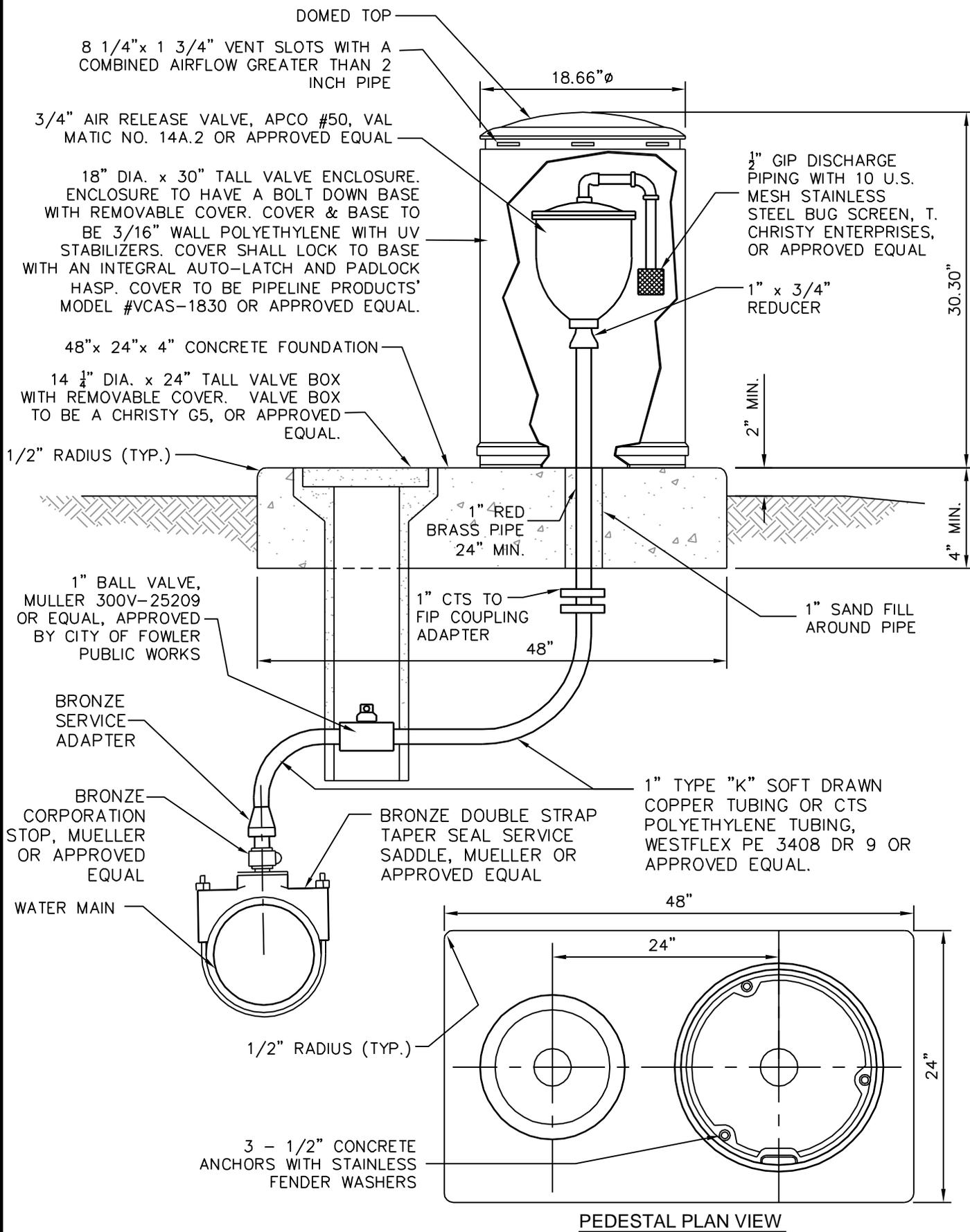
REVISION DATE		CITY OF FOWLER	STD.DWG.
4/10/01		WATER MAIN CONNECTION PROCEDURE	W-14
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SECTION A-A
N.T.S.



REVISION DATE	CITY OF FOWLER		STD.DWG.
6/19/07	FIRE PROTECTION SYSTEM SIAMESE PUMPER CONNECTION		W-15
1/06/09			



REVISION DATE	CITY OF FOWLER		STD.DWG.
1-06-09	AIR RELEASE VALVE		W-16