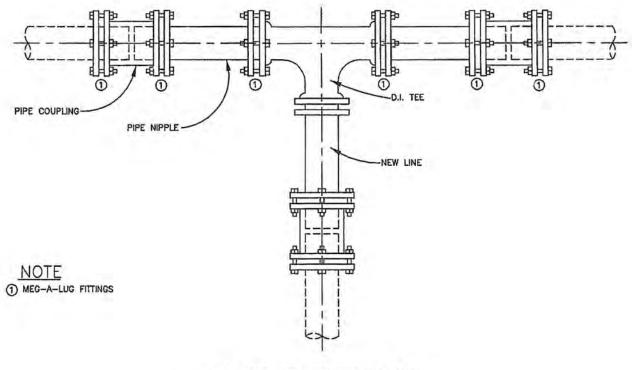


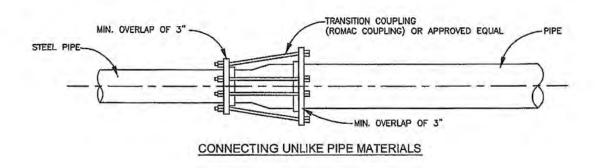
WATER Construction Standards

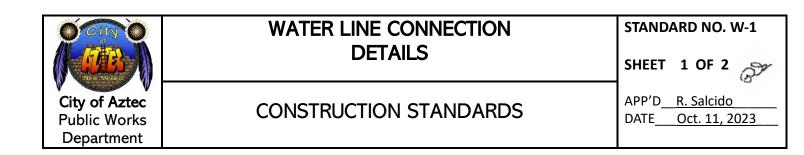
SHEET INDEX

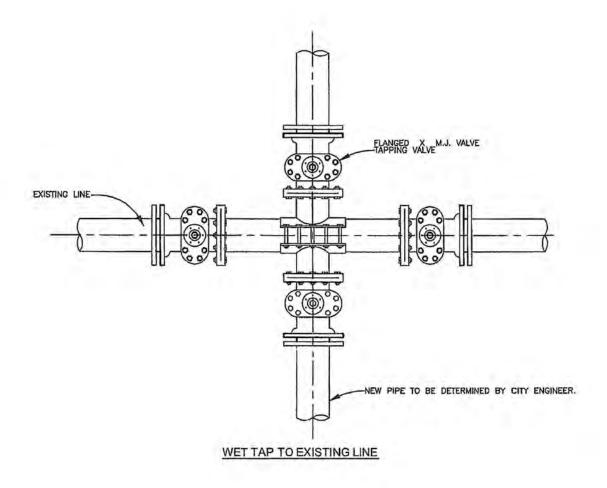
Sheet #	Title
W-1.1	Water Line Connection Details
W-1.2	Water Line Connection Details
W-2	Typical Asphalt Street Valve Box Raising
W-3.1	Valve Installation for Asphalt Paving Areas
W-3.2	Valve Installation for Non-Pavement Areas
W-4.1	Pressure Reducer Valve Assembly Pre-Cast Vault
W-4.2	Blow-Off and Vent Pipe Detail
W-5	Blow-Off Valve Assembly Detail
W-6.1	Standard Fire Hydrant
W-6.2	Double Steamer Fire Hydrant
W-6.3	Standard Or Double Fire Hydrant (Optional Offset)
W-6.4	Fire Hydrant Offset Alternate
W-6.5	Fire Hydrant (Top View) Without Bollard
W-6.6	Fire Hydrant (Top View) With Bollard
W-6.7	For Existing Standard or Double Fire Hydrant Replacement Only
W-7.1	Air Relief or Vac Valve Assembly 6" Thru 12" Pipe
W-7.2	Air Relief or Vac Valve Assembly 16" Pipe or Larger
W-8.1	Thrust Blocks Only with Approval
W-8.2	Thrust Blocks
W-9	Stationary Water Line Location Marker
W-10	Water Service Connection 5/8" Meter
W-11	Water Service Connection 1" Meter
W-12	Water Service Connection 1-1/2" Meter
W-13	Water Service Connection 2" Meter
W-14	Large Water Meter Vault Detail 3" Meter
W-15	Large Water Meter Vault Detail 4" Meter
W-16	Large Water Meter Vault Detail 6" Meter
W-17	Large Water Meter Vault Detail 8" Meter
W-18	Water Service Manifold Detail
W-19	Typical Fire Line Installation
W-20.1	Typical Water Valve Abandonment
W-20.2	Typical Fire Hydrant Abandonment
W-20.3	Typical Pipe Section for Abandonment



CUTTING TEE INTO EXISTING LINE

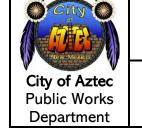






NOTE

 ALL TAP SADDLES OVER 4" SHALL BE TWO PIECE STAINLESS STEEL CAPABLE OF FITTING A/C, DI OR PVC PIPE.



WATER LINE CONNECTION DETAILS

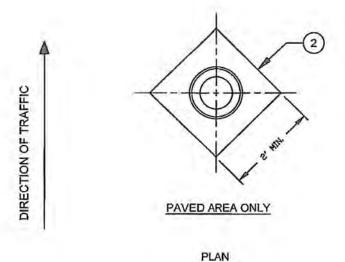
STANDARD NO. W-1

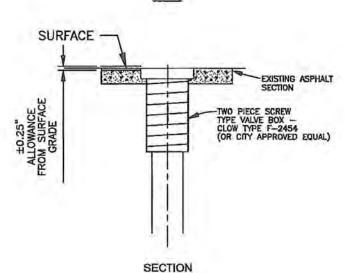
SHEET 2 OF 2

APP'D R. Salcido

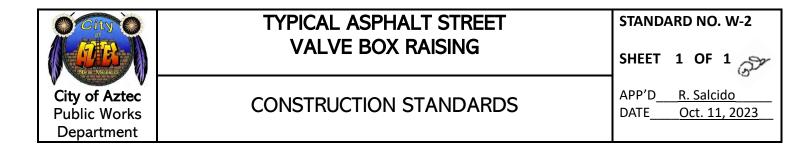
CONSTRUCTION STANDARDS

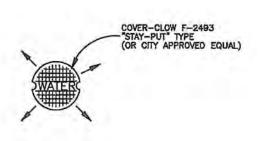
DATE Oct. 11, 2023

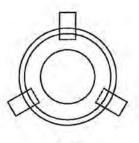




- 1. FINAL LID ADJUSTMENT SHALL BE FLUSH WITH EXISTING SURFACE ±0.25 INCH.
 2. CUT AND REMOVE EXISTING PAVEMENT TO NEAT LINES AS SHOWN OR AS DIRECTED. REMOVE ASPHALT CONCRETE FROM THE WATER VALVE FRAME AND COVERS. CIRCULAR PAVEMENT CUT AROUND WATER VALVE LID COVER ALSO ACCEPTABLE.
 3. REMOVE EXISTING MORTAR AND MASONRY WHICH IS LOOSE, DETERIORATED OR UNSOUND AS DIRECTED BY THE ENGINEER. REPLACE PAVEMENT WITH MINIMUM 3" BITUMINOUS CONCRETE MATCH EXISTING ON TAMPED SUBBASE. SEAL PAVEMENT JOINT WITH ASPHALT.
 4. SET WATER VALVE LID FRAME TO REQUIRED GRADE WITH WATER VALVE LID GRADE RINGS OR AS DIRECTED BY THE ENGINEER. WATER VALVE LID FRAMES ARE TO BE SET IN FULL MORTAR BEDS.
 5. CONTRACTOR TO FURNISH NEW FRAME AND COVER AS NECESSARY.
 6. HOT MIX ASPHALT SHALL BE USED FOR VALVE LID ADJUSTMENT UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

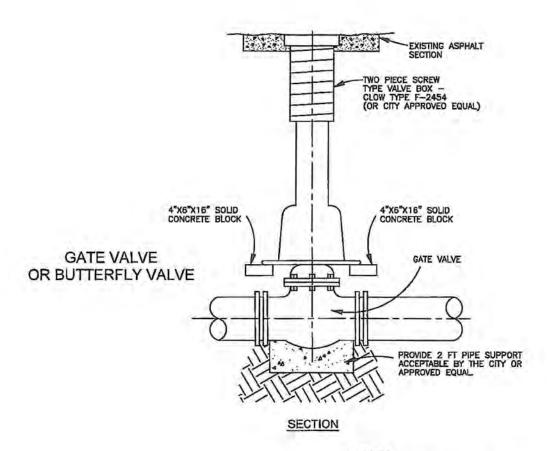






SET BASE ON SOLID CONCRETE BLOCK AFTER BACKFILLING PIPE

PLAN



NOTE:

- MEG—A-LUG WEDGE ACTION JOIST RESTRAINT, SERIES 1100
 FOR CAST IRON OR DUCTILE, SERIES 1100 PV FOR CAST
 IRON SIZE PVC (TYPICAL).
- PRE-MIXED CONCRETE BAGS MAY BE USED WITH CITY ENGINEER APPROVAL.



VALVE INSTALLATION FOR ASPHALT PAVING AREAS

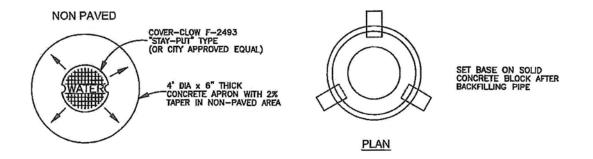
STANDARD NO. W-3

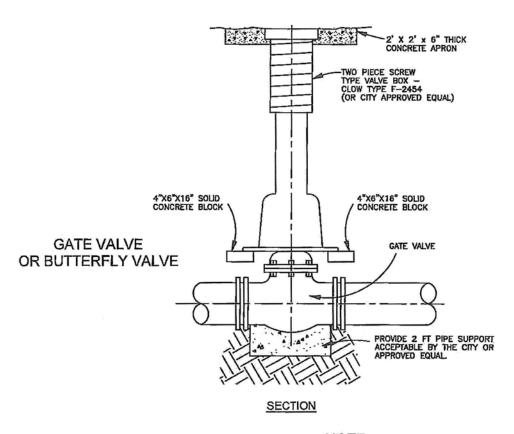
SHEET 1 OF 2

APP'D<u>R. Salcido</u>

CONSTRUCTION STANDARDS

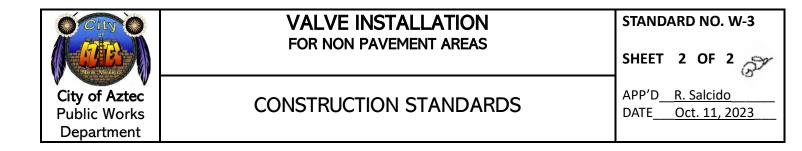
DATE Oct. 11, 2023

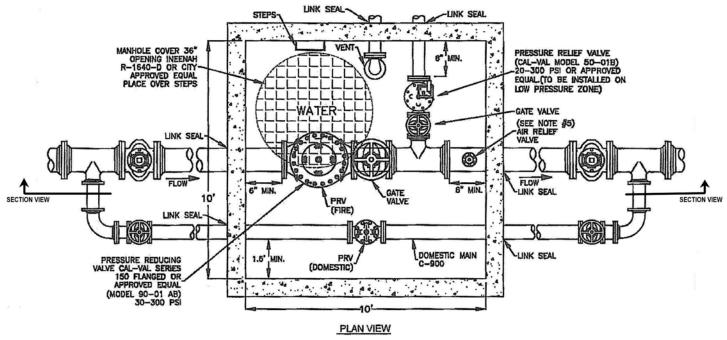


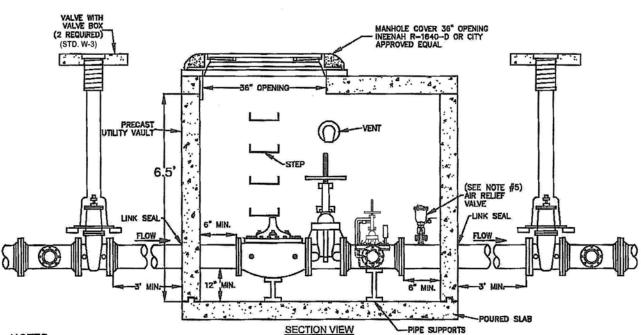


- MEG-A-LUG WEDGE ACTION JOIST RESTRAINT, SERIES 1100
 FOR CAST IRON OR DUCTILE, SERIES 1100 PV FOR CAST IRON SIZE PVC (TYPICAL).
- IRON SIZE PVC (TYPICAL).

 2. PRE-MIXED CONCRETE BAGS MAY BE USED WITH CITY ENGINEER APPROVAL.

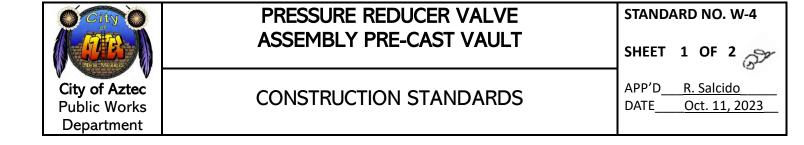


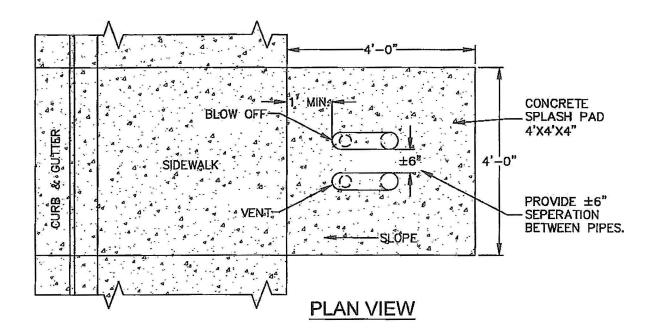


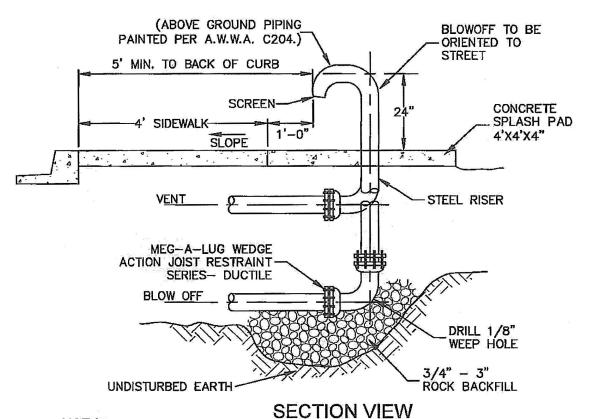


- 1. PRECAST MANHOLE SHALL BE DESIGNED FOR HS-20 LOADING.
- 2. VALVES SHALL BE CAL-VAL ONLY-NO SUBSTITUTIONS WILL BE ALLOWED.
- 3. THE GATE VALVE SERVING THE PRESSURE RELIEF VALVE SHALL BOTH MATCH IN SIZE.
- 4, IF THE PROPOSED PRV IS SMALLER THAN THE LINE SIZE, THEN REDUCERS ARE REQUIRED IMMEDIATELY BEFORE AND AFTER THE PRV INSIDE THE VAULT.
- 5. ARY SHALL BE INSTALLED ON THE DECLINE SIDE OF THE PRV.
- 6. CITY SHALL PROVIDE PRY SPEC INFORMATION AND SIZE.

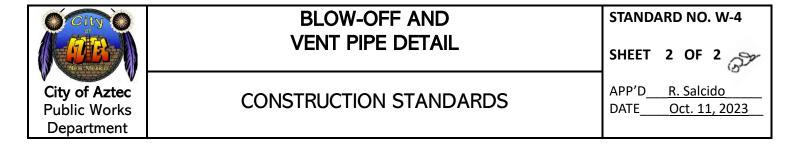
PRV MATRIX						
PRV (FIRE)	PRV (DOMESTIC)	DOMESTIC MAIN SIZE	VAULT SIZE	PRESSURE RELIEF SIZE	BLOW OFF AND VENT PIPE SIZE	
6"	1" to 4"	4"	10'X10'X6.5'	4"	4"	
8"	1" to 4"	4"	10'X10'X6.5'	4"	4 ^m	
10"	1" to 6"	6"	10'X10'X6.5'	5"	6"	

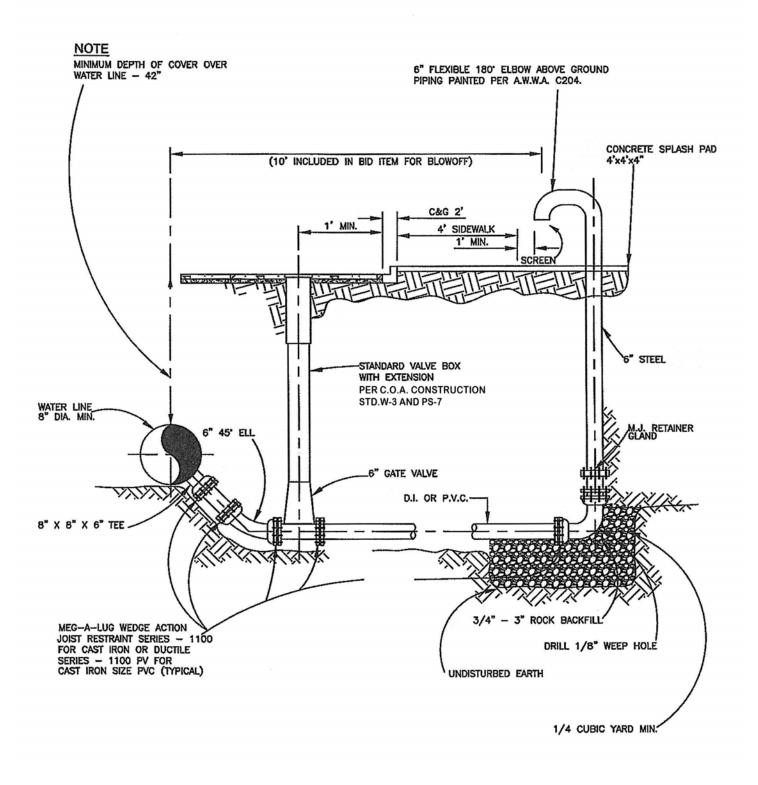


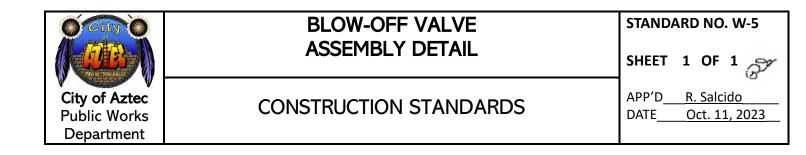




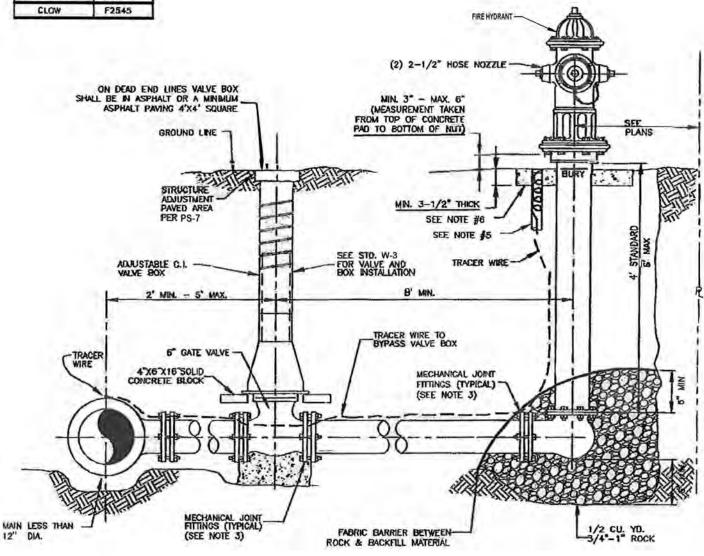
- SEE STD.W-4 SHEET 1 OF 2 FOR THE PRV MATRIX TABLE FOR BLOW OFF AND VENT PIPE SIZING.
- 2.
- BLOW OFF PIPE AND VENT LOCATION TYPICAL 1ft BEHIND SIDEWALK
 MINIMUM 10ft HORIZONTAL SEPARATION FROM THE VAULT FOR BIDDING PURPOSES.
 LOCATION OF THE BLOW OFF AND VENT PIPES SHALL BE DETERMINED IN THE FIELD
 - BY THE CITY.







FIRE HYDRA INTEGRAL	
AANUFACTURER*	MODEL
MAH	129
MUELLER	A423/A425
KENNEDY	K-810
CLOW	F2545



- ORIENTATION OF NOZZLES AS SPECIFIED.
 MEG-A-LUG WEDGE ACTION JOINT RESTRANT, SERIES 1100 FOR CAST FON OR DUCTILE, SERIES 2000 PV FOR CAST IRON SIZE PVC.
 HYDRANT BURY 6" PIPE.

- 3. HYDRANT BURY 6" PIPE.
 4. TRACER WIRE TO BE IN A 2" PVC PIPE WITH INVERTED THREADED CAP (TEFLON TAPED), FLUSH WITH TOP OF CONCRETE PAD.
 (LEAVE 12" TO 18" SLACK INSIDE TUBING)

 5. THE TOP SIDE OF THE 48" CONCRETE PAD SHALL BE LOCATED FLUSH AND LEVEL WITH THE BACKSIDE SIDEWALK ELEVATION.

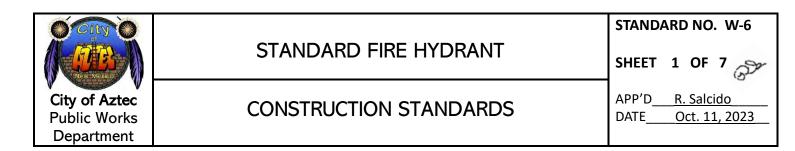
 -IF NO SIDEWALK AREA; FLUSH WITH THE BACK OF SIDEWALK (FUTURE) ELEVATION.

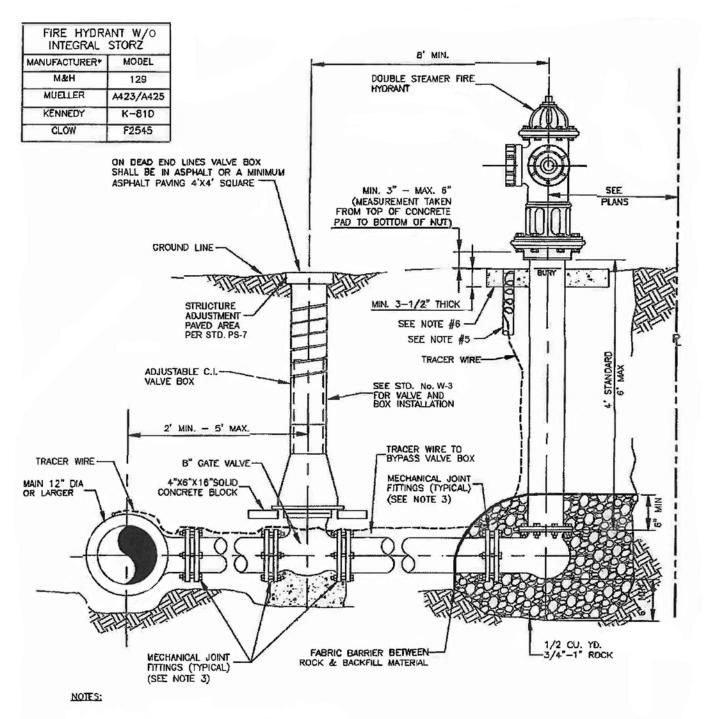
 -IF NO CURB & GUTTER; FLUSH WITH THE FINAL ROAD ELEVATION.

 -IF NO ROAD FRONTAGE; FLUSH WITH THE FINAL GROUND ELEVATION.

 ANY COOLINE SLODE BELIEVATION SUBPORTED THE "OLERALADEA". SHALL BE COMPLETED BY THE CONTRACTOR.

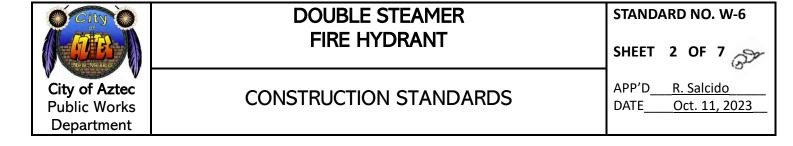
 - ANY GROUND SLOPE REMEDIATION SURROUNDING THE "CLEAR-AREA" SHALL BE COMPLETED BY THE CONTRACTOR, PRE-AUTHORIZED BY THE CITY.



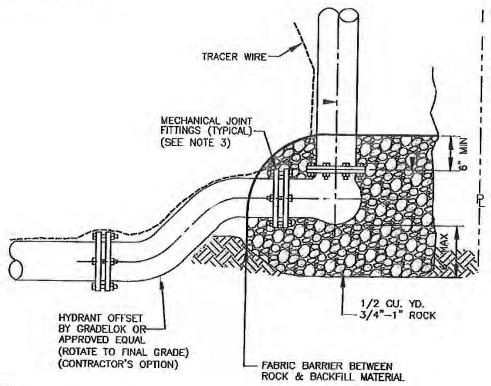


- 1. ORIENTATION OF NOZZLES AS SPECIFIED.
- 2. MEG-A-LUG WEDGE ACTION JOINT RESTRAINT. SERIES -- 1100 FOR CAST IRON OR DUCTILE, SERIES -- 2000 PV FOR CAST IRON SIZE PVC. 3. HYDRANT BURY 8" PIPE.
- TRACER WIRE TO BE IN A 2" PVC PIPE WITH INVERTED THREADED CAP (TEFLON TAPED), FLUSH WITH TOP OF CONCRETE PAD. (LEAVE 12" TO 18" SLACK INSIDE TUBING)
- 5. THE TOP SIDE OF THE 48" CONCRETE PAD SHALL BE LOCATED FLUSH AND LEVEL WITH THE BACKSIDE SIDEWALK ELEVATION. -IF NO SIDEWALK AREA; FLUSH WITH THE BACK OF SIDEWALK (FUTURE) ELEVATION. -IF NO CURB & GUTTER; FLUSH WITH THE FINAL ROAD ELEVATION. -IF NO ROAD FRONTAGE; FLUSH WITH THE FINAL GROUND ELEVATION.

 - ANY GROUND SLOPE REMEDIATION SURROUNDING THE "CLEAR-AREA" SHALL BE COMPLETED BY THE CONTRACTOR, PRE-AUTHORIZED BY THE CITY.



FIRE HYDR INTEGRAL	ANT W/O STORZ
MANUFACTURER	MODEL
м&н	129
MUELLER	A423/A425
KENNEDY	K-81D
CLOW	F2545



- 1, ORIENTATION OF NOZZLES AS SPECIFIED. 2. BURY 6" or 8" PIPE.
- 3. TWO RESTRAINED 45 BENDS (EQUIVALENT TO PIPE SIZE) MAY BE INSTALLED IN LIEU OF THE SWIVEL OPTION.



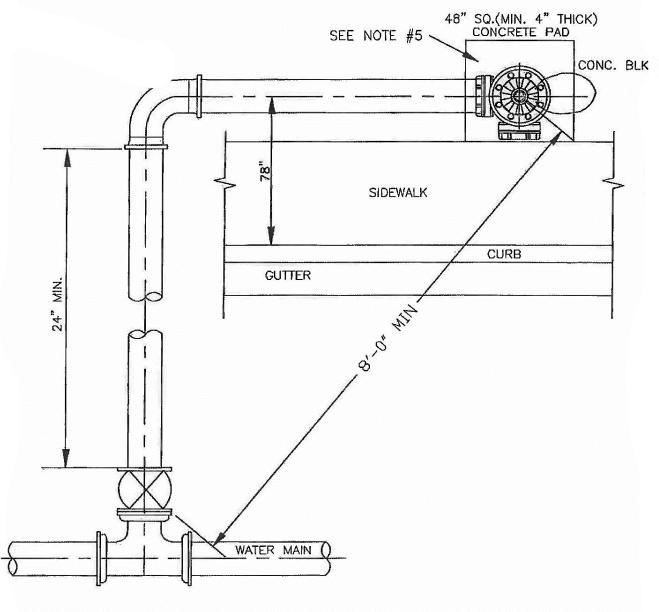
STANDARD OR DOUBLE FIRE HYDRANT (OPTIONAL OFFSET)

CONSTRUCTION STANDARDS

STANDARD NO. W-6

SHEET

APP'D R. Salcido Oct. 11, 2023 DATE



- MINIMUM DIRECT DISTANCE FIRE HYDRANT TO GATE VALVE SHALL BE 8'-0".
 ALL JOINTS SHALL BE MEGA-LUIGS.
 LUBRICATE HYDRANT NOZZLE THREADS WITH NON-TOXIC GREASE.

- 4. NON FLANGED FIRE HYDRANT JOINTS REQUIRE MEG -- A-LUG OR APPROVED EQUAL.
- 4. NON FLANGED FIRE HIDRANT JUNIOS REQUIRE MEG-A-LUG OR AFFROVED EQUAL.

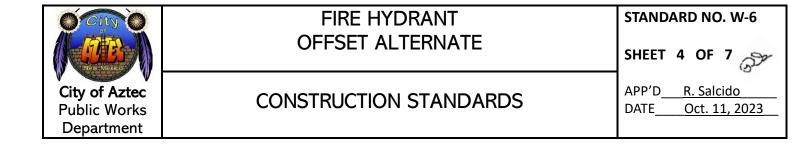
 5. THE TOP SIDE OF THE 48" CONCRETE PAD SHALL BE LOCATED FLUSH AND LEVEL WITH THE BACKSIDE SIDEWALK ELEVATION.

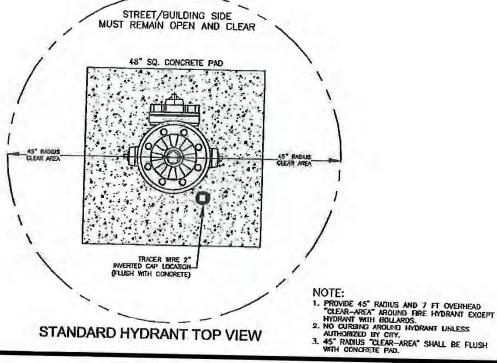
 —IF NO SIDEWALK AREA; FLUSH WITH THE BACK OF SIDEWALK (FUTURE) ELEVATION.

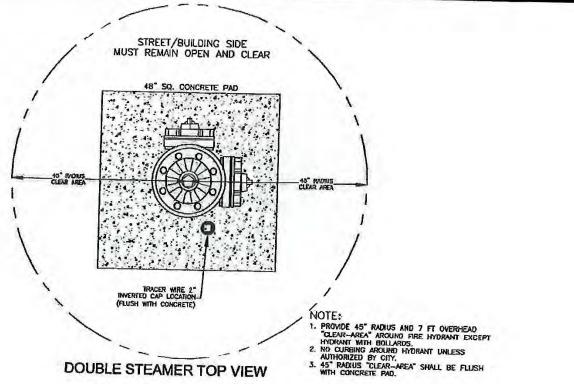
 —IF NO CURB & GUTTER; FLUSH WITH THE FINAL ROAD ELEVATION.

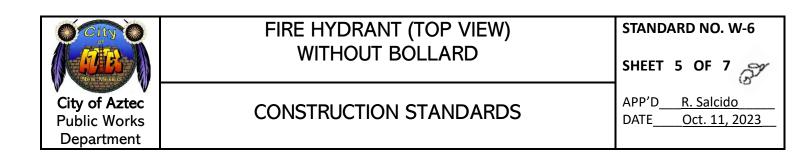
 —IF NO ROAD FRONTAGE; FLUSH WITH THE FINAL GROUND ELEVATION.

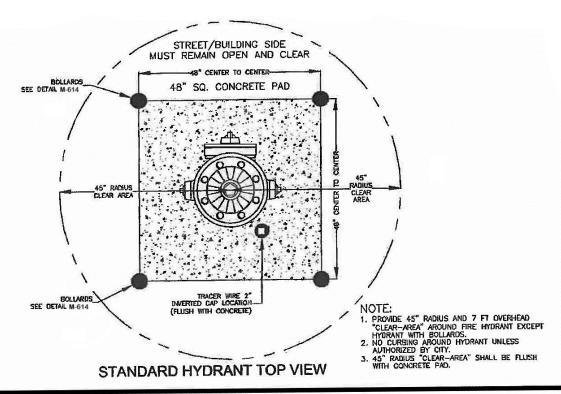
ANY GROUND SLOPE REMEDIATION SURROUNDING THE "CLEAR-AREA" SHALL BE COMPLETED BY THE CONTRACTOR, PRE-AUTHORIZED BY THE CITY.

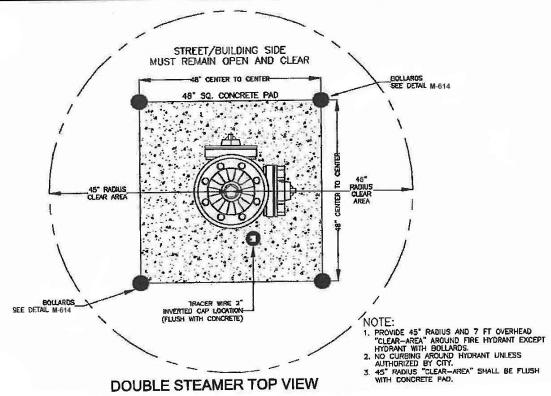


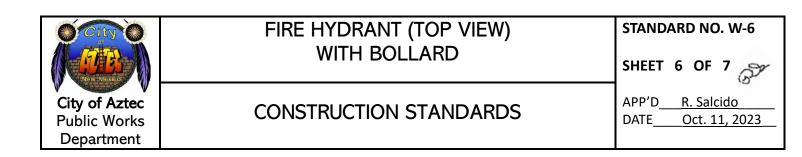


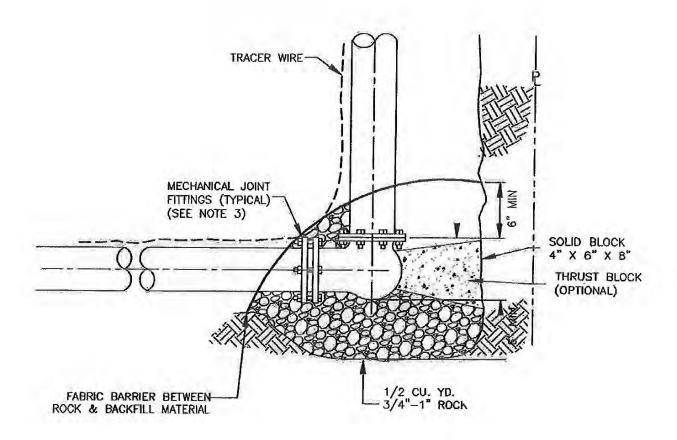






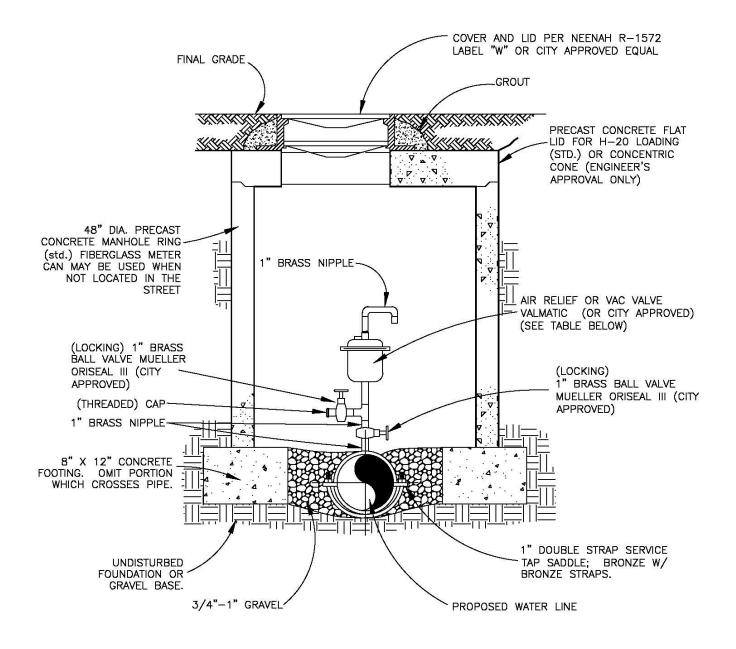




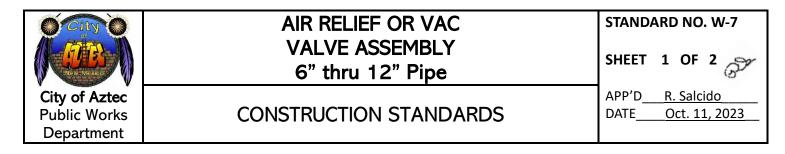


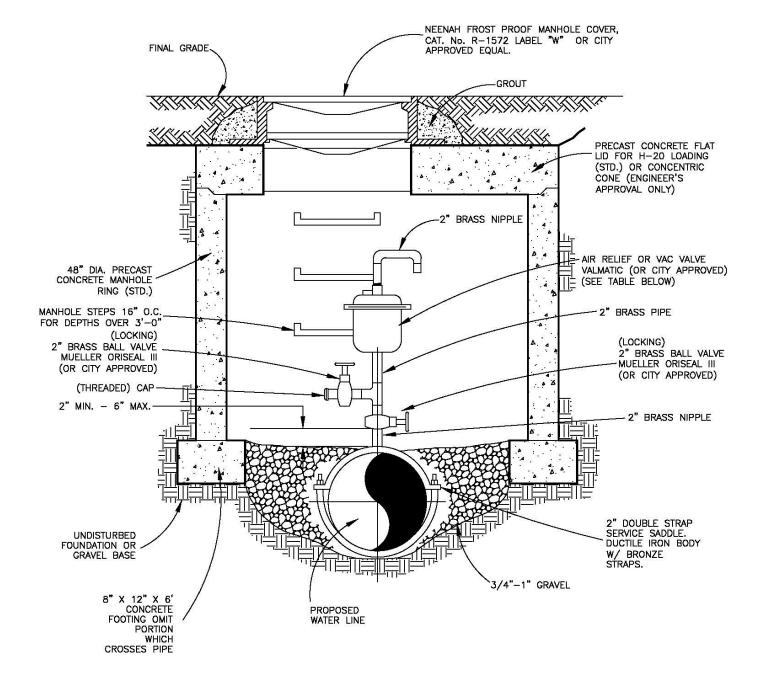
- 1. ORIENTATION OF NOZZLES AS SPECIFIED.
- 2. BURY 6" or 8" PIPE.

* City	FOR EXISTING STANDARD OR	STANDARD NO. W-6
(DB)	DOUBLE FIRE HYDRANT REPLACEMENT ONLY	SHEET 7 OF 7
City of Aztec Public Works Department	CONSTRUCTION STANDARDS	APP'D R. Salcido DATE Oct. 11, 2023

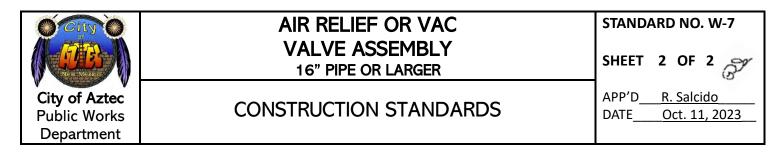


AIR RELIEF OR VAC VALVE DATA						
WATERLINE INLET OUTLET ORIFICE V. DIAMETER SIZE N.P.T. SIZE N.P.T. SIZE M.C.						
6" OR UNDER	1"	3/8"	1/16*	15		
8"	1"	1/2"	3/32"	22		
10"	1"	1/2*	3/32"	22		
12"	1"	1/2"	1/8"	25		

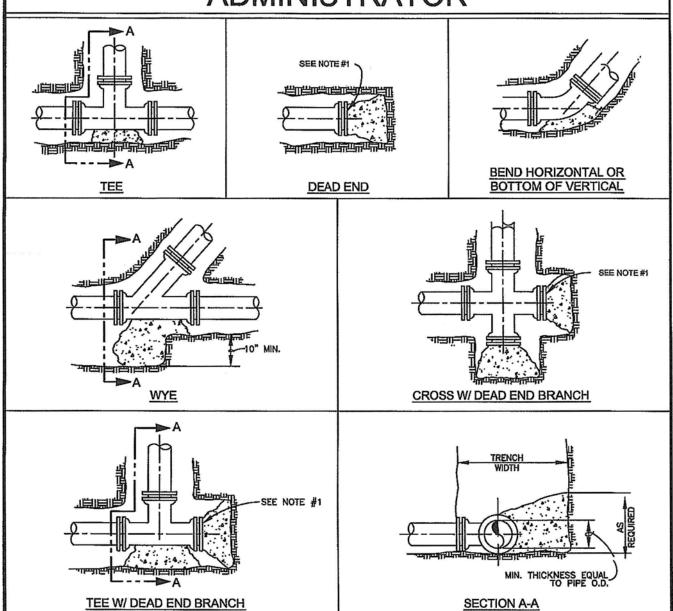




AIR RELIEF OR VAC VALVE DATA						
WATERLINE INLET OUTLET ORIFICE VALMATIC DIAMETER SIZE N.P.T. SIZE N.P.T. SIZE MODEL N						
16"	2"	1/2"	3/16"	38		
24"	2" 1/2" 3/16" 38			38		
OVER 24"	AS DIRECTED BY ENGINEER.					



MEG-A-LUGS ARE REQUIRED UNLESS APPROVED BY WATER & WASTEWATER ADMINISTRATOR



NOTES

- 1. AT DEAD ENDS, WRAP FITTINGS WITH TAR PAPER, FELT, PLASTIC ETC. TO PROVIDE BOND BREAK BETWEEN CONCRETE AND FITTINGS 2. ALL THRUST BLOCKING SHALL BE CAST—IN—PLACE CONCRETE HAVING A MINIMUM YIELD STRENGTH OF 2000 P.S.I.
- 3. THRUST BLOCKING SHALL BE CAST AGAINST UNDISTURBED EARTH. FORMS SHALL BE USED AS REQUIRED TO OBTAIN ADEQUATE BEARING AREA AND TO CONFINE THE CONCRETE THRUST BLOCKING SHALL BEAR ON THE FITTING OR END CAP ONLY AND SHOULD NOT BE ALLOWED TO SPILL OVER THE JOINT OR AGAINST THE PIPE.



THRUST BLOCKS ONLY WITH APPROVAL

CONSTRUCTION STANDARDS

STANDARD NO. W-8

SHEET 1 OF 2

APP'D R. Salcido
DATE Oct. 11, 2023

MEG-A-LUGS ARE REQUIRED UNLESS APPROVED BY WATER & WASTEWATER ADMINISTRATOR TABLE OF BEARING AREAS IN SQ. FT FOR CONCRETE THRUST BLOCKING

FOR 150 P.S.I. INTERNAL STATIC PRESSURE AND 2000 LBS. PER SQ. FT SOIL BEARING CAPACITY.

PIPE		BE	NDS	7 V 10 V 10 V	TEES	PLUGS
SIZE	90°	45°	22 1/2	11 1/4	IEE2	PLUGS
4	1,50	0.75	0.50	0.0	1.00	1.00
6	3.00	1.75	1.00	0.0	2.25	2.25
8	5.50	3.00	1.50	1,00	3.75	3.75
10	8.50	4,50	2.50	1,50	6.00	6.00
12	12.00	6.50	3.50	1.75	8.50	8.50
14	16.50	9.00	4.50	2,25	11.50	11.50
16	21.50	11.50	6.00	3.00	15.00	15.00
18	27.00	14.75	7.50	3.75	19.00	19,00
20	33.50	18.00	9.25	4.75	23.50	23,50
24	48.00	26.00	13.25	6.75	34.00	34.00
30	75.25	40.75	20.75	10.50	53.00	53.00
36	108.25	58.50	30.00	15.00	76.50	76.50

AREAS GIVEN IN TABLE ARE BASED UPON AN INTERNAL STATIC PRESSURE OF 150 P.S.I. AND A SOIL BEARING CAPACITY OF 2000 LBS, PER SQ. FT. BEARING AREAS FOR ANY PRESSURE AND SOIL BEARING CAPACITY MAY BE OBTAINED BY MULTIPLYING THE TABULATED VALUES BY A CORRECTION FACTOR "F".

F= ACTUAL SPECIFIED TEST PRESSURE IN HUNDREDS OF LBS.
ACTUAL SOIL BEARING CAPACITY IN THOUSANDS OF LBS.

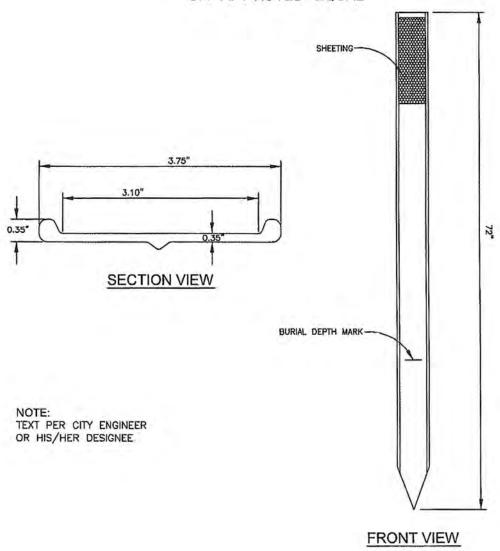
EXAMPLE: TO FIND BEARING AREA FOR 8" - 90" BEND WITH A STATIC INTERNAL PRESSURE OF 100 P.S.I. AND WITH A SOIL BEARING CAPACITY OF 3000 LBS. PER SQ. FT.

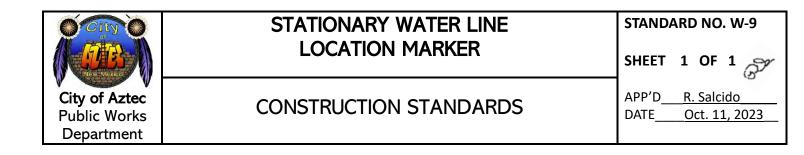
F=1.3=.33 TABULATED VALUE = 550 SQ, FT. 0.33 X 550 = 1.82 SAY 2 SQ, FT. OR 2 FT. LONG BY 1 FT. HIGH

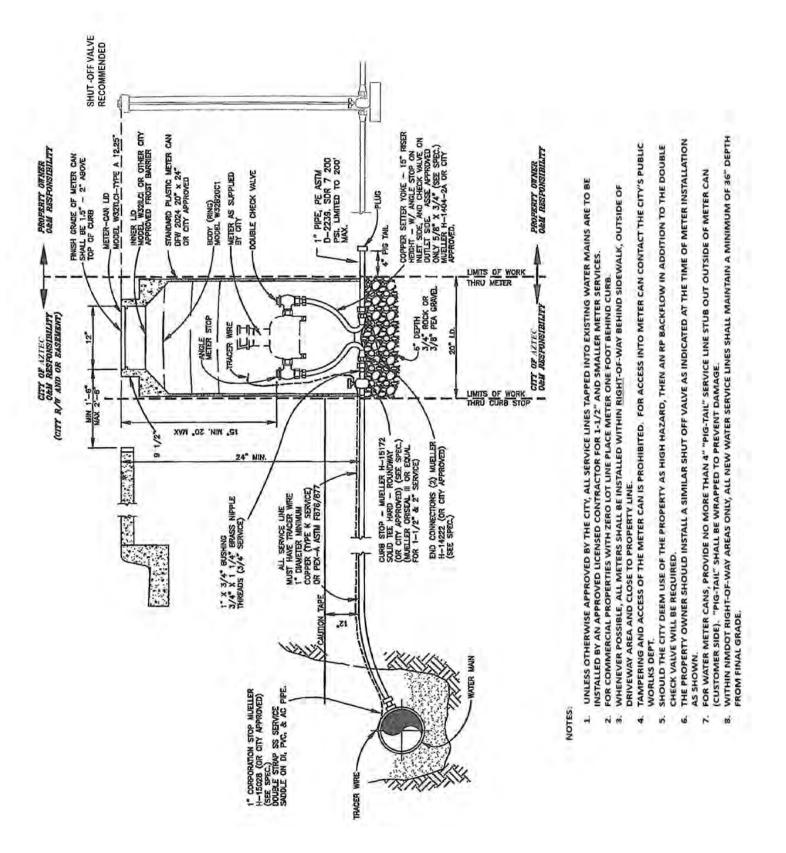
City	THRUST BLOCKS	STANDARD NO. W-8
NEW MERIES		SHEET 2 OF 2
City of Aztec Public Works Department	CONSTRUCTION STANDARDS	APP'D R. Salcido DATE Oct. 11, 2023

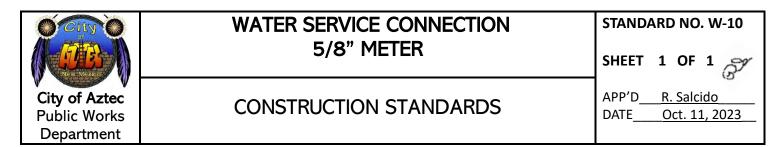
FIBERGLASS POST DETAIL

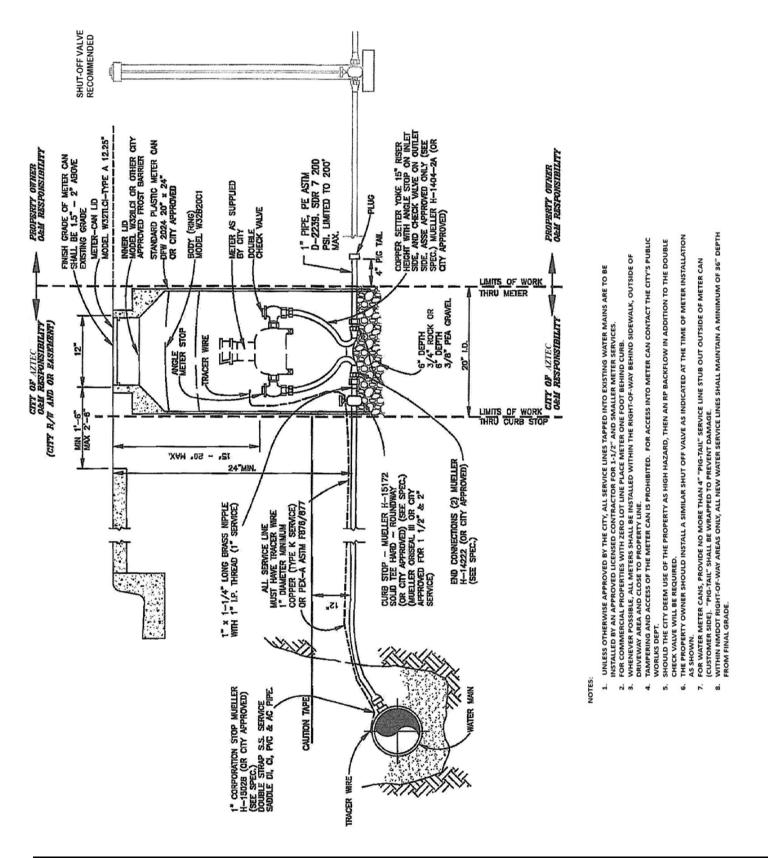
CARSONITE CUM-375 OR APPROVED EQUAL

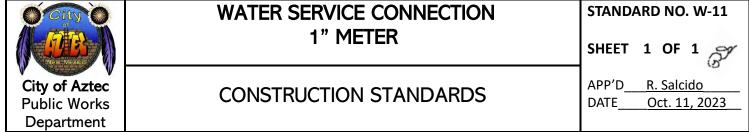


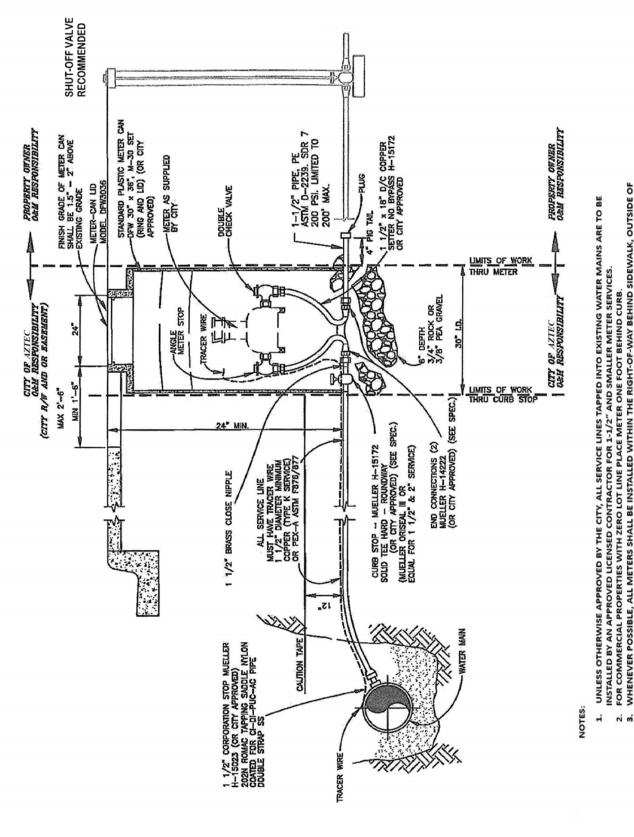












(CUSTOMER SIDE). "PIG-TAIL" SHALL BE WRAPPED TO PREVENT DAMAGE. WITHIN NMDOT RIGHT-OF-WAY AREAS ONLY, ALL NEW WATER SERVICE LINES SHALL MAINTAIN A MINIMUM OF 36" DEPTH

FROM FINAL GRADE

FOR WATER METER CANS, PROVIDE NO MORE THAN 4" "PIG-TAIL" SERVICE LINE STUB OUT OUTSIDE OF METER CAN

THE PROPERTY OWNER SHOULD INSTALL A SIMILAR SHUT OFF VALVE AS INDICATED AT THE TIME OF METER INSTALLATION

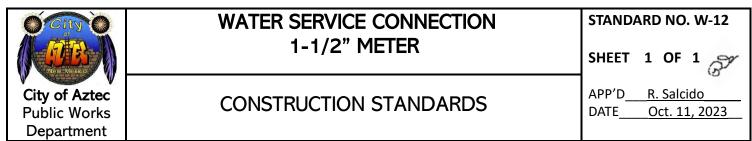
TAMPERING AND ACCESS OF THE METER CAN IS PROHIBITED. FOR ACCESS INTO METER CAN CONTACT THE CITY'S PUBLIC SHOULD THE CITY DEEM USE OF THE PROPERTY AS HIGH HAZARD, THEN AN RP BACKFLOW IN ADDITION TO THE DOUBLE

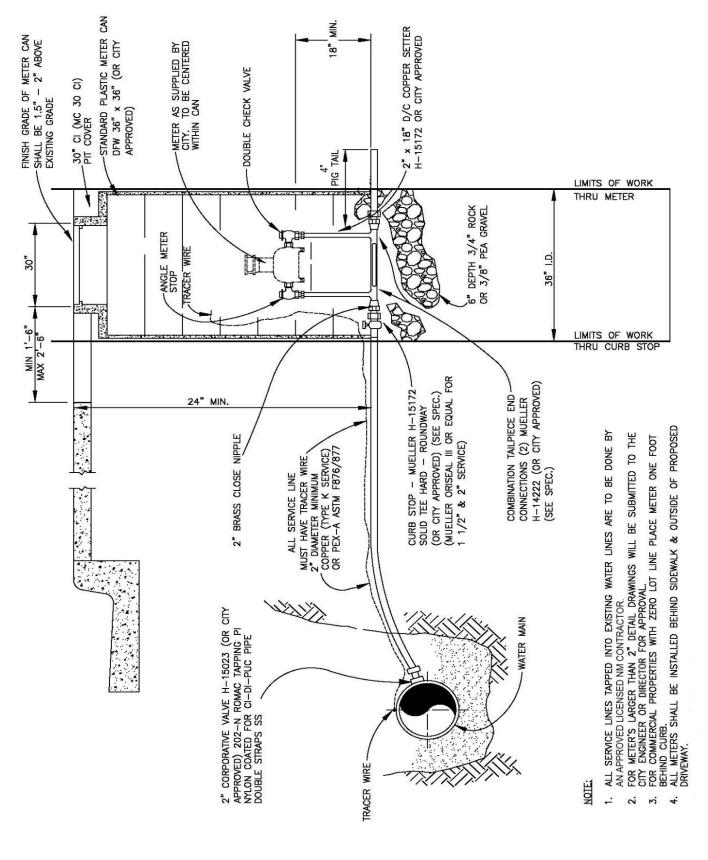
DRIVEWAY AREA AND CLOSE TO PROPERTY LINE.

CHECK VALVE WILL BE REQUIRED.

AS SHOWN.

WORLKS DEPT.







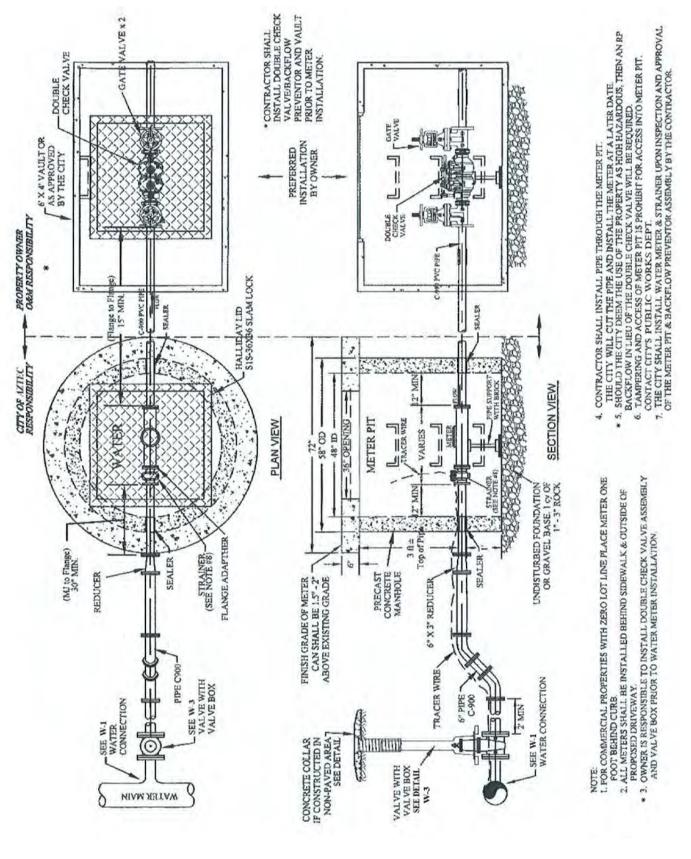
WATER SERVICE CONNECTION 2" METER

CONSTRUCTION STANDARDS

STANDARD NO. W-13

SHEET 1 OF 1

APP'D R. Salcido
DATE Oct. 11, 2023





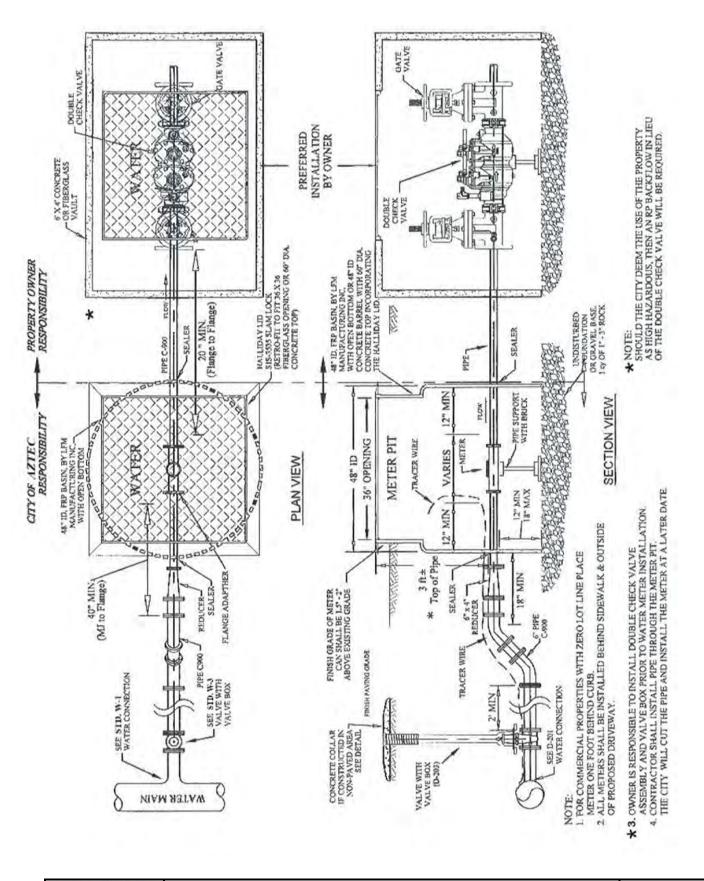
LARGE WATER METER VAULT DETAIL 3" METER

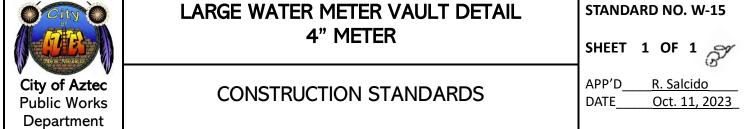
CONSTRUCTION STANDARDS

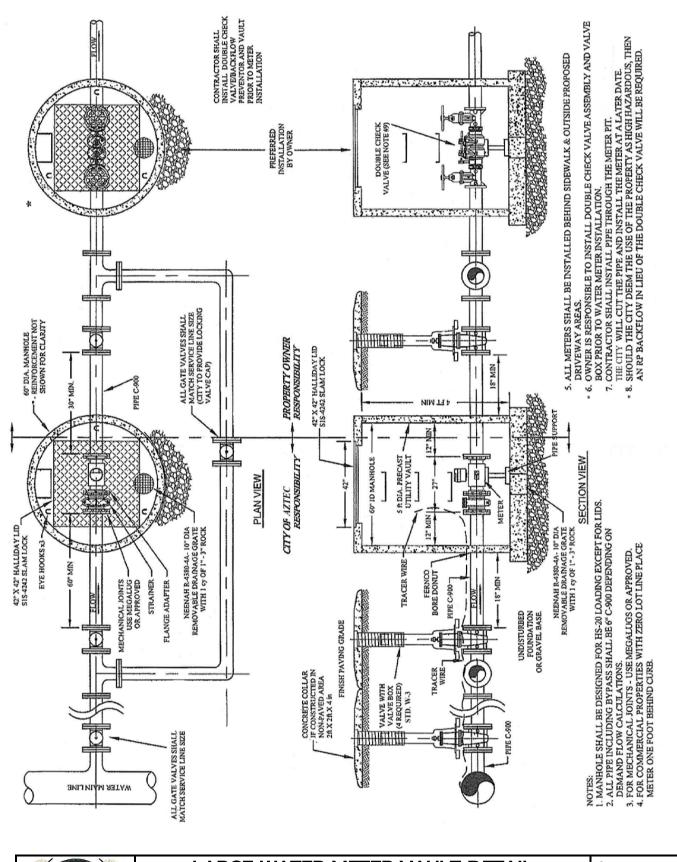
STANDARD NO. W-14

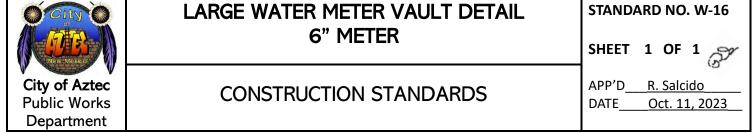
SHEET 1 OF 1

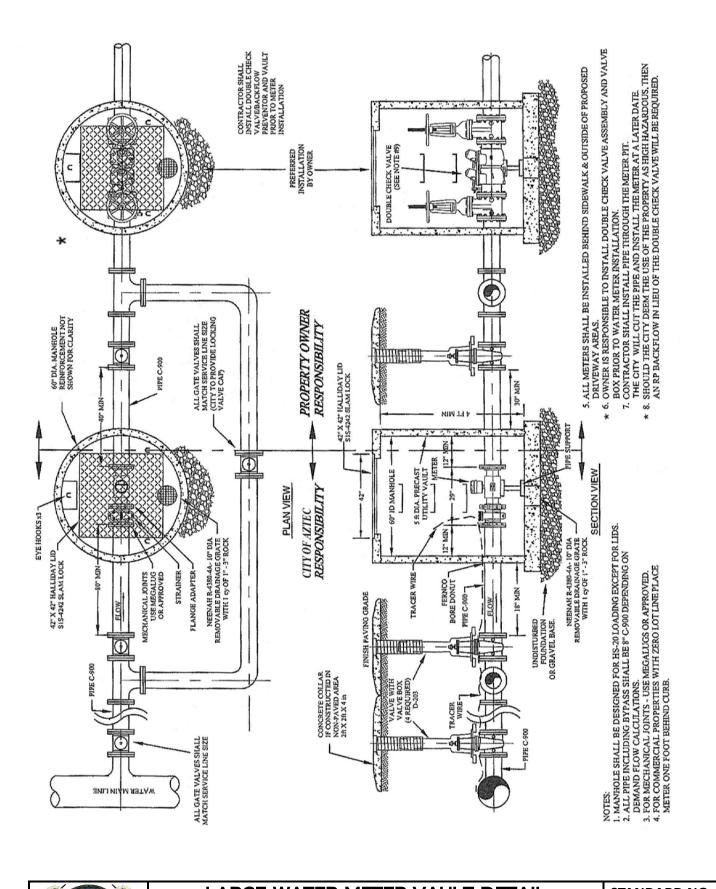
APP'D R. Salcido
DATE Oct. 11, 2023

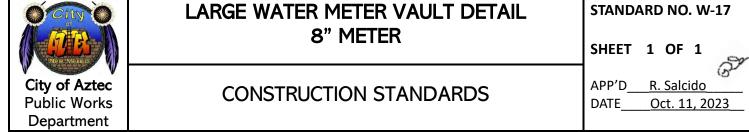


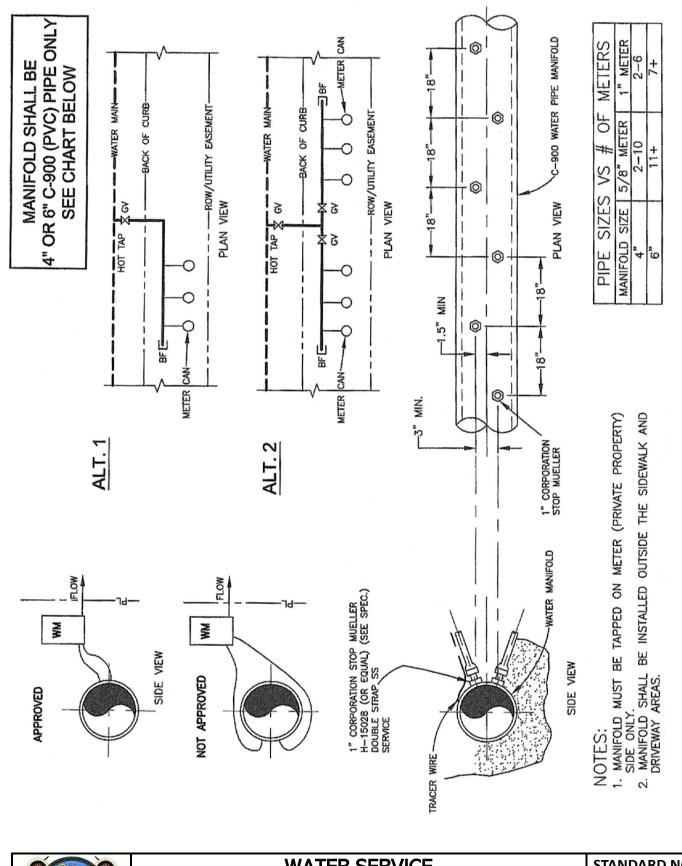




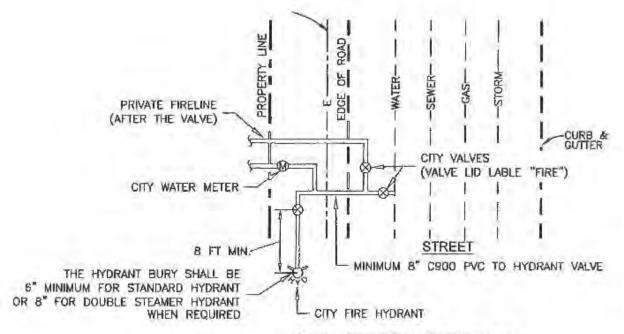




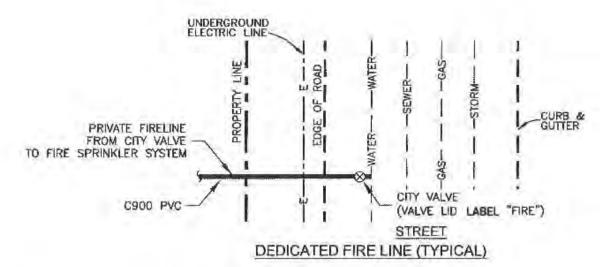




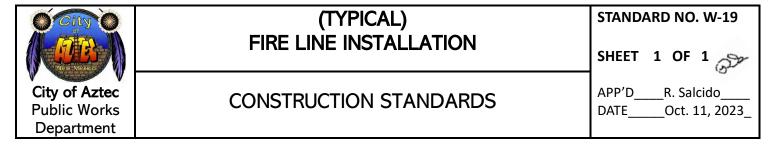


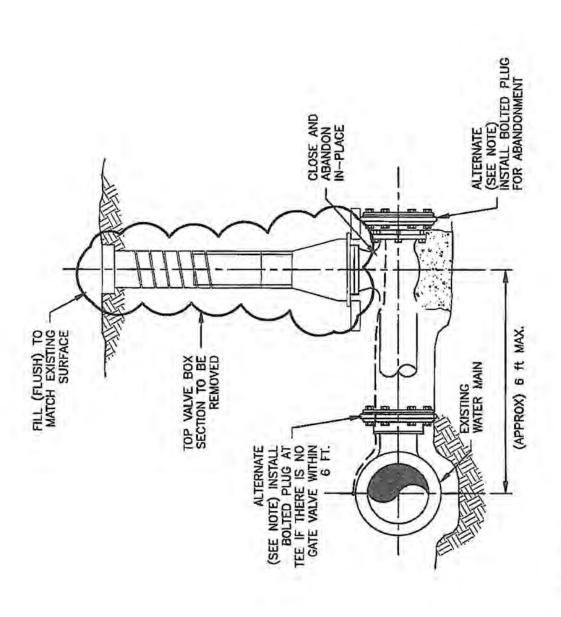


JOINT USE FIRE LINE (TYPICAL)



- 1. FOR WATER SERVICE CONNECTIONS SEE STD. No. W-10 through W-18
 2. FOR FIRE FLOW AND FIREJINE INSTALLATION POLICY, SEE CITY OF AZTEC WEBSITE AT WWW.AZTECHM.GOV
 3. ALL PRIVATE VALVES ON THE SPRINKLER SYSTEM SHALL BE ELECTRONICALLY MONITORED AND SHALL BE INSPECTED AND APPROVED BY THE SAN JUAN COUNTY FIRE DEPARMENT.
- WHEN AN ON-SITE HYDRANT IS REQUIRED, THE MINIMUM PIPE SIZE SHALL BE 8" UP TO THE REMOTE MOST HYDRANT TEE.
- 5. HYDRAULICALLY CALCULATED FIRE SERVICE LINE TO THE BASE OF THE RISER, MINIMUM 4" FOR NFPA 13 AND NFPA 13R SYSTEM, MINIMUM 1-1/2" FOR NFPA 13D SYSTEMS.
 6. FIRELINE SHALL NOT SUPPLY MORE THAN ONE PROPERTY UNLESS SPECIFIED BY THE CITY. FIRELINES THAT
- SUPPLY MULTIPLE BUILDINGS ON A PROPERTY SHALL BE EQUIPPED WITH PIV'S (POST INDICATOR VALVE) AT EACH BUILDING
- 7. ALL 4" AND LARGER FIRE LINES SHALL BE C900 PVC





IF GATE VALVE IS APPROXIMATELY 6 FEET OR LESS FROM THE MAIN TEE, THEN PLUG IMMEDIATELY AFTER GATE VALVE, OTHERWISE, PLUG AFTER MAIN LINE TEE.



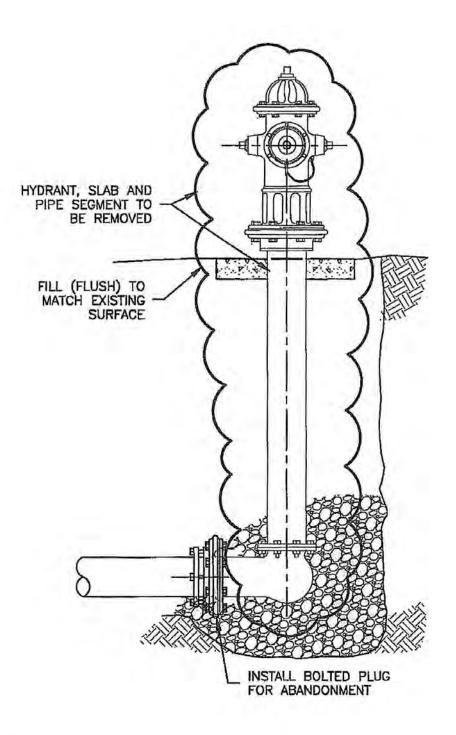
TYPICAL WATER VALVE ABANDONMENT

STANDARD NO. W-20

1 OF 3

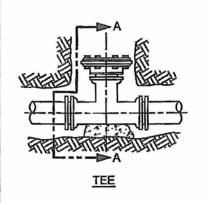
APP'D R. Salcido Oct. 11, 2023 DATE

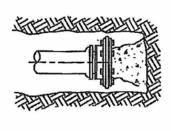
CONSTRUCTION STANDARDS



IF GATE VALVE IS APPROXIMATELY 6 FEET OR LESS FROM THE MAIN TEE, THEN PLUG IMMEDIATELY AFTER GATE VALVE. OTHERWISE, PLUG AFTER MAIN LINE TEE.

City	TYPICAL FIRE HYDRANT	STANDARD NO. W-20
New Mexico	ABANDONMENT	SHEET 2 OF 3
City of Aztec Public Works Department	CONSTRUCTION STANDARDS	APP'D R. Salcido DATE Oct. 11, 2023

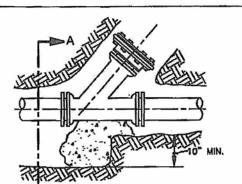


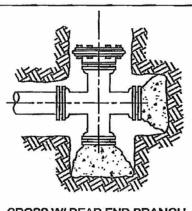


DEAD END



BEND HORIZONTAL OR BOTTOM OF VERTICAL

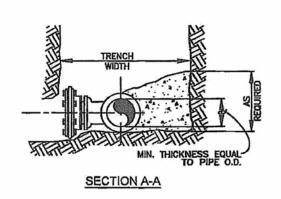




CROSS W/ DEAD END BRANCH



WYE



NOTE:

- 1. INSTALL BOLTED PLUG FOR ADANDONMENT.
- 2. USE A RESTRAINING JOINT WITH FLANGE PLATE TO SEAL,



TYPICAL PIPE SECTION FOR ABANDONMENT

CONSTRUCTION STANDARDS

STANDARD NO. W-20

SHEET 3 OF 3



DATE Oct. 11, 2023