

BAY COUNTY
 UTILITIES
 STANDARD
 DETAILS

WATER SERVICE CONNECTION

DATE : SEP 2017

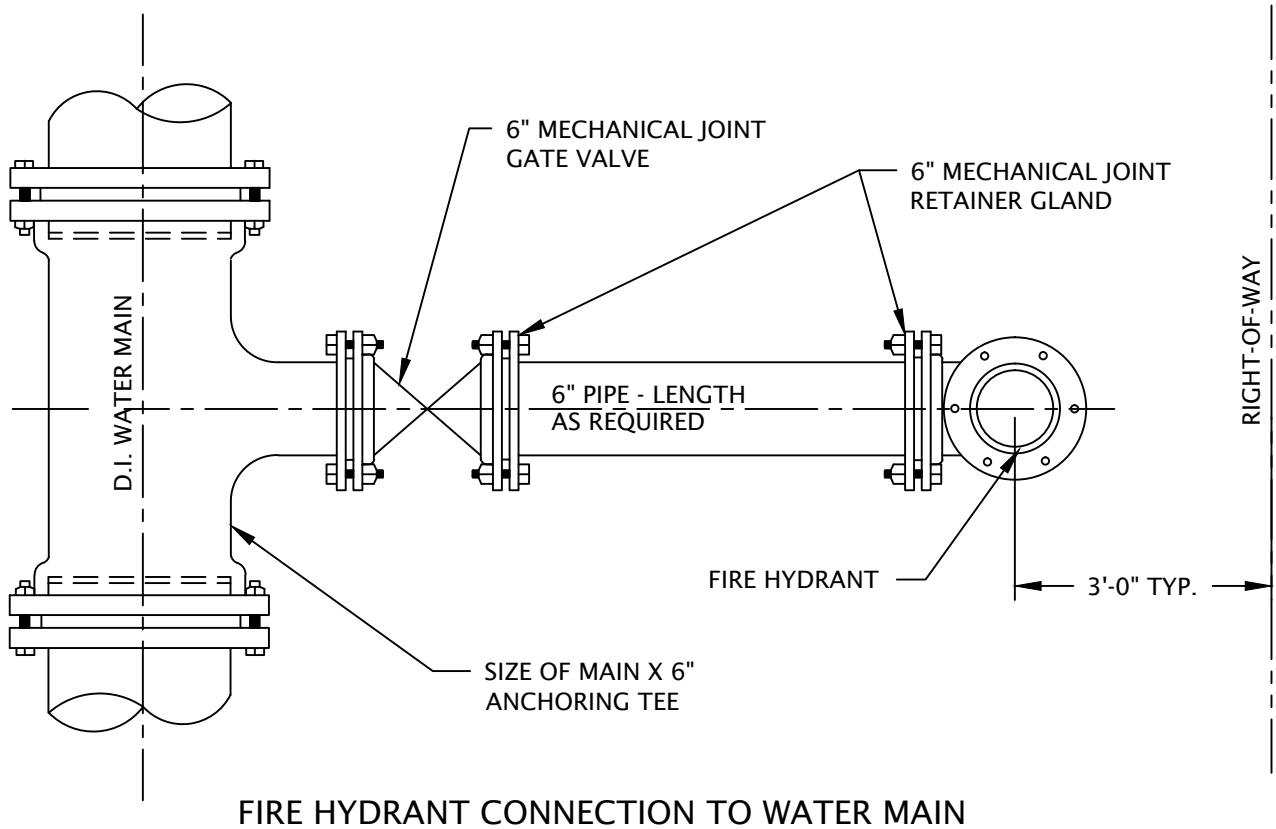
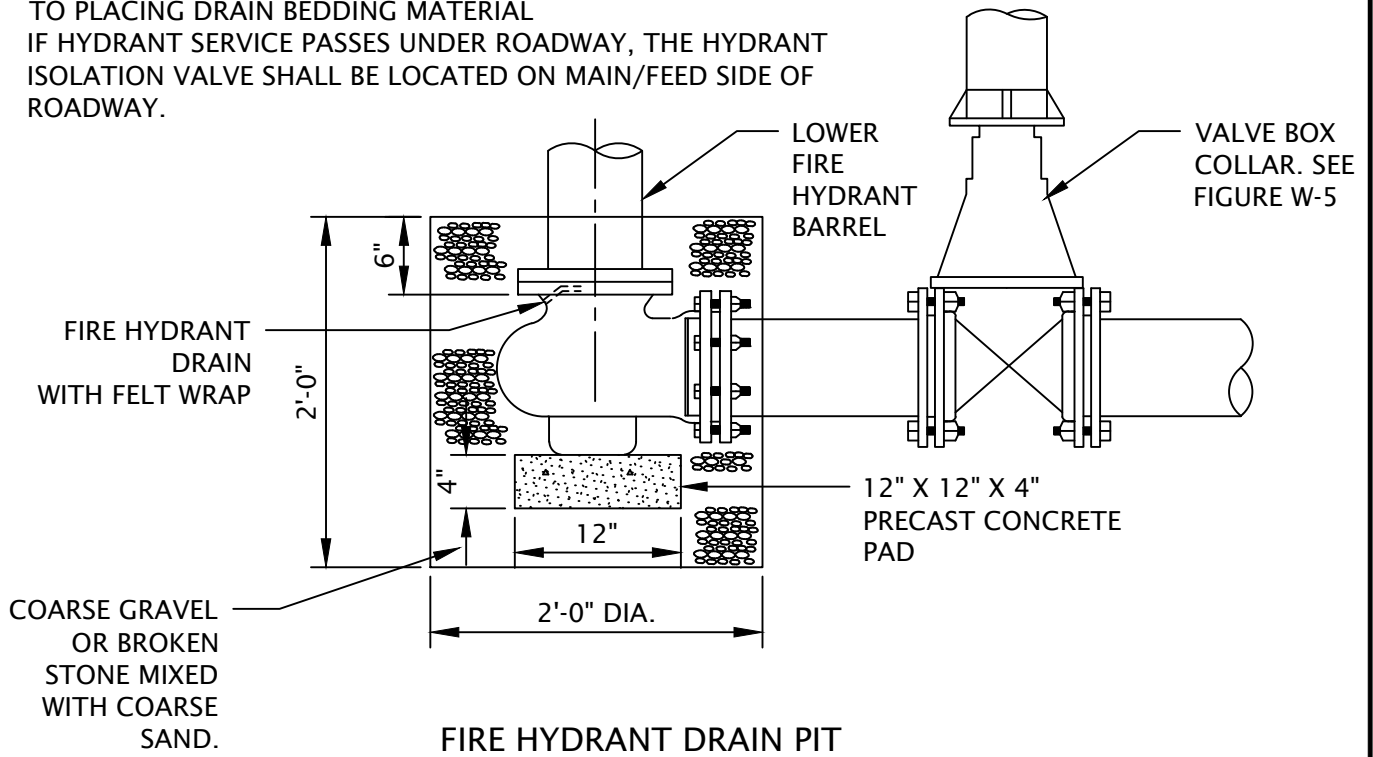
SCALE : NTS

FIGURE :

W-1

NOTES:

1. DO NOT PERMIT FIRE HYDRANT DRAIN PIT TO BE SUBMERGED IN ANY STREAM OR TO BE WITHIN 5' OF ANY SANITARY SEWER.
2. WRAP THE WEEPHOLE/DRAINHOLE WITH W FELT/MESH MATERIAL, PRIOR TO PLACING DRAIN BEDDING MATERIAL
3. IF HYDRANT SERVICE PASSES UNDER ROADWAY, THE HYDRANT ISOLATION VALVE SHALL BE LOCATED ON MAIN/FEED SIDE OF ROADWAY.

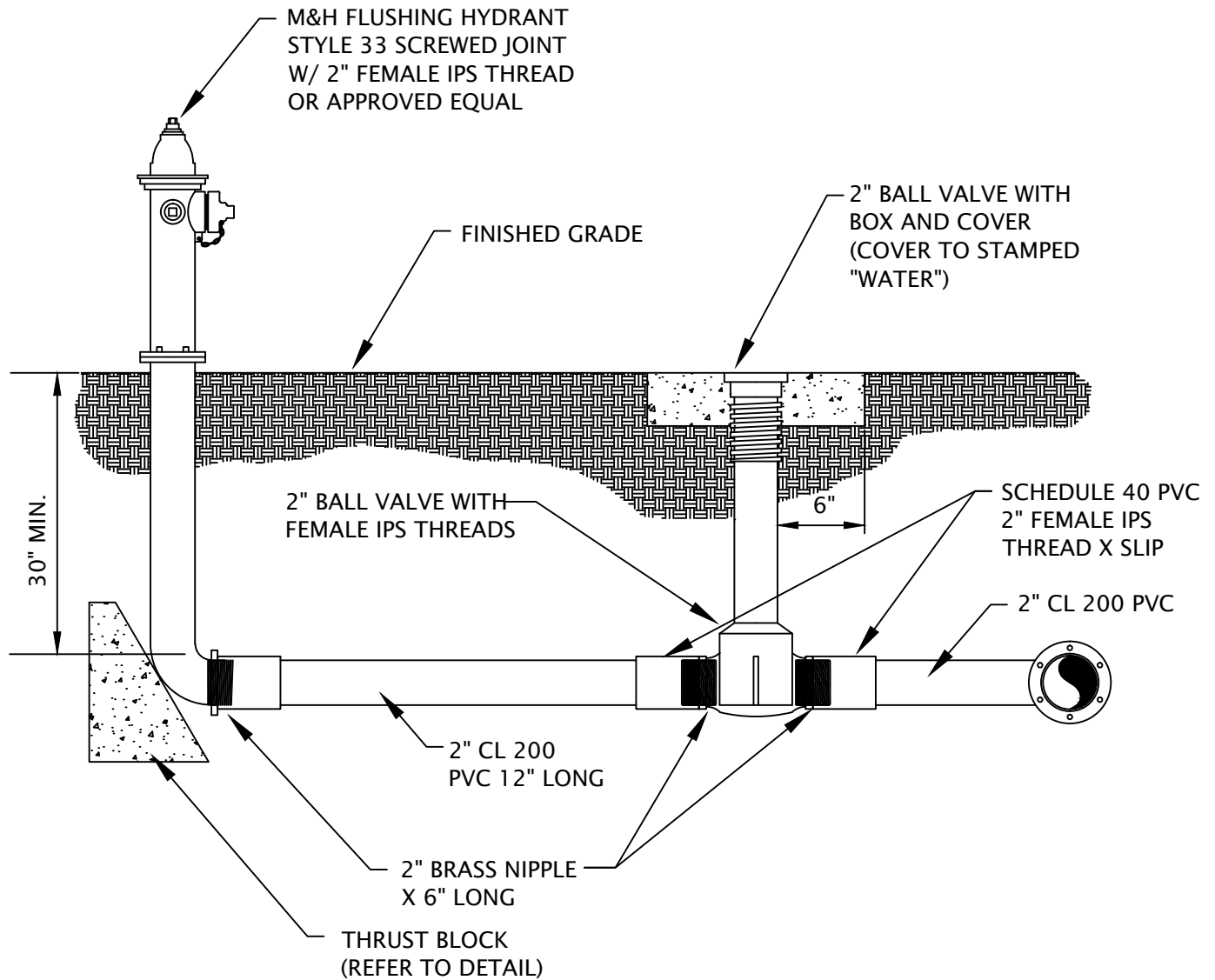


BAY COUNTY
UTILITIES
STANDARD
DETAILS

FIRE HYDRANT ASSEMBLY

DATE : SEP 2017
SCALE : NTS

FIGURE : **W-2**



NOTES:

1. FLUSH HYDRANTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK WITHIN R/W EXCEPT WHERE CONDITIONS AND OR REGULATION PROHIBIT. FLUSH HYDRANTS SHALL BE LOCATED WITHIN RIGHTS OF WAY OR UTILITY EASEMENTS.
2. ALL RODS AND ASSOCIATED HARDWARE SHALL BE STAINLESS STEEL.
3. ALL MECHANICAL JOINTS SHALL USE MEGA-LUG RESTRAINT TYPE RETAINING GLANDS. VALVE BOXES SHALL BE HEIGHT ADJUSTABLE.

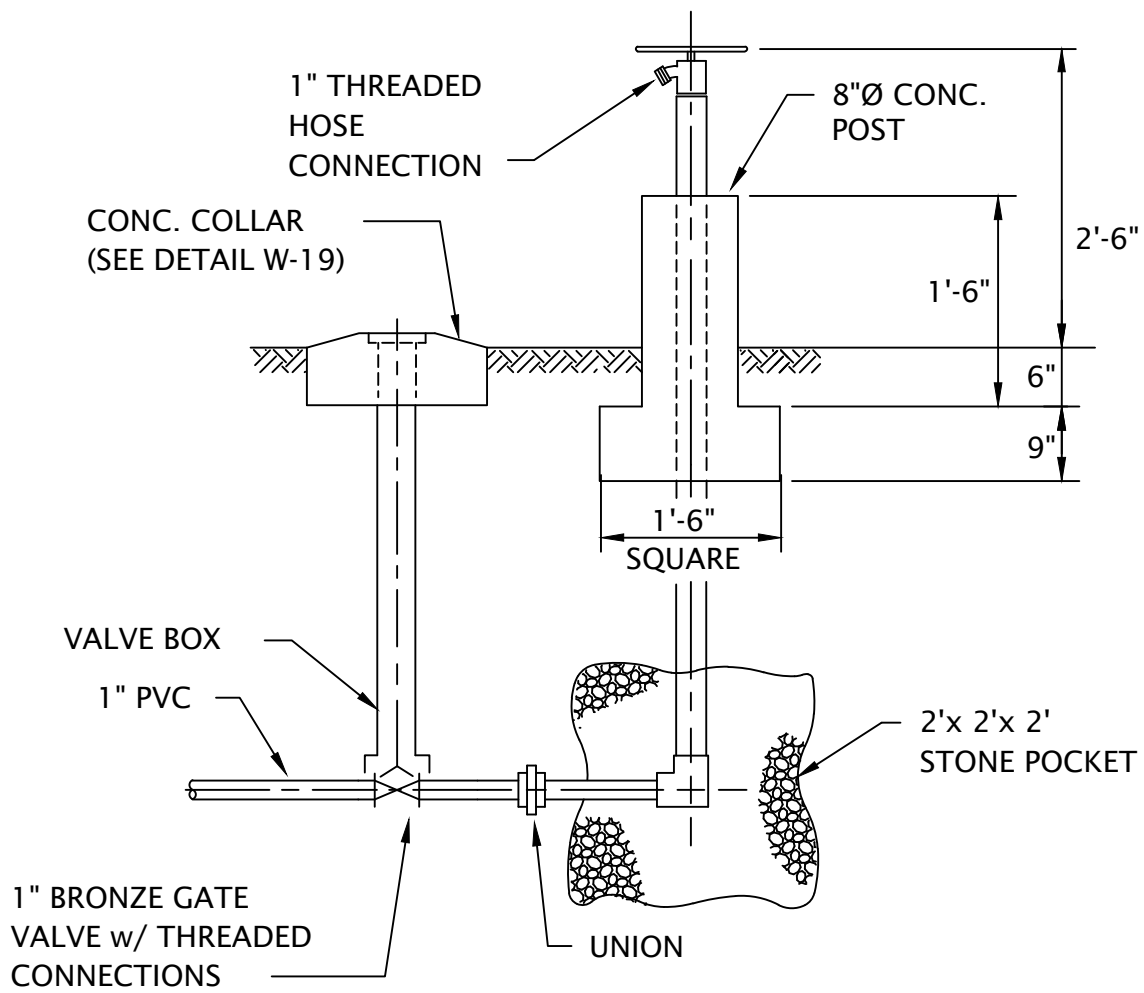


BAY COUNTY
UTILITIES
STANDARD
DETAILS

**ABOVE GRADE
FLUSHING HYDRANT**

DATE : SEP 2017
SCALE : NTS

FIGURE : **W-3**



POST HYDRANT SHALL BE ZURN Z1390 OR EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

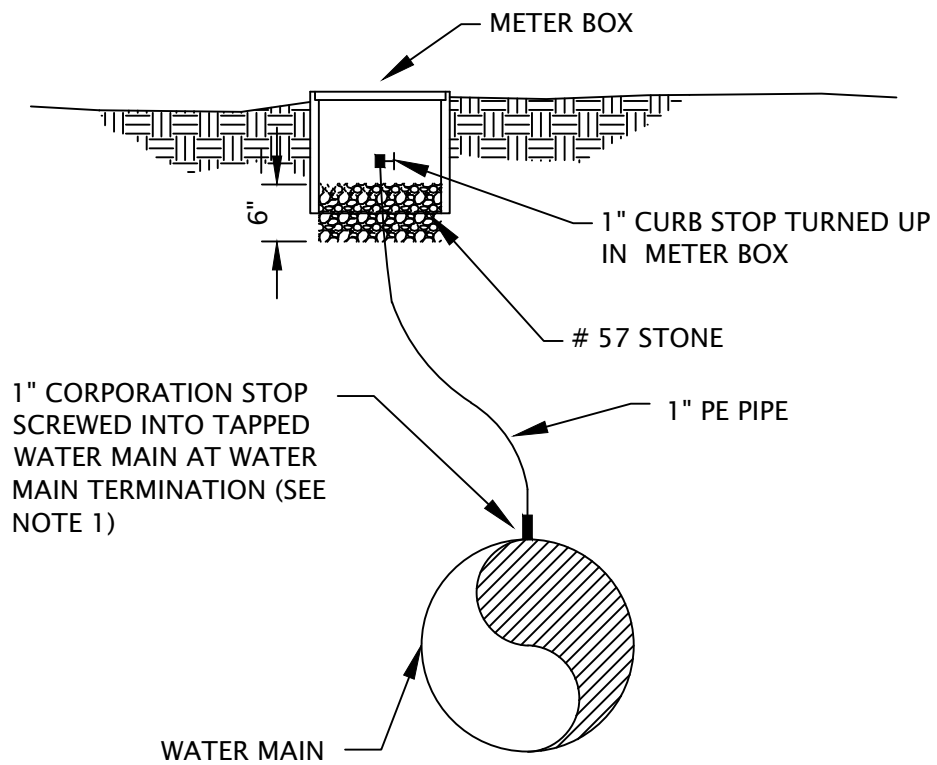


BAY COUNTY UTILITIES STANDARD DETAILS

NON-FREEZE POST HYDRANT

DATE : SEP 2017
SCALE : NTS

FIGURE : W-4



NOTE 1: DOUBLE STRAP SERVICE CLAMP REQUIRED ON ALL CONNECTIONS TO PVC WATER MAIN.

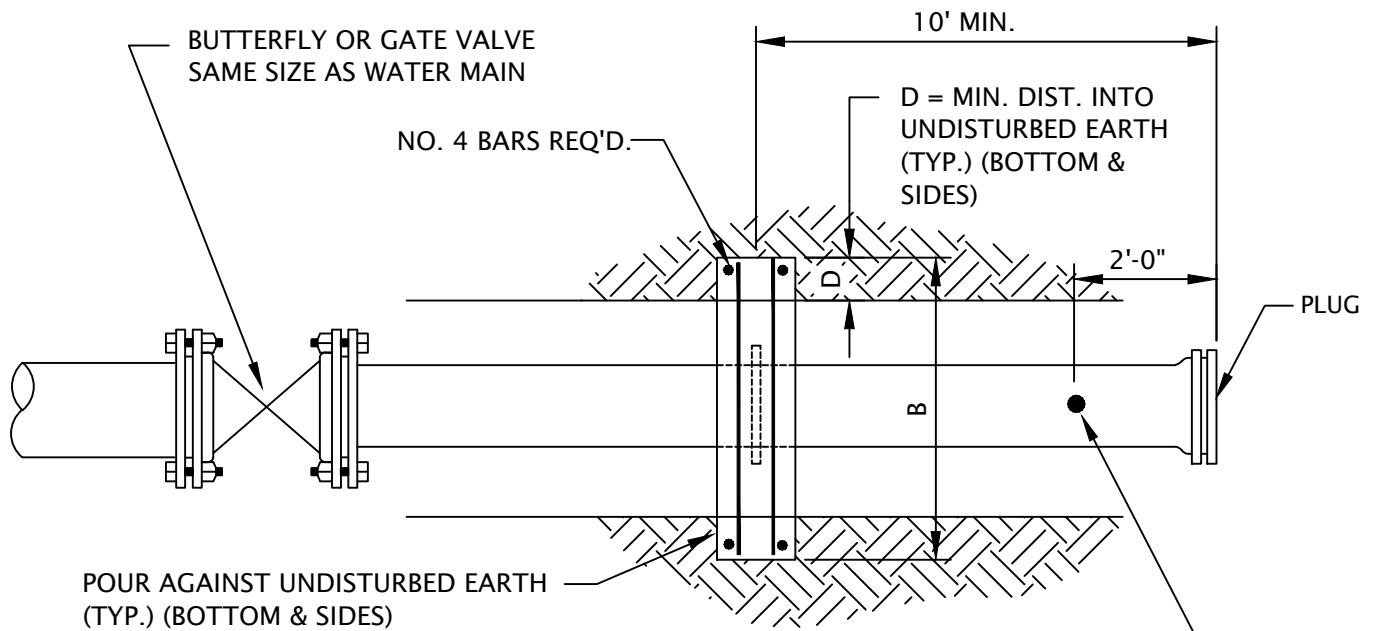


BAY COUNTY
UTILITIES
STANDARD
DETAILS

MANUAL
AIR RELEASE VALVE

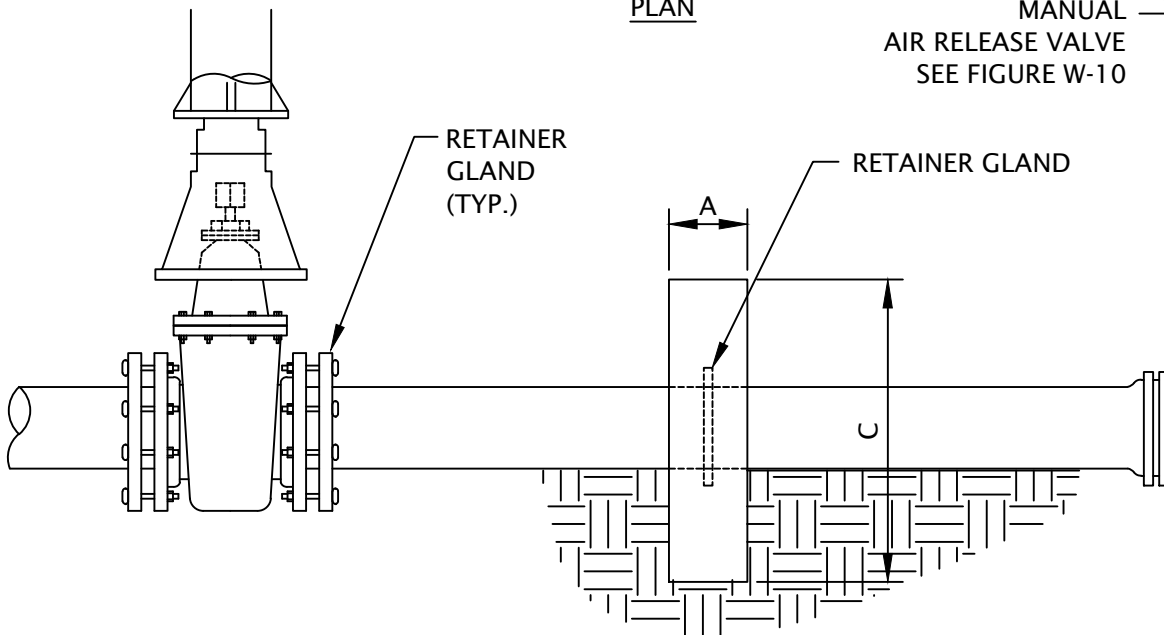
DATE : SEP 2017
SCALE : NTS

FIGURE : W-5



PLAN

MANUAL
AIR RELEASE VALVE
SEE FIGURE W-10



SECTION

MAIN DIA	CONCRETE COLLAR DIM.				REINFORCING STEEL
	A	B	C	D	
16"	1'-3"	6'-6"	6'-6"	1'-6"	#8 @ 12" O.C. E.W.E.F.
12"	1'-2"	5'-3"	5'-3"	1'-0"	#7 @ 12" O.C. E.W.E.F.
6" or 8"	1'-0"	4'-0"	4'-0"	0'-8"	#6 @ 12" O.C. E.W.E.F.

TEST PRESSURE: 150 P.S.I.
SOIL BEARING PRESSURE: 3000 P.S.F.



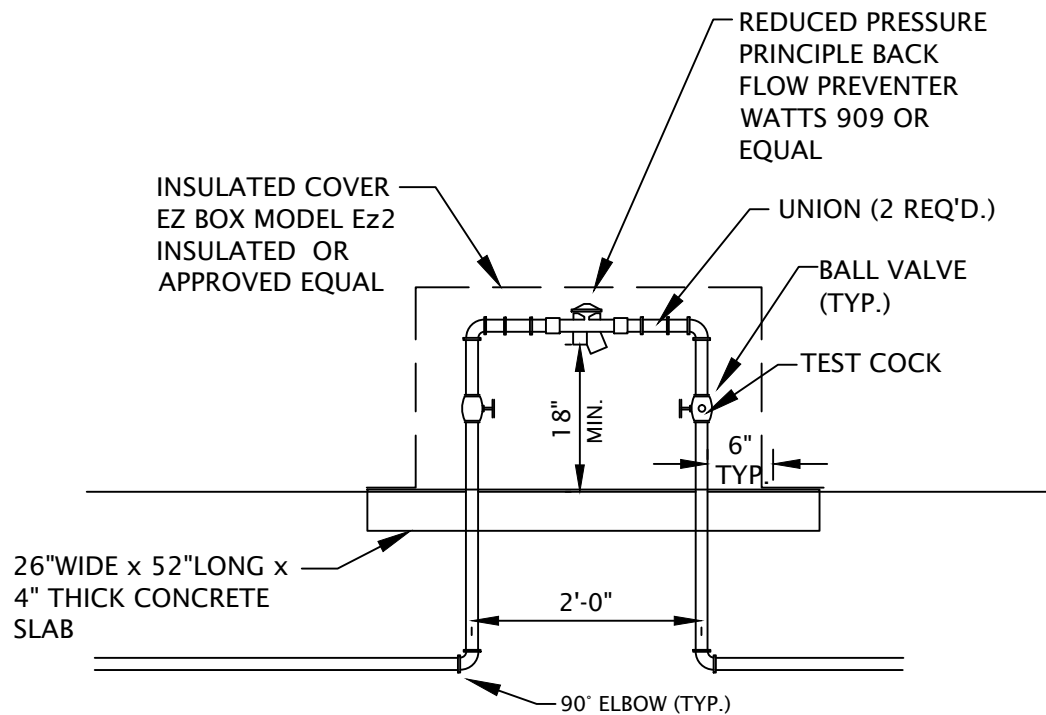
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STANDARD
DETAILS

WATER MAIN TERMINATION

DATE : SEP 2017
SCALE : NTS

FIGURE :

W-6



NOTES:

1. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL OR BRASS.
2. ALL ITEMS ABOVE GRADE SHALL HAVE ONE COAT OF APPROVED RUST RESISTANT BLUE ENAMEL PAINT.



BAY COUNTY
UTILITIES
STANDARD
DETAILS

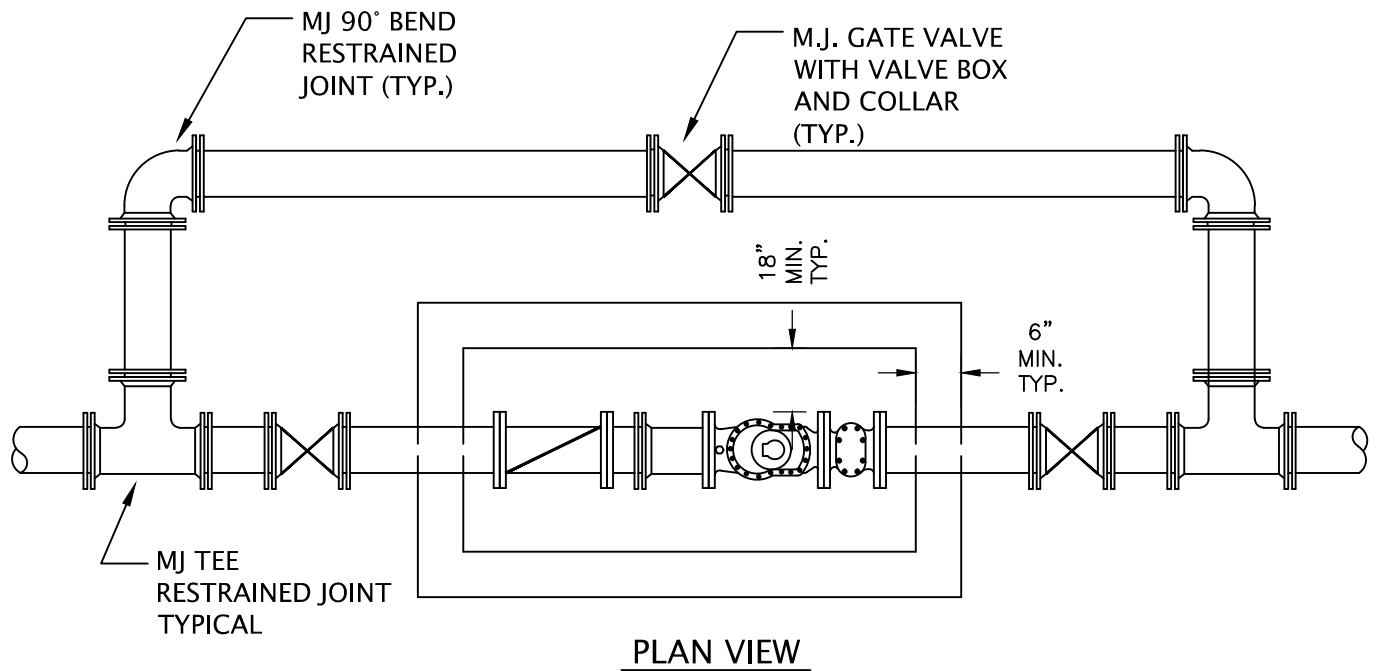
1 1/2" AND 2"
BACKFLOW PREVENTERS

DATE : SEP 2017

SCALE : NTS

FIGURE :

W-7



PLAN VIEW

NOTES:

1. ALL EXPOSED METAL SHALL BE PAINTED WITH 2 COATS OF EXTERIOR ENAMEL PAINT.
2. VALVE VAULT SHALL BE SIZED TO PERMIT EASY REMOVAL OF CHECK VALVE SPINDLES WITH MINIMUM CLEARANCES AS SHOWN FOR 6" DIAMETER PIPE AND SMALLER. CLEARANCES SHALL INCREASE AS REQ'D FOR LARGER PIPE SIZES
3. VALVE VAULT SHALL HAVE SEALED FLOOR AND DRAIN.
4. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE OR NON-SHRINK GROUT.
5. VALVE VAULT COVERS SHALL BE ALUMINUM WITH 316 S.S. HARDWARE AND LOCK BRACKET AS APPROVED BY THE COUNTY.
6. ACCESS HATCH LOAD REQUIREMENTS WILL BE APPROVED BY BAY COUNTY ON A CASE BY CASE SCENARIO.
7. METER VAULT SHALL BE SIZED BASED ON METER FITTING CLEARANCE REQUIREMENTS AND THE MINIMUM CLEARANCE REQUIREMENTS SHOWN IN THIS DETAIL.
8. A SUMP PUMP WITH WEATHERPROOF ELECTRICAL PLUG SHALL BE PROVIDED IF WATER TABLE PRECLUDES THE USE OF GRAVEL FILLED BLOCKOUT.
9. ALL METERS WITH PIT PAD SHALL HAVE SENSUS PROTOCOL.
10. METER OPTIONS (TO BE APPROVED BY BAY COUNTY UTILITY SERVICES):
 - a. COMPOUND METERS OMNIC₂ OR APPROVED EQUIVALENT
 - b. ELECTROMAGNETIC METER EVOQ4 (BATTERY POWERED) OR APPROVED EQUIVALENT
 - c. ELECTROMAGNETIC METER ULTRAMAG MCCROMETER (AVAILABLE POWER SUPPLY) OR APPROVED EQUIVALENT.
12. ALL METERS SHALL BEGIN WITH 1000 U.S. GALLONS ON THE REGISTER.
13. ALL METERS SHALL BE APPROVED BY BAY COUNTY UTILITY SERVICES ON A CASE BY CASE BASIS. THE FACTORING ISSUES BEING:
 - a. LOCATION
 - b. SIZE
 - c. FLOWS
14. VAULT SIZE SHALL BE DETERMINED BY THE METER SIZE.
15. INSTALL CAST IRON STRAINER WITH ANY TYPE OF TURBINE, COMPOUND, PROPELLER, FOR ANY METER THAT HAS INTERNAL ROTATING OR SPINNING PARTS FOR MEASUREMENT.
16. ONLY ELECTROMAGNETIC FLOW METERS OR COMPOUND METERS WILL BE ALLOWED AND MUST BE APPROVED BY BAY COUNTY UTILITY SERVICES.



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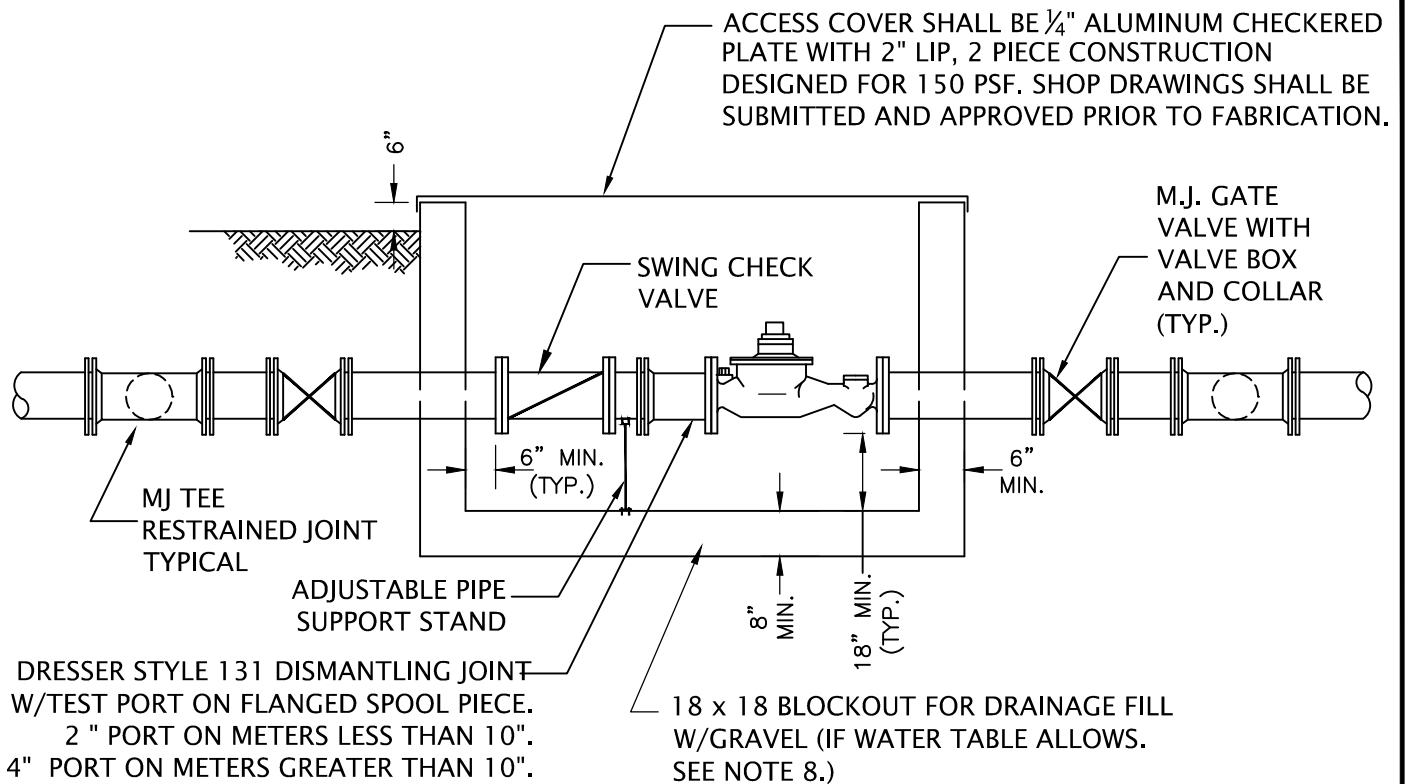
**MASTER WATER METER VAULT
FOR 3" AND LARGER METERS**

DATE : SEP 2017

SCALE : NTS

FIGURE :

W-8



SECTION VIEW

NOTES:

1. ALL EXPOSED METAL SHALL BE PAINTED WITH 2 COATS OF EXTERIOR ENAMEL PAINT.
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3. VALVE VAULT SHALL HAVE SEALED FLOOR AND DRAIN.
4. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE OR NON-SHRINK GROUT.
5. VALVE VAULT COVERS SHALL BE ALUMINUM WITH 316 S.S. HARDWARE AND LOCK BRACKET AS APPROVED BY THE COUNTY.
6. ACCESS HATCH LOAD REQUIREMENTS WILL BE APPROVED BY BAY COUNTY ON A CASE BY CASE SCENARIO.
7. METER VAULT SHALL BE SIZED BASED ON METER FITTING CLEARANCE REQUIREMENTS AND THE MINIMUM CLEARANCE REQUIREMENTS SHOWN IN THIS DETAIL.
8. A SUMP PUMP WITH WEATHERPROOF ELECTRICAL PLUG SHALL BE PROVIDED IF WATER TABLE PRECLUDES THE USE OF GRAVEL FILLED BLOCKOUT.
9. ALL METERS WITH PIT PAD SHALL HAVE SENSUS PROTOCOL.
10. METER OPTIONS (TO BE APPROVED BY BAY COUNTY UTILITY SERVICES):
 - a. COMPOUND METERS OMNIC2 OR APPROVED EQUIVALENT
 - b. ELECTROMAGNETIC METER EVOQ4 (BATTERY POWERED) OR APPROVED EQUIVALENT
 - c. ELECTROMAGNETIC METER ULTRAMAG MCCROMETER (AVAILABLE POWER SUPPLY) OR APPROVED EQUIVALENT.
12. ALL METERS SHALL BEGIN WITH 1000 U.S. GALLONS ON THE REGISTER.
13. ALL METERS SHALL BE APPROVED BY BAY COUNTY UTILITY SERVICES ON A CASE BY CASE BASIS. THE FACTORING ISSUES BEING:
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MASTER WATER METER VAULT FOR 3" AND SMALLER METERS

DATE : SEP 2017

SCALE : NTS

FIGURE :

W-9