

NOTES:

1. TEMPORARY FILL SHALL BE PLACED UNTIL FDEP CLEARANCE HAS BEEN RECEIVED.
2. AFTER FDEP CLEARANCE HAS BEEN RECEIVED, THE CORPORATION STOP SHALL BE CLOSED, PE TUBING SHALL BE REMOVED, AND A CAP/PLUG SHALL BE INSTALLED AT THE CORPORATION STOP.

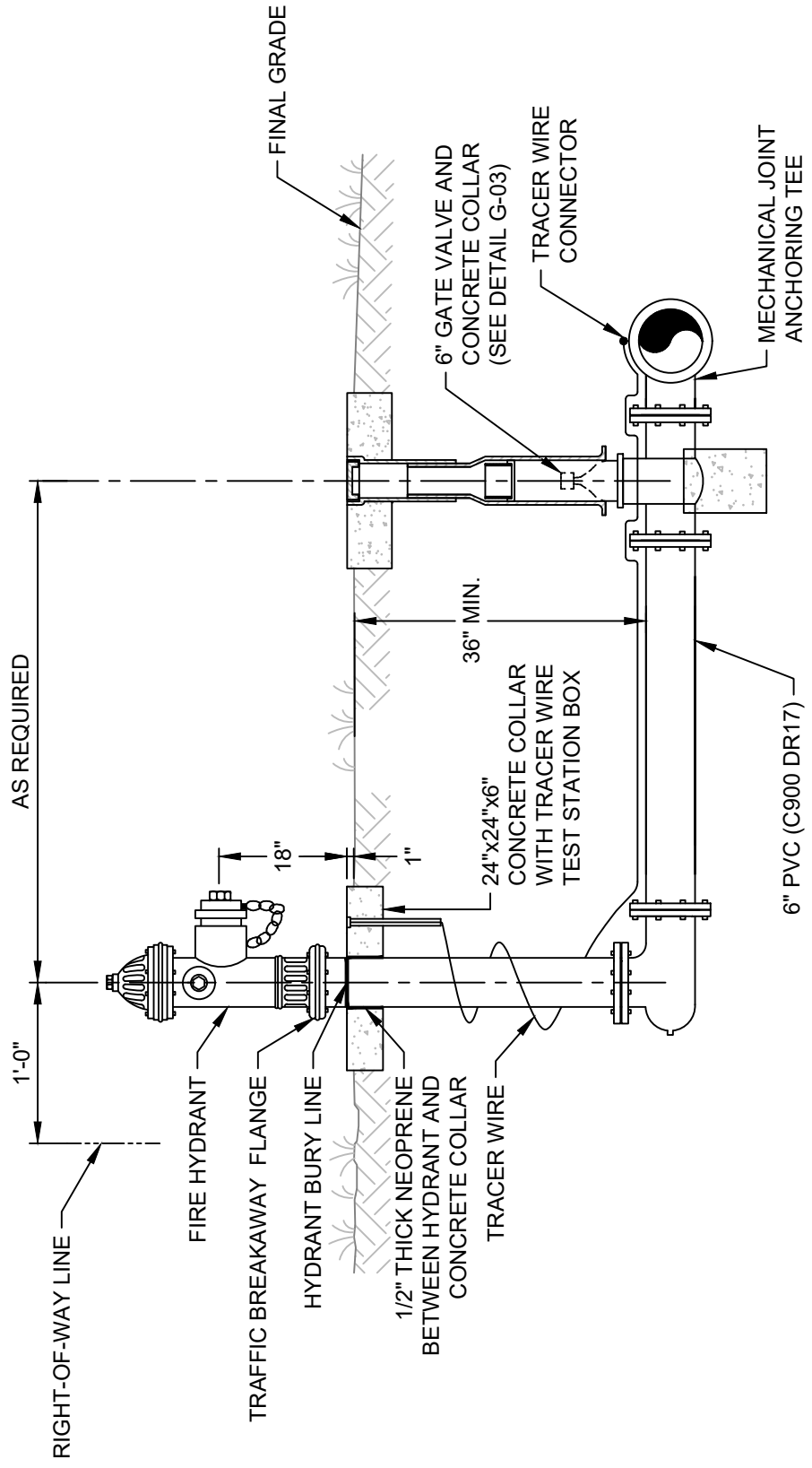
water details 0.621 2023jmf.dwg Jun-2023

TYPICAL FIRE HYDRANT ASSEMBLY

DETAIL

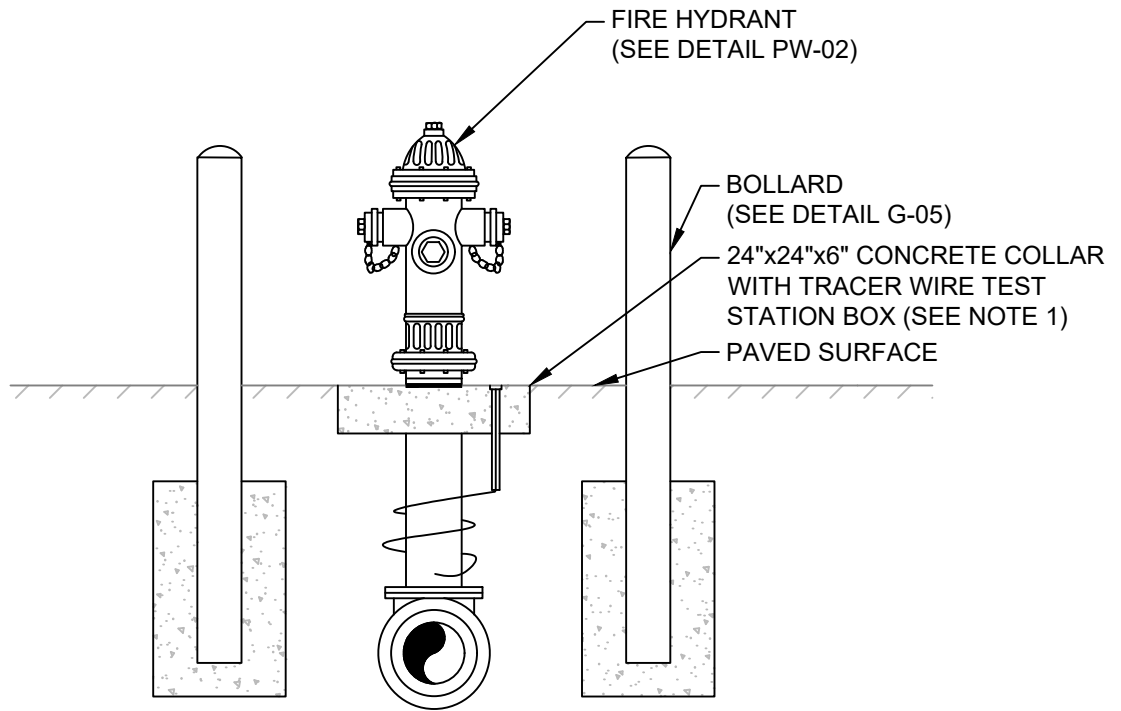
PW-02

SHEET 1 OF 1

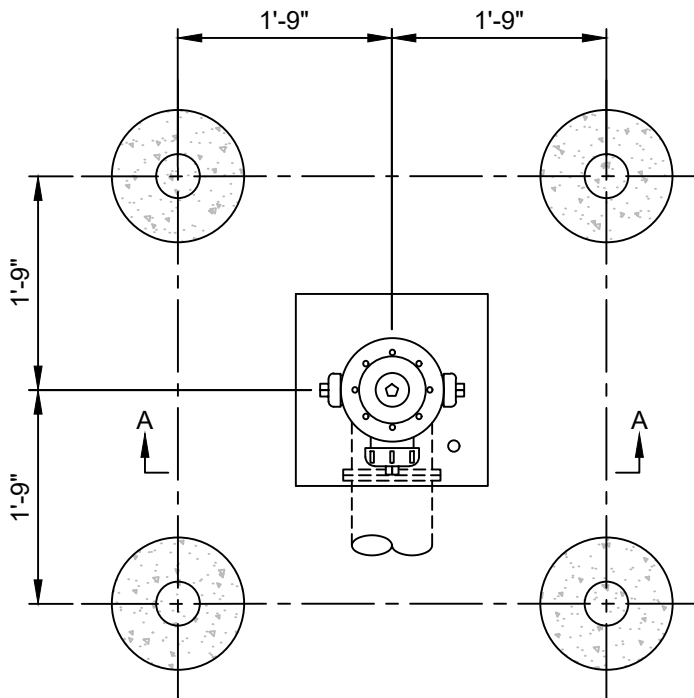


NOTES:

1. FIRE HYDRANTS SHALL BE PAINTED WITH TWO COATS OF SHERWIN-WILLIAMS SAFETY YELLOW #7543.
2. FIRE HYDRANTS INSTALLED IN PAVED AREAS SHALL BE PROTECTED WITH BOLLARDS. REFER TO DETAIL PW-03.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.



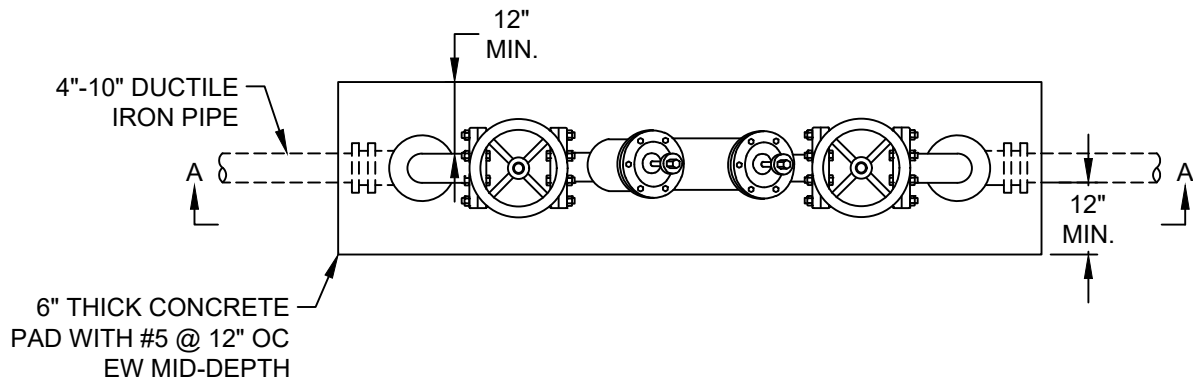
SECTION A-A



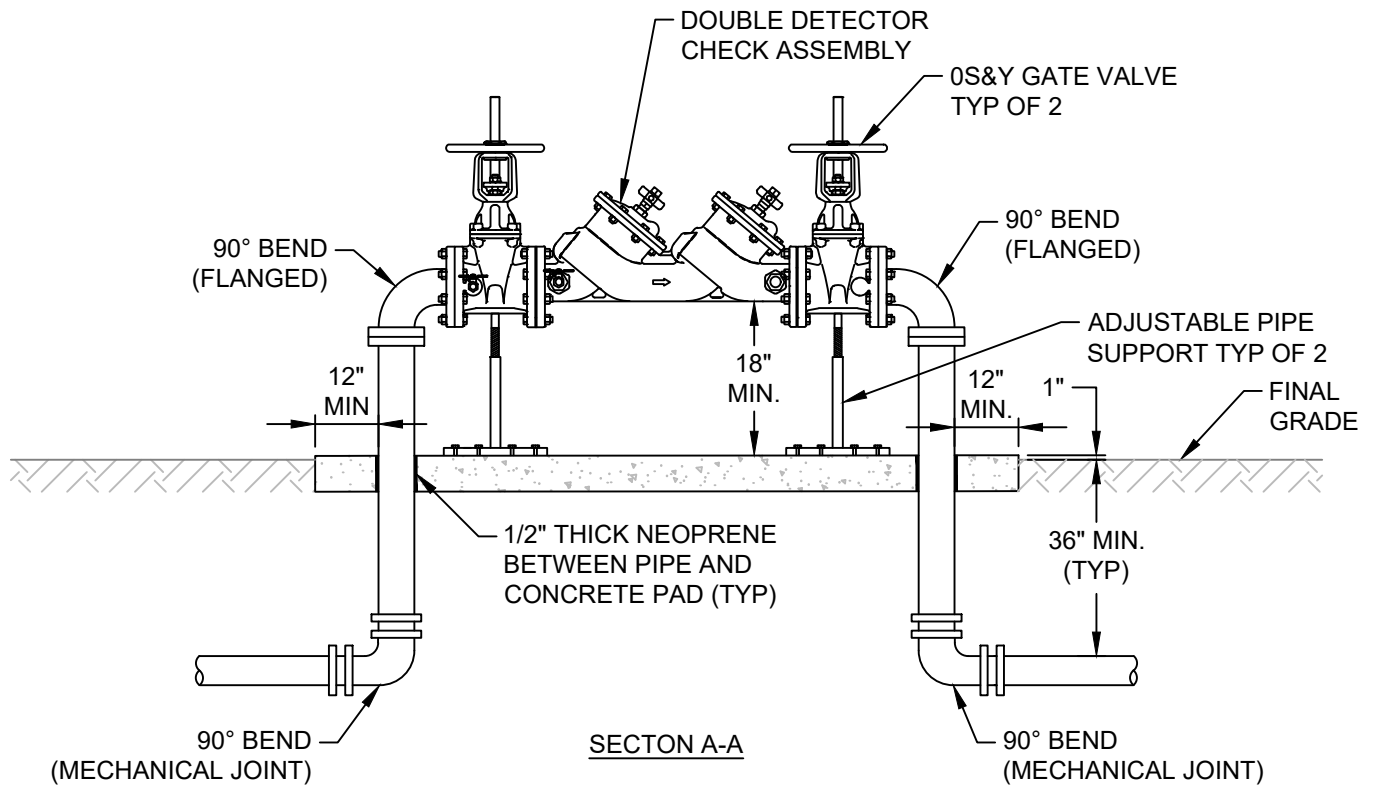
PLAN

NOTES:

1. 24"x24"x6" CONCRETE PAD SHALL BE FLUSH WITH SURROUNDING PAVEMENT. PROVIDE 1/2-INCH PREMOLDED JOINT FILLER WHERE CONCRETE COLLAR ABUTS PAVED SURFACE.



PLAN



SECTION A-A

NOTES:

1. DOUBLE DETECTOR CHECK ASSEMBLY SHALL MEET UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH REQUIREMENTS AND SHALL BE APPROVED BY NPU.
2. BACKFLOW ASSEMBLY MAY BE INCORPORATED IF SHOWN ON PLANS.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.
4. SUBGRADE BELOW CONCRETE PAD SHALL BE COMPACTED TO MINIMUM 98% AS DETERMINED BY FDOT METHOD 1-T 180. SUBGRADE SHALL BE CRUSHED STONE PER NPU SPECIFICATION SECTION 311030. MINIMUM THICKNESS SHALL BE 6".
5. ALL ABOVE GROUND PIPE AND FITTINGS SHALL BE FLANGED. BELOW GROUND FITTINGS SHALL BE MECHANICAL JOINT WITH RESTRAINED JOINTS.
6. ADJUSTABLE PIPE SUPPORTS SHALL BE ANCHORED TO CONCRETE PAD.

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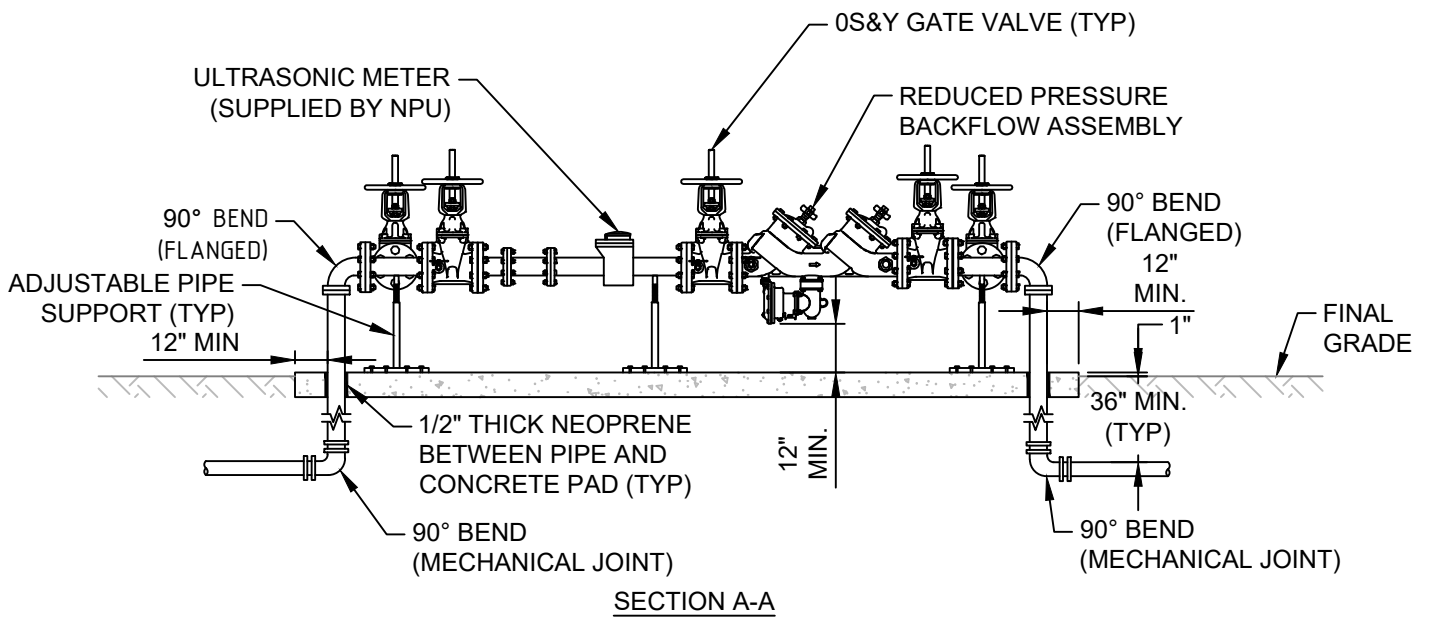
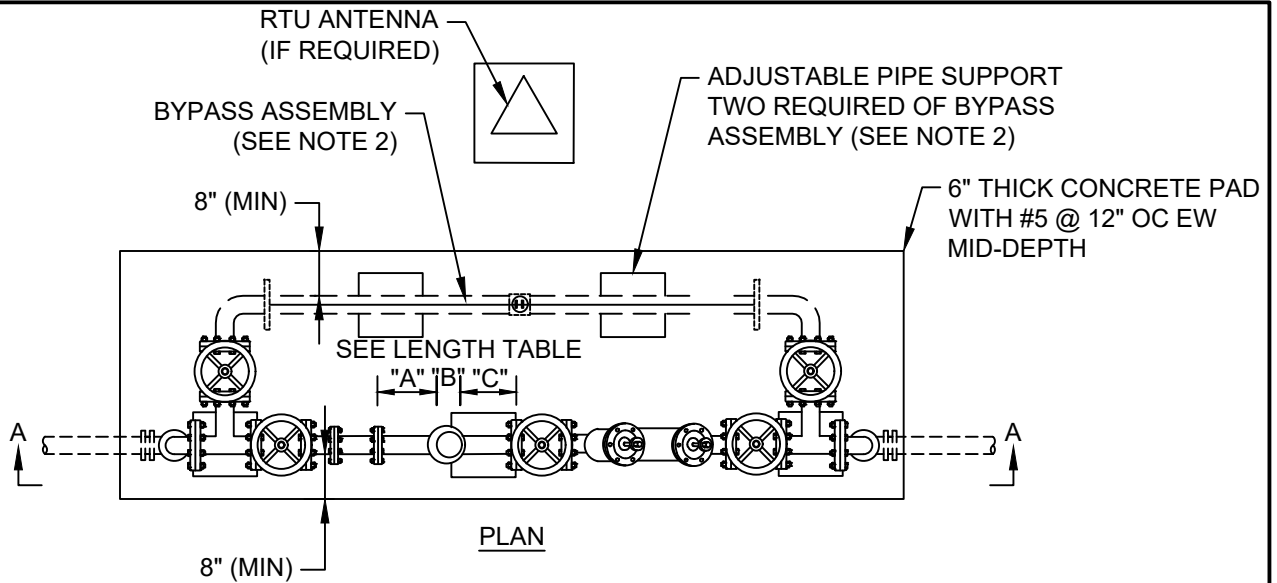


4"-10" BACKFLOW PREVENTION ASSEMBLY FOR FIRE LINE SYSTEMS

DETAIL

PW-04

SHEET 1 OF 1



LENGTH TABLE	
LABEL	LENGTH
"A"	MINIMUM 7 PIPE DIAMETERS
"B"	LENGTH PER MANUFACTURER
"C"	MINIMUM 3 PIPE DIAMETERS

NOTES:

1. REDUCED PRESSURE BACKFLOW ASSEMBLY SHALL MEET UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH REQUIREMENTS AND SHALL BE APPROVED BY NPU.
2. BYPASS ASSEMBLY AND METER SHALL BE INSTALLED BY THE CONTRACTOR IF INDICATED ON THE PLANS.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.
4. SUBGRADE BELOW CONCRETE PAD SHALL BE COMPACTED TO MINIMUM 98% AS DETERMINED BY FDOT METHOD 1-T 180. SUBGRADE MATERIAL SHALL BE CRUSHED STONE PER NPU SPECIFICATION SECTION 311030. MINIMUM THICKNESS SHALL BE 6".
5. ALL ABOVE GROUND PIPE AND FITTINGS SHALL BE FLANGED. BELOW GROUND FITTINGS SHALL BE MECHANICAL JOINT WITH RESTRAINED JOINTS.
6. ADJUSTABLE PIPE SUPPORTS SHALL BE ANCHORED TO CONCRETE SLAB.

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3" AND ABOVE WATER METERS WITH PROVISIONS FOR BYPASS ASSEMBLY

DETAIL

PW-05

SHEET 1 OF 1

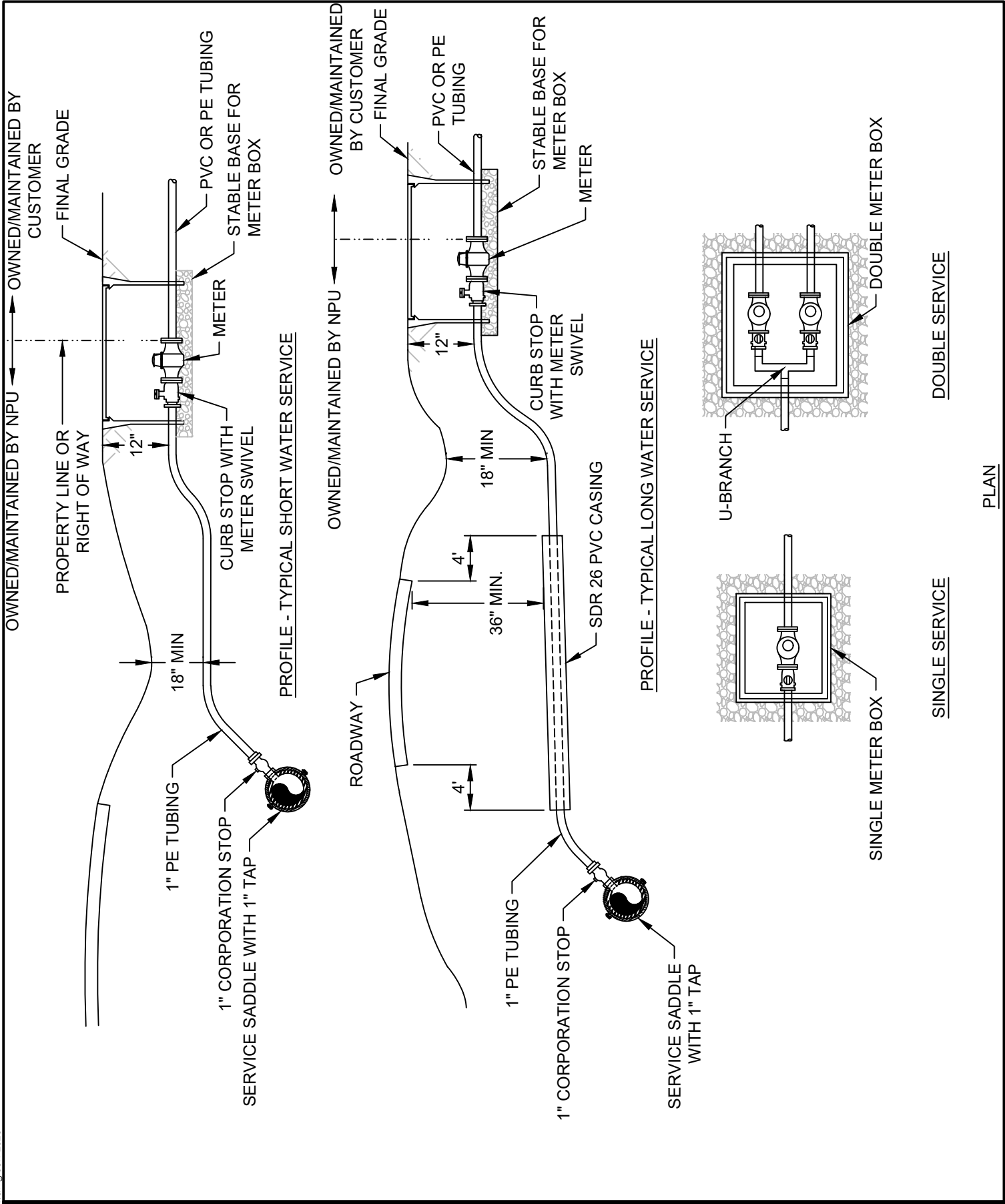


TYPICAL 5/8" - 1" WATER SERVICE

DETAIL

PW-06

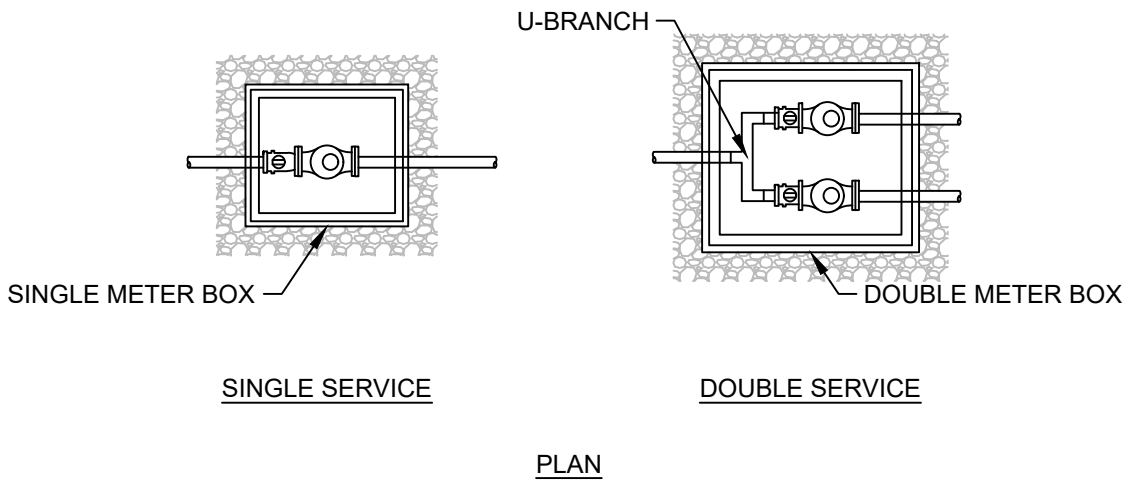
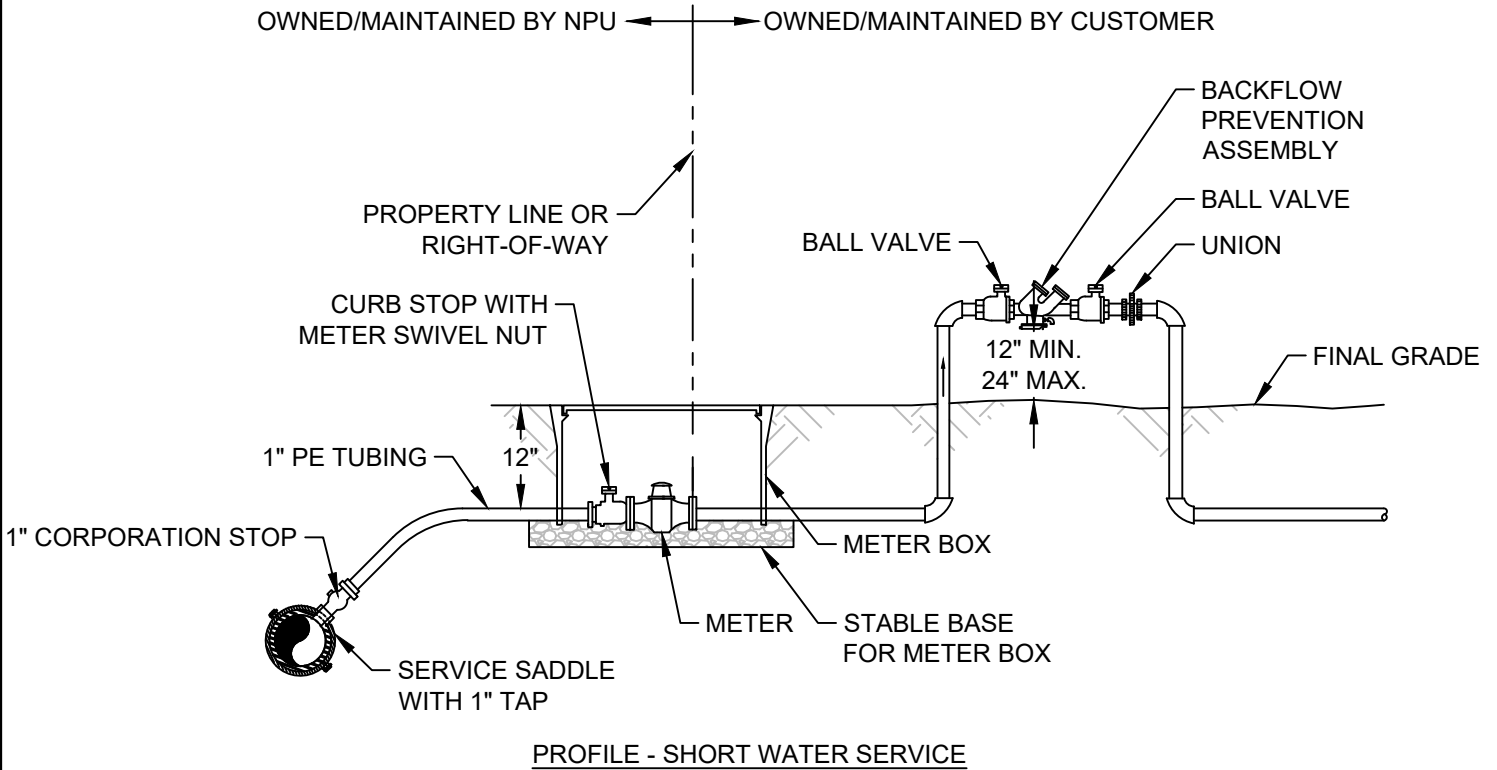
SHEET 1 OF 1



DOUBLE SERVICE

SINGLE SERVICE

PLAN



NOTES:

1. BACKFLOW PREVENTION ASSEMBLY TYPE SHALL BE APPROVED BY NPU AND SHALL BE IN ACCORDANCE WITH THE LATEST CITY CROSS CONNECTION CONTROL PLAN ORDINANCE. THE ASSEMBLY SHALL ALSO BE IN ACCORDANCE WITH AWWA M14 AND SHALL BE LOCATED IMMEDIATELY DOWNSTREAM OF METER.
2. LONG SERVICE UNDER PAVEMENT SHALL BE INSTALLED WITH A SDR 26 PVC CASING. SEE DETAIL PW-06.

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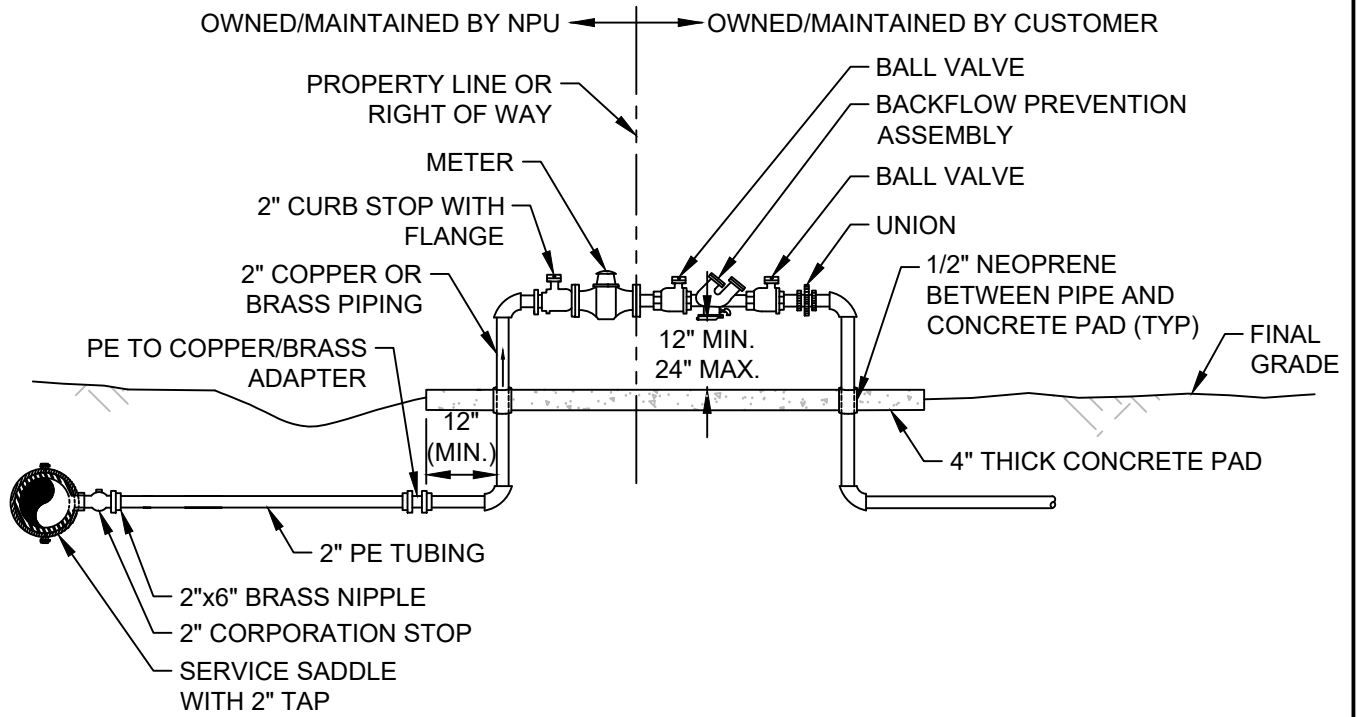


5/8" - 1" WATER METER WITH BACKFLOW PREVENTER

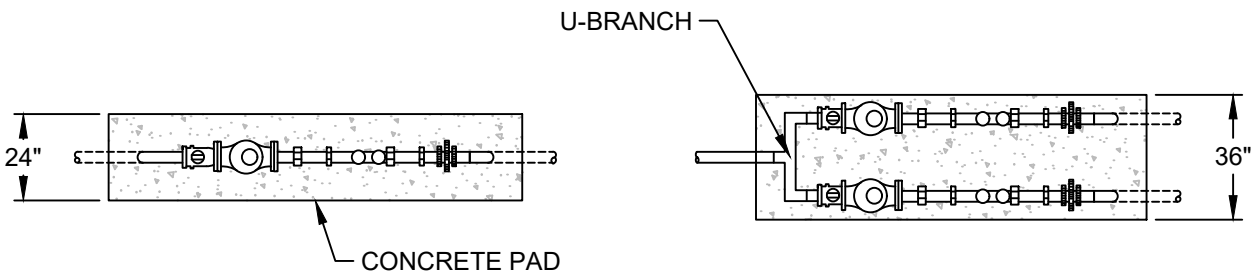
DETAIL

PW-07

SHEET 1 OF 1



PROFILE - SHORT WATER SERVICE



SINGLE SERVICE

DOUBLE SERVICE

PLAN

NOTES:

1. BACKFLOW PREVENTION ASSEMBLY TYPE SHALL BE APPROVED BY NPU AND SHALL BE IN ACCORDANCE WITH THE LATEST CITY CROSS CONNECTION CONTROL PLAN ORDINANCE. THE ASSEMBLY SHALL ALSO BE IN ACCORDANCE WITH AWWA M14 AND SHALL BE LOCATED IMMEDIATELY DOWNSTREAM OF METER.
2. LONG SERVICE UNDER PAVEMENT SHALL BE PIPING INSTALLED WITH A SDR 26 PVC CASING. SEE DETAIL PW-06.

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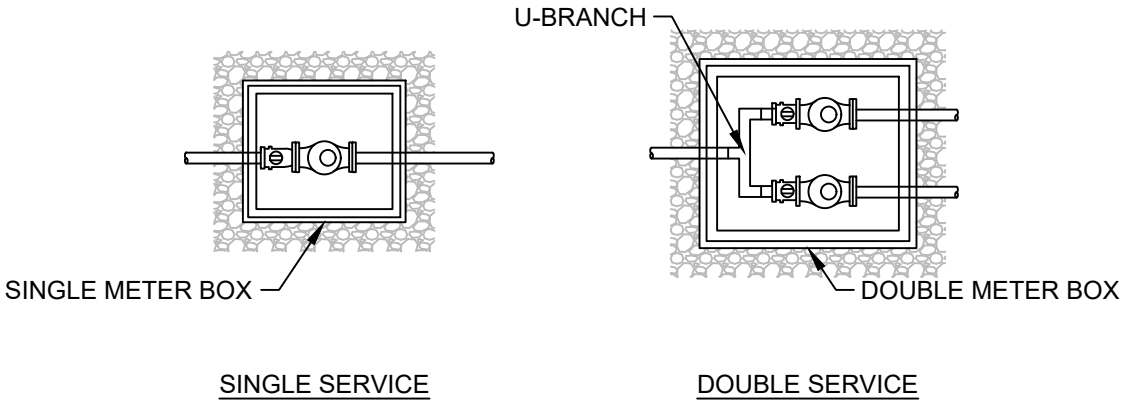
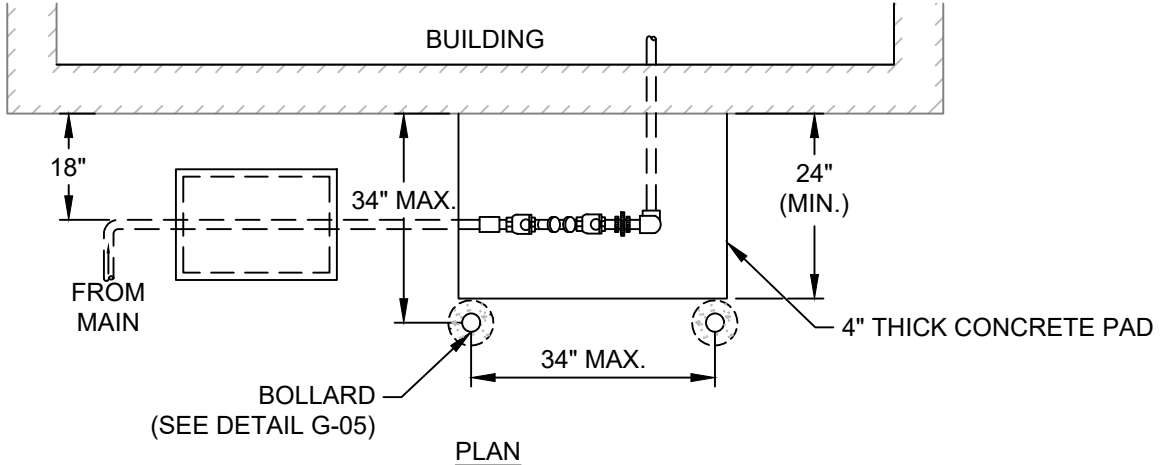
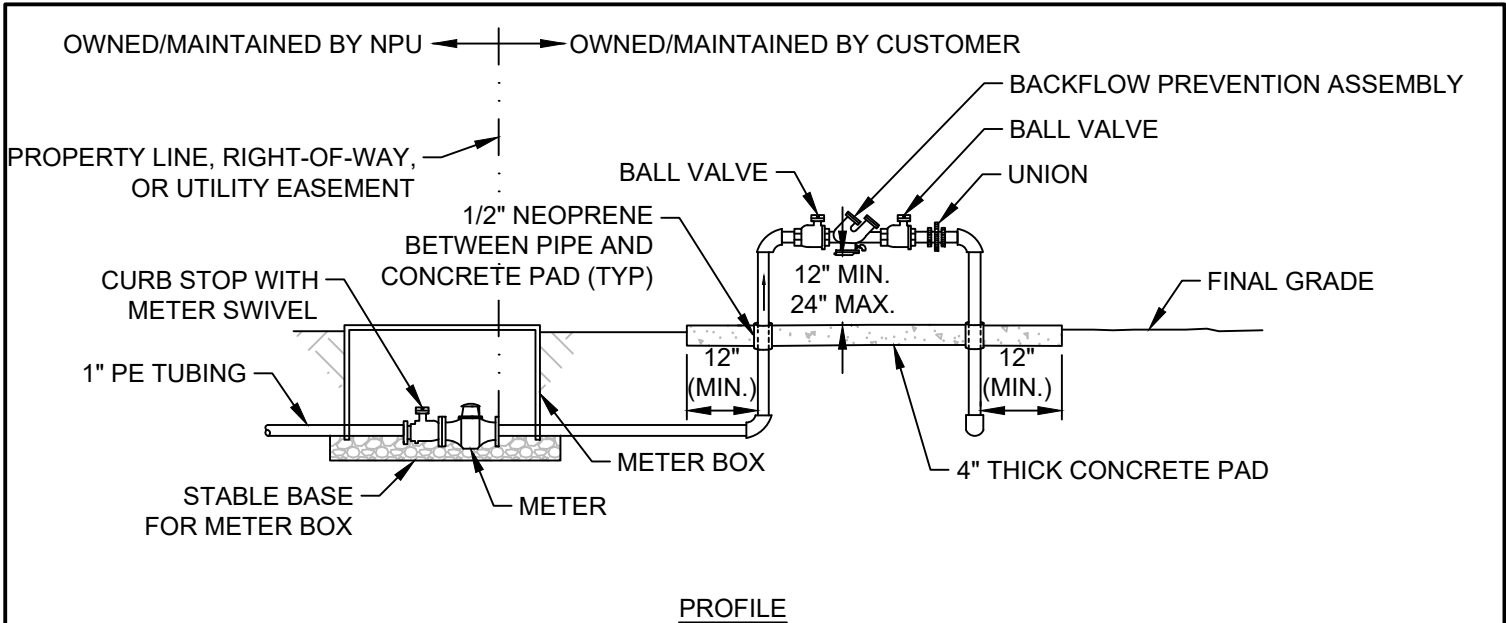


1 1/2" - 2" WATER METER WITH BACKFLOW PREVENTER

DETAIL

PW-08

SHEET 1 OF 1



NOTES:

- METER SHALL BE LOCATED WITHIN RIGHT OF WAY AT THE PROPERTY LINE OR WITHIN A UTILITY EASEMENT.
- BACKFLOW PREVENTION ASSEMBLY TYPE SHALL BE APPROVED BY NPU AND SHALL BE IN ACCORDANCE WITH THE LATEST CITY CROSS CONNECTION CONTROL PLAN ORDINANCE. THE ASSEMBLY SHALL ALSO BE IN ACCORDANCE WITH AWWA M14 AND SHALL BE LOCATED IMMEDIATELY DOWNSTREAM OF METER.

PLAN

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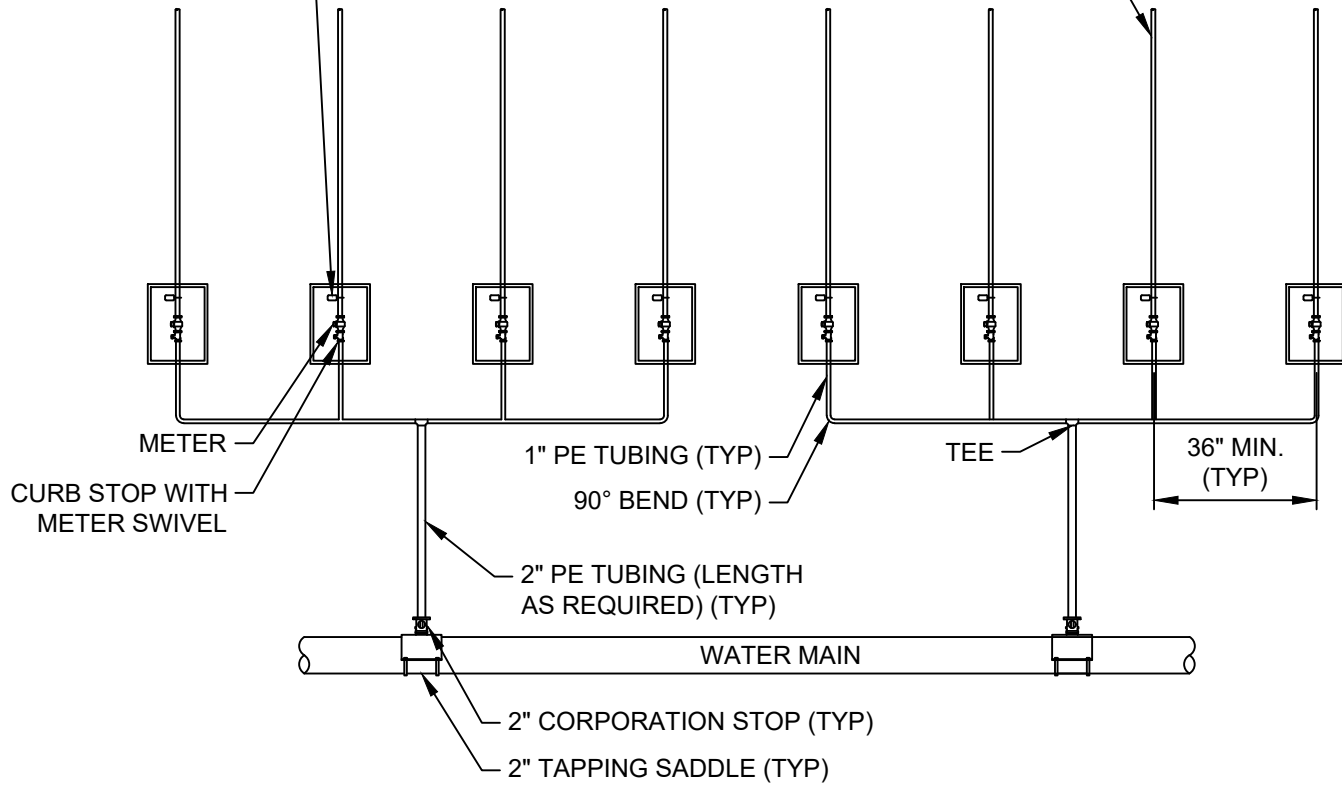


5/8" - 1" BUILDING AREA BELOW GROUND WATER METER INSTALLATION

DETAIL
PW-09
SHEET 1 OF 1

BRASS TAG WIRED TO SERVICE, (STAMPED WITH UNIT/BUILDING IDENTIFIER) (TYP)

PE TUBING (TO BACKFLOW DEVICE) (TYP)



PLAN

NOTES:

1. CONNECTIONS TO NEW AND EXISTING WATER MAINS SHALL BE MADE WITH A TEE AND TAPPING SADDLE.
2. PIPING SHALL BE SIZED BY THE ENGINEER BASED ON THE NUMBER OF METERS AND REQUIRED FLOWS. THE MINIMUM PIPE SIZE ALLOWED IS 4" (NOMINAL).
3. TEES AND 90 DEGREE BENDS SHALL BE COPPER TUBE SIZE (CTS) BRASS COMPRESSION FITTINGS.
4. NO MORE THAN FOUR METERS MAY BE CONNECTED TO A SINGLE HEADER. PROVIDE ADDITIONAL HEADERS AS NECESSARY.
5. A SINGLE ROW METER BANK IS TO BE INSTALLED WITH METERS AT THE RIGHT-OF-WAY.

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METER BANK FOR 5/8" - 1" COMMERCIAL WATER METERS

DETAIL

PW-10

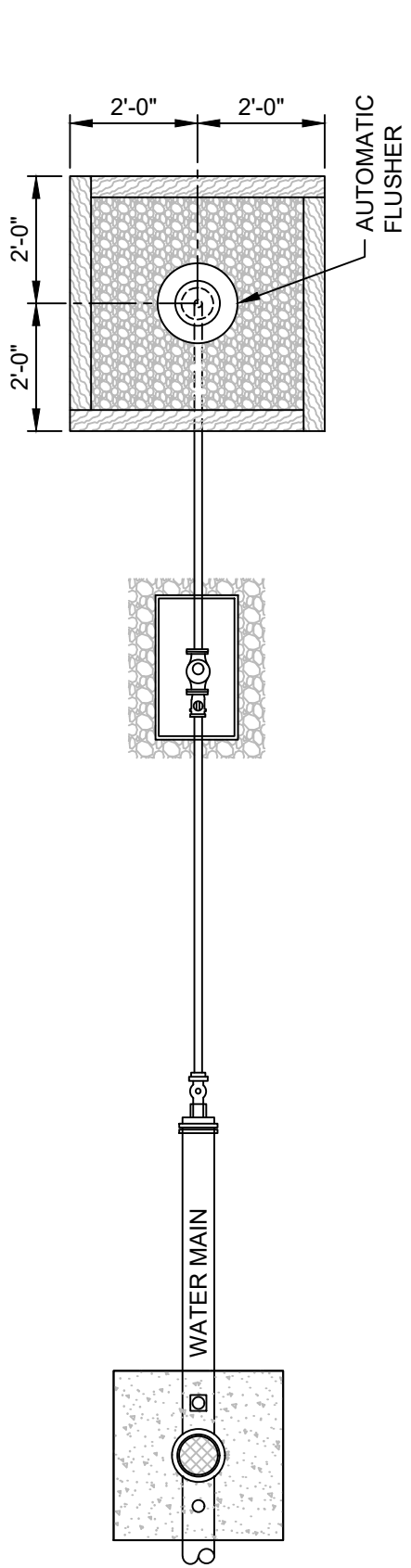
SHEET 1 OF 1

AUTOMATIC FLUSHING ASSEMBLY

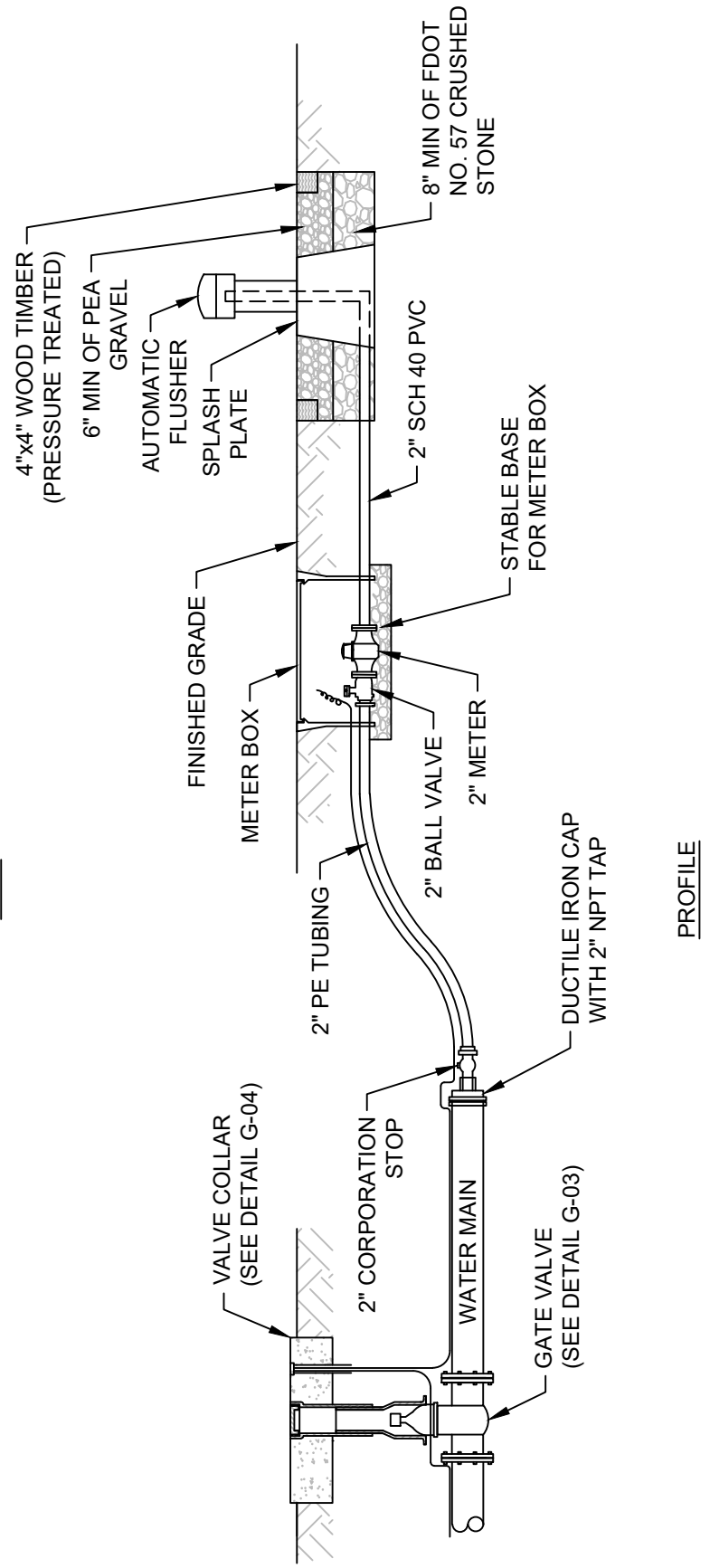
DETAIL

PW-11

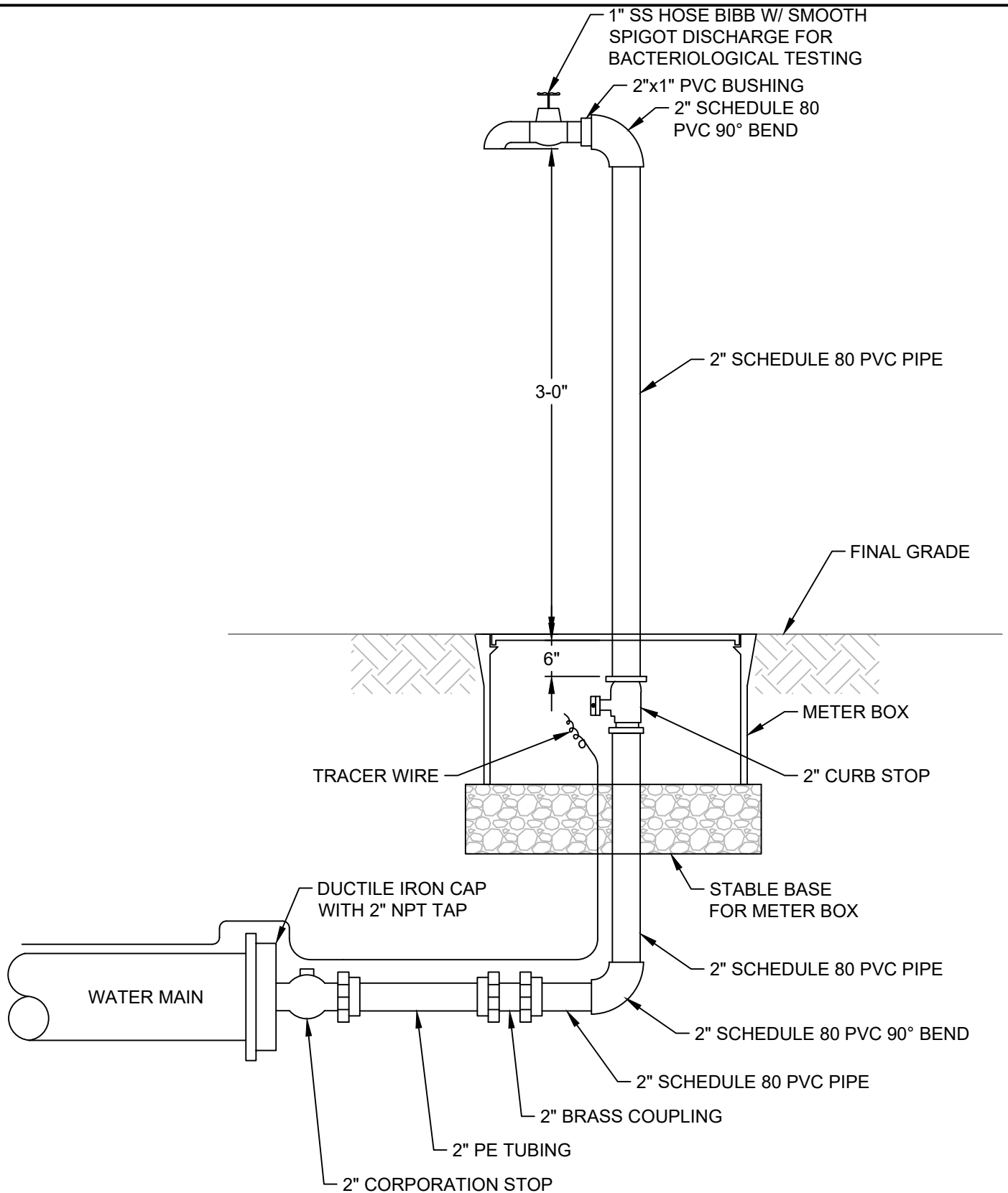
SHEET 1 OF 1



PLAN



PROFILE



NOTES:

1. WATER MAIN SHALL BE RESTRAINED PER DETAIL G-02.

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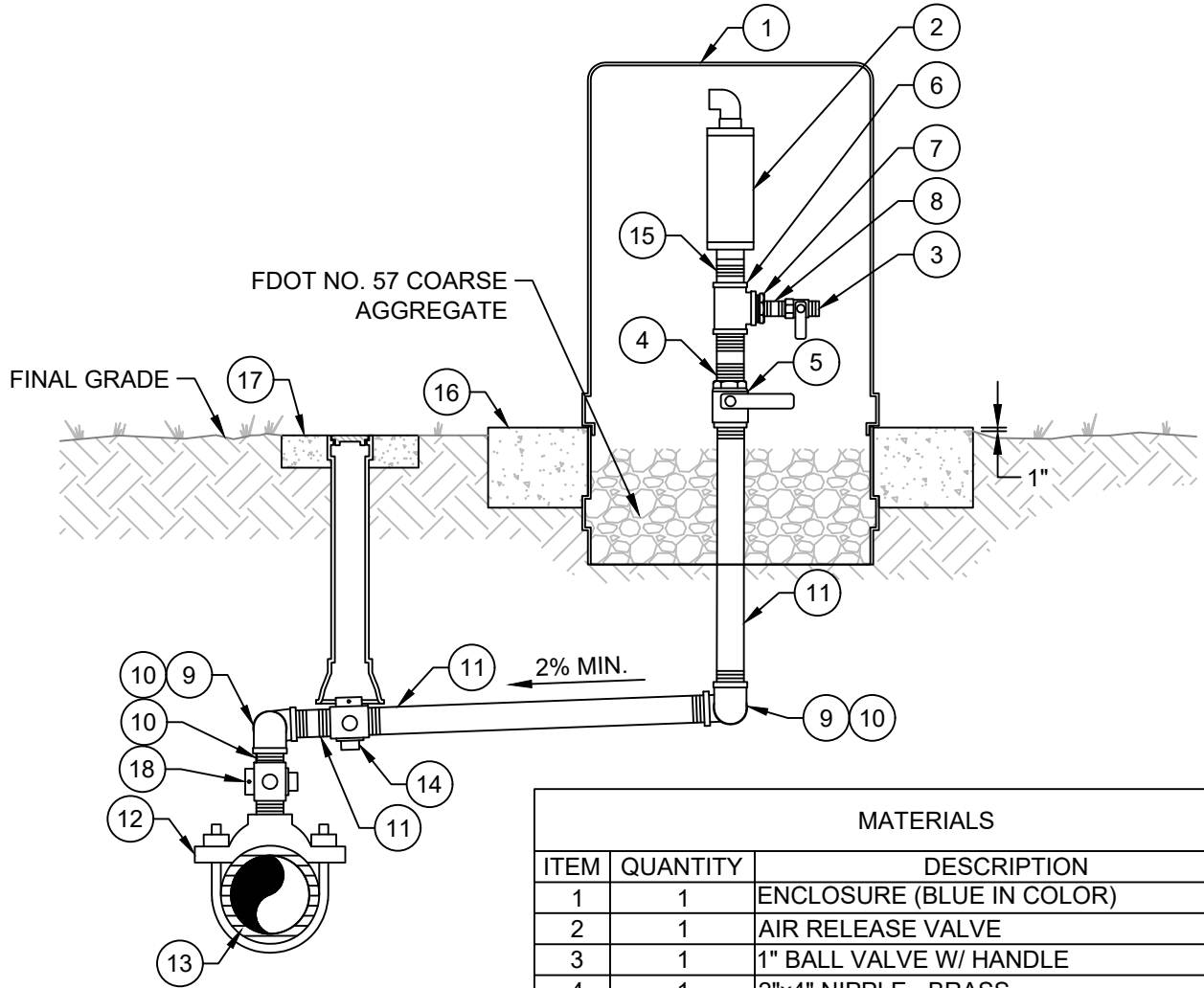


TEMPORARY BLOW OFF ASSEMBLY FOR DEAD END WATER MAIN

DETAIL

PW-12

SHEET 1 OF 1



MATERIALS		
ITEM	QUANTITY	DESCRIPTION
1	1	ENCLOSURE (BLUE IN COLOR)
2	1	AIR RELEASE VALVE
3	1	1" BALL VALVE W/ HANDLE
4	1	2"x4" NIPPLE - BRASS
5	1	2" BALL VALVE W/ HANDLE
6	1	2" TEE - BRASS
7	1	2"x1" BUSHING - BRASS
8	1	1" SHORT NIPPLE - BRASS
9	4	2"x90° ELBOW - BRASS
10	3	2" SHORT NIPPLE - BRASS
11	3	2" PVC PIPE (SCH 80)
12	1	SERVICE SADDLE W/ 2" TAP
13	-	WATER MAIN
14	1	2" BALL VALVE W/ 2" SQUARE OPERATING NUT
15	1	2"x2" NIPPLE - BRASS
16	1	6" CONCRETE COLLAR AROUND ENCLOSURE
17	1	VALVE COLLAR (SEE DETAIL G-04)
18	1	2" CORPORATION STOP

NOTES:

1. LOCATION OF AIR RELEASE VALVE ENCLOSURE SHALL BE AS CLOSE TO THE EDGE OF RIGHT-OF-WAY AS PRACTICAL.
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.
3. STAINLESS STEEL BALL VALVE IS REQUIRED FOR FORCE MAINS.

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POTABLE WATER AUTOMATIC AIR RELEASE VALVE

DETAIL
PW-13
SHEET 1 OF 1