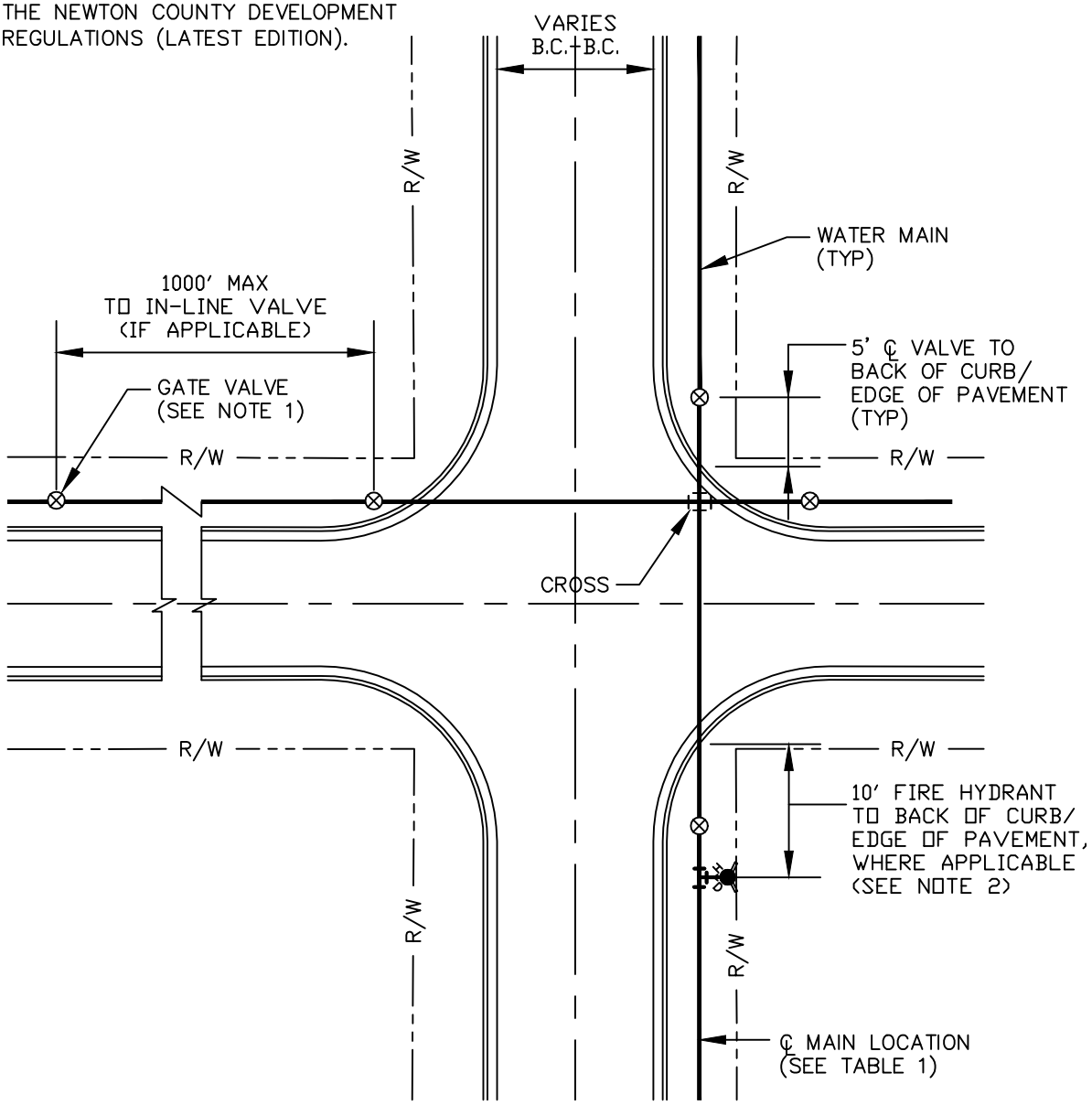
NOTES

1. VALVES SHALL NOT BE LOCATED WITHIN ROADS, CURBS, OR DITCH LINES.
2. SEE FIRE HYDRANT STANDARD DETAIL A–12.
3. WATER MAIN LOCATIONS SHALL BE IN ACCORDANCE WITH THE NEWTON COUNTY STANDARDS FOR CONSTRUCTION AND DESIGN ORDINANCE AS REQUIRED UNDER DIVISION 610 OF THE NEWTON COUNTY DEVELOPMENT REGULATIONS (LATEST EDITION).

TABLE 1 – WATER MAIN LOCATIONS			
ROW WIDTH, FT	CURB & GUTTER	SIDEWALK	WATER MAIN LOCATION
50	YES	YES	8 FT FROM BACK OF CURB
60	YES	YES	10 FT FROM BACK OF CURB
50–80	YES	NO	4 FT FROM BACK OF CURB
60	NO	NO	5 FT OUTSIDE EDGE OF PAVEMENT



4–WAY INTERSECTION

WATER MAIN LOCATION
SUBDIVISION STREET

NOT TO SCALE

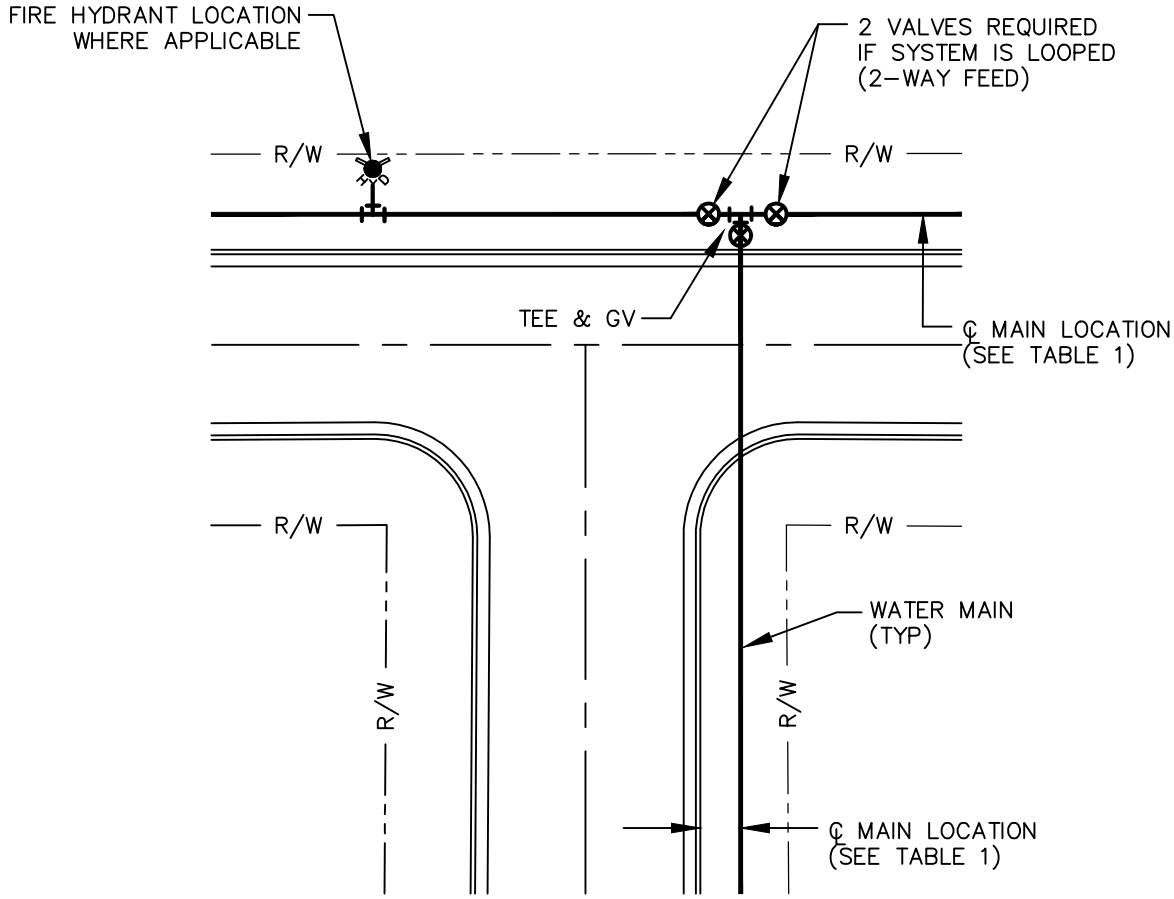
REVISED AUGUST 2021

STANDARD DETAIL NO. A-1

NOTES

1. VALVES SHALL NOT BE LOCATED WITHIN ROADS, CURBS, OR DITCH LINES.
2. SEE FIRE HYDRANT STANDARD DETAIL A–12.
3. WATER MAIN LOCATIONS SHALL BE IN ACCORDANCE WITH THE NEWTON COUNTY STANDARDS FOR CONSTRUCTION AND DESIGN ORDINANCE AS REQUIRED UNDER DIVISION 610 OF THE NEWTON COUNTY DEVELOPMENT REGULATIONS (LATEST EDITION).

TABLE 1 – WATER MAIN LOCATIONS			
ROW WIDTH, FT	CURB & GUTTER	SIDEWALK	WATER MAIN LOCATION
50	YES	YES	8 FT FROM BACK OF CURB
60	YES	YES	10 FT FROM BACK OF CURB
50–80	YES	NO	4 FT FROM BACK OF CURB
60	NO	NO	5 FT OUTSIDE EDGE OF PAVEMENT



TEE INTERSECTION

WATER MAIN LOCATION
SUBDIVISION STREET

NOT TO SCALE

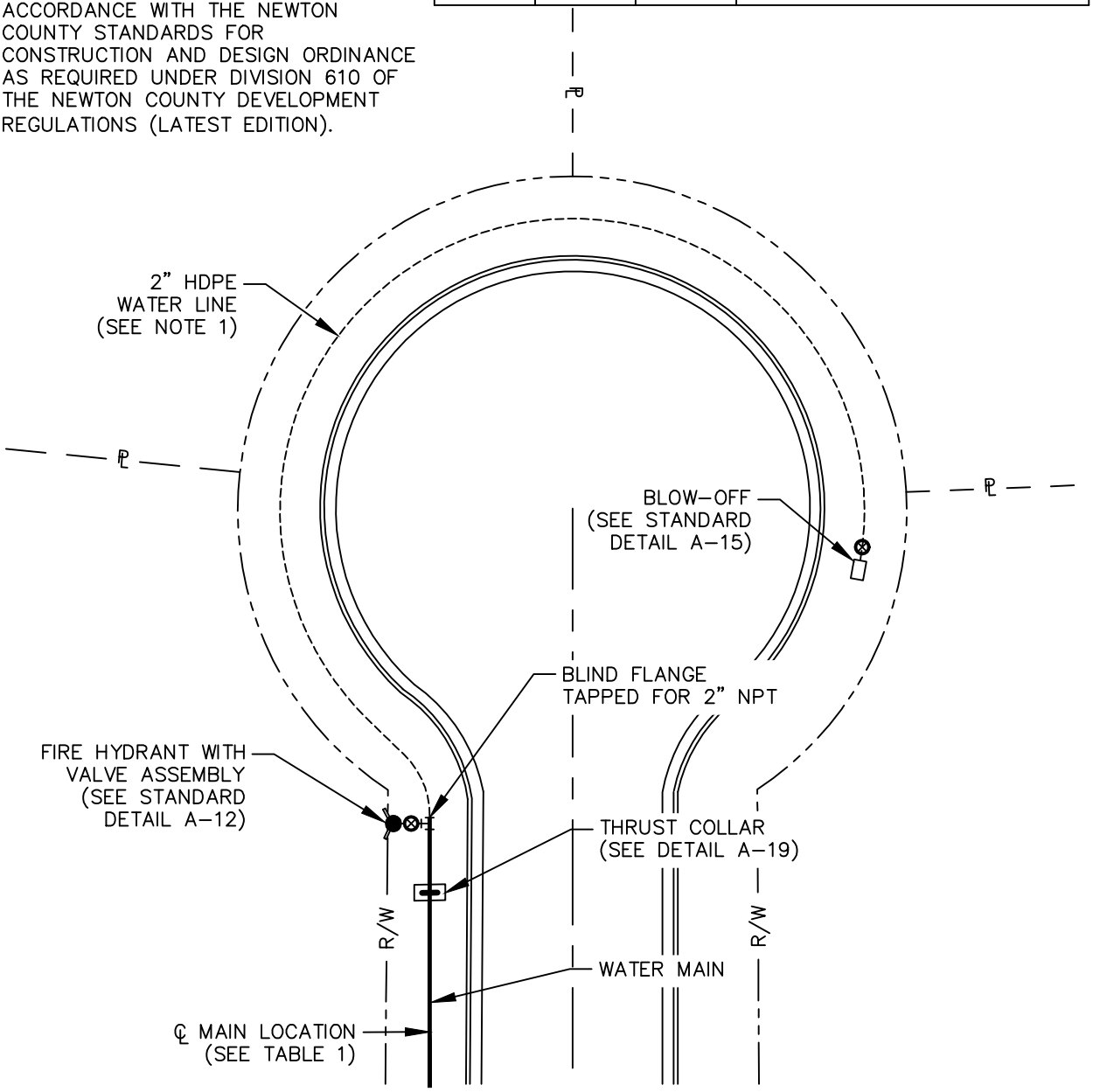
REVISED AUGUST 2021

STANDARD DETAIL NO. A-2

NOTES

1. EXTEND 2" HDPE LINE, IN ACCORDANCE WITH TABLE 1, TO ALLOW SERVICE TO ALL PROPERTIES ON CUL-DE-SAC.
2. BLOW OFF METER BOX SHALL BE PLACED AT END OF 2-INCH SUPPLY LINE IN RIGHT-OF-WAY.
3. WATER MAIN LOCATIONS SHALL BE IN ACCORDANCE WITH THE NEWTON COUNTY STANDARDS FOR CONSTRUCTION AND DESIGN ORDINANCE AS REQUIRED UNDER DIVISION 610 OF THE NEWTON COUNTY DEVELOPMENT REGULATIONS (LATEST EDITION).

TABLE 1 – WATER MAIN LOCATIONS			
ROW WIDTH, FT	CURB & GUTTER	SIDEWALK	WATER MAIN LOCATION
50	YES	YES	8 FT FROM BACK OF CURB
60	YES	YES	10 FT FROM BACK OF CURB
50-80	YES	NO	4 FT FROM BACK OF CURB
60	NO	NO	5 FT OUTSIDE EDGE OF PAVEMENT



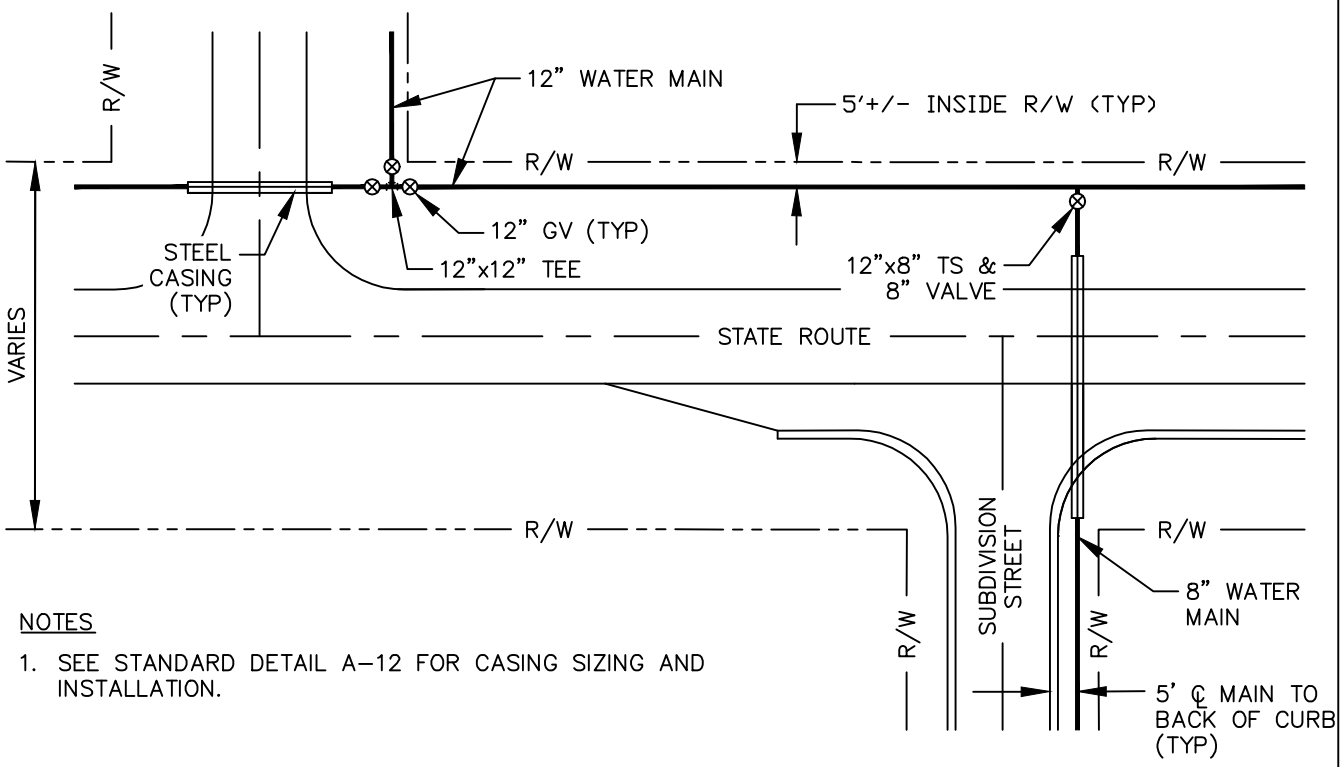
CUL-DE-SAC

WATER MAIN LOCATION
SUBDIVISION STREET

NOT TO SCALE

REVISED AUGUST 2021

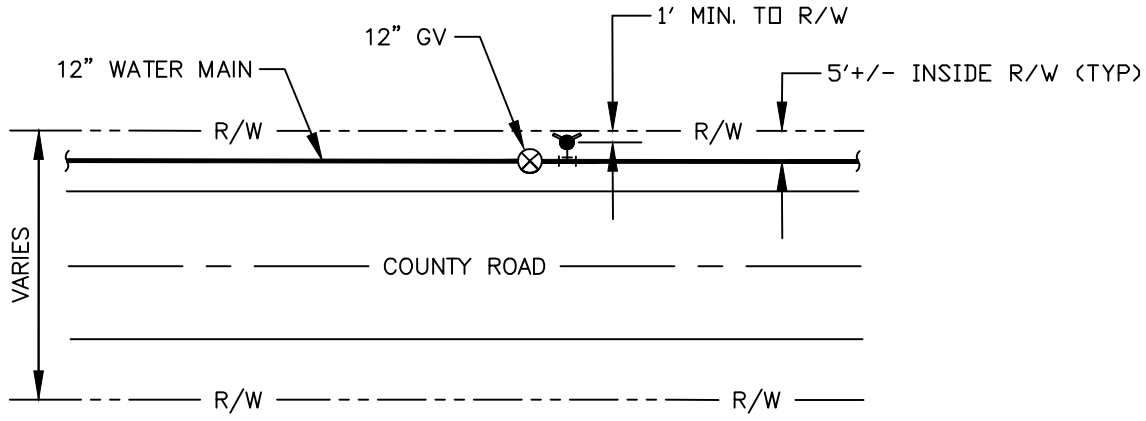
STANDARD DETAIL NO. A-3



NOTES

1. SEE STANDARD DETAIL A–12 FOR CASING SIZING AND INSTALLATION.

GEORGIA DOT ROADS



NEWTON COUNTY ROADS

NOTE

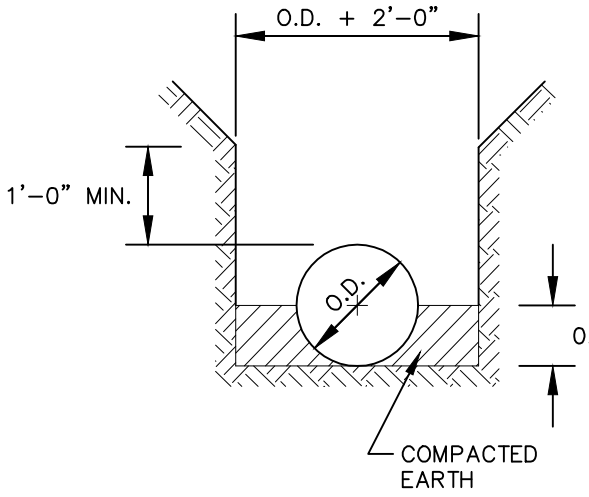
WATER MAIN LOCATIONS SHALL BE IN ACCORDANCE WITH THE NEWTON COUNTY STANDARDS FOR CONSTRUCTION AND DESIGN ORDINANCE AS REQUIRED UNDER DIVISION 610 OF THE NEWTON COUNTY DEVELOPMENT REGULATIONS (LATEST EDITION).

WATER MAIN LOCATION ROADWAYS

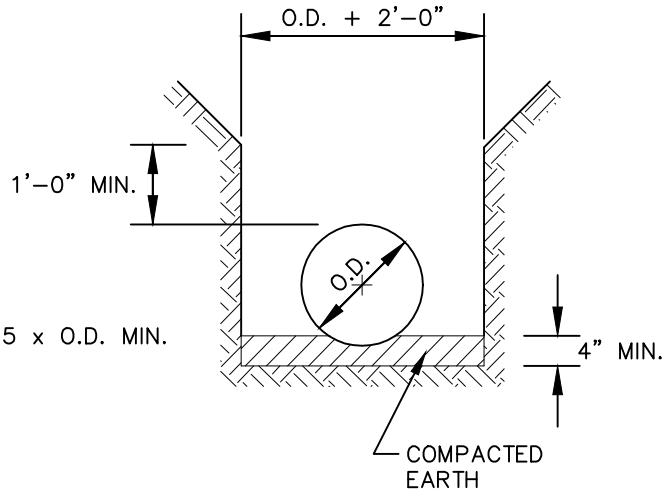
NOT TO SCALE

REVISED AUGUST 2021

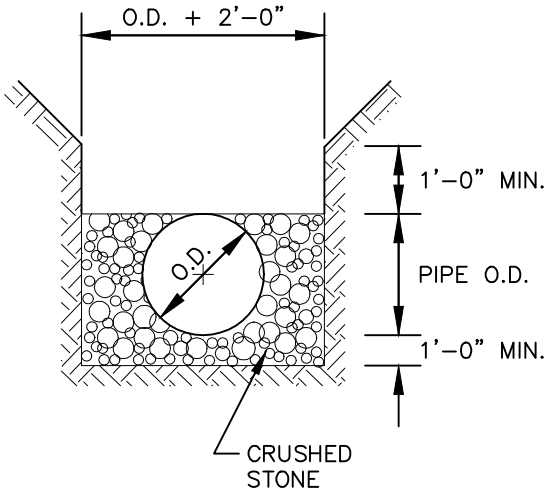
STANDARD DETAIL NO. A-4



TYPE 2



TYPE 3



TYPE 6

NOTES

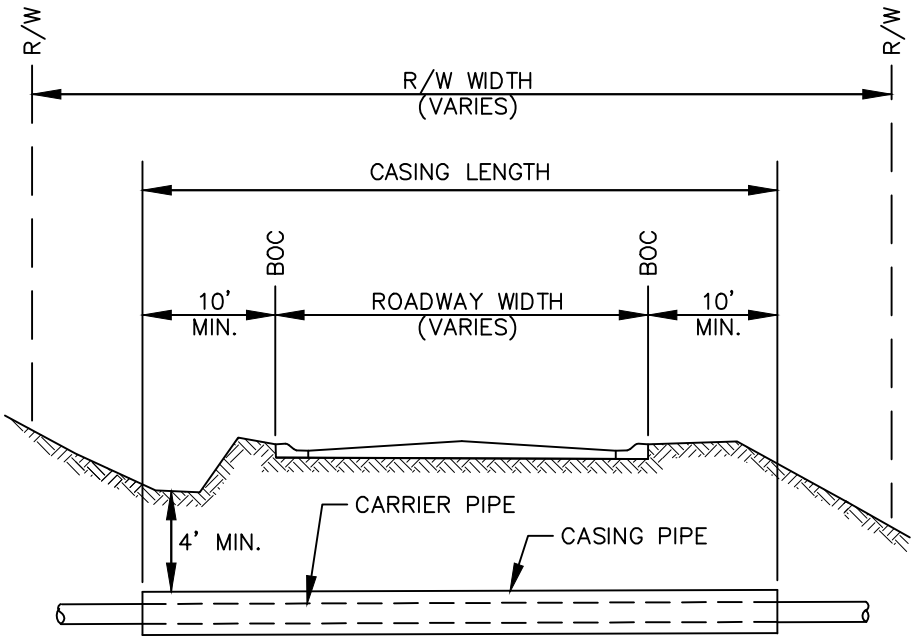
1. STONE SHALL BE #57 STONE COARSE AGGREGATE IN ACCORDANCE WITH GDOT SPECIFICATION SECTION 800.
2. PUSH-ON DIP SHALL UTILIZE TYPE 2 BEDDING AT A MINIMUM.
3. RESTRAINED JOINT DIP SHALL UTILIZE TYPE 3 BEDDING AT A MINIMUM.
4. TYPE 6 BEDDING SHALL BE USED IN WET TRENCH CONDITIONS.

WATER MAIN PIPE BEDDING

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-5



NOTES

1. RESTRAINED JOINTS ARE REQUIRED FOR ALL DIP CARRIER PIPE.
2. CASING SHALL EXTEND A MINIMUM OF 2' OUTSIDE OF ROADSIDE DITCHES. FOR NON-DITCHED ROAD SIDE SLOPES, CASING SHALL EXTEND A MINIMUM OF 2' BEYOND TOE OF SLOPE.
3. CASINGS USED FOR WATER CROSSINGS AT ROADWAYS SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE:

CARRIER LINE SIZE	MINIMUM CASING SIZE	MATERIAL
3/4"	1 1/2"	PVC
1"	1 1/2"	PVC
1 1/2"	2"	PVC
2"	2 1/2"	PVC
3"	8"	STL
4"	8"	STL
6"	12"	STL
8"	16"	STL
10"	16"	STL
12"	18"	STL

STL : STEEL

CASING REQUIREMENTS

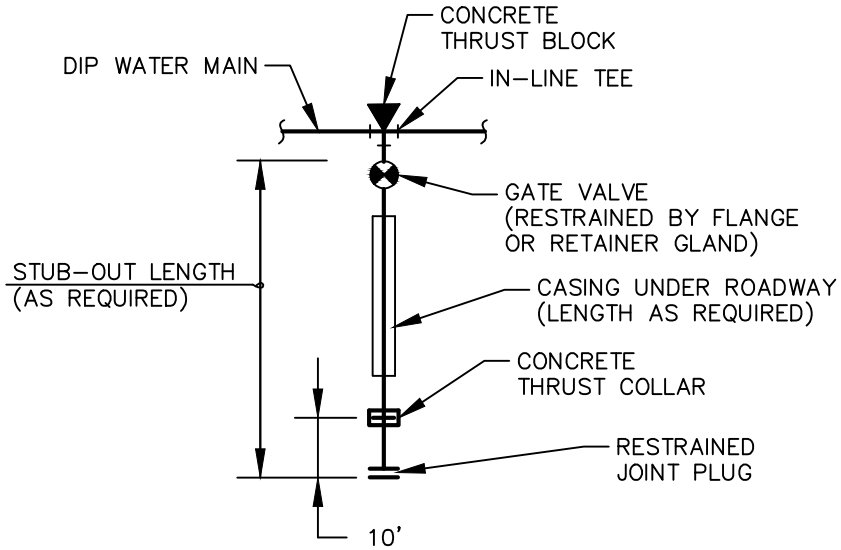
NOT TO SCALE

REVISED AUGUST 2021

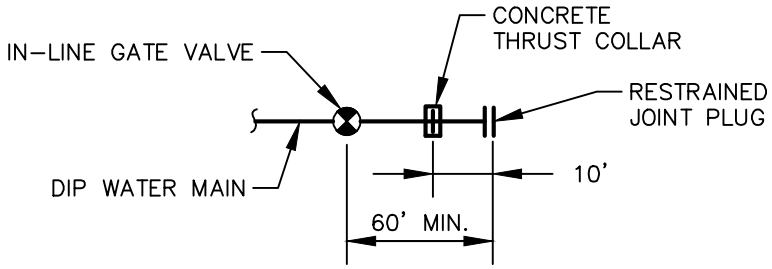
STANDARD DETAIL NO. A-6

NOTES

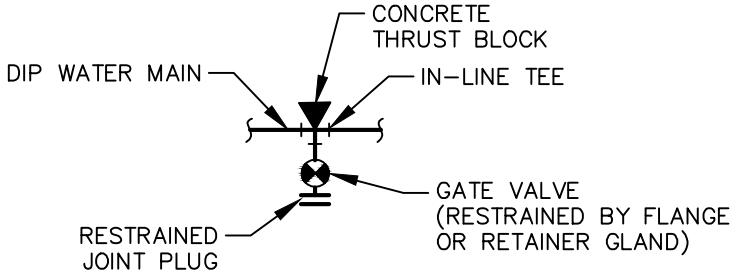
1. SEE STANDARD DETAILS A–16 AND A–17 FOR THRUST BLOCKS.
2. SEE STANDARD DETAIL A–14 FOR GATE VALVE AND VALVE BOX INSTALLATION.
3. SEE STANDARD DETAIL A–19 FOR THRUST COLLAR.
4. SEE STANDARD DETAIL A–8 FOR STUB–OUT USED FOR TEMPORARY DEAD END.



LONG SIDE (L.S.)



DEAD END (D.E.)



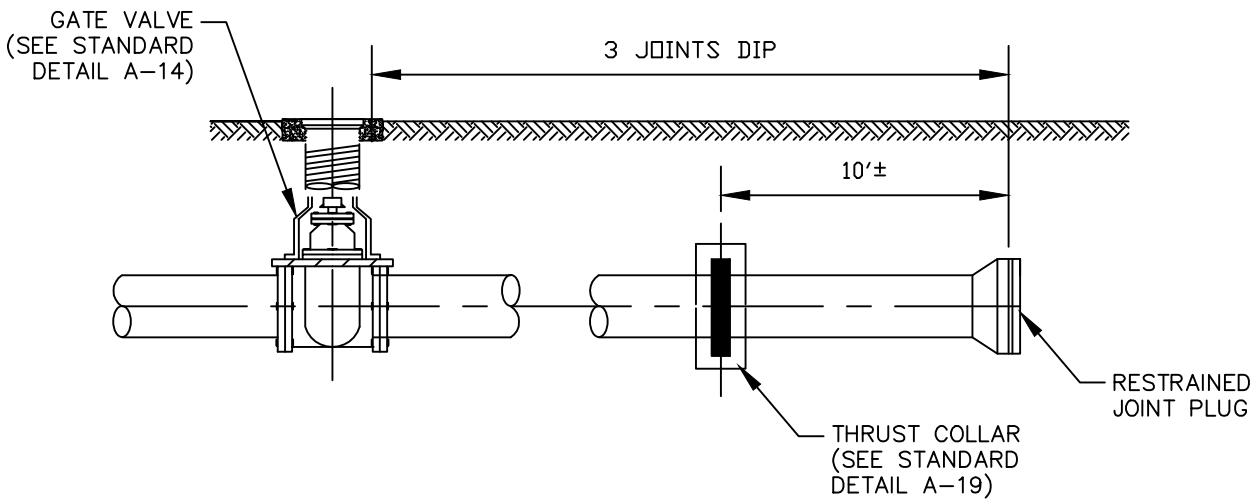
SHORT SIDE (S.S.)

WATER MAIN STUB-OUT DETAILS

NOT TO SCALE

REVISED AUGUST 2021

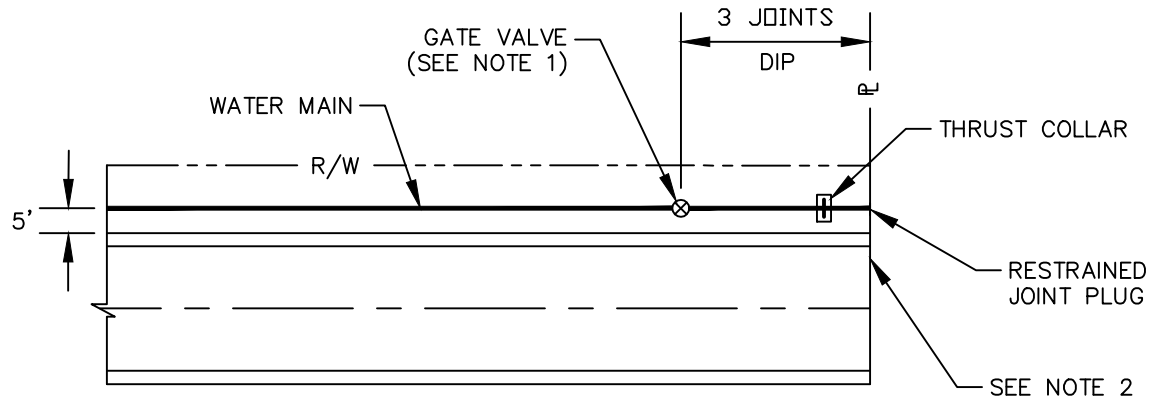
STANDARD DETAIL NO. A-7



ELEVATION

NOTES

1. LOCATE VALVE AT NEAREST INTERSECTION IF STREET WILL REMAIN UNDEVELOPED AND IS LESS THAN 100' IN LENGTH.
2. EXTEND NEW MAIN TO END OF CURBING OR LAST PROPERTY LINE.



PLAN

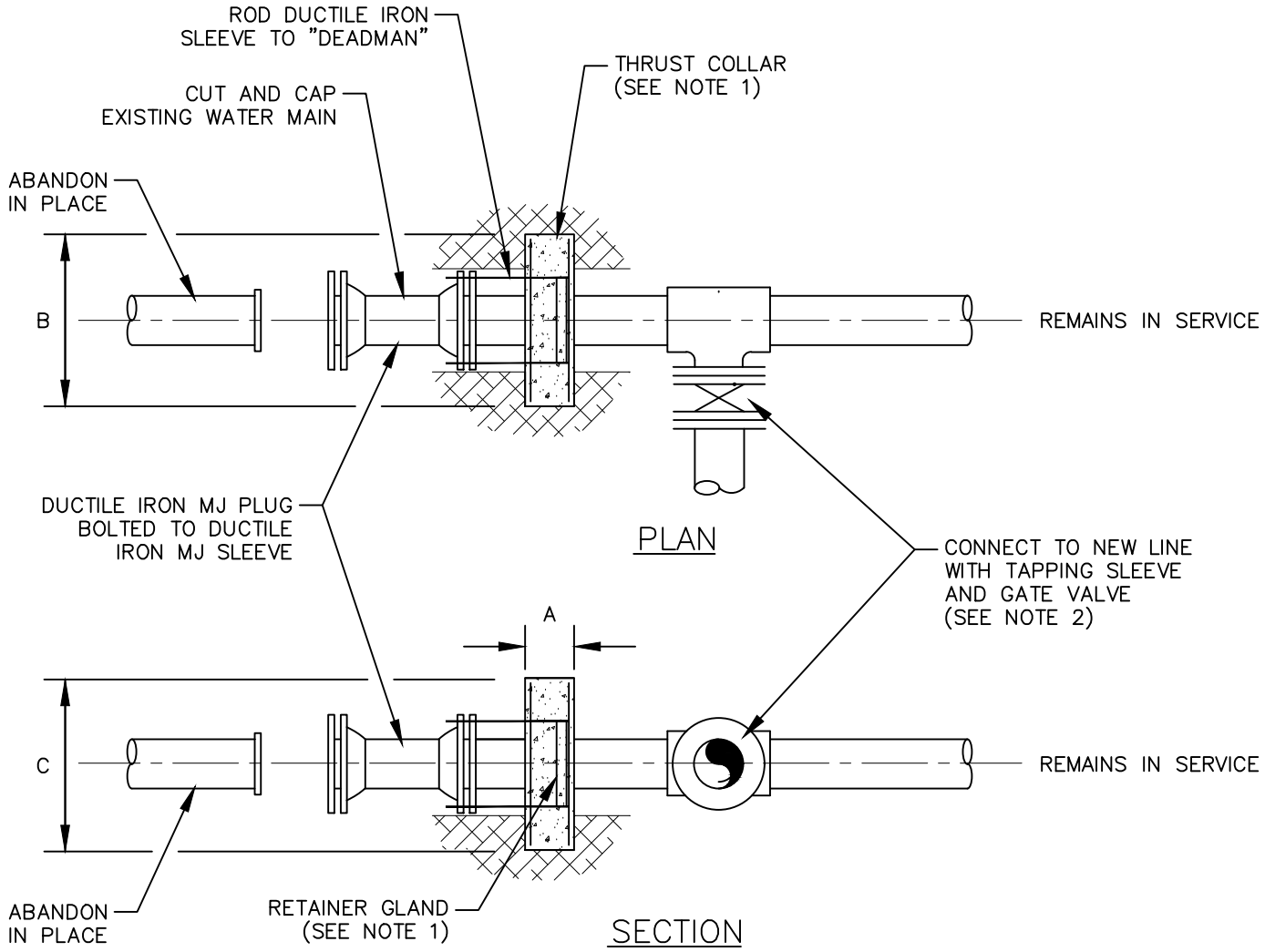
TEMPORARY DEAD END IN SUBDIVISION

TEMPORARY DEAD END IN SUBDIVISION

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-8



NOTES

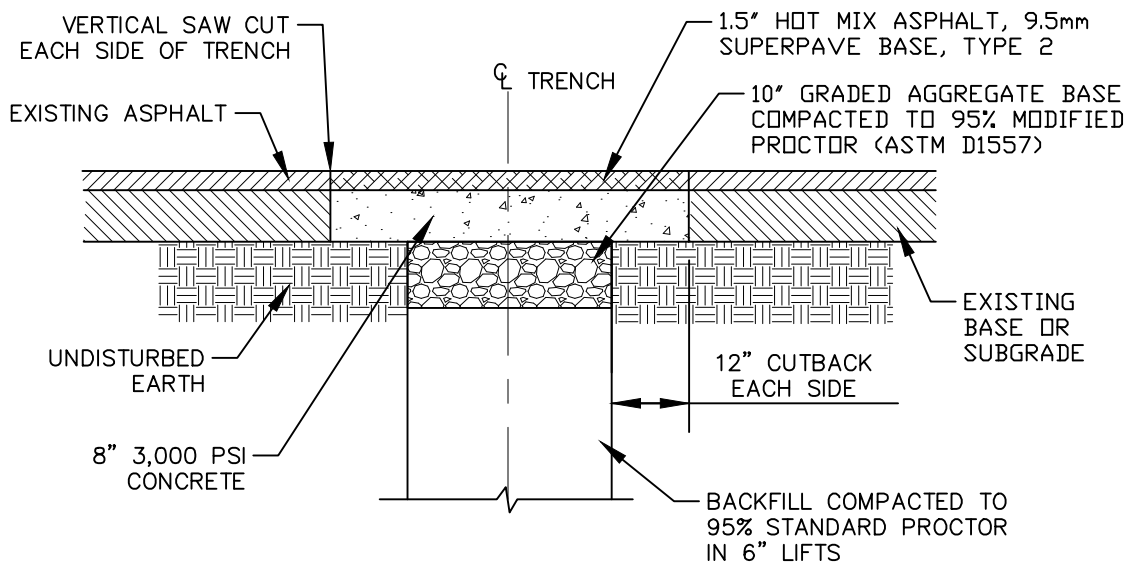
1. SEE STANDARD DETAIL A–19 FOR THRUST COLLAR.
2. SEE STANDARD DETAIL A–10 FOR TAPPING SLEEVE AND VALVE CONNECTION.

NEW CONNECTION TO AND ABANDONMENT OF EXISTING WATER MAIN

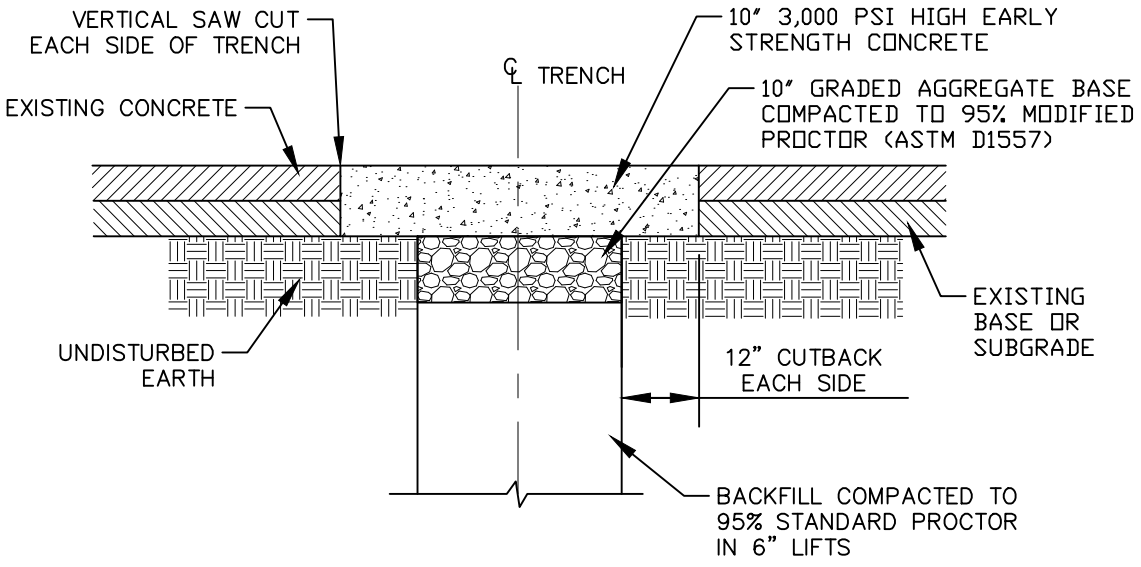
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-9



ASPHALT



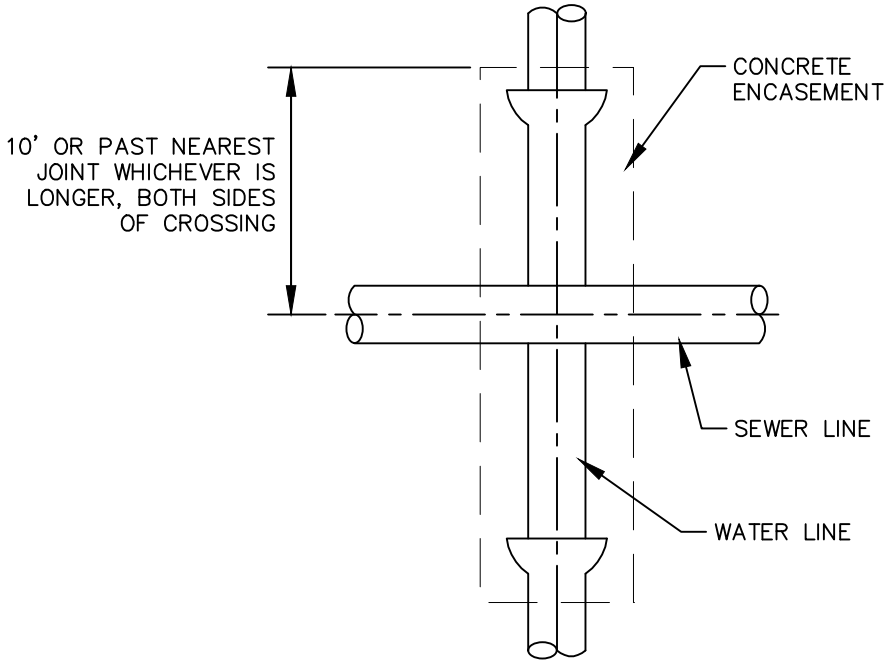
CONCRETE

PAVEMENT REPLACEMENT
COUNTY ROADS

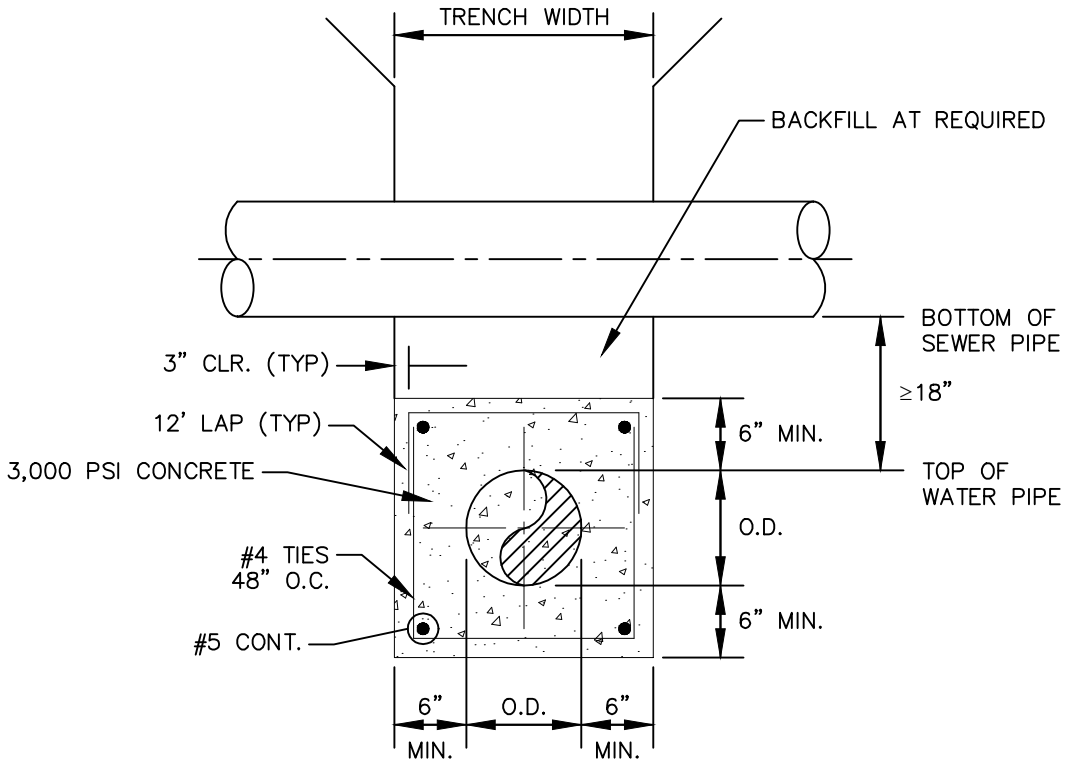
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-10



PLAN



SECTION

CONCRETE ENCASEMENT

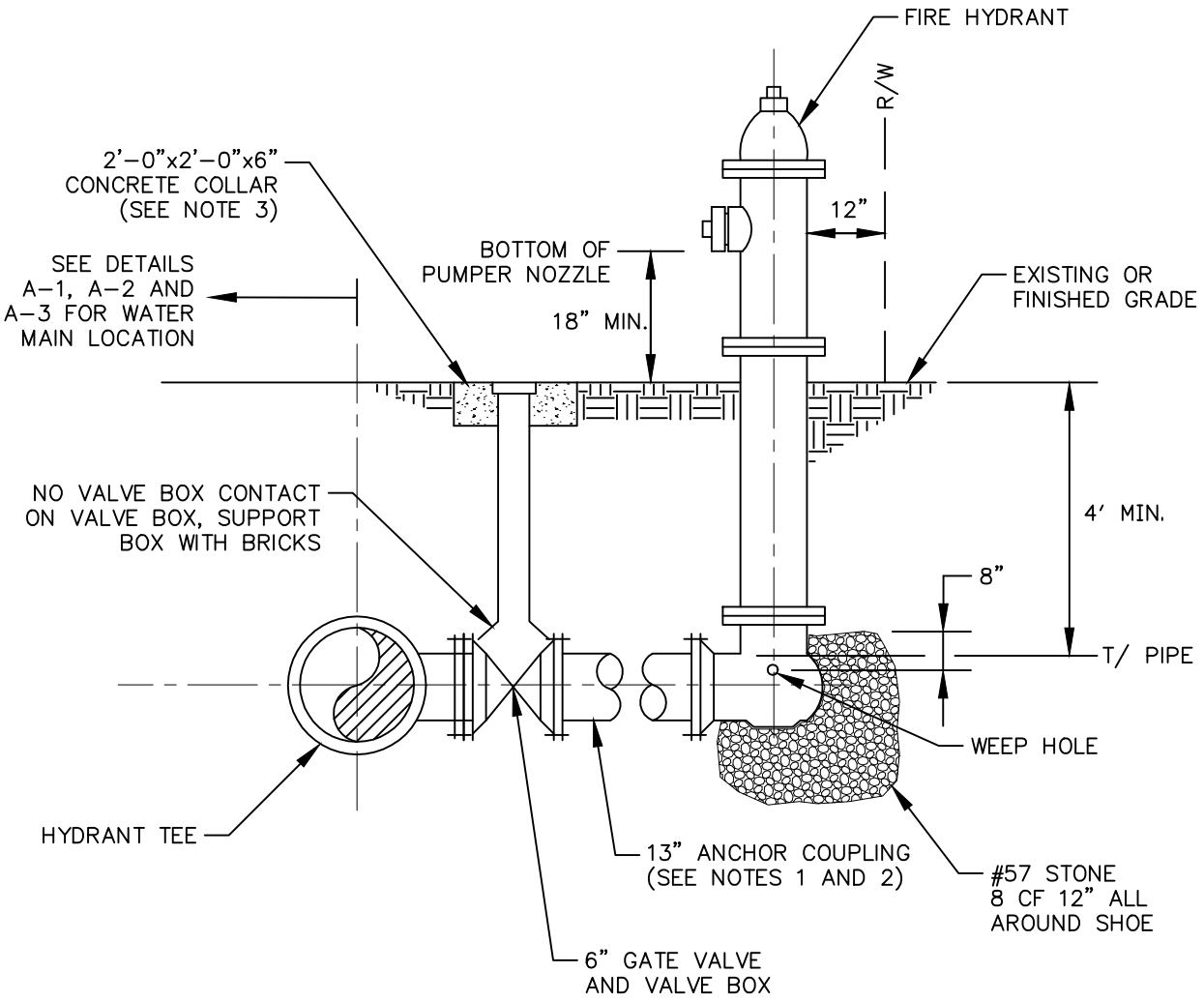
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-11

NOTES

1. PROVIDE LONGER ANCHOR COUPLING, WHERE NEEDED, TO PLACE HYDRANT 12" INSIDE RIGHT-OF-WAY.
2. REPLACE ANCHOR COUPLING WITH GRADELOK HYDRANT CONNECTOR WHERE REQUIRED FOR VERTICAL ADJUSTMENT TO EXISTING OR FINAL GRADE.
3. TYPE II CONCRETE IN ACCORDANCE WITH ASTM C 150 FOR ALL UNPAVED AREAS. CENTER WITH #4 REBAR EA. SIDE, EA. WAY.



FIRE HYDRANT INSTALLATION
SUBDIVISION STREET

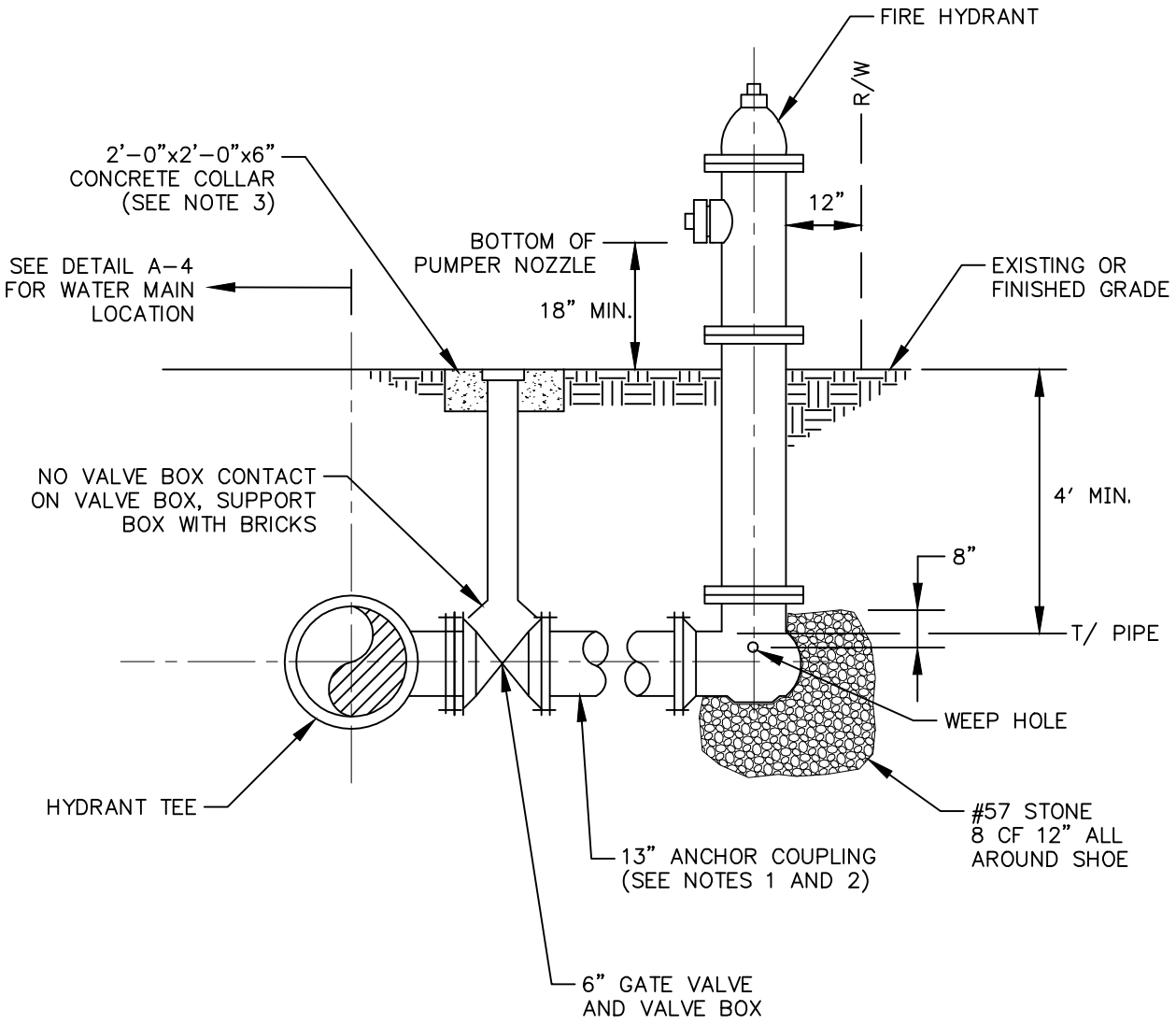
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-12

NOTES

1. PROVIDE LONGER ANCHOR COUPLING, WHERE NEEDED, TO PLACE HYDRANT 12" INSIDE RIGHT-OF-WAY.
2. REPLACE ANCHOR COUPLING WITH GRADELOK HYDRANT CONNECTOR WHERE REQUIRED FOR VERTICAL ADJUSTMENT TO EXISTING OR FINAL GRADE.
3. TYPE II CONCRETE IN ACCORDANCE WITH ASTM C 150 FOR ALL UNPAVED AREAS. CENTER WITH #4 REBAR EA. SIDE, EA. WAY.
4. FOR MAIN SIZES 16-INCH AND LARGER, 6-INCH GATE VALVE MAY BE CONNECTED TO MAIN BY TAPPING SADDLE AND ANCHOR COUPLING INSTEAD OF HYDRANT TEE.

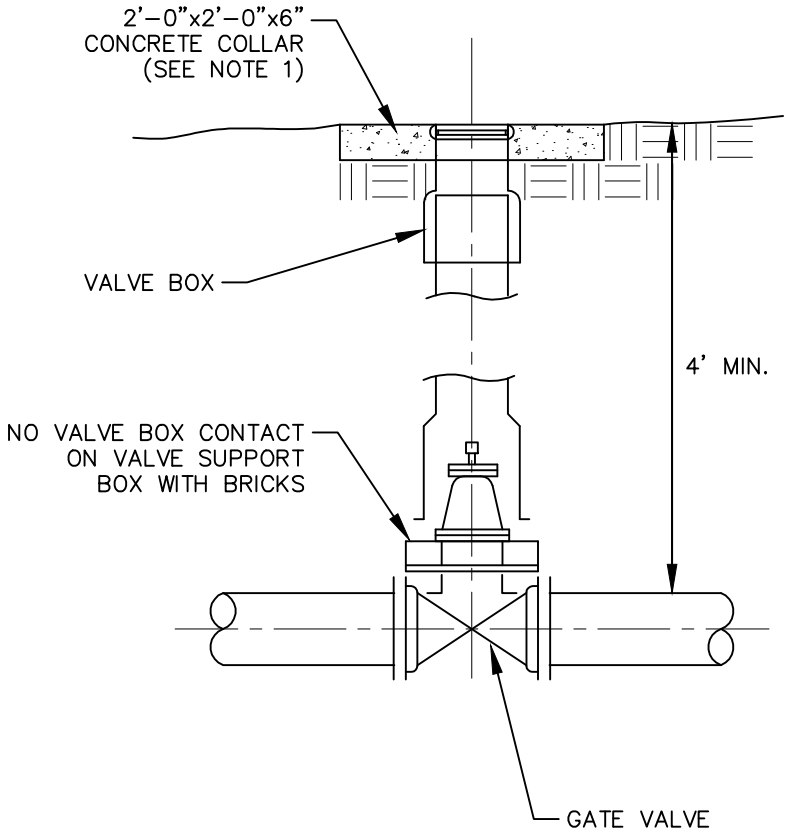


FIRE HYDRANT INSTALLATION ROADS AND HIGHWAYS

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-13



NOTES

1. TYPE II CONCRETE IN ACCORDANCE WITH ASTM C 150 FOR ALL UNPAVED AREAS. CENTER WITH #4 REBAR EA. SIDE, EA. WAY.
2. WHERE DEPTH TO MAIN REQUIRES, PROVIDE VALVE EXTENSION.

GATE VALVE

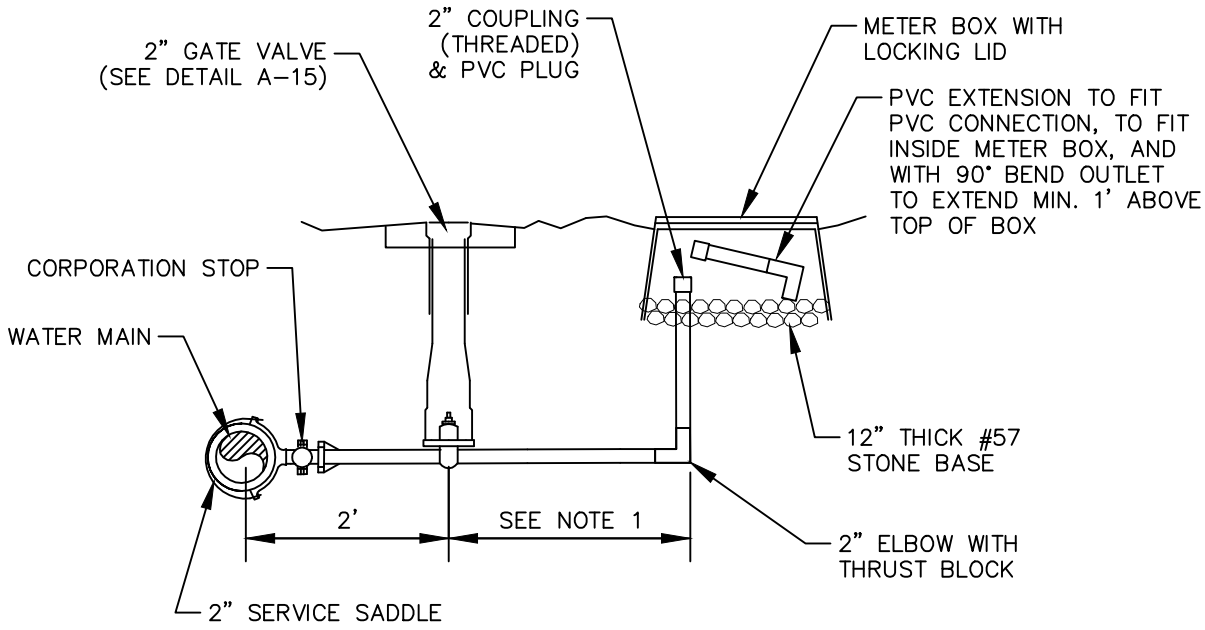
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-14

NOTES

1. PIPING SHALL BE 2–INCH HDPE SERVICE TUBING.
2. METER BOX SHALL BE MINIMUM 12–15/16" x 17–9/16" AT TOP, 21–13/16" X 16–9/16" AT BOTTOM AND 12" DEEP. METER BOX SHALL BE FIBERGLASS REINFORCED/POLYMER CONCRETE MANUFACTURED BY MACLEAN, HIGHLINE, OR QUAZITE.
3. BOX SHALL BE PLACED AT EASEMENT LINE, RIGHT–OF–WAY OR AS OTHERWISE DIRECTED BY NCWSA.
4. FOR BLOW OFFS ON CUL–DE–SACS, INSTALL GATE VALVE AND BOX AT END OF 2–INCH SUPPLY LINE.

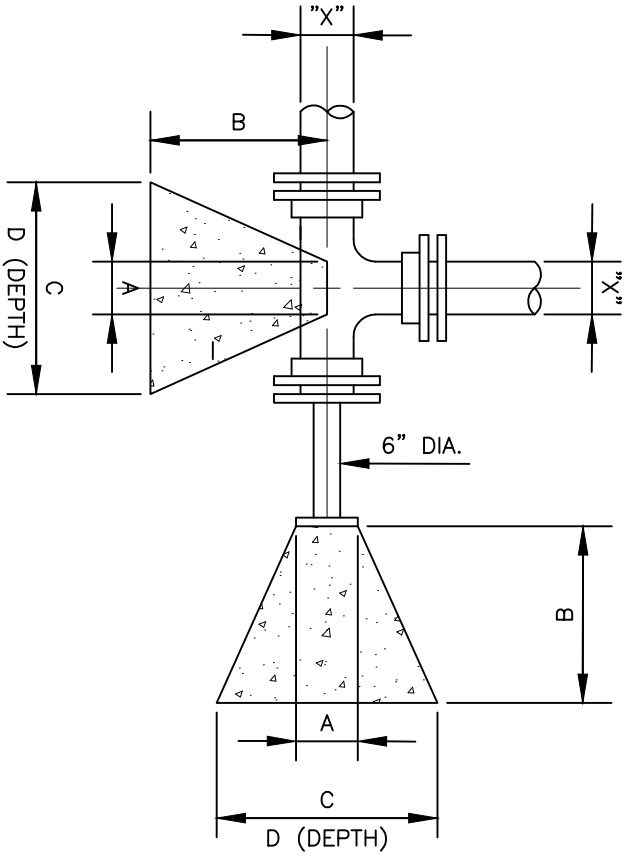


BLOW OFF

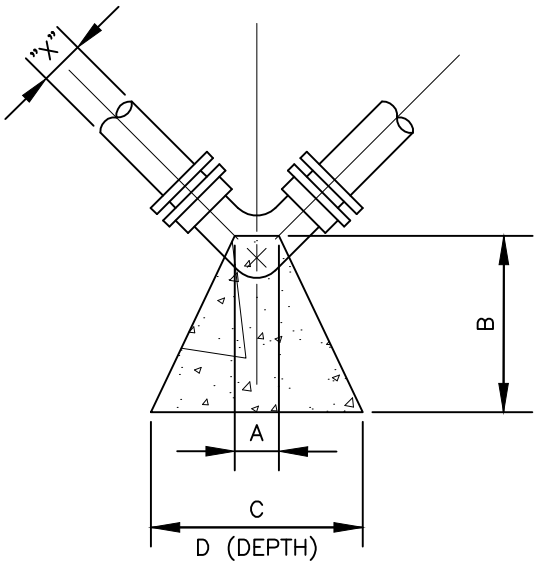
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-15



PLAN–TEE/DEAD END



PLAN–BENDS

NOTES

1. "X" = DIAMETER OF THE PIPE TO BE BLOCKED.
2. SEE DETAIL A–17 FOR THRUST BLOCK DIMENSIONS.

TYPICAL BLOCKING DETAIL

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-16

BLOCKING DIMENSIONS				
"X"	A	B	C	D
TEES AND DEAD ENDS				
16"	1'–3"	3'–6"	7'–6"	4'–9"
12"	1'–0"	3'–0"	5'–6"	3'–6"
10"	1'–0"	2'–6"	4'–9"	3'–0"
8"	0'–10"	2'–0"	4'–0"	2'–6"
6"	0'–8"	1'–6"	2'–9"	1'–9"
90° BENDS				
16"	1'–3"	5'–6"	9'–0"	5'–6"
12"	1'–0"	4'–0"	6'–9"	4'–3"
10"	1'–0"	3'–0"	5'–9"	3'–6"
8"	0'–10"	2'–6"	4'–9"	3'–0"
6"	0'–8"	1'–6"	3'–6"	2'–9"
45° BENDS				
16"	1'–3"	3'–6"	6'–9"	4'–3"
12"	1'–0"	2'–3"	5'–3"	3'–3"
10"	1'–0"	2'–3"	4'–6"	2'–9"
8"	0'–10"	1'–6"	3'–6"	2'–3"
6"	0'–8"	1'–3"	2'–6"	1'–6"
22 1/2° BENDS				
16"	1'–3"	1'–6"	4'–9"	3'–0"
12"	1'–0"	1'–6"	3'–6"	2'–3"
10"	1'–0"	1'–3"	3'–0"	2'–0"
8"	0'–10"	1'–0"	2'–6"	1'–6"
6"	0'–8"	1'–0"	1'–9"	1'–3"
11 1/4° BENDS				
16"	1'–3"	1'–6"	3'–3"	2'–0"
12"	1'–0"	1'–6"	2'–6"	1'–6"
10"	1'–0"	1'–0"	2'–3"	1'–3"
8"	0'–10"	1'–0"	1'–9"	1'–0"
6"	0'–8"	1'–0"	1'–6"	0'–4"

NOTES

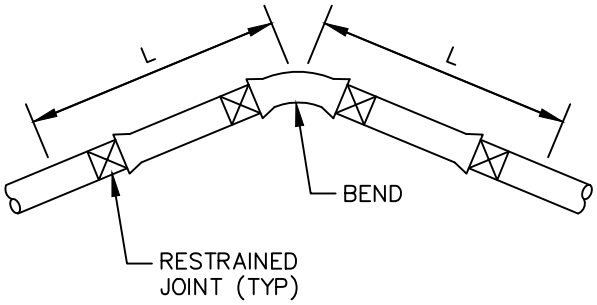
1. THRUST BLOCK DIMENSIONS ARE BASED ON THE FOLLOWING CONDITIONS:
   LINE PRESSURE = 250 PSI
   SOIL BEARING CAPACITY = 2,000 PSF
   CONTRACTOR SHALL PROVIDE CALCULATIONS FOR THRUST BLOCK SIZING WHEN CONDITIONS EITHER EXCEED THE MAXIMUM PRESSURE OR SOIL CAPACITY IS BELOW THE MINIMUM BEARING CAPACITY.
2. MECHANICAL JOINT FITTINGS 4" ID AND LESS SHALL BE RESTRAINED WITH RETAINER GLANDS.

TYPICAL BLOCKING SIZES

NOT TO SCALE

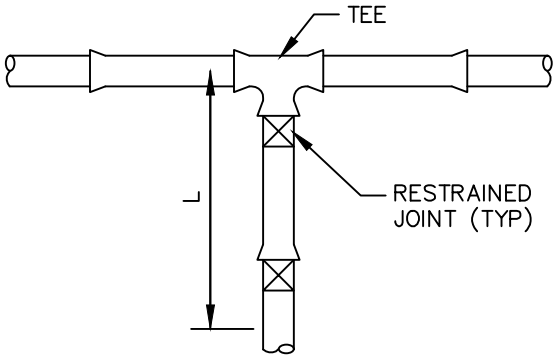
REVISED AUGUST 2021

STANDARD DETAIL NO. A-17



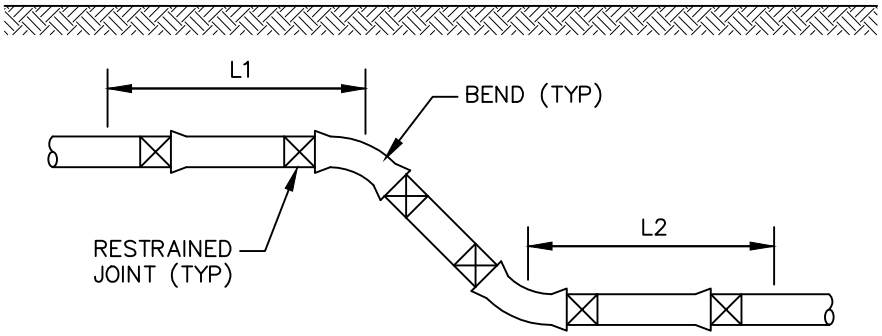
PIPE SIZE, IN	L, FT			
	11–1/4°	22–1/2°	45°	90°
6	18	18	18	36
8	18	18	18	54
10	18	18	36	54
12	18	18	36	54

HORIZONTAL BEND



PIPE SIZE, IN	L, FT
6	54
8	72
10	90
12	108

TEE



PIPE SIZE, IN	11–1/4°		22–1/2°		45°	
	L1, FT	L2, FT	L1, FT	L2, FT	L1, FT	L2, FT
6	18	18	36	18	54	36
8	18	18	36	18	72	36
10	18	18	54	18	90	36
12	36	18	54	18	108	54

VERTICAL OFFSET

NOTES

1. LENGTHS SHOWN ARE MINIMUM REQUIREMENTS.
2. TEE PIPE SIZES ARE FOR THE BRANCH LINE.
3. CONDITIONS NOT SHOWN HEREIN SHALL BE IN ACCORDANCE WITH DIPRA "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE", LATEST EDITION.
4. RESTRAINED JOINTS SHALL NOT BE USED FOR THRUST RESTRAINT IN LAYING CONDITIONS WITH HIGH ORGANIC CONTENT OR WHERE DEPTH OF COVER IS LESS THAN 3 FEET UNLESS OTHERWISE APPROVED BY THE AUTHORITY.
5. ALL BENDS SHALL HAVE RESTRAINING FLANGE ADAPTERS OR MECHANICAL JOINT RESTRAINTS.
6. DESIGN CRITERIA:

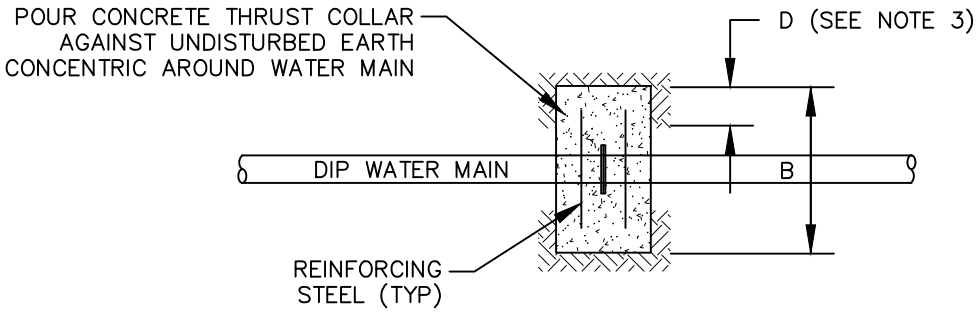
PIPE MATERIAL: DIP
TEST PRESSURE: 200 PSI (EXCEPT 150 PSI FOR L2)
SOIL TYPE: SAND SILT
LAYING CONDITION: TYPE 3
DEPTH OF COVER: 4 FT
SAFETY FACTOR: 1.5

RESTRAINED JOINT PIPE

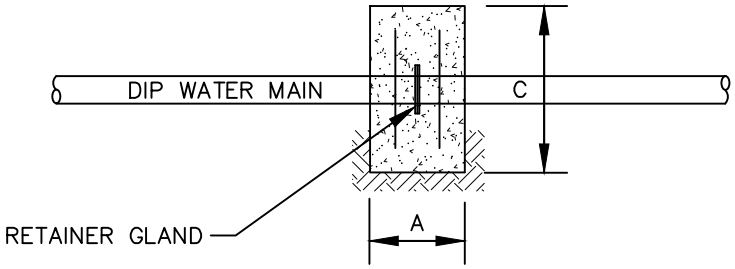
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-18



PLAN



SECTION

WATER MAIN DIA.	CONC. COLLAR DIM.				STEEL REINFORCING
	A	B	C	D	
16"	1'–3"	6'–6"	6'–6"	1'–6"	#8 @ 12" O.C. EW EF
12"	1'–2"	5'–3"	5'–3"	1'–0"	#7 @ 12" O.C. EW EF
6" OR 8"	1'–0"	4'–0"	4'–0"	0'–8"	#6 @ 12" O.C. EW EF

NOTES

1. THRUST COLLAR DIMENSIONS ARE BASED ON THE FOLLOWING CONDITIONS:

   LINE PRESSURE = 250 PSI (MAXIMUM)
   SOIL BEARING CAPACITY = 2,000 (MINIMUM)

   CONTRACTOR SHALL PROVIDE CALCULATIONS FOR THRUST COLLAR SIZING WHEN CONDITIONS EITHER EXCEED THE MAXIMUM PRESSURE OR SOIL CAPACITY IS BELOW THE MINIMUM BEARING CAPACITY.

2. D = MINIMUM DISTANCE INTO UNDISTURBED EARTH.

THRUST COLLARS

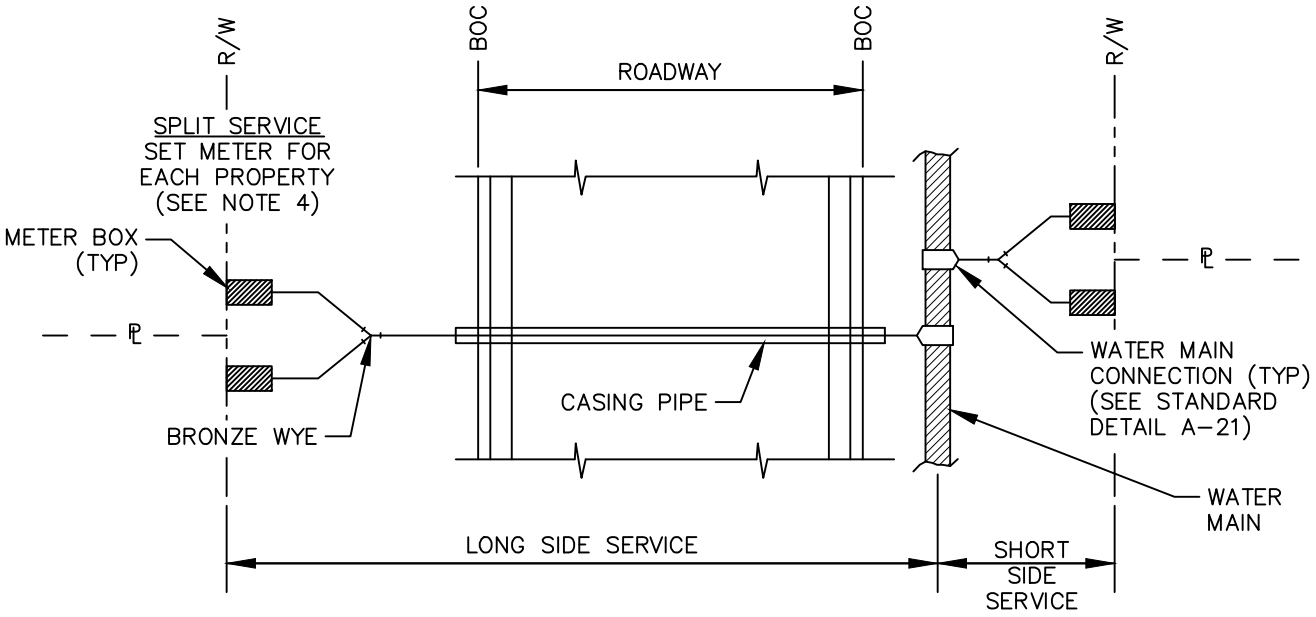
NOT TO SCALE

REVISED AUGUST 2021

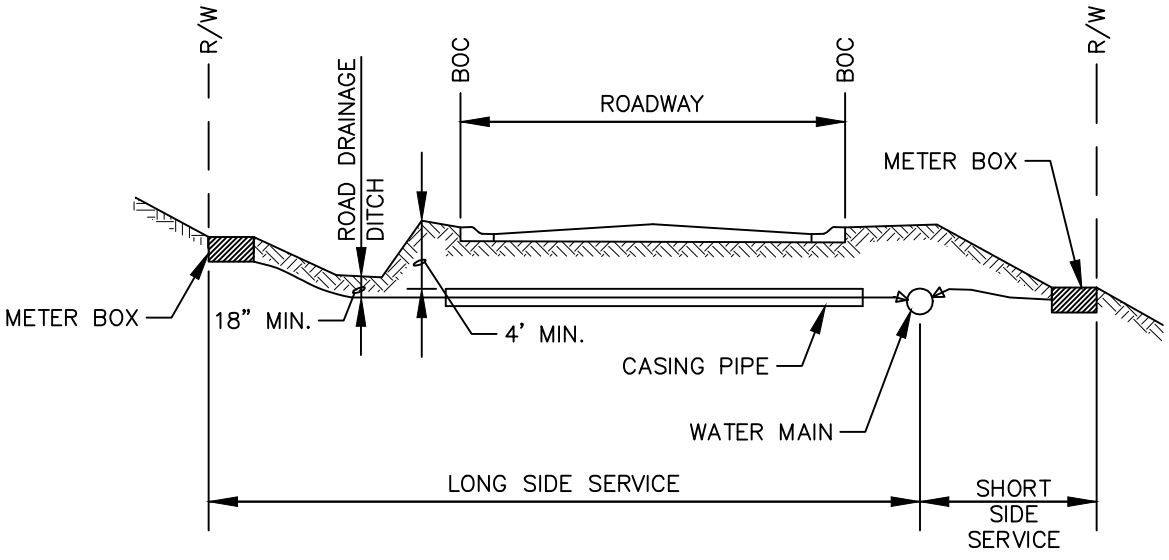
STANDARD DETAIL NO. A-19

NOTES

1. SEE STANDARD DETAIL A–6 FOR CASING SIZES.
2. SEE STANDARD DETAIL A–22 FOR METER BOX INSTALLATION.
3. METER BOXES TO BE LOCATED 12" INSIDE RIGHT–OF–WAY.
4. USE SINGLE SERVICE CONNECTION IN CASES WHERE ONLY ONE CUSTOMER SERVICE IS NEEDED. OMIT WYE FOR SINGLE SERVICE CONNECTION.



PLAN



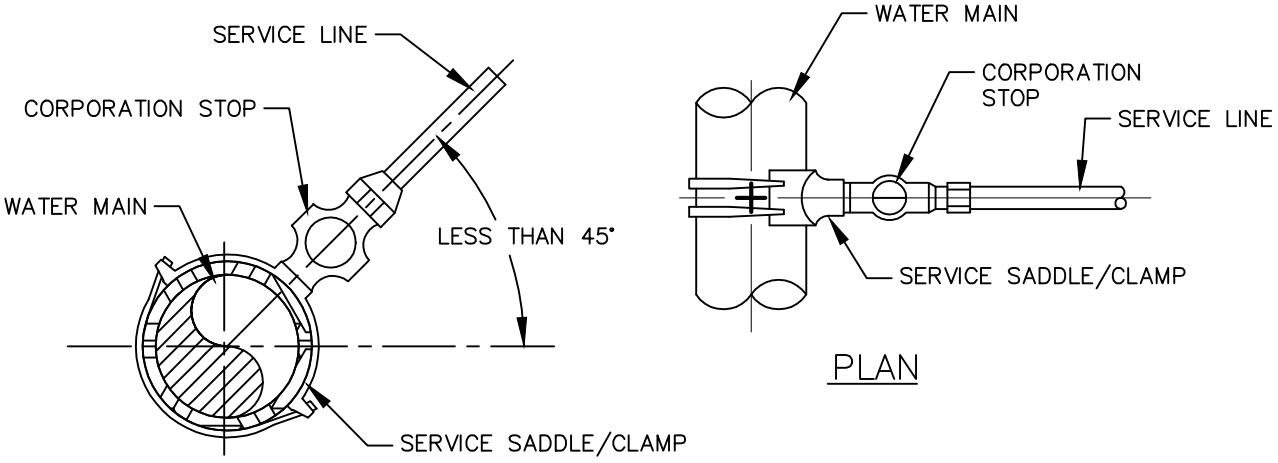
CROSS SECTION

WATER METER LOCATION
SUBDIVISION STREET

NOT TO SCALE

REVISED AUGUST 2021

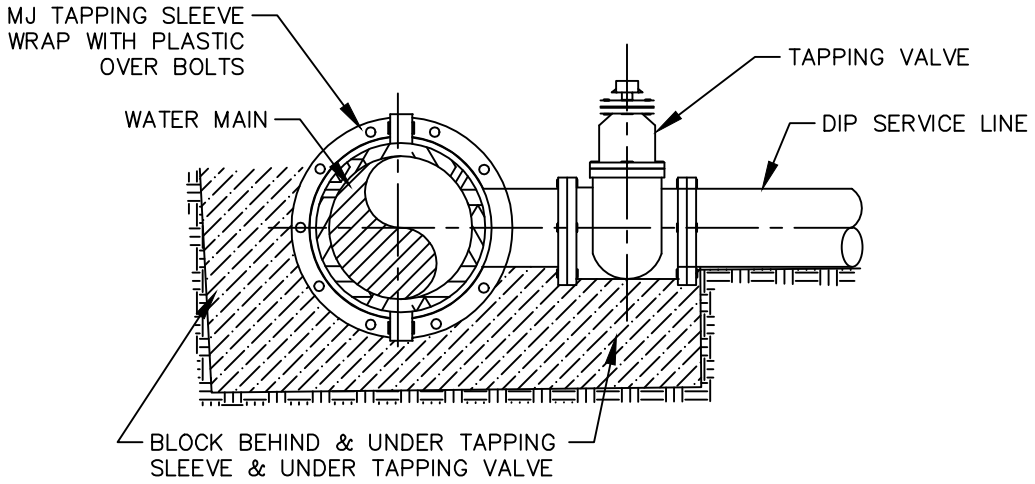
STANDARD DETAIL NO. A-20



SECTION

PLAN

TYPICAL SERVICE



3" & LARGER SERVICES

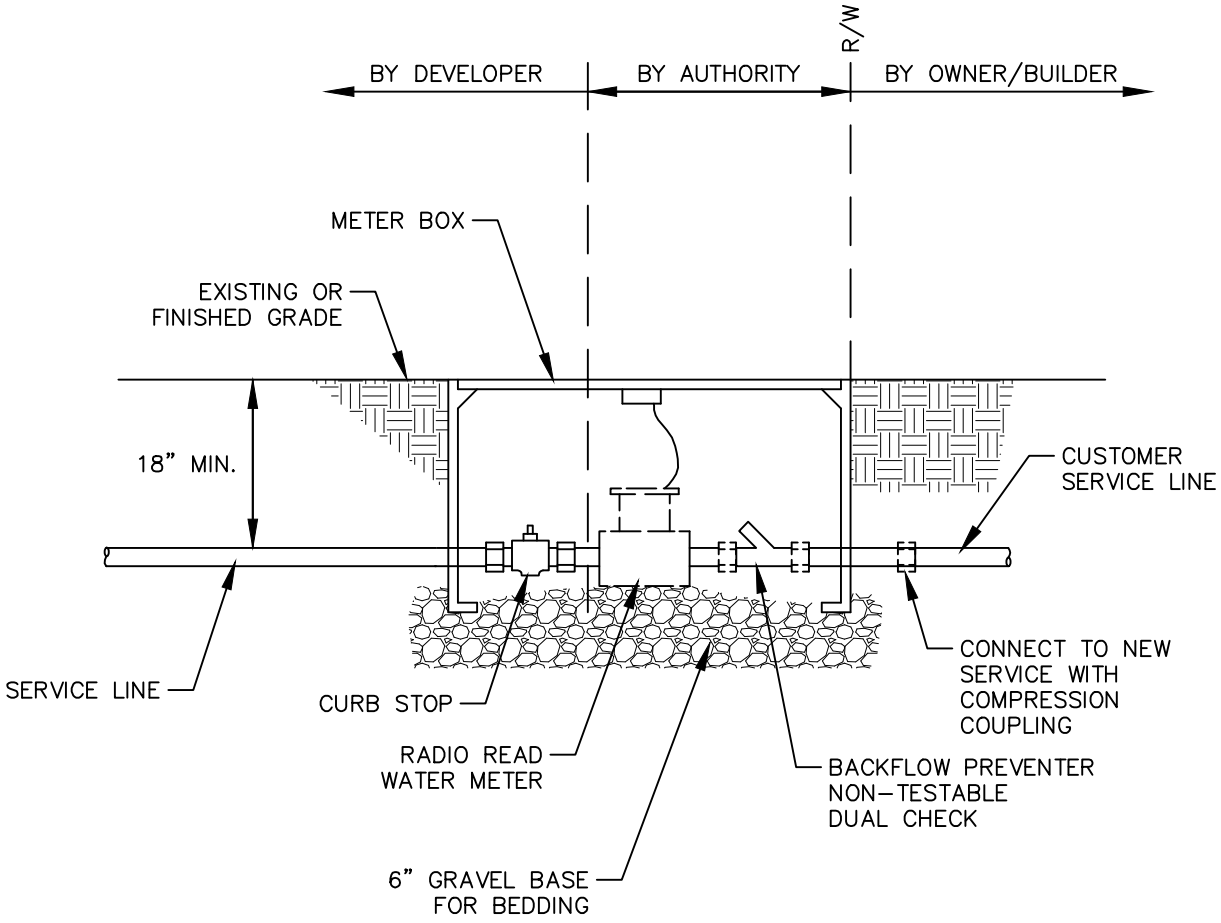
(TAPPING SLEEVE AND VALVE)

CONNECTIONS TO WATER MAINS

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-21



NOTES

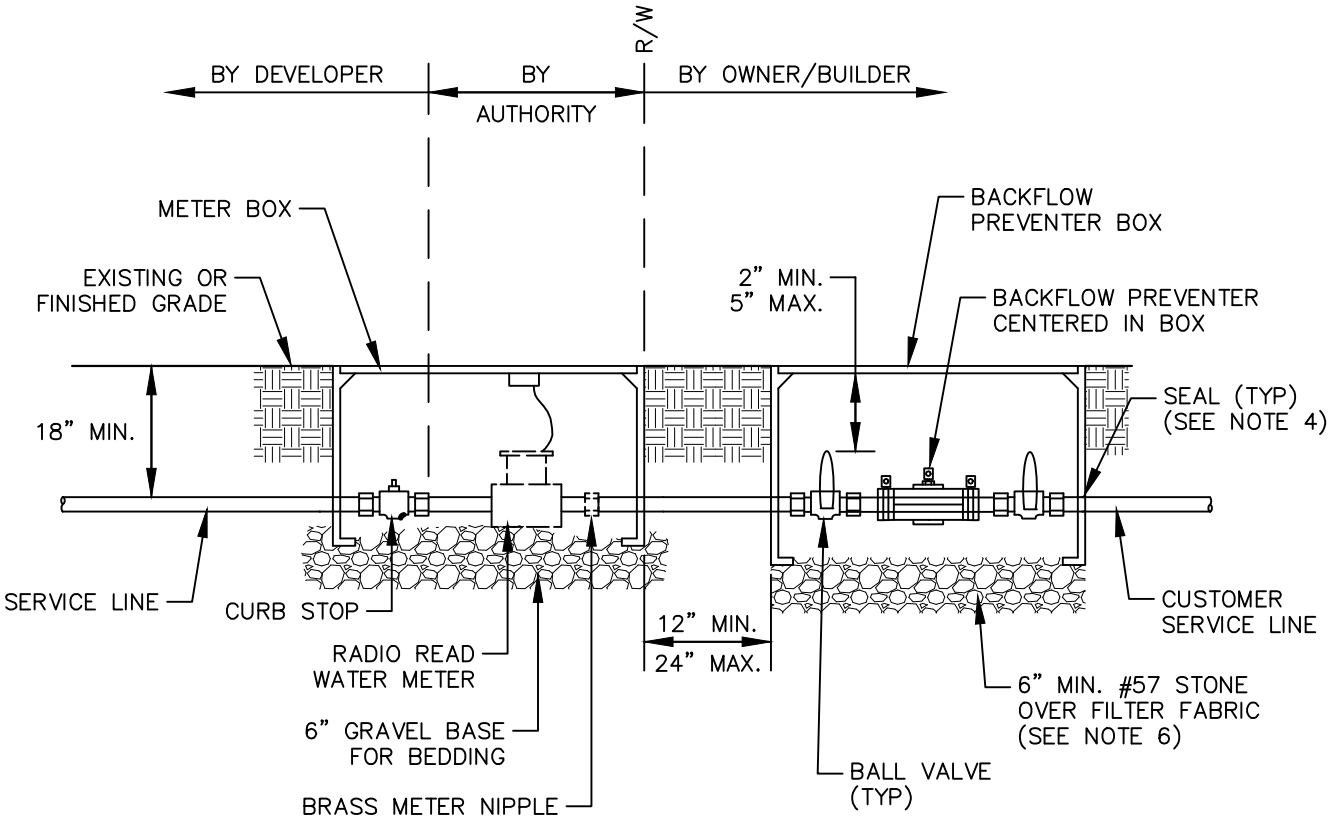
1. SEE STANDARD DETAIL A-21 FOR SERVICE LINE CONNECTION DETAILS.
2. METER BOX TO BE FURNISHED AND INSTALLED BY DEVELOPER.
3. WATER METER TO BE FURNISHED AND INSTALLED BY THE AUTHORITY.
4. OWNER OR DEVELOPER SHALL FURNISH AND INSTALL ALL MATERIALS PAST THE AUTHORITY-FURNISHED STUB-OUT.

RESIDENTIAL WATER METER AND BOX

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-22



NOTES

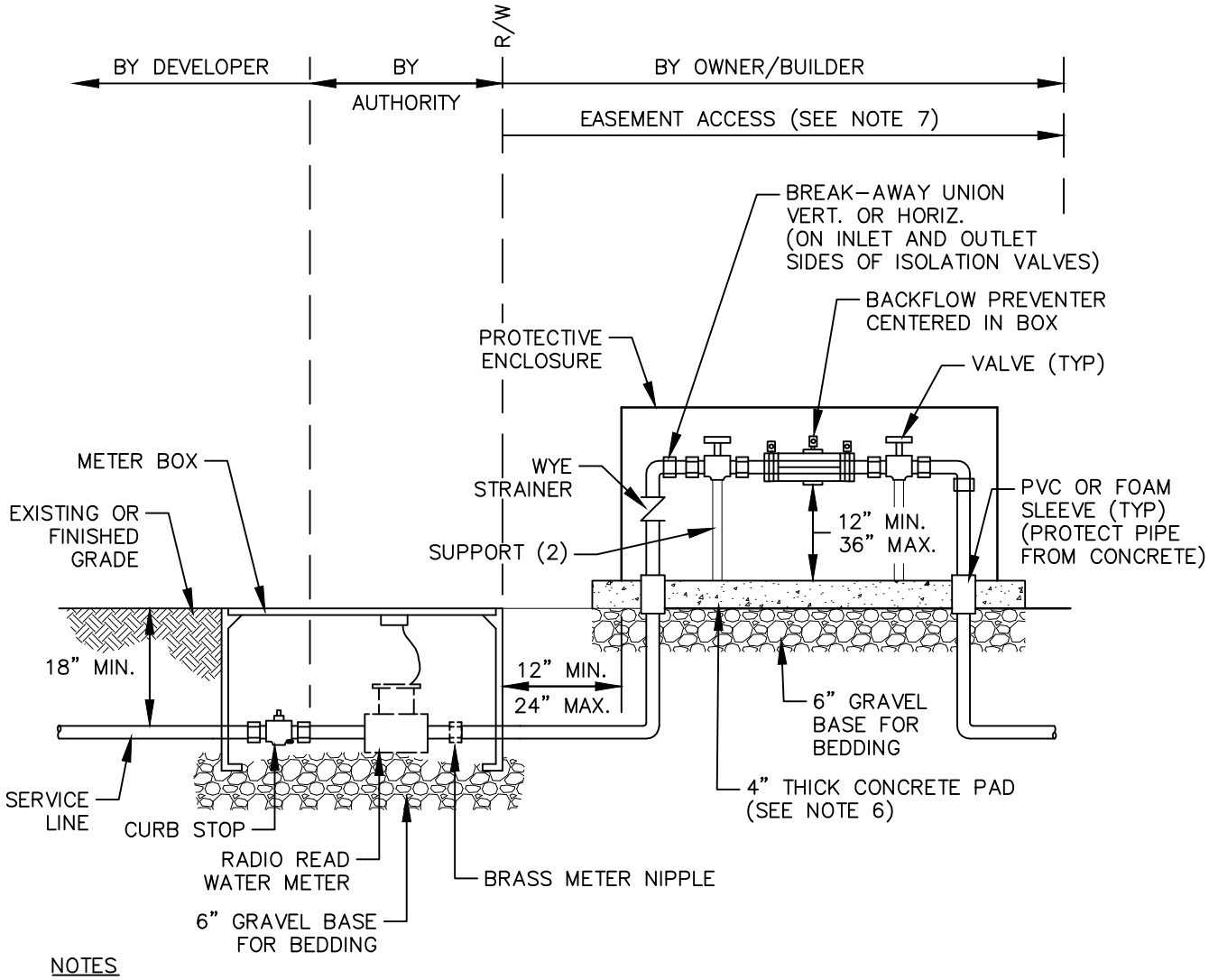
1. METER AND BACKFLOW PREVENTER BOXES TO BE FURNISHED AND INSTALLED BY DEVELOPER/OWNER.
2. LEAK PROOF BACKFLOW PREVENTER BOX MINIMUM DIMENSIONS 18"H x 28"W x 41"L. ALL TEST COCKS AND VALVES SHALL BE EASILY ACCESSIBLE.
3. WATER METER TO BE FURNISHED AND INSTALLED BY THE AUTHORITY.
4. ENDS SEALED WITH EXPANSION FOAM OR SILICONE CAULK ON BOTH SIDES TO PREVENT DIRT AND WATER FROM ENTERING BACKFLOW PREVENTER BOX.
5. TEST COCKS SHALL BE FITTED WITH BRASS OR PLASTIC PLUGS OR CAPS.
6. SECURE BACKFLOW PREVENTER IN PLACE WITH EASILY ACCESSIBLE BREAK–AWAY UNIONS. (BUILT–IN ON SOME MODELS.)
7. ALL RELATED APPURTENANCES TO THE BACKFLOW PREVENTER DEVICE SHALL BE COPPER OR BRASS.
8. PROVIDE 4"–6" OF CLEARANCE BETWEEN THE TOP OF GRAVEL TO THE BOTTOM OF THE BACKFLOW PREVENTER DEVICE.
9. FOR POTABLE USE ONLY.

3/4" - 2" COMMERCIAL WATER METER AND DCV BACKFLOW PREVENTION DEVICE (LOW HAZARD APPLICATION)

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-23



NOTES

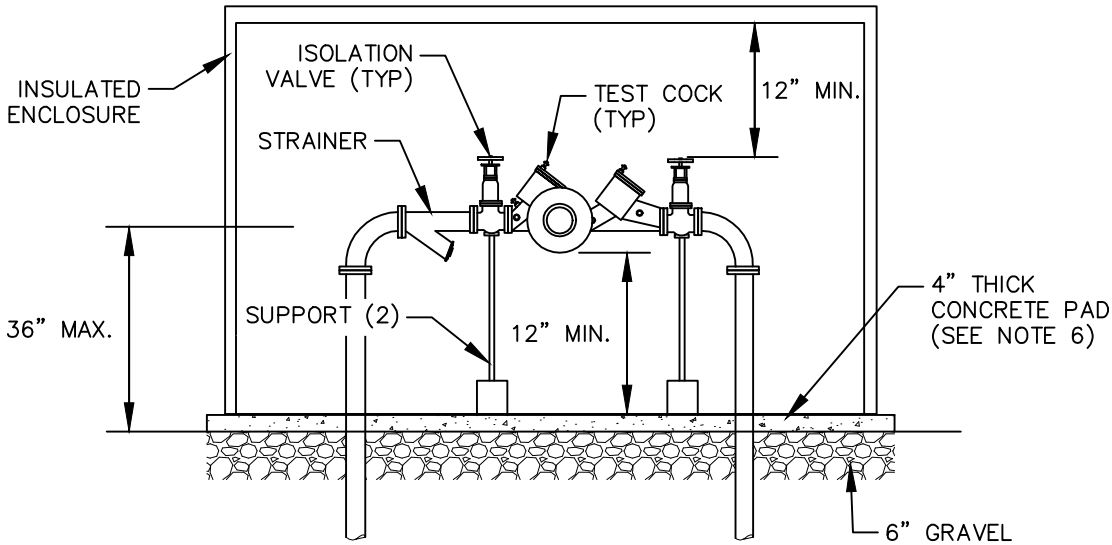
1. HOT BOX PROTECTIVE ENCLOSURE SHALL BE HEATED OR INSULATED TO PROTECT FROM FREEZING.
2. RPZ ENCLOSURE SHALL BE PROVIDED WITH GROUND ANCHOR CAPABILITIES AND LOCKABLE LID.
3. RPZ ENCLOSURE SHALL HAVE A DRAIN PORT APPROPRIATELY SIZED TO ALLOW DISCHARGE OF WATER IN THE EVENT THE RPZ VALVE OPENS.
4. WATER METER TO BE FURNISHED AND INSTALLED BY THE AUTHORITY.
5. SECURE RPZ DEVICE IN PLACE WITH BREAK-AWAY UNIONS. (BUILT-IN ON SOME MODELS.)
6. CONCRETE PAD SHALL BE 3,000 PSI MIN. REINFORCED WITH #3 REBAR, CENTERED, AT 12" EA. WAY. SET CONCRETE PAD AT GRADE WITH FILTER FABRIC BETWEEN CONCRETE FACE AND GRAVEL BASE.
7. EASEMENT SHALL PROVIDE DIRECT ACCESS FROM RIGHT-OF-WAY WITH MINIMUM OF 3' ON EACH SIDE OF RPZ SLAB.
8. ALL RELATED APPURTENANCES TO THE BACKFLOW PREVENTER DEVICE SHALL BE COPPER OR BRASS.

3/4" - 2" COMMERCIAL WATER METER AND RPZ BACKFLOW PREVENTION DEVICE (HIGH HAZARD APPLICATION)

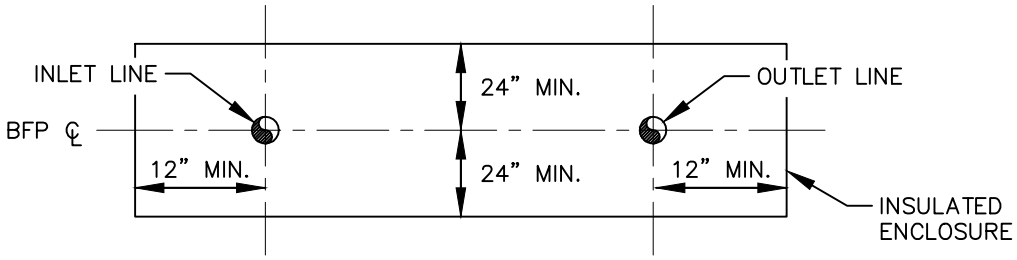
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-24



SECTION



PLAN – CLEARANCE REQUIREMENTS

NOTES

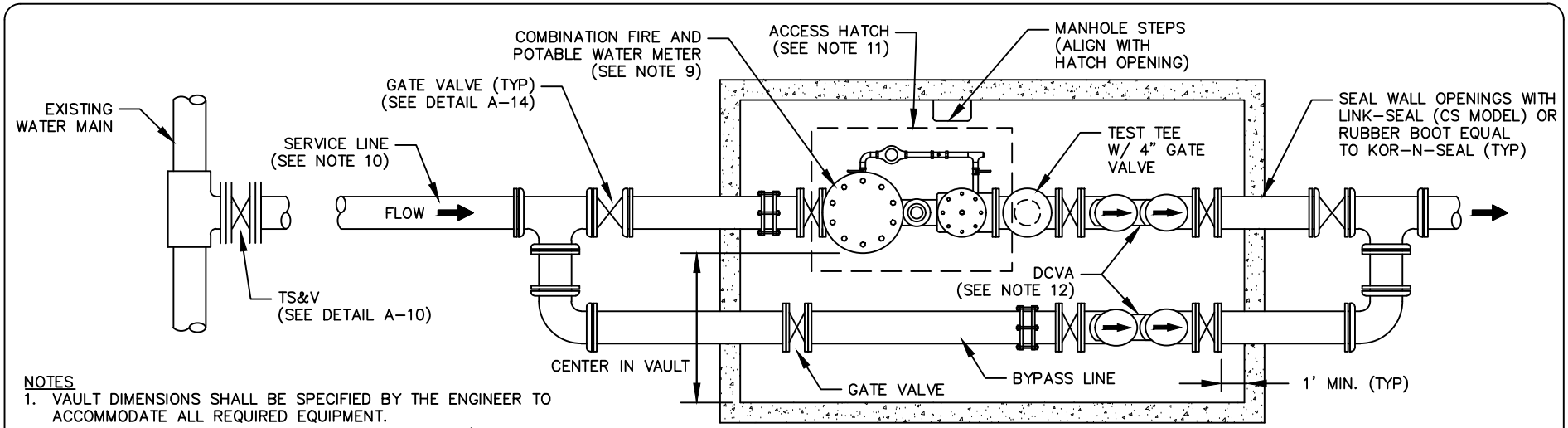
1. APPROVED INSULATED ENCLOSURE MANUFACTURERS: HOT BOX AND HYDROCOWL. INSTALLATION OF INSULATED ENCLOSURE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. HEATERS ARE RECOMMENDED TO PREVENT FREEZING.
2. RPZ ENCLOSURE SHALL BE PROVIDED WITH GROUND ANCHOR CAPABILITIES AND LOCKABLE LID.
3. RPZ ENCLOSURE SHALL HAVE A DRAIN PORT APPROPRIATELY SIZED TO ALLOW DISCHARGE OF WATER IN THE EVENT THE RPZ VALVE OPENS.
4. FITTINGS AND PIPE INSIDE ENCLOSURE SHALL BE FLANGED DIP. BURIED PIPE SHALL BE MJ DIP.
5. CONCRETE PAD SHALL BE 3,000 PSI MIN. REINFORCED WITH #3 REBAR, CENTERED, AT 12" EA. WAY. SET CONCRETE PAD AT GRADE WITH FILTER FABRIC BETWEEN CONCRETE FACE AND GRAVEL BASE.
6. EASEMENT SHALL BE PROVIDED FOR DIRECT ACCESS FROM RIGHT–OF–WAY WITH MINIMUM OF 5' ON EACH SIDE OF RPZ SLAB.
7. ISOLATION VALVES SHALL BE RESILIENT WEDGE, NON–RISING STEM GATE VALVES. WHERE REQUIRED BY FIRE OR OTHER CODE(S), RESILIENT WEDGE VALVES SHALL BE USED.
8. PIPE SUPPORTS SHALL BE INSTALLED TO FULLY SUPPORT THE RPZ DEVICE AND ALL ASSOCIATED VALVES, FITTINGS AND PIPING.

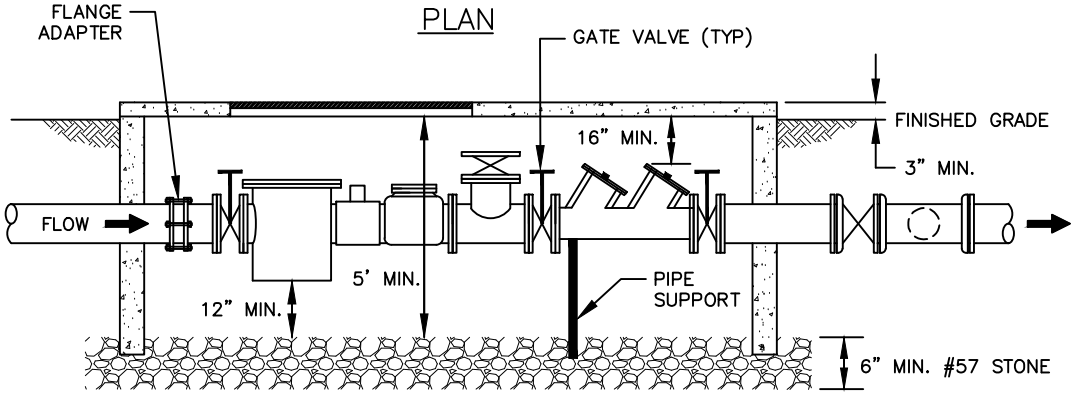
3"-10" COMMERCIAL RPZ BACKFLOW PREVENTION DEVICE (HIGH HAZARD APPLICATION)

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-25





SECTION – MAINLINE

NOTES

1. VAULT DIMENSIONS SHALL BE SPECIFIED BY THE ENGINEER TO ACCOMMODATE ALL REQUIRED EQUIPMENT.
2. VAULT SHALL BE PRECAST REINFORCED CONCRETE (MIN. 3,000 PSI) IN ACCORDANCE WITH ASTM C858 AND C913. IN AREAS WITH OCCASIONAL TRAFFIC LOADINGS, THE VAULT SHALL BE DESIGNED FOR HS20-44 WHEEL LOADS SUPPORTED BY SHOP DRAWINGS STAMPED BY A GEORGIA REGISTERED PROFESSIONAL ENGINEER.
3. LOCATE VAULT OUTSIDE OF RIGHT-OF-WAY.
4. MAINTAIN 1' MINIMUM CLEARANCE BETWEEN ALL PIPING AND VAULT WALLS.
5. ALL INTERIOR PIPE AND FITTINGS 3" AND LARGER SHALL BE FLANGED DIP IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
6. BYPASS LINES SHALL BE SIZED AS FOLLOWS:

MAINLINE	BYPASS	MAINLINE	BYPASS
3"	3"	8"	6"
4"	3"	10"	8"
6"	4"	12"	10"

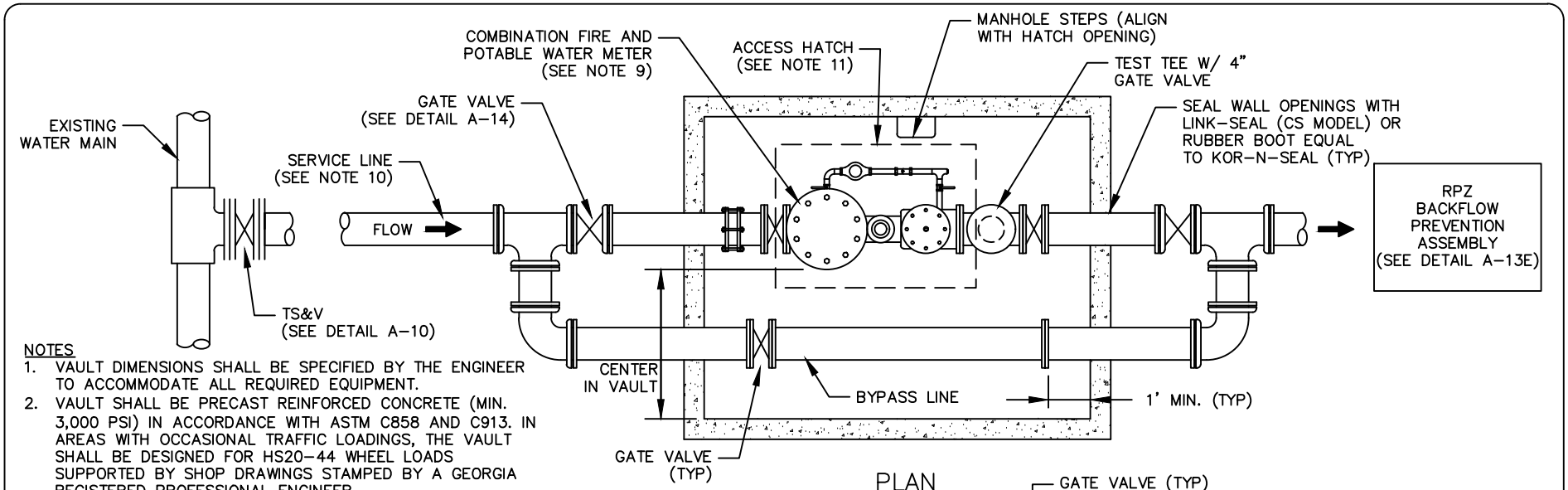
7. ALL MAINLINE AND BYPASS LINE GATE VALVES SHALL BE OS&Y. 4" VALVE ON TEST TEE SHALL BE NRS. ALL GATE VALVES SHALL HAVE HANDWHEEL OPERATORS.
8. PIPE SUPPORTS SHALL BE 3,000 PSI, MIN. 8"x8" REINFORCED CONCRETE. SUPPORTS SHALL BE LOCATED SO AS TO ALLOW FULL SUPPORT OF EQUIPMENT WHEN DISCONNECTED FOR SERVICING, REPLACEMENT, ETC. A MINIMUM OF ONE SUPPORT SHALL BE SUPPLIED FOR EACH METER OR CHECK VALVE ASSEMBLY.
9. FLOW METER SHALL BE RECORDALL FIRE SERIES ASSEMBLIES (FSAA) COLD WATER METER AND STRAINER WITH DISC BYPASS BY BADGER METER.
10. RESTRAIN MJ PIPE WITH MEGA-LUGS OR PUSH-ON JOINT PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
11. ACCESS HATCH OPENING SHALL BE GREATER THAN LONGEST EQUIPMENT PIECE AND NO LESS THAN 36"x36". CAST HATCH IN TOP SLAB CENTERED OVER THE WATER METER. HATCH SHALL BE BILCO TYPE J-AL.
12. DOUBLE CHECK VALVE ASSEMBLIES (DCVA) SHALL BE WATTS MODEL 709, FEBCO MODEL LF850, OR AMES MODEL 2000SS.
13. BACKFLOW PREVENTERS SHALL BE TESTABLE PER AWWA STANDARDS.
14. PRESSURE TEST AND DISINFECT IN ACCORDANCE WITH AWWA.

LOW HAZARD APPLICATION
LARGE WATER METER CONNECTION FOR COMBINED POTABLE AND FIRE FLOW

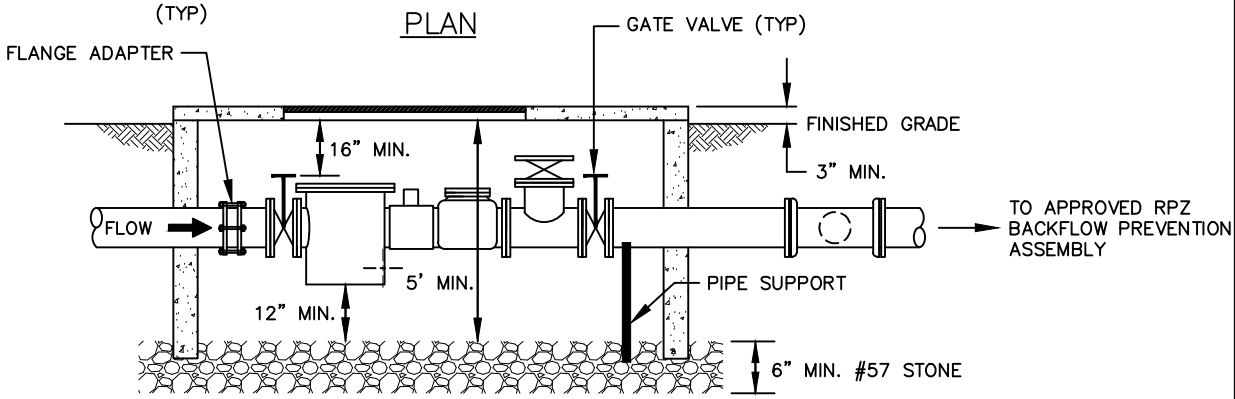
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-26



PLAN



SECTION – MAINLINE

NOTES

1. VAULT DIMENSIONS SHALL BE SPECIFIED BY THE ENGINEER TO ACCOMMODATE ALL REQUIRED EQUIPMENT.
2. VAULT SHALL BE PRECAST REINFORCED CONCRETE (MIN. 3,000 PSI) IN ACCORDANCE WITH ASTM C858 AND C913. IN AREAS WITH OCCASIONAL TRAFFIC LOADINGS, THE VAULT SHALL BE DESIGNED FOR HS20-44 WHEEL LOADS SUPPORTED BY SHOP DRAWINGS STAMPED BY A GEORGIA REGISTERED PROFESSIONAL ENGINEER.
3. LOCATE VAULT OUTSIDE OF RIGHT-OF-WAY (EASEMENT REQUIRED).
4. MAINTAIN 1' MINIMUM CLEARANCE BETWEEN ALL PIPING AND VAULT WALLS.
5. ALL INTERIOR PIPE AND FITTINGS 3" AND LARGER SHALL BE FLANGED DIP IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
6. BYPASS LINES SHALL BE SIZED AS FOLLOWS:

MAINLINE	BYPASS	MAINLINE	BYPASS
3"	3"	8"	6"
4"	3"	10"	8"
6"	4"	12"	10"

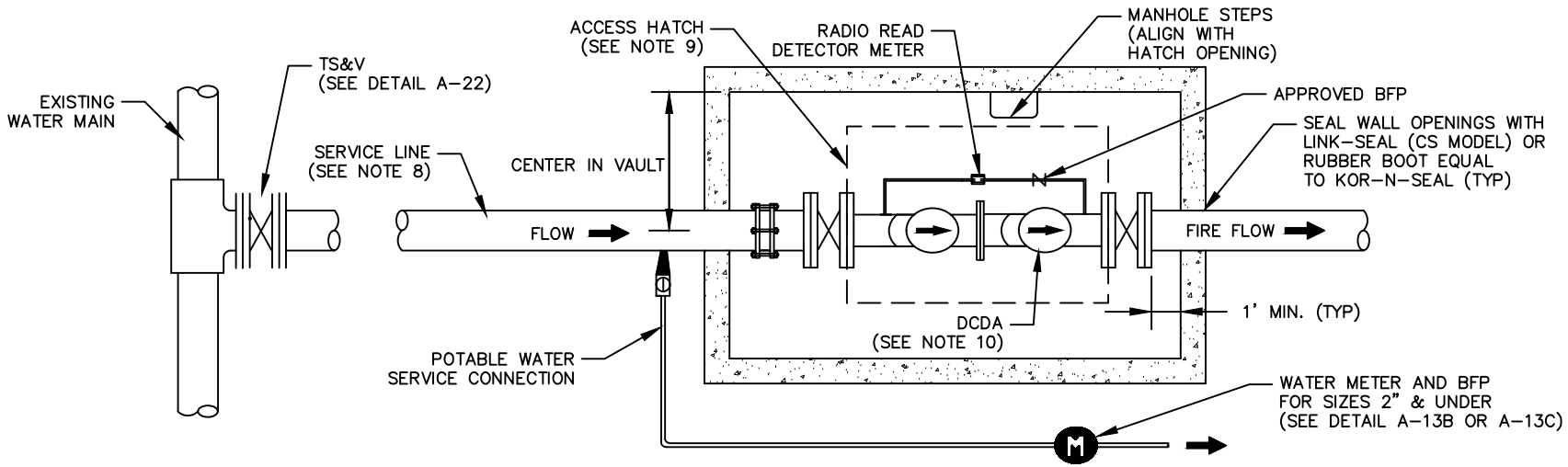
7. ALL MAINLINE AND BYPASS LINE GATE VALVES SHALL BE OS&Y. 4" VALVE ON TEST TEE SHALL BE NRS. ALL GATE VALVES SHALL HAVE HANDWHEEL OPERATORS.
8. PIPE SUPPORTS SHALL BE 3,000 PSI, MIN. 8"x8" REINFORCED CONCRETE. SUPPORTS SHALL BE LOCATED SO AS TO ALLOW FULL SUPPORT OF EQUIPMENT WHEN DISCONNECTED FOR SERVICING, REPLACEMENT, ETC. A MINIMUM OF ONE SUPPORT SHALL BE SUPPLIED FOR EACH METER OR CHECK VALVE ASSEMBLY.
9. FLOW METER SHALL BE RECORDALL FIRE SERIES ASSEMBLIES (FSAA) COLD WATER METER AND STRAINER WITH DISC BYPASS BY BADGER METER.
10. RESTRAIN MJ PIPE WITH MEGA-LUGS OR PUSH-ON JOINT PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
11. ACCESS HATCH OPENING SHALL BE GREATER THAN THE FLOW METER LENGTH AND NO LESS THAN 36"x36". CAST HATCH IN TOP SLAB CENTERED OVER THE WATER METER. HATCH SHALL BE BILCO TYPE J-AL.
12. PRESSURE TEST AND DISINFECT IN ACCORDANCE WITH AWWA.
13. INSTALL RPZ BACKFLOW PREVENTER BETWEEN METER VAULT AND FIRST POINT OF USE IN CUSTOMER PIPING SYSTEM.

HIGH HAZARD APPLICATION
LARGE WATER METER CONNECTION
FOR COMBINED
POTABLE AND FIRE FLOW

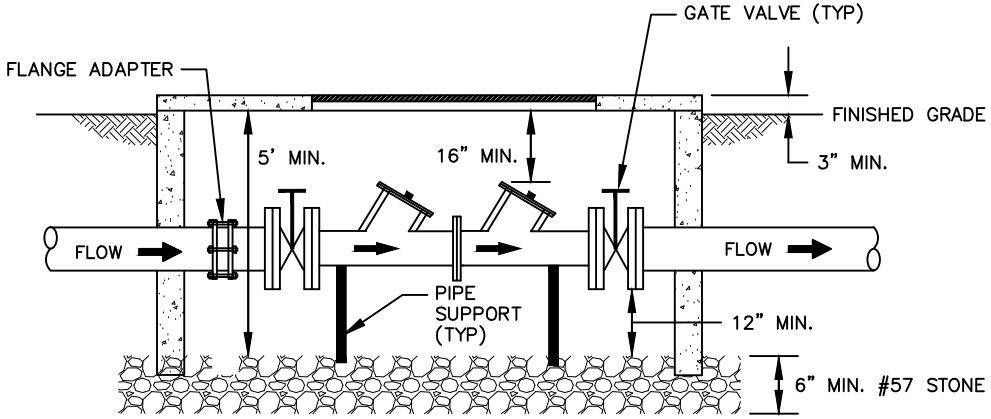
NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-27



PLAN



SECTION

NOTES

1. VAULT DIMENSIONS SHALL BE SPECIFIED BY THE ENGINEER TO ACCOMMODATE ALL REQUIRED EQUIPMENT. MINIMUM SIZE SHALL BE 6' LONG x 6' WIDE.
2. VAULT SHALL BE PRECAST REINFORCED CONCRETE (MIN. 3,000 PSI) IN ACCORDANCE WITH ASTM C858 AND C913. IN AREAS WITH OCCASIONAL TRAFFIC LOADINGS, THE VAULT SHALL BE DESIGNED FOR HS20-44 WHEEL LOADS SUPPORTED BY SHOP DRAWINGS STAMPED BY A GEORGIA REGISTERED PROFESSIONAL ENGINEER.
3. LOCATE VAULT OUTSIDE OF RIGHT-OF-WAY (EASEMENT REQUIRED).
4. MAINTAIN 1' MINIMUM CLEARANCE BETWEEN ALL PIPING AND VAULT WALLS.
5. ALL INTERIOR PIPE AND FITTINGS 3" AND LARGER SHALL BE FLANGED DIP IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
6. ALL GATE VALVES SHALL BE OS&Y WITH HANDWHEEL OPERATORS.
7. PIPE SUPPORTS SHALL BE 3,000 PSI, MIN. 8"x8" REINFORCED CONCRETE. SUPPORTS SHALL BE LOCATED SO AS TO ALLOW FULL SUPPORT OF EQUIPMENT WHEN DISCONNECTED FOR SERVICING, REPLACEMENT, ETC. A MINIMUM OF ONE SUPPORT SHALL BE SUPPLIED FOR EACH CHECK VALVE ASSEMBLY.
8. RESTRAIN MJ PIPE WITH MEGA-LUGS OR PUSH-ON JOINT PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
9. ACCESS HATCH OPENING SHALL BE GREATER THAN LONGEST EQUIPMENT PIECE AND NO LESS THAN 36"x36". CAST HATCH IN TOP SLAB CENTERED OVER THE WATER METER. HATCH SHALL BE BILCO TYPE J-AL.
10. DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) SHALL BE WATTS MODEL 709DCDA, FEBCO MODEL 856, OR AMES MODEL 3000SS.
11. BACKFLOW PREVENTERS SHALL BE TESTABLE PER AWWA STANDARDS.
12. PRESSURE TEST AND DISINFECT IN ACCORDANCE WITH AWWA.
13. THIS DETAIL IS FOR USE ON SERVICES WITH DEDICATED FIRE SPRINKLER LINES. SEE DETAILS A-27 AND A-28 FOR INSTALLATIONS WHERE THERE ARE FIRE HYDRANTS ON PRIVATE PROPERTY.

FIRE LINE SERVICE CONNECTION AND POTABLE WATER METER 2" AND UNDER

NOT TO SCALE

REVISED AUGUST 2021

STANDARD DETAIL NO. A-28