

WATER MAIN BACKFILL REQUIREMENTS

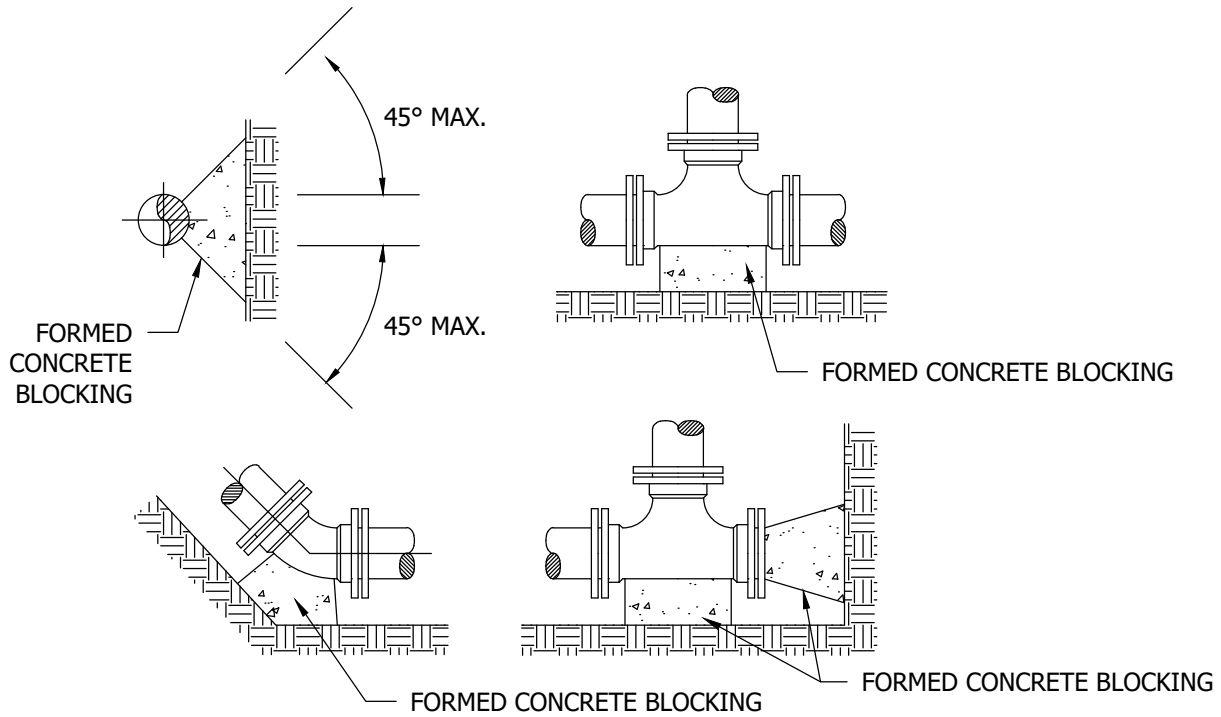


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-1



CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH
 ALL POURED IN PLACE CONCRETE SHALL HAVE A (28) DAY STRENGTH OF 3000 PSI
 AND 2" TO 4" SLUMP

SIZE	TEE & PLUG	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND
4"	2.0	2.5	1.5	1.0	1.0
6"	4.0	5.5	3.0	1.5	1.0
8"	6.5	9.0	5.0	2.5	1.5
10"	10.0	14.0	7.5	4.0	2.0
12"	14.0	20.0	11.0	5.5	3.0
14"	19.0	27.0	14.5	7.5	4.0
16"	25.0	35.0	19.0	10.0	5.0
18"	31.5	44.5	24.0	12.5	6.5
20"	38.0	54.5	29.5	15.0	7.5
24"	55.5	78.5	42.5	22.0	11.0

NOTE:

- * THE THRUST BLOCK AREAS ARE BASED ON A SOIL BEARING LOAD OF 2,000 LB./SQ. FT.
- * GREASE ALL WATER MAIN SURFACES PRIOR TO PLACEMENT OF CONCRETE.

(AREA IN SQ. FT. REQUIRED FOR CONCRETE THRUST BLOCKING)

THRUST BLOCK DETAILS

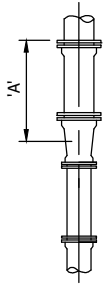


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

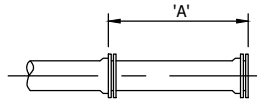
DATE:
11/25/2020

SCALE:
NOT TO SCALE

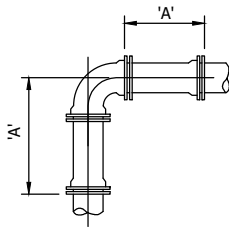
DETAIL NO:
W-2



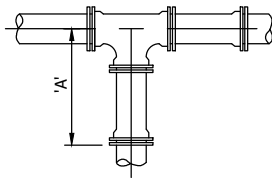
REDUCER



DEAD END PLUG



90° BEND



TEE

NOTES:

1. FITTINGS TO BE RESTRAINED WITH EBBA IRON MEGA-LUG SERIES OR APPROVED EQUAL.
2. DUCTILE IRON PIPE SHALL BE RESTRAINED WITH EBBA IRON, INC. SERIES 1100 AT MECHANICAL JOINTS, AND SERIES 1700 AT PIPE BELLS.
3. PVC PIPE SHALL BE RESTRAINED WITH EBBA IRON, INC. SERIES 2000 AT MECHANICAL JOINTS, AND SERIES 1600 OR 2800 AT PIPE BELLS.
4. TO STABILIZE THE JOINTS AT TEES, THE CONTRACTOR SHALL PROVIDE RESTRAINT DEVICES ON BOTH RUN JOINTS OF ALL TEES. FULL LENGTHS OF PIPE SHOULD BE USED AT TEES.

NOTE:

TABLE VALUES BASED UPON A 5' MINIMUM BURY, GRANULAR BACKFILL, TYPE 3 LAYING CONDITION. 150 psig TEST PRESSURE AND A 1:5 FACTOR OF SAFETY FOR POLY WRAPPED DUCTILE IRON OR PVC PIPE.

	'A'	'A'	'A'	'A'	'A'	'A'	'A'	'A'	'A'
FITTING SIZE	90° HORIZ. BEND	45° HORIZ. BEND	22 1/2° HORIZ. BEND	BRANCH FOR TAPPING SLEEVE OR TEE	DEAD END PLUG OR IN-LINE VALVE	45° VERTICAL DOWNWARD BEND	22 1/2° VERTICAL DOWNWARD BEND	45° VERTICAL UPWARD BEND	22 1/2° VERTICAL UPWARD BEND
4"	31'-0"	13'-0"	6'-0"	54'-0"	54'-0"	34'-0"	17'-0"	13'-0"	6'-0"
6"	45'-0"	19'-0"	9'-0"	77'-0"	77'-0"	49'-0"	24'-0"	19'-0"	9'-0"
8"	58'-0"	24'-0"	12'-0"	101'-0"	101'-0"	64'-0"	31'-0"	24'-0"	12'-0"
12"	83'-0"	34'-0"	17'-0"	146'-0"	146'-0"	93'-0"	44'-0"	34'-0"	17'-0"
14"	96'-0"	40'-0"	19'-0"	169'-0"	169'-0"	107'-0"	51'-0"	40'-0"	19'-0"
16"	108'-0"	45'-0"	21'-0"	191'-0"	191'-0"	121'-0"	58'-0"	45'-0"	21'-0"

	'A'
DIFFERENCE IN REDUCER NOMINAL SIZE	RESTRAINED JOINT LENGTH
2-INCHES	16'-0"
4-INCHES	30'-0"
6-INCHES	47'-0"
8-INCHES	57'-0"
12-INCHES	93'-0"

RESTRAINT JOINT DETAILS

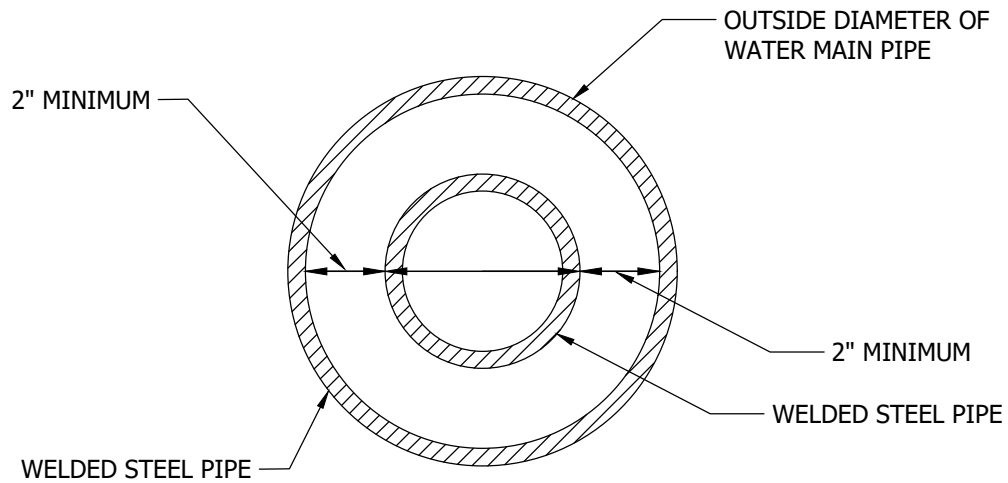


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-3



DIAMETER OF CASTING	WALL THICKNESS (INCHES)	
	UNDER HIGHWAY	UNDER RAILROAD
UNDER 14"	0.250	0.188
14"	0.250	0.219
16"	0.250	0.219
18"	0.250	0.250
20"	0.375	0.281
22"	0.375	0.312
24"	0.375	0.344

STEEL CASING DETAIL

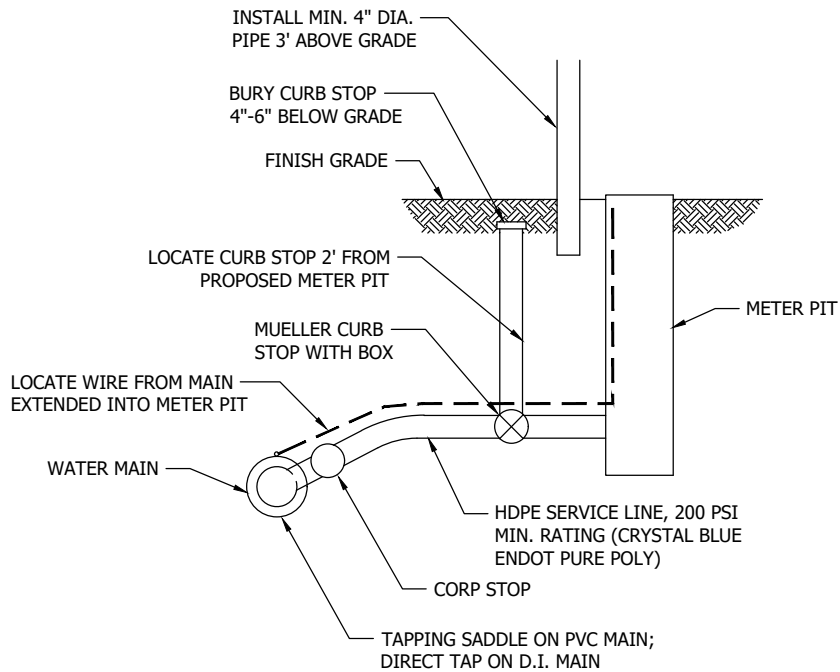


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-4



WATER SERVICE CONNECTION

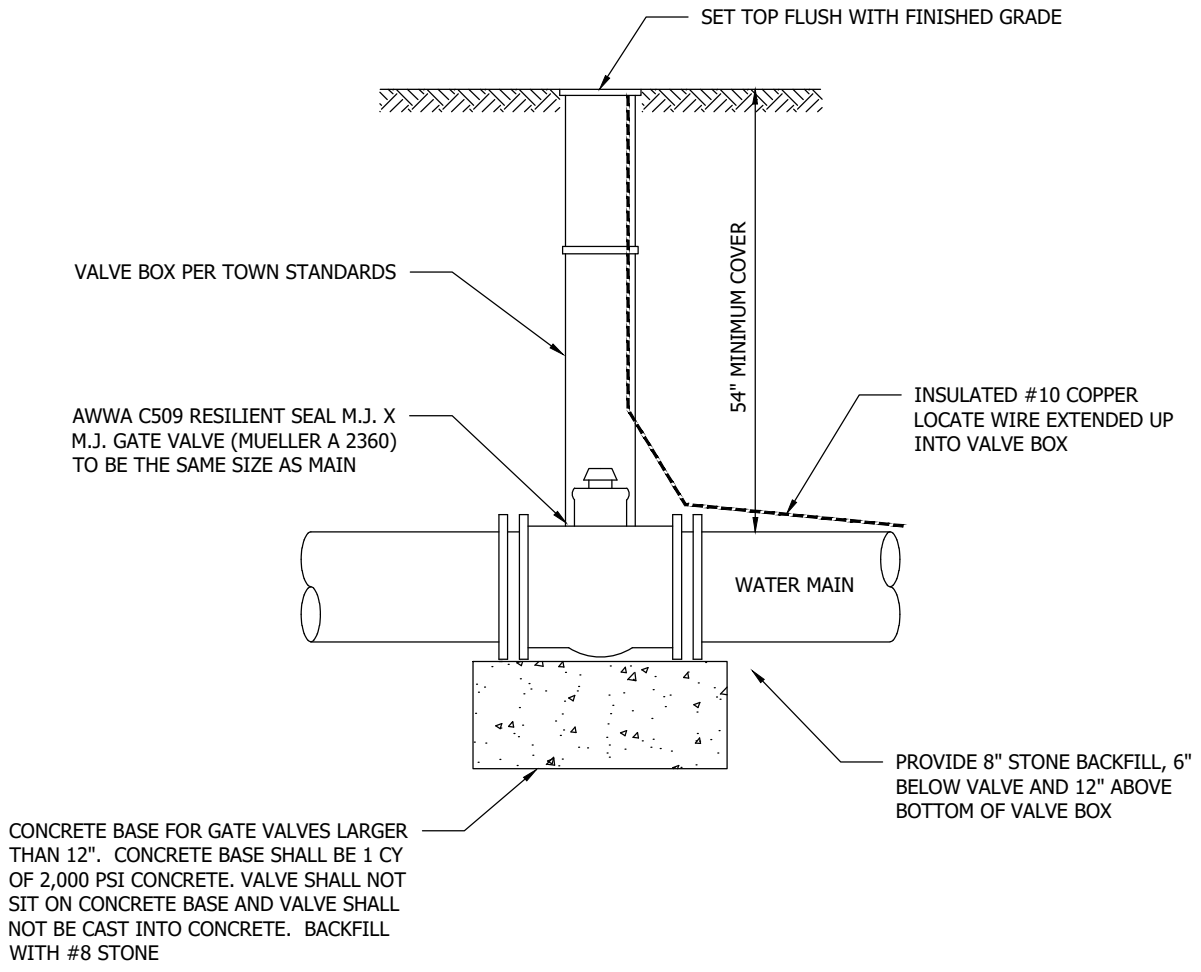


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-5



GATE VALVE AND BOX

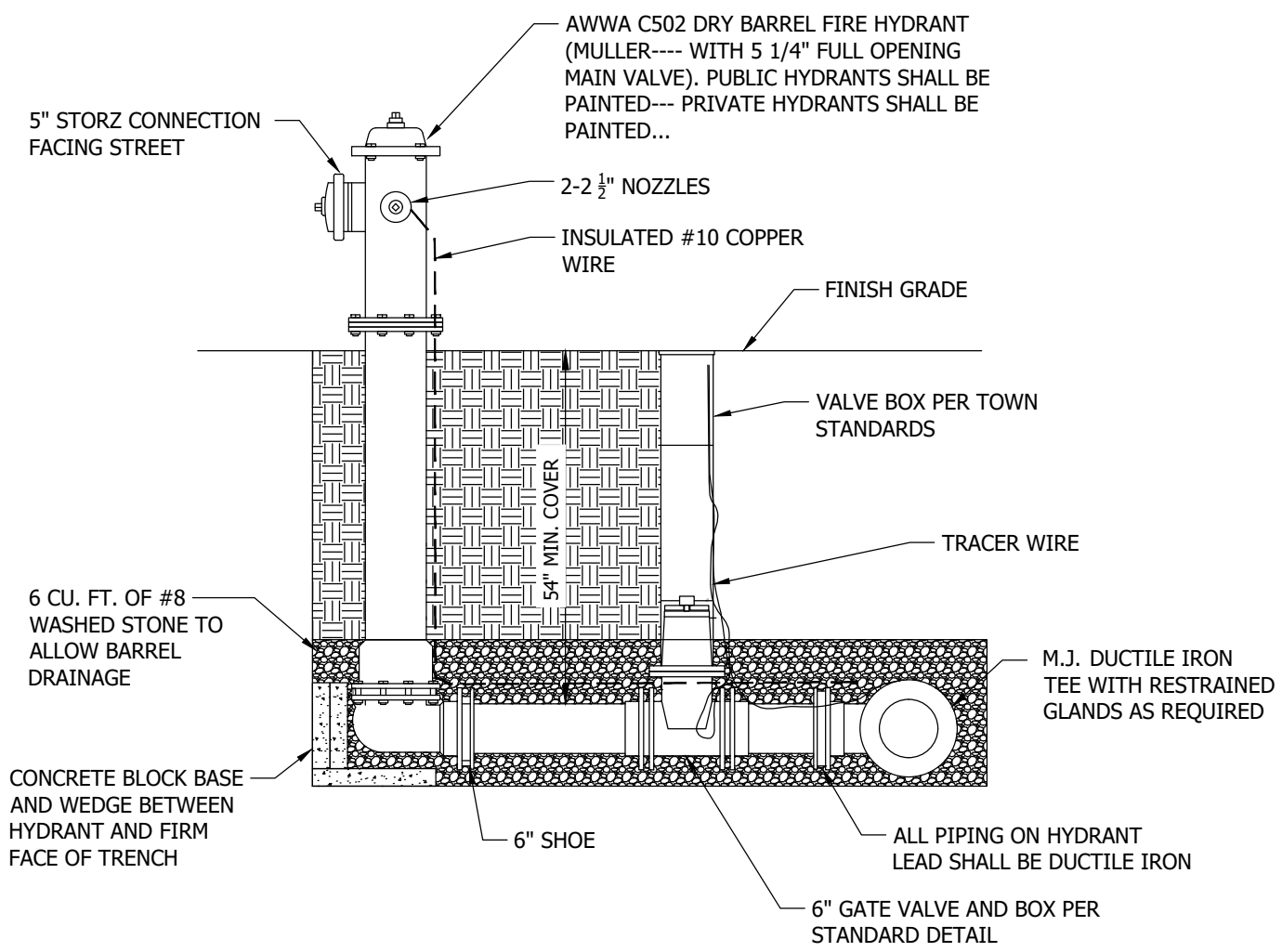
TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL



DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-6



NOTE:
 SNOWPLOWABLE BLUE REFLECTOR
 SHALL BE INSTALLED IN CENTER
 OF ROAD AT ALL FIRE HYDRANTS

FIRE HYDRANT DETAIL



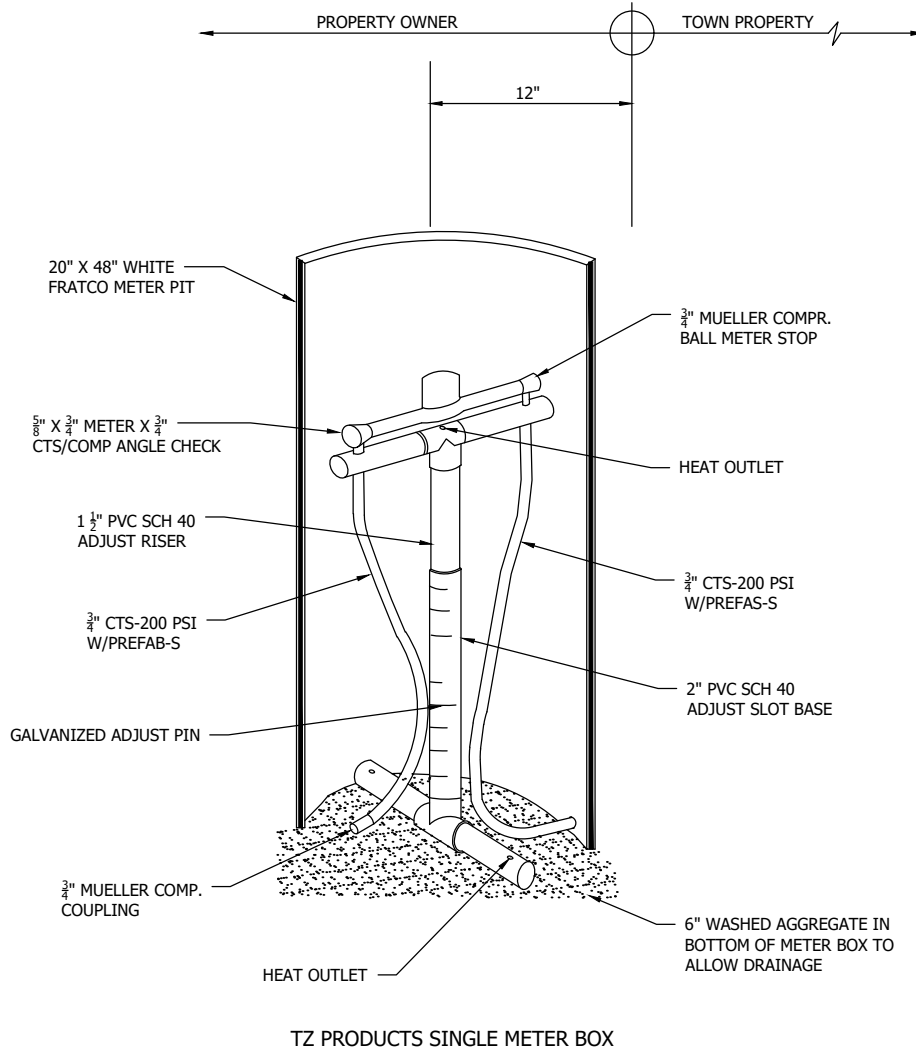
TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE: 11/25/2020
SCALE: NOT TO SCALE
DETAIL NO: W-7

WATER METER SERVICE NOTES:

1. MINIMUM 6" OF WASHED AGGREGATE SHALL BE USED UNDER ALL METER PITS FOR DRAINAGE.
2. ALL TUBING CONNECTIONS WILL BE DONE WITH MUELLER OR MCDONALD BRASS COMPRESSION FITTINGS.
3. ALL CORPORATION AND CURB STOPS SHALL BE MEULLER 300 BALL VALVE OR MCDONALD EQUIVALENT.
4. FINAL GRADE OF METER PIT IS THE RESPONSIBILITY OF THE DEVELOPER. NO MORE THAN MAXIMUM 12" RISER MAY BE ADDED IN ORDER TO BRING THE PIT TO GRADE.
5. METER PIT LIDS SHALL BE CAST IRON WITH LARGE PENTAGON NUT (MUELLER OR TYLER). METER PIT LIDS SHALL HAVE HOLES FOR RADIO READ ANTENNA MOUNTING.
6. THE DEVELOPER SHALL SUBMIT FIXTURE UNIT FLOW AND PRESSURE LOSS CALCULATIONS FOR THE TOWN'S REVIEW AND APPROVAL FOR ANY PLANNED MULTI-FAMILY, COMMERCIAL, OR INDUSTRIAL CONNECTION.

WATER METER SETTING SCHEDULE				
STYLE	SINGLE 5/8"	SINGLE 3/4"	SINGLE 1"	SINGLE 1 1/2"-2"
INLET	3/4" COMP.	3/4" COMP.	1" COMP.	1 1/2"-2" COMP.
OUTLET	3/4" COMP.	3/4" COMP.	1" COMP.	1 1/2"-2" COMP.



SINGLE WATER METER AND PIT

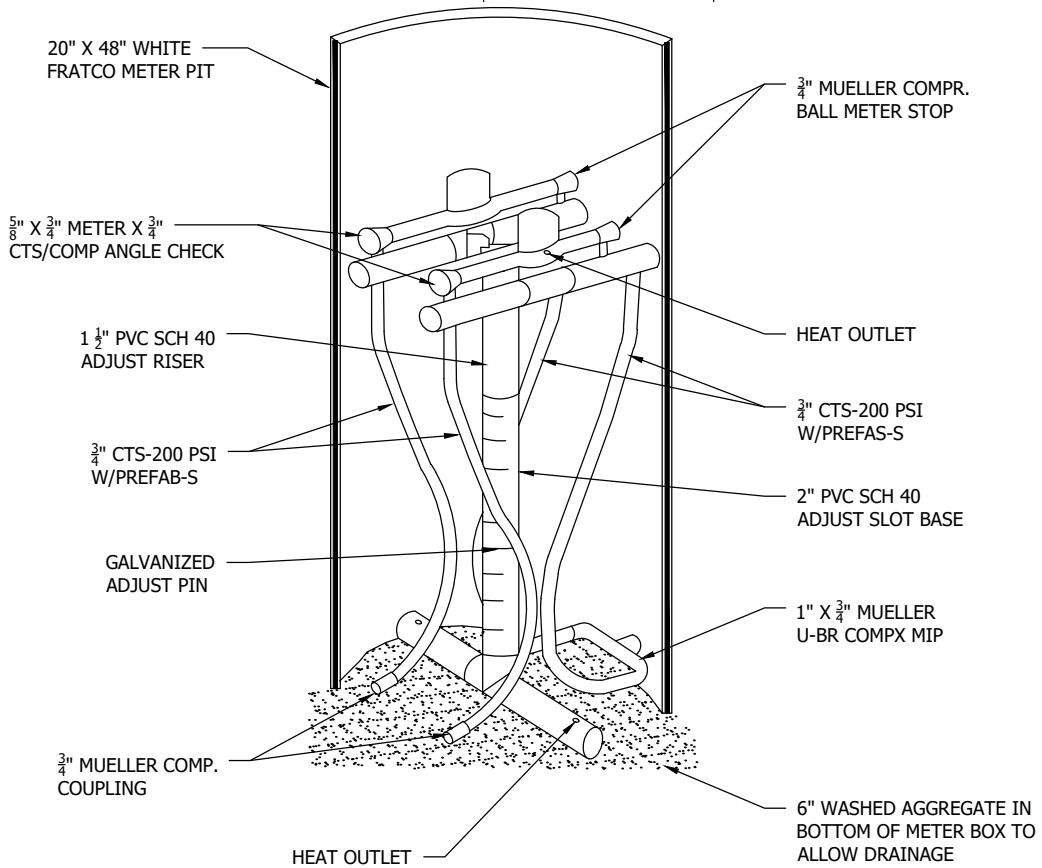
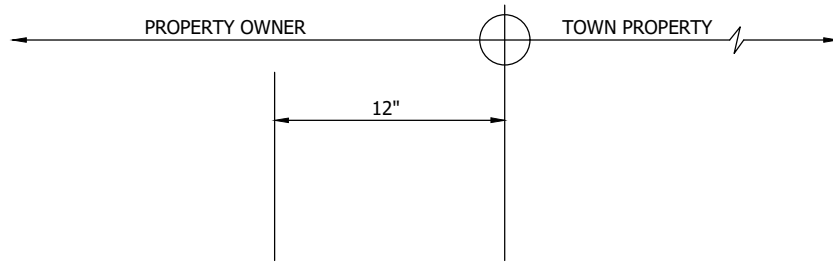
TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL



DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-8



TZ PRODUCTS DUAL METER BOX

DUAL WATER METER AND PIT

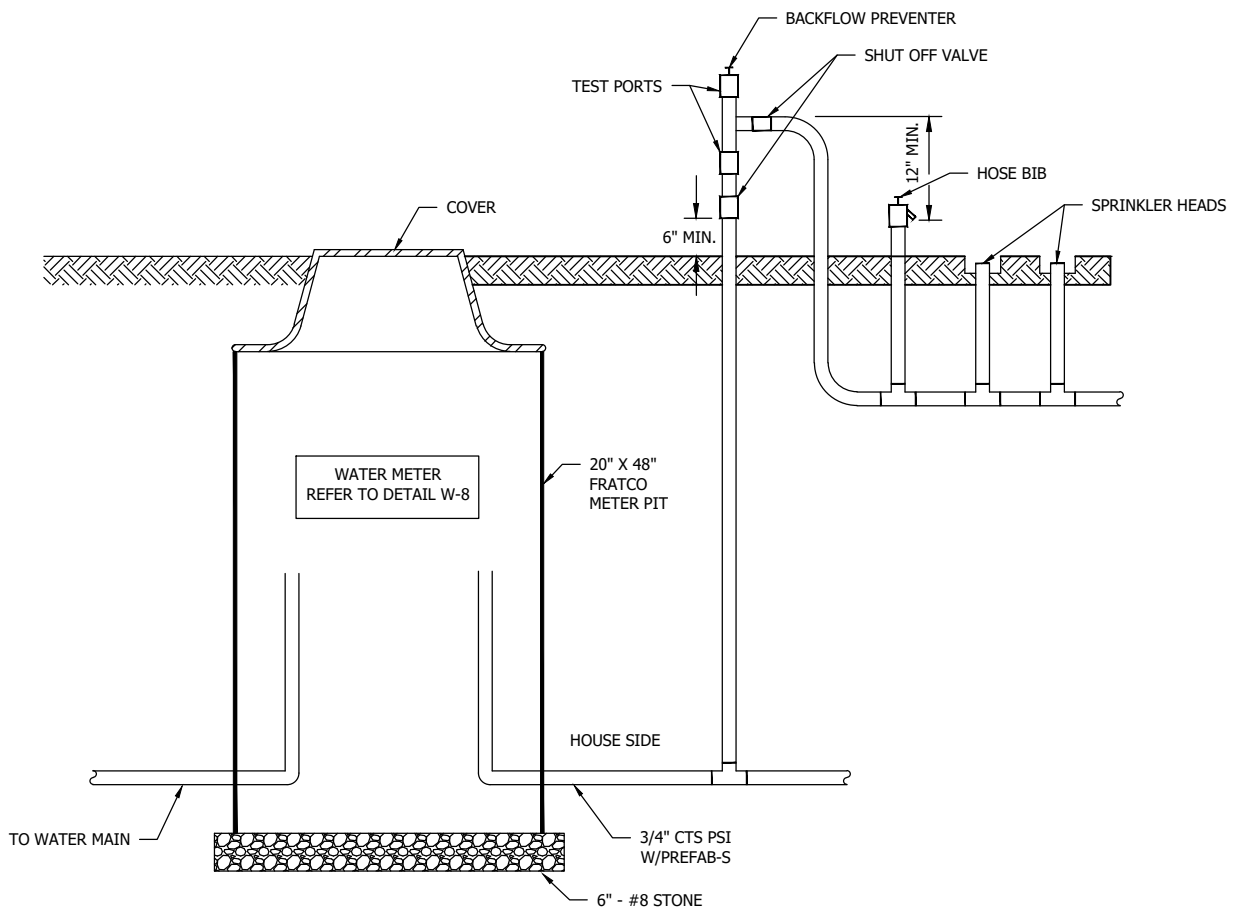


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-9



IRRIGATION CONNECTION - RESIDENTIAL

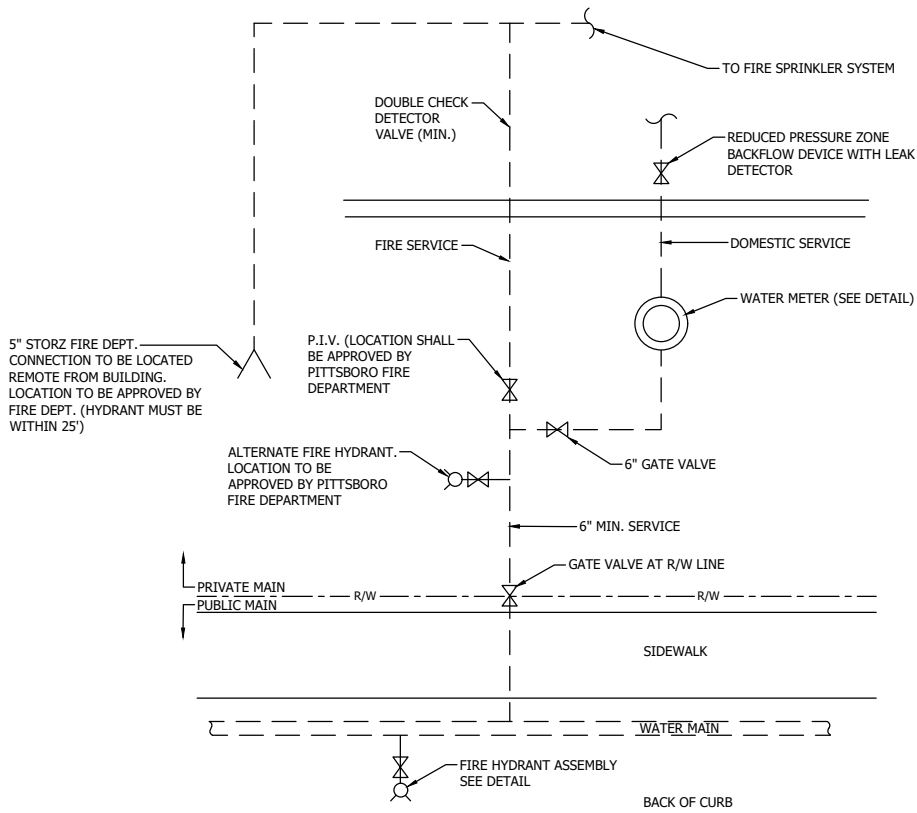


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:
08/25/2019

SCALE:
NOT TO SCALE

DETAIL NO:
W-10



NOTES:

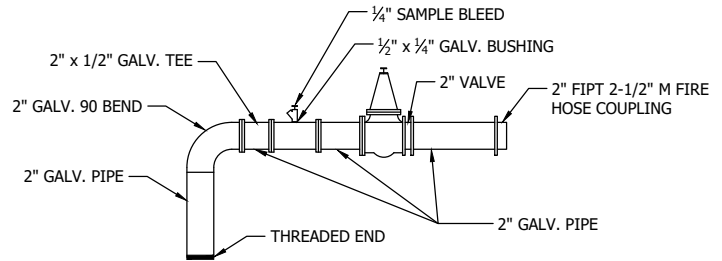
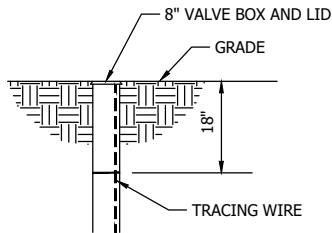
1. PRIVATE FIRE SERVICE MAINS SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER EITHER BEYOND THE SHUT-OFF VALVE LOCATED AT THE R/W LINE OR BEYOND THE METER.
2. MULTI-UNIT RESIDENTIAL COMPLEXES MAY BE SERVED WITH A COMMON MAIN FOR FIRE AND DOMESTIC SERVICE, MASTER-METERED AT THE ENTRANCE TO THE PROPERTY, WITH FIRE DEPARTMENT CONNECTIONS FOR EACH BUILDING. A FIRE-SERVICE RATED METER SHALL BE REQUIRED FOR SUCH A CONFIGURATION.
3. ALL PRIVATE MAINS SHALL BE CONSTRUCTED TO MEET OR EXCEED THE SAME STANDARDS AS PUBLIC MAINS IN ADDITION TO ANY APPLICABLE STANDARDS OF THE NFPA, AND SHALL BE HYDROSTATIC TESTED AND DISINFECTED PRIOR TO BEING PLACED INTO SERVICE.
4. THE OWNER SHALL REPAIR ANY LEAKS ON PRIVATE MAINS WITHIN 48 HOURS OF THEIR DISCOVERY. IF THE REPAIR IS NOT COMPLETED WITHIN THIS TIME, THE UTILITY CAN FIX THE LEAK AND CHARGE THE OWNER FOR THE COST OF REPAIRS OR SHUT OFF SERVICE UNTIL THE REPAIR IS MADE.
5. THE DEVELOPER'S ENGINEER SHALL SUBMIT DESIGN CALCULATIONS OF THE PLANNED SYSTEM FOR THE TOWN'S REVIEW.
6. AN APPROVED BACKFLOW PREVENTION DEVICE SHALL BE REQUIRED AT THE CONNECTION TO THE MAIN IF THERE ARE ANY POTENTIAL CROSS CONNECTION SOURCES WITHIN THE PRIVATE MAIN SYSTEM.
7. BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL SHALL COMPLY WITH 327IAC 8-10.

STANDARD FIRE SERVICE CONNECTION

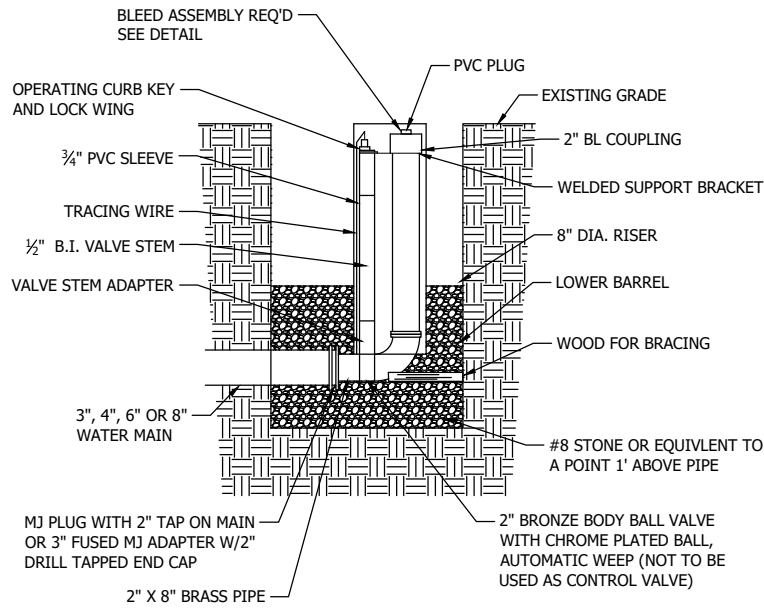


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:	11/25/2020
SCALE:	NOT TO SCALE
DETAIL NO:	W-11



BLEED ASSEMBLY DETAIL



BLOW-OFF ASSEMBLY

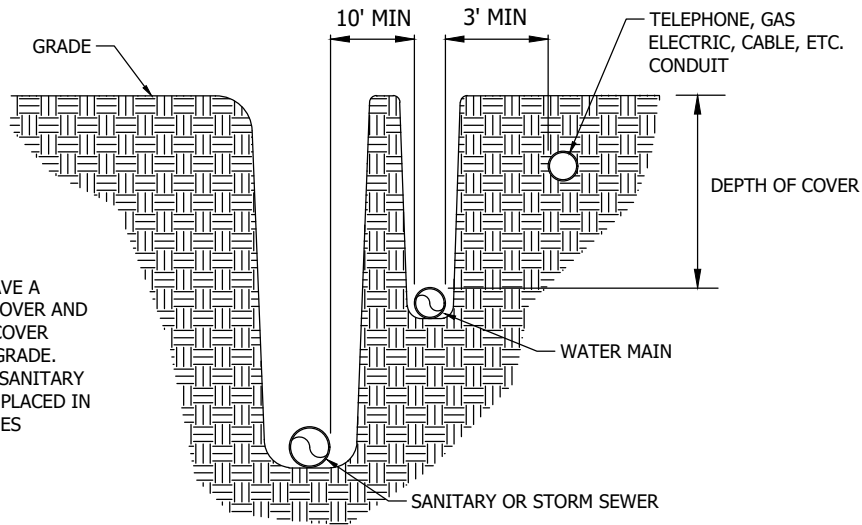
TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL



DATE:
11/25/2020

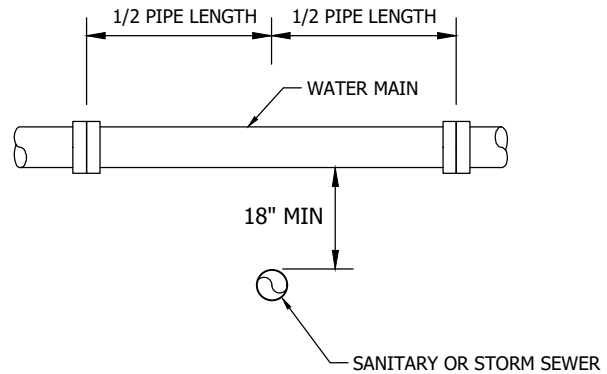
SCALE:
NOT TO SCALE

DETAIL NO:
W-12



NOTE:

1. ALL PIPE SHALL HAVE A MINIMUM OF 54" COVER AND MAXIMUM OF 72" COVER BELOW FINISHED GRADE.
2. WATER MAIN AND SANITARY SEWERS SHALL BE PLACED IN SEPARATE TRENCHES



WATER AND SEWER MAIN SEPARATION

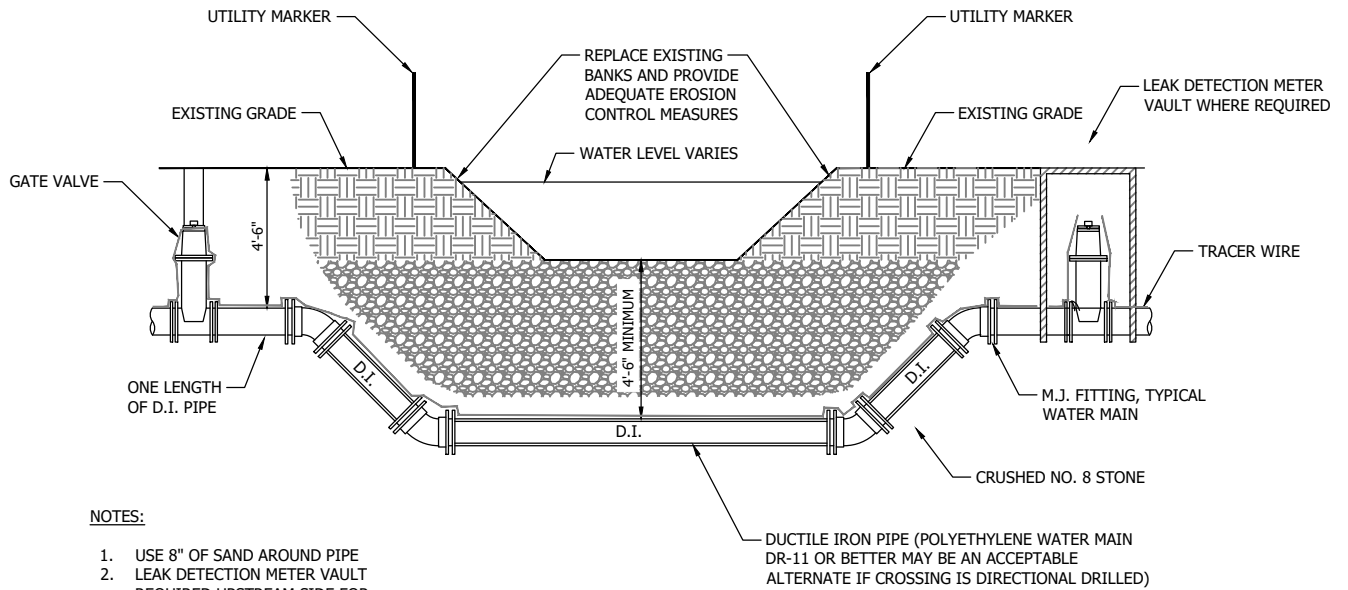


TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-13



NOTES:

1. USE 8" OF SAND AROUND PIPE
2. LEAK DETECTION METER VAULT REQUIRED UPSTREAM SIDE FOR ALL CREEK CROSSINGS GREATER THAN 15' IN WIDTH

DUCTILE IRON PIPE (POLYETHYLENE WATER MAIN DR-11 OR BETTER MAY BE AN ACCEPTABLE ALTERNATE IF CROSSING IS DIRECTIONAL DRILLED)

STREAM CROSSING DETAIL



TOWN OF PITTSBORO STANDARD CONSTRUCTION DETAIL

DATE:
11/25/2020

SCALE:
NOT TO SCALE

DETAIL NO:
W-14