



DROP LID (CAST IRON)

TYLER NO. 6860  
MUELLER NO. H-10361



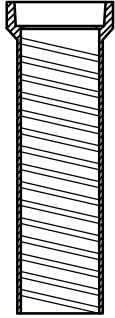
NOTES:

TIE ROD ASSEMBLIES TO BE STAINLESS STEEL OR FUSION BONDED EPOXY COATED.

COR-BLUE BOLTS & NUTS REQUIRED ON ALL MECHANICAL JOINT FITTINGS.

8.0' MINIMUM COVER REQUIRED OVER TOP OF WATER MAIN.

RESTRAIN TEE AND VALVE WITH MEGALUG THRUST RESTRAINTS. (OR EQUAL)

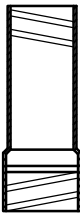


TOP (CAST IRON)

TYLER NO. 6860 26"  
MUELLER NO. H-10361 26"

GRADE

ADJUST TOP TO 3/8" BELOW GRADE.  
SET BOX TO PROVIDE 12" OF ADJUSTMENT.



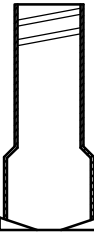
EXTENSION (DUCTILE IRON)

TYLER NO. 58 14"  
NO. 59 18"  
NO. 60 24"

MUELLER NO. 58 14"  
NO. 59 20"

TYLER NO. 6860  
MUELLER NO. H-10357

GATE VALVE BOX, SCREW TYPE, 3  
PIECE, 5 1/4" SHAFT, SIZE G BOX,  
8'-0" EXTENDED, #6 ROUND BASE



BOTTOM (DUCTILE IRON)

TYLER NO. 6860 65"  
MUELLER NO. H-10361 65"

RESILIENT SEATED WEDGE  
VALVE CONFORMING TO  
AWWA C-509-80 STANDARDS

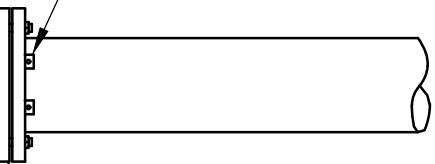
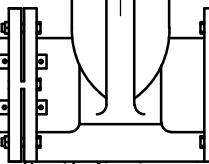
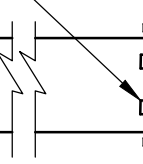
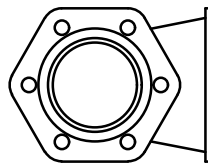
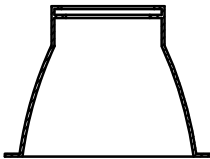
GATE VALVE ADAPTER: 1/4" STEEL  
W/PROTECTIVE COATING, 1/2"  
RUBBER GASKET INSTALLED  
BETWEEN GATE VALVE AND  
GATE VALVE ADAPTER

BASE

VARIABLE

MEGALUGS

MEGALUGS



8" CONC. BLOCK



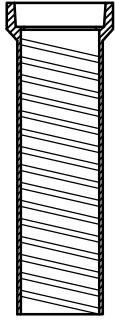
GATE VALVE & BOX  
INSTALLATION

LAST REVISION:  
JAN 2021

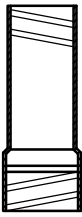
PLATE NO.  
WAT-1



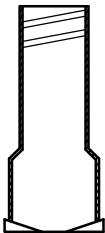
**DROP LID (CAST IRON)**  
 TYLER NO. 6850 OR 6860  
 MUELLER NO. H-10361



**TOP (CAST IRON)**  
 TYLER NO. 6850 26"  
 MUELLER NO. H-10361 26"



**EXTENSION (DUCTILE IRON)**  
 TYLER NO. 58 14"  
           NO. 59 18"  
           NO. 60 24"  
 MUELLER NO. 58 14"  
           NO. 59 20"



**BOTTOM (DUCTILE IRON)**  
 TYLER NO. 6850 65"  
 MUELLER NO. H-10361 65"

**NOTES:**  
 ANTI-CORROSIVE COATING REQUIRED ON ALL BOLTS AND TIE ROD ASSEMBLIES.

COR-BLUE BOLTS & NUTS REQUIRED ON ALL MECHANICAL JOINT FITTINGS.

8.0' MINIMUM COVER REQUIRED OVER TOP OF WATER MAIN.

RESTRAIN TEE AND VALVE WITH MEGALUG THRUST RESTRAINTS (OR EQUAL)

GRADE

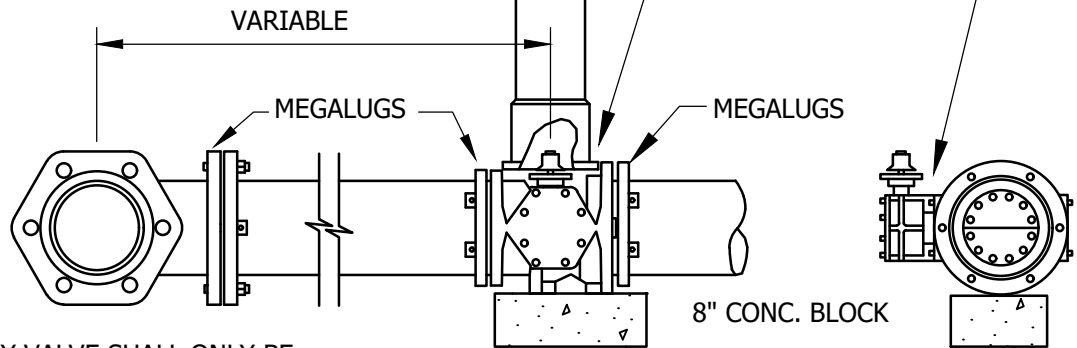
ADJUST TOP TO 3/8" BELOW GRADE. BOX TO BE SET TO PROVIDE 12" OF ADJUSTMENT.

GATE VALVE BOX, SCREW TYPE, 3 PIECE, 5 1/4" SHAFT, SIZE G BOX, 8'-0" EXTENDED.

TYLER NO. 6850  
 MUELLER NO. H-10357

VALVE STEM PLACEMENT:  
EAST - WEST WATERMAIN- VALVE ON NORTH SIDE OF WATERMAIN  
NORTH - SOUTH WATERMAIN - VALVE ON WEST SIDE WATERMAIN  
 UNLESS DIRECTED BY THE ENGINEER

BUTTERFLY VALVE CONFORMING TO AWWA C504.



END VIEW

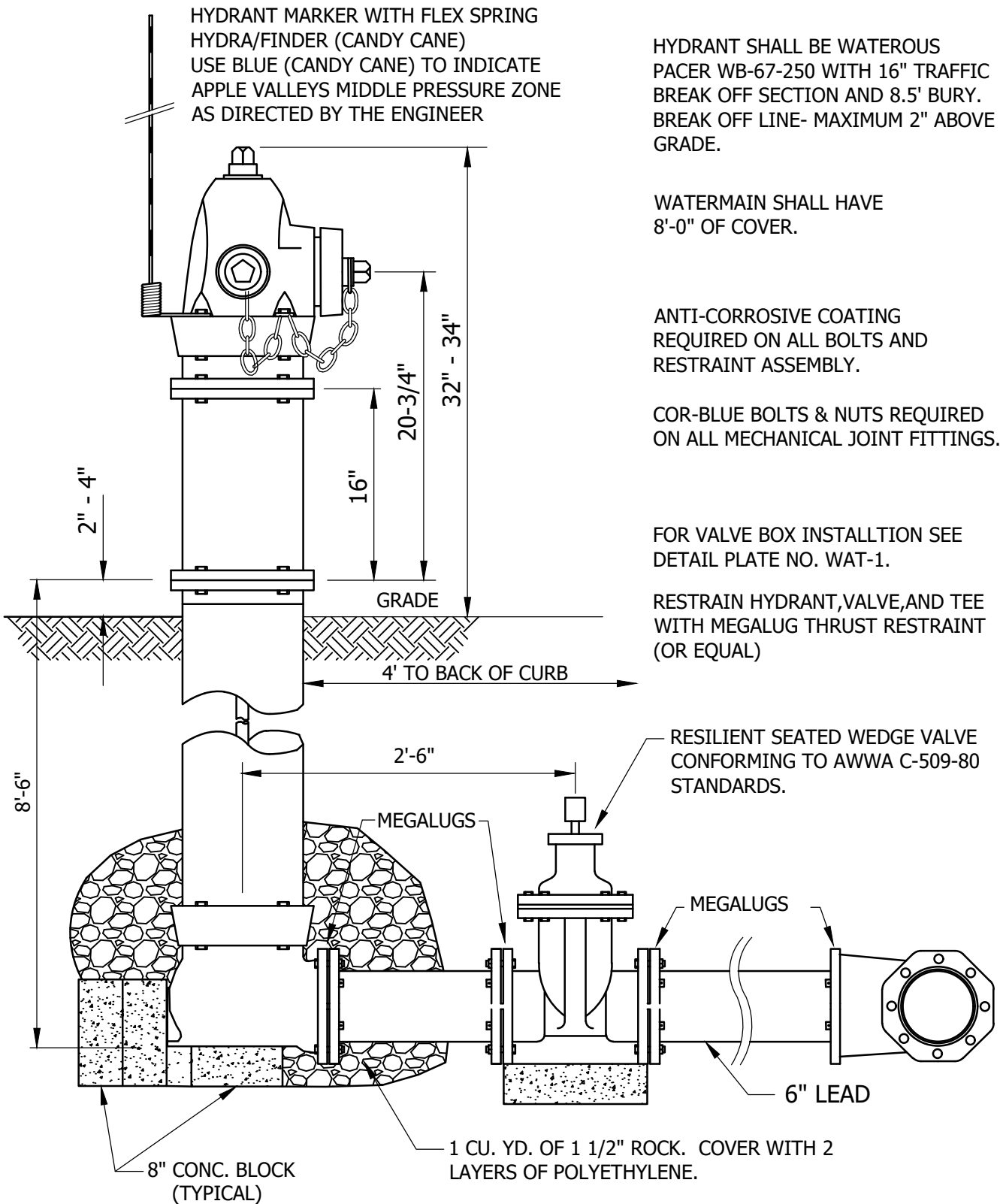
NOTE: BUTTERFLY VALVE SHALL ONLY BE USED ON 14" PIPE OR LARGER & WHEN APPROVED BY THE CITY.



**BUTTERFLY VALVE & BOX  
 INSTALLATION**

LAST REVISION:  
 JAN 2021

PLATE NO.  
 WAT-2



VALVE & HYDRANT  
 INSTALLATION

LAST REVISION:  
 JAN 2021

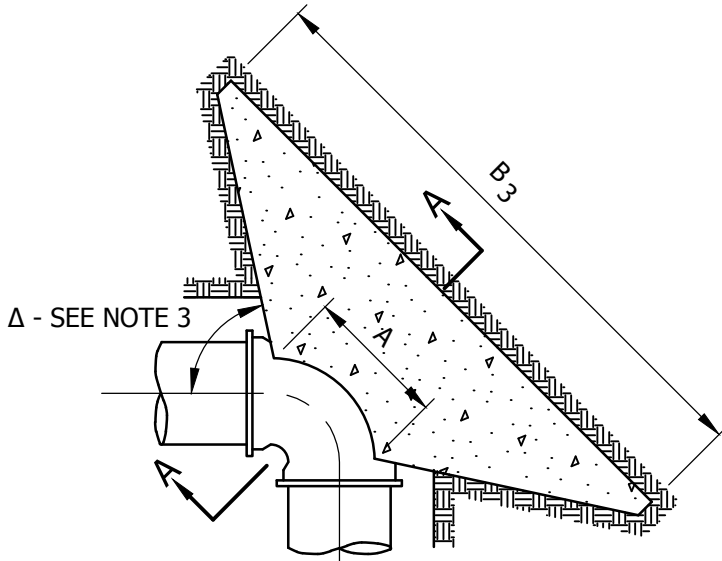
PLATE NO.  
 WAT-3

BUTTRESS DIMENSIONS

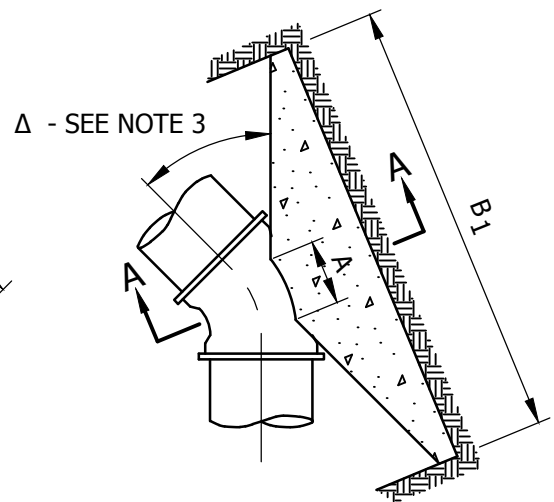
PIPE SIZE	22 1/2° BEND		45° BEND		90° BEND	
	B <sub>1</sub>	D <sub>1</sub>	B <sub>2</sub>	D <sub>2</sub>	B <sub>3</sub>	D <sub>3</sub>
6"	1'-5"	1'-5"	1'-5"	1'-5"	2'-1"	1'-6"
8"	1'-5"	1'-5"	2'-1"	1'-6"	2'-8"	2'-0"
12"	1'-10"	1'-10"	3'-4"	2'-0"	4'-9"	2'-6"
16"	3'-0"	2'-0"	3'-10"	3'-0"	6'-2"	3'-6"
20"	3'-6"	2'-8"	5'-6"	3'-4"	8'-4"	4'-0"
24"	4'-4"	3'-0"	6'-10"	3'-10"	9'-8"	5'-0"

NOTES:

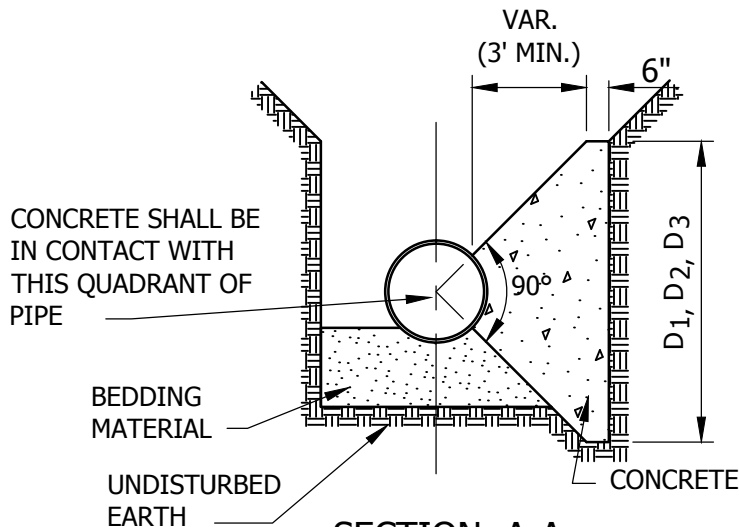
1. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS POURED AGAINST FIRM UNDISTURBED EARTH.
2. DIMENSION 'A' SHOULD BE AS LARGE AS POSSIBLE.
3. Δ = 45° MINIMUM.
4. PLACE POLYETHYLENE BETWEEN CONCRETE & PIPE.
5. ALL BENDS AND FITTINGS SHALL BE RESTRAINED WITH MEGALUGS THRUST RESTRAINTS OR EQUAL.



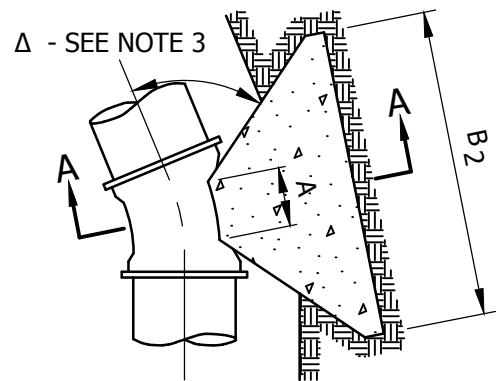
PLAN 45° TO 90° BENDS



PLAN 22 1/2° TO 45° BENDS



SECTION A-A



PLAN 0° TO 22 1/2° BENDS



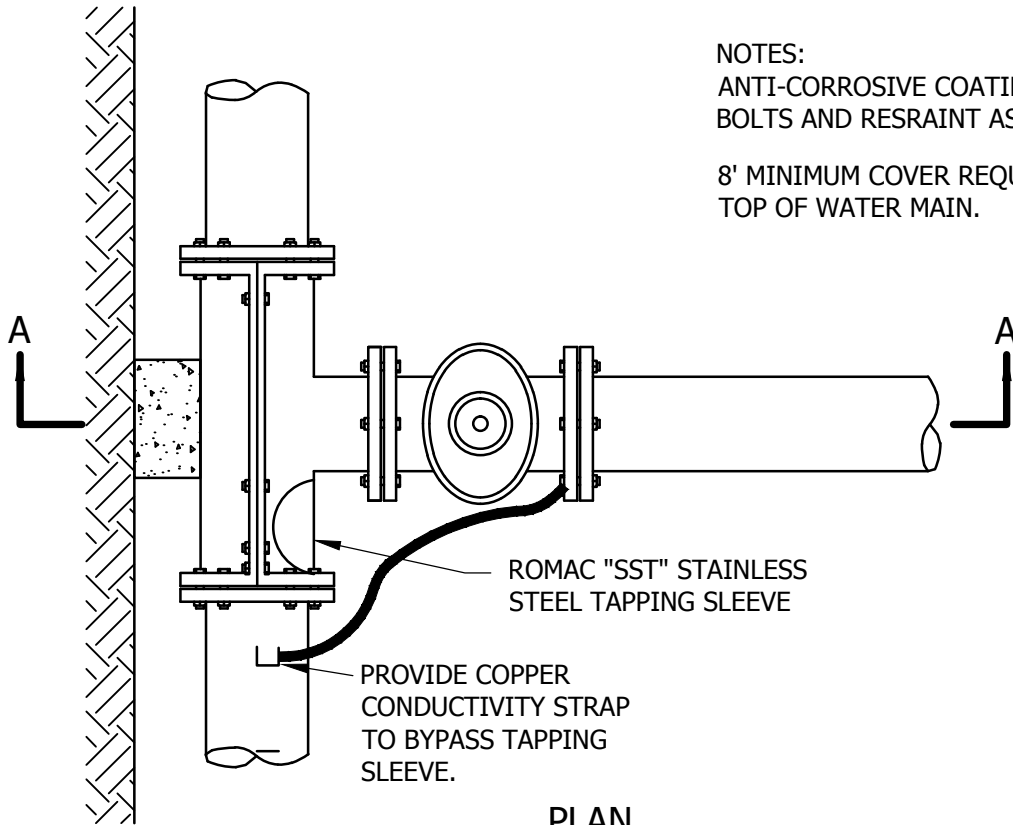
CONCRETE THRUST BLOCKING

LAST REVISION:  
APR 2009

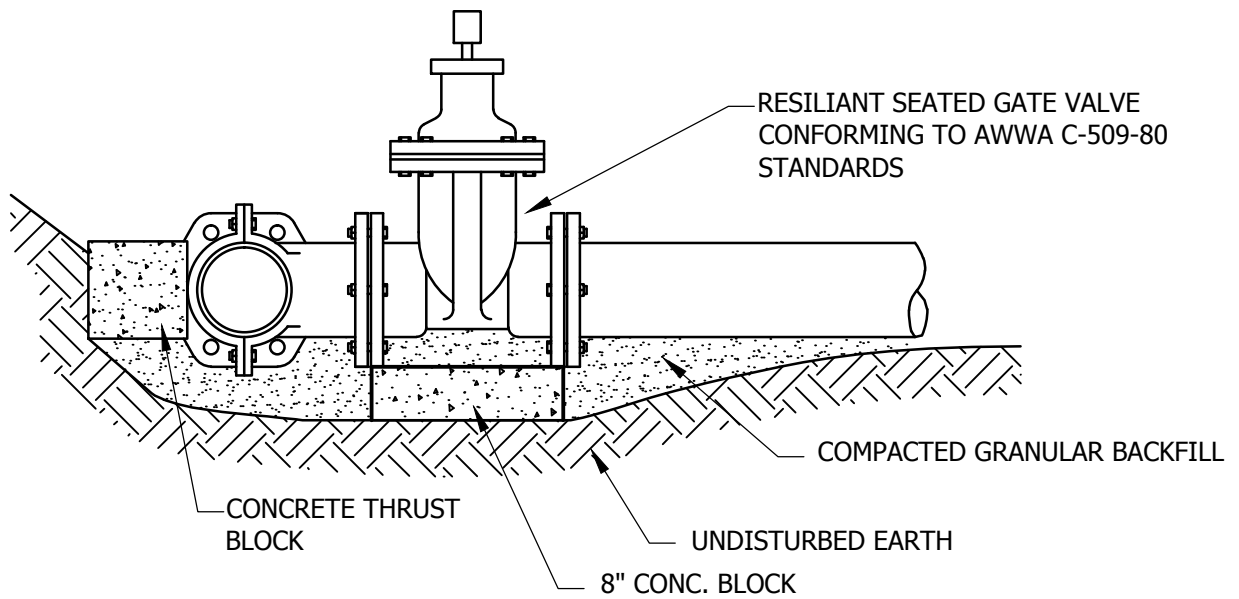
PLATE NO.  
WAT-4

NOTES:  
ANTI-CORROSIVE COATING REQUIRED ON ALL  
BOLTS AND RESRAINT ASSEMBLIES.

8' MINIMUM COVER REQUIRED OVER  
TOP OF WATER MAIN.



PLAN



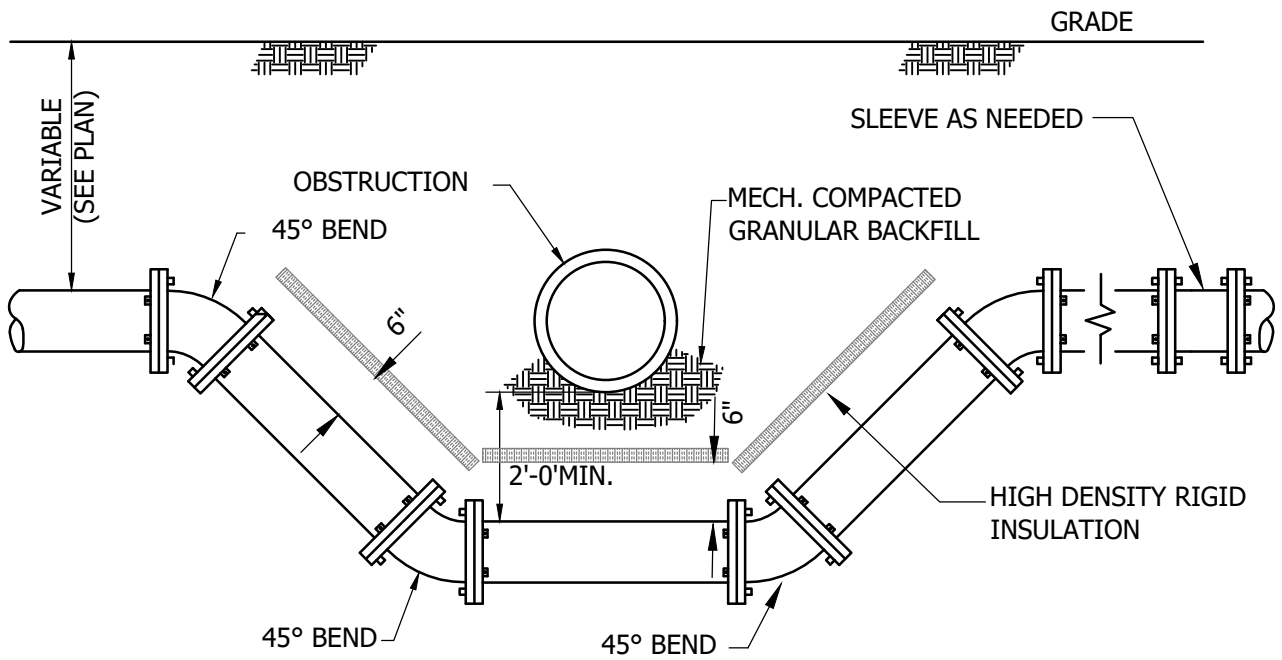
SECTION A-A



WATERMAIN WET TAP

LAST REVISION:  
JUNE 2009

PLATE NO.  
WAT-5



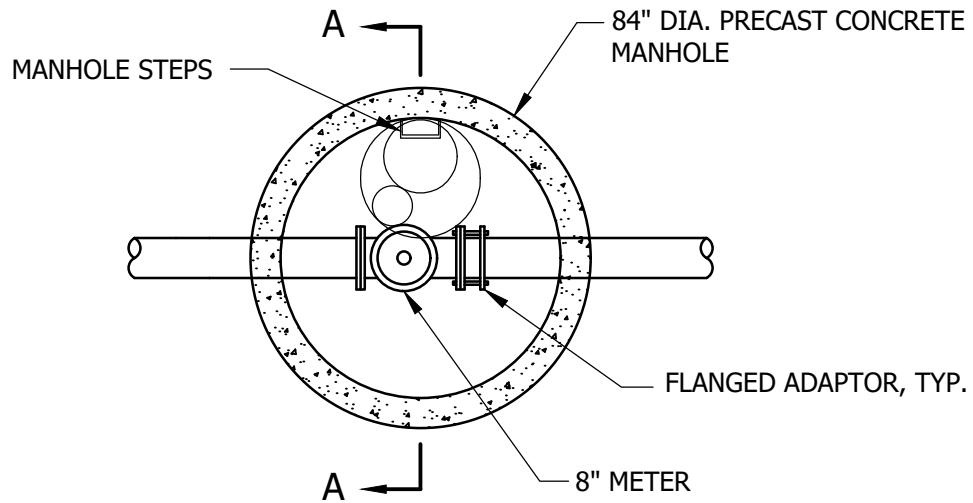
1. USE MEGALUG THRUST RESTRAINTS ON ALL FITTINGS.
2. ON NEW CONSTRUCTION: RESTRAIN A MINIMUM OF TWO PIPE JOINTS (40LF) LEFT AND RIGHT OF THE OFFSET PIPING.
3. SEE PLATE NO. WAT-4 TO DETERMINE THE REQUIRED CONCRETE THRUST BLOCKING.
4. CORE-BLUE BOLTS & NUTS REQUIRED ON ALL MECHANICAL JOINT FITTINGS.



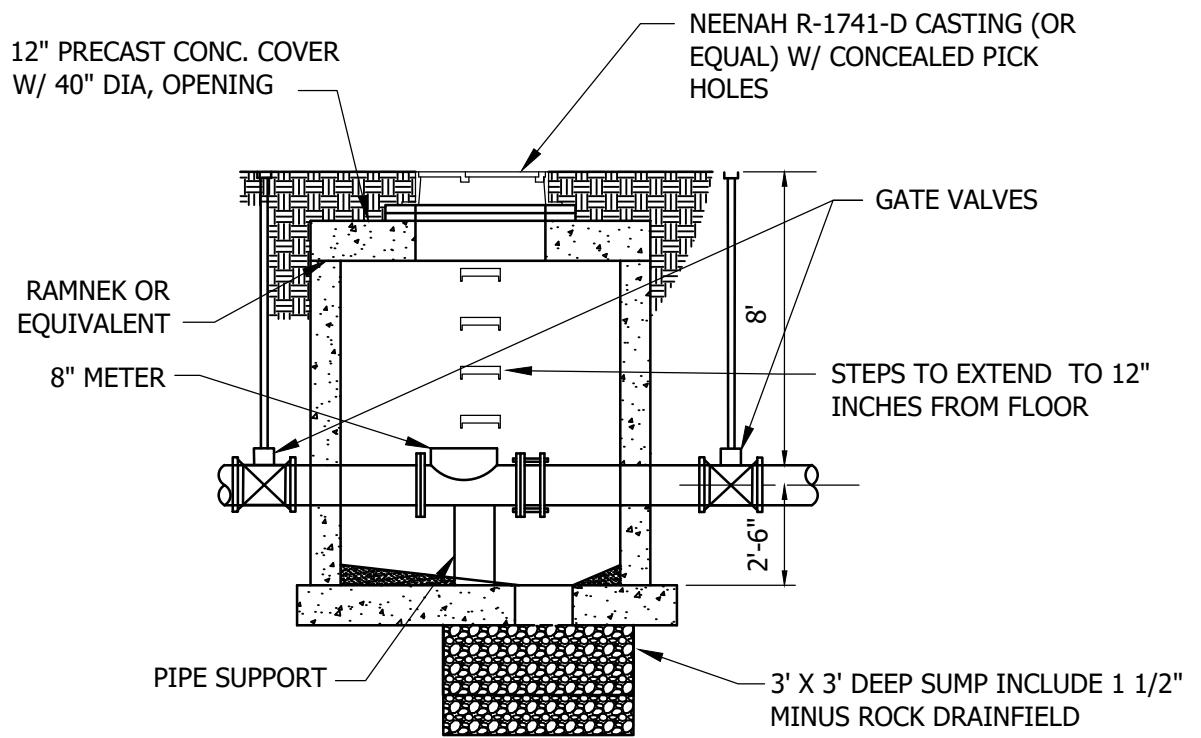
## WATERMAIN OFFSET WITH INSULATION

LAST REVISION:  
APR 2009

PLATE NO.  
WAT-6



PLAN



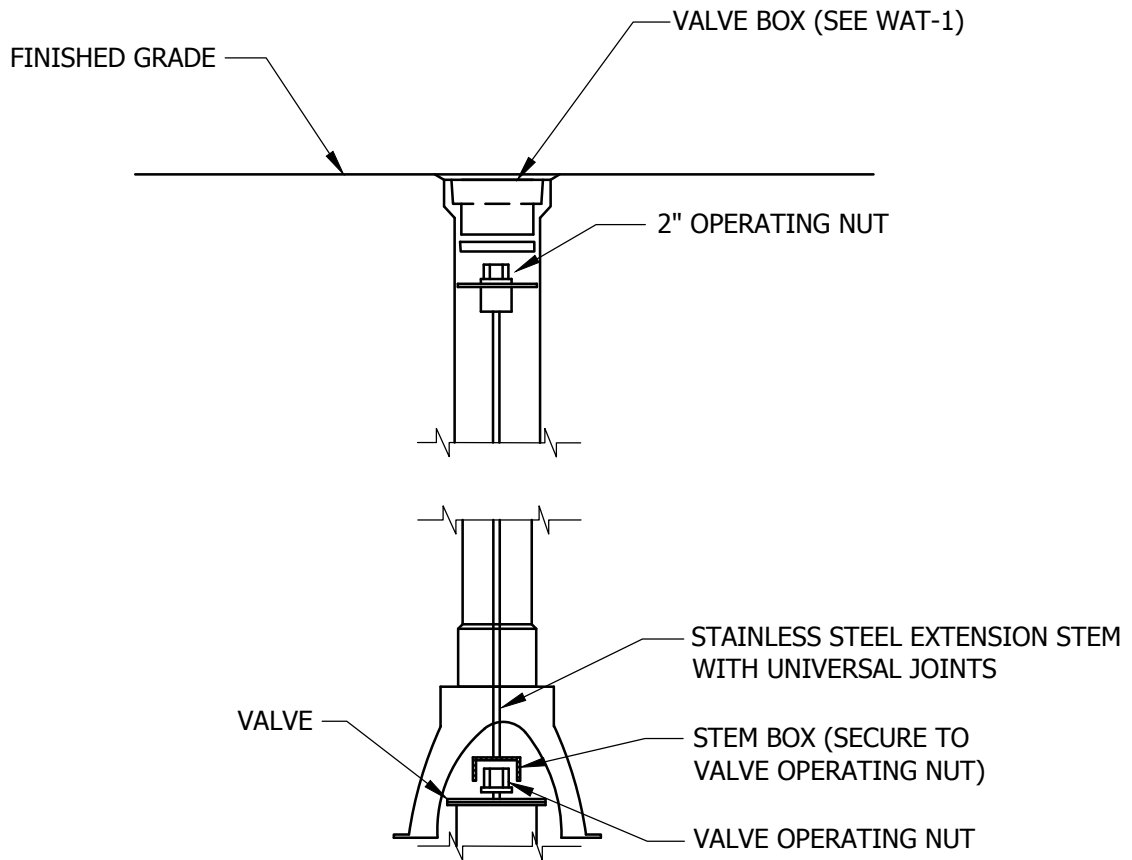
SECTION A-A



METER STATION

LAST REVISION:  
DEC 2019

PLATE NO.  
WAT-7



NOTE:  
 VALVE STEM EXTENSION  
 REQUIRED WHEN OPERATING  
 NUT EXCEEDS 10' IN DEPTH.

VALVE STEM EXTENSION



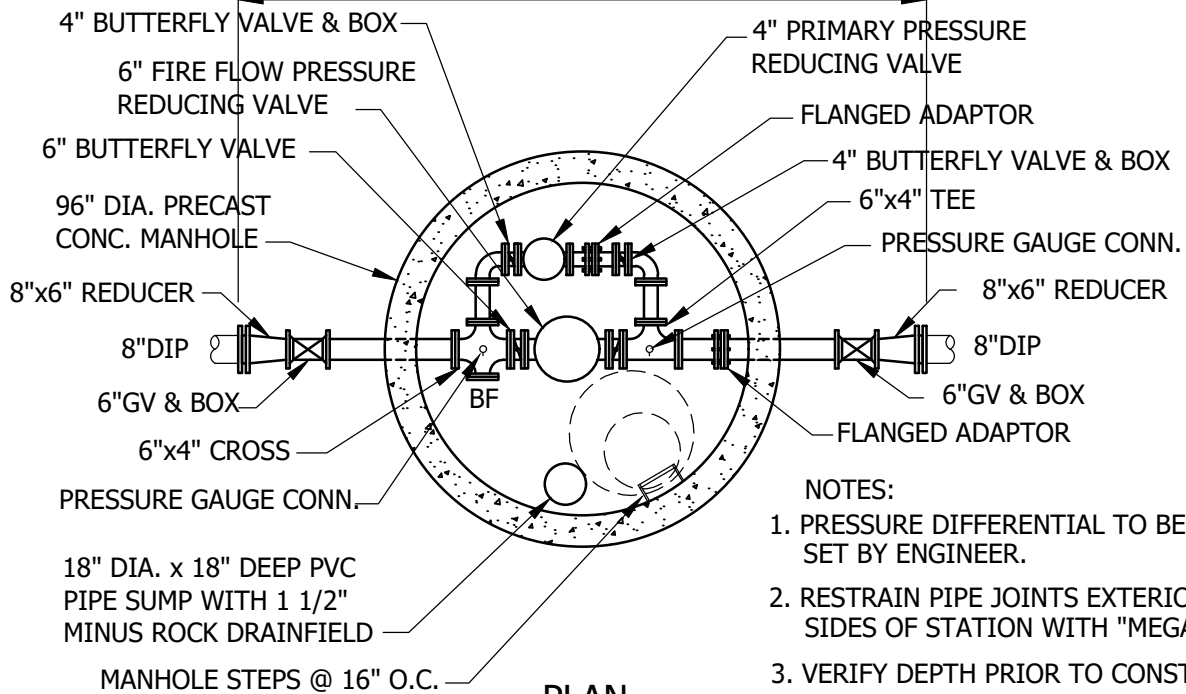
VALVE STEM EXTENSION

LAST REVISION:  
 JUNE 2009

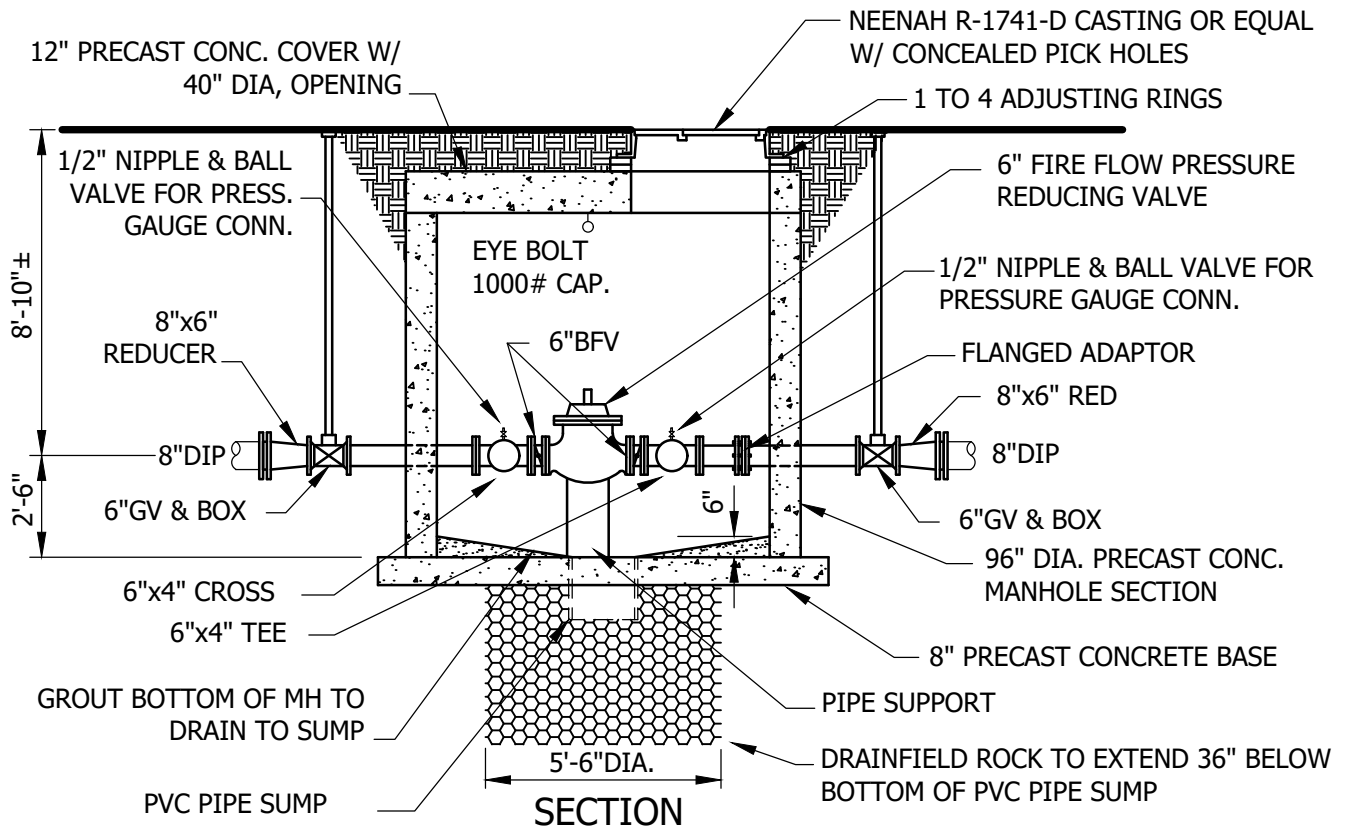
PLATE NO.  
 WAT-8



LUMP SUM PRV STATION BID



PLAN



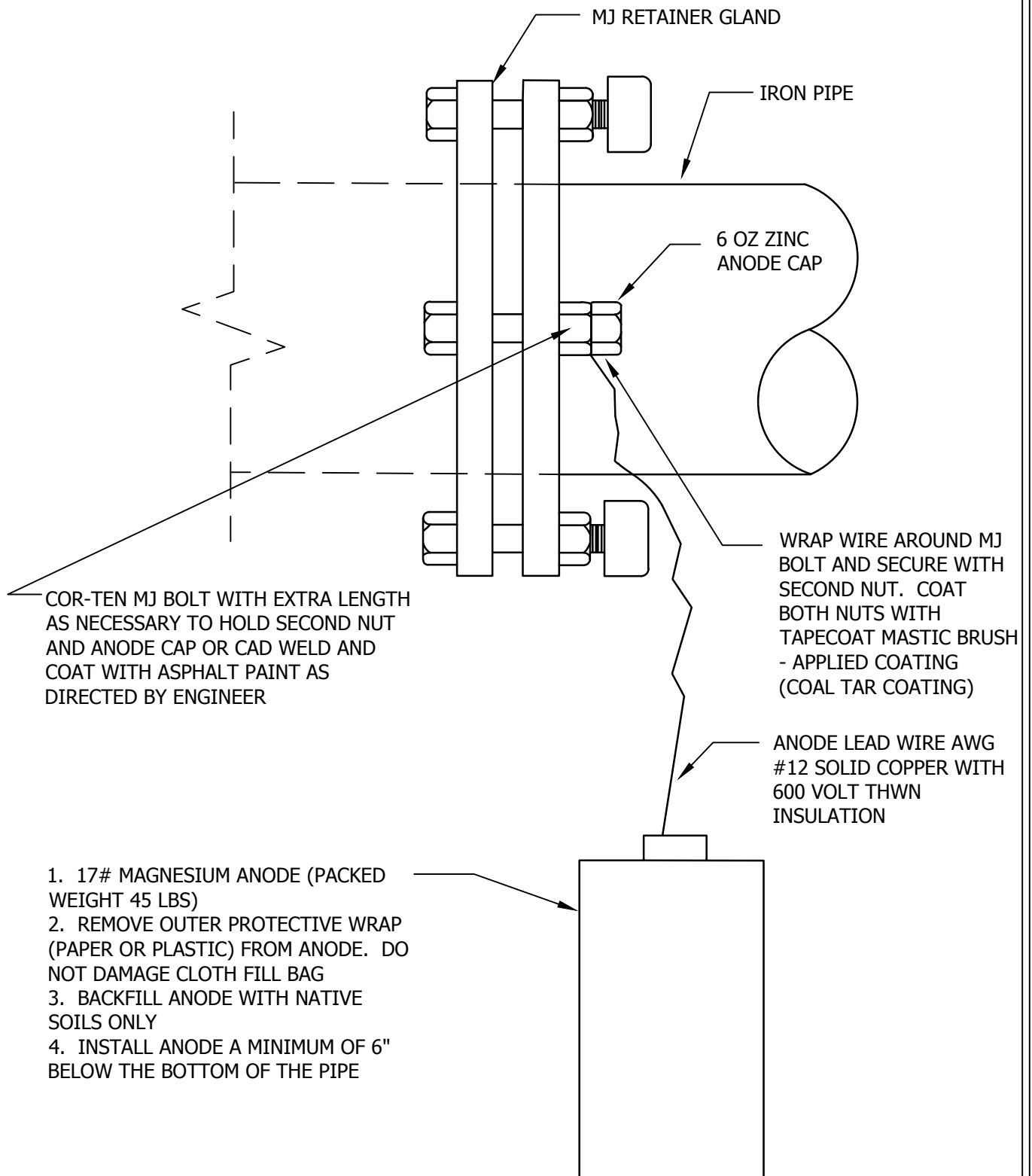
SECTION



PRESSURE REDUCING STATION

LAST REVISION:  
 DEC 2020

PLATE NO.  
 WAT-9



## ANODE CONNECTION

LAST REVISION:  
JAN 2017

PLATE NO.  
**WAT-10**