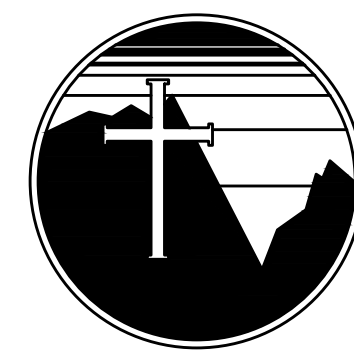


# TOWN OF MEEKER, CO

## Water Valve Replacement

**PREPARED BY:**



**MOUNTAIN CROSS ENGINEERING, INC.**  
 Civil and Environmental Consulting and Design  
 826 1/2 Grand Avenue Glenwood Springs, CO 81601  
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**GENERAL NOTES:**

1. PIPELINE MATERIAL SHALL BE CLASS 350 DUCTILE IRON PIPE; POLYWRAP IS REQUIRED.
2. INSTALL MEGA-LUG JOINT RESTRAINTS ON ALL FITTING JOINTS.
3. A MINIMUM SEPARATION OF 10 FEET BETWEEN THE EDGE OF THE WATER LINE AND THE EDGE OF A SEWER MAIN SHALL BE MAINTAINED.
4. THE NEW WATER LINE SHALL BE INSTALLED AT A POSITIVE OR FLAT GRADE AT ALL TIMES; NO INTERMEDIATE HIGH POINTS IN THE PIPELINE WILL BE ALLOWED.
5. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS.
6. ALL EXISTING IMPROVEMENTS, INCLUDING SIDEWALKS, PAVEMENT, TURF GRASS, LANDSCAPING, CULVERT PIPES, SIGNS, MAILBOXES, DRAINAGE, ETC. SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.
7. ALL DISTURBED EMBANKMENT AREAS SHALL BE SEEDDED AND MULCHED; EXISTING TURF GRASS SHALL BE REPLACED WITH SOD. FINISH GRADING SHALL MAINTAIN DRAINAGE.
8. MINIMIZE THE TIME THAT DRIVEWAY ACCESSES ONTO THE STREET ARE CLOSED. PROVIDE ALTERNATIVE ACCESS WHERE FEASIBLE.
9. PRESSURE TESTING WILL NOT BE ALLOWED UNTIL THE PIPE HAS BEEN INITIALLY BACKFILLED.
10. WATER LINE TO BE CHLORINATED, TESTED, AND CHARGED PER CITY BLOCK AS CONSTRUCTION PROCEEDS.
11. CONTRACTOR TO POTHOLE AND VERIFY PIPE SIZE AND FITTINGS NEEDED PRIOR TO BEGINNING CONSTRUCTION. CONTACT THE ENGINEER AND/OR TOWN OF MEEKER FOR DESIGN ALTERNATIVES IF NECESSARY.



**DRAWING LIST:**

1. Cover Sheet
2. Plan Sheet
3. Details



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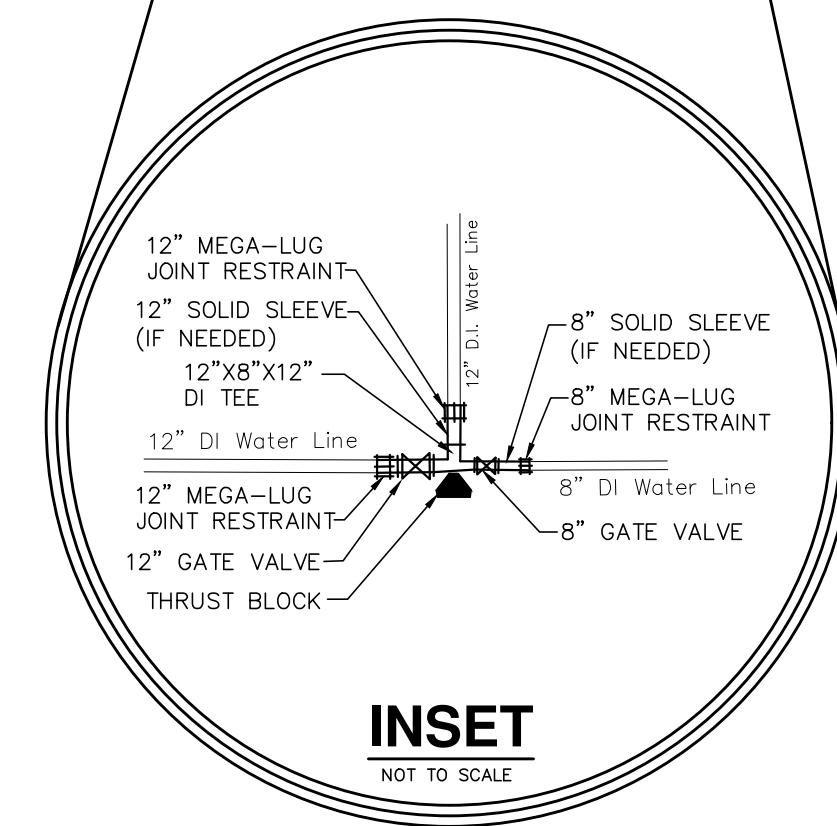
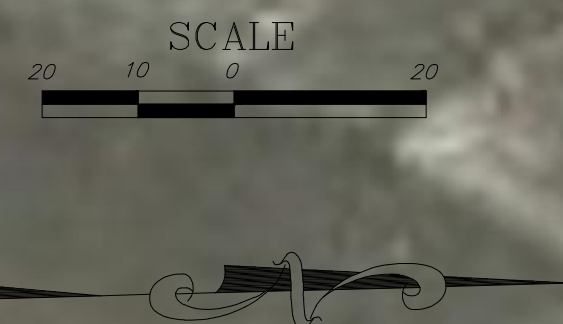
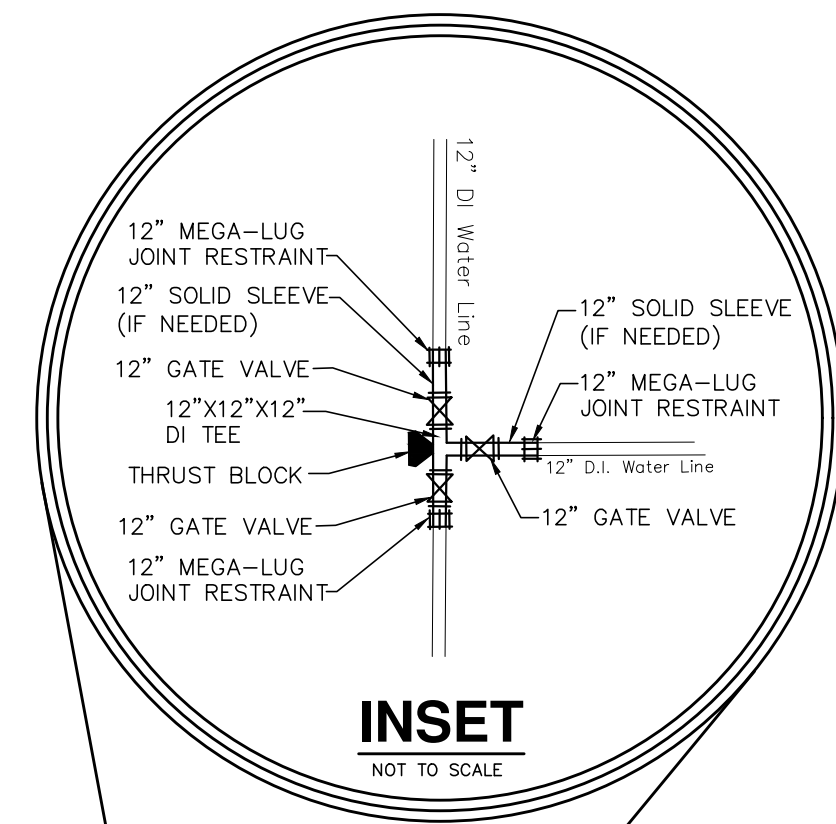
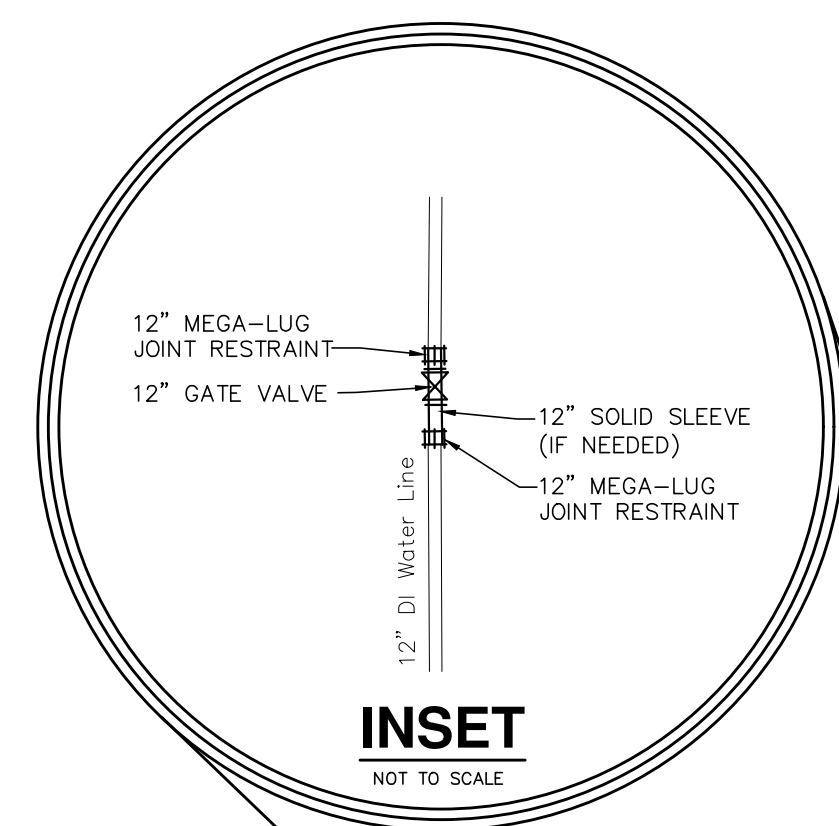
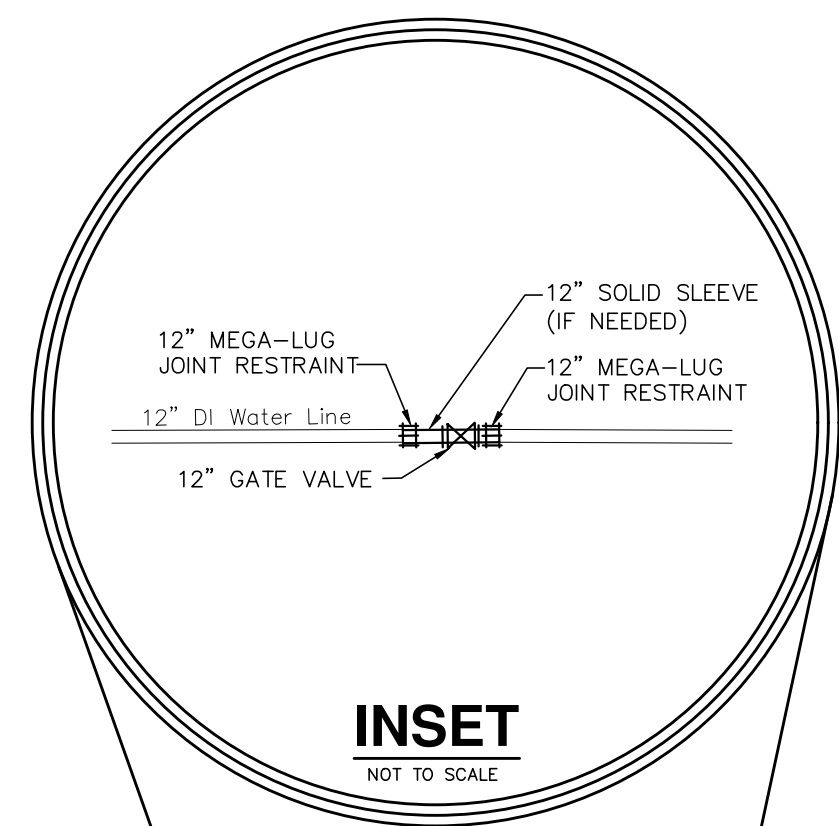
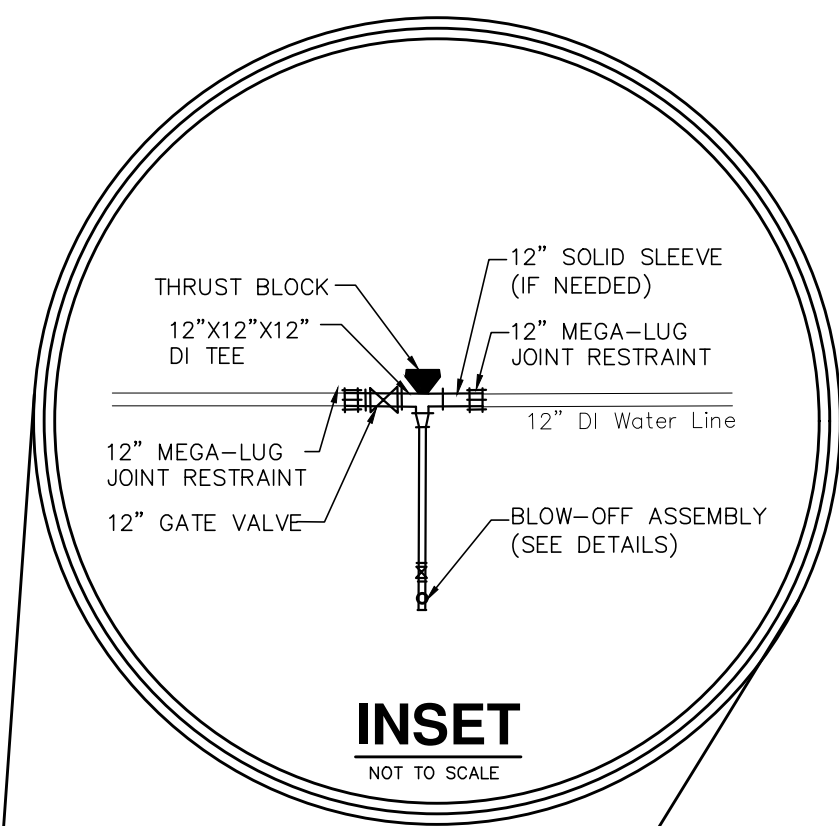
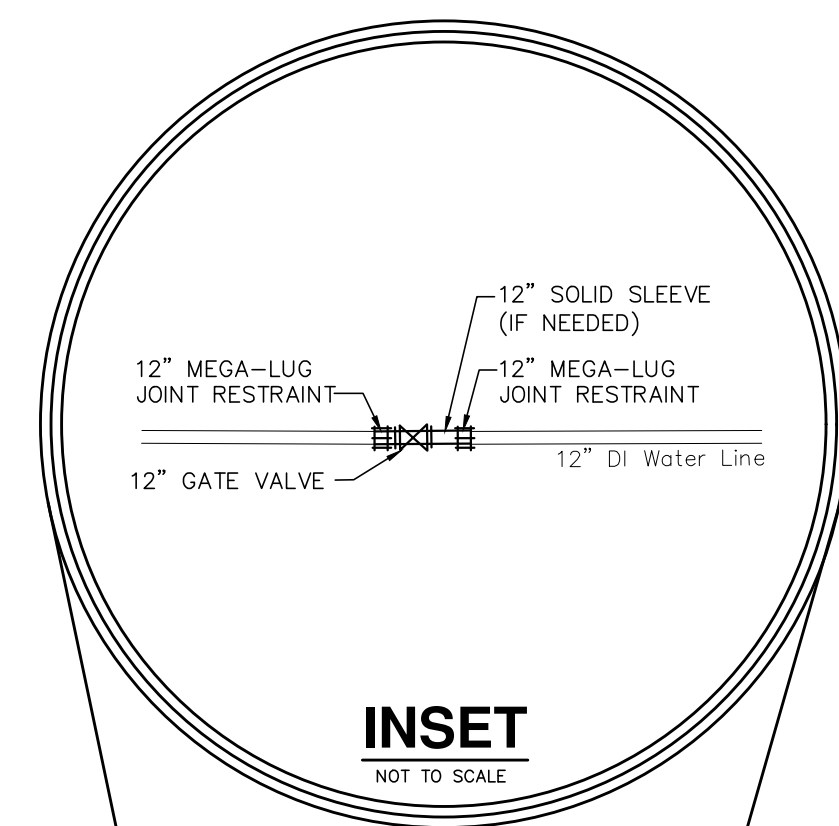
**TOWN OF MEEKER**  
**Water Valve Replacement**  
**COVER**



REVISIONS	DATE	BY	COMMENTS

DATE: 01/11/23  
 SCALE: NO SCALE  
 ENGINEER: C. HALE  
 DWG FILE: WaterValvesDesign  
 JOB: 319-061  
 SHEET: **1**





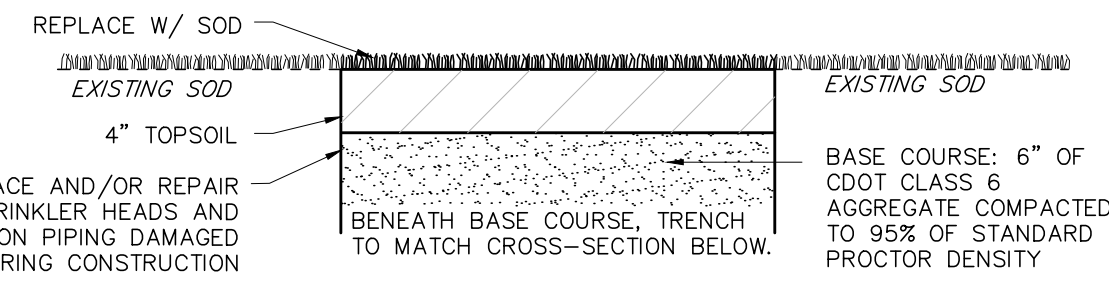
**TOWN OF MEEKER**  
Water Valve Replacement  
PLAN SHEET



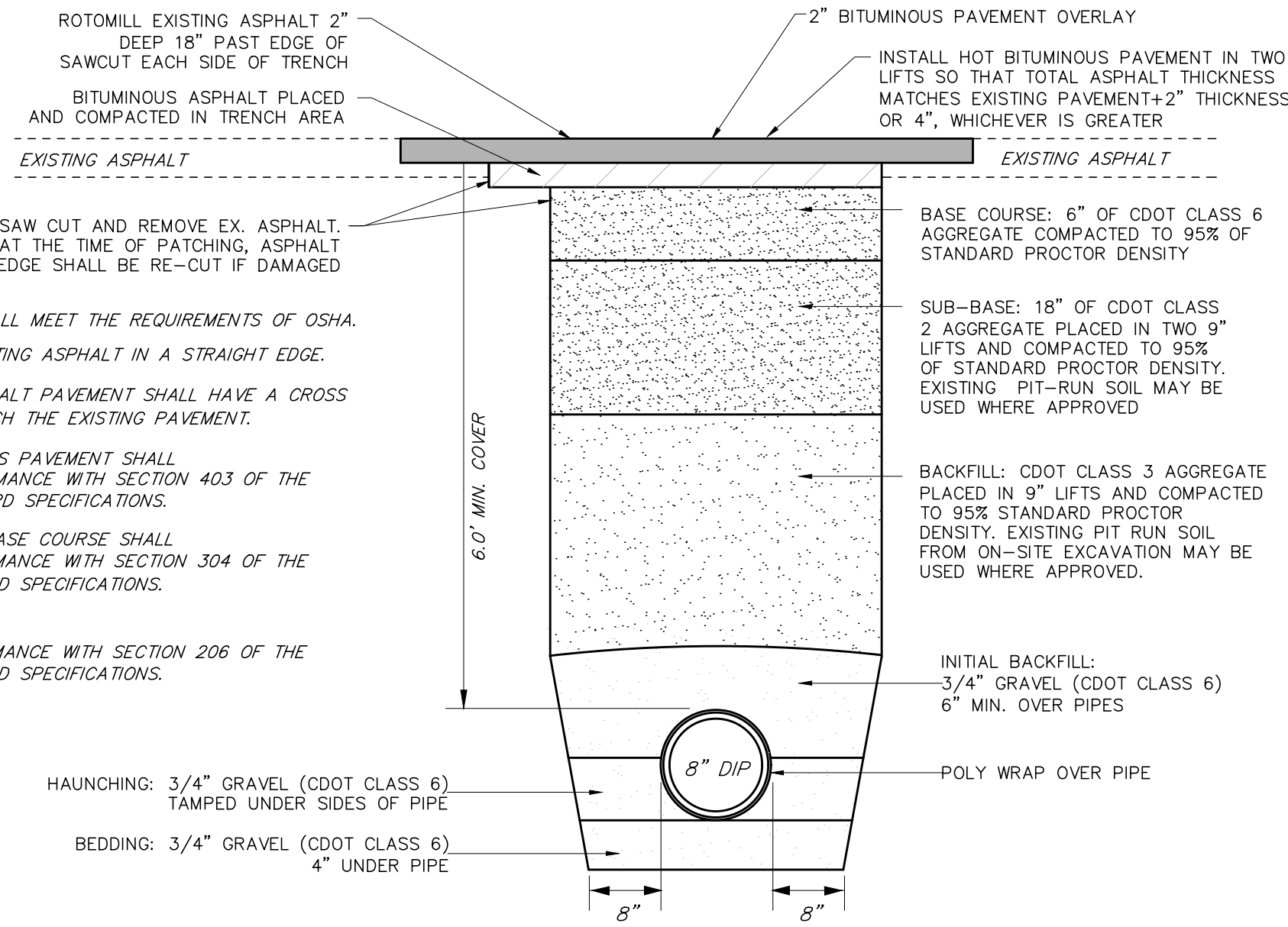
REVISIONS	DATE	BY	COMMENTS

DATE: 01/11/23  
SCALE: 1" = 100'  
ENGINEER: C. HALE  
DWG FILE: WaterValvesDesign  
JOB: 319-061  
SHEET: **2**





TRENCH IN LANDSCAPING

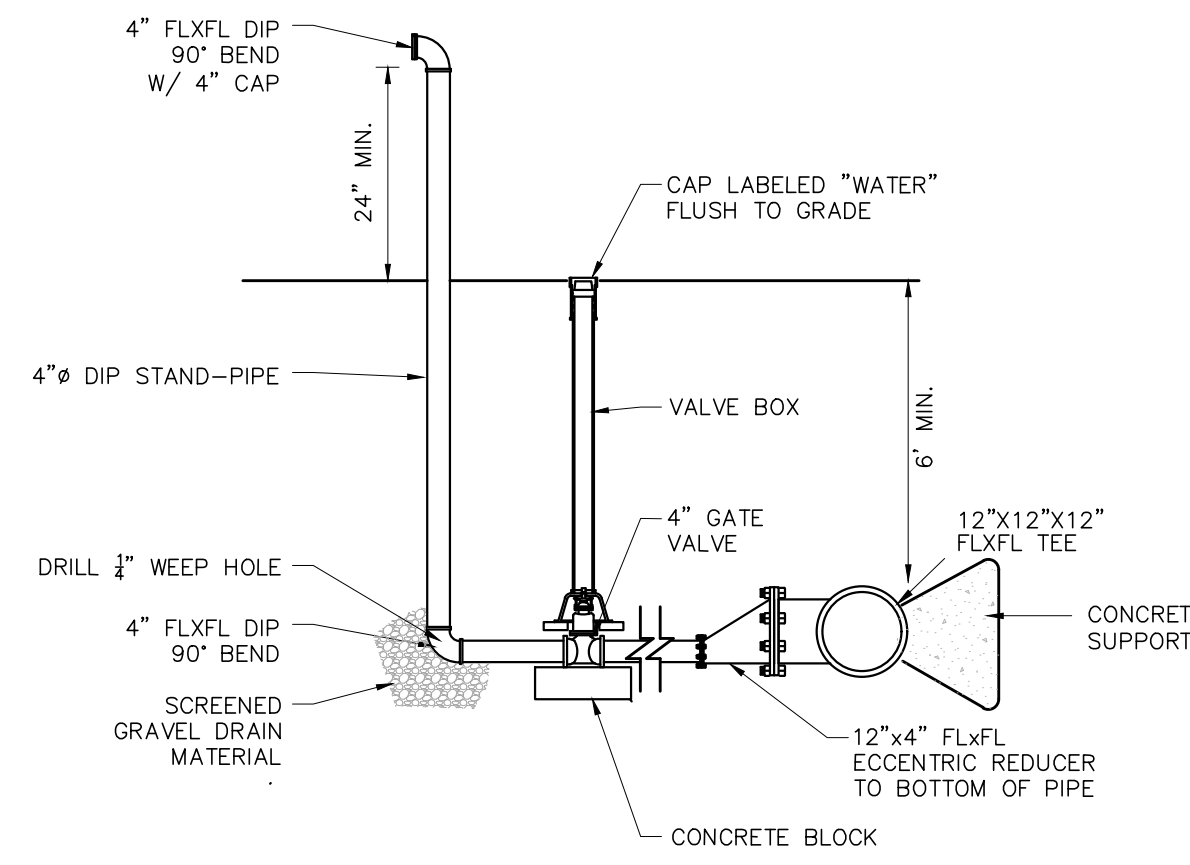


CROSS-SECTION OF WATER LINE TRENCH

NOT TO SCALE

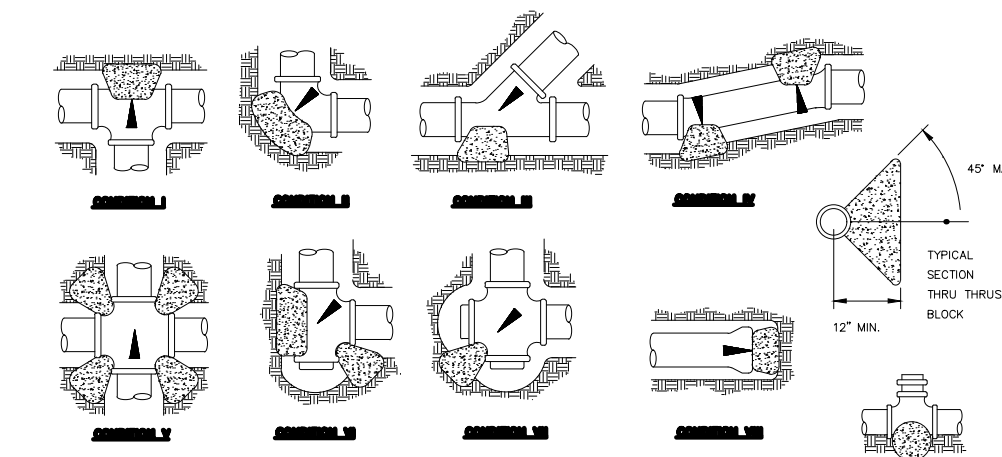
NOTES:

1. TRENCHING SHALL MEET THE REQUIREMENTS OF OSHA.
2. SAW CUT EXISTING ASPHALT IN A STRAIGHT EDGE.
3. THE NEW ASPHALT PAVEMENT SHALL HAVE A CROSS SLOPE TO MATCH THE EXISTING PAVEMENT.
4. HOT BITUMINOUS PAVEMENT SHALL BE IN CONFORMANCE WITH SECTION 403 OF THE CDOT STANDARD SPECIFICATIONS.
5. AGGREGATE BASE COURSE SHALL BE IN CONFORMANCE WITH SECTION 304 OF THE CDOT STANDARD SPECIFICATIONS.
6. BACKFILL SHALL BE IN CONFORMANCE WITH SECTION 206 OF THE CDOT STANDARD SPECIFICATIONS.



BLOW-OFF ASSEMBLY

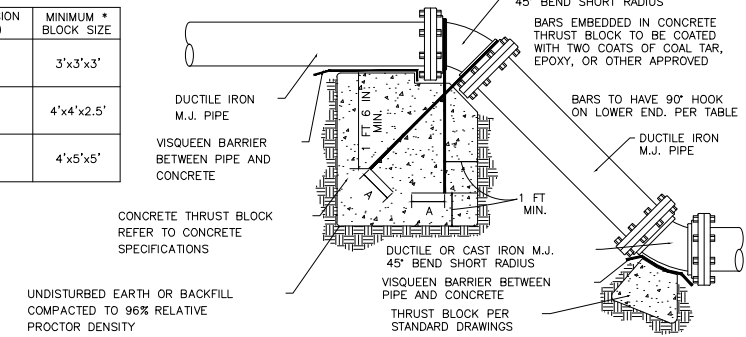
NOT TO SCALE



PIPE SIZE	CONCRETE					
	I	II	III	IV	V	VI
4"	2.6	3.3	2.6	1.3	2.0	3.3
6"	4.6	6.9	3.9	2.0	3.3	6.9
8"	5.9	11.0	5.9	3.3	5.9	11.0
10"	12.4	17.5	9.8	5.2	6.9	17.5
12"	17.5	24.8	13.9	7.8	9.1	24.8
14"	24.0	33.8	18.2	9.7	12.5	33.8
16"	31.1	44.0	23.8	12.7	15.5	44.0
18"	40.0	56.8	30.8	16.2	19.8	56.8
20"	49.6	68.8	37.2	19.9	24.2	68.8
24"	58.2	82.6	44.6	23.7	29.0	82.6

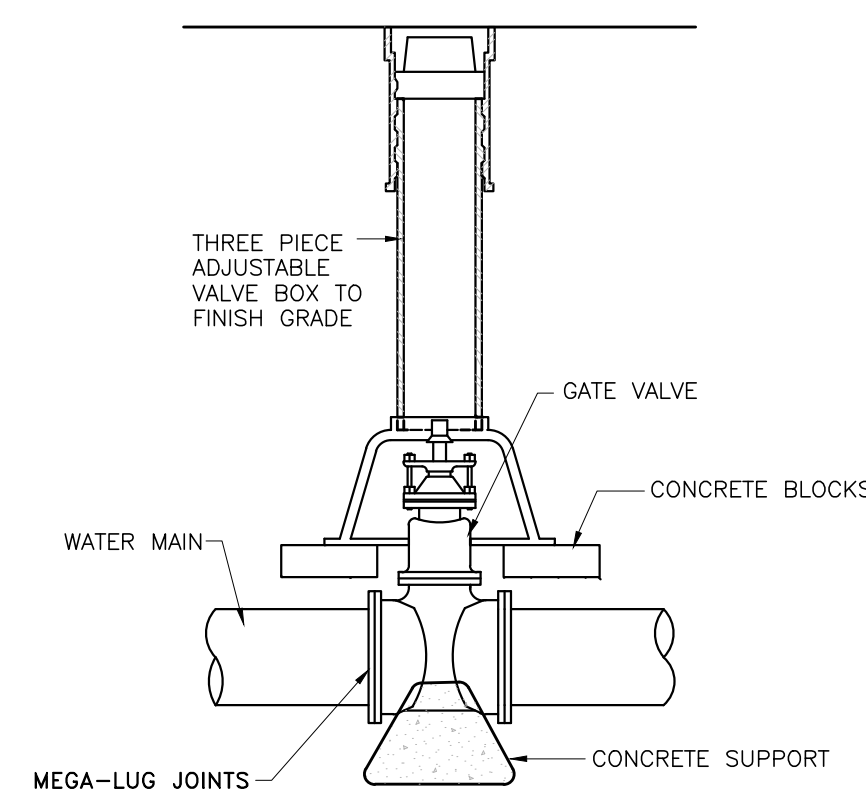
1. ALL THRUST BLOCK BEARING FACES SHALL BE FINISHED AGAINST UNDISTURBED SOIL OR APPROVED COMPACTED BACKFILL.
2. CONCRETE SHALL BE 2000 PSI.
3. CALCULATED BASED ON 2000 PSI ALLOWABLE SOIL BEARING PRESSURE. THRUST BLOCK SIZE MAY BE CHANGED BASED ON ACTUAL SOIL CONDITIONS & APPROVAL OF ENGINEER.
4. A VISCOUS BARRIER SHALL BE PLACED BETWEEN ALL PIPES / FITTINGS AND THE CONCRETE THRUST BLOCKS.

PIPE SIZE	MINIMUM BOND SIZE	MINIMUM EXTENSION (HOOK)	MINIMUM BLOCK SIZE	PIPE TYPE
4"	#4	4"	3"x3"x1'	DUCTILE IRON BELL PIPE
6"	#5	5"	4"x4"x2'	DUCTILE IRON BELL PIPE
12"	#8	8"	4"x8"x1'	DUCTILE IRON BELL PIPE



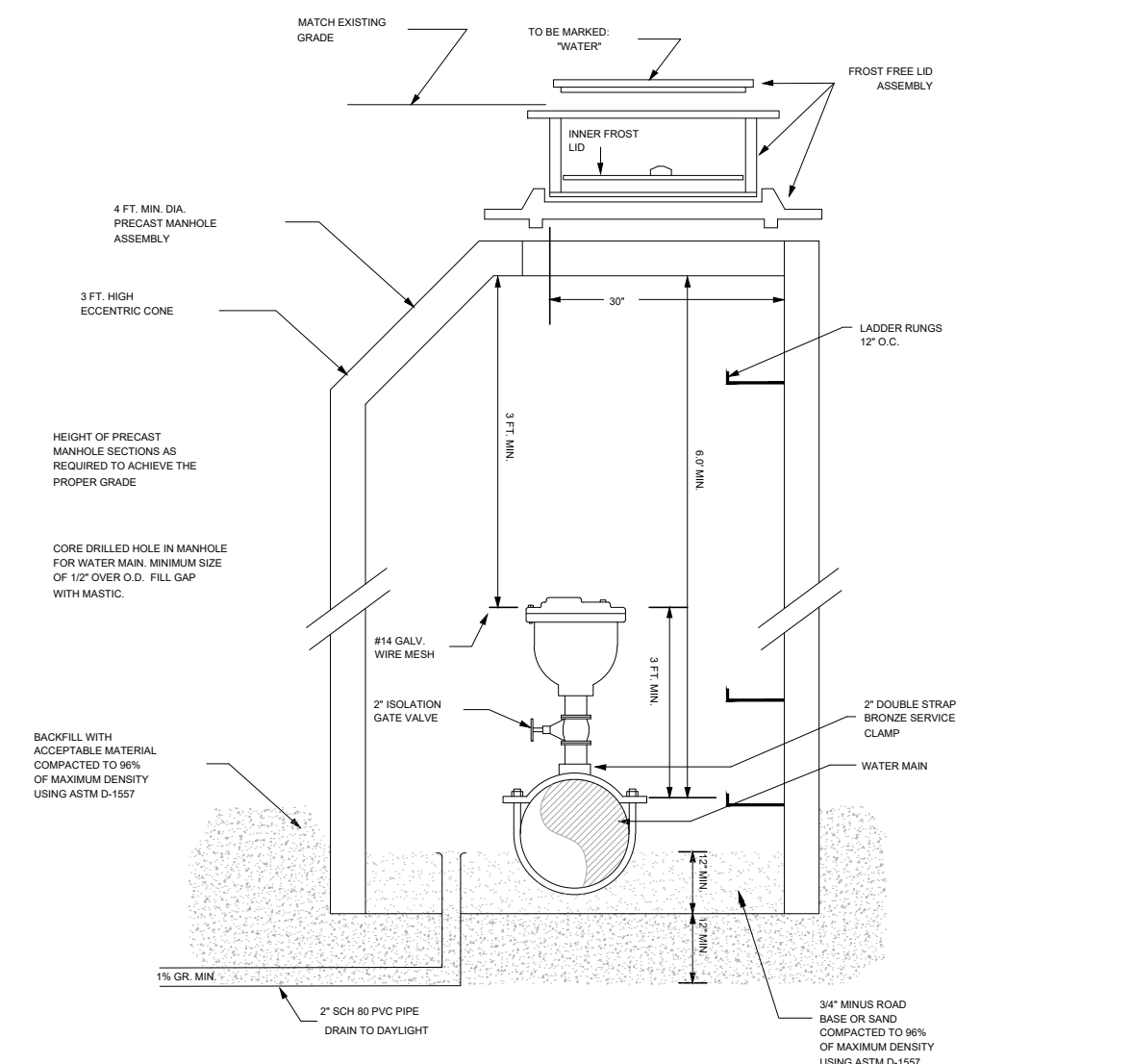
THRUST BLOCK DETAIL

NOT TO SCALE



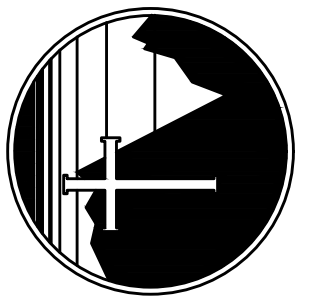
TYPICAL GATE VALVE

NOT TO SCALE



COMBINATION AIR RELEASE/VACUUM VALVE MANHOLE DETAIL

NOT TO SCALE



**TOWN OF MEEKER**  
Water Valve Replacement  
DETAILS



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ENGINEER C. HALE  
DWG FILE WaterValvesDesign  
JOB 319-061  
SHEET