

# CITY OF MADISON

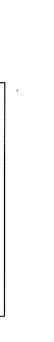
MADISON WATER UTILITY PUBLIC WORKS PLAN OF PROPOSED IMPROVEMENT

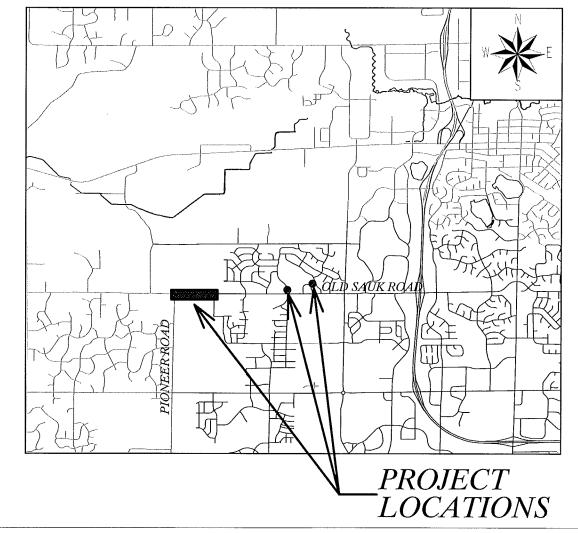
#### INDEX OF SHEETS

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## OLD SAUK ROAD WATER PIPELINE 2018

CITY PROJECT NO. 10445 MUNIS NO. 10445-86-179 CONTRACT NO. 8186





PUBLIC IMPROVEMENT PROJECT APPROVED

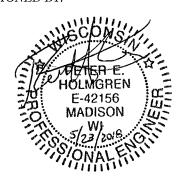
APRIL 10, 2018

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

Principal Engineer Madison Water Utility

WATER DESIGNED BY:



CONVENTIONAL SIGNS FIELD VERIFY ALL UTILITY LOCATIONS

GAS

WATER

STORM SEWER SANITARY SEWER

POWER POLE

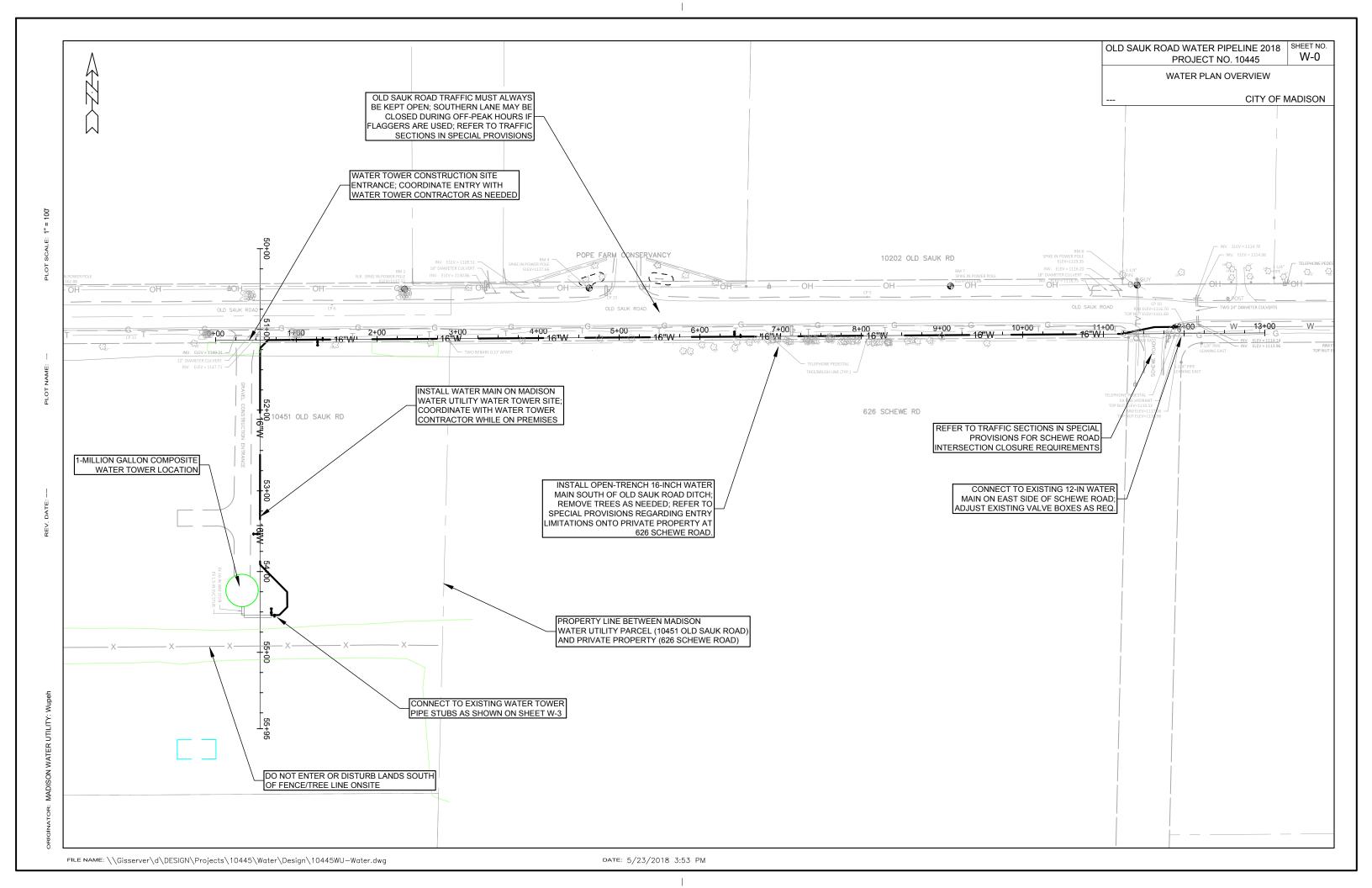
BURIED ELECTRIC

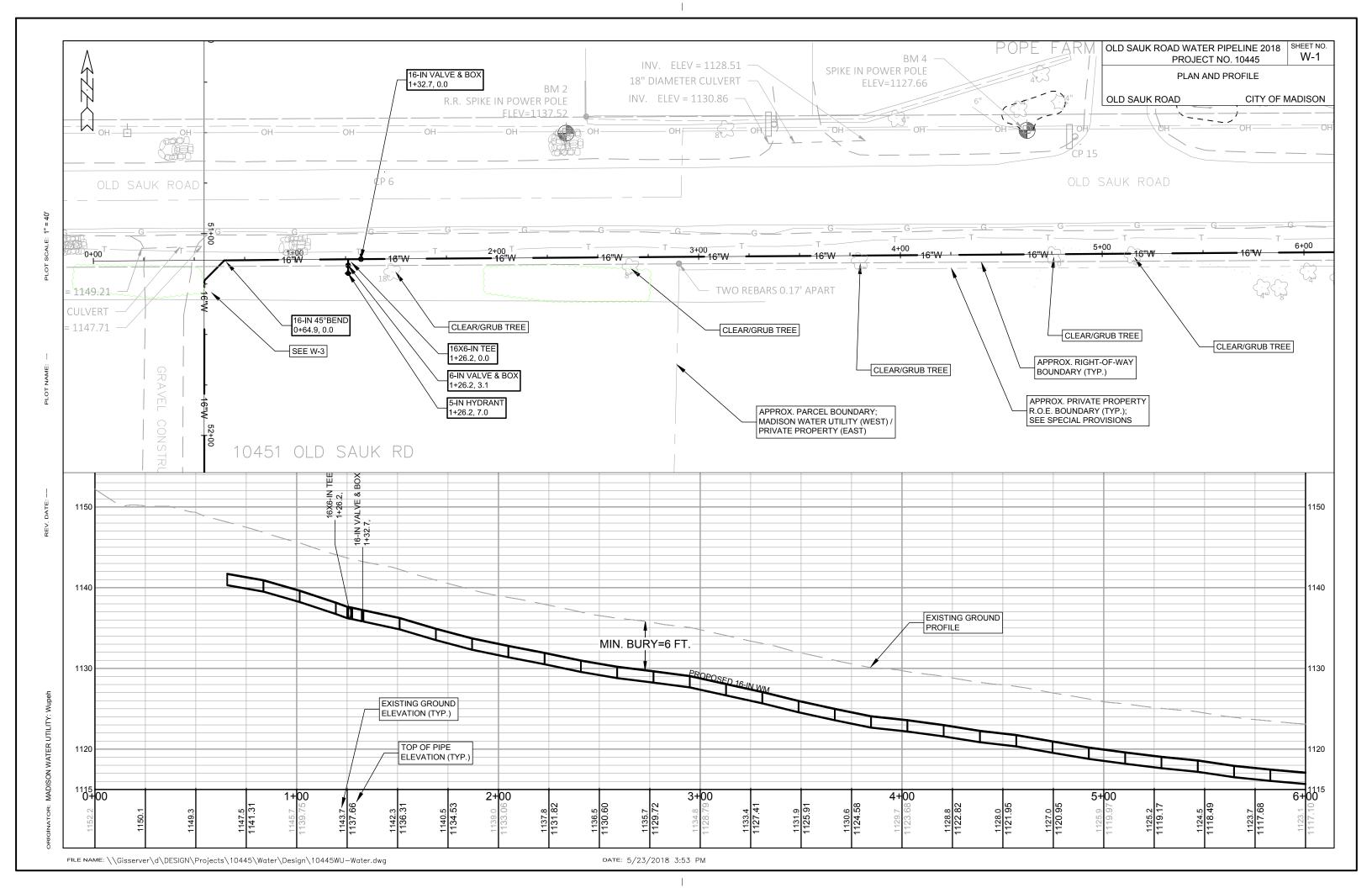
OVERHEAD ELECTRIC

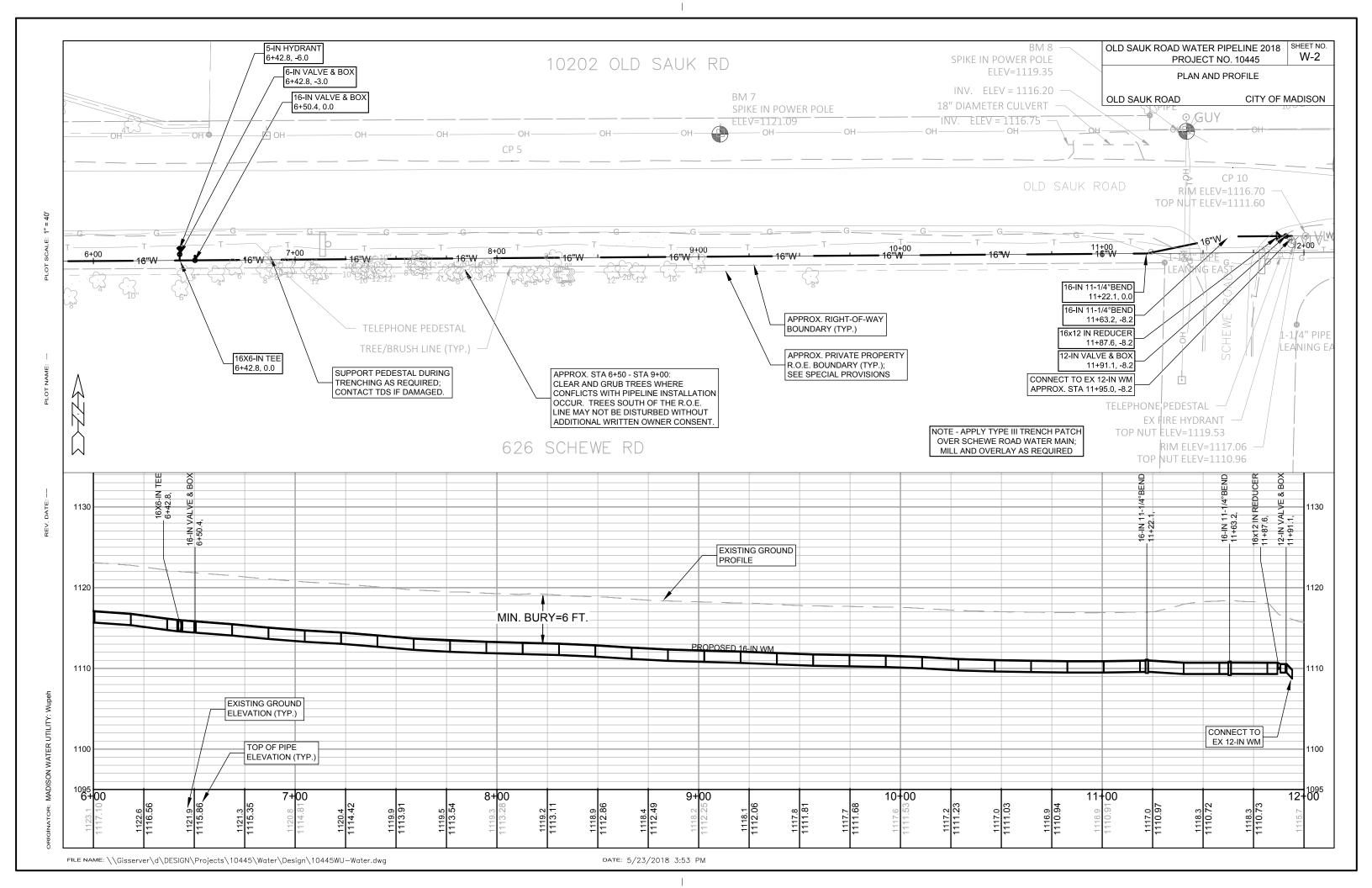
ADA COMPLIANT RAMP W/

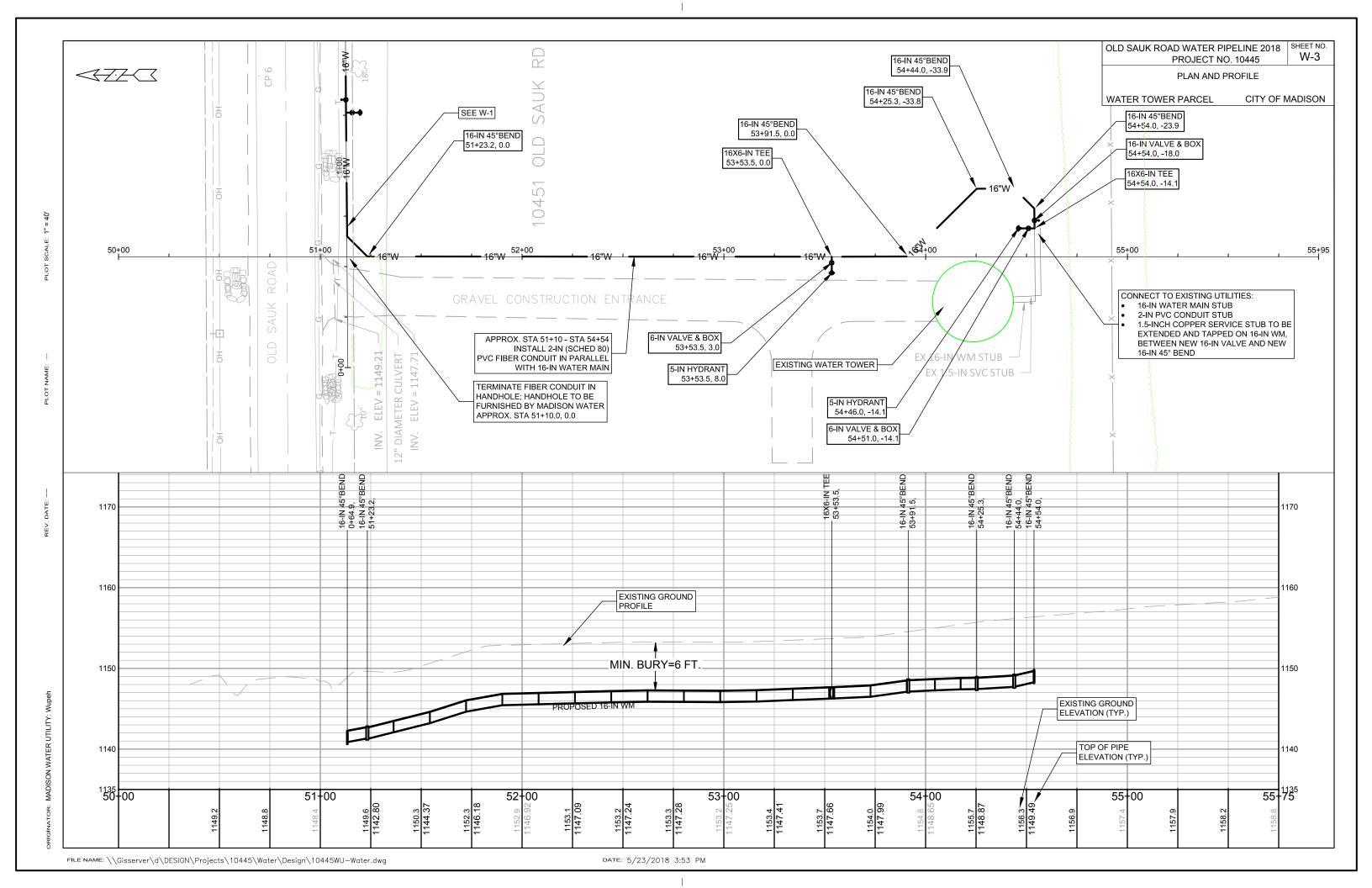
COMBUSTIBLE FLUIDS

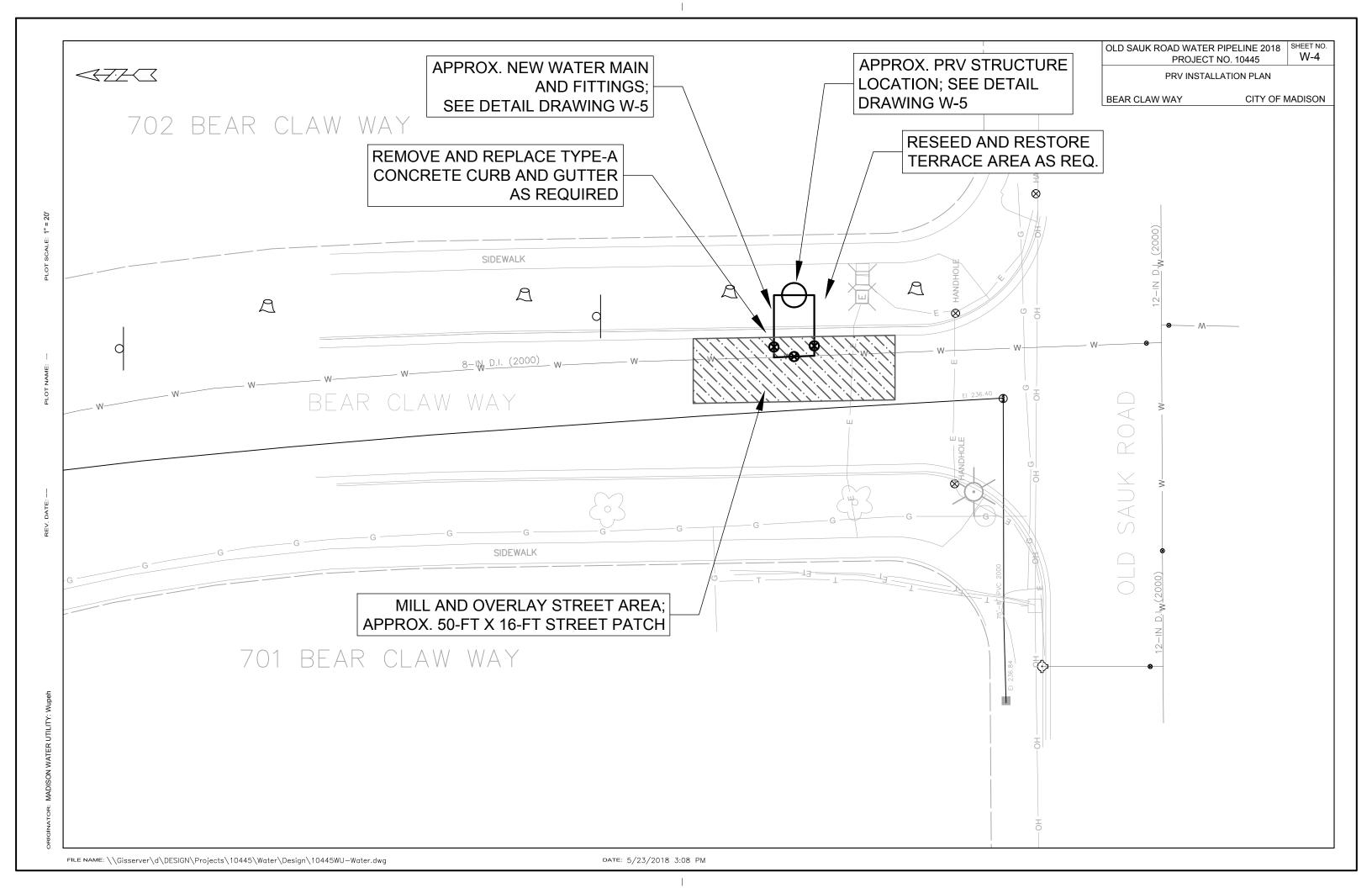
DETECTABLE WARNING FIELD



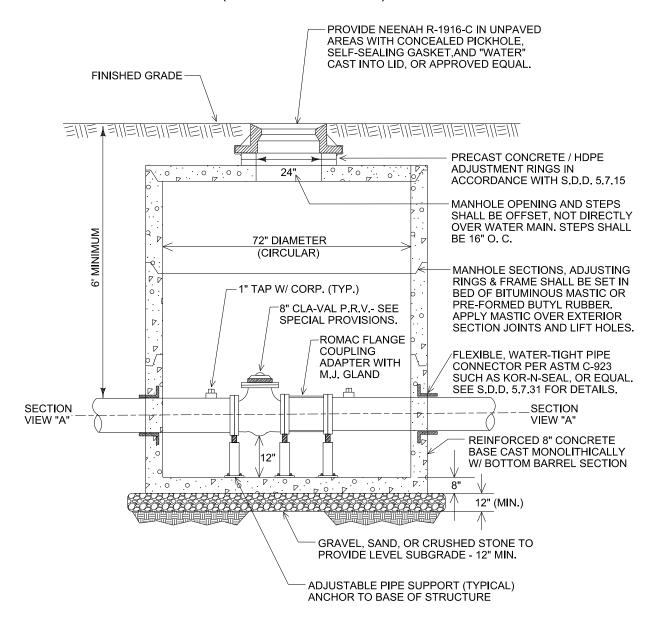






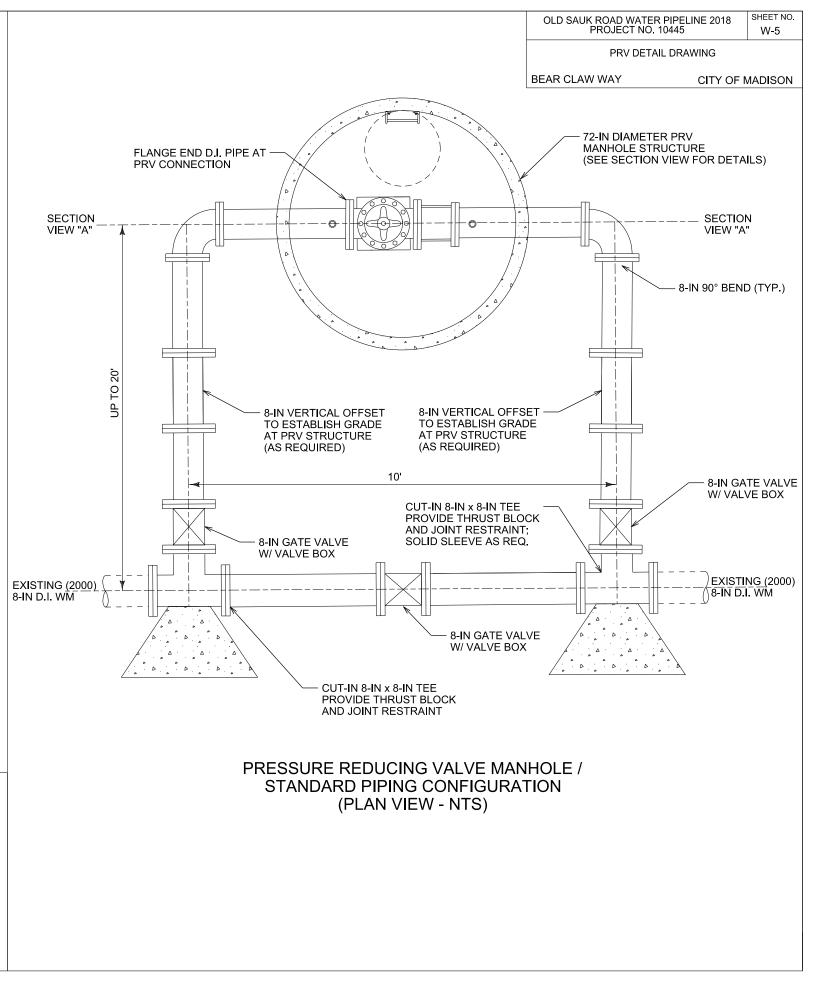


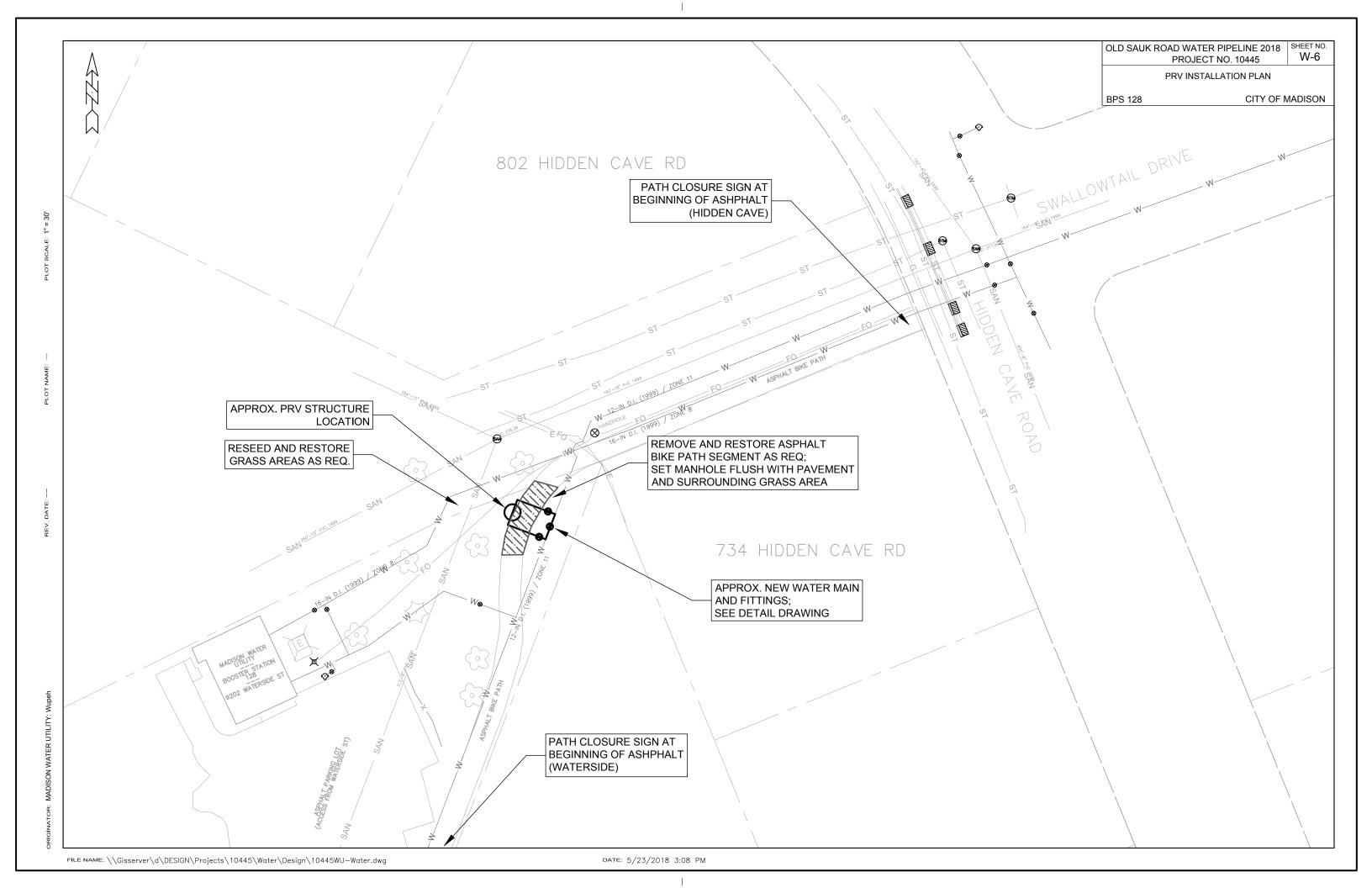
## PRESSURE REDUCING VALVE MANHOLE (SECTION A-A - NTS)



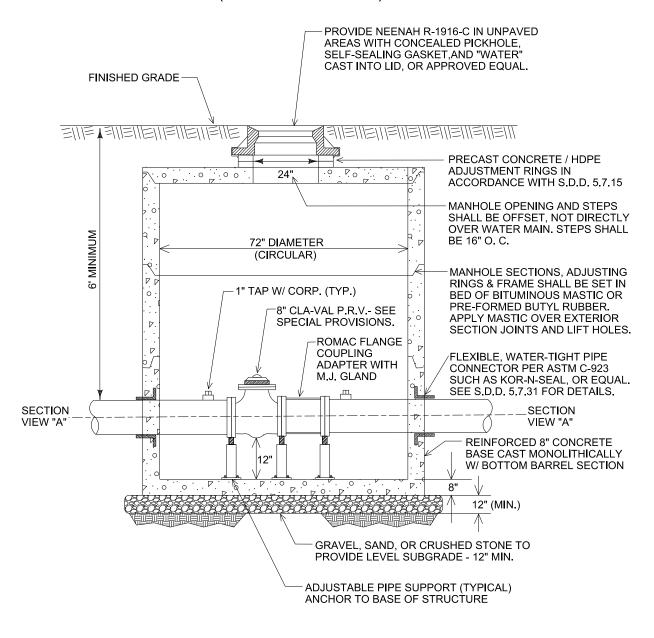
#### NOTES:

- 1. THE CONTRACT UNIT PRICE FOR THE LUMP SUM BID ITEM 90160 "INSTALL PRV BEAR CLAW" SHALL INCLUDE ALL COSTS OF FURNISHING AND PLACING THE LEVELING BASE AND SRUCTURE, AS SPECIFIED; AND ALSO ALL COSTS ASSOCIATED WITH CONSTRUCTION OF THE PIPING, AS SPECIFIED (CUT-IN CONNECTIONS, D.I. PIPE, VALVES, VALVE BOXES, THRUST RESTRAINT, JOINT RESTRAINT, OFFSET FITTINGS, FLANGE PIPE/ADAPTORS, TAPS, ETC).
- 2. ALL PIPE, FITTINGS, AND APPURENANCES SHALL BE NEWLY FURNISHED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
- 3. ALL DISTURBANCES, INCLUDING LANDSCAPE AND PAVEMENT, ASSOCIATED WITH CONSTRUCTION SHALL BE RESTORED UNDER BID ITEM 90160 " INSTALL PRV BEAR CLAW".
- 4. SEE THE SPECIAL PROVISIONS FOR MORE INFORMATION REGARDING THE CLA-VAL PRESSURE REDUCING VALVE.
- 5. MANHOLE SHALL BE WATER TIGHT.



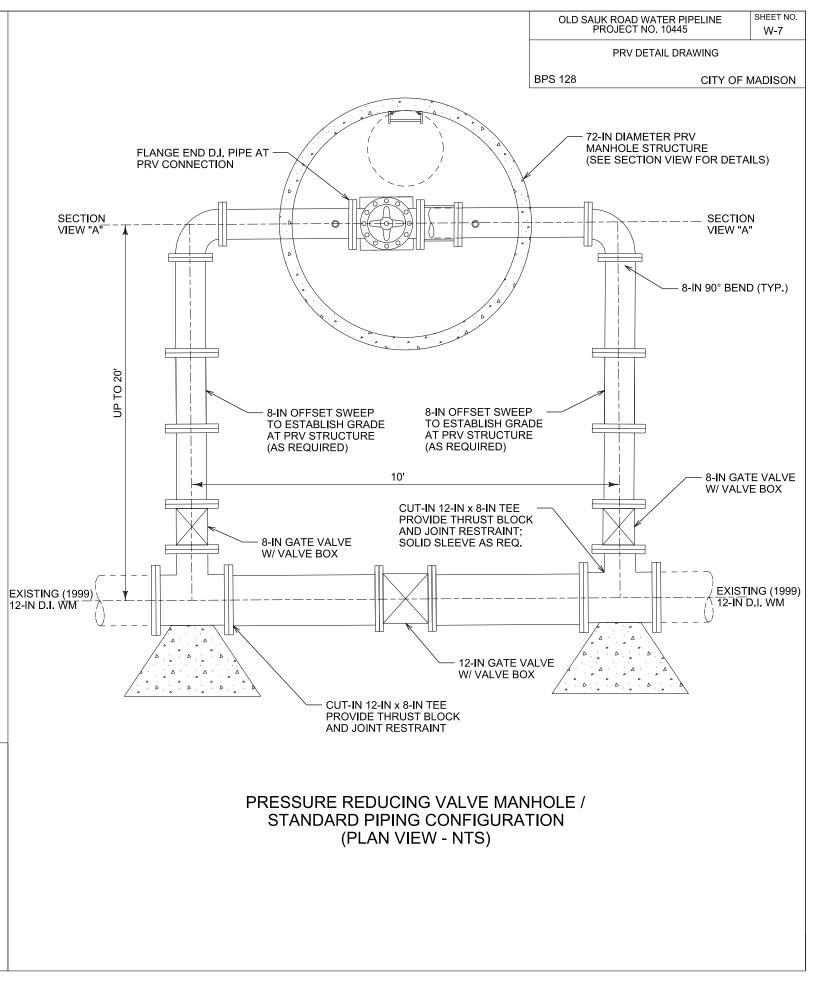


## PRESSURE REDUCING VALVE MANHOLE (SECTION A-A - NTS)



#### NOTES:

- 1. THE CONTRACT UNIT PRICE FOR THE LUMP SUM BID ITEM 90161 "INSTALL PRV BPS 118" SHALL INCLUDE ALL COSTS OF FURNISHING AND PLACING THE LEVELING BASE AND SRUCTURE, AS SPECIFIED; AND ALSO ALL COSTS ASSOCIATED WITH CONSTRUCTION OF THE PIPING, AS SPECIFIED (CUT-IN CONNECTIONS, D.I. PIPE, VALVES, VALVE BOXES, THRUST RESTRAINT, JOINT RESTRAINT, OFFSET FITTINGS, FLANGE PIPE/ADAPTORS, TAPS, ETC).
- 2. ALL PIPE, FITTINGS, AND APPURENANCES SHALL BE NEWLY FURNISHED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
- 3. ALL DISTURBANCES, INCLUDING LANDSCAPE AND PAVEMENT, ASSOCIATED WITH CONSTRUCTION SHALL BE RESTORED UNDER BID ITEM 90161 " INSTALL PRV BPS 128".
- 4. SEE THE SPECIAL PROVISIONS FOR MORE INFORMATION REGARDING THE CLA-VAL PRESSURE REDUCING VALVE.
- 5. SEE THE SPECIAL PROVISIONS FOR COORDINATION INFORMATION WHILE WORKING ON AND NEAR THE BIKE PATH AND WITHIN THE EASEMENT AREA SURROUNDING BPS 128.
- 6. MANHOLE SHALL BE WATER TIGHT.



- 1. CONSTRUCT NEW WATER MAIN 6.0' BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED. INSULATE MAIN WITH POLYSTYRENE BOARD AT UTILITY CROSSINGS OR OTHER AREAS IDENTIFIED BY ENGINEER AS HAVING INADEQUATE
- 2. VERIFY SIZE OF EXISTING
  WATER SERVICES AND RECONNECT SERVICES
- 3. MINIMIZE DISRUPTION OF SERVICE TO EXISTING CUSTOMERS. NOTIFY PER CONTRACT REQUIREMENTS OF ANY PLANNED WATER OUTAGE.
- 4. THE EXISTING UTILITIES SHOWN ON THIS PLAN REPRESENT THE BEST INFORMATION AVAILABLE TO THE WATER UTILITY AT THE TIME OF PLAN PREPARATION. CONTRACTOR IS RESPONSIBLE FOR HAVING EACH UTILITY LOCATED PRIOR TO COMMENCING WORK.

- WN1 REPLACE THE EXISTING LEAD SERVICE WITH A NEW COPPER SERVICE.
- WN2 EXTEND AND RECONNECT THE EXISTING COPPER SERVICE FROM THE OLDER WATER MAIN TO THE NEWER WATER MAIN.
- WN3 EXISTING SERVICE TO BE ABANDONED WHEN THE WATER MAIN IS CUT OFF; ABANDON CURB BOX AS REQUIRED.
- WN4 DISCONNECT FROM THE OLDER WATER MAIN AND RECONNECT THE EXISTING COPPER WATER SERVICE LATERAL TO THE NEWER
- WN5 RELOCATE THE EXISTING FIRE HYDRANT.
- WN6 ABANDON WATER VALVE ACCESS STRUCTURE.
- WN7 FURNISH AND INSTALL THE NEW TOP SECTION FOR THE WATER ACCESS STRUCTURE.
- WN8 ABANDON THE VALVE BOX.
- WN9 FURNISH THE DITCH, COMPACTION, AND ALL MATERIALS AND LABOR FOR THE INSTALLATION OF NEW SERVICE LATERAL.
- WN10 REMOVE AND SALVAGE EXISTING HYDRANT
- WN11 REPLACE THE EXISTING COPPER SERVICE WITH A COPPER

#### **ESTIMATE OF PROJECT WATER MATERIALS:**

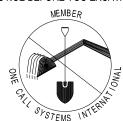
\* ESTIMATE OF MATERIALS IS FOR INFORMATION ONLY. ENGINEER DOES NOT GUARANTEE ACCURACY OF MATERIAL TAKE-OFF. ALWAYS REFER TO PLANS.

OLD SAUK PIPELINE		BEAR CLAW PRV		
WATER MAINS	TOTAL		WATER MAINS	TOTAL
6-IN PIPE (LF)	40		8-IN PIPE (LF)	50
12-IN PIPE (LF)	<10		POLY WRAP	45
16-IN PIPE (LF)	1500		8-IN VALVE & BOX	3
POLY WRAP	1750		8-IN PRV	1
6-IN VALVE & BOX	4		8-IN X ?-IN OFFSET*	2
12-IN VALVE & BOX	1		8-IN - 90° BEND	2
16-IN VALVE & BOX	3		8-IN SOLID SLEEVE	1
16-IN - 11.25° BEND	2		8-IN X 8-IN TEE	2
16-IN - 45° BEND	4			
16-IN X 12-IN REDUCER	1		BPS 128 PRV	
16-IN X 6-IN TEE	4		WATER MAINS	TOTAL
5-IN HYDRANT	4		8-IN PIPE (LF)	40
1.5-IN COPPER PIPING	AS REQ		12-IN PIPE (LF)	10
			POLY WRAP	45
			8-IN VALVE & BOX	2
*AS NEEDED PER FIELD CONDITIONS;		12-IN VALVE & BOX	1	
SEE DETAIL DRAWINGS			8-IN PRV	1
			8-IN X ?-IN OFFSET*	2
			8-IN - 90° BEND	2
			12-IN X 8-IN TEE	2

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE **TOLL FREE** 811 OR 1-800-242-8511 FAX-A-LOCATE 1-800-338-3860 TDD (FOR HEARING IMPAIRED) 1-800-542-2289

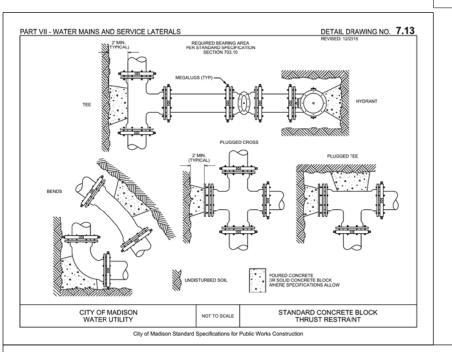
> WIS, STATUTE 182,0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.



DISCLAIMER NOTE: UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCING WORK.

WATER ESTIMATE OF MATERIALS

CITY OF MADISON



DETAIL DRAWING NO. 7.04 PART VII - WATER MAINS AND SERVICE LATERALS REVISED: 12/2017 RoDon HIGH-VISIBILITY MIN. 2.5 FT. OR AS REQUIRED LOCATING DEVICE W/ A BOLT-ON FLAT STEEL MOUNTING BRACKET. STANDARD 5 FT. LENGTH. BY DRAWINGS OR FIELD CONDITIONS BURYLINE ON HYDRANT SHALL BE AT FOR MORE DETAILS GO TO RoDonCorp.com BURY LINE ON HYDRANT SHALL BE AT FINISHED GRADE OR WITHIN +3 INCHES. DO NOT DISH OUT OR BUILD UP GRADE AROUND HYDRANT TO MEET REQUIREMENTS. 0 1/2-IN EXPANSION JOINT FILLER WHEN IN CONCRETE VALVE BOX 1/4 INCH - 1/2 INCH BELOW FINAL GRADE - GROUND PAVEMENT - CURB & GUTTER - 4 FT. X 4 FT. MIN. SIZE, 6 MIL POLYETHYLENE FILM OR GEOTEXTILE FABRIC. 6 FT (MIN.) 6-IN VALVE & BOX 1-IN WASHED STONE, MIN 1/2 CUBIC YARD. HYDRANT LEAD (\*) MEGALUGS (TYP) POURED CONCRETE OR SOLID CONCRETE BLOCK TO UNDISTURBED SOIL. SOLID CONCRETE MASONRY BLOCK (\*) RESTRAIN ENTIRE LENGTH OF HYDRANT LEAD FROM THE TEE THROUGH THE VALVE TO THE HYDRANT AS SPECIFIED USING JOINT RESTRAINTS PER SECTION 703.10 SOLID CONCRETE MASONRY BLOCK CITY OF MADISON NOT TO SCALE TYPICAL HYDRANT INSTALLATION WATER UTILITY City of Madison Standard Specifications for Public Works Construction

FILE NAME: \\Glsserver\d\DESIGN\Projects\10445\Water\Design\10445WU-Materlals.dgn

NOTES & DETAIL DRAWINGS