



Madison Water Utility  
 119 E. OLIN AVE.  
 MADISON, WI 53713

# CITY OF MADISON

## MADISON WATER UTILITY

### PUBLIC WORKS PLAN OF PROPOSED IMPROVEMENT

#### ALLIS / SPAANEM / SHAFFER WATER MAIN

PUBLIC IMPROVEMENT PROJECT  
 APPROVED

JUNE 2, 2020

BY THE COMMON COUNCIL  
 OF MADISON, WISCONSIN

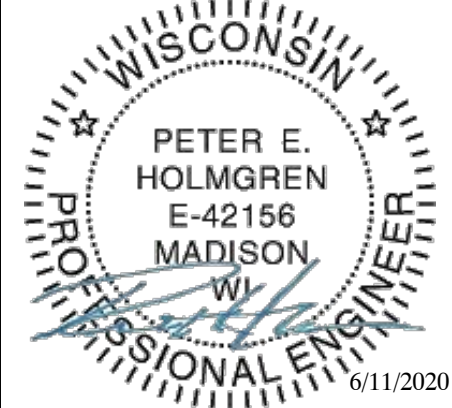
PUBLIC IMPROVEMENT DESIGN  
 APPROVED BY:

6/11/2020

Principal Engineer  
 Madison Water Utility

Date

WATER  
 DESIGNED BY:



6/11/2020

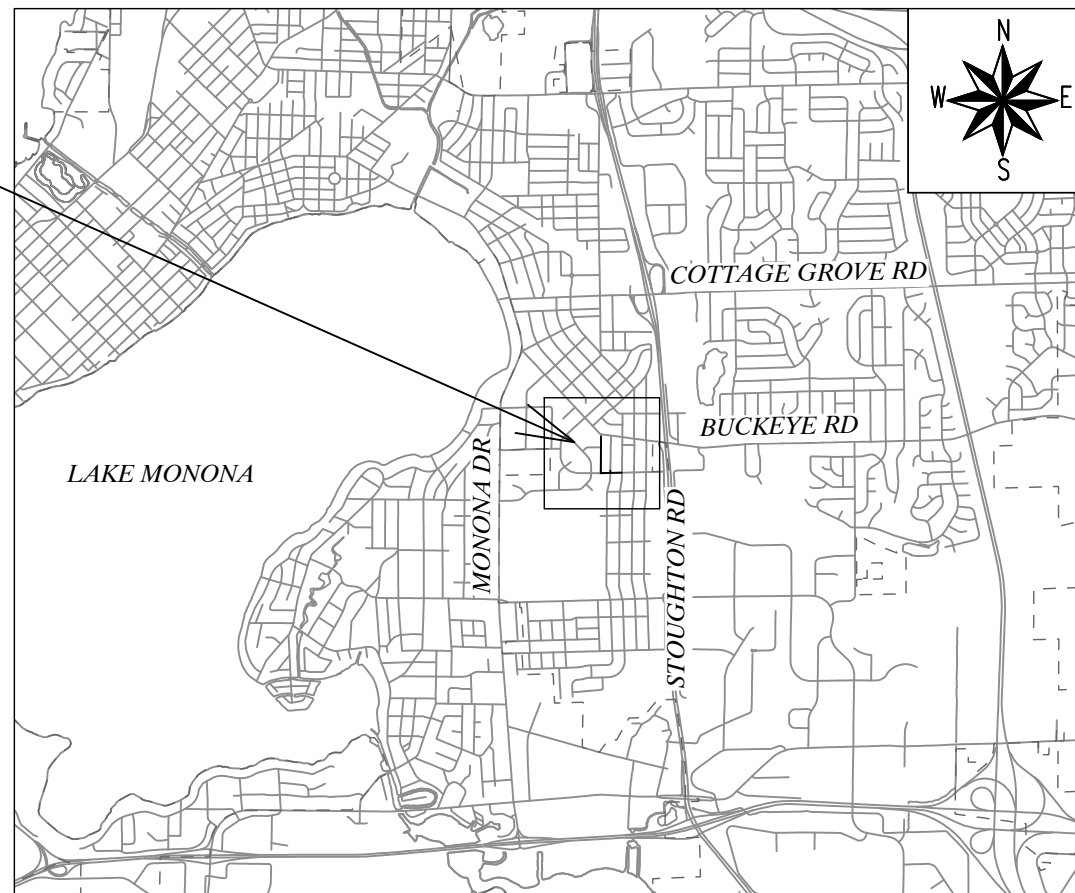
INDEX OF SHEETS

SHEET NO.	1	TITLE SHEET
SHEET NO.	EC-1 TO EC-6	EROSION CONTROL PLAN
SHEET NO.	W-1 TO W-5	WATER PLAN & PROFILE
SHEET NO.	W-6	WELL 9 SITE - PIPING DETAIL
SHEET NO.	W-7	WATER IMPACT PLAN
SHEET NO.	W-8	WATER ESTIMATE OF MATERIALS
SHEET NO.	W-9	WATER PLAN & PROFILE

**REVISED 08.01.2020 - SHEETS W-9 AND EC-6 ADDED**

CITY PROJECT NO. 12999  
 CONTRACT NO. 8920

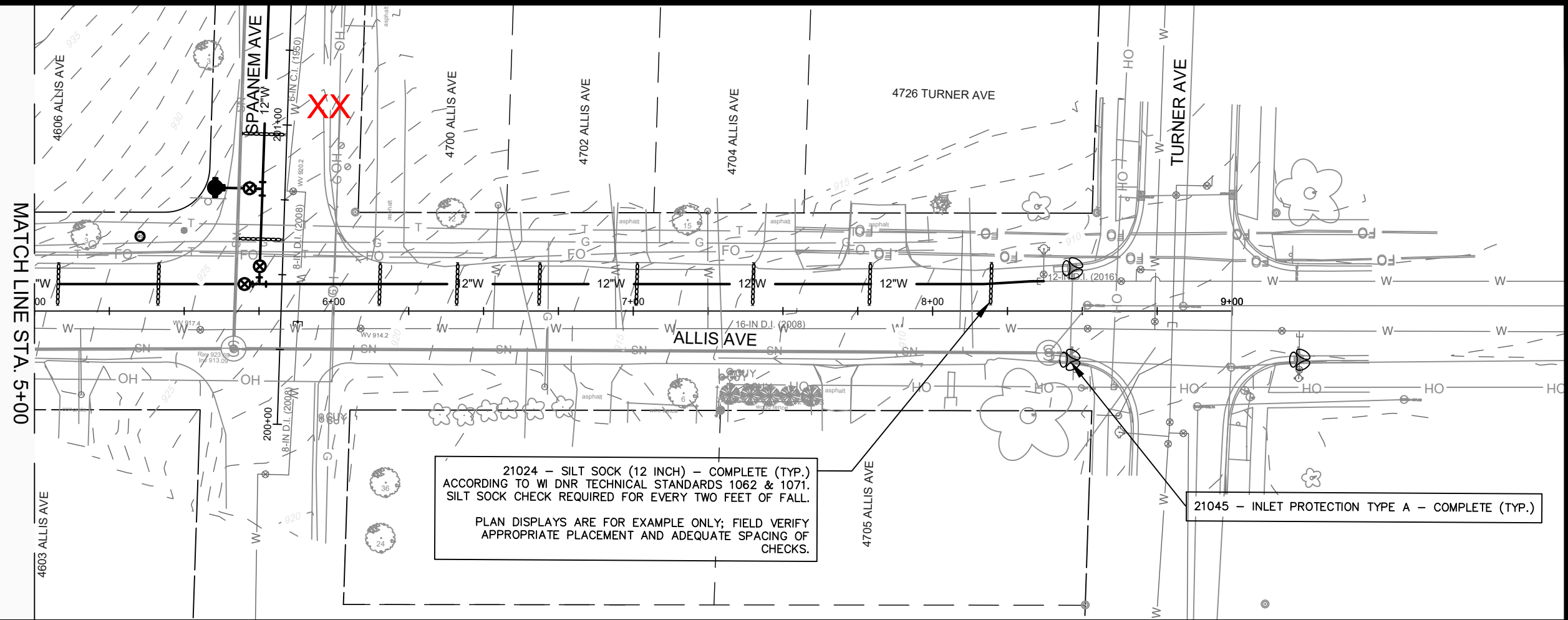
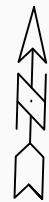
PROJECT  
 LOCATION



CONVENTIONAL SIGNS  
 FIELD VERIFY ALL UTILITY LOCATIONS

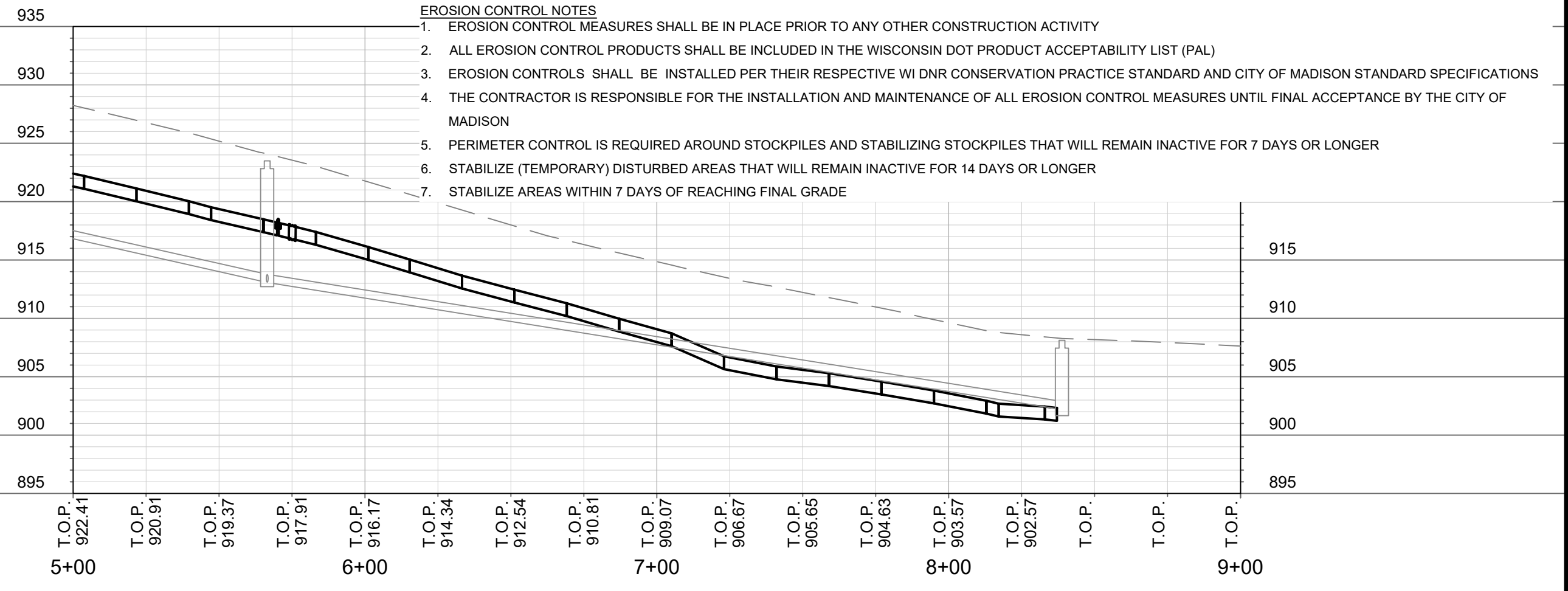
GAS	— G —
STORM SEWER	— ST —
SANITARY SEWER	— SAN —
WATER	— W —
BURIED ELECTRIC	— E —
OVERHEAD ELECTRIC	— OH —
POWER POLE	□
ADA COMPLIANT RAMP W/ DETECTABLE WARNING FIELD	▒
COMBUSTIBLE FLUIDS	☀



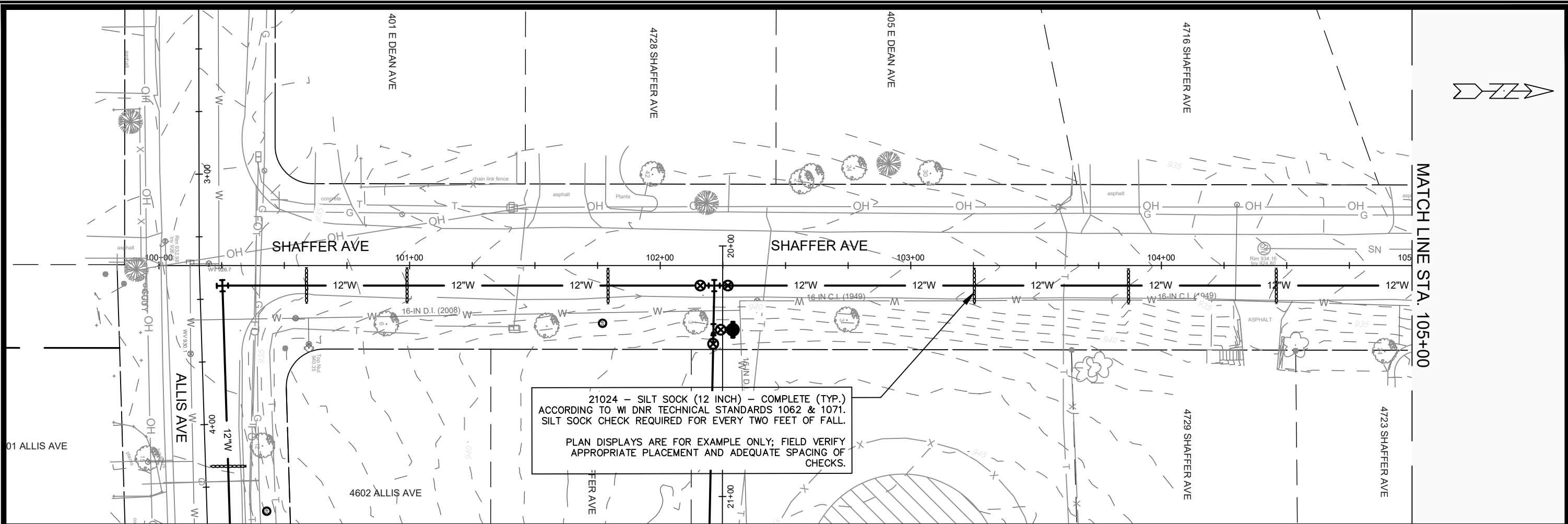


21024 - SILT SOCK (12 INCH) - COMPLETE (TYP.)  
 ACCORDING TO WI DNR TECHNICAL STANDARDS 1062 & 1071.  
 SILT SOCK CHECK REQUIRED FOR EVERY TWO FEET OF FALL.  
 PLAN DISPLAYS ARE FOR EXAMPLE ONLY; FIELD VERIFY  
 APPROPRIATE PLACEMENT AND ADEQUATE SPACING OF  
 CHECKS.

21045 - INLET PROTECTION TYPE A - COMPLETE (TYP.)



MARK	XX	REVISION	08.01.20	DATE	BY
DESIGNED BY	PEH	DATE	7/24/2020 12:18 PM	SCALE	1" = 40'
PROJECT NO.	12999	CITY OF MADISON	WISCONSIN		
CONTRACT NO.	8920	EROSION CONTROL	ALLIS / SPAANEM / SHAFFER WATER MAIN		
PROJECT LOCATION	MADISON, WI	12999	12999		
CONTRACT NO.	8920	EC-2	EC-2		

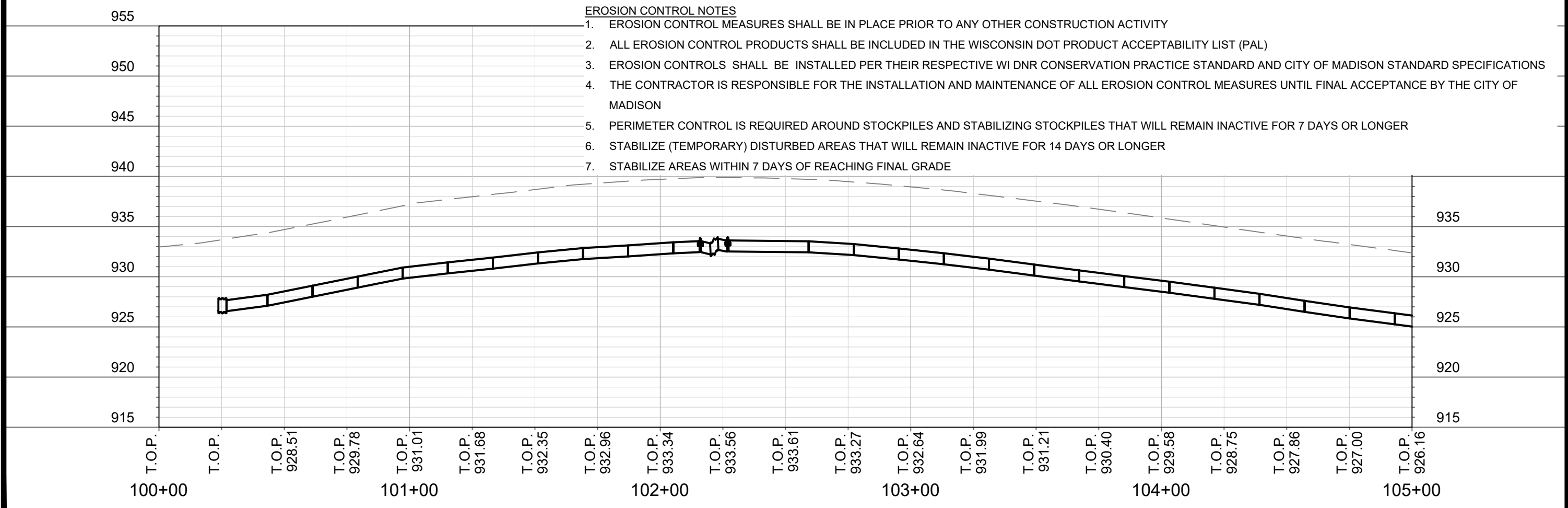


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MARK	REVISION	DATE	BY
12999	Designed By: PEH	Date: 6/11/2020 3:05 PM	Scale: 1" = 40'
12999			EC-3

12999  
 MADISON, WI  
 8920  
 CONTRACT NO:



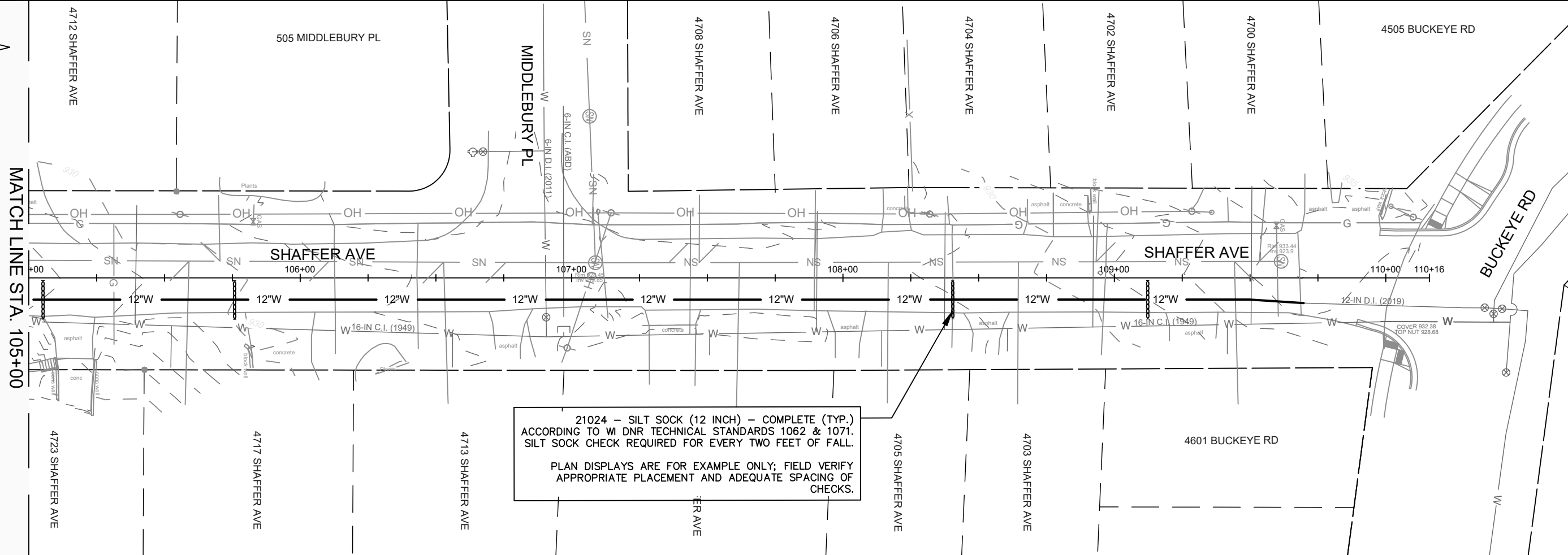
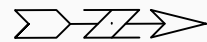
**EROSION CONTROL NOTES**

1. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY
2. ALL EROSION CONTROL PRODUCTS SHALL BE INCLUDED IN THE WISCONSIN DOT PRODUCT ACCEPTABILITY LIST (PAL)
3. EROSION CONTROLS SHALL BE INSTALLED PER THEIR RESPECTIVE WI DNR CONSERVATION PRACTICE STANDARD AND CITY OF MADISON STANDARD SPECIFICATIONS
4. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON
5. PERIMETER CONTROL IS REQUIRED AROUND STOCKPILES AND STABILIZING STOCKPILES THAT WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER
6. STABILIZE (TEMPORARY) DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER
7. STABILIZE AREAS WITHIN 7 DAYS OF REACHING FINAL GRADE

EROSION CONTROL  
 ALLIS / SPAANEM / SHAFFER WATER MAIN  
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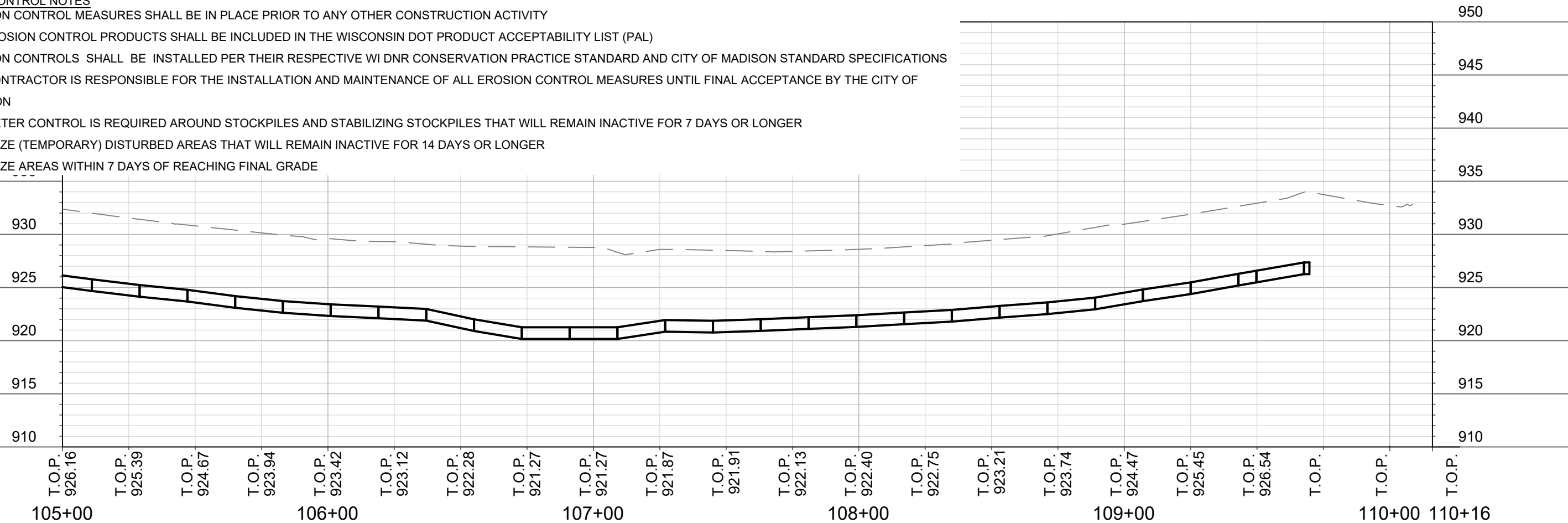


12999  
 EC-3



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MARK	REVISION	DATE	BY
Designed By: PEH	Date: 6/11/2020 3:06 PM		
12999			EC-4

12999  
 MADISON, WI  
 CONTRACT NO: 8920

EROSION CONTROL  
 ALLIS / SPAANEM / SHAFER WATER MAIN  
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12999  
 EC-4



405 E DEAN AVE

4728 SHAFFER AVE

SHAFFER AVE

4724 SPAANEM AVE

UNIT WELL 9

SPAANEM AVE

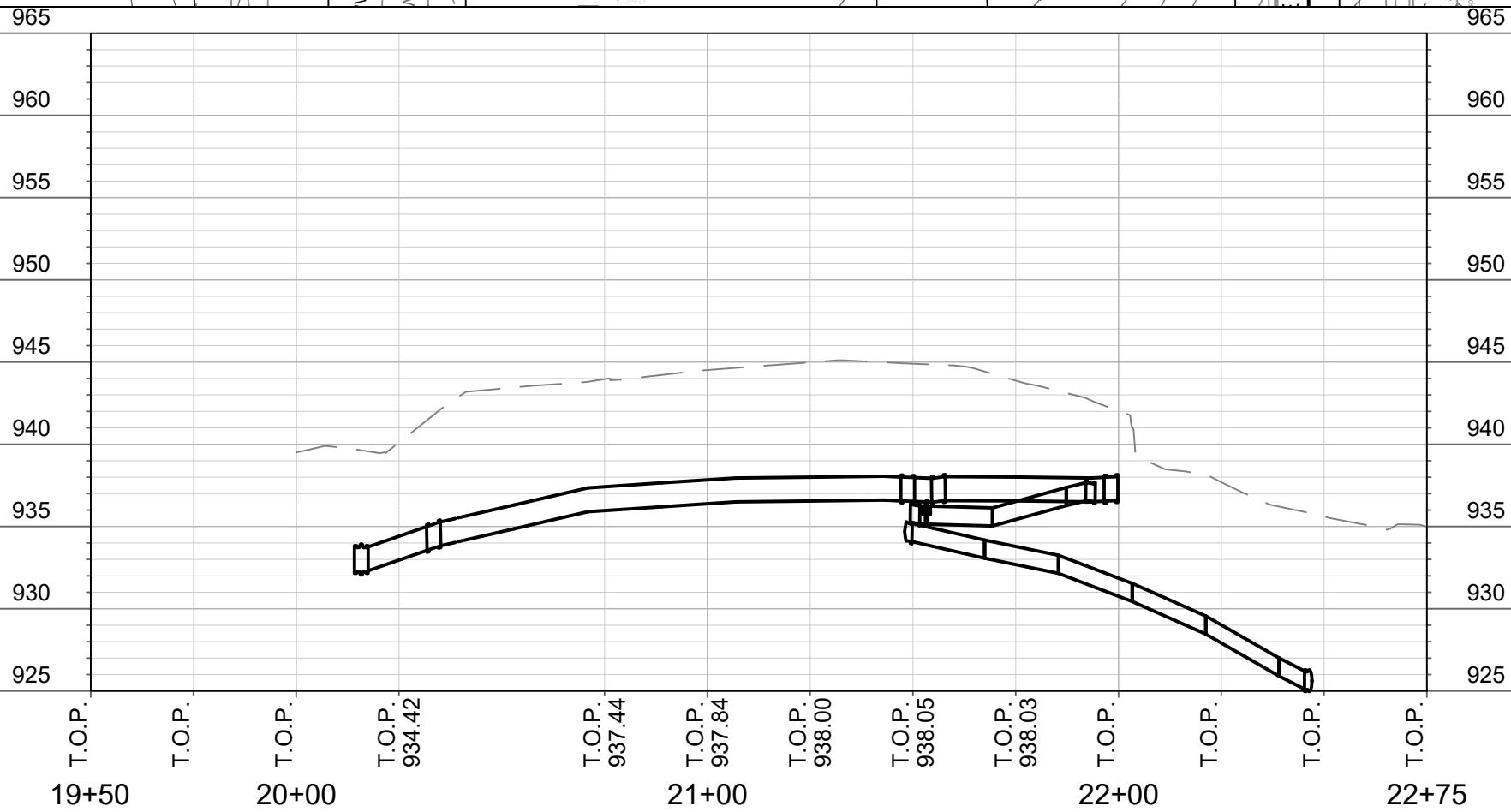
4725 SPAANEM AVE

4727 SPAANEM AVE

4731 SHAFFER AVE

EROSION MATTING (TYP.)  
w/RESTORATION SEEDING

XX



REVISION	DATE	BY
REVISION 1	08.01.20	PEH
XX		
MARK	DESIGNED BY: PEH	DATE: 8/17/2020 10:28 AM
12999		Scale: 1" = 40'

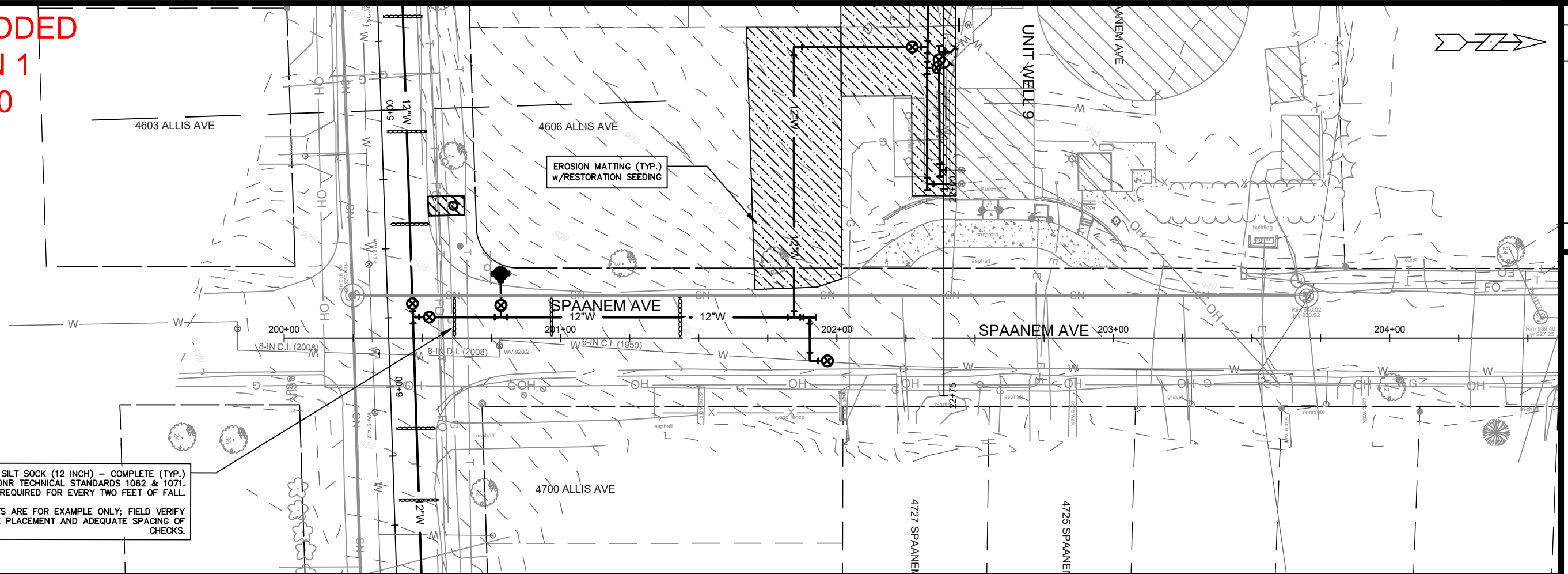
12999  
MADISON, WI  
8920  
CONTRACT NO:

EROSION CONTROL  
ALLIS / SPAANEM / SHAFFER WATER MAIN  
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12999  
EC-5

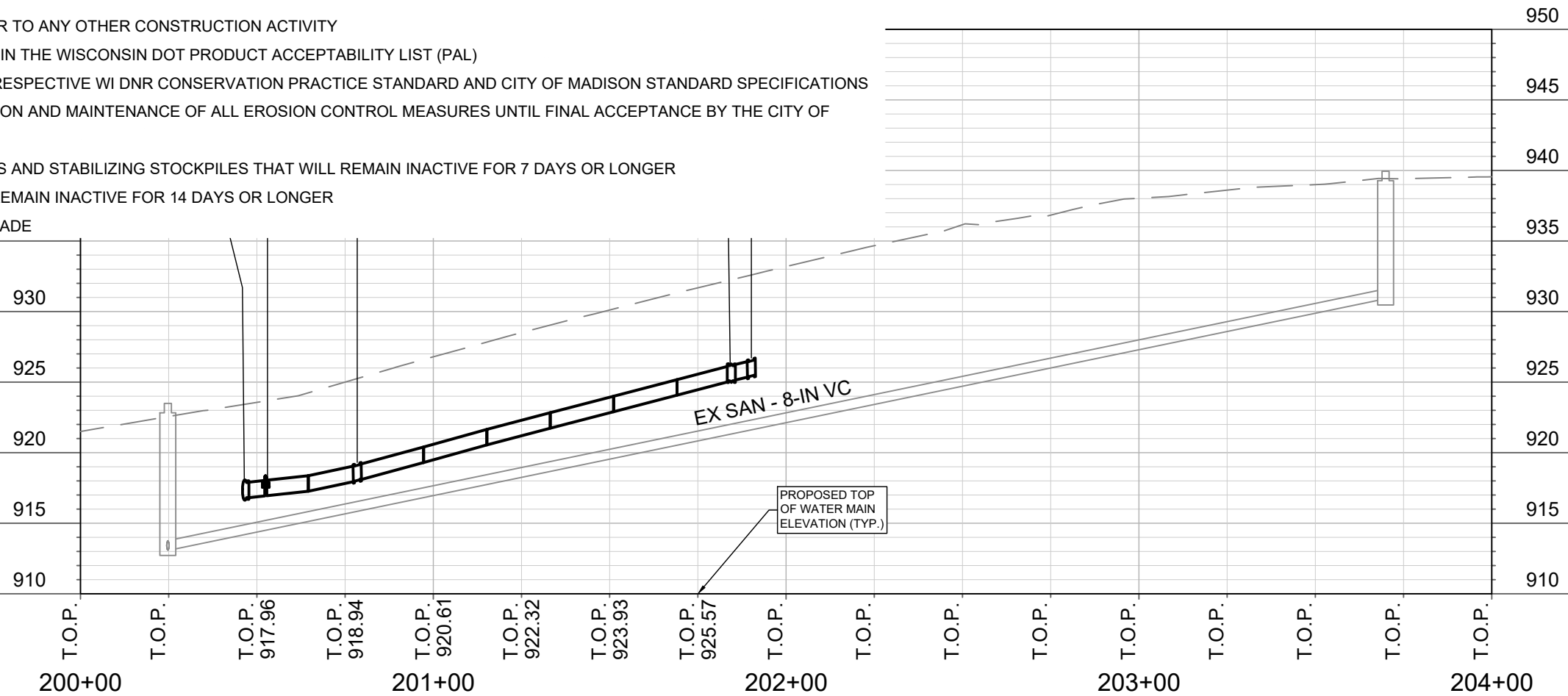
**SHEET ADDED  
REVISION 1  
08.01.2020**



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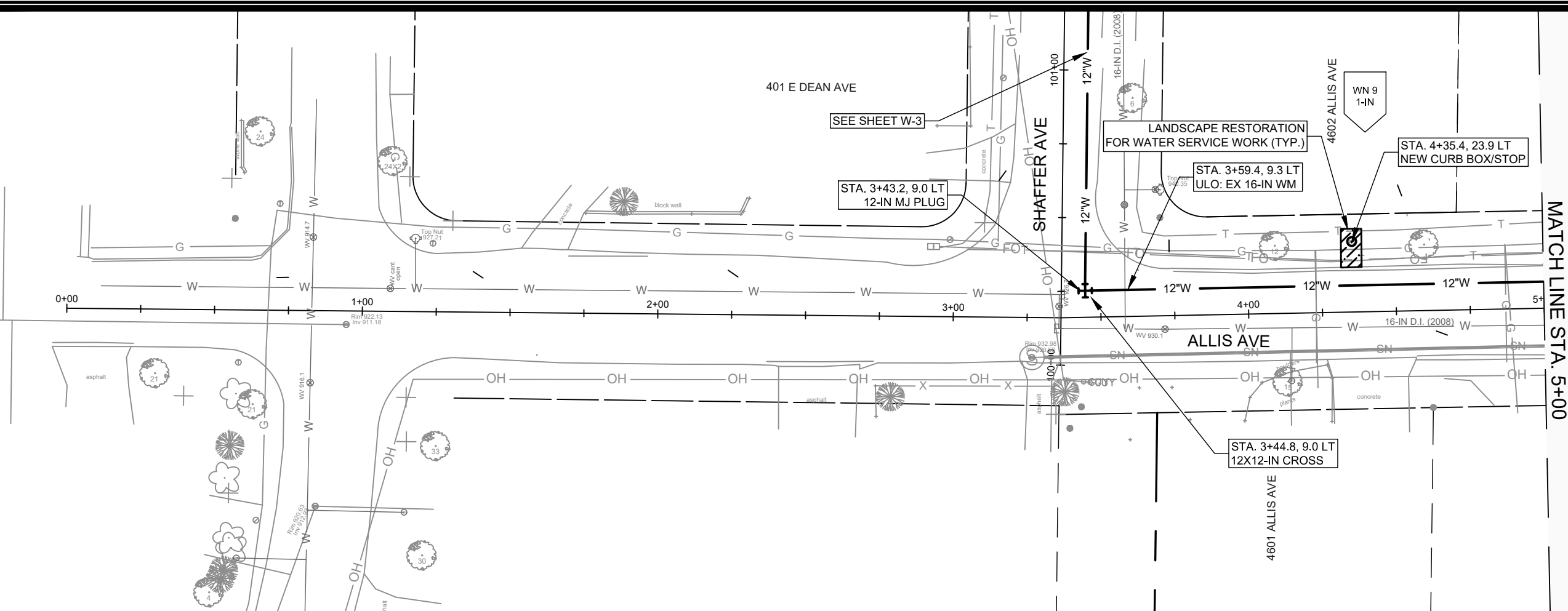
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Designed By: PEH	Date: 8/17/2020 10:28 AM	Scale: 1" = 40'	EC-6

12999  
MADISON, WI  
8920  
CONTRACT NO:

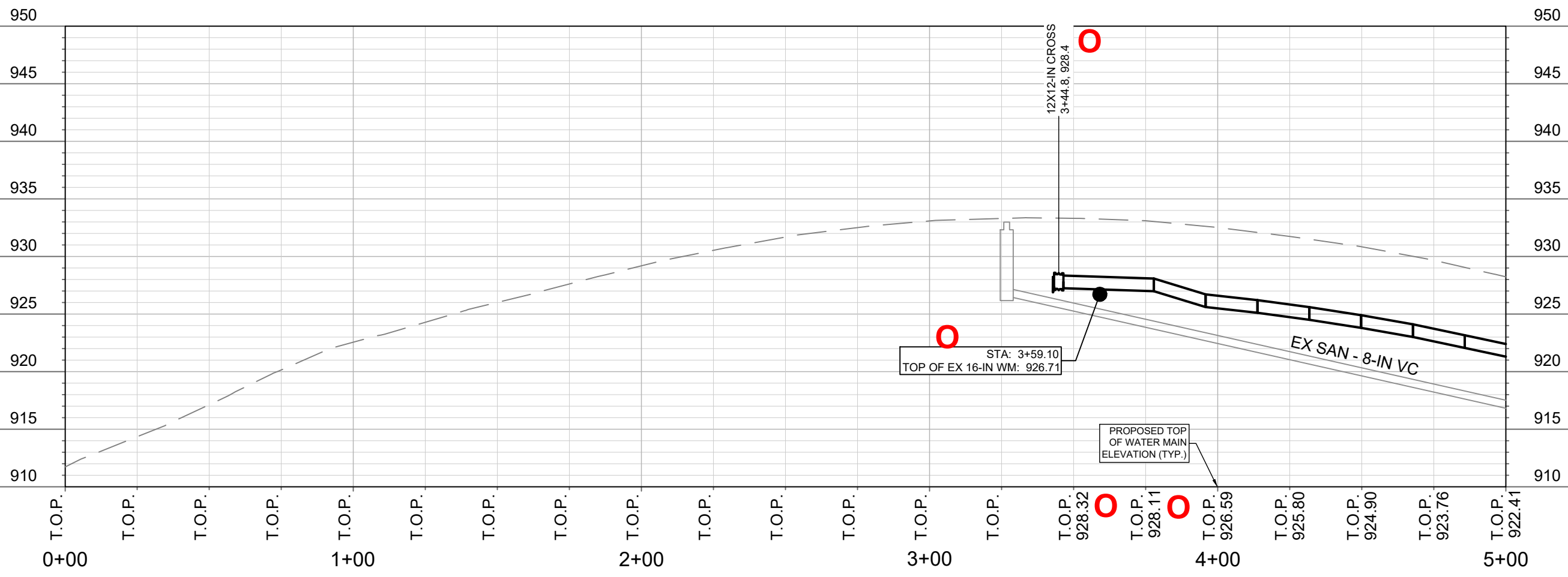
EROSION CONTROL  
ALLIS / SPAANEM / SHAFFER WATER MAIN  
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12999  
EC-6



MATCH LINE STA. 5+00



REVISION 2	08.28.20	PEH	DATE	BY
ADDENDUM 1	06.18.20	PEH	DATE	BY
DESIGNED BY	PEH	DATE	8/26/2020	10:58 AM
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PROJECT NO.	12999			

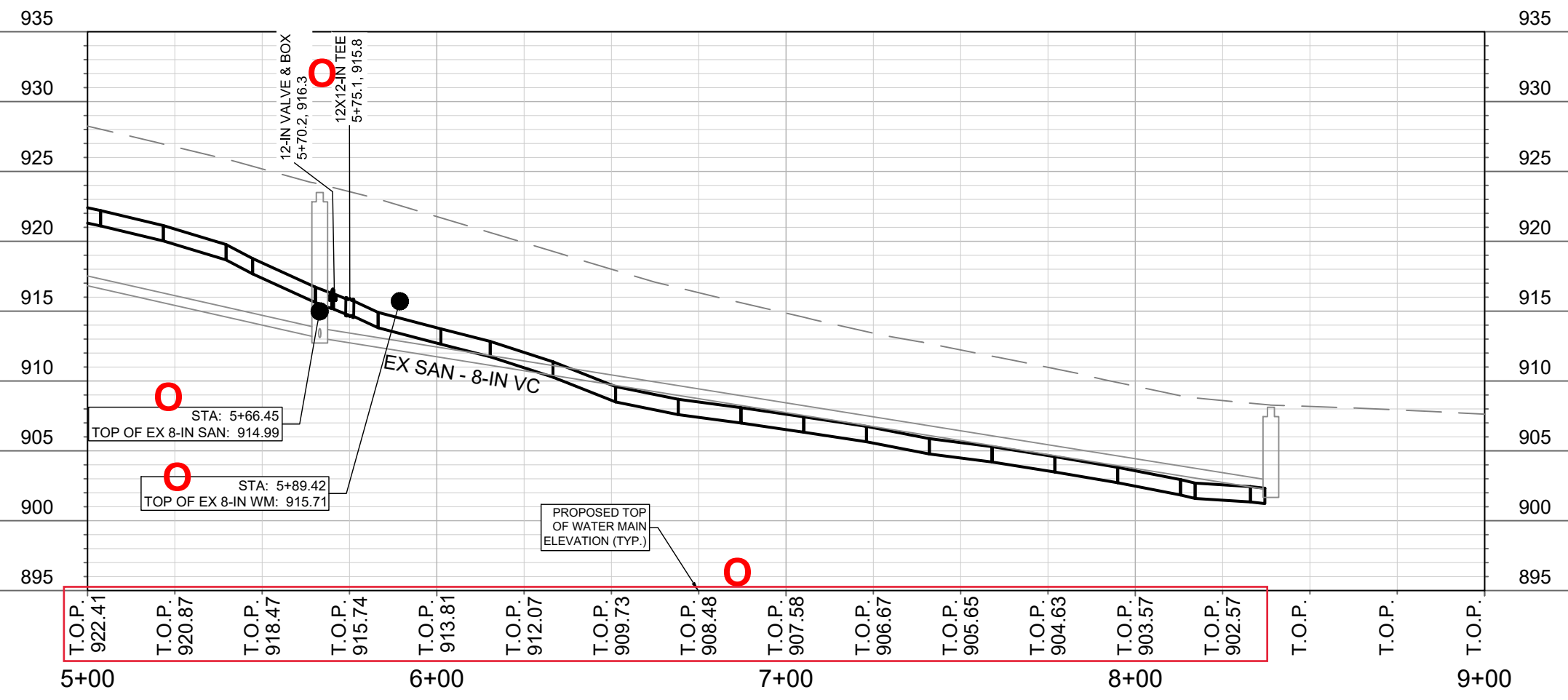
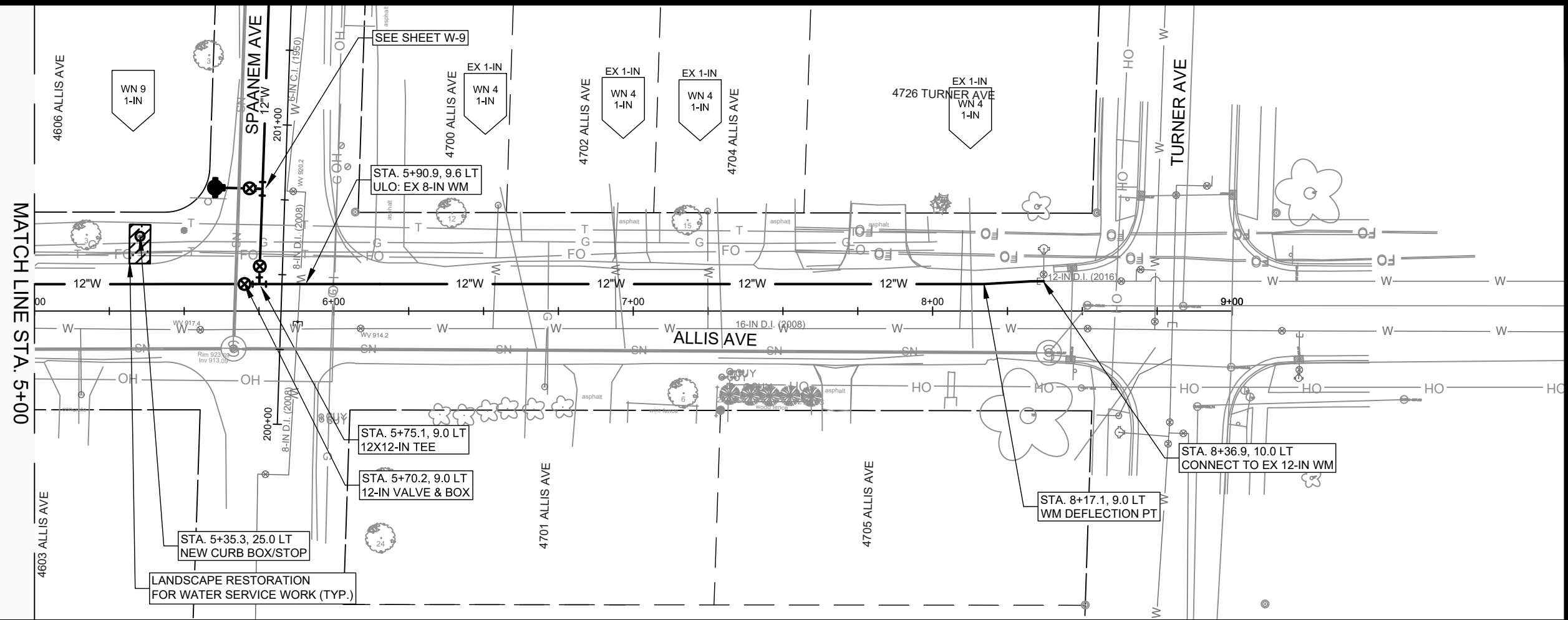
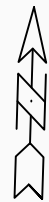
12999  
MADISON, WI  
CONTRACT NO: 8920

ALLIS AVENUE  
ALLIS / SPAANEM / SHAFER WATER MAIN  
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12999  
W-1





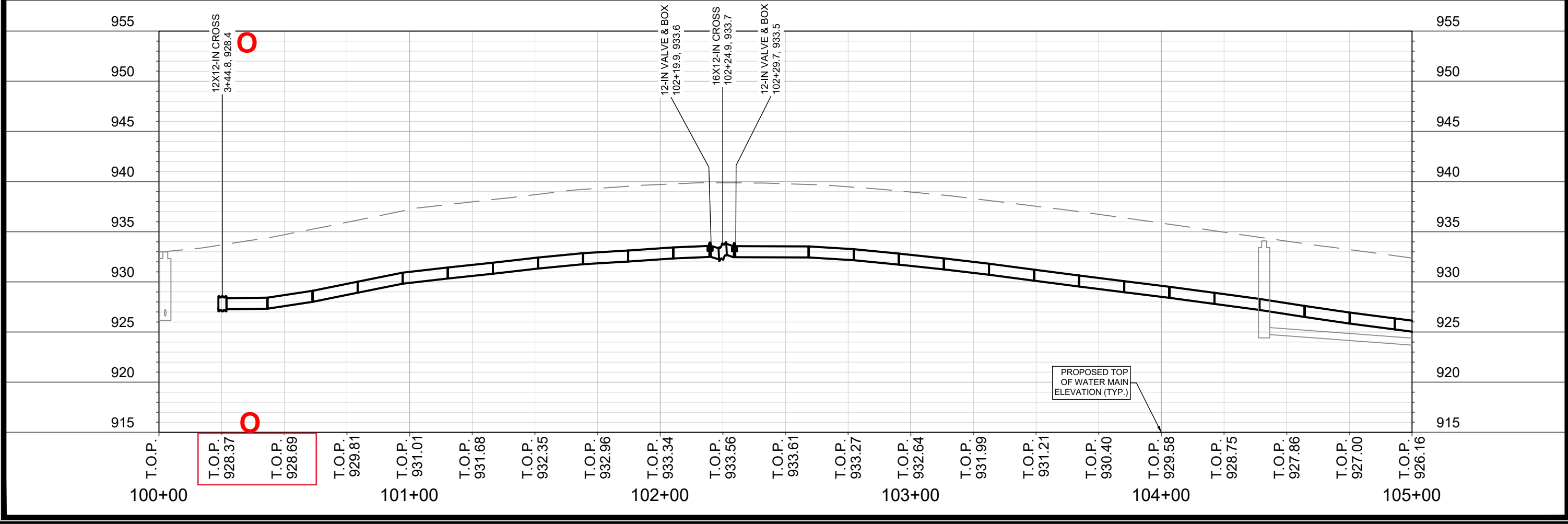
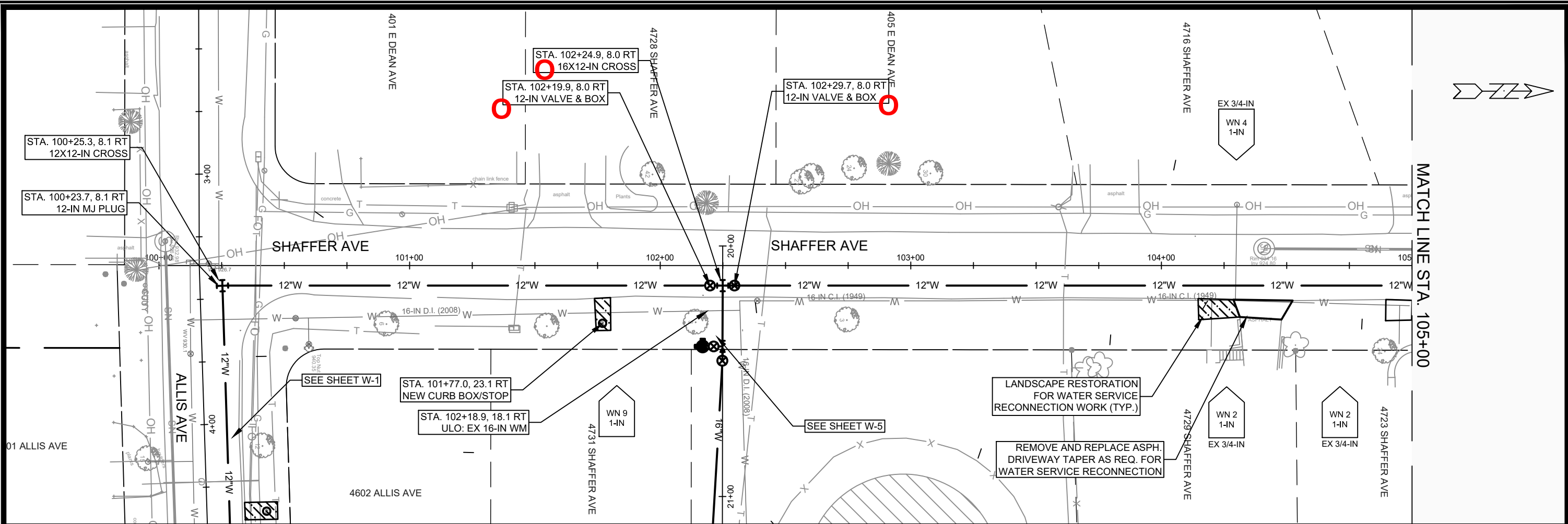
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X	ADDENDUM 1	06.19.20	PEH
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12999		W-2	

12999  
MADISON, WI  
CONTRACT NO.: 8920

ALLIS AVENUE  
ALLIS / SPAANEM / SHAFFER WATER MAIN  
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12999  
W-2

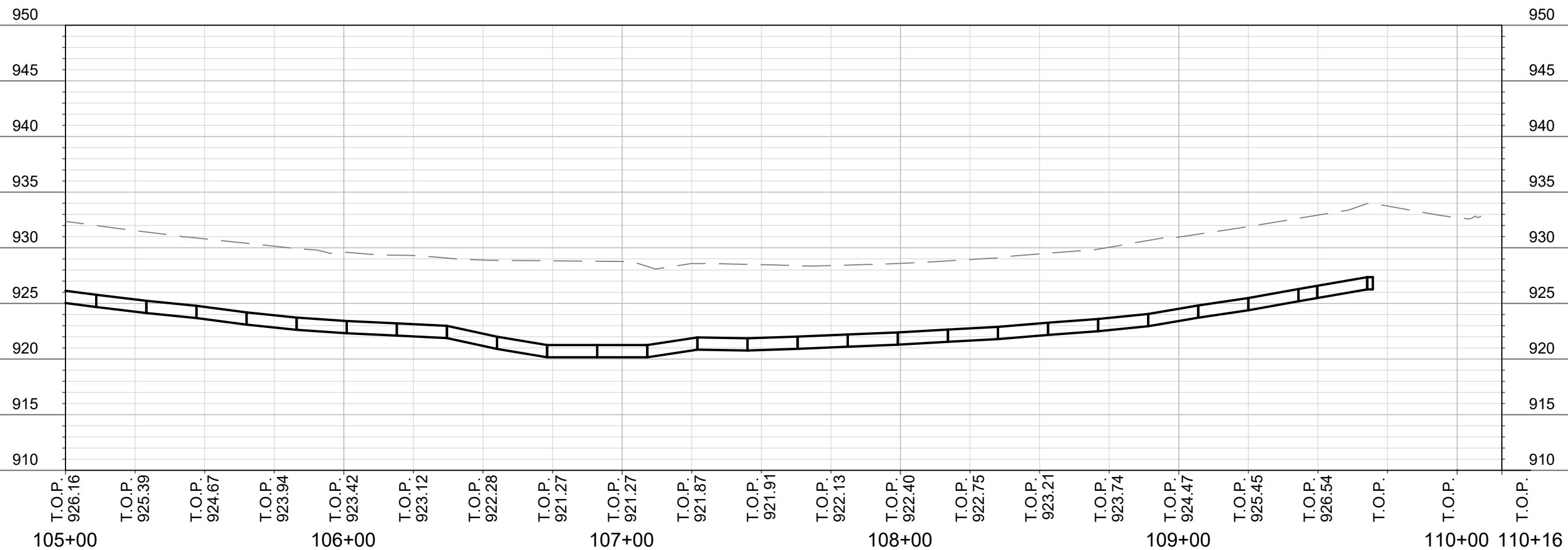
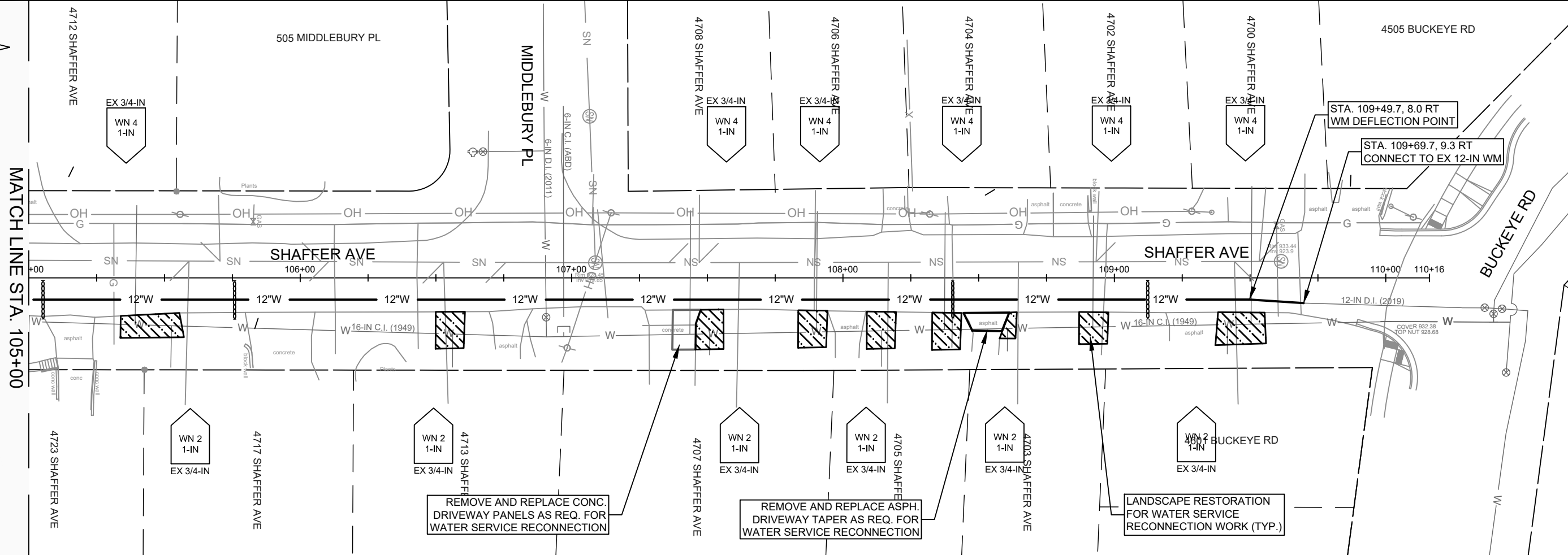
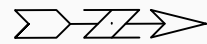


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SCALE	1" = 40'			
MARK	12999			

12999  
MADISON, WI  
8920  
CONTRACT NO.

SHAFFER AVENUE  
ALLIS / SPAANEM / SHAFFER WATER MAIN  
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12999  
W-3

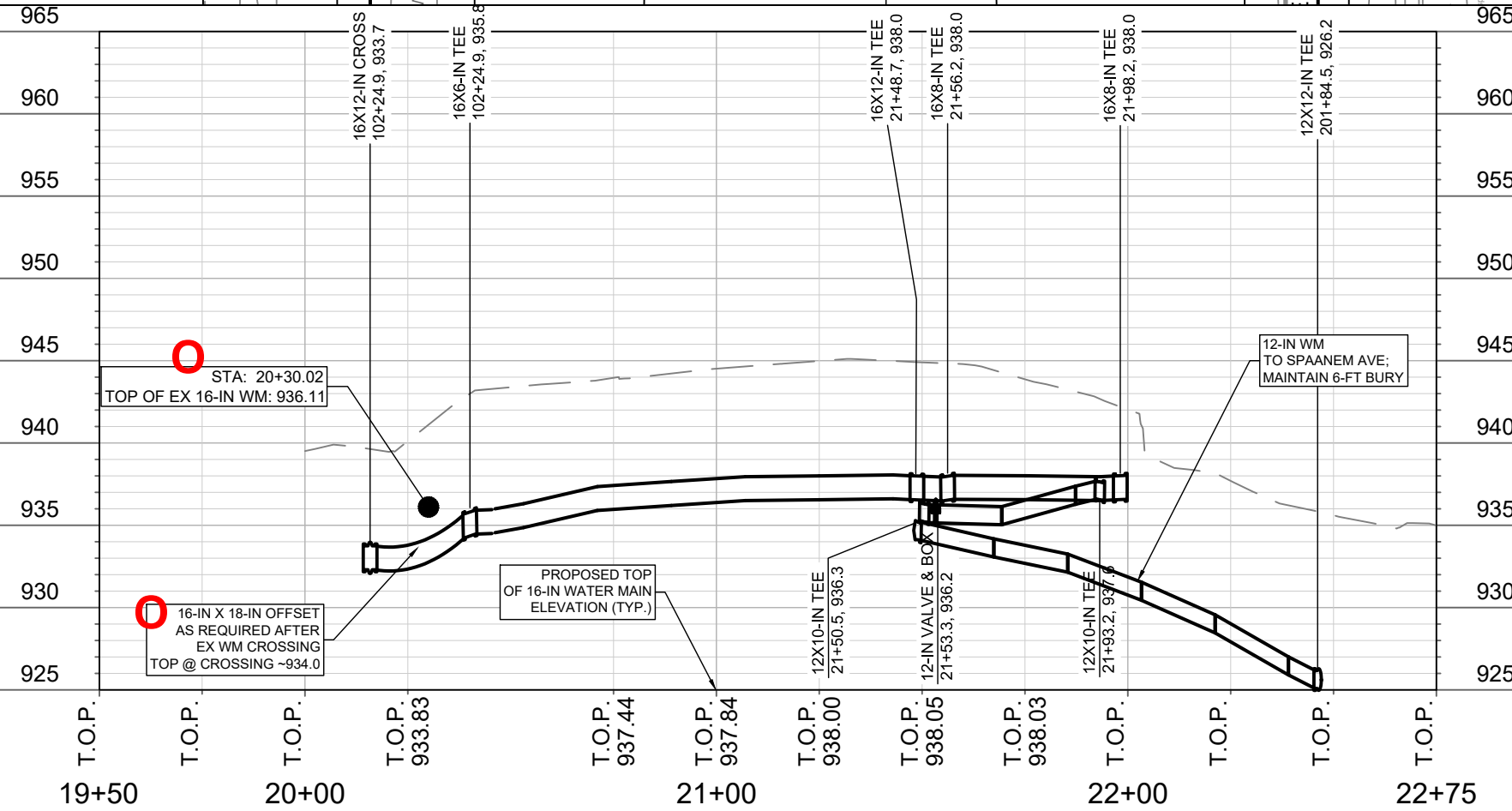
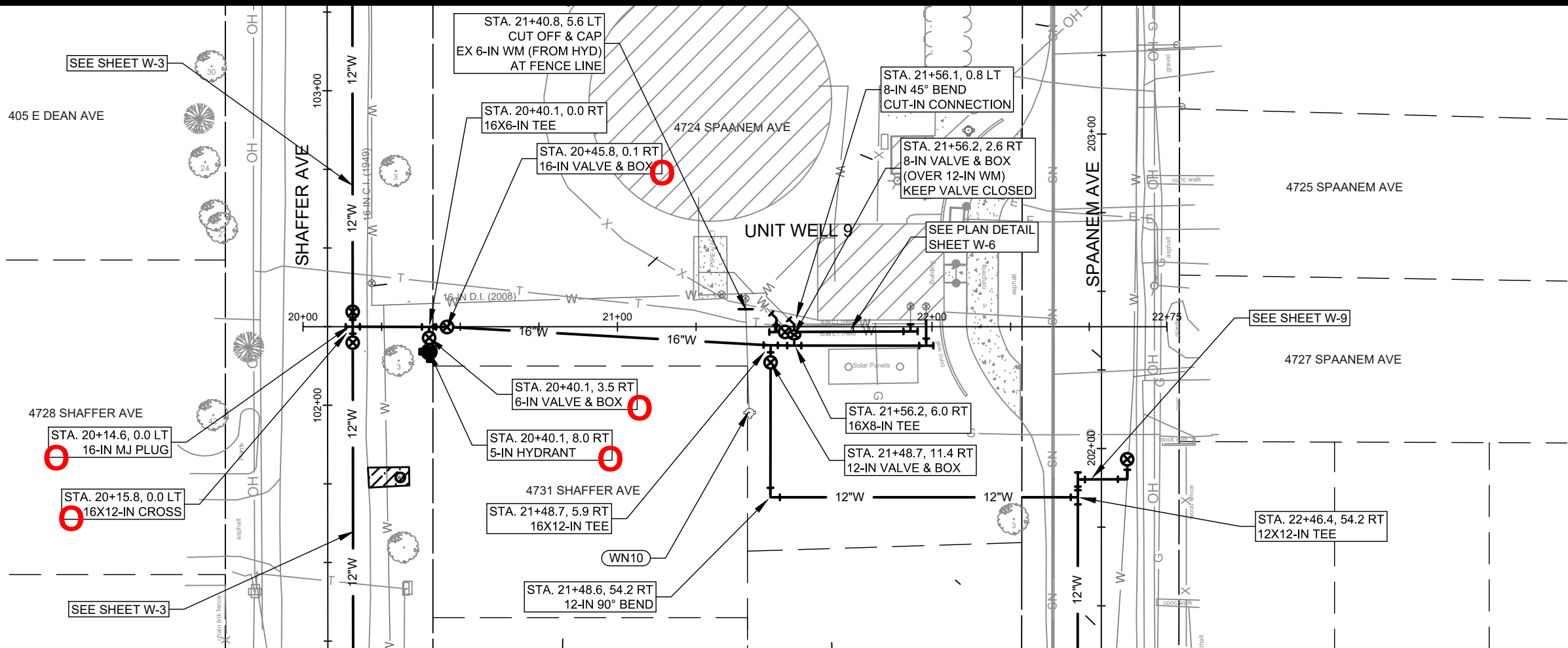


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12999  
MADISON, WI  
CONTRACT NO: 8920  
W-4

SHAFER AVENUE  
ALLIS / SPAANEM / SHAFER WATER MAIN  
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12999  
W-4





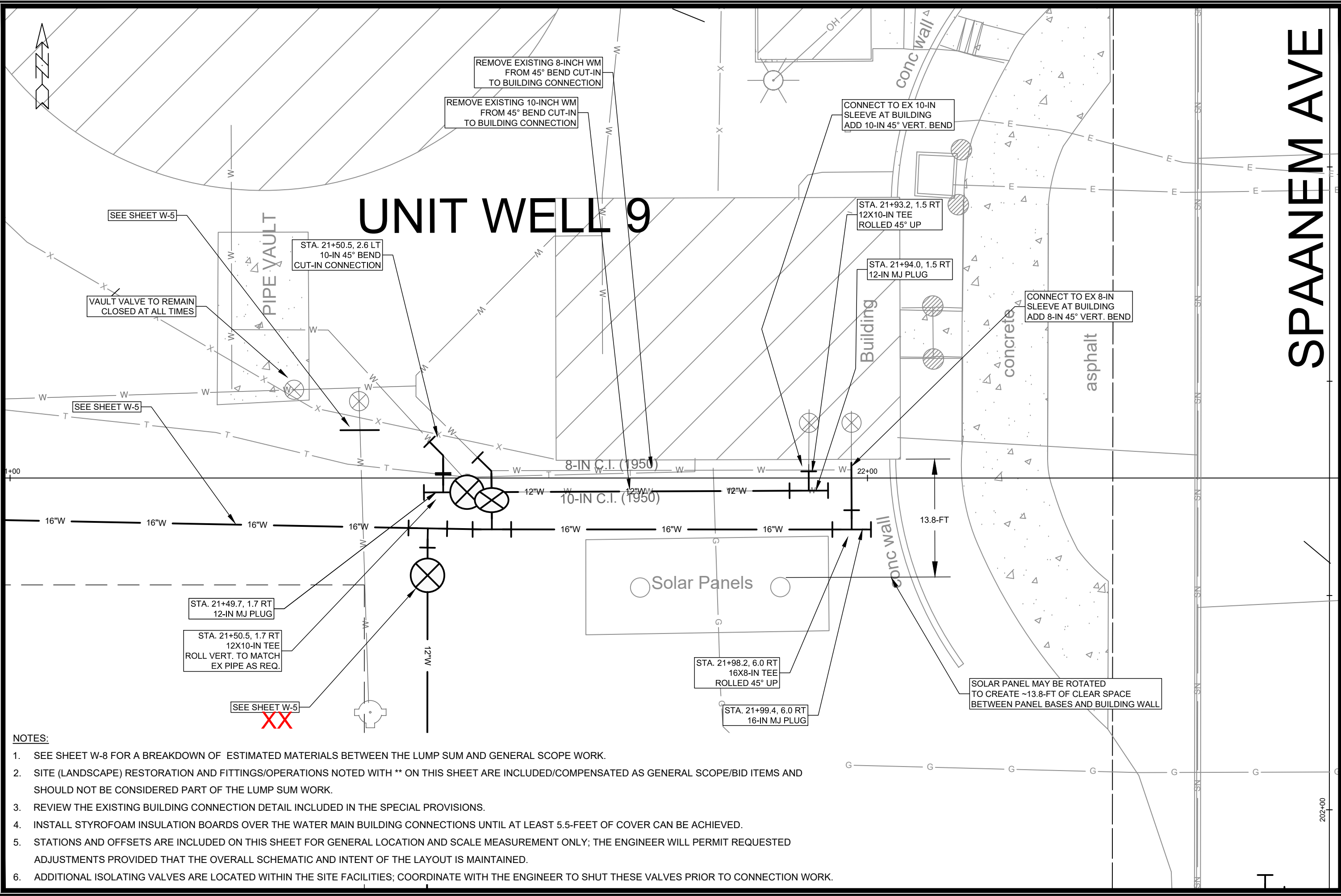
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Designed By: PEH				Scale: 1" = 40'
Date: 8/26/2020 10:59 AM				12999

12999  
MADISON, WI  
8920  
CONTRACT NO:

WELL 9 SITE  
ALLIS / SPAANEM / SHAFER WATER MAIN  
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12999  
W-5



# UNIT WELL 9

# SPANANEM AVE

- NOTES:**
- SEE SHEET W-8 FOR A BREAKDOWN OF ESTIMATED MATERIALS BETWEEN THE LUMP SUM AND GENERAL SCOPE WORK.
  - SITE (LANDSCAPE) RESTORATION AND FITTINGS/OPERATIONS NOTED WITH \*\* ON THIS SHEET ARE INCLUDED/COMPENSATED AS GENERAL SCOPE/BID ITEMS AND SHOULD NOT BE CONSIDERED PART OF THE LUMP SUM WORK.
  - REVIEW THE EXISTING BUILDING CONNECTION DETAIL INCLUDED IN THE SPECIAL PROVISIONS.
  - INSTALL STYROFOAM INSULATION BOARDS OVER THE WATER MAIN BUILDING CONNECTIONS UNTIL AT LEAST 5.5- FEET OF COVER CAN BE ACHIEVED.
  - STATIONS AND OFFSETS ARE INCLUDED ON THIS SHEET FOR GENERAL LOCATION AND SCALE MEASUREMENT ONLY; THE ENGINEER WILL PERMIT REQUESTED ADJUSTMENTS PROVIDED THAT THE OVERALL SCHEMATIC AND INTENT OF THE LAYOUT IS MAINTAINED.
  - ADDITIONAL ISOLATING VALVES ARE LOCATED WITHIN THE SITE FACILITIES; COORDINATE WITH THE ENGINEER TO SHUT THESE VALVES PRIOR TO CONNECTION WORK.

REVISION 1	08.01.20	PEH	DATE	BY
ADDENDUM 1	06.18.20	PEH	DATE	BY
MARK	XX	XX	DATE	BY
Designed By: PEH	Date: 7/24/2020 12:18 PM	Scale: 1" = 20'		
12999				
W-6				

12999  
MADISON, WI  
8920  
CONTRACT NO:

WELL 9 SITE - PLAN DETAIL  
ALLIS / SPANANEM / SHAFER WATER MAIN  
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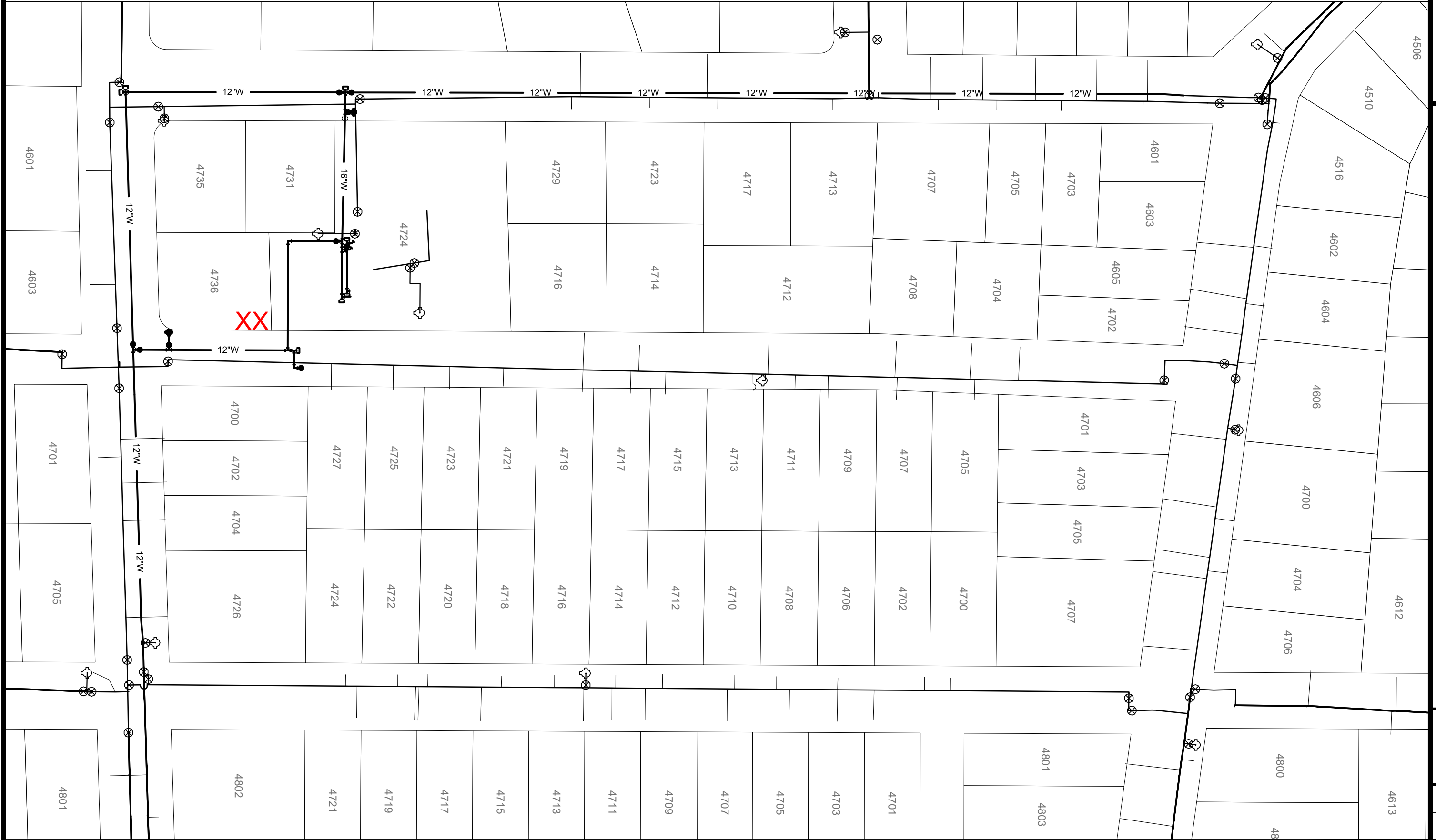
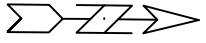


12999  
W-6

**DISCLAIMER NOTE:**  
 THE WATER IMPACT PLAN IS PROVIDED FOR REFERENCE PURPOSES  
 TO AID PLANNING CONNECTION POINT ISOLATION AND PREPARING  
 NOTIFICATION LISTS DURING PLANNED OUTAGES. REQUEST ANY  
 ALTERNATIVE CONNECTION METHODS IN WRITING, PER SPECS.



MARK	REVISION	DATE	BY
XX	REVISION 1	08.01.20	PEH
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SCALE: AS SHOWN  
 DESIGNED BY: PEH  
 MADISON WATER UTILITY  
 119 E OLIN AVE, MADISON, WI 53713  
 PRINTING DATE: 02/24/2020

0268 : ON CONTRACT

**NISNOCSSIM 'NOSIDAW OF CITY**  
 NAWL IMPACT PLAN  
 NAWATER WATW / SHAFFER SHS / MEMNAPS / SILLA



12999  
 W-7

**ESTIMATE OF NEW WATER MATERIALS\***

XX

RIGHT OF WAY AND WELL 9 SITE ACCESS WORK			WELL 9 SITE - LUMP SUM WORK (SHEET W-6)		
DESCRIPTION	QUANTITY	UNIT	DESCRIPTION	QUANTITY	UNIT
6-INCH PIPE	50	LNFT	8-INCH PIPE	<20	LNFT
12-INCH PIPE	1750	LNFT	10-INCH PIPE	<10	LNFT
16-INCH PIPE	150	LNFT	12-INCH PIPE	40	LNFT
6-INCH WATER VALVE	3	EACH	16-INCH PIPE	40	LNFT
8-INCH WATER VALVE	1	EACH	12-IN MJ PLUG	2	EACH
12-INCH WATER VALVE	6	EACH	16-IN MJ PLUG	1	EACH
16-INCH WATER VALVE	1	EACH	8-IN 45° BEND	2	EACH
5-IN HYDRANT	2	EACH	10-IN 45° BEND	2	EACH
ANODE	1	EACH	12X10-IN TEE	2	EACH
6-IN MJ CAP	1	EACH	16X8-IN TEE	2	EACH
8-IN MJ PLUG	1	EACH			
12-IN MJ PLUG	4	EACH	INSULATION BOARDS	32	LNFT
16-IN MJ PLUG	1	EACH			
12X12-IN CROSS	1	EACH			
16X12-IN CROSS	1	EACH			
6-IN 90° BEND	1	EACH			
12X6-IN TEE	3	EACH			
12X12-IN TEE	1	EACH			
16X12-IN TEE	2	EACH			
16X6-IN TEE	1	EACH			
1-INCH COPPER FOR SVC	AS REQ.	LNFT			

\* ESTIMATES OF MATERIALS ARE FOR INFORMATION ONLY. ENGINEER DOES NOT GUARANTEE ACCURACY OF MATERIAL TAKE-OFF.

CONSTRUCTION NOTES:

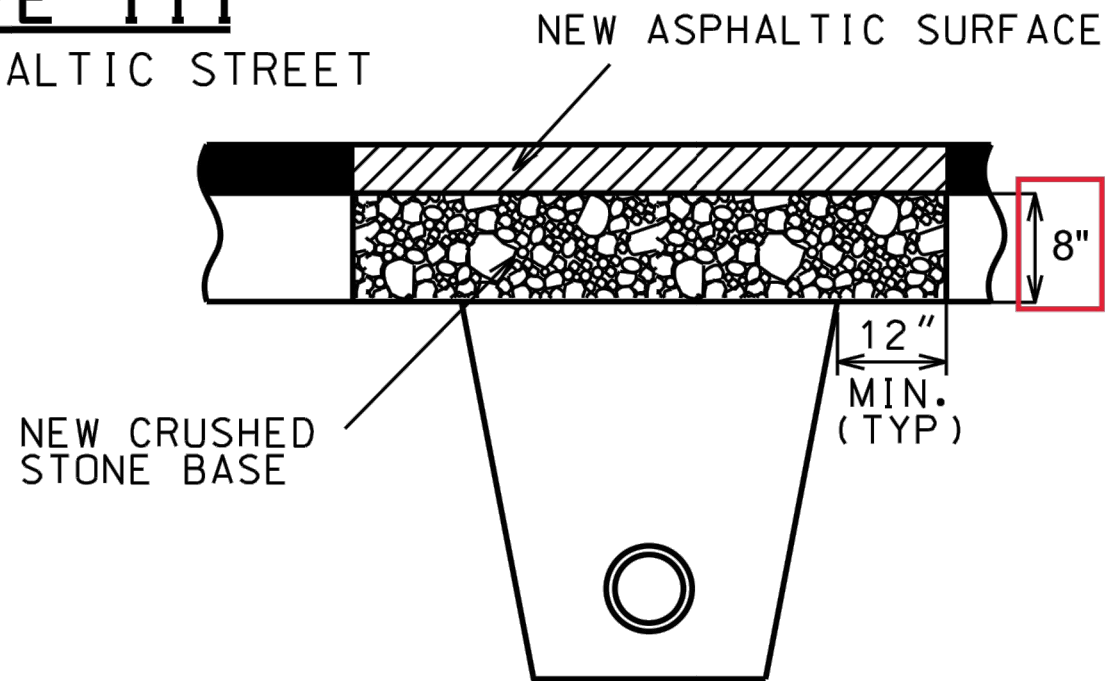
- WN1 REPLACE THE EXISTING LEAD SERVICE WITH A NEW COPPER SERVICE.
- WN-2 EXTEND AND RECONNECT THE EXISTING COPPER SERVICE TO THE NEW WATER MAIN.
- WN-3 EXISTING SERVICE TO BE ABANDONED WHEN THE WATER MAIN IS CUT OFF.
- WN-4 DISCONNECT FROM THE EXISTING WATER MAIN AND RECONNECT THE EXISTING COPPER WATER SERVICE LATERAL TO THE NEW WATER MAIN.
- WN-5 RELOCATE THE EXISTING FIRE HYDRANT.
- WN-6 ABANDON WATER VALVE ACCESS STRUCTURE.
- WN-7 FURNISH AND INSTALL THE NEW TOP SECTION FOR THE WATER ACCESS STRUCTURE.
- WN-8 ABANDON THE VALVE BOX.
- WN-9 FURNISH THE DITCH, COMPACTION, AND ALL MATERIALS AND LABOR FOR THE INSTALLATION OF NEW SERVICE LATERAL.
- WN-10 REMOVE AND SALVAGE EXISTING HYDRANT
- WN-11 REPLACE THE EXISTING COPPER SERVICE WITH A COPPER SERVICE
- WN-20+ SEE WATER IMPACT PLAN FOR CONNECTION POINT ISOLATION AND WATER SHUT-OFF NOTIFICATION INFORMATION.

NO.	DATE	BY
08.01.20	PEH	PEH
REVISION 1	ADDENDUM 1	REVISION
XX	X	MARK

WATER UTILITY ULO SCHEDULE

ULO	UTILITY	STATION	OFFSET	SHEET
#1	WATER	3+59	9.3'LT	W-1
#2	WATER	5+91	9.6'LT	W-2
#3	WATER	102+19	18.1'RT	W-3

**TYPE III**  
ASPHALTIC STREET



TYPE III UTILITY TRENCH PATCH

THE PATCH SHALL BE CRUSHED STONE BASE COURSE, GRADATION NO. 2 OVERLAID WITH ASPHALT UPPER LAYER EQUAL IN THICKNESS TO THE EXISTING ASPHALTIC PAVEMENT, WITH A MINIMUM THICKNESS OF:

Allis Avenue:	2.5-inch asphaltic base
Spaanem Avenue:	2.5-inch asphaltic base
Shaffer Avenue:	3.0-inch asphaltic base

THE PAVEMENT ALONG THE PATCH SHALL BE SAWCUT, FULL DEPTH, AND INCIDENTAL TO THE TRENCH PATCH. THE EDGES OF THE EXISTING ASPHALTIC PAVEMENT SHALL BE FREE OF LOOSE STONES OR PAVEMENT MATERIAL.

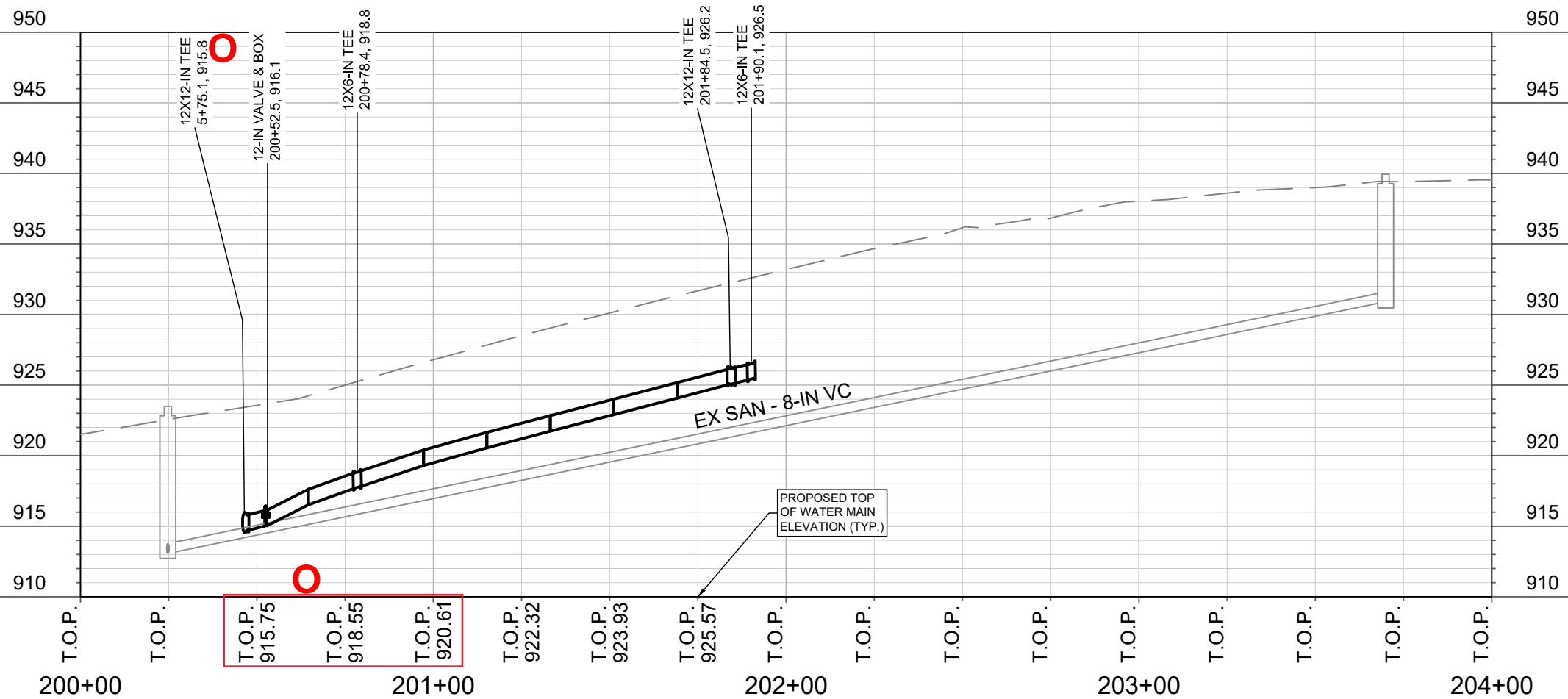
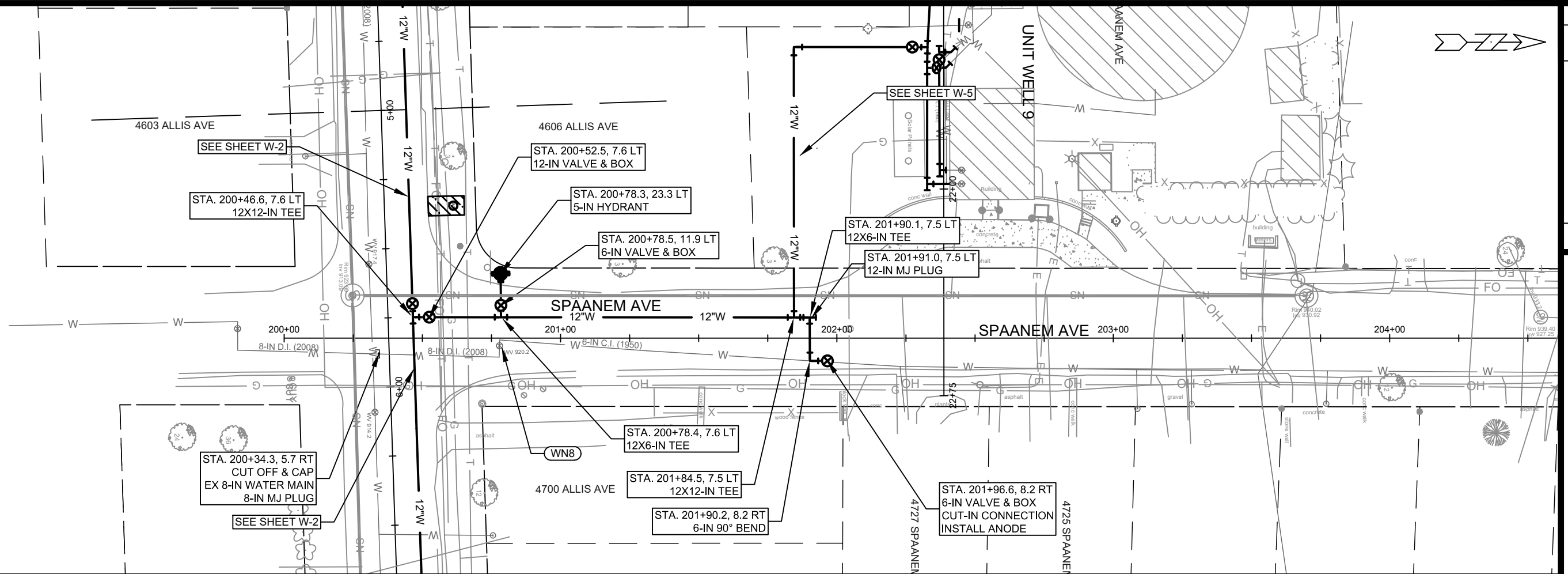
THE CRUSED STONE BASE COURSE SHALL BE INSTALLED IN TWO LIFTS. THE LOWER LIFT SHALL BE THOROUGHLY MECHANICALLY COMPACTED PRIOR TO PLACING THE UPPER LIFT.

THE ASPHALT UPPER LAYER SHALL BE LAID IN TWO LIFTS. THE ASPHALT UPPER LAYER SHALL BE MACHINE LAID WHERE DIRECTED BY THE ENGINEER. WHERE THE ASPHALTIC UPPER LAYER IS MACHINE LAID AND IS NOT MORE THAN 3" IN THICKNESS, THE ASPHALT SURFACE COURSE MAY BE IN ONE LIFT.

PRIOR TO PLACING THE ASPHALT UPPER LAYER, THE EDGES OF THE PATCH AND THE SURFACE OF THE CRUSED STONE BASE SHALL BE TACKED AND PRIMED WITH LIQUID ASPHALT.

SCALE: N/A  
DESIGNED BY: PEH  
MADISON WATER UTILITY  
119 E OLIN AVE, MADISON, WI 53713  
PRINTING DATE: 7/24/20  
CONTRACT NO: 8920





MARK	0	REVISION	2	DATE	08.26.20	BY	PEH
DESIGNED BY	PEH	DATE	8/26/2020	TIME	1:50 AM	SCALE	1" = 40'
PROJECT NO.	12999	SHEET NO.	W-9				

12999  
MADISON, WI  
8920  
CONTRACT NO:

SPAANEM AVENUE  
ALLIS / SPAANEM / SHAFFER WATER MAIN  
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