

Madison, Wisconsin

# CITY OF MADISON

## CITY ENGINEERING DIVISION

### DEPARTMENT OF PUBLIC WORKS

# PLAN OF PROPOSED IMPROVEMENT

PUBLIC IMPROVEMENT PROJECT APPROVED

AUGUST 11, 2015

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

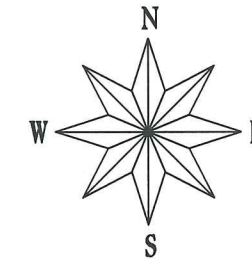
*[Signature]* 8/24/15  
City Engineer Date

INDEX OF SHEETS

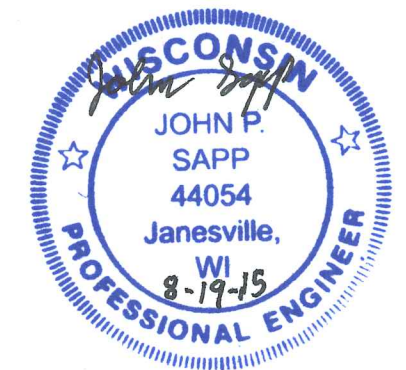
SHEET NO.	TITLE
1	
DI-D3	DETAILS
PI-P2	STREET PLAN & PROFILE
UI-U2	SEWER PLAN & PROFILE
U3-U4	SEWER SCHEDULES
WI-W2	WATER PLAN & PROFILES
W3	WATER IMPACT PLAN
W4	WATER ESTIMATE OF MATERIALS

## BIRCHWOOD POINT PHASE 4

CITY PROJECT NO. 11092  
CITY CONTRACT NO. 2440  
MUNIS NO. 11092



STREET DESIGNED BY:

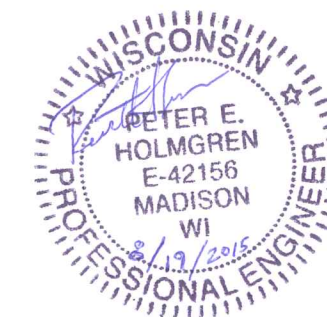


SANITARY SEWER DESIGNED BY:

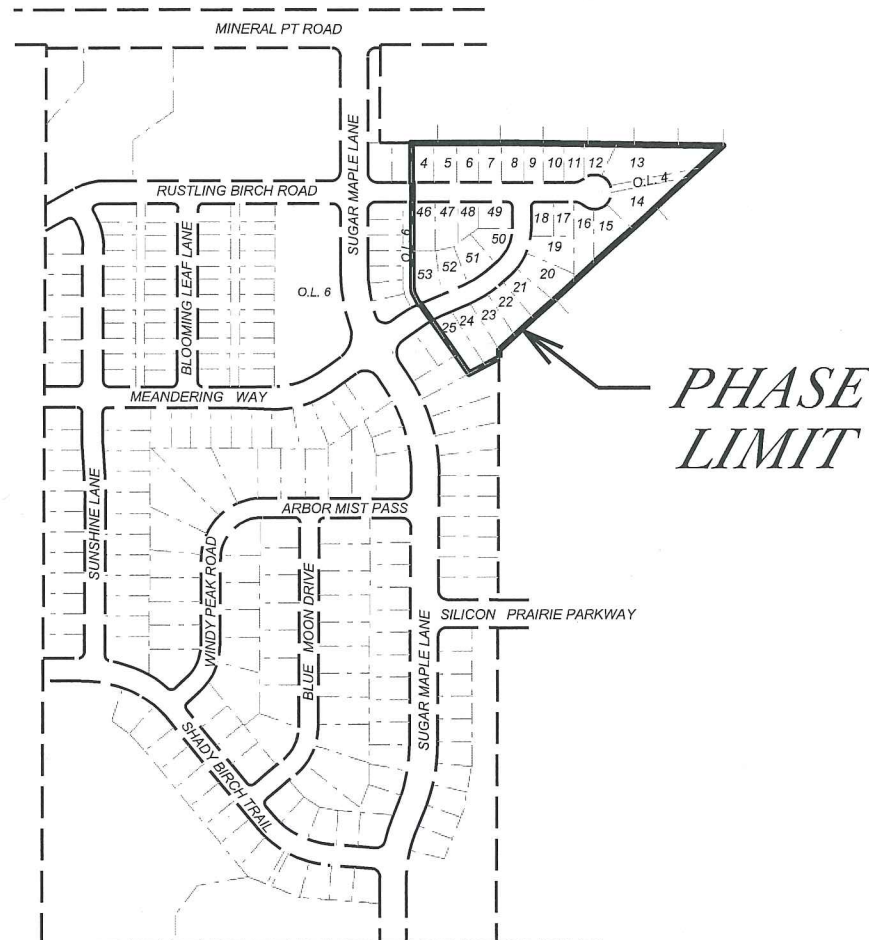
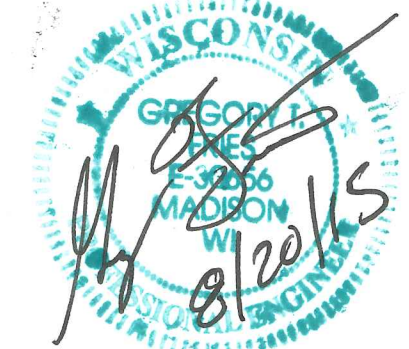


8/20/15

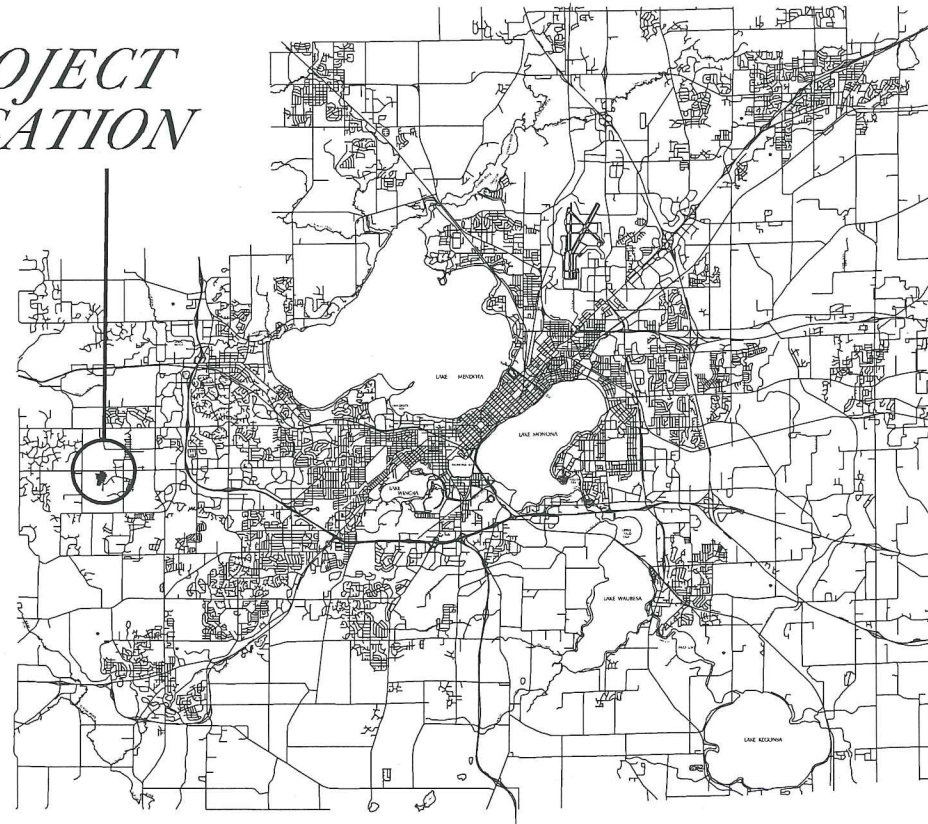
WATER DESIGNED BY:



STORM SEWER DESIGNED BY:



### PROJECT LOCATION



PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

DETAIL

STANDARD NOTES  
AND COMMENTS

CITY OF MADISON

THE LOCATION AND INFORMATION FOR PROPOSED NEW TREES, IN THE PUBLIC RIGHT OF WAY OR ON PUBLIC LANDS ARE APPROXIMATE AND ARE SHOWN FOR REFERENCE ONLY. THE LOCATIONS, SPECIFICATIONS AND PLANTING METHODS OF ALL PROPOSED NEW OR REPLACEMENT TREES IN THE PUBLIC RIGHT OF WAY OR ON PUBLIC LANDS SHALL BE APPROVED BY THE CITY FORESTER PRIOR TO INSTALLATION.

NO TREES IN THE RIGHT OF WAY OR ON PUBLIC LANDS SHALL BE TRIMMED, PRUNED, REMOVED OR ADVERSELY AFFECTED IN ANY WAY UNTIL THE DEVELOPER HAS RECEIVED WRITTEN PERMISSION FROM THE CITY ENGINEER OR CITY FORESTER. SAID WRITTEN PERMISSION SHALL INCLUDE LANGUAGE INDICATING THAT SECTION 10.101 OF THE MADISON GENERAL ORDINANCES AND ADMINISTRATIVE PROCEDURE MEMORANDUM NO. 6-2, REFERING TO NOTIFICATION OF PROPERTY OCCUPANTS AND/OR OWNERS, HAS BEEN COMPLIED WITH.

ALL PAVEMENT WITHIN THE RUSTLING BIRCH ROAD AND MEANDERING WAY RIGHTS-OF-WAY SHALL BE TYPE A PAVEMENT PER STANDARD DETAIL DRAWING 4.02.

UNDERDRAINS SHALL BE INSTALLED, PER STANDARD DETAIL DRAWING 4.05 FOR 75' ON EACH SIDE OF THE LOW POINT, OR TO THE NEAREST CURB HIGH POINT. ALL UNDERDRAIN SHALL BE WRAPPED.

ALL GUTTERS SHALL DRAIN WITH A MINIMUM GRADES OF 0.5% TOWARD STORM SEWER INLETS.

ALL DITCHES SHALL DRAIN WITH A MINIMUM GRADES OF 0.5%

THE CROSS SLOPE OF SIDEWALKS AND BARRIER FREE SIDEWALK CURB RAMPS SHALL BE 1.5%. THE LONGITUDINAL GRADE OF BARRIER FREE SIDEWALK CURB RAMPS SHALL NOT EXCEED 8.33%. ALL SIDEWALK RAMPS SHALL BE CONSTRUCTED ACCORDING TO S.D.D. 3.03. AT ALL OTHER LOCATIONS THE LONGITUDINAL GRADE OF SIDEWALKS SHALL NOT EXCEED 5.0 % OR THE ADJACENT STREET GRADE WHICHEVER IS GREATER NOR BE LESS THAN 0.5% AND SHALL DRAIN TOWARD STORM SEWER INLETS. SIDE SLOPES WITHIN TEN FEET OF A PUBLIC SIDEWALK SHALL NOT EXCEED 4:00:1. ALL SIDEWALK AND SIDEWALK RAMP ELEVATIONS AND GRADES SHALL BE FIELD VERIFIED AND SET TO COMPLY WITH THE CITY OF MADISON STANDARD SPECIFICATIONS AND THE A.D.A. GUIDELINES.

OBTAIN A PRINT OUT OF THE ALIGNMENT FROM THE CITY ENGINEER PRIOR TO STAKING THIS PROJECT.

CURB STATION AND OFFSETS SHALL BE TO THE FACE OF CURB UNLESS OTHERWISE INDICATED. CURB ELEVATIONS SHALL BE TO THE TOP OF CURB (OR EXTENDED TOP OF CURB FOR DRIVEWAYS OR RAMPS) UNLESS OTHERWISE INDICATED.

POWER POLES AND OTHER OBSTRUCTIONS SHALL BE MOVED TO PROVIDE 2 FEET MINIMUM OF CLEAR DISTANCE FROM ANY FACE OF CURB OR EDGE OF SIDEWALK.

ANY INFORMATION SHOWN ON THIS PLAN, WHICH IS NOT PART OF THIS PROJECT, IS PRELIMINARY AND NOT FOR CONSTRUCTION.

THERE MAY BE EXISTING UTILITIES OR OTHER FEATURES WHICH ARE EITHER NOT SHOWN OR SHOWN INCORRECTLY ON THIS PLAN. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO LOCATE AND IDENTIFY ALL UTILITIES AND TOPOGRAPHY WHICH MAY AFFECT THE CONSTRUCTION OF THESE IMPROVEMENTS.

ALL PERMANENT SIGNING AND POSTING WILL BE DETERMINED AND PROVIDED BY THE TRAFFIC ENGINEERING DIVISION, FOLLOWING CONSTRUCTION OF THESE IMPROVEMENTS.

THE DEVELOPER SHALL PROVIDE, INSTALL AND MAINTAIN ALL STREET END BARRICADES, SIGNING AND TRAFFIC CONTROL, AS REQUIRED BY THE CITY TRAFFIC ENGINEER.

PAVEMENT SAWCUTS SHALL BE AS DIRECTED BY THE CITY CONSTRUCTION ENGINEER. SAWCUTS SHOWN ON THE PLAN ARE APPROXIMATE.

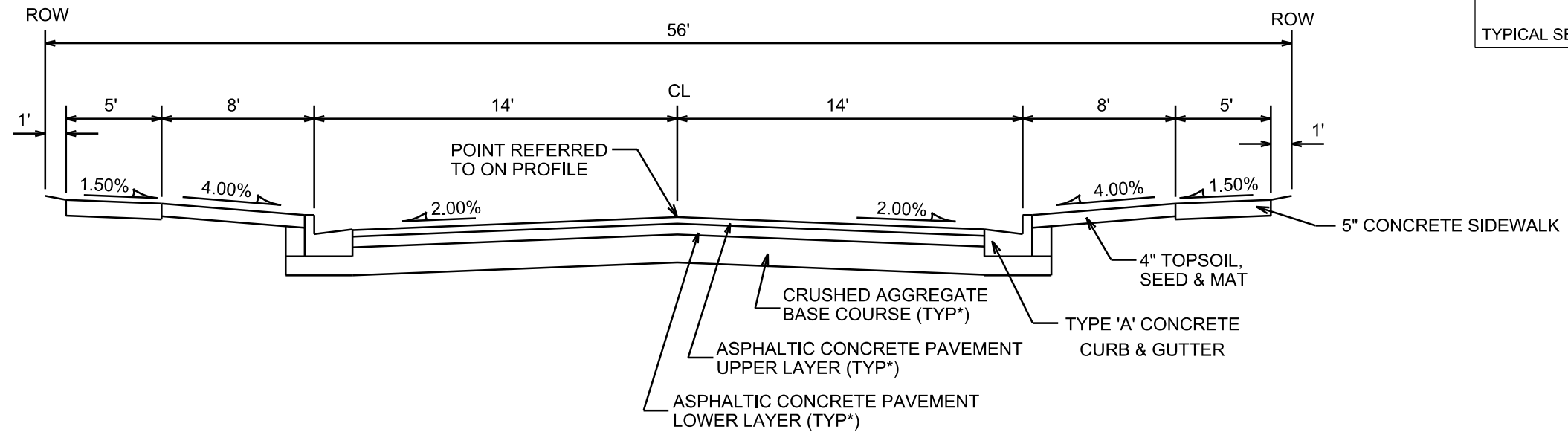
CURB ON CUL DE SACS SHALL BE INSTALLED ACCORDING TO SDD 3.05.

PLOT SCALE: \_\_\_\_\_

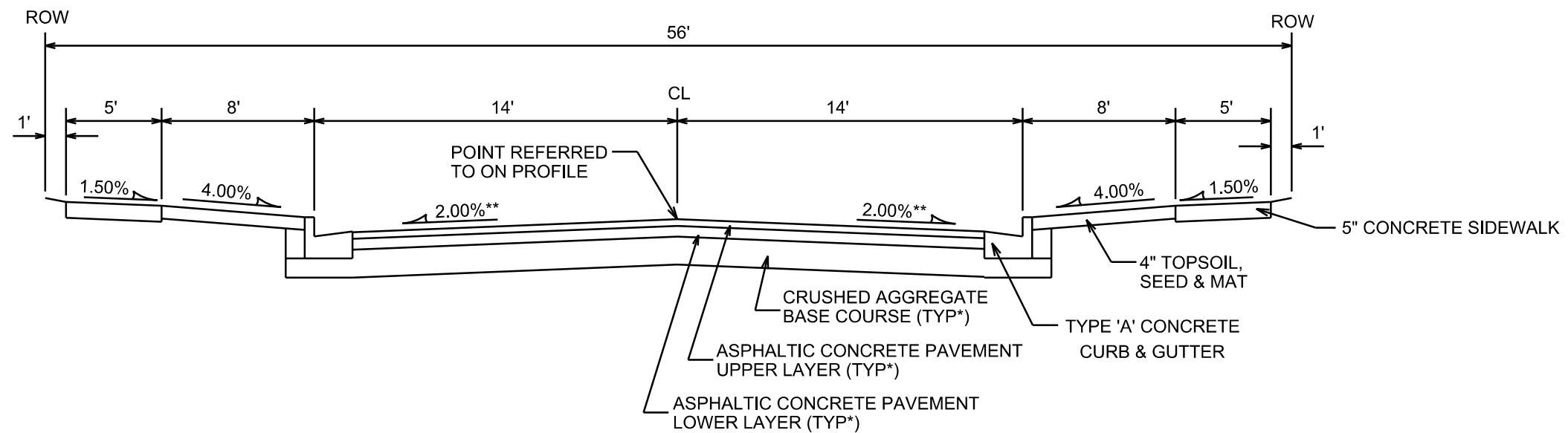
PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



**TYPICAL SECTION**  
RUSTLING BIRCH ROAD  
NOT TO SCALE



**TYPICAL SECTION**  
MEANDERING WAY  
NOT TO SCALE

CITY OF MADISON MINIMUM PAVEMENT DESIGN

TYPE	CRUSHED AGG. BASE COURSE		ASPHALTIC CONCRETE PAVEMENT			
	LOWER LAYER GRADATION 1	UPPER LAYER GRADATION 2	LOWER LAYER TYPE	LOWER LAYER THICKNESS	UPPER LAYER TYPE	UPPER LAYER THICKNESS
A	6"	4"	E-0.3	1.75"	E-0.3	1.75"
B	6"	4"	E-1	2.25"	E-1	2"
C	6"	4"	E-3	3.25"	E-3	2"

NOTES:

\* RUSTLING BIRCH ROAD & MEANDERING WAY TO BE CONSTRUCTED AS TYPE 'A' PAVEMENT PER CITY OF MADISON MINIMUM PAVEMENT DESIGN

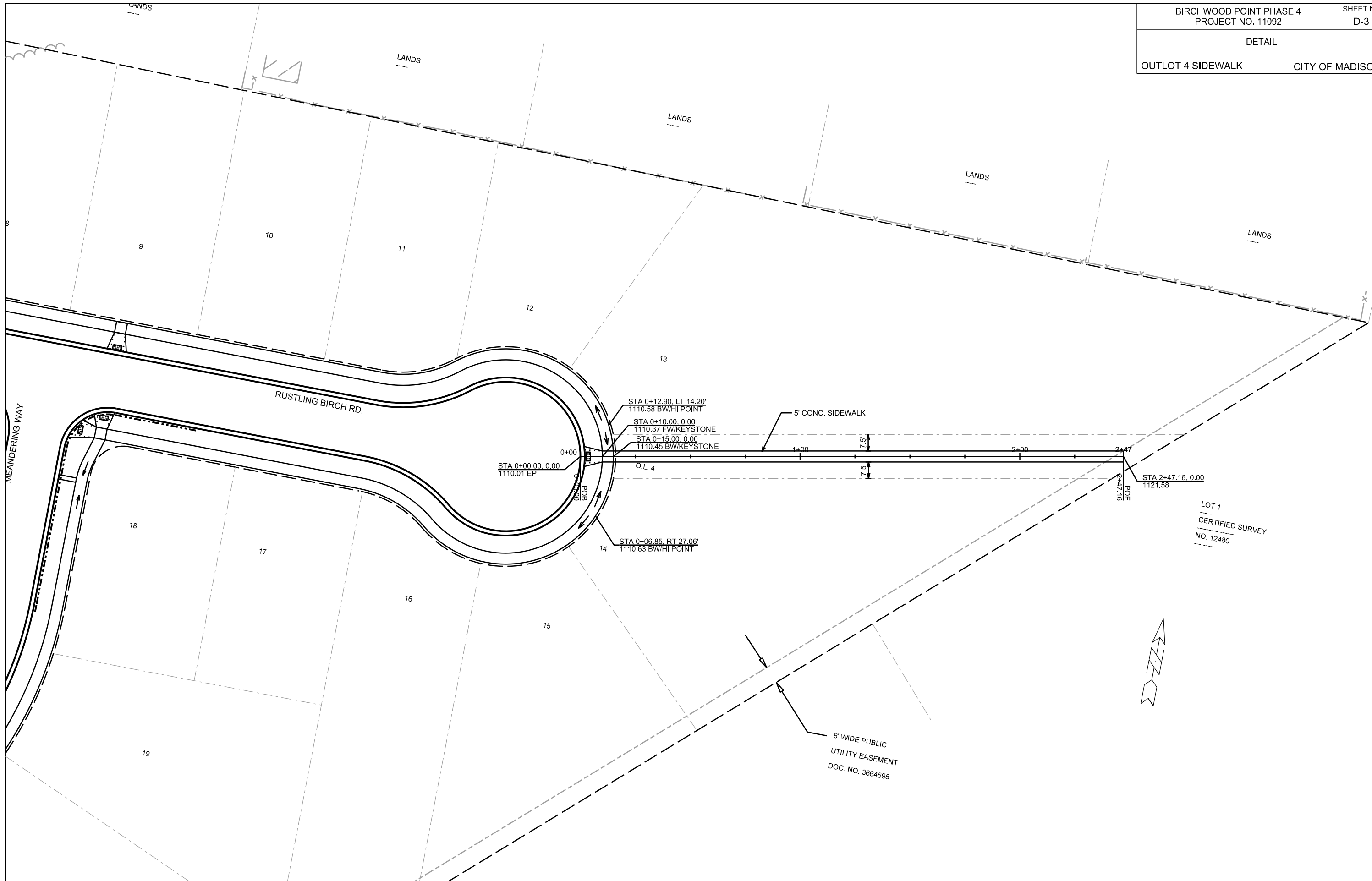
\*\* CROSS SLOPE VARIES FROM STA 65+25 TO STA 66+82 . SEE SHEET P-1.

PLOT SCALE: \_\_\_\_\_

PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



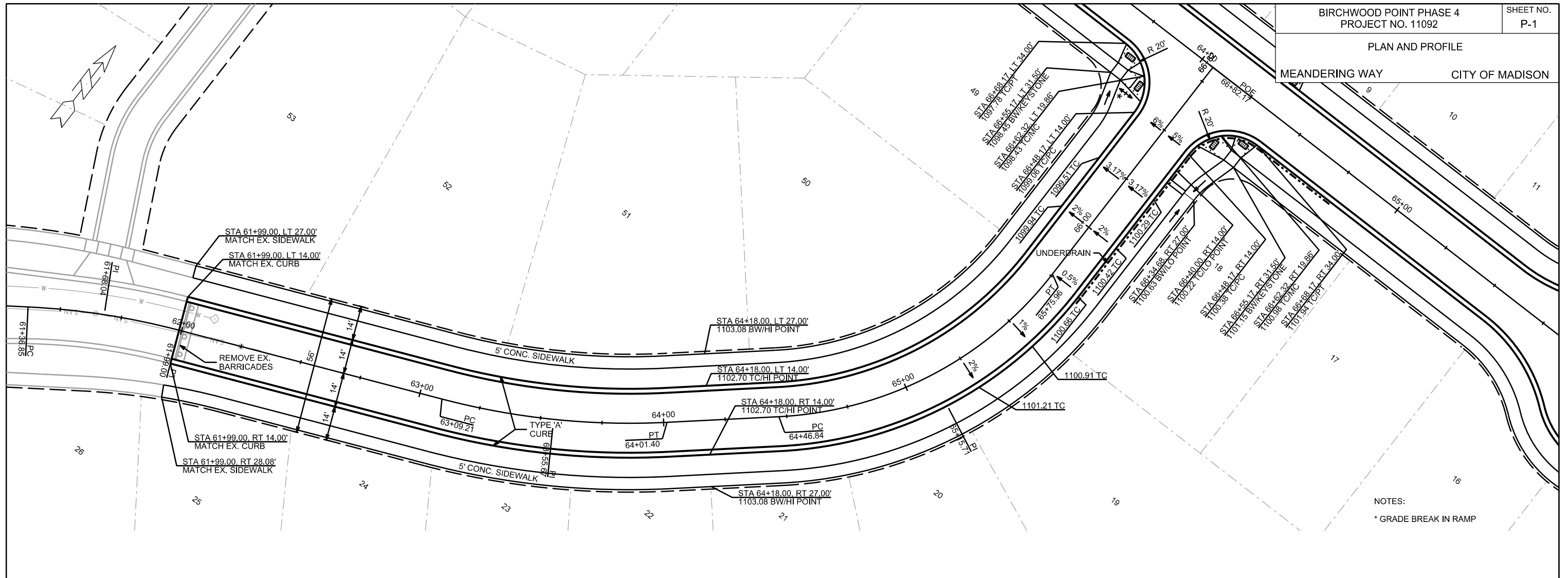
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PLOT NAME: \_\_\_\_\_

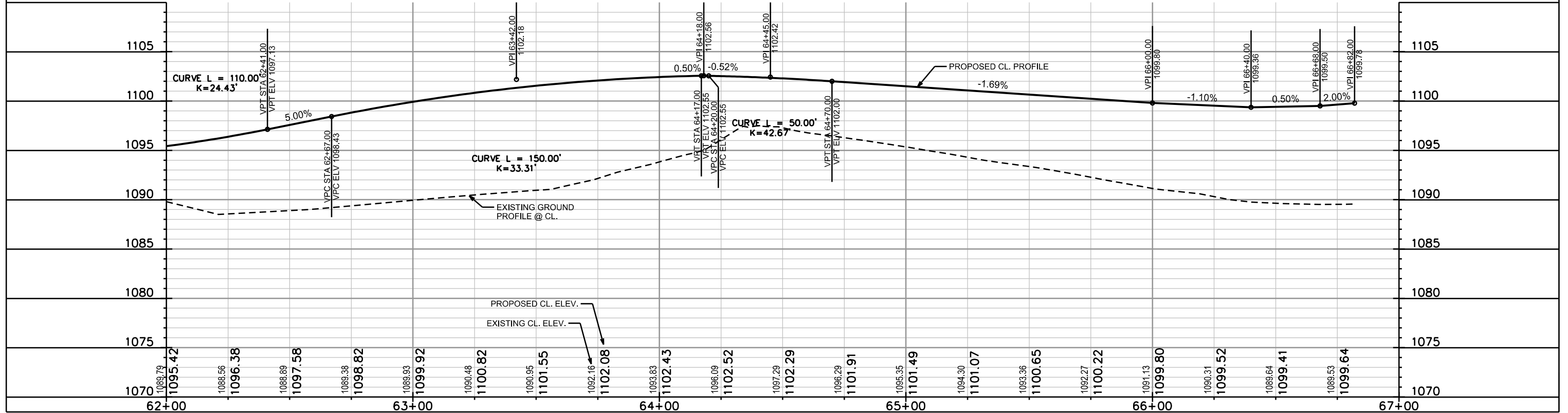
REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLAN AND PROFILE  
MEANDERING WAY CITY OF MADISON



NOTES:  
\* GRADE BREAK IN RAMP



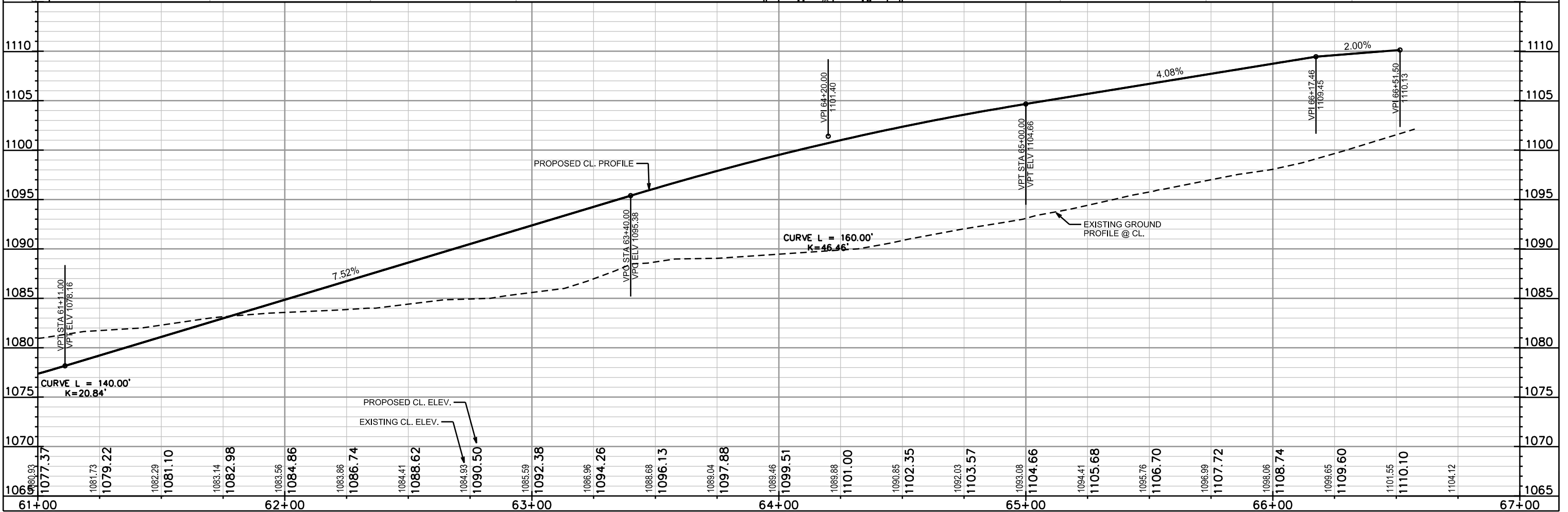
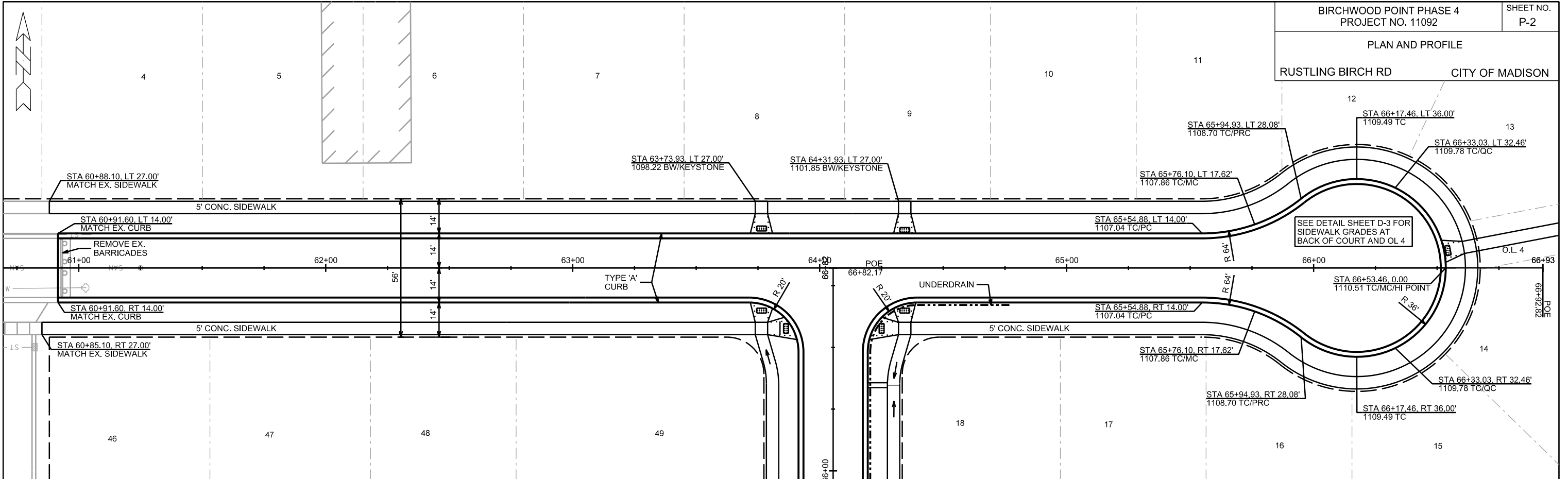
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PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

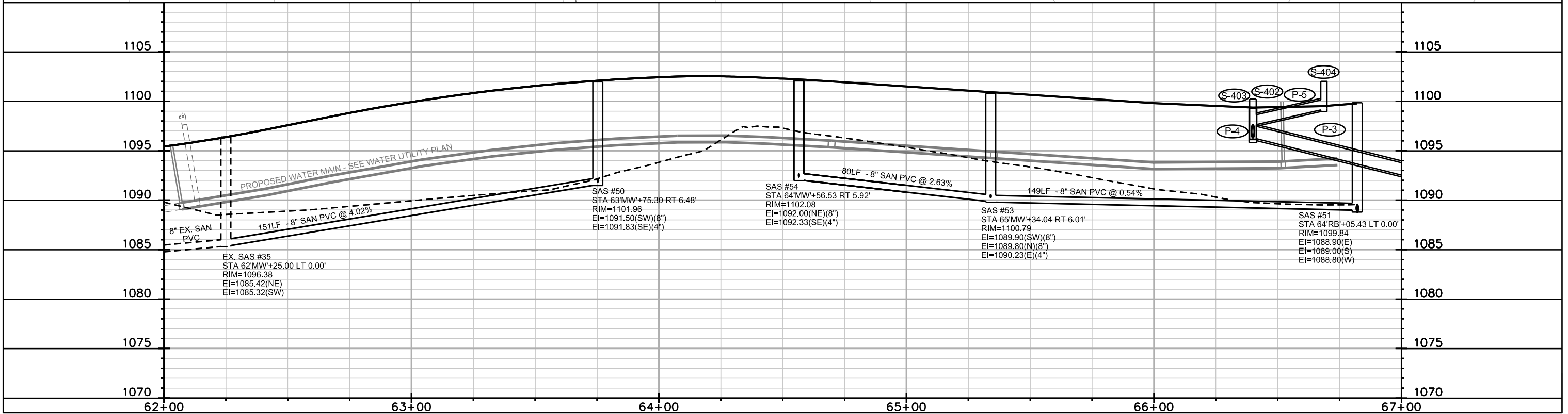
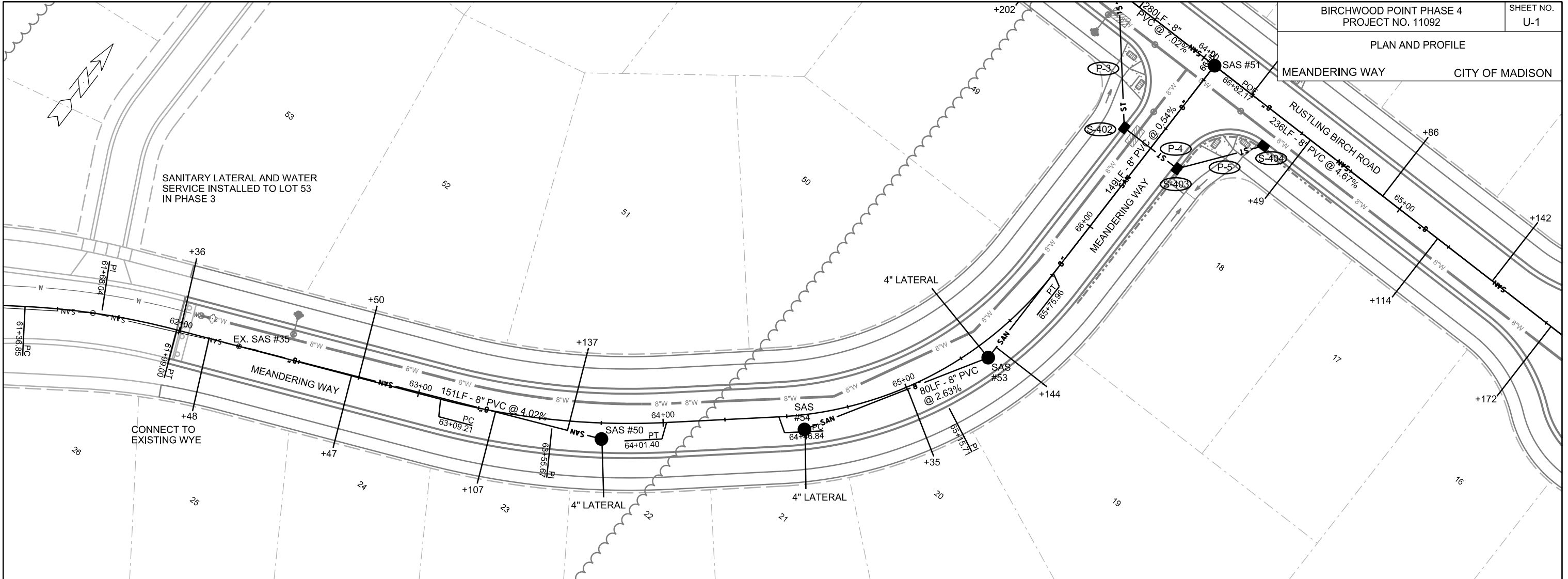
PLAN AND PROFILE  
RUSTLING BIRCH RD CITY OF MADISON



PLOT SCALE: \_\_\_\_\_  
PLOT NAME: \_\_\_\_\_  
REV. DATE: \_\_\_\_\_  
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLAN AND PROFILE

MEANDERING WAY CITY OF MADISON



PLOT SCALE: \_\_\_\_\_

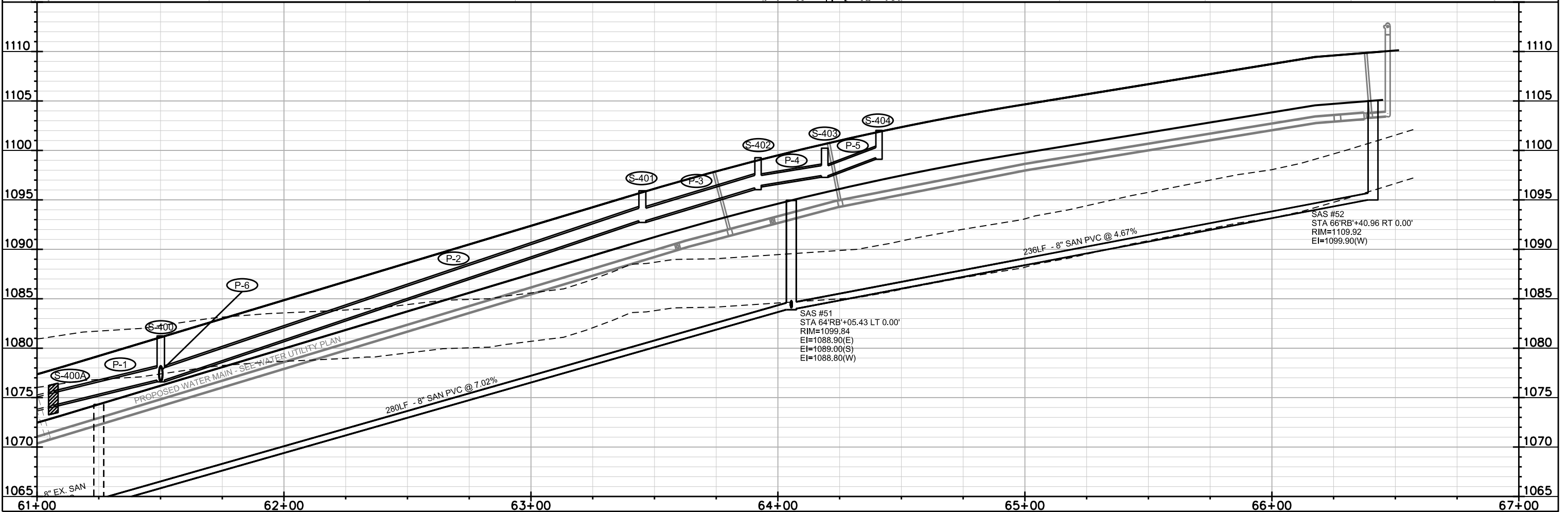
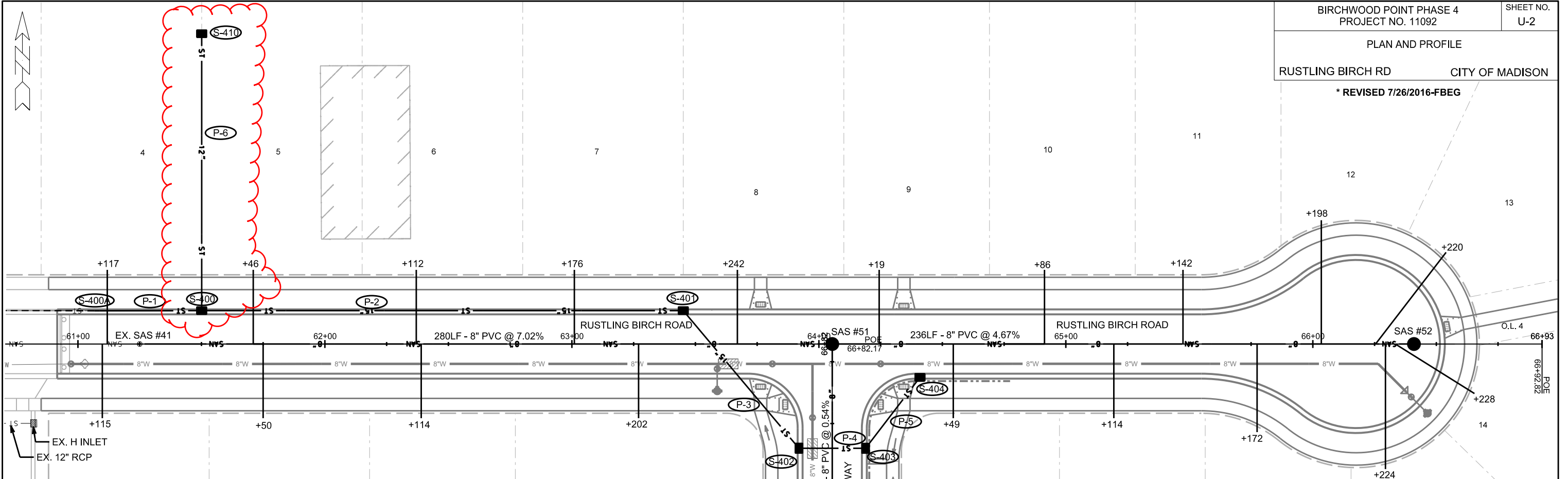
PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLAN AND PROFILE  
RUSTLING BIRCH RD CITY OF MADISON

\* REVISED 7/26/2016-FBEG



PLOT SCALE: \_\_\_\_\_

PLOT NAME: \_\_\_\_\_

REV. DATE: \_\_\_\_\_

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



# SANITARY SCHEDULE

## ALIGNMENT CODES:

'MW'- MEANDERING WAY  
'RB'- RUSTLING BIRCH DR

BIRCHWOOD POINT PHASE 4

PROJECT NO. 11092

SHEET NO.

U-3

SANITARY SEWER SCHEDULE

CITY OF MADISON

### PROPOSED SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH	NOTES
SAS#50	63'MW'+75.30	RT-6.48	1101.96	1091.50	10.46	
SAS#51	64'RB'+05.43	LT-0.00	1099.84	1088.80	11.04	
SAS#52	66'RB'+40.96	RT-0.00	1109.92	1099.90	10.02	
SAS#53	65'MW'+34.04	RT-6.01	1100.79	1089.80	10.99	
SAS#54	64'MW'+56.53	RT-5.92	1102.08	1092.00	10.08	

### PROPOSED SANITARY PIPES

FROM SAS (DWNSTRM)	TO SAS (UPSTREAM)	EI # (DWNSTRM)	EI # (UPSTRM)	LENGTH (FT)	SLOPE (%)	SIZE (DIA)	PVC TYPE	NOTES
EX. SAS #35	SAS#50	1085.42	1091.50	151	4.02%	8"	SDR-35	PER ASTM D3034
EX. SAS #41	SAS#51	1069.10	1088.80	280	7.02%	8"	SDR-35	PER ASTM D3034
SAS#51	SAS#52	1088.90	1099.90	236	4.67%	8"	SDR-35	PER ASTM D3034
SAS#51	SAS#53	1089.00	1089.80	149	0.54%	8"	SDR-35	PER ASTM D3034
SAS#53	SAS#54	1089.90	1092.00	80	2.63%	8"	SDR-35	PER ASTM D3034

PLOT SCALE: ---

PLOT NAME: ---

REV. DATE: ---

# STORM SEWER SCHEDULE

## ALIGNMENT CODES:

'RB' - RUSTLING BIRCH ROAD  
'MW' - MEANDERING WAY

BIRCHWOOD POINT PHASE 4  
PROJECT NO. 11092

SHEET NO.  
U-4

STORM SEWER SCHEDULE

CITY OF MADISON

\*Revised 07/26/2016- FEBG  
\*\*Revised 08/29/2016- FEBG

### PROPOSED STORM STRUCTURES

STRUC NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
S-400A	61'RB'+06.60	LT-13.42	CONCRETE COLLAR	-	1074.23	-	PER S.D.D. 5.4.5
S-400	61'RB'+50.11	LT-13.50	H INLET	1081.24	1076.78	4.46	FP; W/ R-3067-7004-V
S-401	63'RB'+45.11	LT-13.50	H INLET	1095.91	1092.89	3.02	FP; W/ R-3067-7004-V
S-402	66'MW'+40.00	LT-13.50	H INLET	1099.22	1096.20	3.02	FP; W/ R-3067-7004-V
S-403	66'MW'+40.00	RT-13.50	H INLET	1100.22	1097.47	2.75	FP; W/ R-3067-7004-V
S-404	64'RB'+40.93	RT-13.50	H INLET	1102.02	1099.27	2.75	FP; W/ R-3067-7004-V
* S-410	61'RB'+50.15	LT-125.50	H INLET	1082.50	1079.53	2.97	**FP; W/ R-1878-B7G(1)

### PROPOSED STORM PIPES

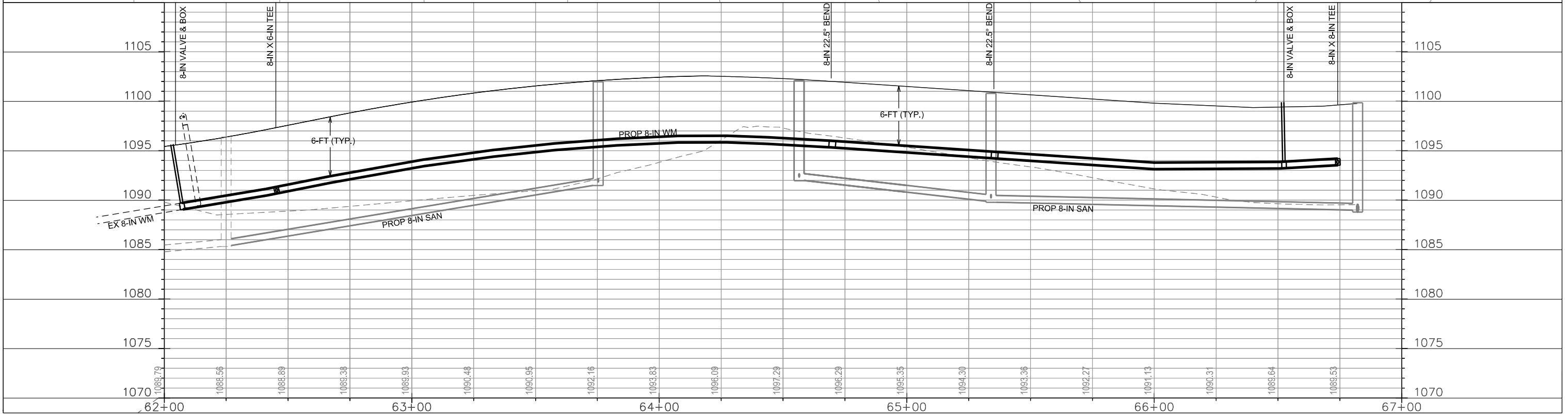
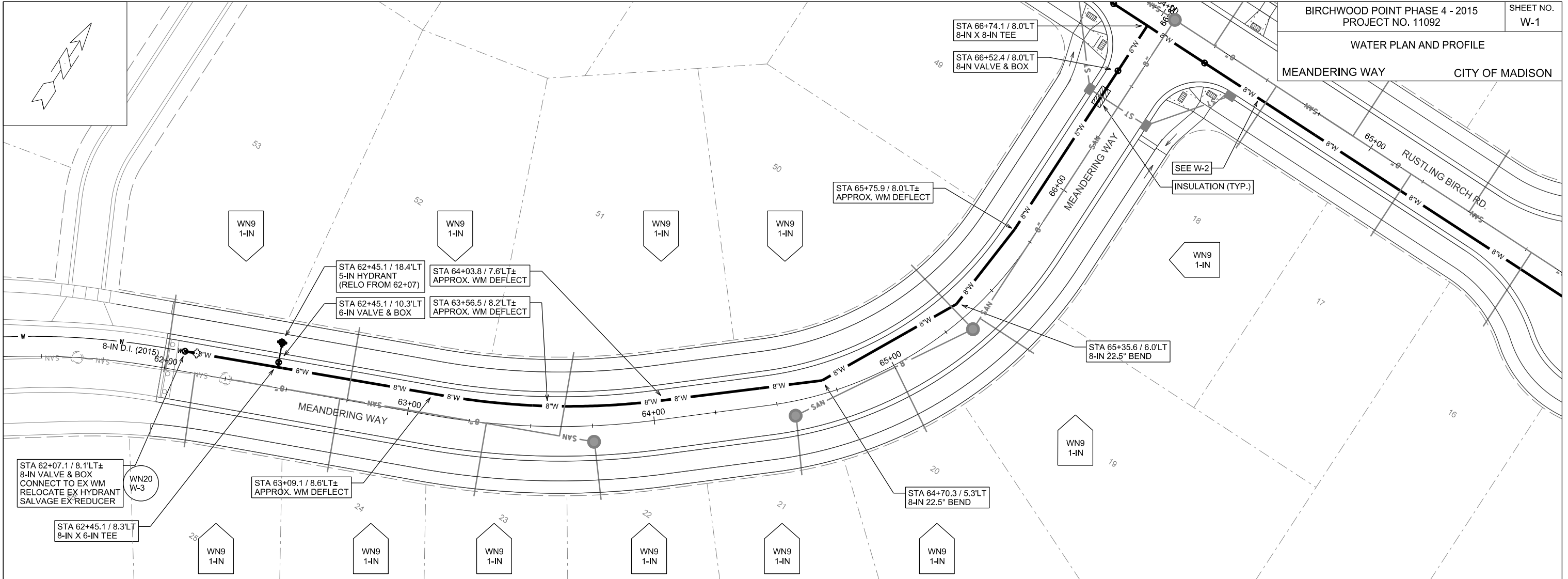
PIPE NO.	FROM SAS (DWNSTRM)	TO SAS (UPSTREAM)	EI # (DWNSTRM)	EI # (UPSTRM)	PIPE LENGTH (FT)	PLAN LENGTH (FT)	SLOPE (%)	SIZE (DIA)	TYPE	NOTES
P-1	S-400A	S-400	1074.23	1076.78	42	44	6.06%	15"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-2	S-400	S-401	1076.78	1092.89	192	195	8.39%	15"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-3	S-401	S-402	1092.89	1096.20	70	73	4.74%	15"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-4	S-402	S-403	1096.45	1097.47	25	27	4.08%	12"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-5	S-403	S-404	1097.47	1099.27	33	36	5.42%	12"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
* P-6	S-400	S-410	1077.03	1079.53	110	112	2.27%	12"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A) (1)

### SPECIFIC NOTES:

\* (1) PRIVATE STORM PIPE

### STANDARD NOTES:

- ABBREVIATIONS: AE = APRON ENDWALL; RCP = REINFORCED CONCRETE PIPE; HERCP = HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE; DNA = DOES NOT APPLY; SAS = SEWER ACCESS STRUCTURE; LP = LOW POINT INLET STRUCTURE; FP = FIELD POURED STRUCTURE; TR = TOP OF CONCRETE ROOF; NCM = NO CROWN MATCH FOR PIPES; UD = UNDERDRAIN
- APPROXIMATE DISCHARGE E.I. GIVEN, ADJUST E.I. AND PIPE SLOPE IN THE FIELD.
- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SAS'S.
- TOP OF CONCRETE ROOF (TR) IS 1.25' BELOW TOP OF CASTING UNLESS OTHERWISE NOTED.
- ALL REINFORCED CONCRETE PIPES TO BE CLASS III UNLESS OTHERWISE NOTED.
- SURVEYOR TO CONFIRM THAT ALL INLET STATION / OFFSETS LINE UP WITH PROPOSED CURB AND GUTTER.
- ALL STRUCTURES CALLED OUT AS FIELD POURED SHALL BE FIELD POURED. ALL OTHER STRUCTURES (NOT INDICATED AS FIELD POURED) SHALL BE SUBMITTED TO CITY ENGINEERING FOR APPROVAL IF PRECAST STRUCTURES ARE PREFERRED. CONTACT LAUREN STRIEGL OF CITY ENGINEERING AT (608) 266-4094, LSTRIEGL@CITYOFMADISON.COM, FOR PRECAST APPROVALS, OR FAX SHOP DRAWINGS TO (608) 264-9275.
- INLETS LOCATED IN TYPE "H" CURB SHALL BE INSTALLED PER S.D.D. 5.7.27



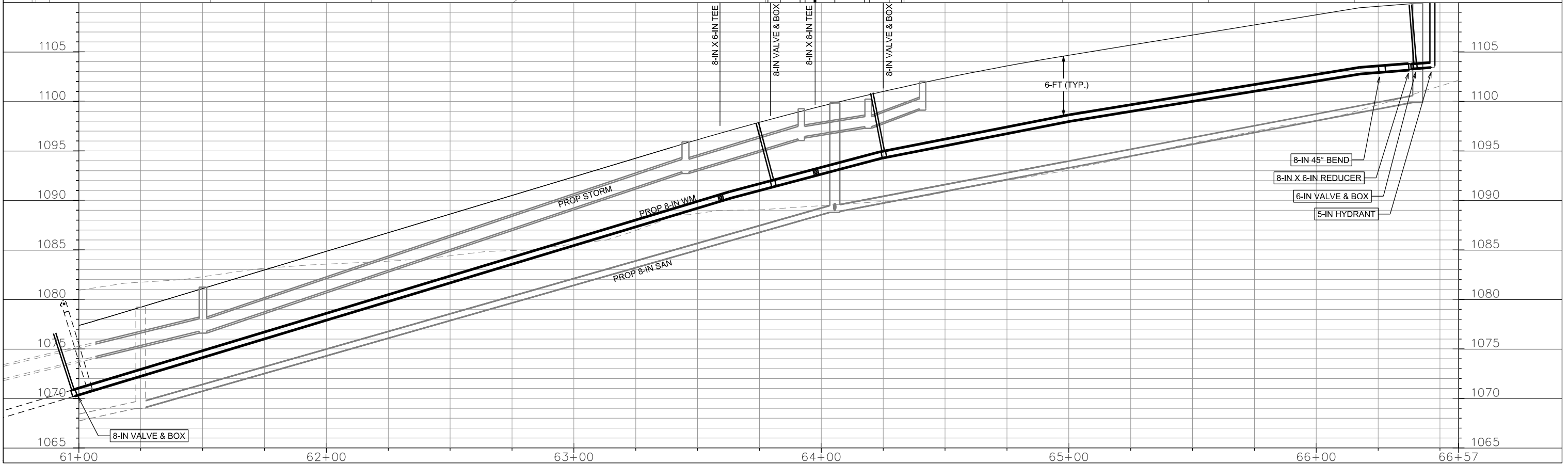
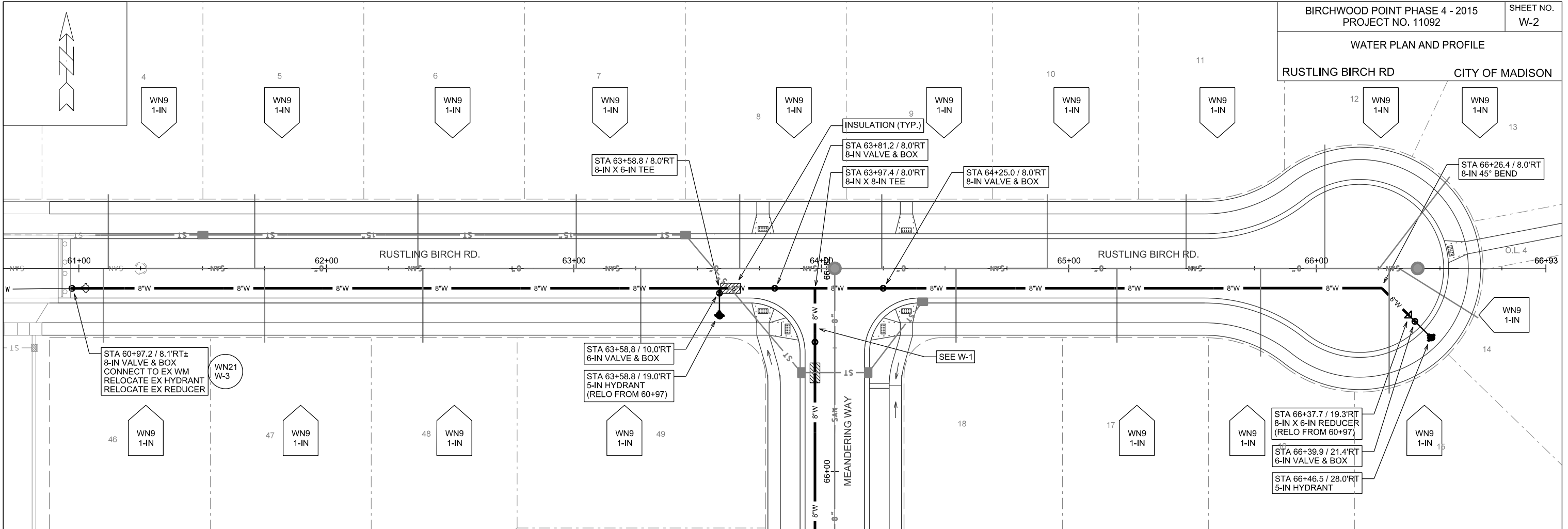
PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

WATER PLAN AND PROFILE  
RUSTLING BIRCH RD CITY OF MADISON

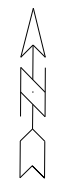


PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



2 3 4 5 6 7 8 9 10 11 12 13

### RUSTLING BIRCH ROAD

### SUGAR MAPLE LANE

### MEANDERING WAY

WN21: CONNECT TO EX WM (W-2)  
\*TURNING VALVES:  
-V-A  
\*NOTIFY (IF DEVELOPED):  
-RUSTLING BIRCH RD: LOT #3

WN20: CONNECT TO EX WM (W-1)  
\*TURNING VALVES:  
\*V-B  
\*NOTIFY (IF DEVELOPED):  
\*MEANDERING WAY: LOT #26

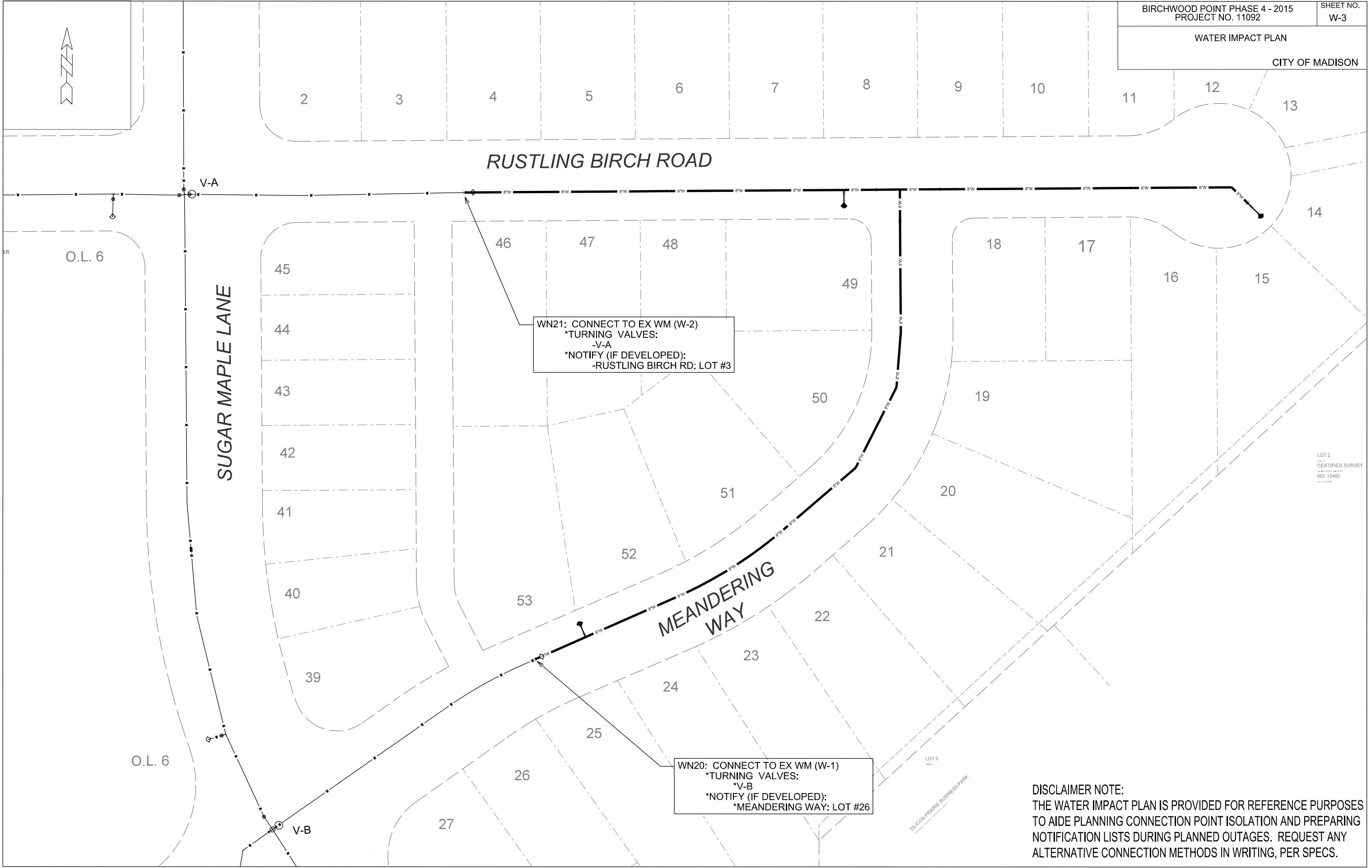
**DISCLAIMER NOTE:**  
THE WATER IMPACT PLAN IS PROVIDED FOR REFERENCE PURPOSES TO AIDE PLANNING CONNECTION POINT ISOLATION AND PREPARING NOTIFICATION LISTS DURING PLANNED OUTAGES. REQUEST ANY ALTERNATIVE CONNECTION METHODS IN WRITING, PER SPECS.

PLOT SCALE:  
PLOT NAME:  
REV. DATE:  
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

FILE NAME: DATE:

LOT 2  
CERTIFIED SURVEY  
NO. 12480

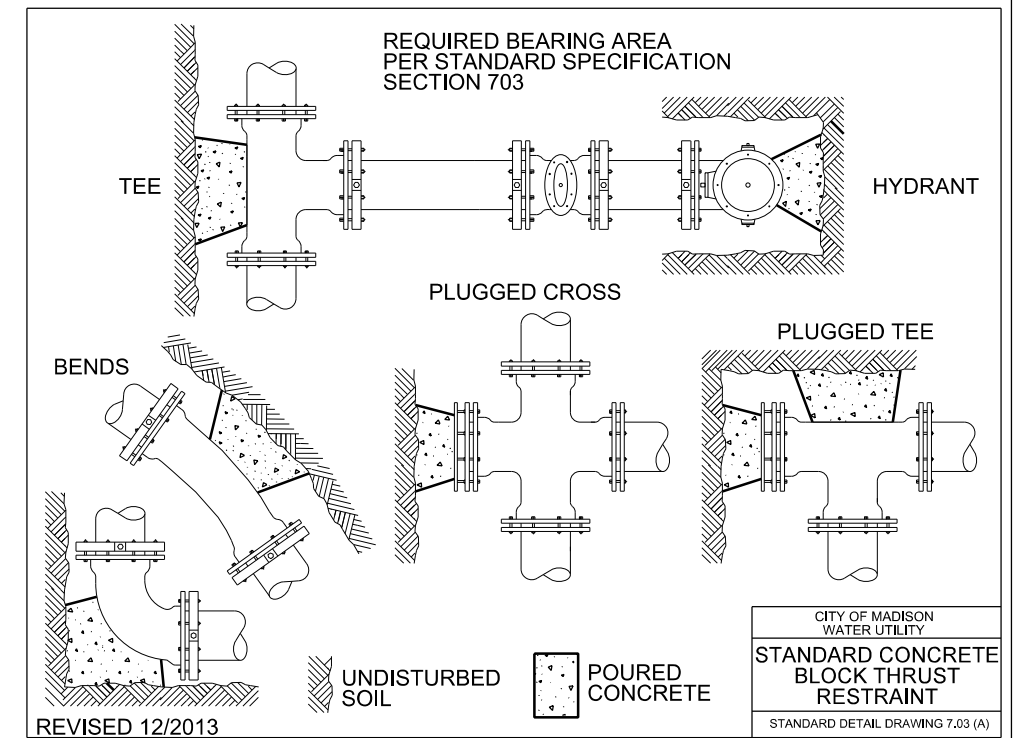
LOT 9  
SILICON PRAIRIE BUSINESS PARK



CONSTRUCTION NOTES:

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 COVER.
2. VERIFY SIZE OF EXISTING WATER SERVICES AND RECONNECT SERVICES AS INDICATED.
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 TO THE NEW WATER MAIN.
- WN3 EXISTING SERVICE TO BE ABANDONED WHEN THE WATER MAIN IS CUT OFF.
- WN4 DISCONNECT FROM THE OLD WATER MAIN AND RECONNECT THE EXISTING COPPER WATER SERVICE LATERAL TO THE NEW WATER MAIN.
- 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 SERVICE
- WN20+ SEE WATER IMPACT PLAN FOR CONNECTION POINT ISOLATION AND WATER SHUT-OFF NOTIFICATION INFORMATION.



ESTIMATE OF MATERIALS SUPPLIED BY CONTRACTOR\*:

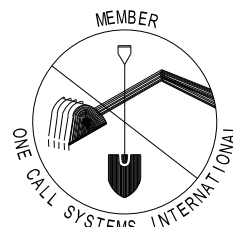
\* ESTIMATE OF MATERIALS IS FOR INFORMATION ONLY. ENGINEER DOES NOT GUARANTEE ACCURACY OF MATERIAL TAKE-OFF.

- 40-FT - 6-IN PIPE
- 1020-FT - 8-IN PIPE
- 1200-FT - POLYWRAP
- 3 - 6-IN VALVE & BOX
- 5 - 8-IN VALVE & BOX
- 2 - 8-IN X 6-IN TEE
- 1 - 8-IN X 8-IN TEE
- 2 - 8-IN 22.5° BEND
- 1 - 8-IN 45° BEND
- 1 - 5-IN HYDRANT
- 16-FT - 2-IN STYROFOAM INSULATION
- 1-IN COPPER SERVICE PIPING (AS REQUIRED)

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.



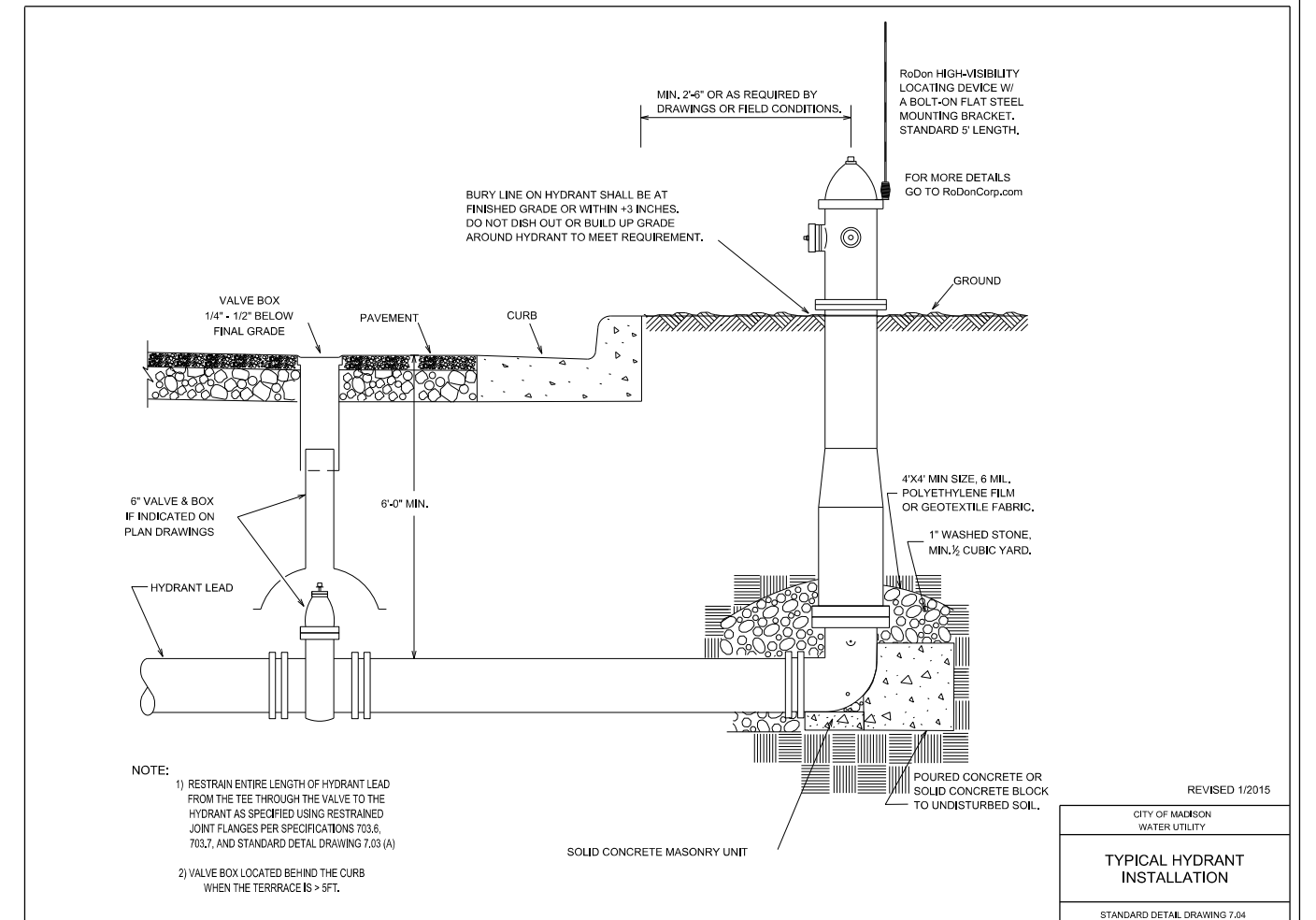
ESTIMATE OF MATERIALS SALVAGED\*:

- 1 - 8-IN X 6-IN REDUCER

ESTIMATE OF MATERIALS REUSED\*:

- 1 - 8-IN X 6-IN REDUCER
- 2 - 5-IN HYDRANT

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.



PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION