

Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

PUBLIC IMPROVEMENT PROJECT APPROVED

JANUARY 3, 2017

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

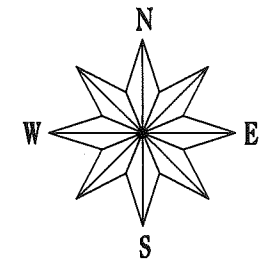
[Signature] 3/7/17
City Engineer Date

INDEX OF SHEETS

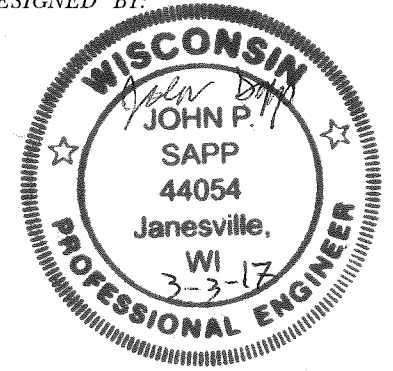
SHEET NO.	TITLE
1	DETAILS
DI-D2	STREET PLAN & PROFILES
PI-P3	SEWER PLAN & PROFILES
UI-U3	SANITARY SEWER SCHEDULE
U4	SEWER SCHEDULE
U5	WATER PLAN & PROFILES
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BIRCHWOOD POINT PHASE 9

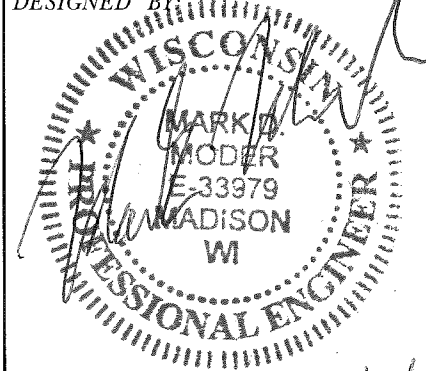
CITY PROJECT NO. 11504
CITY CONTRACT NO. 7859



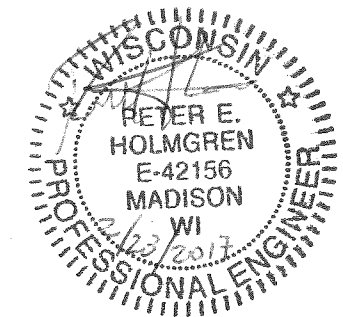
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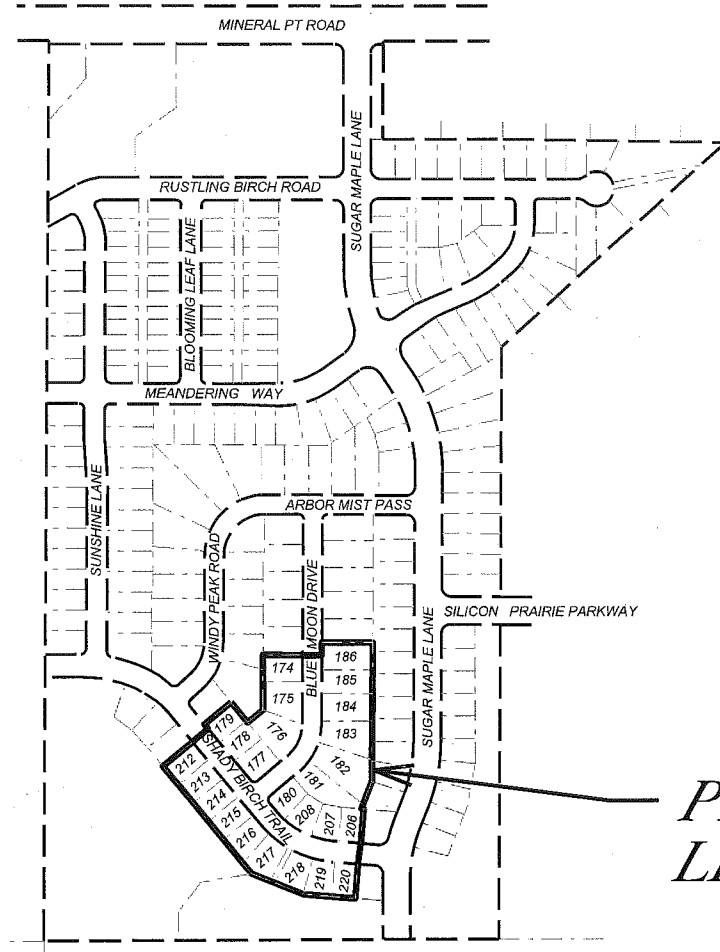
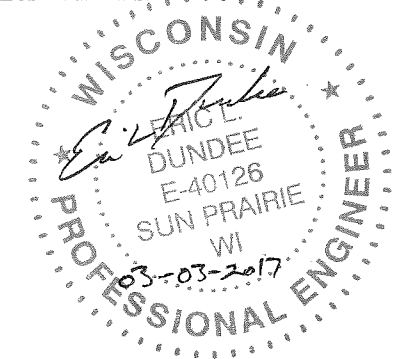
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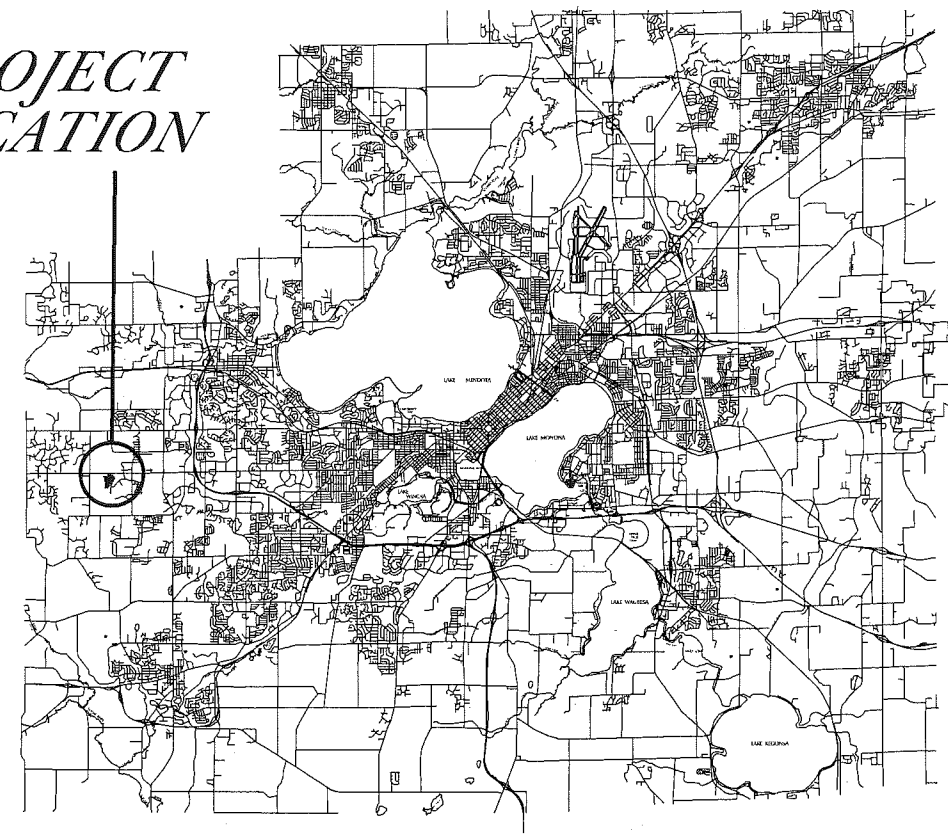
WATER DESIGNED BY:



STORM SEWER DESIGNED BY:



PROJECT LOCATION



PHASE LIMITS

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

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, REFERRING TO NOTIFICATION OF PROPERTY OCCUPANTS AND/OR OWNERS, HAS BEEN COMPLIED WITH.

ALL PAVEMENT WITHIN THE BLUE MOON DRIVE AND SHADY BIRCH TRAIL RIGHT-OF-WAY SHALL BE TYPE A PAVEMENT PER STANDARD DETAIL DRAWING 4.02.

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.

CONVENTIONAL SIGNS

FIELD VERIFY ALL UTILITY LOCATIONS

GAS ——— G ———

STORM SEWER ——— ST ———

SANITARY SEWER ——— SAN ———

WATER ——— W ———

OVERHEAD ELECTRIC ——— OH ———

POWER POLE 

ADA COMPLIANT RAMP W/
DETECTABLE WARNING FIELD 

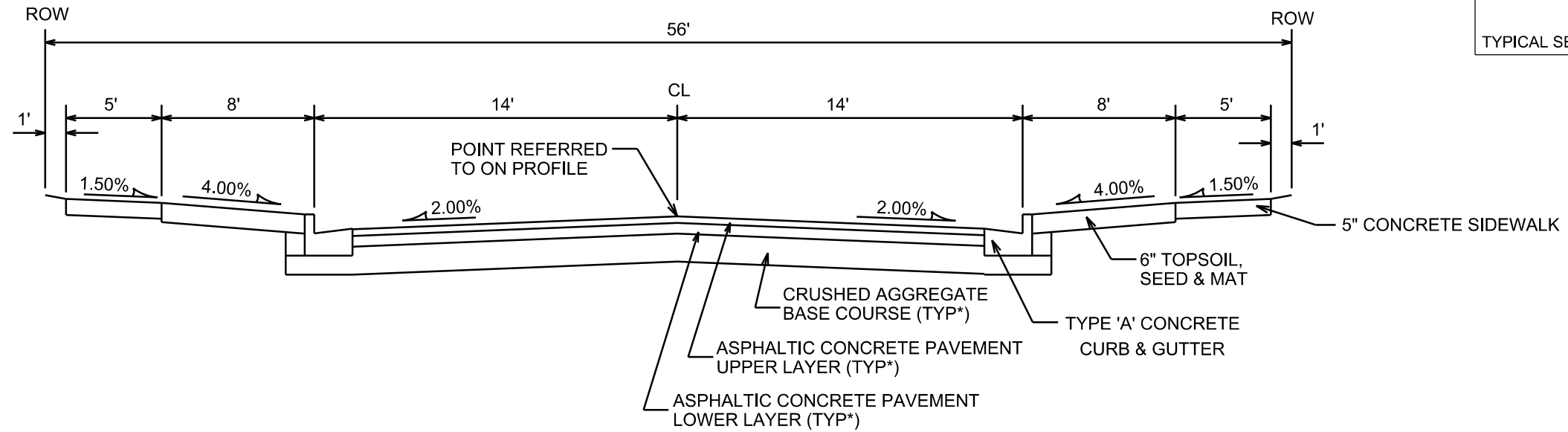
COMBUSTIBLE FLUIDS 

PLOT SCALE: _____

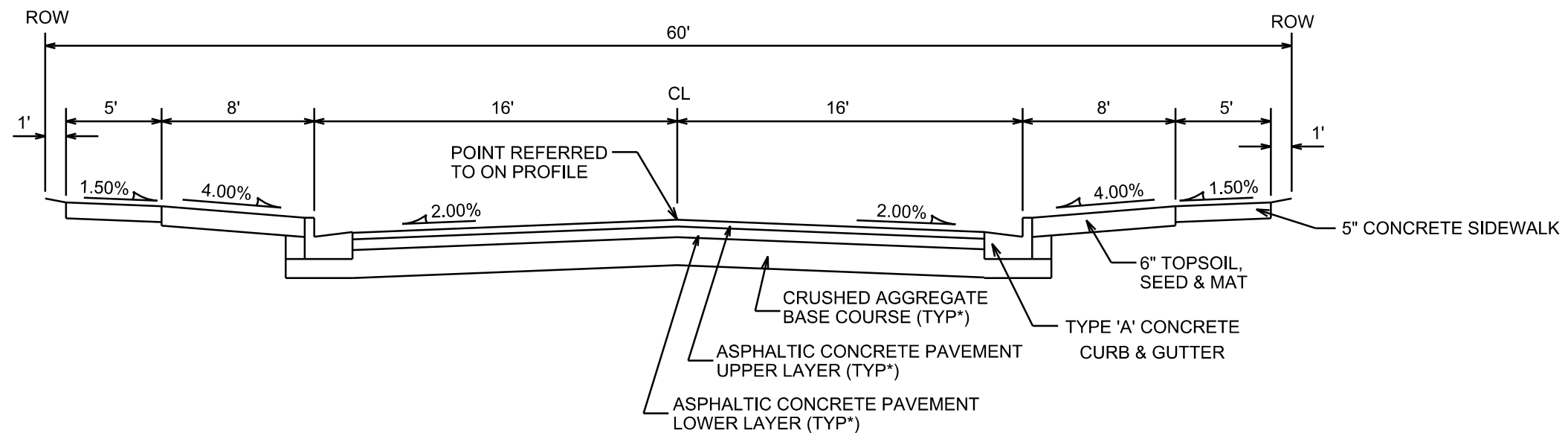
PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



TYPICAL SECTION
BLUE MOON DRIVE



TYPICAL SECTION
SHADY BIRCH TRAIL

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:

* BLUE MOON DRIVE AND SHADY BIRCH TRAIL TO BE CONSTRUCTED AS TYPE 'A' PAVEMENT PER CITY OF MADISON MINIMUM PAVEMENT DESIGN

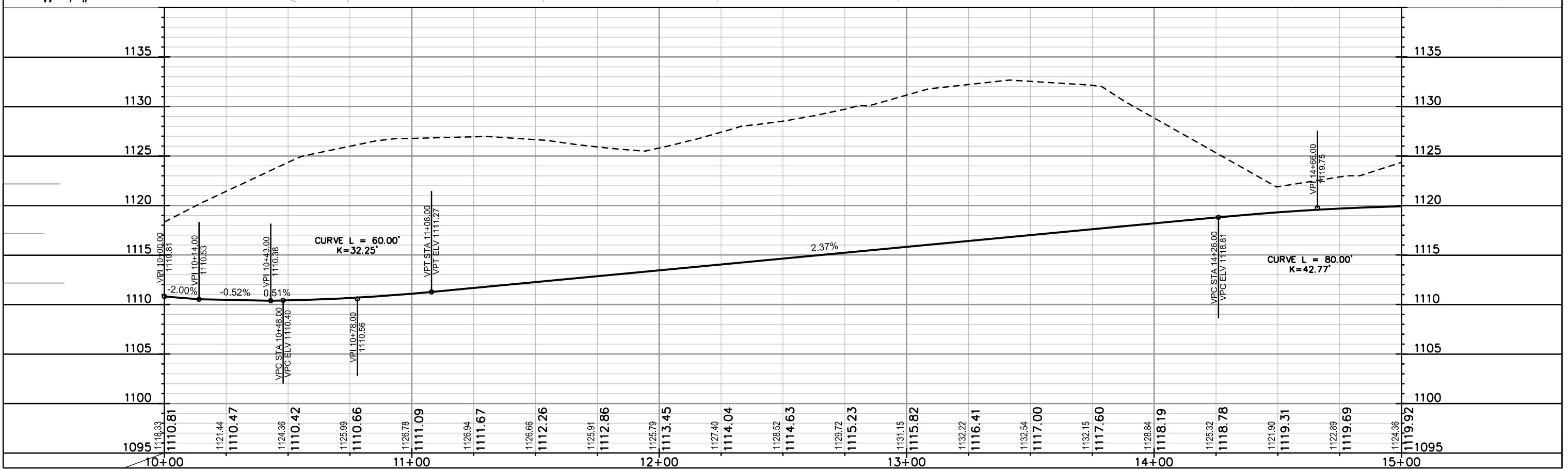
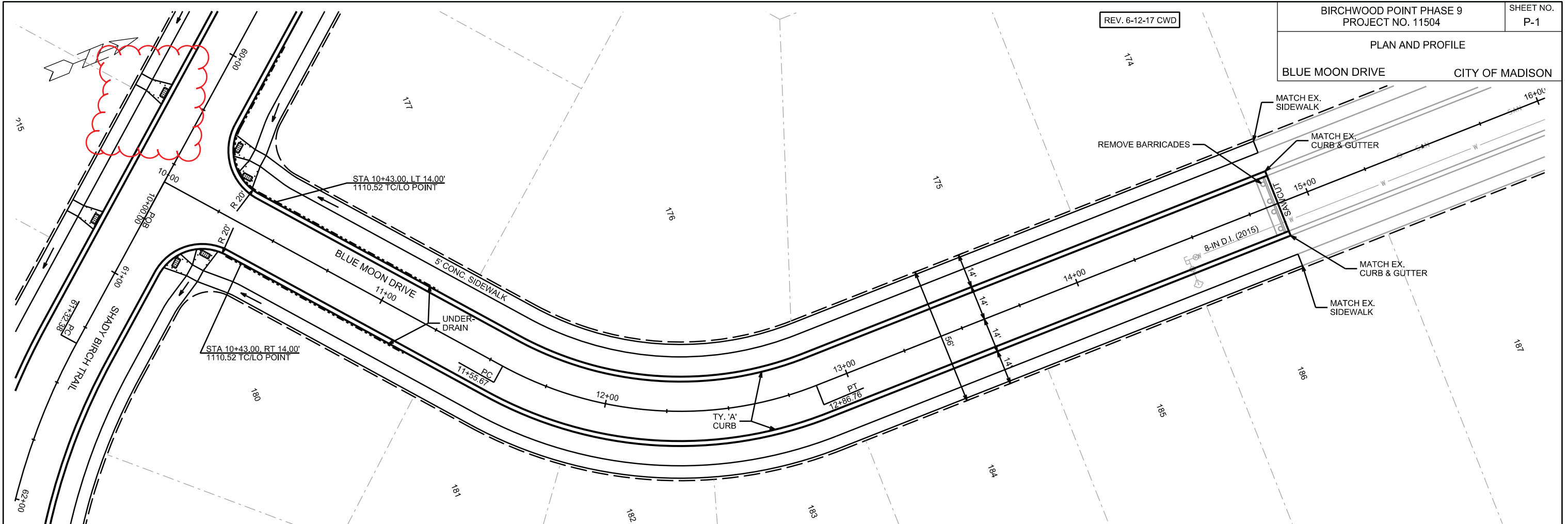
PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLAN AND PROFILE
BLUE MOON DRIVE CITY OF MADISON



PLOT SCALE: _____

PLOT NAME: _____

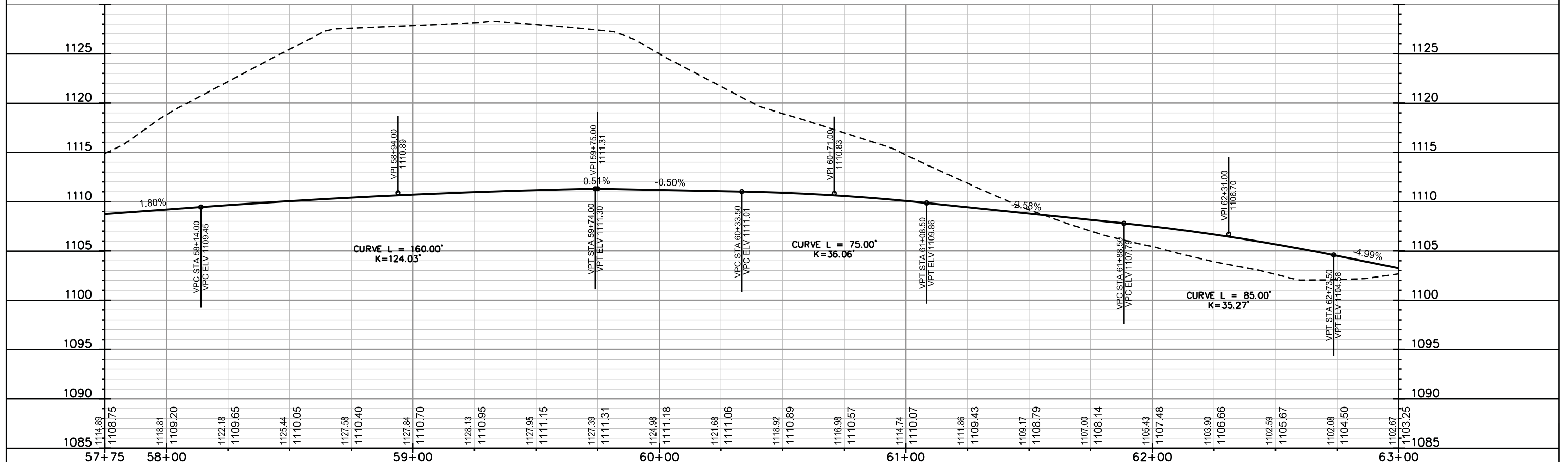
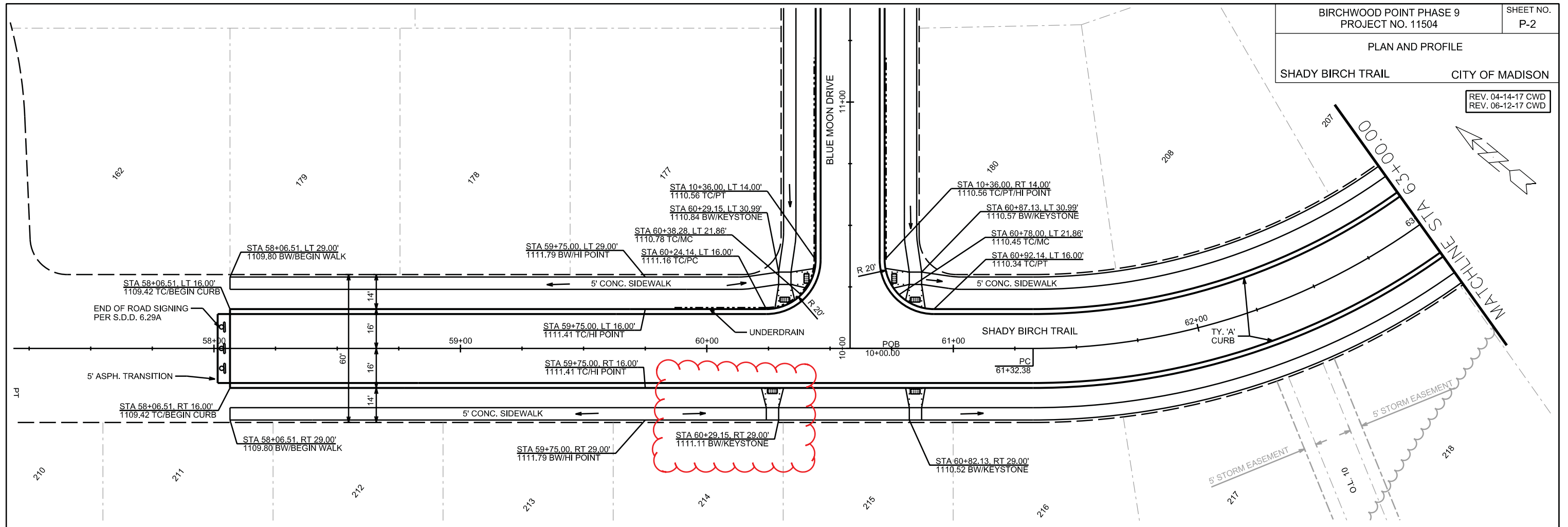
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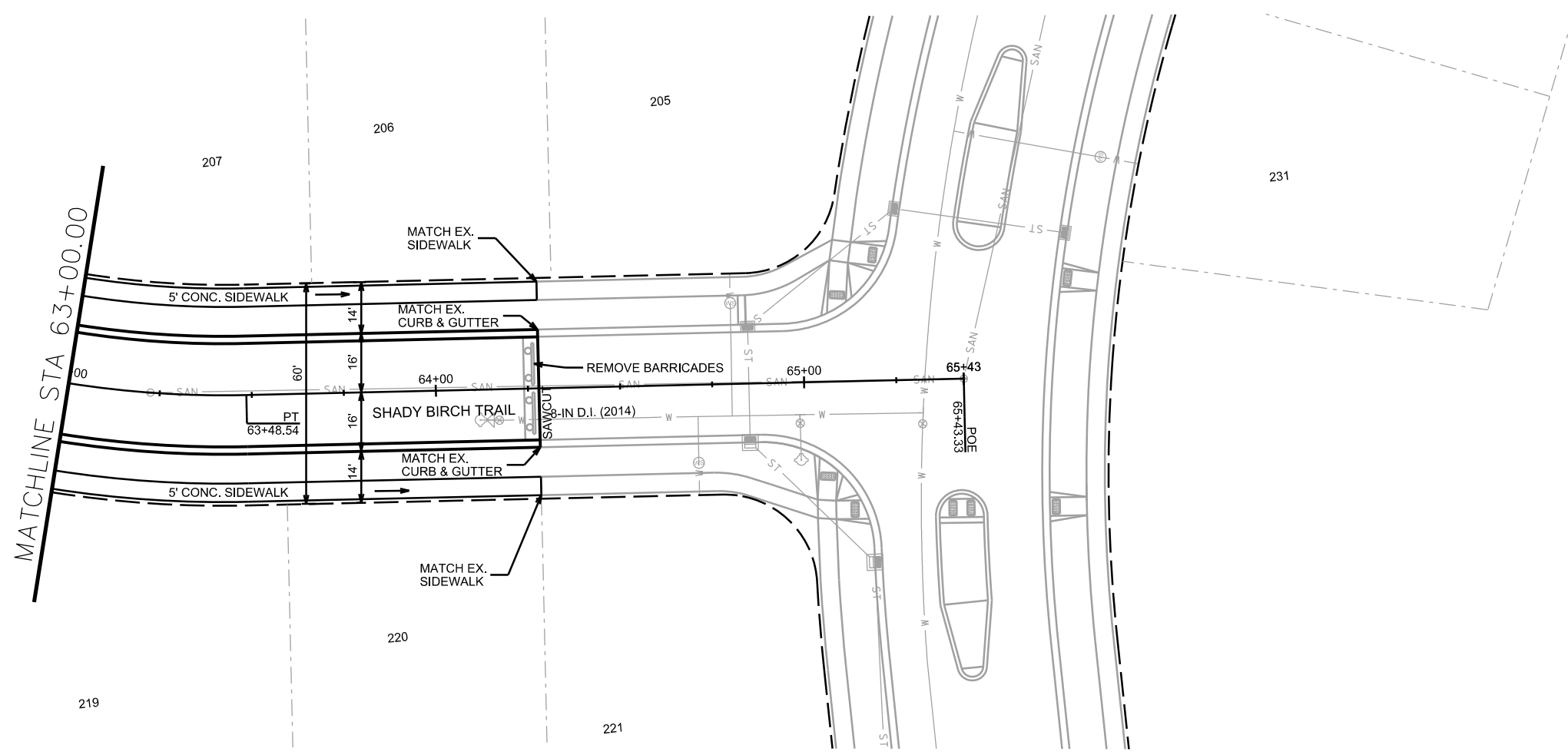
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLAN AND PROFILE

SHADY BIRCH TRAIL CITY OF MADISON

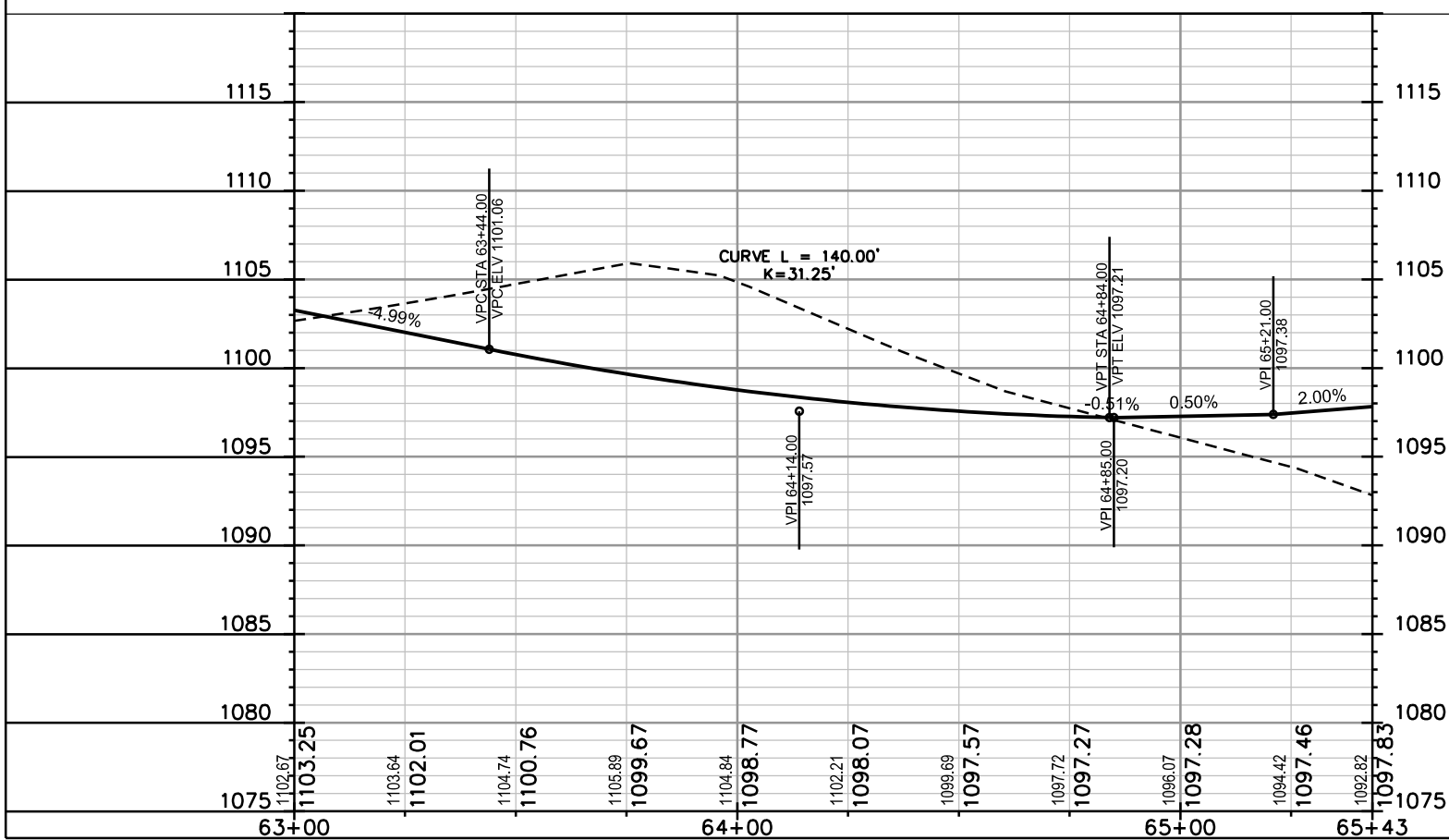
REV. 04-14-17 CWD
REV. 06-12-17 CWD





O.L. 11

PLAT BOUNDARY



PLOT SCALE: _____

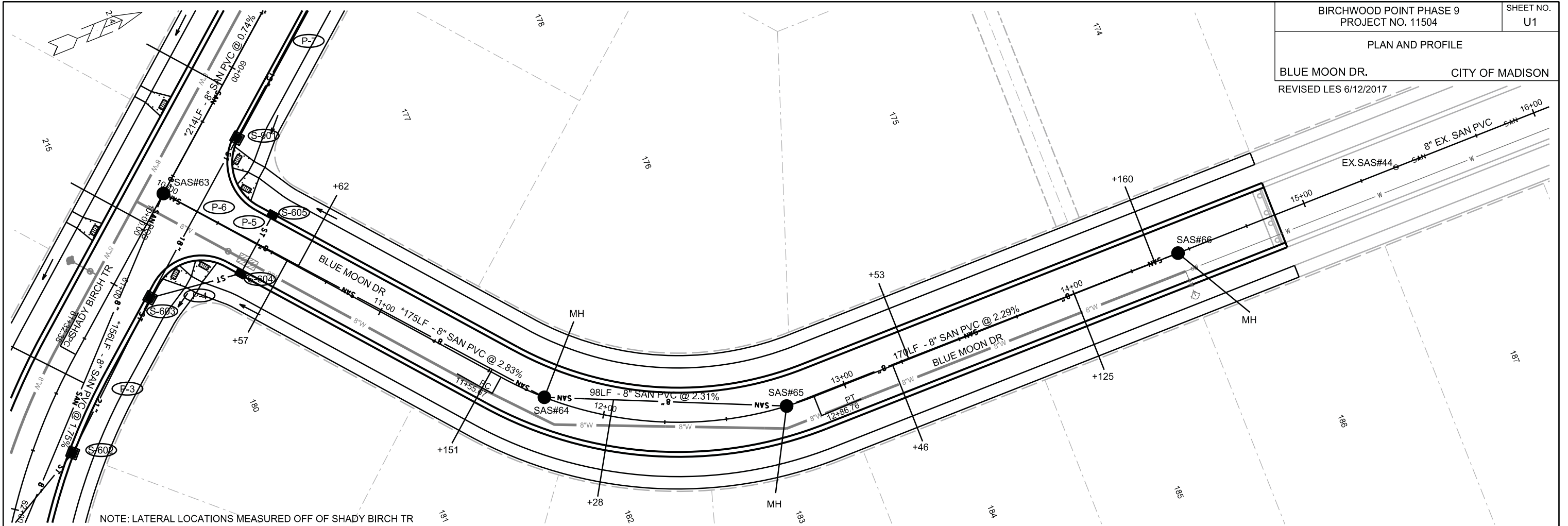
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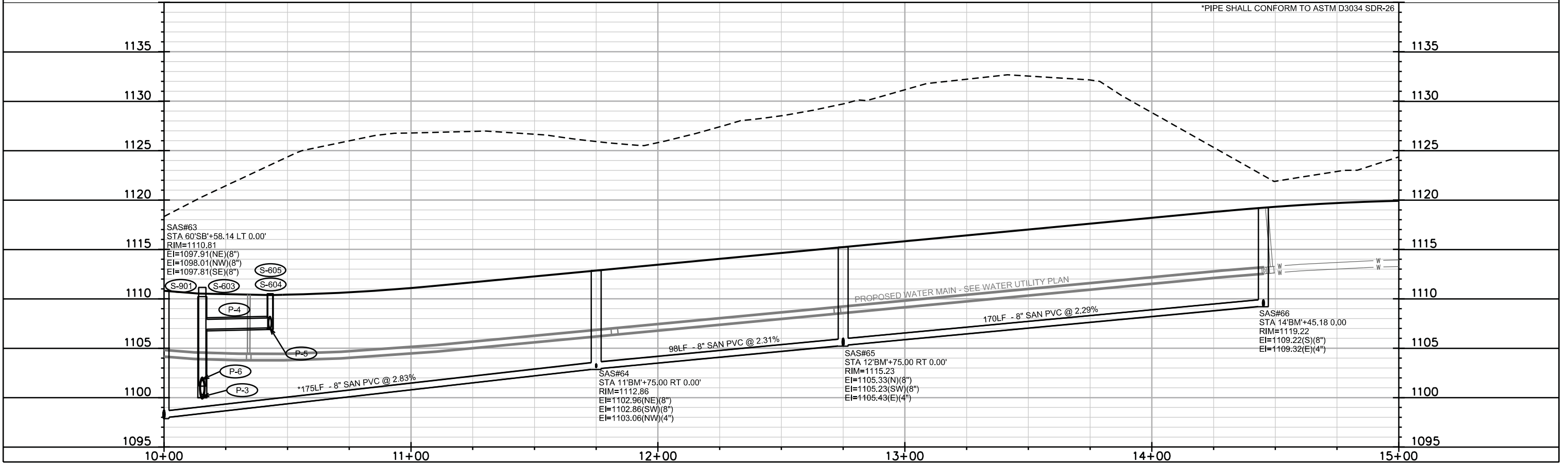
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLAN AND PROFILE

BLUE MOON DR. CITY OF MADISON
REVISED LES 6/12/2017



NOTE: LATERAL LOCATIONS MEASURED OFF OF SHADY BIRCH TR



*PIPE SHALL CONFORM TO ASTM D3034 SDR-26

PLOT SCALE: _____

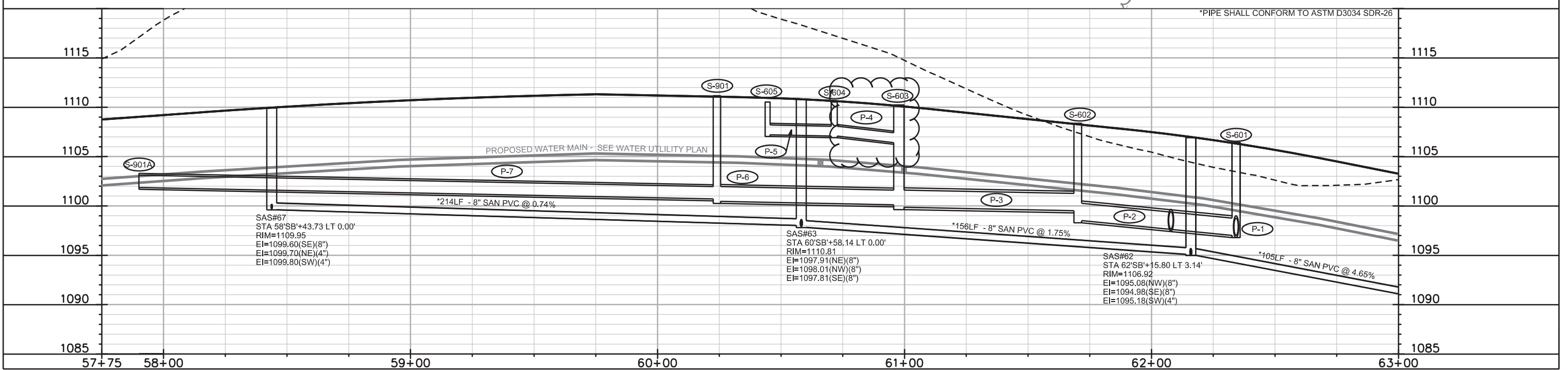
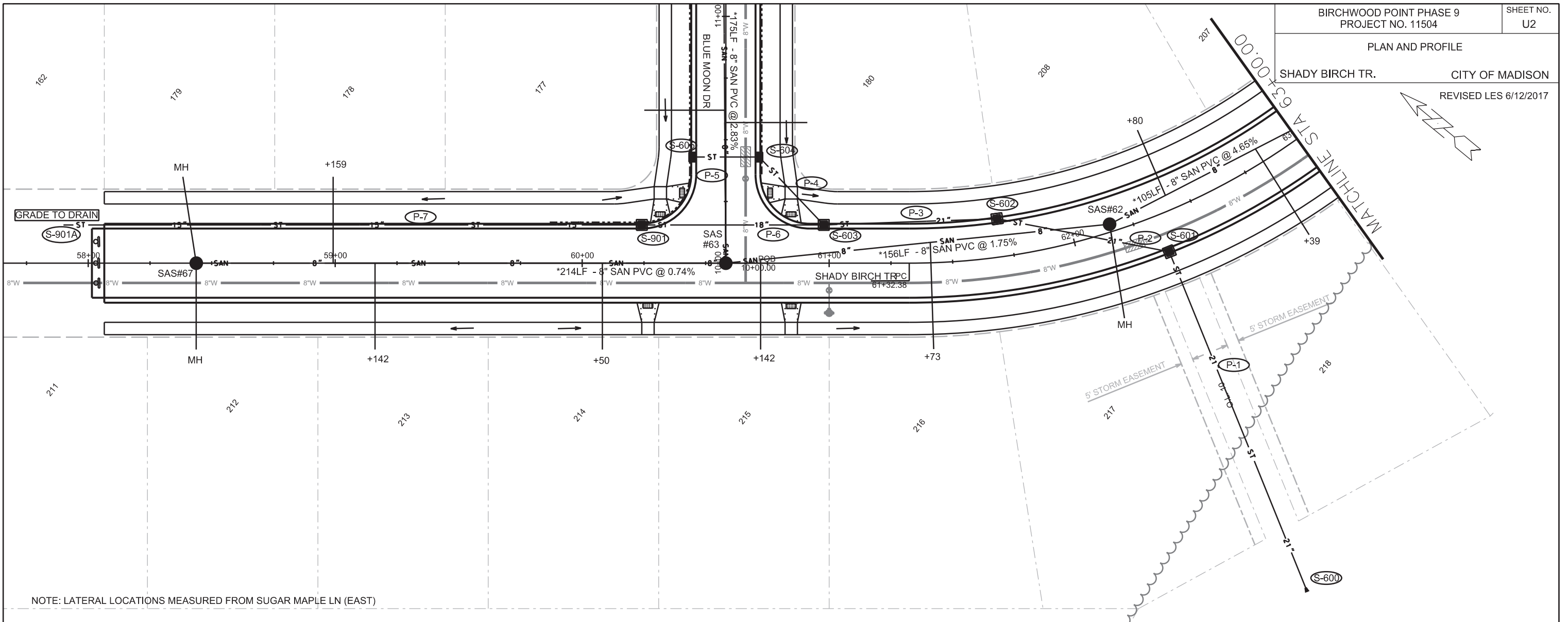
PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

PLAN AND PROFILE

SHADY BIRCH TR. CITY OF MADISON
REVISED LES 6/12/2017

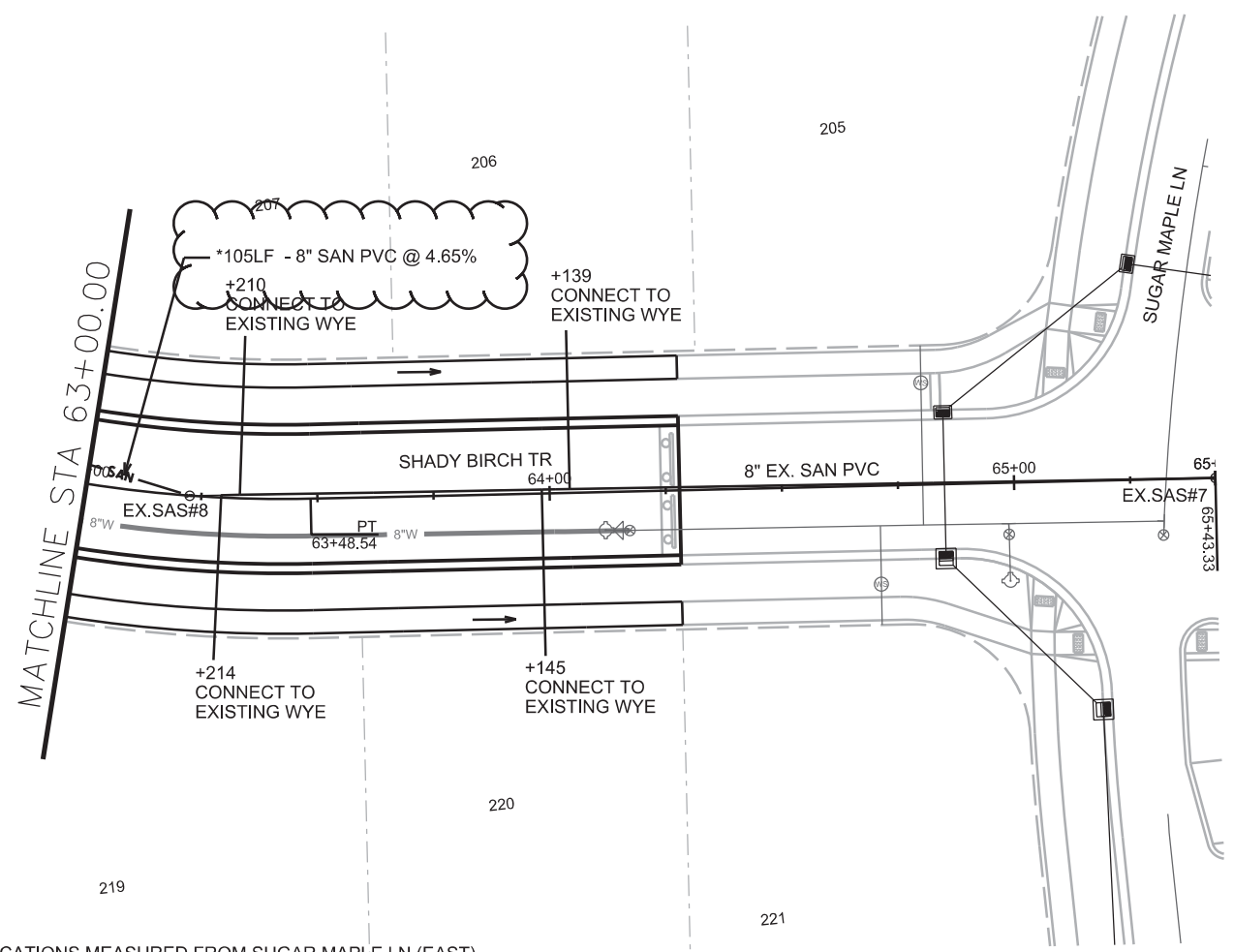


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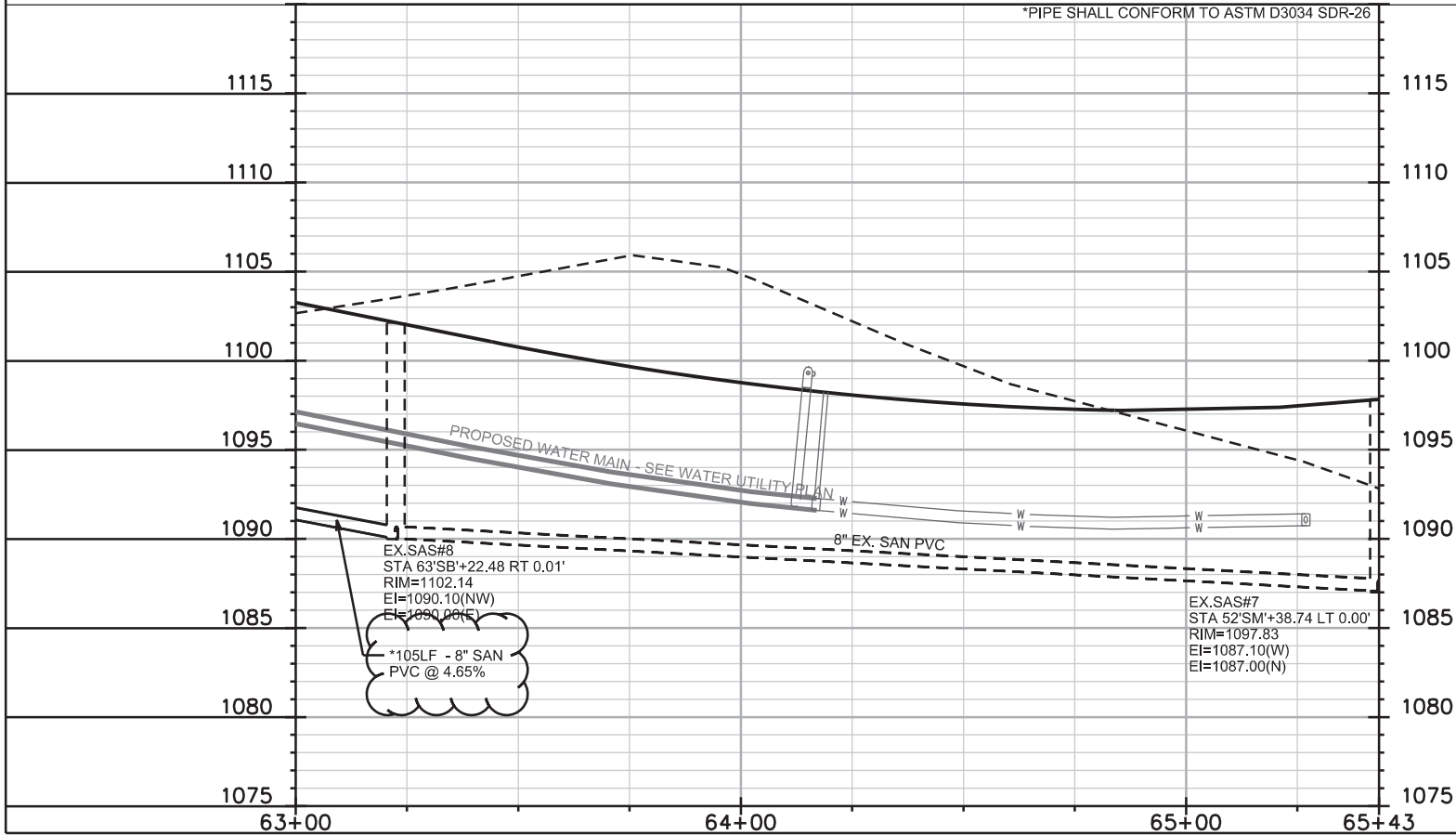
REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



NOTE: LATERAL LOCATIONS MEASURED FROM SUGAR MAPLE LN (EAST)

*PIPE SHALL CONFORM TO ASTM D3034 SDR-26



PLOT SCALE: _____

PLOT NAME: _____

REV. DATE: _____

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

SANITARY SCHEDULE

ALIGNMENT CODES:

'BM' - BLUE MOON DR
'SB' - SHADY BIRCH TR

BIRCHWOOD POINT PHASE 9
PROJECT NO. 11504

SHEET NO.
U4

SANITARY SEWER SCHEDULE CITY OF MADISON

PROPOSED SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH	NOTES
* SAS#62	62'SB'+15.80	LT-3.14	1106.92	1094.98	11.94	
* SAS#63	60'SB'+58.14	LT-0.00	1110.81	1097.81	13.00	
SAS#64	11'BM'+75.00	RT-0.00	1112.86	1102.86	10.00	
SAS#65	12'BM'+75.00	RT-0.00	1115.23	1105.23	10.00	
SAS#66	14'BM'+45.18	LT-0.00	1119.22	1109.22	10.00	
* SAS#67	58'SB'+43.73	LT-0.00	1109.95	1099.60	10.35	

PROPOSED SANITARY PIPES

FROM SAS (DWNSTRM)	TO SAS (UPSTREAM)	EI # (DWNSTRM)	EI # (UPSTRM)	LENGTH (FT)	SLOPE (%)	SIZE (DIA)	PVC TYPE	NOTES
* EX.SAS#8	SAS#62	1090.10	1094.98	105	4.65%	8"	SDR-26	
* SAS#62	SAS#63	1095.08	1097.81	156	1.75%	8"	SDR-26	
* SAS#63	SAS#64	1097.91	1102.86	175	2.83%	8"	SDR-26	
SAS#64	SAS#65	1102.96	1105.23	98	2.31%	8"	SDR-35	
SAS#65	SAS#66	1105.33	1109.22	170	2.29%	8"	SDR-35	
* SAS#63	SAS#67	1098.01	1099.60	214	0.74%	8"	SDR-26	

PLOT SCALE: 1"=100'

PLOT NAME: SANITARY SCHEDULE

REV. DATE: 04/14/2017

STORM SEWER SCHEDULE

ALIGNMENT CODES:

'SB' - SHADY BIRCH TR
'BM' - BLUE MOON DR

BIRCHWOOD POINT PHASE 9

SHEET NO.

PROJECT NO. 11504

U5

STORM SEWER SCHEDULE

CITY OF MADISON

REVISED LES 6/12/2017

PROPOSED STORM STRUCTURES

STRUC NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
S-600	62'SB'+35.08	RT-164.23	18" RCP AE W/ GATE	-	1094.00	-	PER S.D.D. 5.4.1 AND S.D.D. 5.6.1
S-601	62'SB'+34.38	RT-15.50	3X3 SAS	1106.41	1097.00	9.41	W/ R-3067-7004-V
S-602	61'SB'+70.26	LT-15.50	3X3 SAS	1108.36	1098.50	9.86	W/ R-3067-7004-V
S-603	60'SB'+97.80	LT-15.50	3X3 SAS	1110.22	1099.84	10.38	W/ R-3067-7004-V
S-604	10'BM'+43.00	RT-13.50	H INLET	1110.52	1107.07	3.45	W/ R-3067-7004-VB; LP; UD; SEE SPEC. NOTE 1
S-605	10'BM'+43.00	LT-13.50	H INLET	1110.52	1107.19	3.33	W/ R-3067-7004-VB; LP; UD; SEE SPEC. NOTE 1
S-901	60'SB'+24.14	LT-15.50	3X3 SAS	1111.16	1100.44	10.72	W/ R-3067-7004-V
S-901A	57'SB'+90.00	LT-15.50	CAP	-	1101.85	-	

PROPOSED STORM PIPES

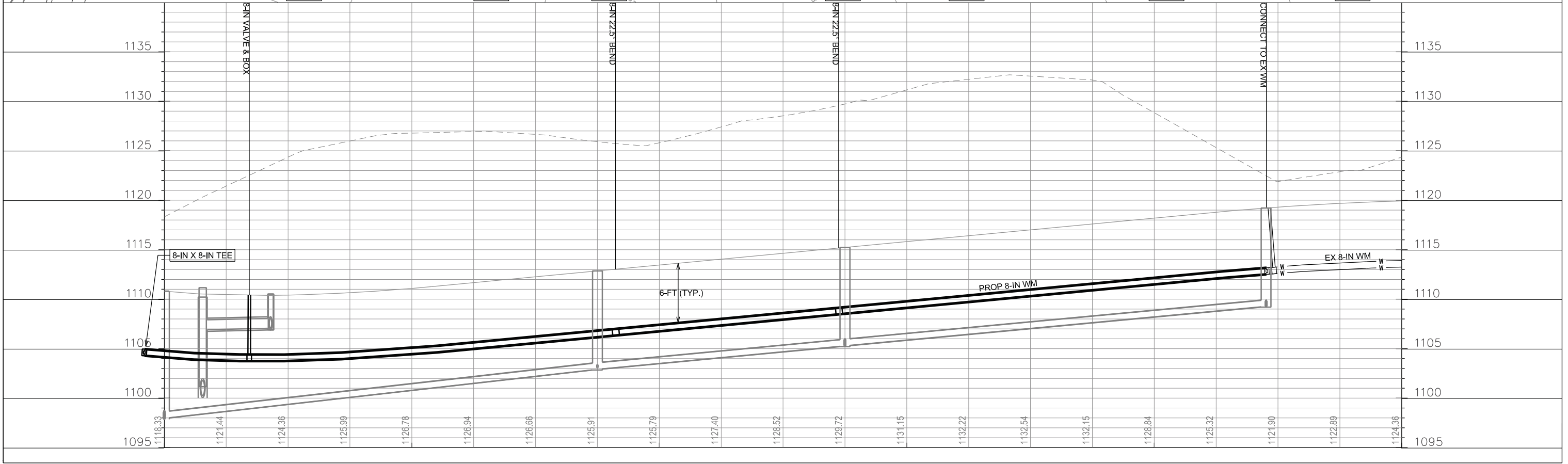
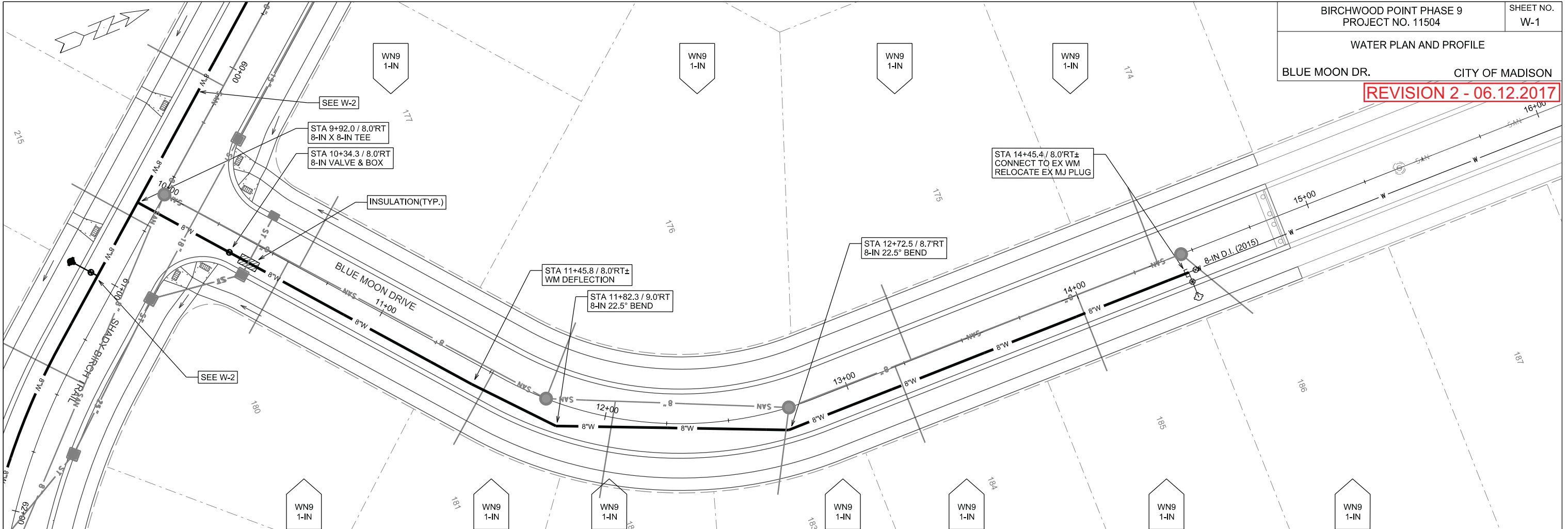
PIPE NO.	FROM SAS (DWNSTRM)	TO SAS (UPSTREAM)	EI # (DWNSTRM)	EI # (UPSTRM)	PIPE LENGTH (FT)	PLAN LENGTH (FT)	SLOPE (%)	SIZE (DIA)	TYPE	NOTES
P-1	S-600	S-601	1094.00	1097.00	147	149	2.04%	21"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-2	S-601	S-602	1097.00	1098.50	68	71	2.22%	21"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-3	S-602	S-603	1099.50	1099.84	67	70	0.50%	21"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
* P-4	S-603	S-604	1106.40	1107.07	34	38	1.94%	12"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-5	S-604	S-605	1107.07	1107.19	25	27	0.50%	12"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-6	S-603	S-901	1100.09	1100.44	71	74	0.50%	18"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)
P-7	S-901	S-901A	1100.69	1101.85	233	234	0.50%	15"	RCP	CLASS III (ASTM C 76) PER SPEC. 504.2(A)

SPECIAL NOTES:

- 1) THE STORM STRUCTURE SHALL HAVE A 2" PVC PIPE INSTALLED FROM AND THROUGH THE FRONT WALL OF THE INLET, BENT UP TO THE TOP OF THE SURFACE COURSE OF BINDER IN FRONT OF THE INLET SUCH THAT THE CENTER OF THE PIPE IS 5" FROM THE EDGE OF GUTTER. WHEN THE PAVEMENT IS BEING PREPARED FOR SURFACE IT IS THE CONTRACTORS RESPONSIBILITY TO SAW CUT OUT A 2' X 2' SQUARE REMOVE THE PIPE, PATCH THE INLET, PATCH THE BINDER AND PAVE THE STREET.
- 2) TOP OF CASTING ELEVATION FOR H INLET FLAT IS 1" ABOVE FLOWLINE OF CASTING.

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

SHADY BIRCH TR. CITY OF MADISON

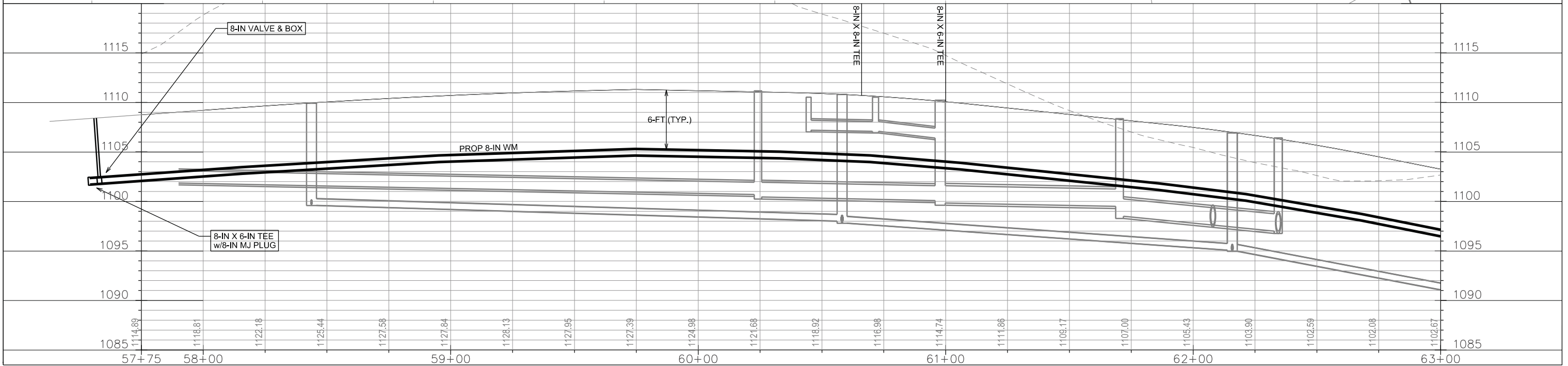
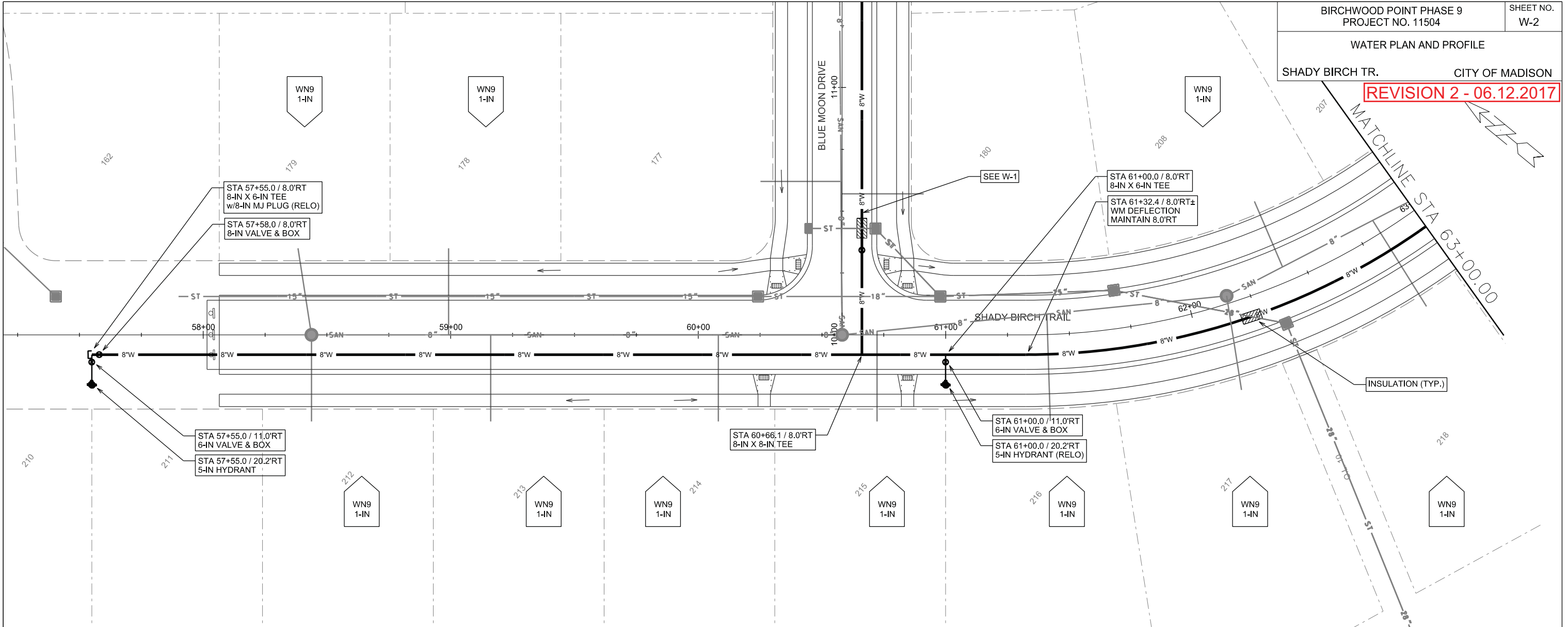
REVISION 2 - 06.12.2017

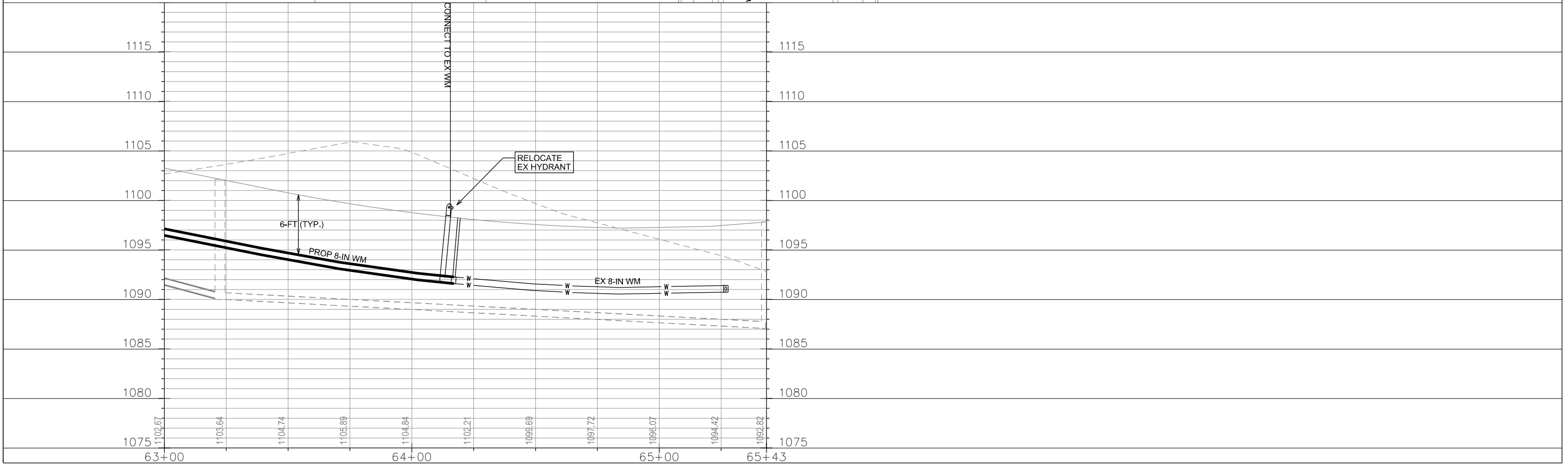
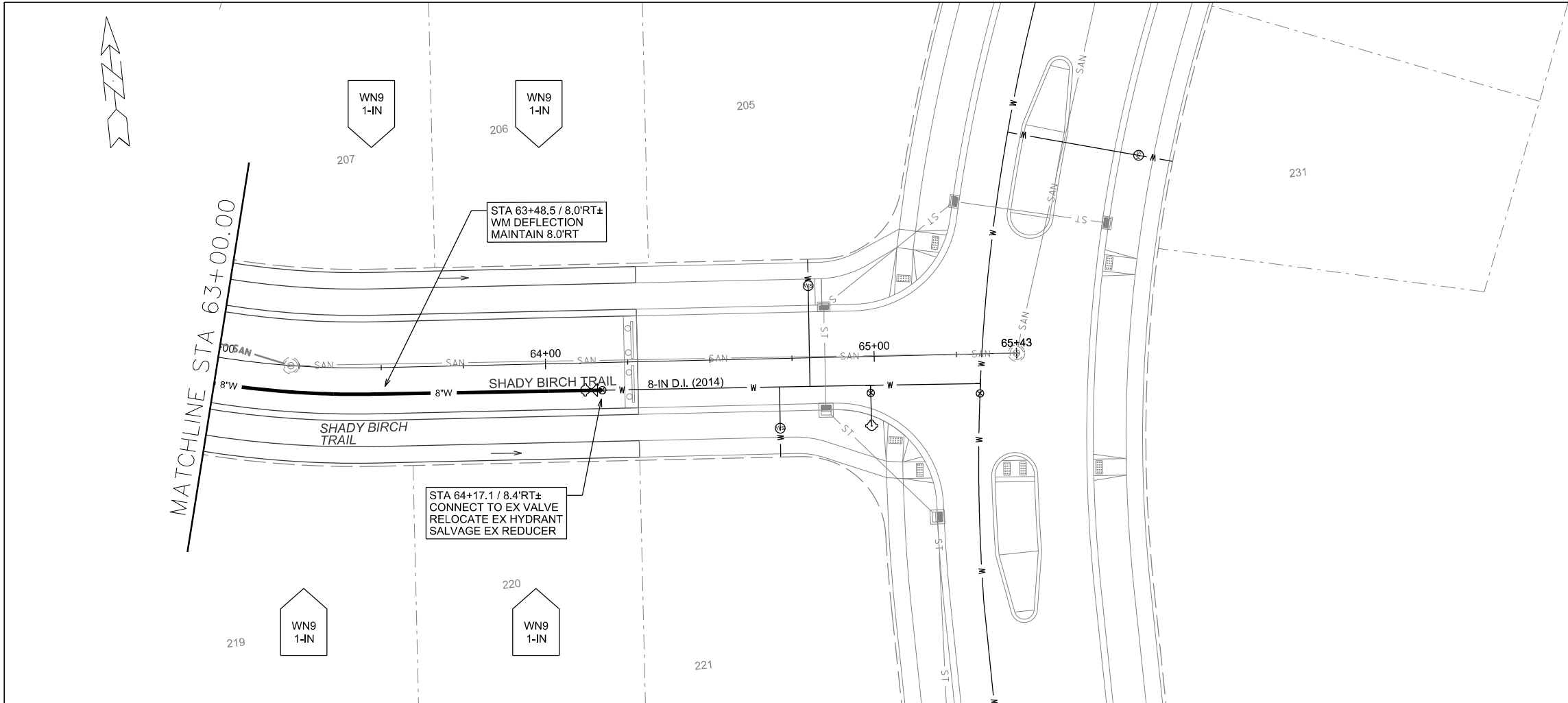
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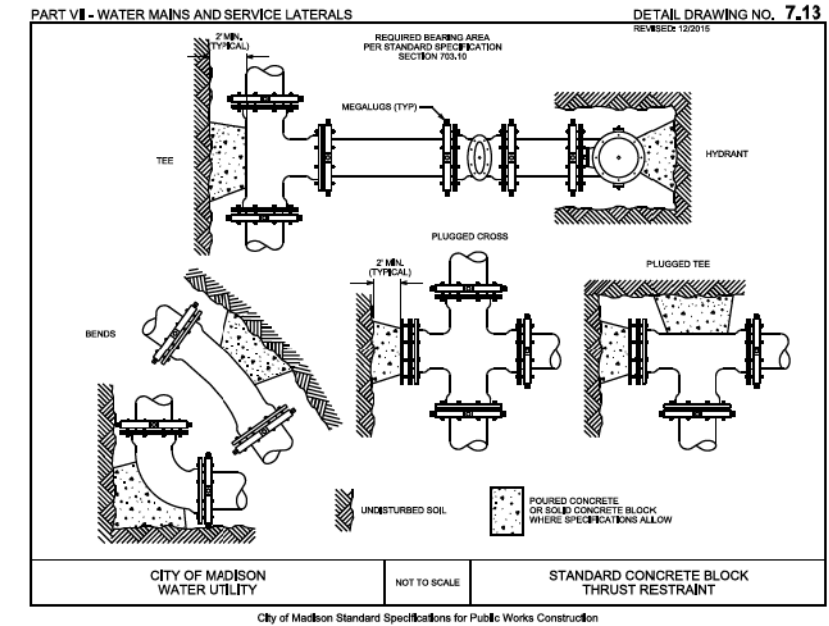
ORIGINATOR: CITY OF MADISON, STREETS DIVISION

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.

 INDICATES INSULATION AT STORM SEWER CROSSING

- 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



ESTIMATE OF PROJECT WATER MATERIALS:

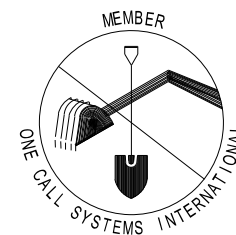
* ESTIMATE OF MATERIALS IS FOR INFORMATION ONLY. ENGINEER DOES NOT GUARANTEE ACCURACY OF MATERIAL TAKE-OFF. ALWAYS REFER TO PLANS.

WATER MAIN AND FITTING MATERIALS	
6-IN PIPE (LF)	30
8-IN PIPE (LF)	1140
POLY WRAP (LF)	1300
6-IN VALVES & BOXES	2
8-IN VALVES & BOXES	2
8-IN 22.5° BENDS	2
8-IN X 6-IN TEES	2
8-IN X 8-IN TEES	1
5-IN HYDRANTS	1
REUSED MATERIALS	
5-IN HYDRANTS	1
8-IN MJ PLUGS	1
SALVAGED MATERIALS	
8-IN X 6-IN REDUCERS	1
MISC. MATERIALS	
INSULATION (LF)	AS REQ
COPPER TUBING (1-IN TO 2-IN)	AS REQ

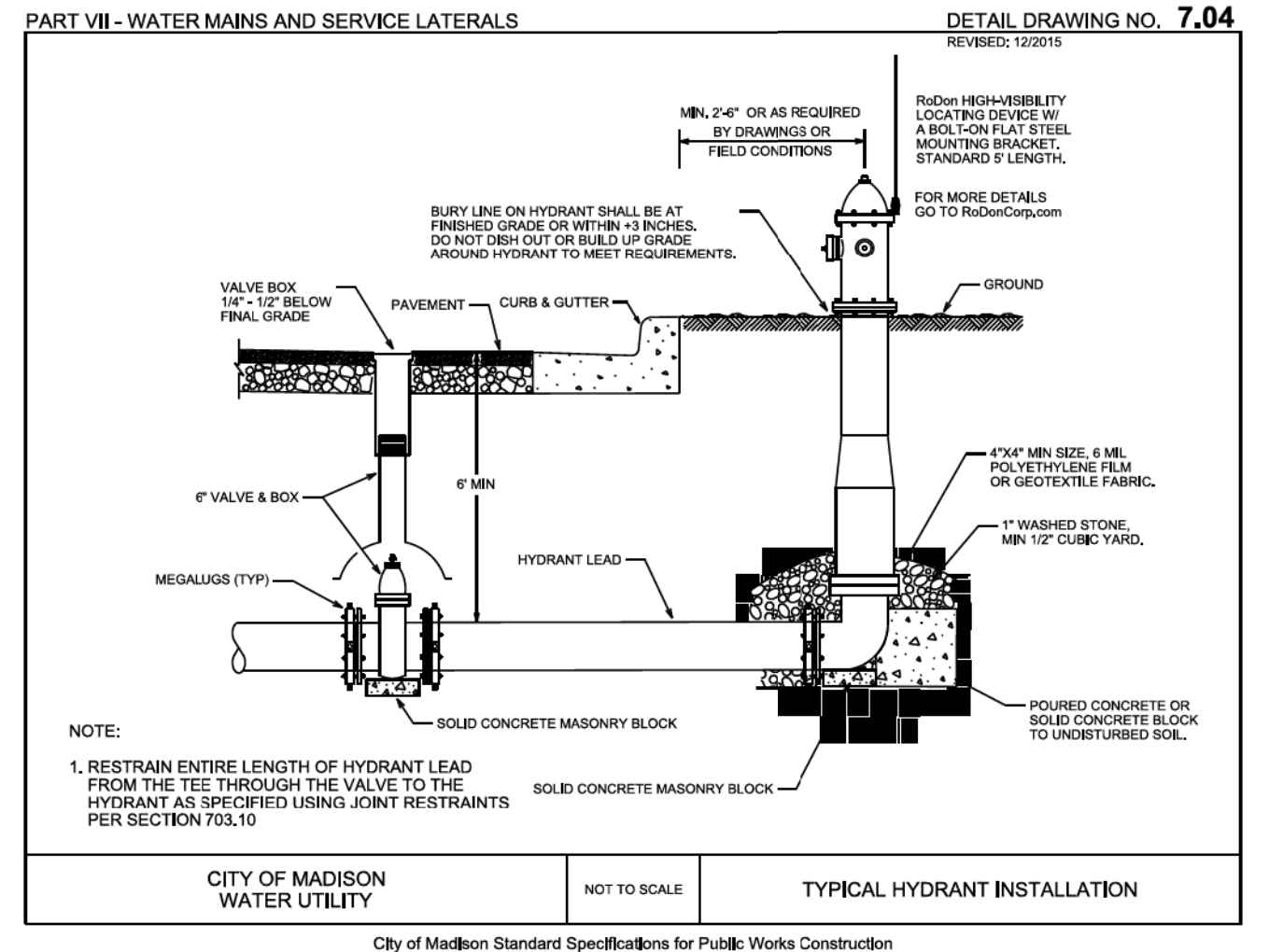
TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

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.



PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION