

**Madison, Wisconsin**

**INDEX OF SHEETS - STREET GRADES AND GEOMETRICS**

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P1	RESTON HEIGHTS DRIVE
P2	O.L. 2 & O.L. 3 ALLEYS
P3	

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U2	RESTON HEIGHTS DRIVE STORM & SANITARY
U3	O.L.2 & O.L.3 ALLEYS STORM & SANITARY
U4	STORM SEWER SCHEDULE
W1	JUNEBERRY DRIVE WATER
W2	RESTON HEIGHTS DRIVE WATER
W3	WATER IMPACT PLAN
W4	WATER MATERIALS

# CITY OF MADISON

## CITY ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS

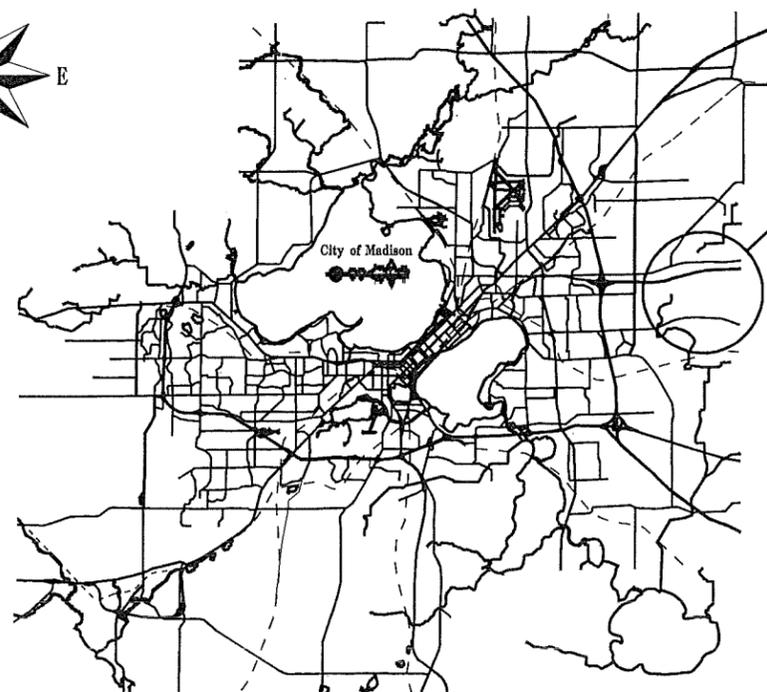
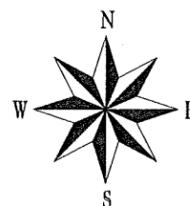
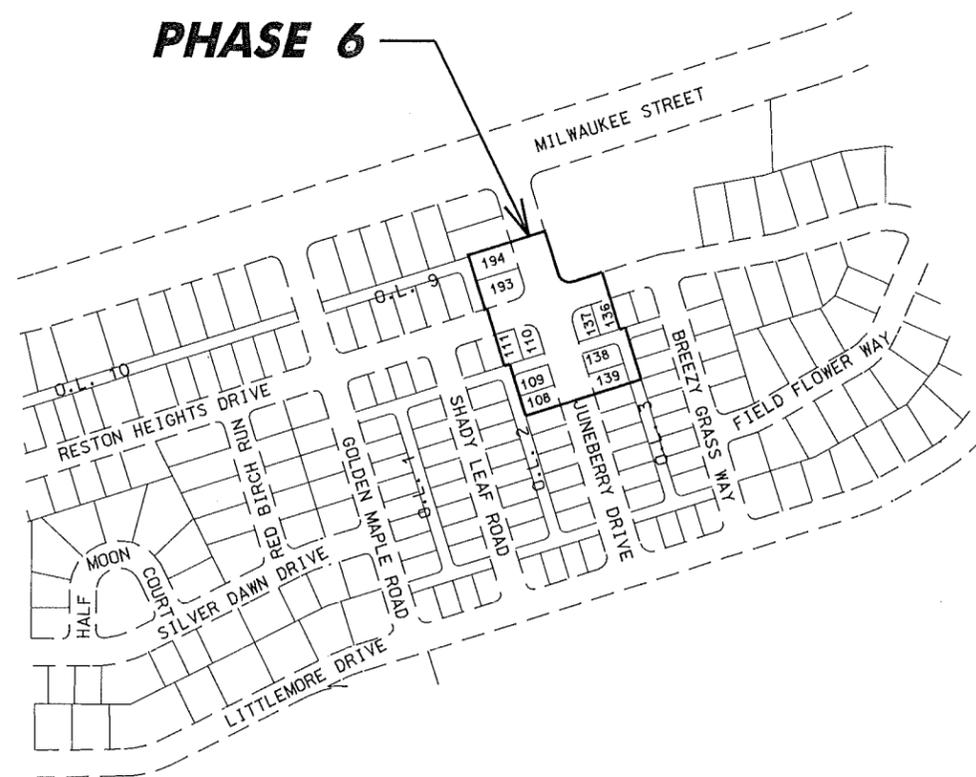
### PLAN OF PROPOSED IMPROVEMENT

# THE MEADOWLANDS

## PHASE 6

**JUNEBERRY DRIVE, RESTON HEIGHTS DRIVE,  
OUTLOTS 2 & 3 ALLEYS**

**CITY PROJECT NO. 53B2355**

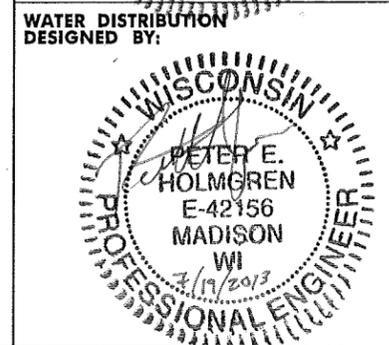
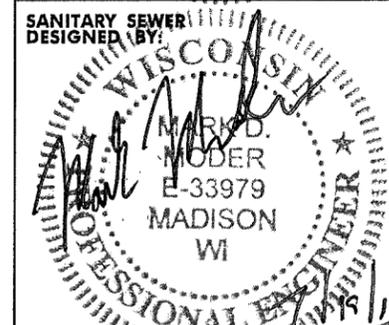
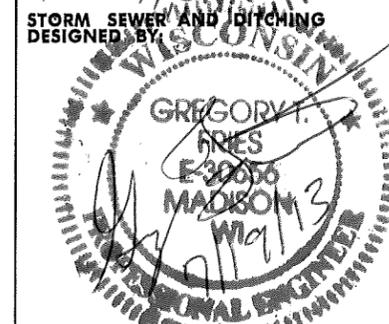
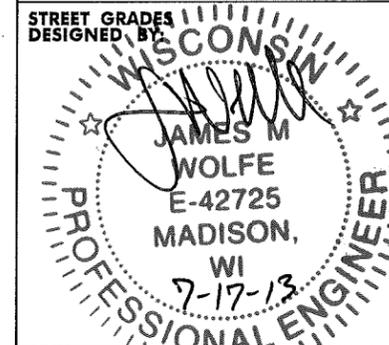


**PROJECT  
LOCATION**

PUBLIC IMPROVEMENT PROJECT APPROVED  
JUNE 18, 2013  
BY THE COMMON COUNCIL  
OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN  
APPROVED BY:

*[Signature]* 7/19/13  
City Engineer Date



DETAILS

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 IN THE JUNE BERRY DRIVE RIGHT-OF-WAY SHALL BE TYPE "B", AND ALL OTHER PAVEMENT SHALL BE TYPE "A" PER STANDARD DETAIL DRAWING 4.02.**

**ALL ISLANDS SHALL HAVE TYPE "H" C & G PER S.D.D. 3.08 AND MOUNTABLE NOSES PER S.D.D. 3.13. ALL OTHER C & G SHALL BE TYPE "A" PER S.D.D. 3.06 UNLESS OTHERWISE NOTED.**

**ISLAND INTERIORS SHALL BE OF SOD WHERE THE BACK TO BACK OF CURB DIMENSION IS GREATER THAN 6'.**

**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.**

**PAVEMENT CROSS SLOPES SHALL BE 2%, TERRACES SHALL SLOPE AT A 4% GRADE TOWARD THE GUTTER, SHOULDERS SHALL HAVE A 4% CROSS SLOPE AND CROSS SLOPES FORMING DITCHES SHALL NOT EXCEED 4.00:1 UNLESS OTHERWISE INDICATED.**

**THE CROSS SLOPE OF SIDEWALKS AND BARRIER FREE SIDEWALK CURB RAMPS SHALL BE 2%. 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. A 2 FOOT WIDE CONCRETE FLUME SHALL BE INSTALLED BETWEEN THE SIDEWALK AND THE BACK OF CURB AT SIDEWALK LOW POINTS WHICH CANNOT OTHERWISE BE DRAINED DIRECTLY TO THE GUTTER. SIDE SLOPES WITHIN TEN FEET OF A PUBLIC SIDEWALK SHALL NOT EXCEED 4.00:1. THE DESIGN OF SIDEWALK ELEVATIONS AND GRADES IS NOT INCLUDED IN THIS PLAN. 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.**

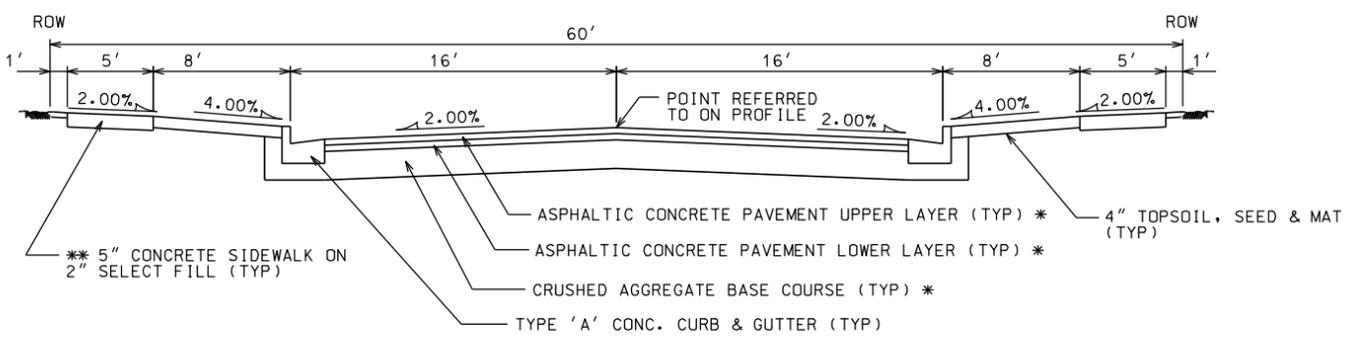
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PLOT NAME: .....

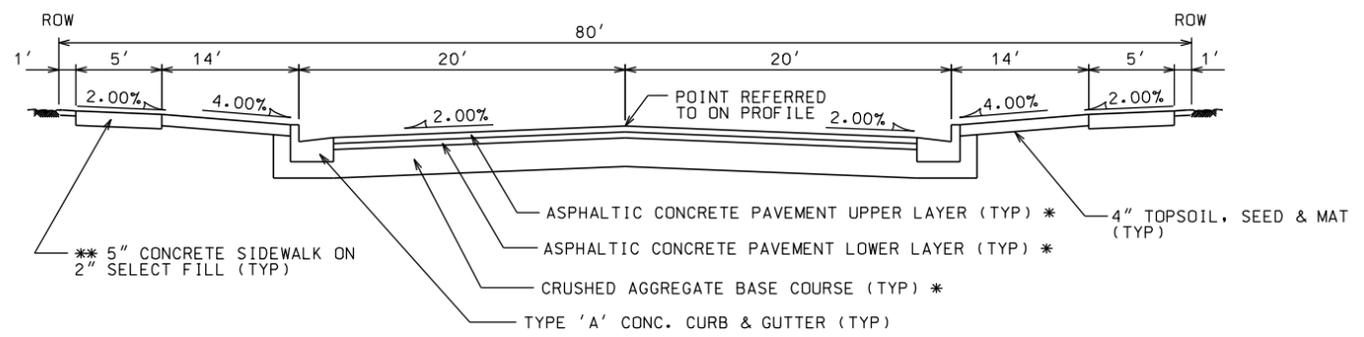
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ORIGINATOR: CITY OF MADISON, STREETS DIVISION

TYPICAL SECTION - RESTON HEIGHTS DRIVE



TYPICAL SECTION - JUNE BERRY DRIVE



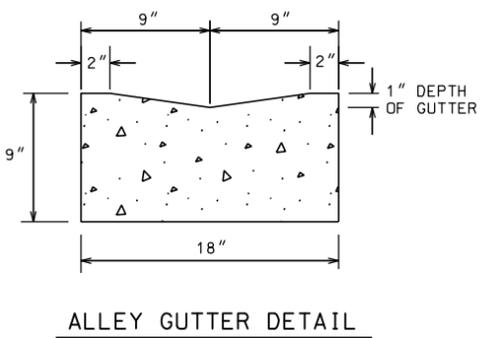
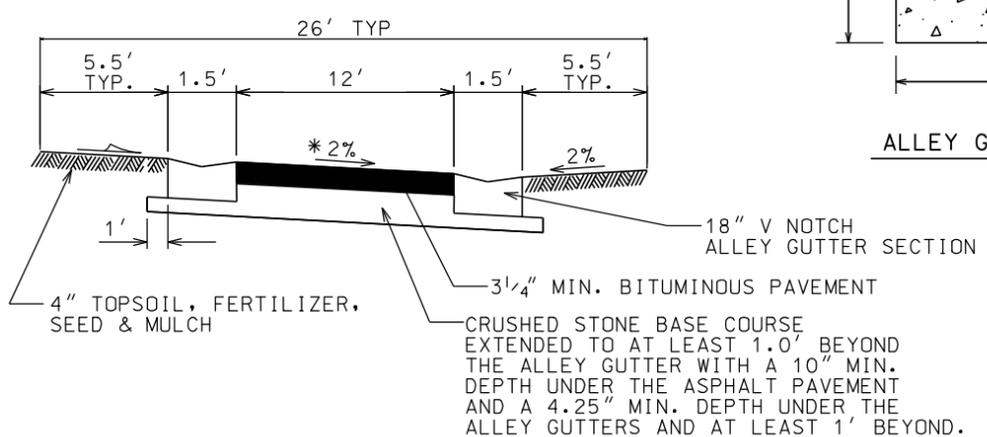
NOTES:

- \* A PAVEMENT DESIGN IN ACCORDANCE WITH STANDARD DETAIL DRAWING 4.06 IS REQUIRED ON ALL PROJECTS
- \*\* 3" OF CRUSHED AGGREGATE BASE COURSE GRADATION 3 SHALL BE PLACED UNDER THE SIDEWALK WHERE THE CENTERLINE GRADE OF THE STREET EXCEEDS 5%

\* CITY OF MADISON MINIMUM PAVEMENT DESIGN

TYPE	CRUSHED AGGREGATE 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	2.00"
C	6"	4"	E-3	3.25"	E-3	2.00"

TYPICAL ALLEY SECTION



ALLEY GUTTER DETAIL

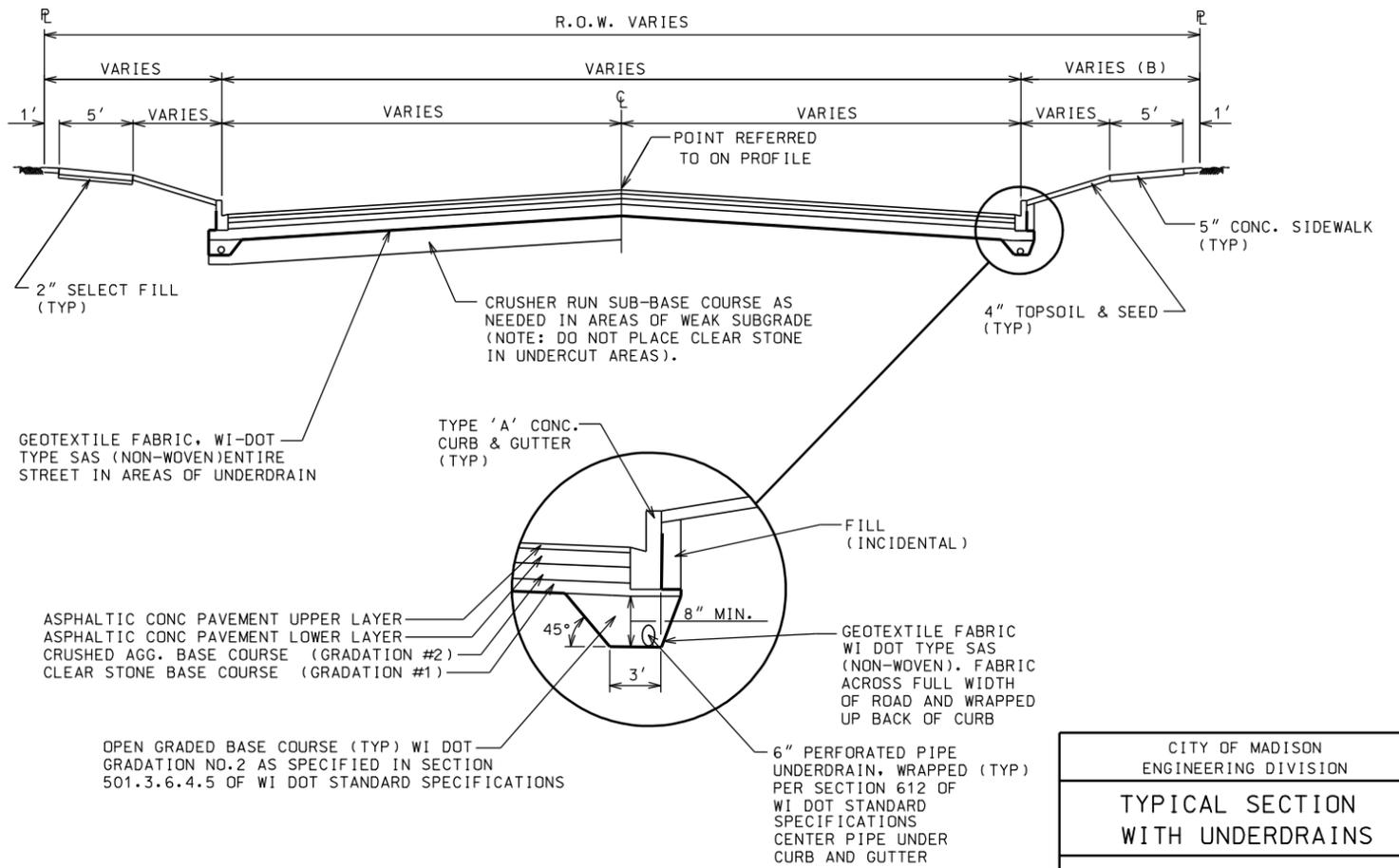
\* SEE ARROWS ON PLAN PAVEMENT FOR DIRECTION OF CROSS SLOPE.

HORIZONTAL ALIGNMENT NOTE  
EDGE OF PAVEMENT RADII SHALL NOT BE LESS THAN 25 FEET

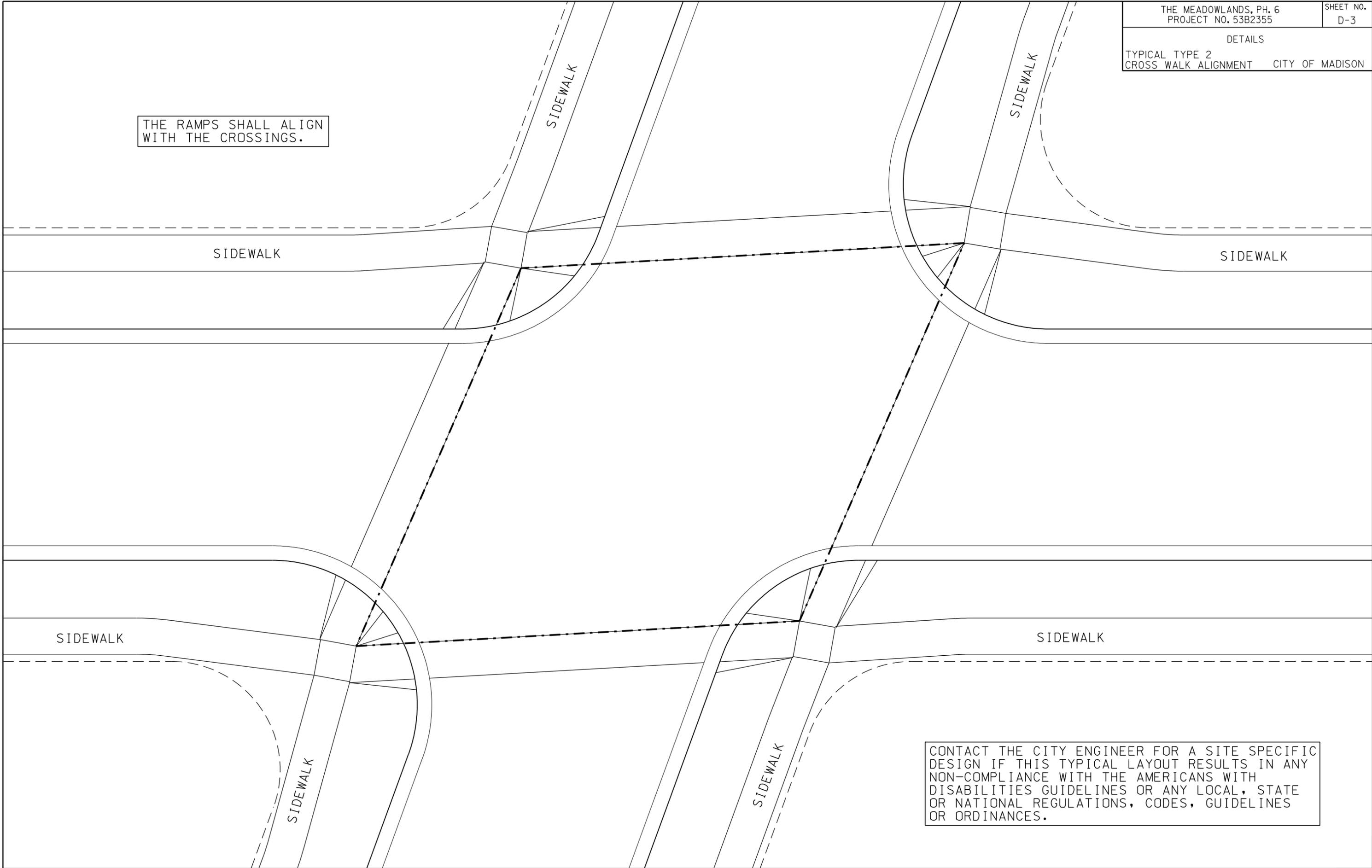
CURBS SHALL HAVE A MINIMUM 0.5% LONGITUDINAL GRADE TOWARD INLETS.  
ALL STORM WATER SHALL BE COLLECTED BY STORM SEWER INLETS PRIOR TO FLOWING OVER PRIVATE PROPERTY OR SIDEWALKS.

THE EDGE OF ALLEY PAVEMENT SHALL NOT BE CLOSER THAN 7.0' TO THE PROPERTY LINE AT ANY POINT.

UNDERDRAIN INSTALLATION



THE RAMPS SHALL ALIGN  
WITH THE CROSSINGS.



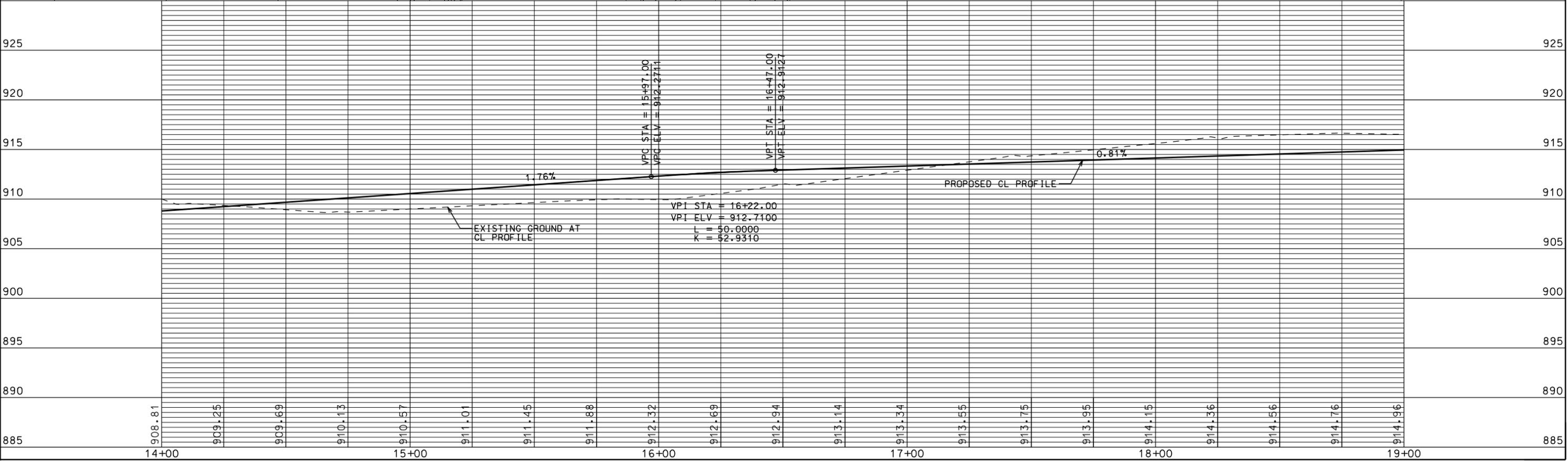
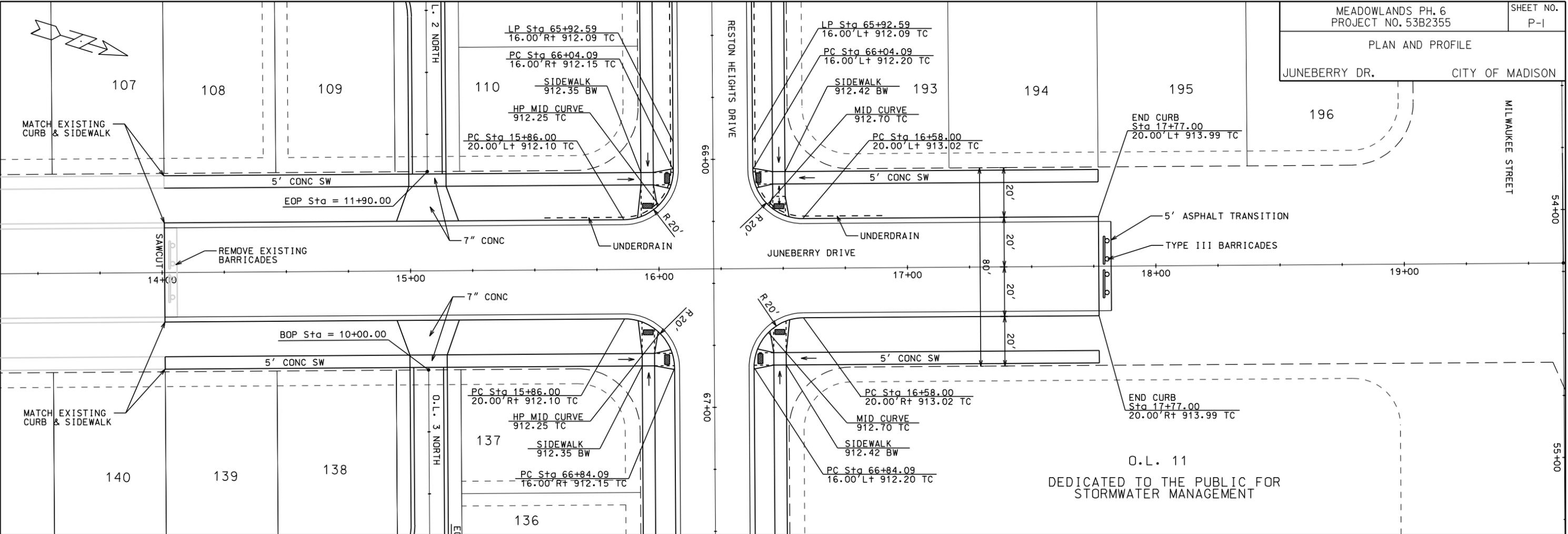
CONTACT THE CITY ENGINEER FOR A SITE SPECIFIC  
DESIGN IF THIS TYPICAL LAYOUT RESULTS IN ANY  
NON-COMPLIANCE WITH THE AMERICANS WITH  
DISABILITIES GUIDELINES OR ANY LOCAL, STATE  
OR NATIONAL REGULATIONS, CODES, GUIDELINES  
OR ORDINANCES.

PLOT SCALE: .....

PLOT NAME: .....

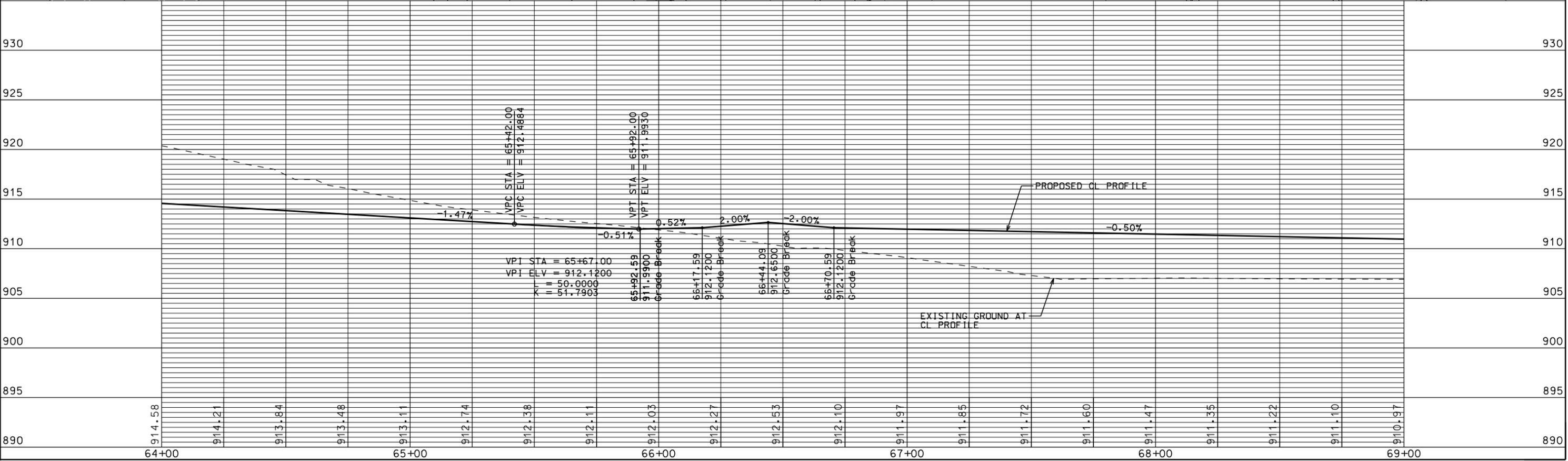
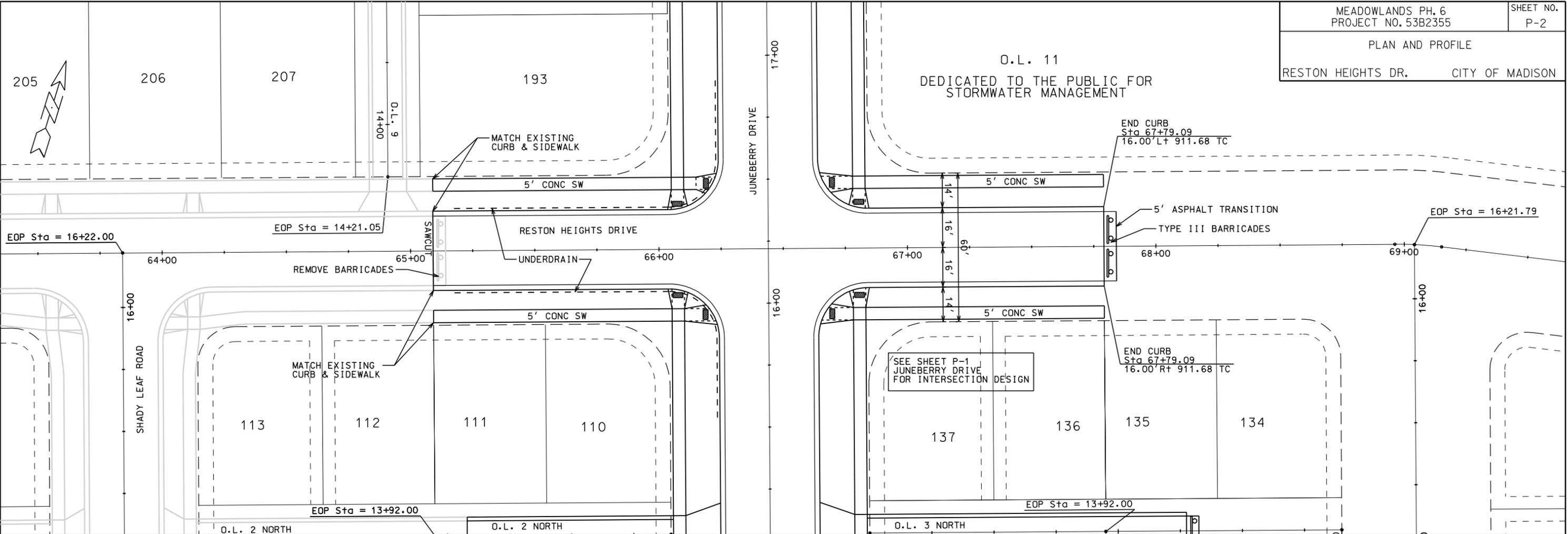
REV. DATE: .....

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



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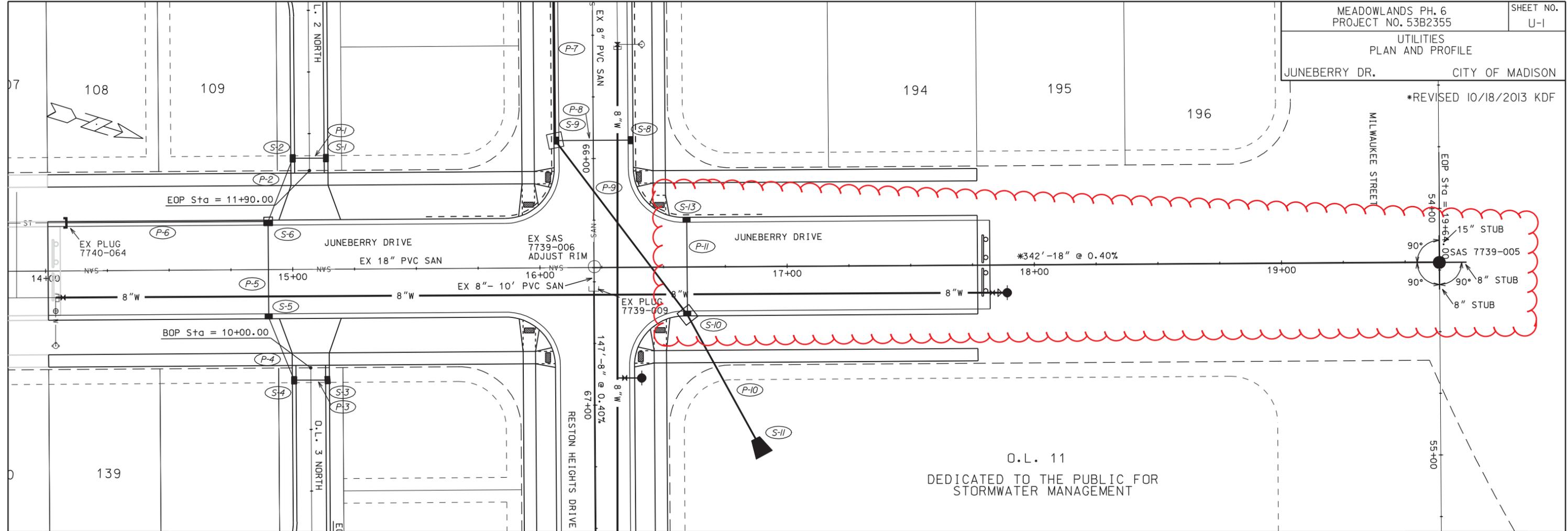


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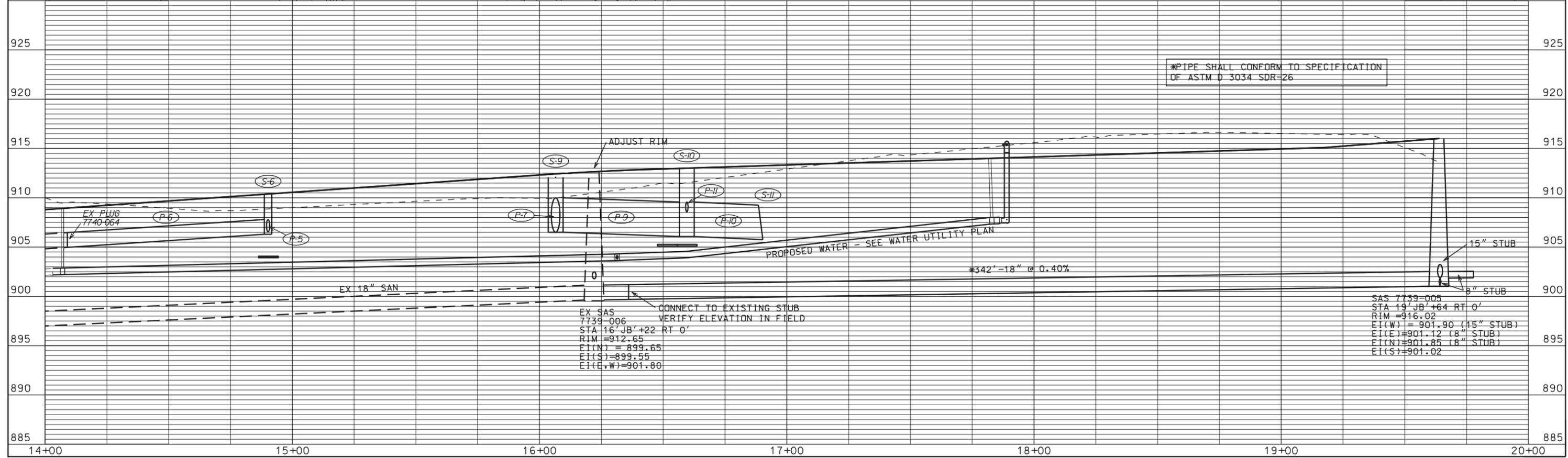
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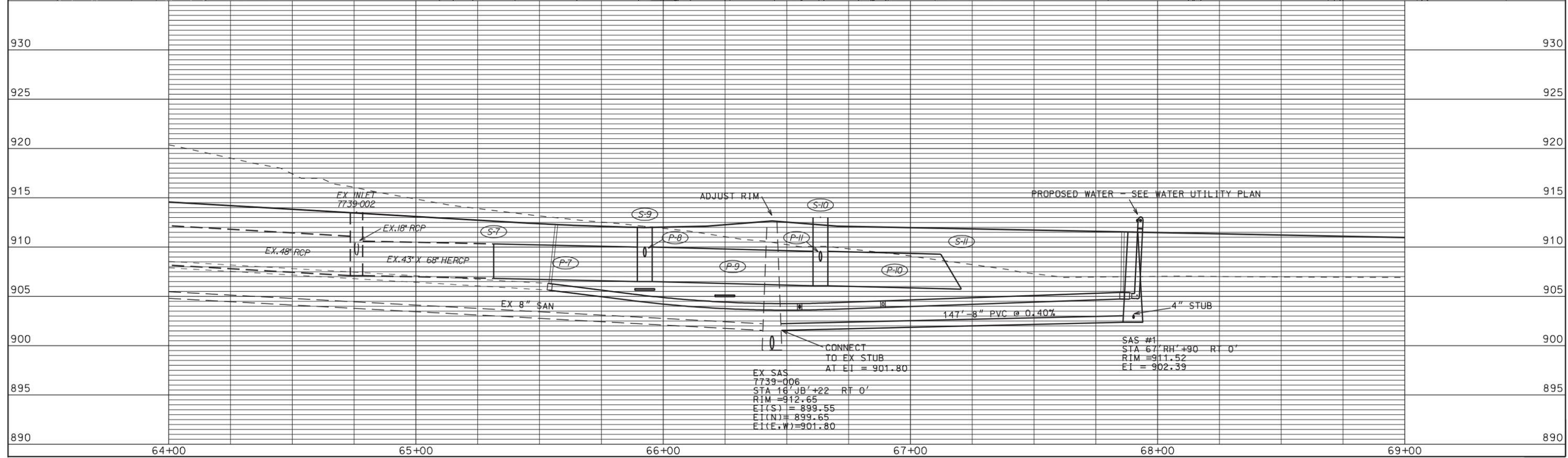
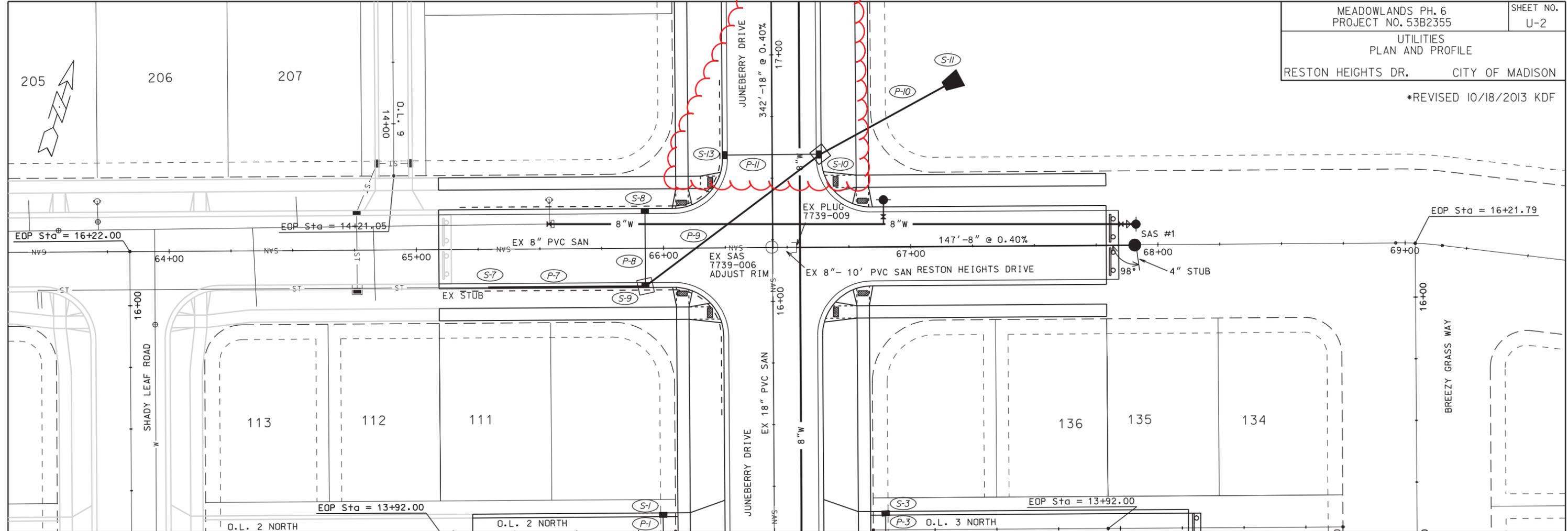
\*REVISED 10/18/2013 KDF



O.L. 11  
DEDICATED TO THE PUBLIC FOR  
STORMWATER MANAGEMENT



\*REVISED 10/18/2013 KDF



EX SAS  
 7739-006  
 STA 16' JB'+22 RT 0'  
 RIM = 912.65  
 EI(S) = 899.55  
 EI(N) = 899.65  
 EI(E,W) = 901.80

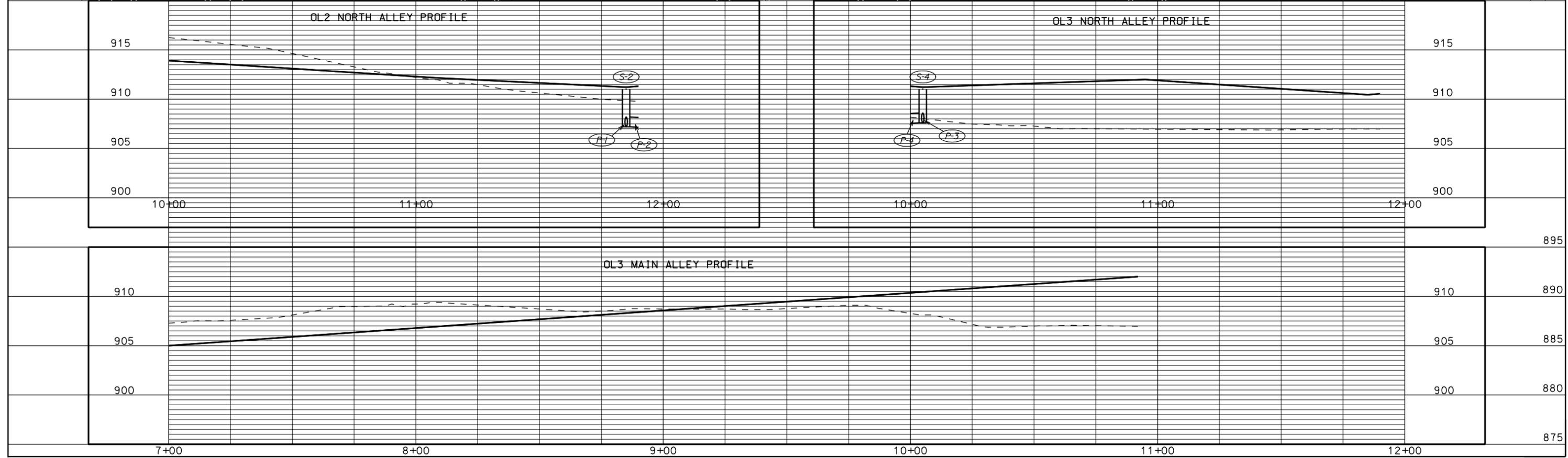
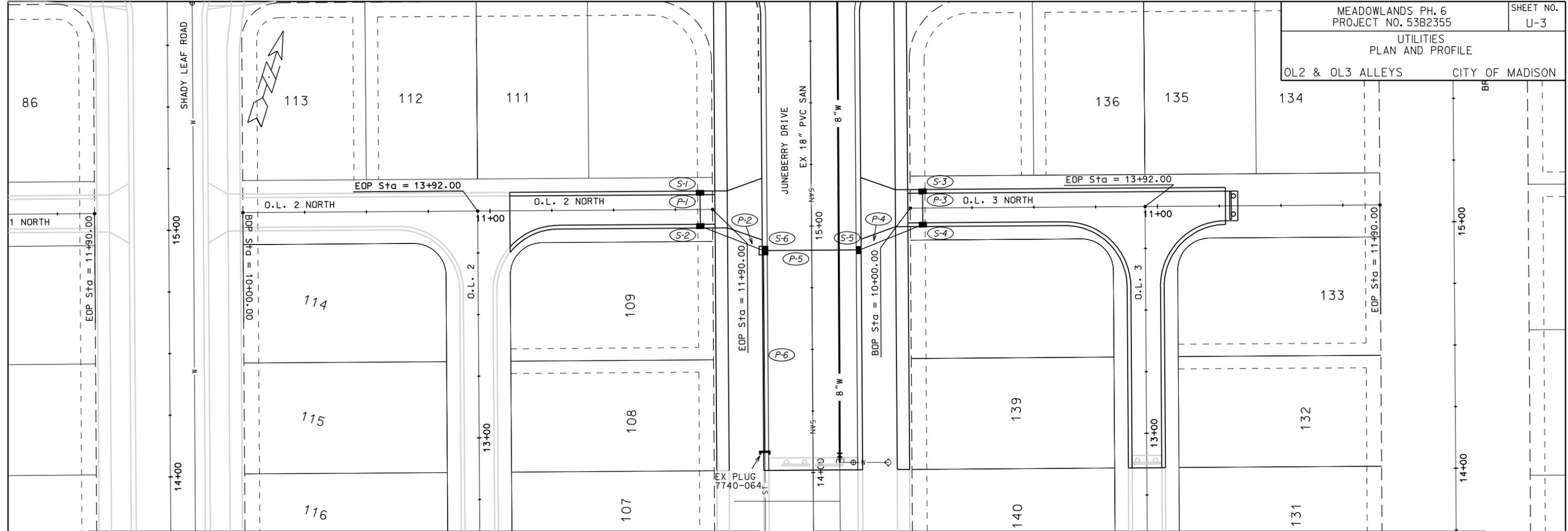
SAS #1  
 STA 67' RH'+90 RT 0'  
 RIM = 911.52  
 EI = 902.39

PLOT SCALE: .....

PLOT NAME: .....

REV. DATE: .....

ORIGINATOR: CITY OF MADISON, STREETS DIVISION



ORIGINATOR: CITY OF MADISON, STREETS DIVISION

REV. DATE: PLOT NAME: PLOT SCALE:

# SANITARY SEWER SCHEDULE

## ALIGNMENT CODES:

'RH' - RESTON HEIGHTS  
'JB' - JUNE BERRY DRIVE  
'O2' - O.L. 2  
'O3' - O.L. 3

MEADOWLANDS PH. 6 PROJECT NO. 53B2355	SHEET NO. U-4
SANITARY AND STORM SCHEDULES CITY OF MADISON	

\* REVISED 10/18/2013 KDF

### PROPOSED SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH	NOTES
SAS #1	67'RH'+90.00	CL	911.52	902.39	9.13	4' DIA
* SAS 7739-005	19'JB'+64.00	CL	916.02	901.02	15.00	4' DIA

### PROPOSED SANITARY PIPES

FROM SAS (DWNSTRM)	TO SAS (UPSTREAM)	EI # (DWNSTRM)	EI # (UPSTRM)	LENGTH (FT)	SLOPE (%)	SIZE (DIA)	PVC TYPE	NOTES
EX.SAS 7739-006	SAS #1	901.80	902.39	147	0.40%	8"	SDR-35	---
* EX.SAS 7739-006	SAS 7739-005	899.65	901.02	342	0.40%	18"	SDR-26	---

# STORM SEWER SCHEDULE

### PROPOSED STORM STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
S-1	11'O2'+85.00	LT-6.75	H INLET	911.27	907.31	3.96	W/ R-3382, (1)
S-2	11'O2'+85.00	RT-6.75	H INLET	911.03	907.21	3.82	W/ R-3382, (1)
S-3	10'O3'+05.00	LT-6.75	H INLET	911.27	907.76	3.51	W/ R-3382, (1)
S-4	10'O3'+05.00	RT-6.75	H INLET	911.03	907.60	3.43	W/ R-3382, (1)
S-5	14'JB'+90.17	RT-19.50	H INLET	910.42	907.02	3.40	W/ R-3067-7004, FP
S-6	14'JB'+90.17	LT-19.50	3X3 SAS	910.42	906.30	4.12	W/ R-3067-7004, FP
S-7	65'RH'+28.97	RT-15.50	EX. STORM STUB	---	906.83	---	---
S-8	65'RH'+92.59	LT-15.50	H INLET	912.09	909.25	2.84	W/ R-3067-7004, FP
S-9	65'RH'+92.59	RT-15.50	6X6 SAS	912.09	906.51	5.58	W/ R-3067-7004, FP, CAST PIPE INTO ROOF
S-10	16'JB'+59.55	RT-19.50	6X6 SAS	913.02	906.07	6.95	W/ R-3067-7004, FP, CAST PIPE INTO ROOF
S-11	67'RH'+20.61	LT-68.30	43"X68" RCP AE	---	905.50	---	W/ AE GATE, (2)
<del>S-12</del>	<del>16'JB'+40.81</del>	<del>LT-5.55</del>	<del>STM TAP</del>	<del>908.01</del>	<del>908.01</del>	<del>---</del>	<del>(3)</del>
S-13	16'JB'+59.55	LT-19.50	H INLET	913.02	908.96	4.06	W/ R-3067-7004

### PROPOSED STORM PIPES

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	LGTH (FT)	DISCH. E.I.	INLET E.I.	SLOPE (%)	PIPE SIZE	TYPE	NOTES
P-1	S-2	S-1	14	907.21	907.31	0.75%	12"	RCP	---
P-2	S-6	S-2	27	906.80	907.21	1.50%	12"	RCP	---
P-3	S-4	S-3	14	907.60	907.76	1.20%	12"	RCP	---
P-4	S-5	S-4	27	907.27	907.60	1.20%	12"	RCP	---
P-5	S-6	S-5	39	906.55	907.02	1.20%	15"	RCP	---
P-6	EX PLUG 7740-064	S-6	81	904.98	906.30	1.63%	18"	RCP	---
P-7	S-9	S-7	64	906.51	906.83	0.50%	43"X68"	HERCP	---
P-8	S-9	S-8	31	909.09	909.25	0.50%	12"	RCP	---
P-9	S-10	S-9	89	906.07	906.51	0.50%	43"X68"	HERCP	---
P-10	S-11	S-10	65	905.50	906.07	0.88%	43"X68"	HERCP	---
* P-11	<b>S-10</b>	S-13	<b>39</b>	<b>908.57</b>	908.96	<b>1.00%</b>	12"	RCP	---

### 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

- 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 KYLE FRANK OF CITY ENGINEERING AT (608) 266-4098 FOR PRECAST APPROVALS, OR FAX SHOP DRAWINGS TO (608)264-9275.

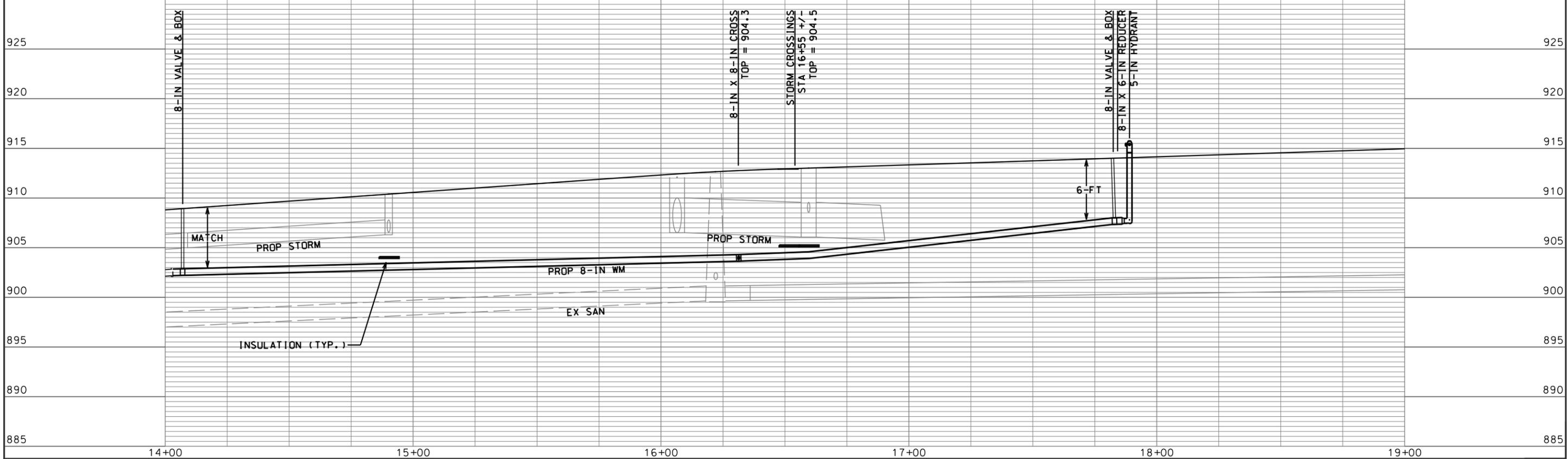
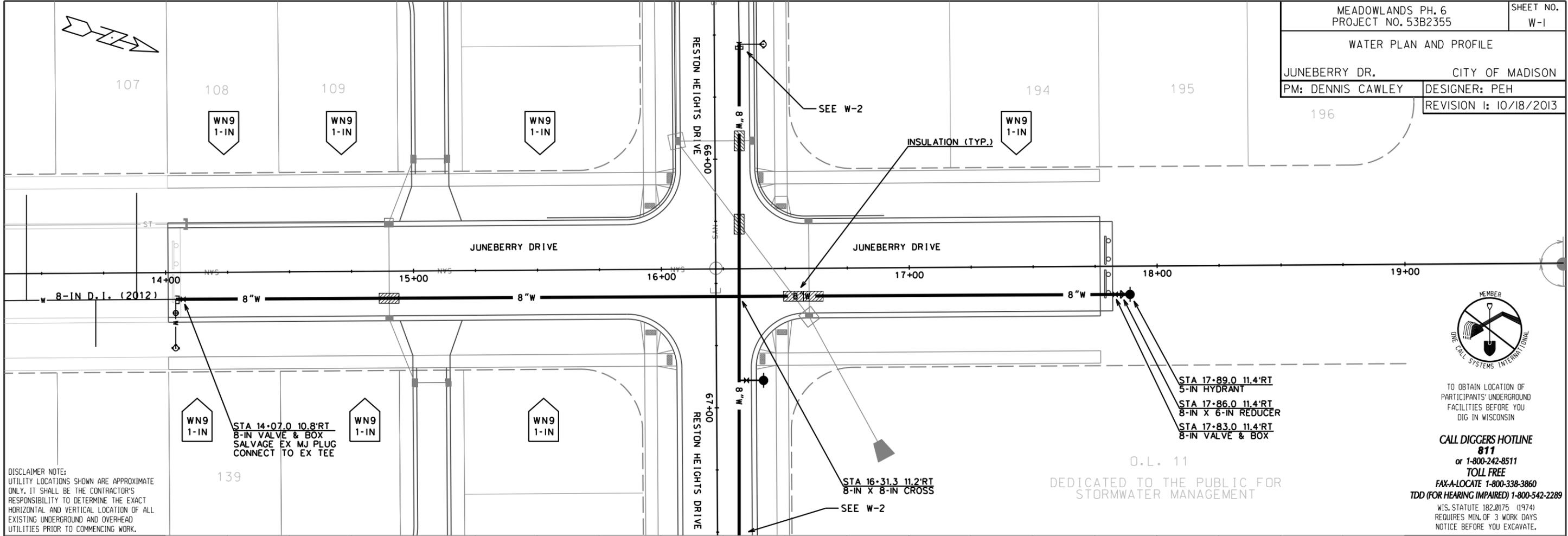
### SPECIFIC NOTES

(1) H INLETS IN ALLEYS SHALL HAVE NEENAH R-3382 FRAMES AND GRATES, PER

S.D.D. 5.7.33 CASTING GRADES GIVEN AT FLOW LINE.

(2) STATION AND OFFSET FROM END OF AE. SEE STANDARD DETAIL DRAWINGS 5.4.1 AND 5.4.4

(3) INSTALL ELECTRONIC MARKER BALL ABOVE TAP



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

**CALL DIGGERS HOTLINE 811**  
or 1-800-242-8511  
TOLL FREE  
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.

O.L. 11  
DEDICATED TO THE PUBLIC FOR STORMWATER MANAGEMENT

PLOT SCALE: .....  
PLOT NAME: .....  
REV. DATE: .....

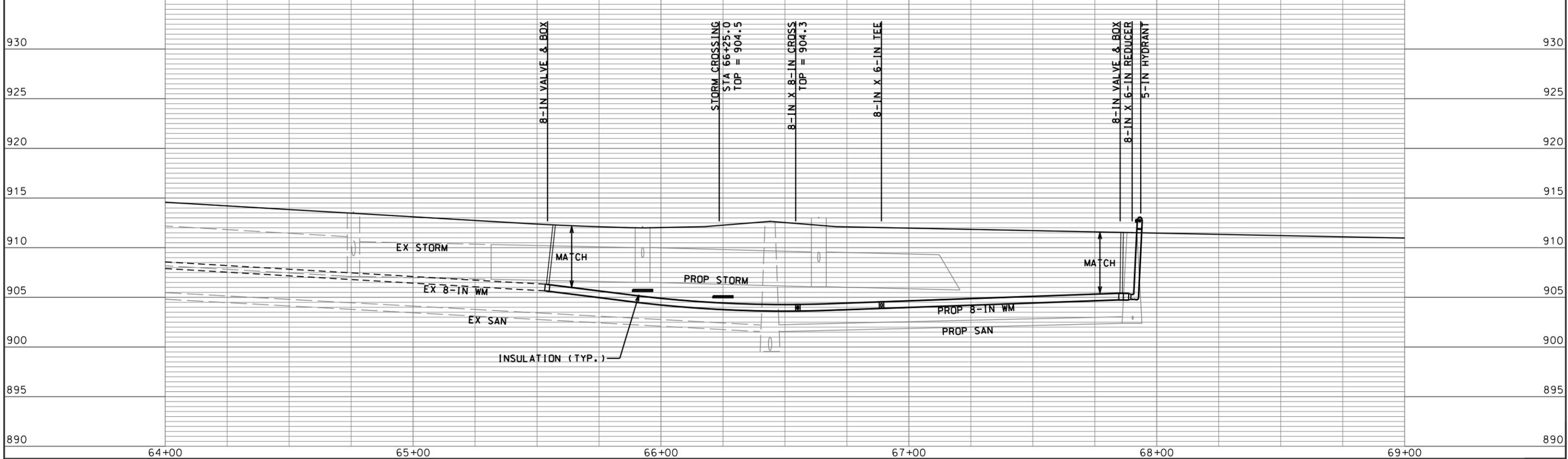
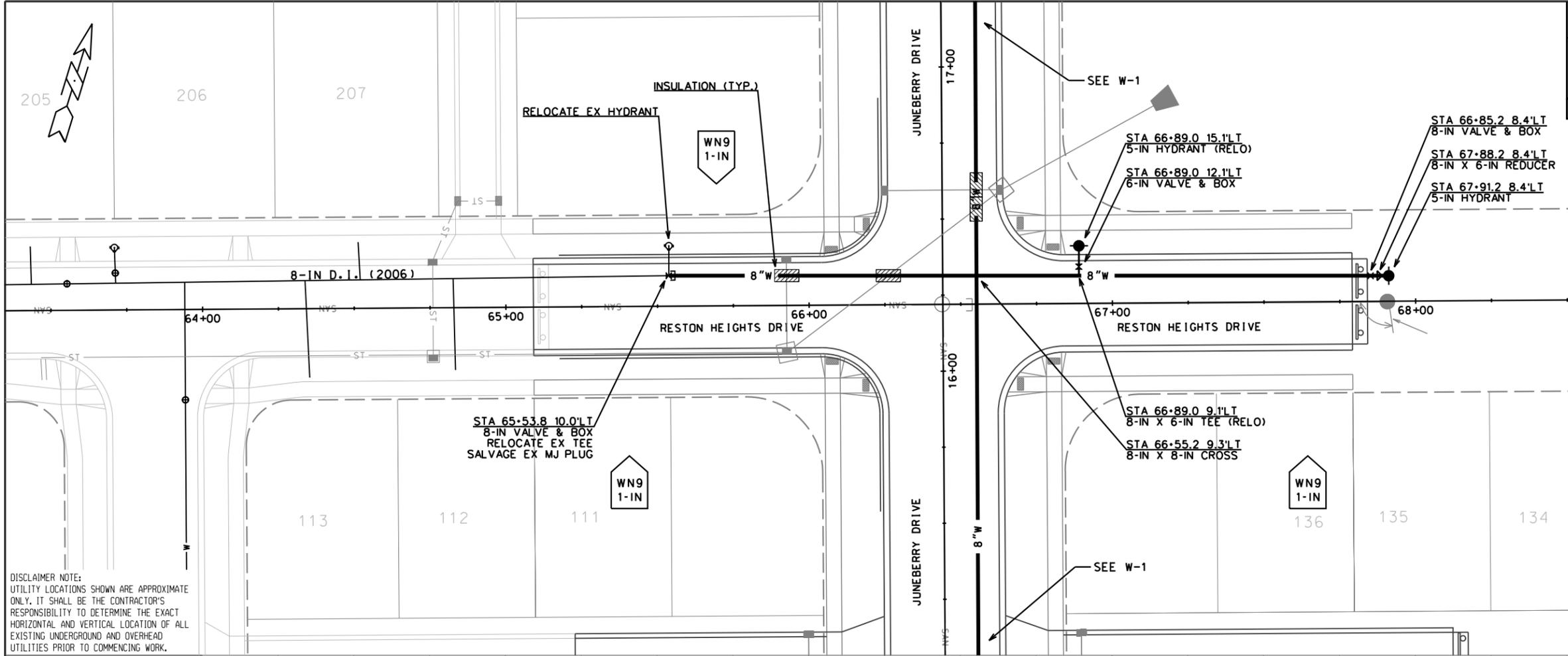
ORIGINATOR: CITY OF MADISON, STREETS DIVISION



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

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.

SCALE: 1" = 100'



CONNECTION OF NEW VALVE  
RESTON HEIGHTS DRIVE

ISOLATING VALVES:  
-V-1, V-3

NOTIFICATIONS:  
-7028-7041 RESTON HEIGHTS DR

CONNECTION OF NEW VALVE  
JUNEBERRY DRIVE

ISOLATING VALVES:  
-V-1911

NOTIFICATIONS:  
-218-239 JUNEBERRY DR



PLOT SCALE: .....  
PLOT NAME: .....  
REV. DATE: .....

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 DISTRUPTION OF SERVICE TO EXISTING CUSTOMERS. NOTIFY PER CONTRACT REQUIREMENTS OF ANY PLANNED WATER OUTAGE.
4. EXISTING WATER MAIN SHALL REMAIN IN SERVICE UNTIL NEW WATER MAIN IS TESTED AND ACCEPTED BY MADISON WATER UTILITY AND ALL SERVICES ARE RECONNECTED.
5. 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 (OR TO THE LARGER PARALLEL EXISTING 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 (OR TO THE LARGER PARALLEL EXISTING 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

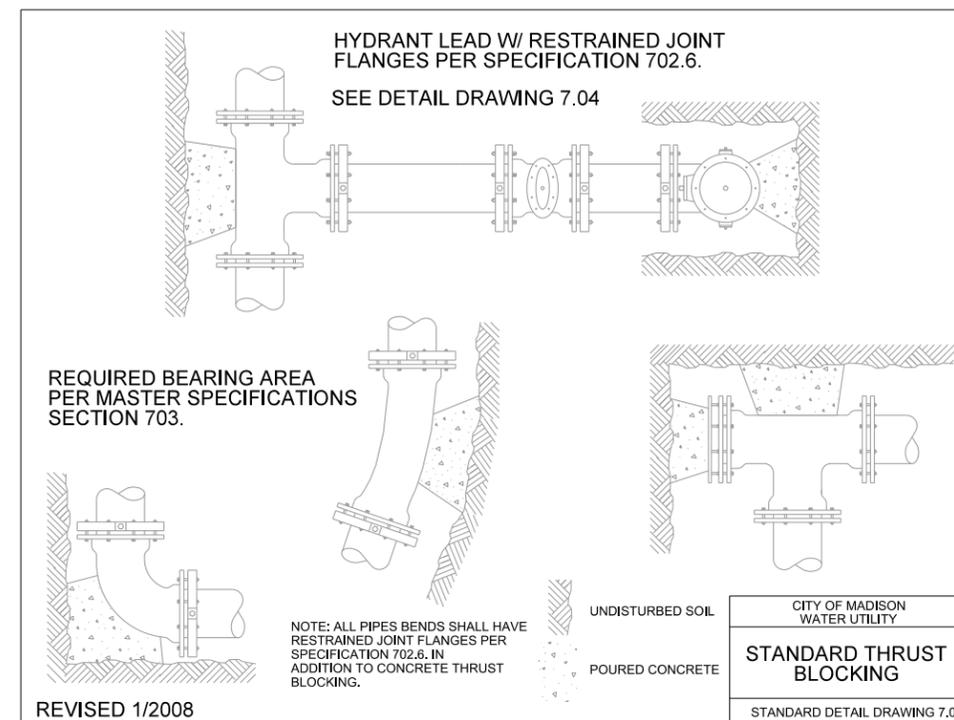
**ESTIMATE OF MATERIALS SUPPLIED BY CONTRACTOR:**

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

- 40' - 6" PIPE
- 620' - 8" PIPE
- 710' - POLYWRAP
- 1 - 6" VALVE & BOX
- 4 - 8" VALVE & BOX
- 1 - 8"X8" CROSS
- 2 - 8"X6" REDUCER
- 2 - 5" HYDRANT
- 40' - 2" STYROFOAM INSULATION
- 1-IN COPPER TUBING (AS REQUIRED)

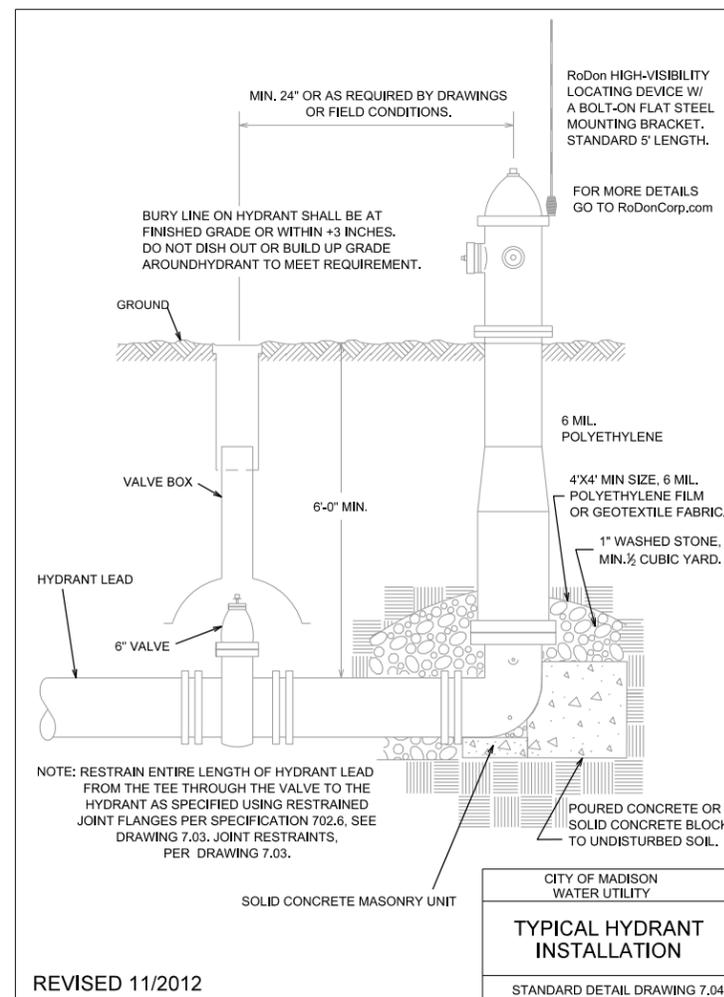
**MATERIALS REUSED**

- 1 - 8"X6" TEE
- 1 - 5" HYDRANT



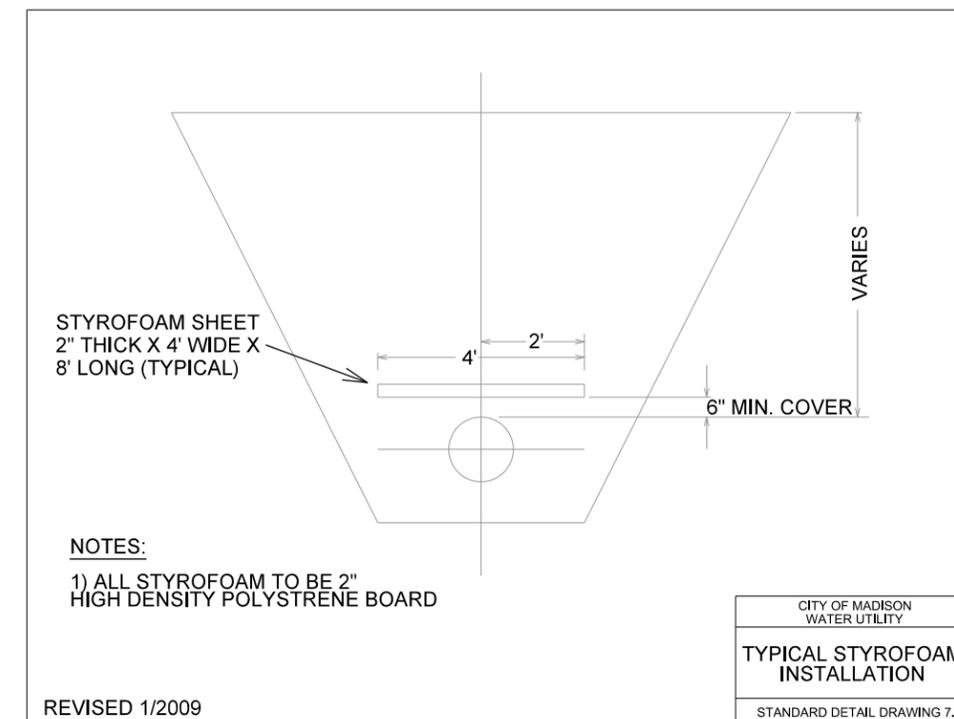
REVISED 1/2008

CITY OF MADISON  
WATER UTILITY  
**STANDARD THRUST  
BLOCKING**  
STANDARD DETAIL DRAWING 7.03



REVISED 11/2012

CITY OF MADISON  
WATER UTILITY  
**TYPICAL HYDRANT  
INSTALLATION**  
STANDARD DETAIL DRAWING 7.04



REVISED 1/2009

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WATER UTILITY  
**TYPICAL STYROFOAM  
INSTALLATION**  
STANDARD DETAIL DRAWING 7.05