

Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

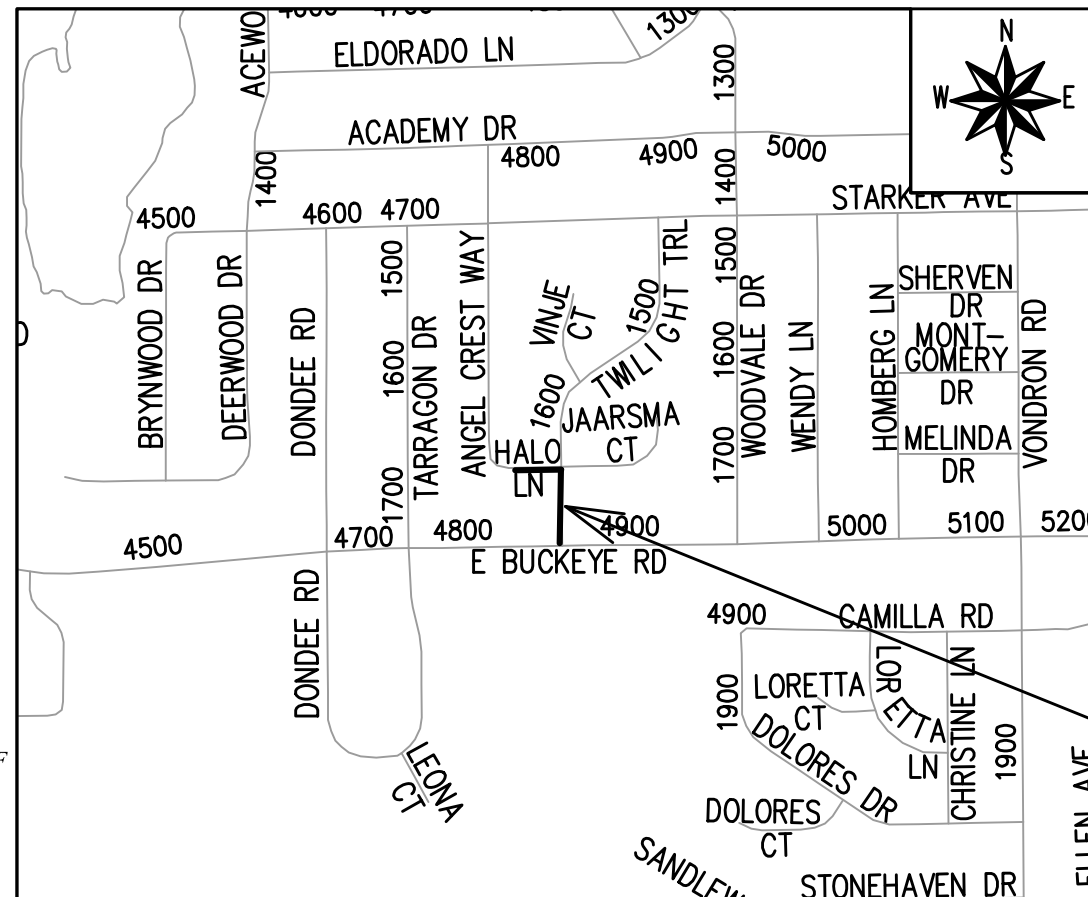
INDEX OF SHEETS

SHEET NO.	TITLE
1	
D1	DETAILS
EC1	EROSION CONTROL
P1-P2	PLAN & PROFILE
U1-U2	SEWER PLAN & PROFILES
U3	SEWER SCHEDULES

HALO LANE AND TWILIGHT TRAIL RESURFACING ASSESSMENT DISTRICT-2023

CITY PROJECT NO. 13011
CONTRACT NO. 8583

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	



PROJECT
LOCATION

PLOT SCALE: 1" = 1'

PLOT NAME: ---
REV. DATE: 1/23/2023 2:08 PM

ORIGINATOR: CITY OF MADISON

PUBLIC IMPROVEMENT PROJECT
APPROVED

APPROVED DATE: JANUARY 17, 2023

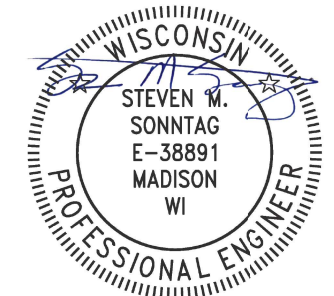
BY THE COMMON COUNCIL
OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN
APPROVED BY:

N. Greg Fries Jan 26, 2023

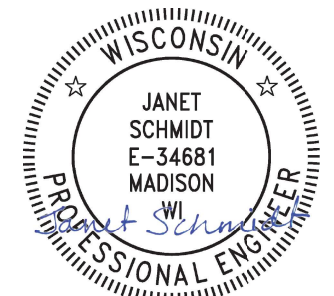
City Engineer Date

STREET
DESIGNED BY:



Jan 26, 2023

STORM SEWER
DESIGNED BY:

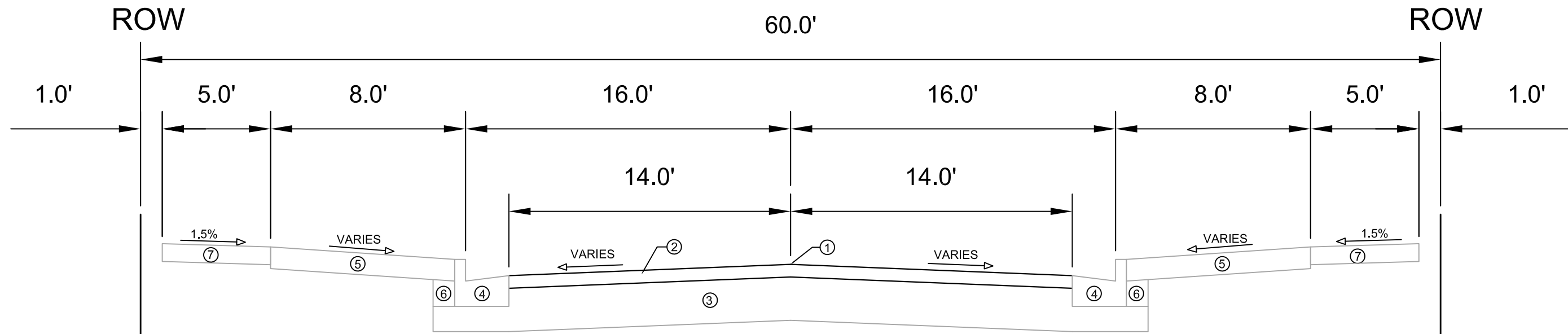


Jan 26, 2023

NOTES:
ALL GUTTERS SHALL DRAIN WITH A MINIMUM GRADE OF
0.50% TOWARD STORM SEWER INLETS.

EARTH WORK SUMMARY:

ESTIMATED UNDISTRIBUTED UNDERCUT = 740.0 C.Y.
TOTAL UNCLASSIFIED EXCAVATION CUT = 740.0 C.Y.



TYPICAL SECTION
TWILIGHT TRAIL
HALO LANE

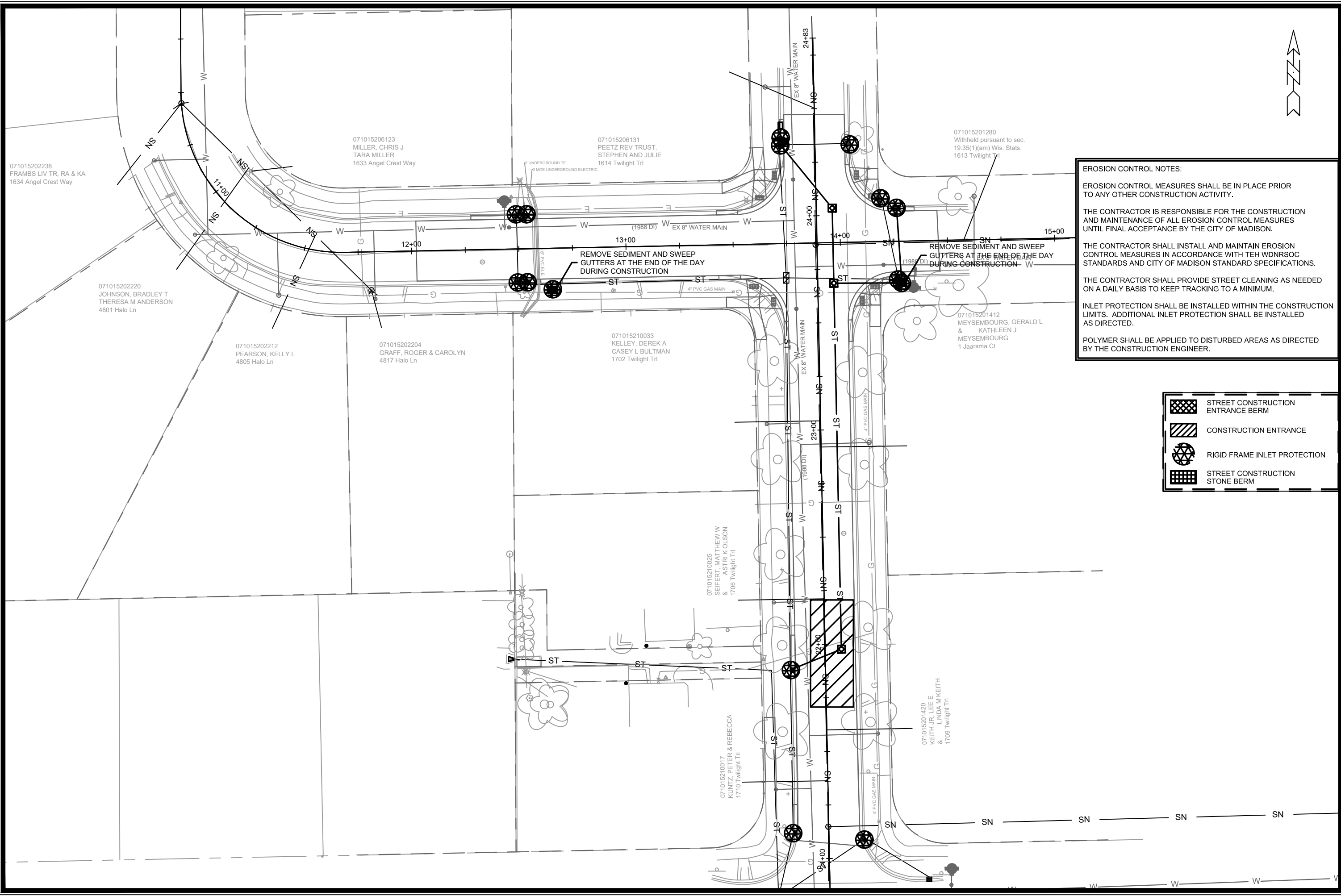
- ① POINT REFERRED TO ON PROFILE
- ② 3.00" HMA PAVEMENT- TYPE 4 LT 58-28 S
- ③ EXISTING BASE COURSE TO REMAIN.
- ④ EXISTING CONCRETE CURB AND GUTTER TYPE 'A'. REMOVE AND REPLACE AS SHOWN ON THE P-SHEETS OR AS DIRECTED BY THE ENGINEER.
- ⑤ RESTORE DISTURBED AREAS WITH 6" TOPSOIL, SEED AND MATTING
- ⑥ FILL INCIDENTAL TO CURB AND GUTTER REPLACEMENT.
- ⑦ EXISTING 5" CONCRETE SIDEWALK, REMOVE AND REPLACE AS SHOWN ON THE P-SHEETS OR AS DIRECTED BY THE ENGINEER

MARK	REVISION	DATE	BY
13011		1/24/2023 10:25 AM	
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13011
TYPICAL SECTION
HALO LANE & TWILIGHT TRAIL RESURFACING ASSESSMENT DISTRICT- 2023 MADISON, WI
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CONTRACT NO: 8583



13011
D-1



EROSION CONTROL NOTES:

EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY.





THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL FINAL ACCEPTANCE BY THE CITY OF MADISON.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH TEH WDNR SOC STANDARDS AND CITY OF MADISON STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL PROVIDE STREET CLEANING AS NEEDED ON A DAILY BASIS TO KEEP TRACKING TO A MINIMUM.

INLET PROTECTION SHALL BE INSTALLED WITHIN THE CONSTRUCTION LIMITS. ADDITIONAL INLET PROTECTION SHALL BE INSTALLED AS DIRECTED.

POLYMER SHALL BE APPLIED TO DISTURBED AREAS AS DIRECTED BY THE CONSTRUCTION ENGINEER.

-  STREET CONSTRUCTION ENTRANCE BERM
-  CONSTRUCTION ENTRANCE
-  RIGID FRAME INLET PROTECTION
-  STREET CONSTRUCTION STONE BERM

MARK	REVISION	DATE	BY
1	ULOS & STORM SEWER	3/21/2023	TAC

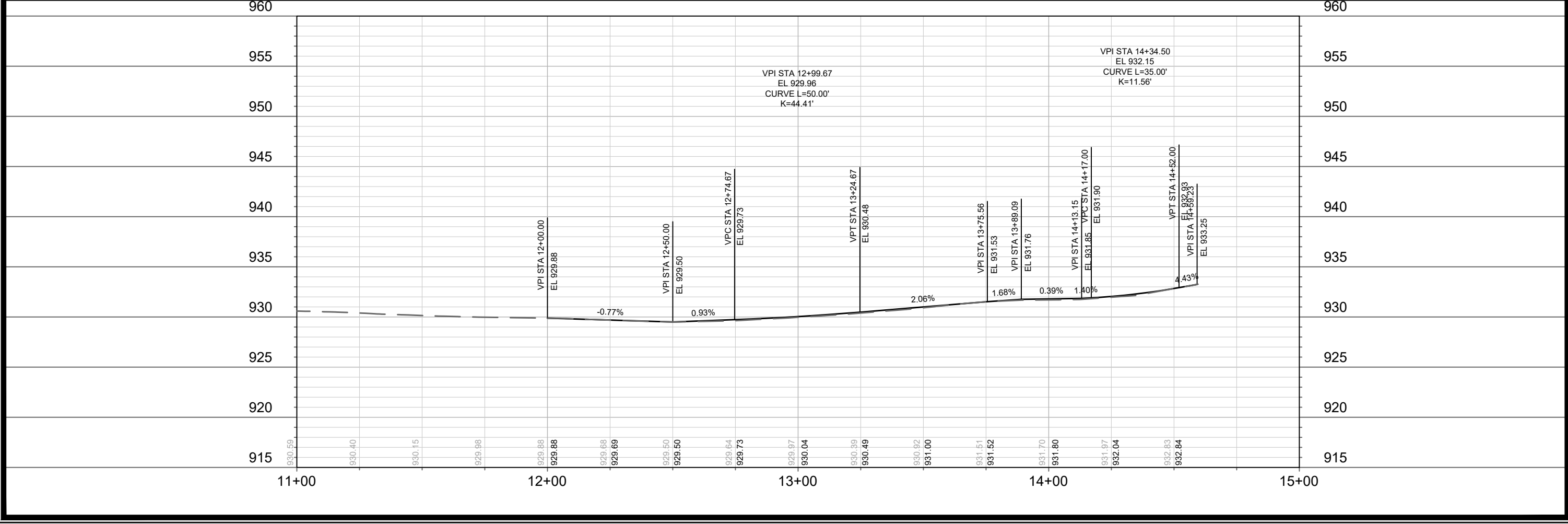
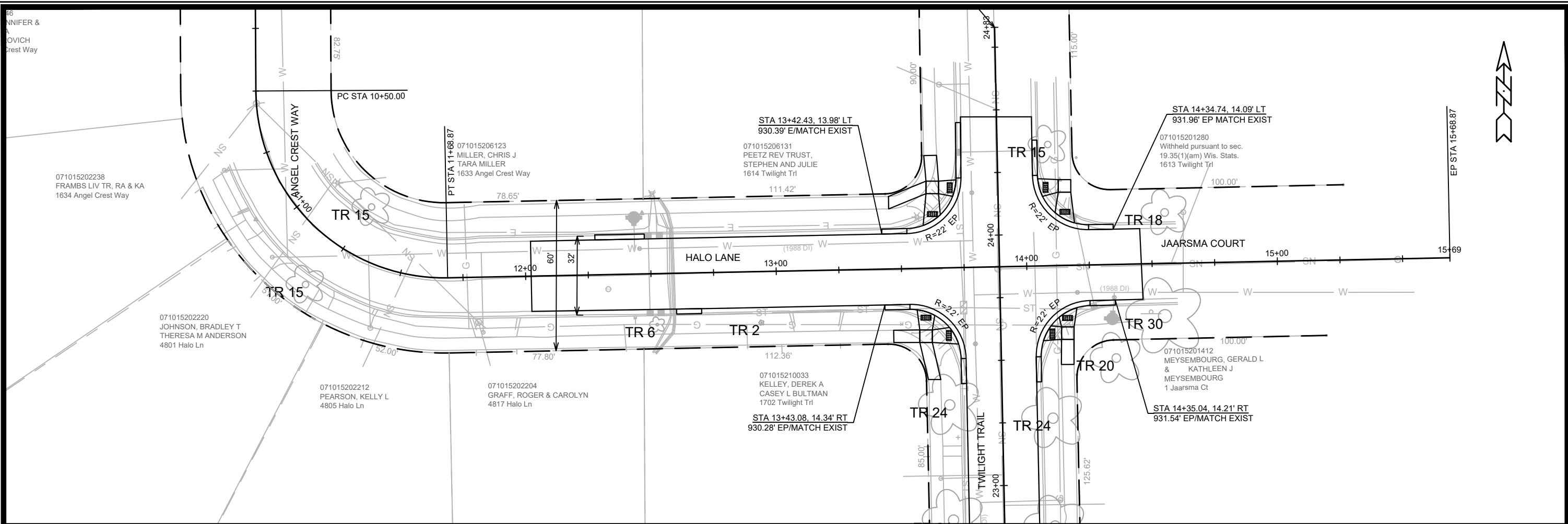
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13011
 HALO LANE & TWILIGHT TRAIL RESURFACING ASSESSMENT DISTRICT- 2023 MADISON, WI
 CONTRACT NO: 8583
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EROSION CONTROL PLAN



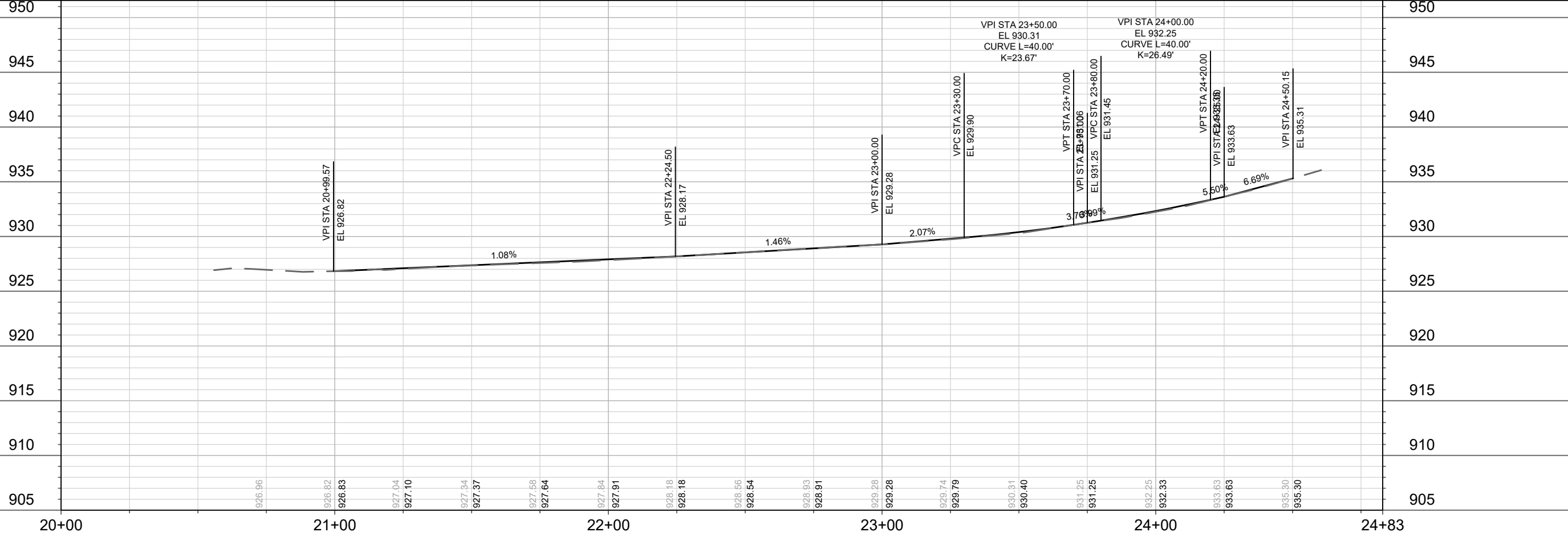
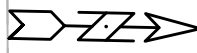
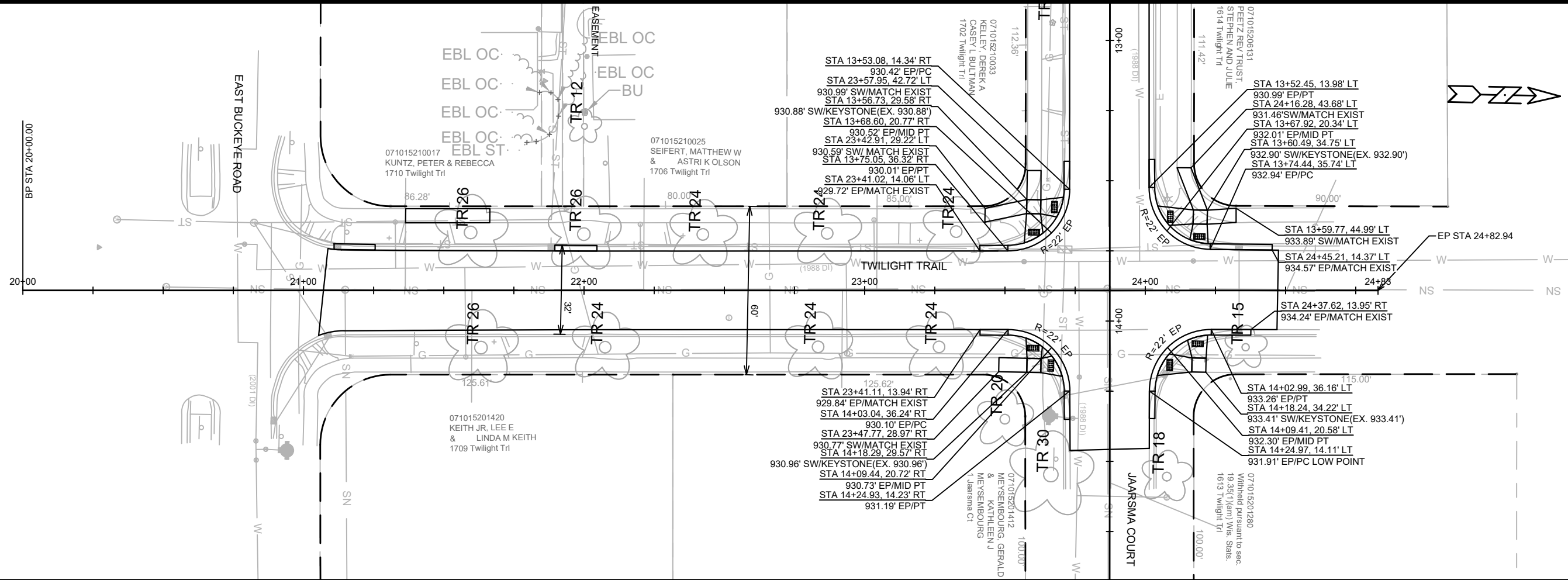
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 EC1




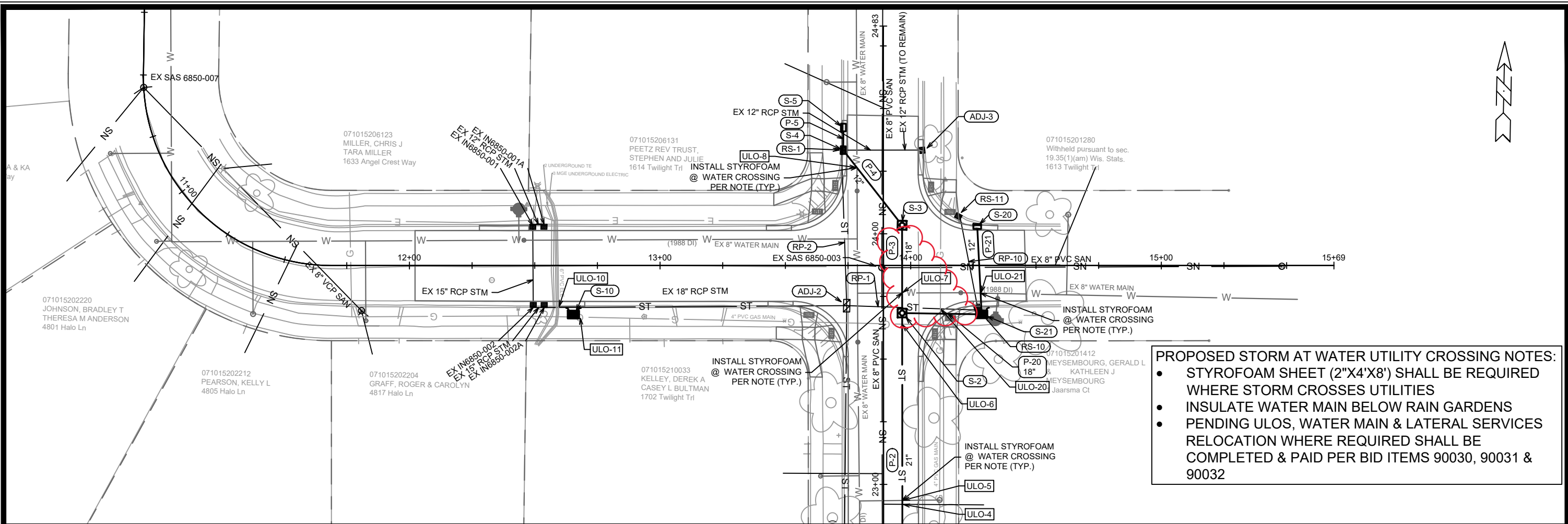
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CONTRACT NO:	8583
PROJECT NO:	13011
SHEET NO:	P-1

13011
 PLAN AND PROFILE - HALO
 HALO LANE & TWILIGHT TRAIL RESURFACING ASSESSMENT DISTRICT- 2023 MADISON, WI
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 P-1

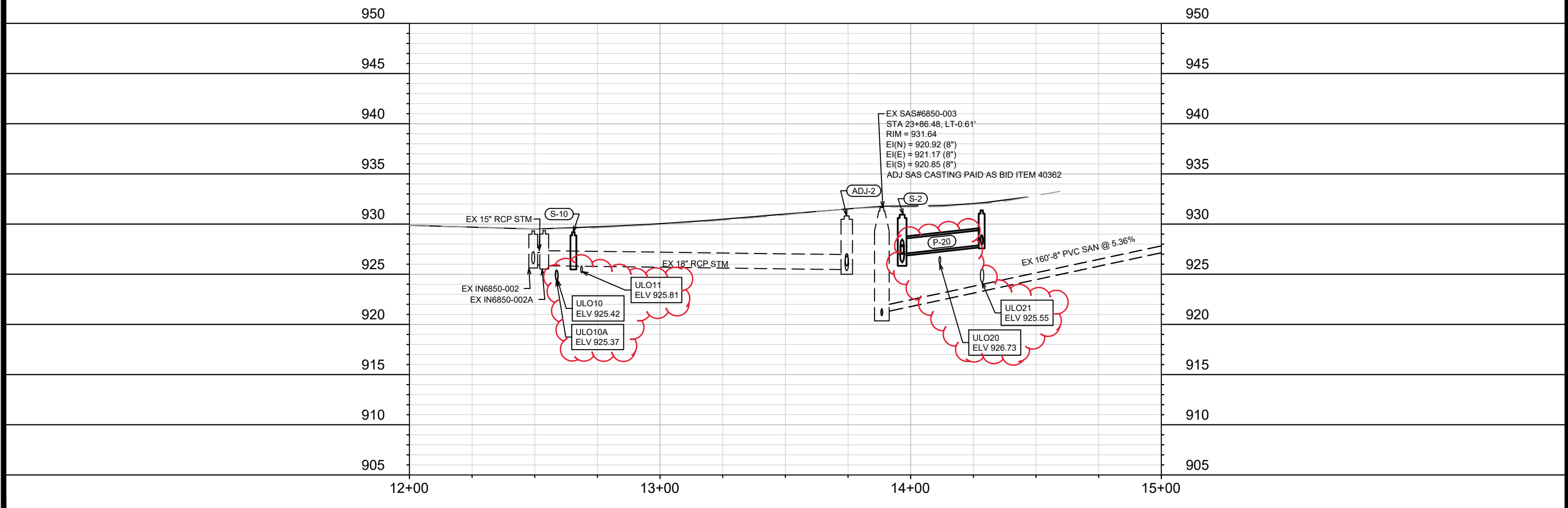


 13011 P-2	PLAN AND PROFILE - TWILIGHT HALO LANE & TWILIGHT TRAIL RESURFACING ASSESSMENT DISTRICT- 2023 MADISON, WI	CONTRACT NO: 8583
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PROPOSED STORM AT WATER UTILITY CROSSING NOTES:

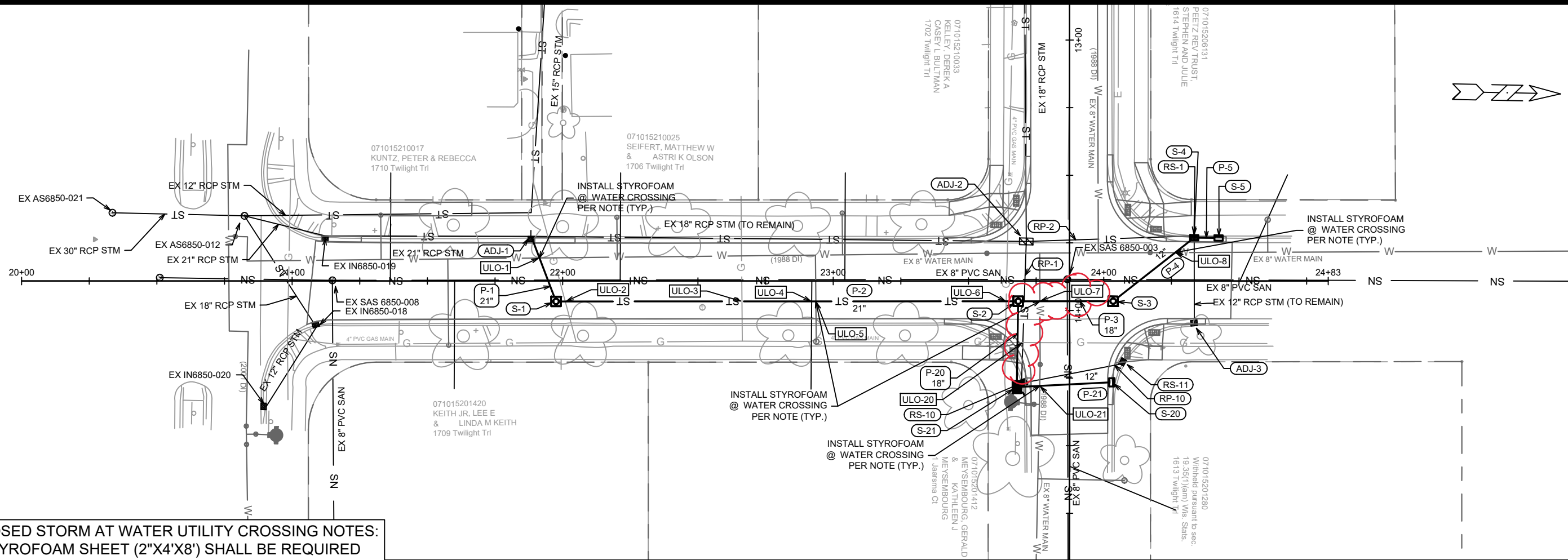
- STYROFOAM SHEET (2"X4'X8') SHALL BE REQUIRED WHERE STORM CROSSES UTILITIES
- INSULATE WATER MAIN BELOW RAIN GARDENS
- PENDING ULOS, WATER MAIN & LATERAL SERVICES RELOCATION WHERE REQUIRED SHALL BE COMPLETED & PAID PER BID ITEMS 90030, 90031 & 90032



DATE	BY	U-1
3/21/23	TAC	
REVISION	ULOS & STORM SEWER	
DATE	BY	U-1
3/21/23	TAC	
REVISION	ULOS & STORM SEWER	
DATE	BY	U-1
3/21/23	TAC	
REVISION	ULOS & STORM SEWER	
DATE	BY	U-1
3/21/23	TAC	
REVISION	ULOS & STORM SEWER	

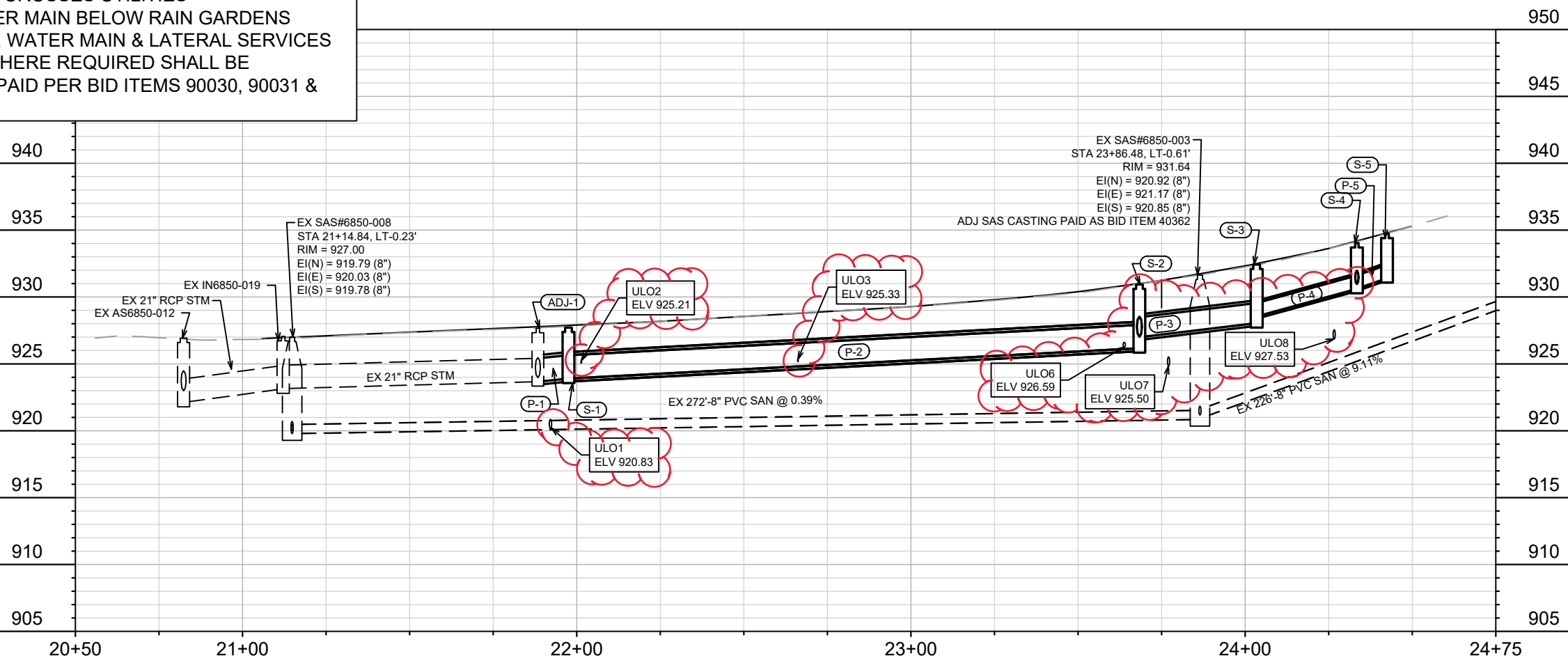
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 HALO LANE & TWILIGHT TRAIL RESURFACING ASSESSMENT DISTRICT- 2023 MADISON, WI
 CONTRACT NO: 8583
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 PLAN AND PROFILE - HALO

 13011
 U-1



PROPOSED STORM AT WATER UTILITY CROSSING NOTES:

- STYROFOAM SHEET (2'X4'X8') SHALL BE REQUIRED WHERE STORM CROSSES UTILITIES
- INSULATE WATER MAIN BELOW RAIN GARDENS
- PENDING ULOS, WATER MAIN & LATERAL SERVICES RELOCATION WHERE REQUIRED SHALL BE COMPLETED & PAID PER BID ITEMS 90030, 90031 & 90032



MARK	REVISION	DATE	BY
1	ULOS & STORM SEWER	3/21/2023	TAC
2	DESIGNED BY TAC	DATE: 3/27/2023 6:01 AM	Scale: 1"=40'
3	13011		

13011
 HALO LANE & TWILIGHT TRAIL RESURFACING ASSESSMENT DISTRICT-2023 MADISON, WI
 8583
 CONTRACT NO:

PLAN AND PROFILE - TWILIGHT
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 U-2

SEWER SCHEDULE

*REV 3/21/2023 TAC

HALO LANE & TWILIGHT TRAIL RESURFACING ASSESSMENT DISTRICT-2023	SHEET NO. U-3
PROJECT NO. 13011 SEWER SCHEDULE	
CITY OF MADISON	

PROPOSED STORM STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
HALO LANE							
S-10	12+65.42	RT-19.57	TERR IN TYPE IV	929.20	925.81	3.39	FP
S-20	14+26.55	LT-15.61	H INLET	932.29	928.96	3.33	W/R-3067-7004-V
S-21	14+28.33	RT-19.47	TERR IN TYPE III	931.37	927.91	3.46	FP
TWILIGHT TRAIL							
S-1	21+97.53	RT-7.56	3x3 STORM SAS	927.71	923.90	3.81	FP,W/R-1550-0054
* S-2	23+68.35	RT-7.50	3x3 STORM SAS	930.94	926.17	4.77	W/R-1550-0054
* S-3	24+03.44	RT-7.49	3x3 STORM SAS	932.43	928.05	4.38	W/R-1550-0054
S-4	24+33.42	LT-16.01	3x3 STORM SAS	934.04	930.61	3.43	FP,W/R-3067-7004-V,[6]
* S-5	24+42.45	LT-15.91	H INLET	934.74	931.41	3.33	W/R-3067-7004-V

STORM STRUCTURE ADJUSTMENTS

ADJUST NO.	STATION	LOCATION (OFFSET)	TYPE	EX. TOC ELEV.	ADJUST ELEV.	ADJUST DIFF.	NOTES
TWILIGHT TRAIL							
ADJ-1	21+88.38	LT-16.48	H INLET	927.66	927.74	0.08	[1],[4]
ADJ-2	23+71.34	LT-14.62	4X4 STORM SAS	930.81	930.81	0.00	[2],[5]
ADJ-3	24+33.44	RT-16.55	H INLET	934.29	934.38	0.09	[1]

STORM STRUCTURE REMOVALS

STRUCTURE NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
HALO LANE							
RS-10	14+26.89	RT-17.76	H INLET	931.49	928.26	3.23	-
RS-11	14+19.47	LT-20.52	H INLET	932.20	928.79	3.41	-
TWILIGHT TRAIL							
RS-1	24+33.42	LT-16.65	H INLET	934.04	930.61	3.43	-

SANITARY STRUCTURE ADJUSTMENTS

ADJUST STRUCTURE ID NO.	STATION	LOCATION (OFFSET)	EX. TOC ELEV.	ADJUST ELEV.	ADJUST DIFF.	NOTES
TWILIGHT TRAIL EX SAS6850-003	21+88.38	LT-16.48	931.64	931.64	0.00	[3]

NOTE: PLAN LENGTH (PAY LENGTH) IS FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE. PIPE LENGTH IS ACTUAL LENGTH OF PIPE FROM STRUCTURE WALL TO STRUCTURE WALL. SLOPE CALCULATED USING PIPE LENGTH.

SPECIFIC NOTES:

- [1] CASTING ADJUST PAID AS BID ITEM 40364
- [2] CASTING ADJUST PAID AS BID ITEM 40363
- [3] CASTING ADJUST PAID AS BID ITEM 40362
- [4] TAP ADJ-1
- [5] 15" PLUG AT ADJ-2
- [6] CONNECT EXSTING 12" RCP @ EI = 930.97

PROPOSED STORM PIPES

PIPE NO.	FROM (DNSTM)	TO (UPSTM)	DISCH. E.I.	INLET E.I.	PLAN (PAY) LGTH (FT)	PIPE LGTH (FT)	SLOPE (%)	PIPE SIZE	TYPE	NOTES
HALO LANE										
* P-20	S-2	S-21	927.03	927.91	32	29	3.00%	18"	RCP	-
P-21	S-21	S-20	927.91	928.96	35	33	3.23%	12"	RCP	-
TWILIGHT TRAIL										
P-1	ADJ-1	S-1	923.67	923.90	26	23	1.00%	21"	RCP	[4]
* P-2	S-1	S-2	923.90	926.17	171	168	1.35%	21"	RCP	-
* P-3	S-2	S-3	926.99	928.05	35	32	3.30%	18"	RCP	-
* P-4	S-3	S-4	928.55	930.61	38	34	6.03%	12"	RCP	-
P-5	S-4	S-5	930.61	931.41	9	6	13.03%	12"	TYPE II	-

STORM PIPE REMOVALS

REMOVE NO.	REMOVE FROM	REMOVE TO	LGTH (FT)	PAY LGTH (FT)	PIPE SIZE	PIPE TYPE	NOTES
HALO LANE							
RP-10	RS-11	RS-10	39	36	12"	RCP	
TWILIGHT TRAIL							
RP-1	RS-10	ADJ-2	53	18	15"	RCP	[5]
RP-2	RS-1	ADJ-2	62	59	15"	RCP	[5]

STORM SEWER ULOs

ADJUST NO.	STATION	LOCATION (OFFSET)	TYPE	TOP ELEV.	NOTES
HALO LANE					
* ULO-10	12+59.51	RT-16.74	ELECTRIC	925.42	OK
* ULO-10A	12+59.51	RT-16.74	ELECTRIC	925.37	OK
* ULO-11	12+68.05	RT-20.61	GAS	925.81	CONFLICT, RELOCATE NEEDED
* ULO-20	14+11.85	RT-17.26	GAS	926.73	SEPERATION CONFLICT, STM REVISED
* ULO-21	14+27.90	RT-11.02	WATER	925.55	OK
TWILIGHT TRAIL					
* ULO-1	21+91.41	LT-8.51	WATER	920.83	OK
* ULO-2	22+01.04	RT-7.56	GAS	925.21	CONFLICT, RELOCATE NEEDED
* ULO-3	22+66.26	RT-7.54	GAS	925.33	CONFLICT, RELOCATE NEEDED
* ULO-4	22+92.03	RT-7.53	SANITARY	N/A	DID NOT FIND
* ULO-5	22+93.58	RT-7.53	WATER	N/A	DID NOT FIND
* ULO-6	23+63.93	RT-7.52	GAS	926.59	CONFLICT, RELOCATE NEEDED
* ULO-7	23+76.38	RT-7.47	WATER	925.50	SEPERATION CONFLICT, STM REVISED
* ULO-8	24+26.40	LT-10.51	WATER	927.53	OK

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
- TOP OF CASTING GRADE GIVEN IS THE TOP OF CURB FOR INLET STRUCTURES AND THE FLOWLINE OF THE CLOSED CASTING FOR SASs.
- 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 REBAR FOR FIELD POUR STRUCTURES SHALL BE EPOXY COATED. ANY EXPOSED STEEL SHALL BE TOUCHED UP OR RECOATED PRIOR TO USE.
- ALL FIELD POURED SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING 5.7.3.
- ALL PRECAST SAS STORM STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DETAIL DRAWING 5.7.5.
- 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 TODD CHOJNOWSKI OF CITY ENGINEERING AT (608) 266-4094 FOR PRECAST APPROVALS, FAX SHOP DRAWINGS TO (608)264-9275, OR EMAIL SHOP DRAWINGS TO TCHOJNOWSKI@CITYOFMADISON.COM.