

Madison, Wisconsin

CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

PUBLIC IMPROVEMENT PROJECT APPROVED

September 4, 2018

BY THE COMMON COUNCIL OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN APPROVED BY:

[Signature] 12/5/18
City Engineer Date

STREET DESIGNED BY:

[Signature]
WISCONSIN PROFESSIONAL ENGINEER
STEVEN M. SONNTAG
E-38891
MADISON WI
12/4/2018

SANITARY SEWER DESIGNED BY:

[Signature]
WISCONSIN PROFESSIONAL ENGINEER
MARK D. MODER
E-33979
MADISON WI
12/4/18

STORM SEWER DESIGNED BY:

[Signature]
WISCONSIN PROFESSIONAL ENGINEER
JANET SCHMIDT
E-34681
MADISON WI
12-5-18

INDEX OF SHEETS

SHEET NO.	TITLE
1	1
D-1	DETAIL
EC1-EC4	EROSION CONTROL
P1-P4	PLAN & PROFILE
U1-U4	SEWER PLAN & PROFILE
U5	SEWER SCHEDULES
PM1-PM2	PAVEMENT MARKING

DARWIN ROAD RESURFACING WITH UTILITIES ASSESSMENT DISTRICT - 2019

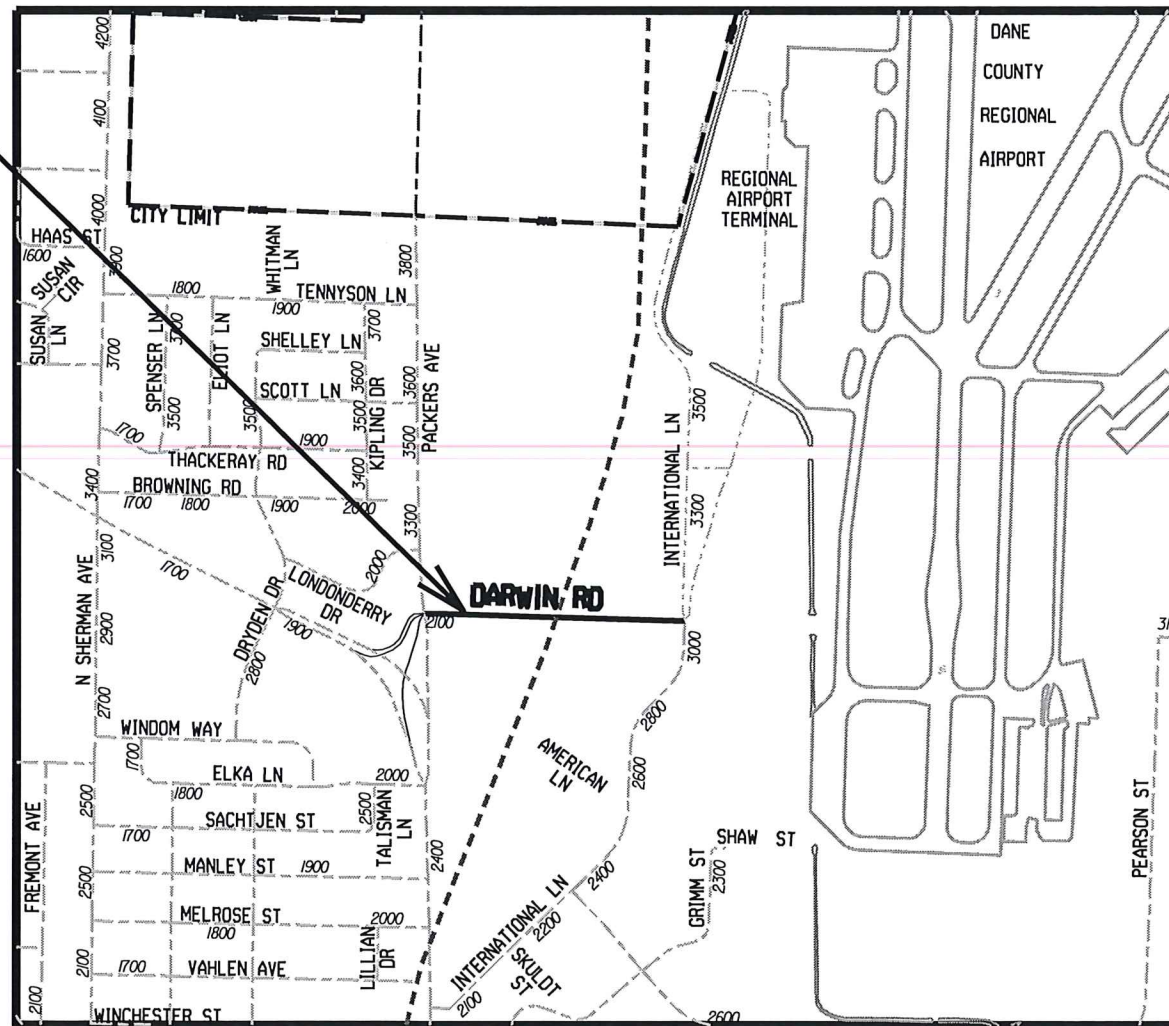
CITY PROJECT NO. 11746
8124

CONSTRUCTION PROJECT LOCATION

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	■

NOTES:
 ALL GUTTERS SHALL DRAIN WITH A MINIMUM GRADE OF 0.50% TOWARD STORM SEWER INLETS.
 SIDEWALK RAMPS AND CURB THRU SIDEWALK RAMPS SHALL HAVE A MAXIMUM SLOPE OF 1" PER 12". SIDEWALK AND CURB RAMPS SHALL BE CONSTRUCTED WITH A SIDE SLOPE OF 2.00%.
 SIDEWALK SHALL HAVE A MINIMUM LONGITUDINAL SLOPE OF 0.50% AND A MAXIMUM LONGITUDINAL SLOPE OF 5.00% EXCEPT WHERE STREET GRADES EXCEED 5.00%.

EARTH WORK SUMMARY:
 ESTIMATED UNDISTRIBUTED UNDERCUT..... 450.00 C.Y.
 TOTAL UNCLASSIFIED EXCAVATION CUT..... 450.00 C.Y.

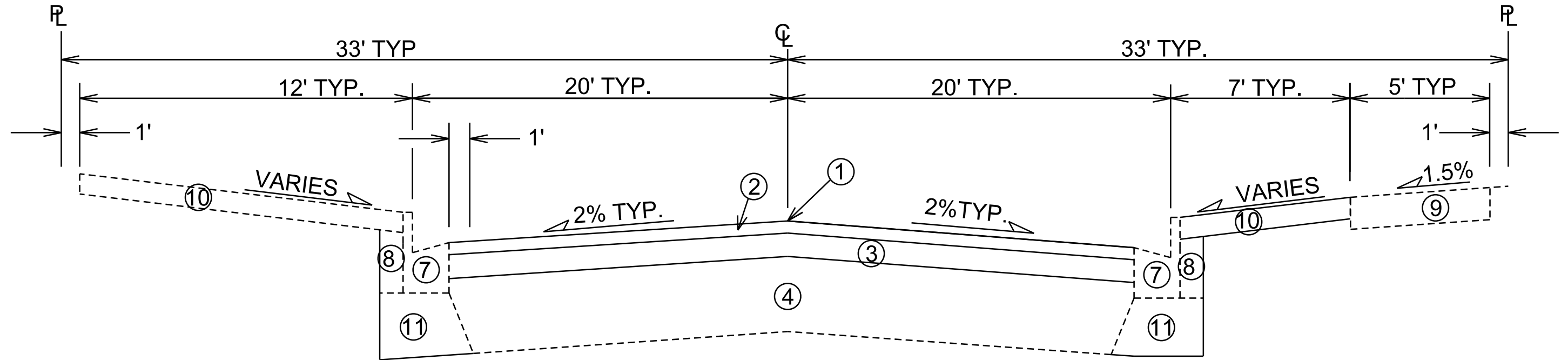


PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, STREETS DIVISION

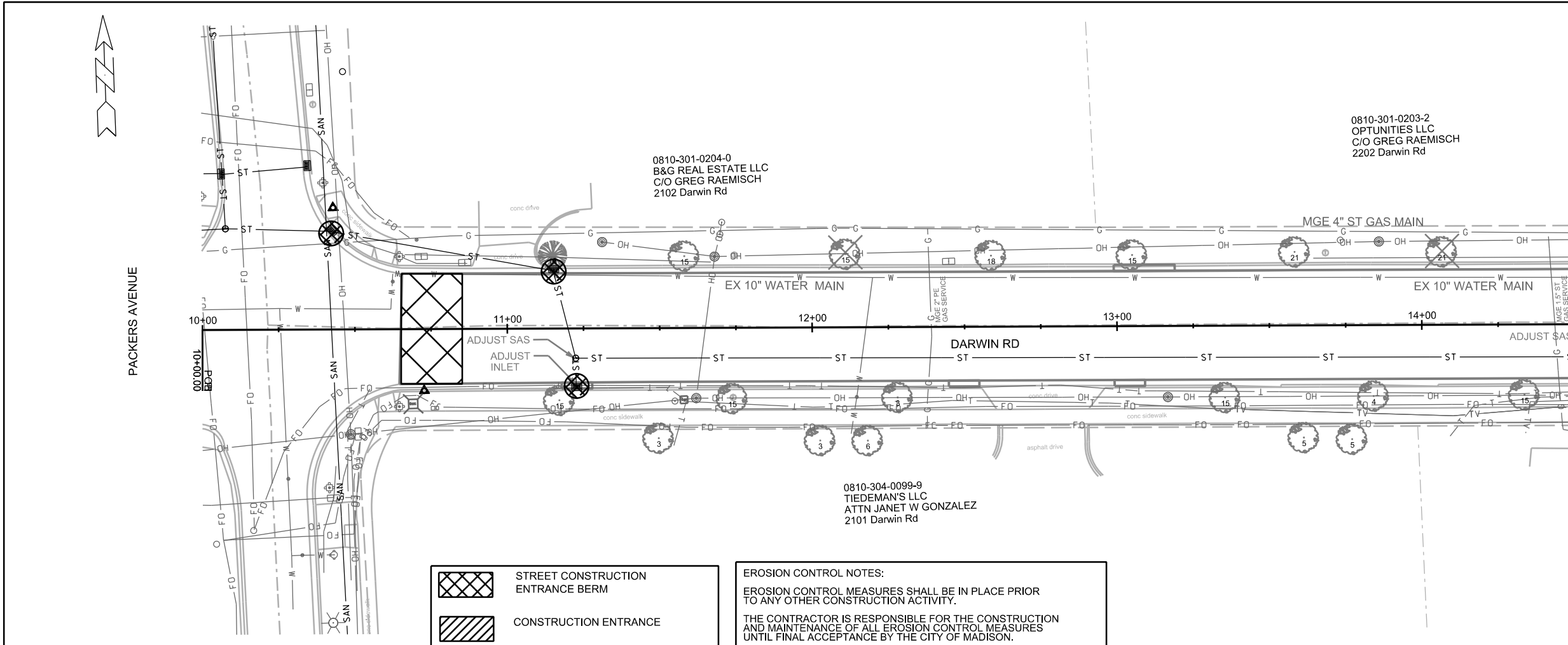








TYPICAL SECTION
DARWIN ROAD

- ① POINT REFERRED TO ON PROFILE
- ② 2.0" BITUMINOUS UPPER LAYER, 4 LT 58-28 S
- ③ 2.5" BITUMINOUS LOWER LAYER, 3 LT 58-28 S
- ④ PULVERIZED ASPAHLT AND EXISTING BASE
- ⑦ REMOVE & REPLACE CONCRETE CURB & GUTTER AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER
- ⑧ FILL, INCIDENTAL WHERE CURB IS REPLACED
- ⑨ 5" CONCRETE SIDEWALK, REMOVE & REPLACE AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER
- ⑩ RESTORE DISTURBED AREAS W/ 6" TOPSOIL, SEED & MAT
- ⑪ 4" MIN GRADATION 2 CRUSHED AGGREGATE AS NECESSARY FOR CURB REPLACEMENT

TYPICAL SECTION NOT TO SCALE

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



-  STREET CONSTRUCTION ENTRANCE BERM
-  CONSTRUCTION ENTRANCE
-  TYPE D HYBRID INLET PROTECTION
-  TYPE C INLET PROTECTION
-  SILT SOCK (VELOCITY CHECK)
-  STREET CONSTRUCTION STONE BERM

EROSION CONTROL NOTES:

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

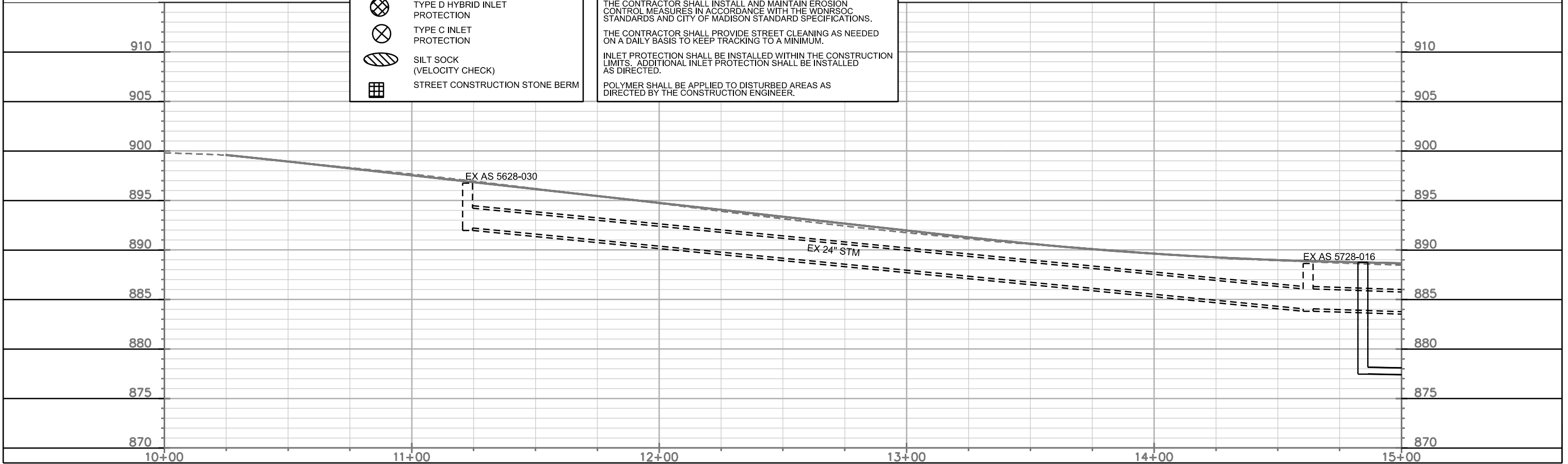
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THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDMRSOC STANDARDS AND CITY OF MADISON STANDARD SPECIFICATIONS.

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.

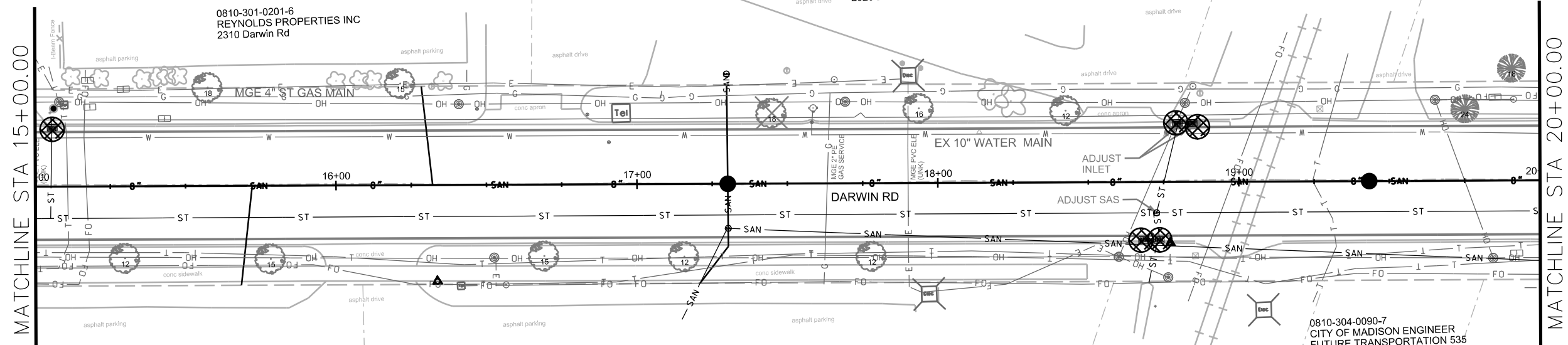


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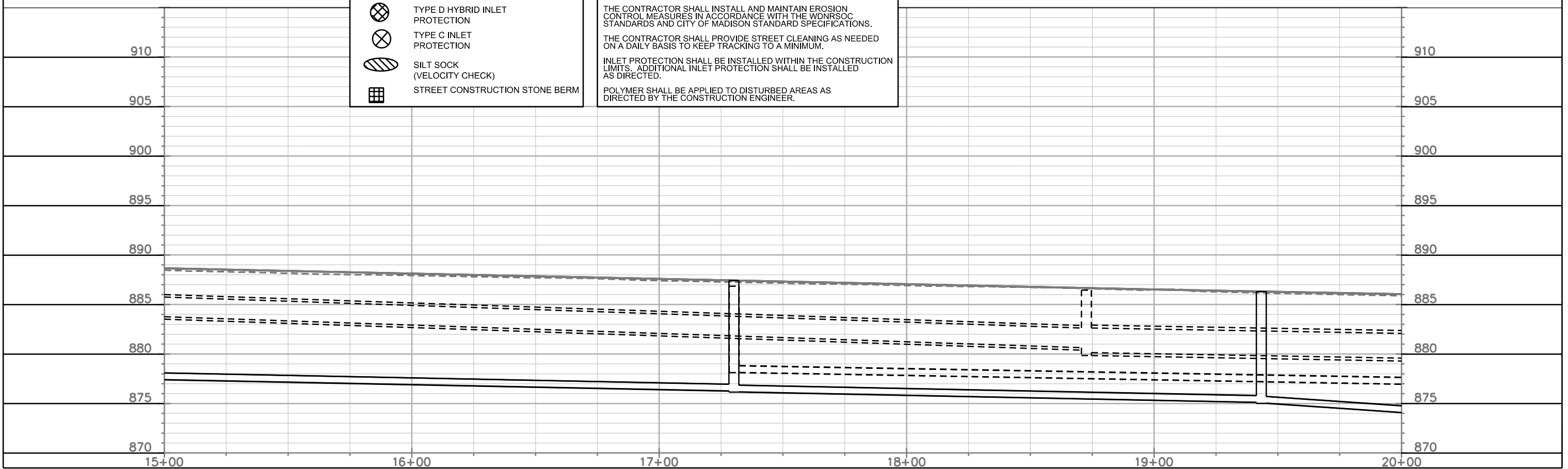
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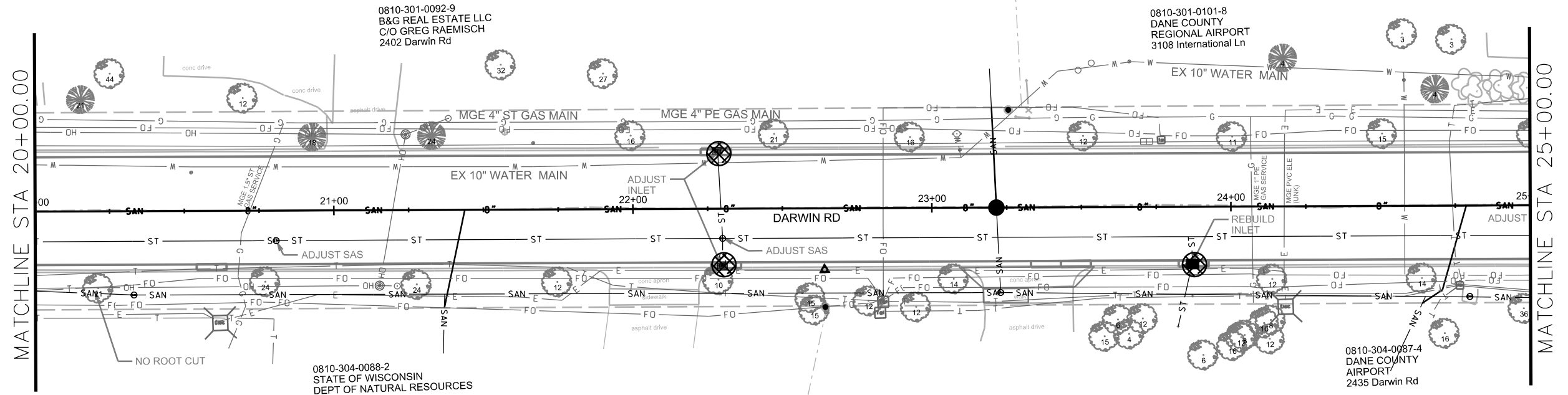








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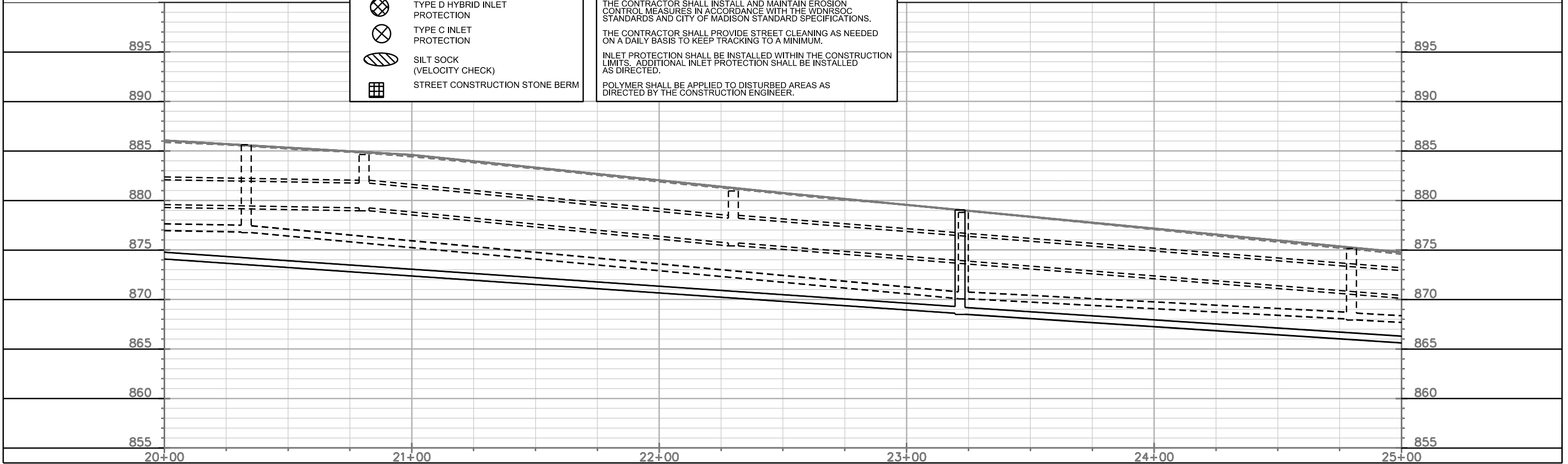
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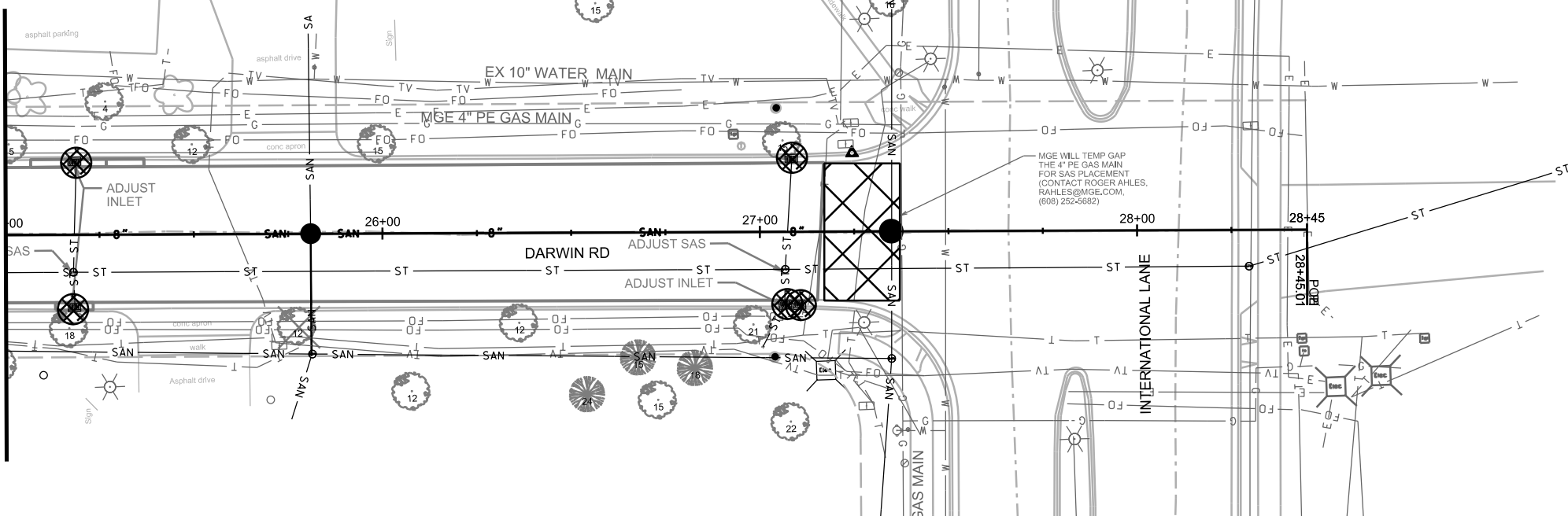
PLOT NAME: _____

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ORIGINATOR: CITY OF MADISON, STREETS DIVISION

0810-301-0101-8
DANE COUNTY
REGIONAL AIRPORT
3108 International Ln

MATCHLINE STA 25+00.00



MGE WILL TEMP GAP
THE 4\"/>

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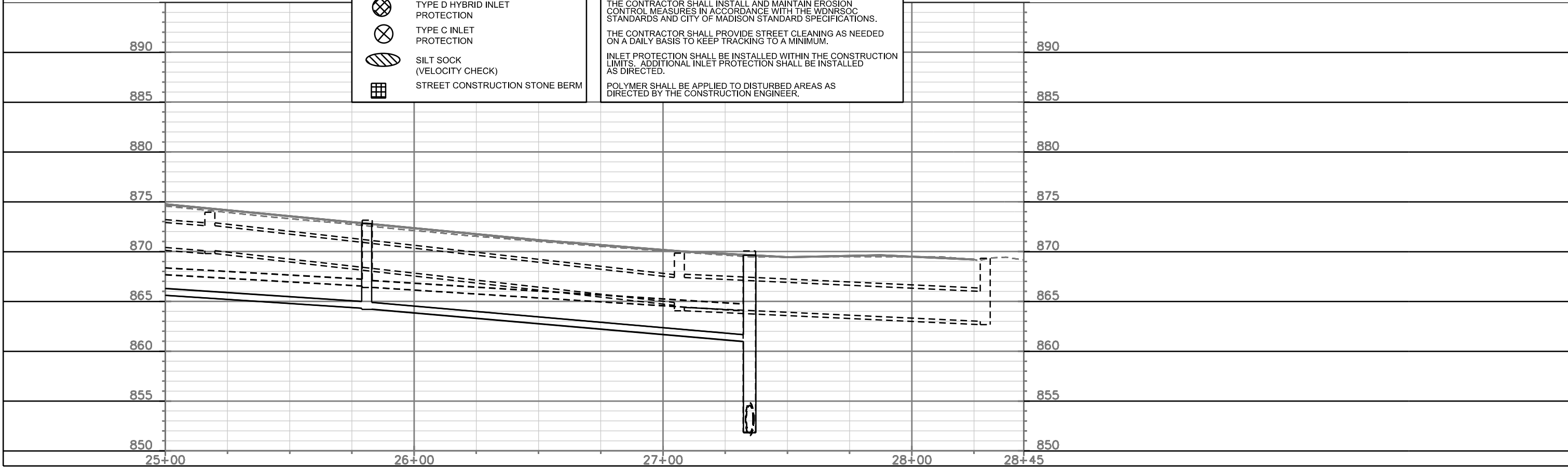
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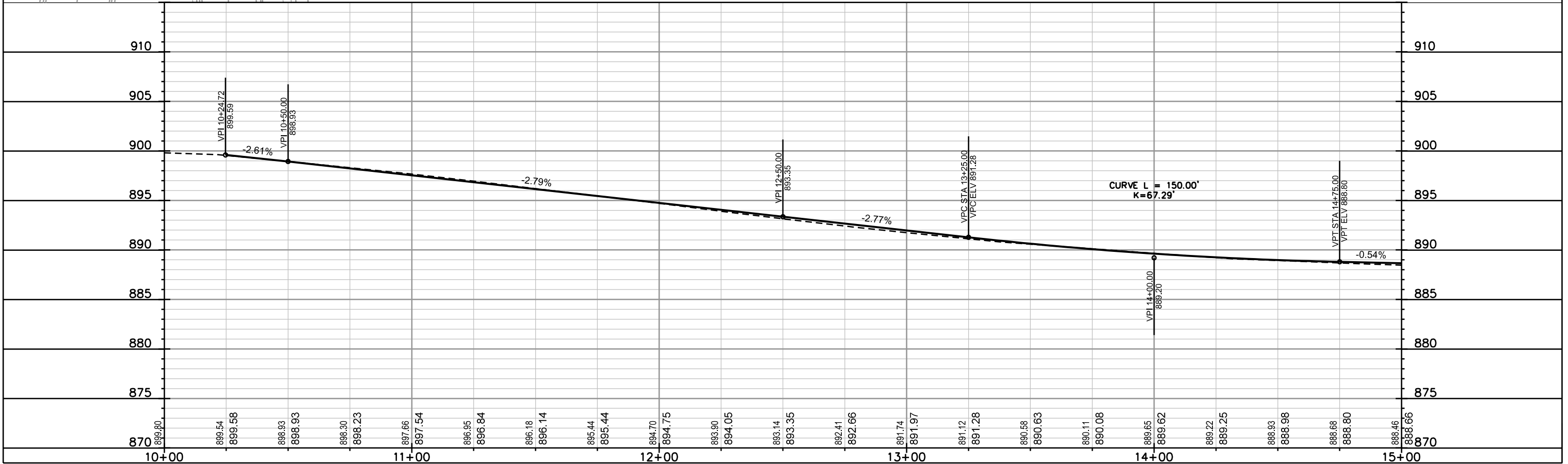
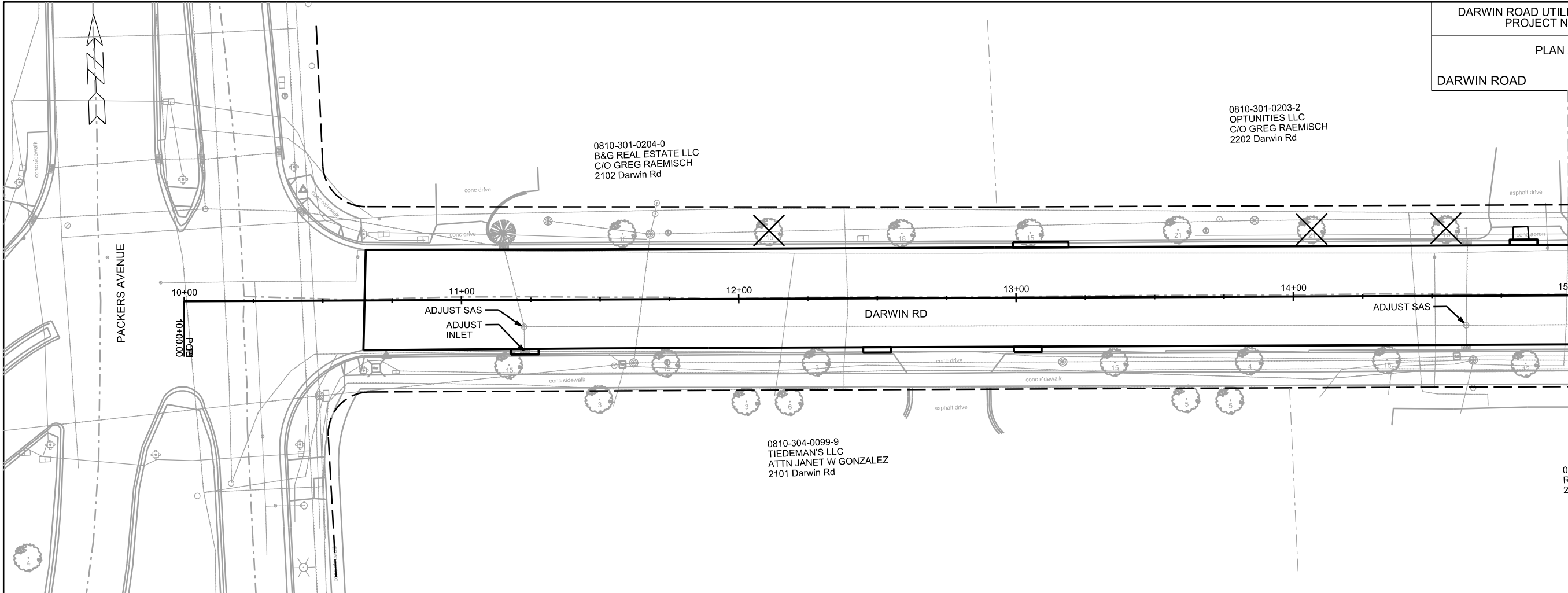


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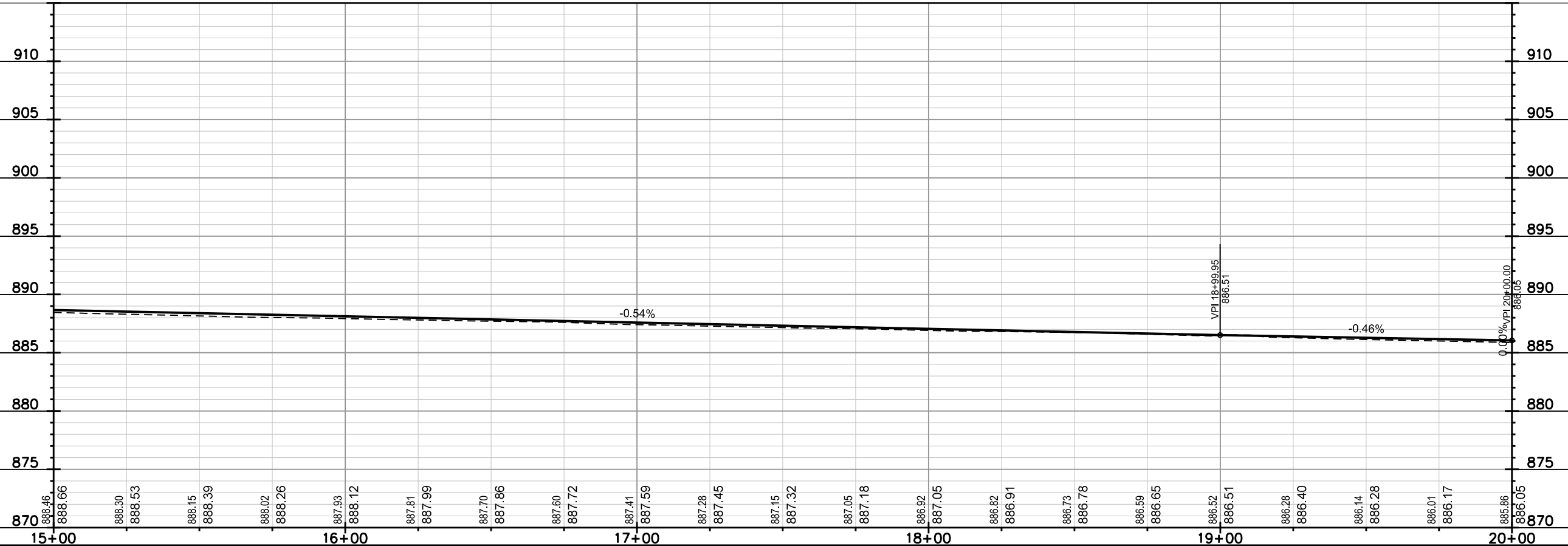
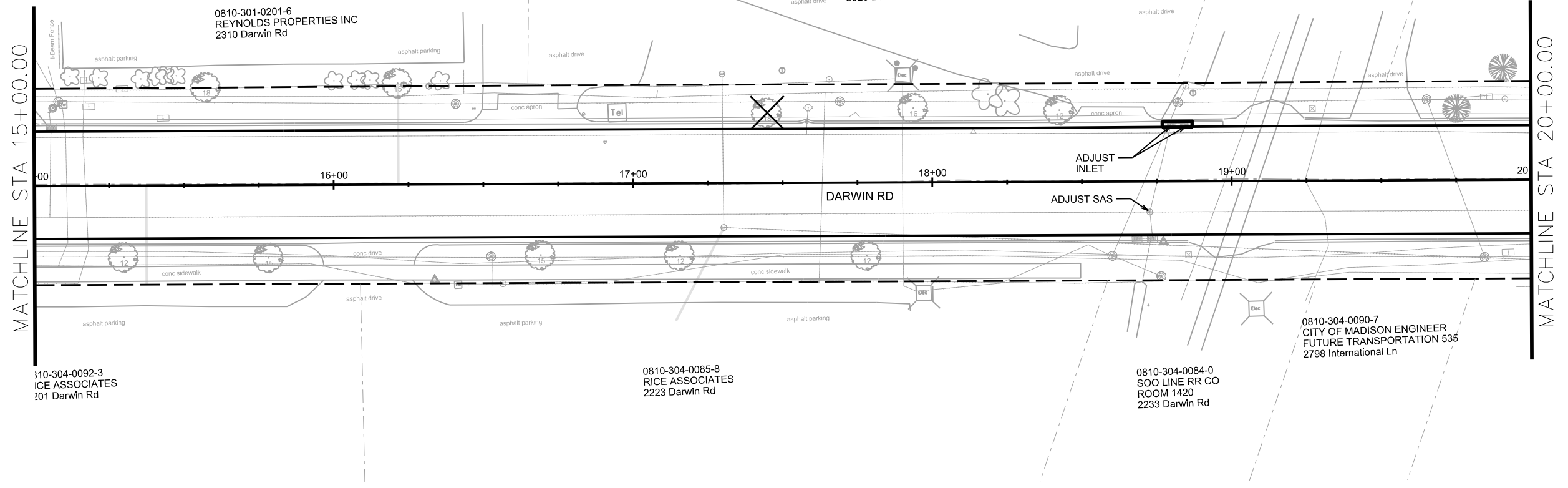
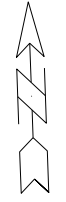


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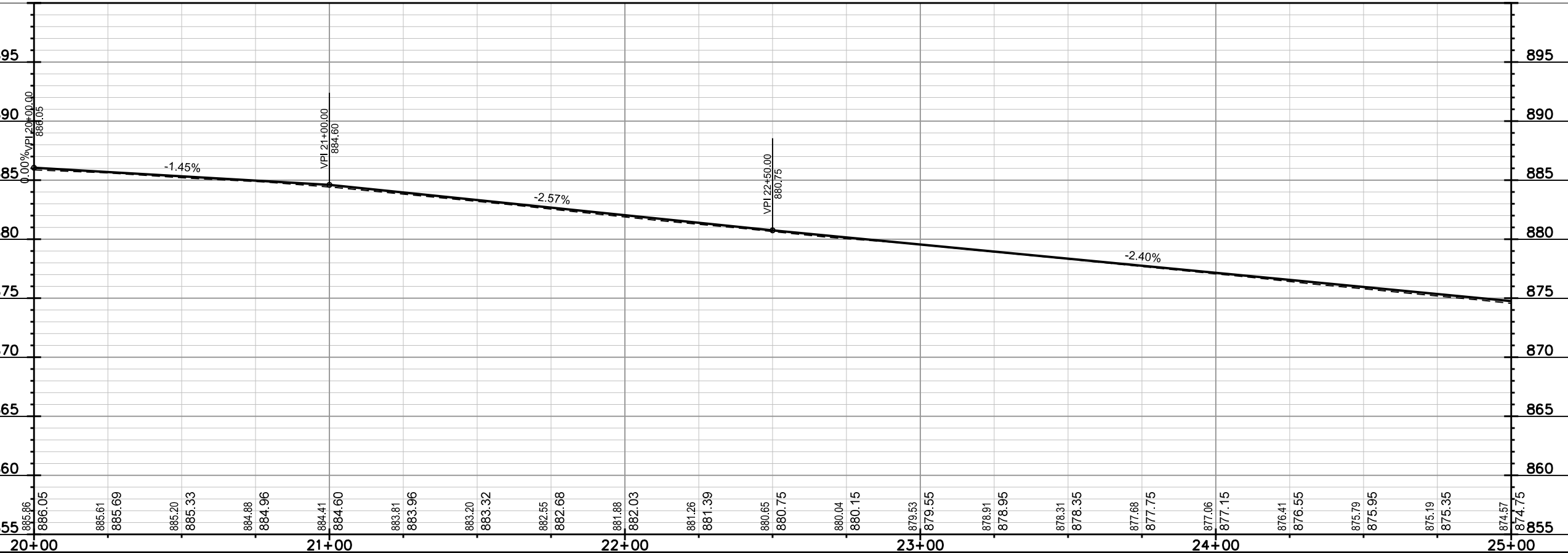
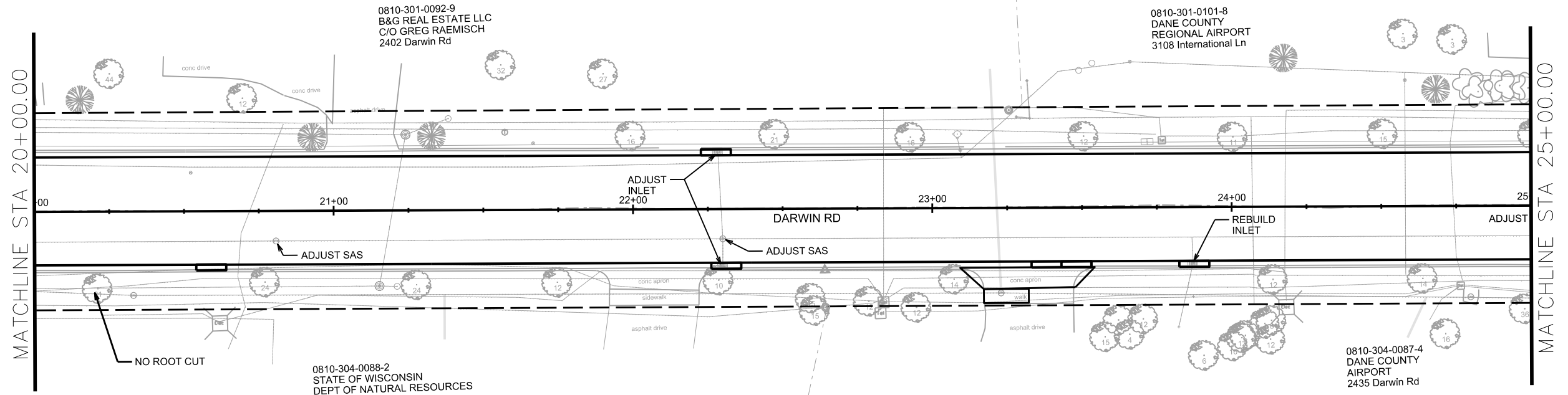
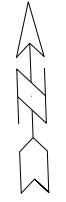


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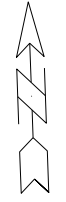


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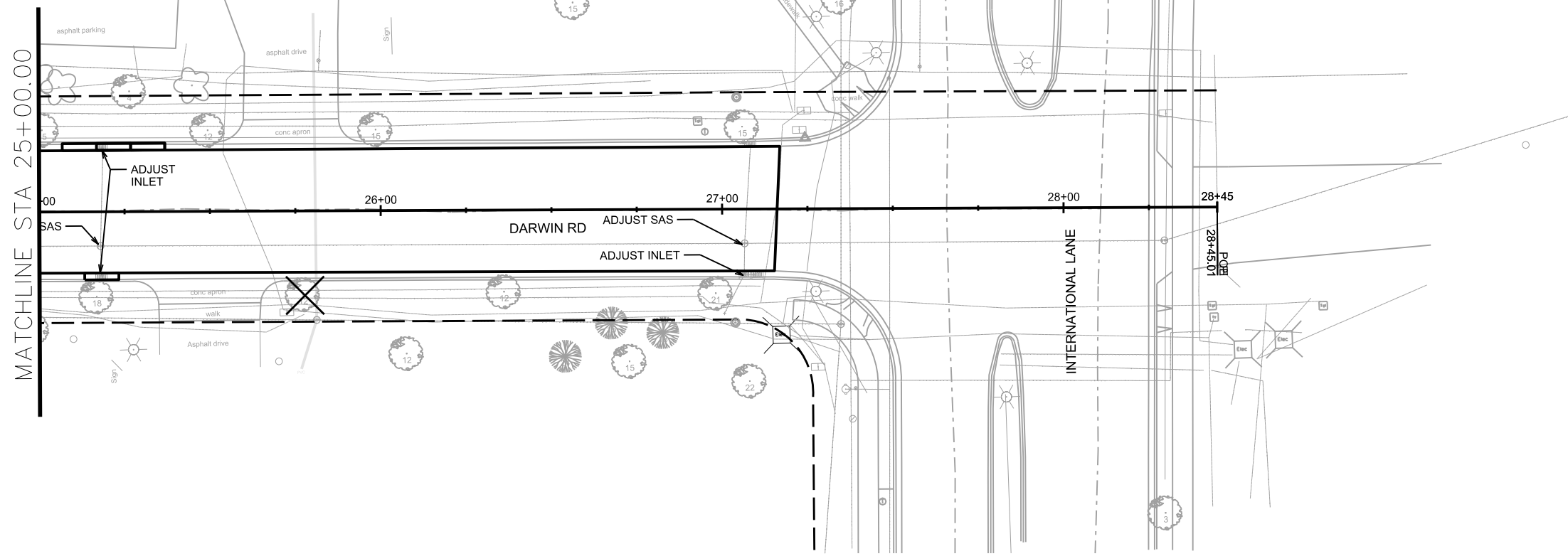
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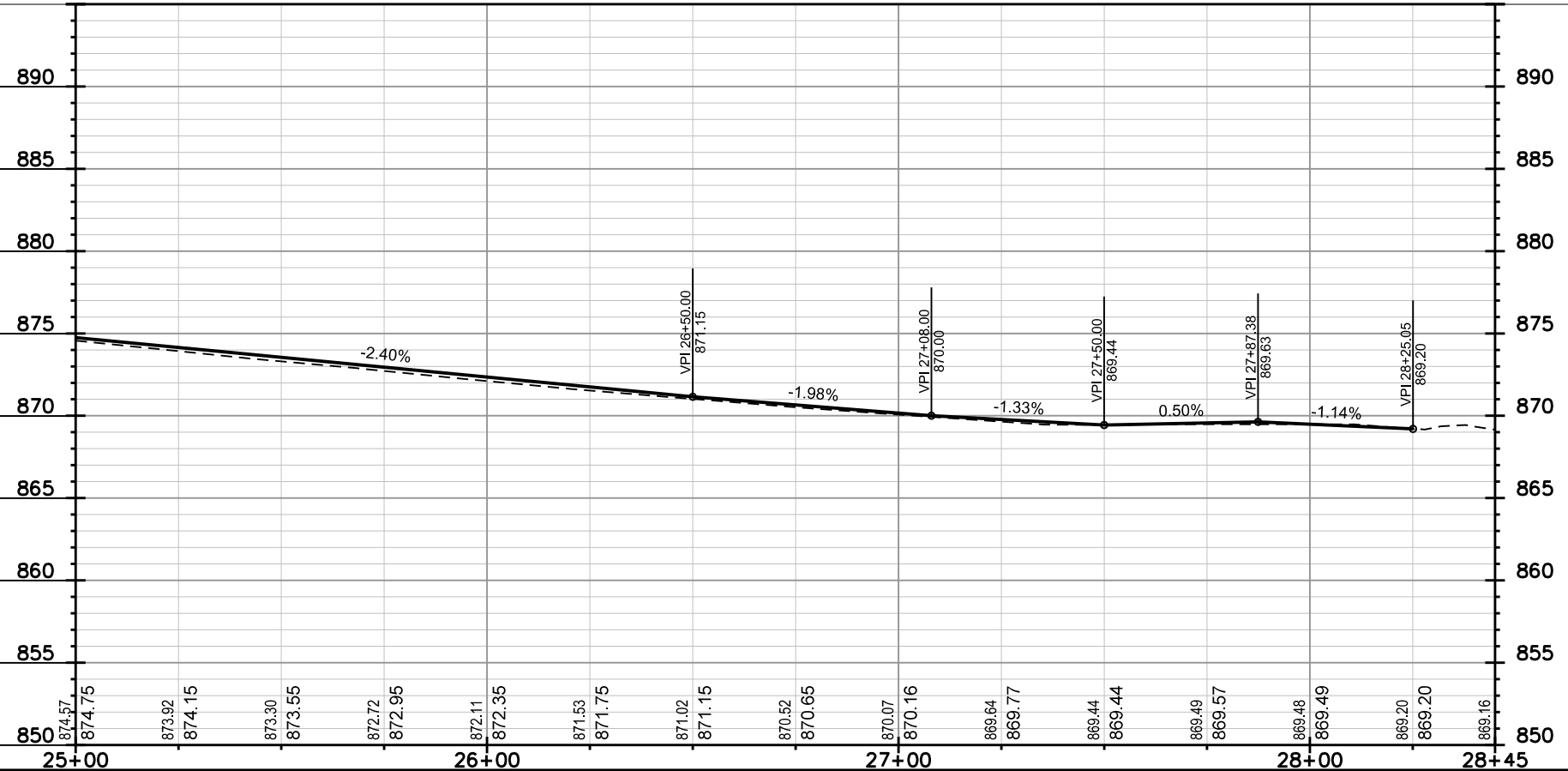
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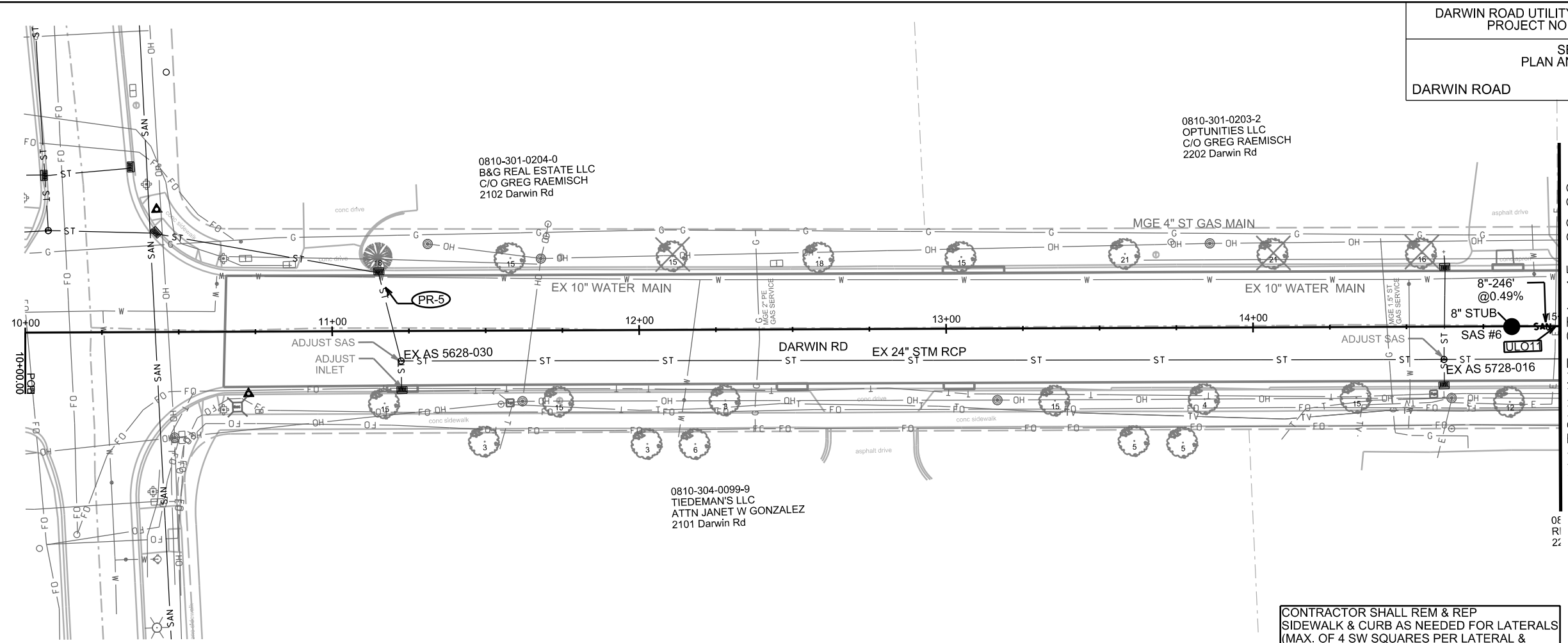
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REV 5/7/2019 DAO

PACKERS AVENUE



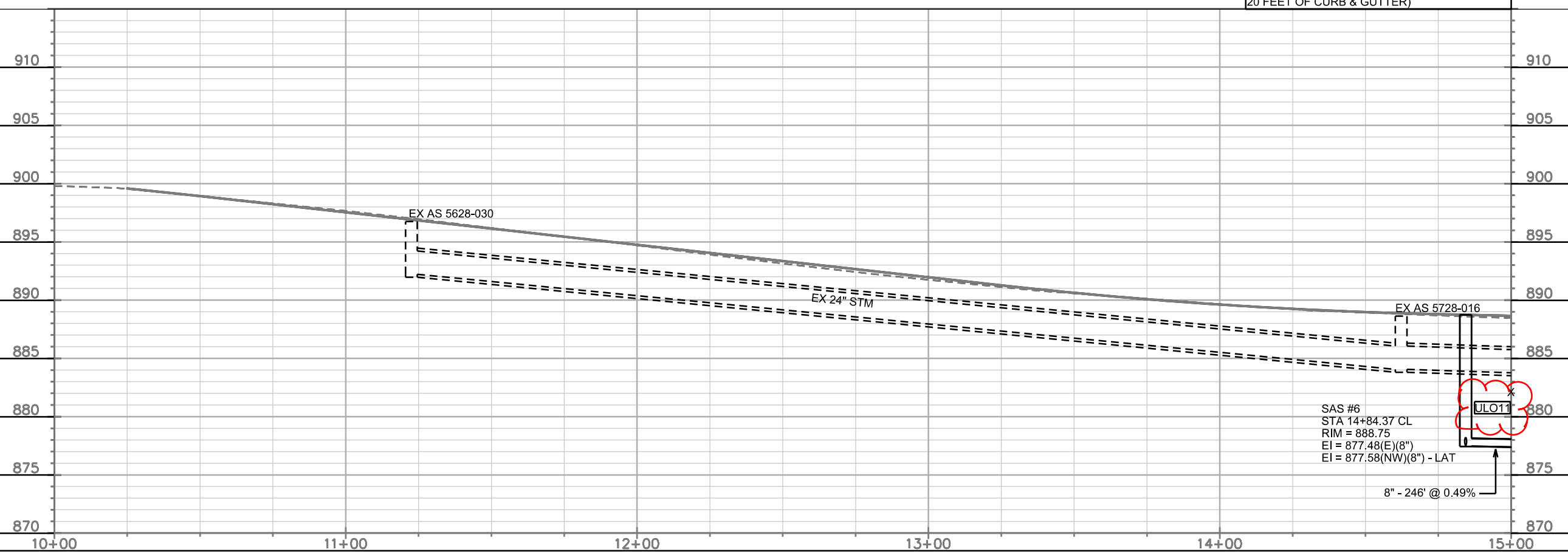
0810-301-0204-0
B&G REAL ESTATE LLC
C/O GREG RAEMISCH
2102 Darwin Rd

0810-301-0203-2
OPTUNITIES LLC
C/O GREG RAEMISCH
2202 Darwin Rd

0810-304-0099-9
TIEDEMAN'S LLC
ATTN JANET W GONZALEZ
2101 Darwin Rd

CONTRACTOR SHALL REM & REP
SIDEWALK & CURB AS NEEDED FOR LATERALS
(MAX. OF 4 SW SQUARES PER LATERAL &
20 FEET OF CURB & GUTTER)

MATCHLINE STA 15+00.00



SAS #6
STA 14+84.37 CL
RIM = 888.75
EI = 877.48(E)(8")
EI = 877.58(NW)(8") - LAT

8" - 246' @ 0.49%

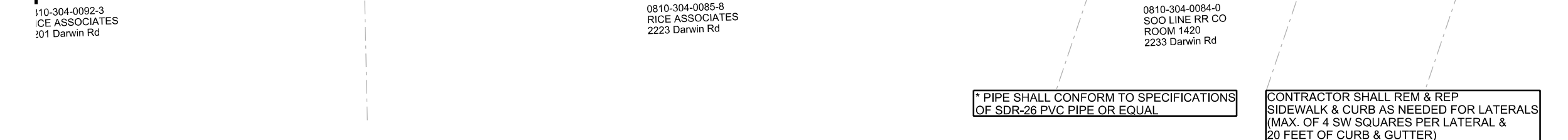
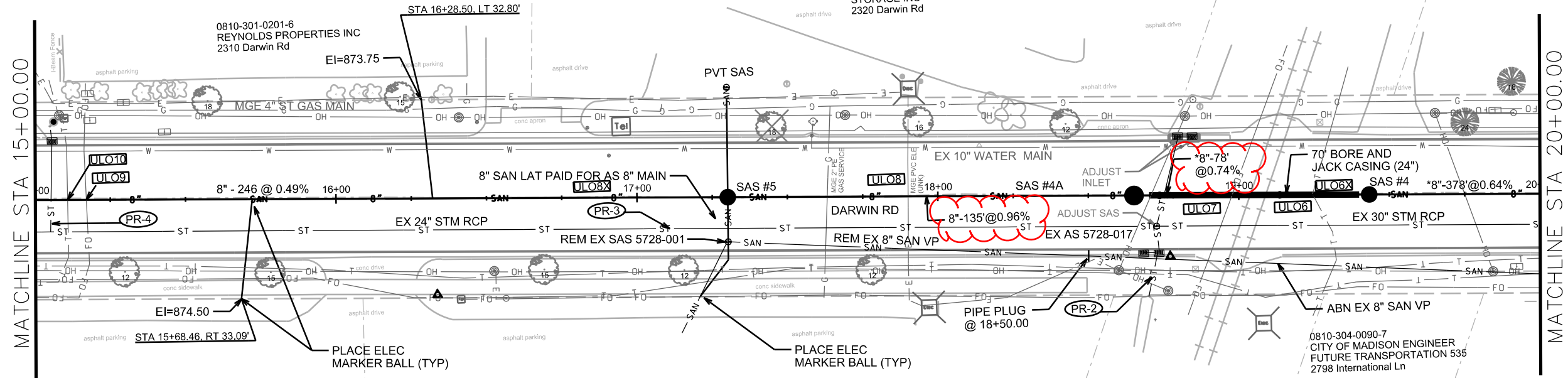
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ORIGINATOR: CITY OF MADISON, STREETS DIVISION

REV 5/7/2019 DAO
REV 5/9/2019 DAO



* PIPE SHALL CONFORM TO SPECIFICATIONS OF SDR-26 PVC PIPE OR EQUAL

CONTRACTOR SHALL REM & REP SIDEWALK & CURB AS NEEDED FOR LATERALS (MAX. OF 4 SW SQUARES PER LATERAL & 20 FEET OF CURB & GUTTER)

CASING PIPE TO BE SIZED BY THE CONTRACTOR MIN. CASING SIZE 24" DIAMETER

FILL VOIDS W/ BLOWN SAND.

NOTE:
WALL THICKNESS FOR STEEL CASING PIPE WITH 35,000 P.S.I. MIN. YIELD STRENGTH. FOR MATERIAL OF LOWER YIELD STRENGTH, INCREASE THICKNESS AN ADDITIONAL 1/16".

RAILROAD CASING PIPE DETAIL
NOT TO SCALE

MIN. THK. (IN.) FOR PIPE NOT CATHODICALLY PROTECTED	CASING PIPE DIAMETER (IN.)
0.3750	18 - 22
0.4375	22 - 25
0.500	25 - 34
0.5625	34 - 42
0.6250	42 - 48

APPROX. LOCATION OF RR TRACKS @ 886.53

REM EX SAS 5728-001
STA 17+30.31 RT 14.81'
RIM = 886.86
EI = 878.14(E)(8")
EI = 878.26(W)(8")
EI = 878.36(SW)(8")
EI = 878.36(N)(6")

SAS #4
STA 19+43.33 CL
RIM = 886.31
EI = 869.03(E)(8")
EI = 869.13(W)(8")

SAS #5
STA 17+30.18 CL
RIM = 887.42
EI = 876.17(E)(8")
EI = 876.27(W)(8")
EI = 876.67(N)(6") - TAP LAT
EI = 876.50(SW)(8") - TAP LAT

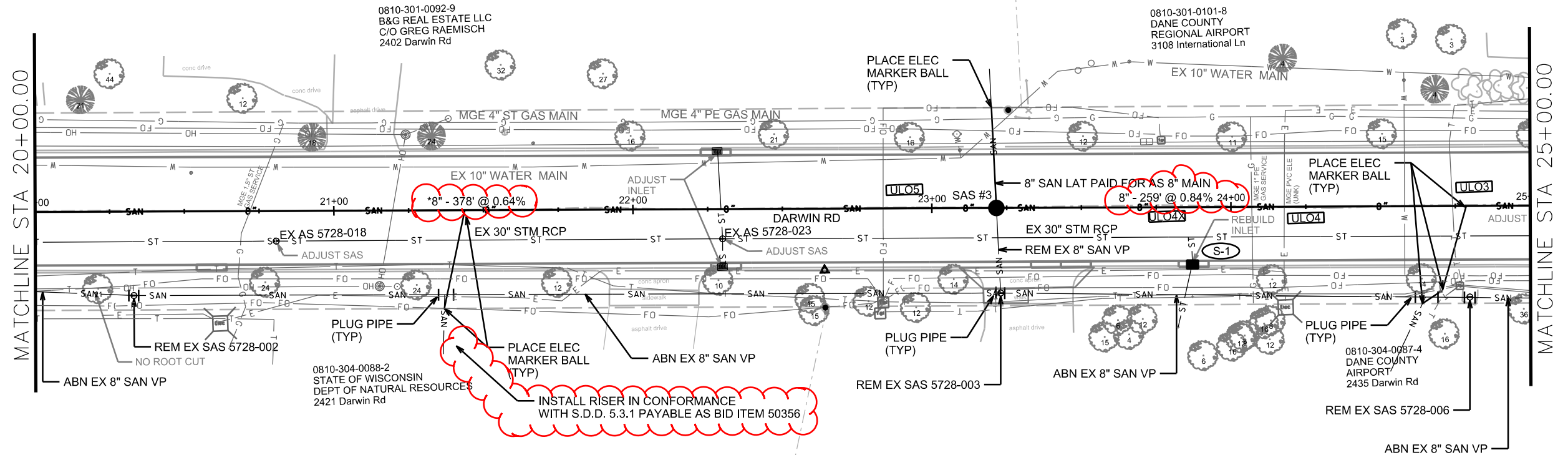
SAS #4A (5" DIA)
STA 18+45.16 CL
RIM = 886.81
EI = 869.71(E)(8")
EI = 870.04(W)(8") - INSIDE DROP
EI = 874.88(W)(8") - INSIDE DROP

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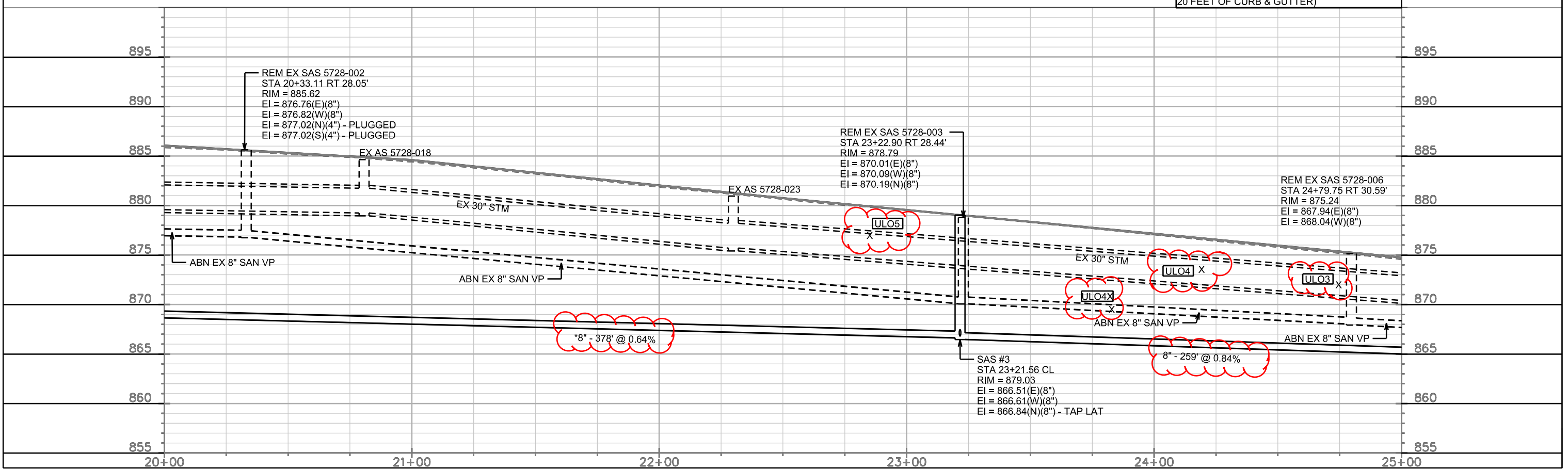
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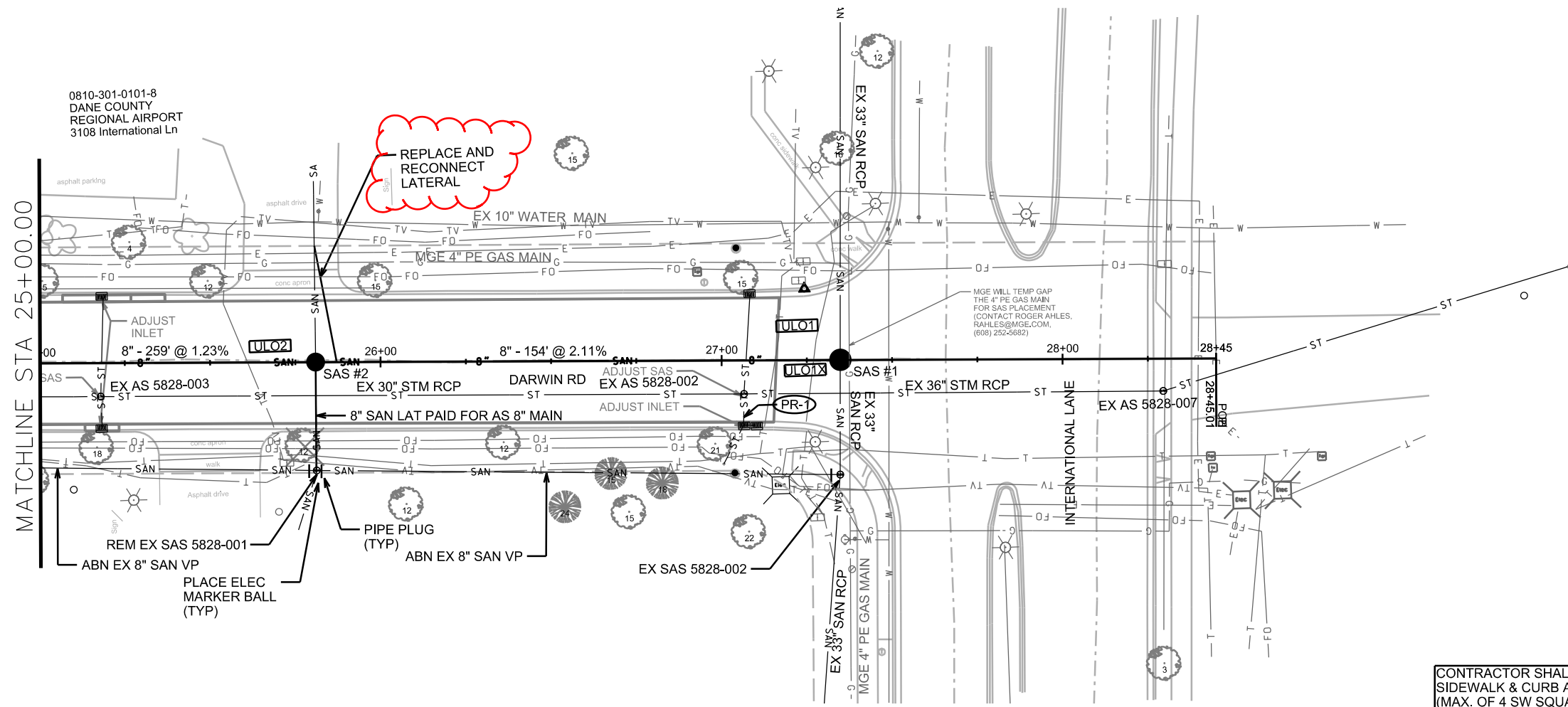
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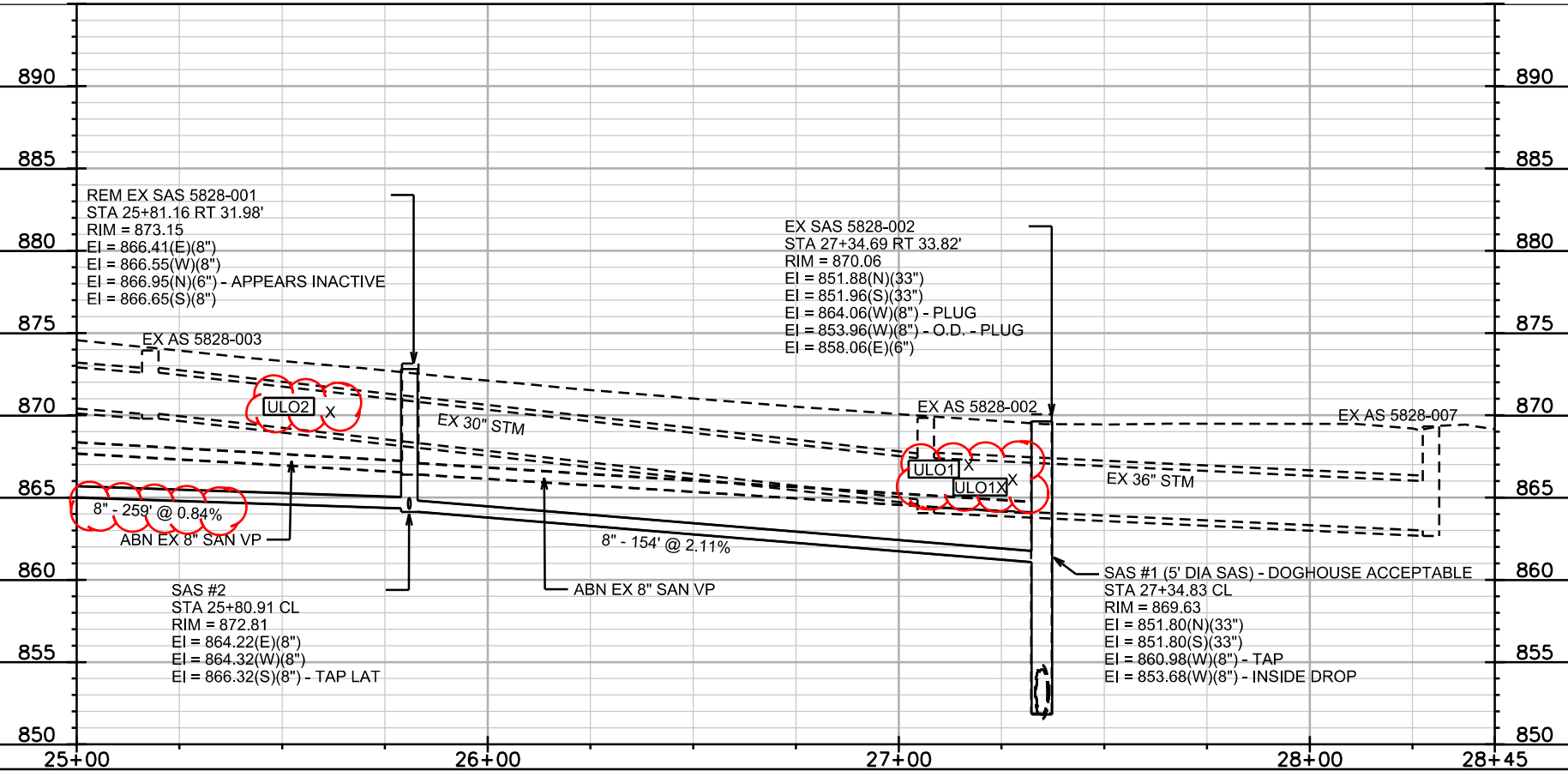
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SEWER SCHEDULE

* REV 5/7/2019 DAO
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DARWIN ROAD UTILITY W/RES.- 2019	SHEET NO.
PROJECT NO. 11746	U-5
SEWER SCHEDULE	
CITY OF MADISON	

PROPOSED SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	TOP OF CASTING	E.I.	DEPTH	NOTES
DARWIN RD						
SAS #1	27+34.83	CL	869.63	851.80	17.83	5' SAS; INSIDE DROP; DOGHOUSE MH ACCEPTABLE
SAS #2	25+80.91	CL	872.81	864.22	8.59	4' SAS
* SAS #3	23+21.56	CL	879.03	866.51	12.52	4' SAS
* SAS #4	19+43.33	CL	886.31	869.03	17.28	4' SAS
** SAS #4A	18+65.16	CL	886.81	869.71	17.10	5' SAS; INSIDE DROP = 4.84'
SAS #5	17+30.18	CL	887.42	876.17	11.25	4' SAS
SAS #6	14+84.37	CL	888.75	877.48	11.27	4' SAS

REMOVE SANITARY STRUCTURES

SAS NO.	STATION	LOCATION (OFFSET)	EX TOP OF CASTING	EX E.I.	DEPTH	NOTES
DARWIN RD						
SAS 5828-001	25+81.16	RT-31.98	873.15	866.41	6.74	
SAS 5827-006	24+79.75	RT-30.59	875.15	867.94	7.21	
SAS 5728-003	23+22.90	RT-28.44	878.79	870.07	8.72	
SAS 5728-002	20+33.11	RT-28.05	885.62	876.76	8.86	
SAS 5728-001	17+30.31	RT-14.81	886.86	878.14	8.72	

REBUILD STORM STRUCTURES

STRUC. NO.	STATION	LOCATION (OFFSET)	TYPE	TOP OF CASTING	E.I.	DEPTH	NOTES
DARWIN RD							
S-1	23+87.07	RT-19.16	H INLET	877.22	874.20	3.02	FP; W/3067-7004-V; (2)

ULOS

ULO NO.	STATION	LOC OFFSET	TYPE	NOTES
* ULO1	27+26.38	RT-0.14	AT&T 6" PVC	867.33 @ TOP
* ULO1X	27+15.73	LT-0.67	AT&T 2" PVC	866.43 @ TOP
* ULO2	25+60.40	LT-0.26	TEL 2" PVC	870.55 @ TOP
* ULO3	24+73.27	LT-0.35	TEL 2 x 6" PVC	872.34 @ TOP
* ULO4	24+17.89	LT-0.16	ELEC 6" PVC	873.90 @ TOP
* ULO4X	23+82.85	LT-0.99	WINFO 2" PVC	869.50 @ TOP
* ULO5	22+83.77	LT-0.36	TDS FO 2" PVC	877.32 @ TOP
* ULO6X	19+22.65	RT-1.19	FO 4" PVC	876.77 @ TOP
* ULO6	19+12.09	LT-1.32	FO 6" PVC	882.87 @ TOP
* ULO7	18+97.91	RT-0.54	FO 6" PVC	873.75 @ TOP
* ULO8	17+90.63	LT-0.43	ELEC 6" PVC	884.39 @ TOP
* ULO8X	16+95.65	CL	TEL 2" PVC	884.97 @ TOP
* ULO9	15+17.23	LT-0.33	AT&T 2" PVC	883.04 @ TOP
* ULO10	15+11.03	LT-0.60	AT&T 2" PVC	882.41 @ TOP
* ULO11	14+98.60	LT-0.45	ELEC 6" PVC	882.46 @ TOP

PROPOSED SANITARY PIPES

FROM (DNSTM)	TO (UPSTM)	DWNSTRM E.I.	UPSTRM E.I.	PLAN (PAY) LGTH (FT)	SLOPE (%)	PIPE SIZE	PVC TYPE	NOTES
DARWIN RD								
SAS #1	SAS #2	860.98	864.22	154	2.11%	8"	SDR-35	
* SAS #2	SAS #3	864.32	866.51	259	0.84%	8"	SDR-35	
* SAS #3	SAS #4	866.61	869.03	378	0.64%	8"	SDR-26	
* SAS #4	SAS #4A	869.13	869.71	78	0.74%	8"	SDR-26	(5)
** SAS #4A	SAS #5	874.88	876.17	135	0.96%	8"	SDR-35	
SAS #5	SAS #6	876.27	877.48	246	0.49%	8"	SRD-35	

ABANDON SANITARY PIPES

REMOVE FROM	REMOVE TO	LENGTH (ft)	PAID (Y/N)	SIZE (DIA)	PIPE TYPE	NOTES
DARWIN RD						
SAS 5828-002	SAS 5828-001	154	N	8"	VP	(1)
SAS 5828-001	SAS 5827-006	101	N	8"	VP	
SAS 5827-006	SAS 5728-003	157	N	8"	VP	
SAS 5728-003	18+25.00	170	N	8"	VP	

REMOVE SANITARY PIPES

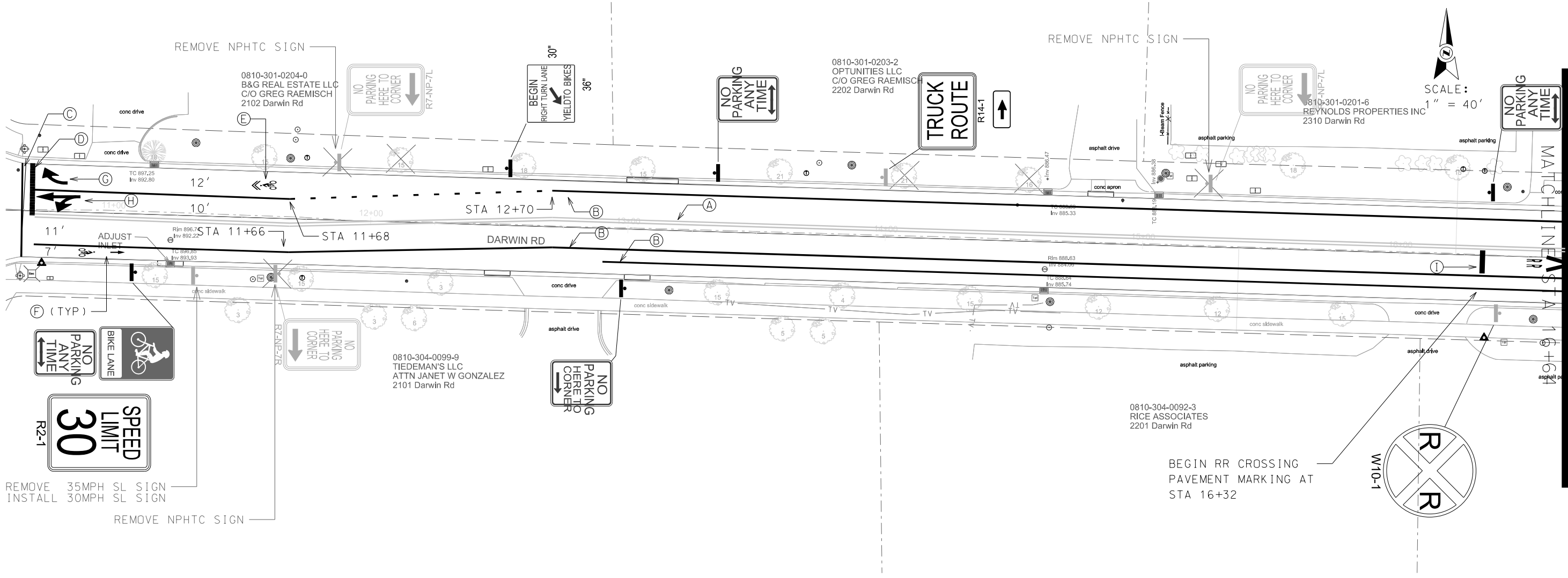
REMOVE FROM	REMOVE TO	LENGTH (ft)	PAID (Y/N)	SIZE (DIA)	PIPE TYPE	NOTES
DARWIN RD						
18+25.00	SAS 5728-001	120	Y	8"	VP	
23+21.93		28	Y	8"	VP	EX LAT
25+80.85		17	Y	6"	VP	EX LAT

POINT REPAIR STORM PIPE

POINT REPAIR NO.	STATION	LOCATION (OFFSET)	SIZE (DIA)	PIPE TYPE	NOTES
DARWIN RD					
PR-1	27+06.45	RT-16.58	12"	RCP	JOINT SEPARATION; (4)
PR-2	18+71.35	RT-26.95	24"	RCP	JOINT SEPARATION; (4)
PR-3	17+10.90	RT-10.38	24"	RCP	JOINT SEPARATION; (4)
PR-4	15+05.20	RT-8.02	15"	RCP	JOINT SEPARATION/FRACTURE; (4)
PR-5	11+16.40	LT-14.48	24"	RCP	JOINT SEPARATION; (4)

SPECIFIC NOTES

- (1) PLUG EX MAIN AND OUTSIDE DROP AT EX SAS 5828-002
- (2) PAID AS BID ITEM 40366 & 50793 ; PRIVATE STORM TYPE 1 RECONNECT 12" RCP
- (3) ADJUST INLET CASTING WITH CURB & GUTTER REHABILITATION
- (4) TO BE PAID AS 2 COLLARS, 4-FT SECTION OF PIPE AND SELECT FILL
- (5) 70' OF PIPE SHALL BE BORE AND JACK TO CROSS RAILROAD TRACKS



SCALE: 1" = 40'

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.

LEGEND

(A)	PAVEMENT MARKING EPOXY, DOUBLE LINE, 4-INCH
(B)	PAVEMENT MARKING EPOXY, LINE, 6-INCH
(C)	PAVEMENT MARKING EPOXY, CROSSWALK, 6-INCH
(D)	PAVEMENT MARKING EPOXY, STOP LINE, 24-INCH
(E)	PAVEMENT MARKING EPOXY, SYMBOL, BIKE SHARROW
(F)	PAVMENT MARKING EPOXY, SYMBOL, BIKE LANE & STRAIGHT ARROW
(G)	PAVEMENT MARKING EPOXY, SYMBOL, RIGHT ARROW
(H)	PAVEMENT MARKING EPOXY, SYMBOL, STRAIGHT & LEFT ARROW
(I)	PAVEMENT MARKING EPOXY, SYMBOL, RAILROAD CROSSING

PLOT SCALE:

PLOT NAME:

REV. DATE:

ORIGINATOR: CITY OF MADISON, TRAFFIC ENG. DIV.

