

RHI

PROJECT ID: 9175-10-60

COUNTY: LANGLADE

WITH:

JUNE 2017

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right of Way Plat
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS = 144



DESIGN DESIGNATION

A.A.D.T.	2016	=	280
A.A.D.T.	2026	=	310
D.H.V.		=	11.8
D.D.		=	59/41
T.		=	14.0%
DESIGN SPEED		=	55
ESALS		=	65,700

CONVENTIONAL SYMBOLS	
PLAN	CORPORATE LIMITS
	PROPERTY LINE
	LOT LINE
	LIMITED HIGHWAY EASEMENT
	EXISTING RIGHT OF WAY
	PROPOSED OR NEW R/W LINE
	SLOPE INTERCEPT
	REFERENCE LINE
	EXISTING CULVERT
	PROPOSED CULVERT (Box or Pipe)
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	ELECTRIC
	OVERHEAD UTILITY
	FIBER OPTIC
	GAS
	SANITARY SEWER
	STORM SEWER
	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

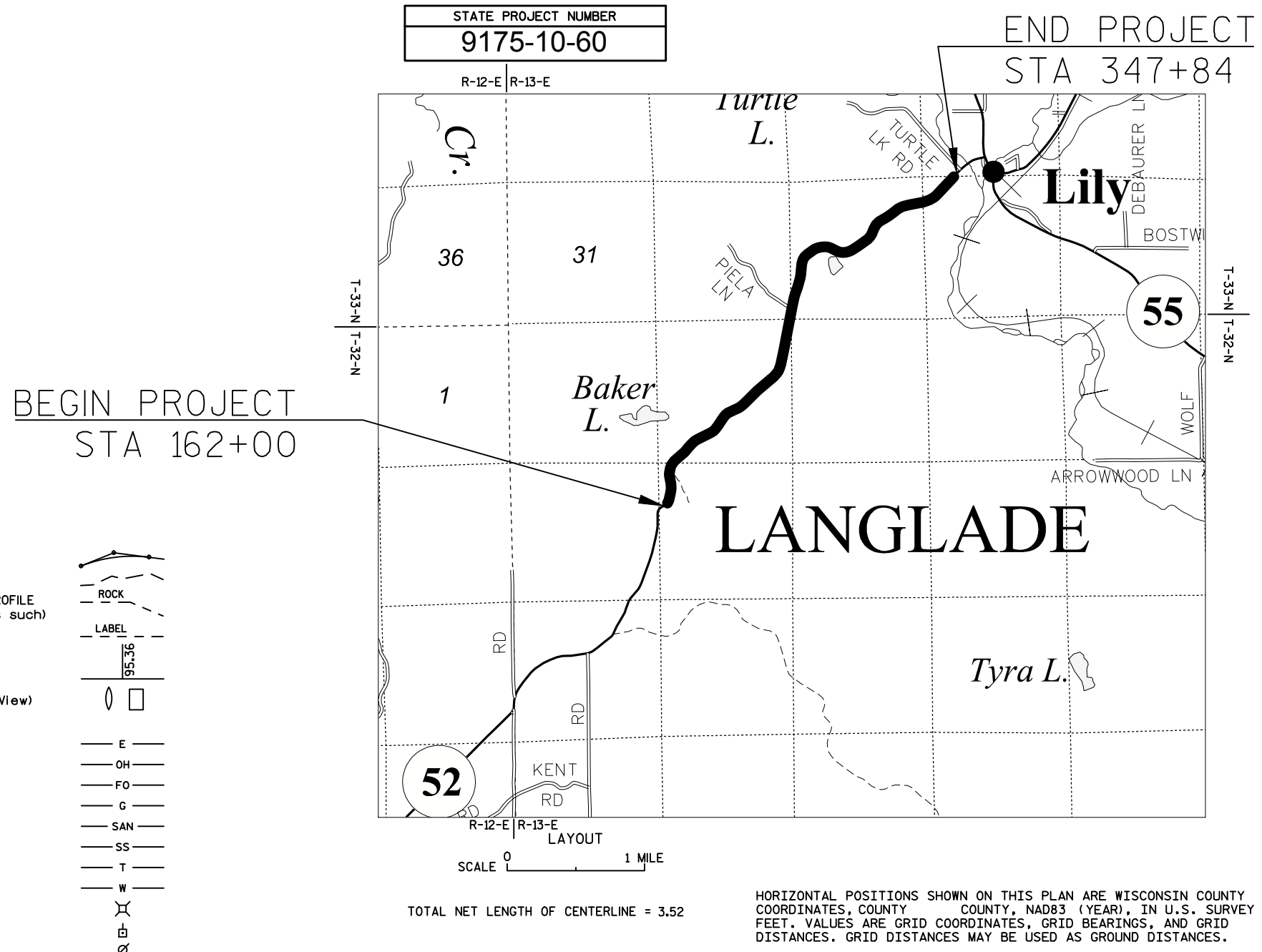
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9175-10-60	WISC 2017323	1

ANTIGO - LILY

KENT RD - STH 55

STH 52

LANGLADE



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JEFF BROCK
Designer	BEN ROSKOSKEY
Project Manager	DAN ERVA
Regional Examiner	CHERYL SIMON
Regional Supervisor	MIKE WENDT

APPROVED FOR THE DEPARTMENT

DATE: 1/17/17

(Signature)

E

GENERAL NOTES

- 1. WHEN THE QUANTITY OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON THE DEPTH OR THICKNESS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL DEPTH WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL BY THE ENGINEER IN THE FIELD.
- 2. THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS RE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- 3. PRESENCE OF CRACK FILLED MATERIAL CONTAINING RUBBER ADDITIVE MAY STILL BE PRESENT AFTER MILLING. RUBBER CRACK FILL MATERIAL MUST BE REMOVED AS SPECIFIED IN PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING.
- 4. PERMANENT SIGNING STATIONING WAS CALCULATED FROM THE PHOTOLOG AND MAY BE PLUS OR MINUS 50 FEET.
- 5. ALL QUANTITIES, NOTES, AND REFERENCES TO STH 52 MAINLINE STATIONING REFERS TO THE EXISTING ALIGNMENT.

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
PERMANENT SIGNING
TRAFFIC CONTROL

AS-BUILTS

7037

UTILITIES AND OTHER CONTACTS

FRONTIER COMMUNICATIONS - COMMUNICATION LINE

FIELD CONTACT NAME
STREET ADDRESS
PO BOX *****
CTIY, WI ZIP CODE
PHONE: (###) ###-### WORK
PHONE: (###) ###-### MOBILE
E-MAIL: INSERT EMAIL NAME HERE

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY

FIELD CONTACT NAME
STREET ADDRESS
PO BOX *****
CTIY, WI ZIP CODE
PHONE: (###) ###-### WORK
PHONE: (###) ###-### MOBILE
E-MAIL: INSERT EMAIL NAME HERE

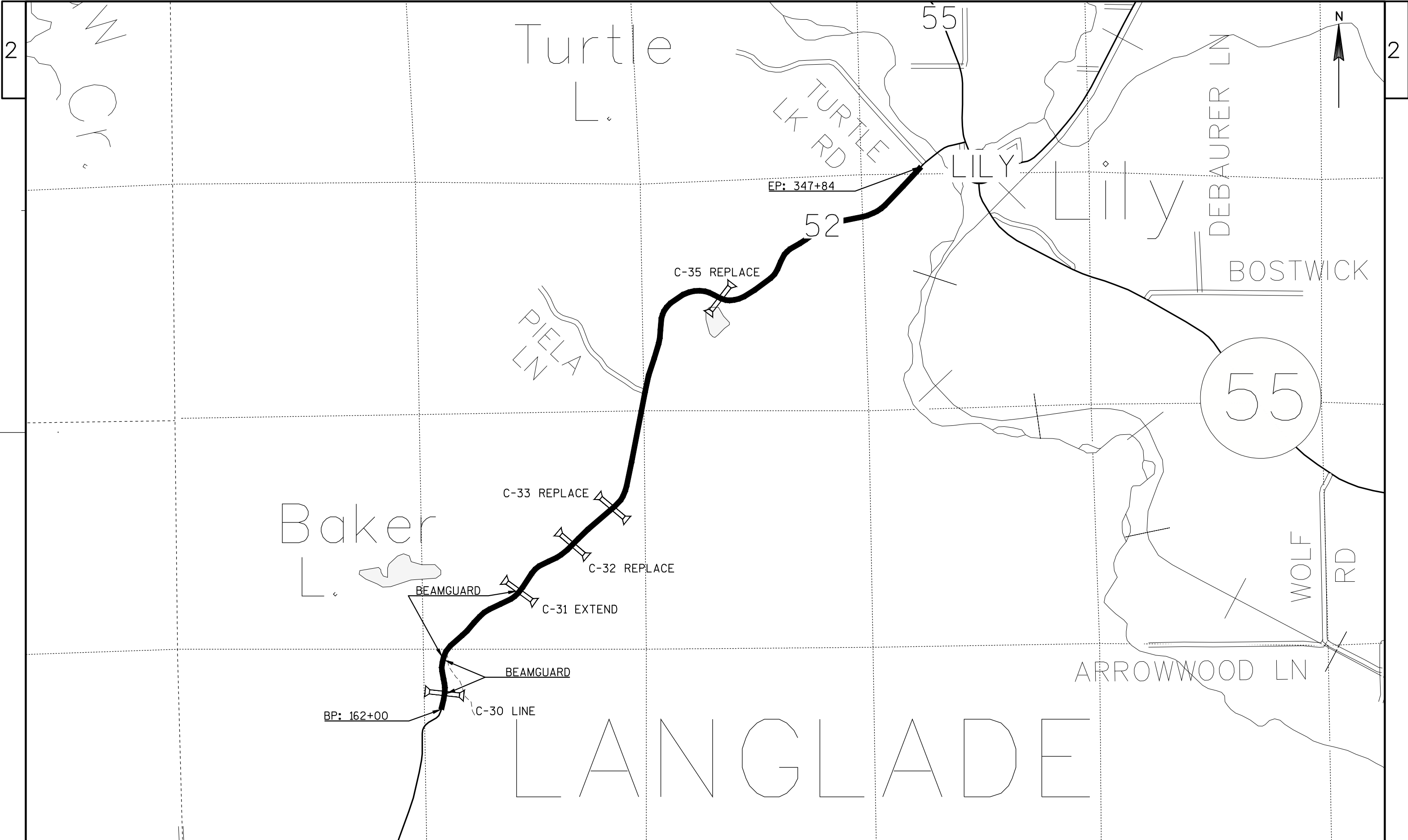
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

NORTHERN REGION HEADQUARTERS
JON SIMONSEN
107 SUTLIFF AVENUE
RHINELANDER, WI 54501
(715) 367-1936

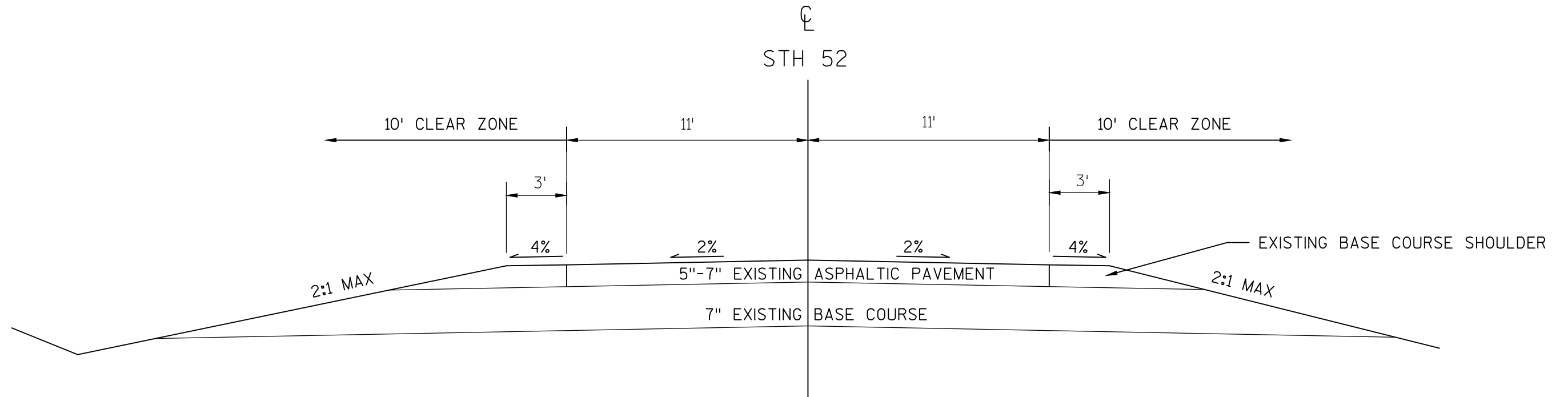
DIGGERSHOTLINE

Dial  or (800)242-8511

www.DiggersHotline.com

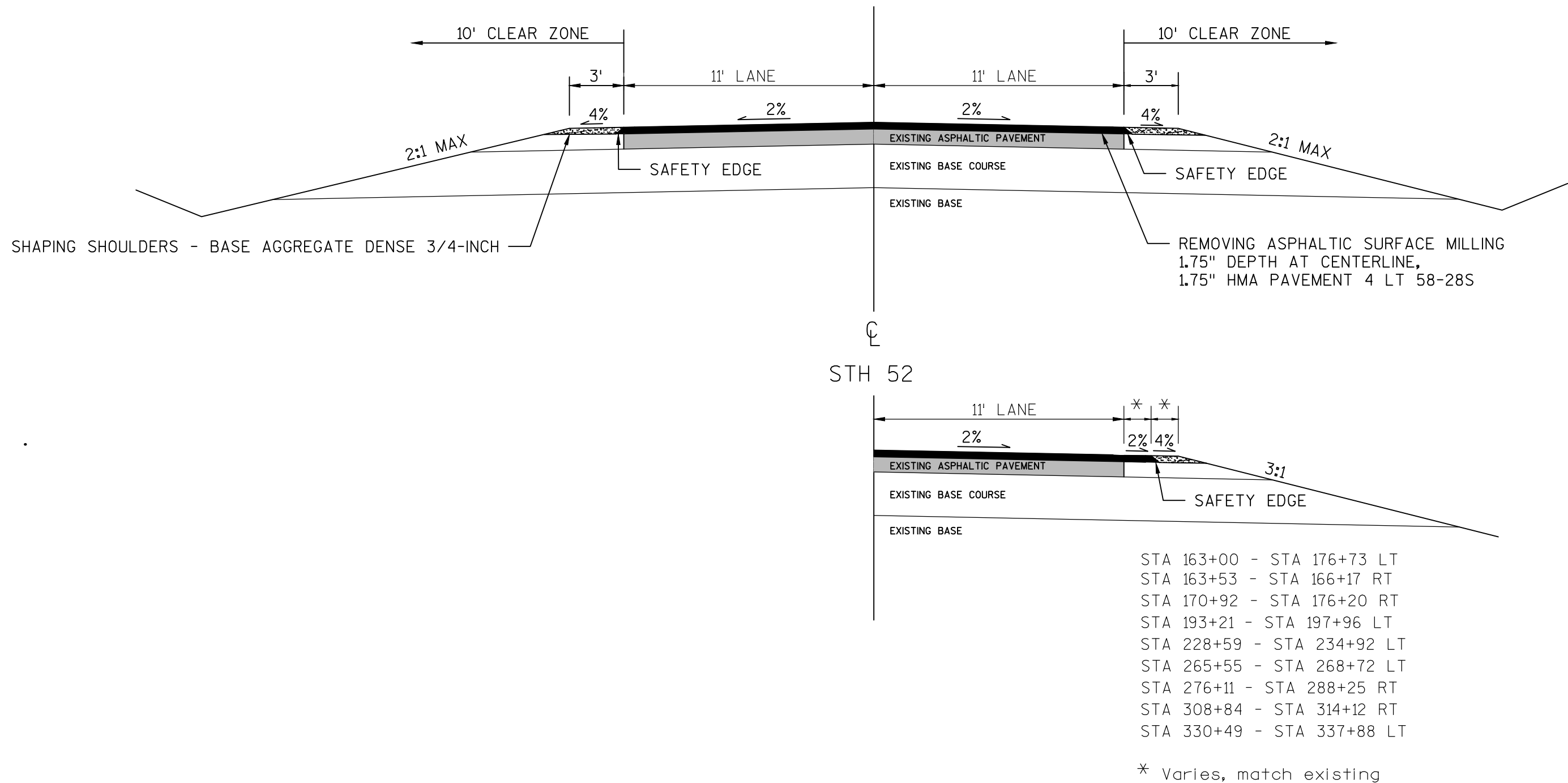


PROJECT NO: 9175-10-60	HWY: 52	COUNTY: LANGLADE	PROJECT OVERVIEW	SHEET	E
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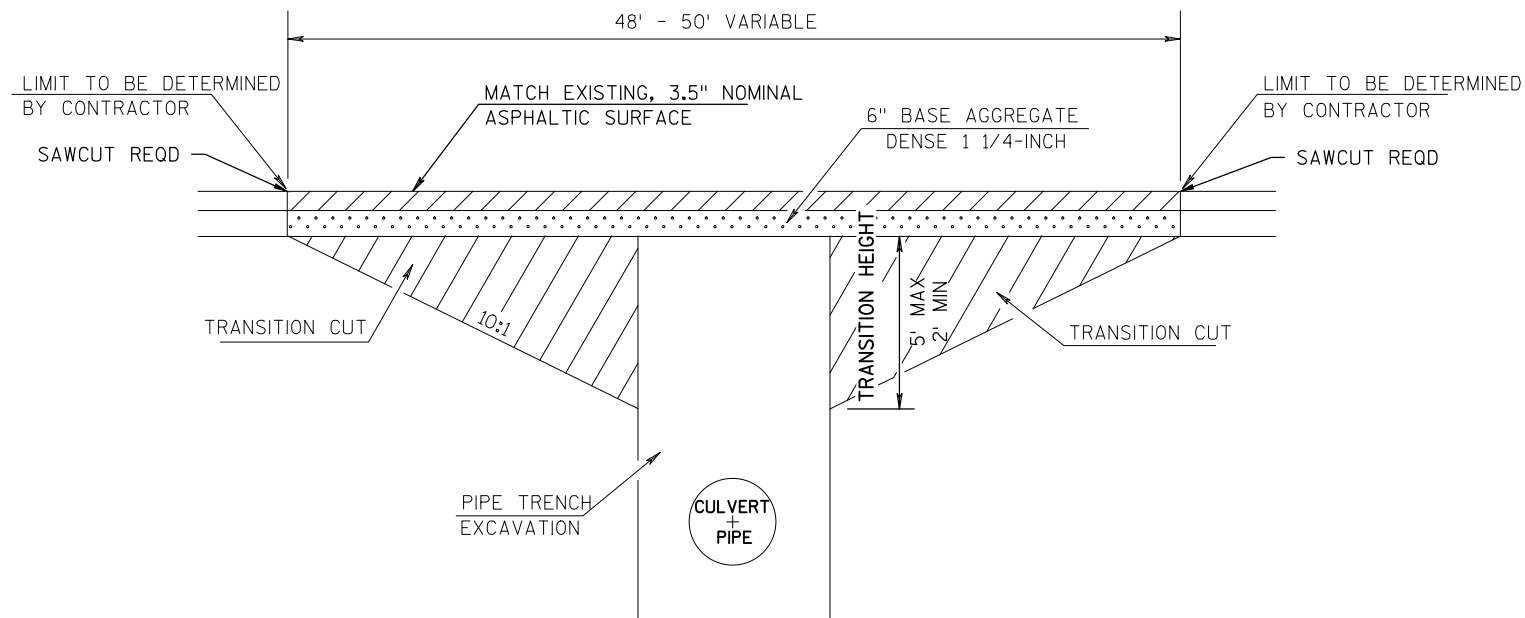
EXISTING TYPICAL SECTION

STATION 162+00 - STA 347+84



PROPOSED TYPICAL SECTION

STA 162+00 - STA 347+84



LOCATIONS	CULVERT ID #	SIZE	TRANSITION HEIGHT	LENGTH OF TRANSITION CUT	TRANSITION CUT VOLUME
STA 213+90	C-32	30"	2'	50'	45 CY
STA 226+43	C-33	24"	2'	50'	45 CY
STA 289+28	C-35	24"	2'	50'	45 CY

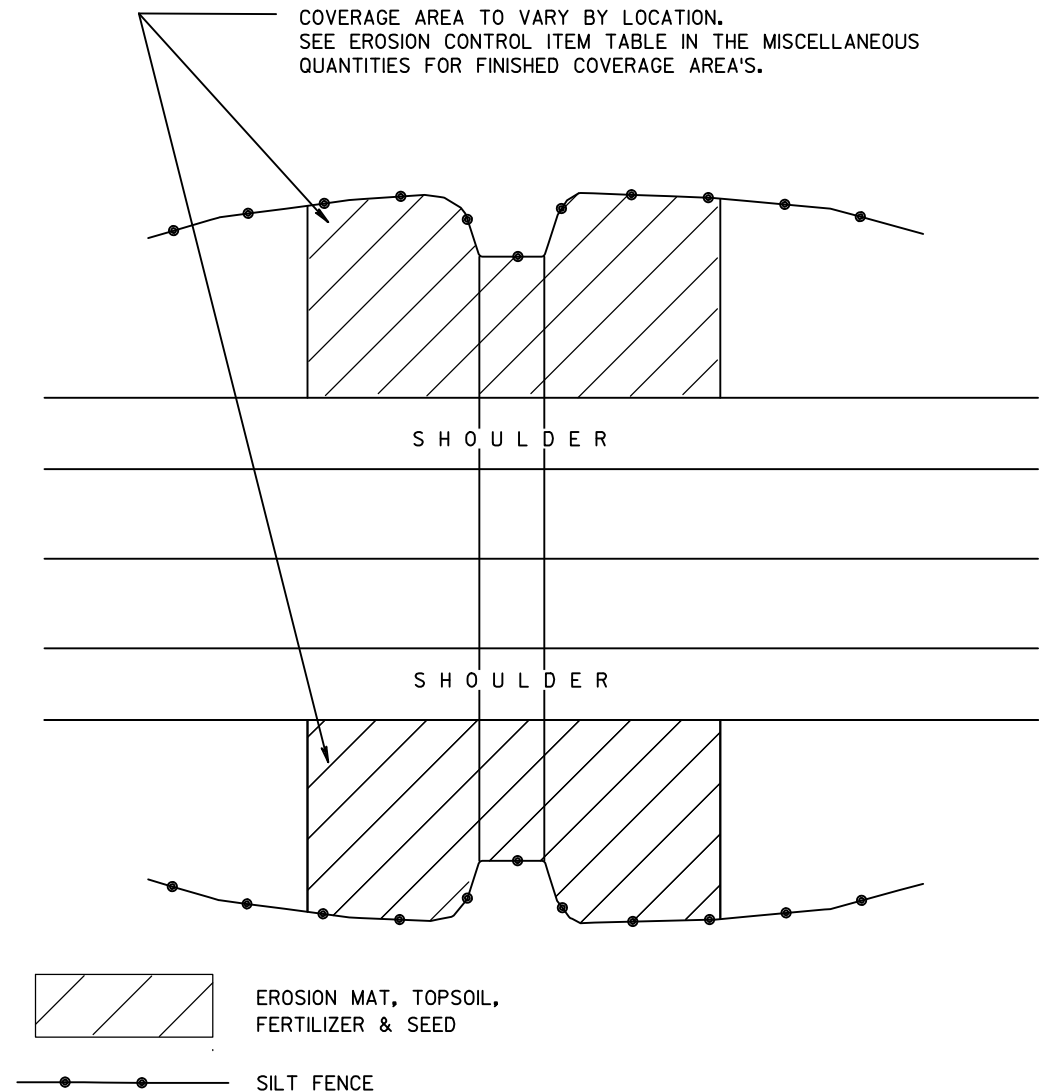
CULVERT PIPE TRANSITION

NOTE: REUSE MATERIAL REMOVED IN TRANSITION CUT AND PIPE TRENCH EXCAVATIONS AS BACKFILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER TO USE BACKFILL GRANULAR.

PIPE TRENCH EXCAVATION, EXCLUDING TRANSITION CUT, IS CONSIDERED INCIDENTAL TO PIPE INSTALLATION. TRANSITION CUT WILL BE PAID FOR AS EXCAVATION COMMON.

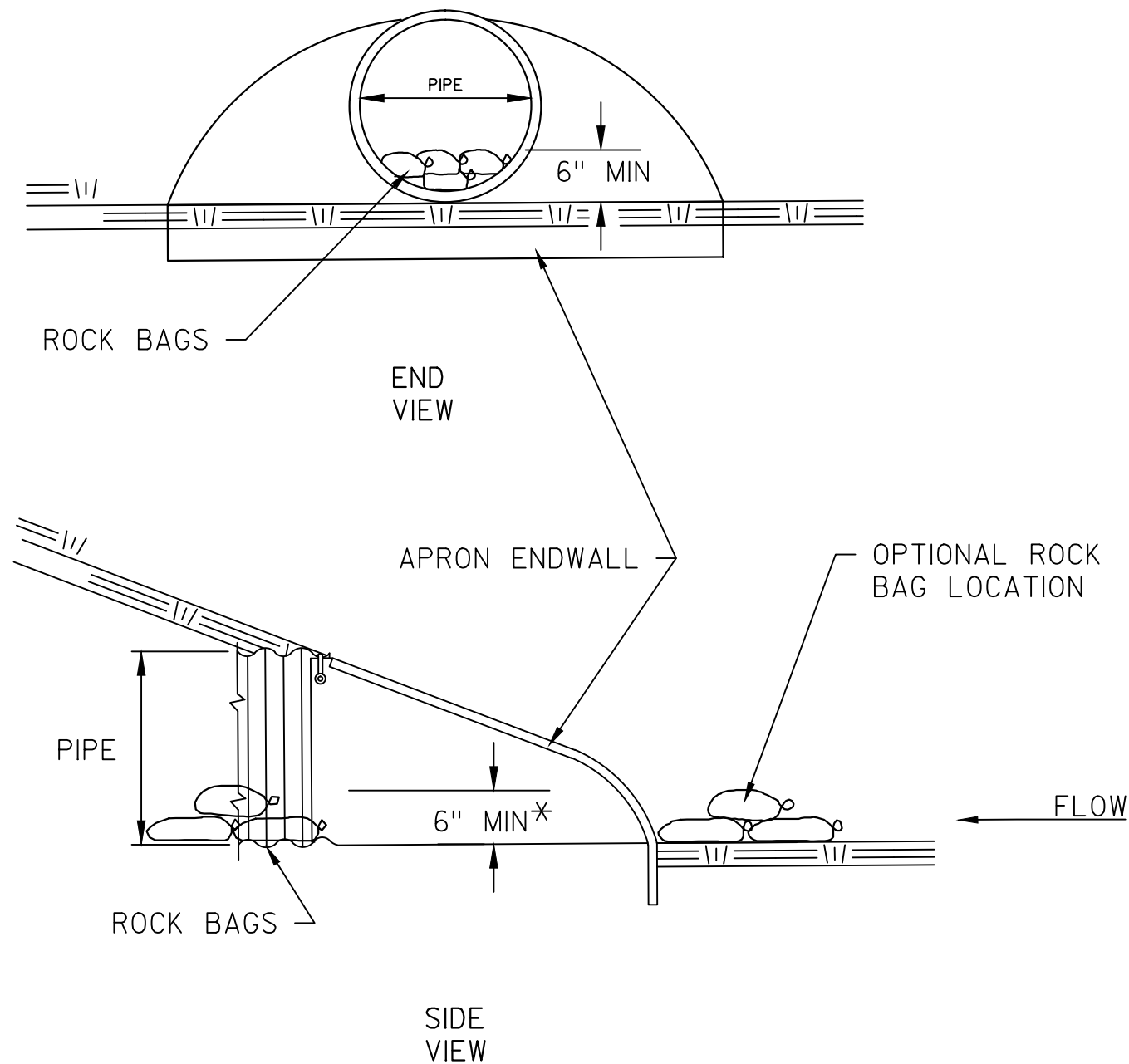
TRANSITION CUT WILL BE TO EDGE OF SHOULDER ON EACH SIDE OF CENTERLINE.

CONSTRUCT PER STANDARD SPECIFICATION 520.



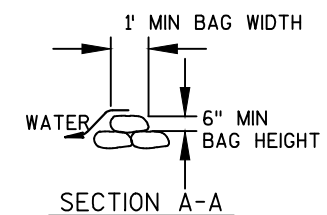
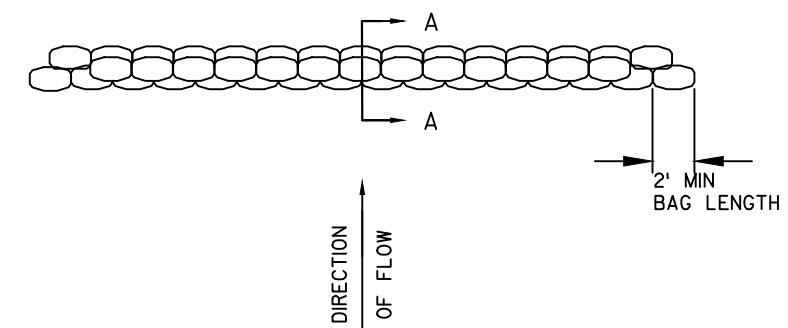
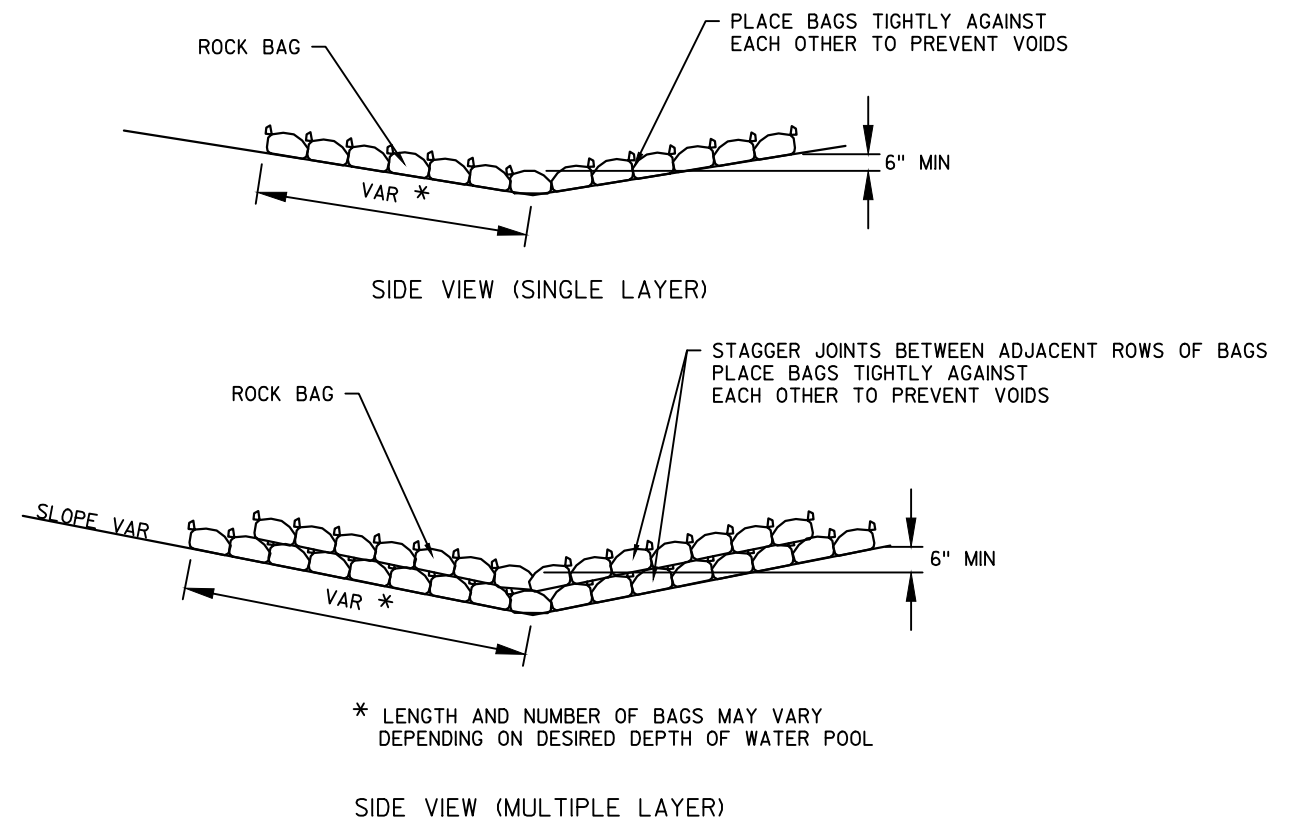
DETAIL FOR EROSION CONTROL

STA 165+22 C-30
STA 197+13 C-31
STA 213+90 C-32
STA 226+43 C-33
STA 289+28 C-35

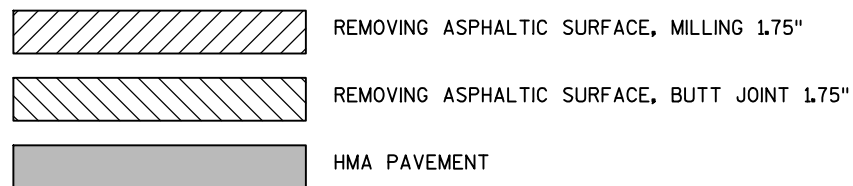
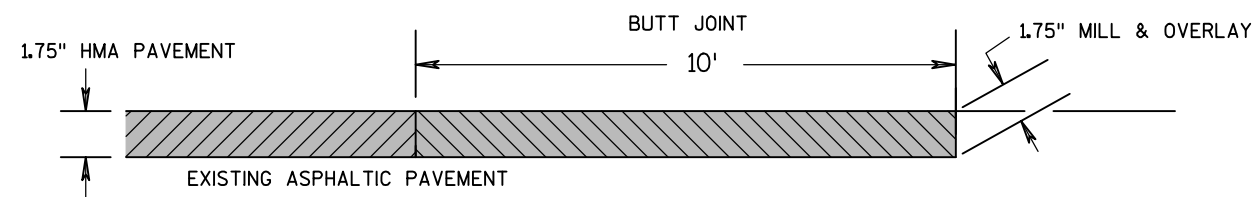


CULVERT PIPE CHECK

STA 165+22 C-30
 STA 197+13 C-31
 STA 213+90 C-32
 STA 226+43 C-33
 STA 289+28 C-35



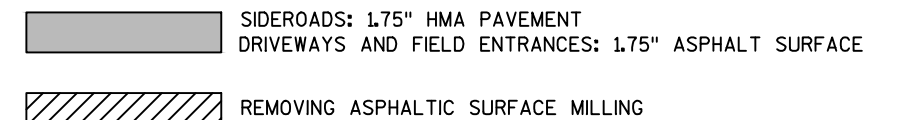
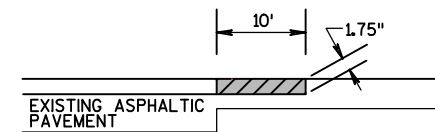
ROCK BAGS USED FOR DITCH CHECKS



NOTE: EXACT DIMENSIONS AND LOCATIONS TO BE
DETERMINED BY THE ENGINEER IN THE FIELD.

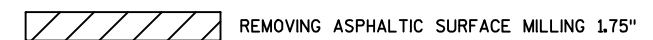
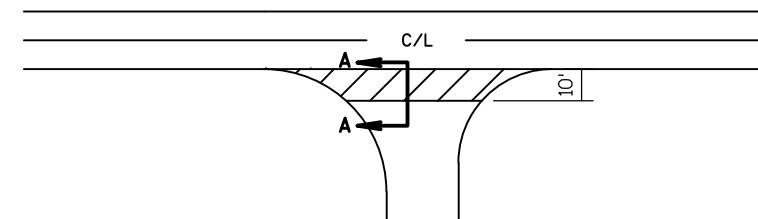
MAINLINE BUTT JOINT DETAIL

STA 162+00 - 162+10
STA 347+74 - 347+84



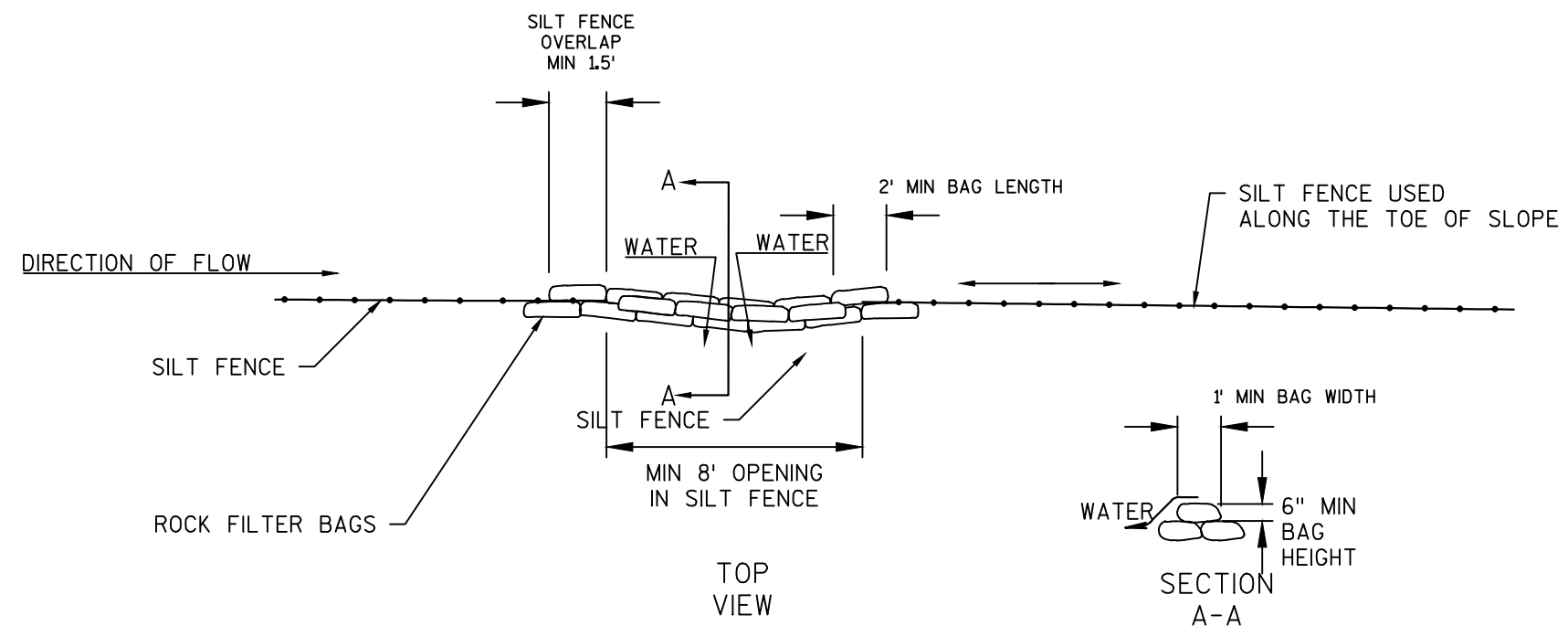
NOTE: EXACT DIMENSIONS AND LOCATIONS TO BE
DETERMINED BY THE ENGINEER IN THE FIELD.

SECTION A - A



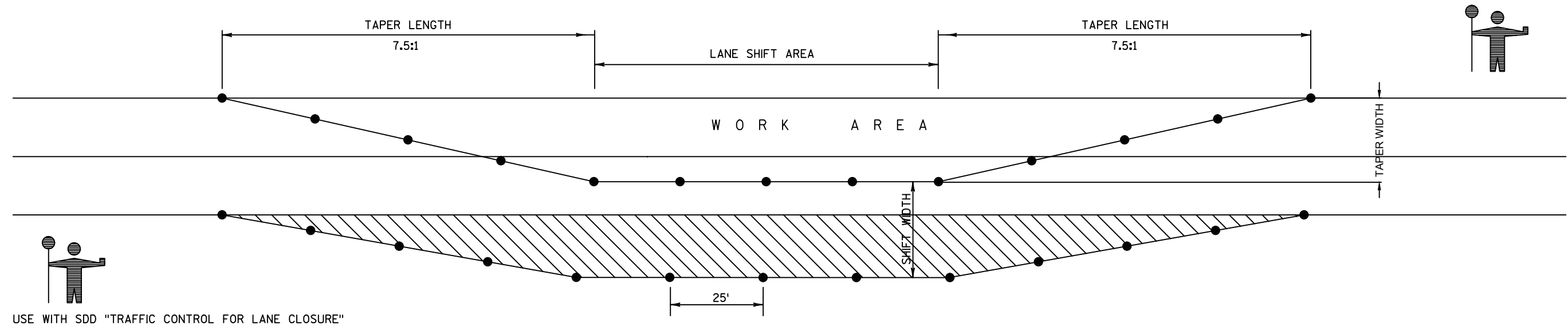
NOTE: EXACT DIMENSIONS AND LOCATIONS TO BE
DETERMINED BY THE ENGINEER IN THE FIELD.

SIDEROADS & DRIVEWAYS



ROCK BAGS USED FOR SILT FENCE RELIEF

USE WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE"

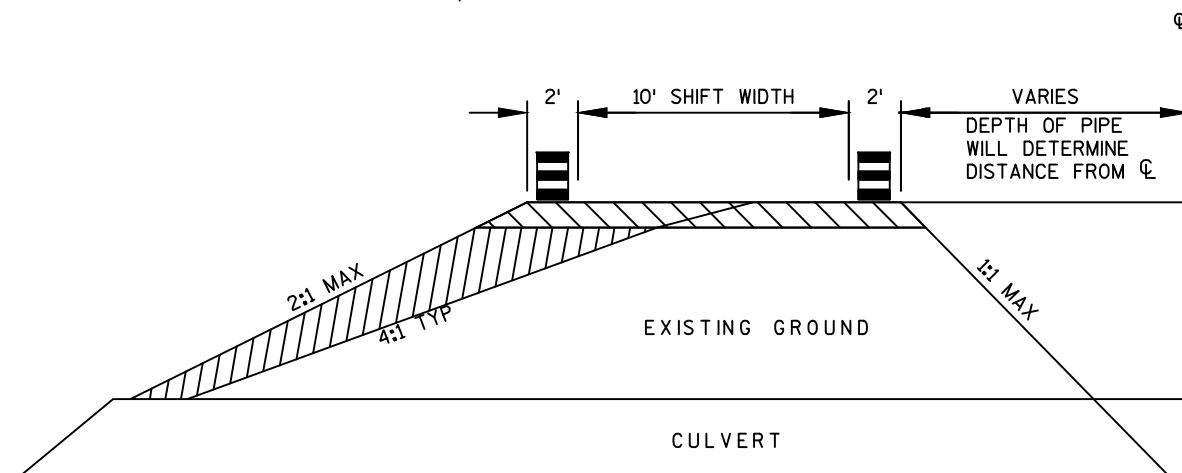


NOTES

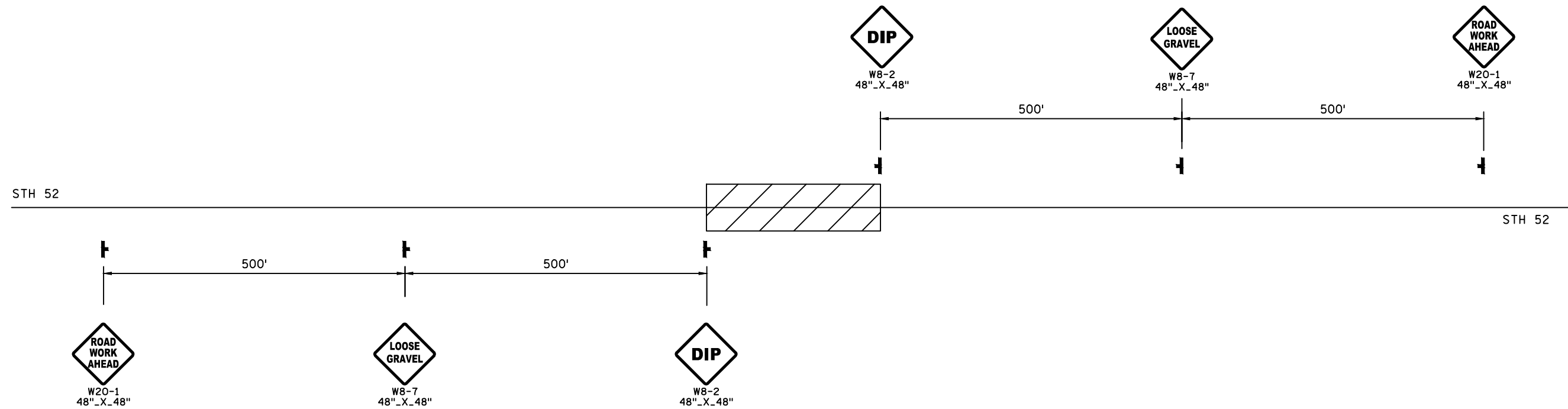
1. THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION
2. ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION
3. CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS
4. USE WITH SDD "TRAFFIC CONTROL FOR LANE CLOSURE"

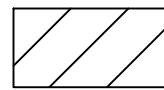
KEY

- DRUM WITHOUT WARNING LIGHT
- ▨ 6" BASE AGGREGATE DENSE 1 1/4" INCH - INCIDENTAL TO LANE SHIFT ITEM
- ▧ FILL - INCIDENTAL TO LANE SHIFT ITEM



LANE SHIFT DETAIL

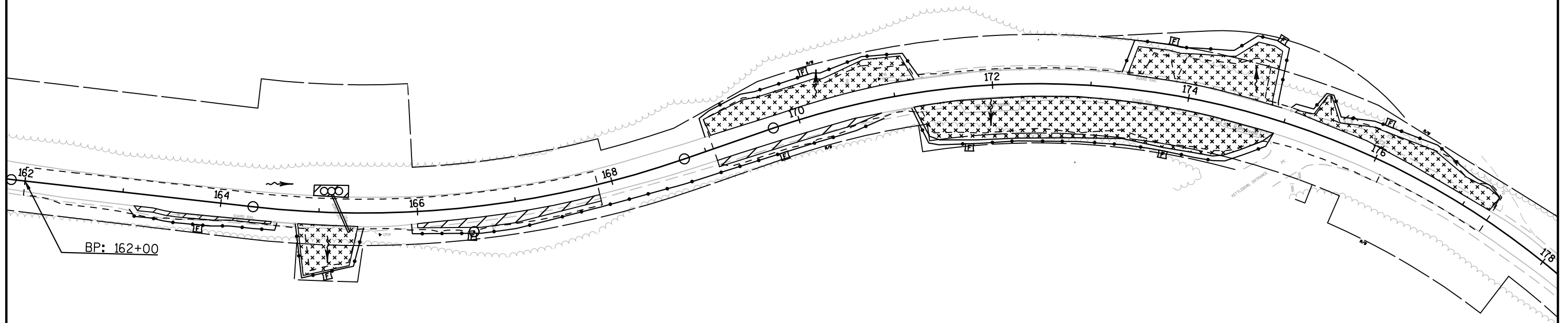


 CULVERT PIPE TRANSITION AREA
48' MIN - 110' MAX

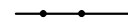
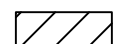
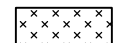
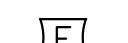


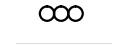
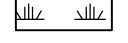
TEMPORARY SIGNING AT CULVERT PIPE REPLACEMENT

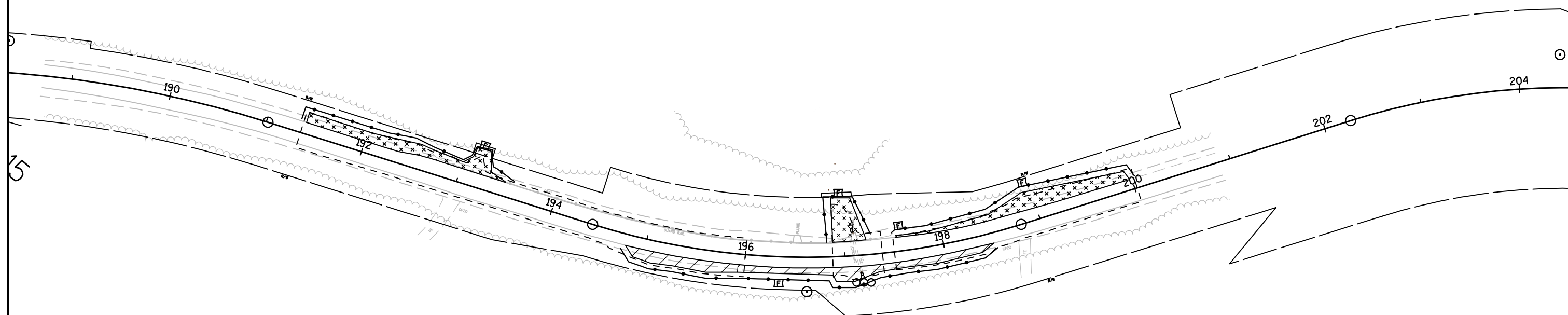
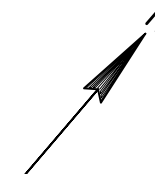
LEGEND

	SILT FENCE
	EROSION MAT CLASS I TYPE A
	EROSION MAT CLASS II TYPE B
	SILT FENCE RELIEF
	SURFACE WATER FLOW
	ROCK BAG DITCH CHECKS
	ROCK BAG CULVERT CHECK
	WETLAND

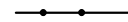

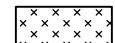

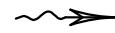


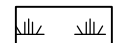


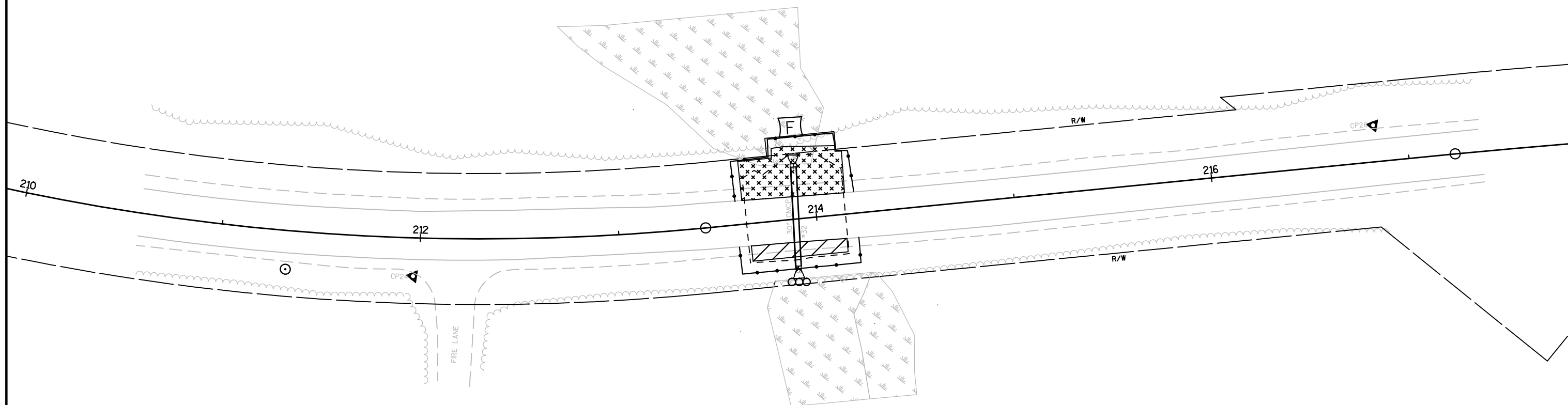
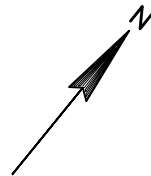
LEGEND

	SILT FENCE
	EROSION MAT CLASS I TYPE A
	EROSION MAT CLASS II TYPE B
	SILT FENCE RELIEF
	SURFACE WATER FLOW
	ROCK BAG DITCH CHECKS
	ROCK BAG CULVERT CHECK
	WETLAND











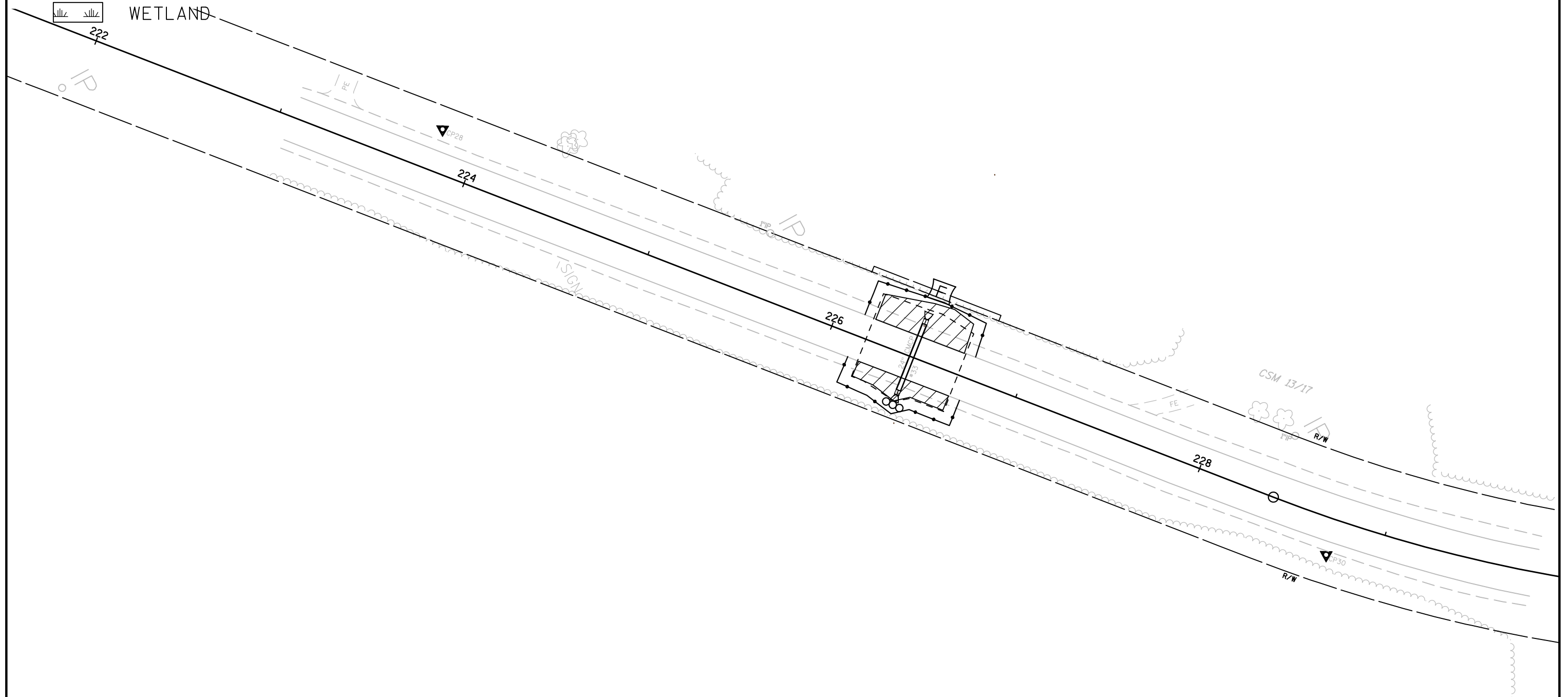
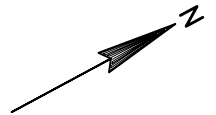
LEGEND

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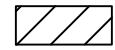
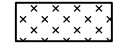

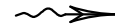


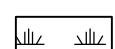


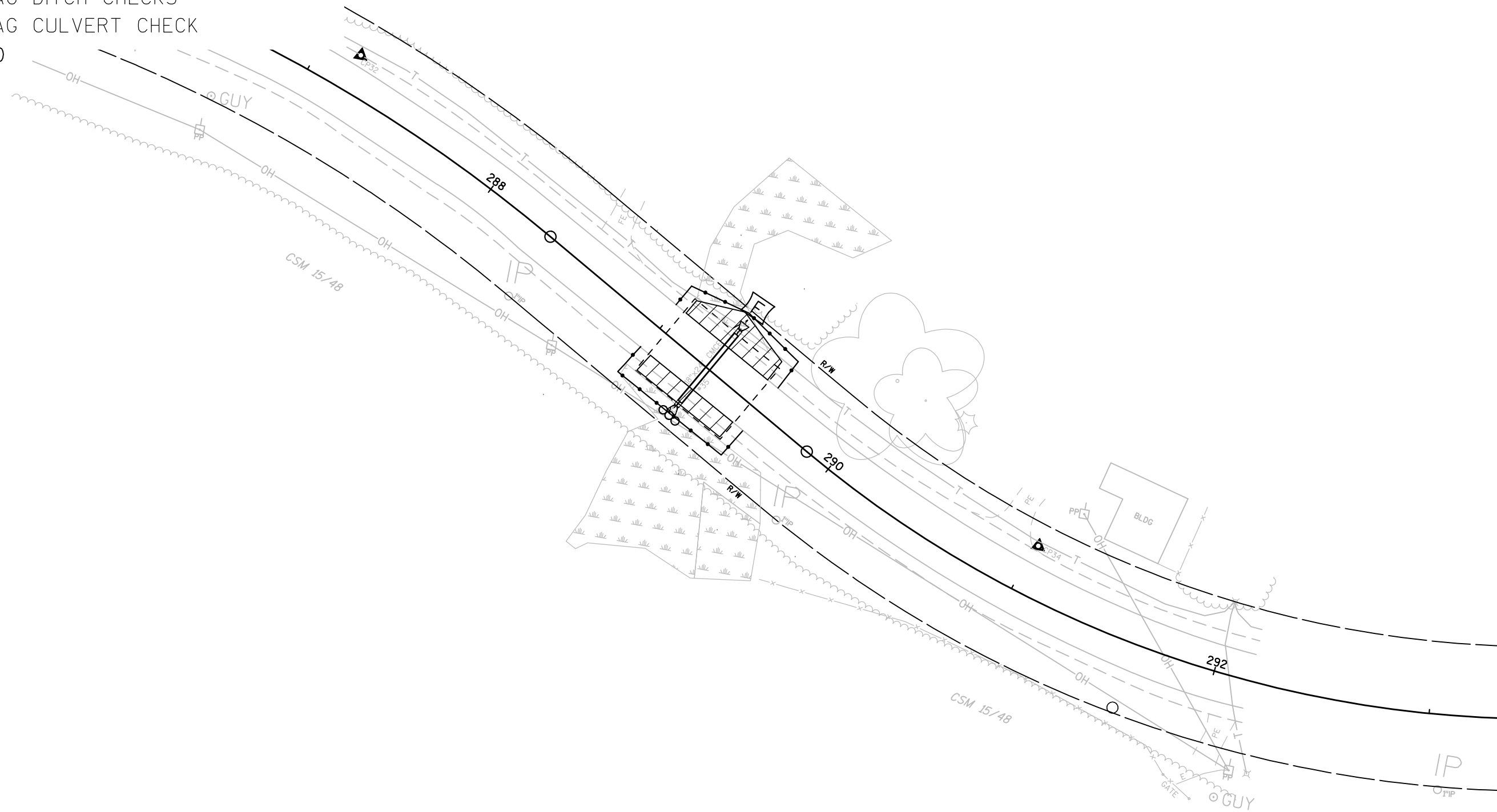
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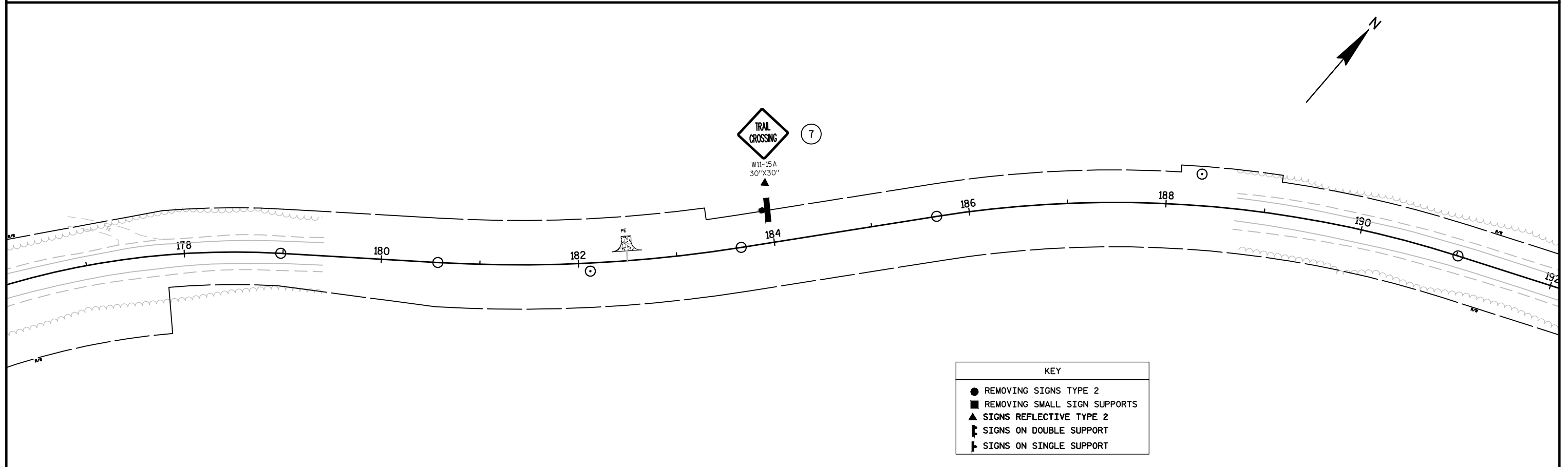
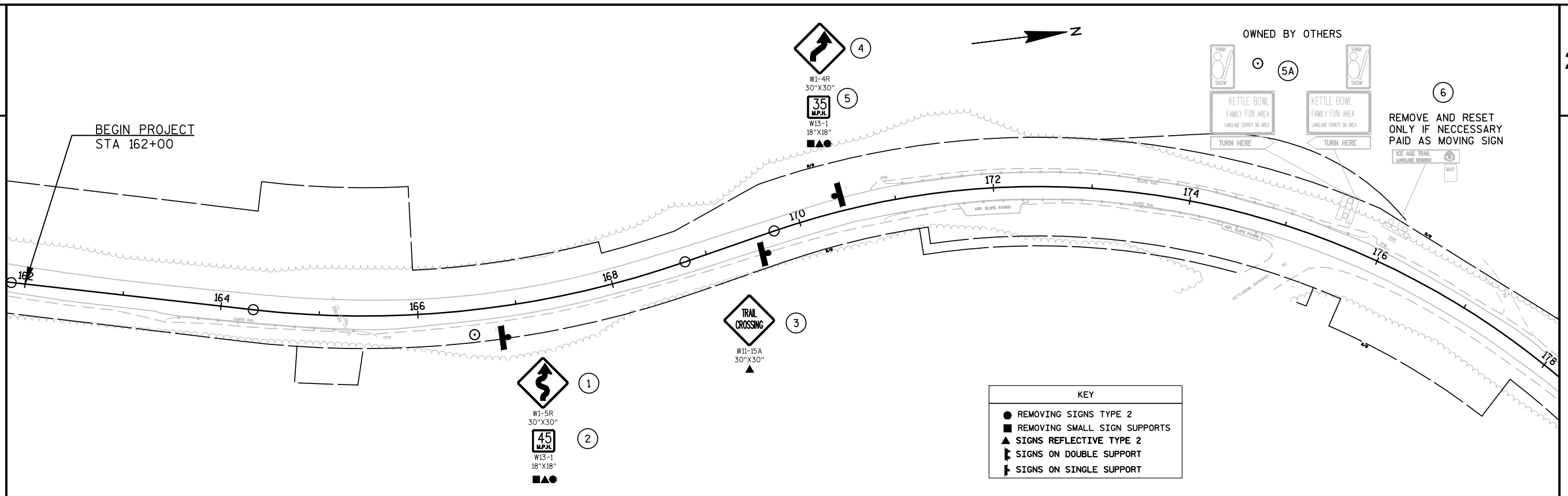
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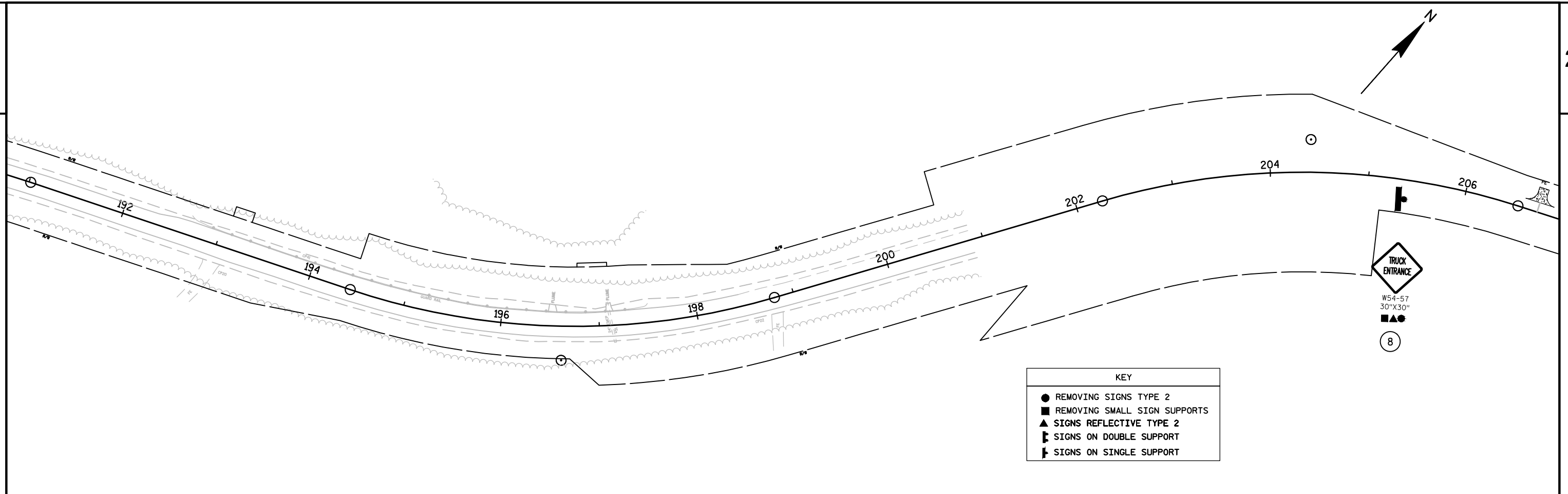


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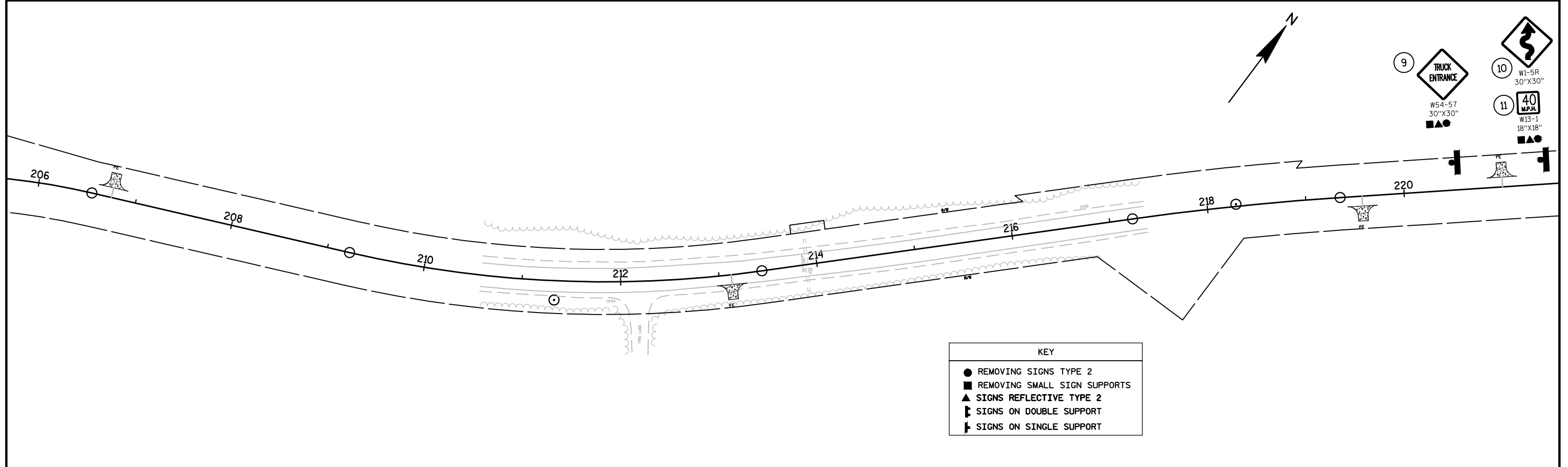
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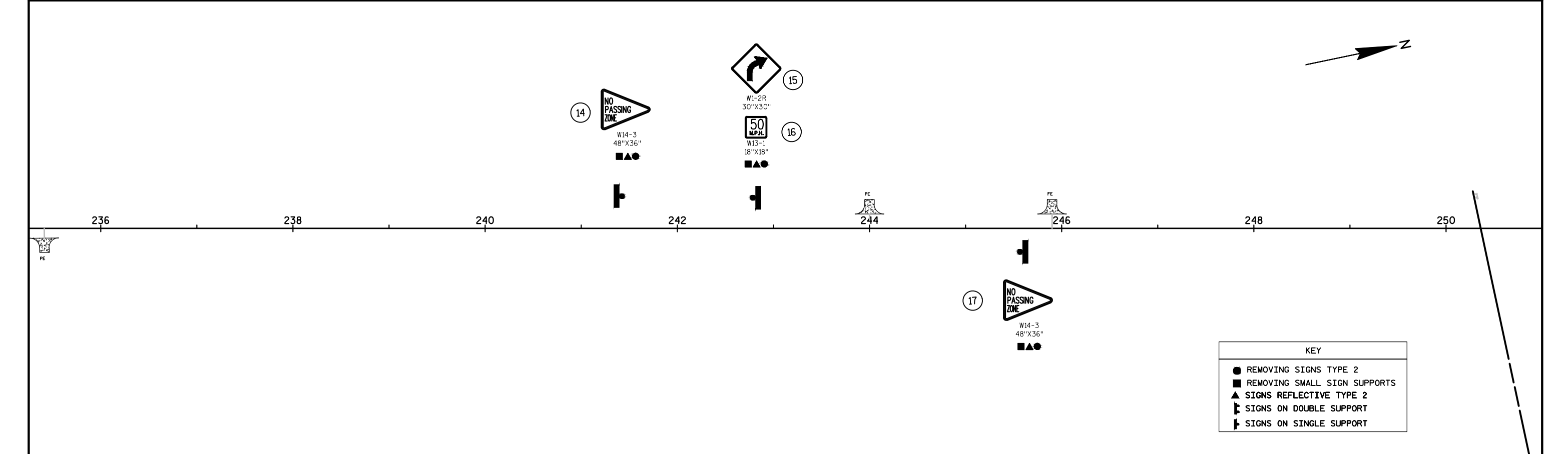
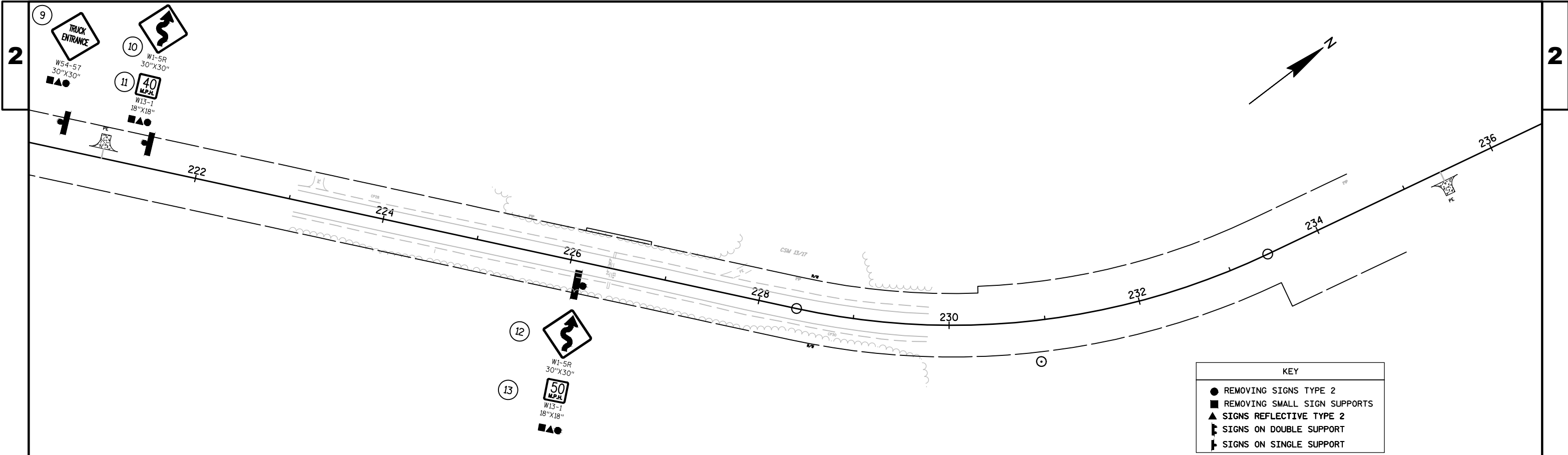


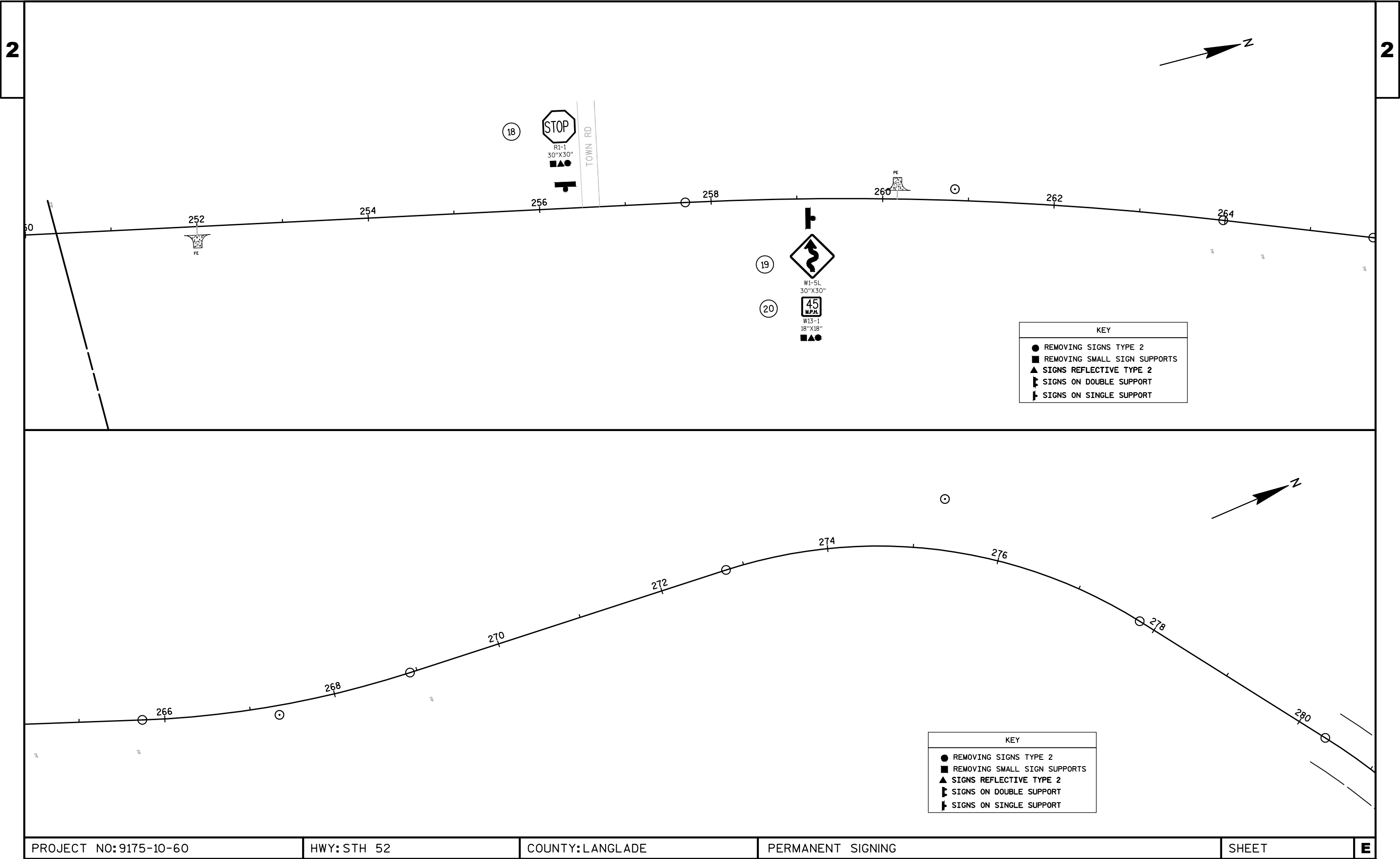


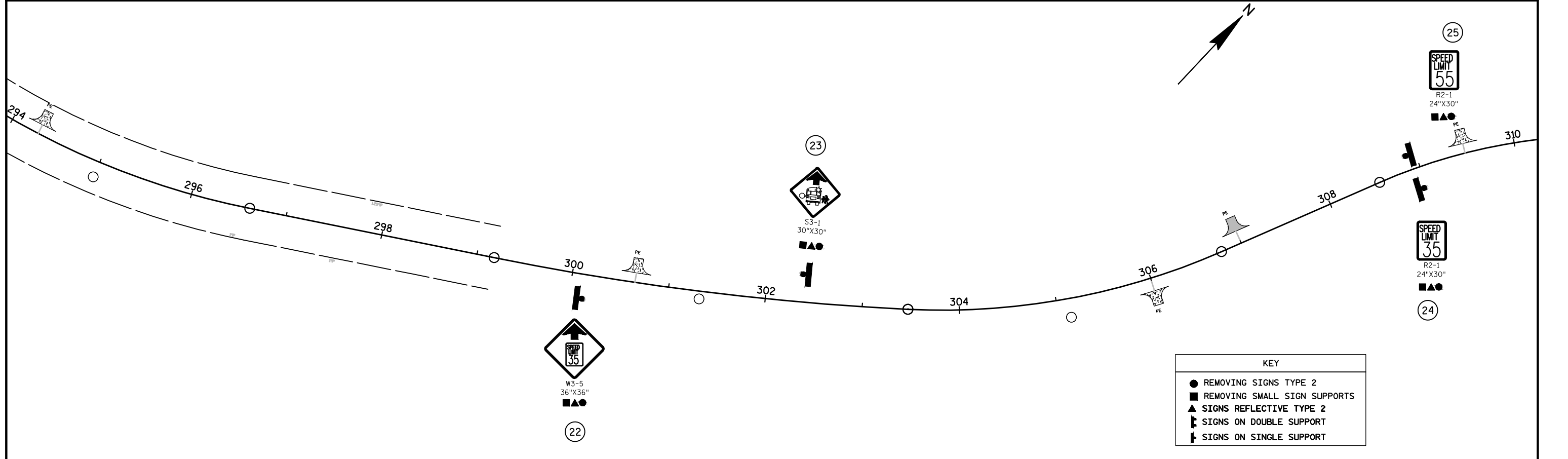
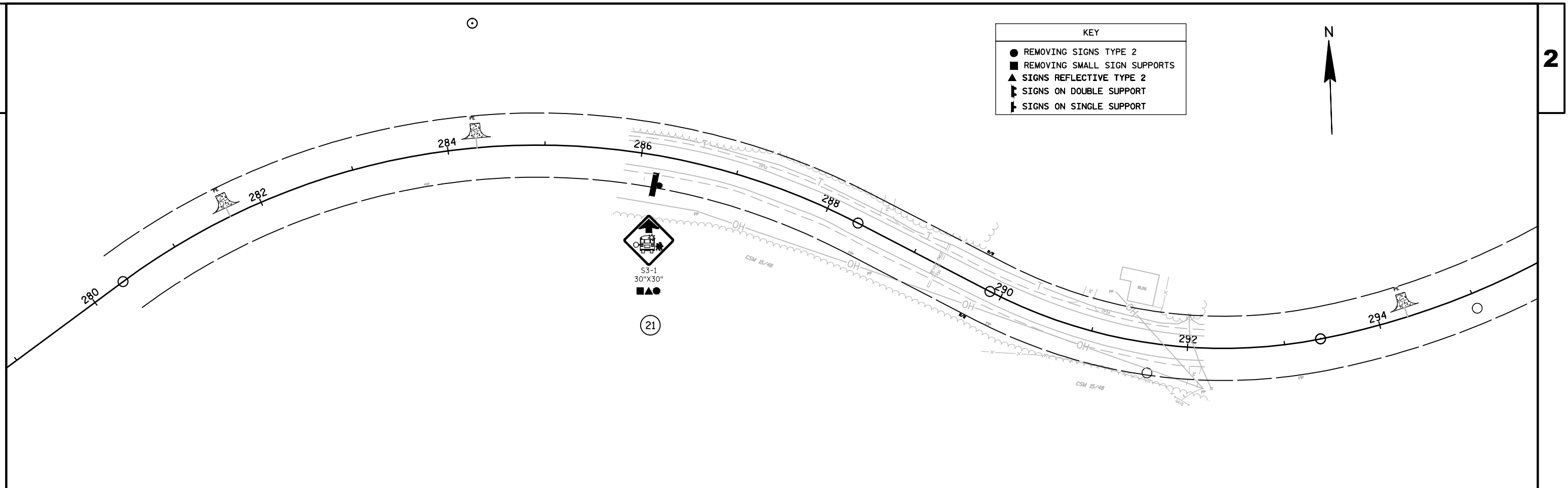
KEY	
●	REMOVING SIGNS TYPE 2
■	REMOVING SMALL SIGN SUPPORTS
▲	SIGNS REFLECTIVE TYPE 2
⌋	SIGNS ON DOUBLE SUPPORT
⌋	SIGNS ON SINGLE SUPPORT

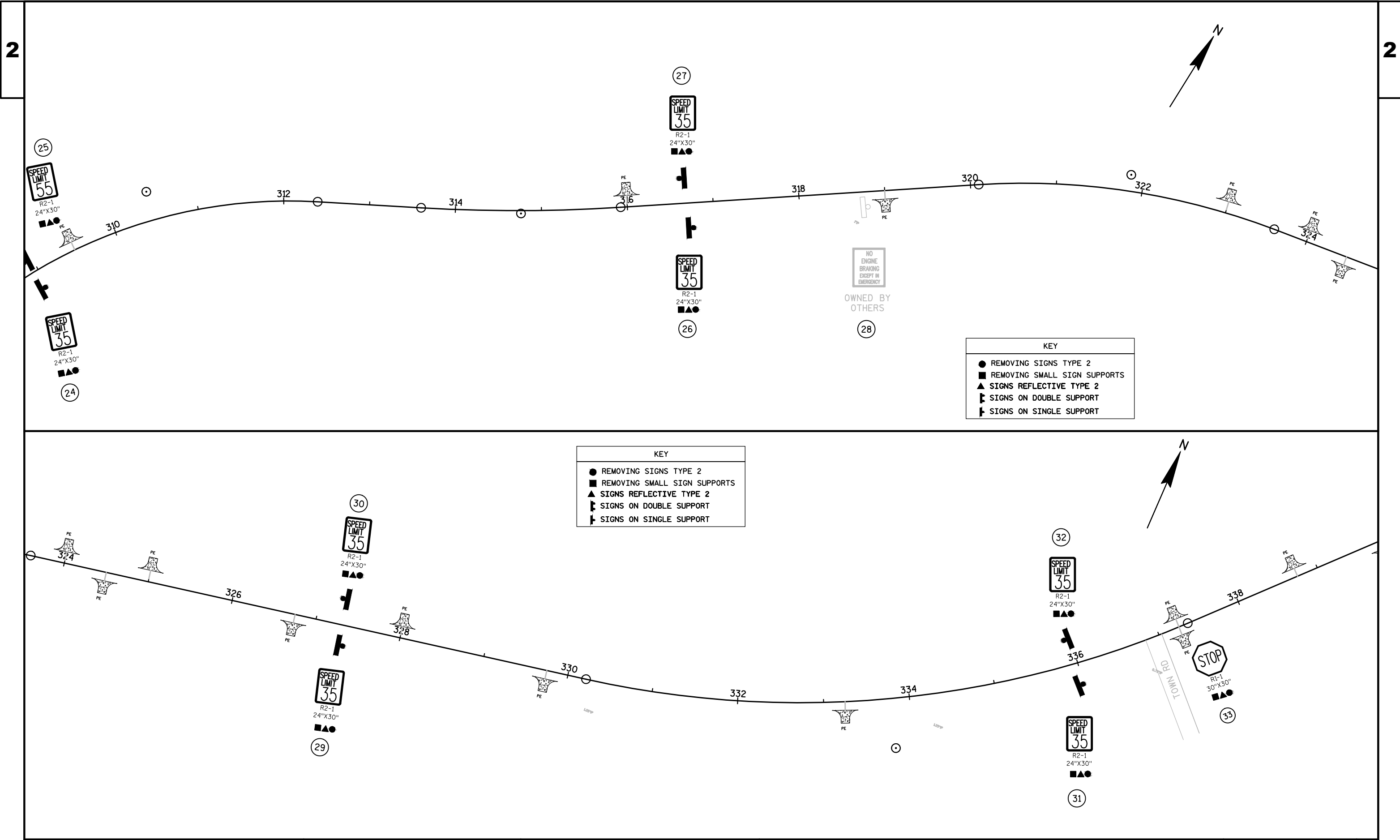


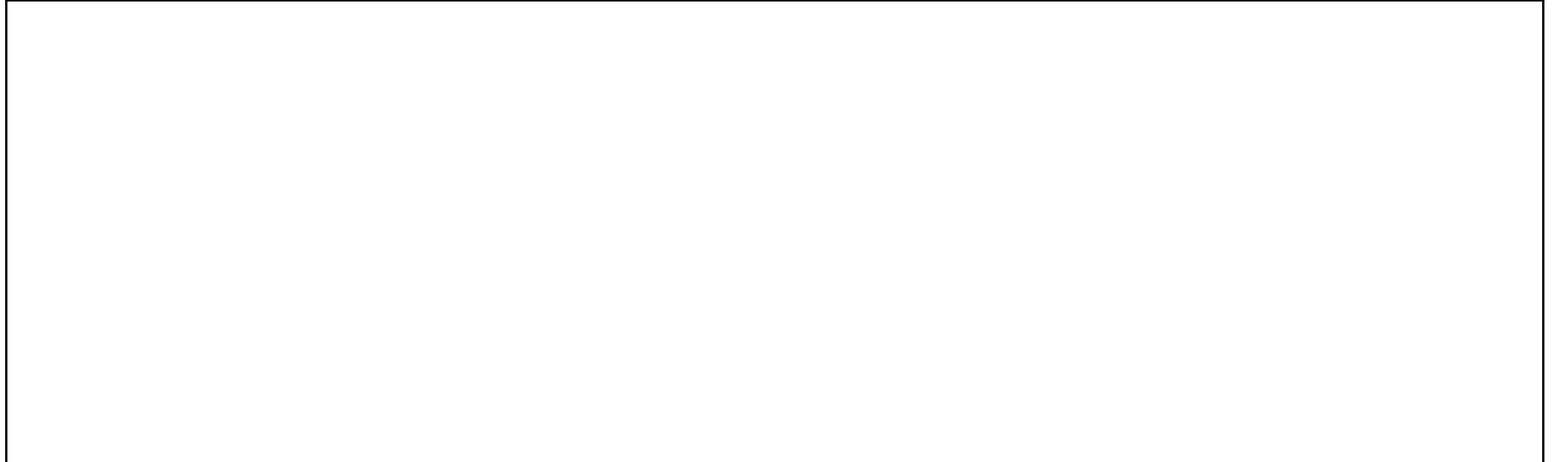
KEY	
●	REMOVING SIGNS TYPE 2
■	REMOVING SMALL SIGN SUPPORTS
▲	SIGNS REFLECTIVE TYPE 2
⌋	SIGNS ON DOUBLE SUPPORT
⌋	SIGNS ON SINGLE SUPPORT











Estimate Of Quantities

9175-10-60					
Line	Item	Item Description	Unit	Total	Qty
0010	201.0105	Clearing	STA	9.000	9.000
0020	201.0205	Grubbing	STA	9.000	9.000
0030	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0040	204.0115	Removing Asphaltic Surface Butt Joints	SY	50.000	50.000
0050	204.0120	Removing Asphaltic Surface Milling	SY	49,708.000	49,708.000
0060	204.0165	Removing Guardrail	LF	1,600.000	1,600.000
0070	205.0100	Excavation Common **P**	CY	143.000	143.000
0080	208.0100	Borrow **P**	CY	1,325.000	1,325.000
0090	209.2100	Backfill Granular Grade 2	CY	65.000	65.000
0100	213.0100	Finishing Roadway (project) 01. 9175-10-60	EACH	1.000	1.000
0110	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,141.000	1,141.000
0120	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	387.000	387.000
0130	305.0500	Shaping Shoulders	STA	372.000	372.000
0140	440.4410	Incentive IRI Ride	DOL	14,000.000	14,000.000
0150	450.4000	HMA Cold Weather Paving	TON	5,220.000	5,220.000
0160	455.0605	Tack Coat	GAL	3,480.000	3,480.000
0170	460.2000	Incentive Density HMA Pavement	DOL	3,340.000	3,340.000
0180	460.5224	HMA Pavement 4 LT 58-28 S	TON	5,220.000	5,220.000
0190	465.0105	Asphaltic Surface	TON	87.000	87.000
0200	520.9700.S	Culvert Pipe Liners (size) 01. 24-inch	LF	48.000	48.000
0210	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	1.000	1.000
0220	521.0124	Culvert Pipe Corrugated Steel 24-Inch	LF	7.000	7.000
0230	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	4.000	4.000
0240	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	76.000	76.000
0250	522.0330	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	50.000	50.000
0260	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	4.000
0270	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0280	614.2310	MGS Guardrail 3 HS	LF	1,500.000	1,500.000
0290	614.2610	MGS Guardrail Terminal EAT	EACH	8.000	8.000
0300	618.0100	Maintenance And Repair of Haul Roads (project) 01. 9175-10-60	EACH	1.000	1.000
0310	619.1000	Mobilization	EACH	1.000	1.000
0320	624.0100	Water	MGAL	40.000	40.000
0330	625.0100	Topsoil	SY	5,852.000	5,852.000
0340	628.1504	Silt Fence	LF	4,227.000	4,227.000
0350	628.1520	Silt Fence Maintenance	LF	4,227.000	4,227.000
0360	628.2002	Erosion Mat Class I Type A	SY	1,177.000	1,177.000
0370	628.2023	Erosion Mat Class II Type B	SY	4,675.000	4,675.000

Estimate Of Quantities

9175-10-60					
Line	Item	Item Description	Unit	Total	Qty
0380	628.7555	Culvert Pipe Checks	EACH	5.000	5.000
0390	628.7570	Rock Bags	EACH	324.000	324.000
0400	629.0210	Fertilizer Type B	CWT	3.690	3.690
0410	630.0120	Seeding Mixture No. 20	LB	158.000	158.000
0420	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	34.000	34.000
0430	637.2210	Signs Type II Reflective H	SF	69.360	69.360
0440	637.2230	Signs Type II Reflective F	SF	151.250	151.250
0450	638.2102	Moving Signs Type II	EACH	2.000	2.000
0460	638.2602	Removing Signs Type II	EACH	37.000	37.000
0470	638.3000	Removing Small Sign Supports	EACH	29.000	29.000
0480	642.5201	Field Office Type C	EACH	1.000	1.000
0490	643.0100	Traffic Control (project) 01. 9175-10-60	EACH	1.000	1.000
0500	643.0300	Traffic Control Drums	DAY	172.000	172.000
0510	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0520	643.0900	Traffic Control Signs	DAY	658.000	658.000
0530	646.0106	Pavement Marking Epoxy 4-Inch	LF	37,168.000	37,168.000
0540	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	34,718.000	34,718.000
0550	648.0100	Locating No-Passing Zones	MI	3.520	3.520
0560	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	37,168.000	37,168.000
0570	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0580	650.8000	Construction Staking Resurfacing Reference	LF	18,584.000	18,584.000
0590	650.9910	Construction Staking Supplemental Control (project) 01. 9175-10-60	LS	1.000	1.000
0600	650.9920	Construction Staking Slope Stakes	LF	2,545.000	2,545.000
0610	690.0150	Sawing Asphalt	LF	132.000	132.000
0620	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0630	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0640	SPV.0060	Special 01. Lane Shift	EACH	4.000	4.000

3

CLEARING & GRUBBING

STATION	LOCATION	201.0105 CLEARING STATIONS	201.0205 GRUBBING STATIONS
164+00 - 166+00	RT	2	2
171+00 - 173+00	RT	2	2
174+00 - 177+00	LT	3	3
196+00 - 198+00	LT	2	2
TOTALS		9	9

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 EACH
213+90	CL	1
226+44	CL	1
289+28	CL	1
TOTAL		3

3

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	204.0120 SY
162+00 - 347+84	49708
TOTAL	49708

REMOVING ASPHALTIC SURFACE BUTT JOINT

STATION - STATION	204.0115 SY
162+00 - 162+08	25
347+76 - 347+84	25
TOTAL	50

REMOVING GUARDRAIL

STATION - STATION	LOCATION	204.0165 LF
163+45 - 165+60	RT	215
170+84 - 174+92	RT	408
170+90 - 175+82	LT	492
192+67 - 197+52	LT	485
TOTAL		1600

3

EARTHWORK SUMMARY

Division	From/To Station	Location	205.0100 Common Excavation **p**	Available Material	Unexpanded Fill	Expanded Fill	Mass Ordinate +/-	Waste	208.0100 Borrow **p**	Comment:
						Factor 1.25				
	162+00 - 348+50	LT & RT	8	8	0	0	8	0	1068	Beamguard Grading
	213+60 - 214+15	LT & RT	45	45	0	0	45	0	101	C-32
	226+18 - 226+68	LT & RT	45	45	0	0	45	0	73	C-33
	289+04 - 289+54	LT & RT	45	45	0	0	45	0	83	C-35
Project Total			143	143	0	0	143	0	1325	

3

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110	305.0120	624.0100	REMARKS
		3/4-INCH TON	1 1/4-INCH TON	Water MGAL	
162+00 - 347+84	LT & RT	989	0	28.3	SHOLDER GRAVEL
213+65 - 214+15	LT & RT	12	132	4.1	C-32 REMOVAL AND TEMP WIDENING
226+18 - 226+68	LT & RT	12	127	4.0	C-33 REMOVAL AND TEMP WIDENING
289+04 - 289+54	LT & RT	11	128	4.0	C-35 REMOVAL AND TEMP WIDENING
162+00 - 347+84	LT & RT	117			DRIVEWAYS, UNDISTRIBUTED
TOTALS		1141	387	40	

BACKFILL GRANULAR Grade 2

LOCATION	209.2100 CY	REMARKS
UNDISTRIBUTED	65	
TOTAL	65	

SHAPING SHOULDERS

STATION - STATION	LOCATION	305.0500 STATION	REMARKS
162+00 - 347.84	LT & RT	372	
TOTAL		372	

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TACK COAT

STATION - STATION		455.0605 GALLONS	REMARKS
162+00 - 347+84		3480	
TOTAL		3480	

HMA PAVEMENT

STATION - STATION		460.5224 4 LT 58-28 S	450.4000 HMA COLD WEATHER PAVING	REMARKS
162+00 - 347+84		5220	5220	
TOTALS		5220	5220	

ASPHALTIC SURFACE

STATION	LOCATION	465.0105 TON	REMARKS
214+00	LT & RT	29	C-32 CULVERT REPLACEMENT
226+50	LT & RT	29	C-33 CULVERT REPLACEMENT
289+50	LT & RT	29	C-35 CULVERT REPLACEMENT
TOTAL		87	

3

CROSS DRAIN CULVERT PIPES

STATION	LOCATION	522.0324	522.0330	521.0124	520.9700.S	520.9750.S	522.1024	522.1030	521.1024	** JOINT TIES EACH	REMARKS
		REINFORCED CONCRETE CLASS IV	CULVERT PIPE	CORRUGATED STEEL	LINERS	CLEANING CULVERT PIPES FOR LINER VERIFICATION EACH	APRON ENDWALLS FOR CULVERT PIPE	REINFORCED CONCRETE	CORRUGATED STEEL		
		24-INCH LF	30-INCH LF	24-INCH LF	24-INCH LF			24-INCH EACH	30-INCH EACH	24-INCH EACH	
165+22	CL				48	1				2	C-30
197+09	LT			4						1	C-31
197+16	RT			3						1	C-31
213+90	CL		50						2		C-32
226+44	CL	36						2			C-33
289+28	CL	40						2			C-35
TOTALS		76	50	7	48	1		4	2	4	40

** FOR INFORMATIONAL PURPOSES ONLY. NOT A BID ITEM. TIE ALL CULVERT JOINTS

3

TOPSOIL, FERTILIZER, AND SEEDING

		625.0100 TOPSOIL	629.0210 FERTILIZER TYPE B	630.0120 SEEDING MIXTURE NO. 20 LB
STATION - STATION	LOCATION	SY	CWT	
163+20 - 177+20	LT	1700	1.07	46
163+20 - 177+20	RT	2150	1.35	58
191+00 - 200+00	LT	650	0.41	18
191+00 - 200+00	RT	360	0.23	10
213+70 - 214+25	LT	150	0.09	4
213+70 - 214+25	RT	50	0.03	1
226+20 - 226+70	LT	90	0.06	2
226+20 - 226+70	RT	50	0.03	1
289+00 - 289+60	LT	70	0.04	2
289+00 - 289+70	RT	50	0.03	1
UNDISTRIBUTED		532	0.34	14
TOTALS		5852	3.69	158

BEAM GUARD

		614.2310 MGS GUARDRAIL 3 HS LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
STATION - STATION	LOCATION		
163+33 - 166+50	RT	212.5	2
170+27 - 174+92	RT	350.0	2
170+72 - 175+95	LT	425.0	2
192+55 - 198+83	LT	512.5	2
TOTALS		1500	8

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EROSION CONTROL ITEMS

		628.1504 SILT FENCE	628.1520 SILT FENCE MAINTENANCE	628.2002 EROSION MAT CLASS I TYPE A SY	628.2023 EROSION MAT CLASS II TYPE B SY	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH
STATION	LOCATION	LF	LF				
163+20 - 177+20	LT	773	773	50	1650	1	60
163+20 - 177+20	RT	1360	1360	350	1800		90
191+00 - 200+00	LT	715	715		650		60
191+00 - 200+00	RT	400	400	360		1	15
213+70 - 214+25	LT	90	90		150		
213+70 - 214+25	RT	115	115	50		1	15
226+20 - 226+70	LT	90	90	90			15
226+20 - 226+70	RT	120	120	50		1	
289+00 - 289+60	LT	90	90	70			15
289+00 - 289+70	RT	90	90	50		1	
UNDISTRIBUTED		384	384	107	425		54
TOTALS		4227	4227	1177	4675	5	324

SIGN LISTING

						634.0616	637.2210	637.2230	638.3000	638.2602	638.2102	REMARKS
						POSTS	SIGNS	SIGNS	REMOVING	REMOVING	MOVING	
						WOOD	TYPE II	TYPE II	SMALL	SIGNS	SIGNS	
						4" X 6"	REFLECTIVE H	REFLECTIVE F	SIGN	TYPE II	TYPE II	
						16-FT			SUPPORTS			
STATION	LOCATION	SIGN NO.	SIGN CODE	MESSAGE	SIZE	EACH	SF	SF	EACH	EACH	EACH	
166+70	RT	1	W1-5R	ROAD SHARP CURVES	30" X 30"	1	---	6.25	1	1	---	
166+70	RT	2	W13-1	45 MPH	18" X 18"	---	---	2.25	---	1	---	MOUNT ON SIGN NO. 1 POST
169+50	RT	3	W11-15A	TRAIL CROSSING	30" X 30"	1	---	6.25	---	---	---	
170+50	LT	4	W1-4R	ROAD CURVES AHEAD	30" X 30"	1	---	6.25	1	1	---	
170+50	LT	5	W13-1	35 MPH	18" X 18"	---	---	2.25	---	1	---	MOUNT ON SIGN NO. 4 POST
175+50	LT	5A	---	---	---	---	---	---	---	---	---	TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION
176+00	LT	6	---	---	---	---	---	---	---	---	2	ICE AGE TRAIL SIGNS ON DOUBLE POST
184+00	LT	7	W11-15A	TRAIL CROSSING	30" X 30"	1	---	6.25	---	---	---	
205+20	RT	8	W54-57	TRUCK ENTRANCE	30" X 30"	1	---	6.25	1	1	---	
220+60	LT	9	W54-57	TRUCK ENTRANCE	30" X 30"	1	---	6.25	1	1	---	
221+60	LT	10	W1-5L	ROAD SHARP CURVES L	30" X 30"	1	---	6.25	1	1	---	
221+60	LT	11	W13-1	40 MPH	18" X 18"	---	---	2.25	---	1	---	MOUNT ON SIGN NO. 10 POST
225+80	RT	12	W1-5R	ROAD SHARP CURVES	30" X 30"	1	---	6.25	1	1	---	
225+80	RT	13	W13-1	50 MPH	18" X 18"	---	---	2.25	---	1	---	MOUNT ON SIGN NO. 12 POST
241+30	LT	14	W14-3	NO PASSING ZONE	48" X 36"	1	---	6.00	---	1	---	
242+70	LT	15	W1-2R	ROAD CURVES RIGHT	30" X 30"	1	---	6.25	1	1	---	
242+70	LT	16	W13-1	50 MPH	18" X 18"	---	---	2.25	---	1	---	MOUNT ON SIGN NO. 15 POST
245+70	RT	17	W14-3	NO PASSING ZONE	48" X 36"	1	---	6.00	1	1	---	
256+20	LT	18	R1-1	STOP	30" X 30"	1	5.18	---	1	1	---	ON SIDE ROAD
259+10	RT	19	W1-5L	ROAD SHARP CURVES L	30" X 30"	1	---	6.25	1	1	---	
259+10	RT	20	W13-1	45 MPH	18" X 18"	---	---	2.25	---	1	---	MOUNT ON SIGN NO. 19 POST
286+00	RT	21	S3-1	SCHOOL BUS STOP AHEAD	36" X 36"	1	---	9.00	1	1	---	
300+00	RT	22	W3-5	SPEED REDUCTION AHEAD 35 MPH	36" X 36"	1	---	9.00	---	1	---	
302+40	LT	23	S3-1	SCHOOL BUS STOP AHEAD	36" X 36"	1	---	9.00	1	1	---	
308+80	RT	24	R2-1	SPEED LIMIT 35	24" X 30"	1	5.00	---	1	1	---	
308+80	LT	25	R2-1	SPEED LIMIT 55	24" X 30"	1	5.00	---	1	1	---	
316+60	RT	26	R2-1	SPEED LIMIT 35	24" X 30"	1	5.00	---	1	1	---	
316+60	LT	27	R2-1	SPEED LIMIT 35	24" X 30"	1	5.00	---	1	1	---	
318+80	RT	28	R10-64	NO ENGINE BRAKING	---	---	---	---	---	---	---	TO BE REMOVED BY OTHERS PRIOR TO CONSTRUCTION
327+20	RT	29	R2-1	SPEED LIMIT 35	24" X 30"	1	5.00	---	1	1	---	
327+20	LT	30	R2-1	SPEED LIMIT 35	24" x 30"	1	5.00	---	1	1	---	
336+00	RT	31	R2-1	SPEED LIMIT 35	24" X 30"	1	5.00	---	1	1	---	
336+00	LT	32	R2-1	SPEED LIMIT 35	24" X 30"	1	5.00	---	1	1	---	
337+20	RT	33	R1-1	STOP	30" X 30"	1	5.18	---	1	1	---	ON SIDE ROAD
340+40	RT	34	W14-3	NO PASSING ZONE	48" X 36"	1	---	6.00	1	1	---	
344+00	RT	35	W5-2	NARROW BRIDGE	36" X 36"	1	---	9.00	1	1	---	
345+20	LT	36	W14-3	NO PASSING ZONE	48" X 36"	1	---	6.00	1	1	---	
345+20	LT	37	W1-5R	ROAD SHARP CURVES R	30" X 30"	1	---	6.25	---	1	---	MOUNT ON SIGN NO. 36 POST
346+00	RT	38	R2-1	SPEED LIMIT 35	24" X 30"	1	5.00	---	1	1	---	
347+30	LT	39	R2-1	SPEED LIMIT 35	24" X 30"	1	5.00	---	1	1	---	
347+50	RT	40	W3-1	STOP AHEAD	36" X 36"	1	---	9.00	1	1	---	
348+10	RT	41	I2-3-U	LILY UNINCORPORATED	54" X 24"	2	9.00	---	2	1	--	
TOTALS						34	69.36	151.25	29.00	37.00	2.00	

TRAFFIC CONTROL ITEMS

	643.0100 TRAFFIC CONTROL PROJECT	643.0300 TRAFFIC CONTROL DRUMS	643.0900 TRAFFIC CONTROL SIGNS	643.0310.S TEMPORARY PORTABLE RUMBLE STRIPS LS	SPV.0060 LANE SHIFT
LOCATION	EACH	NO. DAYS	NO. DAYS	LS	EACH
PROJECT	1		10 61	1	
211+90 - 216+00		30 2	8 2		2
224+25 - 228+50		29 2	8 2		1
287+00 - 290+50		27 2	8 2		1
TOTALS	1	172	658	1	4

PAVEMENT MARKING

	646.0106 EPOXY 4-INCH EDGE LINE WHITE	646.0406 SAME DAY EPOXY 4-INCH	649.0402 TEMPORARY PAVEMENT MARKING PAINT 4-INCH YELLOW	648.0100** LOCATING NO-PASSING ZONES	
STATION - STATION	CENTERLINE LT/RT	LF	CENTERLINE YELLOW LF	NO PASSING YELLOW LF	MI
162+00 - 235+40	DOUBLE YELLOW	14,680		14,680	
235+40 - 242+80	SOLID / SKIP	1,480	928	1,480	
242+80 - 244+90	DOUBLE YELLOW	420		420	
244+90 - 252+80	SKIP / SOLID	1,580	990	1,580	
252+80 - 335+20	DOUBLE YELLOW	16,480		16,480	
335+20 - 341+00	SOLID / SKIP	1,160	730	1,160	
341+00 - 344+70	SKIP	740	100	740	
344+70 - 347+84	SKIP / SOLID	628	390	628	
162+00 - 347+84					3.52
SUB TOTALS		37,168	3,138	31,580	3.52
PROJECT TOTAL		37,168		37,168	3.52

** Use a spotting sight distance of 0.21 miles.

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CONSTRUCTION STAKING

	650.6000 PIPE CULVERTS	650.8000 RESURFACING REFERENCE	650.9910 SUPPLEMENTAL CONTROL (PROJECT) 9175-10-60 LS	650.9920 SLOPE STAKES	
STATION - STATION	EACH	LF	LS	LF	REMARKS
162+00 - 347+84		18584	1		STH 52 MAINLINE
213+90	1				C-32
226+44	1				C-33
289+28	1				C-35
162+00 - 177+29				1529	BG & C-30
191+36 - 200+02				866	BG & C-31
213+65 - 214+15				50	C-32
226+18 - 226+68				50	C-33
289+04 - 289+54				50	C-35
TOTALS	3	18584	1	2545	

SAWING ASPHALT

		690.0150 LF	
STATION	LOCATION	LF	REMARKS
213+65	C-32	22	
214+15	C-32	22	
226+19	C-33	22	
226+69	C-33	22	
289+03	C-35	22	
289+53	C-35	22	
TOTAL		132	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 9175-10-21

ANTIGO - LILY
KENT RD - STH 55

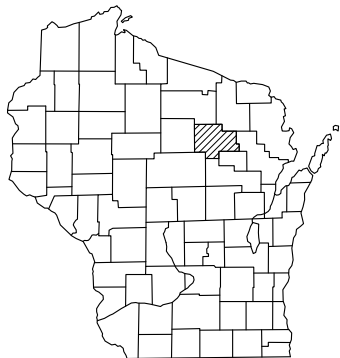
STH 52
LANGLADE COUNTY

LANGLADE COUNTY, WI
RECEIVED FOR RECORD

2016 JAN 13 AM 11:45

REGISTER OF DEEDS

Sandra Fisher



NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM COORDINATES, LANGLADE COUNTY, NAD83(1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT. TYPE 2 MONUMENTS ARE TYPICALLY 1" I.D. x 24" IRON PIPES WEIGHING 1.68 LBS/FT. UNLESS OTHERWISE NOTED.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. EXCLUDING RIGHT-OF-WAY BOUNDARIES, THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

NOT WITHSTANDING ITS DEPICTION ON A PLAT, THE BOUNDARY OF A PARCEL EXTENDS TO THE BOUNDARY OF THE ADJOINING PROPERTY PARCEL OR BODY OF WATER.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLEs EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE THE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

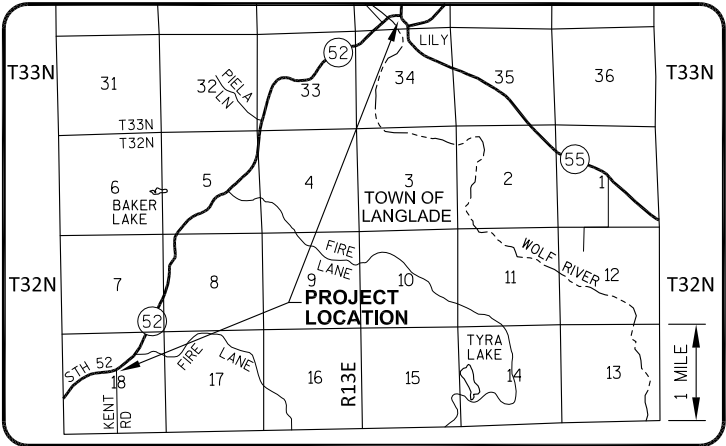
A HIGHWAY EASEMENT (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGION OFFICE IN RHINELANDER.

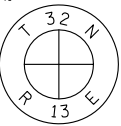
SEE DETAIL SHEETS FOR BASIS OF EXISTING HIGHWAY R/W.

COORDINATES SHOWN ON PLSS CORNERS ARE FIELD-MEASURED VALUES ON PHYSICAL MONUMENTS, NOT RECORD COUNTY VALUES.



CONVENTIONAL SYMBOLS AND ABBREVIATIONS

SECTION LINE	---	AC	ACRES
QUARTER LINE	---	ACC	ACCESS CONTROL
SIXTEENTH LINE	---	AP	ACCESS POINT
NEW REFERENCE LINE	---	BAR	ROUND IRON REBAR
NEW R/W LINE	---	BLDG	BUILDING
EXISTING R/W LINE	---	C	CURVE
PROPERTY LINE	---	CAN	CANOPY
LOT AND TIE LINES	---	CMK	CHISELED MARK
UNDERGROUND FACILITY	---	CSM	CERTIFIED SURVEY MAP
TEMP. LIMITED EASEMENT	---	DOC	DOCUMENT
PERM. LIMITED EASEMENT	---	E	ELECTRIC CABLE
R/W MONUMENT (SET)	●	EX	EXISTING
IRON PIPE OR BAR (FOUND)	○	FO	FIBER OPTIC CABLE
MAG NAIL FOUND	□	FRAC	FRACTIONAL
SIGN	○	G	GAS MAIN
POWER POLE	⊕	GAR	GARAGE
TELEPHONE POLE	⊗	H	HOUSE
UTILITY PEDESTAL	⊕	HE	HIGHWAY EASEMENT
LIGHT POLE	⊗	INL	INLET
POLE	●	IP	IRON PIPE
MANHOLE	⊗	J/I	JACKET/IMAGE
INLET	□	NT	NON-TANGENT
HYDRANT	⊗	MC	MEANDER CORNER
VALVE	⊗	MH	MANHOLE
R/W GUARD POST	△	M/L	MEANDER LINE
P. POLE (COMPENSABLE)	⊕	OH	OVERHEAD UTILITY LINE
PEDESTAL (COMPENSABLE)	⊗	OL	OUTLOT
RECORDED AS	(SLANTED)	PID	TAX PARCEL IDENTIFICATION NUMBER
SAME OWNERSHIP	---	PERM	PERMANENT
NO ACCESS (ACQUISITION)	---	PI	POINT OF INTERSECTION
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)	---	PL	PROPERTY LINE
POINT NUMBER, MAJOR	(X)	PLE	PERMANENT LIMITED EASEMENT
POINT NUMBER, MINOR	(X)	PLSS	PUBLIC LAND SURVEY SYSTEM
POINT NUMBER, EXISTING	(X)	POS	PLAT OF SURVEY
IRON PIPES / MONUMENTS	(X)	POT	POINT ON TANGENT
SECTION CORNER:		PP	POWER POLE
		QL	QUARTER LINE
		R	RADIUS
		R	RECORDED AS
		R/L	REFERENCE LINE
		ROR	RELEASE OF RIGHTS
		R/W	RIGHT-OF-WAY
		RWGP	R/W GUARD POST
		SAN	SANITARY SEWER
		SEC	SECTION
		SI	SLOPE INTERCEPT
		SL	SECTION LINE
		SS	STORM SEWER
		T	TELEPHONE CABLE
		TEMP	TEMPORARY
		TLE	TEMPORARY LIMITED EASEMENT
		TV	CABLE TELEVISION
		VAR	VARIES
		V/P	VOLUME/PAGE
		X	EAST
		Y	NORTH



434553

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9175-10-21-4.01
SHEET 2 OF 2
AMENDMENT NO:

040400_52.DWG
REVISED: 02/16/2016

COORDINATE TABLE

POINT	Y (NORTH)	X (EAST)
372	388730.484	684499.131
373	388967.784	684557.591
375	389415.170	684564.390
376	389508.610	684544.361
1004	389515.527	684576.628
1005	389420.449	684597.006
1006	389149.260	684638.942
1007	388841.612	684597.680
1010	388991.704	684460.494
1011	388998.880	684431.365
1012	389145.688	684454.413
1013	389139.750	684539.206
1014	389330.315	684533.409
1015	389331.880	684545.307
1016	389389.602	684535.928
1017	389532.072	684458.314

COORDINATE TABLE

POINT	Y (NORTH)	X (EAST)
1018	389653.197	684428.250
1019	389847.694	684492.451
1150	388724.088	684567.222
1151	389753.159	684419.598
1153	389852.352	684426.616
1168	388754.404	684402.034
1200	389079.762	684614.966
1201	389070.607	684647.874
1203	389007.199	684637.799
1204	389014.262	684600.605
1210	390025.656	684680.557
1211	389968.420	684642.994
1212	389656.111	684586.555
1213	389655.252	684559.568
1216	389959.293	684500.346
1217	390025.792	684514.659

TRANSPORTATION PROJECT PLAT NO: 9175-10-21 - 4.01

PART OF THE NW1/4-NW1/4 OF SECTION 8, T32N, R13E, IN THE TOWN OF LANGLADE, LANGLADE COUNTY, WISCONSIN

RELOCATION ORDER - STH 52, ANTIGO - LILY, KENT RD - STH 55, LANGLADE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1) THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2) THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LANGLADE COUNTY, WI
RECEIVED FOR RECORD

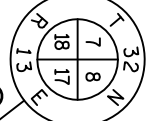
2016 JAN 13 AM 11:45

REGISTER OF DEEDS

Andrea Fisher

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9175-10-21- 4.01
SHEET 1 OF 2

EXISTING
ALUM. MONUMENT
WITH STAMPED CAP
Y 384774.26
X 683975.79

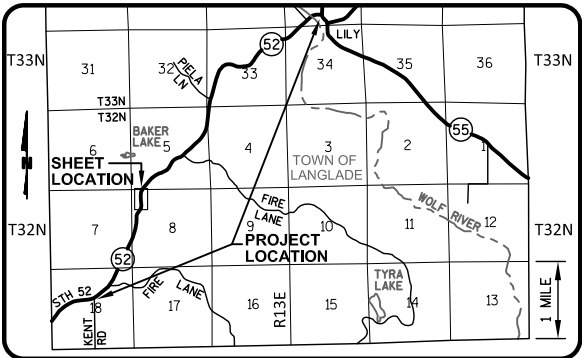


I, DAVID L. ROBERTS, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 9175-10-21-4.01, AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 01/07/2016 DAVID L. ROBERTS
PLS S-1725, FOR GREMMER & ASSOCIATES, INC.

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTH CENTRAL REGION: RHINELANDER.

DATE 1-7-2016 BRENT STELLA
BRENT STELLA
REAL ESTATE SUPERVISOR



NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM COORDINATES, LANGLADE COUNTY, NAD83(1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT. TYPE 2 MONUMENTS ARE TYPICALLY 1" I.D. x 24" IRON PIPES WEIGHING 168 LBS/FT. UNLESS OTHERWISE NOTED.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF THIS DOCUMENT FOR ADDITIONAL INFORMATION.

COURSE TABLE

FROM POINT	TO POINT	BEARING	DISTANCE
203	1217	S89°57'11"E	525.74'
1217	1173	S89°57'11"E	87.93'
1173	1210	S89°57'11"E	77.97'
1210	1211	S33°16'33"W	68.46'
1212	1213	S88°10'34"W	27.00'
1004	1005	S12°05'54"E	97.24'
1200	1201	S74°27'12"E	34.16'
1201	1203	S09°01'41"W	64.20'
1203	1204	N79°14'52"W	37.86'
1150	372	N84°38'02"W	68.39'
372	1168	N76°09'38"W	100.00'
1168	1010	N13°50'22"E	244.39'
1010	1011	N76°09'38"W	30.00'
1012	1013	S85°59'41"E	85.00'
1014	1015	N82°30'36"E	12.00'
1017	1018	N13°56'23"W	124.80'
1151	1153	N04°02'48"E	99.44'
1153	1019	S85°57'12"E	66.00'
1019	1216	N04°02'48"E	111.88'

CURVE TABLE

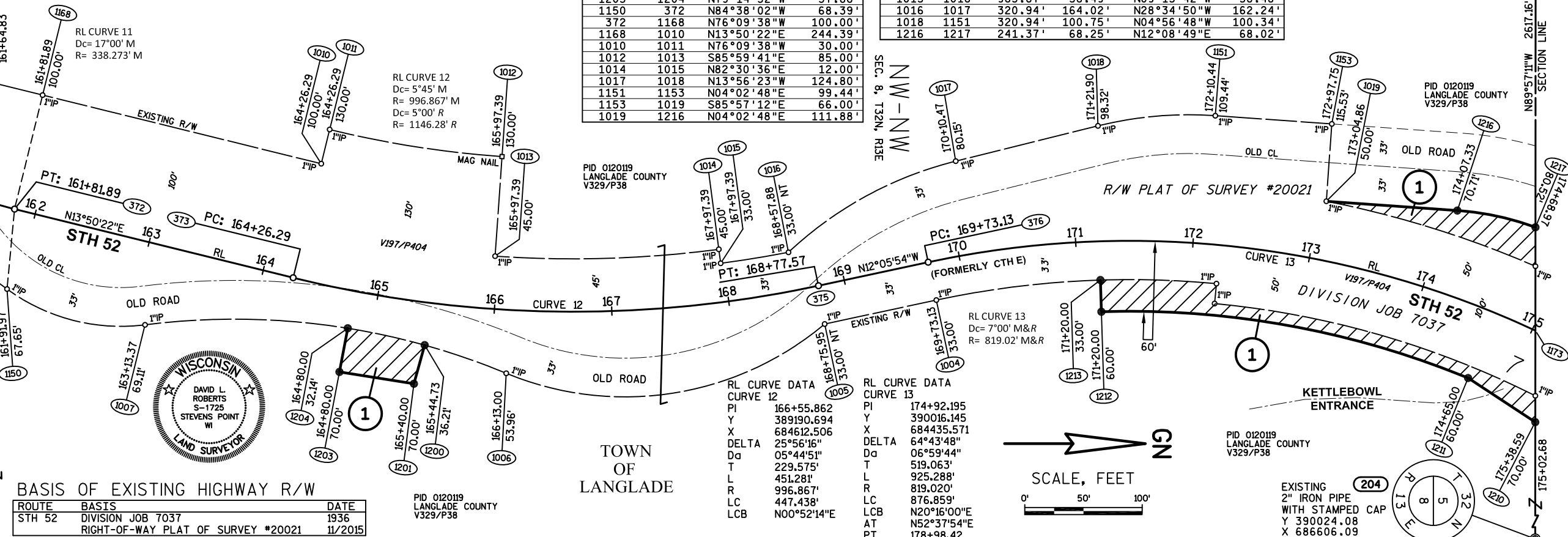
FROM POINT	TO POINT	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
1211	1212	759.02'	319.72'	S10°14'37"W	317.37'
1213	1004	786.02'	140.95'	S06°57'40"E	140.76'
1005	1006	264.01'	288.56'	S08°47'25"E	274.41'
1006	1200	604.27'	73.56'	S19°02'03"W	73.52'
1204	1007	604.27'	173.27'	S00°58'15"W	172.67'
1007	1150	163.66'	124.38'	S14°31'44"W	121.41'
1011	1012	866.87'	148.79'	N08°55'21"E	148.61'
1013	1014	951.87'	190.97'	N01°44'32"W	190.65'
1015	1016	963.87'	58.49'	N09°13'42"W	58.48'
1016	1017	320.94'	164.02'	N28°34'50"W	162.24'
1018	1151	320.94'	100.75'	N04°56'48"W	100.34'
1216	1217	241.37'	68.25'	N12°08'49"E	68.02'

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL OWNER (S) NUMBER	INTEREST REQUIRED	R/W ACRES	EXISTING ACRES	REQUIRED TOTAL ACRES	TEMP
1 LANGLADE COUNTY	FEE	0.26	3.94	4.20	0.00

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

INTEREST REQUIRED	R/W ACRES	EXISTING ACRES	REQUIRED TOTAL ACRES	TEMP
FEE	0.26	3.94	4.20	0.00



ROUTE	BASIS	DATE
STH 52	DIVISION JOB 7037	1936
	RIGHT-OF-WAY PLAT OF SURVEY #20021	11/2015

LANGLADE COUNTY, WI
RECEIVED FOR RECORD

2016 FEB 15 AM 8:41

REGISTER OF DEEDS

Shandra Fisher

TRANSFER FEE

RECORDING FEE *C. 25.00*

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9175-10-21- 4.02

TRANSPORTATION PROJECT PLAT NO: 9175-10-21 - 4.02

PART OF THE SW1/4-SW1/4 OF SECTION 5, T32N, R13E, IN THE TOWN OF LANGLADE, LANGLADE COUNTY, WISCONSIN

RELOCATION ORDER - STH 52, ANTIGO - LILY, KENT ROAD - STH 55, LANGLADE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1) THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2) THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

BASIS OF EXISTING HIGHWAY R/W

ROUTE	BASIS	DATE
STH 52	DIVISION JOB 7037	1936
	RIGHT-OF-WAY PLAT OF SURVEY #20021	11/2015

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM COORDINATES, LANGLADE COUNTY, NAD83(1999) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT. TYPE 2 MONUMENTS ARE TYPICALLY 1" I.D. x 24" IRON PIPES WEIGHING 168 LBS/FT. UNLESS OTHERWISE NOTED.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF TRANSPORTATION PROJECT PLAT NO. 9175-10-21 - 4.01, AS DOCUMENT #434553 FOR ADDITIONAL INFORMATION.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL OWNER (S)
NUMBER

1 LANGLADE COUNTY

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

INTEREST REQUIRED	R/W ACRES REQUIRED	TLE ACRES TEMP
FEE	0.08 2.37 2.45	0.00

CURVE TABLE

FROM POINT	TO POINT	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
1217	1020	241.37'	156.88'	N38°52'03"E	154.14'
1021	1022	864.02'	90.13'	N49°38'36"E	90.09'
1023	1024	1387.69'	268.39'	N47°05'28"E	267.97'
1025	1026	1399.69'	30.78'	N40°55'13"E	30.78'
1044	1045	670.28'	269.22'	S47°12'42"W	267.42'
1045	1046	819.02'	105.06'	S62°23'36"W	104.99'
1048	1049	739.02'	180.47'	S45°38'09"W	180.02'
1050	1220	769.02'	139.36'	S33°26'56"W	139.17'

COORDINATE TABLE

POINT	Y (NORTH)	X (EAST)
378	390331.184	684848.097
379	390427.967	684974.830
381	390640.134	685198.102
1020	390145.802	684611.383
1021	390308.609	684752.133
1022	390366.947	684820.785
1023	390463.731	684947.518
1024	390646.174	685143.788
1025	390638.215	685152.769
1026	390661.473	685172.930
1044	390558.615	685187.987
1045	390376.959	684991.738
1046	390328.308	684898.702
1047	390304.957	684868.126
1048	390267.604	684896.652
1049	390141.733	684767.955
1050	390160.466	684744.523
1154	390201.458	684575.909
1169	390794.898	685286.044
1170	390676.361	685287.809
1210	390025.656	684680.557
1217	390025.792	684514.659
1220	390044.348	684667.815
1221	390034.880	684685.432

RL CURVE DATA

CURVE 13
PI 174+92.195
Y 390016.145
X 684435.571
DELTA 64°43'48"
Dc 06°59'44"
T 519.063'
L 925.288'
R 819.020'
LC 876.859'
LCB N20°16'00"E
BT N12°05'54"W
PC 169+73.13

PID 0120076
LANGLADE COUNTY
V273/P49

SW-SW
SEC. 5, T32N, R13E

RL CURVE 14
Dc= 4°00' M&R
R= 1432.69' M&R

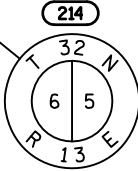
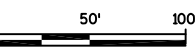
PID 0120076
LANGLADE COUNTY
V273/P49

RL CURVE DATA
CURVE 14
PI 182+12.780
Y 390521.981
X 685097.935
DELTA 12°20'29"
Dc 03°59'57"
T 154.898'
L 308.597'
R 1432.690'
LC 308.001'
LCB N46°27'40"E

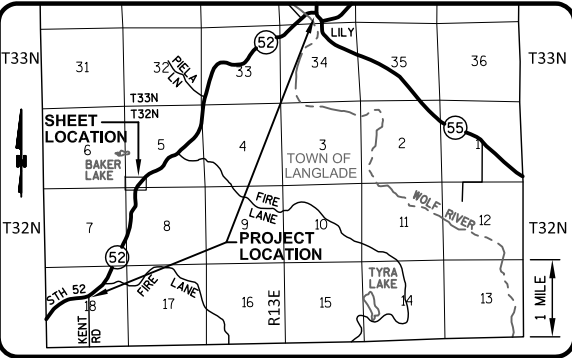
COURSE TABLE

FROM POINT	TO POINT	BEARING	DISTANCE
203	1217	S89°57'11"E	525.74'
1020	1154	N32°30'44"W	66.00'
1154	1021	N58°41'55"E	206.24'
1022	1023	N52°37'54"E	159.46'
1024	1025	S48°26'59"E	12.00'
1026	1169	N40°17'25"E	174.92'
1169	1174	S00°51'11"E	50.16'
1174	1170	S00°51'11"E	68.39'
1170	1044	S40°17'25"W	154.36'
1046	1047	S52°37'54"W	38.47'
1047	1048	S37°22'06"E	47.00'
1049	1050	N51°21'35"W	30.00'
1220	1221	S61°44'33"E	20.00'
1221	1210	S27°51'31"W	10.43'
1210	1173	N89°57'11"W	77.97'
1173	1217	N89°57'11"W	87.93'

SCALE, FEET



EXISTING
2" IRON PIPE
WITH STAMPED CAP
Y 392667.89
X 683945.47



GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac

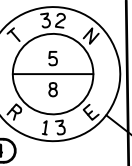
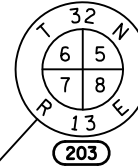
I, DAVID L. ROBERTS, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 9175-10-21-4.02, AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 02/03/2016 DAVID L. ROBERTS
PLS S-1725, FOR GREMMER & ASSOCIATES, INC.

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTH CENTRAL REGION: RHINEFELDER.

DATE 2-4-2016 BRENT L. STELLA
REAL ESTATE SUPERVISOR

EXISTING
2" IRON PIPE
WITH STAMPED CAP
Y 390026.22
X 683988.92



EXISTING
2" IRON PIPE
WITH STAMPED CAP
Y 390024.08
X 686606.09

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM COORDINATES, LANGLADE COUNTY, NAD83(1983) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT. TYPE 2 MONUMENTS ARE TYPICALLY 1" I.D. x 24" IRON PIPES WEIGHING 168 LBS/FT. UNLESS OTHERWISE NOTED.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF TRANSPORTATION PROJECT PLAT NO. 9175-10-21 - 4.01, AS DOCUMENT #434553 FOR ADDITIONAL INFORMATION.

TRANSPORTATION PROJECT PLAT NO: 9175-10-21 - 4.03

PART OF THE NE1/4-SW1/4 AND SE1/4-SW1/4 OF SECTION 5, T32N, R13E, IN THE TOWN OF LANGLADE, LANGLADE COUNTY, WISCONSIN

RELOCATION ORDER - STH 52, ANTIGO - LILY, KENT ROAD - STH 55, LANGLADE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

- 1) THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
- 2) THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LANGLADE COUNTY, WI
RECEIVED FOR RECORD

2016 FEB 15 AM 8:41

REGISTER OF DEEDS

TRANSFER FEE

RECORDING FEE *C. 25.00*

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9175-10-21- 4.03

NE-SW
SEC. 5, T32N, R13E

TOWN
OF
LANGLADE

COURSE TABLE

FROM POINT	TO POINT	BEARING	DISTANCE
204	1179	N00°45'50"W	1318.59'
1179	1056	N89°54'06"W	257.90'
1056	1035	N89°54'06"W	39.48'
1037	1038	N63°47'42"W	66.00'
1038	1039	S67°01'57"W	145.42'
1040	1175	N12°14'04"W	50.27'
1175	1028	N12°14'04"W	36.57'
1028	1029	N37°21'53"W	7.00'
1030	1031	S32°21'53"E	7.00'
1032	1230	N67°01'57"E	205.80'
1230	1231	N22°58'03"W	10.00'
1231	1232	N67°01'57"E	20.00'
1232	1233	S22°58'03"E	10.00'
1233	1033	N67°01'57"E	115.90'
1034	1057	N89°54'06"W	48.56'
1240	1241	N41°40'48"W	4.00'
1241	1242	N47°00'04"E	30.05'
1242	1243	S44°19'04"E	4.00'
1058	1157	N00°20'37"E	90.04'
1157	1059	S89°39'23"E	66.00'
1059	387	S51°30'54"E	60.36'
387	1078	S57°44'11"E	60.00'

RL CURVE DATA
CURVE 16
PI 196+68.316
Y 391328.285
X 686276.199
DELTA 34°46'08"
Dc 07°59'37"
T 224.412'
L 434.965'
R 716.779'
LC 428.322"
LCB N49°38'53"E

PID 0120074
GARTH BOWEN II
2001 LIVING TRUST
DOC. 401394

MANAGED FOREST LAW TRANSFER ORDERS
DOC. 363995, 411953

PID 0120077
LANGLADE COUNTY
V329/P38



COORDINATE TABLE

POINT	Y (NORTH)	X (EAST)
384	391107.380	685754.957
385	391240.718	686069.576
387	391518.048	686395.993
1028	390989.248	685486.556
1029	390994.812	685482.307
1030	391053.970	685567.221
1031	391048.058	685570.968
1032	391137.764	685742.080
1033	391271.101	686056.700
1034	391343.250	686185.902
1035	391343.069	686291.126
1036	391214.339	686091.729
1037	391093.548	685965.626
1038	391122.692	685906.409
1039	391065.948	685772.516

COORDINATE TABLE

POINT	Y (NORTH)	X (EAST)
1040	390904.383	685504.957
1056	391343.001	686330.611
1057	391343.333	686137.344
1058	391465.964	686282.210
1059	391555.608	686348.749
1078	391486.019	686446.729
1157	391556.003	686282.750
1230	391218.071	685931.570
1231	391227.278	685927.668
1232	391235.082	685946.082
1233	391225.875	685949.984
1240	391410.146	686226.622
1241	391413.134	686223.962
1242	391433.628	686245.940
1243	391430.766	686248.734

SCHEDULE OF LANDS & INTERESTS REQUIRED

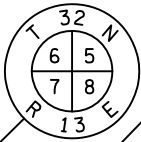
PARCEL OWNER (S) NUMBER	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES TEMP
1 LANGLADE COUNTY	FEE	0.005	1.53	1.54	0.00
4 GARTH BOWEN II 2001 LIVING TRUST	FEE	0.003	0.73	0.73	0.00

CURVE TABLE

FROM POINT	TO POINT	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
1035	1036	749.78'	238.34'	S57°09'14"W	237.34'
1036	1037	254.94'	178.23'	S46°13'58"W	174.62'
1039	1040	1101.28'	313.61'	S58°52'28"W	312.56'
1029	1030	1186.28'	103.52'	N55°08'07"E	103.49'
1031	1032	1179.28'	193.42'	N62°20'02"E	193.20'
1033	1034	683.78'	148.27'	N60°49'14"E	147.98'
1057	1240	656.78'	111.64'	N53°11'23"E	111.51'
1243	1058	656.78'	48.58'	N43°33'47"E	48.57'
1078	1056	776.78'	184.66'	S39°04'26"W	184.22'

MINERAL RESERVATION
V261/P432

EXISTING
2" IRON PIPE
WITH STAMPED CAP
Y 390026.22
X 683988.92



SE-SW
SEC. 5, T32N, R13E

RL CURVE 15
Dc= 5°00' M&R
R= 1146.28' M&R

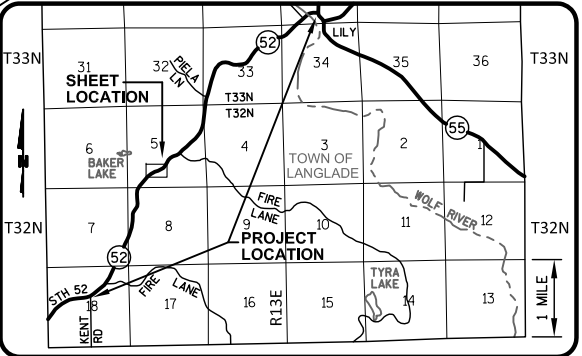
PID 0120077
LANGLADE COUNTY
V329/P38

SCALE, FEET
0' 50' 100'

BASIS OF EXISTING HIGHWAY R/W

ROUTE	BASIS	DATE
STH 52	DIVISION JOB 7037	1936
	RIGHT-OF-WAY PLAT OF SURVEY #20021	11/2015

SECTION LINE
S89°57'11"E 2617.16'



GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac

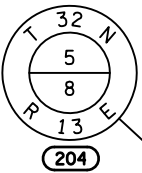
I, DAVID L. ROBERTS, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 9175-10-21-4.03, AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

DATE 02/03/2016 DAVID L. ROBERTS
PLS S-1725, FOR GREMMER & ASSOCIATES, INC.

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTH CENTRAL REGION: RHINELANDER.

DATE 2-4-2016 BRENT STELLA
REAL ESTATE SUPERVISOR

EXISTING
2" IRON PIPE
WITH STAMPED CAP
Y 390024.08
X 686606.09



QUARTER LINE
N00°45'50"W 2637.19'

REVISED: 02/16/2016

040403.52.DWG

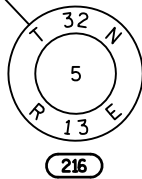
SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W NEW	ACRES REQUIRED EXISTING	TOTAL	TLE ACRES TEMP
5	GARTH BOWEN II 2001 LIVING TRUST	FEE	0.01	1.53	1.54	0.00

BASIS OF EXISTING HIGHWAY R/W

ROUTE	BASIS	DATE
STH 52	DIVISION JOB 7037	1936
	RIGHT-OF-WAY PLAT OF SURVEY #20021	11/2015
FIRE LANE	ASSUMED 49.5' PER MINIMUM TOWN ROAD STANDARDS AND OCCUPATION	---

EXISTING
2" IRON PIPE
WITH STAMPED CAP
Y 392661.04
X 686570.93



NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM COORDINATES, LANGLADE COUNTY, NAD83(1990) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT. TYPE 2 MONUMENTS ARE TYPICALLY 1" I.D. x 24" IRON PIPES WEIGHING 1.68 LBS/FT. UNLESS OTHERWISE NOTED.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF TRANSPORTATION PROJECT PLAT NO. 9175-10-21-4.01, AS DOCUMENT #434553 FOR ADDITIONAL INFORMATION.

COURSE TABLE

FROM POINT	TO POINT	BEARING	DISTANCE
205	1069	N89°48'16"W	1429.46'
1069	1070	S45°14'38"W	353.44'
1071	1072	S51°27'19"W	49.55'
1073	1074	S66°11'15"W	269.79'
1074	390	N23°48'45"W	33.00'
390	1065	N23°48'45"W	33.00'
1065	1066	N66°11'15"E	269.79'
1067	1250	N45°14'38"E	35.05'
1250	1251	N44°45'22"E	9.00'
1251	1252	N45°14'38"E	35.00'
1252	1253	S44°45'22"E	9.00'
1253	1068	N45°14'38"E	217.28'
1068	1176	S89°48'16"E	46.71'
1176	1069	S89°48'16"E	46.71'

RL CURVE DATA
CURVE 17
PI 204+48.384
Y 391999.630
X 686700.008
DELTA 33°55'27"
Dc 07°59'37"
T 218.622'
L 424.395'
R 716.779'
LC 418.223'
LCB N49°13'32"E
BT N32°15'49"E
PC 202+29.76

RL CURVE 17
Dc= 8°00' M
R= 716.779' M
Dc= 10°00' R
R= 573.69' R

RL CURVE DATA
CURVE 18
PI 211+35.812
Y 392282.362
X 687340.673
DELTA 20°56'38"
Dc 04°59'54"
T 211.869'
L 419.009'
R 1146.280'
LC 416.681'
LCB N55°42'57"E

MANAGED FOREST LAND DESIGNATION
DOC. 301139
MANAGED FOREST LAW TRANSFER ORDERS
DOC. 363995, 411953

RL CURVE 18
Dc= 5°00' M&R
R= 1146.28' M&R

PID 0120079
GARTH BOWEN II
2001 LIVING TRUST
DOC. 401395

PID 0120078
JEFFREY B. & DEBORAH M.
MCMULLEN
DOC. 381241

NW-SE
SEC. 5, T32N, R13E

COORDINATE TABLE

POINT	NORTH	EAST
390	392087.897	686900.020
391	392196.821	687146.839
393	392431.537	687491.123
394	392699.400	687761.275
460	392349.930	687399.490
1065	392118.088	686886.696
1066	392227.012	687133.516
1067	392454.971	687467.888
1068	392657.280	687671.926
1069	392656.961	687765.342
1070	392408.104	687514.358
1071	392338.823	687438.092
1072	392307.946	687399.336
1073	392166.630	687160.163
1074	392057.706	686913.343
1250	392479.648	687492.776
1251	392486.039	687486.439
1252	392510.682	687511.293
1253	392504.291	687517.630

CURVE TABLE

FROM POINT	TO POINT	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
1070	1071	1179.28'	103.07'	S47°44'51"W	103.03'
1072	1073	1179.28'	278.45'	S59°25'24"W	277.80'
1066	1067	1113.28'	406.95'	N55°42'57"E	404.68'

TRANSPORTATION PROJECT PLAT NO: 9175-10-21 - 4.04

PART OF THE NW1/4-SE1/4 OF SECTION 5, T32N, R13E, IN THE TOWN OF LANGLADE, LANGLADE COUNTY, WISCONSIN

RELOCATION ORDER - STH 52, ANTIGO - LILY, KENT ROAD - STH 55, LANGLADE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1) THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2) THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

LANGLADE COUNTY, WI
RECEIVED FOR RECORD

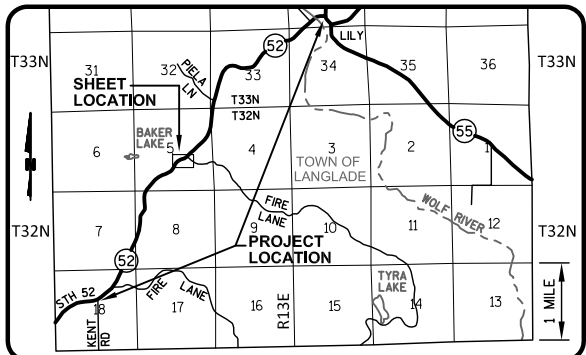
2016 FEB 15 AM 8:41

REGISTER OF DEEDS

TRANSFER FEE

RECORDING FEE *Co. 25.00*

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9175-10-21- 4.04



GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac

I, DAVID L. ROBERTS, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 9175-10-21-4.04, AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

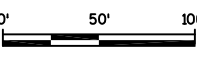
DATE 02/03/2016 DAVID L. ROBERTS
PLS S-1725, FOR GREMMER & ASSOCIATES, INC.

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTH CENTRAL REGION: RHINELANDER.

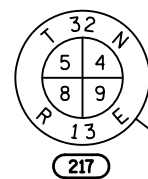
DATE 2-4-2016 BRENT L. STELLA
REAL ESTATE SUPERVISOR



SCALE, FEET



EXISTING
1" IRON PIPE
WITH STAMPED CAP
Y 390021.97
X 689222.78



REVISED: 02/16/2016

040404_52.DWG

APPRAISAL PLAT DATE: 01/07/2016

LANGLADE COUNTY, WI
RECEIVED FOR RECORD

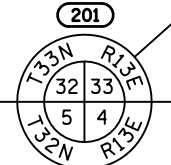
2016 FEB 15 AM 8:42

REGISTER OF DEEDS

TRANSFER FEE

RECORDING FEE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9175-10-21- 4.05



EXISTING
2" IRON PIPE
WITH BRASS CAP
Y 395512.71
X 689163.82

TRANSPORTATION PROJECT PLAT NO: 9175-10-21 - 4.05

PART OF LOT 1 OF CSM 13/17, AND BEING PART OF THE SE1/4-NE1/4 OF SECTION 5, T32N, R13E, IN THE TOWN OF LANGLADE, LANGLADE COUNTY, WISCONSIN

RELOCATION ORDER - STH 52, ANTIGO - LILY, KENT ROAD - STH 55, LANGLADE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1) THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2) THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATE SYSTEM COORDINATES, LANGLADE COUNTY, NAD83(1998) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 MONUMENTS AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT. TYPE 2 MONUMENTS ARE TYPICALLY 1" I.D. x 24" IRON PIPES WEIGHING 168 LBS/FT. UNLESS OTHERWISE NOTED.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF TRANSPORTATION PROJECT PLAT NO. 9175-10-21 - 4.01, AS DOCUMENT #434553 FOR ADDITIONAL INFORMATION.

TOWN OF LANGLADE

COURSE TABLE

FROM POINT	TO POINT	BEARING	DISTANCE
205	1180	N89°48'16"W	1311.94'
1180	1172	N00°41'52"W	111.16'
1172	1177	N00°41'52"W	43.77'
1177	1171	N00°41'52"W	43.40'
1086	1087	N49°30'43"E	618.97'
1087	1260	N49°23'59"E	55.00'
1260	1261	N40°31'25"W	3.31'
1261	1262	N49°28'35"E	69.00'
1262	1263	S40°31'25"E	3.22'
1263	1088	N49°23'59"E	161.21'
1088	397	S42°10'01"E	33.01'
397	1093	S39°00'26"E	33.01'
1093	1161	S49°23'59"W	285.26'
1161	1094	S49°30'43"W	618.99'

CURVE TABLE

FROM POINT	TO POINT	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
1171	1086	2897.93'	19.84'	N49°16'49"E	19.84'
1094	1172	2831.93'	75.68'	S48°42'39"W	75.68'

BASIS OF EXISTING HIGHWAY R/W

ROUTE	BASIS	DATE
STH 52	DIVISION JOB 7037	1936
	RIGHT-OF-WAY PLAT OF SURVEY #20021	11/2015

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED	TLE ACRES
6	JEFFREY B. & DEBORAH M. MCMULLEN	FEE	0.005	0.47
			0.47	0.48
			0.48	0.00

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

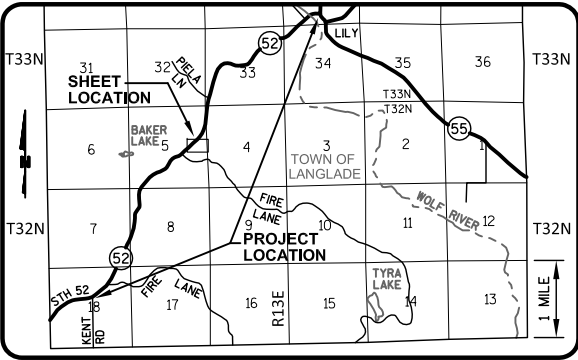
GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac

I, DAVID L. ROBERTS, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 9175-10-21-4.05, AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

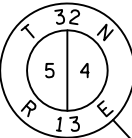
DATE 02/03/2016 DAVID L. ROBERTS
PLS S-1725, FOR GREMMER & ASSOCIATES, INC.

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTH CENTRAL REGION: RHINELANDER.

DATE 2-8-2016 BRENT L. STALLA
BRENT STALLA
REAL ESTATE SUPERVISOR



EXISTING
2" IRON PIPE
WITH STAMPED CAP
Y 392652.08
X 689194.80



COORDINATE TABLE

POINT	NORTH	EAST
396	392842.7340	687916.9319
397	393430.8457	688604.9508
1086	392867.8186	687895.4898
1087	393269.7090	688366.2410
1088	393455.3150	688582.7890
1093	393405.1935	688625.7289
1094	392817.6494	687938.3740
1161	393219.5553	688409.1433
1171	392854.8725	687880.4490
1172	392767.7128	687881.5105
1260	393305.4990	688407.9975
1261	393308.0140	688405.8477
1262	393352.8475	688458.2974
1263	393350.4028	688460.3871

CL CURVE 20
Dc= 7°30' M
R= 764.489' M
Dc= 8°00' R
R= 716.78' R JOB 7037
R= 770.00' R CSM 13/17

PID 0120069.002
LEONARD & MARSHA
SHACKLEFORD
DOC. 370728

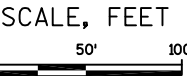
PID 0120069.005
JEFFREY B. & DEBORAH M.
MCMULLEN
DOC. 381241

PID 0120069.001
LEONARD & MARSHA
SHACKLEFORD
DOC. 359726

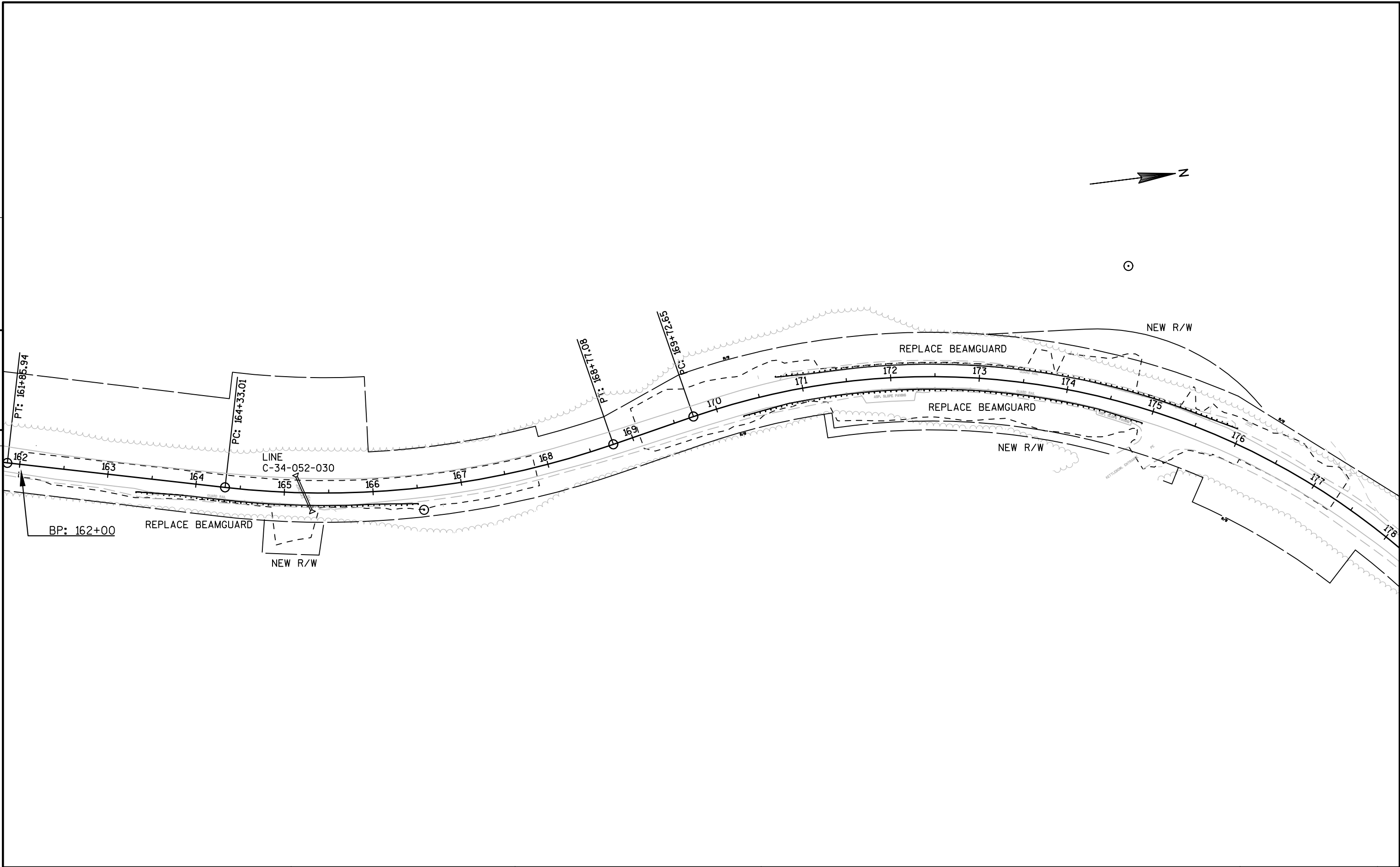
RL CURVE DATA
CURVE 19
PI 218+29.261
Y 392773.943
X 687836.455
DELTA 04°13'58"
Dc 02°00'00"
T 105.871'
L 211.646'
R 2864.930'
LC 211.598'
LCB N47°21'37"E
BT N45°14'38"E
PC 217+23.39

PID 0120069.004
JEFFREY B. & DEBORAH M.
MCMULLEN
DOC. 381241

RL CURVE 19
Dc= 2°00' M&R
R= 2864.93' M&R

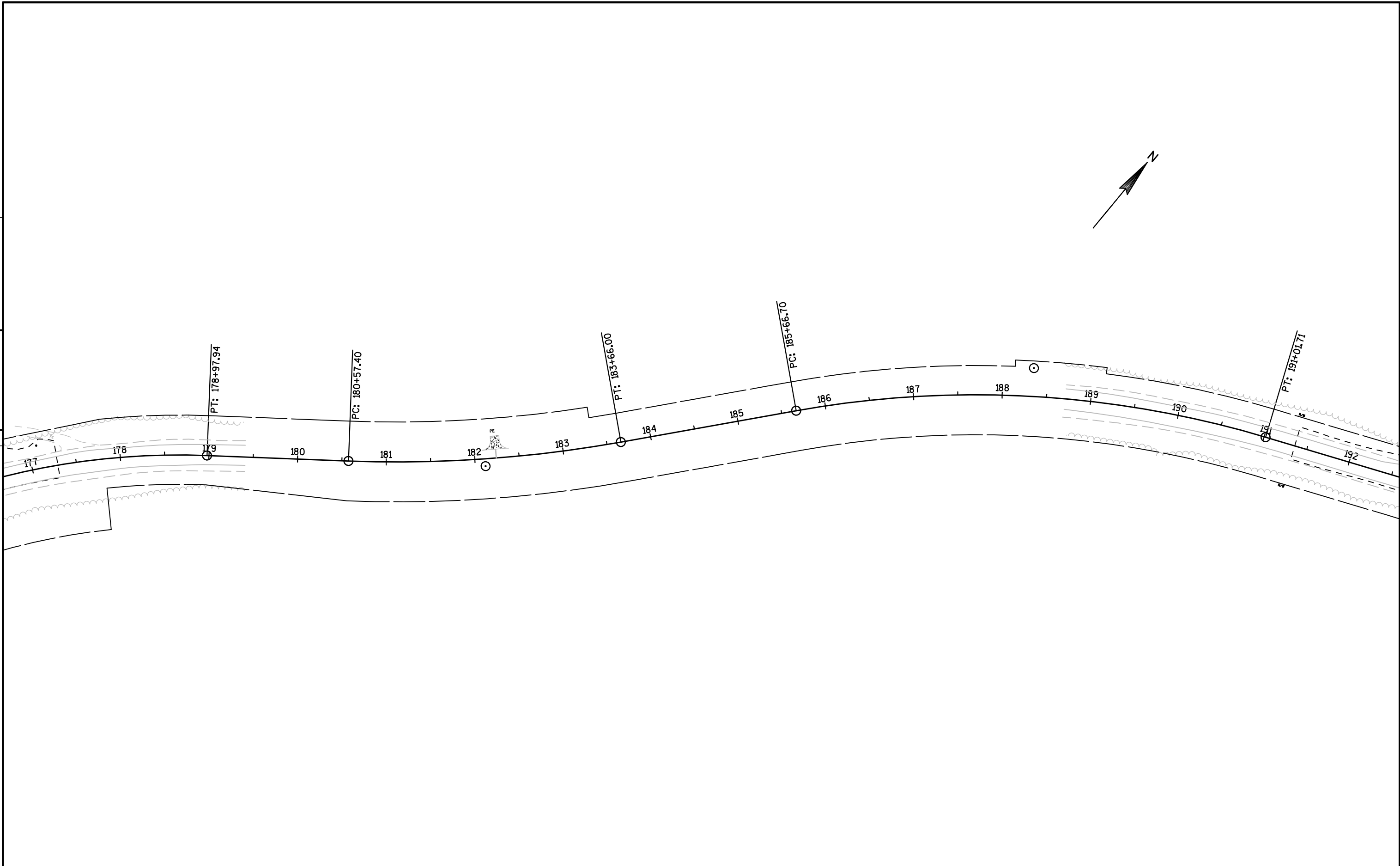


S89°48'16"E 2623.88'
QUARTER LINE



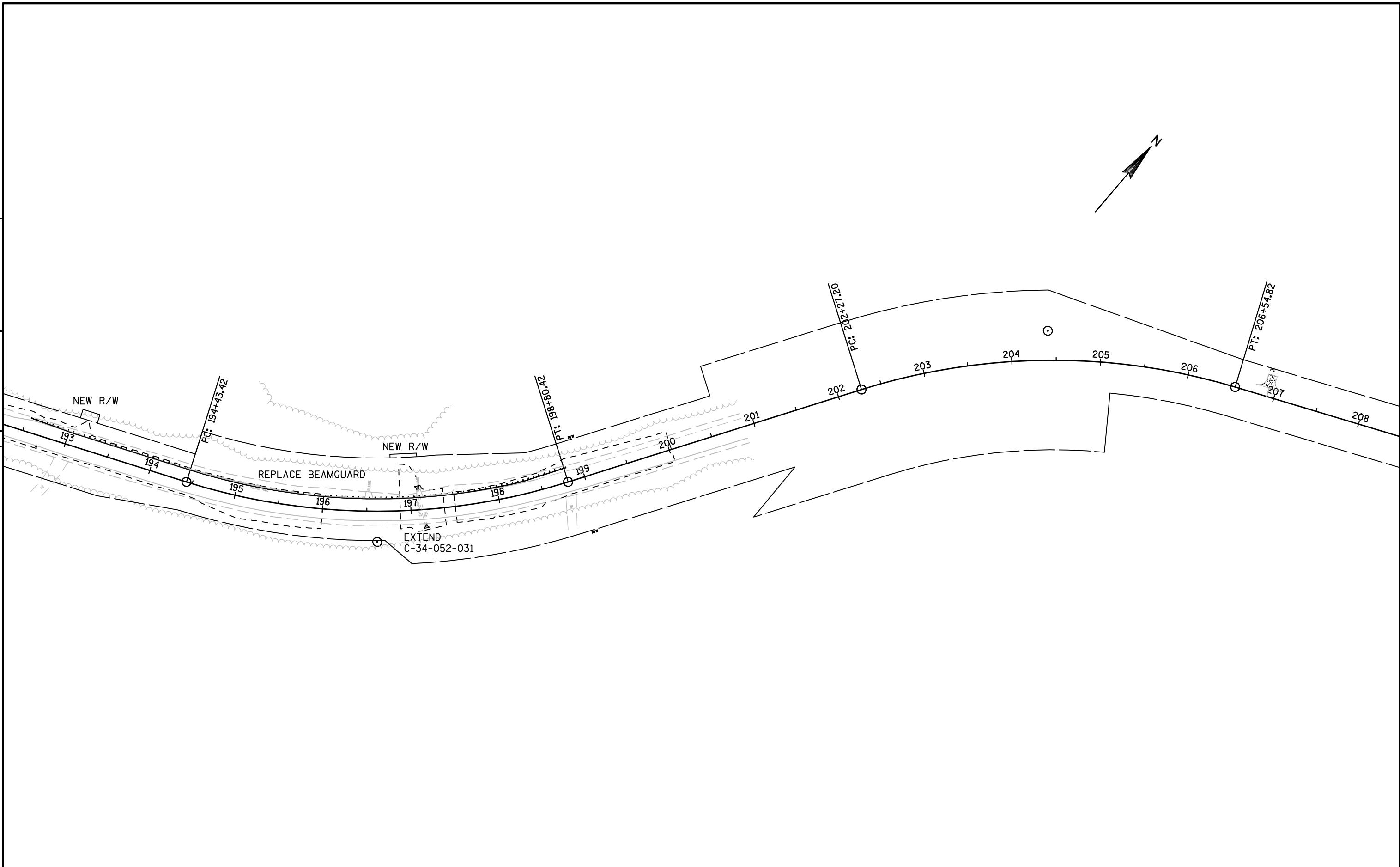
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 163+00 - 177+00	SHEET	E
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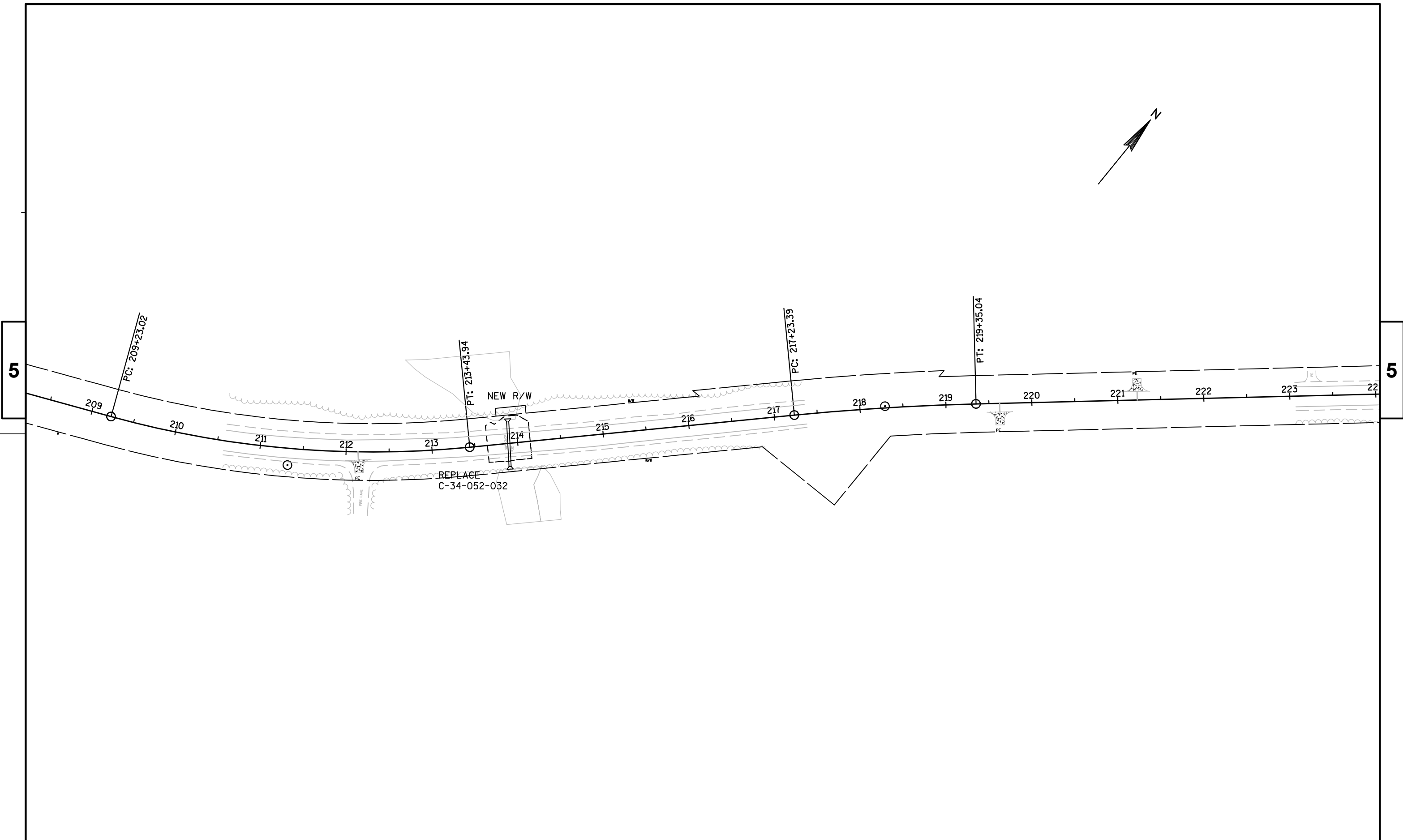


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PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 177+00 - 192+00	SHEET	E
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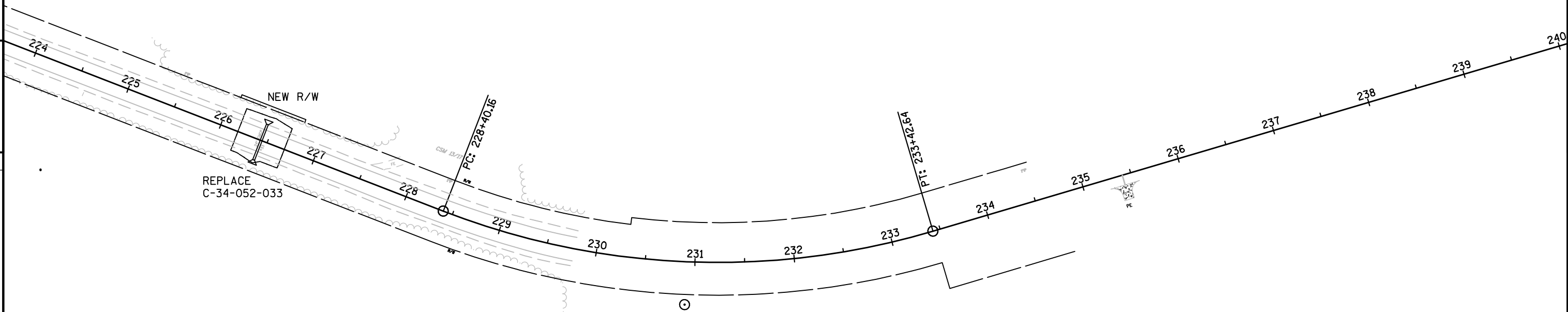


PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 192+00 - 208+00	SHEET	E
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PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 208+00 - 224+00	SHEET	E
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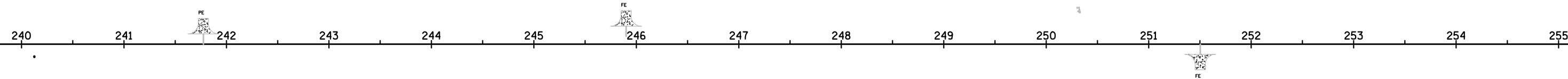


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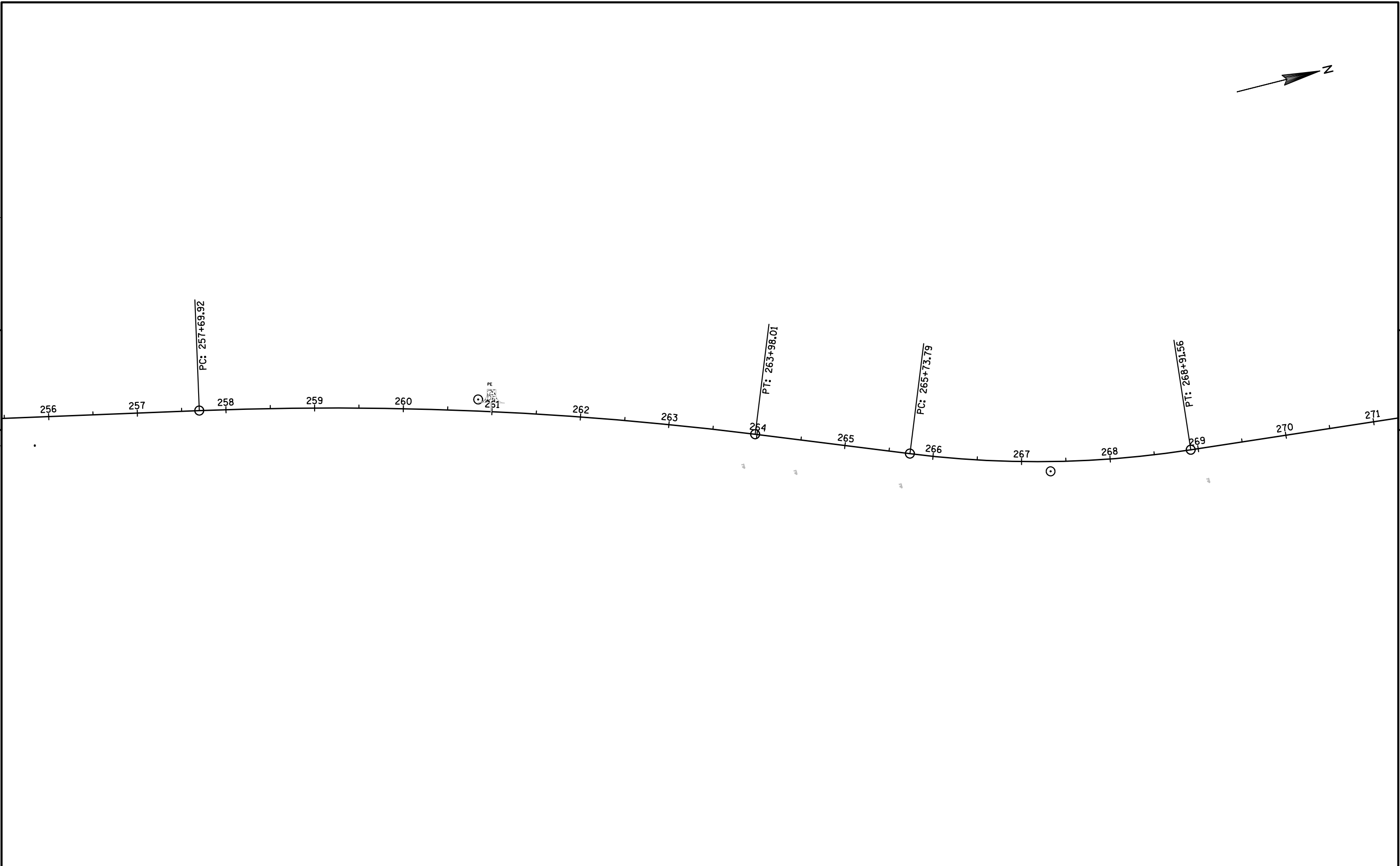
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 224+00 - 240+00	SHEET	E
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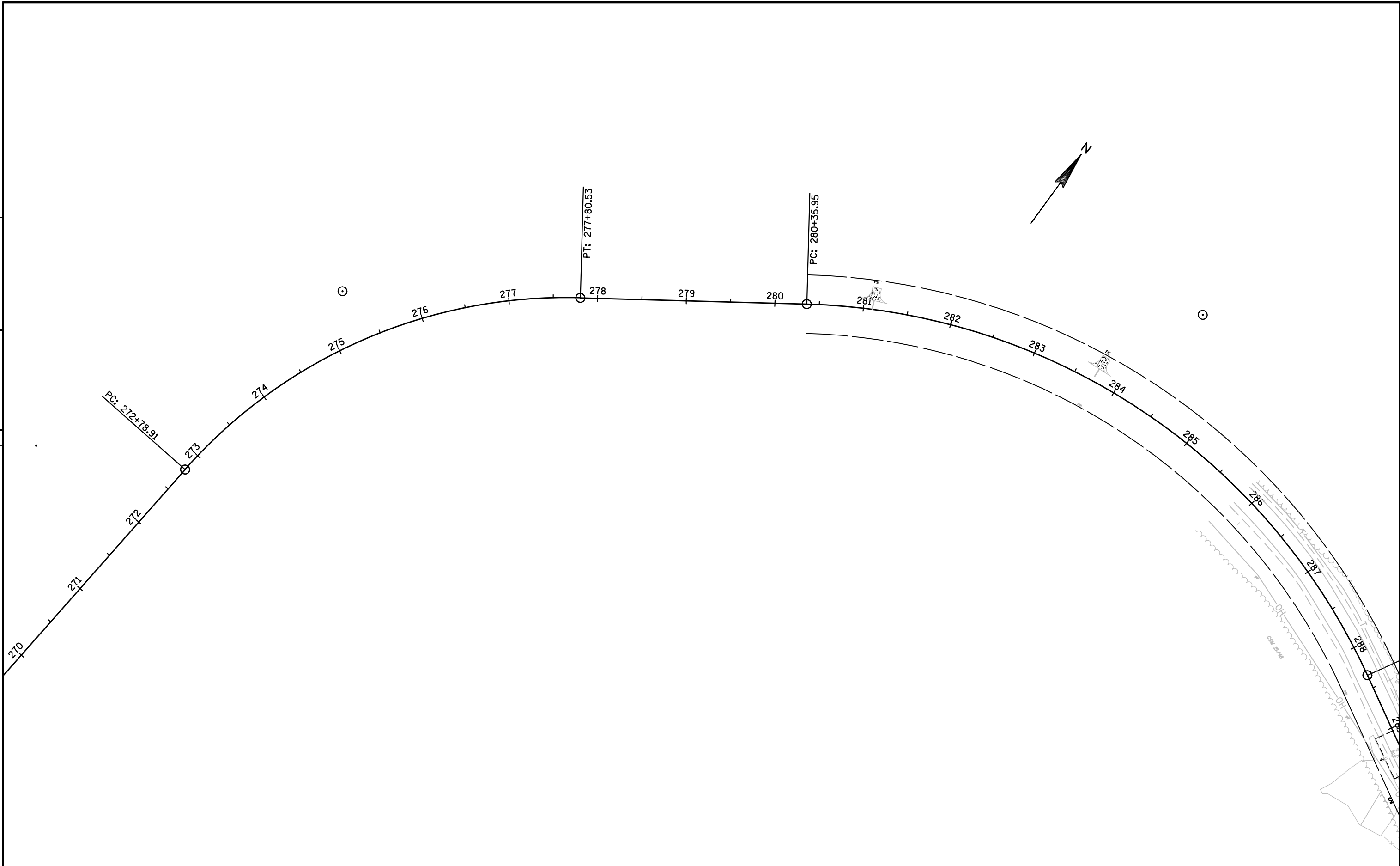


PROJECT NO:9175-10-60	HWY:STH 52	COUNTY:LANGLADE	PLAN STA 240+00 - 255+00	SHEET	E
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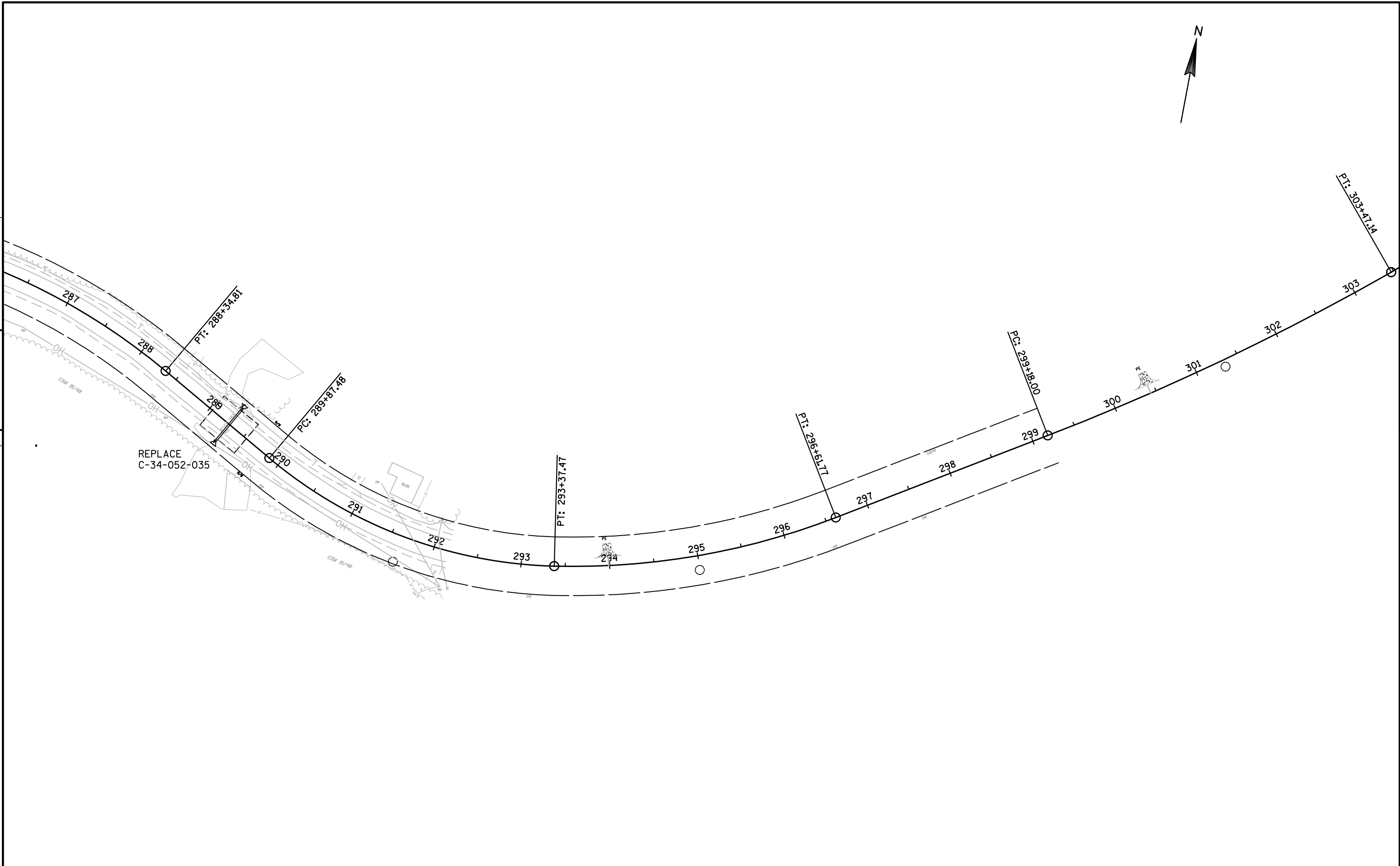
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 255+00 - 271+00	SHEET	E
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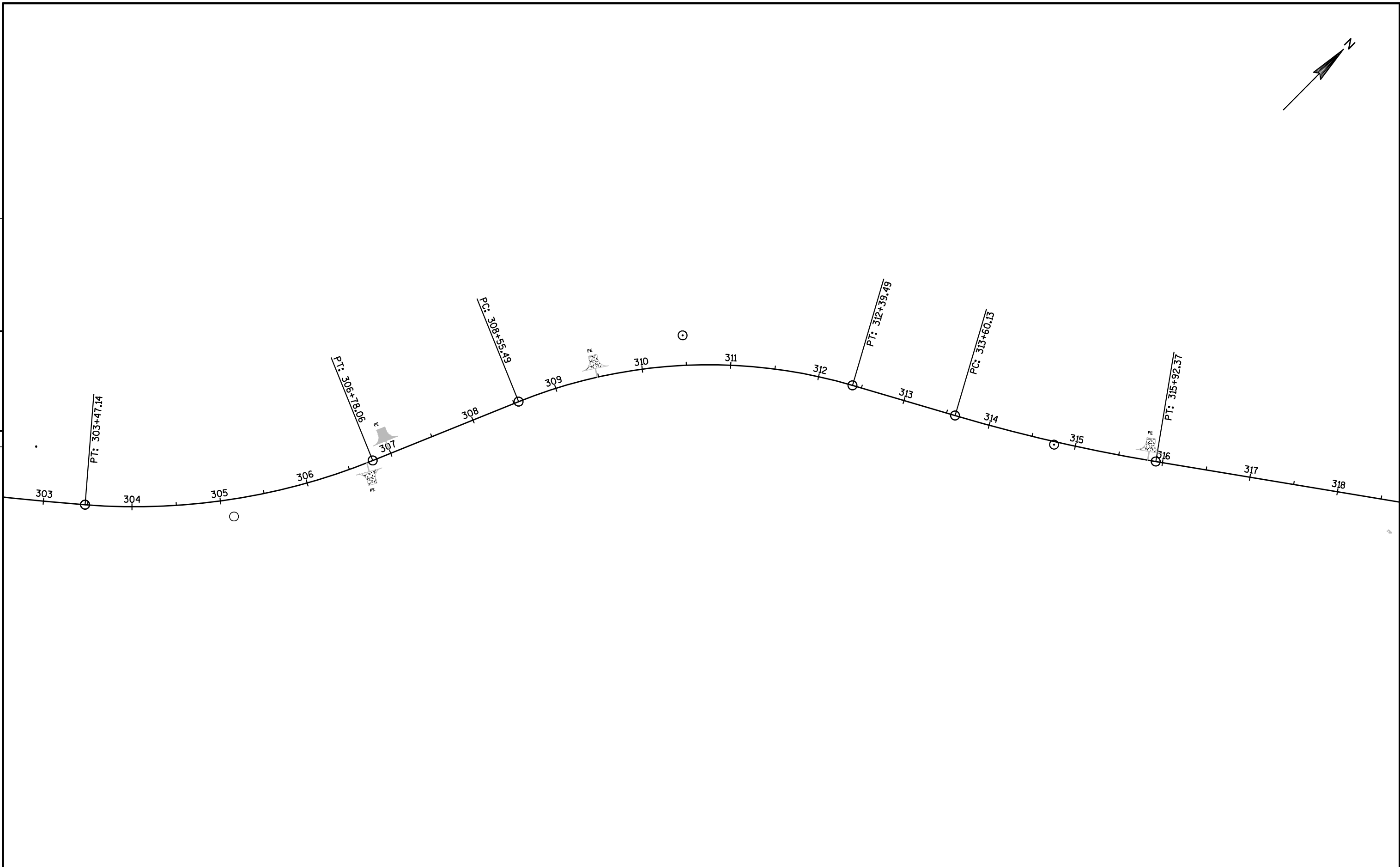
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PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 271+00 - 288+00	SHEET	E
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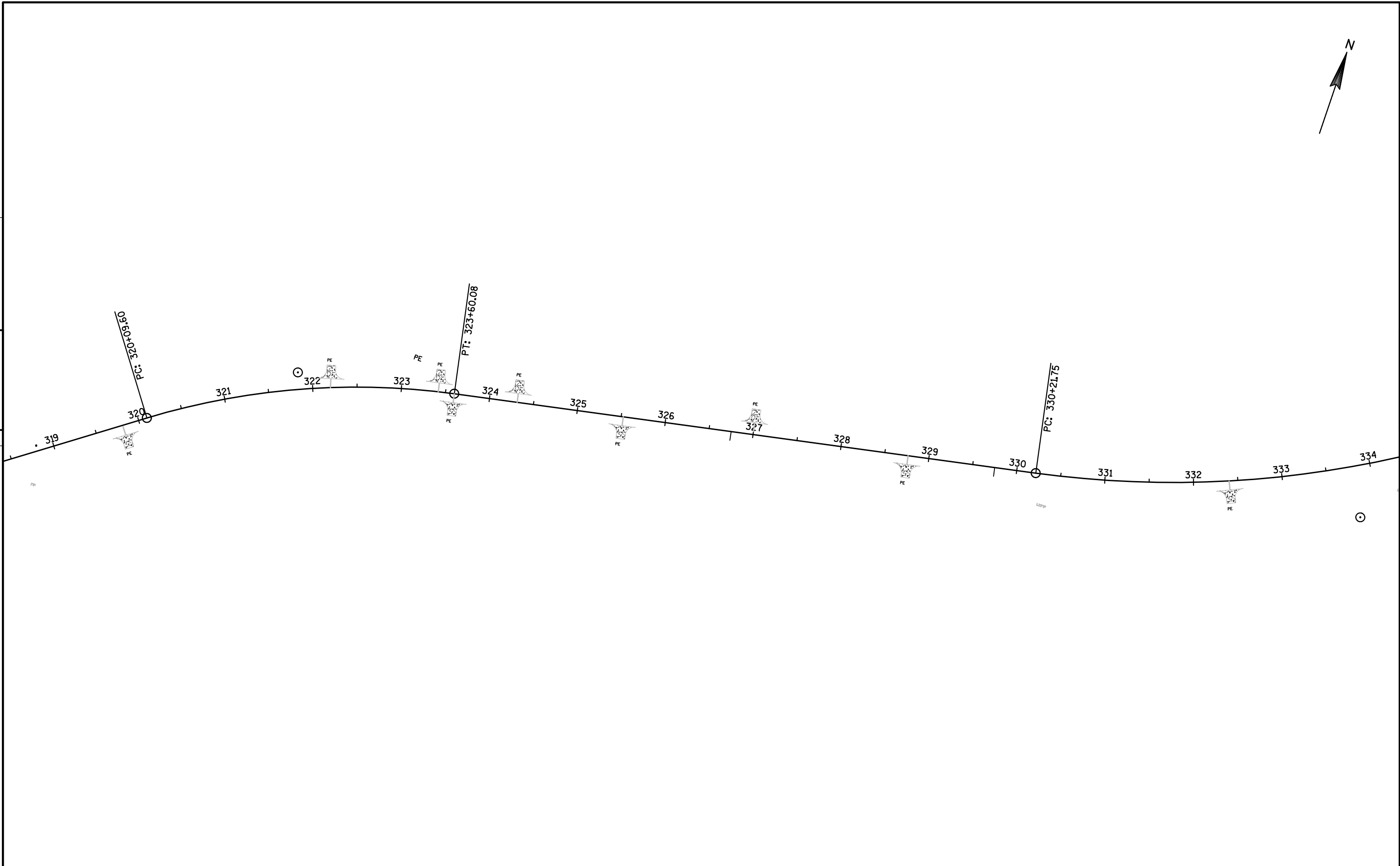
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 288+00 - 303+00	SHEET	E
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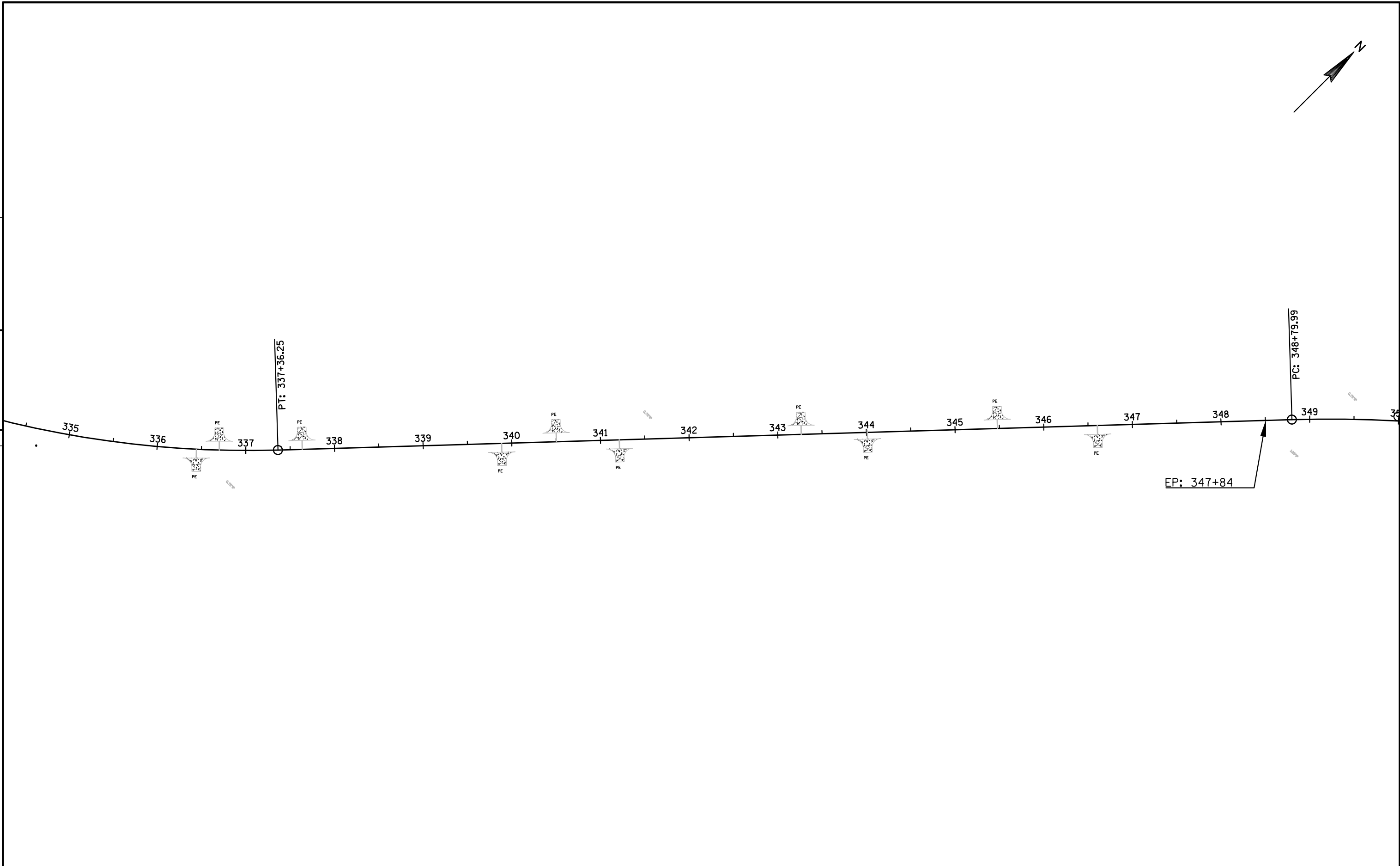


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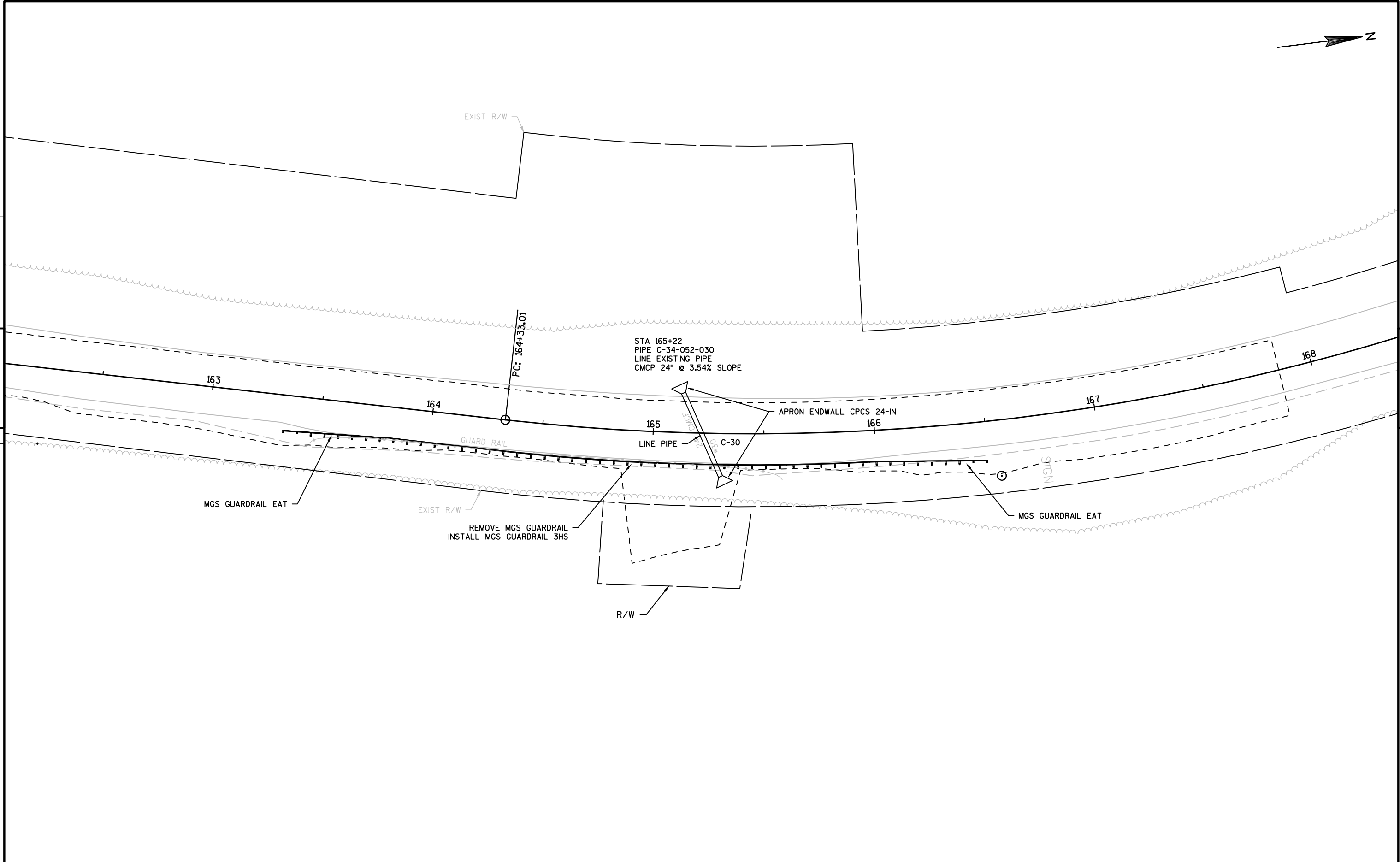
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 303+00 - 318+00	SHEET	E
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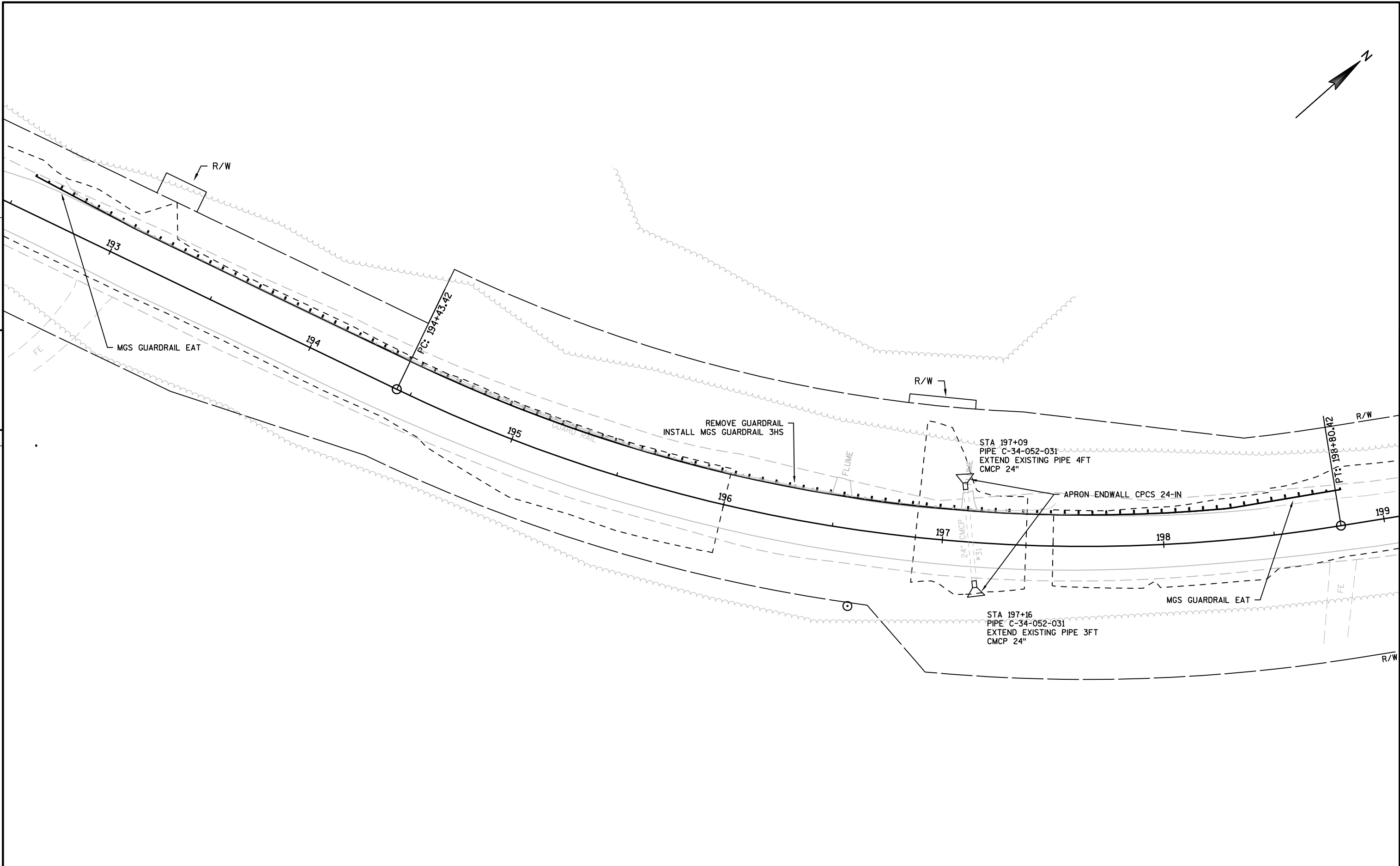


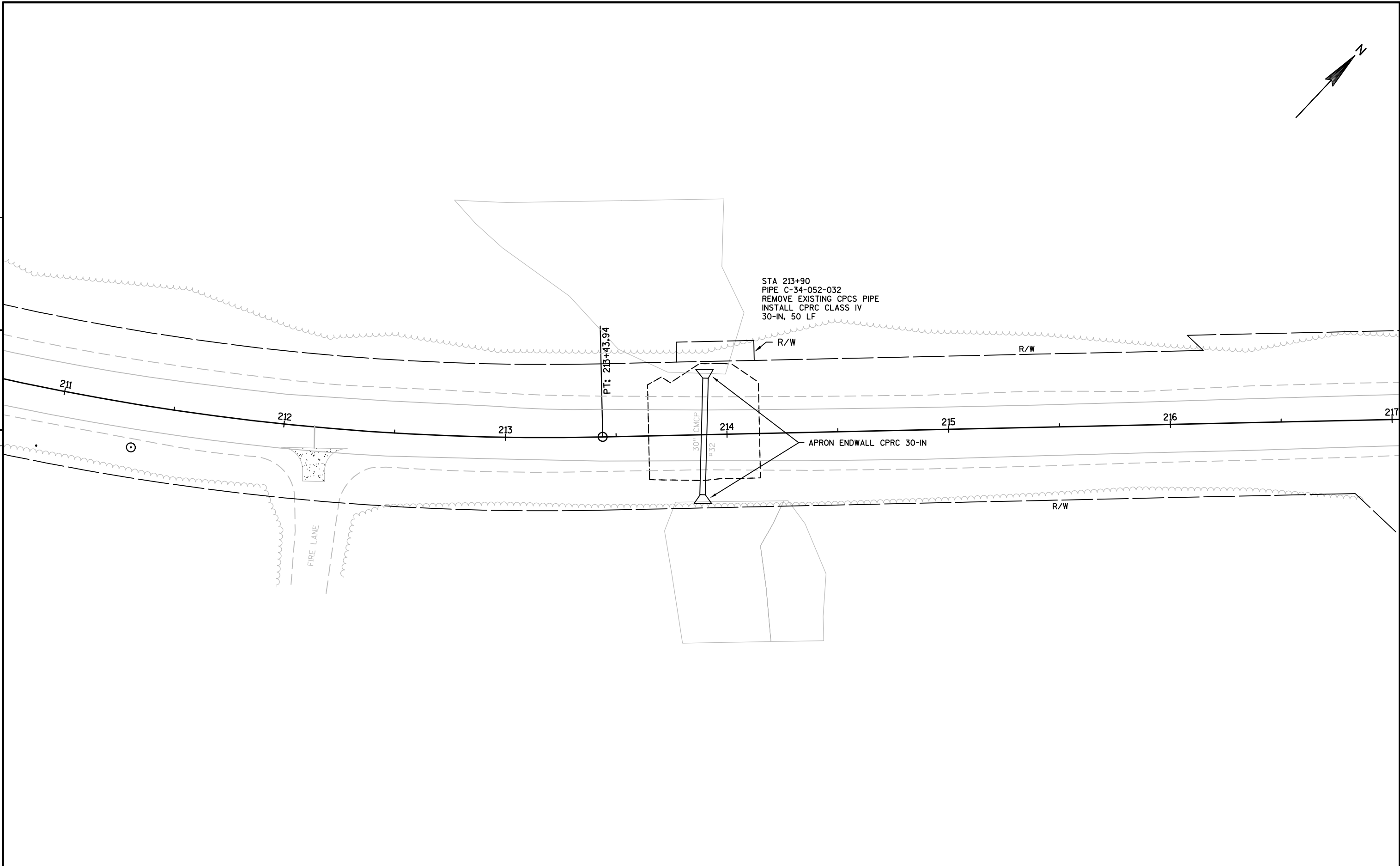
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 318+00 - 334+00	SHEET	E
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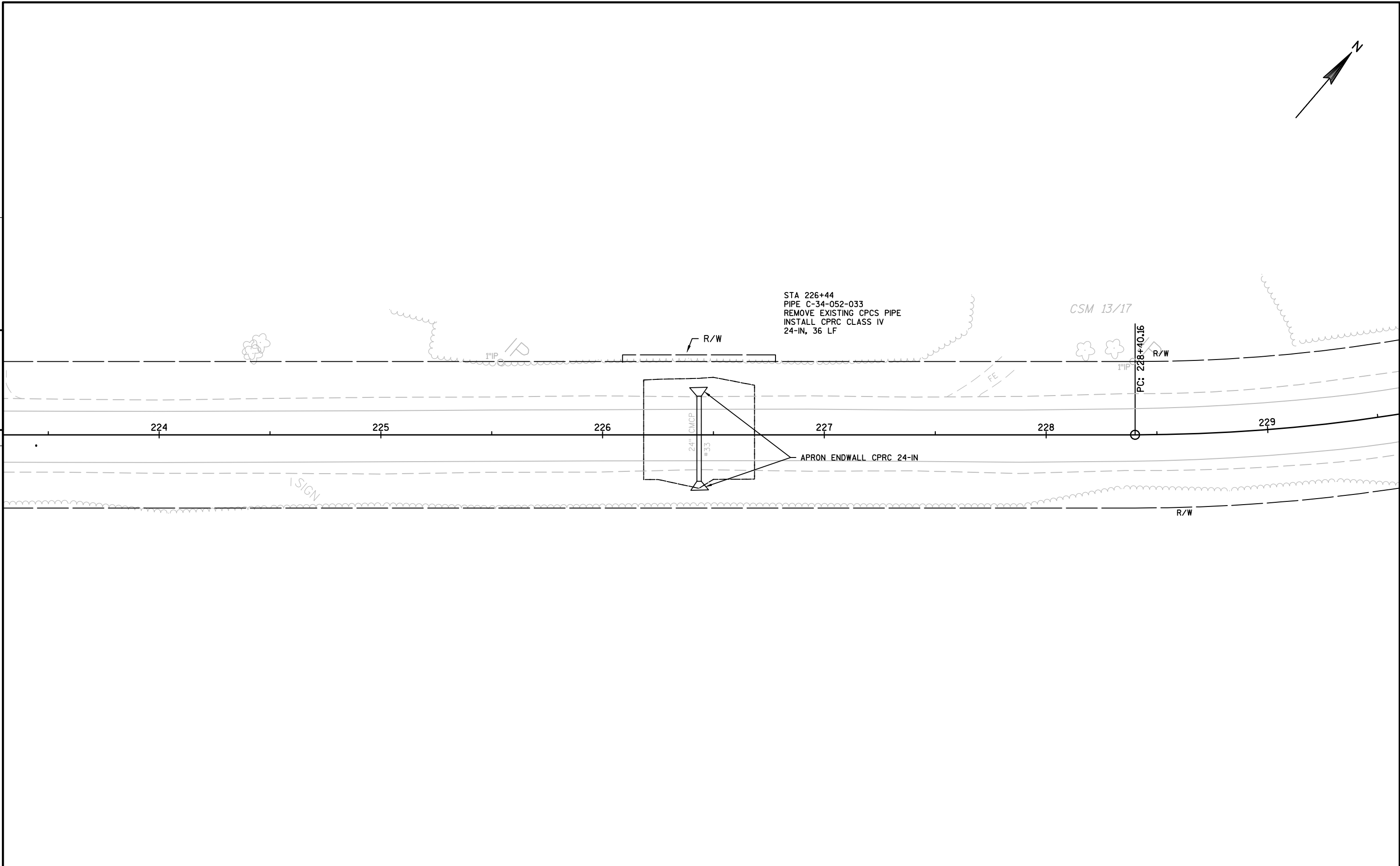
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN STA 334+00 - 348+50	SHEET	E
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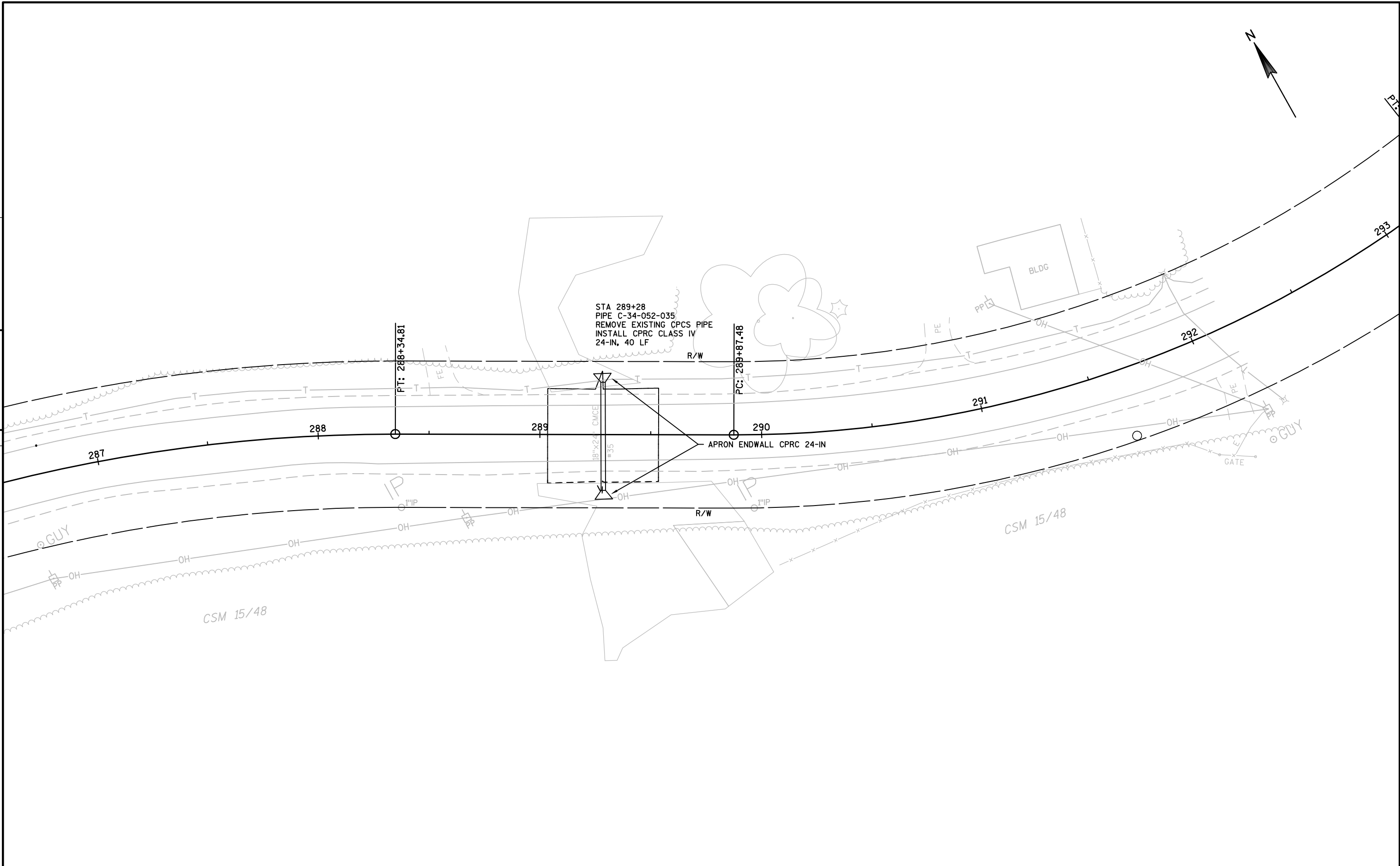






PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN C-32 STA 211+00 - 217+00	SHEET	E
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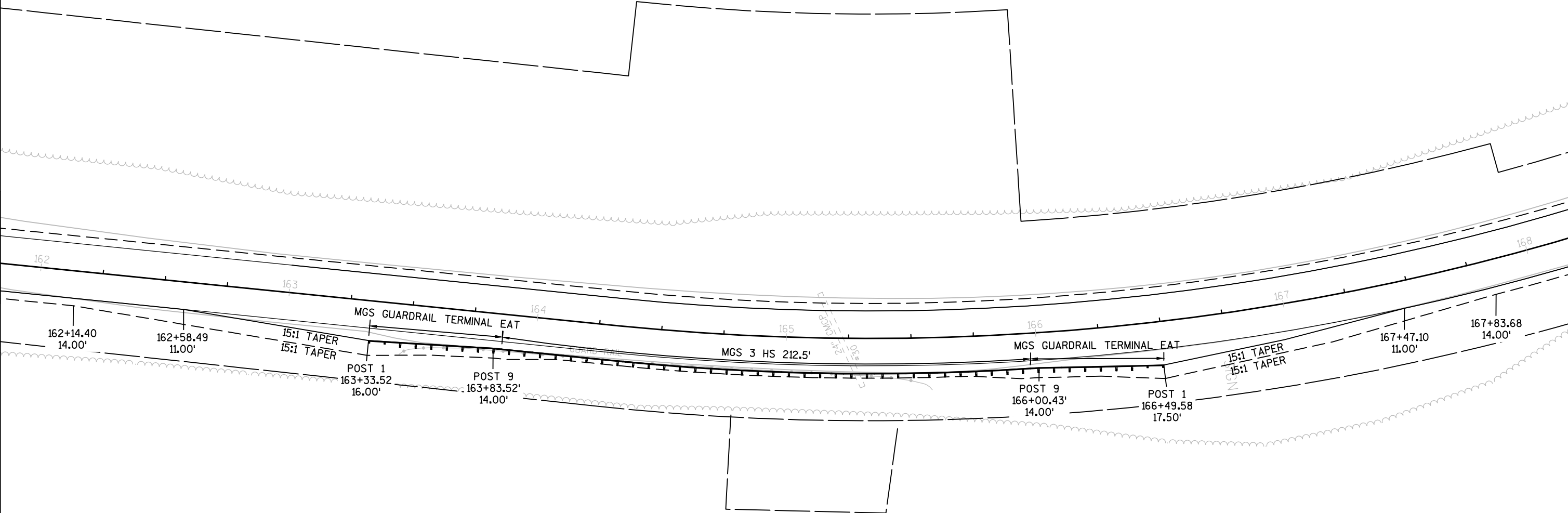
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	PLAN C-35 STA 287+00 - 293+00	SHEET	E
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KEY:
SHOULDER PAVED ———
SHOULDER AGGREGATE - - -



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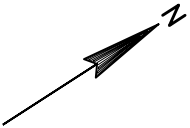


NOTES: OFFSETS TO FACE OF RAIL
PAVE TO FACE OF BEAMGUARD

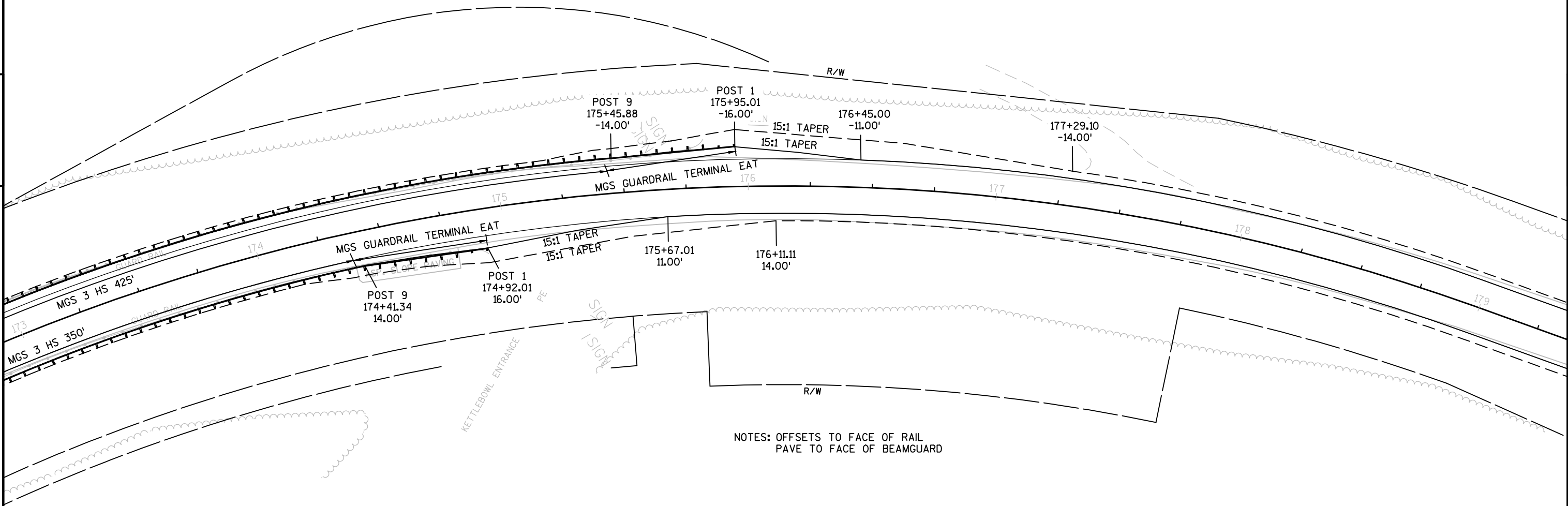


PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	STA 170+27 - STA 175+95 BEAM GUARD DETAILS	SHEET	E
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KEY:
SHOULDER PAVED ———
SHOULDER AGGREGATE - - -

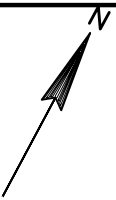


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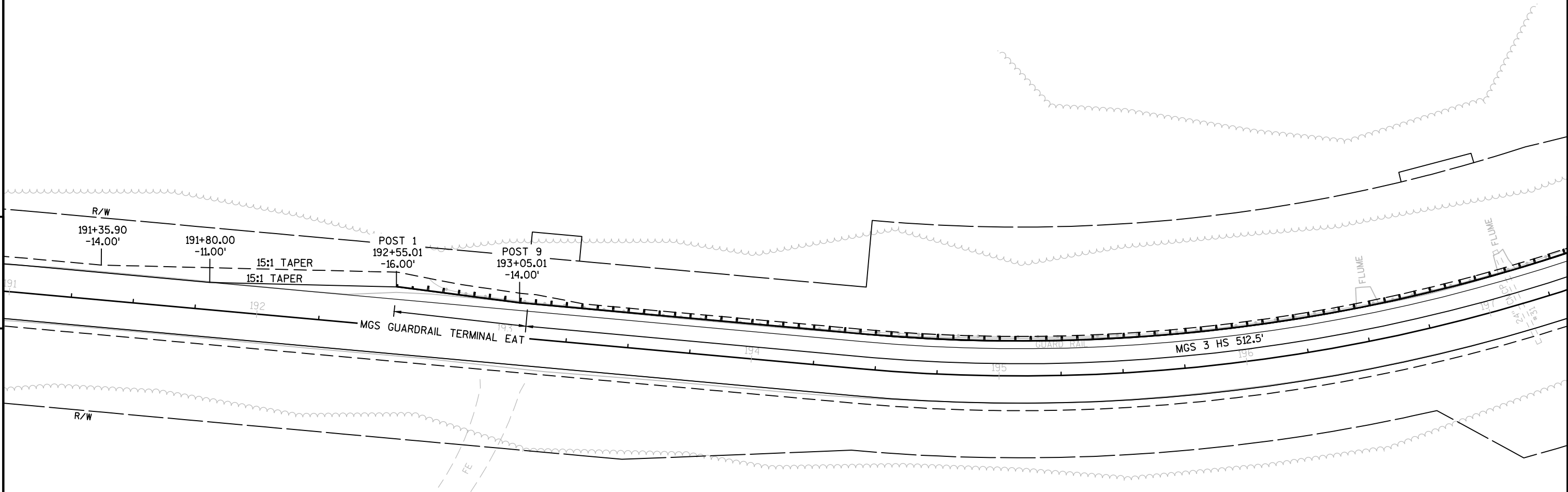


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KEY:
SHOULDER PAVED ———
SHOULDER AGGREGATE - - - -



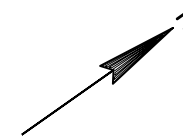
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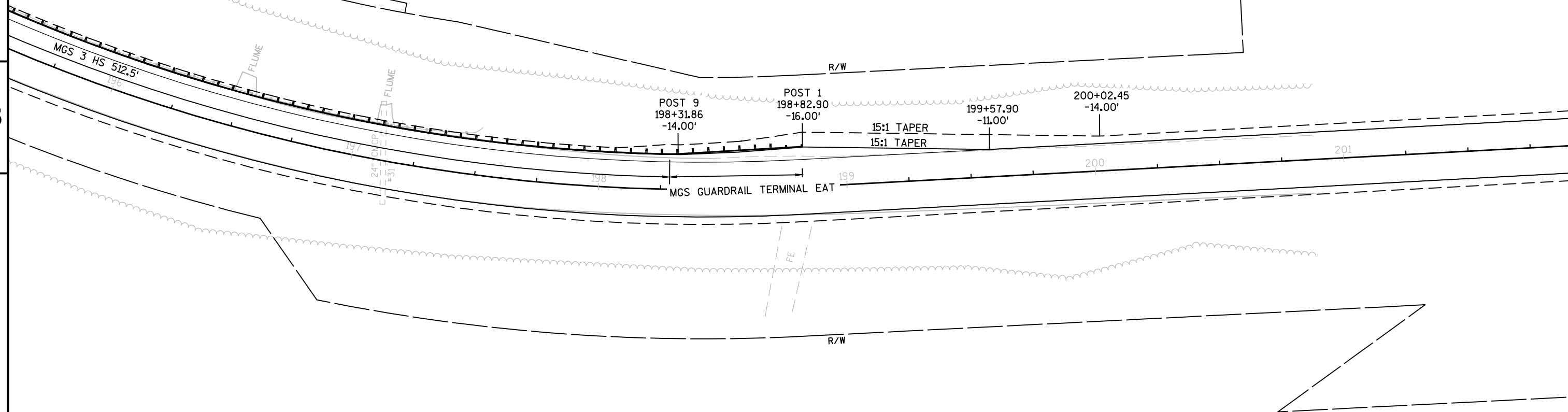
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NOTES: OFFSETS TO FACE OF RAIL
PAVE TO FACE OF BEAMGUARD

KEY:
SHOULDER PAVED ———
SHOULDER AGGREGATE - - -



5



5

NOTES: OFFSETS TO FACE OF RAIL
PAVE TO FACE OF BEAMGUARD

PROJECT NO: 9175-10-60

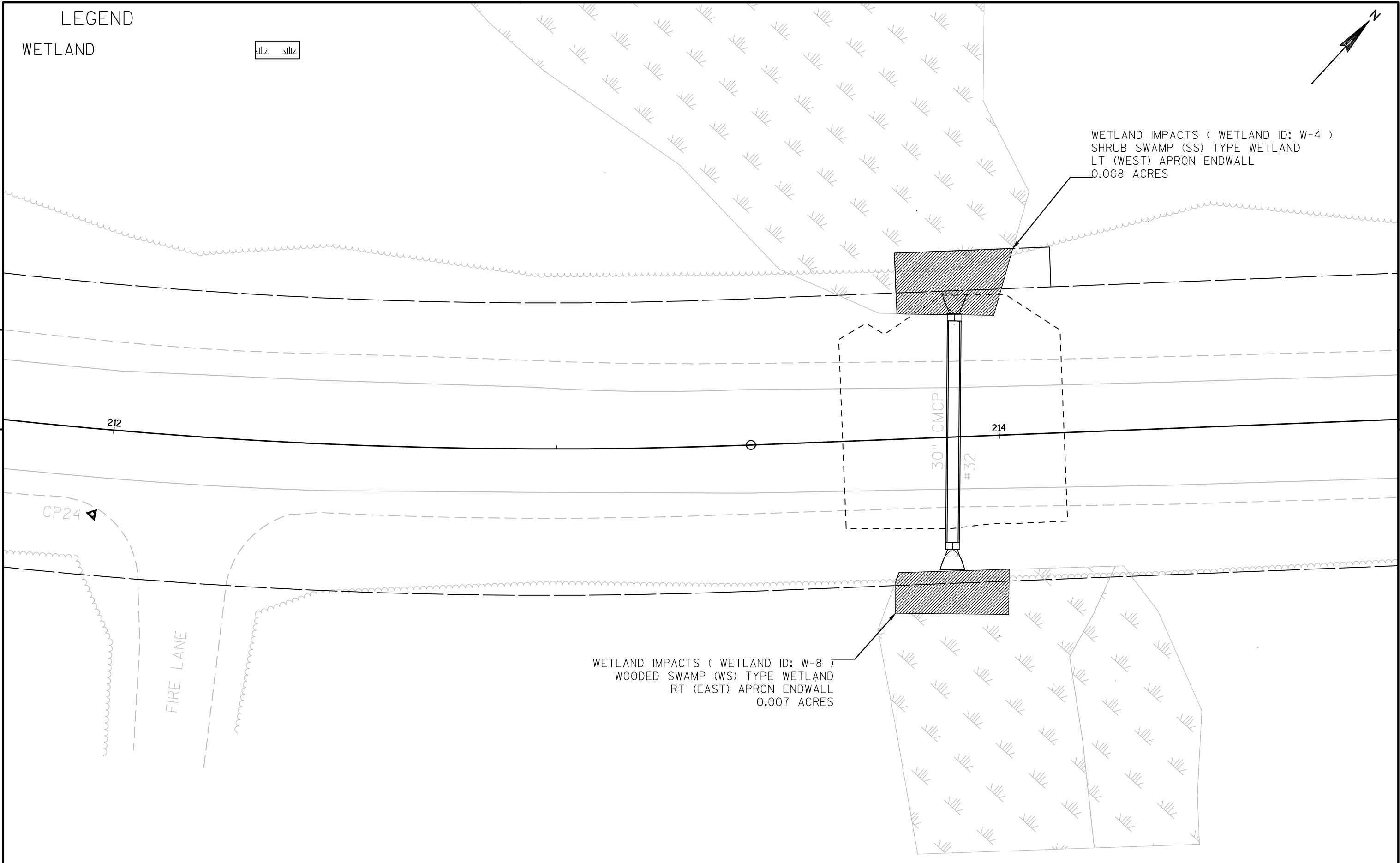
HWY: STH 52

COUNTY: LANGLADE

STA 192+55 - STA 198+83 BEAM GUARD DETAILS

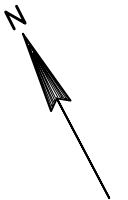
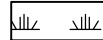
SHEET

E



LEGEND

WETLAND



WETLAND IMPACTS (WETLAND ID: W-17)
DEGRADED WET MEADOW (M(D)) TYPE WETLAND
LT (NORTH) APRON ENDWALL
0.011 ACRES

R/W

5

5

CP32

288

290

18" x 24" CMCE

#35

IP 1"IP

PP

R/W

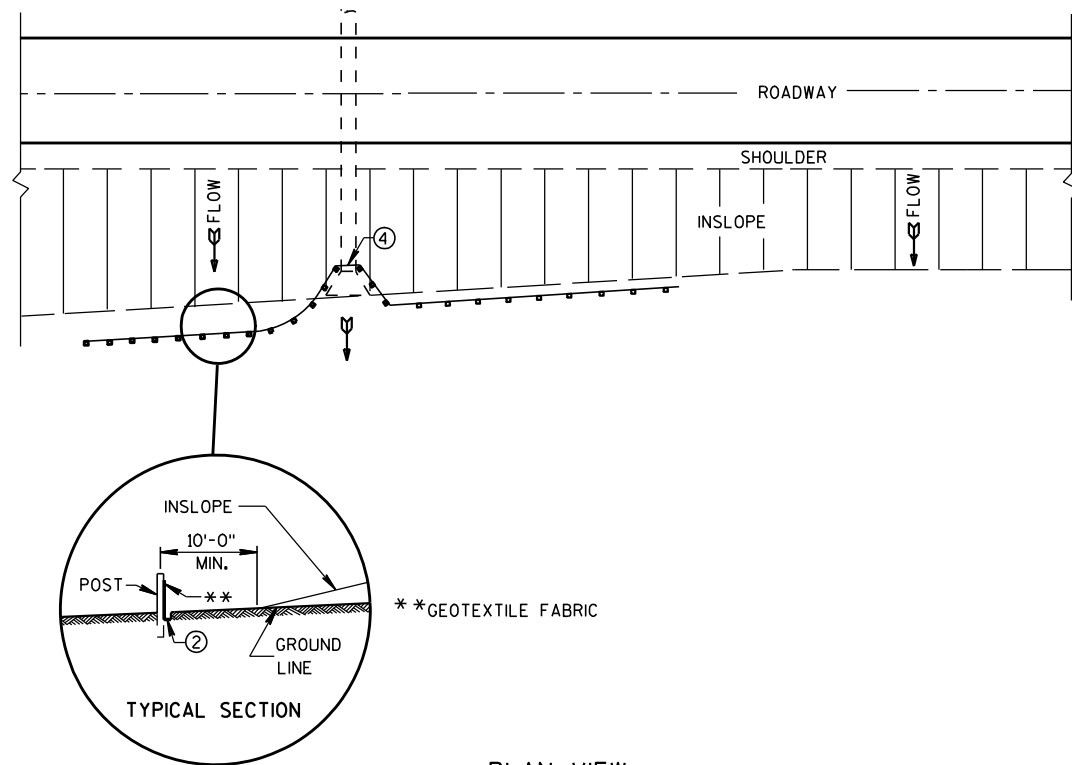
IP 1"IP

WETLAND IMPACTS (WETLAND ID: W-14)
DEGRADED WET MEADOW (M(D)) TYPE WETLAND
RT (SOUTH) APRON ENDWALL
0.016 ACRES

CSM 15/48

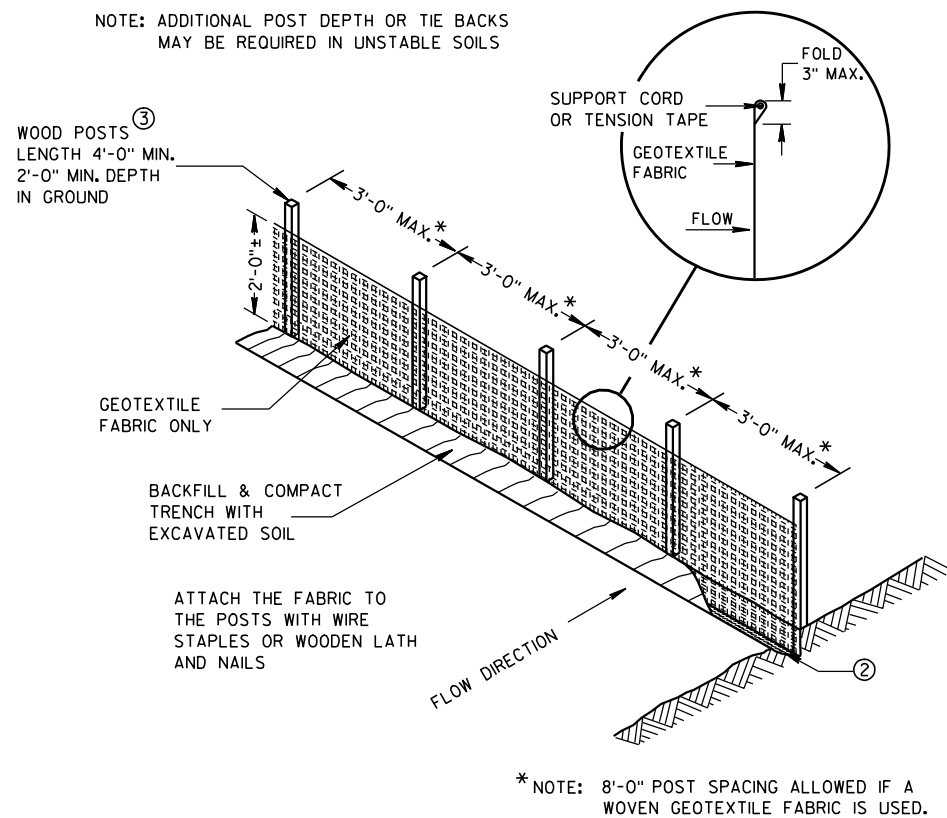
Standard Detail Drawing List

08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
14B29-01	SAFETY EDGE
14B42-04A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-04C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-17A	LONGITUDINAL MARKING (MAINLINE)
15C12-05	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-04A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

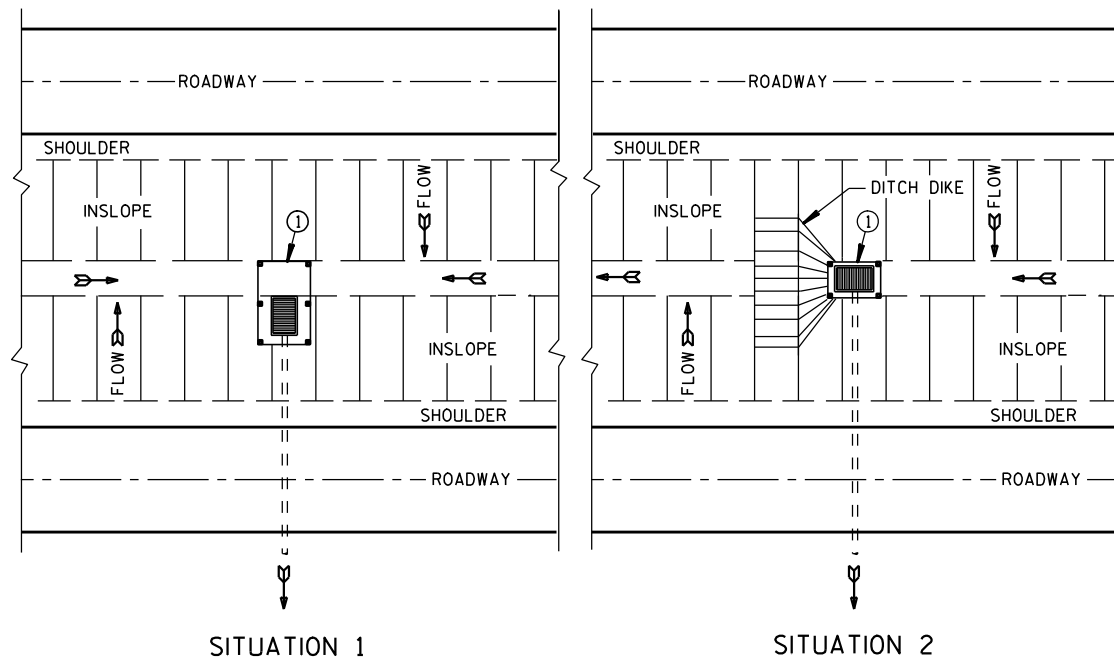


TYPICAL APPLICATION OF SILT FENCE

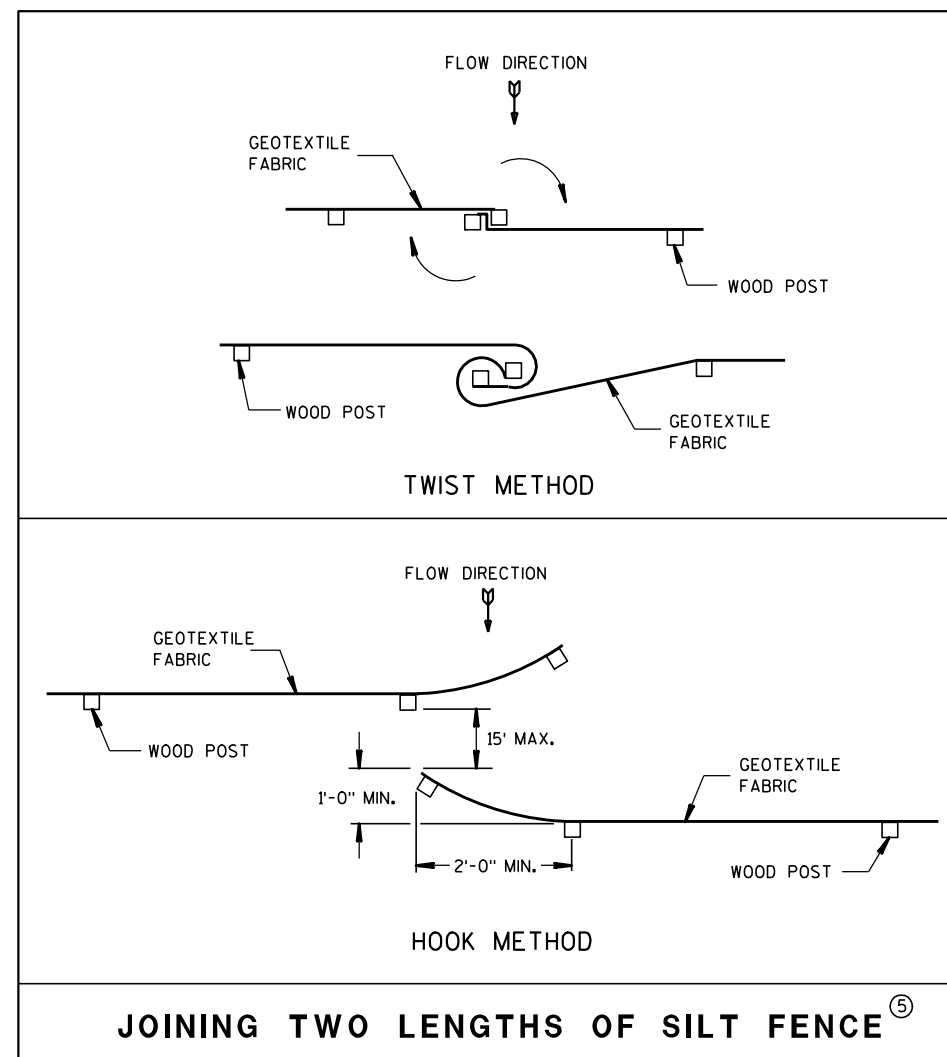
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE



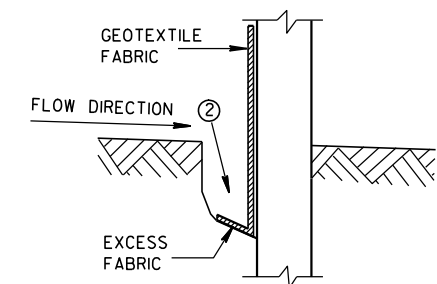
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS



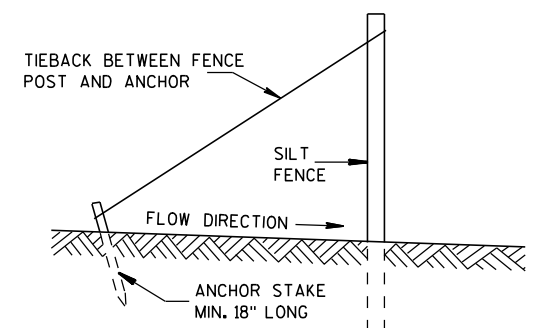
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05

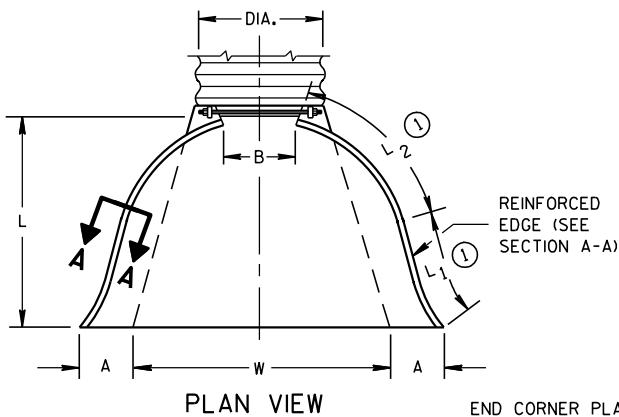
DATE

FHWA

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE		BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2	Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2	Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3	Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3	Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3	Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3	Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3	Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3	Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3	Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3	Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3	Pc.

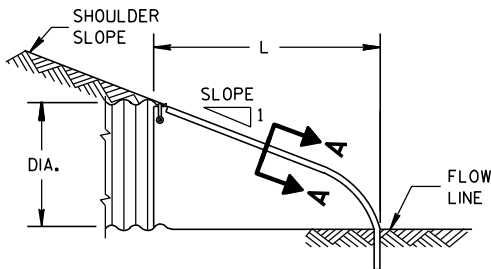
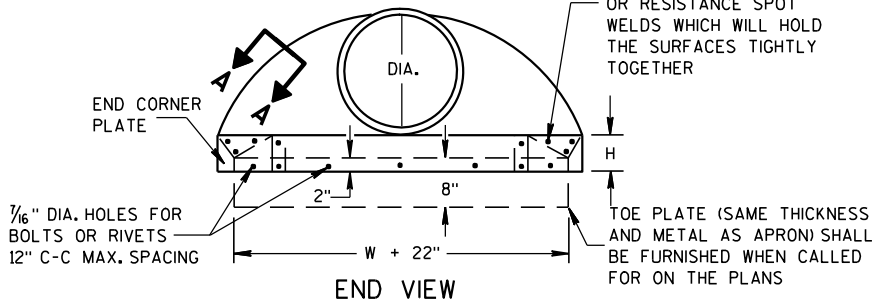
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



REINFORCED
EDGE (SEE
SECTION A-A)

END CORNER PLATES MAY
BE FASTENED TO APRON
PROPER BY BOLTS, RIVETS,
OR RESISTANCE SPOT
WELDS WHICH WILL HOLD
THE SURFACES TIGHTLY
TOGETHER

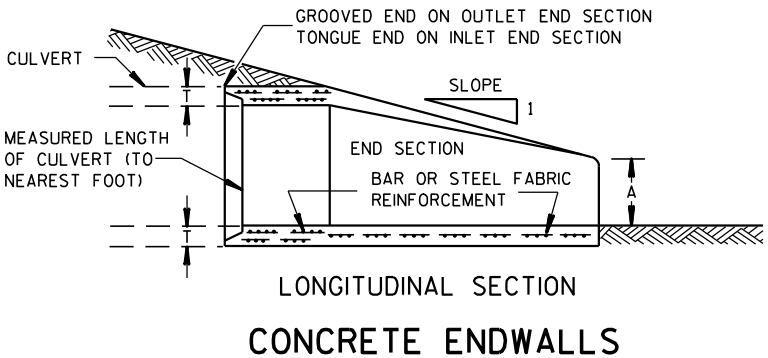
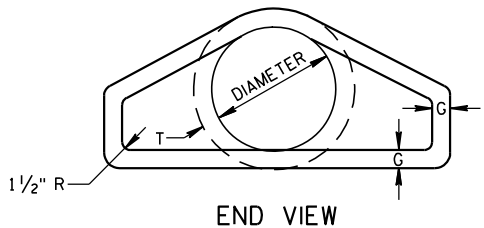
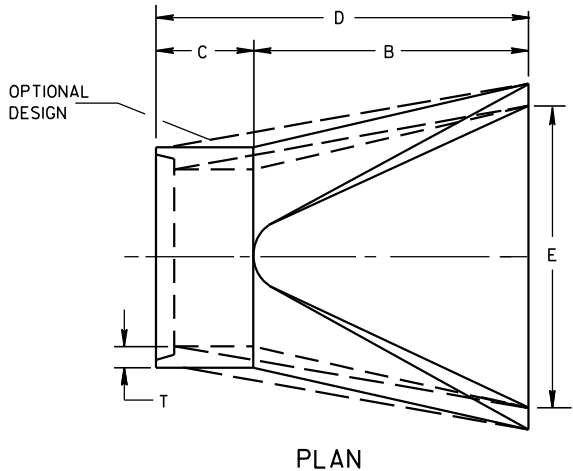
TOE PLATE (SAME THICKNESS
AND METAL AS APRON) SHALL
BE FURNISHED WHEN CALLED
FOR ON THE PLANS



SIDE ELEVATION
METAL ENDWALLS

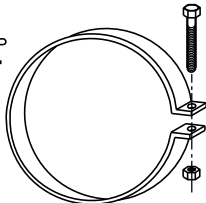
REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1				
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1				
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1				
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1				
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1				
48	5	24	72	26	98	84	5	3 to 1				
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 1/2 to 1				
60	6	30-35	60	39	99	96	5	2 to 1				
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1				
72	7	24-36	78	21	99	108	6	2 to 1				
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1				
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1				
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1				

* MINIMUM
** MAXIMUM

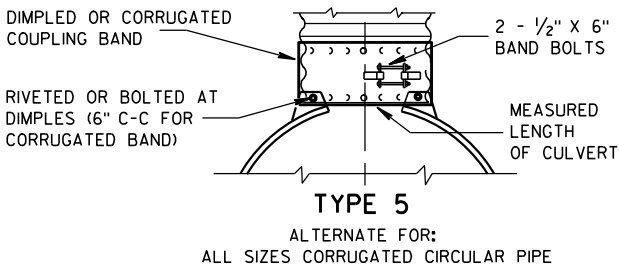
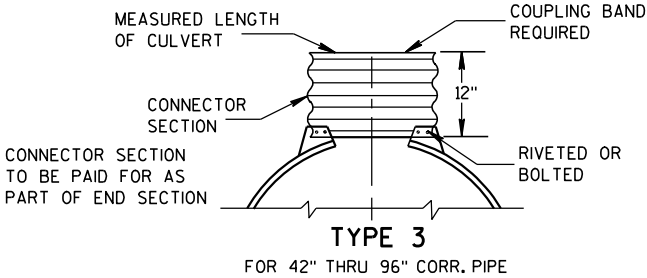
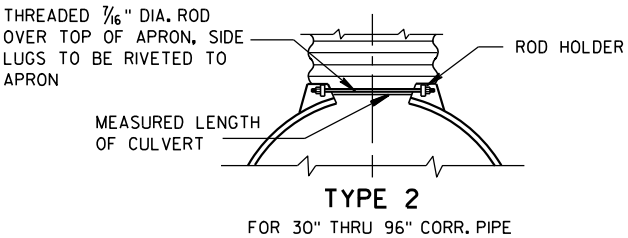
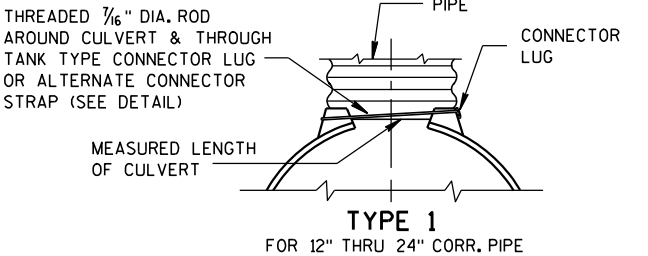


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109"
THICK) GALVANIZED STRAP
WITH STANDARD 6" X 1/2"
BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



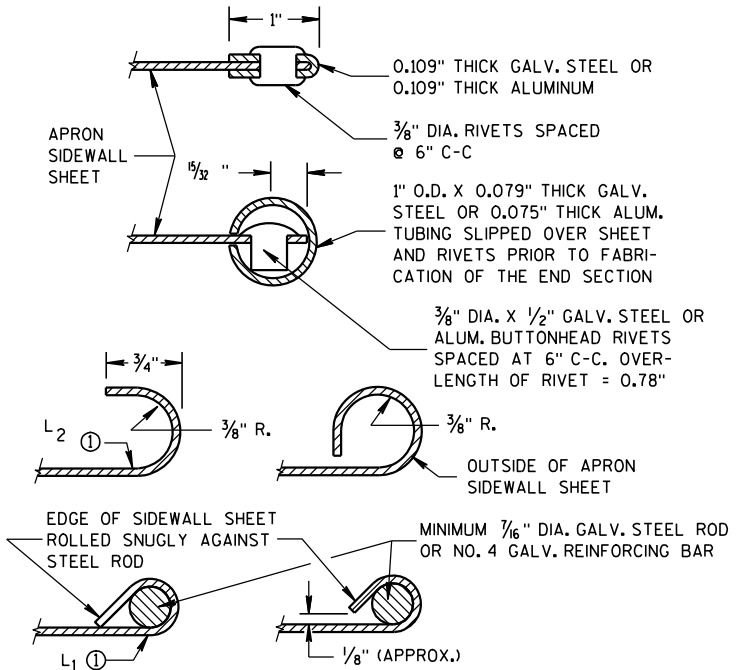
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.
DIMPLED BAND MAY BE USED WITH HELICALLY
CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE
ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5
AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL
CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO
CIRCUMFERENTIAL CORRUGATIONS AT EACH END
USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON
THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE
STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL
OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR
ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE
OF THE SAME METAL.

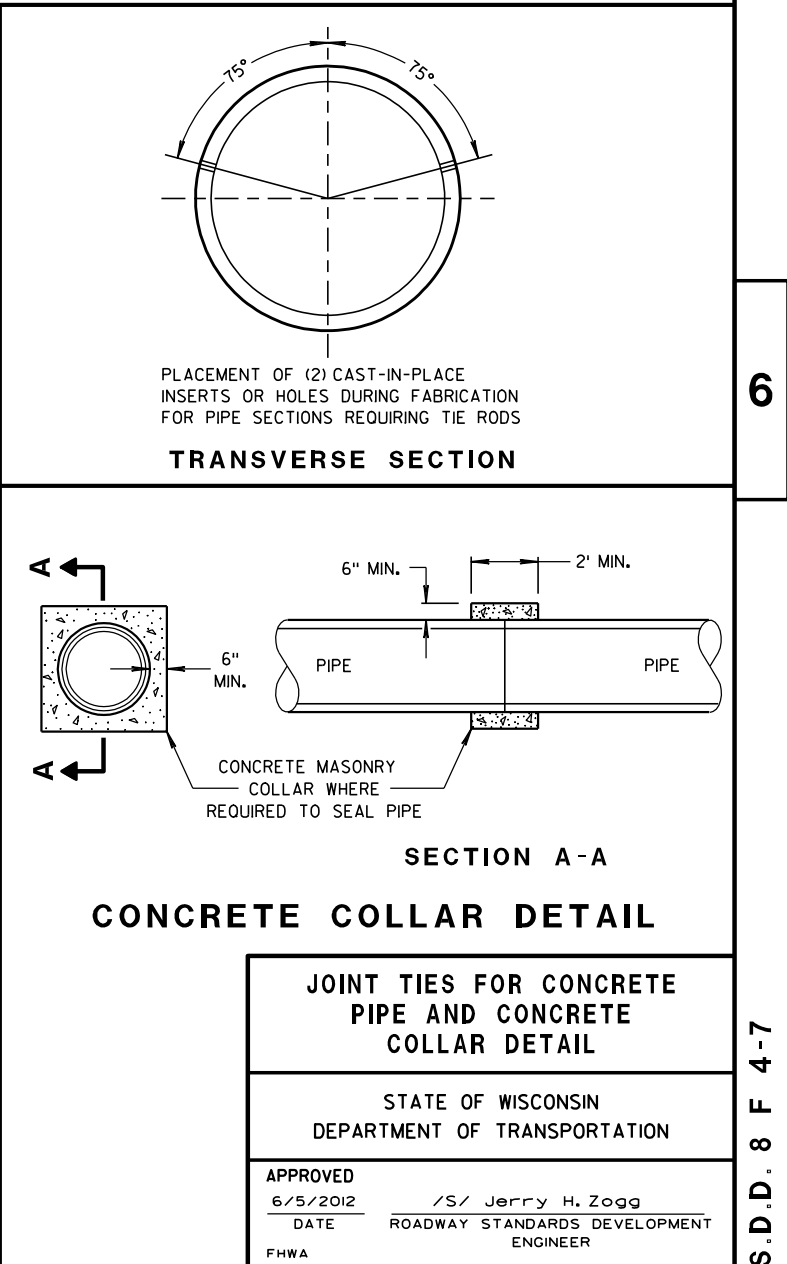
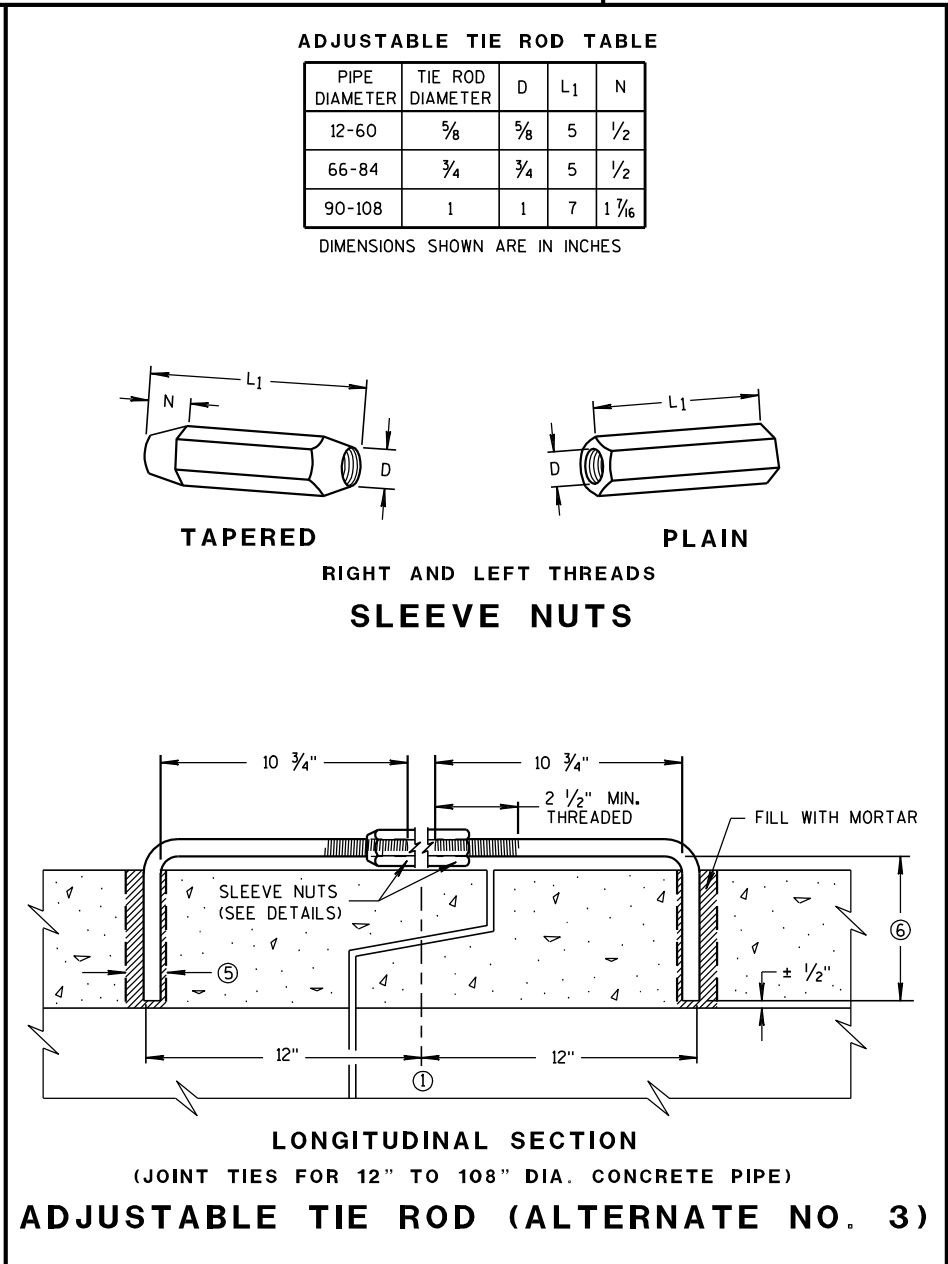
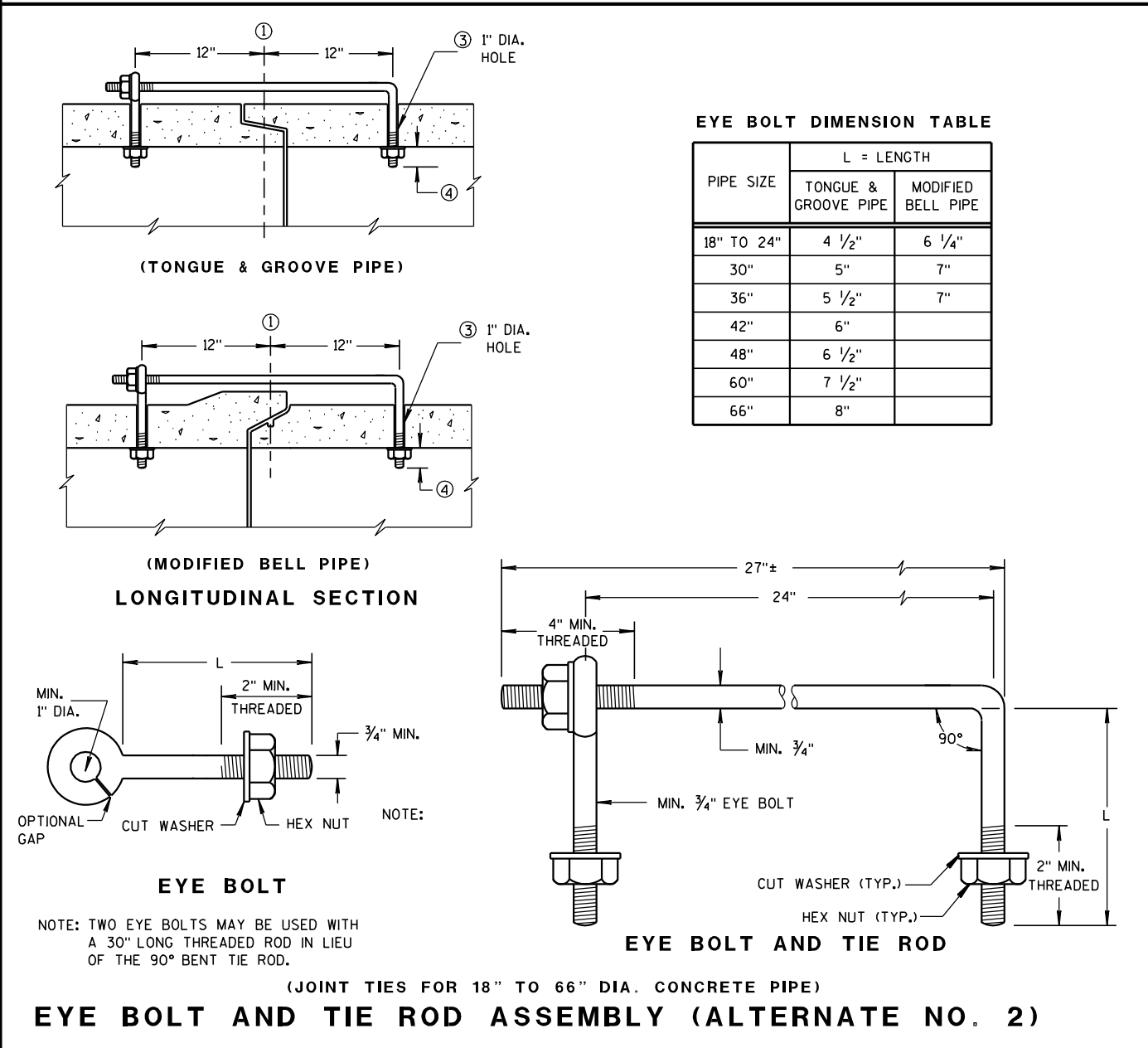
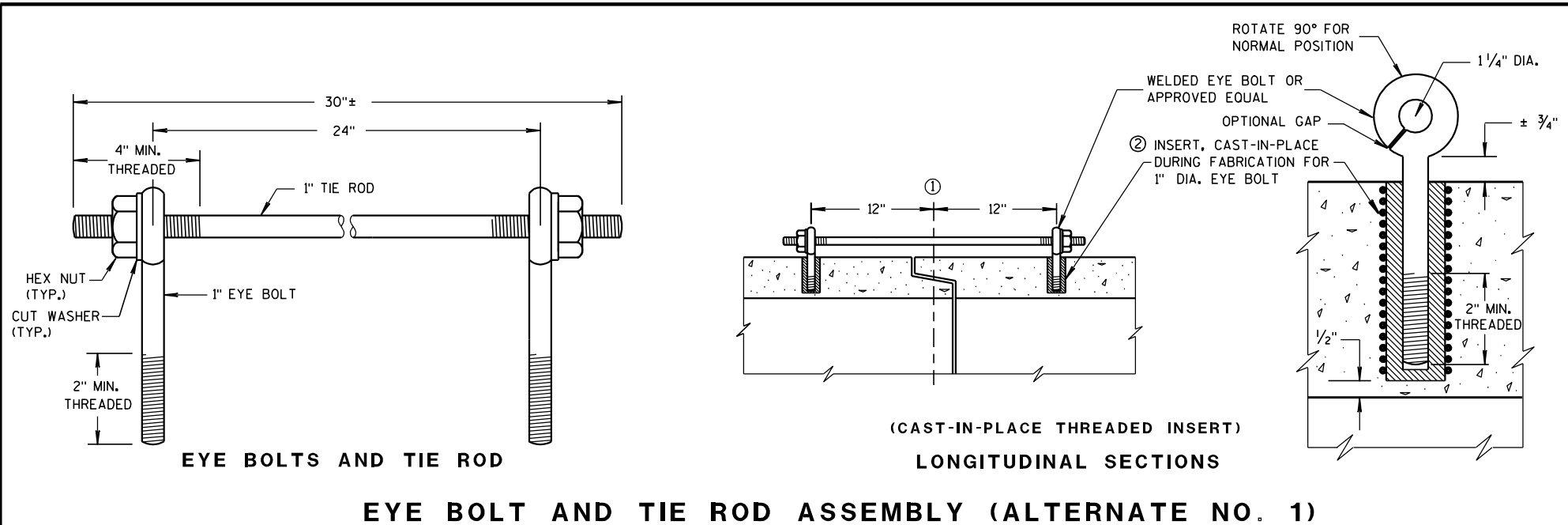
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND
LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL
THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND
LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH
OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE
PERIMETER.

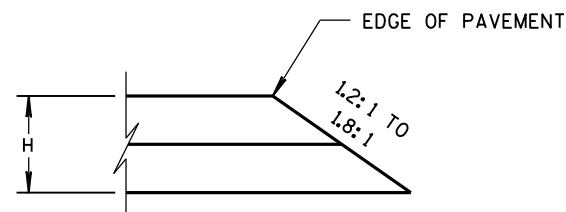
LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS
FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS.
FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED
EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH
GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE
ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM
NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT
TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT
TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

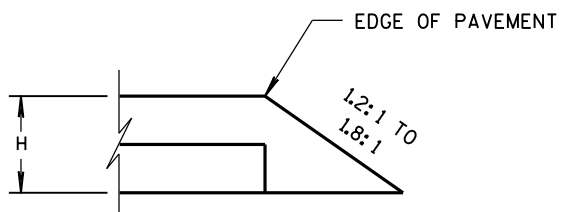
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED
INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 11/30/94 DATE	/S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

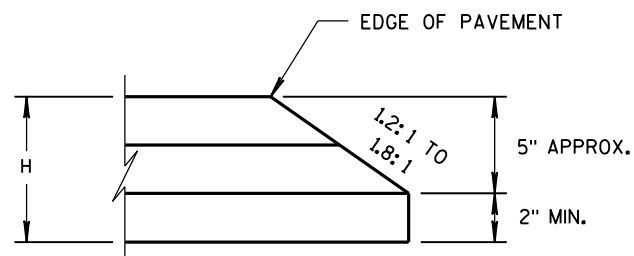




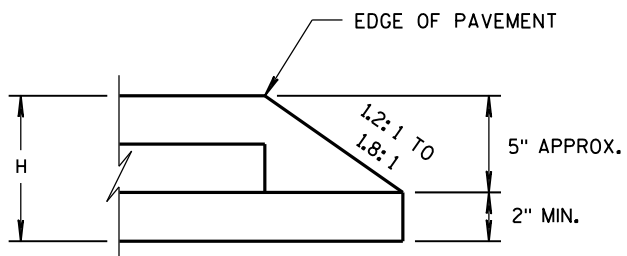
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

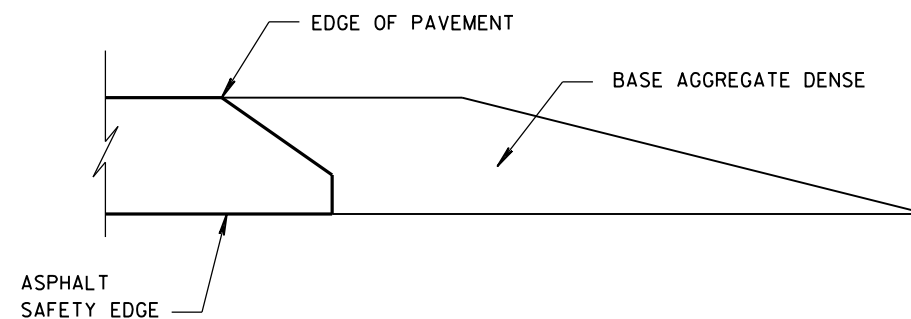


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

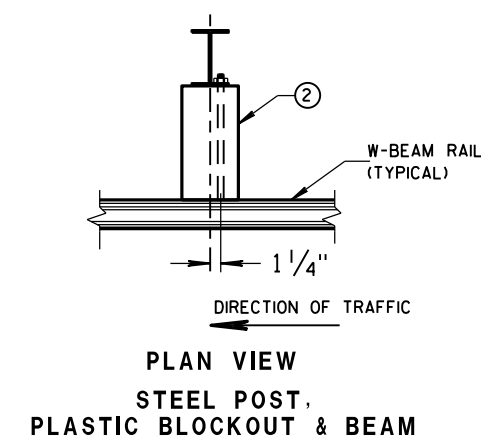
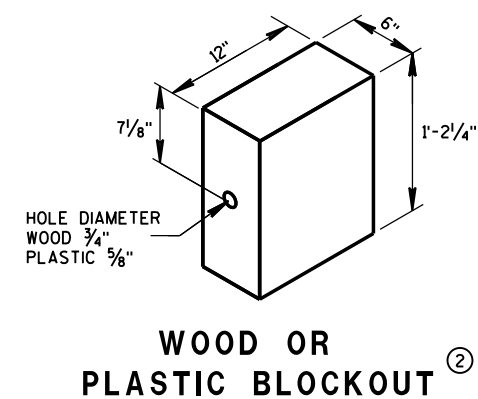
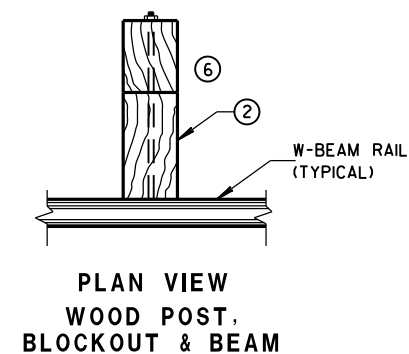
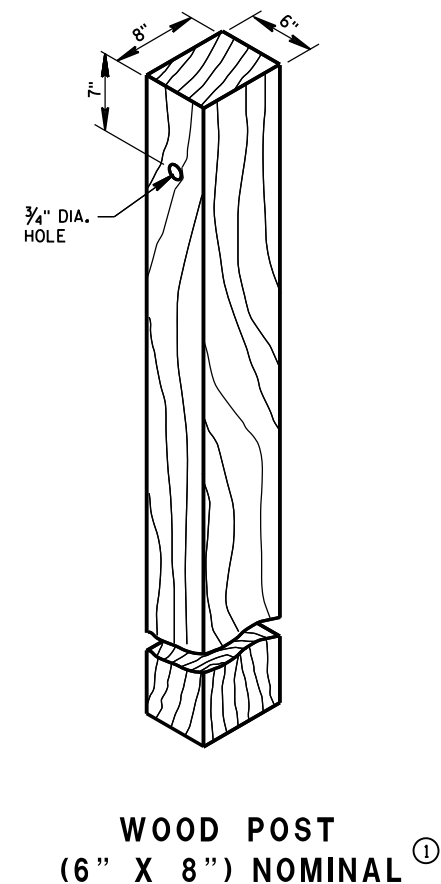
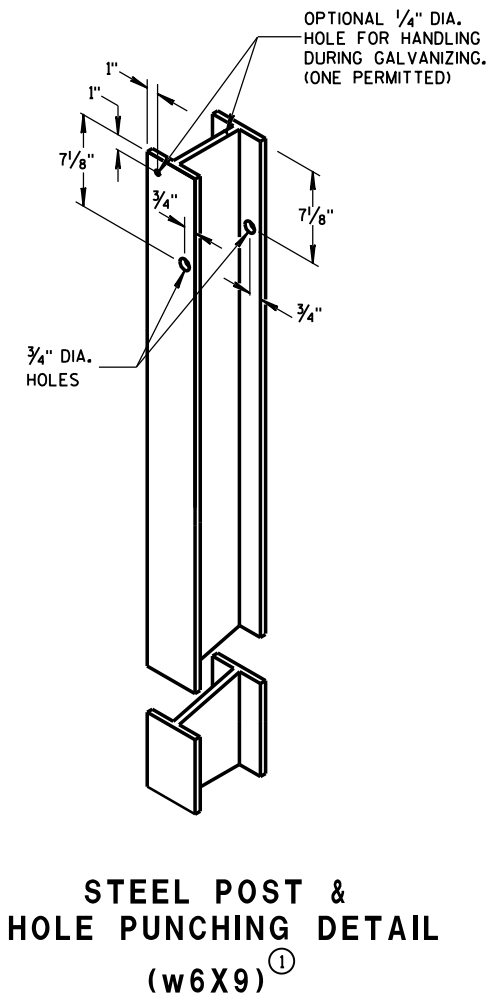
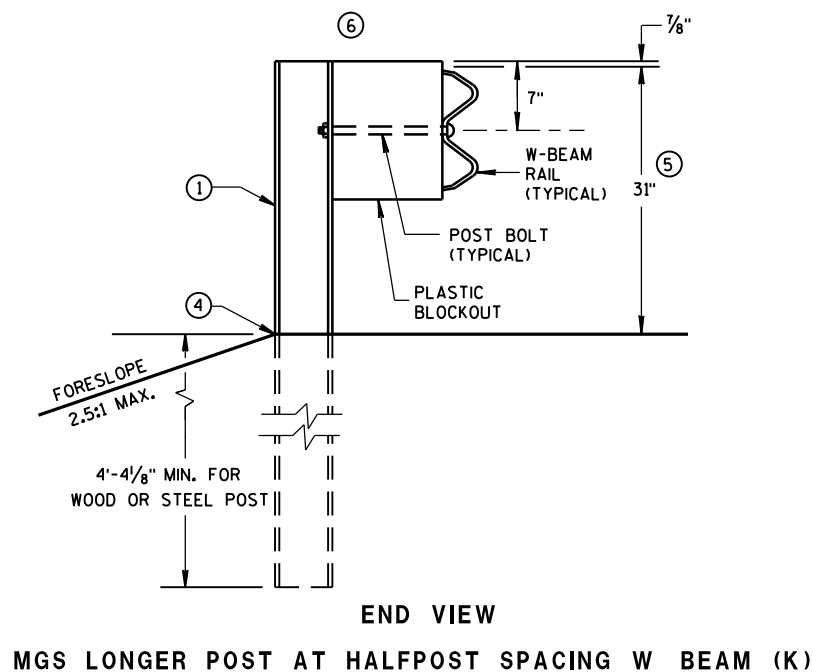
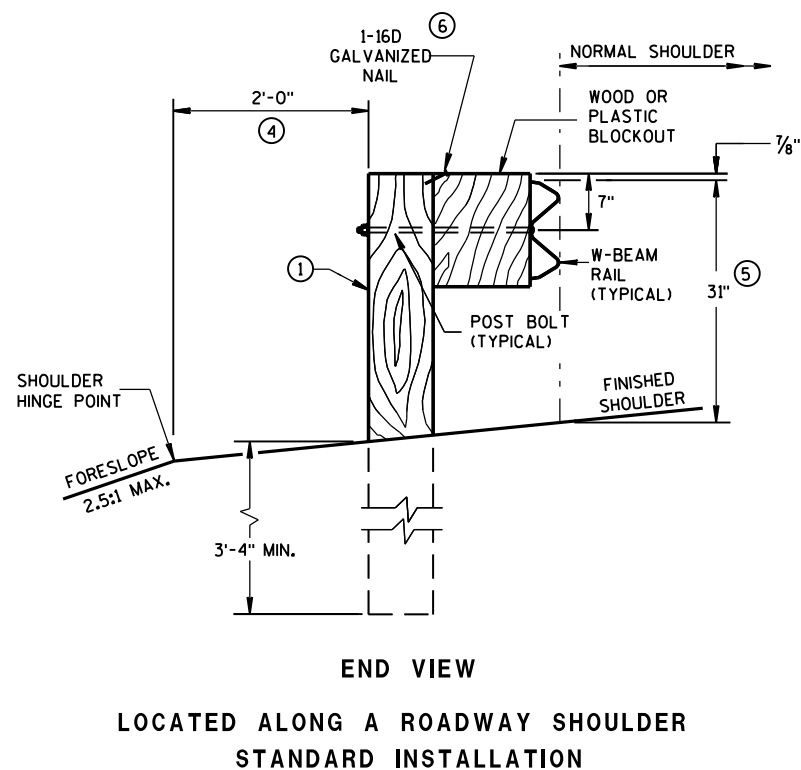
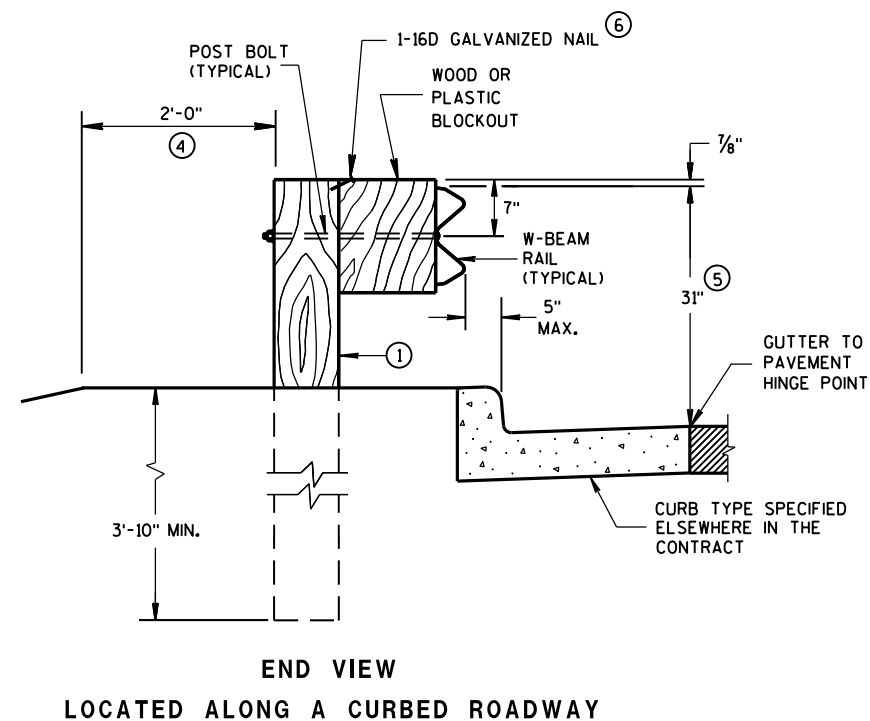
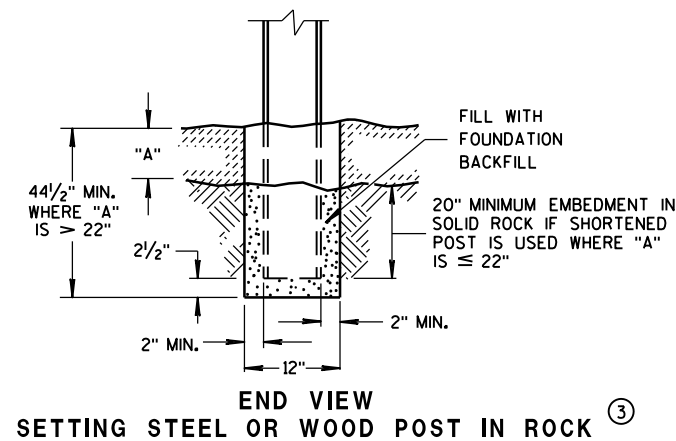
SAFETY EDGE_{SM}

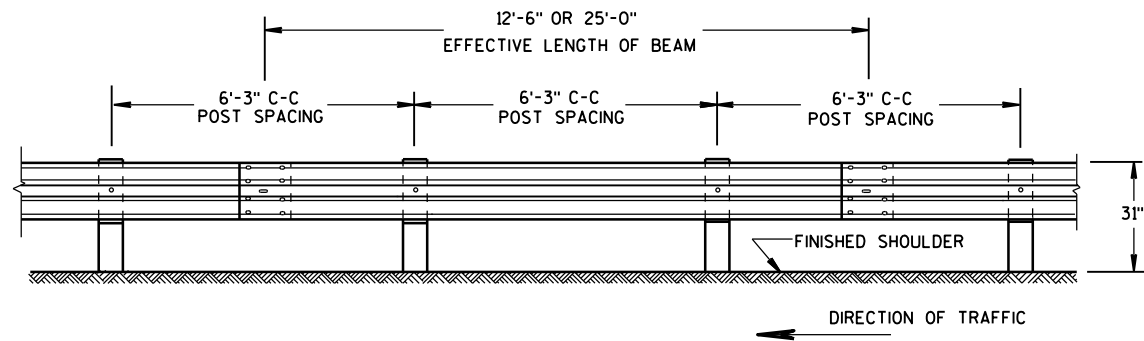
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE
FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

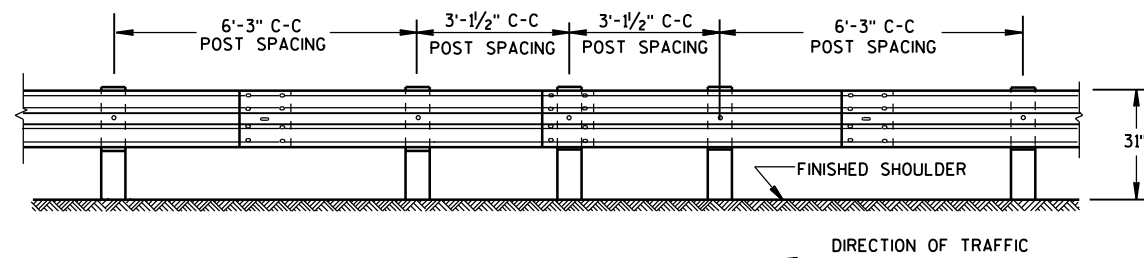
- ① WOOD OR STEEL POSTS (W6X9 OR W6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY $2\frac{1}{2}$ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS TO THE LENGTH AND INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS $\pm 1"$. FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN $27\frac{3}{4}"$ TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.





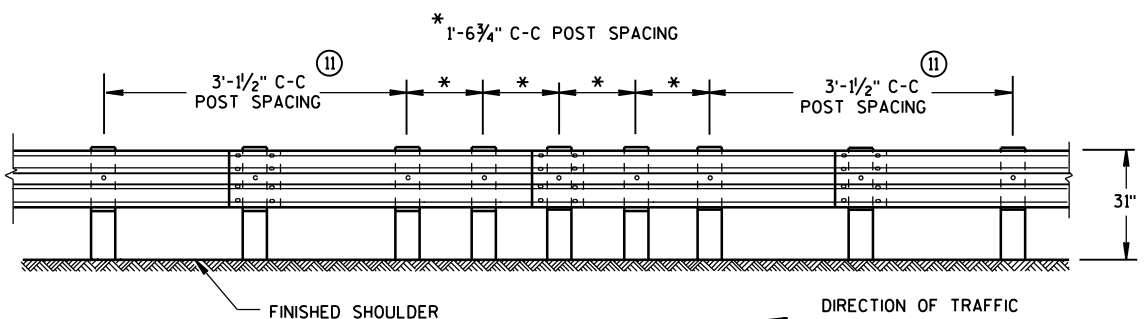
FRONT VIEW

POST SPACING STANDARD INSTALLATION



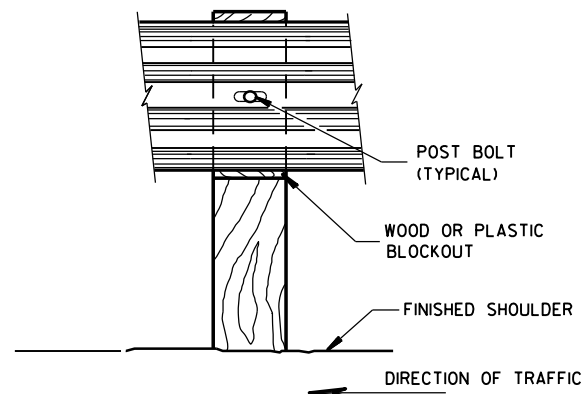
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

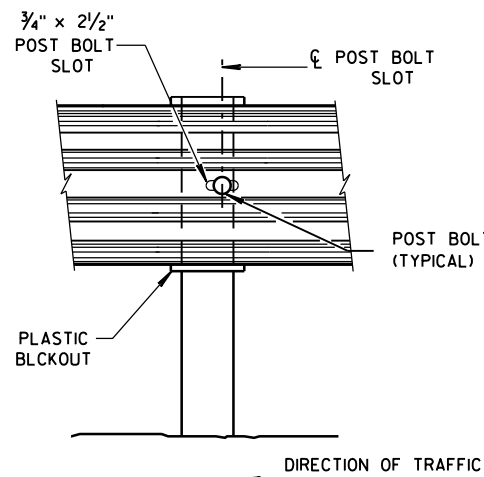


FRONT VIEW

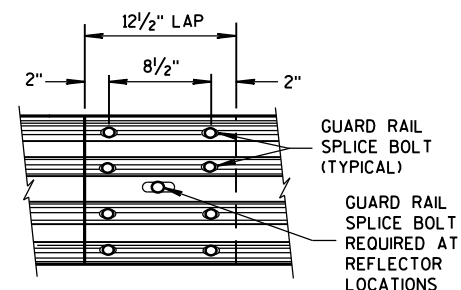
QUARTER POST SPACING (QS)



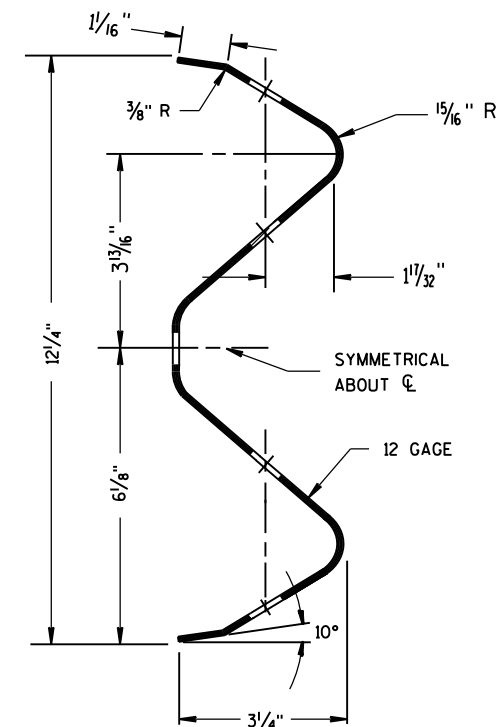
FRONT VIEW AT WOOD POST



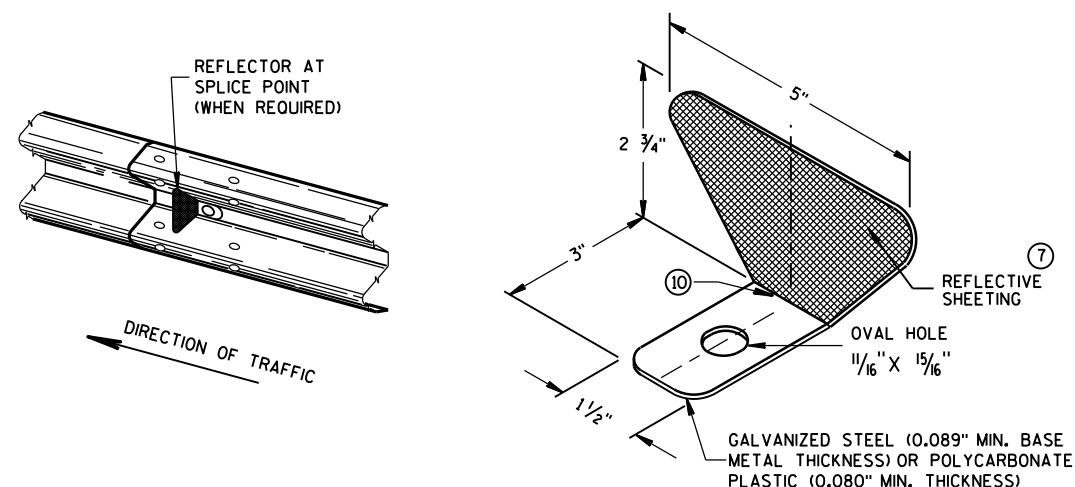
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

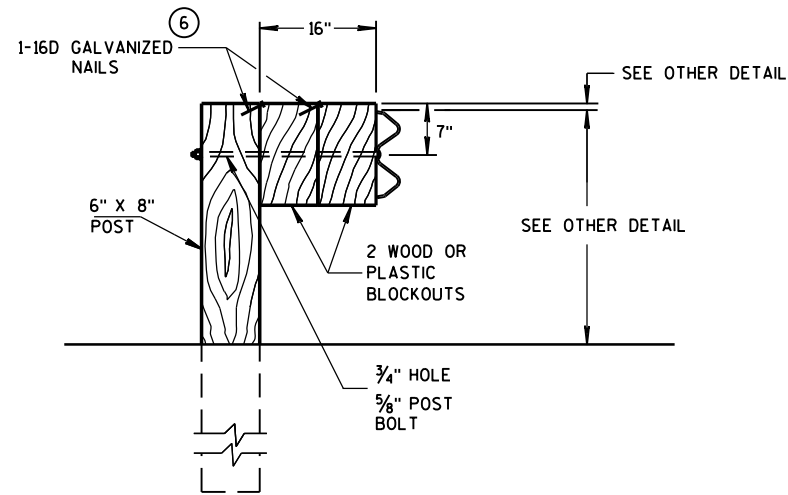
- ⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
 - ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
 - ⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
 - ⑩ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
 - ⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{5}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ⑨	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ⑩	3
	> 200'	100' C-C	2	

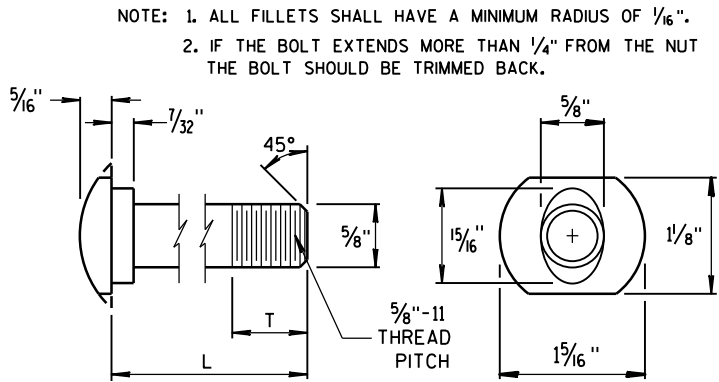
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

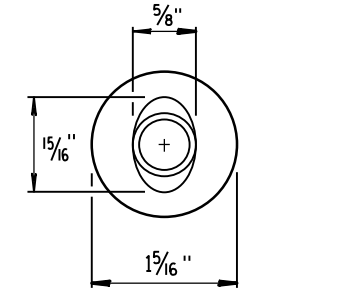


DETAIL FOR 16" BLOCKOUT DEPTH

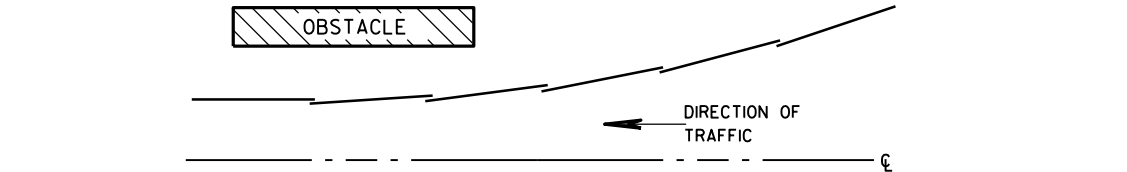
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



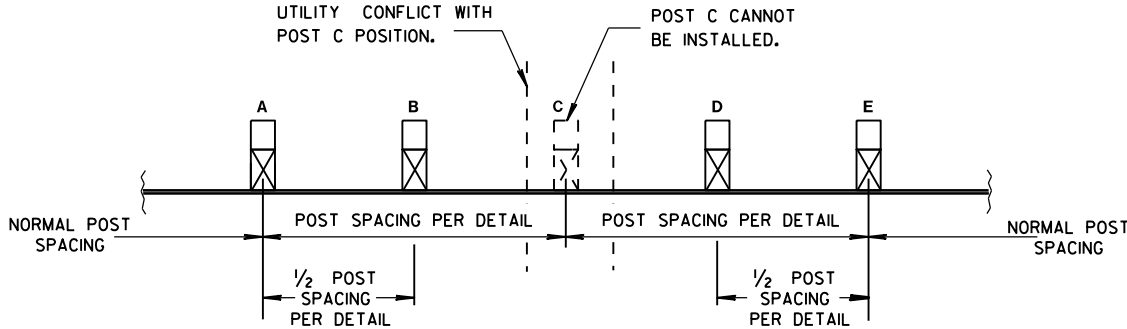
POST BOLT TABLE



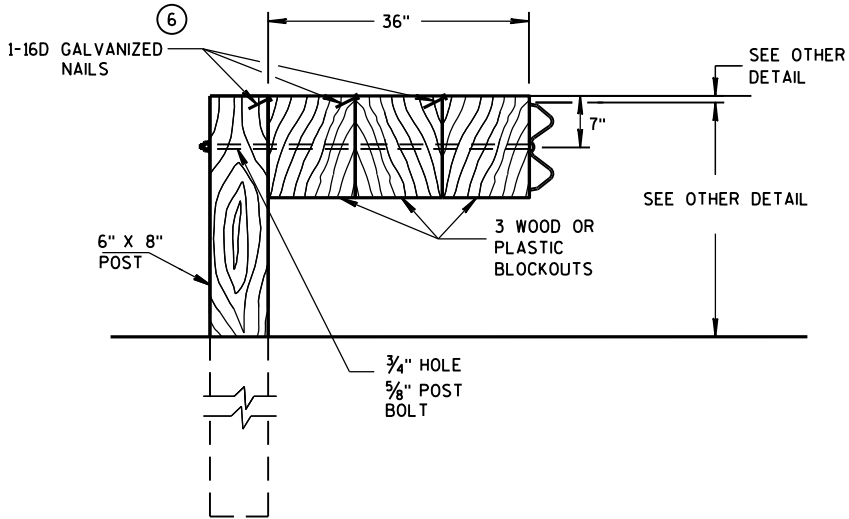
ALTERNATE BOLT HEAD



PLAN VIEW
BEAM LAPPING DETAIL



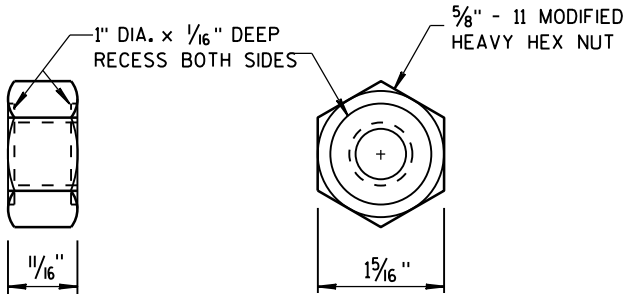
POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



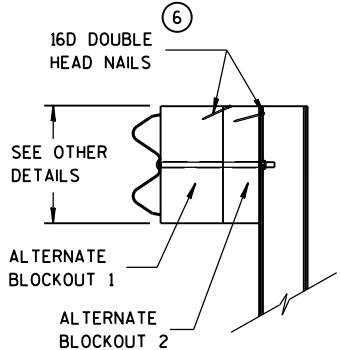
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

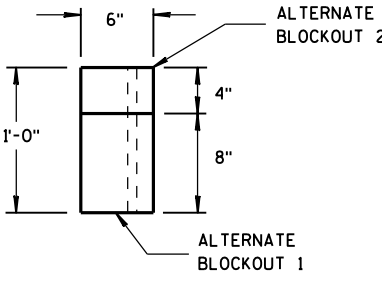
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



POST BOLT, SPLICE BOLT
AND RECESS NUT



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 DATE /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.
- (G) 1/2" DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

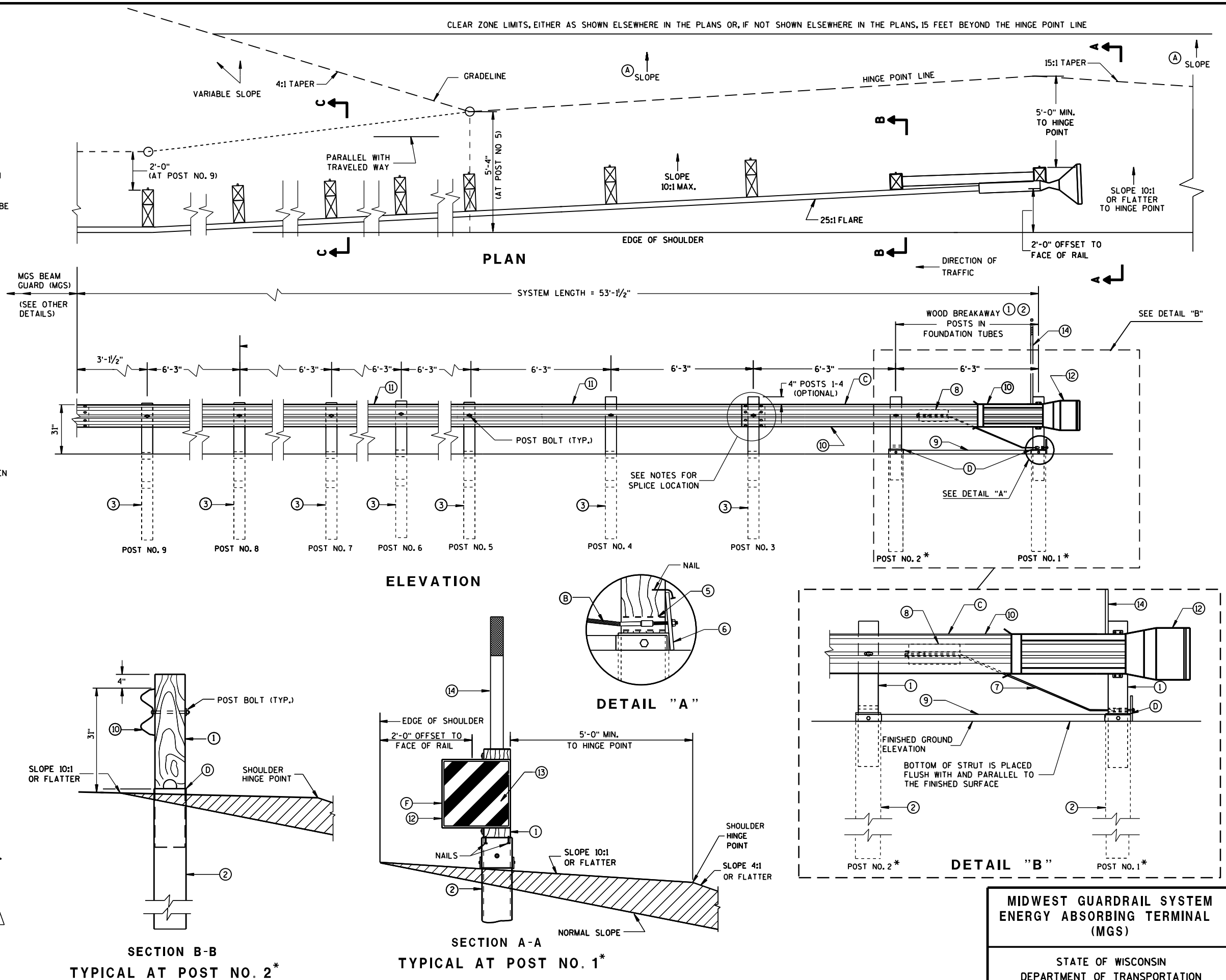
SEE SDD 14B42 FOR MORE INFORMATION.

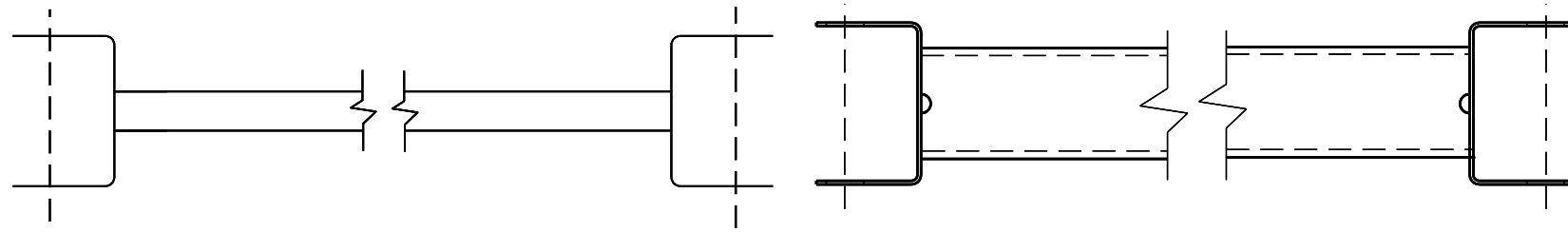
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

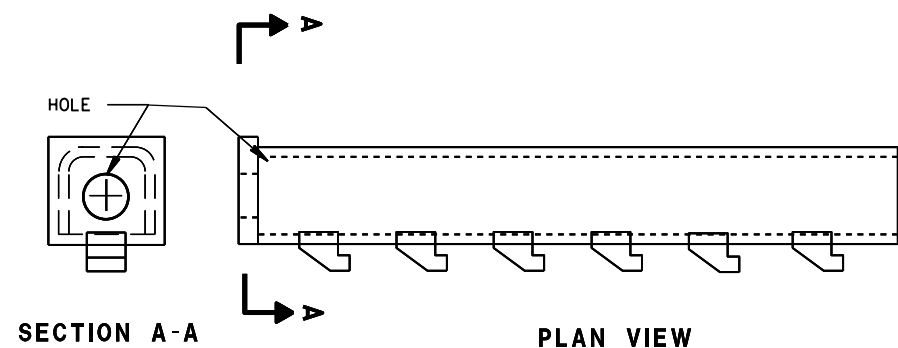
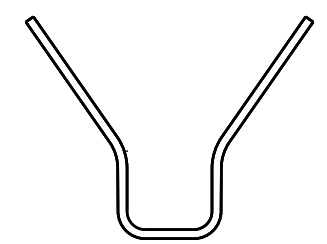
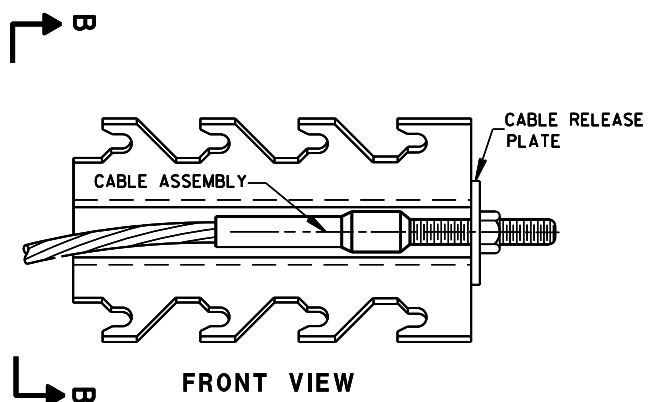
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.





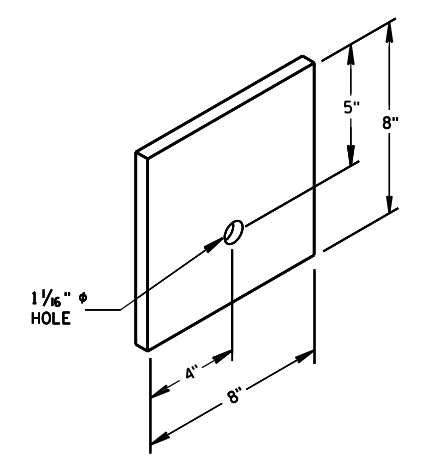
9 H
GENERIC GROUND STRUT



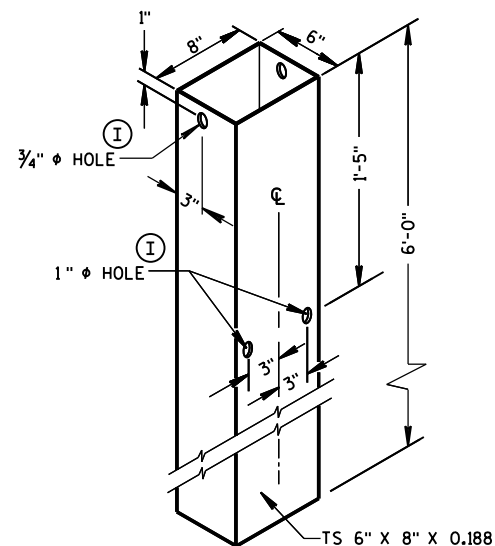
8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

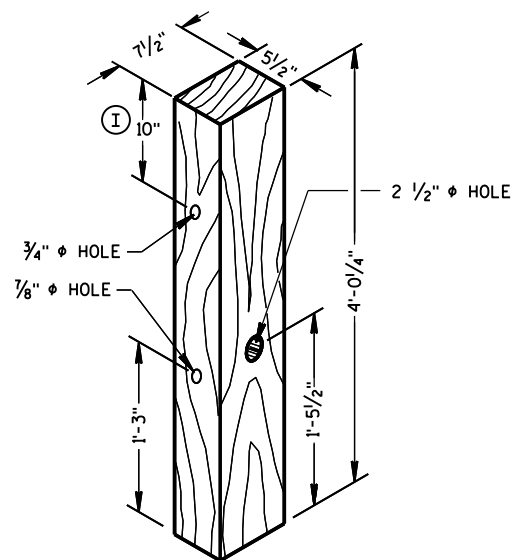
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	END SECTION EAT
⑬	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



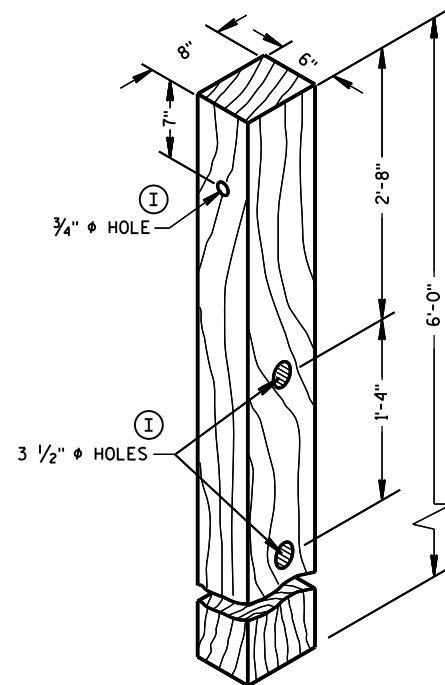
⑥
BEARING PLATE



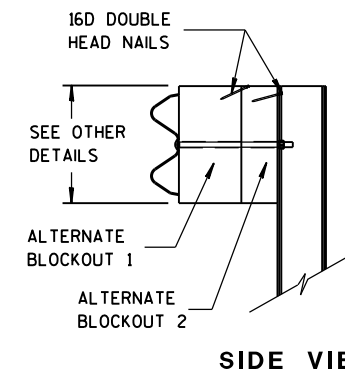
FOUNDATION TUBE ②



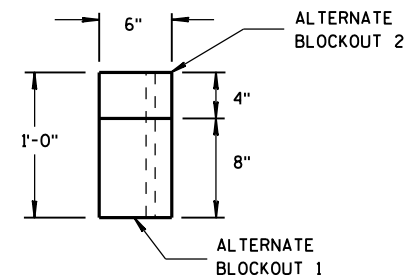
POSTS NUMBER 1 AND 2
WOOD BREAKAWAY POST ①



POSTS NUMBER 3-9
WOOD CRT POST ③

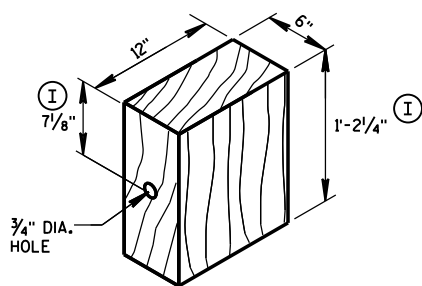


SIDE VIEW



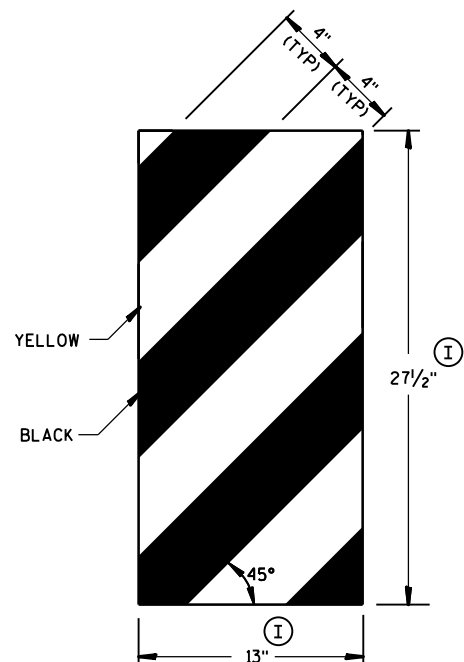
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

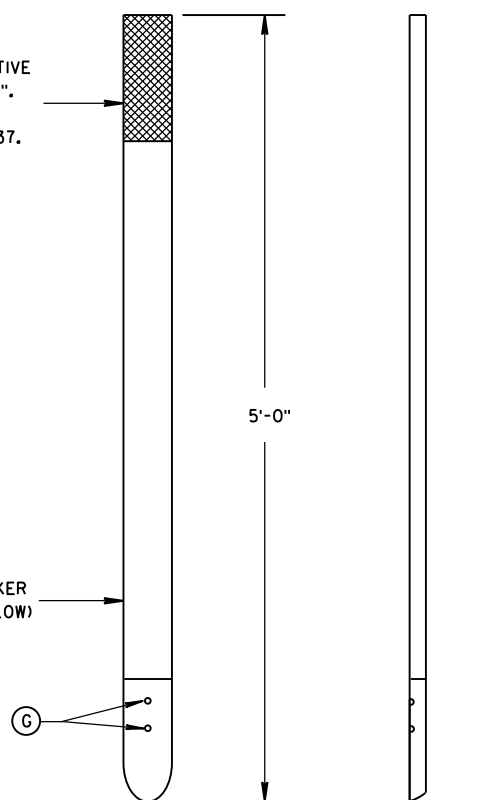
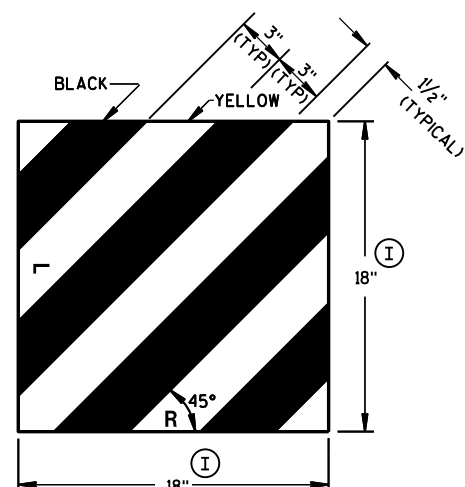


WOOD BLOCKOUT ④
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

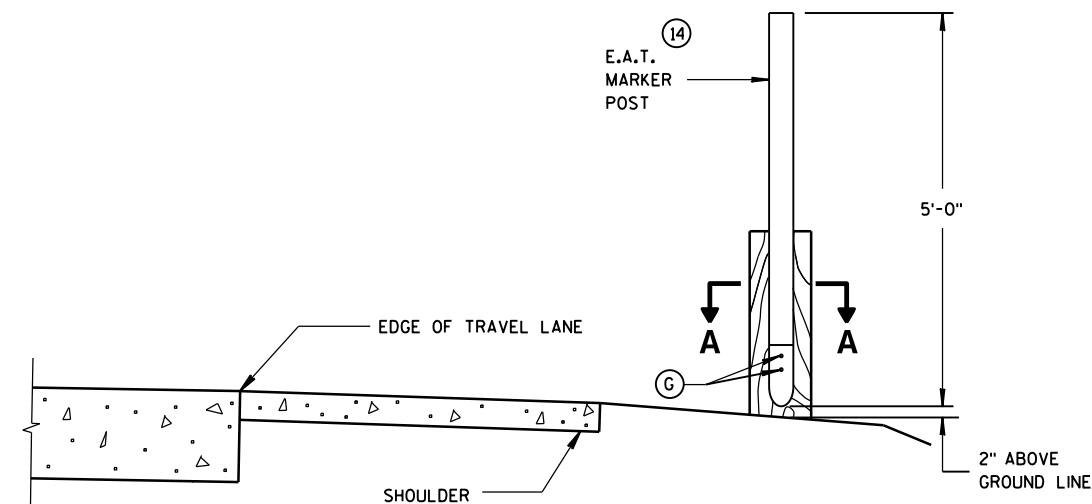
TYPE H
YELLOW REFLECTIVE
SHEETING 3" X 9".
SEE STANDARD
SPECIFICATION 637.



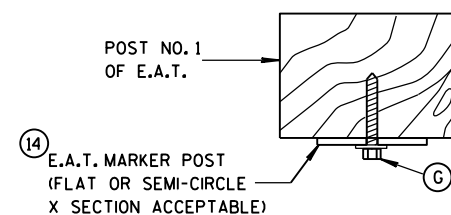
GENERIC REFLECTIVE SHEETING ⑬ ①



FRONT VIEW
SIDE VIEW
E.A.T. MARKER POST ⑭



TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)

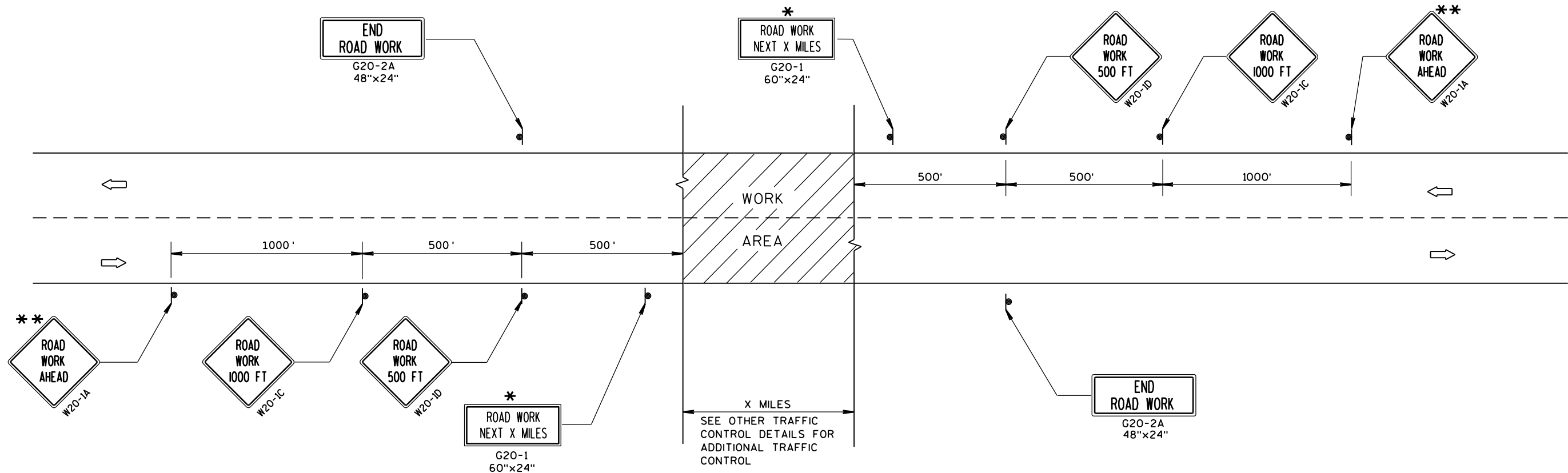


SECTION A-A

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

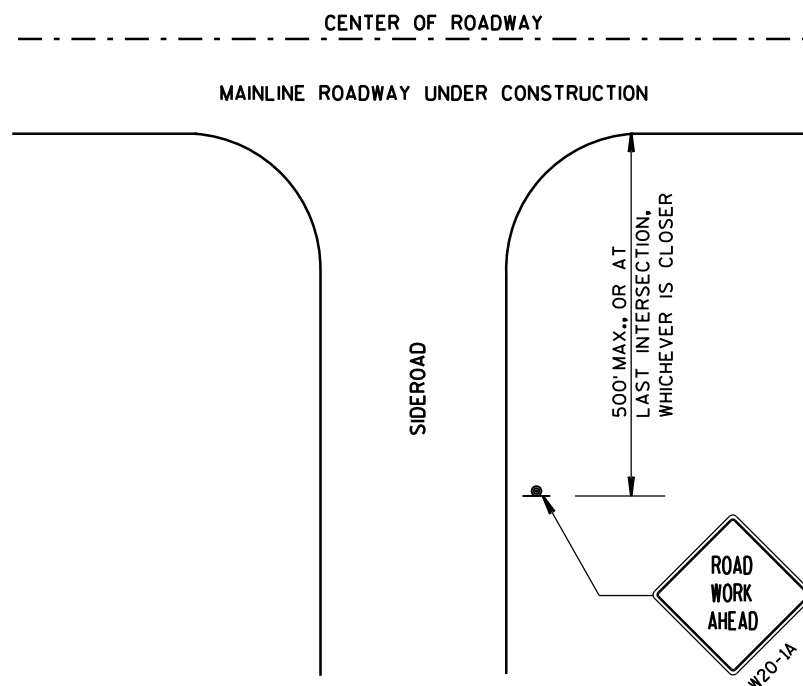
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

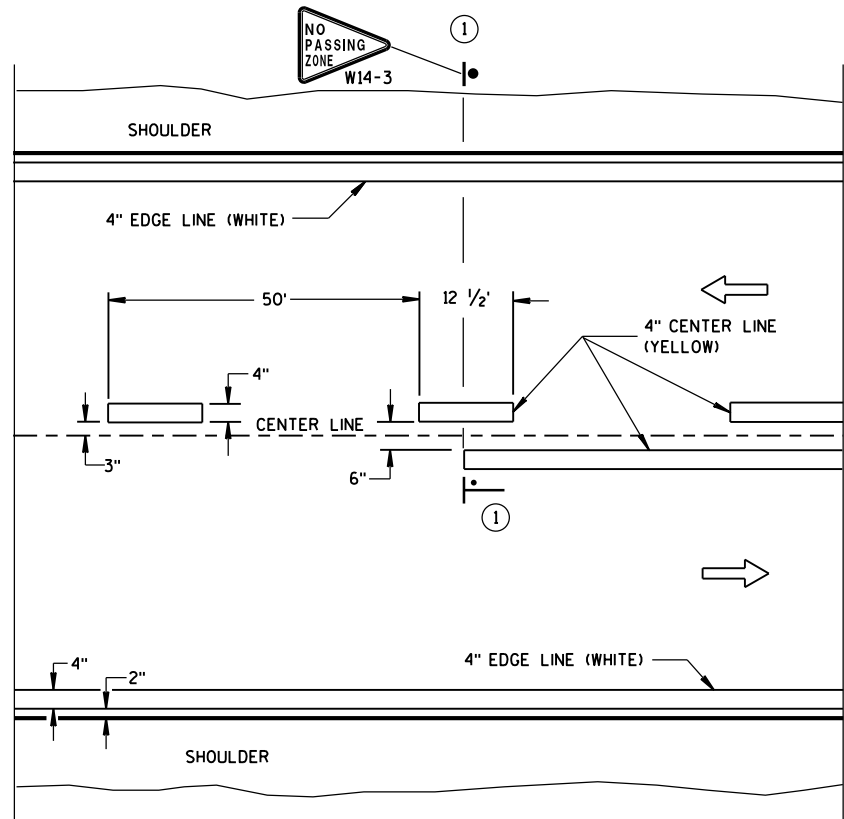
** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



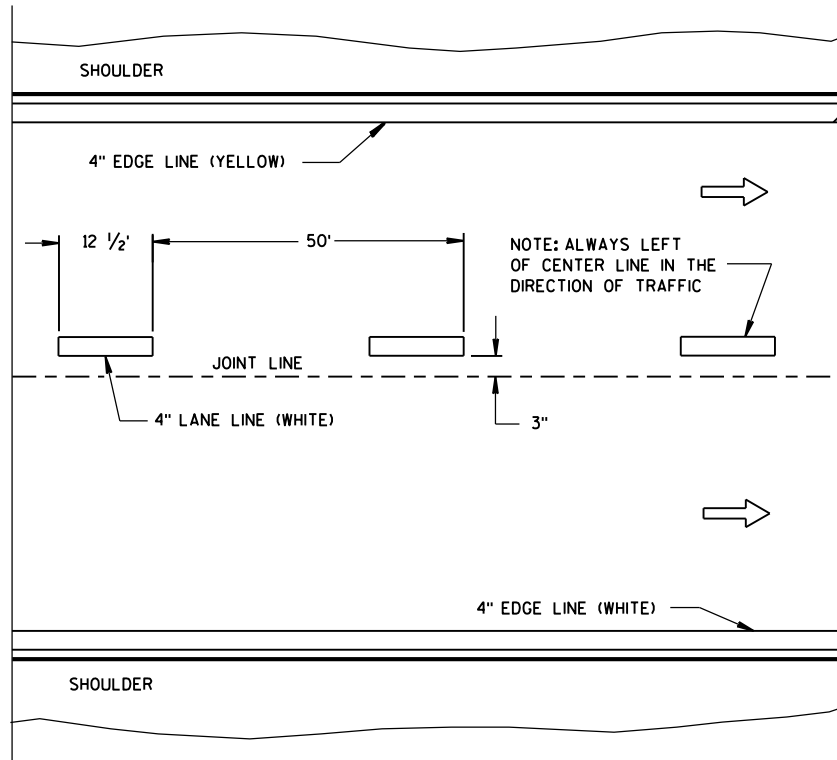
LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

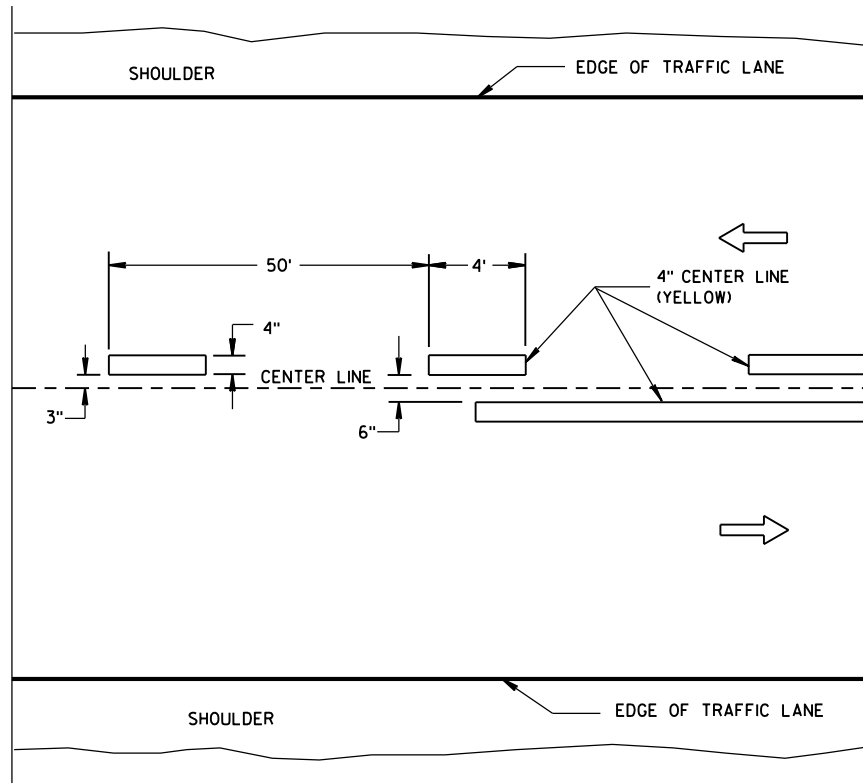


TWO WAY TRAFFIC

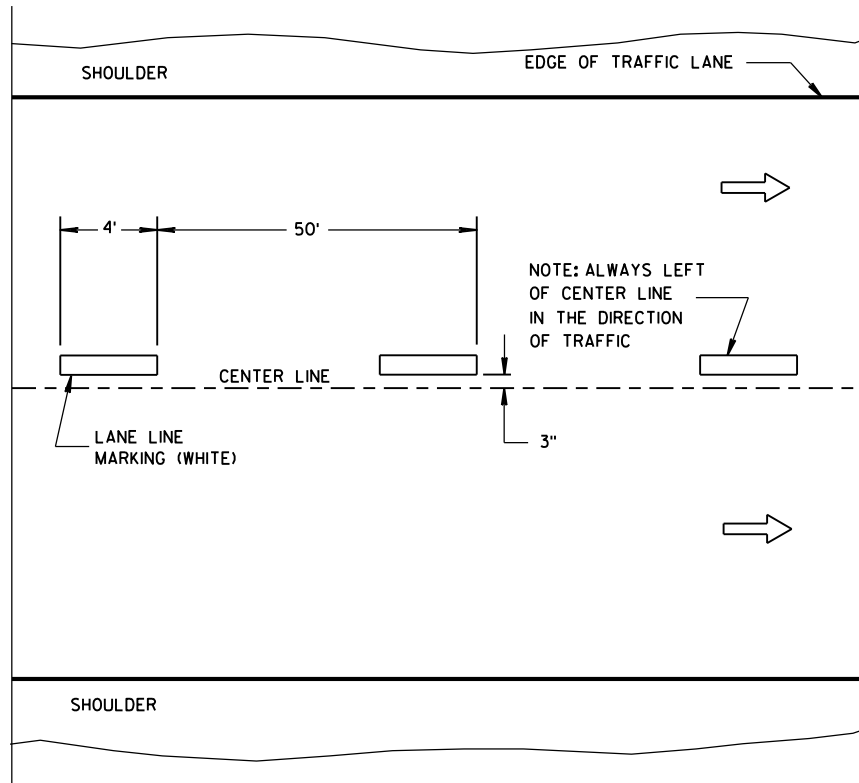


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

① NO PASSING ZONE W14-3 SIGN SHALL BE LOCATED WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

—●— "T" MARKING

● POST MOUNTED SIGN

LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

LEGEND

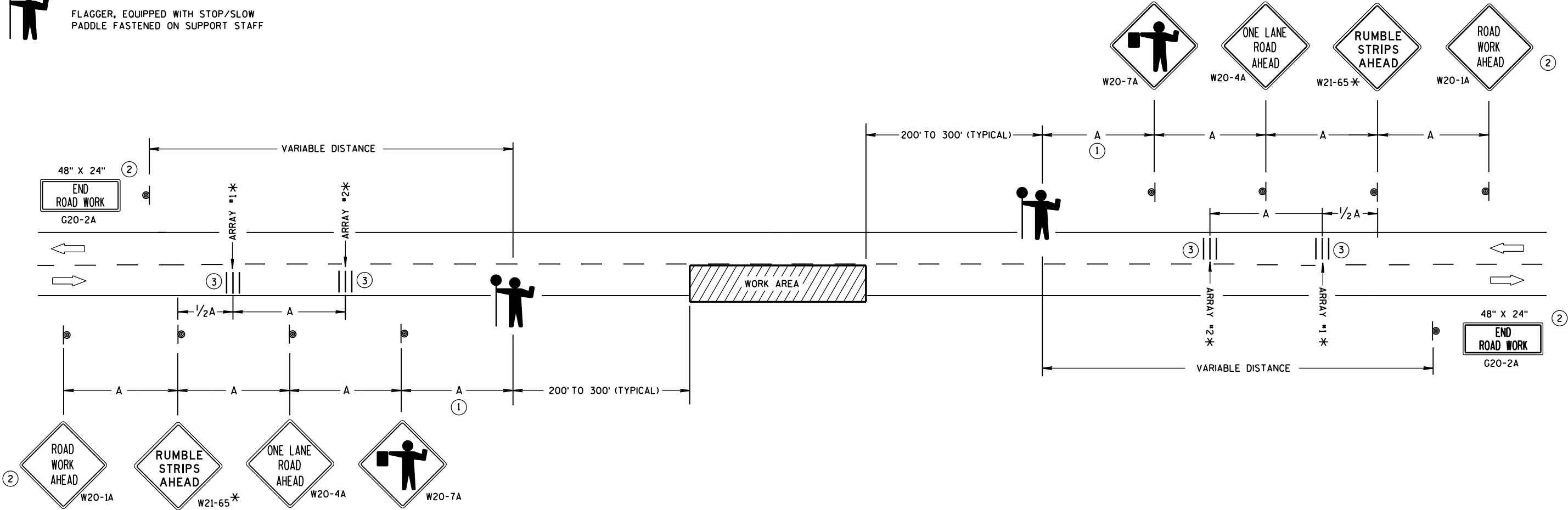
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING A
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING A.



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

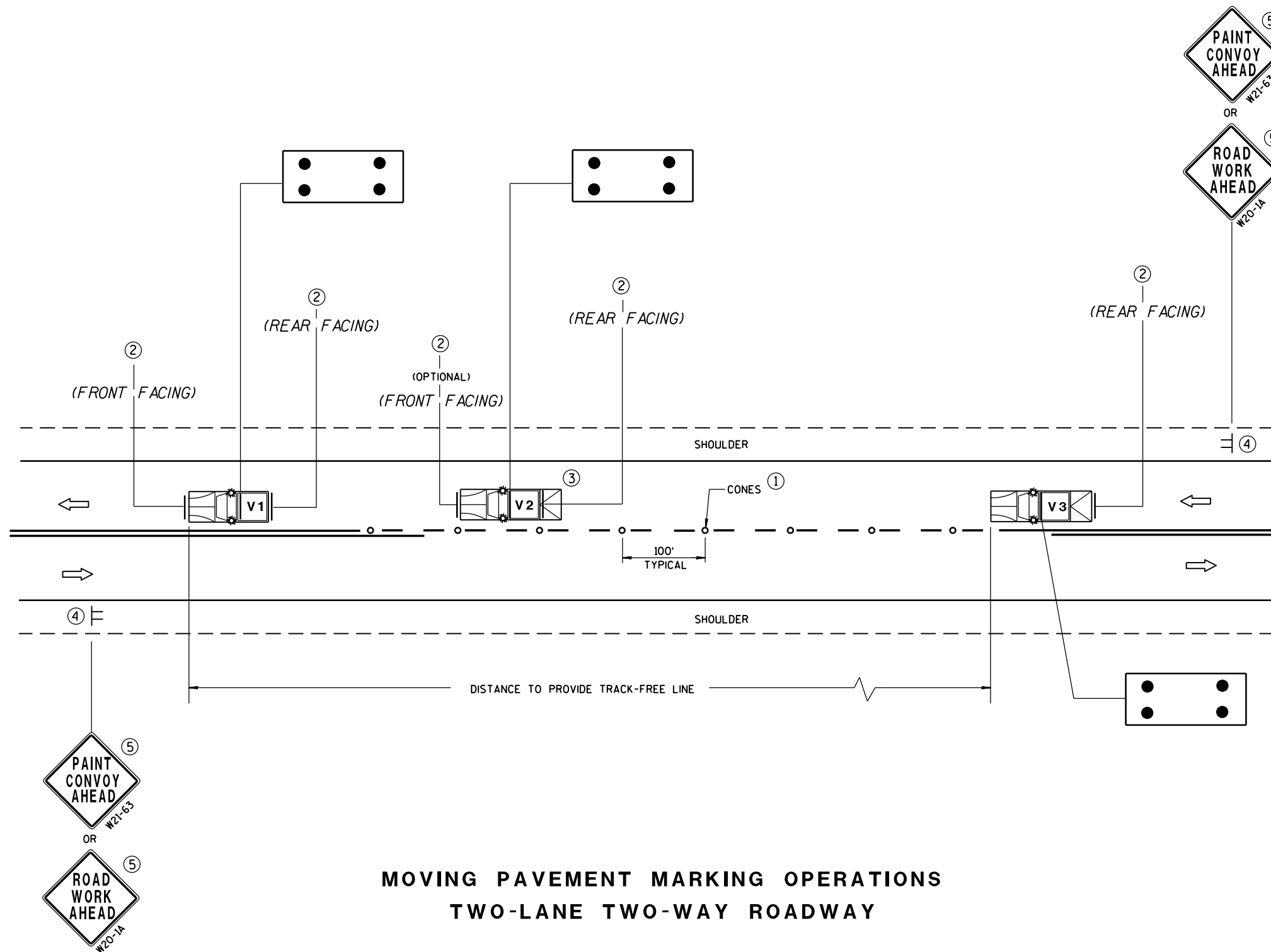
INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, REMOVE TEMPORARY RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- * UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.
- ① FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
 - ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
 - ③ EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED December, 2016 DATE	/S/ Andrew Heldtke WORK ZONE ENGINEER
FHWA	



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

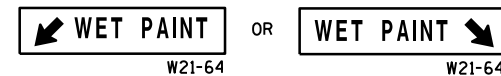
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

NOTES

- ### 1. Sign is Type II - Type H Reflective

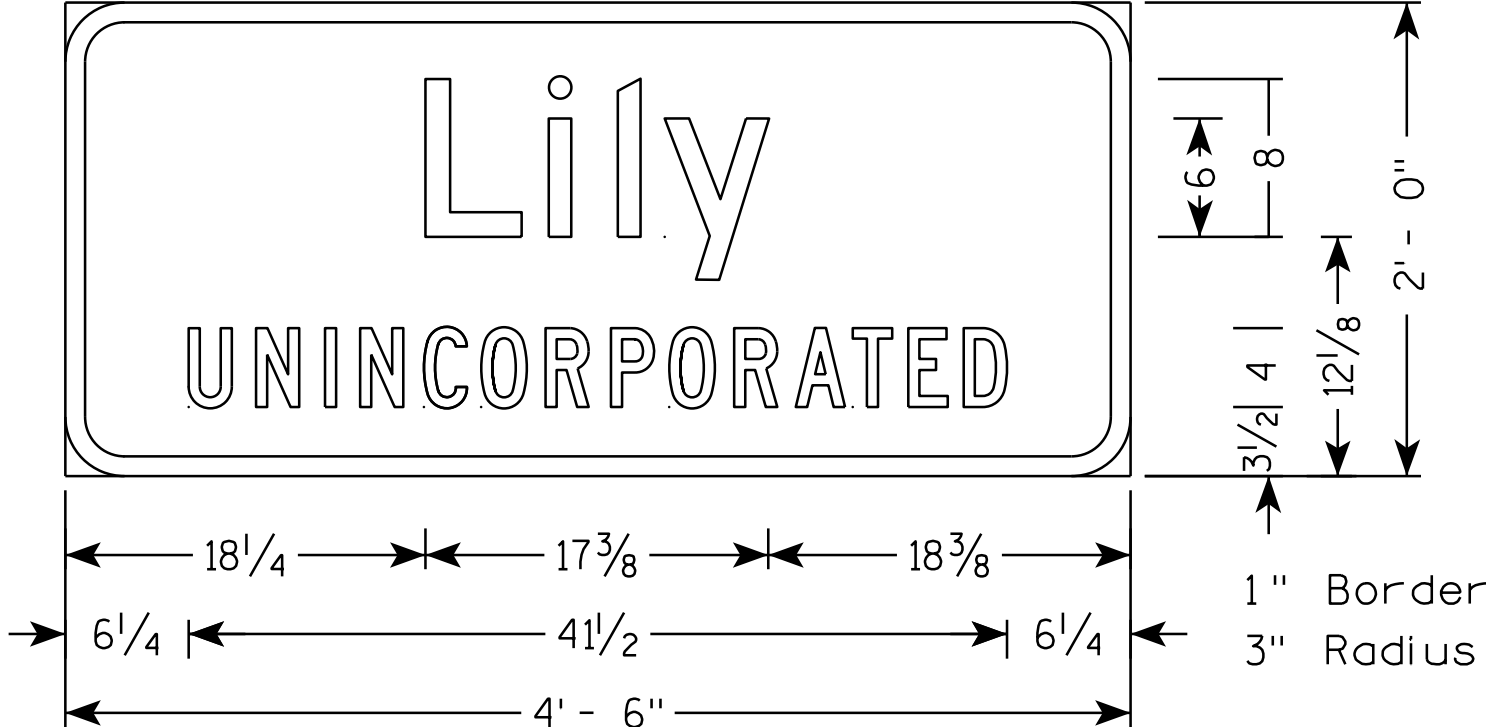
2. Color:

Background - GREEN

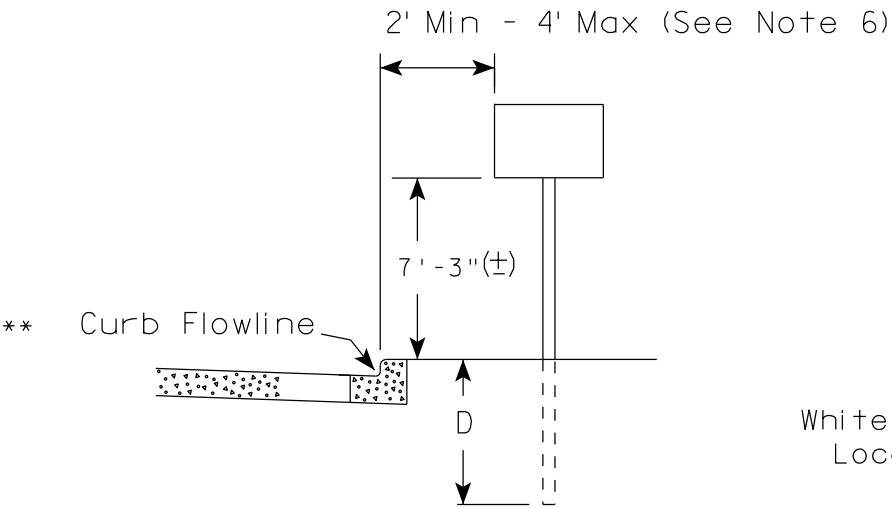
Message - WHITE

3. Message Series - Series D Line 1

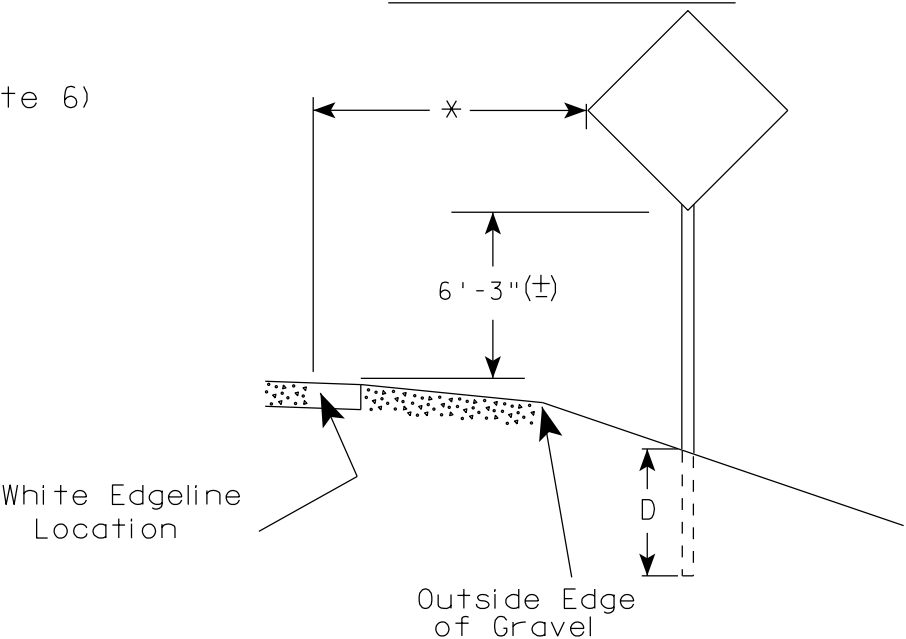
Series C Line 2



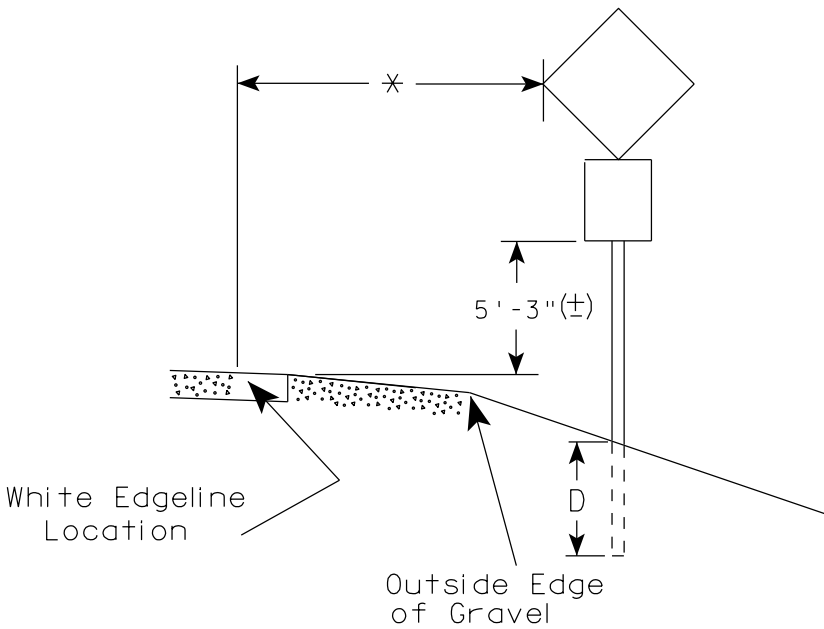
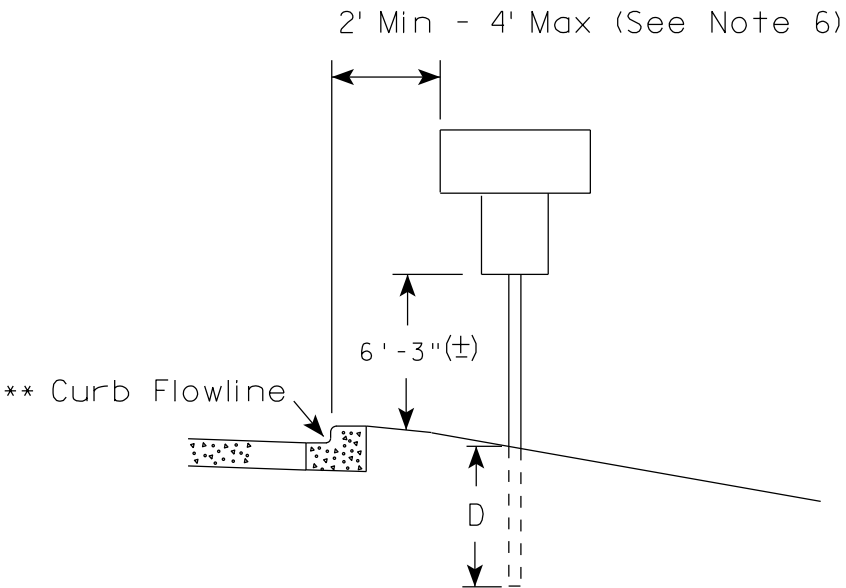
URBAN AREA



RURAL AREA (See Note 2)



- GENERAL NOTES
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
 2. If signs are mounted on barrier wall, see A4-10 sign plate.
 3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
 4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. The (±) tolerance for mounting height is 3 inches.
 8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
 9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).



POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

* * The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

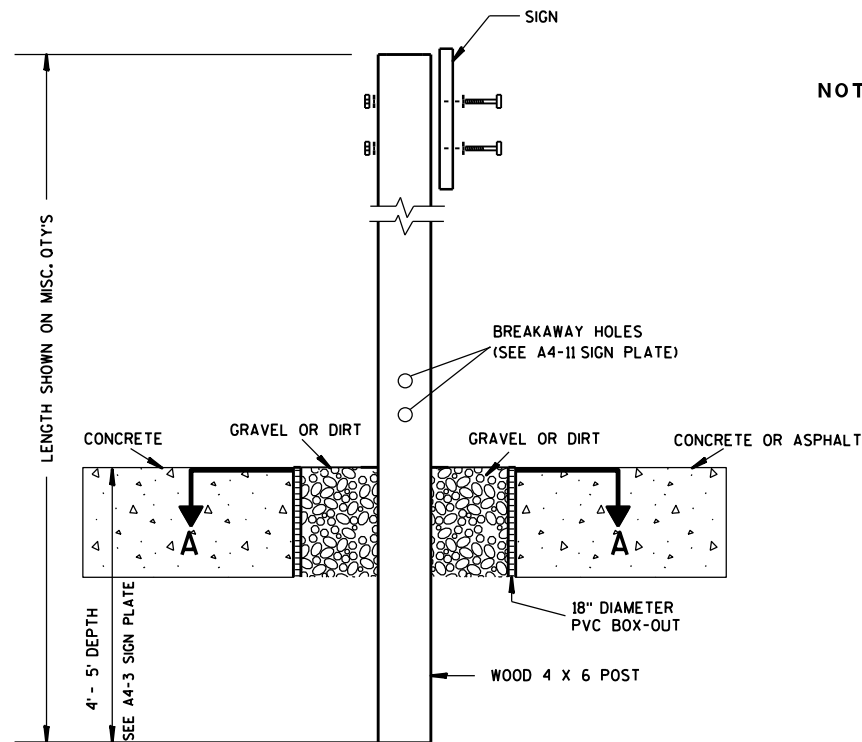
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

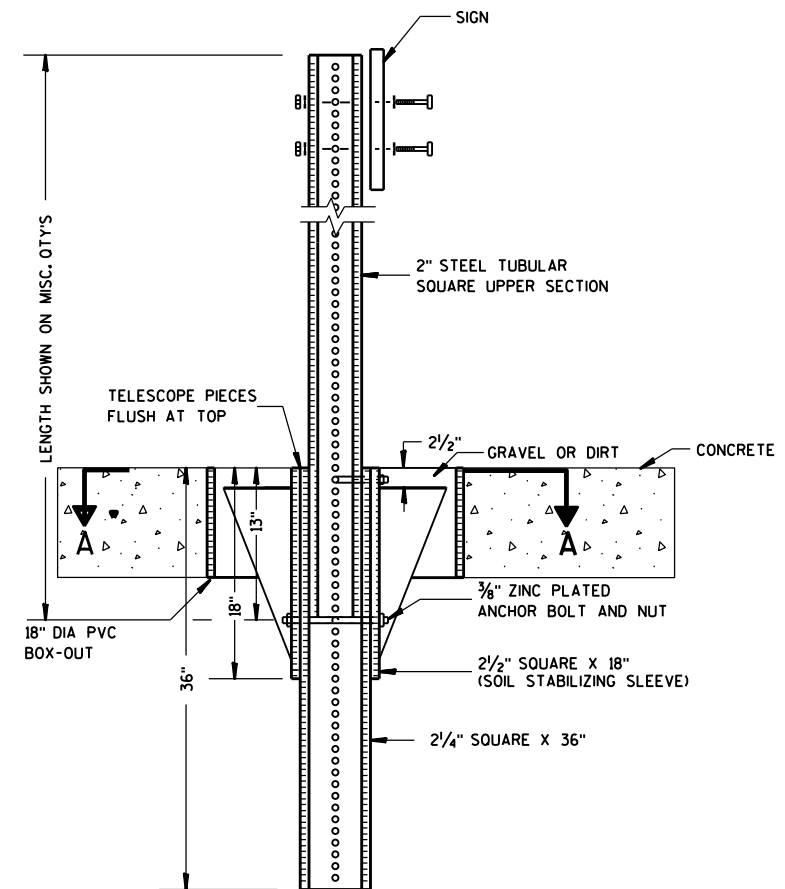
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

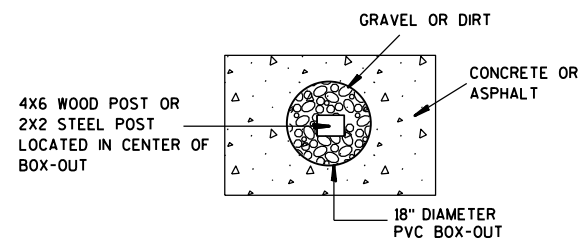
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

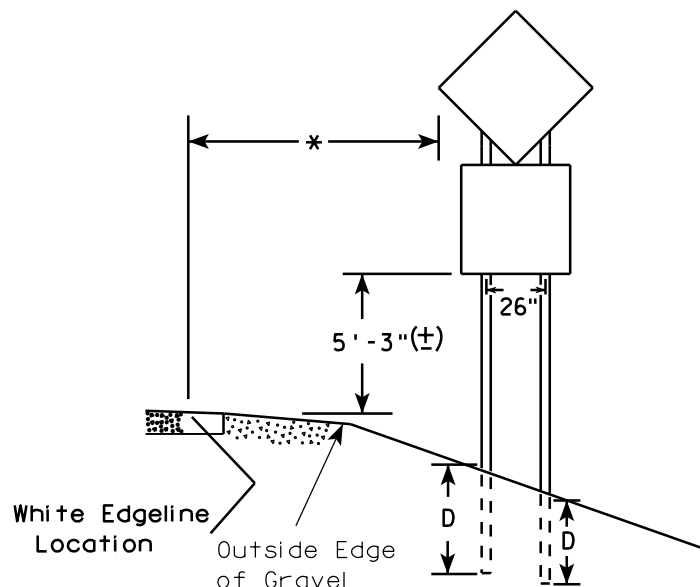
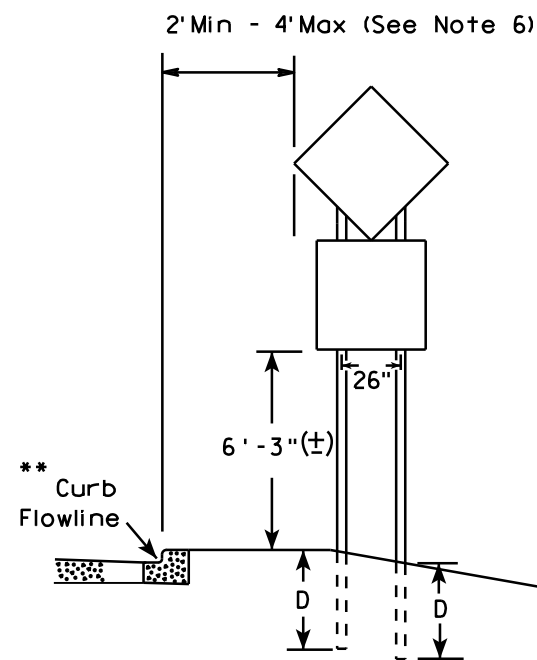
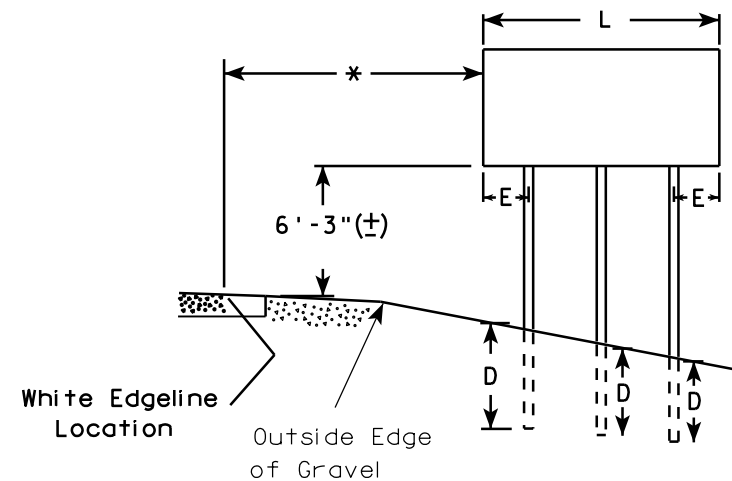
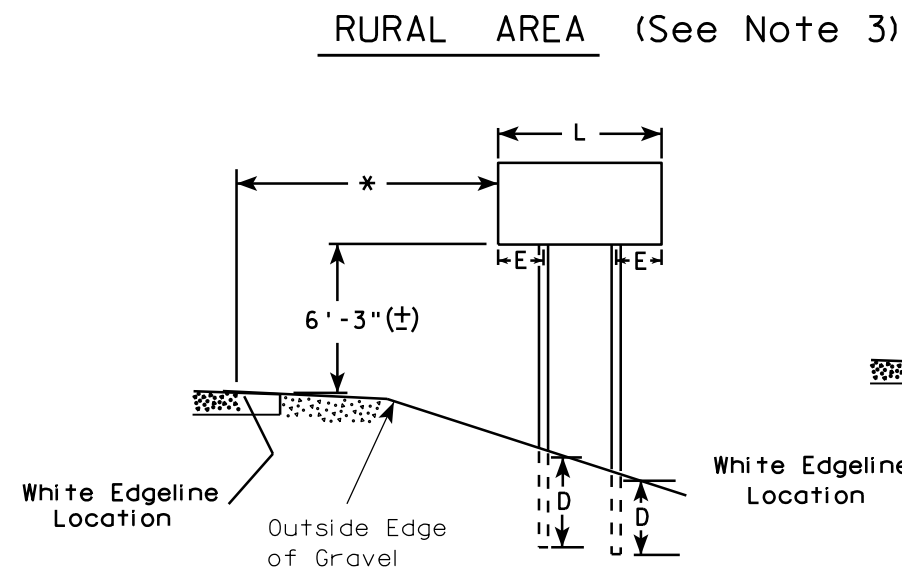
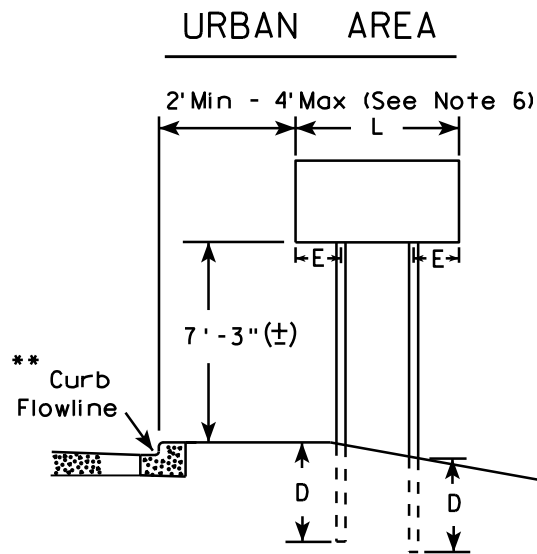
FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

- GENERAL NOTES**
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

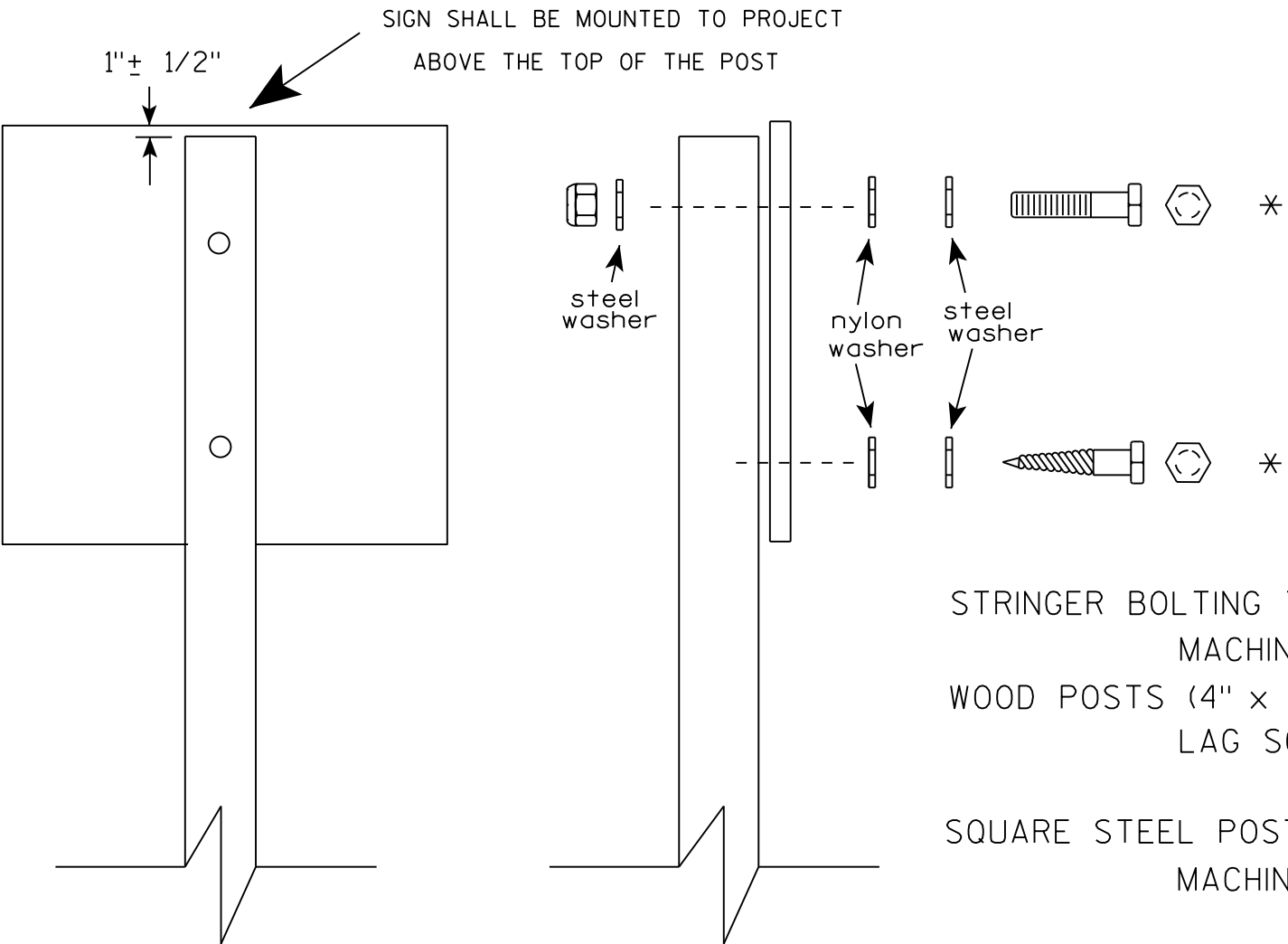
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4.14



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
 - 3/8" X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 - 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
 - 1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

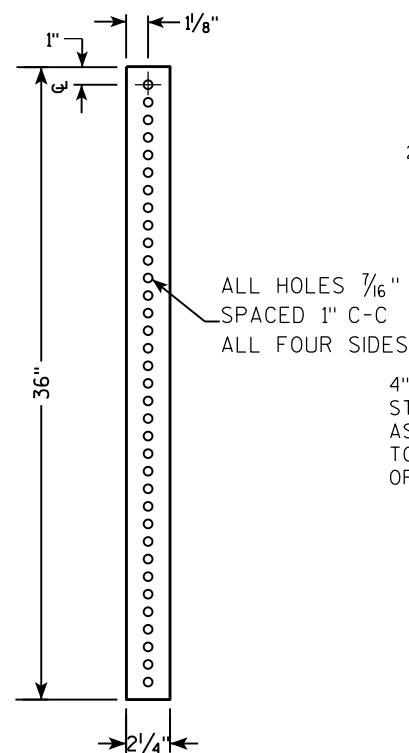
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

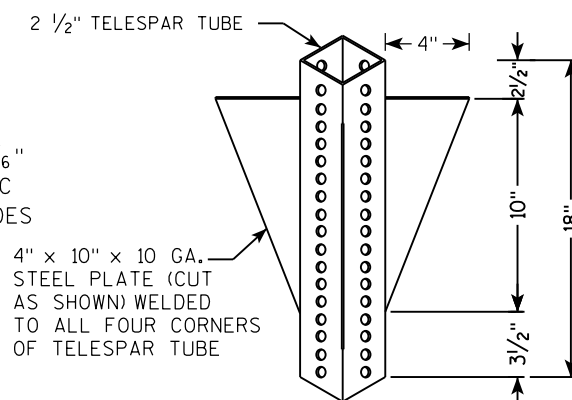
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**



TECHNICAL DRAWING OF A VERTICAL SIGN POST ASSEMBLY.

Labels and Dimensions:

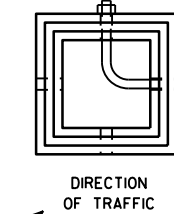
- 18" DIA SCHEDULE 40 PVC BOX-OUT**: The base container for the post.
- 36"**: Total height of the post assembly.
- 18"**: Height of the upper section.
- 13"**: Height of the lower section.
- 2 1/2" GRAVEL OR DIRT**: Material filling the base of the post.
- 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)**: Sleeve around the post in the gravel/dirt section.
- 2 1/4" SQUARE X 36"**: The main vertical post.
- 2" STEEL TUBULAR SQUARE UPPER SECTION**: The upper part of the post.
- ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES**: Specification for the post's perforations.
- 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT**: Hardware securing the post to the box-out.
- 3/16" ZINC PLATED ANCHOR BOLT AND NUT**: Hardware securing the sleeve.
- SIGN**: The sign plate at the top.
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL**: Reference to a specific sign plate for hardware details.
- TELESCOPE PIECES FLUSH AT TOP**: Note on the top connection.
- LONGER SHOWN ON MISC. QTY'S**: Note on the left side of the drawing.

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY.

Labels and Dimensions:

- TELESCOPE PIECES FLUSH AT TOP** (with dimension 36" for the main vertical section)
- 2" STEEL TUBULAR SQUARE UPPER SECTION**
- ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES**
- $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT** (with dimension 1" for the offset)
- $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT**
- 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)**
- 2 1/4" SQUARE X 36"** (the main vertical post)
- SIGN** (with dimension 18" for the sign plate height)
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL**
- LENGTH SHOWN ON MISC. QTY'S** (dimension line on the left)
- 12"** (dimension for the lower section of the post)
- 18"** (dimension for the upper section of the post)
- 36"** (dimension for the total height of the post section shown)
- A** (pointing to the base of the post)
- B** (pointing to the anchor bolt/nut connection)

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

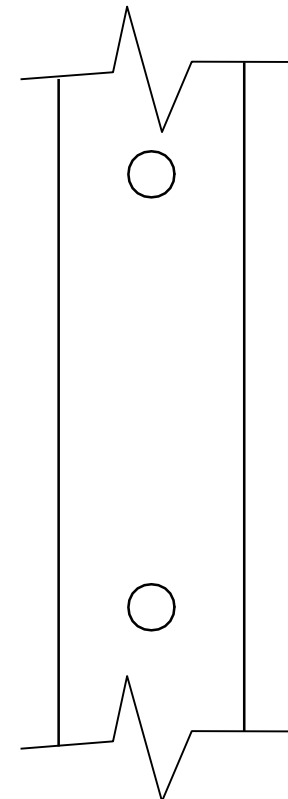
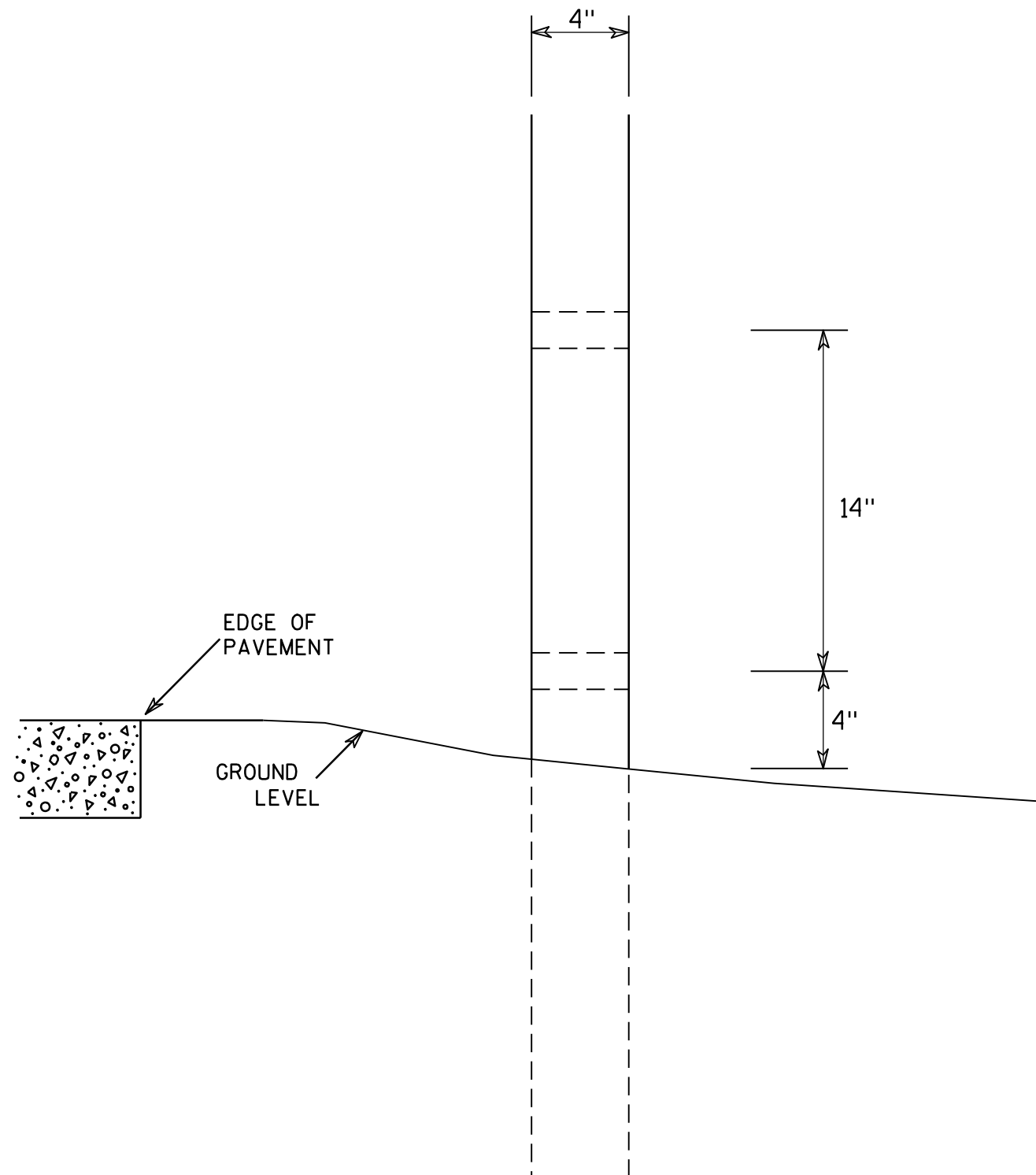
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

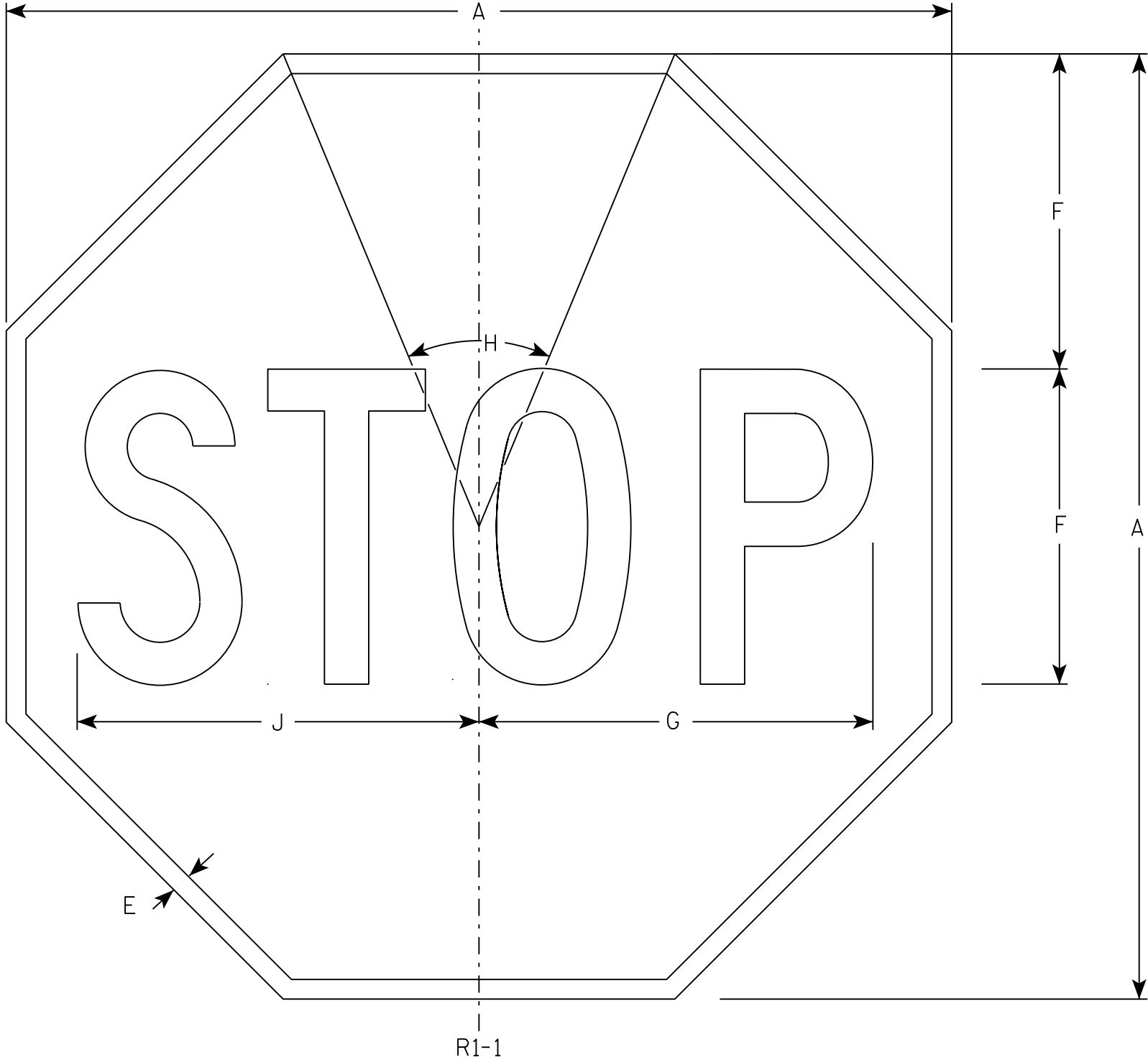
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Red
 - Message - White
- 3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

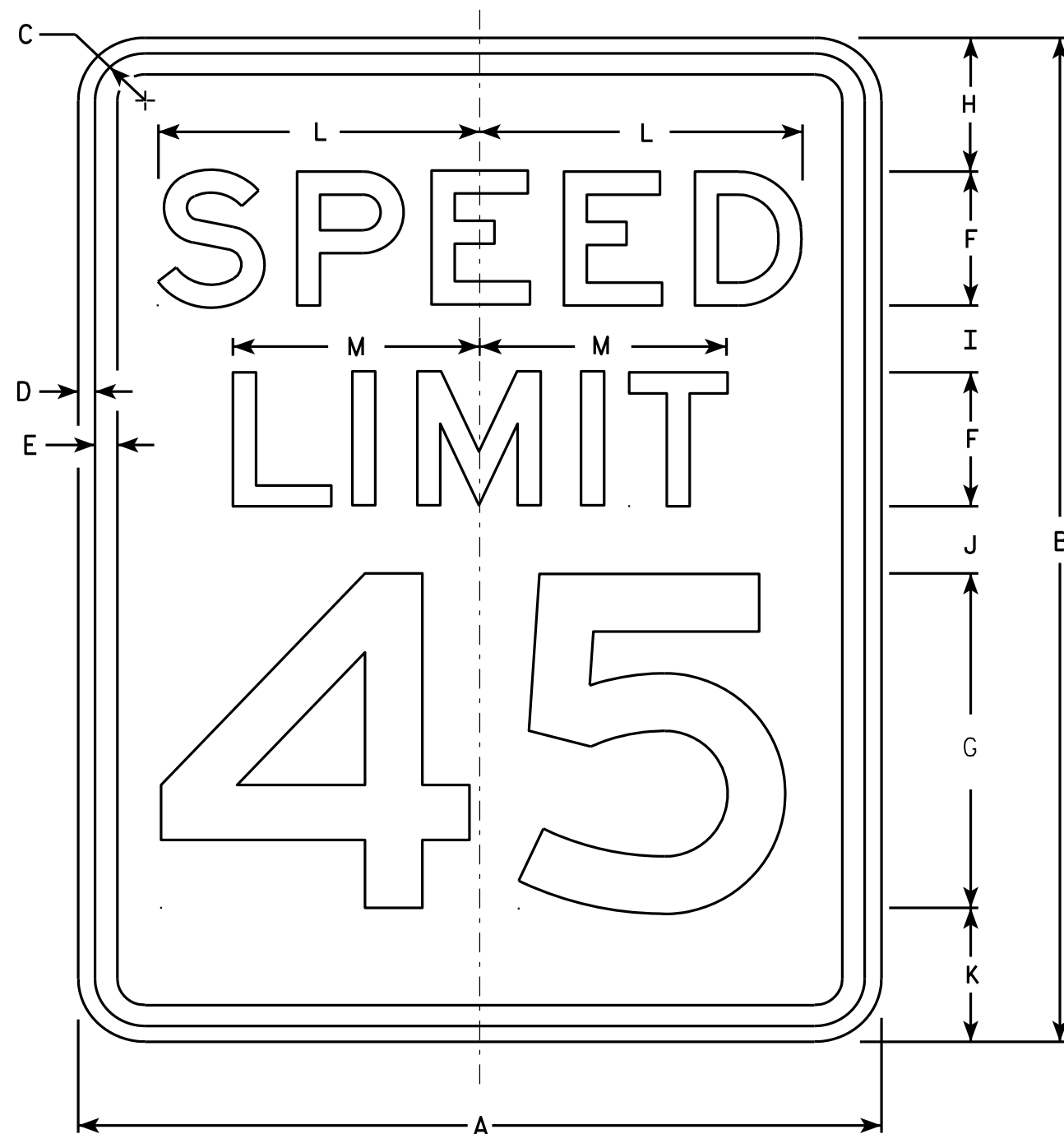
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

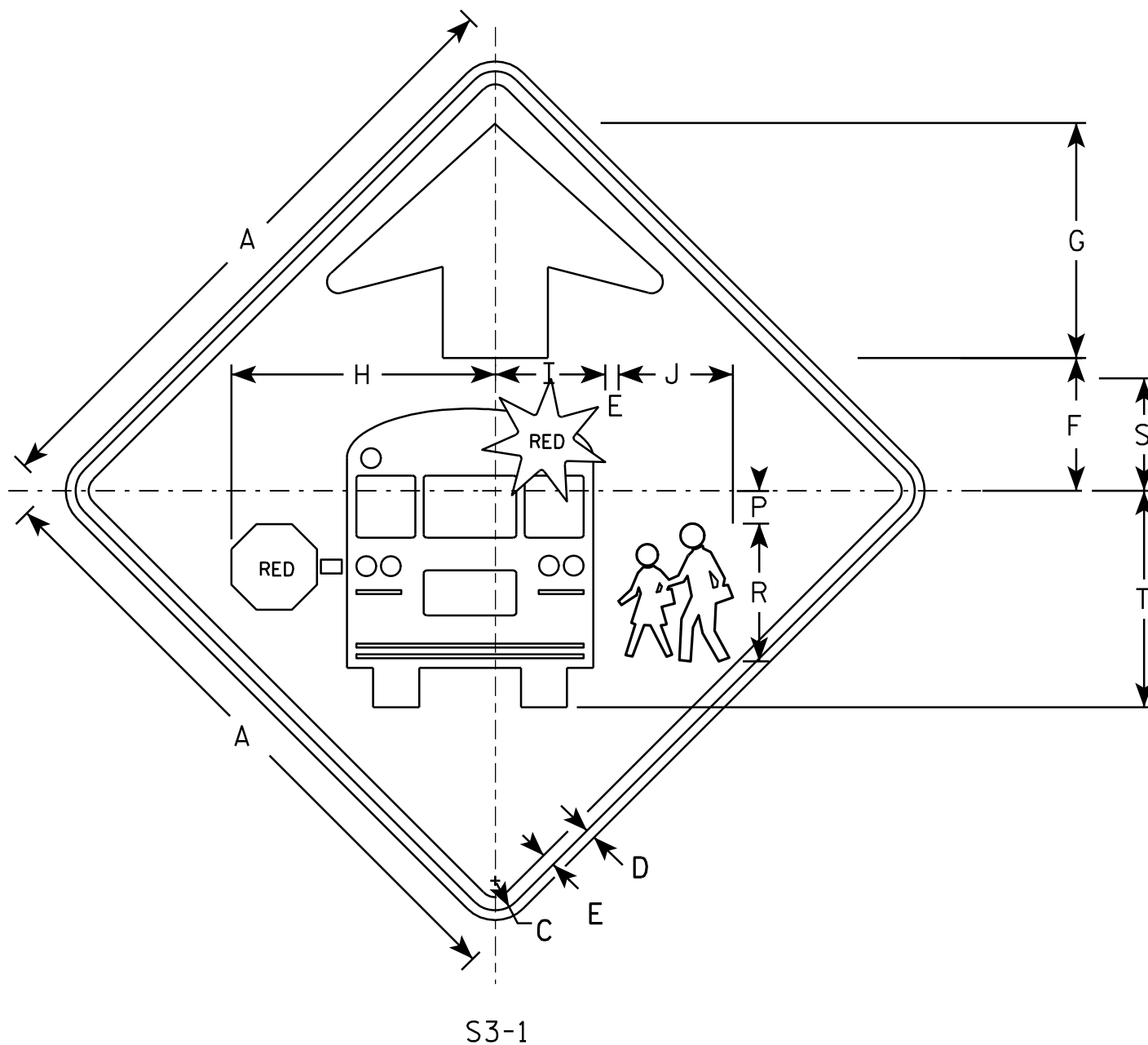
PROJECT NO:

HWY:

COUNTY:

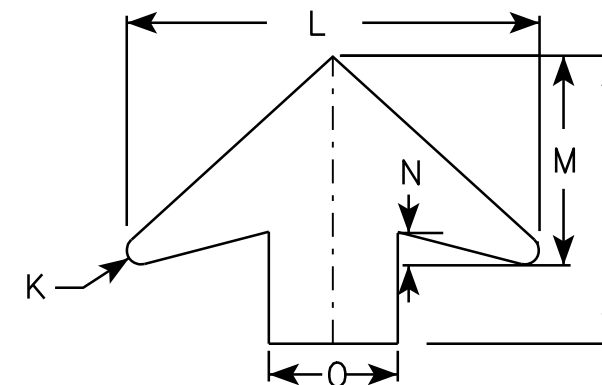
SHEET NO:

E



NOTES

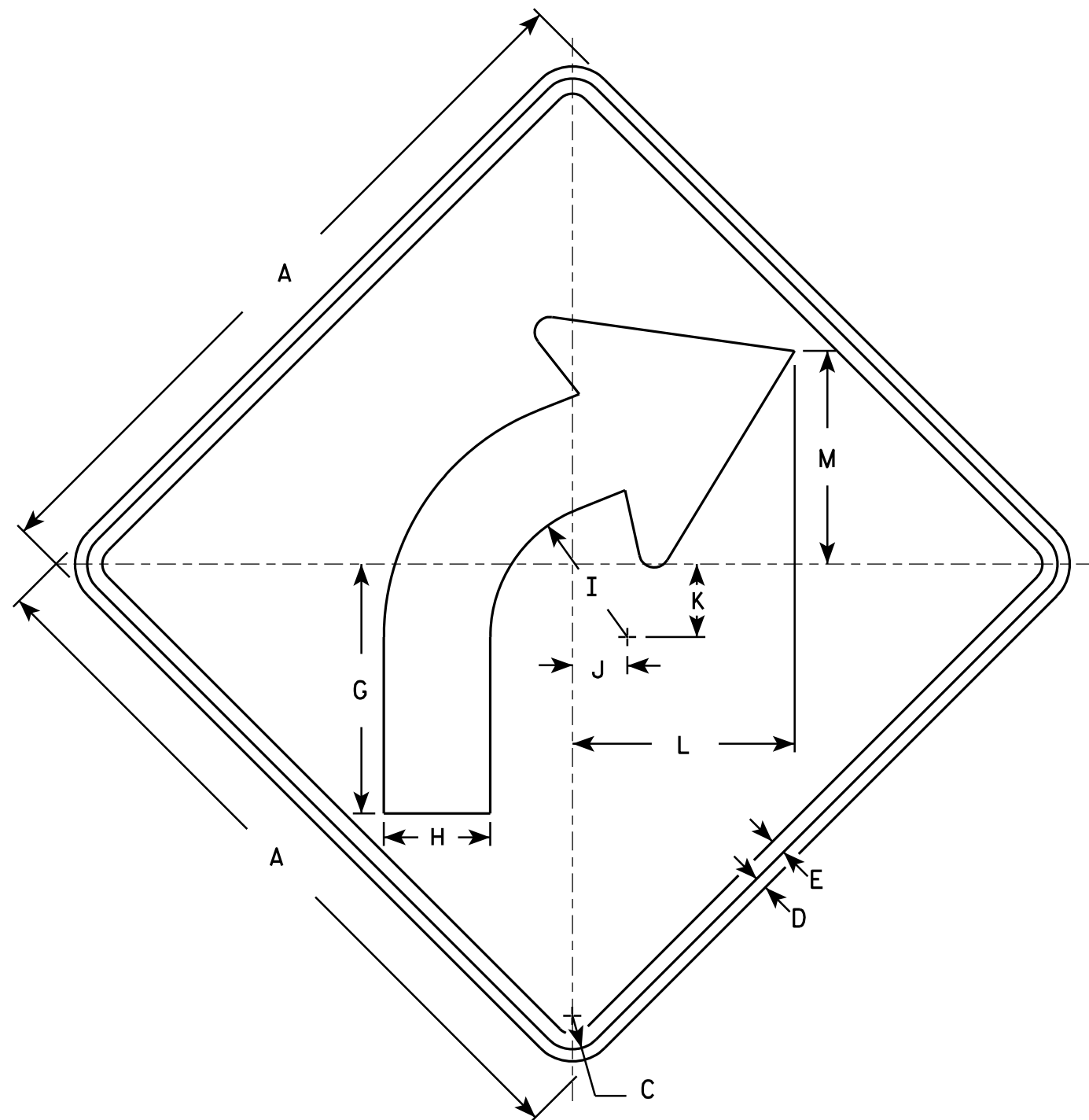
1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 - Background - YELLOW-GREEN
 - Message - BLACK except as noted
 - Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

[illegible]

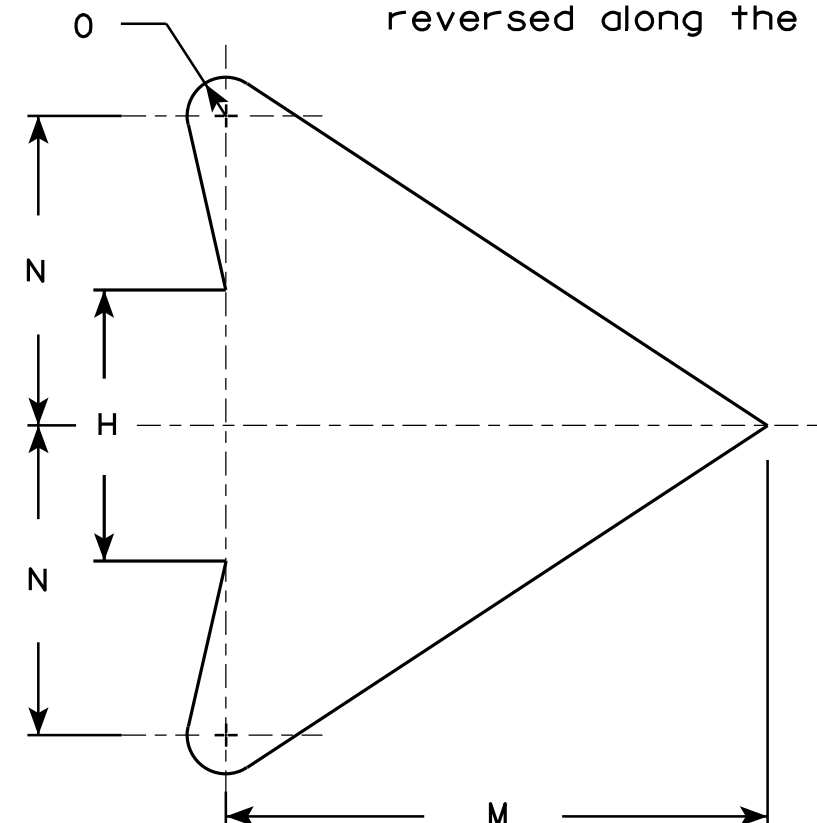
STANDARD SIGN	
S3-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<u>Matthew R. Rauch</u> for State Traffic Engineer
DATE <u>6/8/10</u>	PLATE NO. <u>S3-16</u>

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

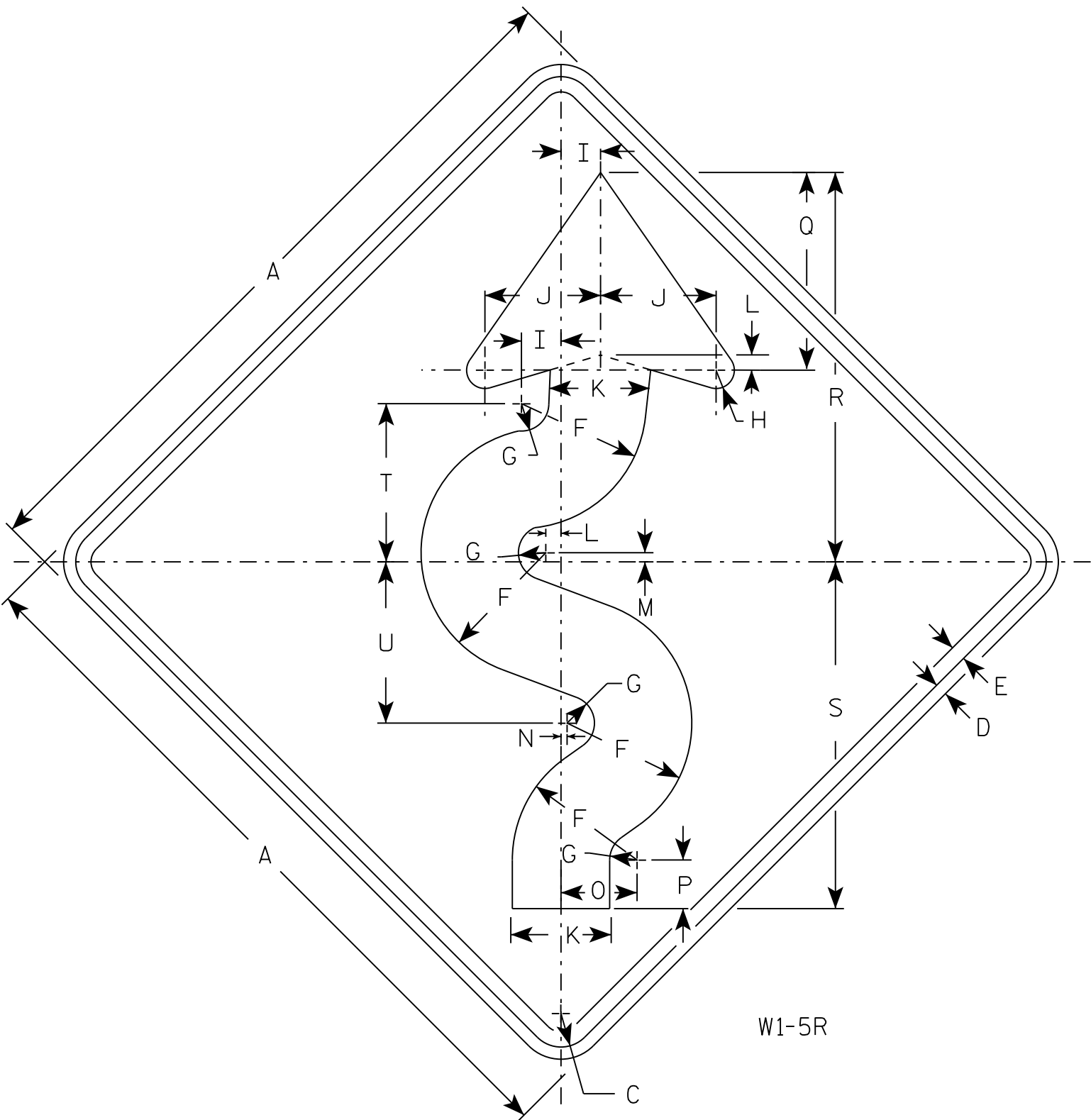
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. W1-5L is the same as W1-5R except the arrow is reversed along the vertical centerline.
- 4. If used with W13-1 of 30 MPH or less, use 36" sign for Size 2S.

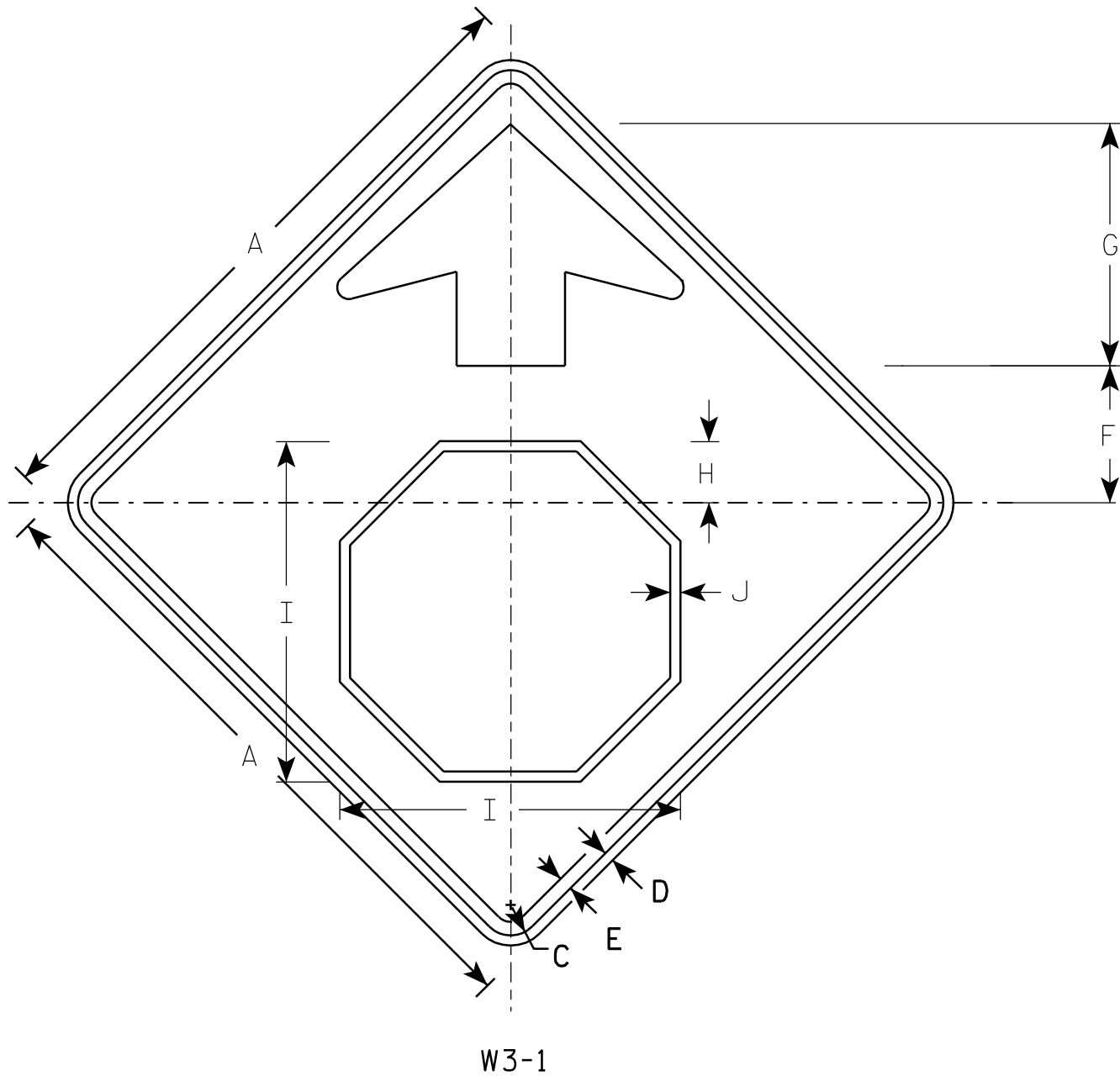
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4 1/8	7/8	5/8	1 1/4	3 3/4	3 1/4	1/2	1/4	1/8	2 1/2	1 5/8	6 1/2	12 3/4	11 3/8	5 1/4	5 1/4						4.0
2S	30		1 3/8	1/2	5/8	5 1/8	1 1/8	3/4	1 5/8	4 3/4	4 1/8	5/8	3/8	1/4	3 1/8	2	8 1/8	16	14 1/4	6 1/2	6 5/8						6.25
2M	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
3	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
4	36		1 5/8	5/8	3/4	6 1/4	1 3/8	1	1 7/8	5 5/8	4 7/8	3/4	3/8	1/4	3 3/4	2 7/8	9 3/4	19 1/8	17 1/8	7 3/4	7 7/8						9.0
5	48		2 1/4	3/4	1	8 1/4	1 3/4	1 1/4	2 1/2	7 1/2	6 1/2	1	1/2	3/8	5	3 1/4	13	25 1/2	22 3/4	10 3/8	10 1/2						16.0

STANDARD SIGN
W1-5

WISCONSIN DEPT OF TRANSPORTATION

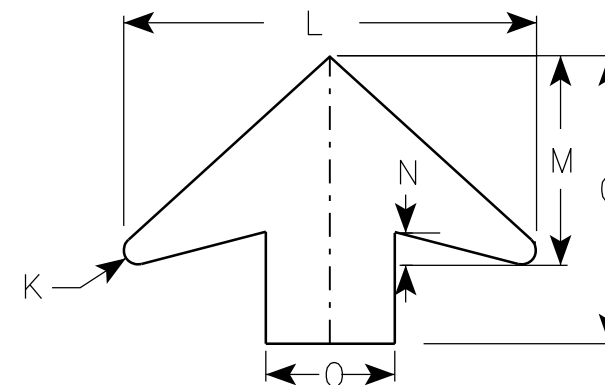
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/1/16 PLATE NO. W1-5.9



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Arrow & Border - BLACK
Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

PROJECT NO:

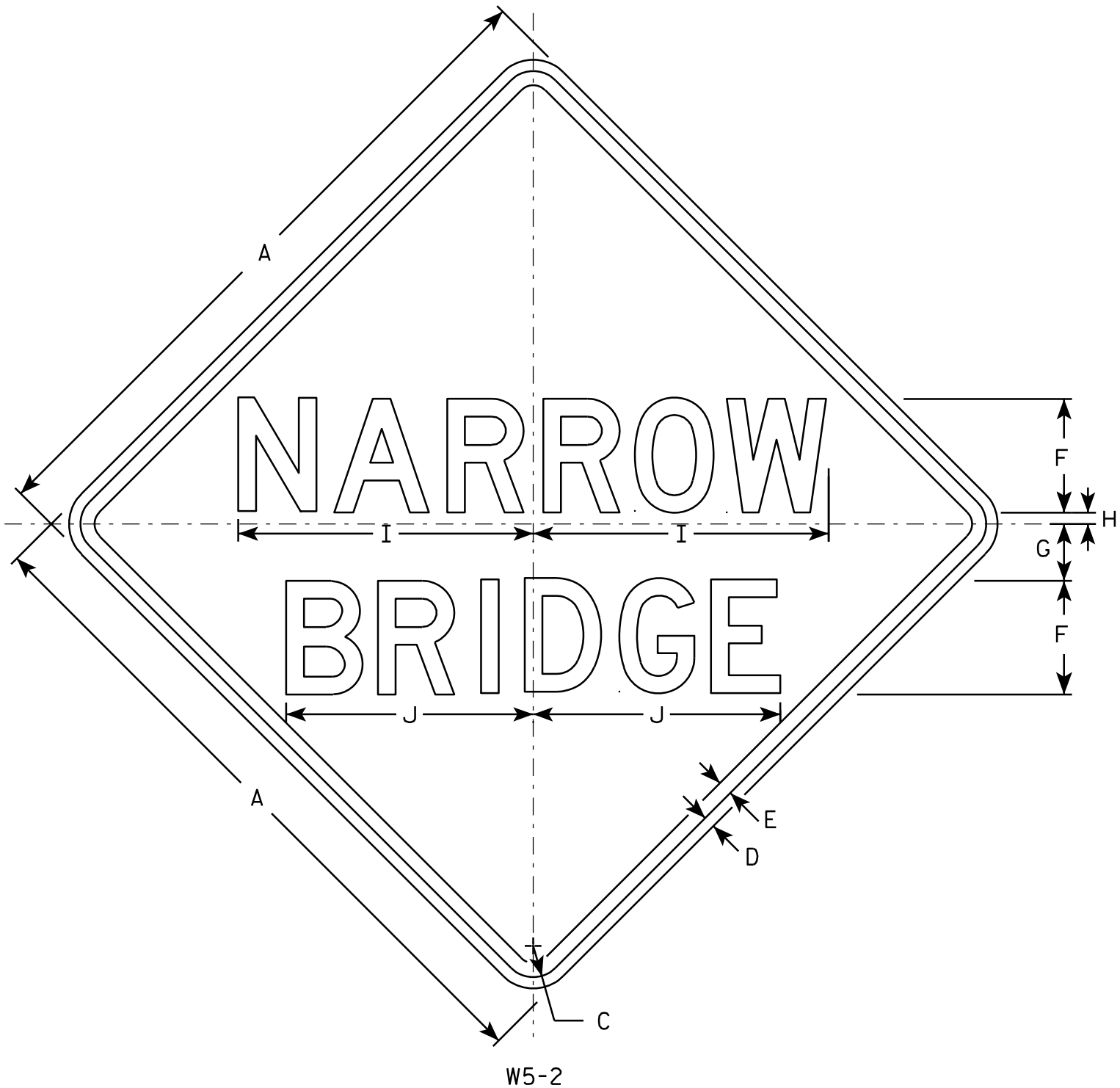
STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W3-1.12

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	2 1/2	1/2	13	10 7/8																	6.25
2S	36		1 5/8	5/8	3/4	6	3	3/4	15 5/8	13 1/8																	9.0
2M	36		1 5/8	5/8	3/4	6	3	3/4	15 5/8	13 1/8																	9.0
3	36		1 5/8	5/8	3/4	6	3	3/4	15 5/8	13 1/8																	9.0
4	48		2 1/4	3/4	1	8	4	3/4	20 3/4	17 3/8																	16.0
5																											

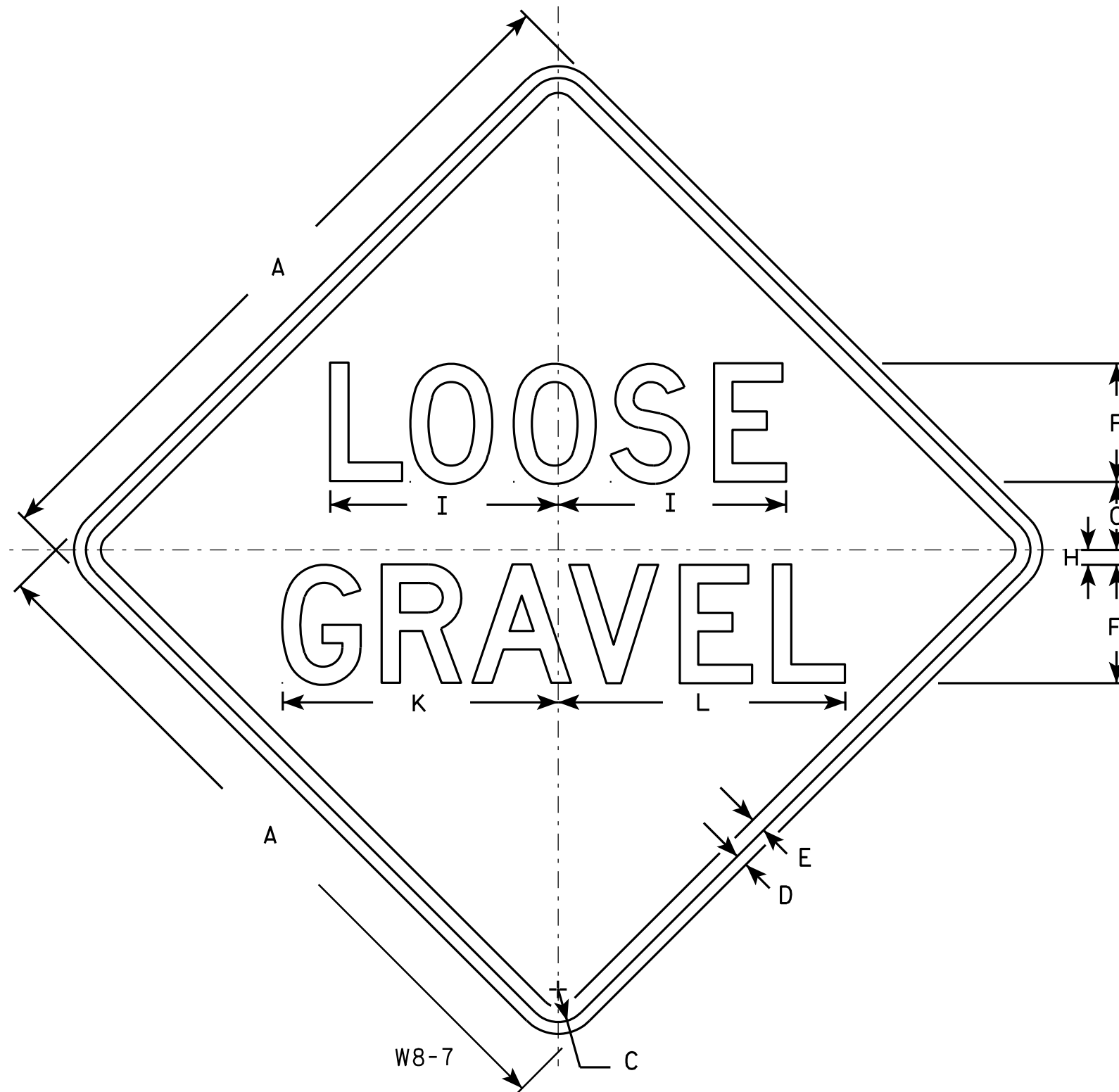
STANDARD SIGN
W5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W5-2.8

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 3/4	1/2	7 3/4		9 1/4	9 3/4															4.0
2S	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
2M	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
3	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
4	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
5	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0

STANDARD SIGN

W8-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/30/12 PLATE NO. W8-7.7

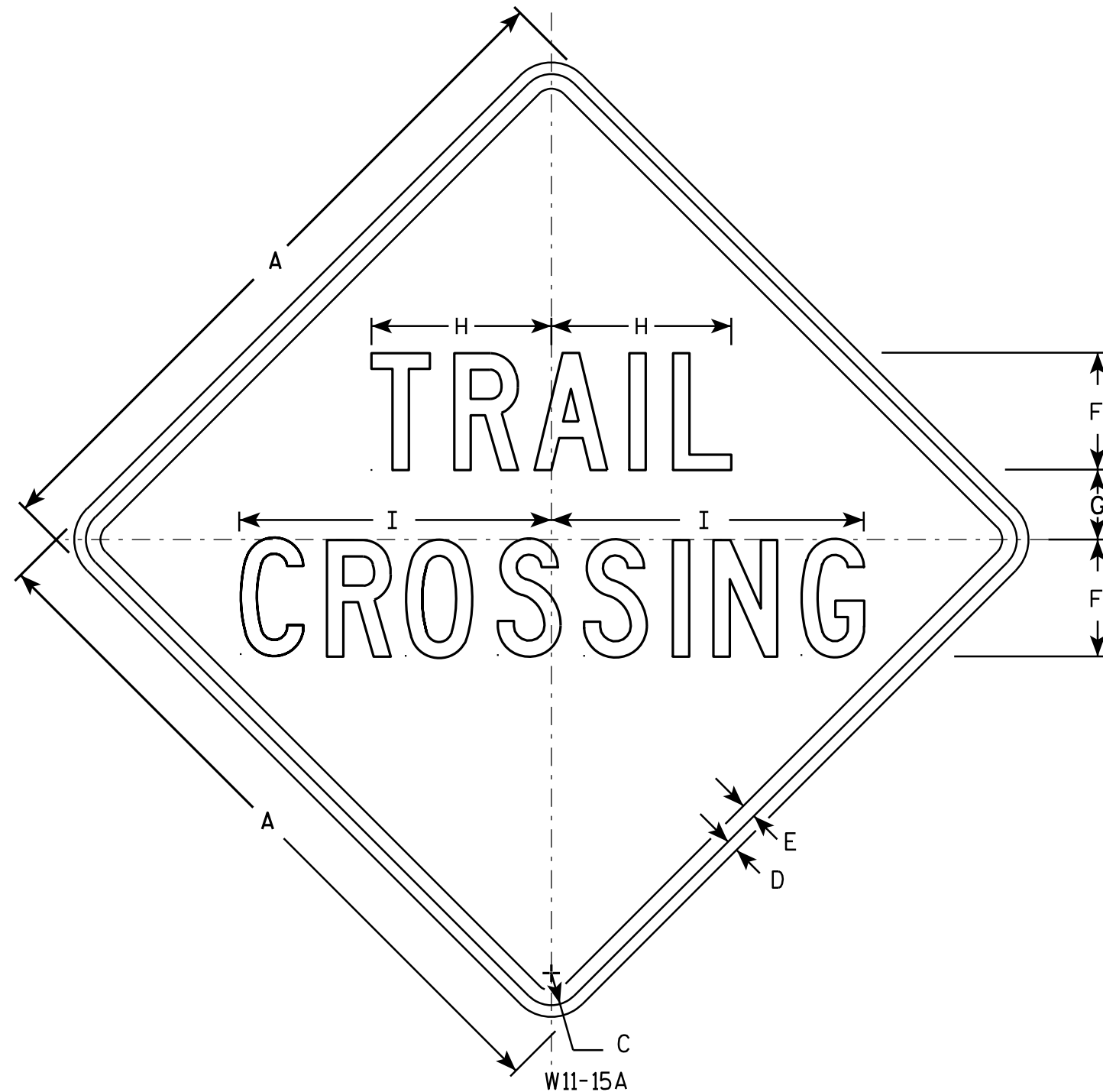
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
Message - Black
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2 3/8	6 1/8	10 3/4																		4.0
2S	30		1 3/8	1/2	5/8	5	3	7 3/4	13 3/8																		6.25
2M	36		1 5/8	5/8	3/4	6	3 1/2	9 1/4	16																		9.0
3	36		1 5/8	5/8	3/4	6	3 1/2	9 1/4	16																		9.0
4	48		2 1/4	3/4	1	8	5	12 7/8	21 1/4																		16.0
5																											

STANDARD SIGN W11-15A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 12/21/10 PLATE NO. W11-15A.1

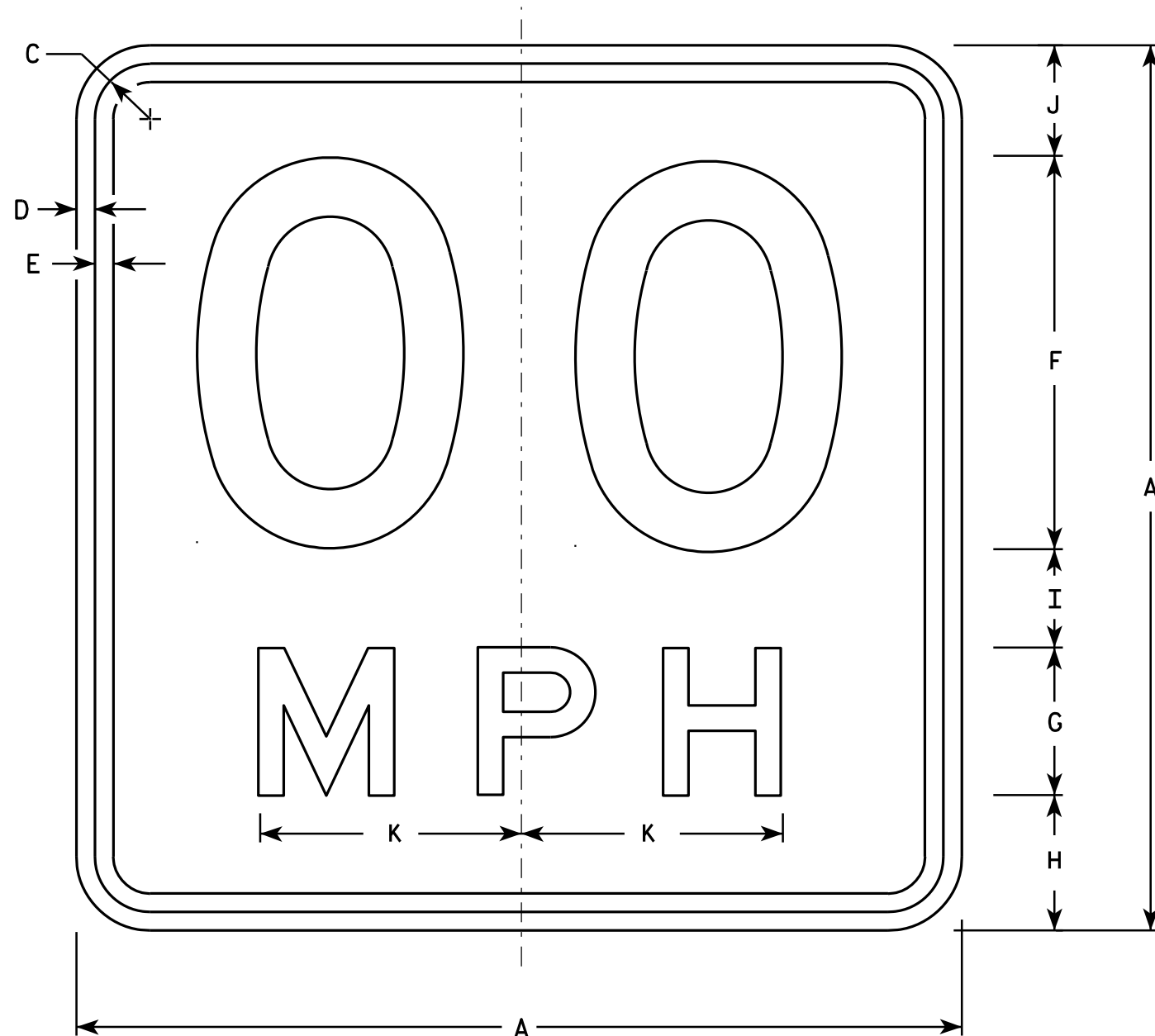
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:

HWY:

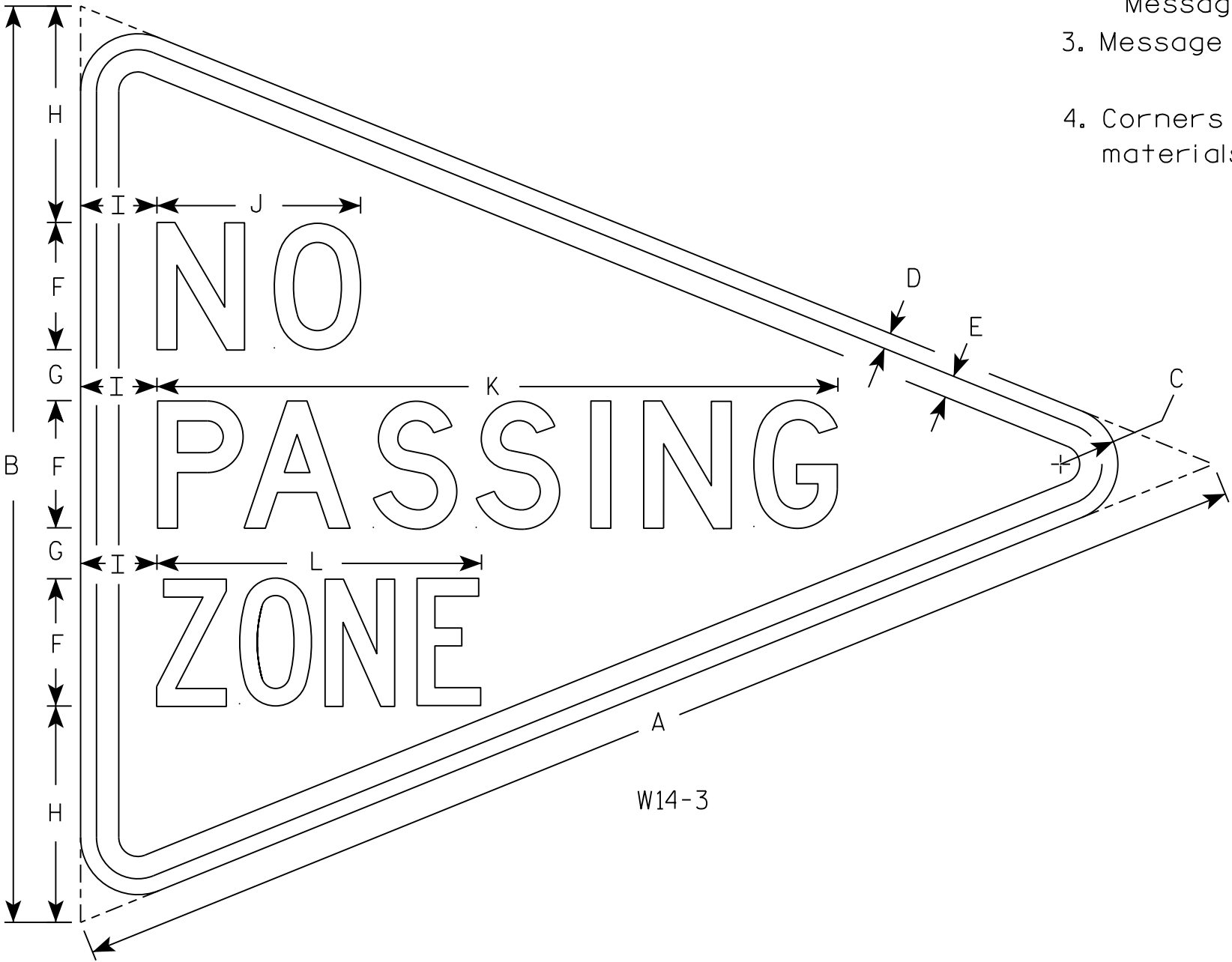
COUNTY:

SHEET NO:

E

NOTES

- 1. Sign is Type II- Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - Lines 1 and 2 are Series D.
Line 3 is series C.
- 4. Corners and borders shall be rounded on all base materials for this sign.



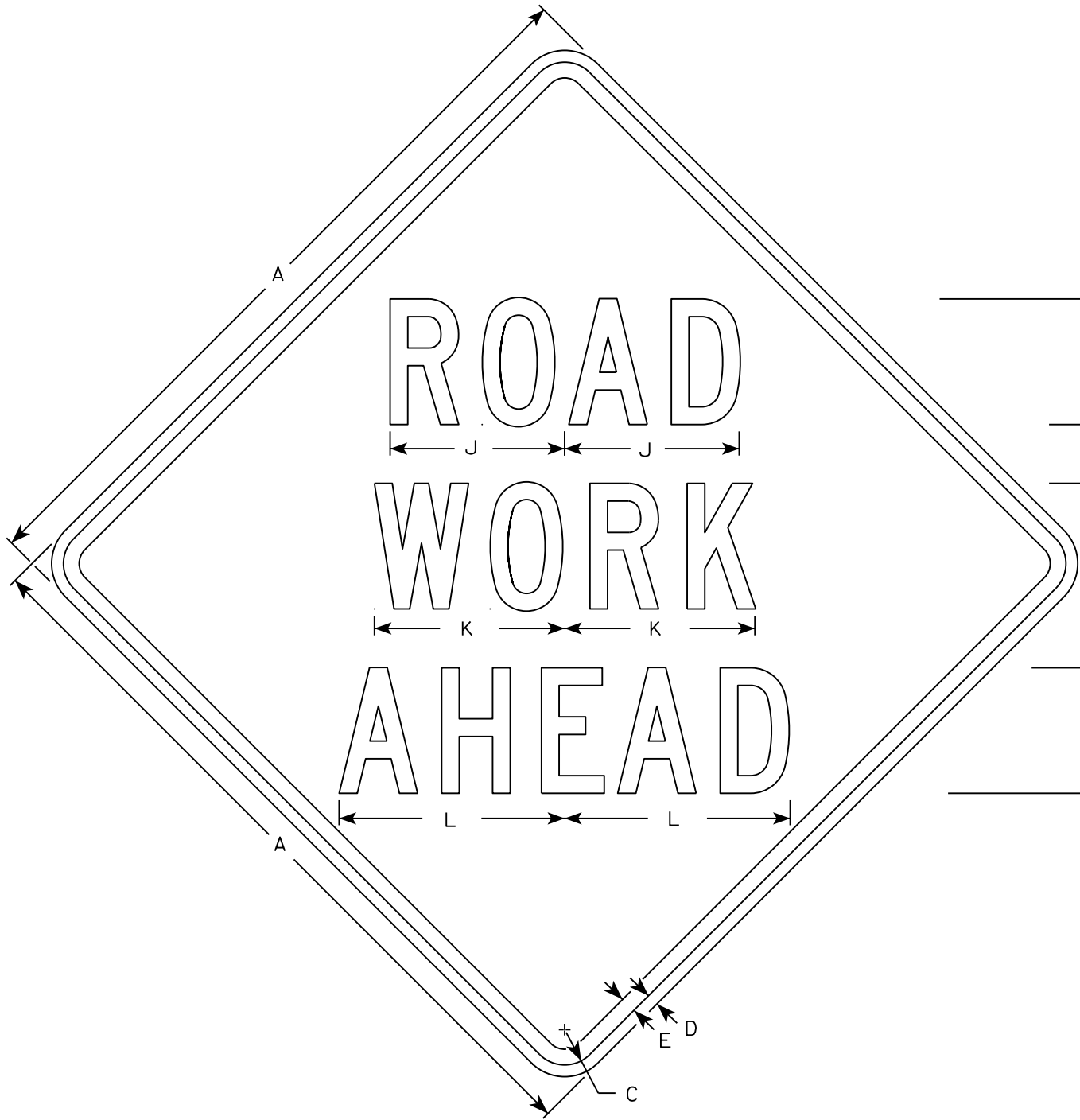
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

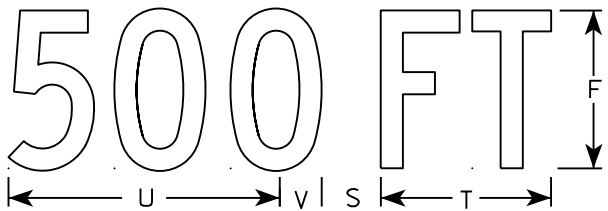
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

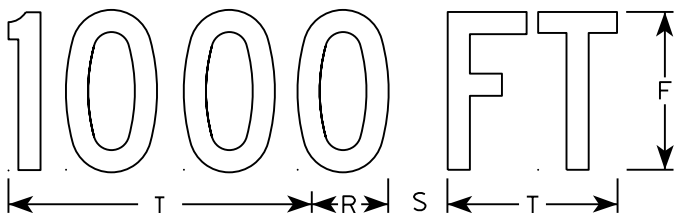
DATE 3/21/17 PLATE NO. W14-3.10



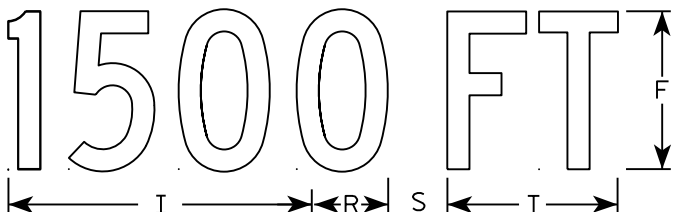
W20-1A



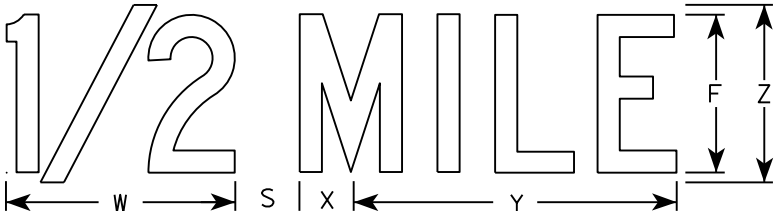
W20-1D



W20-1C



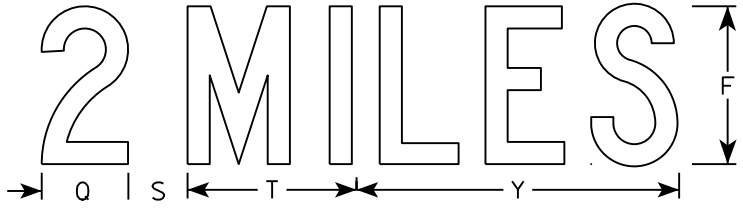
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

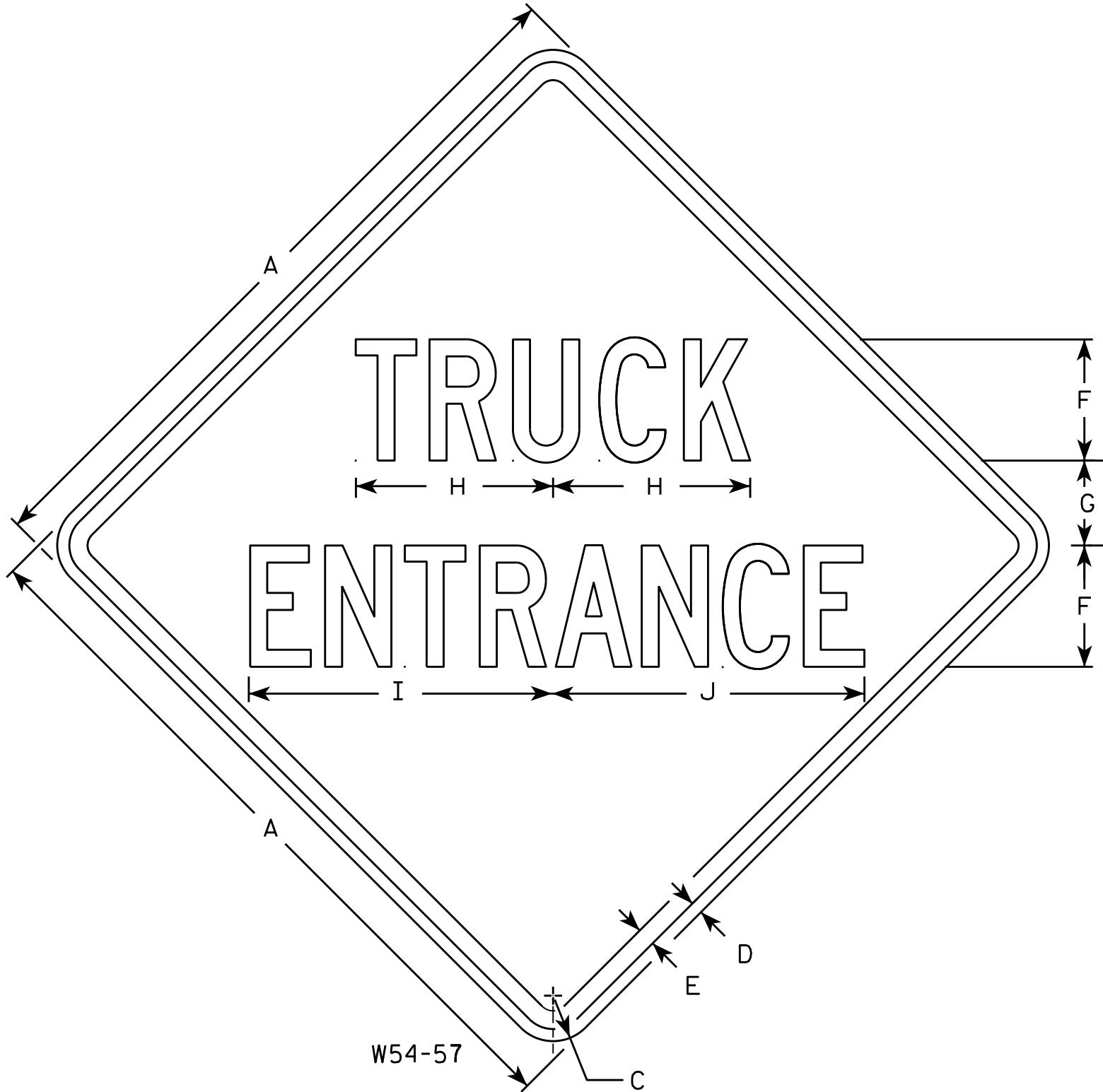
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

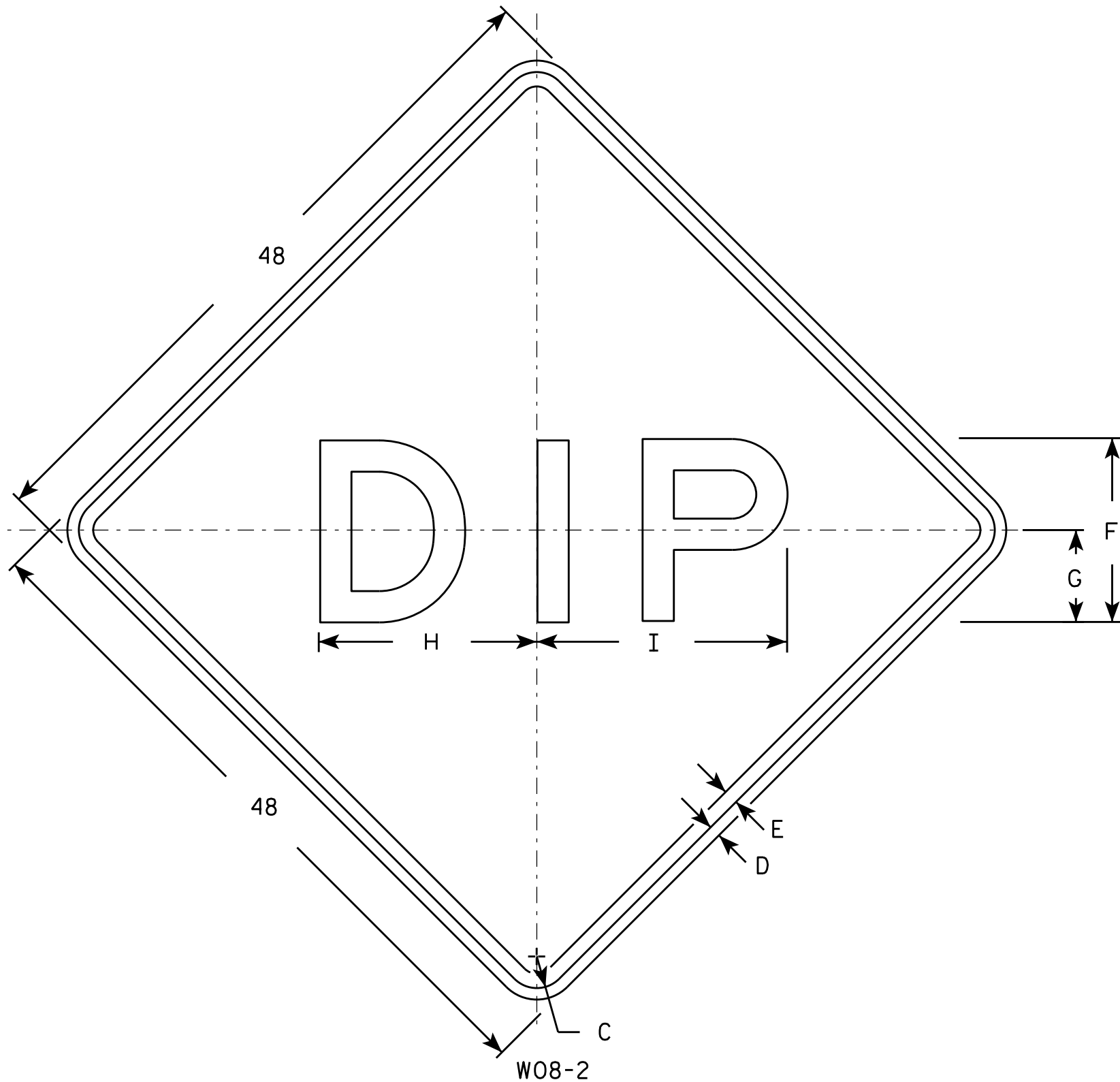
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 3/8	1/2	5/8	5	3 1/2	8 1/8	12 1/2	12 7/8																	6.25
2M	36		1 5/8	5/8	3/4	6	4 1/4	9 5/8	15	15 3/8																	9.00
3	36		1 5/8	5/8	3/4	6	4 1/4	9 5/8	15	15 3/8																	9.00
4	48		2 1/4	3/4	1	8	5 1/2	13	20	20 5/8																	16.00
5																											

STANDARD SIGN
W54-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W54-57.9



NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - E
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

W08-2

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5⁄8	5⁄8	3⁄4	10	5	11 7⁄8	13 1⁄2																		9.0
2S	48		2 1⁄4	3⁄4	1	12	6	14 1⁄4	16 1⁄4																		16.0
2M	48		2 1⁄4	3⁄4	1	12	6	14 1⁄4	16 1⁄4																		16.0
3	48		2 1⁄4	3⁄4	1	12	6	14 1⁄4	16 1⁄4																		16.0
4	48		2 1⁄4	3⁄4	1	12	6	14 1⁄4	16 1⁄4																		16.0
5	48		2 1⁄4	3⁄4	1	12	6	14 1⁄4	16 1⁄4																		16.0

STANDARD SIGN

W08-2

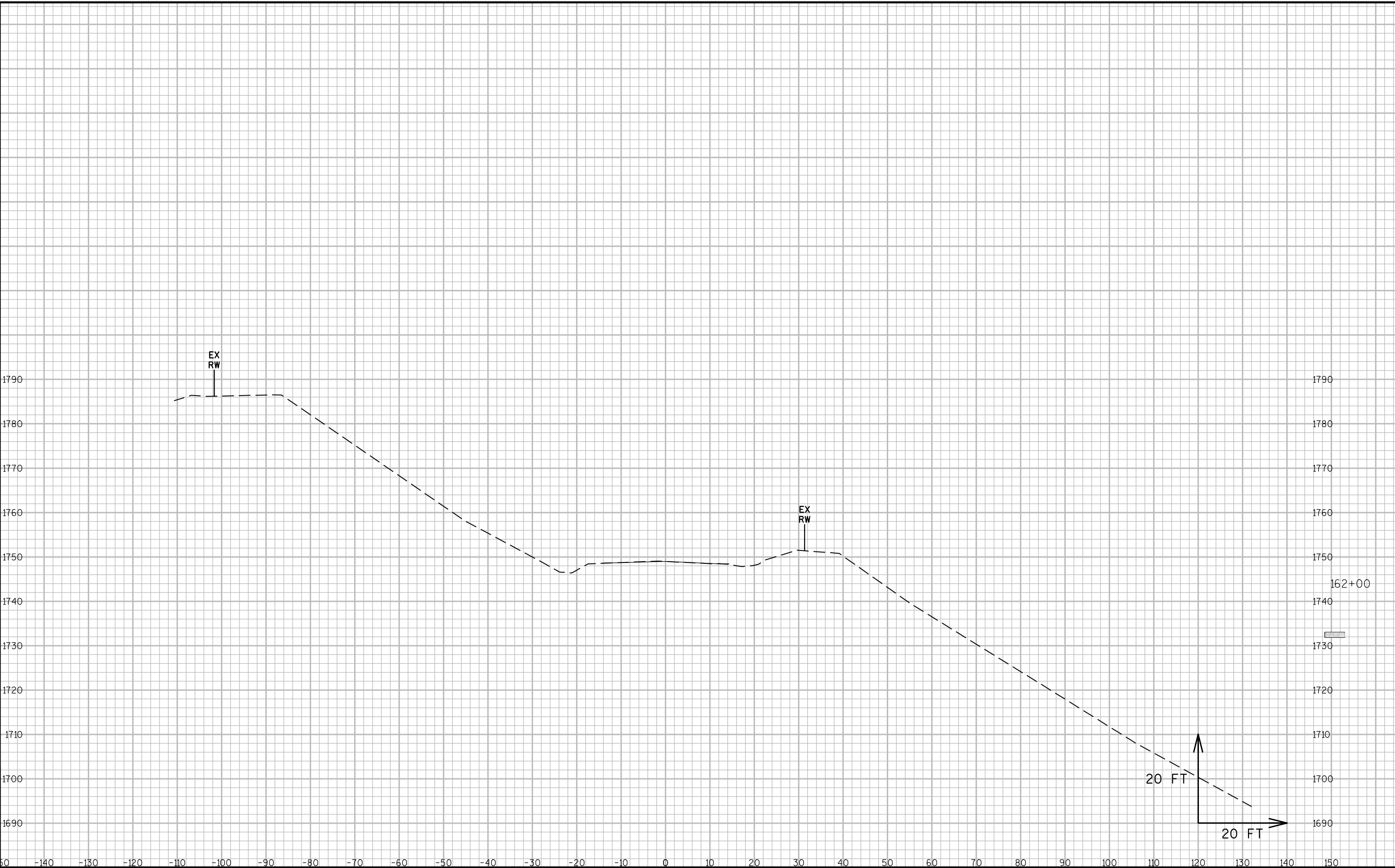
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

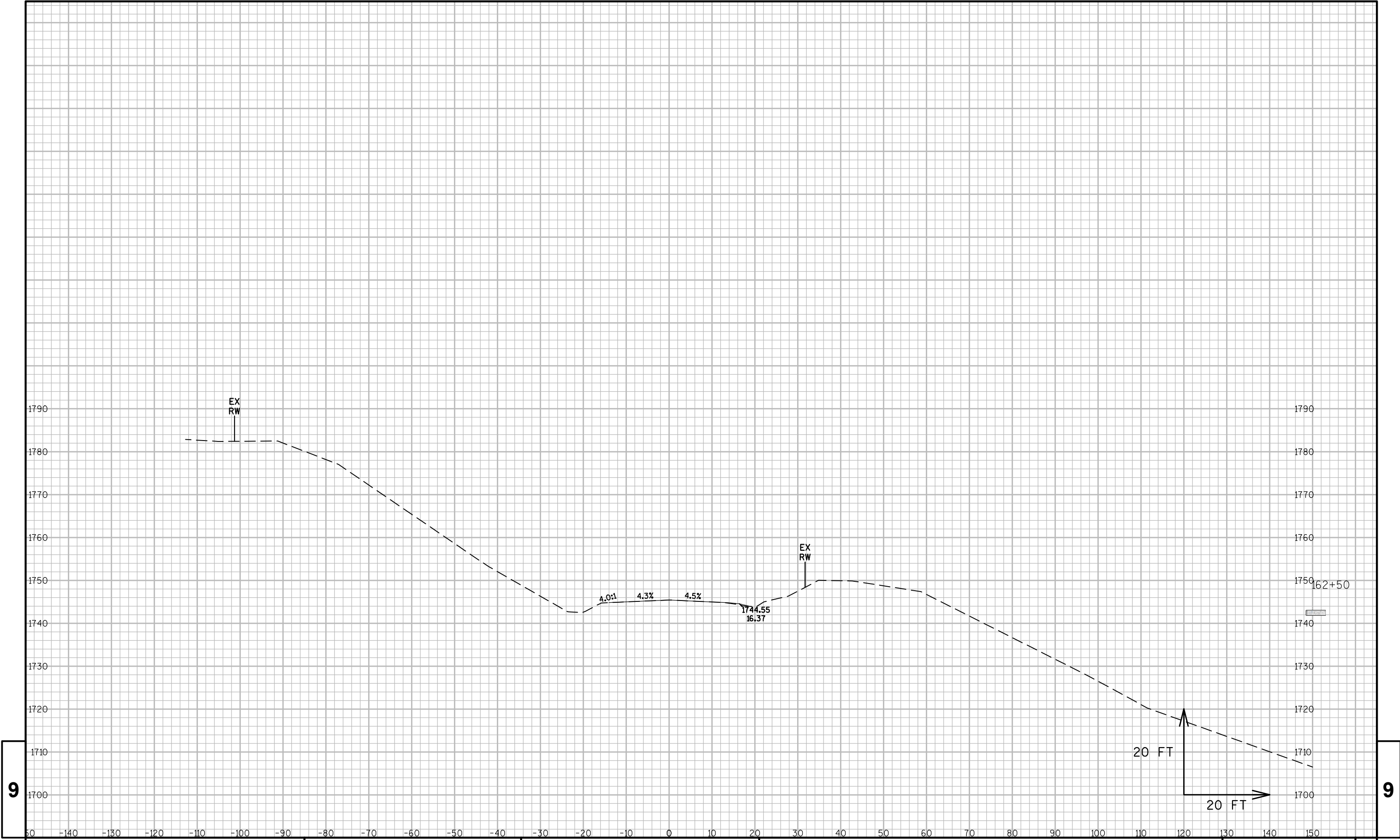
Matthew R. Rauch
for State Traffic Engineer

DATE 11/20/13

PLATE NO. W08-2.1



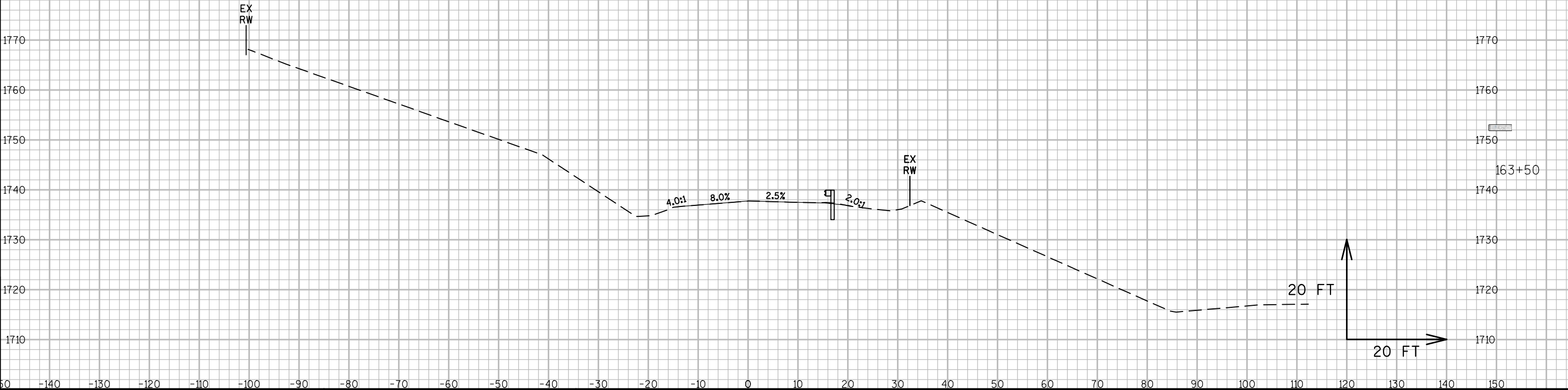






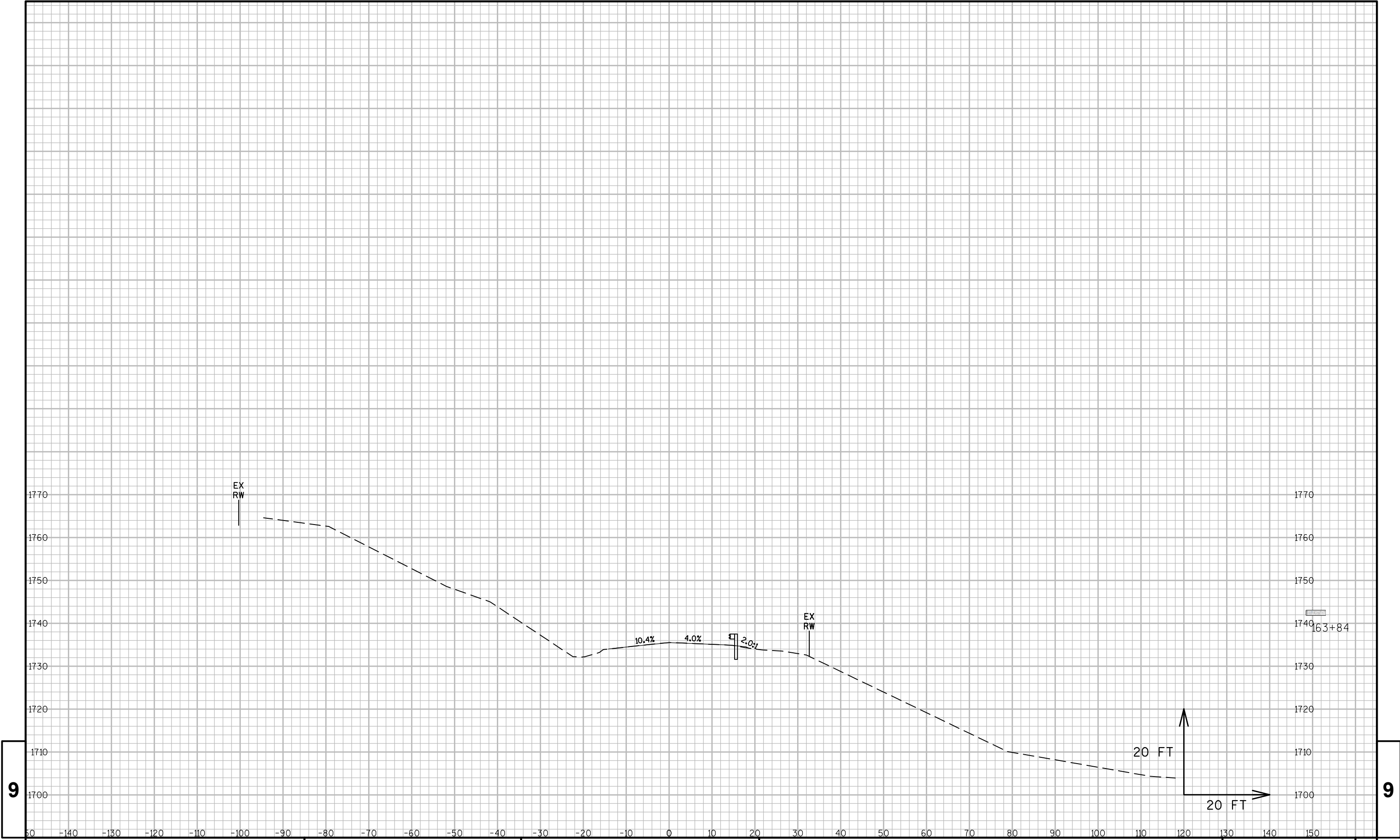
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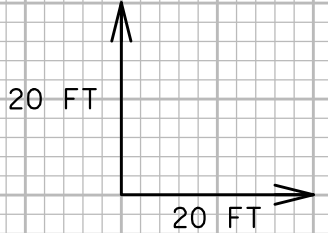
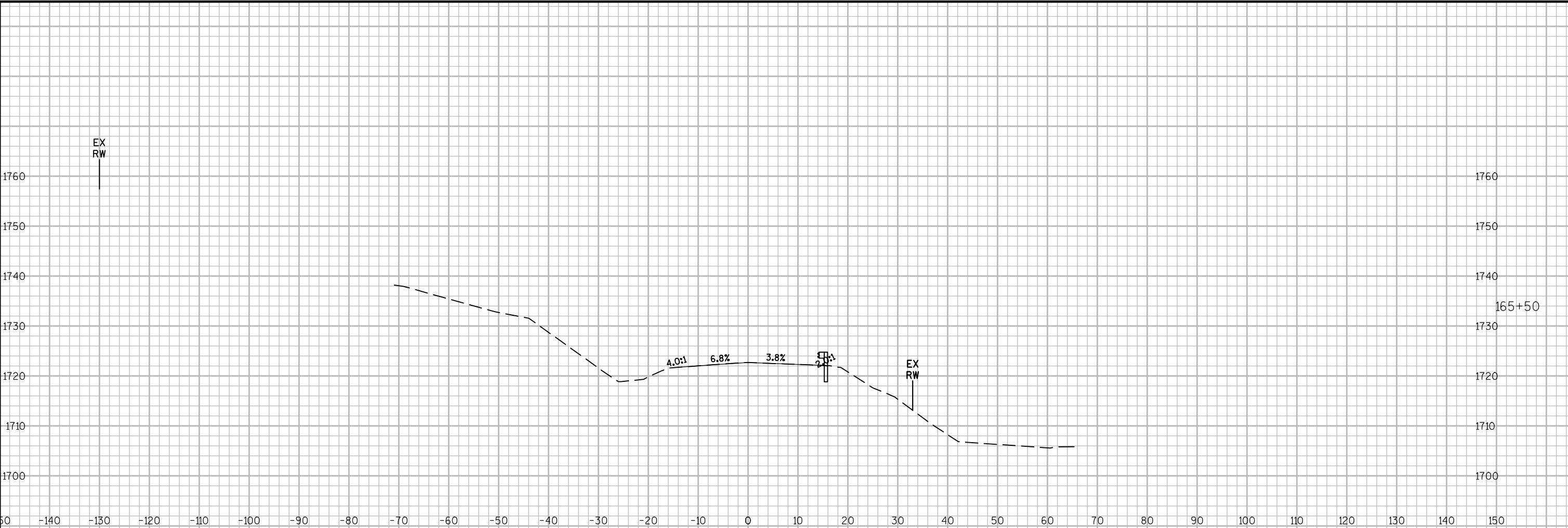
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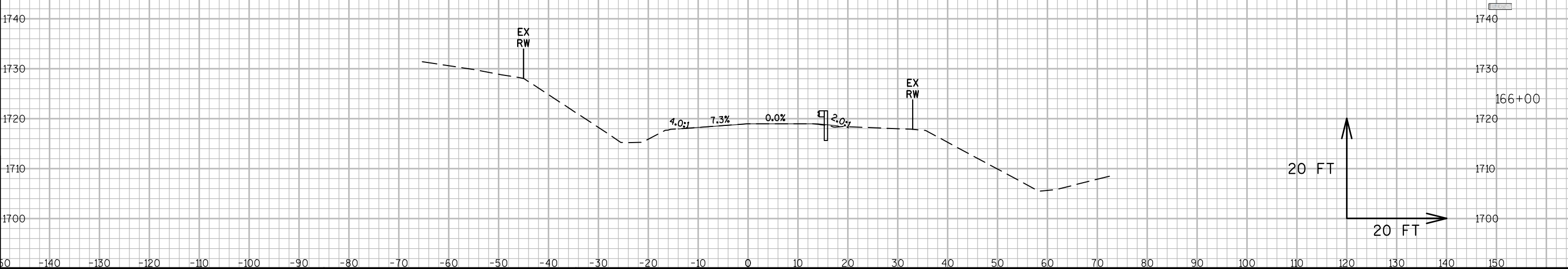
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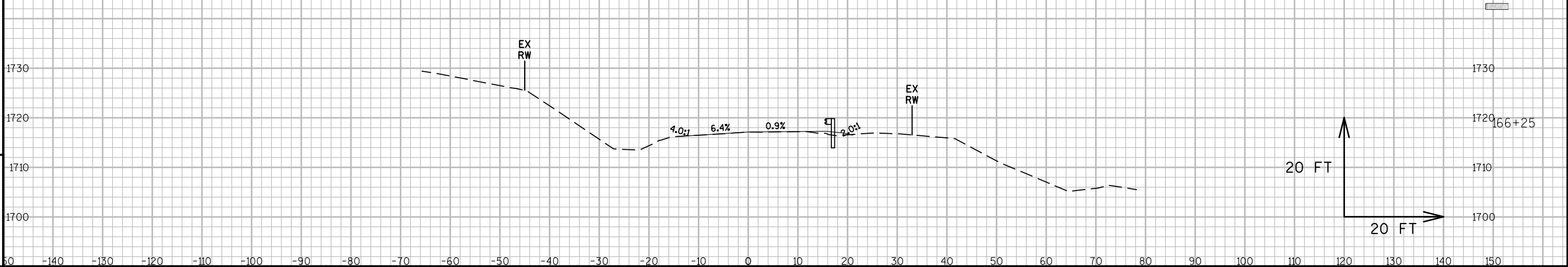
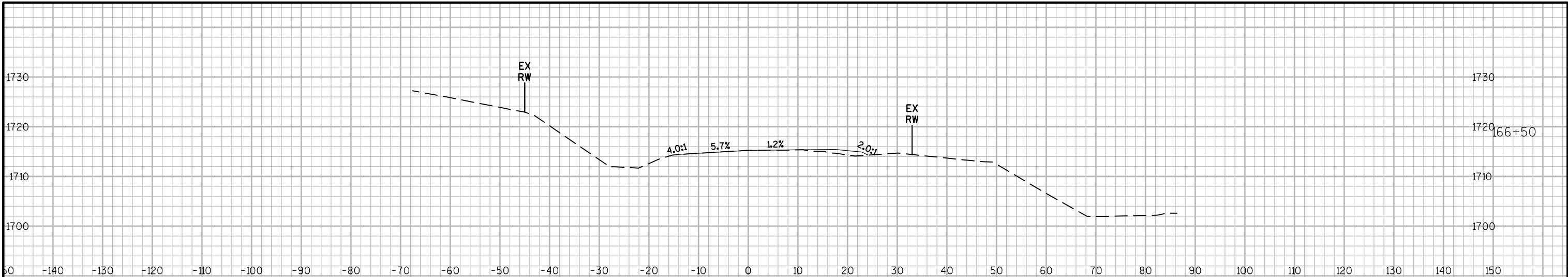
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PROJECT NO: 9175-10-60

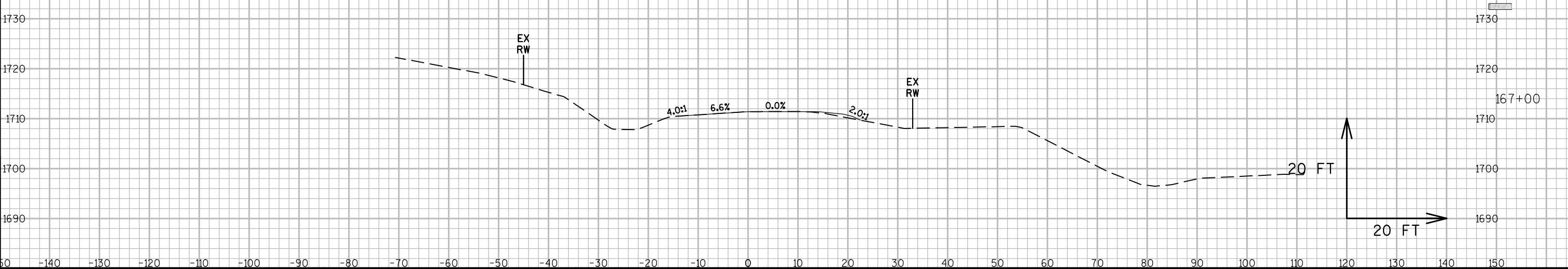
HWY: STH 52

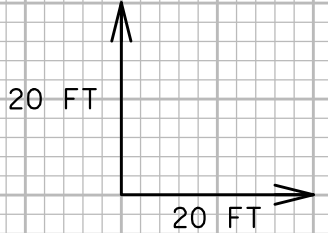
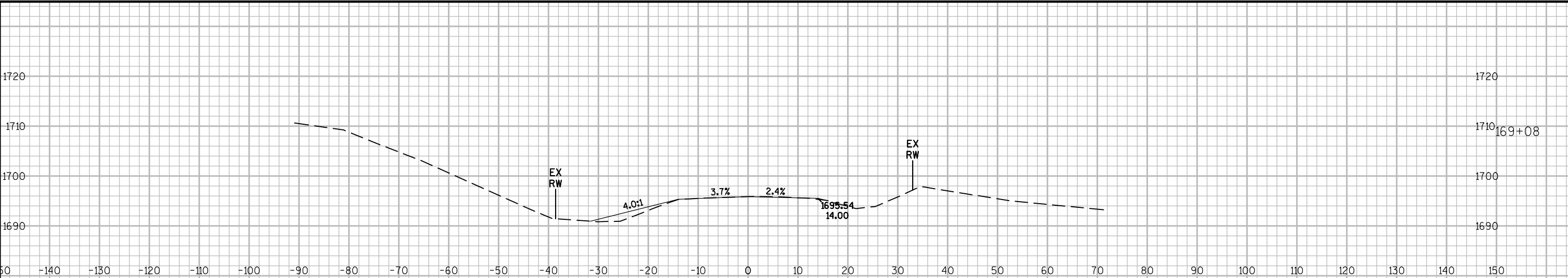
COUNTY: LANGLADE

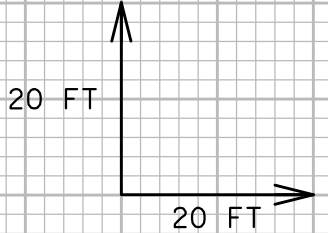
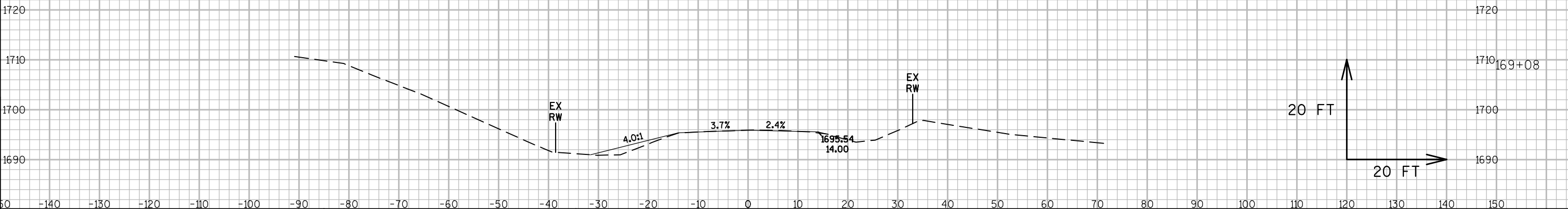
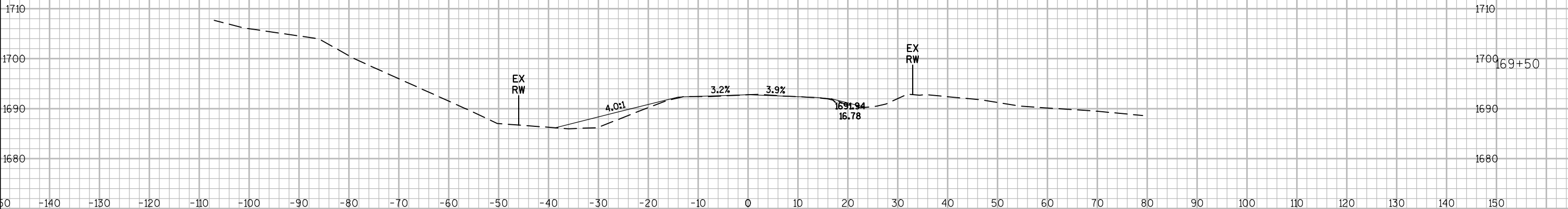
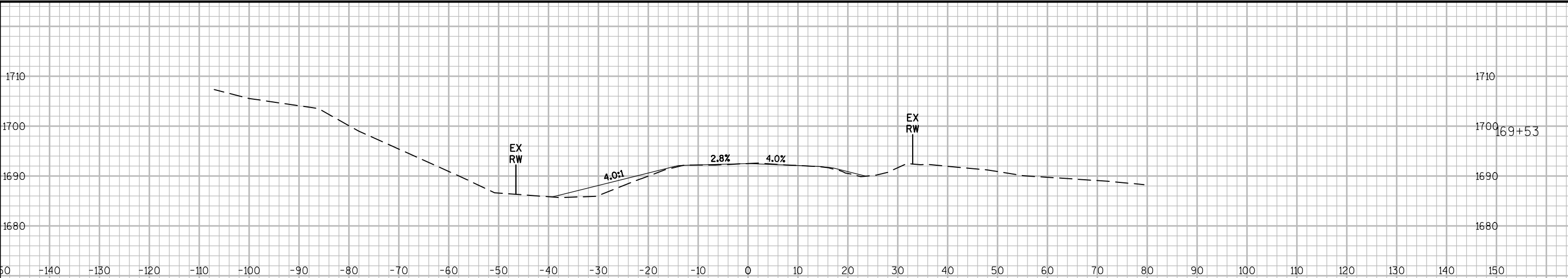
CROSS SECTIONS: STH52

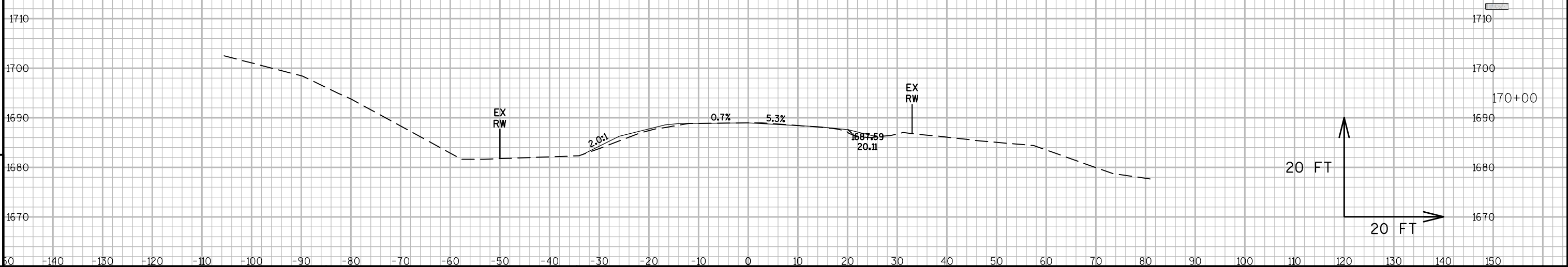
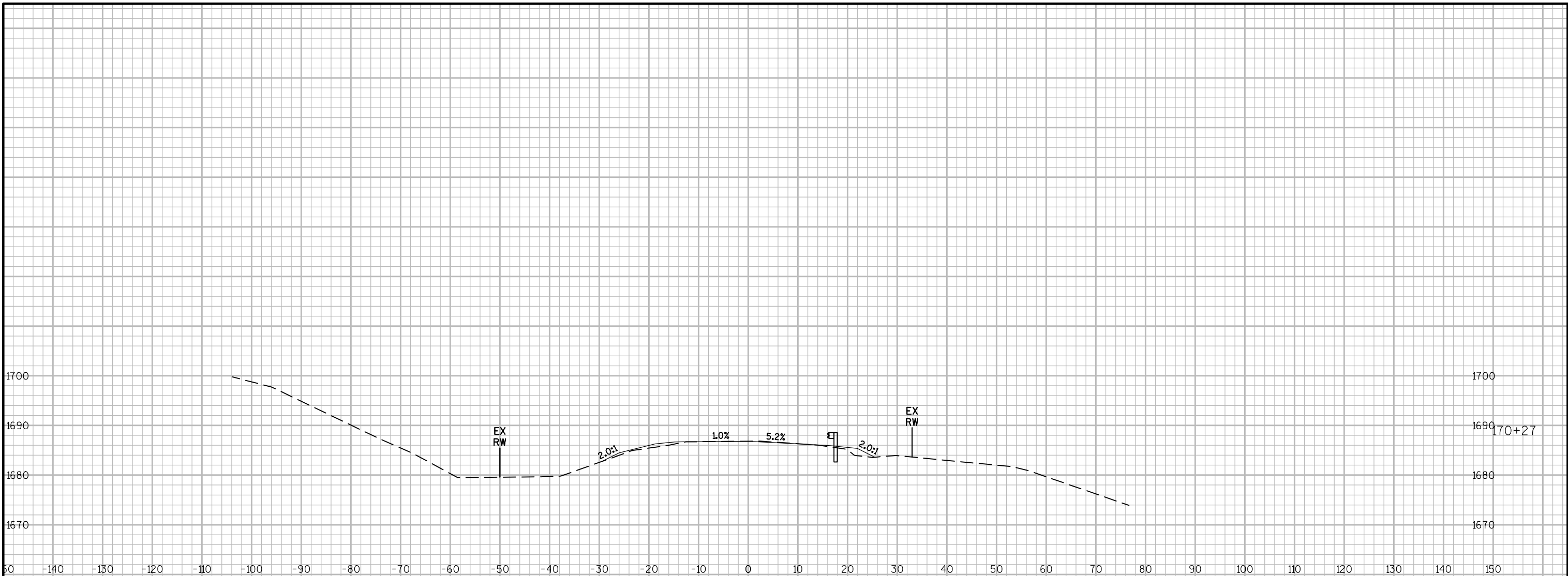
SHEET

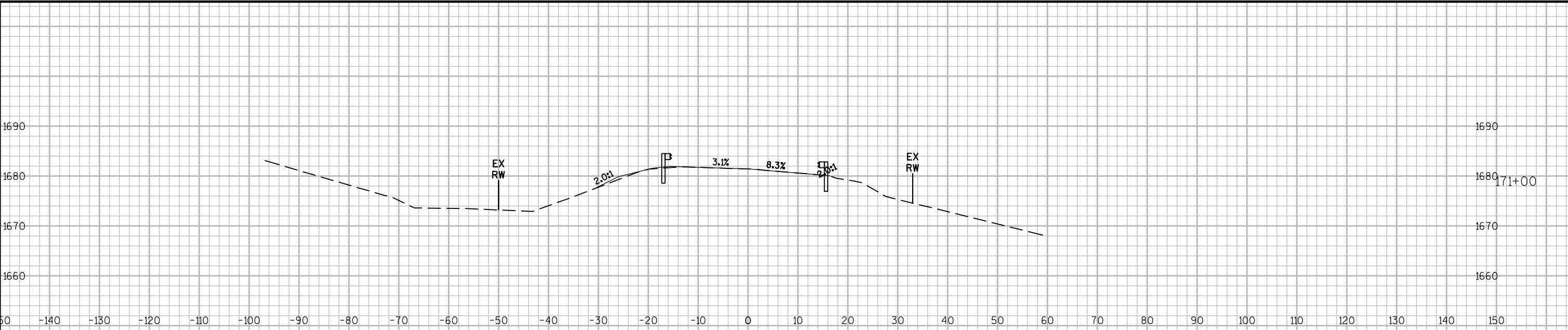
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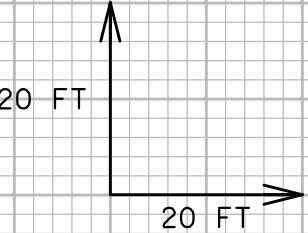
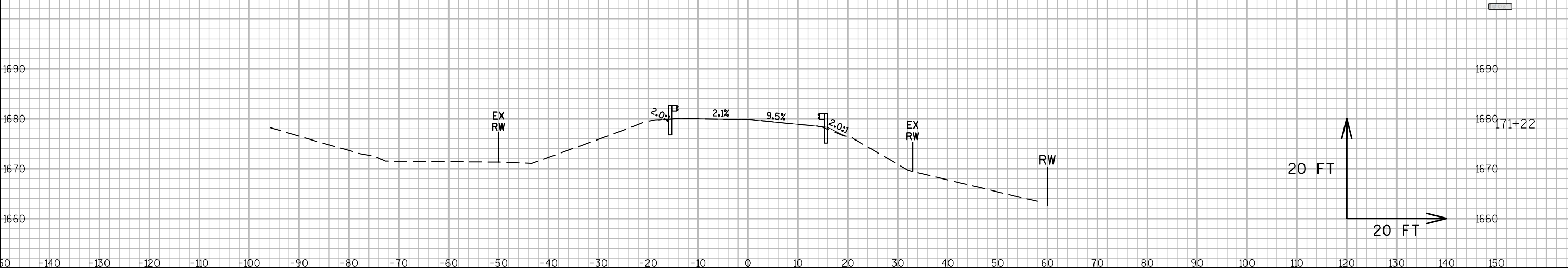
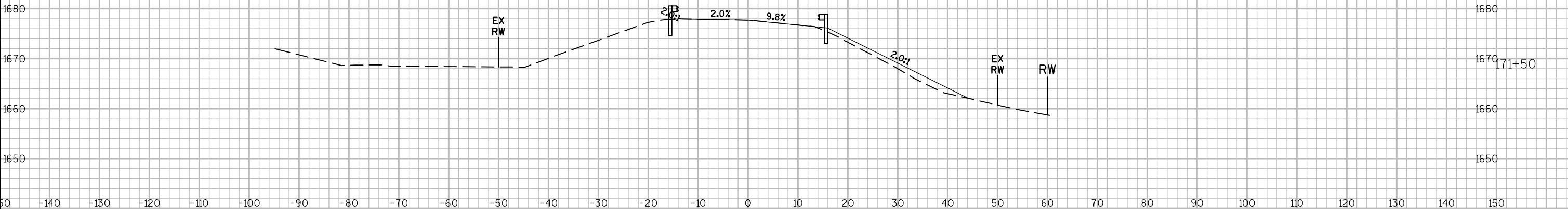
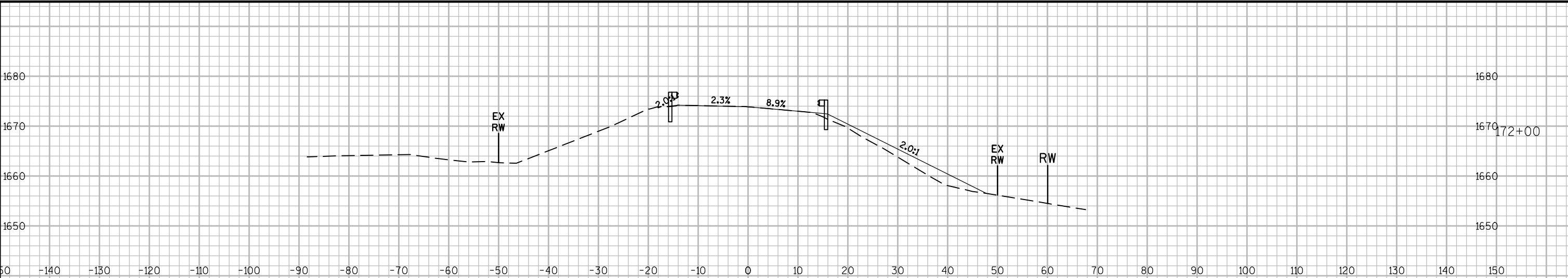


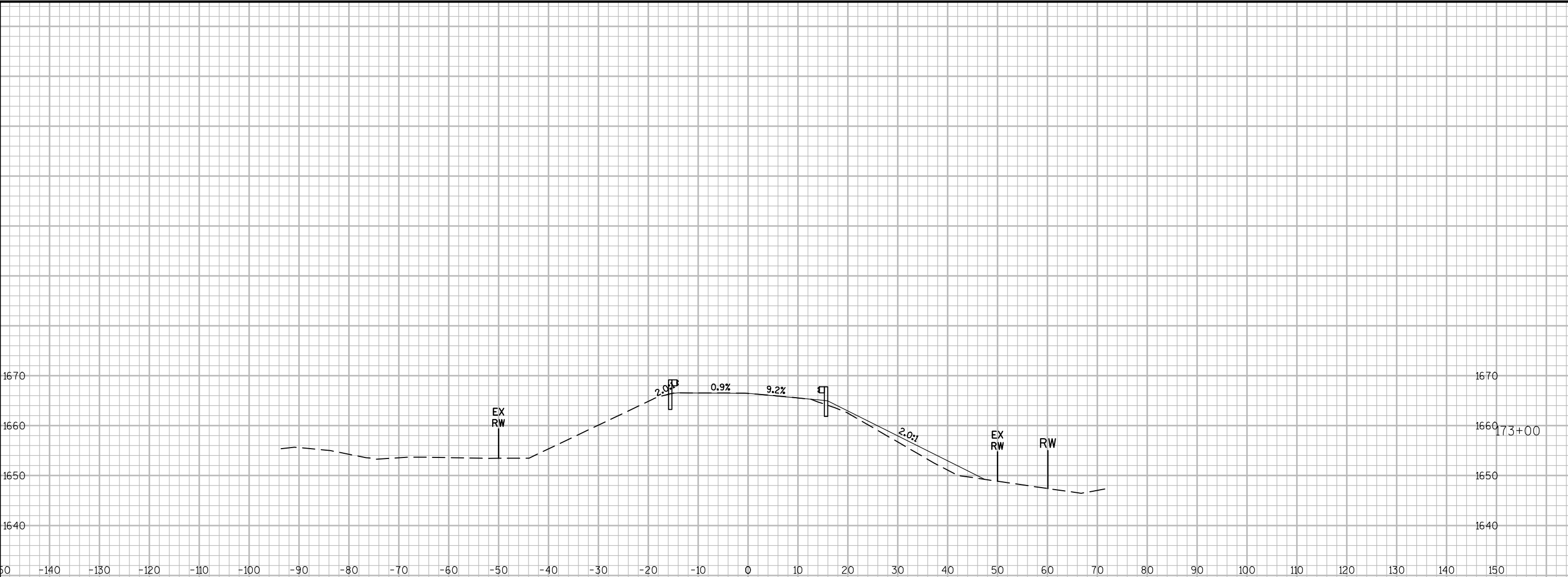


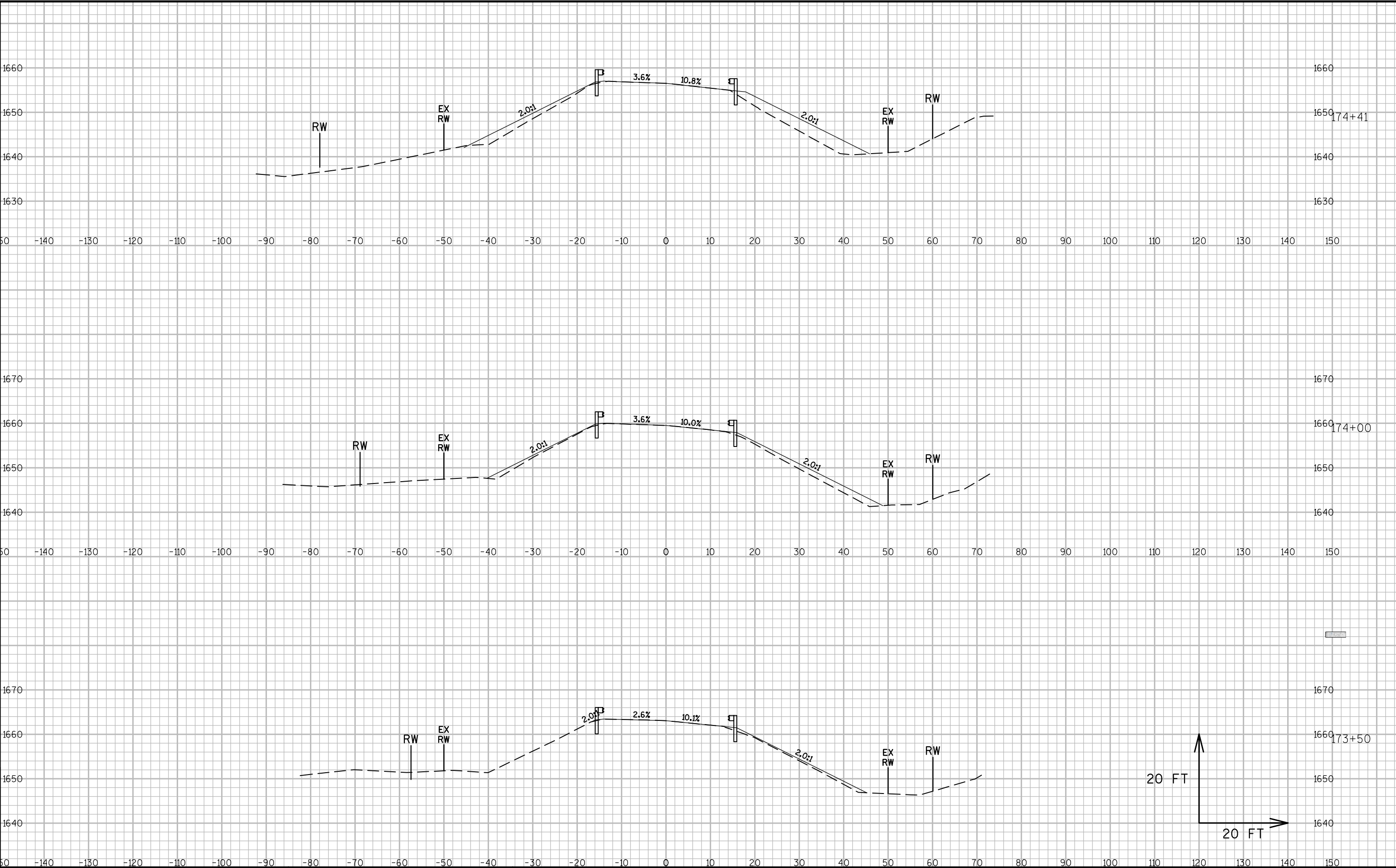


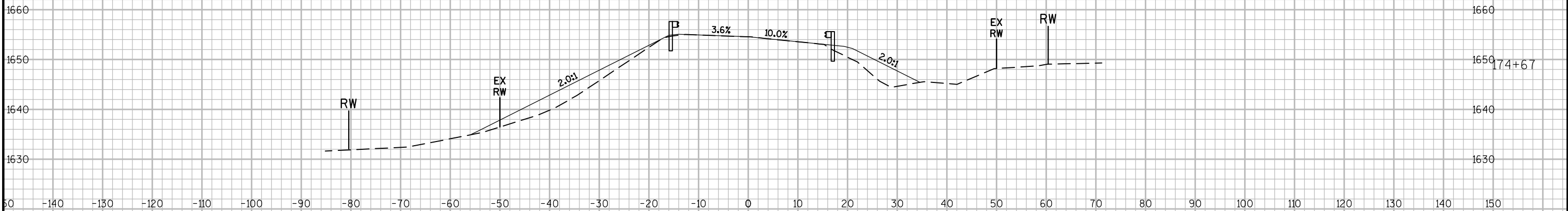
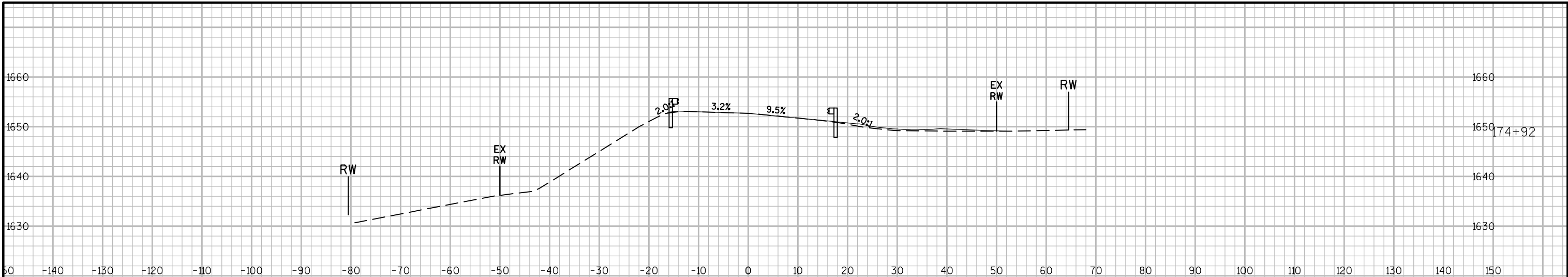












PROJECT NO: 9175-10-60

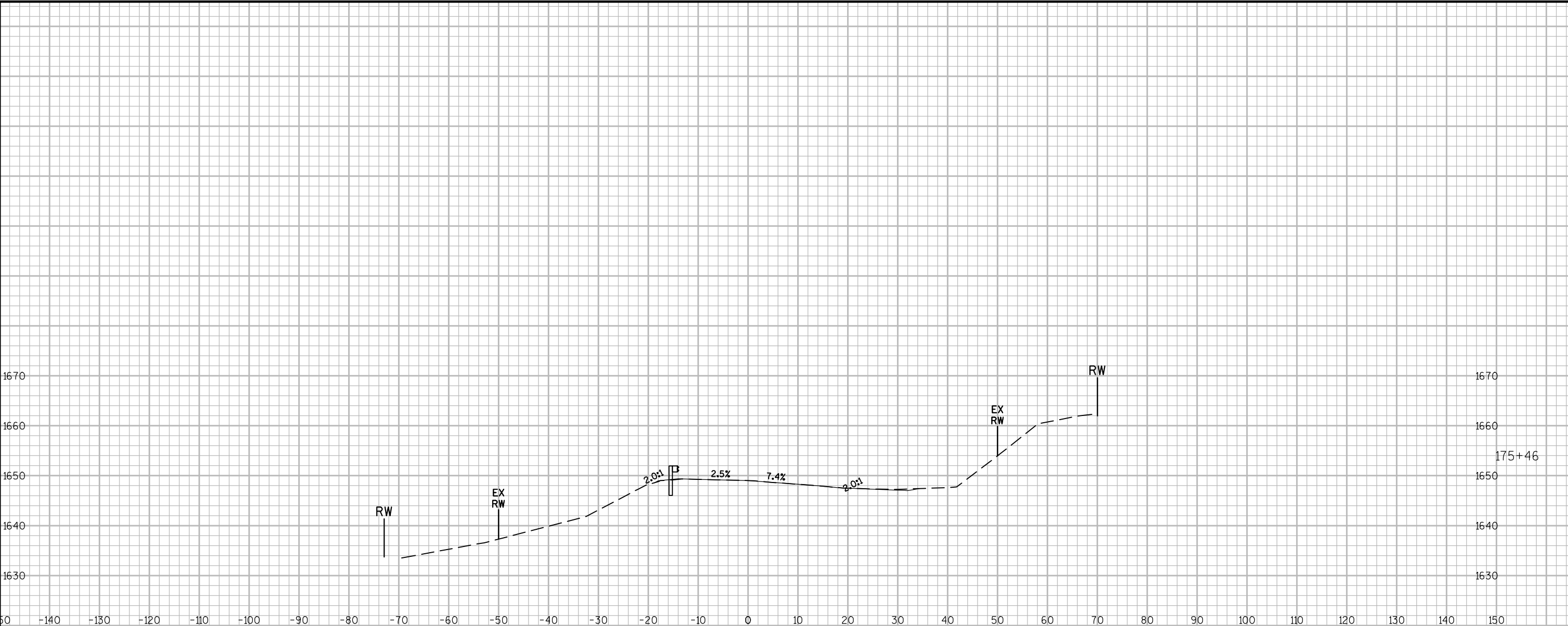
HWY: STH 52

COUNTY: LANGLADE

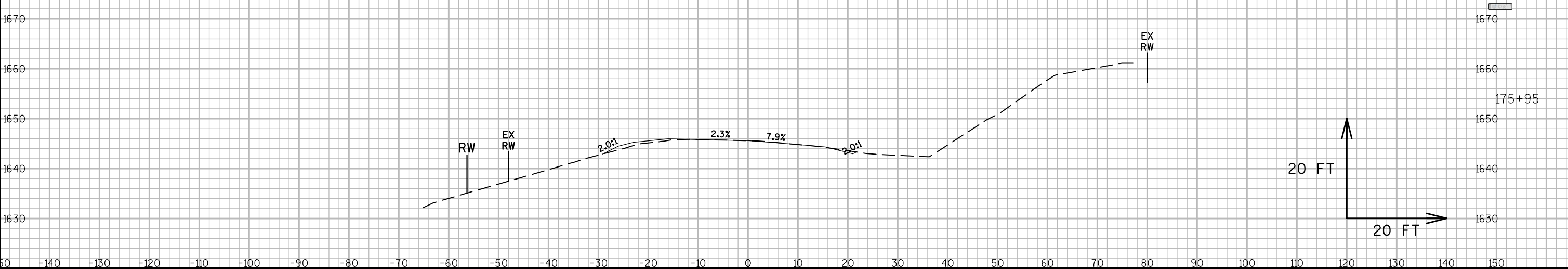
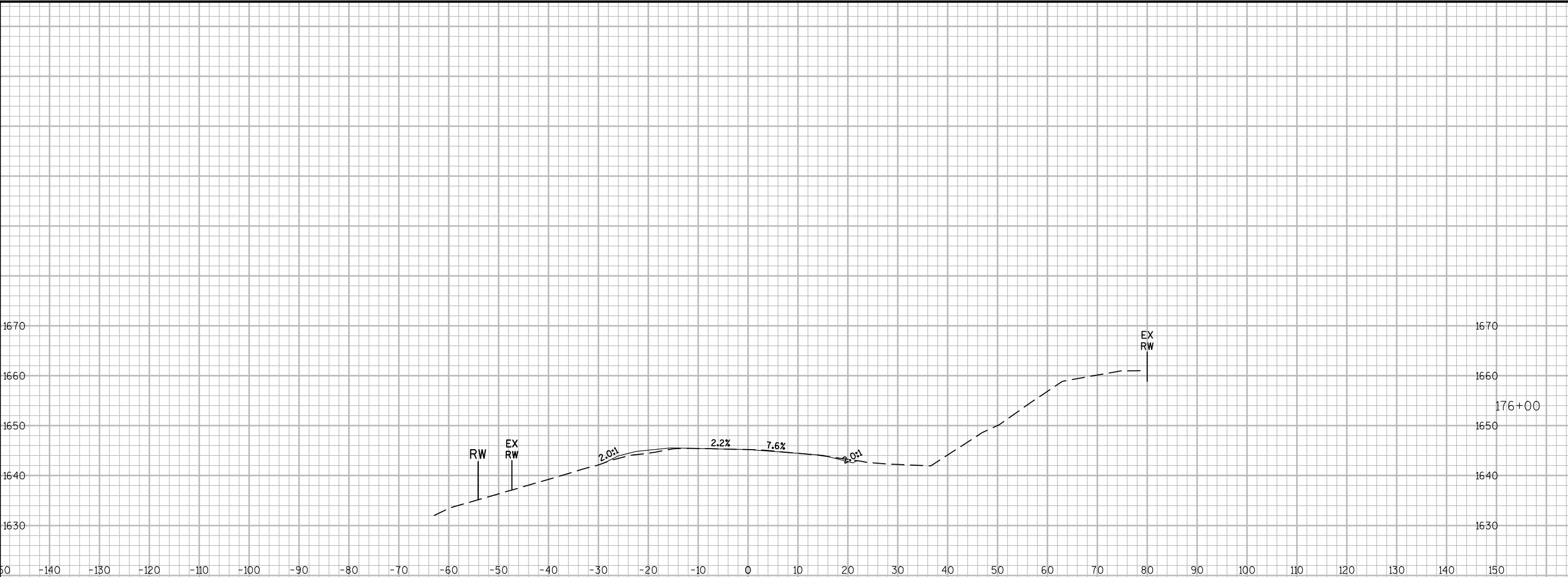
CROSS SECTIONS: STH52

SHEET

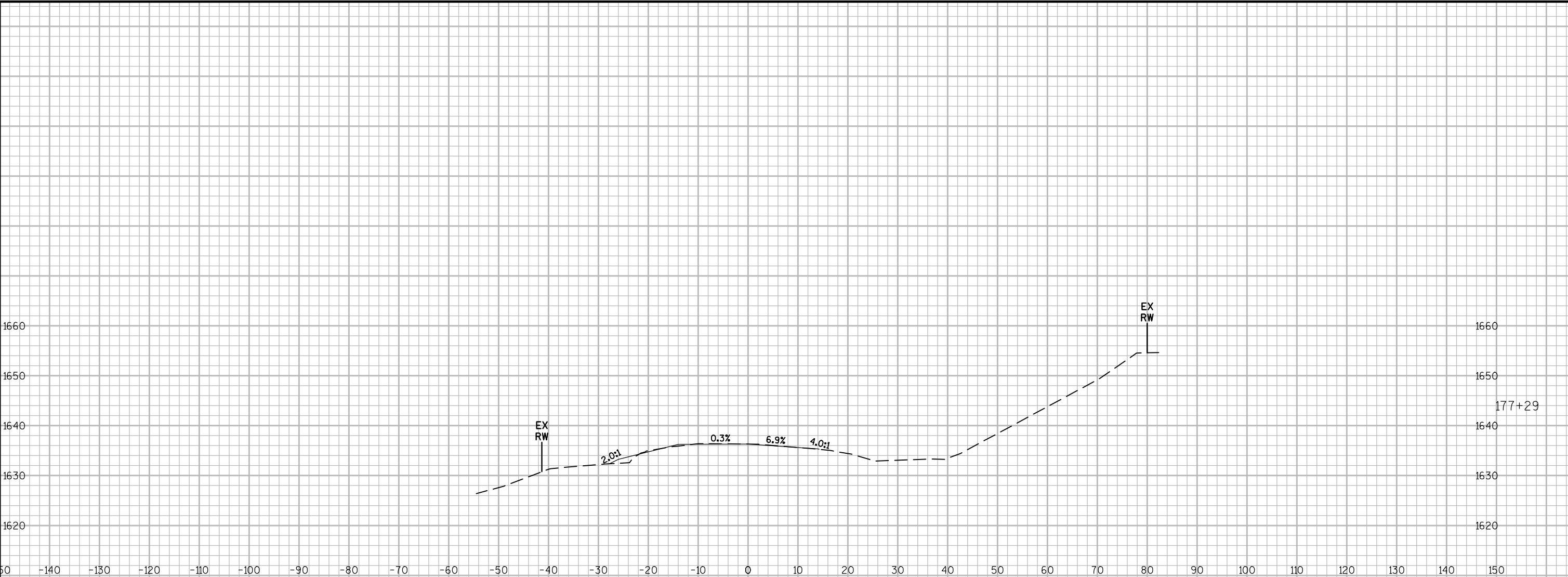
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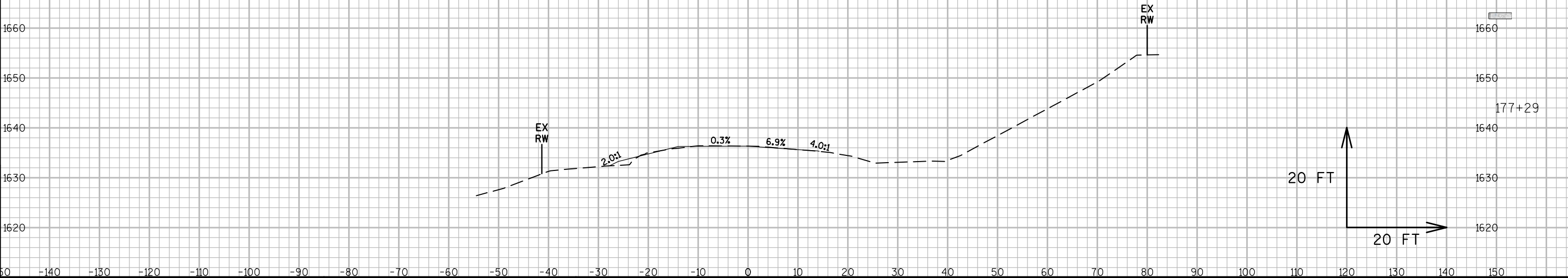
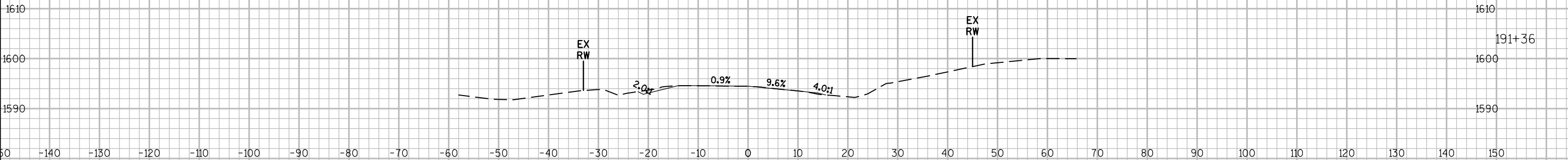
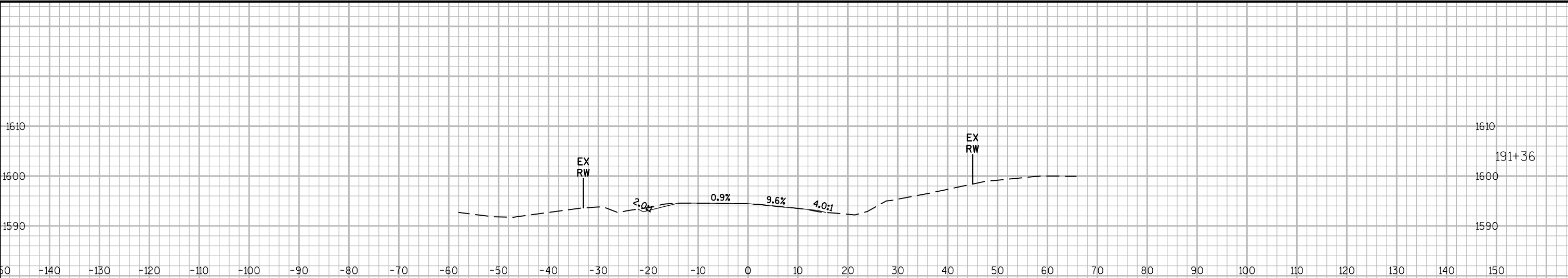


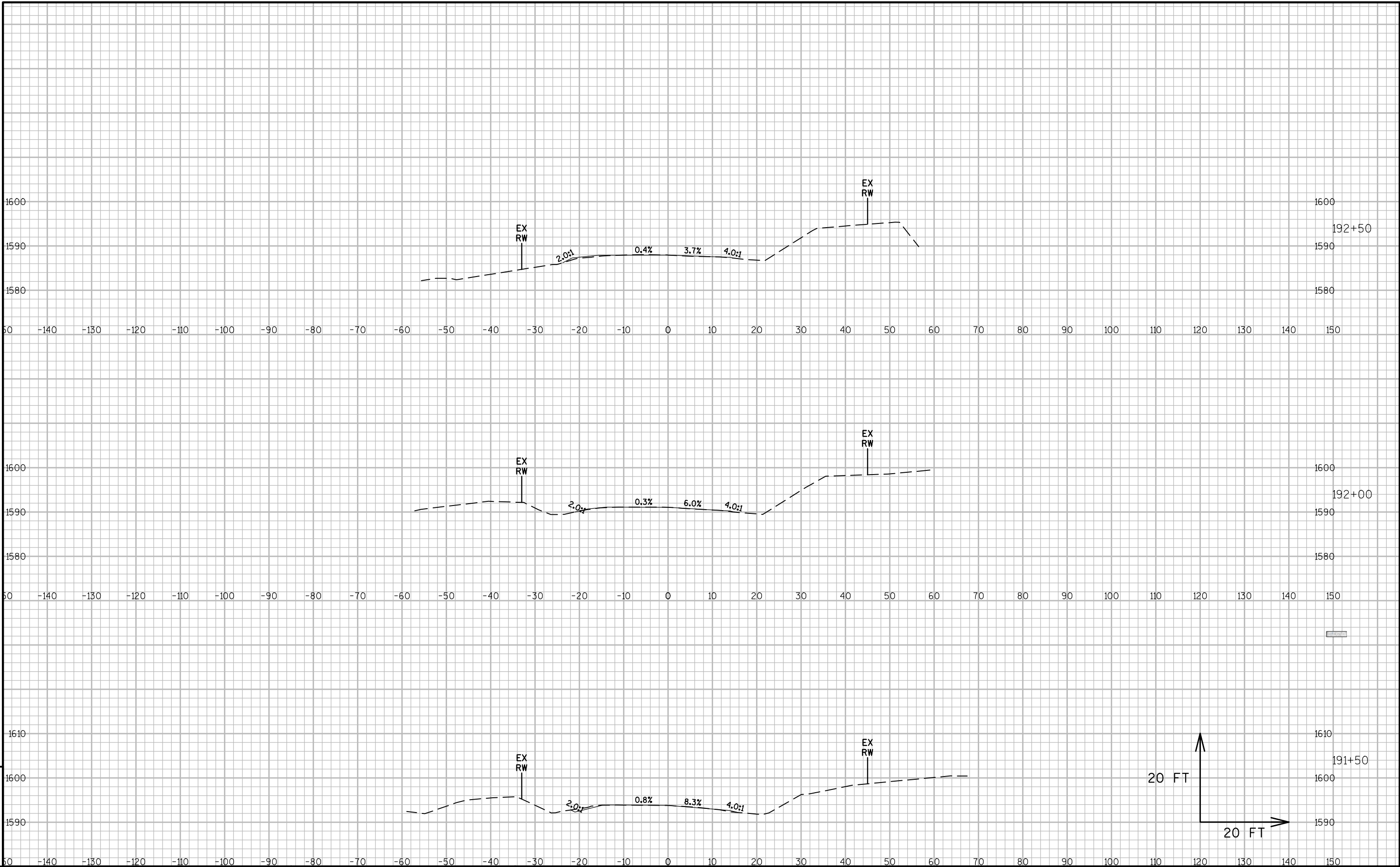


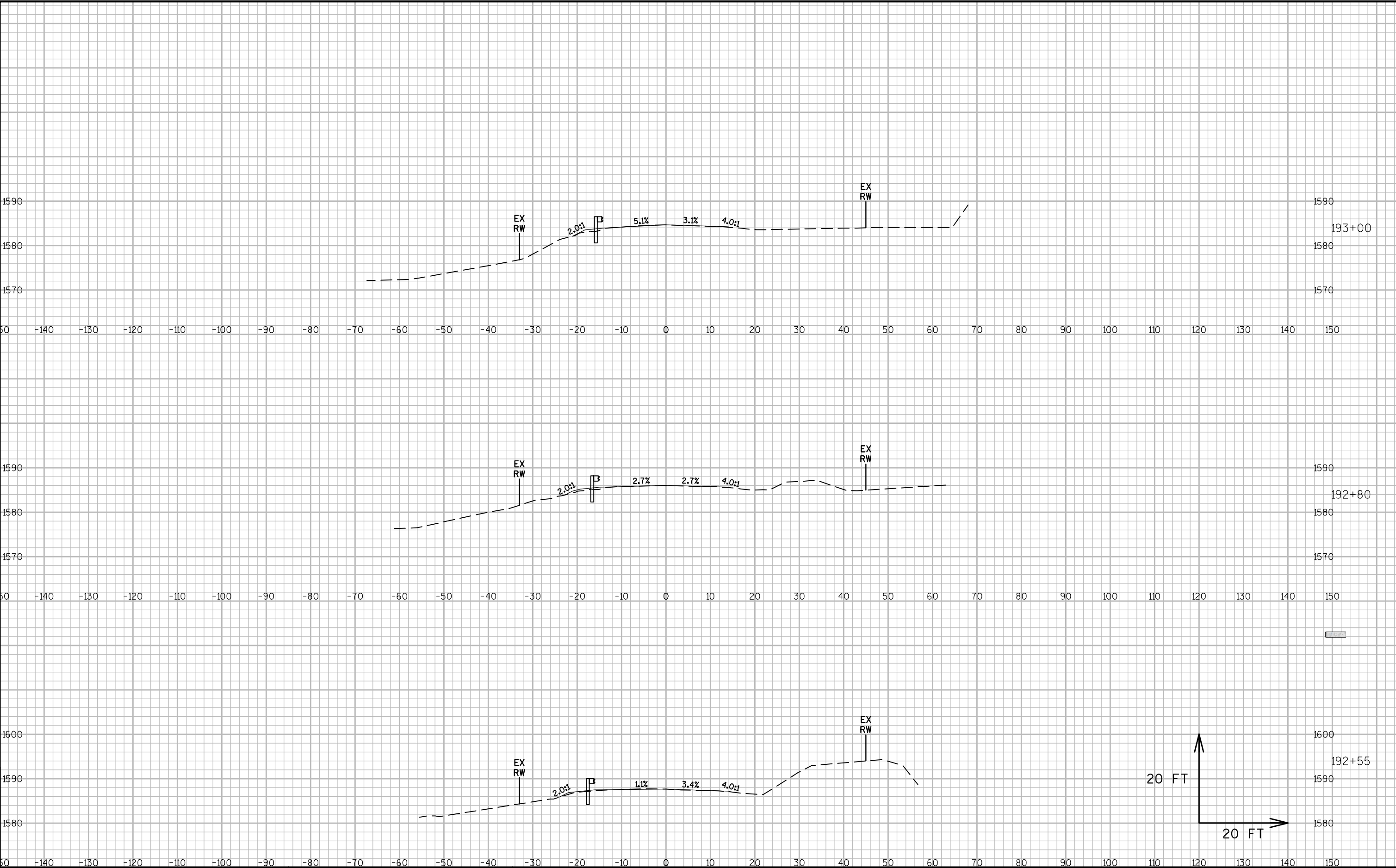


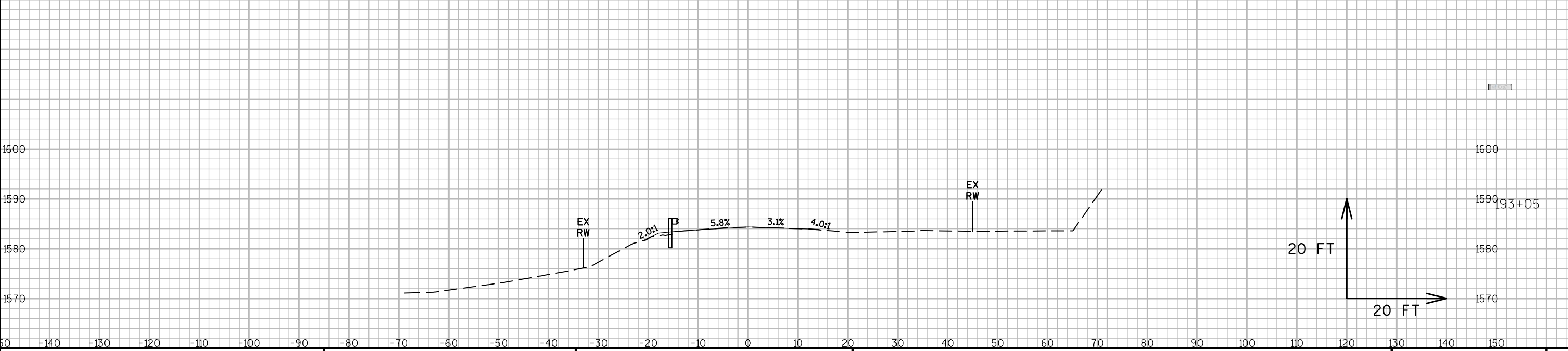
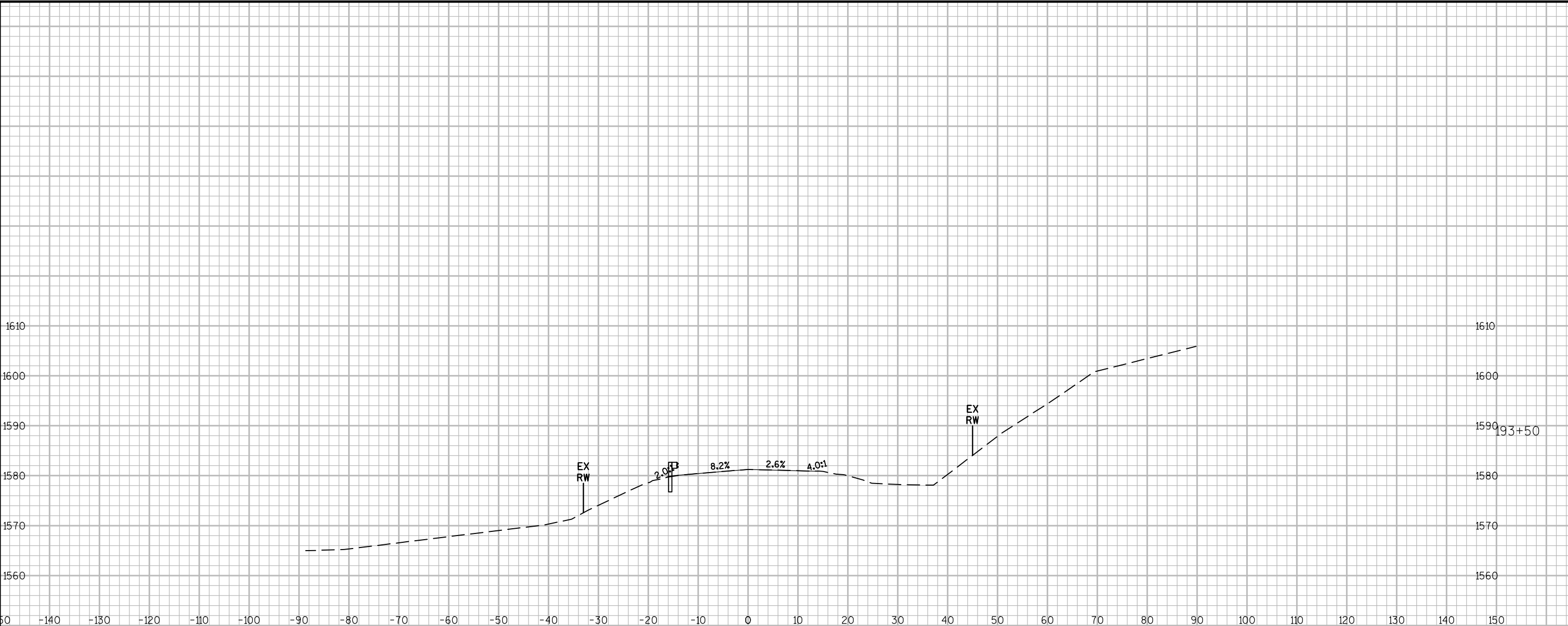


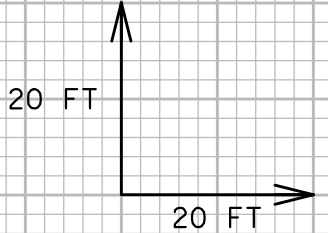
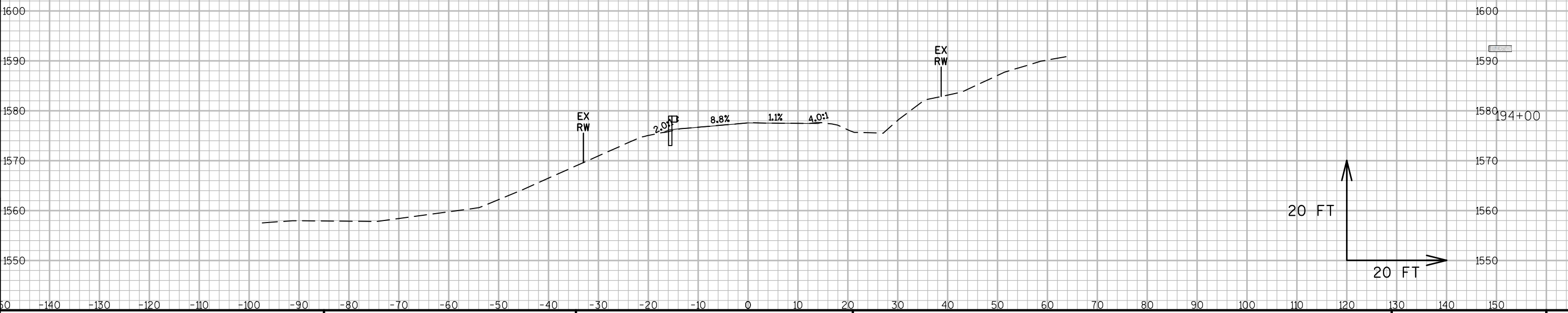






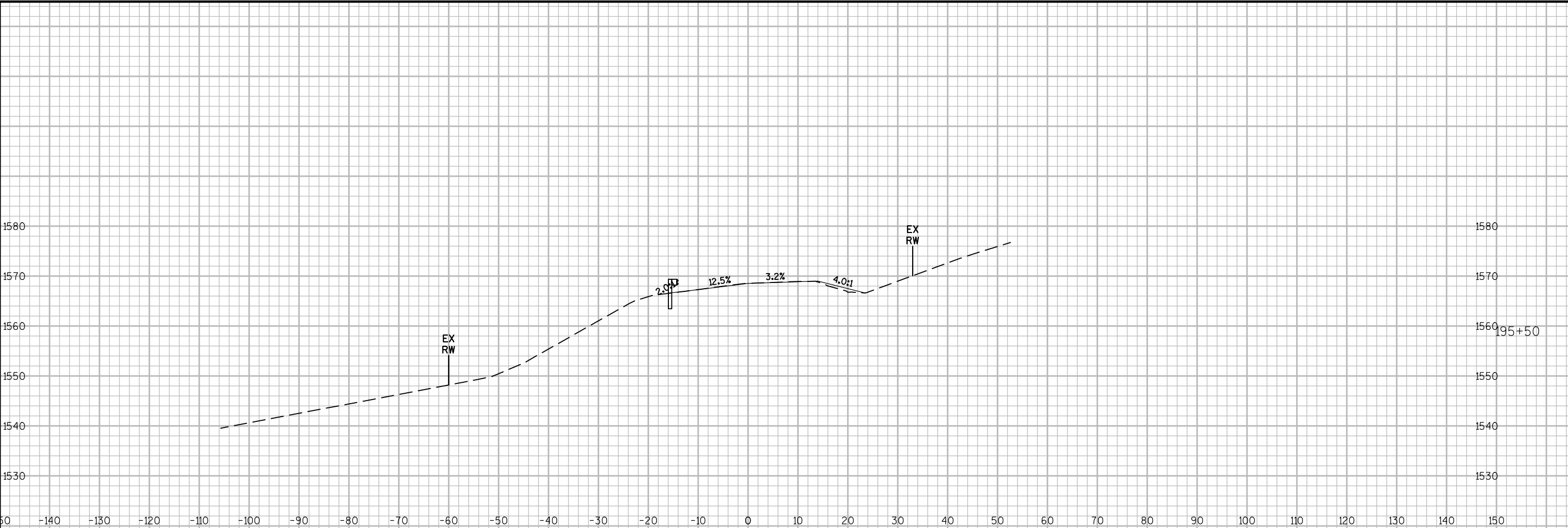


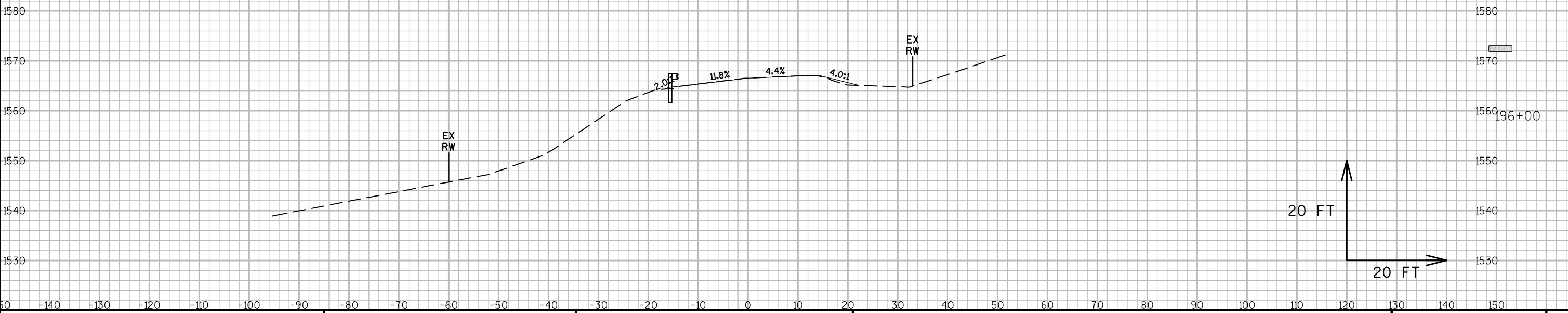
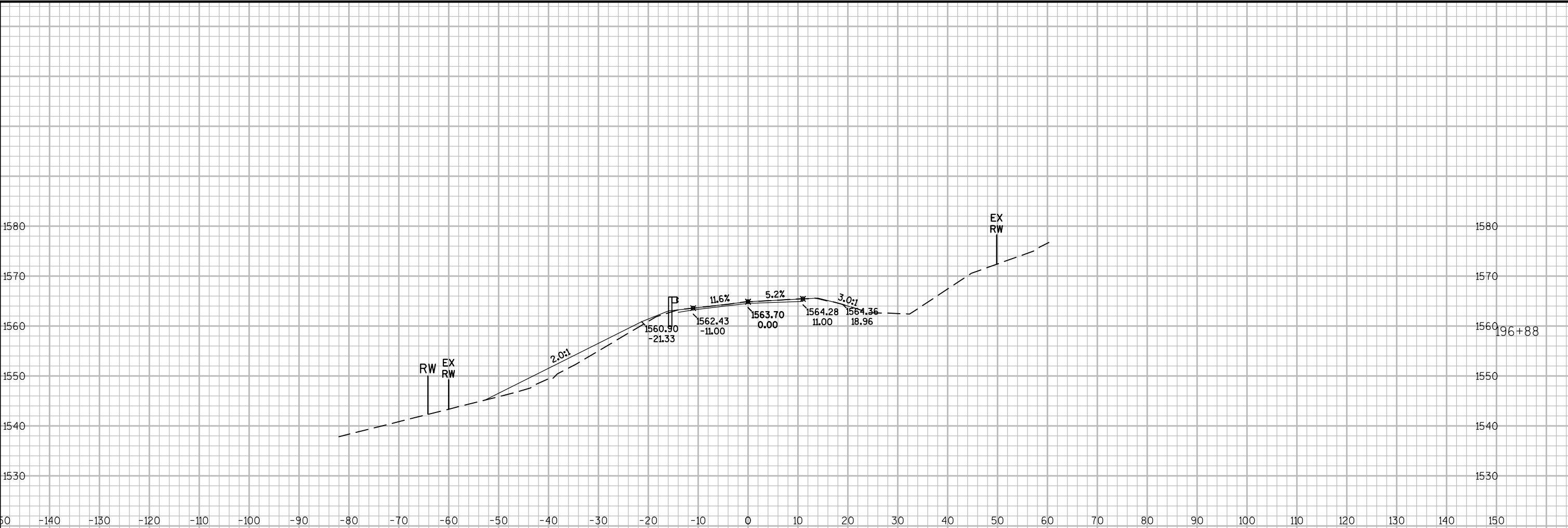


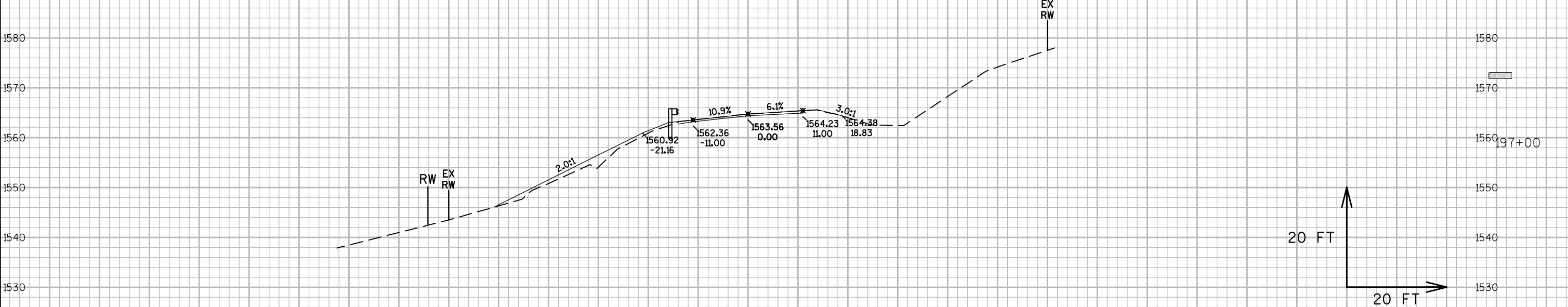
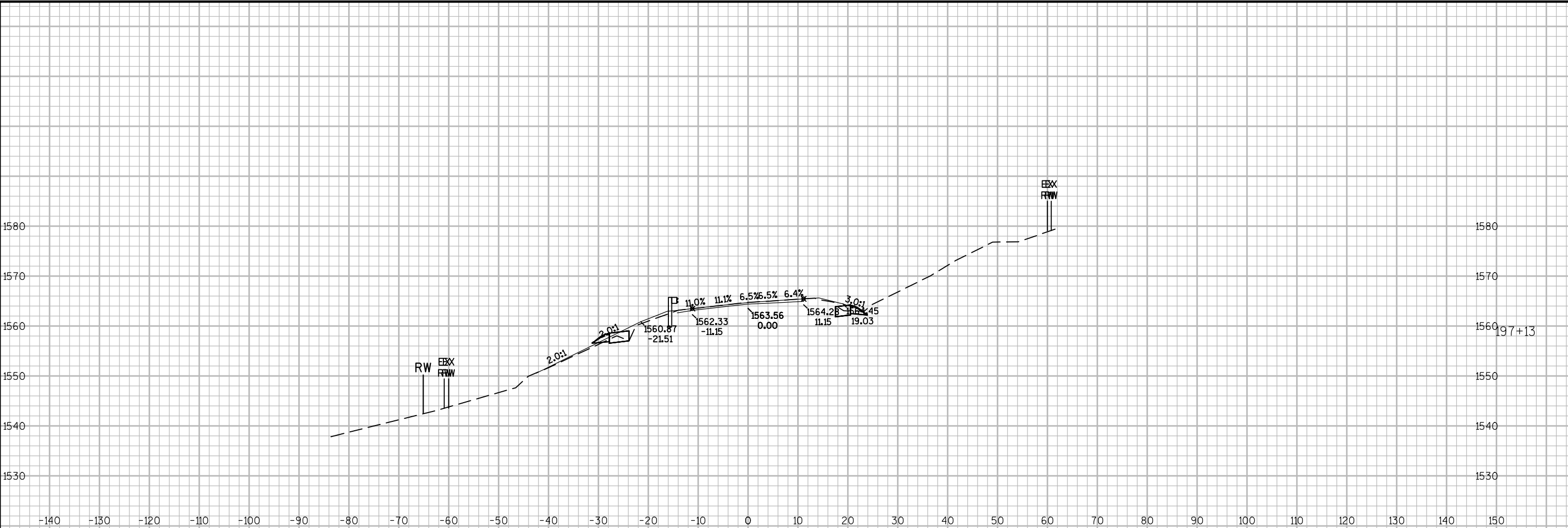


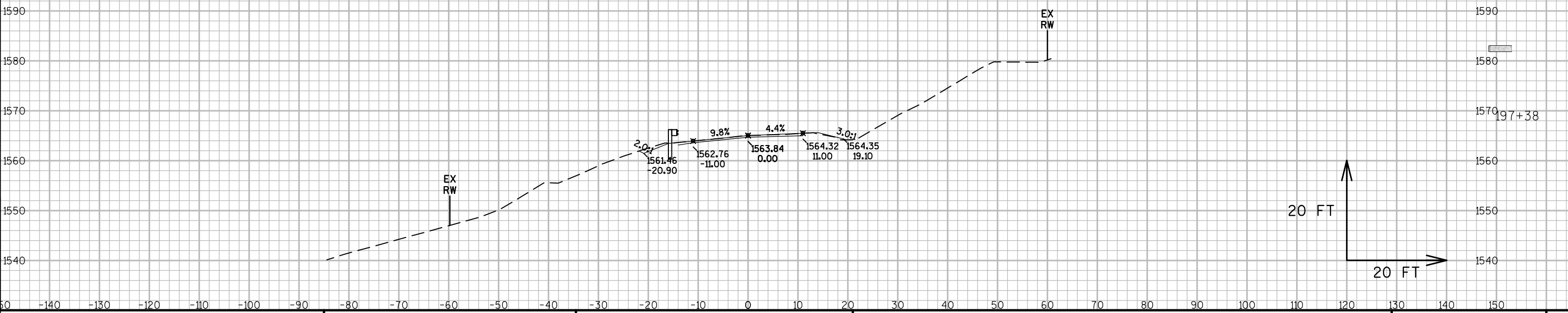
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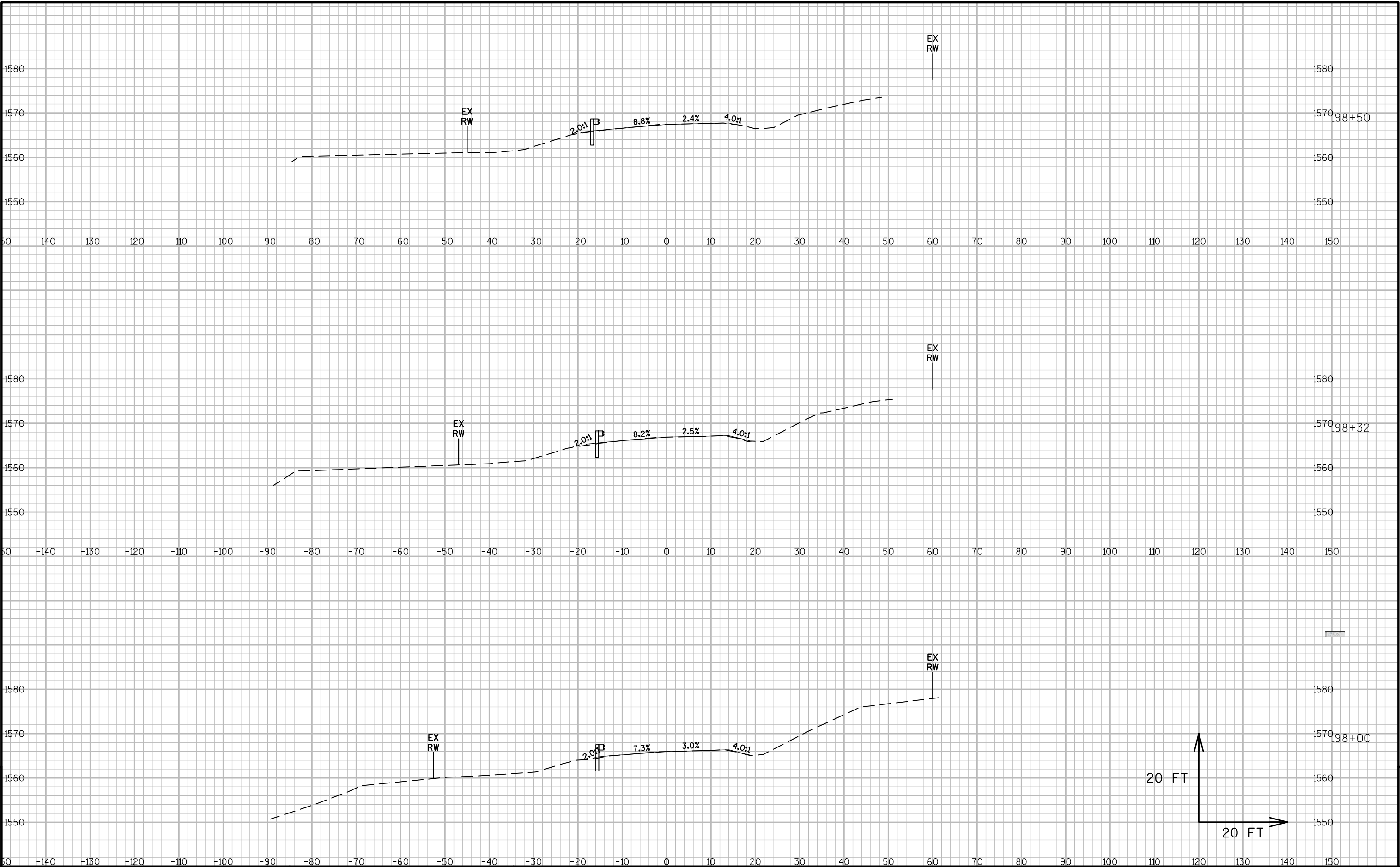


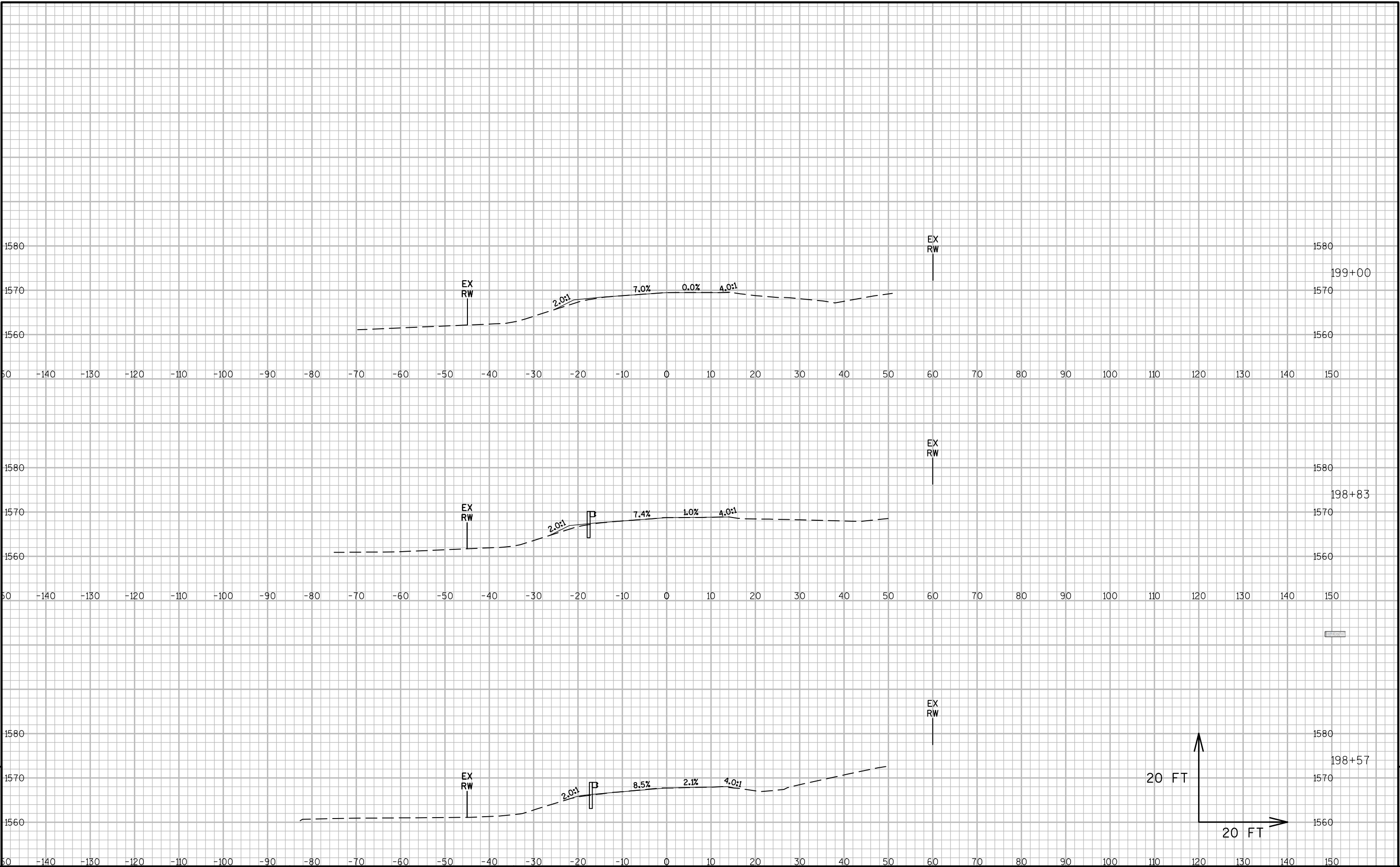


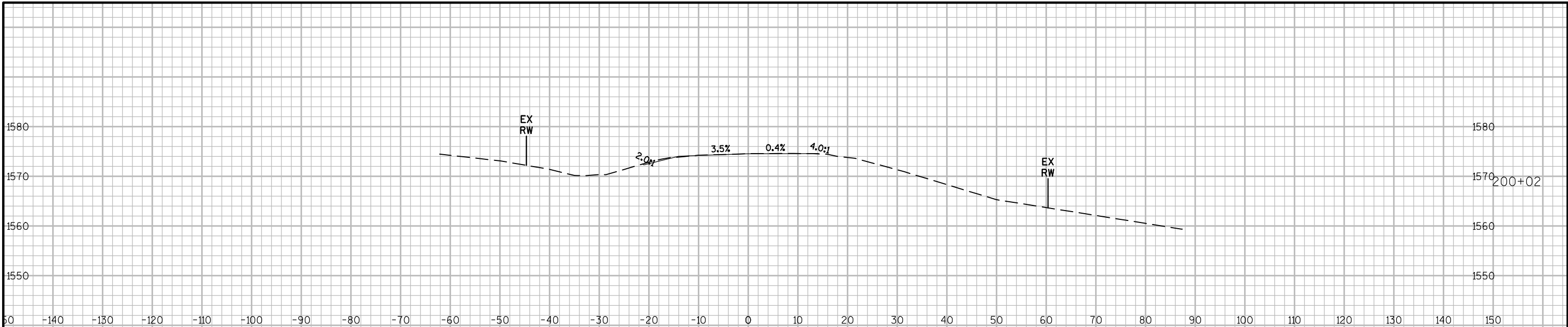


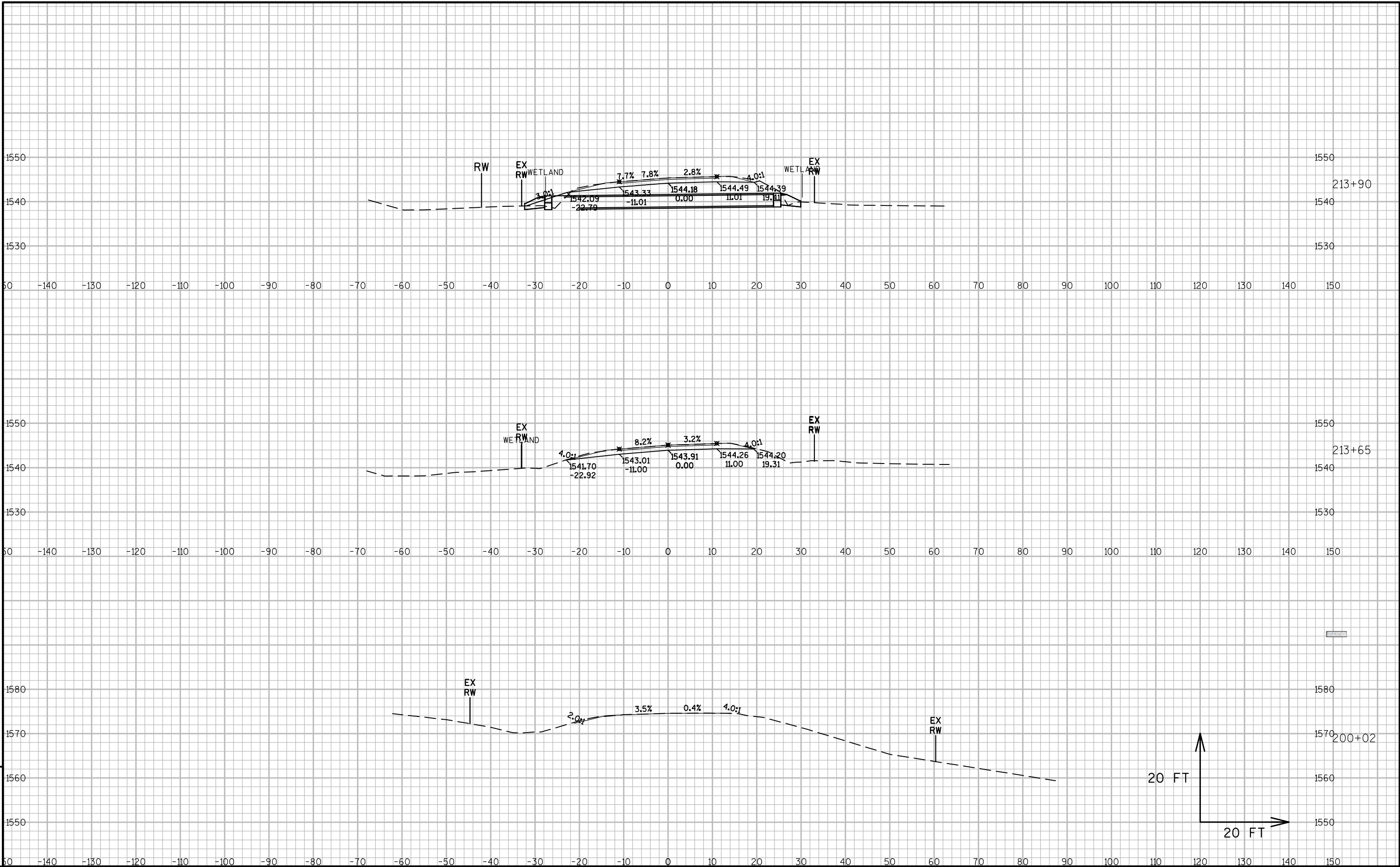


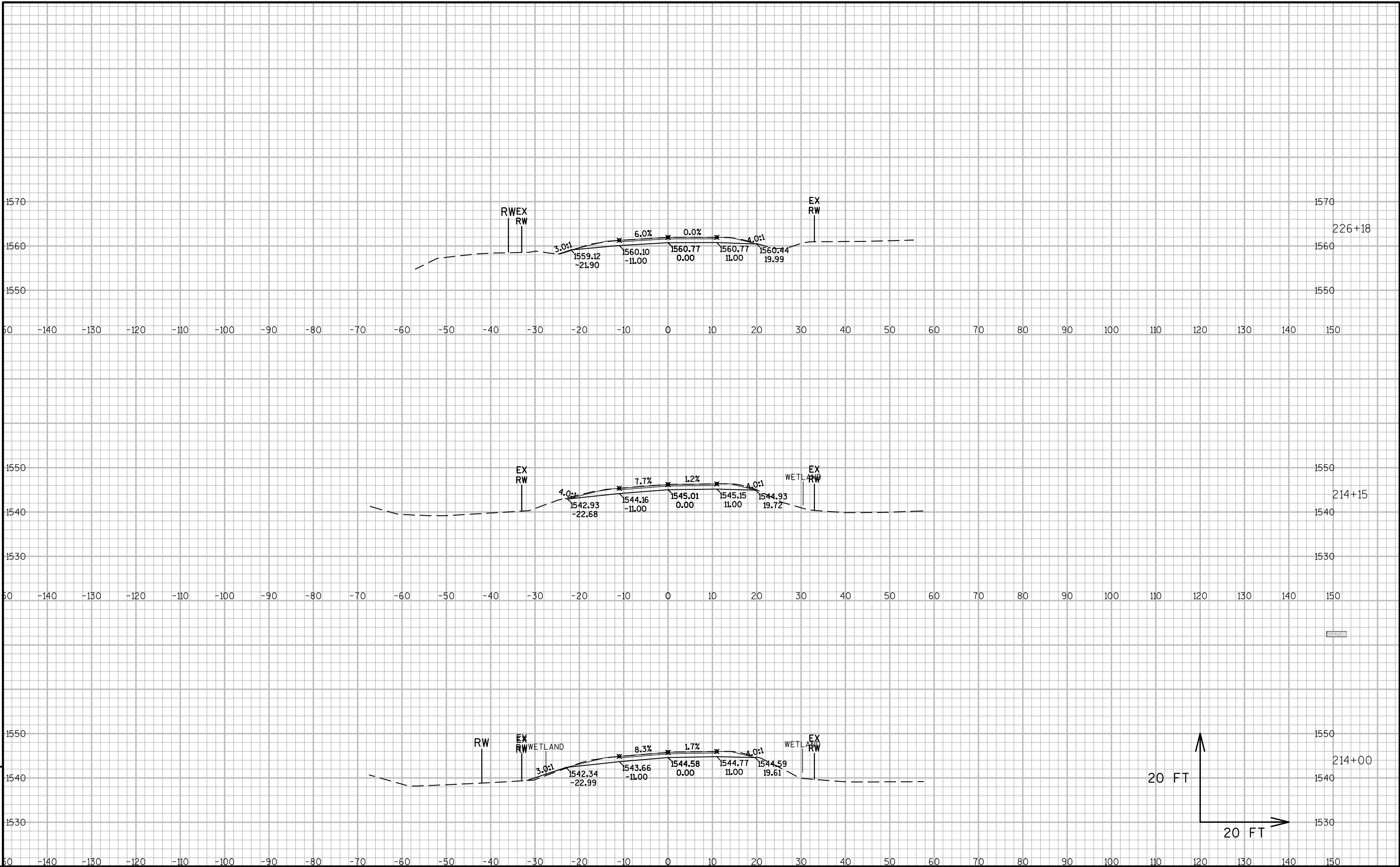
PROJECT NO: 9175-10-60	HWY: STH 52	COUNTY: LANGLADE	CROSS SECTIONS: STH52	SHEET	E
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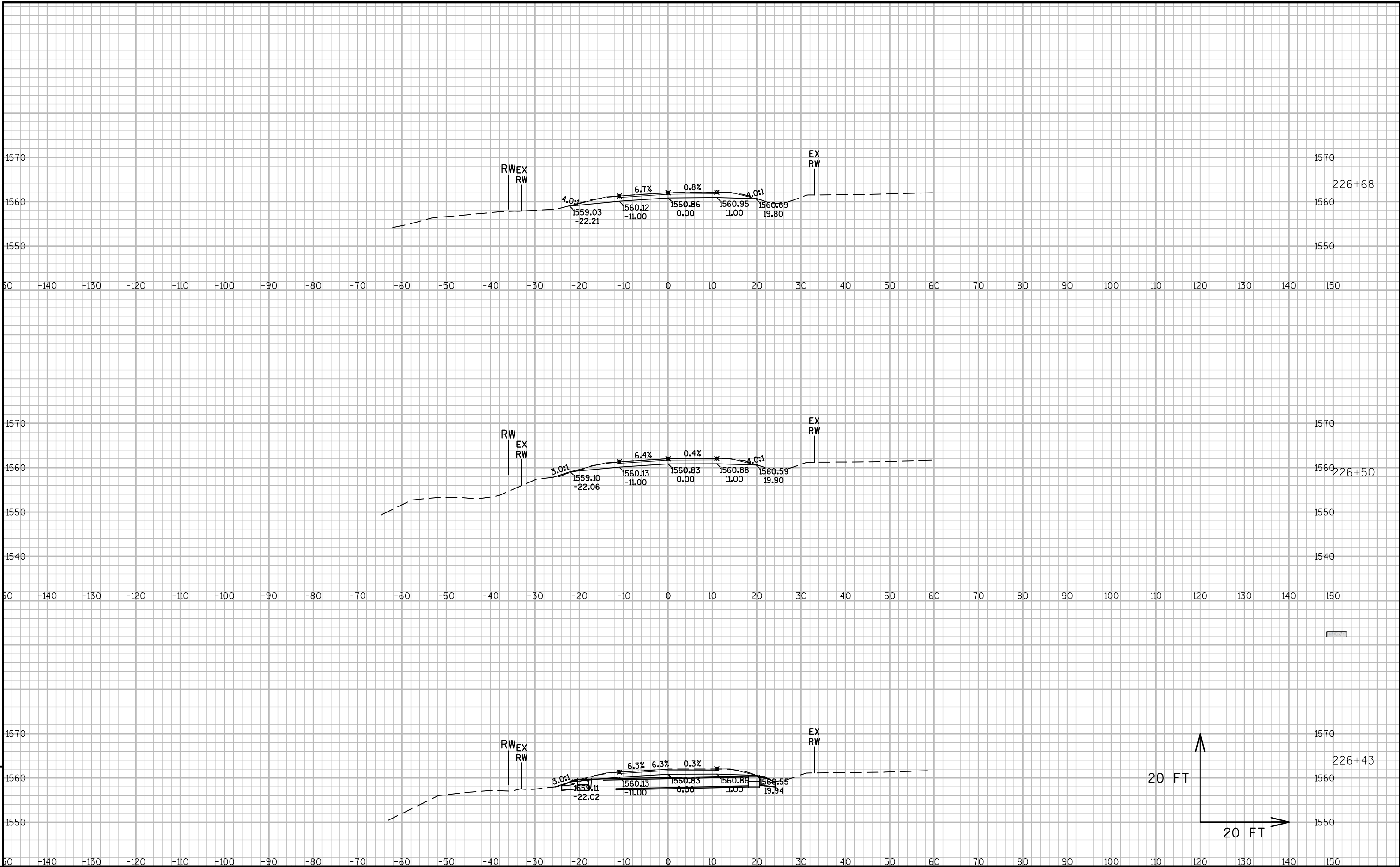


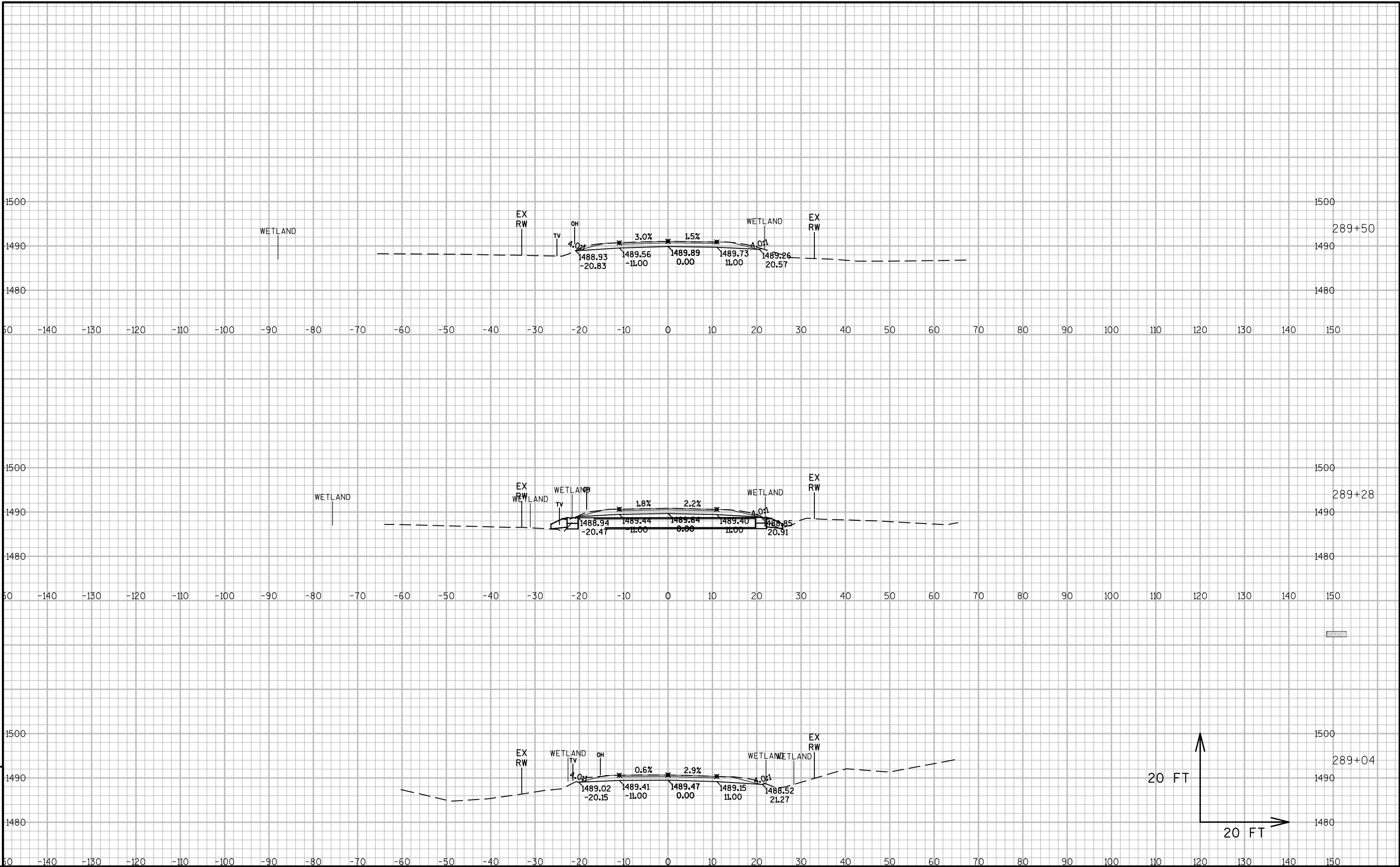


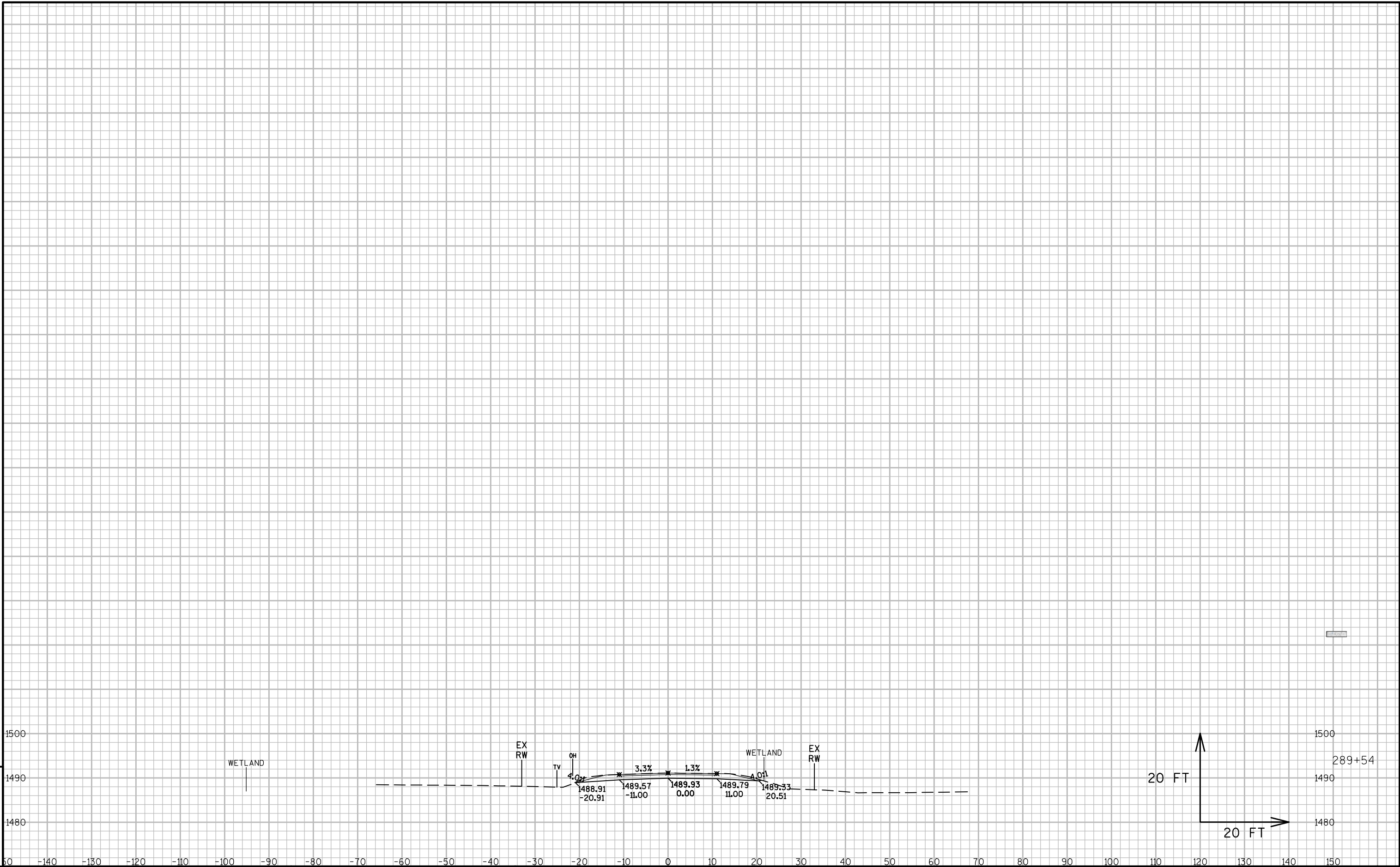


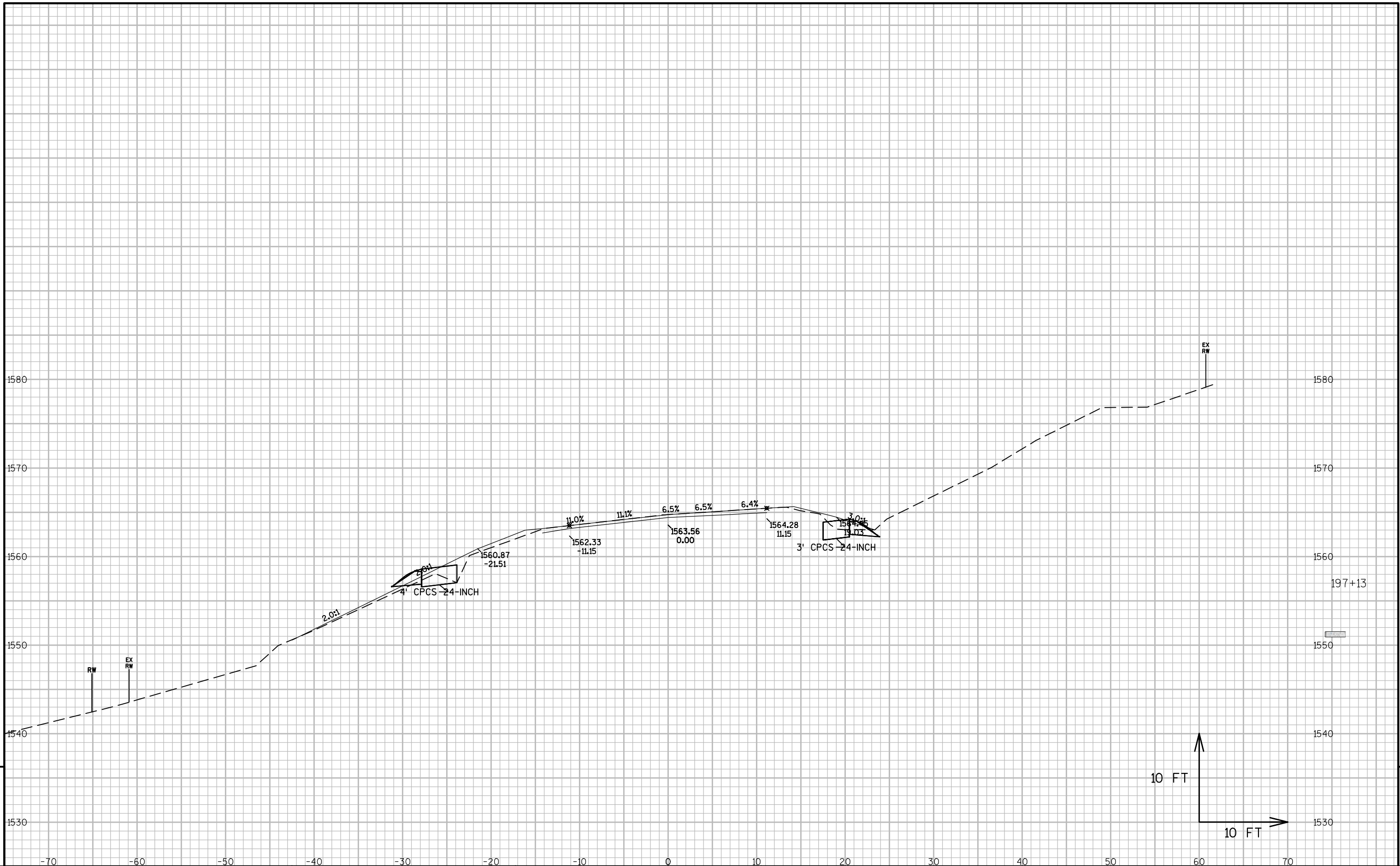


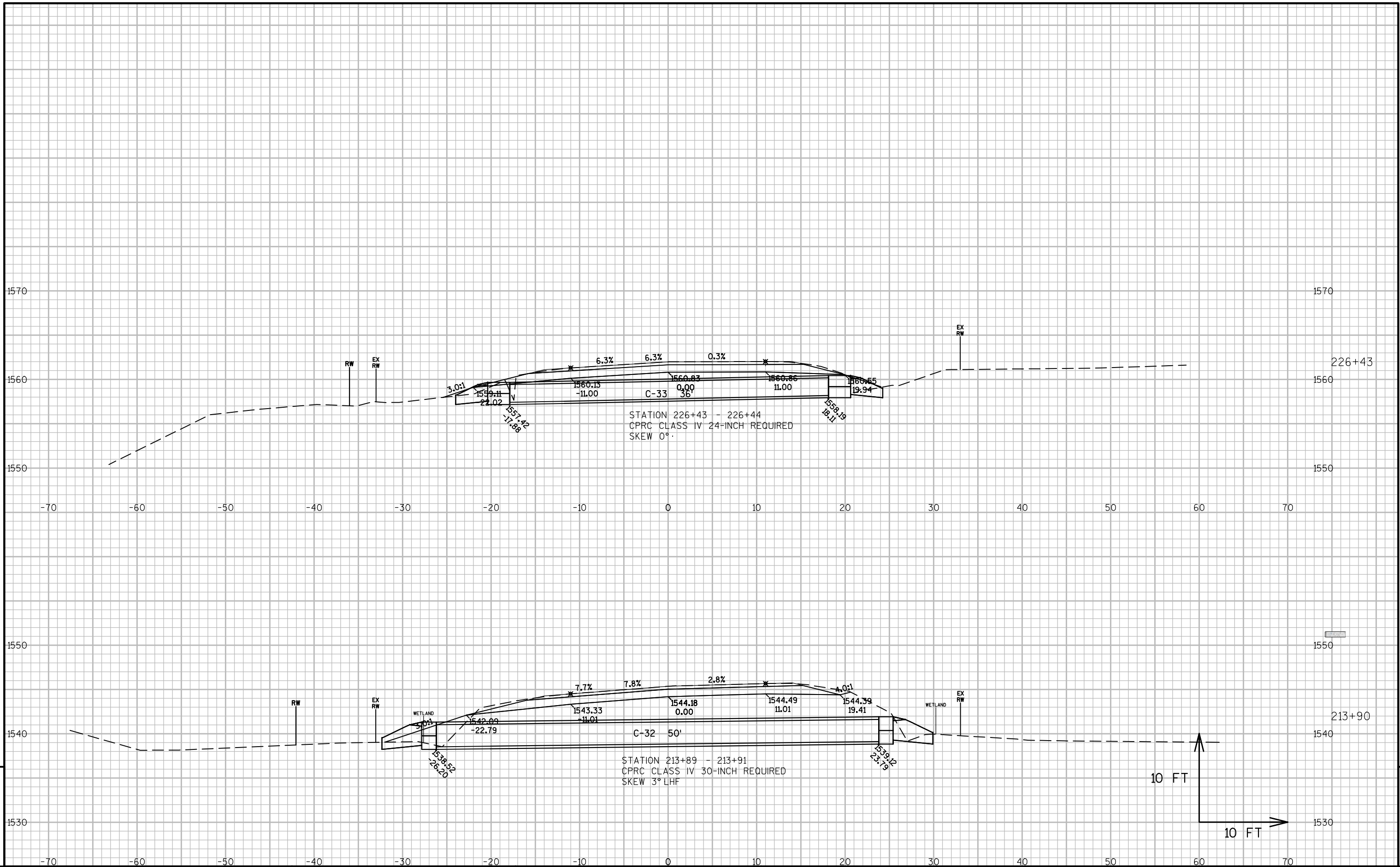


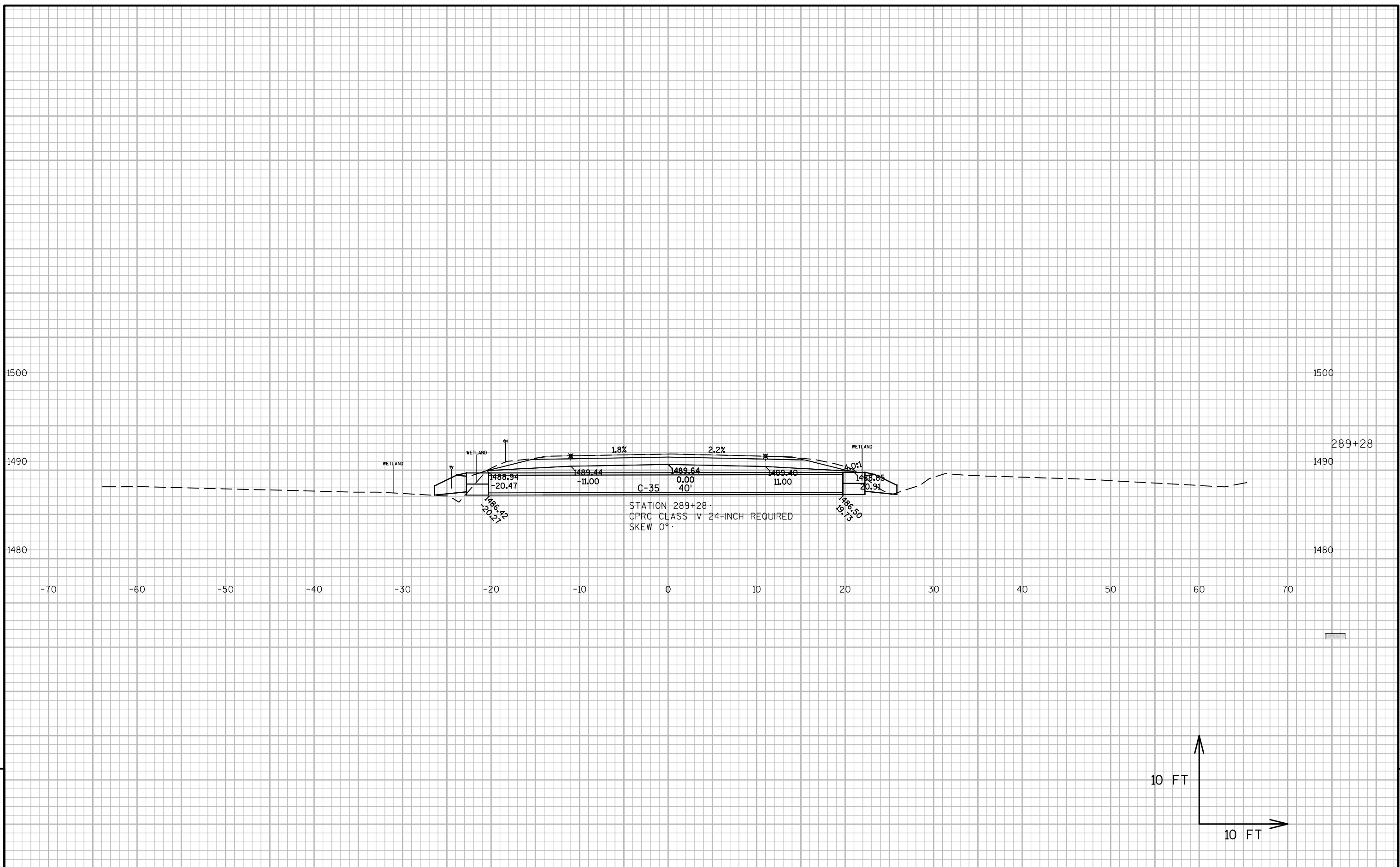














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