

EAU
PROJECT ID: 7062-05-71
WITH: 7062-05-72
COUNTY: JACKSON

FEB 2016

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 = 214

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT

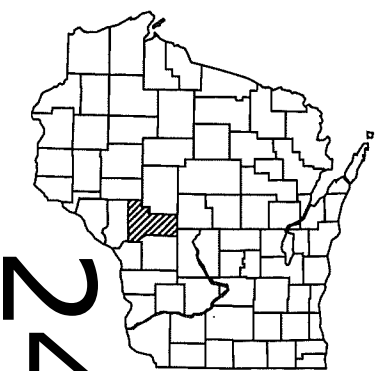
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7062-05-71	WISC 2016025	1
7062-05-72	WISC 2016026	1

SPARTA - BLACK RIVER FALLS
SOUTH COUNTY LINE TO 7TH STREET
STH 27
JACKSON COUNTY

BLACK RIVER FALLS, S ROOSEVELT ROAD
7TH STREET TO WEST 1ST STREET
STH 27
JACKSON COUNTY

STATE PROJECT NUMBER
7062-05-71

STATE PROJECT NUMBER
7062-05-72



DESIGN DESIGNATION

A.A.D.T. (2012)	=	8500
A.A.D.T. (2032)	=	11000
D.H.V. (2032)	=	1144
D.D.	=	62/38
T.	=	15.2%
DESIGN SPEED	=	55 MPH
ESALS	=	1,598,700

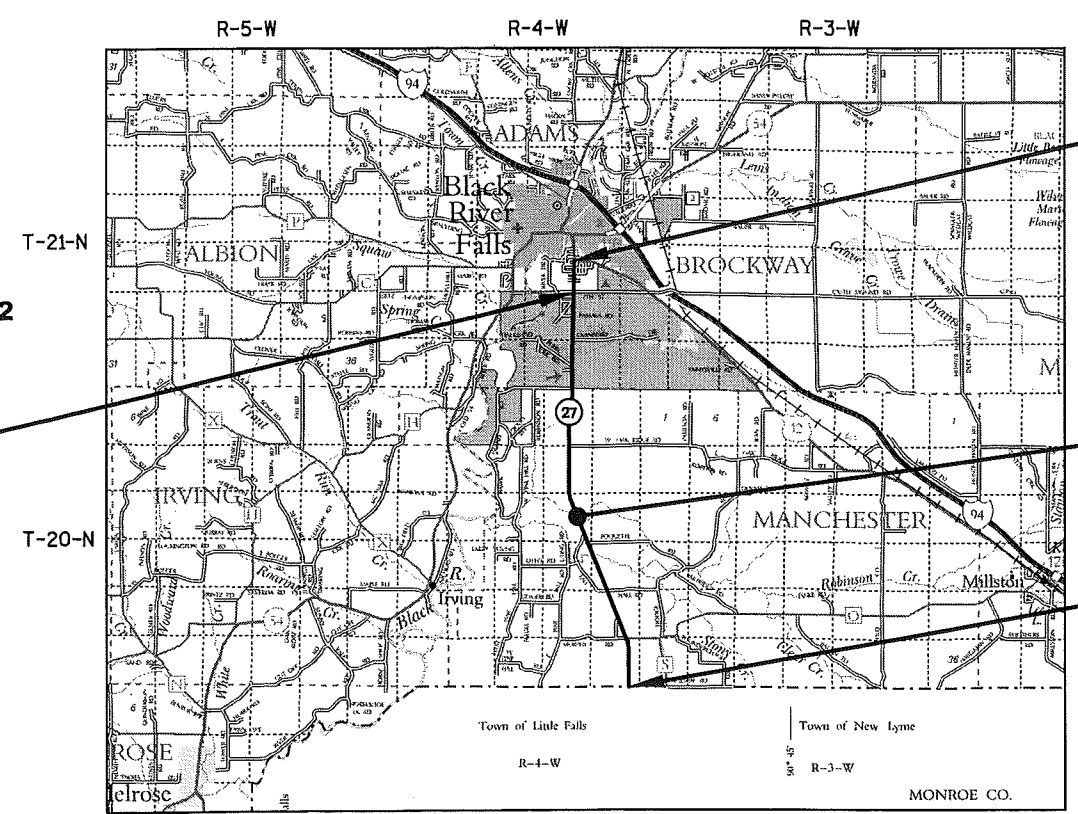
BEGIN PROJECT 7062-05-72
STA. 562+43
Y = 175986.364
X = 385932.070
END PROJECT 7062-05-71
STA. 562+43

END PROJECT 7062-05-72
STA. 593+79

EXCEPTION TO NET LENGTH OF CENTERLINE
(B-27-0003) STA. 267+07 - 268+40

BEGIN PROJECT 7062-05-71
STA. 117+48
Y = 132806.562
X = 392362.036

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	CAUTION
MARSH AREA	---
WOODED OR SHRUB AREA	---
PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	95.36
CULVERT (Profile View)	---
UTILITIES	
ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---



TOTAL NET LENGTH OF CENTERLINE (PROJECT 7062-05-71) = 8.402 MI.
TOTAL NET LENGTH OF CENTERLINE (PROJECT 7062-05-72) = 0.594 MI.
TOTAL NET LENGTH OF CENTERLINE (CONTRACT) = 8.996 MI.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM, ZONE 9627, NAD83 (2007), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NW REGION
Designer	ADAM SARAUER
Project Manager	DAVID KOEPP
Regional Examiner	CHRISTINE KOSKI
Regional Supervisor	TIM MASON

APPROVED FOR THE DEPARTMENT

DATE: 7/15/15

(Signature)

E

UTILITIES & OTHER CONTACTS

BLACK RIVER FALLS, CITY
ELECTRICITY - DISTRIBUTION
(7062-05-72)
KENT FISHER
119 NORTH WATER STREET
BLACK RIVER FALLS, WI 54615
715-284-9463 EXT. 222 (OFFICE)
715-299-9463 (MOBILE)
kfisher@wppienergy.org

*BROCKWAY SANITARY DISTRICT *1
SEWER & WATER
(7062-05-71 & 7062-05-72)
DALE HOFF
P.O. BOX 484
BLACK RIVER FALLS, WI 54615-0484
715-284-5234 (OFFICE)
715-299-3647 (MOBILE)

CENTURYLINK
COMMUNICATION LINE
(7062-05-71 & 7062-05-72)
--EMERGENCY REPAIR CONTACT--
800-824-2877
CONSTRUCTION FIELD CONTACT:
DONNA SMOTHERS
835 RED IRON RD.
BLACK RIVER FALLS, WI 54615
715-284-4375 (OFFICE)
715-797-4854 (MOBILE)
donna.smothers@centurylink.com

CHARTER COMMUNICATIONS
COMMUNICATION LINE
(7062-05-71 & 7062-05-72)
PERRY MCCLELLAN
1228 12TH AVE. SOUTH
ONALASKA, WI 54650
715-370-7140 (MOBILE)
perry.mcclellan@charter.com

DAIRYLAND POWER COOPERATIVE
ELECTRICITY - DISTRIBUTION
(7062-05-71 & 7062-05-72)
KURT D. CHILDS
3200 EAST AVE. SOUTH
P.O. BOX 817
LA CROSSE, WI 54602-0817
608-787-1367
kdcd@dalrynet.com

JACKSON ELECTRIC COOPERATIVE
ELECTRICITY - DISTRIBUTION
(7062-05-71 & 7062-05-72)
STEVE BUCHOLZ
N6868 CO. HWY F
P.O. BOX 546
BLACK RIVER FALLS, WI 54615-0546
715-284-5385
sbucholz@jackelec.com

XCEL ENERGY
ELECTRICITY - TRANSMISSION
(7062-05-71)
COPY ALL CORRESPONDENCE TO:
DAWN SCHULTZ
1414 W. HAMILTON AVE.
P.O. BOX 0008
EAU CLAIRE, WI 54702-0008
715-737-2482
dawn.schultz@xcelenergy.com
CONSTRUCTION FIELD CONTACT:
PAM TAYLOR
P.O. BOX 0008
EAU CLAIRE, WI 54702-0008
715-737-1306
pamela.l.taylor@xcelenergy.com

WE ENERGIES
GAS
(7062-05-71 & 7062-05-72)
--EMERGENCY CONTACT--
800-261-5325
COPY ALL CORRESPONDENCE TO:
DAN SANDE
333 W. EVERETT ST. RM A299
MILWAUKEE, WI 53203
414-221-4578
CONSTRUCTION FIELD CONTACT:
TRAVIS KAHL
1921 8TH ST. SOUTH
WISCONSIN RAPIDS, WI 54494
715-421-7256 (OFFICE)
715-498-6180 (MOBILE)
travis.kahl@we-energies.com

* NOT A MEMEBER OF DIGGERS HOTLINE

DNR REGIONAL TRANSPORTATION LIASON

KAREN KALVELAGE
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
608-785-9115 (OFFICE)
608-785-9000 (FAX)
Karen.Kalvelage@wisconsin.gov



Dial  or (800)242-8511
www.DiggersHotline.com

ABBREVIATIONS

ACCESS POINT	A.P.	LENGTH OF CURVE	L.	SECTION	SEC.
ACRES	AC.	LIMITED HIGHWAY EASEMENT	L.H.E.	SHED	S
AHEAD	AH.	MILE	MI.	SOUTHEAST	SE
AND OTHERS	ET AL	NORTHEAST	NE	SOUTHWEST	SW
BACK	BK.	NORTHWEST	NW	STATION	STA.
BARN	B	PERMANENT	PERM.	STREET	ST.
BUILDINGS	BLDGS.	POINT OF CURVATURE	P.C.	TANGENT	TAN.
CENTRAL ANGLE	Δ	POINT OF INTERSECTION	P.I.	TAVERN	TAV.
CHANNEL CHANGE	CH. CH.	POINT OF TANGENCY	P.T.	TEMPORARY	TEMP.
COMPANY	COM.	POINT OF COMPOUND CURVE	P.C.C.	UNITED STATES COAST &	U.S.C. & G.S.
CORNER	COR.	POINT OF REVERSE CURVE	P.R.C.	GEODETIC SURVEY	
CORPORATION	CORP.	POINT ON CURVE	P.O.C.		
COUNTY	CO.	PROJECT	PROJ.	UNITED STATES GEOLOGICAL	U.S.G.S.
COUNTY TRUNK HIGHWAY	C.T.H.	PROPERTY LINE	P.L.	SURVEY	
CREEK	CR.	QUIT CLAIM DEED	Q.C.D.		
DEGREE OF CURVE	D	RADIUS	R	UNITED STATES HIGHWAY	U.S.H.
GARAGE	G	RAILROAD	RR	WELL	W
GOVERNMENT	GOV'T.	RAILWAY	RY		
HOUSE	H	REQUIRED	REQ'D.		
HOUSE TRAILER	H.T.	RIGHT	RT.		
INCORPORATED	INC.	RIGHT OF WAY	R/W		
IRON PIN	I.P.	ROAD	RD.		
LEFT	LT.				

GENERAL NOTES

THE LOCATIONS OF EXISTING & PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

CROSS DRAIN PIPE ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS, MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL CONCRETE PIPE SHALL HAVE THE APRON ENDWALL AND THE FIRST TWO PIPE JOINTS TIED AT THE JOINTS, (THREE JOINTS TOTAL)

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, TO BE SEEDED, FERTILIZED AND MULCHED AS DIRECTED BY THE ENGINEER. ALL OTHER DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED AND MULCHED AT THE CONTRACTORS EXPENSE.

NO TREES, SHRUBS, OR PRIVATE PLANTINGS ARE TO BE REMOVED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

WETLAND AREAS SHOWN ON THE PLANS WERE FIELD DELINEATED ONLY IN THE LOCATIONS OF PROPOSED GRADING. OTHER WETLAND AREAS MAY EXIST WITHIN THE PROJECT LIMITS. ANY CHANGES TO THE GRADING LIMITS SHOWN ON THE PLANS WILL REQUIRE APPROVAL OF THE ENGINEER AND VERIFICATION OF ANY WETLAND IMPACTS.

PLAN ELEVATIONS = NAVD 88

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS EROSION CONTROL IMPLEMENTATION PLAN AND APPROVED BY THE ENGINEER IN CONSULTATION WITH THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT INCLUDED IN THE EARTHWORK SUMMARY. IT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS WILL BE APPROVED BY THE ENGINEER.

PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT THE COUNTY SURVEYOR CONCERNING MONUMENT AND PROPERTY CORNER PRESERVATION.

ASPHALIC PAVEMENT FOR SHOULDERS UP TO 4 INCHES IN DEPTH MAY BE PLACED IN ONE LIFT.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR HMA / ASPHALTIC PAVEMENT IS MEASURED BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

SHRINKAGE OF EARTHWORK IS 20 PERCENT IN THE YARDAGE SUMMARY, UNLESS OTHERWISE NOTED.

RIGHTS-OF-ENTRY FOR CONSTRUCTION HAVE BEEN OBTAINED. WHICH RIGHTS SHALL BE EXTENDED TO THE CONTRACTOR.

EXACT LOCATION AND WIDTH OF ANY DRIVEWAY ENTRANCES TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALTIC CONCRETE DRIVEWAYS, SIDEWALKS, OR SIDE STREETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER OR AS SHOWN ON THE PLANS.

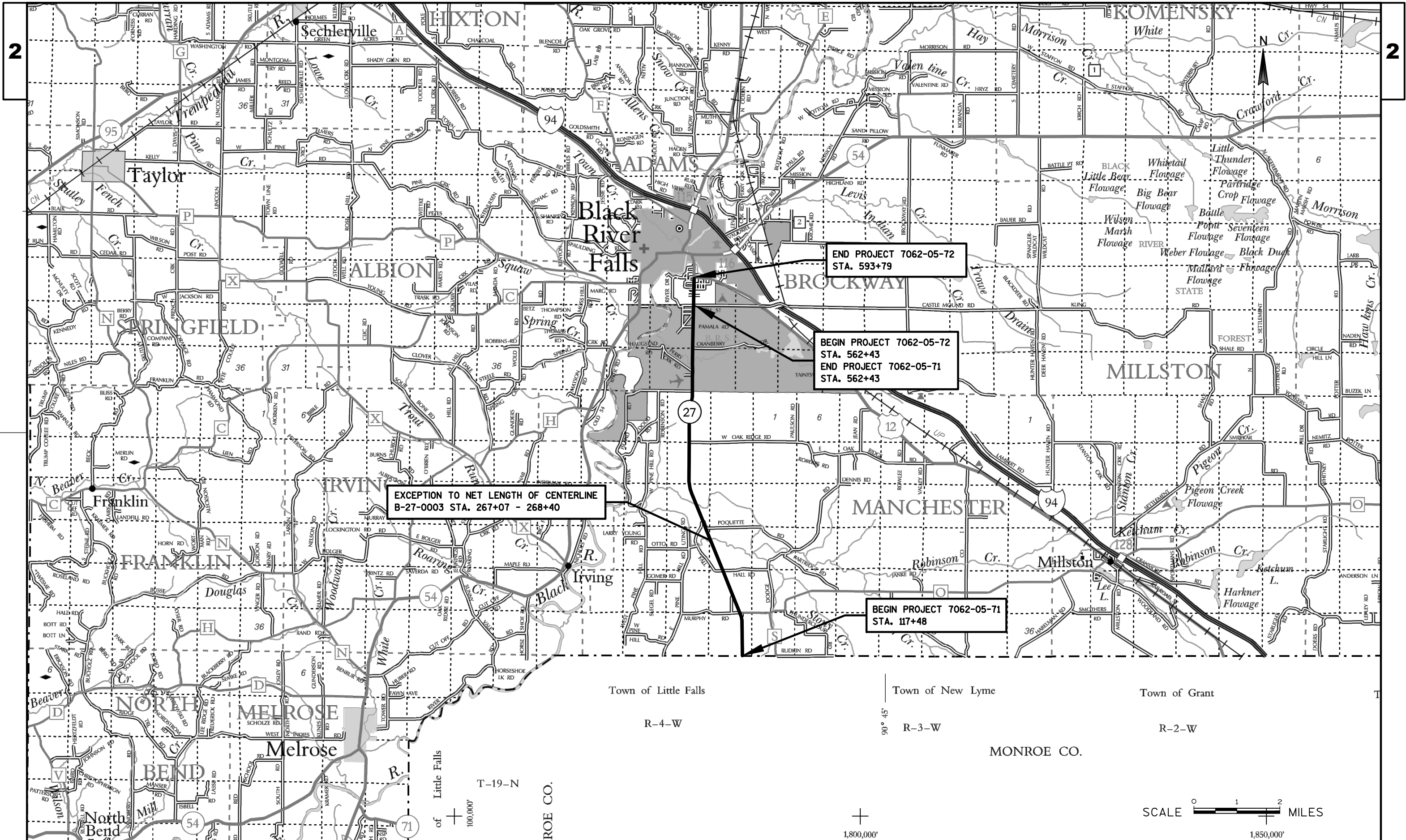
TYPICAL FINISHED SECTIONS SHOW THE GENERAL ROADWAY FEATURES THROUGHOUT THE PROJECT. PAVEMENT, SLOPES, BORDER SLOPES, ETC., MAY VARY WITHIN THE STATION LIMITS OF THE STATION SECTION.

OVERHAUL WILL NOT BE PAID ON THIS PROJECT.

EARTHWORK WASTE MATERIAL SHOWN ON THE EARTHWORK SUMMARY SHALL BE HAULED FROM THE PROJECT, EXCEPT AS DIRECTED BY THE ENGINEER.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE ENGINEER, THE JACKSON COUNTY HIGHWAY DEPARTMENT, THE TOWN OF BROCKWAY, THE TOWN OF MANCHESTER, AND THE CITY OF BLACK RIVER FALLS WITH THE NAME AND TELEPHONE NUMBER OF A LOCAL PERSON RESPONSIBLE FOR EMERGENCY MAINTENANCE OF TRAFFIC CONTROL DEVICES.

CONSTRUCTION SURVEY CONTROL POINTS TO BE PROVIDED BY THE ENGINEER PRIOR TO CONSTRUCTION.



PROJECT NO: 7062-05-71 & 7062-05-72

HWY: STH 27

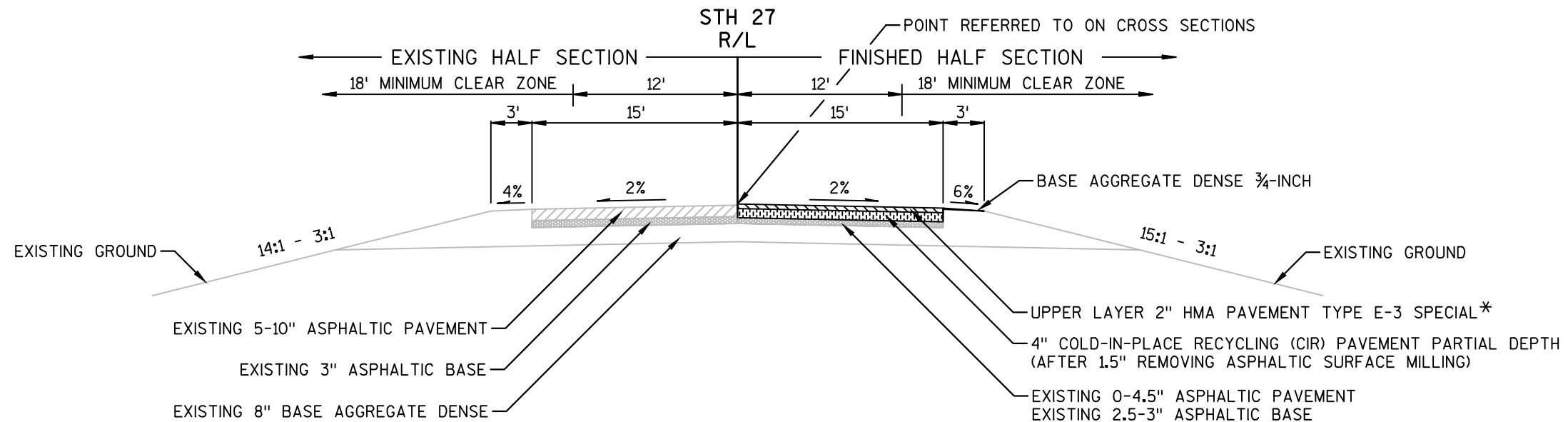
COUNTY: JACKSON

PROJECT OVERVIEW

SHEET

3

E



NOTE: SEE CONSTRUCTION DETAILS FOR FIELD CORE LOG SHOWING EXISTING PAVEMENT DEPTHS.

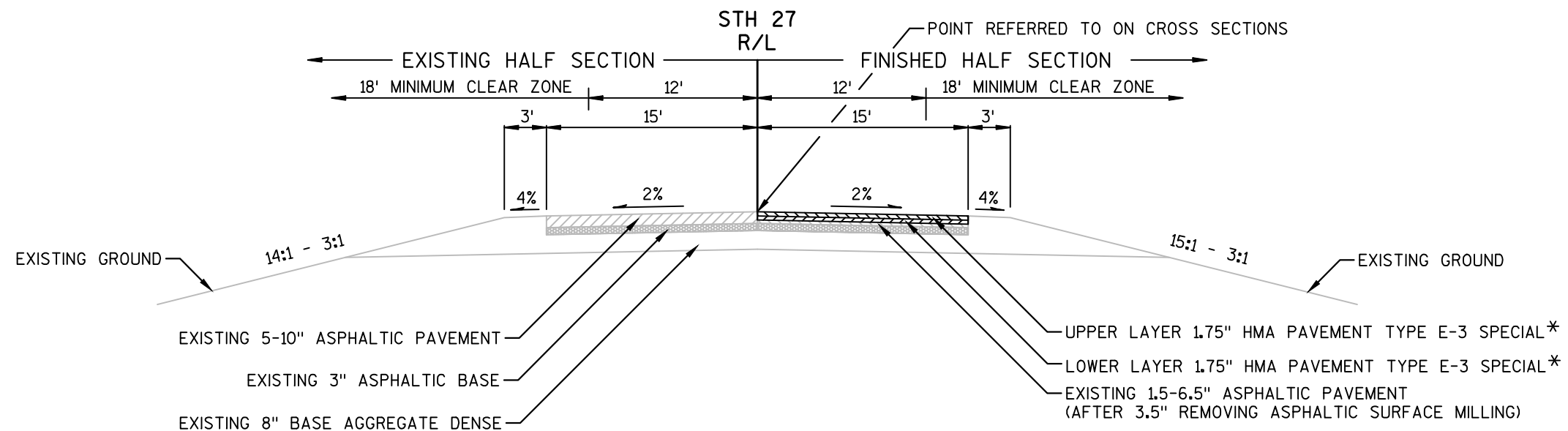
CORE DEPTHS WERE SUPPLEMENTED WITH GROUND PENETRATING RADAR.

GROUND PENETRATING RADAR DATA SHOWING EXISTING HMA LAYER THICKNESS IS AVAILABLE BY CONTACTING DAVID KOEPP (715)836-2078.

TYPICAL HALF SECTION

STA. 117+48 - STA. 547+00
PROJECT 7062-05-71

* ALL HMA PAVEMENT LAYERS SHALL USE A 12.5mm MIX.

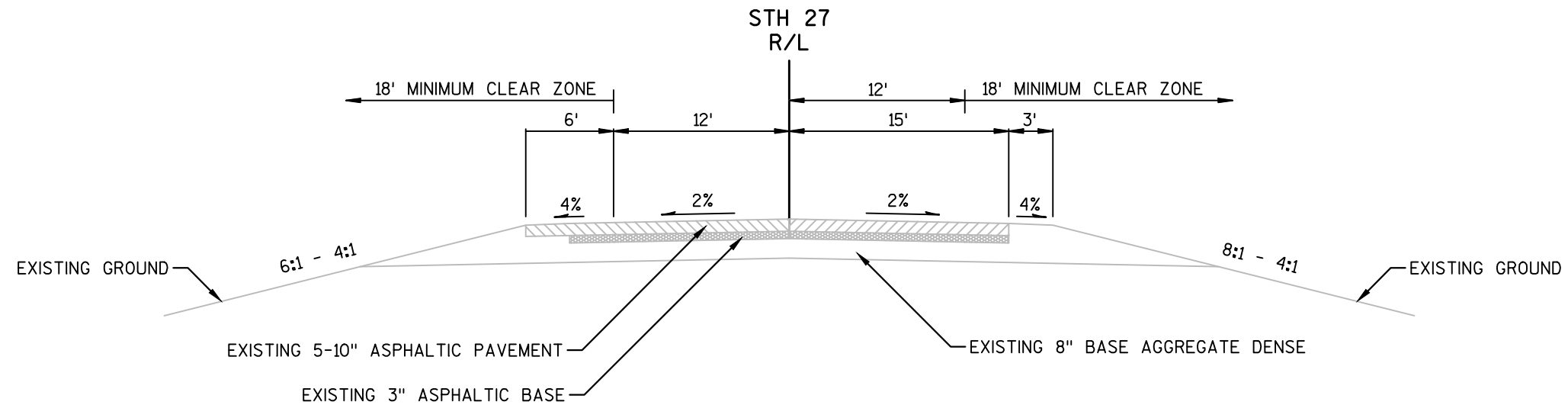


TYPICAL HALF SECTION

STA. 547+00 - STA. 551+80
PROJECT 7062-05-71

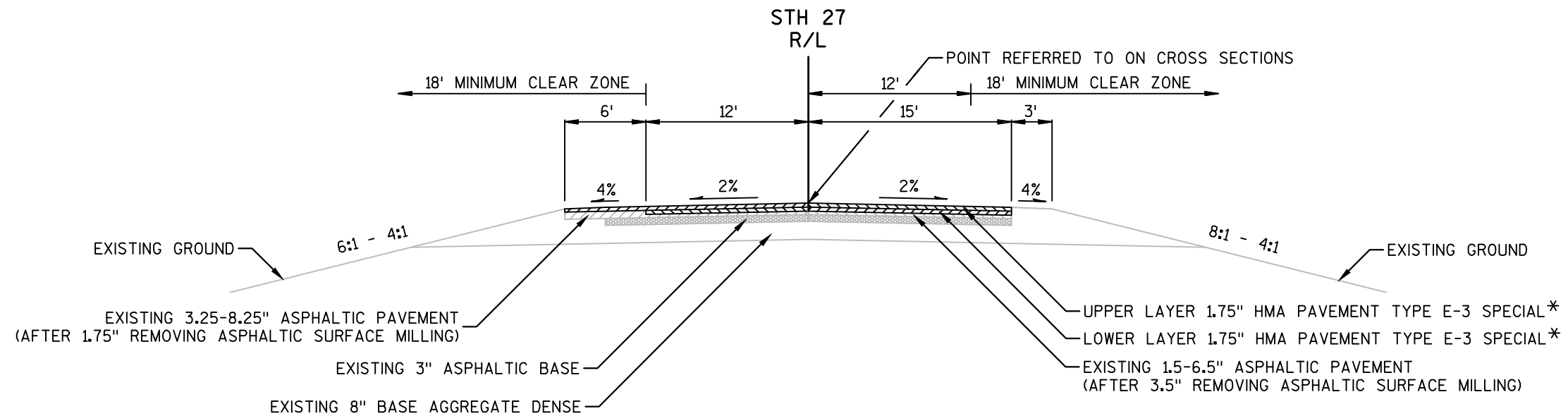
NOTE: TRANSITION ½" PROFILE RAISE AT STA. 547+00 TO MATCH EXISTING PROFILE AT STA. 548+00.

* ALL HMA PAVEMENT LAYERS SHALL USE A 12.5mm MIX.



TYPICAL EXISTING SECTION

STA. 551+80 - STA. 562+43
PROJECT 7062-05-71

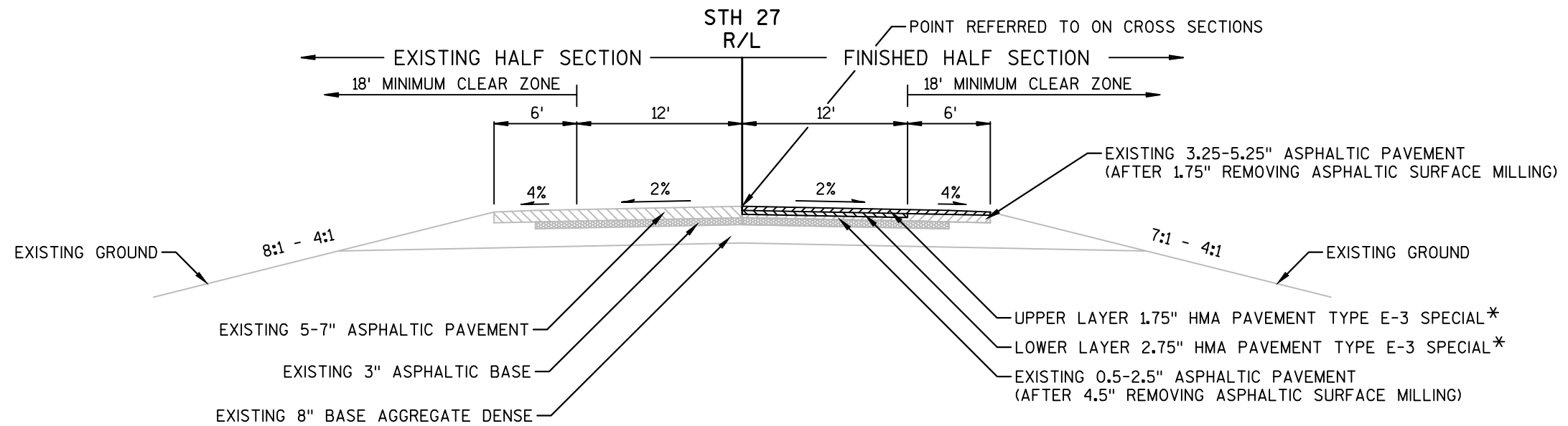


TYPICAL FINISHED SECTION

STA. 551+80 - STA. 562+43
PROJECT 7062-05-71

NOTE: MILL FROM REFERENCE LINE TO 12' LEFT OF R/L AT 3.5" DEPTH.
MILL REMAINING LEFT SHOULDER AT 1.75" DEPTH.

* ALL HMA PAVEMENT LAYERS SHALL USE A 12.5mm MIX.

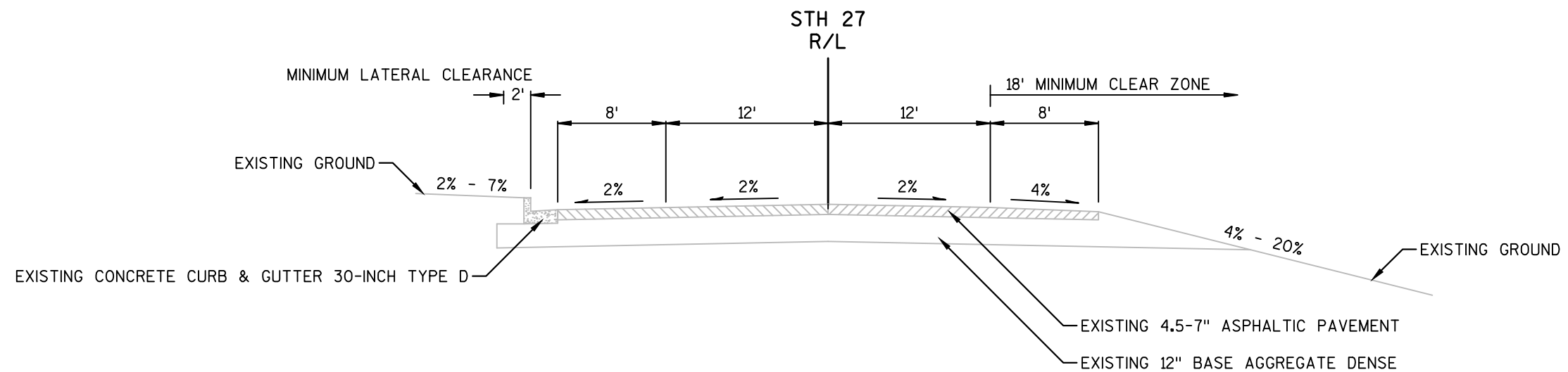


TYPICAL HALF SECTION

STA. 562+43 - STA. 567+83
PROJECT 7062-05-72

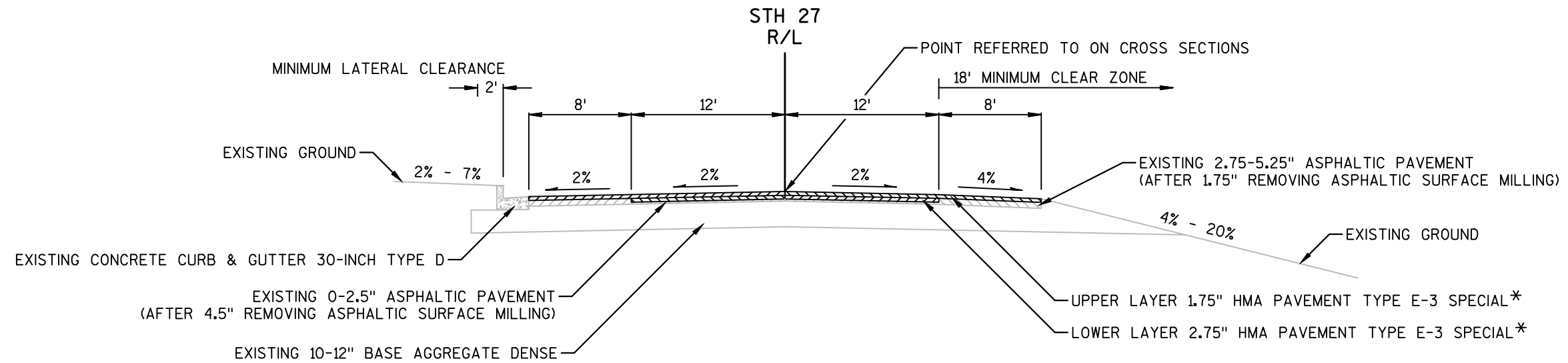
* ALL HMA PAVEMENT LAYERS SHALL USE A 12.5mm MIX.

NOTE: MILL THE CENTER 24' OF ROADWAY AT 4.5" DEPTH.
MILL THE REMAINING SHOULDERS AT 1.75" DEPTH.



TYPICAL EXISTING SECTION

STA. 567+83 - STA. 572+80
PROJECT 7062-05-72

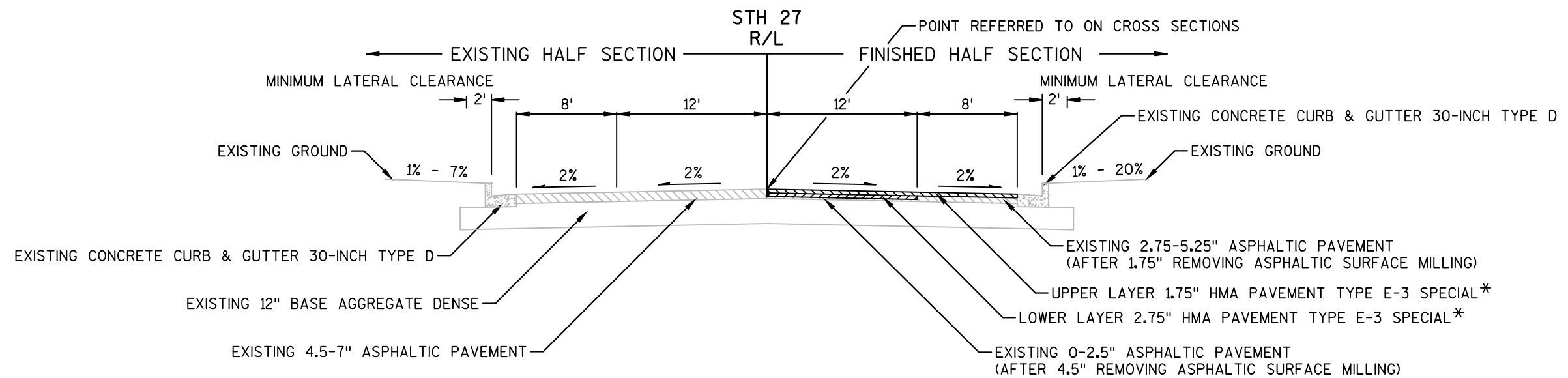


TYPICAL FINISHED SECTION

STA. 567+83 - STA. 572+80
PROJECT 7062-05-72

NOTE: MILL THE CENTER 24' OF ROADWAY AT 4.5" DEPTH.
MILL THE REMAINING SHOULDERS AT 1.75" DEPTH.

* ALL HMA PAVEMENT LAYERS SHALL USE A 12.5mm MIX.



TYPICAL HALF SECTION

STA. 572+80 - STA. 593+79
PROJECT 7062-05-72

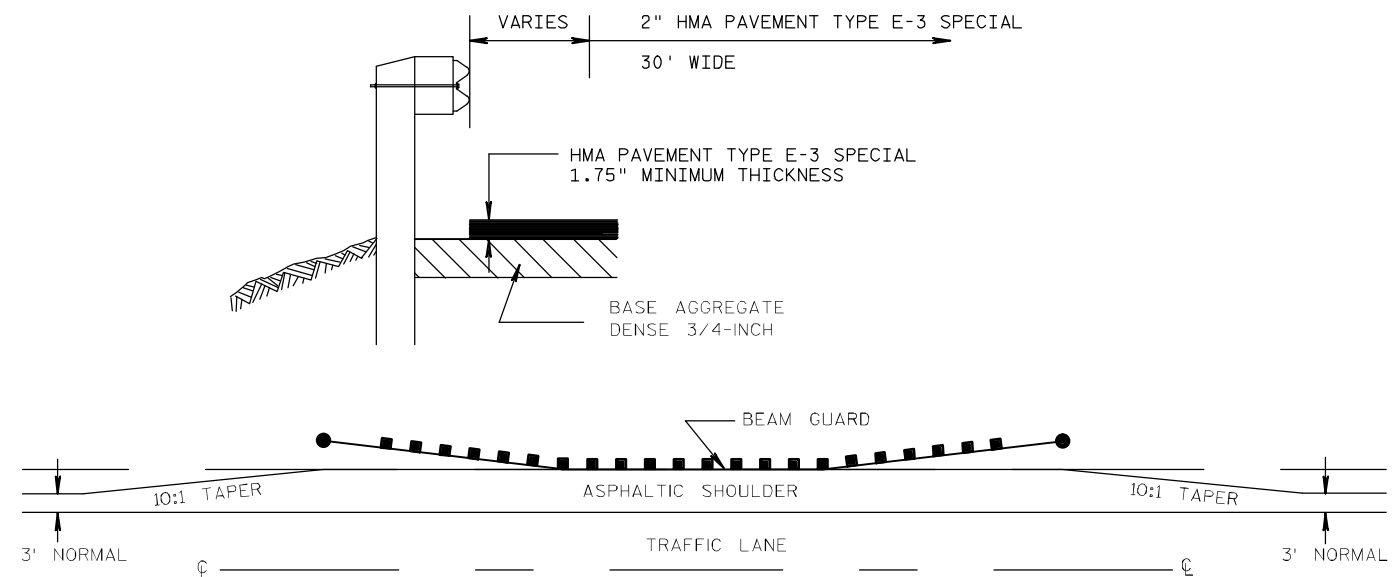
NOTE: MILL THE CENTER 24' OF ROADWAY AT 4.5" DEPTH.
MILL THE REMAINING SHOULDERS AT 1.75" DEPTH.

* ALL HMA PAVEMENT LAYERS SHALL USE A 12.5mm MIX.

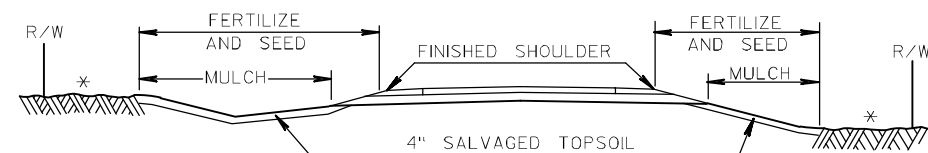
PAVEMENT FIELD CORE LOG

Core Number	Mile	Offset	Pavement Thickness	Comments
---	0.00	---	---	MONROE/JACKSON COUNTY LINE
1	0.30	9' RT.	7.50"	NO INTACT CORE RECOVERED
2	0.60	6' LT.	8.50"	RECOVERED CORE = 4.75"
3	0.90	9' RT.	9.25"	NO INTACT CORE
---	1.04	---	---	CTH O / RT. & MURPHY RD/ LT.
4	1.20	6' LT.	9.25"	RECOVERED CORE = 5.50"
5	1.50	6' RT.	6.75"	NO INTACT CORE
6	1.80	6' LT.	9.00"	RECOVERED CORE = 5.75"
7	2.10	6' RT.	8.00"	RECOVERED CORE = 5.25"
8	2.40	6' LT.	7.75"	RECOVERED CORE = 6.25"
9	2.70	6' RT.	8.50"	RECOVERED CORE = 5.50"
10	3.00	6' LT.	9.00"	RECOVERED CORE PIECES = 1.25" & 5.00"
11	3.30	8' RT.	7.75"	RECOVERED CORE = 5.25"
12	3.60	7' LT.	7.00"	RECOVERED CORE = 5.50"
13	3.90	8.5' RT.	8.00"	RECOVERED CORE PIECES = 1.75" & 4.00"
14	4.20	6' LT.	8.00"	RECOVERED CORE PIECES = < 1.00" & 2.00"
15	4.50	8' RT.	9.50"	RECOVERED CORE = 6.00"
16	4.80	9' LT.	7.25"	RECOVERED CORE = 2.00"
17	5.10	9' RT.	8.25"	RECOVERED CORE PIECES = 4.25" & 1.50"
18	5.40	9' LT.	7.75"	RECOVERED CORE PIECES = 1.50", 2.00", & 1.25"
19	5.70	9' RT.	10.00"	RECOVERED CORE PIECES = 1.00", 1.75", & 1.25"
20	6.00	9' LT.	6.50"	RECOVERED CORE = 6.25"
21	6.30	9' RT.	5.25"	RECOVERED CORE = 5.00"
22	6.60	6' LT.	7.50"	RECOVERED CORE = 6.00"
23	6.90	7' RT.	7.00"	RECOVERED CORE = 5.00"
24	7.20	6' LT.	9.00"	RECOVERED CORE = 5.00"
25	7.50	6' RT.	7.00"	RECOVERED CORE = 5.25"
26	7.80	6' LT.	6.00"	RECOVERED CORE = 5.75"
27	8.10	6' RT.	7.50"	RECOVERED CORE = 5.25"
28	8.40	6' LT.	9.00"	RECOVERED CORE = 6.75"
---	8.62	---	---	7TH STREET/ LT. & RT.
29	8.70	6' RT.	7.00"	RECOVERED CORE = 5.50"
30	9.00	6' LT.	5.50"	RECOVERED CORE = 5.25"
31	9.20	6' RT.	5.00"	RECOVERED CORE = 5.00"
---	9.29	---	---	USH 12/ RT.

NOTE: PAVEMENT FIELD CORE DATA COLLECTED ON JUNE 17, 18, & 21, 2010.

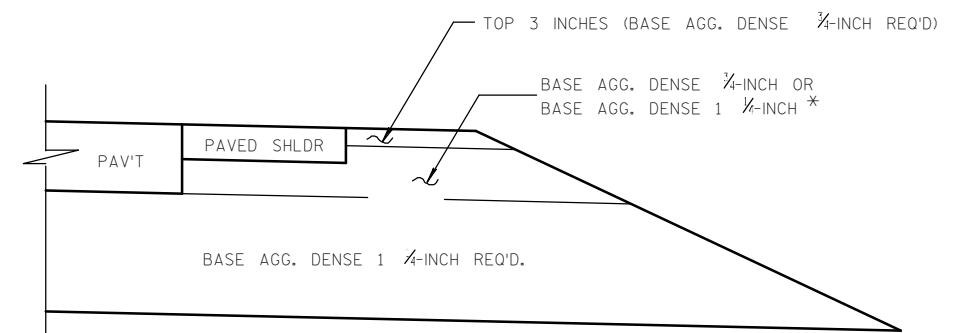


DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD



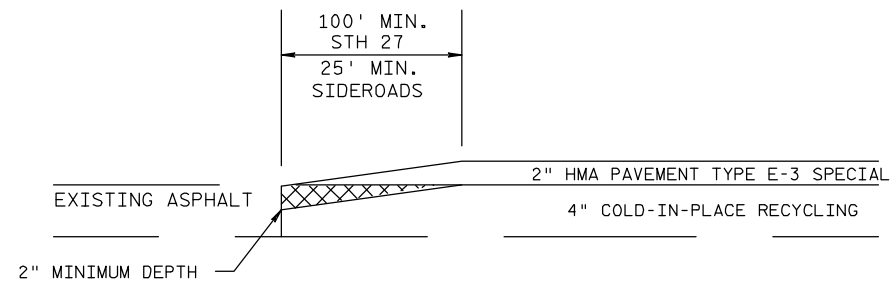
* DISTURBED AREAS TO BE
FERTILIZED & SEEDED

DETAIL FOR FINISHING ITEMS



* PLAN ESTIMATE OF QUANTITIES INCLUDES THIS AREA
AS THE BID ITEM BASE AGGREGATE DENSE 3/4-INCH.

BASE AGG DENSE 3/4-INCH REQUIRED

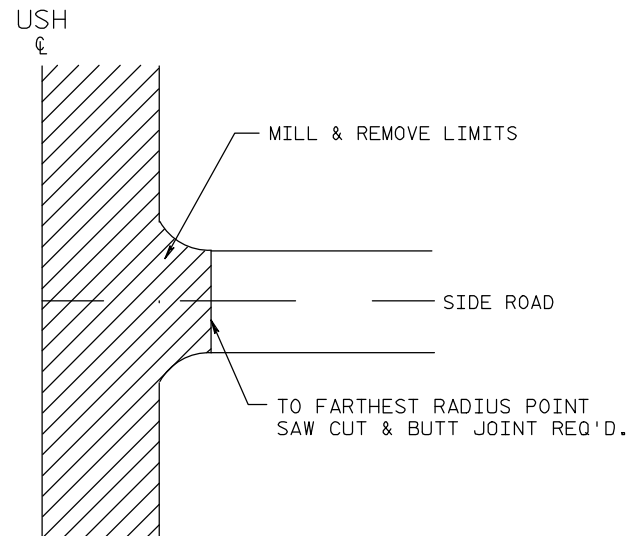


PAID FOR UNDER ITEM 'REMOVING ASPHALTIC SURFACE BUTT JOINTS'

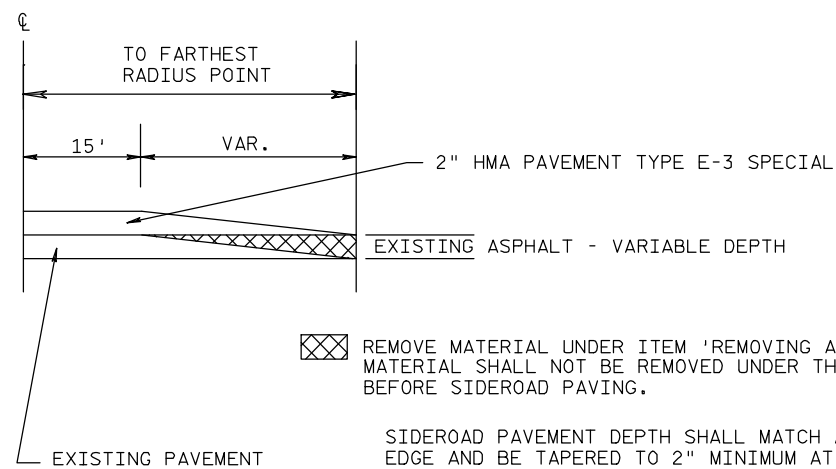
NOTES: BUTT JOINT REQUIRED AT ALL BEGIN AND END PAVING LOCATIONS.

ANY SAWCUTS USED IN THIS OPERATION WILL BE PAID FOR UNDER THE ITEM 'SAWING ASPHALT'.

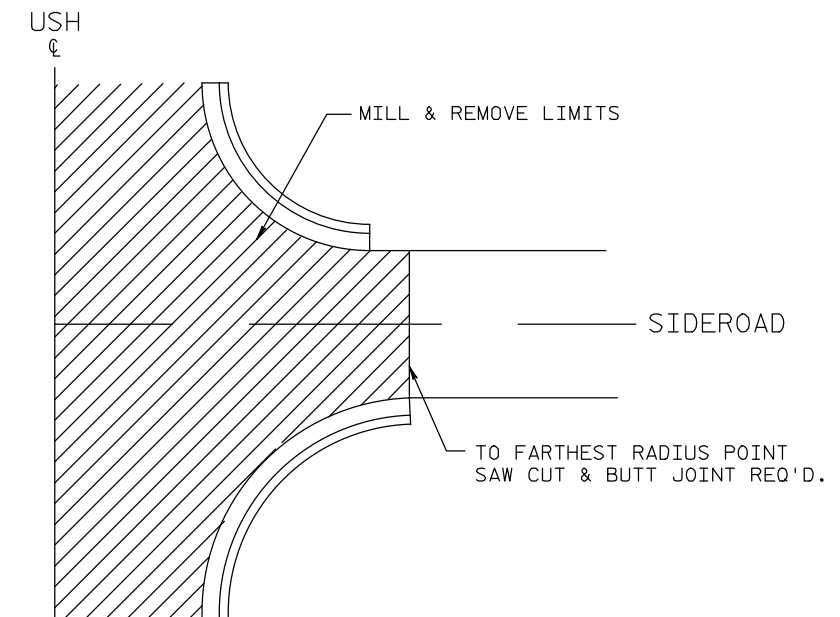
BUTT JOINT



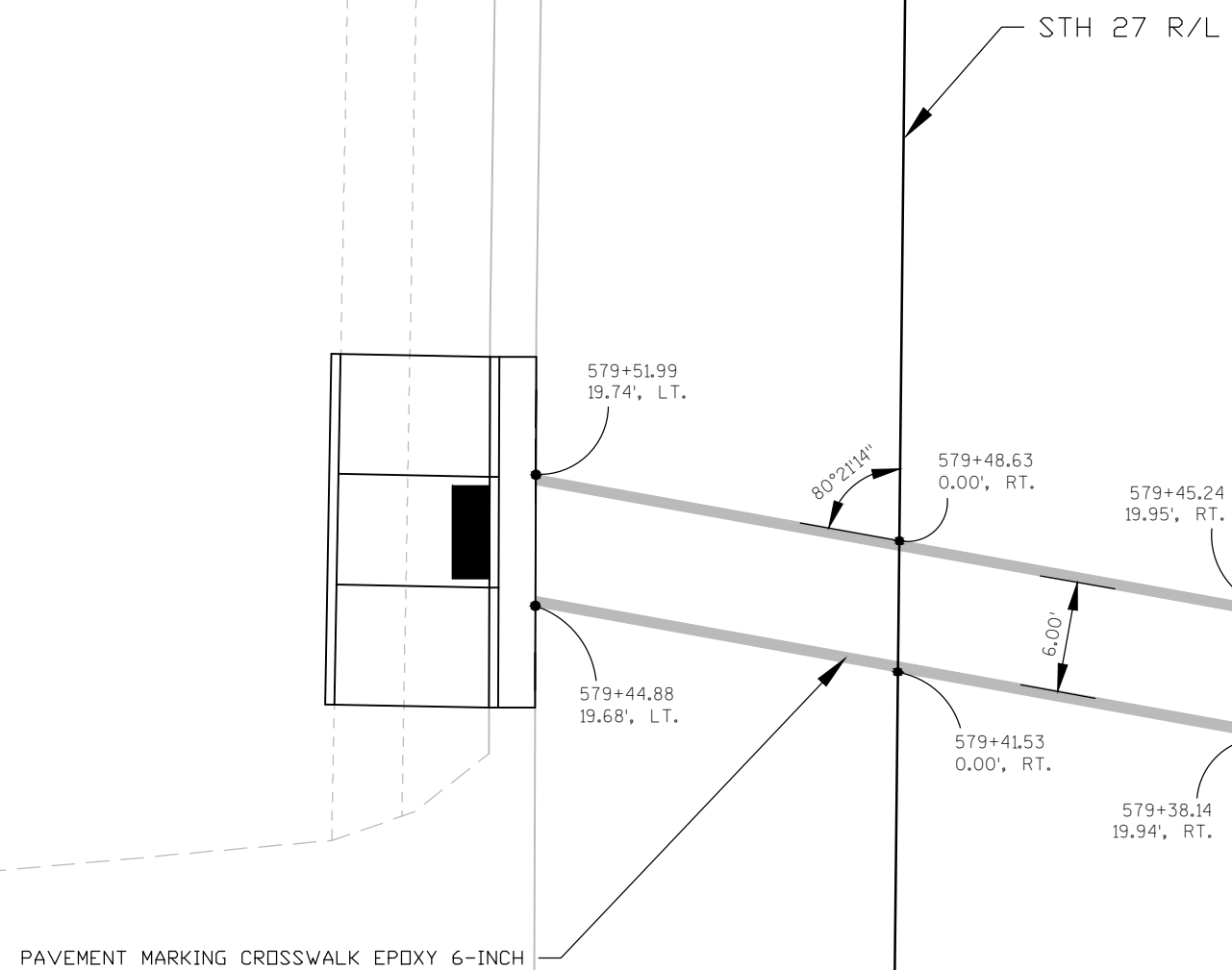
NOTE: IF THE EXISTING SIDEROAD CONSISTS OF A BASE COURSE SURFACE, THE NEW ASPHALT SHALL BE PLACED TO THE ENDS OF THE EXISTING SIDEROAD RADIUS'.

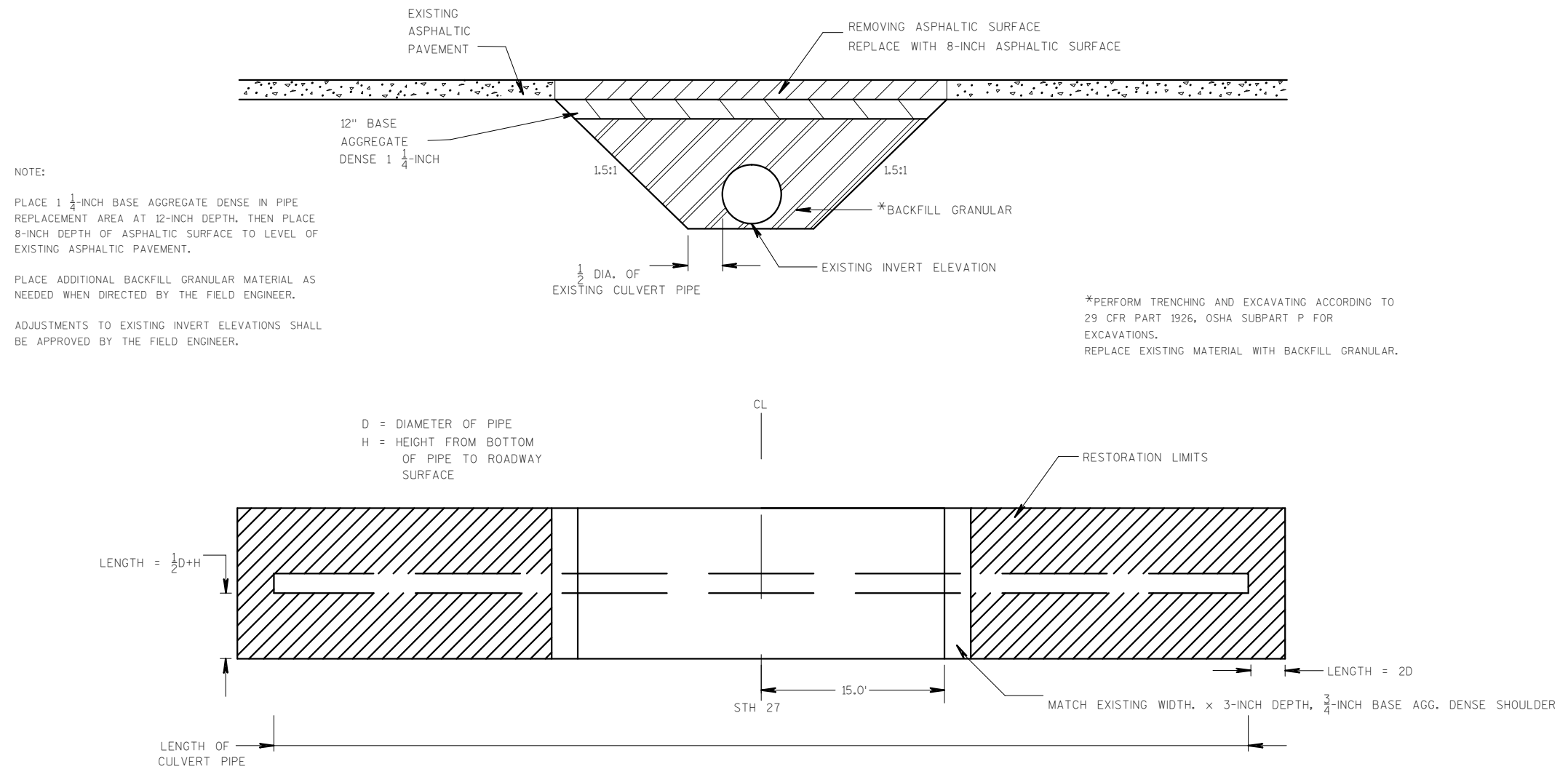


SIDE ROAD DETAIL - NO CURB & GUTTER

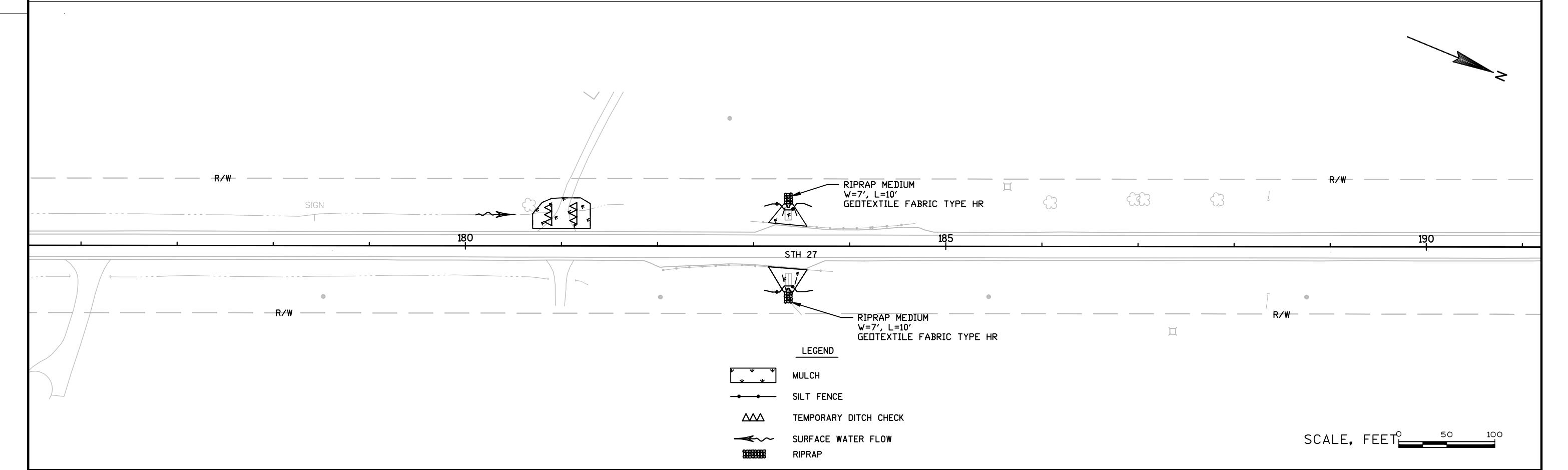
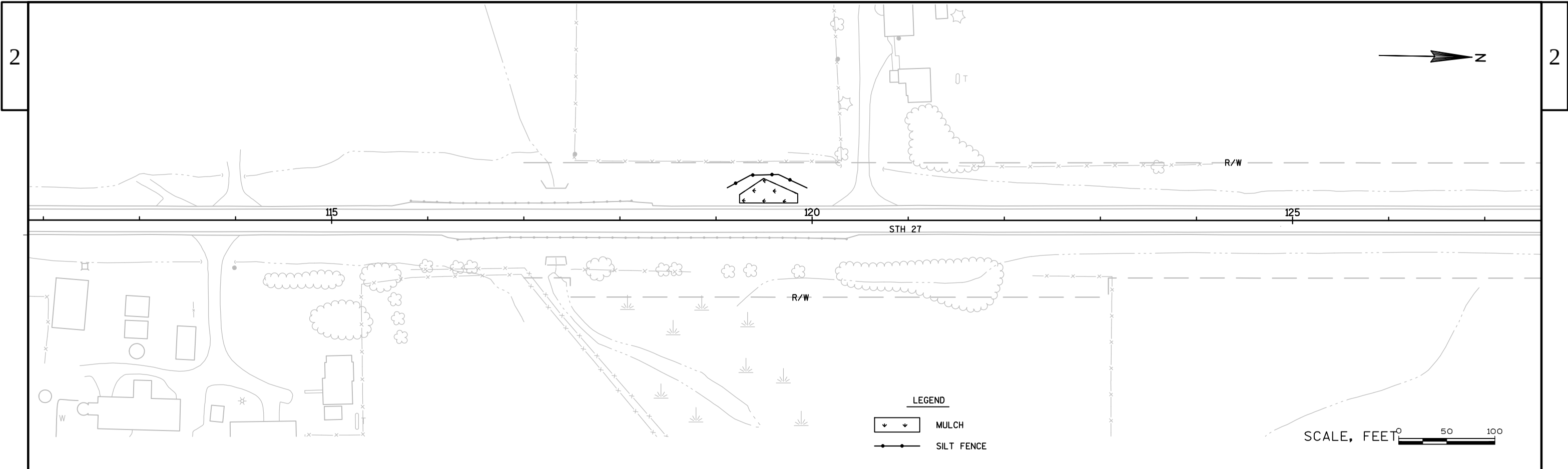


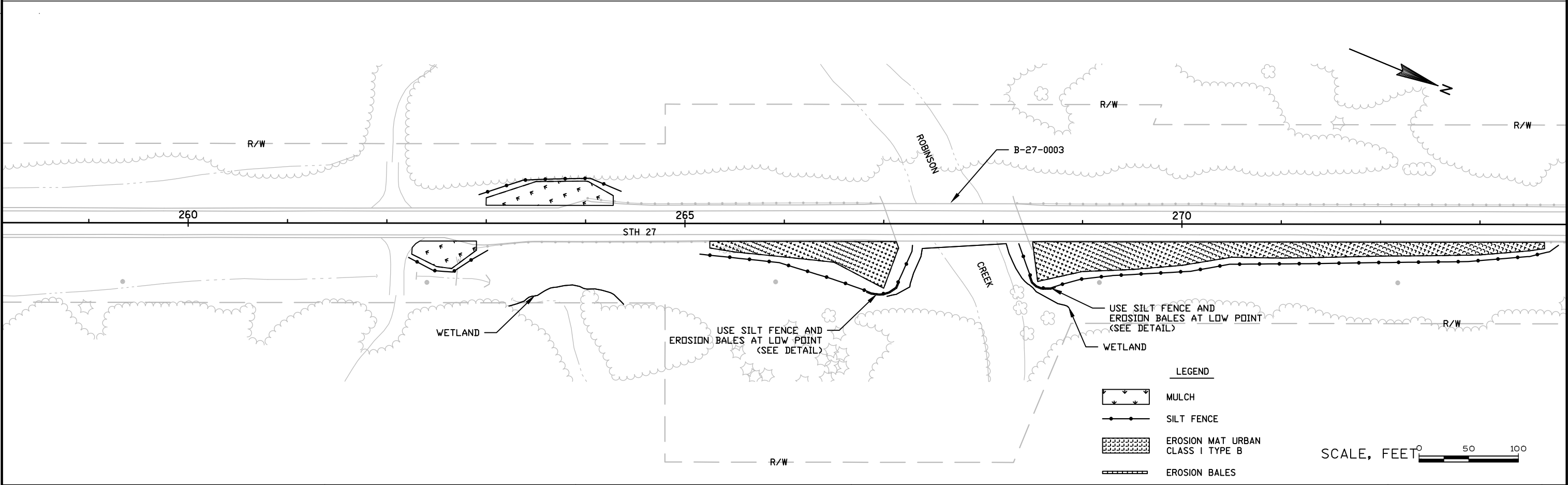
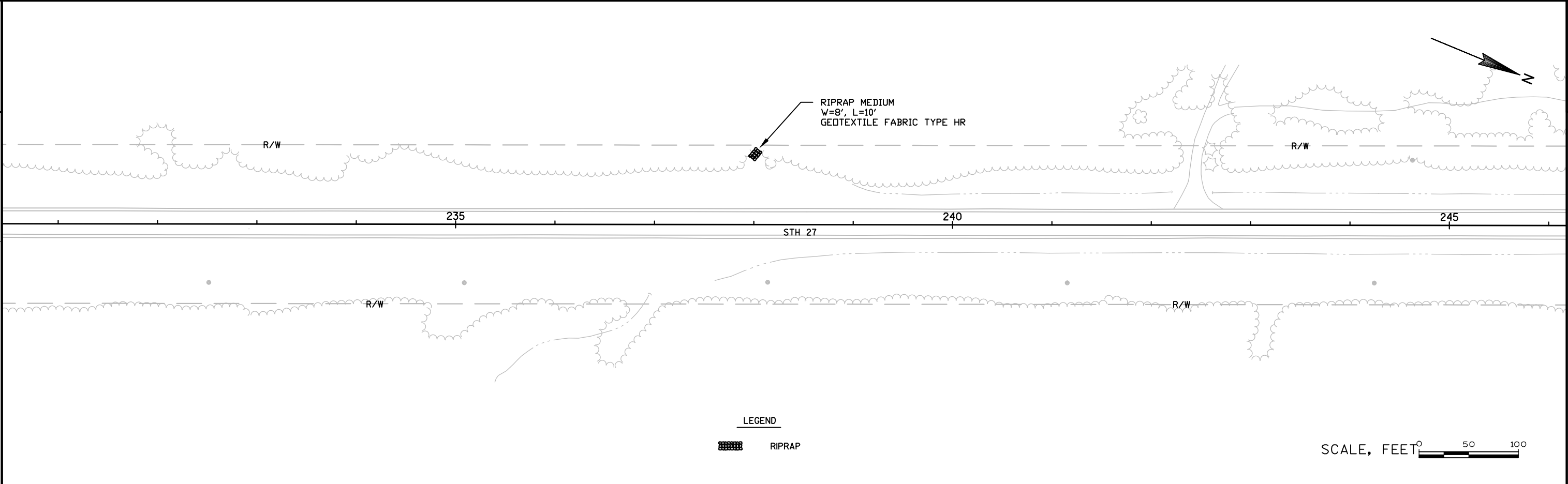
SIDEROAD DETAIL - CURB & GUTTER TO REMAIN

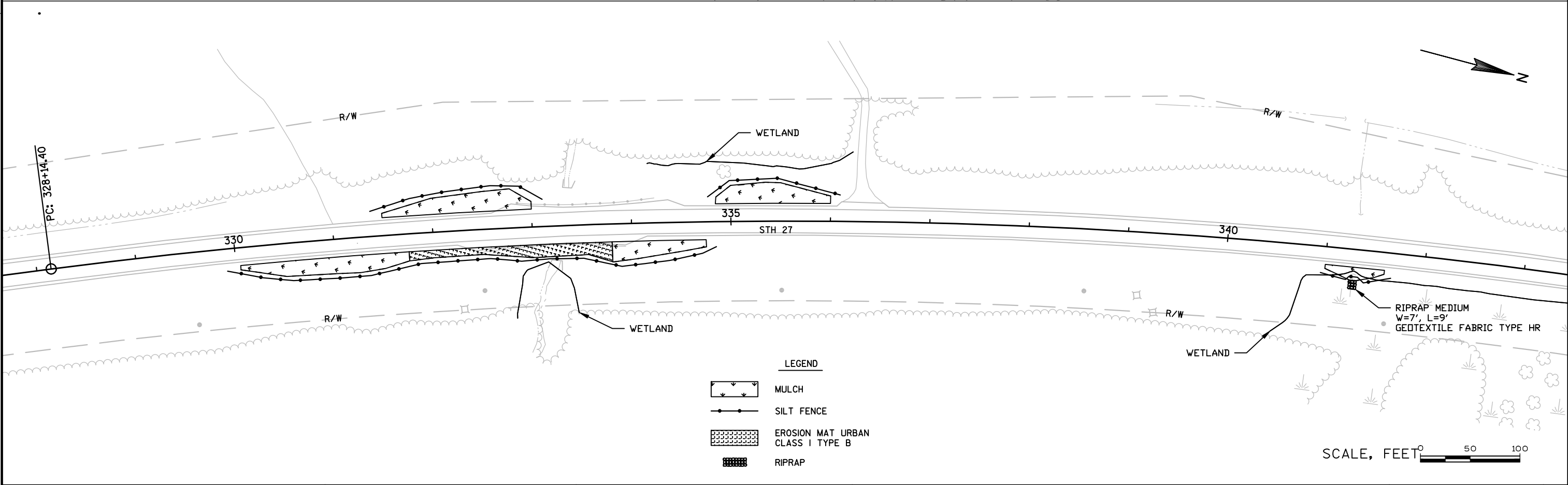
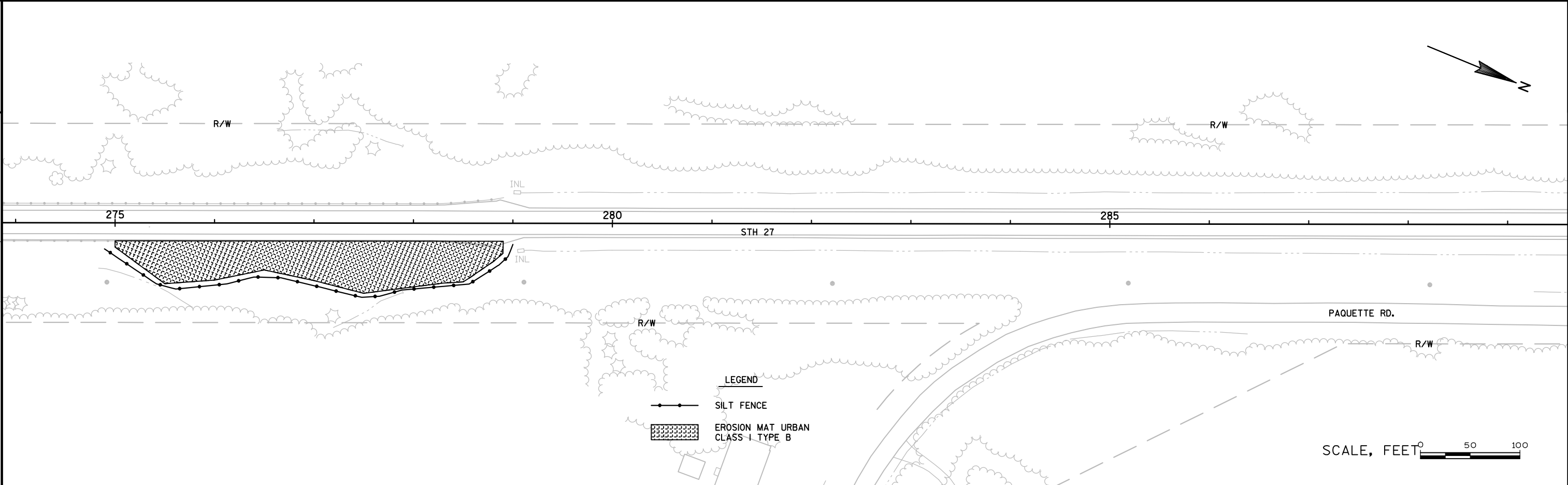


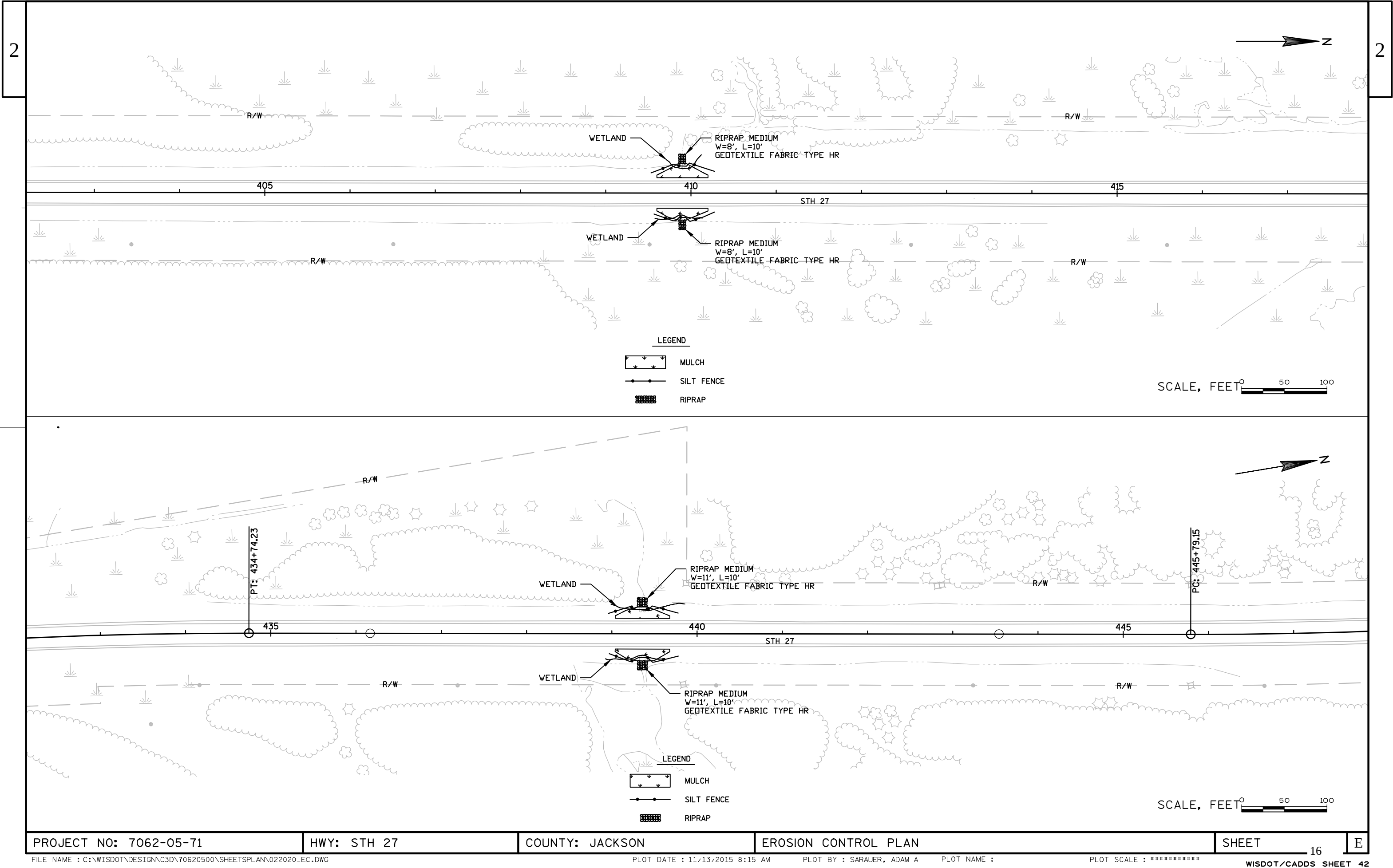


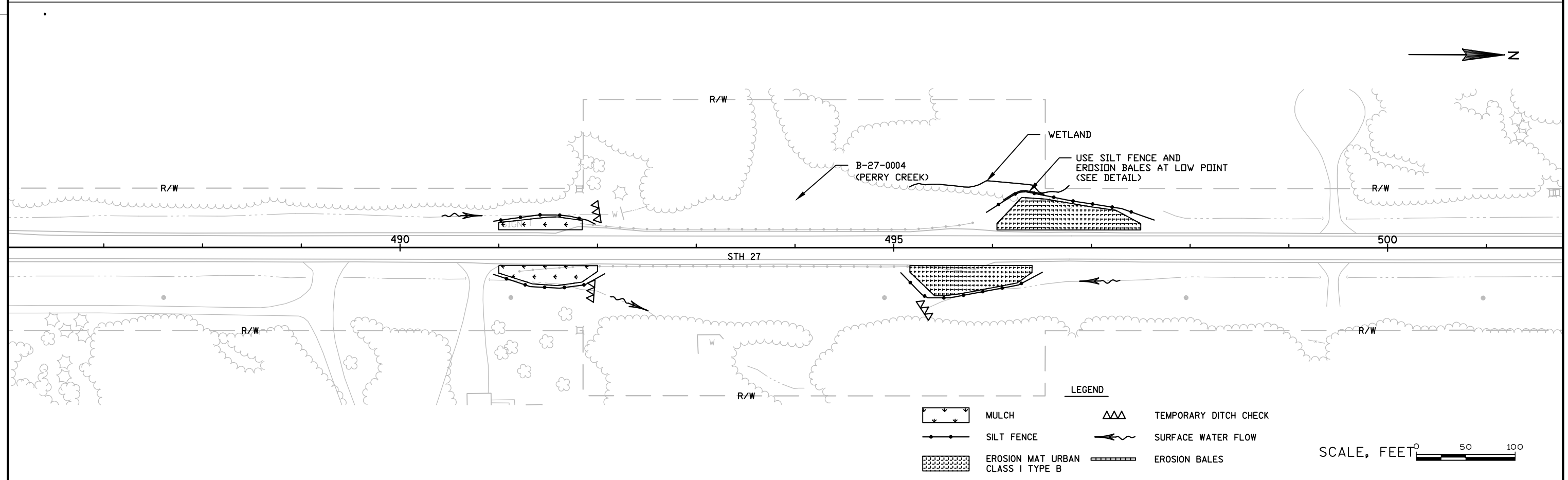
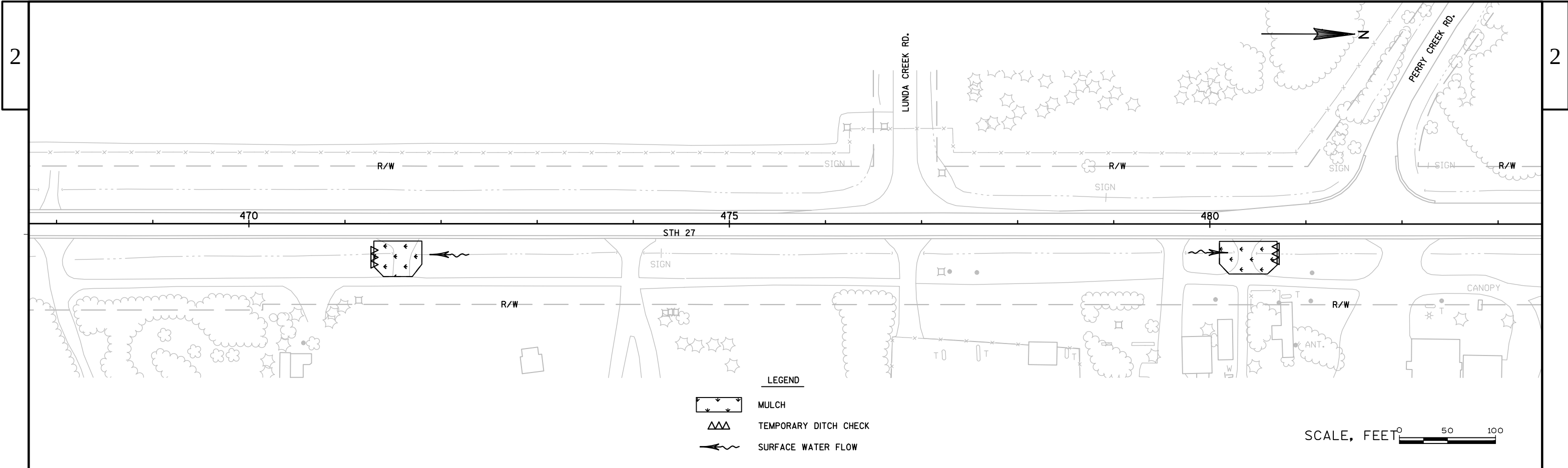
DETAIL FOR CULVERT PIPE INSTALLATION







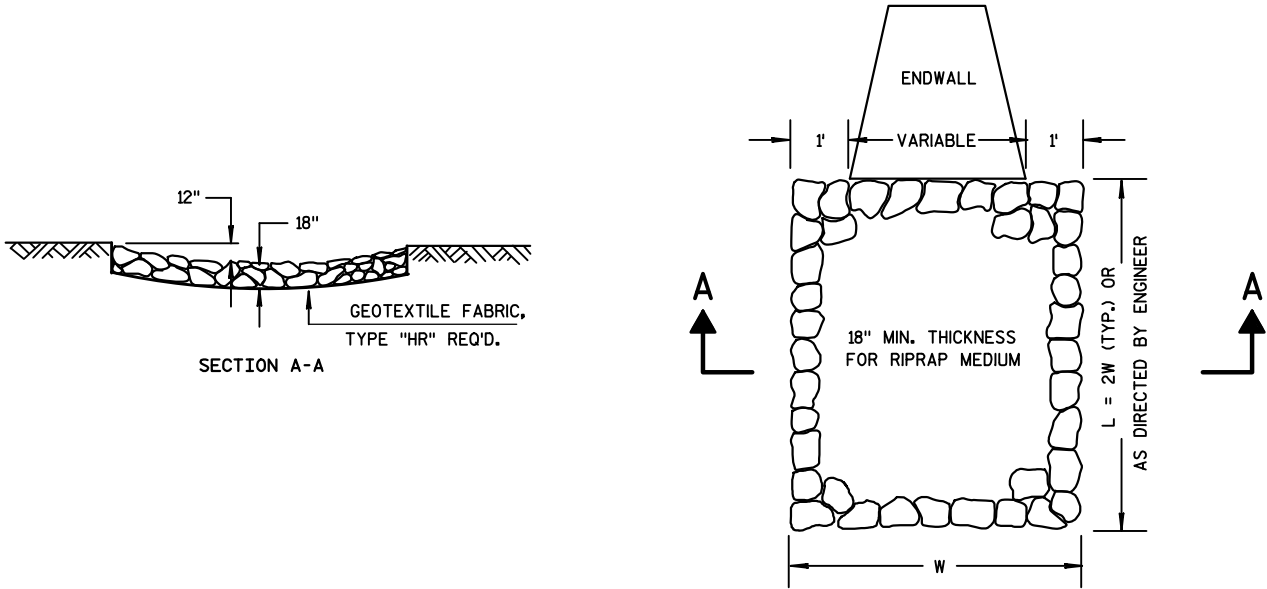




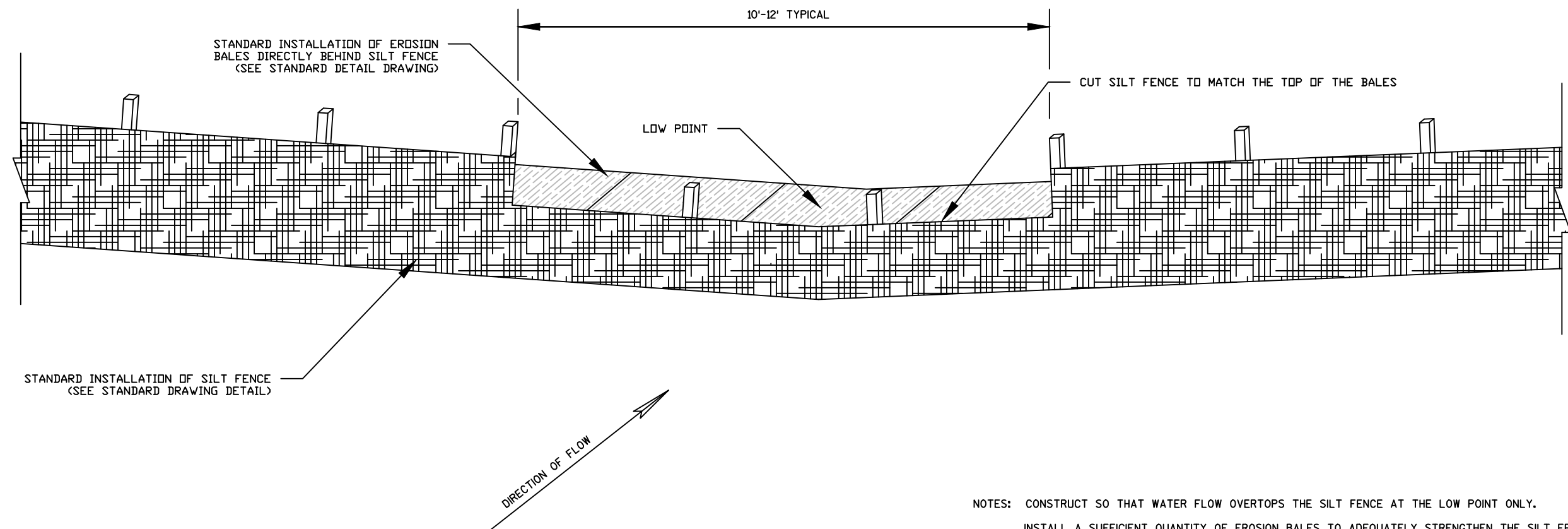
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPE-TURF			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT						.70 - .95						
CONCRETE						.80 - .95						
BRICK						.70 - .80						
DRIVES, WALKS						.75 - .85						
ROOFS						.75 - .95						
GRAVEL ROADS, SHOULDERS						.40 - .60						

TOTAL PROJECT AREA = 170.563 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.524 ACRES

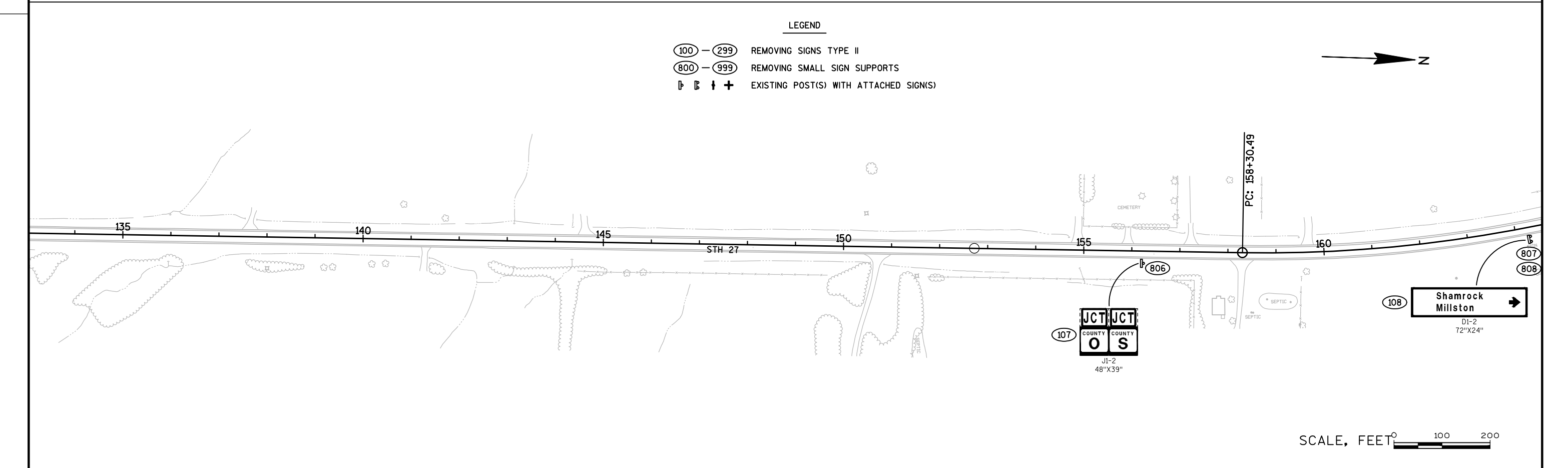
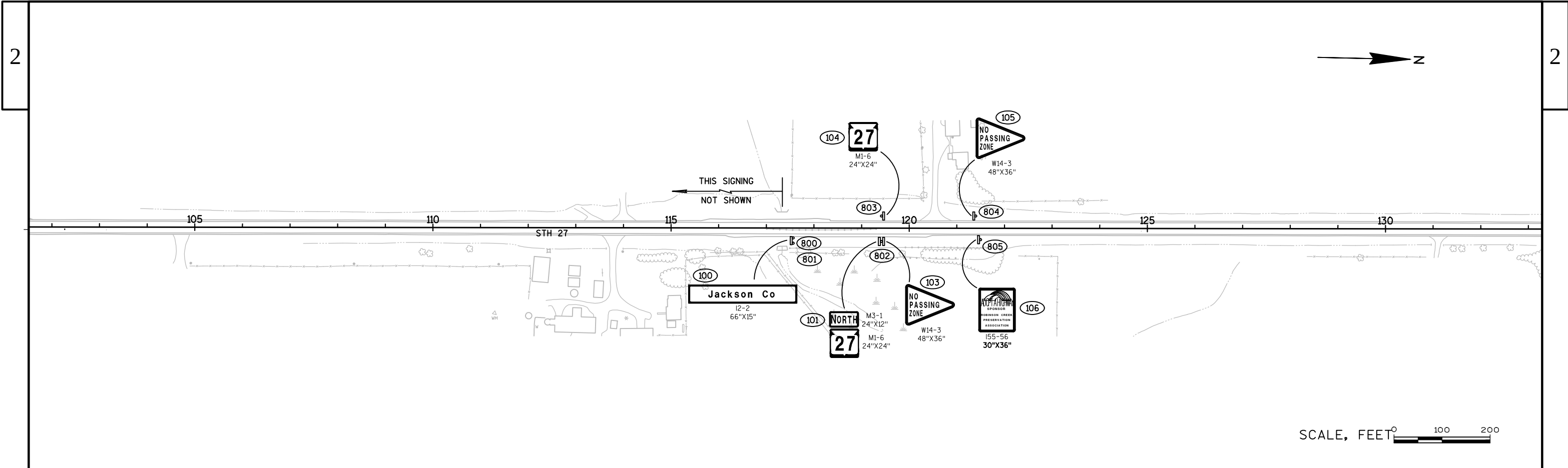


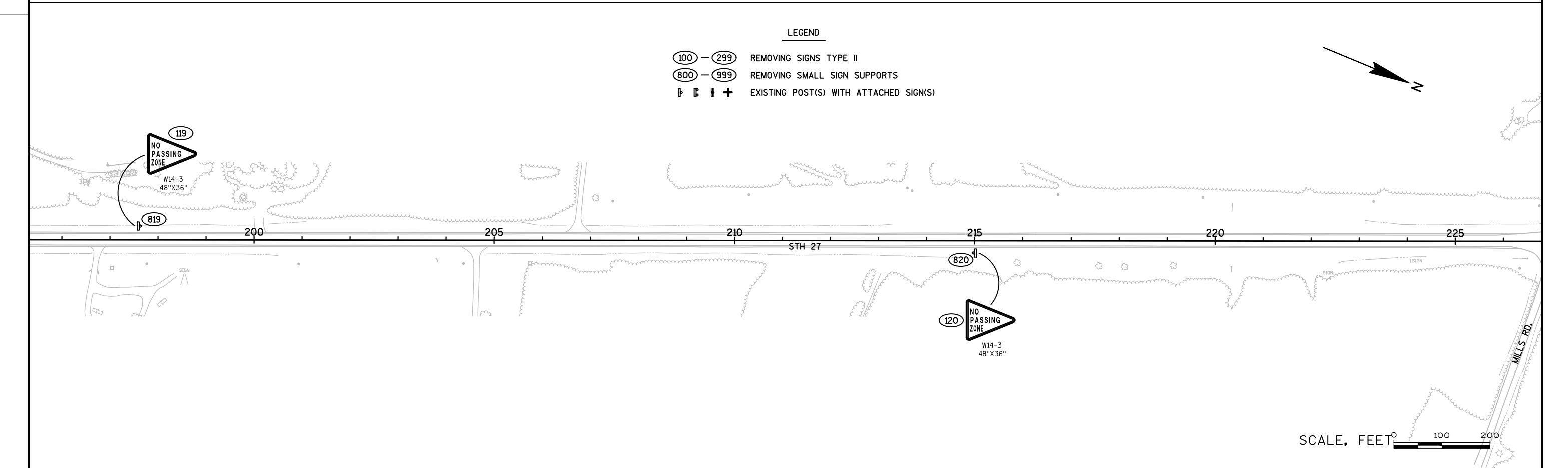
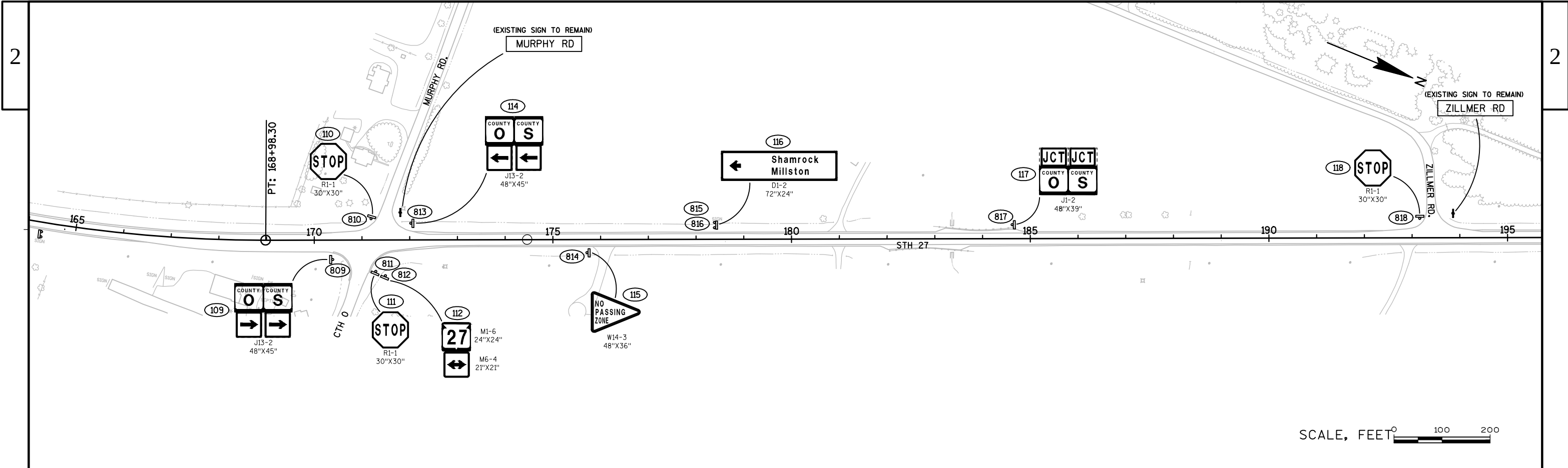
RIPRAP MEDIUM TREATMENT AT CULVERTS

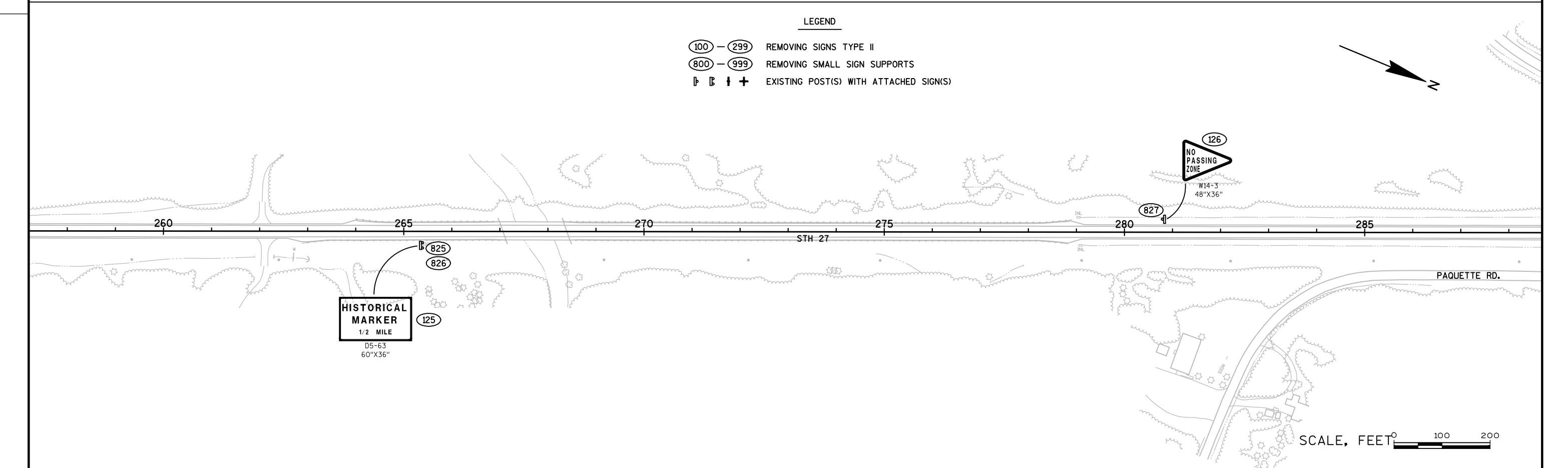
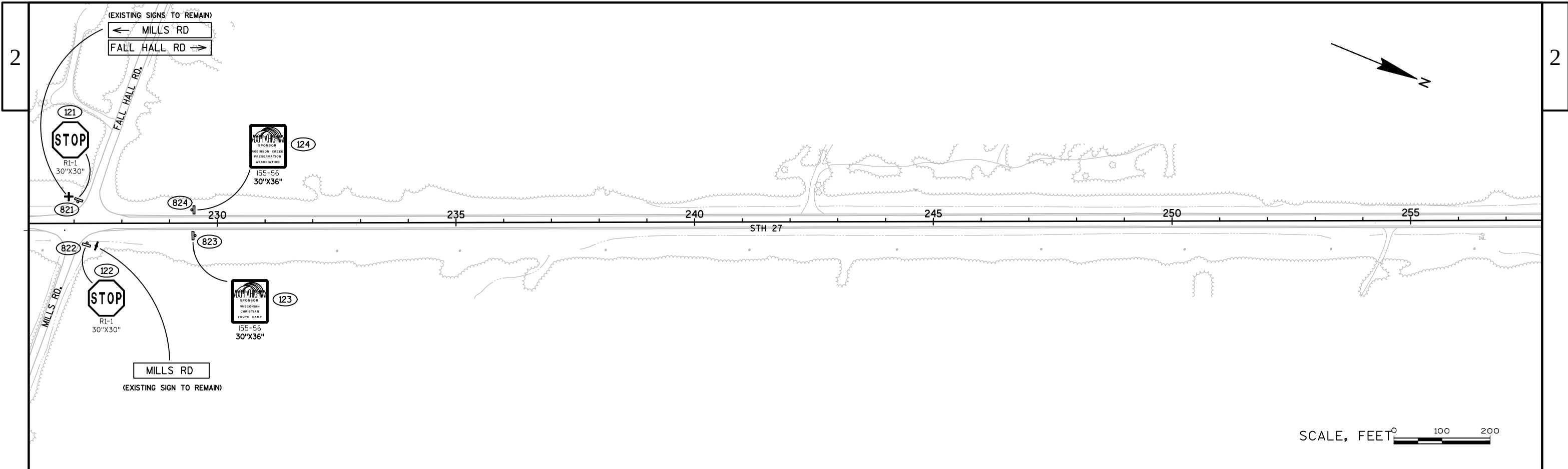


NOTES: CONSTRUCT SO THAT WATER FLOW OVERTOPS THE SILT FENCE AT THE LOW POINT ONLY.
INSTALL A SUFFICIENT QUANTITY OF EROSION BALES TO ADEQUATELY STRENGTHEN THE SILT FENCE AND AS THE ENGINEER DIRECTS.
ROCK BAGS MAY BE SUBSTITUTED FOR EROSION BALES WITH APPROVAL OF THE ENGINEER.

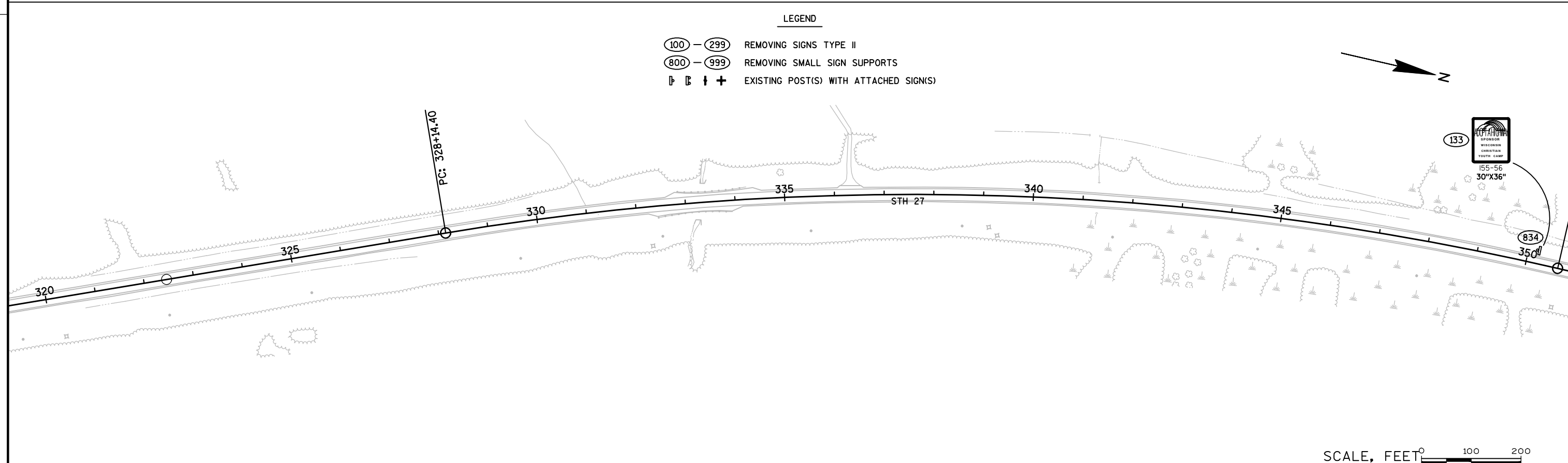
SILT FENCE BACKED WITH EROSION BALES

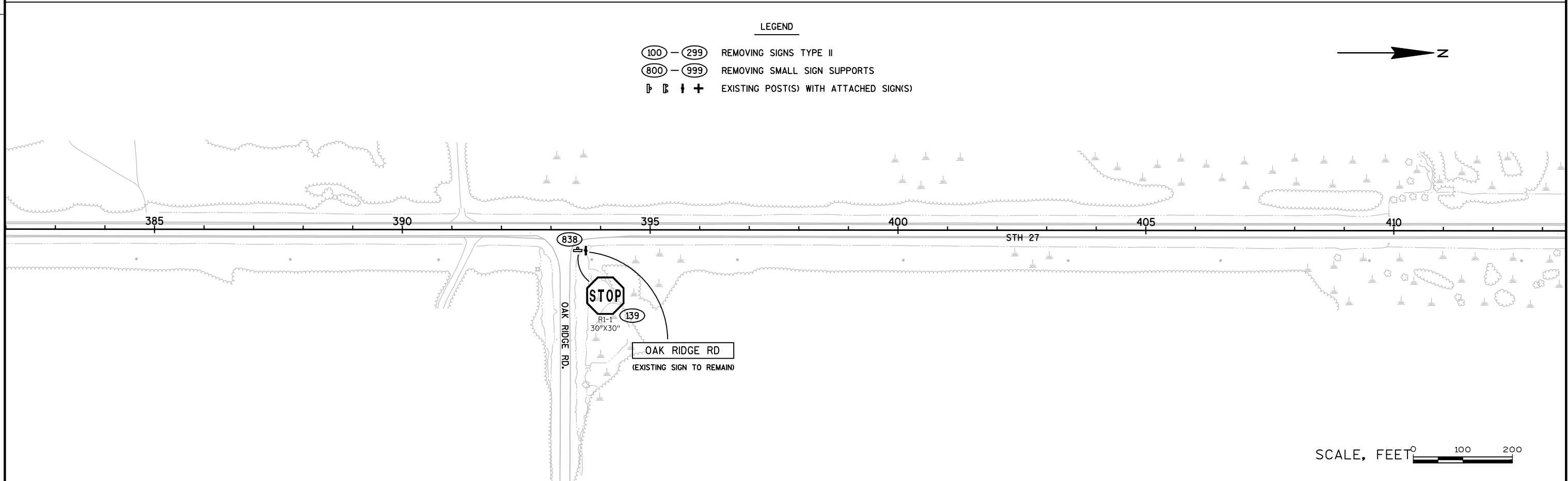
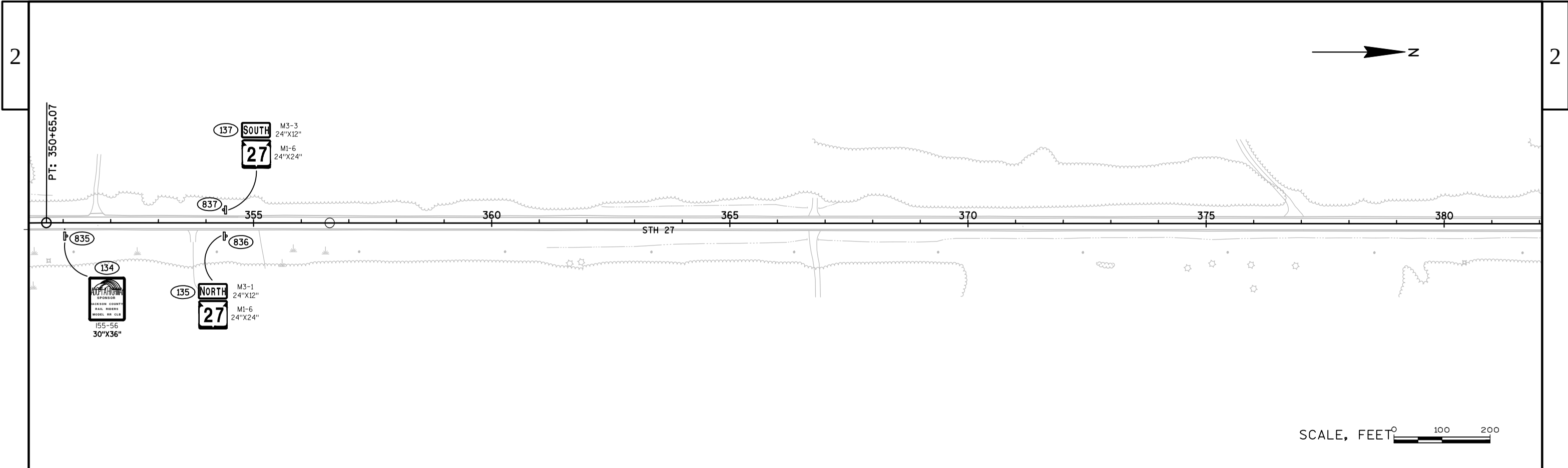


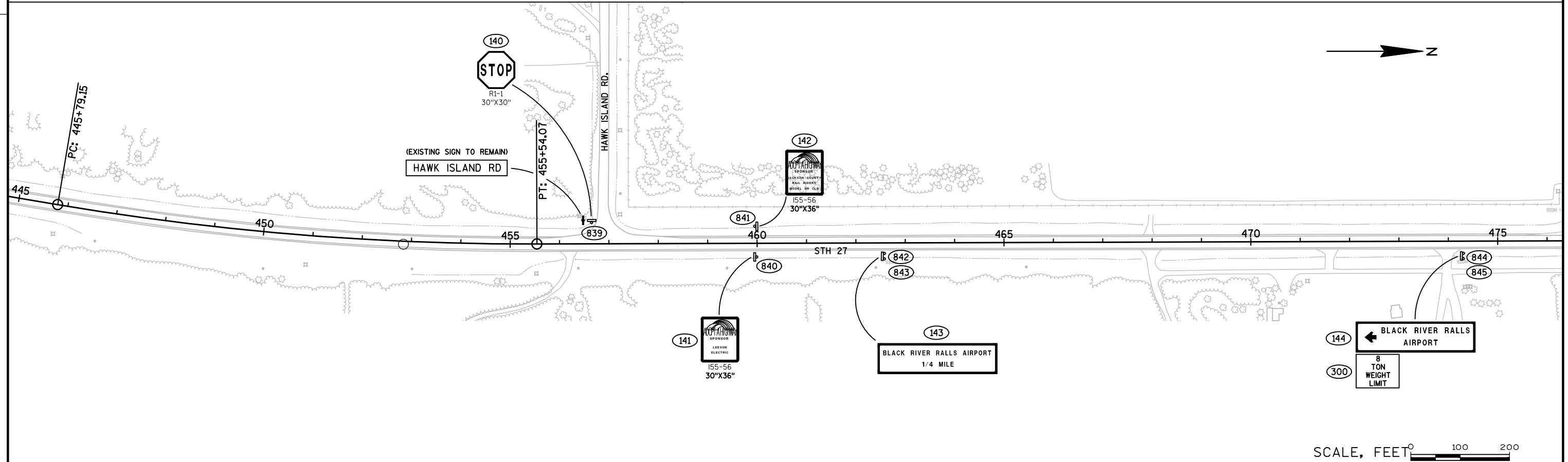
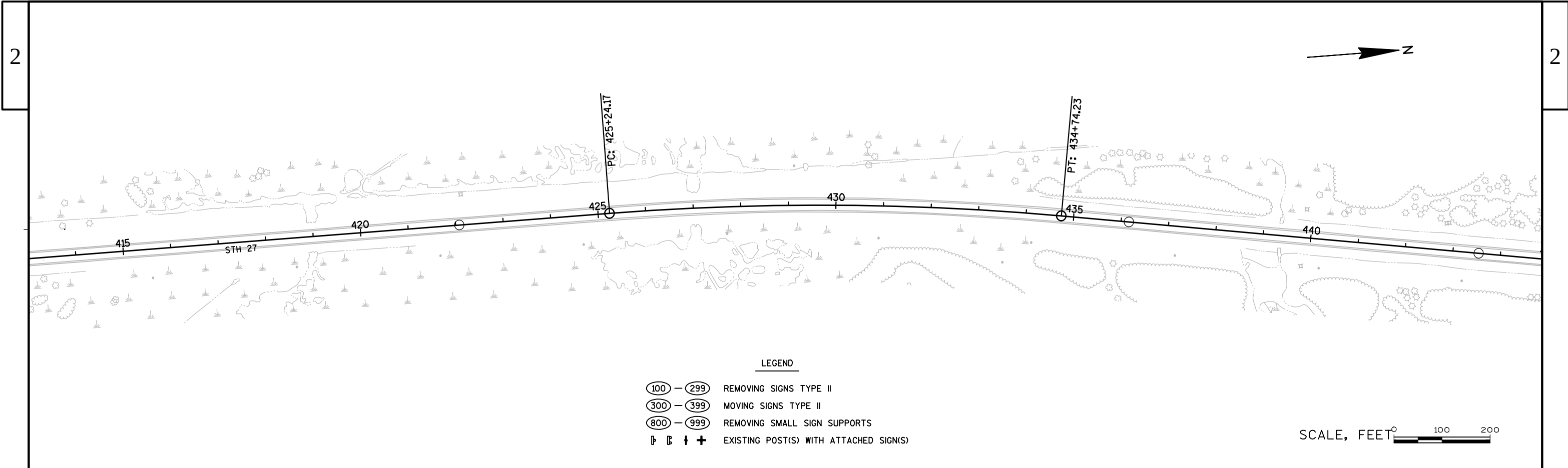


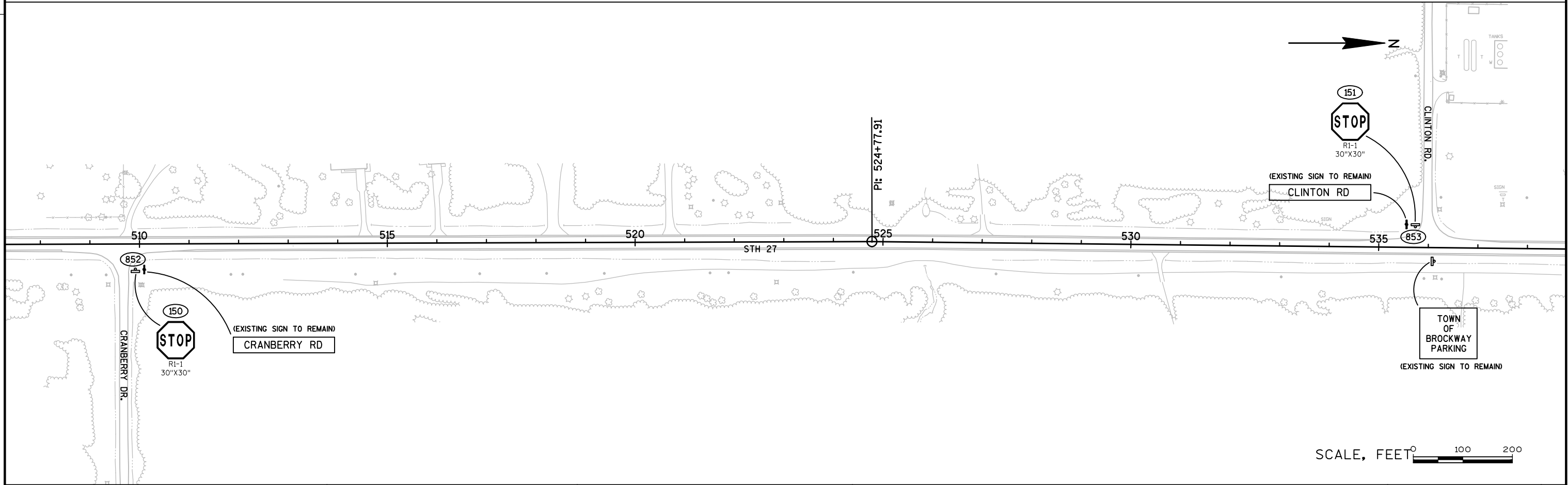
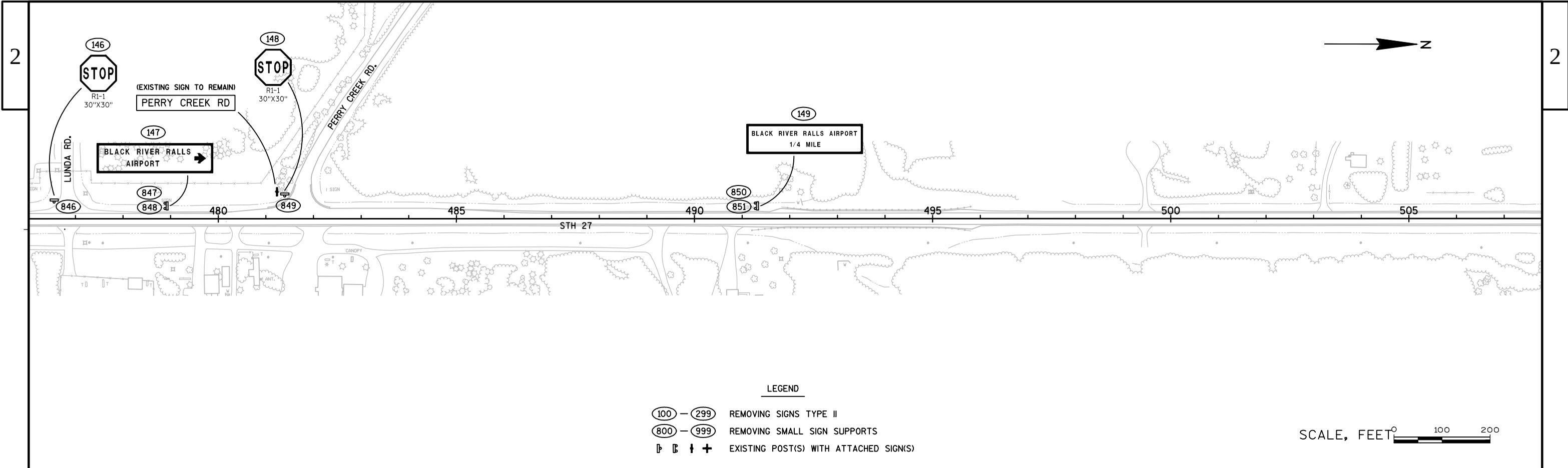


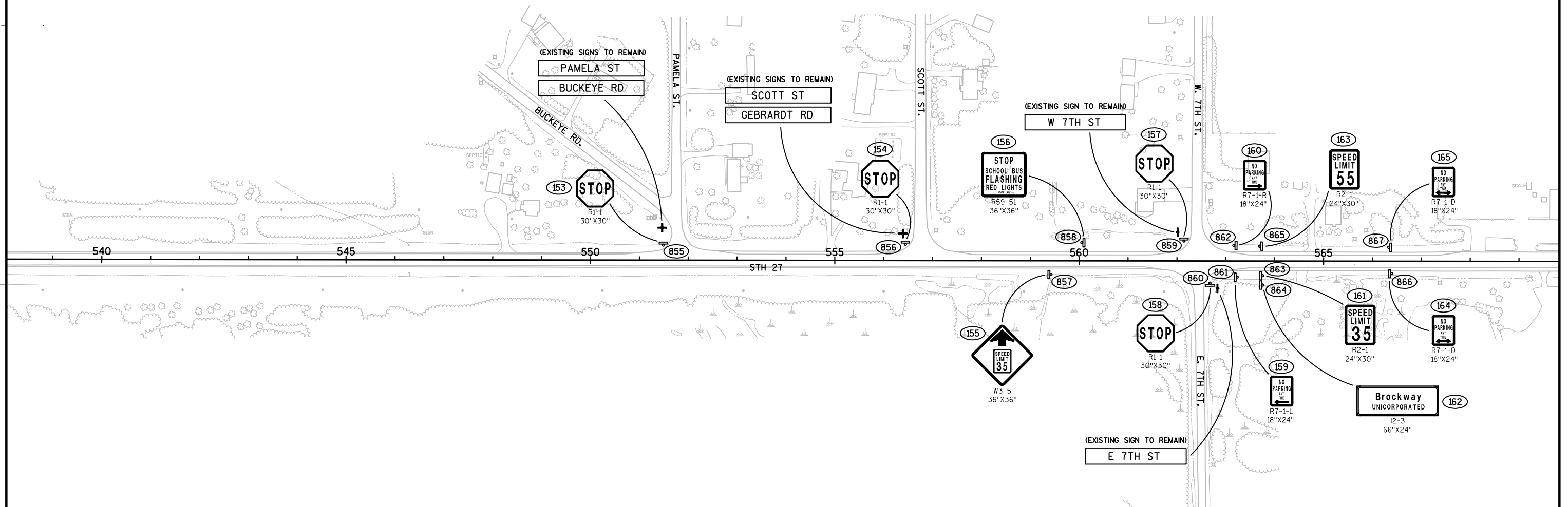
- LEGEND
- (100) - (299) REMOVING SIGNS TYPE II
 - (800) - (999) REMOVING SMALL SIGN SUPPORTS
 - ⌵ ⌴ ⌶ ⌷ EXISTING POST(S) WITH ATTACHED SIGN(S)







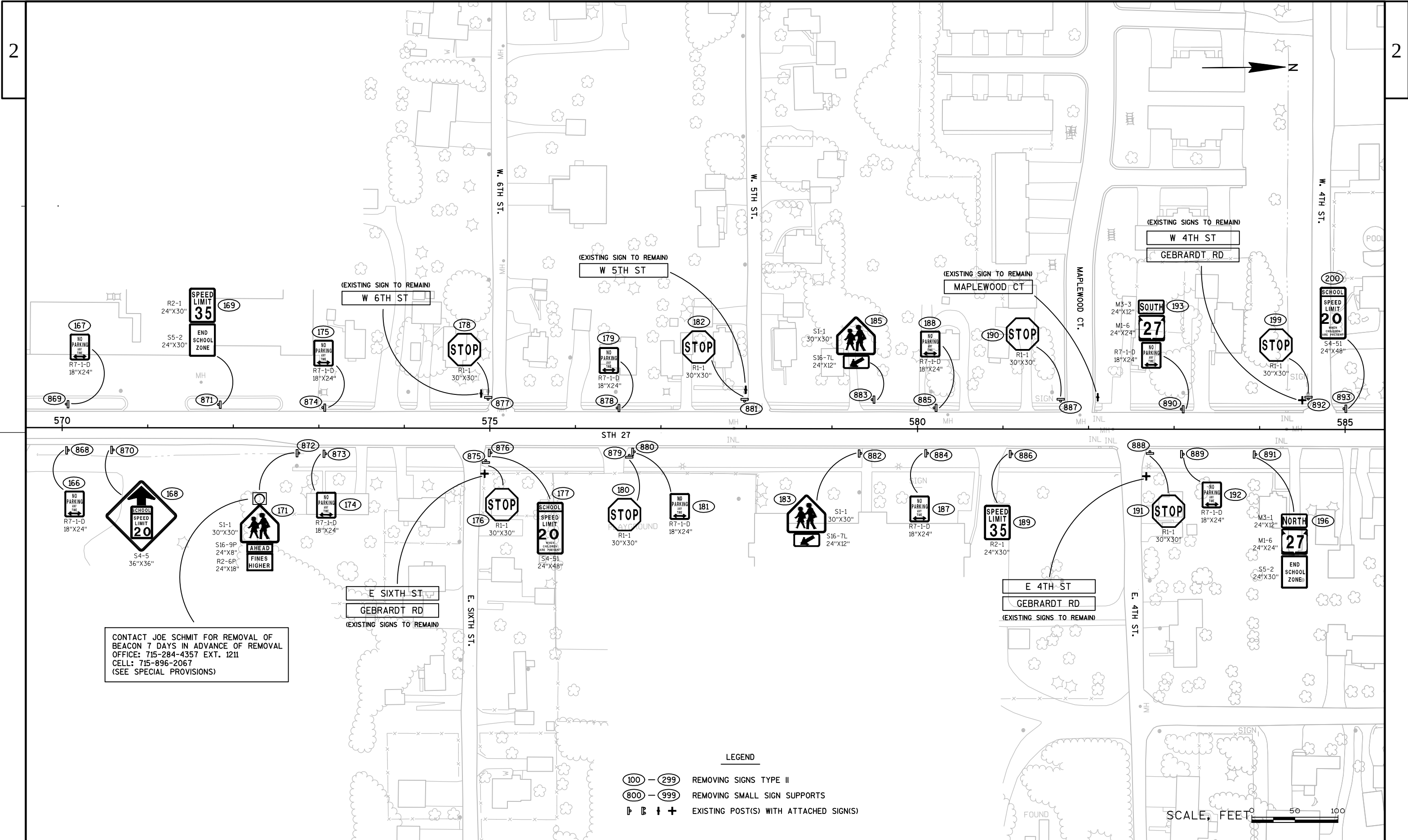




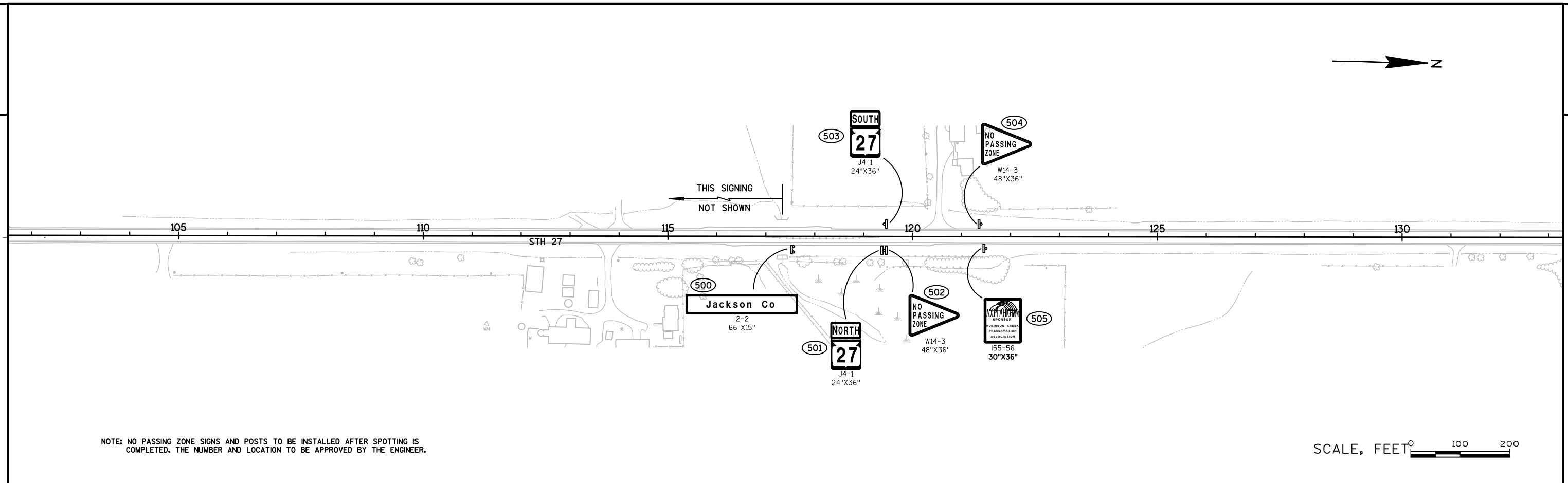
LEGEND

- (100) - (299) REMOVING SIGNS TYPE II
(800) - (999) REMOVING SMALL SIGN SUPPORTS
P B T + EXISTING POST(S) WITH ATTACHED SIGN(S)

SCALE, FEET 0 100 200



SCALE, FEET 

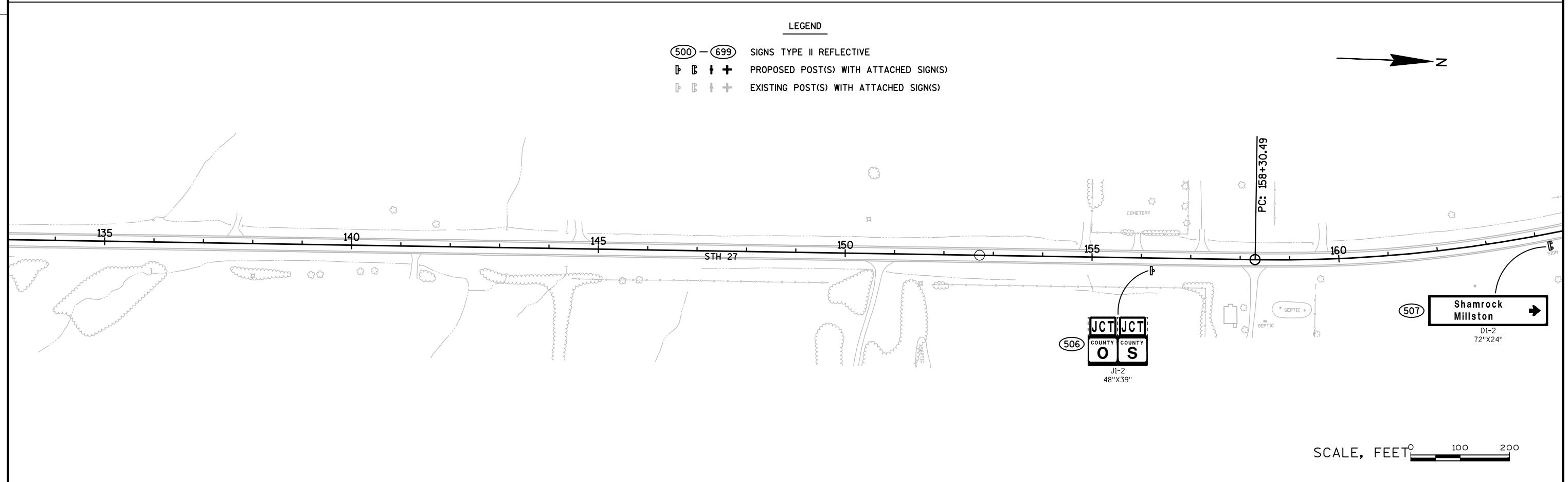


NOTE: NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE APPROVED BY THE ENGINEER.

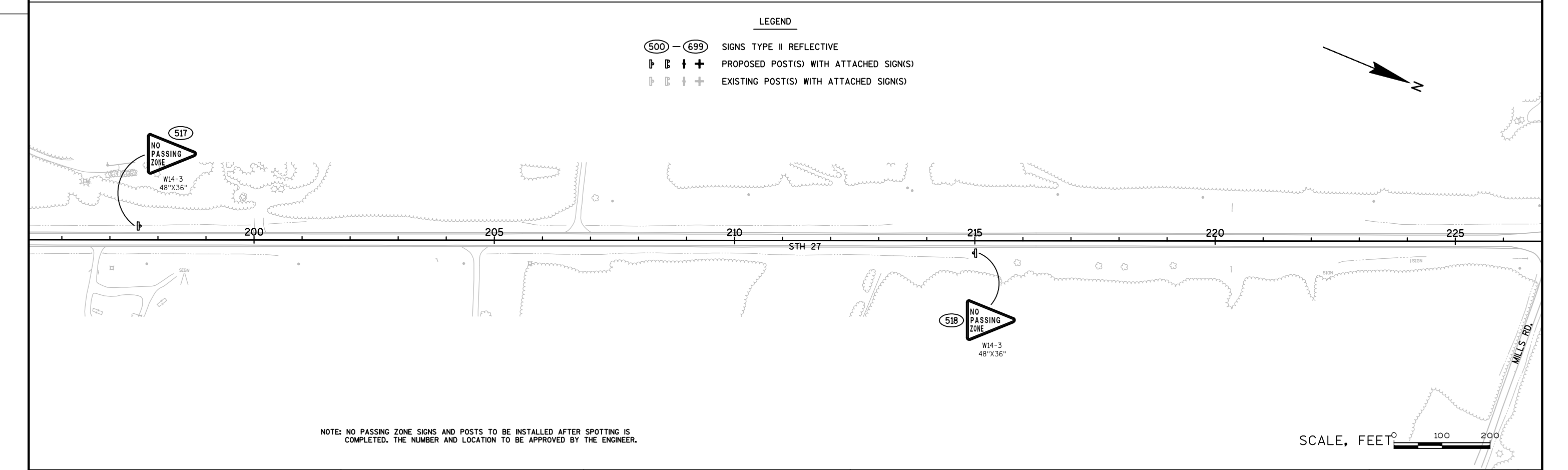
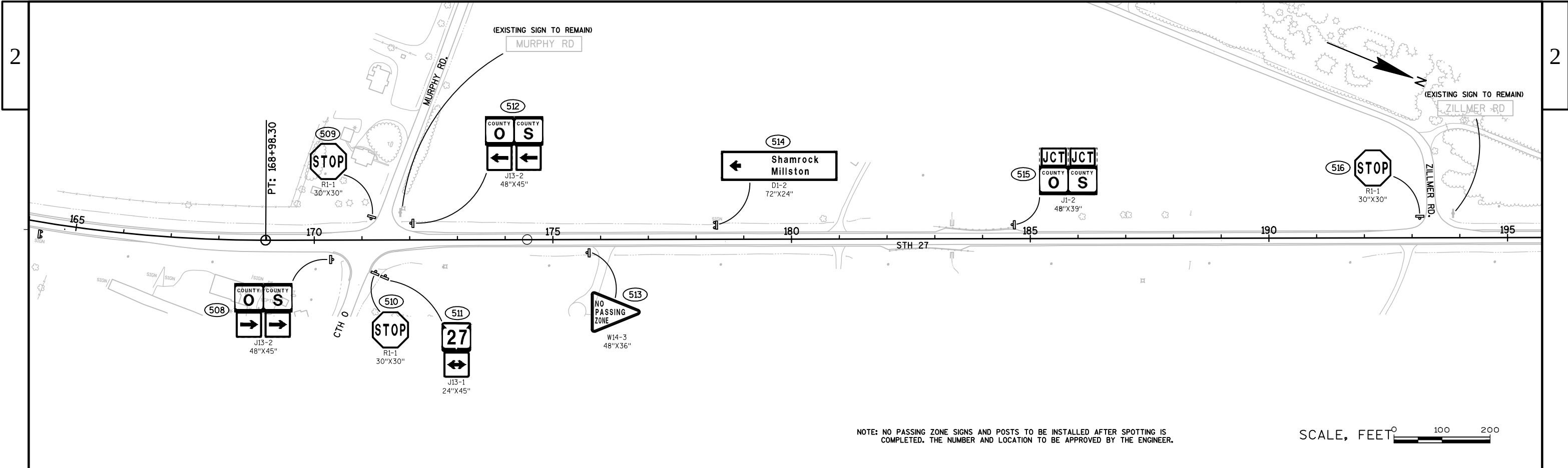
SCALE, FEET 0 100 200

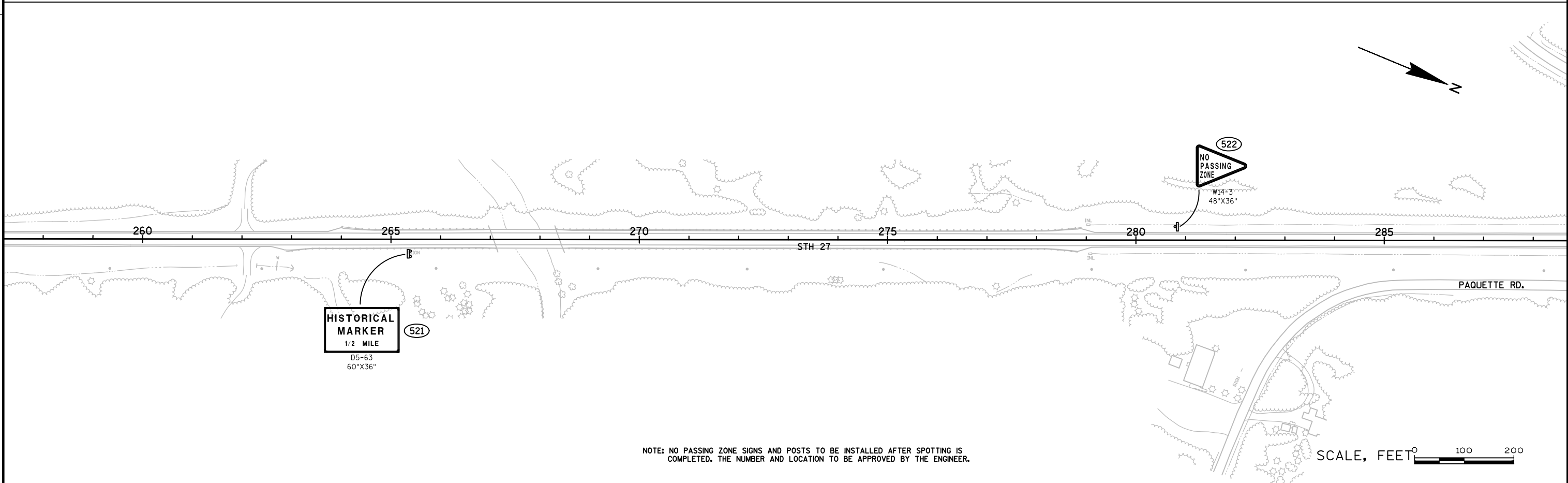
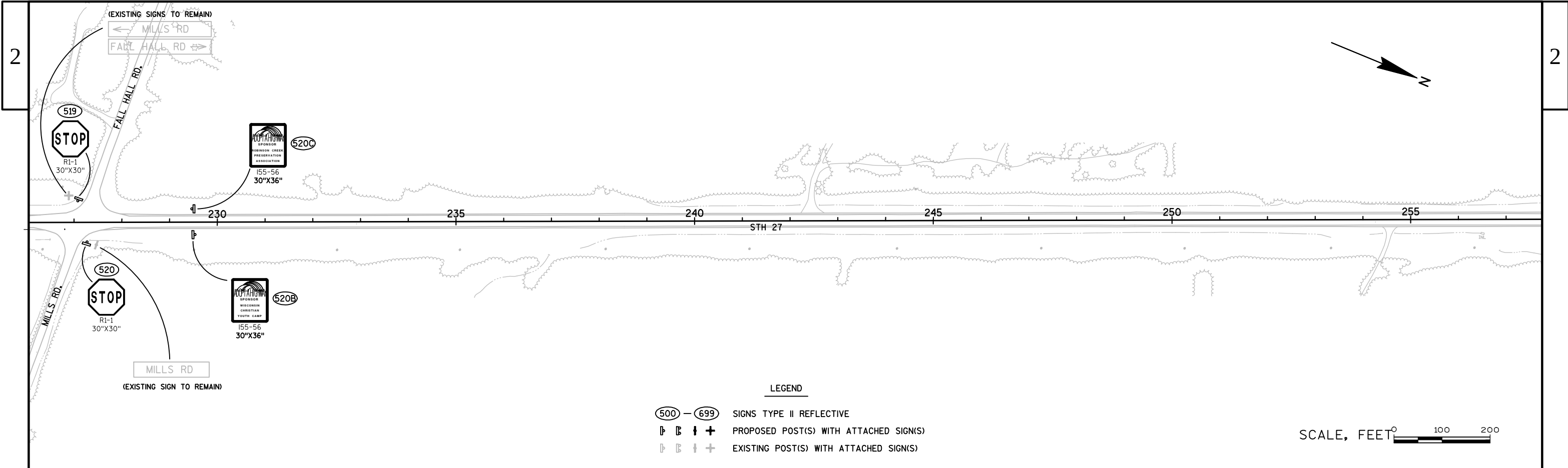
LEGEND

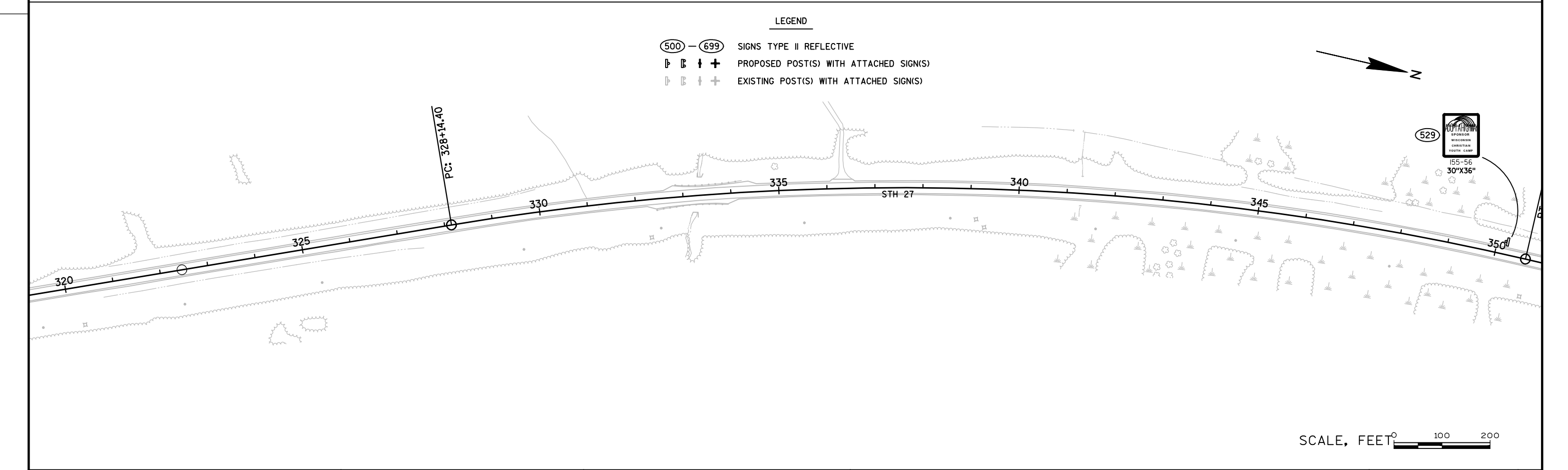
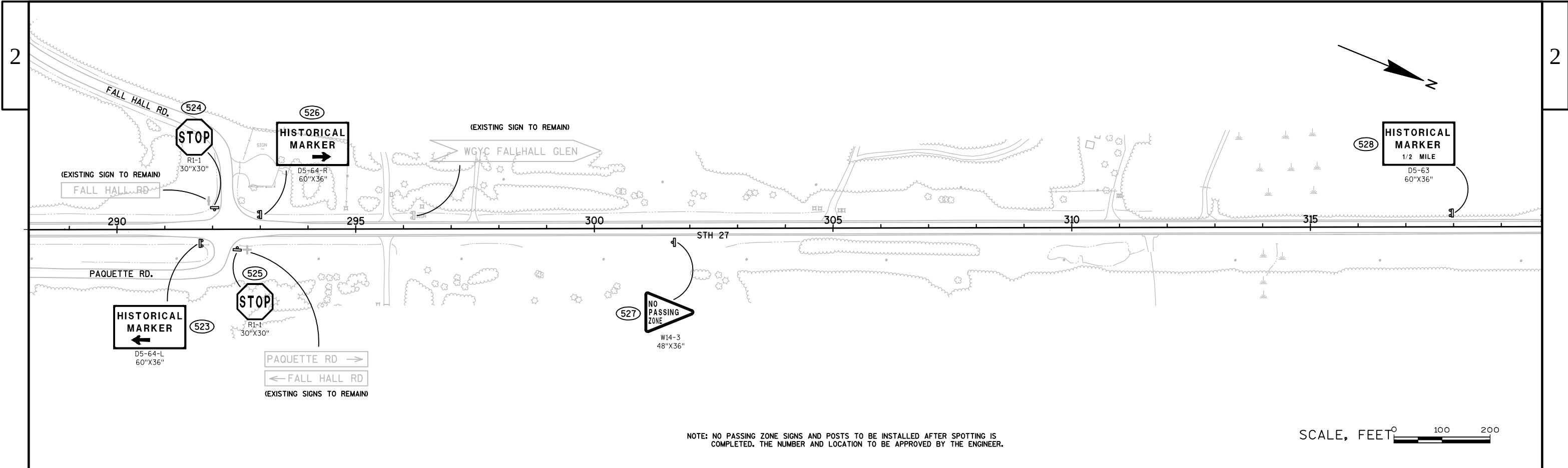
- (500) — (699) SIGNS TYPE II REFLECTIVE
- Ⓟ Ⓠ Ⓡ Ⓢ PROPOSED POST(S) WITH ATTACHED SIGN(S)
- Ⓟ Ⓠ Ⓡ Ⓢ EXISTING POST(S) WITH ATTACHED SIGN(S)

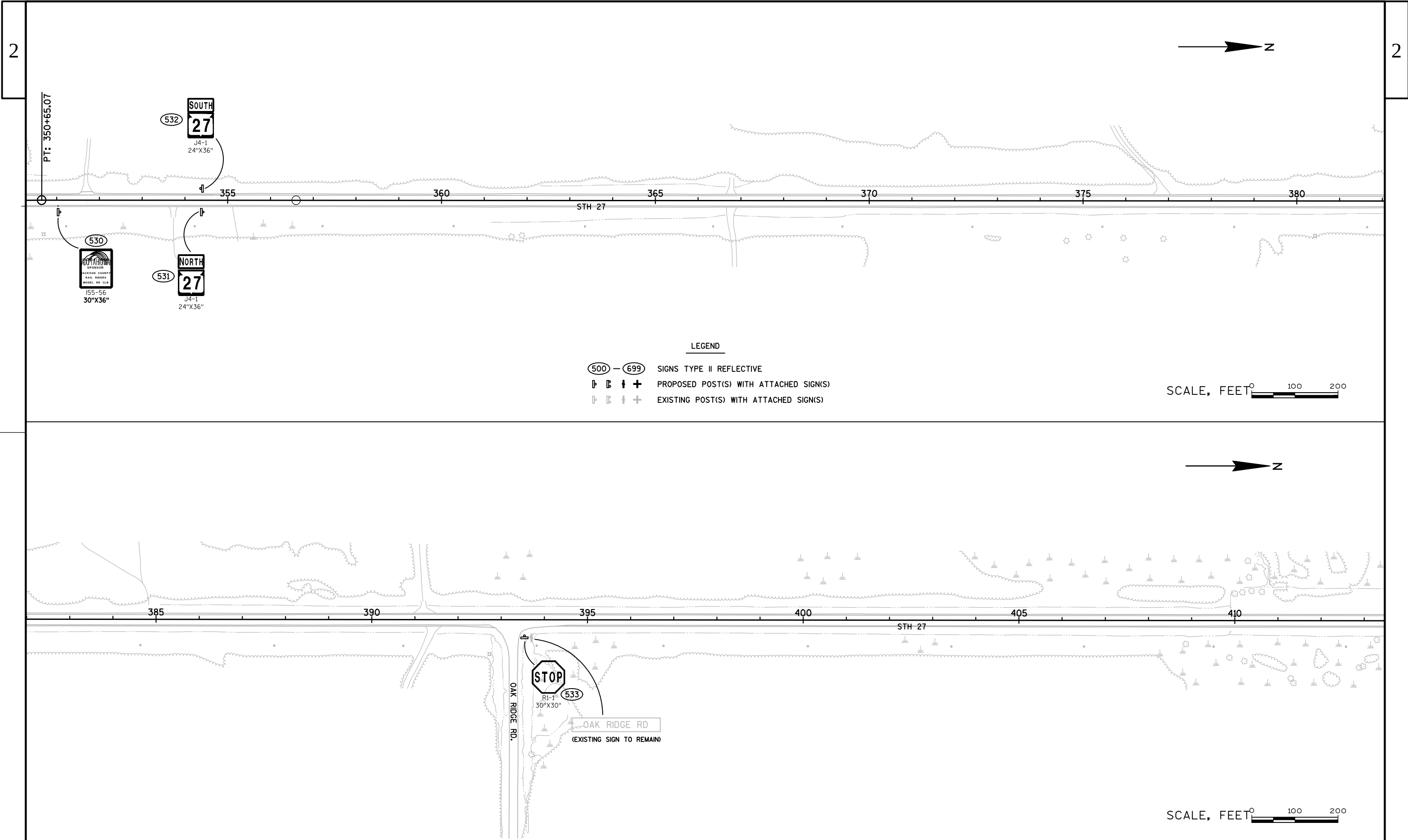


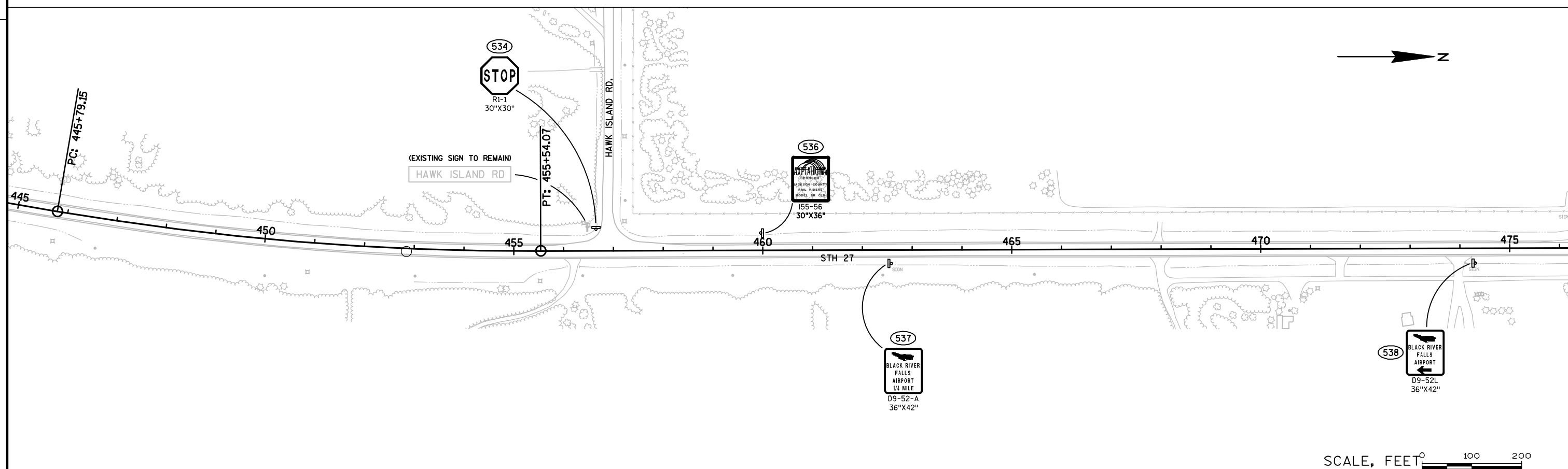
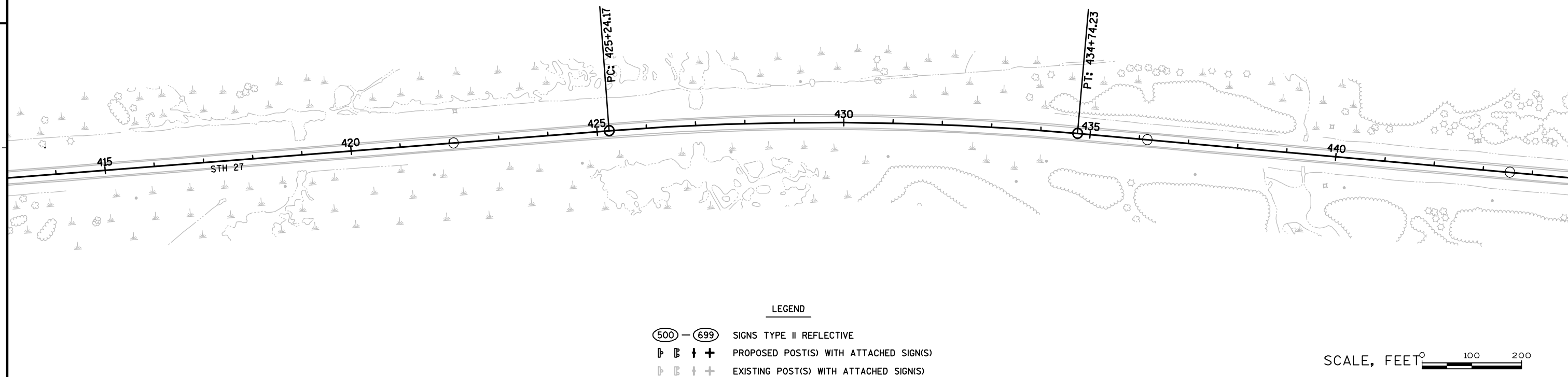
SCALE, FEET 0 100 200

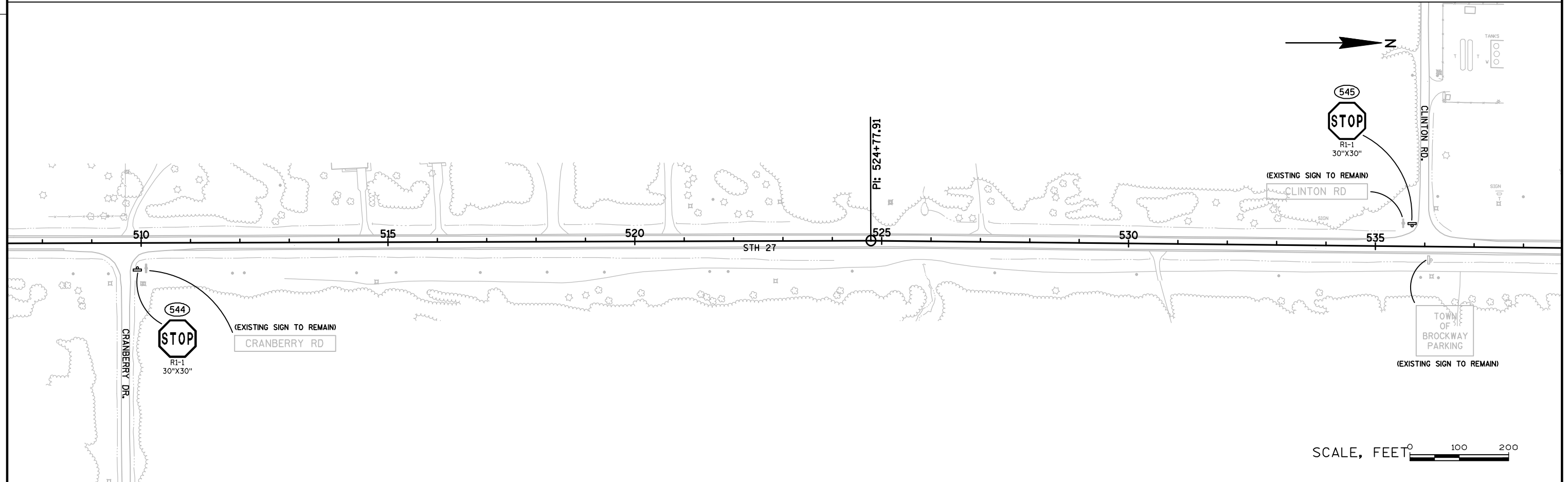
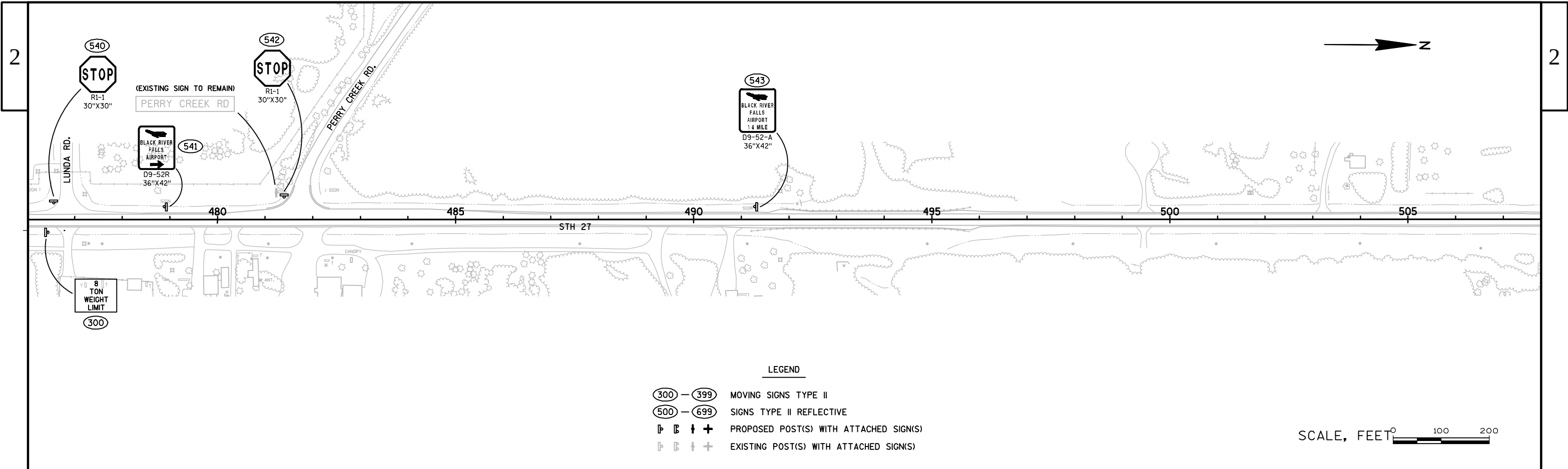


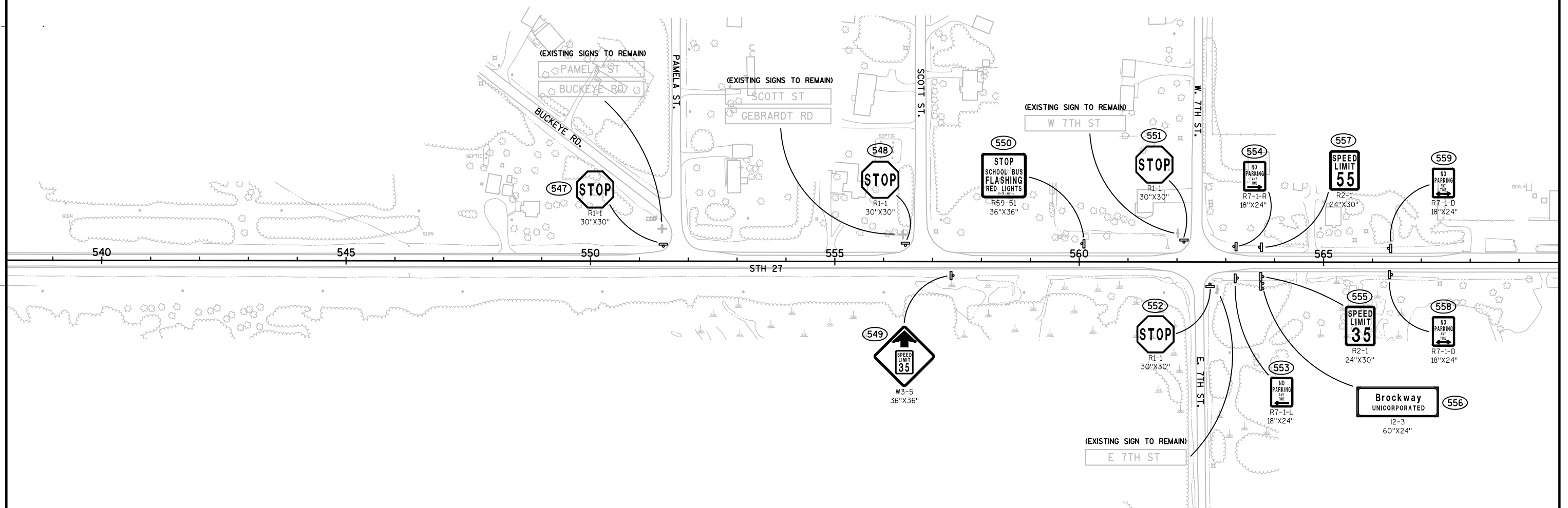








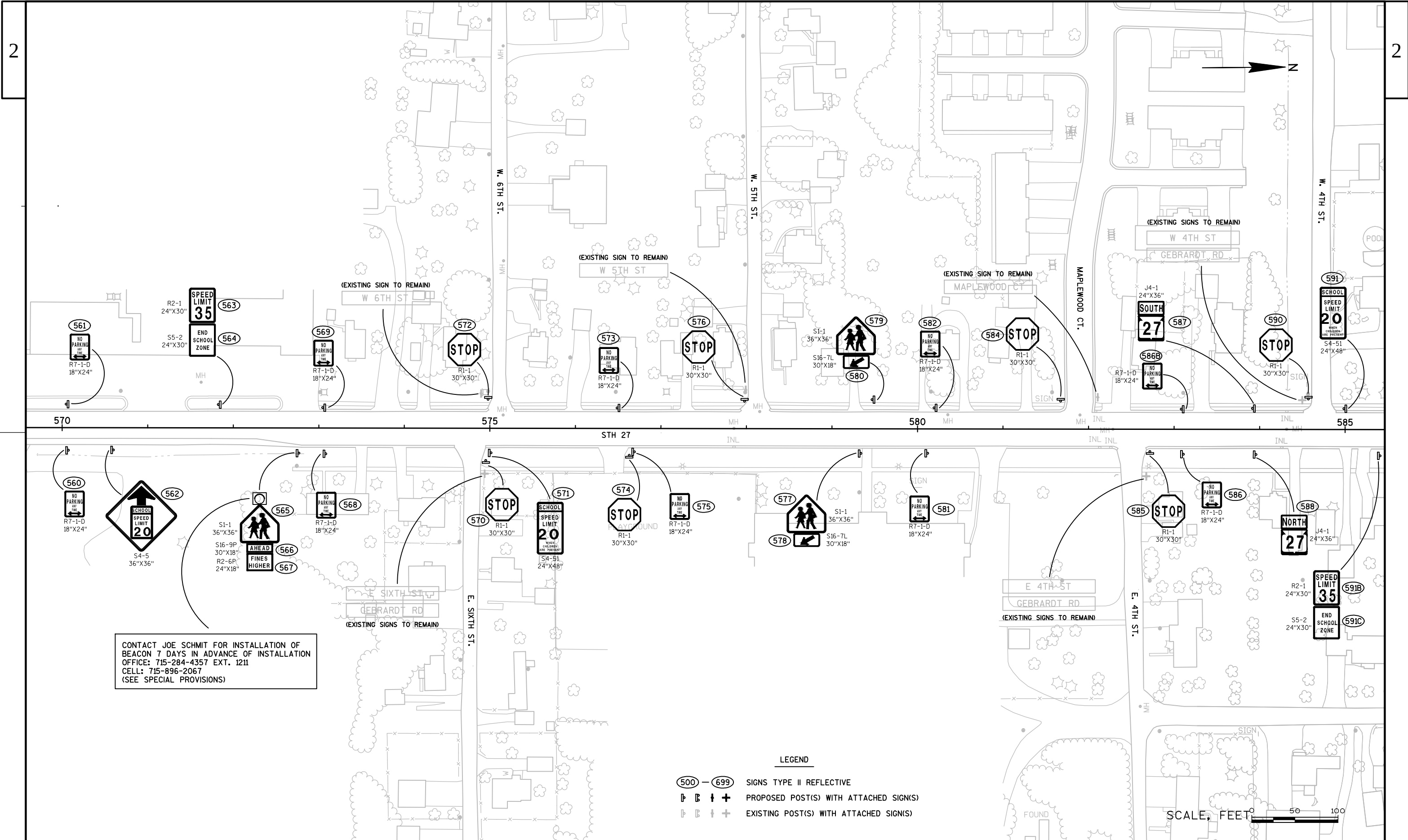


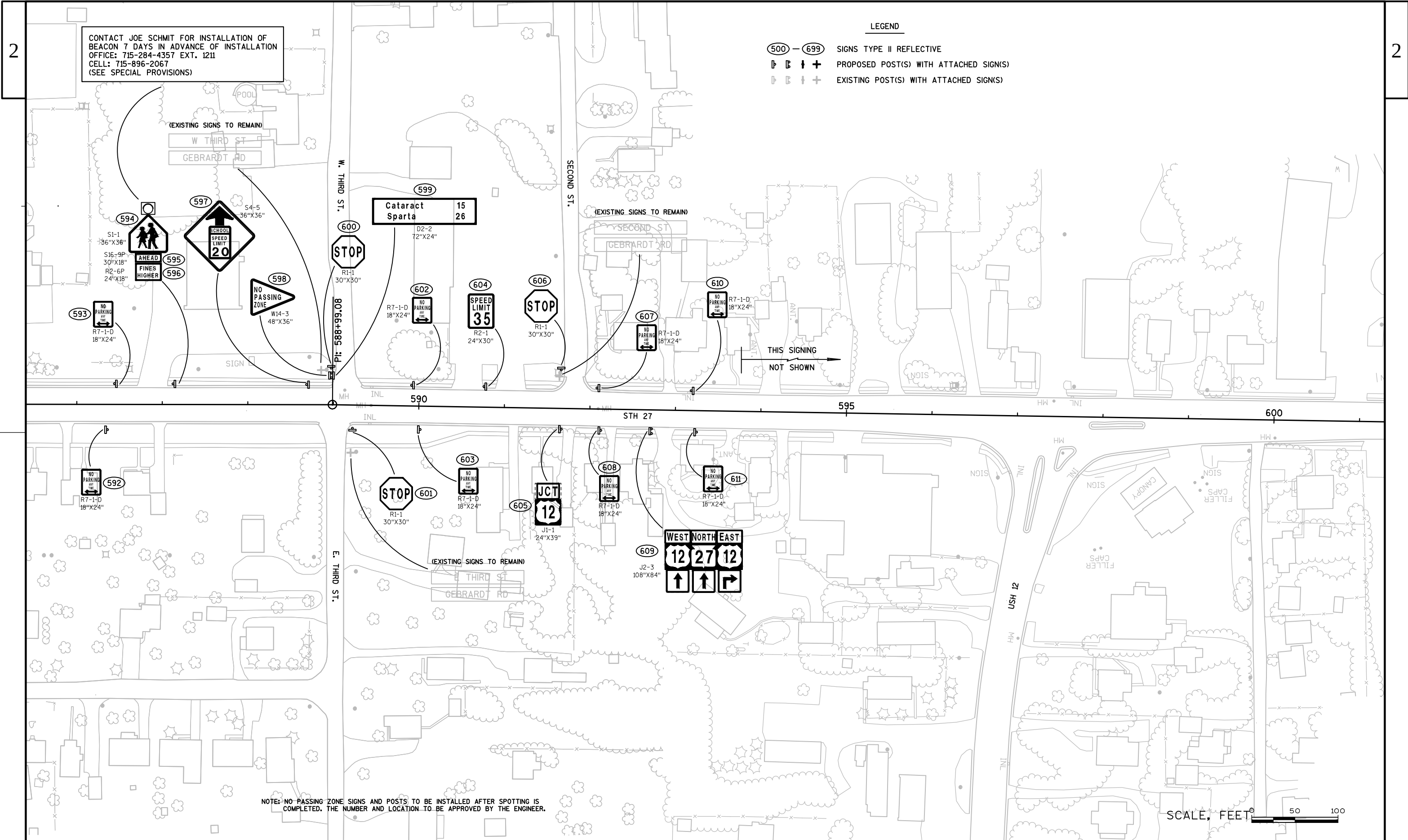


LEGEND

- (500) — (699) SIGNS TYPE II REFLECTIVE
- ⏏ ⏏ ⏏ + PROPOSED POST(S) WITH ATTACHED SIGN(S)
- ⏏ ⏏ ⏏ + EXISTING POST(S) WITH ATTACHED SIGN(S)

SCALE, FEET





CONTACT JOE SCHMIT FOR INSTALLATION OF BEACON 7 DAYS IN ADVANCE OF INSTALLATION
OFFICE: 715-284-4357 EXT. 1211
CELL: 715-896-2067
(SEE SPECIAL PROVISIONS)

LEGEND

- (500) - (699) SIGNS TYPE II REFLECTIVE
- ⌋ ⌋ ⌋ ⌋ PROPOSED POST(S) WITH ATTACHED SIGN(S)
- ⌋ ⌋ ⌋ ⌋ EXISTING POST(S) WITH ATTACHED SIGN(S)

STH 27 ALIGNMENT

Tangent	N	131058.872	E	392394.987	Z	Station	100+00
		Distance 5830.489'		Bearing N 1° 4' 48.44" W			
Arc							
	PC	N	136888.326	E	392285.079	Station	158+30.49
	CC	N	136834.319	E	389420.588		
	PI	N	137428.402	E	392274.896	Station	163+70.66
	TAN		540.172'				
	DB		N 1° 4' 48.44" W				
	DA		N 22° 26' 5.08" W				
	LChord Distance		1061.640'	Bearing N 11° 45' 26.76" W			
	External Distance		50.478'				
	Middle Ordinate		49.604'				
	Radius		2865.000'				
	DEG		1° 59' 59.47"				
	DELTA		21° 21' 16.63"				
	LENGTH		1067.810'				
	PT	N	137927.691	E	392068.750	Station	168+98.3
Tangent	N	137927.691	E	392068.750	Z	Station	168+98.3
		Distance 15916.098'		Bearing N 22° 26' 5.08" W			
Arc							
	PC	N	152639.176	E	385994.674	Station	328+14.4
	CC	N	154825.921	E	391290.998		
	PI	N	153692.922	E	385559.604	Station	339+54.43
	TAN		1140.029'				
	DB		N 22° 26' 5.08" W				
	DA		N 0° 4' 13.02" E				
	LChord Distance		2236.228'	Bearing N 11° 10' 56.03" W			
	External Distance		112.308'				
	Middle Ordinate		110.149'				
	Radius		5730.000'				
	DEG		0° 59' 59.73"				
	DELTA		22° 30' 18.09"				
	LENGTH		2250.668'				
	PT	N	154832.950	E	385561.002	Station	350+65.07
Tangent	N	154832.950	E	385561.002	Z	Station	350+65.07
		Distance 7459.100'		Bearing N 0° 4' 13.02" E			
Arc							
	PC	N	162292.045	E	385570.152	Station	425+24.17
	CC	N	162285.016	E	391300.148		
	PI	N	162768.170	E	385570.736	Station	430+00.29
	TAN		476.126'				
	DB		N 0° 4' 13.02" E				
	DA		N 9° 34' 12.96" E				
	LChord Distance		948.981'	Bearing N 4° 49' 12.99" E			
	External Distance		19.747'				
	Middle Ordinate		19.680'				
	Radius		5730.000'				
	DEG		0° 59' 59.73"				
	DELTA		9° 29' 59.95"				
	LENGTH		950.069'				
	PT	N	163237.669	E	385649.895	Station	434+74.23
Tangent	N	163237.669	E	385649.895	Z	Station	434+74.23
		Distance 1104.913'		Bearing N 9° 34' 12.96" E			

STH 27 ALIGNMENT (CONTINUED)

Arc							
	PC	N	164327.204	E	385833.595	Station	445+79.15
	CC	N	165279.857	E	380183.342		
	PI	N	164809.044	E	385914.835	Station	450+67.79
	TAN		488.640'				
	DB		N 9° 34' 12.96" E				
	DA		N 0° 10' 41.61" W				
	LChord Distance		973.745'	Bearing N 4° 41' 45.68" E			
	External Distance		20.797'				
	Middle Ordinate		20.722'				
	Radius		5730.000'				
	DEG		0° 59' 59.73"				
	DELTA		9° 44' 54.57"				
	LENGTH		974.921'				
	PT	N	165297.681	E	385913.315	Station	455+54.07
Tangent	N	165297.681	E	385913.315	Z	Station	455+54.07
		Distance 6923.846'		Bearing N 0° 10' 41.61" W			
Tangent	N	172221.493	E	385891.777	Z	Station	524+77.91
		Distance 6421.169'		Bearing N 0° 36' 47.44" E			
Tangent	N	178642.294	E	385960.495	Z	Station	588+99.08
		Distance 1328.512'		Bearing N 1° 27' 9.36" E			
Tangent	N	179970.379	E	385994.173	Z	Station	602+27.59
		Distance 479.352'		Bearing N 1° 7' 10.01" E			
End	N	180449.640	E	386003.538	Z	Station	607+06.95

STH 27						
Curve	Station	Description	Left Outside Shoulder	Left Outside Lane	Right Outside Lane	Right Outside Shoulder
	100+00.00'	Begin Alignment	-4.00%	-2.00%	-2.00%	-4.00%
1	156+97.49'	End Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
1	156+97.49'	End Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
1	157+50.49'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
1	158+03.82'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
1	158+57.16'	Low Shoulder Match	-4.00%	-4.00%	4.00%	4.00%
1	158+70.49'	Begin Full Super	-4.50%	-4.50%	4.50%	4.50%
1	168+58.30'	End Full Super	-4.50%	-4.50%	4.50%	4.50%
1	168+71.63'	Low Shoulder Match	-4.00%	-4.00%	4.00%	4.00%
1	169+24.97'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
1	169+78.30'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
1	170+31.30'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
1	170+31.30'	Begin Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
2	327+13.40'	End Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
2	327+13.40'	End Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
2	327+66.40'	Level Crown	0.00%	0.00%	-2.00%	-4.00%
2	327+85.07'	Reverse Crown	2.00%	2.00%	-2.00%	-4.00%
2	328+38.40'	Begin Full Super	2.70%	2.70%	-2.70%	-4.00%
2	350+41.07'	End Full Super	2.70%	2.70%	-2.70%	-4.00%
2	350+59.74'	Reverse Crown	2.00%	2.00%	-2.00%	-4.00%
2	351+13.07'	Level Crown	0.00%	0.00%	-2.00%	-4.00%
2	351+66.07'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
2	351+66.07'	Begin Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
3	424+23.17'	End Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
3	424+23.17'	End Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
3	424+76.17'	Level Crown	0.00%	0.00%	-2.00%	-4.00%
3	425+29.50'	Reverse Crown	2.00%	2.00%	-2.00%	-4.00%
3	425+48.17'	Begin Full Super	2.70%	2.70%	-2.70%	-4.00%
3	434+50.23'	End Full Super	2.70%	2.70%	-2.70%	-4.00%
3	434+68.90'	Reverse Crown	2.00%	2.00%	-2.00%	-4.00%
3	435+22.23'	Level Crown	0.00%	0.00%	-2.00%	-4.00%
3	435+75.23'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
3	435+75.23'	Begin Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
4	444+78.15'	End Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
4	444+78.15'	End Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
4	445+31.15'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
4	445+84.48'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
4	446+03.15'	Begin Full Super	-4.00%	-2.70%	2.70%	2.70%
4	455+30.07'	End Full Super	-4.00%	-2.70%	2.70%	2.70%
4	455+48.74'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
4	456+02.07'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
4	456+55.07'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-4.00%
4	456+55.07'	Begin Normal Shoulder	-4.00%	-2.00%	-2.00%	-4.00%
	607+06.95'	End Alignment	-4.00%	-2.00%	-2.00%	-4.00%

3

DATE 21DEC15		E S T I M A T E O F Q U A N T I T I E S				
LINE					7062-05-71	7062-05-72
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
0010	201.0105	Clearing	STA	1.000	1.000	
0020	201.0205	Grubbing	STA	1.000	1.000	
0030	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000	
0040	203.0200	Removing Old Structure (station) 01.183+36	LS	1.000	1.000	
0050	204.0100	Removing Pavement	SY	32.000	7.000	25.000
0060	204.0110	Removing Asphaltic Surface	SY	877.000	425.000	452.000
0070	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,865.000	2,183.000	682.000
0080	204.0120	Removing Asphaltic Surface Milling	SY	165,709.000	151,582.000	14,127.000
0090	204.0150	Removing Curb & Gutter	LF	242.000		242.000
0100	204.0155	Removing Concrete Sidewalk	SY	61.000		61.000
0110	204.0165	Removing Guardrail	LF	640.000	640.000	
0120	205.0100	Excavation Common	CY	219.000	219.000	
0130	209.0100	Backfill Granular	CY	500.000	500.000	
0140	213.0100	Finishing Roadway (project) 01.7062-05-71	EACH	1.000	1.000	
0150	213.0100	Finishing Roadway (project) 02.7062-05-72	EACH	1.000		1.000
0160	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,511.000	3,477.000	34.000
0170	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	114.000	114.000	
0180	305.0500	Shaping Shoulders	STA	904.000	887.000	17.000
0190	416.0160	Concrete Driveway 6-Inch	SY	32.000	7.000	25.000
0200	440.4410	Incentive IRI Ride	DOL	36,055.000	33,709.000	2,346.000
0210	455.0605	Tack Coat	GAL	9,779.000	8,236.000	1,543.000
0220	460.2000	Incentive Density HMA Pavement	DOL	13,400.000	11,480.000	1,920.000
0230	465.0105	Asphaltic Surface	TON	2,360.000	1,810.000	550.000
0240	465.0110	Asphaltic Surface Patching	TON	100.000	50.000	50.000
0250	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	113.000	41.000	72.000
0260	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	38,537.000	38,537.000	
0270	520.8700	Cleaning Culvert Pipes	EACH	1.000	1.000	
0280	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	80.000	80.000	
0290	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	7.000	7.000	
0300	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000	
0310	524.0124	Culvert Pipe Salvaged 24-Inch	LF	12.000	12.000	
0320	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	242.000		242.000
0330	601.0600	Concrete Curb Pedestrian	LF	19.000		19.000
0340	602.0410	Concrete Sidewalk 5-Inch	SF	1,071.000		1,071.000
0350	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	164.000		164.000
0360	606.0200	Riprap Medium	CY	41.000	41.000	
0370	614.0010	Barrier System Grading Shaping Finishing	EACH	13.000	13.000	
0380	614.0200	Steel Thrie Beam Structure Approach	LF	111.000	111.000	
0390	614.0305	Steel Plate Beam Guard Class A	LF	337.500	337.500	
0400	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	9.000	9.000	
0410	614.0400	Adjusting Steel Plate Beam Guard	LF	2,851.000	2,851.000	
0420	614.0920	Salvaged Rail	LF	648.000	648.000	
0430	614.0925	Salvaged Guardrail End Treatments	EACH	1.000	1.000	
0440	614.0950	Replacing Guardrail Posts and Blocks	EACH	23.000	23.000	
0450	614.0951	Replacing Guardrail Rail and Hardware	LF	285.000	285.000	

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DATE 21DEC15		E S T I M A T E O F Q U A N T I T I E S				
LINE					7062-05-71	7062-05-72
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY
0460	614.2300	MGS Guardrail 3	LF	350.000	350.000	
0470	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000	
0480	618.0100	Maintenance And Repair of Haul Roads	EACH	1.000	1.000	
		(project) 01. 7062-05-71				
0490	619.1000	Mobilization	EACH	1.000	0.930	0.070
0500	624.0100	Water	MGAL	20.000	20.000	
0510	625.0500	Salvaged Topsoil	SY	949.000	872.000	77.000
0520	627.0200	Mulching	SY	1,161.000	1,084.000	77.000
0530	628.1104	Erosion Bales	EACH	55.000	55.000	
0540	628.1504	Silt Fence	LF	4,595.000	4,495.000	100.000
0550	628.1520	Silt Fence Maintenance	LF	4,595.000	4,495.000	100.000
0560	628.1905	Mobilizations Erosion Control	EACH	15.000	12.000	3.000
0570	628.1910	Mobilizations Emergency Erosion Control	EACH	9.000	6.000	3.000
0580	628.2008	Erosion Mat Urban Class I Type B	SY	5,105.000	5,105.000	
0590	628.7015	Inlet Protection Type C	EACH	5.000		5.000
0600	628.7504	Temporary Ditch Checks	LF	195.000	195.000	
0610	628.7570	Rock Bags	EACH	75.000	75.000	
0620	629.0210	Fertilizer Type B	CWT	0.910	0.700	0.210
0630	630.0120	Seeding Mixture No. 20	LB	29.800	29.800	
0640	630.0140	Seeding Mixture No. 40	LB	1.340		1.340
0650	633.5200	Markers Culvert End	EACH	13.000	13.000	
0660	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	17.000		17.000
0670	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	75.000	46.000	29.000
0680	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	18.000	12.000	6.000
0690	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	2.000		2.000
0700	637.2210	Signs Type II Reflective H	SF	614.740	357.260	257.480
0710	637.2230	Signs Type II Reflective F	SF	143.000	51.000	92.000
0720	638.2102	Moving Signs Type II	EACH	1.000	1.000	
0730	638.2602	Removing Signs Type II	EACH	104.000	52.000	52.000
0740	638.3000	Removing Small Sign Supports	EACH	111.000	59.000	52.000
0750	642.5201	Field Office Type C	EACH	1.000	1.000	
0760	643.0100	Traffic Control (project) 01. 7062-05-71	EACH	1.000	1.000	
0770	643.0100	Traffic Control (project) 02. 7062-05-72	EACH	1.000		1.000
0780	643.0300	Traffic Control Drums	DAY	7,400.000	5,000.000	2,400.000
0790	643.0410	Traffic Control Barricades Type II	DAY	1,100.000		1,100.000
0800	643.0420	Traffic Control Barricades Type III	DAY	2,400.000	1,600.000	800.000
0810	643.0705	Traffic Control Warning Lights Type A	DAY	5,100.000	3,100.000	2,000.000
0820	643.0900	Traffic Control Signs	DAY	8,360.000	5,300.000	3,060.000
0830	644.1420.S	Temporary Pedestrian Surface Plywood	SF	250.000		250.000
0840	644.1601.S	Temporary Curb Ramp	EACH	4.000		4.000
0850	645.0120	Geotextile Fabric Type HR	SY	134.000	134.000	
0860	646.0106	Pavement Marking Epoxy 4-Inch	LF	91,851.000	86,635.000	5,216.000
0870	646.0126	Pavement Marking Epoxy 8-Inch	LF	400.000	400.000	
0880	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	24,305.000	22,834.000	1,471.000
0890	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	80.000		80.000
0900	648.0100	Locating No-Passing Zones	MI	9.030	8.430	0.600
0910	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	33,458.000	31,536.000	1,922.000
0920	650.4500	Construction Staking Subgrade	LF	569.000	569.000	
0930	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	261.000		261.000
0940	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000	
0950	650.8000	Construction Staking Resurfacing Reference	LF	47,404.000	44,268.000	3,136.000

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DATE 21DEC15		E S T I M A T E O F Q U A N T I T I E S					
LINE					7062-05-71	7062-05-72	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY	QUANTITY	
0960	650.9910	Construction Staking Supplemental Control (project) 01. 7062-05-71	LS	1.000	1.000		
0970	650.9910	Construction Staking Supplemental Control (project) 02. 7062-05-72	LS	1.000		1.000	
0980	650.9920	Construction Staking Slope Stakes	LF	569.000	569.000		
0990	690.0150	Sawing Asphalt	LF	1,179.000	583.000	596.000	
1000	690.0250	Sawing Concrete	LF	100.000	12.000	88.000	
1010	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,400.000	2,400.000		
1020	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	990.000	990.000		
1030	SPV.0035	Special 01. BASE REPAIR FOR CIR PAVEMENT	CY	250.000	250.000		
1040	SPV.0090	Special 01. CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT	LF	261.000		261.000	
1050	SPV.0105	Special 01. PREP OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL 7062-05-71	LS	1.000	1.000		
1060	SPV.0105	Special 02. MATERIAL TRANSFER VEHICLE 7062-05-71	LS	1.000	1.000		
1070	SPV.0105	Special 03. MILLING AND REMOVING TEMPORARY JOINT 7062-05-71	LS	1.000	1.000		
1080	SPV.0105	Special 04. PREP OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL 7062-05-72	LS	1.000		1.000	
1090	SPV.0105	Special 05. MATERIAL TRANSFER VEHICLE 7062-05-72	LS	1.000		1.000	
1100	SPV.0105	Special 06. MILLING AND REMOVING TEMPORARY JOINT 7062-05-72	LS	1.000		1.000	
1110	SPV.0105	Special 07. PREPARE FOUNDATION FOR CIR PAVEMENT 7062-05-71	LS	1.000	1.000		
1120	SPV.0105	Special 08. PREPARE FOUNDATION FOR HMA UPPER LAYER 7062-05-71	LS	1.000	1.000		
1130	SPV.0165	Special 01. CONCRETE SIDEWALK CURE AND SEAL TREATMENT	SF	1,071.000		1,071.000	
1140	SPV.0170	Special 01. REHEATING HMA LONGITUDINAL JOINTS SPECIAL	STA	477.000	445.000	32.000	
1150	SPV.0180	Special 01. CONCRETE DRIVEWAY CURE AND SEAL TREATMENT	SY	32.000	7.000	25.000	
1160	SPV.0180	Special 02. COLD-IN-PLACE RECYCLING (CIR) PAVEMENT PARTIAL DEPTH	SY	142,598.000	142,598.000		
1170	SPV.0195	Special 01. HMA PAVEMENT TYPE E-3 SPECIAL	TON	20,911.000	17,911.000	3,000.000	
1180	SPV.0195	Special 02. ASPHALT STABILIZING AGENT	TON	801.000	801.000		

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CLEARING <table><tr><th>CATEGORY</th><th>STATION TO</th><th>STATION</th><th>LOCATION</th><th>201.0105 STA</th><th>REMARKS</th></tr><tr><td>0010</td><td>496+15</td><td>- 497+15</td><td>LT.</td><td>1</td><td></td></tr><tr><td colspan="4">TOTAL 0010</td><td>1</td><td></td></tr></table>						CATEGORY	STATION TO	STATION	LOCATION	201.0105 STA	REMARKS	0010	496+15	- 497+15	LT.	1		TOTAL 0010				1		REMOVING PAVEMENT <table><tr><th>CATEGORY</th><th>STATION TO</th><th>STATION</th><th>LOCATION</th><th>204.0100 SY</th><th>REMARKS</th></tr><tr><td>0010</td><td>515+95</td><td>- 516+10</td><td>LT.</td><td>7</td><td>DRIVEWAY</td></tr><tr><td colspan="4">TOTAL 0010</td><td>7</td><td></td></tr></table>						CATEGORY	STATION TO	STATION	LOCATION	204.0100 SY	REMARKS	0010	515+95	- 516+10	LT.	7	DRIVEWAY	TOTAL 0010				7																																																																																																																															
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0010	292+17	- 292+49	LT.	62	FALL HALL RD.																																																																																																																																																																								
0010	393+10	- 393+40	RT.	56	OAK RIDGE RD.																																																																																																																																																																								
0010	456+77	- 457+03	LT.	50	HAWK ISLAND RD.																																																																																																																																																																								
0010	476+68	- 477+01	LT.	62	LUNDA RD.																																																																																																																																																																								
0010	481+58	- 481+97	LT.	77	PERRY CREEK RD.																																																																																																																																																																								
0010	509+48	- 509+81	RT.	56	CRANBERRY DR.																																																																																																																																																																								
0010	535+86	- 536+12	LT.	49	CLINTON RD.																																																																																																																																																																								
0010	551+64	- 551+95	LT.	57	PAMELA ST.																																																																																																																																																																								
0010	556+60	- 556+97	LT.	68	SCOTT ST.																																																																																																																																																																								
0010	562+28	- 562+43	LT.	32	W. 7TH ST.																																																																																																																																																																								
0010	562+28	- 562+43	RT.	23	E. 7TH ST.																																																																																																																																																																								
TOTAL 0010				2183																																																																																																																																																																									
REMOVING OLD STRUCTURE (01. STA 183+36) <table><tr><th>CATEGORY</th><th>STATION</th><th>LOCATION</th><th>203.0200 LS</th><th>REMARKS</th></tr><tr><td>0010</td><td>183+36</td><td>UNDER STH 27</td><td>1</td><td>OLD CATTLE PASS</td></tr><tr><td colspan="3">TOTAL 0010</td><td>1</td><td></td></tr></table>						CATEGORY	STATION	LOCATION	203.0200 LS	REMARKS	0010	183+36	UNDER STH 27	1	OLD CATTLE PASS	TOTAL 0010			1																																																																																																																																																										
CATEGORY	STATION	LOCATION	203.0200 LS	REMARKS																																																																																																																																																																									
0010	183+36	UNDER STH 27	1	OLD CATTLE PASS																																																																																																																																																																									
TOTAL 0010			1																																																																																																																																																																										

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REMOVING ASPHALTIC SURFACE MILLING					
CATEGORY	STATION TO	STATION	LOCATION	204.0120 SY	REMARKS
0010	118+48	- 162+00	LT. & RT.	14416	
0010	162+00	- 206+00	LT. & RT.	15891	
0010	206+00	- 251+00	LT. & RT.	15315	
0010	251+00	- 265+86	LT. & RT.	5140	
0010	269+59	- 314+00	LT. & RT.	15732	
0010	314+00	- 359+00	LT. & RT.	15080	
0010	359+00	- 404+00	LT. & RT.	15074	
0010	404+00	- 449+00	LT. & RT.	14755	
0010	449+00	- 494+00	LT. & RT.	16110	
0010	494+00	- 539+00	LT. & RT.	15342	
0010	539+00	- 562+43	LT. & RT.	8727	
TOTAL 0010				151582	

REMOVING GUARDRAIL					
CATEGORY	STATION TO	STATION	LOCATION	204.0165 LF	REMARKS
0010	182+05	- 182+44	RT.	40	
0010	182+97	- 183+36	LT.	40	
0010	183+43	- 183+82	RT.	40	
0010	184+29	- 184+68	LT.	40	
0010	262+89	- 263+27	RT.	40	
0010	264+01	- 264+40	LT.	40	
0010	278+43	- 278+82	RT.	40	
0010	278+52	- 278+91	LT.	40	
0010	332+43	- 332+83	RT.	40	
0010	332+85	- 333+24	LT.	40	
0010	333+54	- 333+94	RT.	40	
0010	333+84	- 334+23	LT.	40	
0010	491+20	- 491+59	RT.	40	
0010	491+83	- 492+22	LT.	40	
0010	495+41	- 495+80	RT.	40	
0010	495+42	- 495+81	LT.	40	
TOTAL 0010				640	

EXCAVATION COMMON					
CATEGORY	STATION TO	STATION	LOCATION	205.0100 CY	REMARKS
0010	180+70	- 181+30	LT.	56	DRIVEWAY REMOVAL
0010	237+95	- 238+08	LT.	4	CULVERT GRADING
0010	341+00	- 341+60	RT.	12	CULVERT GRADING
0010	409+60	- 410+20	LT.	11	CULVERT GRADING
0010	409+60	- 410+20	RT.	11	CULVERT GRADING
0010	439+04	- 439+68	LT.	13	CULVERT GRADING
0010	439+04	- 439+68	RT.	13	CULVERT GRADING
0010	471+30	- 471+80	RT.	34	DRIVEWAY REMOVAL
0010	480+10	- 480+70	RT.	65	DRIVEWAY REMOVAL
TOTAL 0010				219	

BACKFILL GRANULAR					
CATEGORY	STATION TO	STATION	LOCATION	209.0100 CY	REMARKS
0010	183+17	- 183+56	STH 27	500	CULVERT REPLACEMENT
TOTAL 0010				500	

FINISHING ROADWAY (7062-05-71)			
CATEGORY	LOCATION	213.0100 EACH	REMARKS
0010	PROJECT 7062-05-71	1	
TOTAL 0010		1	

BASE AGGREGATE DENSE 3/4-INCH					
CATEGORY	STATION TO	STATION	LOCATION	305.0110 TON	REMARKS
0010	117+48	- 171+00	LT.	166	SHOULDER
0010	172+00	- 193+00	LT.	73	SHOULDER/CULVERT
0010	194+00	- 227+00	LT.	103	SHOULDER
0010	228+00	- 292+00	LT.	199	SHOULDER
0010	293+00	- 456+50	LT.	507	SHOULDER
0010	457+50	- 481+00	LT.	73	SHOULDER
0010	482+50	- 535+50	LT.	165	SHOULDER
0010	536+50	- 551+00	LT.	45	SHOULDER
0010	552+50	- 556+00	LT.	11	SHOULDER
0010	557+50	- 561+50	LT.	13	SHOULDER
0010	117+48	- 170+25	RT.	164	SHOULDER
0010	171+75	- 226+00	RT.	179	SHOULDER/CULVERT
0010	227+50	- 291+75	RT.	200	SHOULDER
0010	292+75	- 392+75	RT.	310	SHOULDER
0010	394+00	- 509+00	RT.	357	SHOULDER
0010	510+25	- 562+43	RT.	162	SHOULDER
0010			UNDISTRIBUTED	175	DRIVEWAYS
0010			UNDISTRIBUTED	575	
TOTAL 0010				3477	

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BASE AGGREGATE DENSE 1 1/4-INCH					
CATEGORY	STATION TO	STATION	LOCATION	305.0120 TON	REMARKS
0010	183+17	- 183+56	LT. & RT.	114	CULVERT WORK
TOTAL 0010				114	

TACK COAT					
CATEGORY	STATION TO	STATION	LOCATION	455.0605 GAL	REMARKS
0010	117+48	- 162+00	LT. & RT.	755	
0010	162+00	- 206+00	LT. & RT.	822	
0010	206+00	- 251+00	LT. & RT.	781	
0010	251+00	- 266+86	LT. & RT.	283	
0010	268+59	- 314+00	LT. & RT.	835	
0010	314+00	- 359+00	LT. & RT.	765	
0010	359+00	- 404+00	LT. & RT.	765	
0010	404+00	- 449+00	LT. & RT.	751	
0010	449+00	- 494+00	LT. & RT.	829	
0010	494+00	- 539+00	LT. & RT.	791	
0010	539+00	- 547+00	LT. & RT.	134	
0010	547+00	- 551+80	LT. & RT.	208	
0010	551+80	- 562+43	LT. & RT.	517	
TOTAL 0010				8236	

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SHAPING SHOULDERS					
CATEGORY	STATION TO	STATION	LOCATION	305.0500 STA	REMARKS
0010	117+48	- 162+00	LT. & RT.	89	
0010	162+00	- 206+00	LT. & RT.	88	
0010	206+00	- 251+00	LT. & RT.	90	
0010	251+00	- 266+86	LT. & RT.	32	
0010	268+59	- 314+00	LT. & RT.	91	
0010	314+00	- 359+00	LT. & RT.	90	
0010	359+00	- 404+00	LT. & RT.	90	
0010	404+00	- 449+00	LT. & RT.	90	
0010	449+00	- 494+00	LT. & RT.	90	
0010	494+00	- 539+00	LT. & RT.	90	
0010	539+00	- 562+43	LT. & RT.	47	
TOTAL 0010				887	

ASPHALTIC SURFACE					
CATEGORY	STATION	STATION	LOCATION	465.0105 TON	REMARKS
0010	183+17	- 183+56	LT. & RT.	60	CULVERT PIPE WORK
0010			UNDISTRIBUTED	300	PREP. FOUNDATION FOR ASPHALTIC PAVING SPECIAL
0010			UNDISTRIBUTED	1450	FOR LEVELING AND WEDGING
TOTAL 0010				1810	

CONCRETE DRIVEWAY 6-INCH					
CATEGORY	STATION TO	STATION	LOCATION	416.0160 SY	REMARKS
0010	515+95	- 516+10	LT.	7	
TOTAL 0010				7	

ASPHALTIC SURFACE PATCHING				
CATEGORY	LOCATION	465.0110 TON	REMARKS	
0010	UNDISTRIBUTED	50	FOR MINOR REPAIRS, POP-OUTS, AND RAMPING	
	TOTAL 0010	<u>50</u>		

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ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION TO	STATION	LOCATION	465.0120 TON	REMARKS
0010	312+62	- 313+05	LT.	7.5	
0010	479+43	- 479+79	RT.	7.0	
0010	509+60	- 509+97	LT.	7.0	
0010	514+42	- 514+70	LT.	5.8	
0010	520+54	- 520+94	LT.	8.4	
0010	554+77	- 555+11	LT.	5.3	
TOTAL 0010				41.0	

ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL

CATEGORY	STATION TO	STATION	LOCATION	465.0475 LF	REMARKS
0010	117+48	- 169+25	STH 27	5177	
0010	173+25	- 191+43	STH 27	1818	
0010	195+43	- 225+17	STH 27	2974	
0010	229+17	- 266+61	STH 27	3744	
0010	268+84	- 290+25	STH 27	2141	
0010	294+25	- 391+25	STH 27	9700	
0010	395+25	- 454+90	STH 27	5965	
0010	458+90	- 474+85	STH 27	1595	
0010	483+77	- 507+67	STH 27	2390	
0010	511+67	- 533+99	STH 27	2232	
0010	537+99	- 546+00	STH 27	801	
TOTAL 0010				38537	

CLEANING CULVERT PIPES

CATEGORY	STATION	LOCATION	520.8700 EACH	REMARKS
0010	203+80	LT. & RT.	1	24-INCH R.C.C.P.
TOTAL 0010			1	

CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH

CATEGORY	STATION	LOCATION	522.0124 LF	REMARKS
0010	183+36	LT. & RT.	80	8 JOINT TIES REQ'D
TOTAL 0010			80	

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH

CATEGORY	STATION	LOCATION	522.1024 EACH	REMARKS
0010	183+36	LT.	1	2 JOINT TIES REQ'D
0010	183+36	RT.	1	2 JOINT TIES REQ'D
0010	341+29	RT.	1	2 JOINT TIES REQ'D
0010	439+34	LT.	1	2 JOINT TIES REQ'D
0010	439+34	RT.	1	2 JOINT TIES REQ'D
0010	439+38	LT.	1	2 JOINT TIES REQ'D
0010	439+38	RT.	1	2 JOINT TIES REQ'D
TOTAL 0010			7	

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH

CATEGORY	STATION	LOCATION	522.1030 EACH	REMARKS
0010	409+90	LT.	1	2 JOINT TIES REQ'D
0010	409+90	RT.	1	2 JOINT TIES REQ'D
TOTAL 0010			2	

CULVERT PIPE SALVAGED 24-INCH

CATEGORY	STATION	LOCATION	524.0124 LF	REMARKS
0010	135+96	RT.	8	2 JOINT TIES REQ'D.
0010	188+36	RT.	4	2 JOINT TIES REQ'D.
TOTAL 0010			12	

RIPRAP MEDIUM

CATEGORY	STATION TO	STATION	LOCATION	606.0200 CY	REMARKS
0010	183+32	- 183+39	LT.	4	W = 7', L = 10'
0010	183+32	- 183+39	RT.	4	W = 7', L = 10'
0010	237+94	- 238+02	LT.	5	W = 8', L = 10'
0010	341+26	- 341+33	RT.	4	W = 7', L = 9'
0010	409+86	- 409+94	LT.	5	W = 8', L = 10'
0010	409+86	- 409+94	RT.	5	W = 8', L = 10'
0010	439+31	- 439+42	LT.	7	W = 11', L = 10'
0010	439+31	- 439+42	RT.	7	W = 11', L = 10'
TOTAL 0010				41	

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BARRIER SYSTEM GRADING SHAPING FINISHING

					--- FOR INFORMATION ONLY ---										
CATEGORY	STATION TO	STATION	LOCATION	614.0010 EACH	EXCAVATION		SALVAGED		FERTILIZER		SEEDING	CONSTRUCTION		STAKING	
					COMMON	BORROW	TOPSOIL	MULCHING	TYPE B		MIXTURE	SUBGRADE	BASE	SLOPE	
					CY	CY	SY	SY	CWT		NO. 20 LB	LF	LF	STAKES	LF
0010	119+24 -	119+85	LT.	1	0	8	84	117	0.07		3.2	61	61	61	
0010	262+25 -	262+90	RT.	1	0	18	114	147	0.09		4.0	65	65	65	
0010	263+00 -	264+28	LT.	1	0	14	206	276	0.17		7.5	128	128	128	
0010	265+25 -	267+15	RT.	1	0	117	326	0	0.27		11.7	190	190	190	
0010	268+50 -	273+65	RT.	1	0	136	791	0	0.68		29.1	515	515	515	
0010	275+00 -	278+90	RT.	1	0	348	1420	0	1.03		44.2	390	390	390	
0010	330+04 -	334+75	RT.	1	0	66	397	415	0.41		17.8	471	471	471	
0010	331+50 -	333+00	LT.	1	0	44	176	258	0.16		7.0	150	150	150	
0010	334+85 -	336+00	LT.	1	0	25	146	210	0.13		5.7	115	115	115	
0010	491+00 -	492+00	RT.	1	0	34	122	178	0.11		4.9	100	100	100	
0010	491+00 -	491+85	LT.	1	0	3	54	101	0.06		2.8	85	85	85	
0010	495+16 -	496+40	RT.	1	0	57	240	0	0.19		8.4	124	124	124	
0010	496+04 -	497+50	LT.	1	0	108	298	0	0.24		10.3	146	146	146	
TOTAL 0010						978	4374	1702	3.61		156.6	2540	2540	2540	TOTALS

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STEEL THRIE BEAM STRUCTURE APPROACH

CATEGORY	STATION TO	STATION	LOCATION	614.0200 LF	REMARKS
0010	266+74.09	- 267+01.84	LT.	27.75	ATTACH TO EXISTING BEAM GUARD
0010	266+87.43	- 267+15.18	RT.	27.75	ATTACH TO EXISTING BEAM GUARD
0010	268+29.78	- 268+57.53	LT.	27.75	ATTACH TO EXISTING BEAM GUARD
0010	268+43.38	- 268+71.13	RT.	27.75	ATTACH TO EXISTING BEAM GUARD
TOTAL 0010				111.00	

ADJUSTING STEEL PLATE BEAM GUARD

CATEGORY	STATION TO	STATION	LOCATION	614.0400 LF	REMARKS
0010	263+53	- 266+85	RT.	333	
0010	268+58	- 278+27	LT.	969	
0010	268+71	- 278+18	RT.	947	
0010	491+84	- 495+16	RT.	332	
0010	492+47	- 495+17	LT.	270	
TOTAL 0010				2851	

STEEL PLATE BEAM GUARD CLASS A

CATEGORY	STATION TO	STATION	LOCATION	614.0305 LF	REMARKS
0010	117+49.50	- 118+99.50	LT.	150.0	ATTACH TO EXISTING BEAM GUARD
0010	263+15.20	- 263+52.70	RT.	37.5	ATTACH TO EXISTING BEAM GUARD
0010	264+52.70	- 264+65.20	LT.	12.5	ATTACH TO EXISTING BEAM GUARD
0010	278+18.07	- 278+30.57	RT.	12.5	ATTACH TO EXISTING BEAM GUARD
0010	492+09.40	- 492+46.90	LT.	37.5	ATTACH TO EXISTING BEAM GUARD
0010	495+16.91	- 496+04.41	LT.	87.5	ATTACH TO EXISTING BEAM GUARD
TOTAL 0010				337.5	

SALVAGED RAIL

CATEGORY	STATION TO	STATION	LOCATION	614.0920 LF	REMARKS
0010	117+50	- 117+62	LT.	12	
0010	182+44	- 183+43	RT.	98	
0010	183+36	- 184+29	LT.	95	
0010	263+27	- 263+53	RT.	25	
0010	264+40	- 264+65	LT.	25	
0010	266+74	- 267+01	LT.	28	
0010	266+85	- 267+13	RT.	28	
0010	268+30	- 268+58	LT.	28	
0010	268+43	- 268+71	RT.	28	
0010	278+18	- 278+43	RT.	25	
0010	278+27	- 278+52	LT.	25	
0010	332+83	- 333+54	RT.	71	
0010	333+24	- 333+84	LT.	60	
0010	491+59	- 491+84	RT.	25	
0010	492+22	- 492+47	LT.	25	
0010	495+16	- 495+40	RT.	25	
0010	495+17	- 495+42	LT.	25	
TOTAL 0010				648	

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

CATEGORY	STATION TO	STATION	LOCATION	614.0370 EACH	REMARKS
0010	118+99.50	- 119+49.50*	LT.	1	ATTACH TO EXISTING BEAM GUARD
0010	*262+65.20	- 263+15.20	RT.	1	
0010	*264+02.70	- 264+52.70	LT.	1	
0010	278+26.60	- 278+76.60*	LT.	1	ATTACH TO EXISTING BEAM GUARD
0010	278+30.57	- 278+80.57*	RT.	1	
0010	*491+34.18	- 491+84.18	RT.	1	ATTACH TO EXISTING BEAM GUARD
0010	*491+59.40	- 492+09.40	LT.	1	
0010	495+16.23	- 495+66.23*	RT.	1	ATTACH TO EXISTING BEAM GUARD
0010	496+04.41	- 496+54.41*	LT.	1	
TOTAL 0010				9	

SALVAGED GUARDRAIL END TREATMENTS

CATEGORY	STATION TO	STATION	LOCATION	614.0925 EACH	REMARKS
0010	117+62	- 118+12	LT.	1	
TOTAL 0010				1	

* LOCATION OF POST #1

3

REPLACING GUARDRAIL POSTS AND BLOCKS

CATEGORY	LOCATION	614.0950 EACH	REMARKS
0010	UNDISTRIBUTED	23	
TOTAL 0010		23	

REPLACING GUARDRAIL RAIL AND HARDWARE

CATEGORY	LOCATION	614.0951 LF	REMARKS
0010	UNDISTRIBUTED	285	
TOTAL 0010		285	

MGS GUARDRAIL 3

CATEGORY	STATION TO	STATION	LOCATION	614.2300 LF	REMARKS
0010	331+77.63	- 333+52.63	RT.	175	
0010	333+06.87	- 334+81.87	LT.	175	
TOTAL 0010				350	

MGS GUARDRAIL TERMINAL EAT

CATEGORY	STATION TO	STATION	LOCATION	614.2610 EACH	REMARKS
0010	*331+24.50	- 331+77.63	RT.	1	
0010	333+52.63	- 334+05.76*	RT.	1	
0010	*332+53.74	- 333+06.87	LT.	1	
0010	334+81.87	- 335+35.00*	LT.	1	
TOTAL 0010				4	

* LOCATION OF POST #1

MAINTENANCE AND REPAIR OF HAUL ROADS (7062-05-71)

CATEGORY	LOCATION	618.0100 EACH	REMARKS
0010	PROJECT 7062-05-71	1	
TOTAL 0010		1	

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH	REMARKS
0010	PROJECT 7062-05-71	0.93	
TOTAL 0010		0.93	

WATER

CATEGORY	LOCATION	624.0100 MGAL	REMARKS
0010	PROJECT 7062-05-71	20	UNDISTRIBUTED
TOTAL 0010		20	

FINISHING ITEMS

CATEGORY	STATION TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500	MULCHING 627.0200	FERTILIZER TYPE B 629.0210	SEEDING MIXTURE NO. 20 630.0120	REMARKS
				SY	SY	CWT	LB	
0010	180+70	- 181+30	LT.	162	195	0.12	5.3	DRIVEWAY REMOVAL
0010	183+16	- 183+56	LT.	57	57	0.04	1.5	CULVERT GRADING
0010	183+16	- 183+56	RT.	66	66	0.04	1.8	CULVERT GRADING
0010	237+95	- 238+08	LT.	16	16	0.01	0.5	CULVERT GRADING
0010	341+00	- 341+60	RT.	36	62	0.04	1.7	CULVERT GRADING
0010	409+60	- 410+20	LT.	49	72	0.05	2.0	CULVERT GRADING
0010	409+60	- 410+20	RT.	40	64	0.04	1.8	CULVERT GRADING
0010	439+04	- 439+68	LT.	45	67	0.04	1.9	CULVERT GRADING
0010	439+04	- 439+68	RT.	53	76	0.05	2.1	CULVERT GRADING
0010	471+30	- 471+80	RT.	165	193	0.13	5.3	DRIVEWAY REMOVAL
0010	480+10	- 480+70	RT.	183	216	0.14	5.9	DRIVEWAY REMOVAL
TOTAL 0010				872	1084	0.70	29.8	

EROSION BALES

CATEGORY	STATION TO	STATION	LOCATION	628.1104 EACH	REMARKS
0010	266+83	- 267+14	RT.	14	
0010	268+47	- 268+72	RT.	13	
0010	496+12	- 496+52	LT.	17	
0010			UNDISTRIBUTED	11	
TOTAL 0010				55	

SILT FENCE

CATEGORY	STATION TO	STATION	LOCATION	628.1504 LF	REMARKS
0010	119+10	- 119+95	LT.	90	
0010	183+11	- 183+61	RT.	60	
0010	183+11	- 183+60	LT.	60	
0010	262+20	- 263+00	RT.	90	
0010	262+90	- 264+35	LT.	150	
0010	265+15	- 267+30	RT.	250	
0010	268+35	- 273+80	RT.	580	
0010	274+90	- 279+00	RT.	445	
0010	329+90	- 334+85	RT.	500	
0010	331+40	- 333+10	LT.	180	
0010	334+75	- 336+10	LT.	140	
0010	340+95	- 341+65	RT.	75	
0010	409+55	- 410+25	LT.	80	
0010	409+55	- 410+25	RT.	80	
0010	438+95	- 439+75	LT.	90	
0010	438+95	- 439+75	RT.	90	
0010	490+95	- 492+05	RT.	120	
0010	490+95	- 492+00	LT.	105	
0010	495+05	- 496+50	RT.	160	
0010	495+95	- 497+65	LT.	180	
0010			UNDISTRIBUTED	970	
TOTAL 0010				4495	

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SILT FENCE MAINTENANCE

		628.1520	
CATEGORY	LOCATION	LF	REMARKS
0010	UNDISTRIBUTED	4495	
TOTAL 0010		4495	

MOBILIZATIONS EROSION CONTROL

		628.1905	
CATEGORY	LOCATION	EACH	REMARKS
0010	PROJECT 7062-05-71	12	
TOTAL 0010		12	

MOBILIZATIONS EMERGENCY EROSION CONTROL

		628.1910	
CATEGORY	LOCATION	EACH	REMARKS
0010	PROJECT 7062-05-71	6	
TOTAL 0010		6	

EROSION MAT URBAN CLASS I TYPE B

		628.2008	
CATEGORY	STATION TO STATION	LOCATION	SY
0010	265+25 - 267+15	RT.	430
0010	268+50 - 273+65	RT.	1080
0010	275+00 - 278+90	RT.	1640
0010	331+75 - 333+80	RT.	245
0010	495+15 - 496+40	RT.	310
0010	496+05 - 497+50	LT.	380
0010		UNDISTRIBUTED	1020
TOTAL 0010			5105

TEMPORARY DITCH CHECKS

		628.7504	
CATEGORY	STATION LOCATION	LF	REMARKS
0010	180+85 LT.	20	
0010	181+15 LT.	20	
0010	183+36 RT.	20	
0010	471+28 RT.	20	
0010	480+72 RT.	20	
0010	491+95 RT.	20	
0010	492+00 LT.	20	
0010	495+30 RT.	20	
0010	UNDISTRIBUTED	35	
TOTAL 0010		195	

ROCK BAGS

		628.7570	
CATEGORY	LOCATION	EACH	REMARKS
0010	UNDISTRIBUTED	75	
TOTAL 0010		75	

MARKERS CULVERT END

		633.5200	
CATEGORY	STATION LOCATION	EACH	REMARKS
0010	183+36 LT.	1	
0010	183+36 RT.	1	
0010	314+30 LT.	1	
0010	314+30 RT.	1	
0010	341+30 LT.	1	
0010	341+30 RT.	1	
0010	409+90 LT.	1	
0010	409+90 RT.	1	
0010	418+98 LT.	1	
0010	418+98 RT.	1	
0010	427+04 LT.	1	
0010	427+04 RT.	1	
0010	561+81 LT.	1	
TOTAL 0010		13	

POSTS WOOD 4X6				
CATEGORY	SIGN #	16-FT	18-FT	REMARKS
		634.0616 EACH	634.0618 EACH	
0010	300	1	---	
0010	500	2	---	
0010	501, 502	1	---	
0010	503	1	---	
0010	504	1	---	
0010	505	1	---	
0010	506	1	---	
0010	507	2	---	
0010	508	---	1	
0010	509	1	---	
0010	510	1	---	
0010	511	1	---	
0010	512	---	1	
0010	513	1	---	
0010	514	2	---	
0010	515	1	---	
0010	516	1	---	
0010	517	1	---	
0010	518	1	---	
0010	519	1	---	
0010	520	1	---	
0010	520B	1	---	
0010	520C	1	---	
0010	521	1	1	
0010	522	1	---	
0010	523	1	1	
0010	524	1	---	
0010	525	1	---	
0010	526	1	1	
0010	527	1	---	
0010	528	1	1	
0010	529	1	---	
0010	530	1	---	
0010	531	1	---	
0010	532	1	---	
0010	533	1	---	
0010	534	1	---	
0010	536	---	1	
0010	537	---	1	
0010	538	---	1	
0010	540	1	---	
0010	541	---	1	
0010	542	1	---	
0010	543	---	1	
0010	544	1	---	
SUBTOTAL =		41	11	

POSTS WOOD 4X6 (CONTINUED)				
CATEGORY	SIGN #	16-FT	18-FT	REMARKS
		634.0616 EACH	634.0618 EACH	
0010	545	1	---	
0010	547	1	---	
0010	548	1	---	
0010	549	---	1	
0010	550	1	---	
0010	551	1	---	
TOTAL 0010		46	12	

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3

SIGNS TYPE II REFLECTIVE H

CATEGORY	STATION	LOCATION	REF.#	SIGN CODE	SIZE	637.2210 SF	REMARKS
0010	117+48	RT.	500	I2-2	66"X15"	6.88	JACKSON CO
0010	119+42	RT.	501	J4-1	24"X36"	6.00	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)
0010				M3-1	---	---	NORTH CARDINAL ROUTE MARKER
0010				M1-6	---	---	STATE ROUTE MARKER, 27
0010	119+42	LT.	503	J4-1	24"X36"	6.00	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)
0010				M3-3	---	---	SOUTH CARDINAL ROUTE MARKER
0010				M1-6	---	---	STATE ROUTE MARKER, 27
0010	121+50	RT.	505	I55-56	30"X36"	7.50	ADOPT-A-HIGHWAY
0010					---	---	ROBINSON CREEK
0010					---	---	PRESERVATION
0010					---	---	ASSOCIATION
0010	156+25	RT.	506	J1-2	48"X39"	13.00	JUNCTION ASSEMBLY (2 HEADED ROUTE PANEL)
0010				M2-1	---	---	JUNCTION MARKER
0010				M1-5A	---	---	COUNTY MARKER, 0
0010				M2-1	---	---	JUNCTION MARKER
0010				M1-5A	---	---	COUNTY MARKER, S
0010	164+30	RT.	507	D1-2	72"X24"	12.00	TWO DESTINATIONS (ARROW)
0010					---	---	SHAMROCK
0010					---	---	MILLSTON
0010					---	---	RIGHT ARROW
0010	170+39	RT.	508	J13-2	48"X45"	15.00	DIRECTIONAL WITHOUT CARDINAL (2 HEADED ROUTE PANEL)
0010				M1-5A	---	---	COUNTY MARKER, 0
0010				M6-1	---	---	ARROW RIGHT
0010				M1-5A	---	---	COUNTY MARKER, S
0010				M6-1	---	---	ARROW RIGHT
0010	171+19	LT.	509	R1-1	30"X30"	5.18	STOP
0010	171+21	RT.	510	R1-1	30"X30"	5.18	STOP
0010	171+25	RT.	511	J13-1	24"X45"	7.50	DIRECTIONAL WITHOUT CARDINAL (1 HEADED ROUTE PANEL)
0010				M1-6	---	---	STATE ROUTE MARKER, 27
0010				M6-4	---	---	DIRECTIONAL ARROWS LEFT-RIGHT
0010	172+05	LT.	512	J13-2	48"X45"	15.00	DIRECTIONAL WITHOUT CARDINAL (2 HEADED ROUTE PANEL)
0010				M1-5A	---	---	COUNTY MARKER, 0
0010				M6-1	---	---	ARROW LEFT
0010				M1-5A	---	---	COUNTY MARKER, S
0010				M6-1	---	---	ARROW LEFT
0010	178+43	LT.	514	D1-2	72"X24"	12.00	TWO DESTINATIONS (ARROW)
0010					---	---	SHAMROCK
0010					---	---	MILLSTON
0010					---	---	LEFT ARROW
0010	184+65	LT.	515	J1-2	48"X39"	13.00	JUNCTION ASSEMBLY (2 HEADED ROUTE PANEL)
0010				M2-1	---	---	JUNCTION MARKER
0010				M1-5A	---	---	COUNTY MARKER, 0
0010				M2-1	---	---	JUNCTION MARKER
0010				M1-5A	---	---	COUNTY MARKER, S
0010	193+21	LT.	516	R1-1	30"X30"	5.18	STOP
0010	227+13	LT.	519	R1-1	30"X30"	5.18	STOP
0010	227+25	RT.	520	R1-1	30"X30"	5.18	STOP
0010	229+50	RT.	520B	I55-56	30"X36"	7.50	ADOPT-A-HIGHWAY
0010					---	---	WISCONSIN
0010					---	---	CHRISTIAN
0010					---	---	YOUTH CAMP
SUBTOTAL =						147.28	

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SIGNS TYPE II REFLECTIVE H (CONTINUED)

CATEGORY	STATION	LOCATION	REF.#	SIGN CODE	SIZE	637.2210 SF	REMARKS
0010	229+50	LT.	520C	I55-56	30"X36"	7.50	ADOPT-A-HIGHWAY
0010					---	---	ROBINSON CREEK
0010					---	---	PRESERVATION
0010					---	---	ASSOCIATION
0010	265+35	RT.	521	D5-63	60"X36"	15.00	HISTORICAL MARKER 1/2 MILE
0010	291+77	RT.	523	D5-64-L	60"X36"	15.00	HISTORICAL MARKER (LEFT ARROW)
0010	292+09	LT.	524	R1-1	30"X30"	5.18	STOP
0010	292+45	RT.	525	R1-1	30"X30"	5.18	STOP
0010	293+02	LT.	526	D5-64-R	60"X36"	15.00	HISTORICAL MARKER (RIGHT ARROW)
0010	317+96	LT.	528	D5-63	60"X36"	15.00	HISTORICAL MARKER 1/2 MILE
0010	350+20	LT.	529	I55-56	30"X36"	7.50	ADOPT-A-HIGHWAY
0010					---	---	WISCONSIN
0010					---	---	CHRISTIAN
0010					---	---	YOUTH CAMP
0010	351+06	RT.	530	I55-56	30"X36"	7.50	ADOPT-A-HIGHWAY
0010					---	---	JACKSON COUNTY
0010					---	---	RAIL RIDERS
0010					---	---	MODEL RR CLB
0010	354+40	RT.	531	J4-1	24"X36"	6.00	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)
0010				M3-1	---	---	NORTH CARDINAL ROUTE MARKER
0010				M1-6	---	---	STATE ROUTE MARKER, 27
0010	354+40	LT.	532	J4-1	24"X36"	6.00	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)
0010				M3-3	---	---	SOUTH CARDINAL ROUTE MARKER
0010				M1-6	---	---	STATE ROUTE MARKER, 27
0010	393+46	RT.	533	R1-1	30"X30"	5.18	STOP
0010	456+68	LT.	534	R1-1	30"X30"	5.18	STOP
0010	459+99	LT.	536	I55-56	30"X36"	7.50	ADOPT-A-HIGHWAY
0010					---	---	JACKSON COUNTY
0010					---	---	RAIL RIDERS
0010					---	---	MODEL RR CLB
0010	462+55	RT.	537	D9-52-A	36"X42"	10.50	BLACK RIVER FALLS
0010					---	---	AIRPORT 1/4 MILE
0010	474+29	RT.	538	D9-52L	36"X42"	10.50	BLACK RIVER FALLS AIRPORT (LEFT ARROW)
0010	476+58	RT.	540	R1-1	30"X30"	5.18	STOP
0010	478+92	LT.	541	D9-52R	36"X42"	10.50	BLACK RIVER FALLS AIRPORT (RIGHT ARROW)
0010	481+47	LT.	542	R1-1	30"X30"	5.18	STOP
0010	491+32	LT.	543	D9-52-A	36"X42"	10.50	BLACK RIVER FALLS
0010					---	---	AIRPORT 1/4 MILE
0010	509+85	RT.	544	R1-1	30"X30"	5.18	STOP
0010	535+77	LT.	545	R1-1	30"X30"	5.18	STOP
0010	551+56	LT.	547	R1-1	30"X30"	5.18	STOP
0010	556+48	LT.	548	R1-1	30"X30"	5.18	STOP
0010	560+09	LT.	550	R59-51	36"X36"	9.00	STOP FOR BUS FLASHING LIGHTS
0010	562+20	LT.	551	R1-1	30"X30"	5.18	STOP
TOTAL 0010						357.26	

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SIGNS TYPE II REFLECTIVE F

CATEGORY	STATION	LOCATION	REF.#	SIGN CODE	SIZE	637.2230 SF	REMARKS
0010	119+42	RT.	502	W14-3	48"X36"	6.00	NO PASSING ZONE
0010	121+40	LT.	504	W14-3	48"X36"	6.00	NO PASSING ZONE
0010	175+78	RT.	513	W14-3	48"X36"	6.00	NO PASSING ZONE
0010	197+60	LT.	517	W14-3	48"X36"	6.00	NO PASSING ZONE
0010	214+99	RT.	518	W14-3	48"X36"	6.00	NO PASSING ZONE
0010	280+82	LT.	522	W14-3	48"X36"	6.00	NO PASSING ZONE
0010	301+65	RT.	527	W14-3	48"X36"	6.00	NO PASSING ZONE
0010	557+40	RT.	549	W3-5	36"X36"	9.00	SPEED LIMIT 35 MPH AHEAD (ARROW)
TOTAL 0010						51.00	

MOVING SIGNS TYPE II

CATEGORY	EXISTING STATION	EXISTING LOCATION	REF#	NEW STATION	NEW LOCATION	638.2102 EACH	REMARKS
0010	474+29	RT.	300	476+50	RT.	1	8 TON WEIGHT LIMIT
TOTAL 0010						1	

REMOVING SIGNS TYPE II

CATEGORY	STATION	LOCATION	REF.#	638.2602 EACH	REMARKS
0010	117+48	RT.	100	1	JACKSON CO
0010	119+42	RT.	101	1	NORTH, STH 27
0010	119+42	RT.	103	1	NO PASSING ZONE
0010	119+42	LT.	104	1	STH 27
0010	121+40	LT.	105	1	NO PASSING ZONE
0010	121+50	RT.	106	1	ADOPT-A-HIGHWAY
0010	156+25	RT.	107	1	ASSEMBLY - JCT, 0, JCT, S
0010	164+30	RT.	108	1	SHAMROCK, MILLSTON - RIGHT ARROW
0010	170+39	RT.	109	1	ASSEMBLY - 0, RIGHT ARROW, S, RIGHT ARROW
0010	171+19	LT.	110	1	STOP
0010	171+21	RT.	111	1	STOP
0010	171+25	RT.	112	1	STH 27, ARROW - LEFT & RIGHT
0010	172+05	LT.	114	1	ASSEMBLY - 0, LEFT ARROW, S, LEFT ARROW
0010	175+78	RT.	115	1	NO PASSING ZONE
0010	178+43	LT.	116	1	LEFT ARROW - SHAMROCK, MILLSTON
0010	184+65	LT.	117	1	ASSEMBLY - JCT, 0, JCT, S
0010	193+21	LT.	118	1	STOP
0010	197+60	LT.	119	1	NO PASSING ZONE
SUBTOTAL =				18	

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REMOVING SIGNS TYPE II (CONTINUED)

CATEGORY	STATION	LOCATION	REF.#	638.2602 EACH	REMARKS
0010	214+99	RT.	120	1	NO PASSING ZONE
0010	227+13	LT.	121	1	STOP
0010	227+25	RT.	122	1	STOP
0010	229+50	RT.	123	1	ADOPT-A-HIGHWAY
0010	229+50	LT.	124	1	ADOPT-A-HIGHWAY
0010	265+35	RT.	125	1	HISTORICAL MARKER 1/2 MILE
0010	280+82	LT.	126	1	NO PASSING ZONE
0010	291+77	RT.	127	1	HISTORICAL MARKER - LEFT ARROW
0010	292+09	LT.	128	1	STOP
0010	292+45	RT.	129	1	STOP
0010	293+02	LT.	130	1	HISTORICAL MARKER - RIGHT ARROW
0010	301+65	RT.	131	1	NO PASSING ZONE
0010	317+96	LT.	132	1	HISTORICAL MARKER 1/2 MILE
0010	350+20	LT.	133	1	ADOPT-A-HIGHWAY
0010	351+06	RT.	134	1	ADOPT-A-HIGHWAY
0010	354+40	RT.	135	1	NORTH, STH 27
0010	354+40	LT.	137	1	SOUTH, STH 27
0010	393+46	RT.	139	1	STOP
0010	456+68	LT.	140	1	STOP
0010	459+99	RT.	141	1	ADOPT-A-HIGHWAY
0010	459+99	LT.	142	1	ADOPT-A-HIGHWAY
0010	462+55	RT.	143	1	BLACK RIVER FALLS AIRPORT 1/4 MILE
0010	474+29	RT.	144	1	LEFT ARROW - BLACK RIVER FALLS AIRPORT
0010	476+58	LT.	146	1	STOP
0010	478+92	LT.	147	1	BLACK RIVER FALLS AIRPORT - RIGHT ARROW
0010	481+47	LT.	148	1	STOP
0010	491+32	LT.	149	1	BLACK RIVER FALLS AIRPORT 1/4 MILE
0010	509+85	RT.	150	1	STOP
0010	535+77	LT.	151	1	STOP
0010	551+56	LT.	153	1	STOP
0010	556+48	LT.	154	1	STOP
0010	559+40	RT.	155	1	SPEED LIMIT 35 AHEAD
0010	560+09	LT.	156	1	STOP SCHOOL BUS FLASHING RED LIGHTS
0010	562+20	LT.	157	1	STOP
TOTAL 0010				52	

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REMOVING SMALL SIGN SUPPORTS					
CATEGORY	STATION	LOCATION	REF.#	638.3000 EACH	ASSOCIATED SIGNS
0010	117+48	RT.	800	1	100
0010	117+48	RT.	801	1	100
0010	119+42	RT.	802	1	101, 102, 103
0010	119+42	LT.	803	1	104
0010	121+40	LT.	804	1	105
0010	121+50	RT.	805	1	106
0010	156+25	RT.	806	1	107
0010	164+30	RT.	807	1	108
0010	164+30	RT.	808	1	108
0010	170+39	RT.	809	1	109
0010	171+19	LT.	810	1	110
0010	171+21	RT.	811	1	111
0010	171+25	RT.	812	1	112, 113
0010	172+05	LT.	813	1	114
0010	175+78	RT.	814	1	115
0010	178+43	LT.	815	1	116
0010	178+43	LT.	816	1	116
0010	184+65	LT.	817	1	117
0010	193+21	LT.	818	1	118
0010	197+60	LT.	819	1	119
0010	214+99	RT.	820	1	120
0010	227+13	LT.	821	1	121
0010	227+25	RT.	822	1	122
0010	229+50	RT.	823	1	123
0010	229+50	LT.	824	1	124
0010	265+35	RT.	825	1	125
0010	265+35	RT.	826	1	125
0010	280+82	LT.	827	1	126
0010	291+77	RT.	828	1	127
0010	292+09	LT.	829	1	128
0010	292+45	RT.	830	1	129
0010	293+02	LT.	831	1	130
0010	301+65	RT.	832	1	131
0010	317+96	LT.	833	1	132
0010	350+20	LT.	834	1	133
0010	351+06	RT.	835	1	134
0010	354+40	RT.	836	1	135, 136
0010	354+40	LT.	837	1	137, 138
0010	393+46	RT.	838	1	139
0010	456+68	LT.	839	1	140
0010	459+99	RT.	840	1	141
0010	459+99	LT.	841	1	142
0010	462+55	RT.	842	1	143
0010	462+55	RT.	843	1	143
0010	474+29	RT.	844	1	144, 145
SUBTOTAL =				45	

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REMOVING SMALL SIGN SUPPORTS (CONTINUED)					
CATEGORY	STATION	LOCATION	REF.#	638.3000 EACH	ASSOCIATED SIGNS
0010	474+29	RT.	845	1	144
0010	476+58	LT.	846	1	146
0010	478+92	LT.	847	1	147
0010	478+92	LT.	848	1	147
0010	481+47	LT.	849	1	148
0010	491+32	LT.	850	1	149
0010	491+32	LT.	851	1	149
0010	509+85	RT.	852	1	150
0010	535+77	LT.	853	1	151
0010	551+56	LT.	855	1	153
0010	556+48	LT.	856	1	154
0010	559+40	RT.	857	1	155
0010	560+09	LT.	858	1	156
0010	562+20	LT.	859	1	157
TOTAL 0010				59	

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FIELD OFFICE TYPE C

CATEGORY	LOCATION	642.5201 EACH	REMARKS
0010	PROJECT 7062-05-71	1	USE FOR PROJECT 7062-05-72 ALSO.
TOTAL 0010		1	

TRAFFIC CONTROL (7062-05-71)

CATEGORY	LOCATION	643.0100 EACH	REMARKS
0010	PROJECT 7062-05-71	1	
TOTAL 0010		1	

TRAFFIC CONTROL DRUMS

CATEGORY	LOCATION	643.0300 DAY	REMARKS
0010	UNDISTRIBUTED	5000	
TOTAL 0010		5000	

TRAFFIC CONTROL BARRICADES TYPE III

CATEGORY	LOCATION	643.0420 DAY	REMARKS
0010	UNDISTRIBUTED	1600	
TOTAL 0010		1600	

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TRAFFIC CONTROL WARNING LIGHTS TYPE A

CATEGORY	LOCATION	643.0705 DAY	REMARKS
0010	UNDISTRIBUTED	3100	
TOTAL 0010		3100	

TRAFFIC CONTROL SIGNS

CATEGORY	LOCATION	643.0900 DAY	REMARKS
0010	UNDISTRIBUTED	5000	
0010	UNDISTRIBUTED	300	WARN OF ROADWAY SURFACE CONDITIONS
TOTAL 0010		5300	

GEOTEXTILE FABRIC TYPE HR

CATEGORY	STATION TO	STATION	LOCATION	645.0120 SY	REMARKS
0010	183+32	- 183+39	LT.	15	
0010	183+32	- 183+39	RT.	15	
0010	237+94	- 238+02	LT.	16	
0010	341+26	- 341+33	RT.	14	
0010	409+86	- 409+94	LT.	16	
0010	409+86	- 409+94	RT.	16	
0010	439+31	- 439+42	LT.	21	
0010	439+31	- 439+42	RT.	21	
TOTAL 0010				134	

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PAVEMENT MARKING EPOXY 4-INCH

CATEGORY	STATION TO	STATION	LOCATION	646.0106 LF	REMARKS
0010	117+48	- 171+00	EDGELINE, LT.	5352	WHITE
0010	172+00	- 172+40	EDGELINE, LT.	12	WHITE (3' / 9' SKIP)
0010	172+40	- 193+00	EDGELINE, LT.	2060	WHITE
0010	193+83	- 194+55	EDGELINE, LT.	18	WHITE (3' / 9' SKIP)
0010	194+55	- 226+83	EDGELINE, LT.	3228	WHITE
0010	227+78	- 228+20	EDGELINE, LT.	12	WHITE (3' / 9' SKIP)
0010	228+20	- 291+95	EDGELINE, LT.	6375	WHITE
0010	292+93	- 294+10	EDGELINE, LT.	30	WHITE (3' / 9' SKIP)
0010	294+10	- 456+50	EDGELINE, LT.	16240	WHITE
0010	457+43	- 458+56	EDGELINE, LT.	30	WHITE (3' / 9' SKIP)
0010	458+56	- 476+42	EDGELINE, LT.	1786	WHITE
0010	477+35	- 478+47	EDGELINE, LT.	30	WHITE (3' / 9' SKIP)
0010	478+47	- 481+05	EDGELINE, LT.	258	WHITE
0010	482+32	- 535+55	EDGELINE, LT.	5323	WHITE
0010	536+40	- 537+55	EDGELINE, LT.	30	WHITE (3' / 9' SKIP)
0010	537+55	- 551+45	EDGELINE, LT.	1390	WHITE
0010	552+27	- 553+16	EDGELINE, LT.	24	WHITE (3' / 9' SKIP)
0010	553+16	- 556+33	EDGELINE, LT.	317	WHITE
0010	557+26	- 557+88	EDGELINE, LT.	18	WHITE (3' / 9' SKIP)
0010	557+88	- 562+05	EDGELINE, LT.	417	WHITE
0010	117+48	- 170+41	EDGELINE, RT.	5293	WHITE
0010	171+62	- 226+15	EDGELINE, RT.	5453	WHITE
0010	226+15	- 226+65	EDGELINE, RT.	15	WHITE (3' / 9' SKIP)
0010	227+39	- 290+60	EDGELINE, RT.	6321	WHITE
0010	290+60	- 291+80	EDGELINE, RT.	30	WHITE (3' / 9' SKIP)
0010	292+63	- 392+10	EDGELINE, RT.	9947	WHITE
0010	392+10	- 392+75	EDGELINE, RT.	18	WHITE (3' / 9' SKIP)
0010	393+63	- 508+18	EDGELINE, RT.	11455	WHITE
0010	508+18	- 509+00	EDGELINE, RT.	21	WHITE (3' / 9' SKIP)
0010	510+15	- 561+32	EDGELINE, RT.	5117	WHITE
0010	561+32	- 561+87	EDGELINE, RT.	15	WHITE (3' / 9' SKIP)
TOTAL 0010				86635	

PAVEMENT MARKING EPOXY 8-INCH

CATEGORY	STATION TO	STATION	LOCATION	646.0126 LF	REMARKS
0010	168+41	- 170+41	LANELINE, RT.	200	WHITE CHANNELIZING
0010	482+32	- 484+32	LANELINE, LT.	200	WHITE CHANNELIZING
TOTAL 0010				400	

PAVEMENT MARKING SAME DAY EPOXY 4-INCH

CATEGORY	STATION TO	STATION	LOCATION	646.0406 LF	REMARKS
0010	117+48	- 124+34	CENTERLINE, LT.	686	YELLOW
0010	117+48	- 124+34	CENTERLINE, RT.	175	YELLOW (12.5' / 37.5' SKIP)
0010	124+34	- 125+92	CENTERLINE	50	YELLOW (12.5' / 37.5' SKIP)
0010	125+92	- 137+54	CENTERLINE, LT.	300	YELLOW (12.5' / 37.5' SKIP)
0010	125+92	- 137+54	CENTERLINE, RT.	1162	YELLOW
0010	137+54	- 170+22	CENTERLINE	6536	DOUBLE YELLOW
0010	170+22	- 180+78	CENTERLINE, LT.	1056	YELLOW
0010	170+22	- 180+78	CENTERLINE, RT.	275	YELLOW (12.5' / 37.5' SKIP)
0010	180+78	- 202+90	CENTERLINE	563	YELLOW (12.5' / 37.5' SKIP)
0010	202+90	- 208+18	CENTERLINE, LT.	138	YELLOW (12.5' / 37.5' SKIP)
0010	202+90	- 208+18	CENTERLINE, RT.	528	YELLOW
0010	208+18	- 213+99	CENTERLINE	150	YELLOW (12.5' / 37.5' SKIP)
0010	213+99	- 219+27	CENTERLINE, LT.	528	YELLOW
0010	213+99	- 219+27	CENTERLINE, RT.	138	YELLOW (12.5' / 37.5' SKIP)
0010	219+27	- 285+22	CENTERLINE	1650	YELLOW (12.5' / 37.5' SKIP)
0010	285+22	- 295+20	CENTERLINE, LT.	250	YELLOW (12.5' / 37.5' SKIP)
0010	285+22	- 295+20	CENTERLINE, RT.	998	YELLOW
0010	295+20	- 296+78	CENTERLINE	50	YELLOW (12.5' / 37.5' SKIP)
0010	296+78	- 306+28	CENTERLINE, LT.	950	YELLOW
0010	296+78	- 306+28	CENTERLINE, RT.	238	YELLOW (12.5' / 37.5' SKIP)
0010	306+28	- 562+43	CENTERLINE	6413	YELLOW (12.5' / 37.5' SKIP)
TOTAL 0010				22834	

NOTE: CENTERLINE MARKINGS ARE APPROXIMATE AND "NO PASSING ZONE MARKING" SHALL BE LOCATED AND ADJUSTED AS NEEDED IN THE FIELD UNDER BID ITEM 648.0100 LOCATING NO-PASSING ZONES.

LOCATING NO-PASSING ZONES

CATEGORY	STATION TO	STATION	LOCATION	648.0100 MI	REMARKS
0010	117+48	- 562+43	STH 27	8.43	
TOTAL 0010				8.43	

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TEMPORARY PAVEMENT MARKING PAINT 4-INCH

CATEGORY	STATION TO	STATION	LOCATION	649.0402 LF	REMARKS
0010	117+48	- 124+34	CENTERLINE, LT.	1372	YELLOW
0010	117+48	- 124+34	CENTERLINE, RT.	112	YELLOW (4' / 46' SKIP)
0010	124+34	- 125+92	CENTERLINE	32	YELLOW (4' / 46' SKIP)
0010	125+92	- 137+54	CENTERLINE, LT.	192	YELLOW (4' / 46' SKIP)
0010	125+92	- 137+54	CENTERLINE, RT.	2324	YELLOW
0010	137+54	- 170+22	CENTERLINE	13072	DOUBLE YELLOW
0010	170+22	- 180+78	CENTERLINE, LT.	2112	YELLOW
0010	170+22	- 180+78	CENTERLINE, RT.	176	YELLOW (4' / 46' SKIP)
0010	180+78	- 202+90	CENTERLINE	360	YELLOW (4' / 46' SKIP)
0010	202+90	- 208+18	CENTERLINE, LT.	88	YELLOW (4' / 46' SKIP)
0010	202+90	- 208+18	CENTERLINE, RT.	1056	YELLOW
0010	208+18	- 213+99	CENTERLINE	96	YELLOW (4' / 46' SKIP)
0010	213+99	- 219+27	CENTERLINE, LT.	1056	YELLOW
0010	213+99	- 219+27	CENTERLINE, RT.	88	YELLOW (4' / 46' SKIP)
0010	219+27	- 285+22	CENTERLINE	1056	YELLOW (4' / 46' SKIP)
0010	285+22	- 295+20	CENTERLINE, LT.	160	YELLOW (4' / 46' SKIP)
0010	285+22	- 295+20	CENTERLINE, RT.	1996	YELLOW
0010	295+20	- 296+78	CENTERLINE	32	YELLOW (4' / 46' SKIP)
0010	296+78	- 306+28	CENTERLINE, LT.	1900	YELLOW
0010	296+78	- 306+28	CENTERLINE, RT.	152	YELLOW (4' / 46' SKIP)
0010	306+28	- 562+43	CENTERLINE	4104	YELLOW (4' / 46' SKIP)
TOTAL 0010				31536	

NOTE: CENTERLINE MARKINGS ARE APPROXIMATE AND "NO PASSING ZONE MARKING" SHALL BE LOCATED AND ADJUSTED AS NEEDED IN THE FIELD UNDER BID ITEM 648.0100 LOCATING NO-PASSING ZONES. THE QUANTITIES SHOWN ALLOW FOR PAINTING THESE LOCATIONS TWICE. (TWO INTERMEDIATE LAYERS)

CONSTRUCTION STAKING SUBGRADE

CATEGORY	STATION TO	STATION	LOCATION	650.4500 LF	REMARKS
0010	180+70	- 181+30	LT.	60	DRIVEWAY REMOVAL
0010	183+17	- 183+56	LT.	39	CULVERT GRADING
0010	183+17	- 183+56	RT.	39	CULVERT GRADING
0010	237+95	- 238+08	LT.	13	CULVERT GRADING
0010	341+00	- 341+60	RT.	60	CULVERT GRADING
0010	409+60	- 410+20	LT.	60	CULVERT GRADING
0010	409+60	- 410+20	RT.	60	CULVERT GRADING
0010	439+04	- 439+68	LT.	64	CULVERT GRADING
0010	439+04	- 439+68	RT.	64	CULVERT GRADING
0010	471+30	- 471+80	RT.	50	DRIVEWAY REMOVAL
0010	480+10	- 480+70	RT.	60	DRIVEWAY REMOVAL
TOTAL 0010				569	

CONSTRUCTION STAKING PIPE CULVERTS

CATEGORY	STATION	LOCATION	650.6000 EACH	REMARKS
0010	183+36	LT. & RT. STH 27	1	1-24" CPRC
TOTAL 0010			1	

CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION TO	STATION	LOCATION	650.8000 LF	REMARKS
0010	117+48	- 162+00	STH 27	4452	
0010	162+00	- 206+00	STH 27	4400	
0010	206+00	- 251+00	STH 27	4500	
0010	251+00	- 266+59	STH 27	1559	
0010	268+86	- 314+00	STH 27	4514	
0010	314+00	- 359+00	STH 27	4500	
0010	359+00	- 404+00	STH 27	4500	
0010	404+00	- 449+00	STH 27	4500	
0010	449+00	- 494+00	STH 27	4500	
0010	494+00	- 539+00	STH 27	4500	
0010	539+00	- 562+43	STH 27	2343	
TOTAL 0010				44268	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (7062-05-71)

CATEGORY	LOCATION	650.9910 LS	REMARKS
0010	PROJECT 7062-05-71	1	
TOTAL 0010		1	

CONSTRUCTION STAKING SLOPE STAKES

CATEGORY	STATION TO	STATION	LOCATION	650.9920 LF	REMARKS
0010	180+70	- 181+30	LT.	60	DRIVEWAY REMOVAL
0010	183+17	- 183+56	LT.	39	CULVERT GRADING
0010	183+17	- 183+56	RT.	39	CULVERT GRADING
0010	237+95	- 238+08	LT.	13	CULVERT GRADING
0010	341+00	- 341+60	RT.	60	CULVERT GRADING
0010	409+60	- 410+20	LT.	60	CULVERT GRADING
0010	409+60	- 410+20	RT.	60	CULVERT GRADING
0010	439+04	- 439+68	LT.	64	CULVERT GRADING
0010	439+04	- 439+68	RT.	64	CULVERT GRADING
0010	471+30	- 471+80	RT.	50	DRIVEWAY REMOVAL
0010	480+10	- 480+70	RT.	60	DRIVEWAY REMOVAL
TOTAL 0010				569	

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SAWING ASPHALT					
CATEGORY	STATION TO	STATION	LOCATION	690.0150 LF	REMARKS
0010	117+48	- 117+48	LT. & RT.	40	STH 27
0010	170+75	- 171+03	RT.	29	CTH 'O'
0010	171+44	- 171+64	LT.	22	MURPHY RD.
0010	183+17	- 183+17	LT. & RT.	41	STH 27
0010	183+56	- 183+56	LT. & RT.	42	STH 27
0010	193+30	- 193+52	LT.	22	ZILLMER RD.
0010	226+80	- 226+97	RT.	18	MILLS RD.
0010	227+37	- 227+55	LT.	19	FALL HALL RD.
0010	292+03	- 292+31	RT.	29	PAQUETTE RD.
0010	292+18	- 292+43	LT.	25	FALL HALL RD.
0010	393+17	- 393+39	RT.	22	OAK RIDGE RD.
0010	456+78	- 456+99	LT.	20	HAWK ISLAND RD.
0010	476+70	- 476+96	LT.	25	LUNDA RD.
0010	481+62	- 481+93	LT.	32	PERRY CREEK RD.
0010	509+57	- 509+78	RT.	21	CRANBERRY DR.
0010	535+87	- 536+07	LT.	20	CLINTON RD.
0010	551+65	- 551+88	LT.	23	PAMELA ST.
0010	556+62	- 556+89	LT.	27	SCOTT ST.
0010	562+29	- 562+43	LT.	14	W. 7TH ST.
0010	562+35	- 562+43	RT.	8	E. 7TH ST.
0010	312+72	- 312+84	LT.	12	DRIVEWAY
0010	479+52	- 479+72	RT.	20	DRIVEWAY
0010	509+70	- 509+85	LT.	15	DRIVEWAY
0010	520+61	- 520+81	LT.	20	DRIVEWAY
0010	554+84	- 555+00	LT.	17	DRIVEWAY
TOTAL 0010				583	

SAWING CONCRETE					
CATEGORY	STATION TO	STATION	LOCATION	690.0250 LF	REMARKS
0010	515+97	- 516+08	LT.	12	DRIVEWAY
TOTAL 0010				12	

SPECIAL(01. BASE REPAIR FOR CIR PAVEMENT)					
CATEGORY	LOCATION	SPV.0035.01 CY	REMARKS		
0010	UNDISTRIBUTED	250			
TOTAL 0010		250			

SPECIAL(01. PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL (7062-05-71))				
CATEGORY	LOCATION	SPV.0105.01 LS	REMARKS	
0010	PROJECT 7062-05-71	1		
TOTAL 0010		1		

SPECIAL(02. MATERIAL TRANSFER VEHICLE (7062-05-71))				
CATEGORY	LOCATION	SPV.0105.02 LS	REMARKS	
0010	PROJECT 7062-05-71	1		
TOTAL 0010		1		

SPECIAL(03. MILLING AND REMOVING TEMPORARY JOINT (7062-05-71))				
CATEGORY	LOCATION	SPV.0105.03 LS	REMARKS	
0010	PROJECT 7062-05-71	1		
TOTAL 0010		1		

SPECIAL(07. PREPARE FOUNDATION FOR CIR PAVEMENT 7062-05-71)				
CATEGORY	LOCATION	SPV.0105.07 LS	REMARKS	
0010	PROJECT 7062-05-71	1		
TOTAL 0010		1		

SPECIAL(08. PREPARE FOUNDATION FOR HMA UPPER LAYER 7062-05-71)				
CATEGORY	LOCATION	SPV.0105.08 LS	REMARKS	
0010	PROJECT 7062-05-71	1		
TOTAL 0010		1		

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SPECIAL(01. REHEATING HMA LONGITUDINAL JOINTS SPECIAL)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0170.01 STA	REMARKS
0010	117+48	- 162+00	CENTERLINE JOINT	45	UPPER LAYER ONLY
0010	162+00	- 206+00	CENTERLINE JOINT	44	UPPER LAYER ONLY
0010	206+00	- 251+00	CENTERLINE JOINT	45	UPPER LAYER ONLY
0010	251+00	- 266+86	CENTERLINE JOINT	16	UPPER LAYER ONLY
0010	268+59	- 314+00	CENTERLINE JOINT	46	UPPER LAYER ONLY
0010	314+00	- 359+00	CENTERLINE JOINT	45	UPPER LAYER ONLY
0010	359+00	- 404+00	CENTERLINE JOINT	45	UPPER LAYER ONLY
0010	404+00	- 449+00	CENTERLINE JOINT	45	UPPER LAYER ONLY
0010	449+00	- 494+00	CENTERLINE JOINT	45	UPPER LAYER ONLY
0010	494+00	- 539+00	CENTERLINE JOINT	45	UPPER LAYER ONLY
0010	539+00	- 562+43	CENTERLINE JOINT	24	UPPER LAYER ONLY
TOTAL 0010				445	

SPECIAL(01. CONCRETE DRIVEWAY CURE AND SEAL TREATMENT)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0180.01 SY	REMARKS
0010	515+95	- 516+10	LT.	7	
TOTAL 0010				7	

SPECIAL(02. COLD-IN-PLACE RECYCLING (CIR) PAVEMENT PARTIAL DEPTH)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0180.02 SY	REMARKS
0010	117+48	- 162+00	LT. & RT.	14840	
0010	162+00	- 206+00	LT. & RT.	14667	
0010	206+00	- 251+00	LT. & RT.	15000	
0010	251+00	- 266+86	LT. & RT.	5287	
0010	268+59	- 314+00	LT. & RT.	15137	
0010	314+00	- 359+00	LT. & RT.	15000	
0010	359+00	- 404+00	LT. & RT.	15000	
0010	404+00	- 449+00	LT. & RT.	15000	
0010	449+00	- 494+00	LT. & RT.	15000	
0010	494+00	- 539+00	LT. & RT.	15000	
0010	539+00	- 547+00	LT. & RT.	2667	
TOTAL 0010				142598	

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SPECIAL(01. HMA PAVEMENT TYPE E-3 SPECIAL)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0195.01 TON	REMARKS
0010	117+48	- 162+00	LT. & RT.	1683	
0010	162+00	- 206+00	LT. & RT.	1815	
0010	206+00	- 251+00	LT. & RT.	1749	
0010	251+00	- 266+86	LT. & RT.	622	
0010	268+59	- 314+00	LT. & RT.	1838	
0010	314+00	- 359+00	LT. & RT.	1704	
0010	359+00	- 404+00	LT. & RT.	1713	
0010	404+00	- 449+00	LT. & RT.	1680	
0010	449+00	- 494+00	LT. & RT.	1847	
0010	494+00	- 539+00	LT. & RT.	1764	
0010	539+00	- 547+00	LT. & RT.	299	
0010	547+00	- 551+80	LT. & RT.	345	
0010	551+80	- 562+43	LT. & RT.	852	
TOTAL 0010				17911	

SPECIAL(02. ASPHALT STABILIZING AGENT)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0195.02 TON	REMARKS
0010	117+48	- 162+00	LT. & RT.	84	
0010	162+00	- 206+00	LT. & RT.	83	
0010	206+00	- 251+00	LT. & RT.	84	
0010	251+00	- 266+86	LT. & RT.	30	
0010	268+59	- 314+00	LT. & RT.	85	
0010	314+00	- 359+00	LT. & RT.	84	
0010	359+00	- 404+00	LT. & RT.	84	
0010	404+00	- 449+00	LT. & RT.	84	
0010	449+00	- 494+00	LT. & RT.	84	
0010	494+00	- 539+00	LT. & RT.	84	
0010	539+00	- 547+00	LT. & RT.	15	
TOTAL 0010				801	

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REMOVING PAVEMENT					
CATEGORY	STATION TO	STATION	LOCATION	204.0100 SY	REMARKS
0010	573+43	- 573+57	RT.	12	DRIVEWAY
0010	584+33	- 584+50	RT.	13	DRIVEWAY
TOTAL 0010				25	

REMOVING ASPHALTIC SURFACE					
CATEGORY	STATION TO	STATION	LOCATION	204.0110 SY	REMARKS
0010	568+00	- 568+31	LT.	28	DRIVEWAY
0010	568+91	- 569+39	LT.	49	DRIVEWAY
0010	570+70	- 571+49	LT.	85	DRIVEWAY
0010	573+61	- 574+00	LT.	17	DRIVEWAY
0010	574+12	- 574+31	LT.	14	DRIVEWAY
0010	580+67	- 581+04	RT.	72	DRIVEWAY
0010	582+14	- 582+50	LT.	15	DRIVEWAY
0010	583+22	- 583+47	LT.	10	DRIVEWAY
0010	584+95	- 585+07	RT.	12	DRIVEWAY
0010	586+70	- 587+06	LT.	19	DRIVEWAY
0010	590+37	- 590+75	LT.	18	DRIVEWAY
0010	590+89	- 591+25	LT.	18	DRIVEWAY
0010	591+05	- 591+17	RT.	8	DRIVEWAY
0010	591+68	- 591+85	RT.	10	DRIVEWAY
0010	592+17	- 592+32	RT.	9	DRIVEWAY
0010	592+76	- 593+00	RT.	14	DRIVEWAY
0010	592+84	- 593+02	LT.	9	DRIVEWAY
0010	593+59	- 593+79	RT.	12	DRIVEWAY
0010	579+39	- 579+58	LT.	8	SIDEWALK
0010	574+93	- 575+00	LT.	3	SIDEWALK
0010	575+23	- 575+31	LT.	4	SIDEWALK
0010	577+90	- 578+00	LT.	4	SIDEWALK
0010	578+24	- 578+32	RT.	3	SIDEWALK
0010	581+64	- 581+68	RT.	2	SIDEWALK
0010	584+52	- 584+60	RT.	3	SIDEWALK
0010	584+84	- 584+92	RT.	3	SIDEWALK
0010	588+93	- 589+00	LT.	3	SIDEWALK
TOTAL 0010				452	

REMOVING ASPHALTIC SURFACE BUTT JOINTS					
CATEGORY	STATION TO	STATION	LOCATION	204.0115 SY	REMARKS
0010	562+43	- 562+58	LT.	25	W. 7TH ST.
0010	562+43	- 562+57	RT.	28	E. 7TH ST.
0010	574+66	- 574+92	RT.	46	E. SIXTH ST.
0010	575+02	- 575+21	LT.	37	W. 6TH ST.
0010	578+01	- 578+23	LT.	41	W. 5TH ST.
0010	581+74	- 582+06	LT.	68	MAPLEWOOD CT.
0010	582+37	- 582+63	RT.	54	E. 4TH ST.
0010	584+60	- 584+84	LT.	51	W. 4TH ST.
0010	588+90	- 589+16	RT.	51	E. THIRD ST.
0010	589+00	- 589+27	LT.	51	W. THIRD ST.
0010	591+69	- 591+96	LT.	54	W. 2ND ST.
0010	593+39	- 593+79	LT. & RT.	176	STH 27
TOTAL 0010				682	

REMOVING ASPHALTIC SURFACE MILLING					
CATEGORY	STATION TO	STATION	LOCATION	204.0120 SY	REMARKS
0010	562+43	- 568+00	LT. & RT.	2559	
0010	568+00	- 573+00	LT. & RT.	2168	
0010	573+00	- 578+00	LT. & RT.	2293	
0010	578+00	- 583+00	LT. & RT.	2362	
0010	583+00	- 588+00	LT. & RT.	2228	
0010	588+00	- 593+39	LT. & RT.	2517	
TOTAL 0010				14127	

REMOVING CURB & GUTTER					
CATEGORY	STATION TO	STATION	LOCATION	204.0150 LF	REMARKS
0010	567+89	- 568+36	LT.	47	
0010	568+87	- 569+34	LT.	47	
0010	569+42	- 569+76	LT.	34	
0010	570+45	- 570+68	LT.	23	
0010	579+27	- 579+55	RT.	28	
0010	579+39	- 579+58	LT.	19	
0010	580+64	- 581+08	RT.	44	
TOTAL 0010				242	

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REMOVING CONCRETE SIDEWALK

CATEGORY	STATION TO	STATION	LOCATION	204.0155 SY	REMARKS
0010	579+35	- 579+47	RT.	15	
0010	574+63	- 574+70	RT.	3	
0010	574+89	- 574+95	RT.	4	
0010	581+68	- 581+72	LT.	3	
0010	582+07	- 582+16	LT.	5	
0010	582+32	- 582+38	RT.	4	
0010	582+63	- 582+69	RT.	4	
0010	588+86	- 588+92	RT.	4	
0010	589+15	- 589+21	RT.	4	
0010	589+28	- 589+37	LT.	5	
0010	591+57	- 591+68	LT.	6	
0010	591+96	- 592+04	LT.	4	
TOTAL 0010				61	

FINISHING ROADWAY (7062-05-72)

CATEGORY	LOCATION	213.0100 EACH	REMARKS
0010	PROJECT 7062-05-72	1	
TOTAL 0010		1	

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	LOCATION	305.0110 TON	REMARKS
0010	UNDISTRIBUTED	24	DRIVEWAYS - IF APPROVED BY ENGINEER
0010	UNDISTRIBUTED	10	CURB RAMPS/SIDEWALK - IF APPROVED BY ENGINEER
TOTAL 0010		34	

SHAPING SHOULDERS

CATEGORY	STATION TO	STATION	LOCATION	305.0500 STA	REMARKS
0010	562+43	- 567+84	LT.	6	
0010	562+43	- 572+80	RT.	11	
TOTAL 0010				17	

CONCRETE DRIVEWAY 6-INCH

CATEGORY	STATION TO	STATION	LOCATION	416.0160 SY	REMARKS
0010	573+43	- 573+57	RT.	12	
0010	584+33	- 584+50	RT.	13	
TOTAL 0010				25	

TACK COAT

CATEGORY	STATION TO	STATION	LOCATION	455.0605 GAL	REMARKS
0010	562+43	- 568+00	LT. & RT.	270	
0010	568+00	- 573+00	LT. & RT.	220	
0010	573+00	- 578+00	LT. & RT.	249	
0010	578+00	- 583+00	LT. & RT.	268	
0010	583+00	- 588+00	LT. & RT.	234	
0010	588+00	- 593+39	LT. & RT.	302	
TOTAL 0010				1543	

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ASPHALTIC SURFACE

		465.0105		
CATEGORY	LOCATION	TON	REMARKS	
0010	UNDISTRIBUTED	200	FOR PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL	
0010	UNDISTRIBUTED	350	FOR LEVELING AND WEDGING	
TOTAL 0010		550		

ASPHALTIC SURFACE PATCHING

		465.0110		
CATEGORY	LOCATION	TON	REMARKS	
0010	UNDISTRIBUTED	50	FOR MINOR REPAIRS, POP-OUTS, AND RAMPING	
TOTAL 0010		50		

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

		465.0120		
CATEGORY	STATION TO STATION	LOCATION	TON	REMARKS
0010	568+00 - 568+31	LT.	4.8	DRIVEWAY
0010	568+91 - 569+39	LT.	8.4	DRIVEWAY
0010	570+70 - 571+49	LT.	14.5	DRIVEWAY
0010	573+61 - 574+00	LT.	2.9	DRIVEWAY
0010	574+12 - 574+31	LT.	2.4	DRIVEWAY
0010	580+67 - 581+04	RT.	12.3	DRIVEWAY
0010	582+14 - 582+50	LT.	2.7	DRIVEWAY
0010	583+22 - 583+47	LT.	1.7	DRIVEWAY
0010	584+95 - 585+07	RT.	2.1	DRIVEWAY
0010	586+70 - 587+06	LT.	3.2	DRIVEWAY
0010	590+37 - 590+75	LT.	3.1	DRIVEWAY
0010	590+89 - 591+25	LT.	3.1	DRIVEWAY
0010	591+05 - 591+17	RT.	1.4	DRIVEWAY
0010	591+68 - 591+85	RT.	1.7	DRIVEWAY
0010	592+17 - 592+32	RT.	1.6	DRIVEWAY
0010	592+76 - 593+00	RT.	2.4	DRIVEWAY
0010	592+84 - 593+02	LT.	1.6	DRIVEWAY
0010	593+59 - 593+79	RT.	2.1	DRIVEWAY
TOTAL 0010			72.0	

CONCRETE CURB & GUTTER 30-INCH TYPE D

		601.0411		
CATEGORY	STATION TO STATION	LOCATION	LF	REMARKS
0010	567+89 - 568+36	LT.	47	
0010	568+87 - 569+34	LT.	47	
0010	569+42 - 569+76	LT.	34	
0010	570+45 - 570+68	LT.	23	
0010	579+27 - 579+55	RT.	28	
0010	579+39 - 579+58	LT.	19	
0010	580+64 - 581+08	RT.	44	
TOTAL 0010			242	

CONCRETE CURB PEDESTRIAN

		601.0600		
CATEGORY	STATION TO STATION	LOCATION	LF	REMARKS
0010	579+39 - 579+58	LT.	19	
TOTAL 0010			19	

CONCRETE SIDEWALK 5-INCH

CATEGORY	STATION TO	STATION	LOCATION	602.0410 SF	REMARKS
0010	579+35 -	579+47	RT.	128	
0010	579+39 -	579+58	LT.	157	
0010	574+63 -	574+70	RT.	39	
0010	574+89 -	574+96	RT.	38	
0010	574+93 -	575+01	LT.	38	
0010	575+23 -	575+31	LT.	38	
0010	577+90 -	578+01	LT.	46	
0010	578+23 -	578+32	LT.	41	
0010	581+64 -	581+73	LT.	44	
0010	582+07 -	582+16	LT.	51	
0010	582+32 -	582+38	RT.	42	
0010	582+62 -	582+69	RT.	40	
0010	584+52 -	584+61	LT.	41	
0010	584+84 -	584+92	LT.	41	
0010	588+86 -	588+92	RT.	41	
0010	589+15 -	589+21	RT.	50	
0010	588+93 -	589+01	LT.	38	
0010	589+27 -	589+37	LT.	52	
0010	591+57 -	591+69	LT.	61	
0010	591+95 -	592+05	LT.	45	
TOTAL 0010				1071	

CURB RAMP DETECTABLE WARNING FIELD YELLOW

CATEGORY	STATION	LOCATION	602.0505 SF	REMARKS
0010	579+41	RT.	10	
0010	579+49	LT.	10	
0010	574+69	RT.	8	
0010	574+90	RT.	8	
0010	574+98	LT.	8	
0010	575+26	LT.	8	
0010	577+96	LT.	8	
0010	578+27	LT.	8	
0010	581+70	LT.	8	
0010	582+09	LT.	8	
0010	582+37	RT.	8	
0010	582+64	RT.	8	
0010	584+58	LT.	8	
0010	584+87	LT.	8	
0010	588+91	RT.	8	
0010	589+16	RT.	8	
0010	588+99	LT.	8	
0010	589+31	LT.	8	
0010	591+65	LT.	8	
0010	591+99	LT.	8	
TOTAL 0010			164	

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH	REMARKS
0010	PROJECT 7062-05-72	0.07	
TOTAL 0010		0.07	

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FINISHING ITEMS

CATEGORY	STATION TO	STATION	LOCATION	SALVAGED	MULCHING	FERTILIZER	SEEDING	REMARKS
				TOPSOIL		TYPE B	MIXTURE	
				625.0500	627.0200	629.0210	630.0140	
				SY	SY	CWT	LB	
0010	574+61	- 574+70	RT.	3	3	0.010	0.05	
0010	574+89	- 574+97	RT.	2	2	0.010	0.04	
0010	574+91	- 575+02	LT.	3	3	0.010	0.05	
0010	575+22	- 575+33	LT.	3	3	0.010	0.05	
0010	577+88	- 578+01	LT.	3	3	0.010	0.05	
0010	578+21	- 578+35	LT.	4	4	0.010	0.07	
0010	579+27	- 579+55	RT.	9	9	0.010	0.16	
0010	579+32	- 579+65	LT.	7	7	0.010	0.13	
0010	581+62	- 581+73	LT.	3	3	0.010	0.05	
0010	582+06	- 582+18	LT.	4	4	0.010	0.07	
0010	582+29	- 582+38	RT.	3	3	0.010	0.05	
0010	582+62	- 582+71	RT.	3	3	0.010	0.05	
0010	584+49	- 584+61	LT.	4	4	0.010	0.07	
0010	584+83	- 584+95	LT.	4	4	0.010	0.07	
0010	588+82	- 588+92	RT.	3	3	0.010	0.05	
0010	589+15	- 589+24	RT.	3	3	0.010	0.05	
0010	588+90	- 589+01	LT.	3	3	0.010	0.05	
0010	589+26	- 589+40	LT.	4	4	0.010	0.07	
0010	591+53	- 591+69	LT.	5	5	0.010	0.09	
0010	591+94	- 592+07	LT.	4	4	0.010	0.07	
TOTAL 0010				77	77	0.210	1.34	

SILT FENCE

CATEGORY	LOCATION	628.1504	REMARKS
		LF	
0010	UNDISTRIBUTED	100	
TOTAL 0010		100	

SILT FENCE MAINTENANCE

CATEGORY	LOCATION	628.1520	REMARKS
		LF	
0010	UNDISTRIBUTED	100	
TOTAL 0010		100	

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MOBILIZATIONS EROSION CONTROL

CATEGORY	LOCATION	628.1905 EACH	REMARKS
0010	PROJECT 7062-05-72	3	
TOTAL 0010		3	

MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	LOCATION	628.1910 EACH	REMARKS
0010	PROJECT 7062-05-72	3	
TOTAL 0010		3	

INLET PROTECTION TYPE C

CATEGORY	STATION	LOCATION	628.7015 EACH	REMARKS
0010	582+08	LT.	1	
0010	582+26	RT.	1	
0010	584+32	LT.	1	
0010	589+45	LT.	1	
0010	589+43	RT.	1	
TOTAL 0010			5	

POSTS WOOD 4X6

CATEGORY	SIGN #	14-FT 634.0614 EACH	16-FT 634.0616 EACH	18-FT 634.0618 EACH	20-FT 634.062 EACH	REMARKS
0010	552	---	1	---	---	
0010	553	---	1	---	---	
0010	554	---	1	---	---	
0010	555	---	1	---	---	
0010	556	---	1	1	---	
0010	557	---	1	---	---	
0010	558	---	1	---	---	
0010	559	---	1	---	---	
0010	560	---	1	---	---	
0010	561	1	---	---	---	
0010	562	---	---	1	---	
0010	563, 564	---	---	1	---	
0010	565, 566, 567	---	---	1	---	
0010	568	1	---	---	---	
0010	569	1	---	---	---	
0010	570	---	1	---	---	
0010	571	---	1	---	---	
0010	572	---	1	---	---	
0010	573	1	---	---	---	
0010	574	---	1	---	---	
0010	575	1	---	---	---	
0010	576	---	1	---	---	
0010	577, 578	---	1	---	---	
0010	579, 580	---	1	---	---	
0010	581	1	---	---	---	
0010	582	1	---	---	---	
0010	584	---	1	---	---	
0010	585	---	1	---	---	
0010	586	1	---	---	---	
0010	586B	1	---	---	---	
0010	587	---	1	---	---	
0010	588	---	1	---	---	
0010	590	---	1	---	---	
0010	591	---	1	---	---	
0010	591B, 591C	---	---	1	---	
0010	592	1	---	---	---	
0010	593	1	---	---	---	
0010	594, 595, 596	---	---	1	---	
0010	597	---	1	---	---	
0010	598, 599	---	1	---	---	
0010	600	---	1	---	---	
0010	601	---	1	---	---	
0010	602	1	---	---	---	
0010	603	1	---	---	---	
0010	604	---	1	---	---	
0010	605	---	1	---	---	
0010	606	---	1	---	---	
0010	607	1	---	---	---	
0010	608	1	---	---	---	
0010	609	---	---	---	2	
0010	610	1	---	---	---	
0010	611	1	---	---	---	
TOTAL 0010		17	29	6	2	

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SIGNS TYPE II REFLECTIVE H

CATEGORY	STATION	LOCATION	REF.#	SIGN CODE	SIZE	637.2210 SF	REMARKS
0010	562+60	RT.	552	R1-1	30"X30"	5.18	STOP
0010	563+20	RT.	553	R7-1-L	18"X24"	3.00	NO PARKING ANY TIME - LEFT ARROW
0010	563+20	LT.	554	R7-1-R	18"X24"	3.00	NO PARKING ANY TIME - RIGHT ARROW
0010	563+73	RT.	555	R2-1	24"X30"	5.00	SPEED LIMIT 35 MPH
0010	563+73	RT.	556	I-2-3	60"X24"	10.00	BROCKWAY, UNINCORPORATED
0010	563+73	LT.	557	R2-1	24"X30"	5.00	SPEED LIMIT 55 MPH
0010	566+37	RT.	558	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	566+37	LT.	559	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	570+06	RT.	560	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	570+06	LT.	561	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	571+83	LT.	563	R2-1	24"X30"	5.00	SPEED LIMIT 35 MPH
0010	572+75	RT.	567	R2-6P	24"X18"	3.00	FINES HIGHER
0010	573+06	RT.	568	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	573+06	LT.	569	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	574+98	RT.	570	R1-1	30"X30"	5.18	STOP
0010	575+00	LT.	572	R1-1	30"X30"	5.18	STOP
0010	576+50	LT.	573	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	576+64	RT.	574	R1-1	30"X30"	5.18	STOP
0010	576+67	RT.	575	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	577+99	LT.	576	R1-1	30"X30"	5.18	STOP
0010	580+10	RT.	581	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	580+21	LT.	582	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	581+70	LT.	584	R1-1	30"X30"	5.18	STOP
0010	582+71	RT.	585	R1-1	30"X30"	5.18	STOP
0010	583+10	RT.	586	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	583+10	LT.	586B	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	583+95	LT.	587	J4-1	24"X36"	6.00	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)
0010				M3-3	---	---	SOUTH CARDINAL ROUTE MARKER
0010				M1-6	---	---	STATE ROUTE MARKER, 27
0010	583+95	RT.	588	J4-1	24"X36"	6.00	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)
0010				M3-1	---	---	NORTH CARDINAL ROUTE MARKER
0010				M1-6	---	---	STATE ROUTE MARKER, 27
0010	584+59	LT.	590	R1-1	30"X30"	5.18	STOP
0010	585+40	RT.	591B	R2-1	24"X30"	5.00	SPEED LIMIT 35 MPH
0010	586+40	RT.	592	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	586+45	LT.	593	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	587+14	LT.	596	R2-6P	24"X18"	3.00	FINES HIGHER
0010	588+96	LT.	599	D2-2	72"X24"	12.00	CATARACT 15, SPARTA 26
0010	588+96	LT.	600	R1-1	30"X30"	5.18	STOP
0010	589+23	RT.	601	R1-1	30"X30"	5.18	STOP
0010	589+93	LT.	602	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	590+00	RT.	603	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	590+77	LT.	604	R2-1	24"X30"	5.00	SPEED LIMIT 35 MPH
0010	591+65	RT.	605	J1-1	24"X39"	6.50	JUNCTION ASSEMBLY (1 HEADED ROUTE PANEL)
0010				M2-1	---	---	JUNCTION MARKER
0010				M1-4	---	---	US ROUTE MARKER, 12
SUBTOTAL =						177.30	

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SIGNS TYPE II REFLECTIVE H (CONTINUED)

CATEGORY	STATION	LOCATION	REF.#	SIGN CODE	SIZE	637.2210 SF	REMARKS
0010	591+66	LT.	606	R1-1	30"X30"	5.18	STOP
0010	592+10	LT.	607	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	592+12	RT.	608	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	592+72	RT.	609	J2-3	108"X84"	63.00	ROUTE TURN ASSEMBLY (3 HEADED ROUTE PANEL)
0010				M3-4	---	---	WEST CARDINAL ROUTE MARKER
0010				M1-4	---	---	US ROUTE MARKER, 12
0010				M6-1	---	---	ARROW AHEAD
0010				M3-1	---	---	NORTH CARDINAL ROUTE MARKER
0010				M1-6	---	---	STATE ROUTE MARKER, 27
0010				M6-1	---	---	ARROW AHEAD
0010				M3-2	---	---	EAST CARDINAL ROUTE MARKER
0010				M1-4	---	---	US ROUTE MARKER, 12
0010				M5-1R	---	---	ADVANCE ARROW RIGHT TURN
0010	593+20	LT.	610	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
0010	593+25	RT.	611	R7-1-D	18"X24"	3.00	NO PARKING ANY TIME - DOUBLE ARROW
TOTAL 0010						257.48	

SIGNS TYPE II REFLECTIVE F

CATEGORY	STATION	LOCATION	REF.#	SIGN CODE	SIZE	637.2230 SF	REMARKS
0010	570+59	RT.	562	S4-5	36"X36"	9.00	SCHOOL SPEED LIMIT 20 MPH AHEAD - ARROW
0010	571+83	LT.	564	S5-2	24"X30"	5.00	END SCHOOL ZONE
0010	572+75	RT.	565	S1-1	36"X36"	6.75	SCHOOL ADVANCE
0010	572+75	RT.	566	S16-9P	30"X18"	3.75	AHEAD
0010	575+00	RT.	571	S4-51	24"X48"	8.00	SCHOOL SPEED LIMIT 20 MPH
0010	579+32	RT.	577	S1-1	36"X36"	6.75	SCHOOL ADVANCE
0010	579+32	RT.	578	S16-7L	30"X18"	3.75	LEFT DIAGONAL DOWNWARD POINTING ARROW
0010	579+49	LT.	579	S1-1	36"X36"	6.75	SCHOOL ADVANCE
0010	579+49	LT.	580	S16-7L	30"X18"	3.75	LEFT DIAGONAL DOWNWARD POINTING ARROW
0010	585+00	LT.	591	S4-51	24"X48"	8.00	SCHOOL SPEED LIMIT 20 MPH
0010	585+40	RT.	591C	S5-2	24"X30"	5.00	END SCHOOL ZONE
0010	587+14	LT.	594	S1-1	36"X36"	6.75	SCHOOL ADVANCE
0010	587+14	LT.	595	S16-9P	30"X18"	3.75	AHEAD
0010	588+70	LT.	597	S4-5	36"X36"	9.00	SCHOOL SPEED LIMIT 20 MPH AHEAD - ARROW
0010	588+96	LT.	598	W14-3	48"X36"	6.00	NO PASSING ZONE
TOTAL 0010						92.00	

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REMOVING SIGNS TYPE II

CATEGORY	STATION	LOCATION	REF.#	638.2602 EACH	REMARKS
0010	562+60	RT.	158	1	STOP
0010	563+20	RT.	159	1	NO PARKING ANY TIME LEFT ARROW
0010	563+20	LT.	160	1	NO PARKING ANY TIME RIGHT ARROW
0010	563+73	RT.	161	1	SPEED LIMIT 35 MPH
0010	563+73	RT.	162	1	BROCKWAY UNICORPORATED
0010	563+73	LT.	163	1	SPEED LIMIT 55 MPH
0010	566+37	RT.	164	1	NO PARKING ANY TIME DOUBLE ARROW
0010	566+37	LT.	165	1	NO PARKING ANY TIME DOUBLE ARROW
0010	570+06	RT.	166	1	NO PARKING ANY TIME DOUBLE ARROW
0010	570+06	LT.	167	1	NO PARKING ANY TIME DOUBLE ARROW
0010	570+59	RT.	168	1	SCHOOL SPEED LIMIT 20 MPH AHEAD
0010	571+83	LT.	169	1	SPEED LIMIT 35 MPH, END SCHOOL ZONE
0010	572+75	RT.	171	1	SCHOOL ADVANCE, AHEAD, FINES HIGHER
0010	573+06	RT.	174	1	NO PARKING ANY TIME DOUBLE ARROW
0010	573+06	LT.	175	1	NO PARKING ANY TIME DOUBLE ARROW
0010	574+98	RT.	176	1	STOP
0010	575+00	RT.	177	1	SCHOOL SPEED LIMIT 20 MPH
0010	575+00	LT.	178	1	STOP
0010	576+50	LT.	179	1	NO PARKING ANY TIME DOUBLE ARROW
0010	576+64	RT.	180	1	STOP
0010	576+67	RT.	181	1	NO PARKING ANY TIME DOUBLE ARROW
0010	577+99	LT.	182	1	STOP
0010	579+32	RT.	183	1	SCHOOL ADVANCE, LEFT DIAGONAL DOWNWARD POINTING ARROW
0010	579+49	LT.	185	1	SCHOOL ADVANCE, LEFT DIAGONAL DOWNWARD POINTING ARROW
0010	580+10	RT.	187	1	NO PARKING ANY TIME DOUBLE ARROW
0010	580+21	LT.	188	1	NO PARKING ANY TIME DOUBLE ARROW
0010	581+09	RT.	189	1	SPEED LIMIT 35 MPH
0010	581+70	LT.	190	1	STOP
0010	582+71	RT.	191	1	STOP
0010	583+10	RT.	192	1	NO PARKING ANY TIME DOUBLE ARROW
0010	583+10	LT.	193	1	SOUTH, STH 27, NO PARKING ANYTIME DOUBLE ARROW
0010	583+95	RT.	196	1	NORTH, STH 27, END SCHOOL ZONE
0010	584+59	LT.	199	1	STOP
0010	585+00	LT.	200	1	SCHOOL SPEED LIMIT 20 MPH
0010	586+40	RT.	201	1	NO PARKING ANY TIME DOUBLE ARROW
0010	586+45	LT.	202	1	NO PARKING ANY TIME DOUBLE ARROW
0010	587+14	LT.	203	1	SCHOOL ADVANCE, AHEAD, FINES HIGHER
0010	588+70	LT.	206	1	SCHOOL SPEED LIMIT 20 MPH AHEAD
0010	588+96	LT.	207	1	NO PASSING ZONE
0010	588+96	LT.	208	1	CATARACT 15, SPARTA 26
0010	588+96	LT.	209	1	STOP
0010	589+23	RT.	210	1	STOP
0010	589+93	LT.	211	1	NO PARKING ANY TIME DOUBLE ARROW
0010	590+00	RT.	212	1	NO PARKING ANY TIME DOUBLE ARROW
SUBTOTAL =				44	

REMOVING SIGNS TYPE II (CONTINUED)

CATEGORY	STATION	LOCATION	REF.#	638.2602 EACH	REMARKS
0010	590+77	LT.	213	1	SPEED LIMIT 35 MPH
0010	591+65	RT.	214	1	ASSEMBLY - JCT, 12
0010	591+66	LT.	215	1	STOP
0010	592+10	LT.	216	1	NO PARKING ANY TIME DOUBLE ARROW
0010	592+12	RT.	217	1	NO PARKING ANY TIME DOUBLE ARROW
0010	592+72	RT.	218	1	ASSEMBLY - WEST, 12, UP ARROW, NORTH, 27, UP ARROW, EAST, 12, ADVANCE ARROW RIGHT TURN
0010	593+20	LT.	219	1	NO PARKING ANY TIME DOUBLE ARROW
0010	593+25	RT.	220	1	NO PARKING ANY TIME DOUBLE ARROW
TOTAL 0010				52	

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REMOVING SMALL SIGN SUPPORTS

CATEGORY	STATION	LOCATION	REF.#	638.3000 EACH	ASSOCIATED SIGNS
0010	562+60	RT.	860	1	158
0010	563+20	RT.	861	1	159
0010	563+20	LT.	862	1	160
0010	563+73	RT.	863	1	161
0010	563+73	RT.	864	1	162
0010	563+73	LT.	865	1	163
0010	566+37	RT.	866	1	164
0010	566+37	LT.	867	1	165
0010	570+06	RT.	868	1	166
0010	570+06	LT.	869	1	167
0010	570+59	RT.	870	1	168
0010	571+83	LT.	871	1	169, 170
0010	572+75	RT.	872	1	171, 172, 173
0010	573+06	RT.	873	1	174
0010	573+06	LT.	874	1	175
0010	574+98	RT.	875	1	176
0010	575+00	RT.	876	1	177
0010	575+00	LT.	877	1	178
0010	576+50	LT.	878	1	179
0010	576+64	RT.	879	1	180
0010	576+67	RT.	880	1	181
0010	577+99	LT.	881	1	182
0010	579+32	RT.	882	1	183, 184
0010	579+49	LT.	883	1	185, 186
0010	580+10	RT.	884	1	187
0010	580+21	LT.	885	1	188
0010	581+09	RT.	886	1	189
0010	581+70	LT.	887	1	190
0010	582+71	RT.	888	1	191
0010	583+10	RT.	889	1	192
0010	583+10	LT.	890	1	193, 194, 195
0010	583+95	RT.	891	1	196, 197, 198
0010	584+59	LT.	892	1	199
0010	585+00	LT.	893	1	200
0010	586+40	RT.	894	1	201
0010	586+45	LT.	895	1	202
0010	587+14	LT.	896	1	203, 204, 205
0010	588+70	LT.	897	1	206
0010	588+96	LT.	898	1	208
0010	588+96	LT.	899	1	209
0010	589+23	RT.	900	1	210
0010	589+93	LT.	901	1	211
0010	590+00	RT.	902	1	212
0010	590+77	LT.	903	1	213
0010	591+65	RT.	904	1	214
SUBTOTAL =				45	

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REMOVING SMALL SIGN SUPPORTS (CONTINUED)

CATEGORY	STATION	LOCATION	REF.#	638.3000 EACH	ASSOCIATED SIGNS
0010	591+66	LT.	905	1	215
0010	592+10	LT.	906	1	216
0010	592+12	RT.	907	1	217
0010	592+72	RT.	908	1	218
0010	592+72	RT.	909	1	218
0010	593+20	LT.	910	1	219
0010	593+25	RT.	911	1	220
TOTAL 0010				52	

3

TRAFFIC CONTROL (7062-05-72)			
CATEGORY	LOCATION	643.0100 EACH	REMARKS
0010	PROJECT 7062-05-72	1	
TOTAL 0010		1	
TRAFFIC CONTROL DRUMS			
CATEGORY	LOCATION	643.0300 DAY	REMARKS
0010	UNDISTRIBUTED	2400	
TOTAL 0010		2400	
TRAFFIC CONTROL BARRICADES TYPE II			
CATEGORY	LOCATION	643.0410 DAY	REMARKS
0010	UNDISTRIBUTED	1100	
TOTAL 0010		1100	
TRAFFIC CONTROL BARRICADES TYPE III			
CATEGORY	LOCATION	643.0420 DAY	REMARKS
0010	UNDISTRIBUTED	800	
TOTAL 0010		800	
TRAFFIC CONTROL WARNING LIGHTS TYPE A			
CATEGORY	LOCATION	643.0705 DAY	REMARKS
0010	UNDISTRIBUTED	2000	
TOTAL 0010		2000	
TEMPORARY PEDESTRIAN SURFACE PLYWOOD			
CATEGORY	LOCATION	644.1420.S SF	REMARKS
0010	UNDISTRIBUTED	250	FOR SIDEWALK CLOSURES
TOTAL 0010		250	

TEMPORARY CURB RAMP				
CATEGORY	LOCATION	644.1601.S EACH	REMARKS	
0010	UNDISTRIBUTED	4	FOR SIDEWALK CLOSURES	
TOTAL 0010		4		

TRAFFIC CONTROL SIGNS				
CATEGORY	LOCATION	643.0900 DAY	REMARKS	
0010	UNDISTRIBUTED	3000		
0010	UNDISTRIBUTED	60	WARN OF ROADWAY SURFACE CONDITIONS	
TOTAL 0010		3060		

PAVEMENT MARKING EPOXY 4-INCH					
CATEGORY	STATION TO	STATION	LOCATION	646.0106 LF	REMARKS
0010	563+04	- 563+62	EDGE LINE, LT.	15	WHITE (3' / 9' SKIP)
0010	563+62	- 574+95	EDGE LINE, LT.	1133	WHITE
0010	575+29	- 576+09	EDGE LINE, LT.	18	WHITE (3' / 9' SKIP)
0010	576+09	- 577+91	EDGE LINE, LT.	182	WHITE
0010	578+30	- 579+10	EDGE LINE, LT.	18	WHITE (3' / 9' SKIP)
0010	579+10	- 579+33	EDGE LINE, LT.	23	WHITE
0010	579+49	- 581+65	EDGE LINE, LT.	216	WHITE
0010	582+07	- 582+87	EDGE LINE, LT.	18	WHITE (3' / 9' SKIP)
0010	582+87	- 584+52	EDGE LINE, LT.	165	WHITE
0010	584+90	- 585+70	EDGE LINE, LT.	18	WHITE (3' / 9' SKIP)
0010	585+70	- 588+97	EDGE LINE, LT.	327	WHITE
0010	589+35	- 590+15	EDGE LINE, LT.	18	WHITE (3' / 9' SKIP)
0010	590+15	- 591+54	EDGE LINE, LT.	139	WHITE
0010	592+06	- 592+86	EDGE LINE, LT.	18	WHITE (3' / 9' SKIP)
0010	592+86	- 593+79	EDGE LINE, LT.	93	WHITE
0010	562+87	- 573+78	EDGE LINE, RT.	1091	WHITE
0010	573+78	- 574+58	EDGE LINE, RT.	18	WHITE (3' / 9' SKIP)
0010	574+95	- 579+33	EDGE LINE, RT.	438	WHITE
0010	579+45	- 581+49	EDGE LINE, RT.	204	WHITE
0010	581+47	- 582+27	EDGE LINE, RT.	18	WHITE (3' / 9' SKIP)
0010	582+28	- 588+00	EDGE LINE, RT.	572	WHITE
0010	588+00	- 588+80	EDGE LINE, RT.	18	WHITE (3' / 9' SKIP)
0010	589+23	- 593+79	EDGE LINE, RT.	456	WHITE
TOTAL 0010				5216	

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PAVEMENT MARKING SAME DAY EPOXY 4-INCH					
CATEGORY	STATION TO	STATION	LOCATION	646.0406 LF	REMARKS
0010	562+43	- 588+25	CENTERLINE	650	YELLOW (12.5'/37.5' SKIP)
0010	588+25	- 592+12	CENTERLINE, LT.	100	YELLOW (12.5'/37.5' SKIP)
0010	588+25	- 592+12	CENTERLINE, RT.	387	YELLOW
0010	592+12	- 593+79	CENTERLINE	334	DOUBLE YELLOW
TOTAL 0010				1471	
NOTE: CENTERLINE MARKINGS ARE APPROXIMATE AND "NO PASSING ZONE MARKING" SHALL BE LOCATED AND ADJUSTED AS NEEDED IN THE FIELD UNDER BID ITEM 648.0100 LOCATING NO-PASSING ZONES.					

PAVEMENT MARKING CROSSWALK EPOXY 6-INCH					
CATEGORY	STATION TO	STATION	LOCATION	647.0766 LF	REMARKS
0010	579+38	- 579+52	LT. & RT.	80	WHITE, SCHOOL CROSSWALK
TOTAL 0010				80	

LOCATING NO-PASSING ZONES					
CATEGORY	STATION TO	STATION	LOCATION	648.0100 MI	REMARKS
0010	562+43	- 593+79	STH 27	0.60	
TOTAL 0010				0.60	

TEMPORARY PAVEMENT MARKING PAINT 4-INCH					
CATEGORY	STATION TO	STATION	LOCATION	649.0402 LF	REMARKS
0010	562+43	- 588+25	CENTERLINE	416	YELLOW (4'/46' SKIP)
0010	588+25	- 592+12	CENTERLINE, LT.	64	YELLOW (4'/46' SKIP)
0010	588+25	- 592+12	CENTERLINE, RT.	774	YELLOW
0010	592+12	- 593+79	CENTERLINE	668	DOUBLE YELLOW
TOTAL 0010				1922	
NOTE: CENTERLINE MARKINGS ARE APPROXIMATE AND "NO PASSING ZONE MARKING" SHALL BE LOCATED AND ADJUSTED AS NEEDED IN THE FIELD UNDER BID ITEM 648.0100 LOCATING NO-PASSING ZONES. THE QUANTITIES SHOWN ALLOW FOR PAINTING THESE LOCATIONS TWICE. (TWO INTERMEDIATE LAYERS)					

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER					
CATEGORY	STATION TO	STATION	LOCATION	650.5500 LF	REMARKS
0010	567+89	- 568+36	LT.	47	
0010	568+87	- 569+34	LT.	47	
0010	569+42	- 569+76	LT.	34	
0010	570+45	- 570+68	LT.	23	
0010	579+27	- 579+55	RT.	28	
0010	579+39	- 579+58	LT.	19	
0010	580+64	- 581+08	RT.	44	
0010	579+39	- 579+58	LT.	19	
TOTAL 0010				261	

CONSTRUCTION STAKING RESURFACING REFERENCE					
CATEGORY	STATION TO	STATION	LOCATION	650.8000 LF	REMARKS
0010	562+43	- 568+00	STH 27	557	
0010	568+00	- 573+00	STH 27	500	
0010	573+00	- 578+00	STH 27	500	
0010	578+00	- 583+00	STH 27	500	
0010	583+00	- 588+00	STH 27	500	
0010	588+00	- 593+79	STH 27	579	
TOTAL 0010				3136	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (7062-05-72)					
CATEGORY	LOCATION		650.9910 LS	REMARKS	
0010	PROJECT 7062-05-72		1		
TOTAL 0010			1		

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SAWING ASPHALT

CATEGORY	STATION TO	STATION	LOCATION	690.0150 LF	REMARKS
0010	562+43	- 562+52	LT.	9	W. 7TH ST.
0010	562+43	- 562+56	RT.	13	E. 7TH ST.
0010	574+70	- 574+90	RT.	19	E. SIXTH ST.
0010	575+03	- 575+19	LT.	16	W. 6TH ST.
0010	578+02	- 578+19	LT.	17	W. 5TH ST.
0010	581+74	- 582+05	LT.	30	MAPLEWOOD CT.
0010	582+39	- 582+62	RT.	24	E. 4TH ST.
0010	584+60	- 584+83	LT.	23	W. 4TH ST.
0010	588+92	- 589+15	RT.	22	E. THIRD ST.
0010	589+02	- 589+24	LT.	22	W. THIRD ST.
0010	591+69	- 591+96	LT.	27	W. 2ND ST.
0010	593+79	- 593+79	LT. & RT.	40	STH 27
0010	568+01	- 568+31	LT.	30	DRIVEWAY
0010	568+96	- 569+34	LT.	39	DRIVEWAY
0010	570+76	- 571+44	LT.	68	DRIVEWAY
0010	573+65	- 573+95	LT.	30	DRIVEWAY
0010	574+15	- 574+30	LT.	15	DRIVEWAY
0010	582+16	- 582+49	LT.	33	DRIVEWAY
0010	583+23	- 583+42	LT.	19	DRIVEWAY
0010	584+95	- 585+07	RT.	12	DRIVEWAY
0010	586+72	- 587+06	LT.	34	DRIVEWAY
0010	592+86	- 592+99	LT.	14	DRIVEWAY
0010	579+37	- 579+37	LT.	4	SIDEWALK
0010	579+61	- 579+61	LT.	4	SIDEWALK
0010	574+93	- 574+93	LT.	4	SIDEWALK
0010	575+31	- 575+31	LT.	4	SIDEWALK
0010	577+90	- 577+90	LT.	4	SIDEWALK
0010	578+32	- 578+32	LT.	4	SIDEWALK
0010	581+64	- 581+64	LT.	4	SIDEWALK
0010	584+52	- 584+52	LT.	4	SIDEWALK
0010	584+92	- 584+92	LT.	4	SIDEWALK
0010	588+93	- 588+93	LT.	4	SIDEWALK
TOTAL 0010				596	

SAWING CONCRETE

CATEGORY	STATION TO	STATION	LOCATION	690.0250 LF	REMARKS
0010	573+44	- 573+57	RT.	13	DRIVEWAY
0010	584+35	- 584+48	RT.	13	DRIVEWAY
0010	579+35	- 579+47	RT.	12	SIDEWALK
0010	574+63	- 574+63	RT.	5	SIDEWALK
0010	574+95	- 574+95	RT.	5	SIDEWALK
0010	582+16	- 582+16	LT.	5	SIDEWALK
0010	582+16	- 582+16	RT.	6	SIDEWALK
0010	582+69	- 582+69	RT.	5	SIDEWALK
0010	588+86	- 588+86	RT.	5	SIDEWALK
0010	589+21	- 589+21	RT.	5	SIDEWALK
0010	589+37	- 589+37	LT.	5	SIDEWALK
0010	591+57	- 591+57	LT.	5	SIDEWALK
0010	592+04	- 592+04	LT.	4	SIDEWALK
TOTAL 0010				88	

SPECIAL(01. CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0090.01 LF	REMARKS
0010	567+89	- 568+36	LT.	47	
0010	568+87	- 569+34	LT.	47	
0010	569+42	- 569+76	LT.	34	
0010	570+45	- 570+68	LT.	23	
0010	579+27	- 579+55	RT.	28	
0010	579+39	- 579+58	LT.	19	
0010	580+64	- 581+08	RT.	44	
0010	579+39	- 579+58	LT.	19	
TOTAL 0010				261	

SPECIAL(04. PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL (7062-05-72))

CATEGORY	LOCATION	SPV.0105.04 LS	REMARKS
0010	PROJECT 7062-05-72	1	
TOTAL 0010		1	

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SPECIAL(05. MATERIAL TRANSFER VEHICLE (7062-05-72))

CATEGORY	LOCATION	SPV.0105.05 LS	REMARKS
0010	PROJECT 7062-05-72	1	
TOTAL 0010		1	

SPECIAL(06. MILLING AND REMOVING TEMPORARY JOINT (7062-05-72))

CATEGORY	LOCATION	SPV.0105.06 LS	REMARKS
0010	PROJECT 7062-05-72	1	
TOTAL 0010		1	

SPECIAL(01. CONCRETE SIDEWALK CURE AND SEAL TREATMENT)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0165.01 SF	REMARKS
0010	579+35	- 579+47	RT.	128	
0010	579+39	- 579+58	LT.	157	
0010	574+63	- 574+70	RT.	39	
0010	574+89	- 574+96	RT.	38	
0010	574+93	- 575+01	LT.	38	
0010	575+23	- 575+31	LT.	38	
0010	577+90	- 578+01	LT.	46	
0010	578+23	- 578+32	LT.	41	
0010	581+64	- 581+73	LT.	44	
0010	582+07	- 582+16	LT.	51	
0010	582+32	- 582+38	RT.	42	
0010	582+62	- 582+69	RT.	40	
0010	584+52	- 584+61	LT.	41	
0010	584+84	- 584+92	LT.	41	
0010	588+86	- 588+92	RT.	41	
0010	589+15	- 589+21	RT.	50	
0010	588+93	- 589+01	LT.	38	
0010	589+27	- 589+37	LT.	52	
0010	591+57	- 591+69	LT.	61	
0010	591+95	- 592+05	LT.	45	
TOTAL 0010				1071	

SPECIAL(01. REHEATING HMA LONGITUDINAL JOINTS SPECIAL)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0170.01 STA	REMARKS
0010	562+43	- 568+00	CENTERLINE JOINT	6	UPPER LAYER ONLY
0010	568+00	- 573+00	CENTERLINE JOINT	5	UPPER LAYER ONLY
0010	573+00	- 578+00	CENTERLINE JOINT	5	UPPER LAYER ONLY
0010	578+00	- 583+00	CENTERLINE JOINT	5	UPPER LAYER ONLY
0010	583+00	- 588+00	CENTERLINE JOINT	5	UPPER LAYER ONLY
0010	588+00	- 593+79	CENTERLINE JOINT	6	UPPER LAYER ONLY
TOTAL 0010				32	

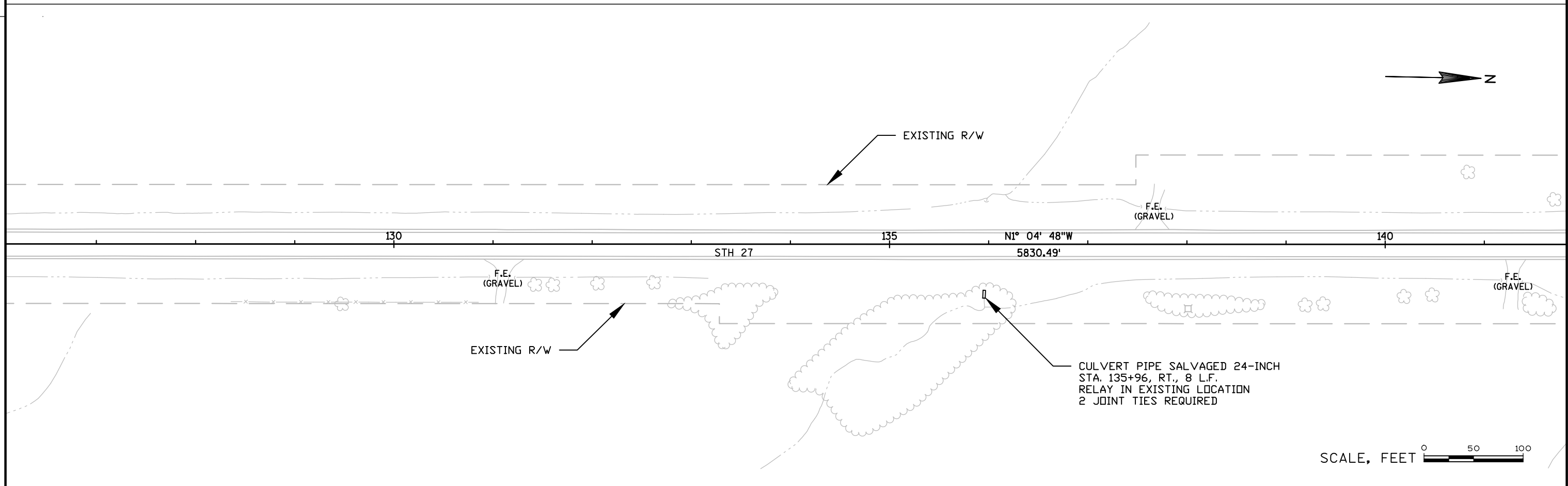
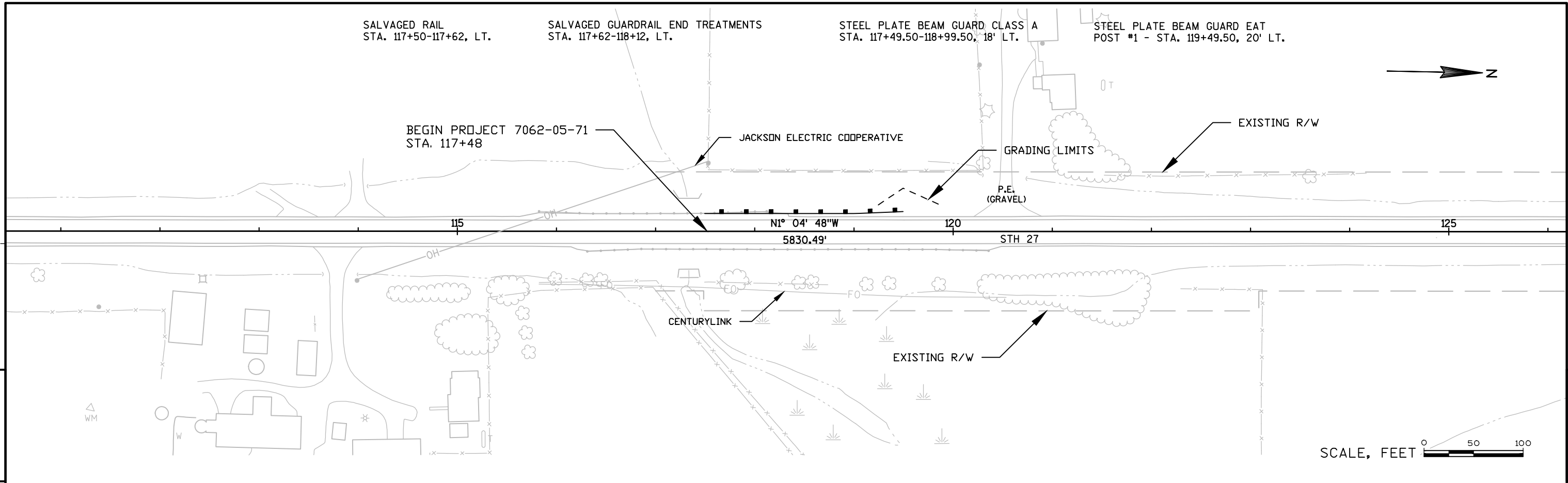
SPECIAL(01. CONCRETE DRIVEWAY CURE AND SEAL TREATMENT)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0180.01 SY	REMARKS
0010	573+43	- 573+57	RT.	12	
0010	584+33	- 584+50	RT.	13	
TOTAL 0010				25	

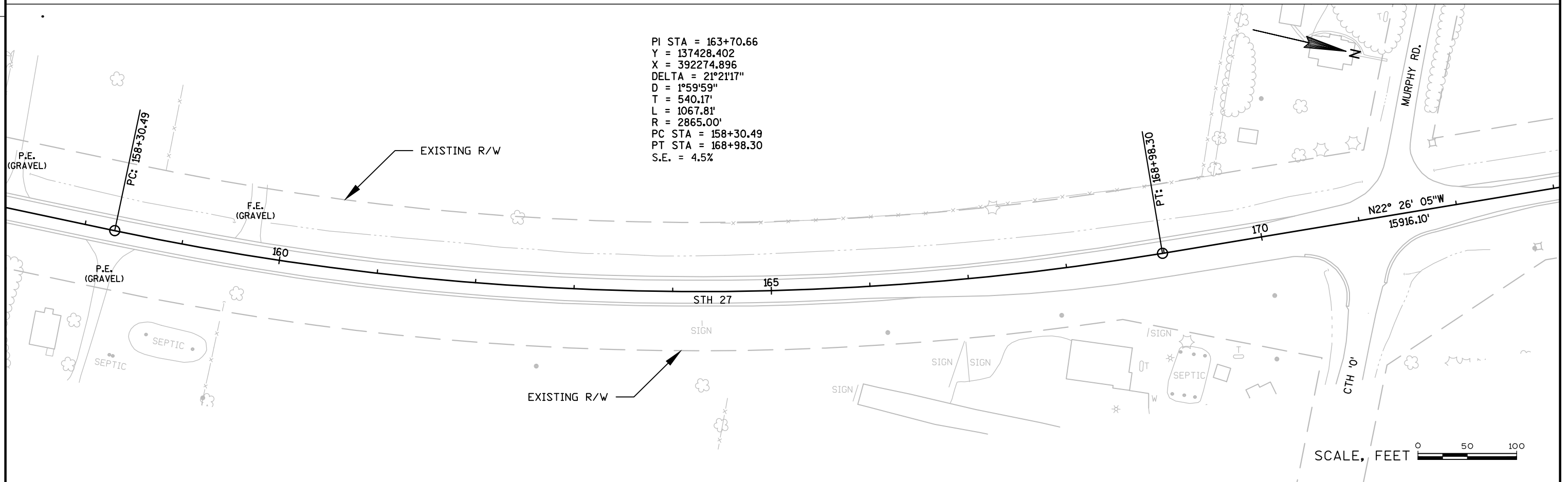
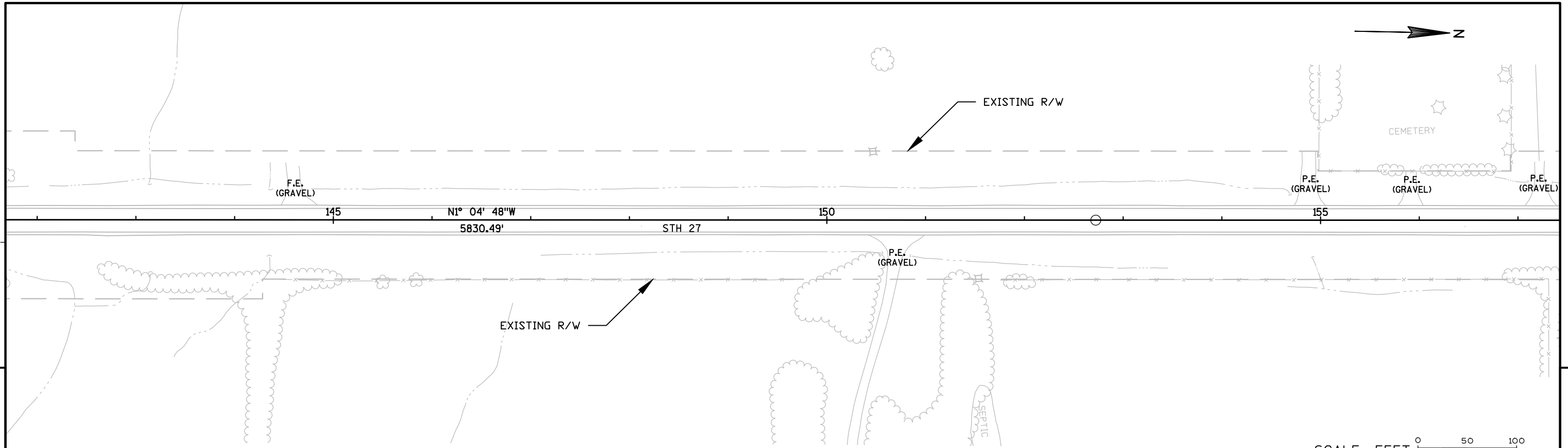
SPECIAL(01. HMA PAVEMENT TYPE E-3 SPECIAL)

CATEGORY	STATION TO	STATION	LOCATION	SPV.0195.01 TON	REMARKS
0010	562+43	- 568+00	LT. & RT.	533	
0010	568+00	- 573+00	LT. & RT.	420	
0010	573+00	- 578+00	LT. & RT.	483	
0010	578+00	- 583+00	LT. & RT.	524	
0010	583+00	- 588+00	LT. & RT.	451	
0010	588+00	- 593+79	LT. & RT.	589	
TOTAL 0010				3000	

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PROJECT NO: 7062-05-71	HWY: STH 27	COUNTY: JACKSON	PLAN	SHEET 79	E
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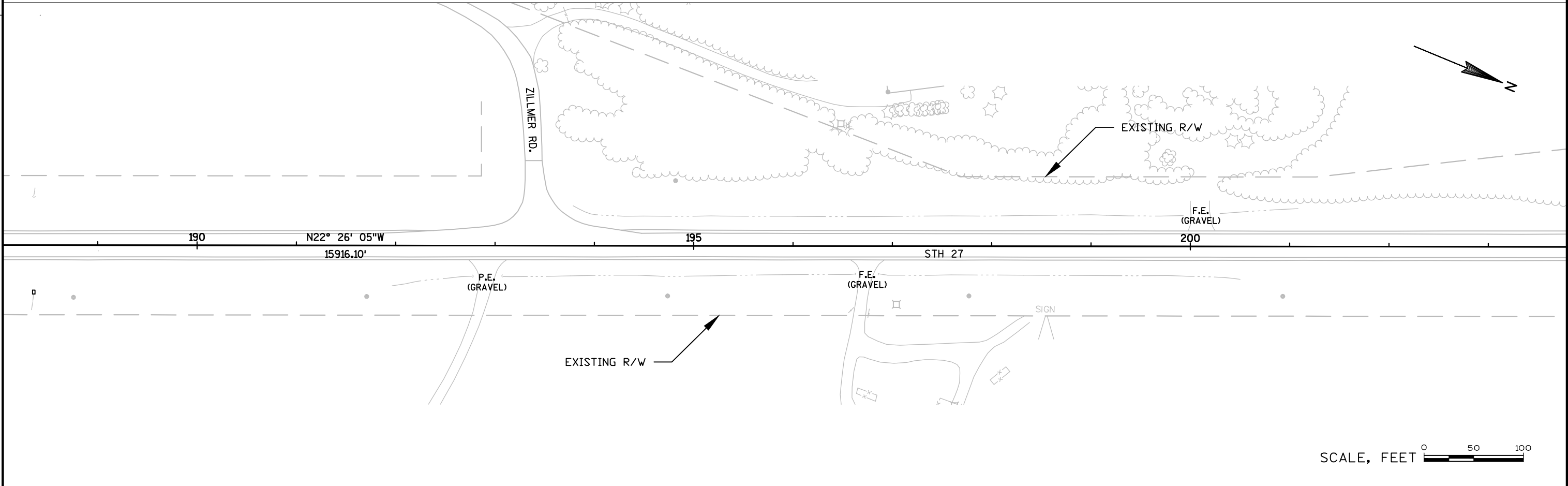
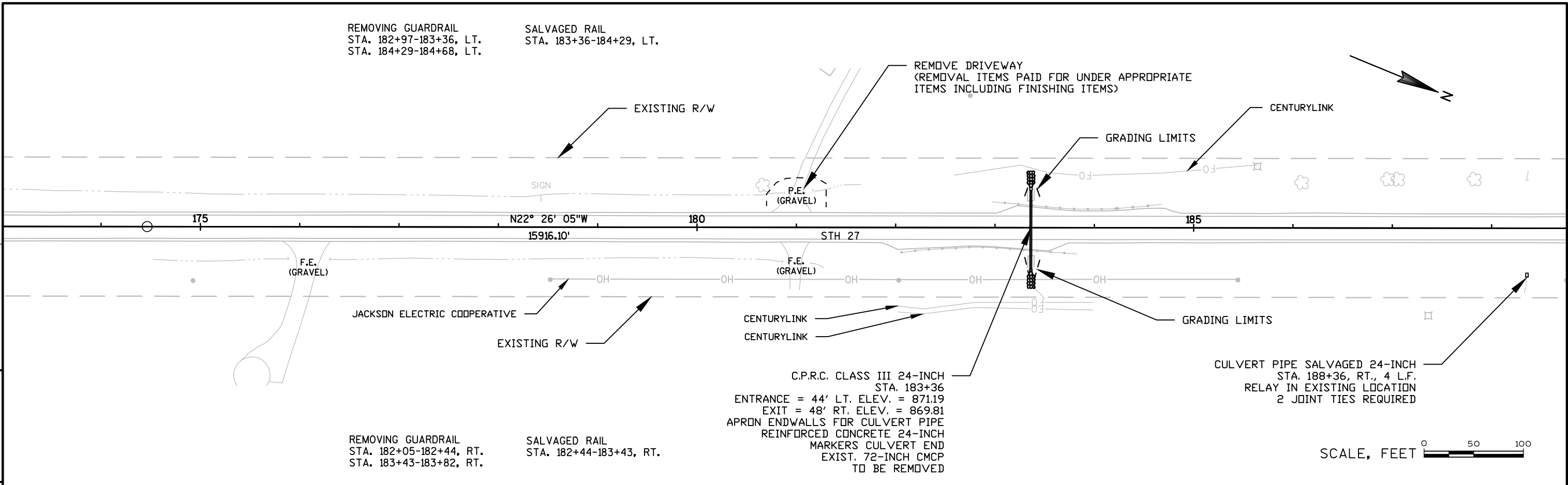


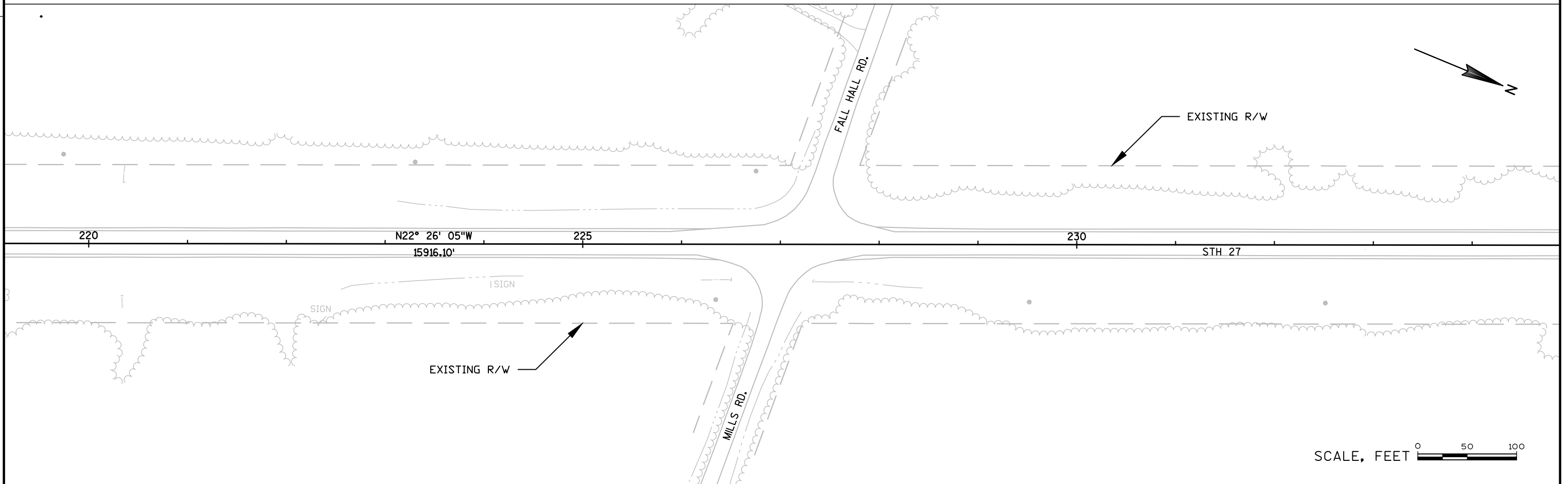
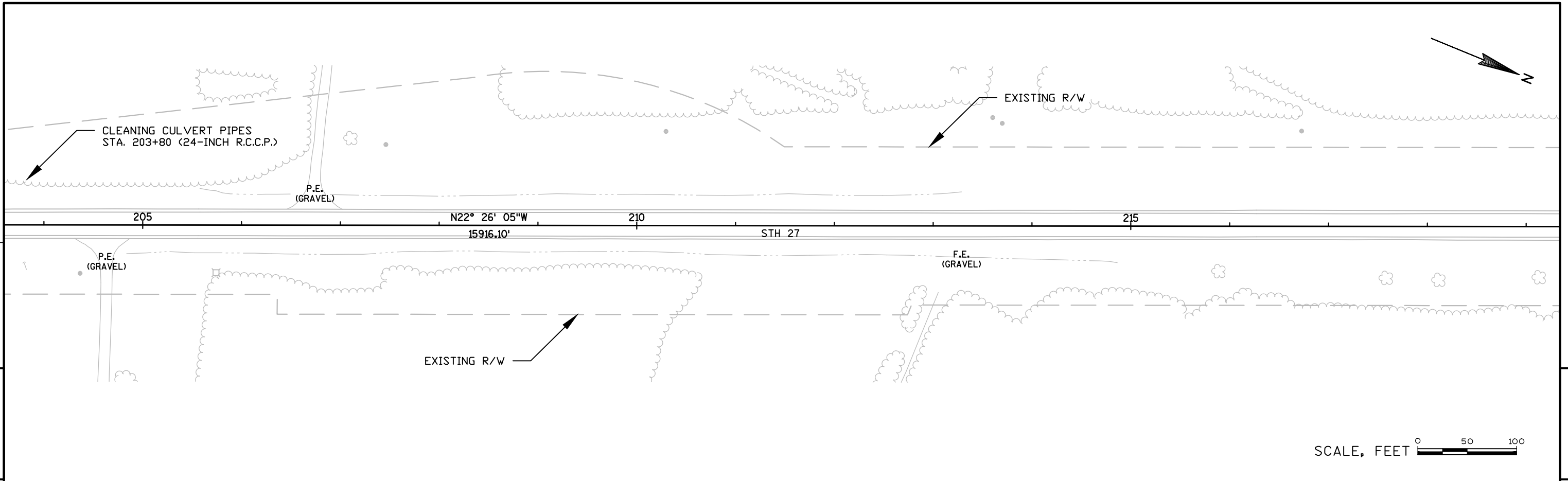
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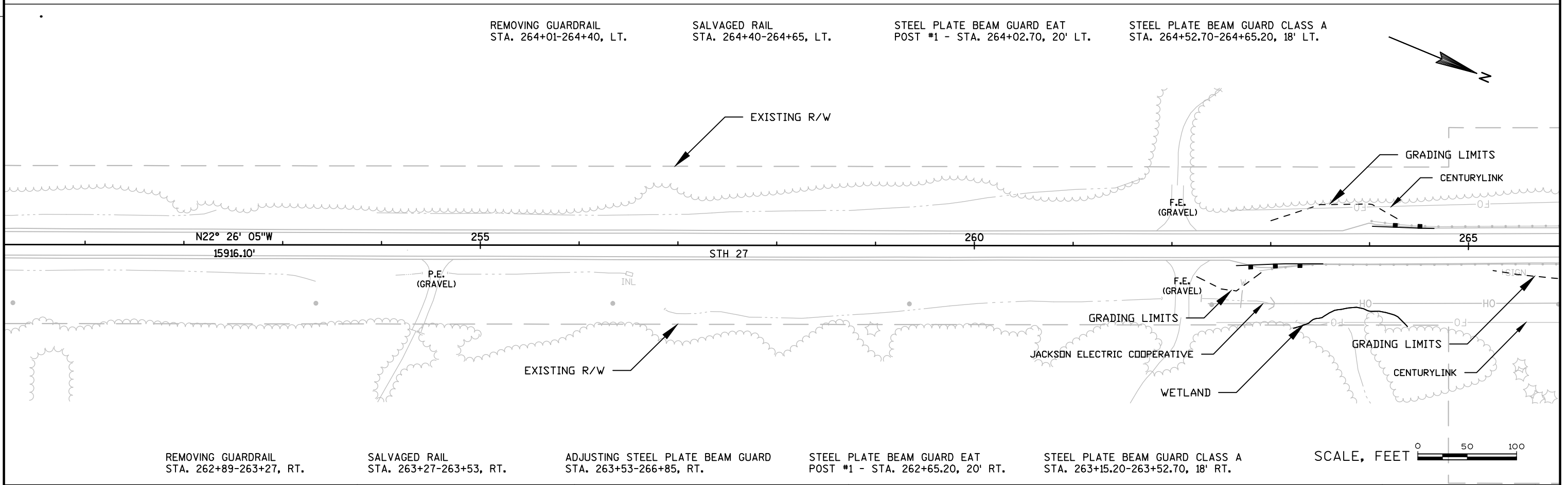
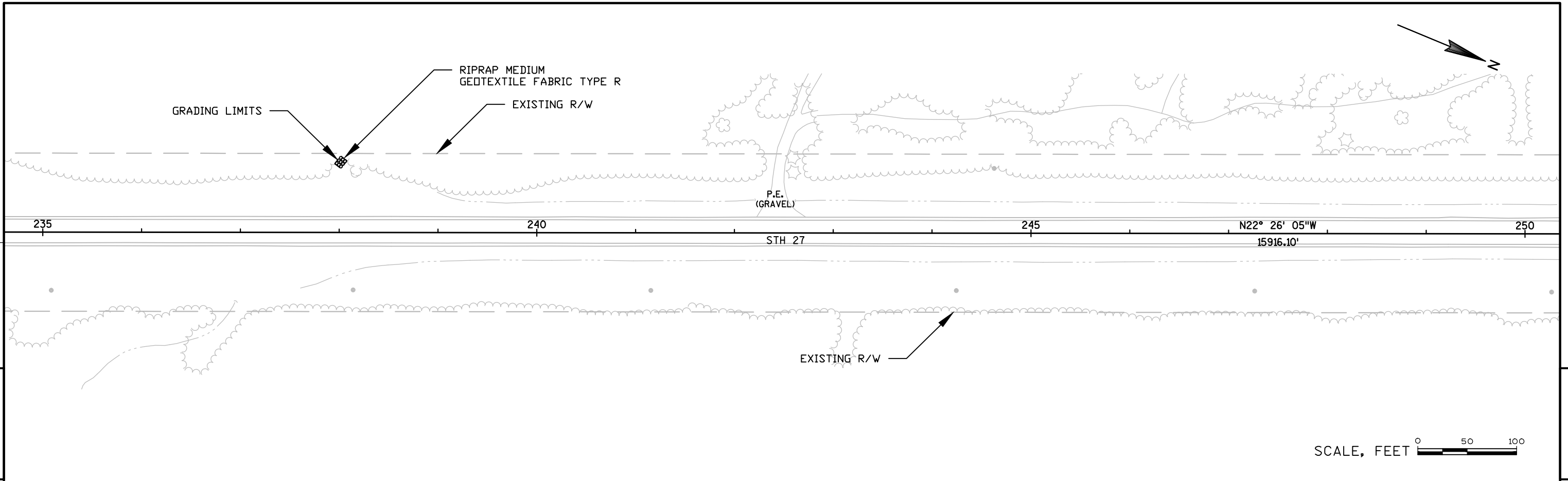
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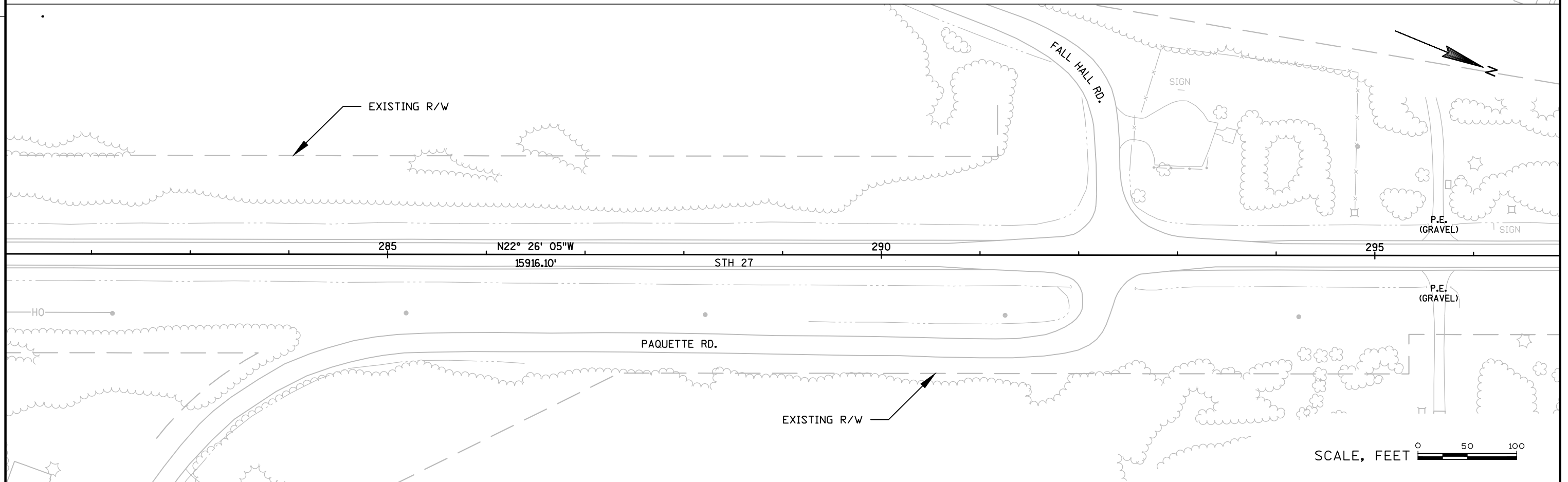
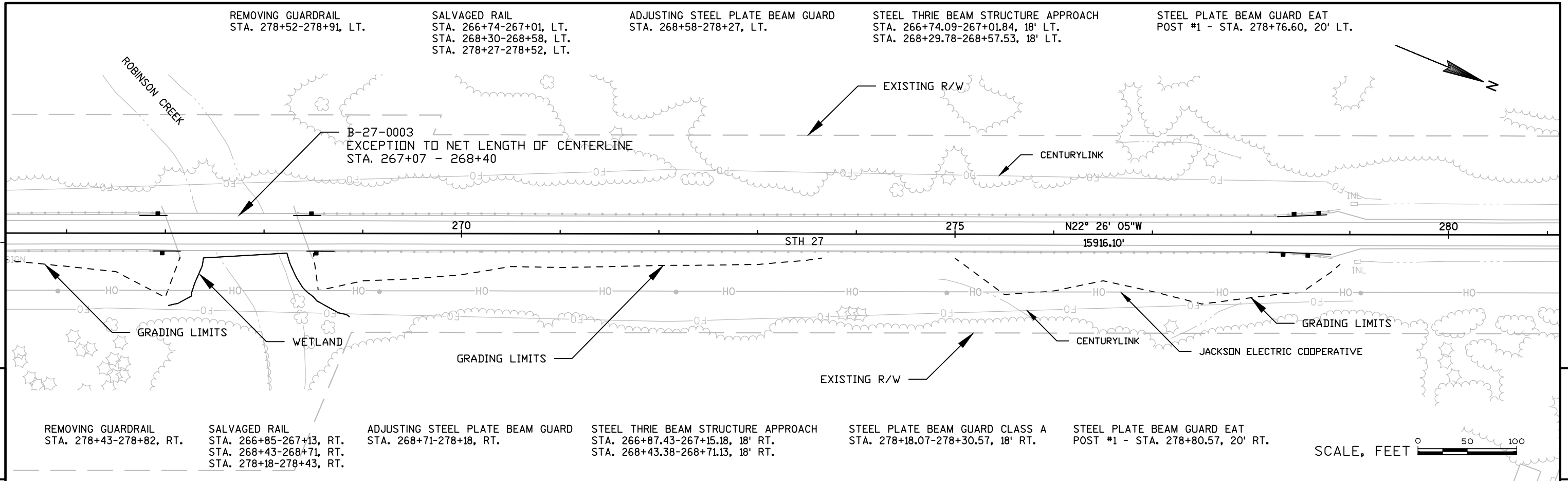


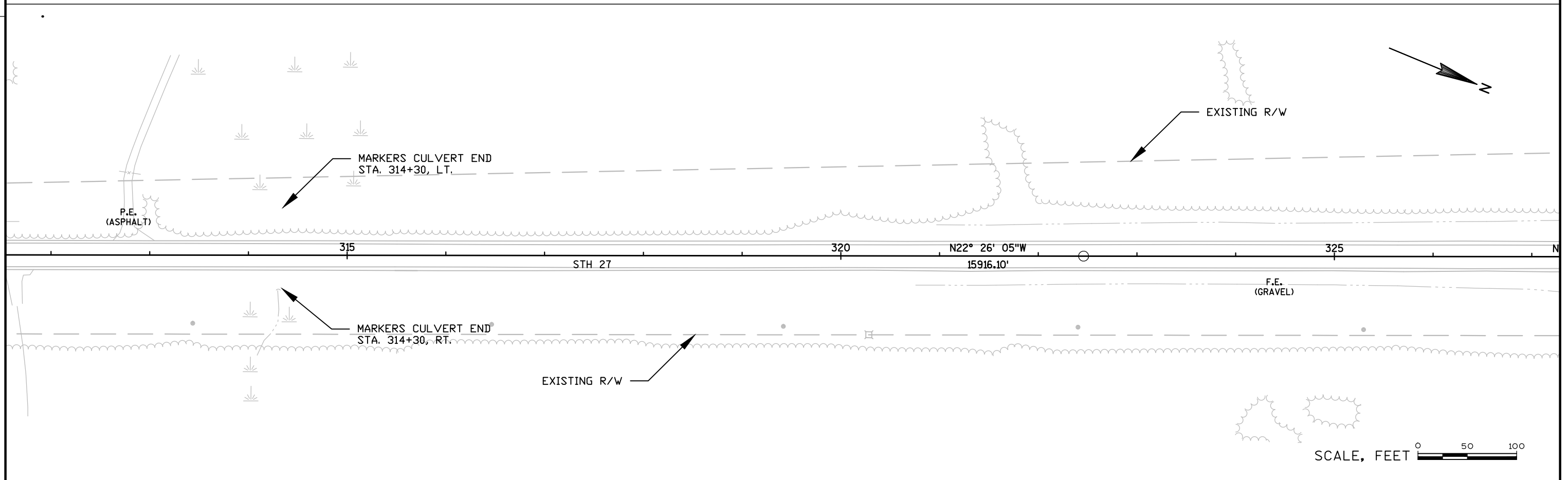
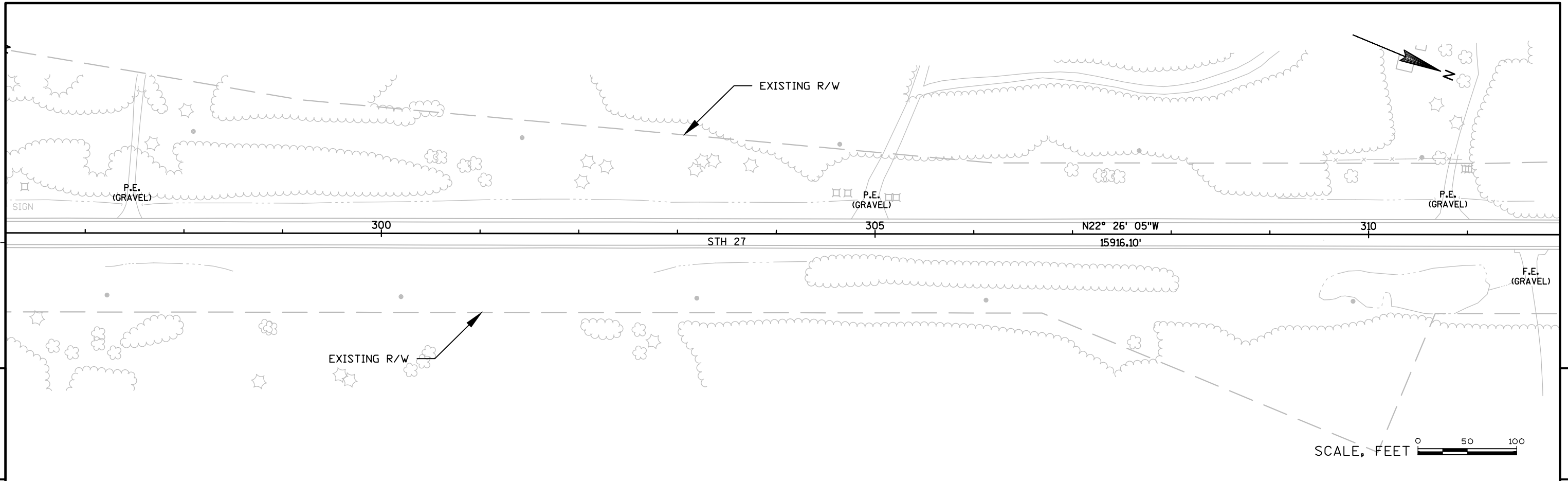


PROJECT NO: 7062-05-71	HWY: STH 27	COUNTY: JACKSON	PLAN	SHEET 82	E
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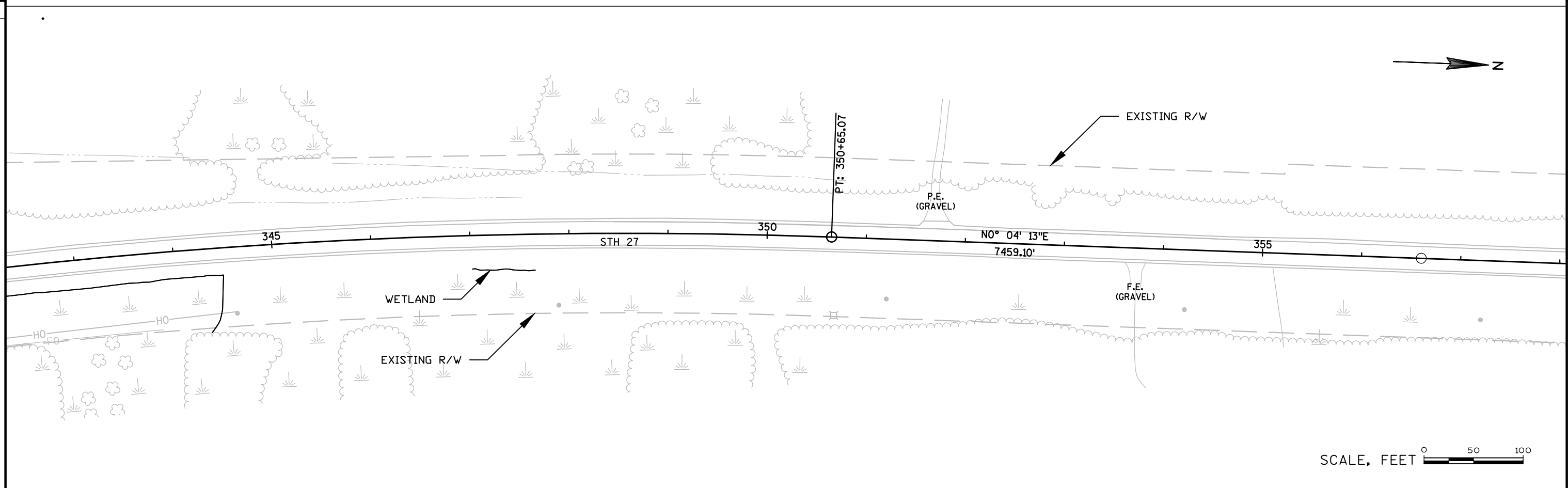
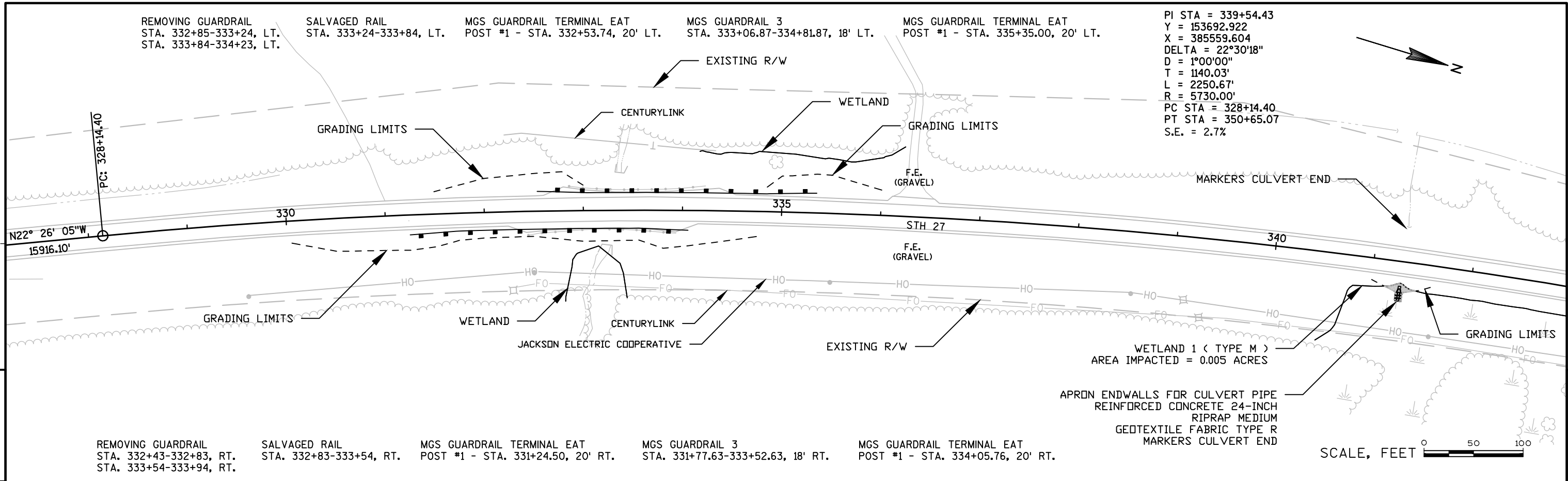


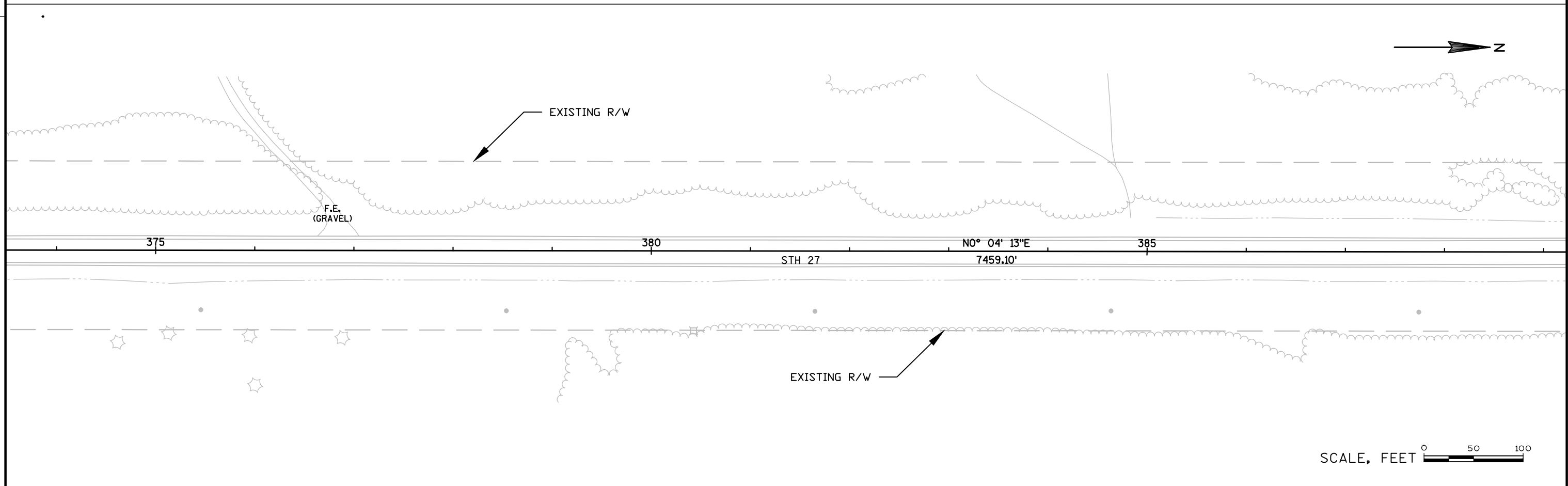
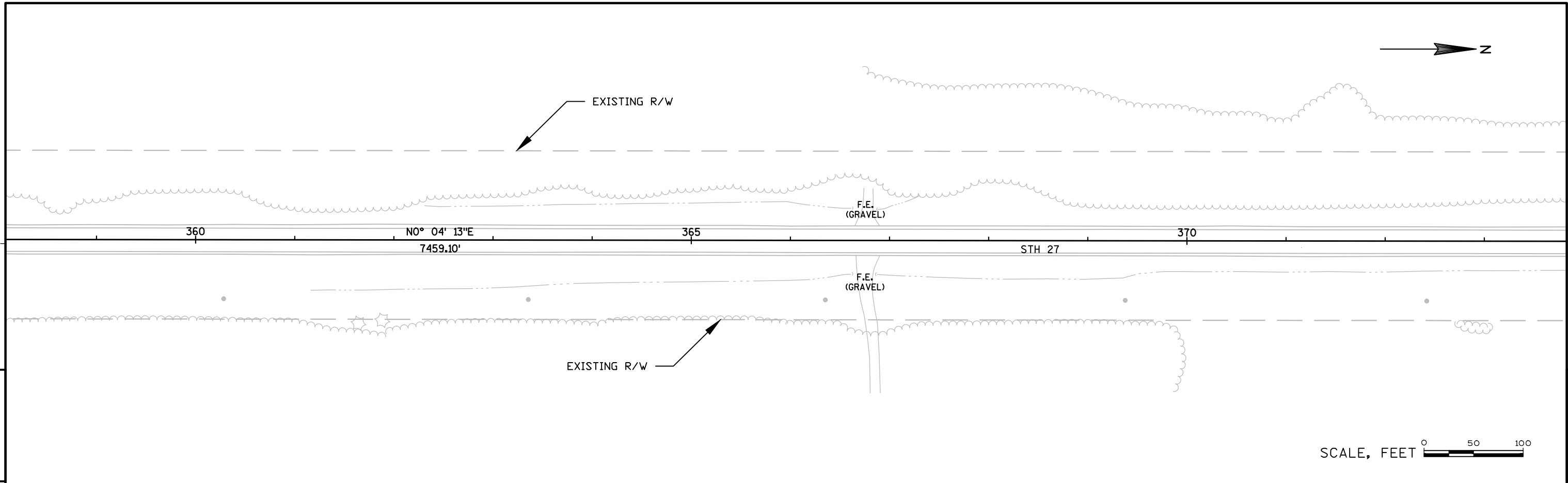
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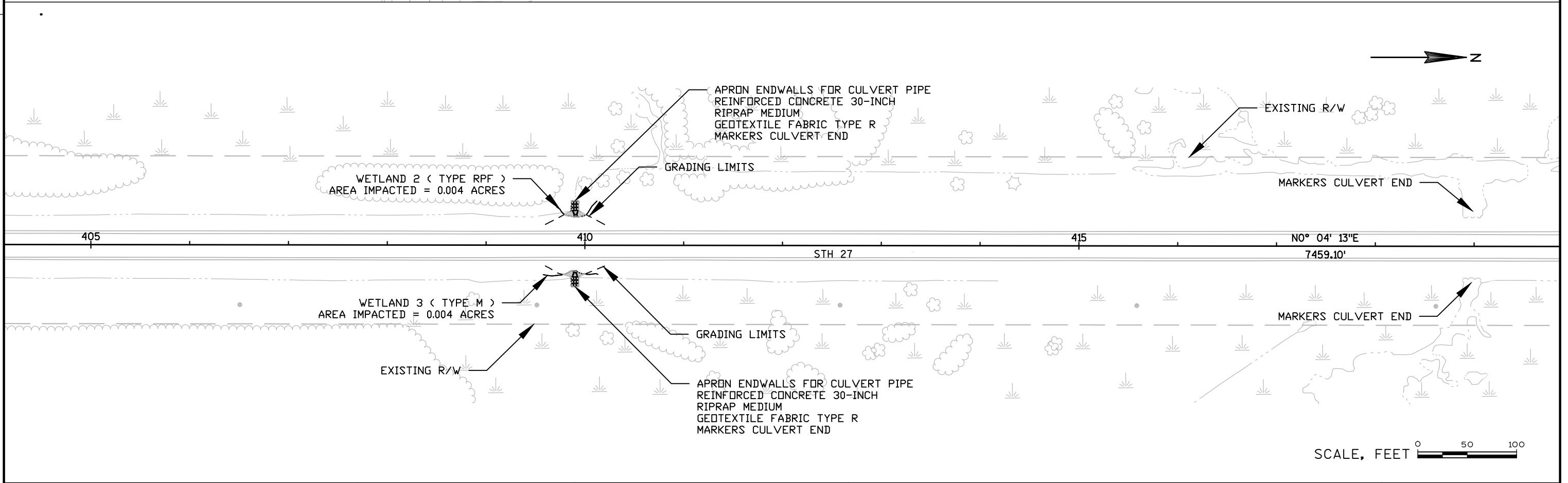
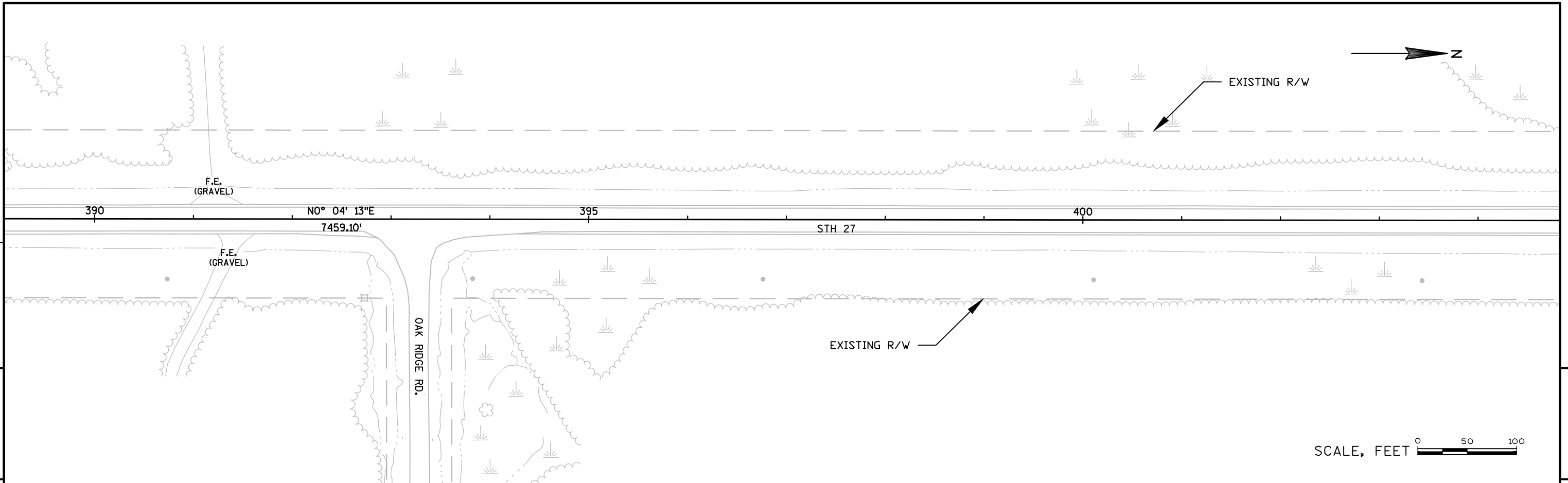


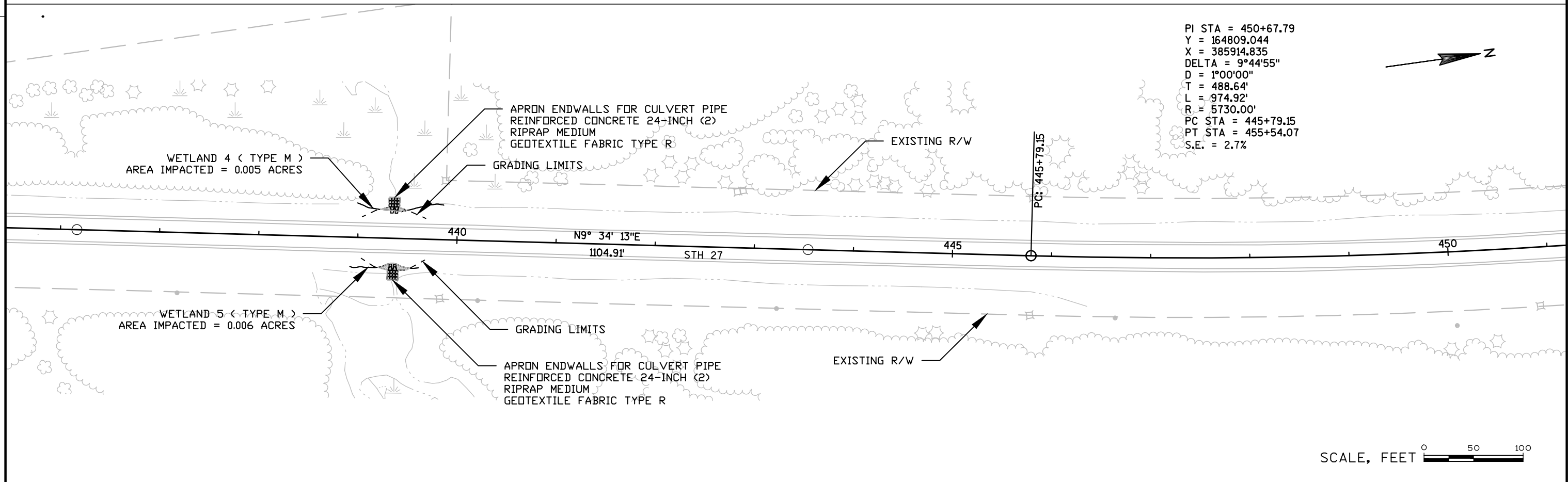
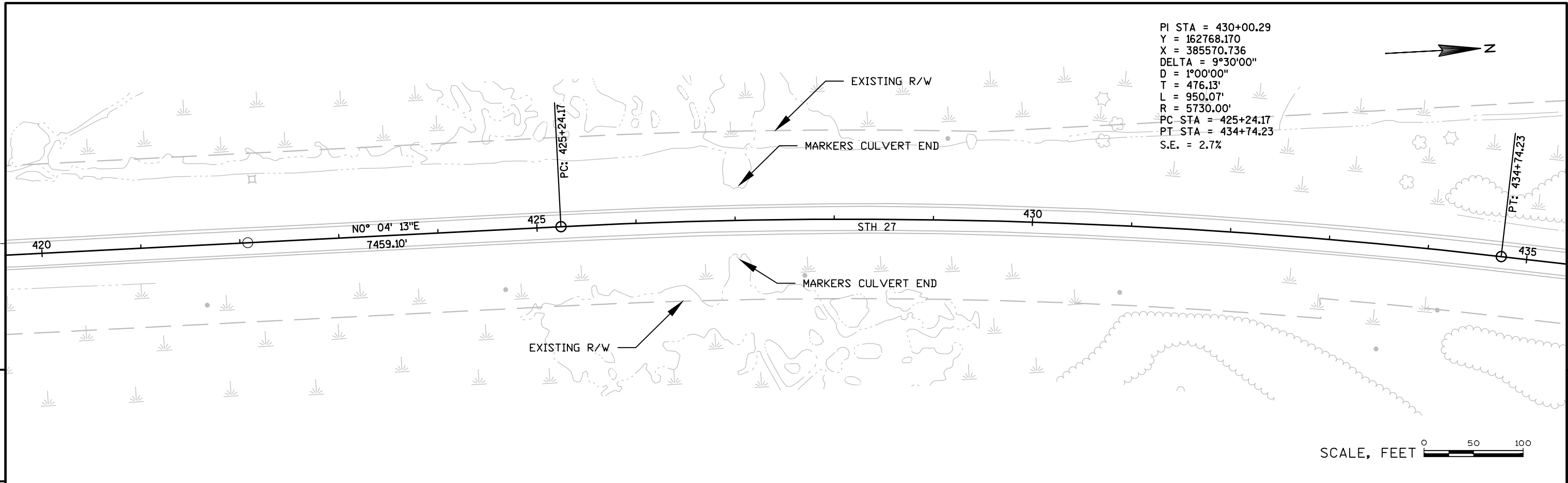


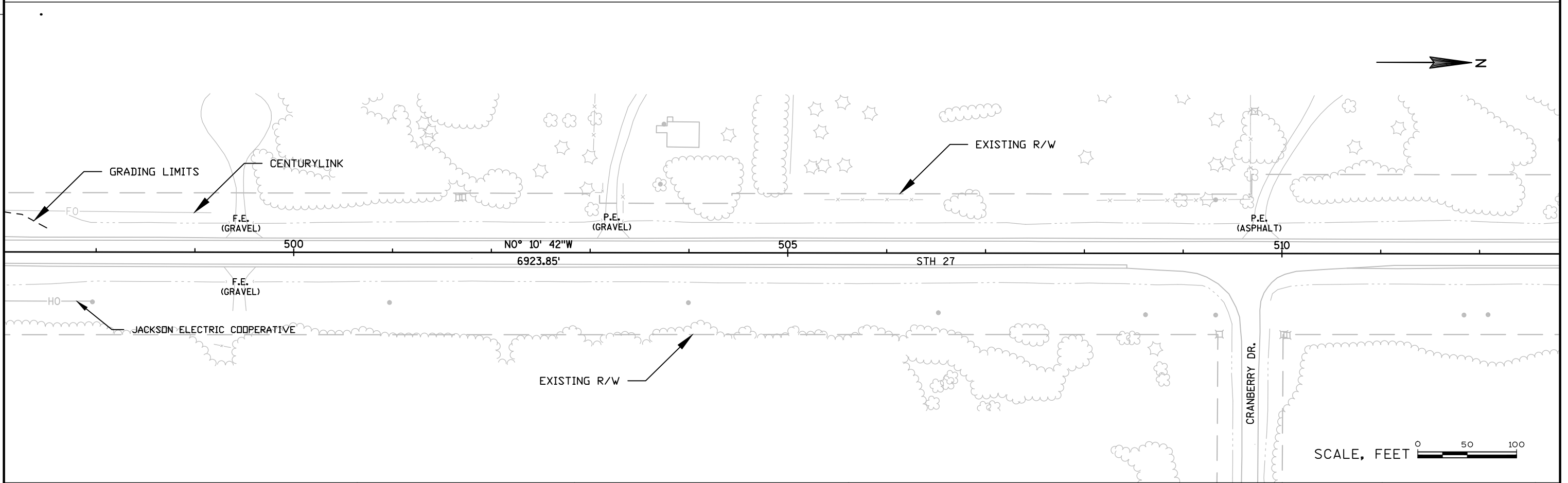
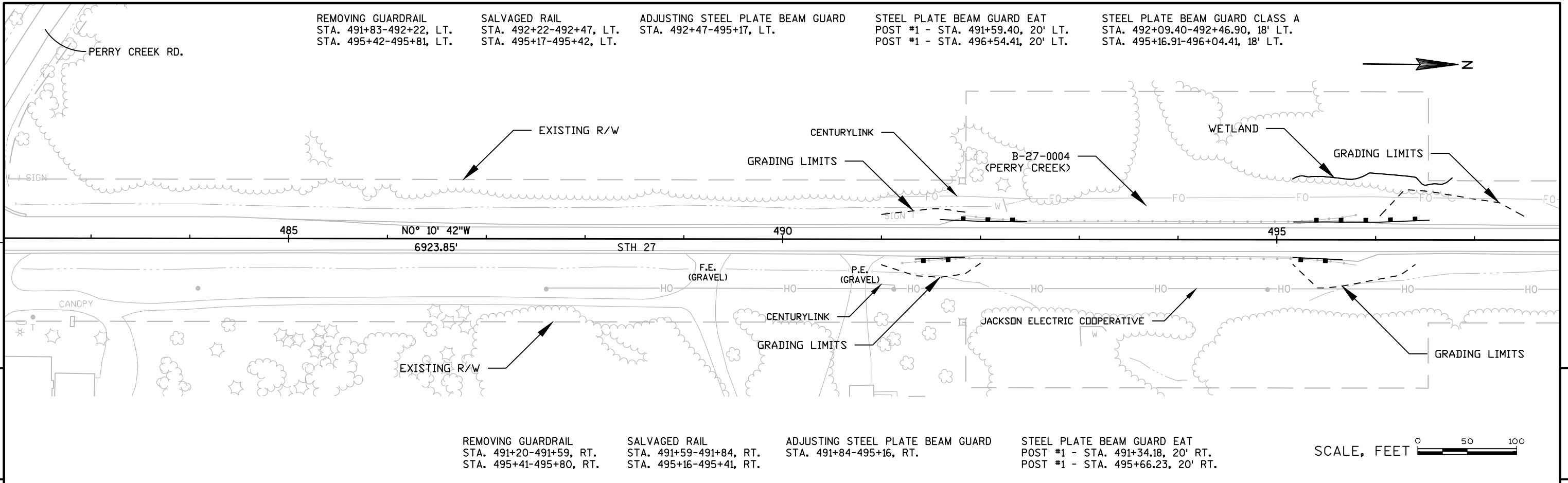
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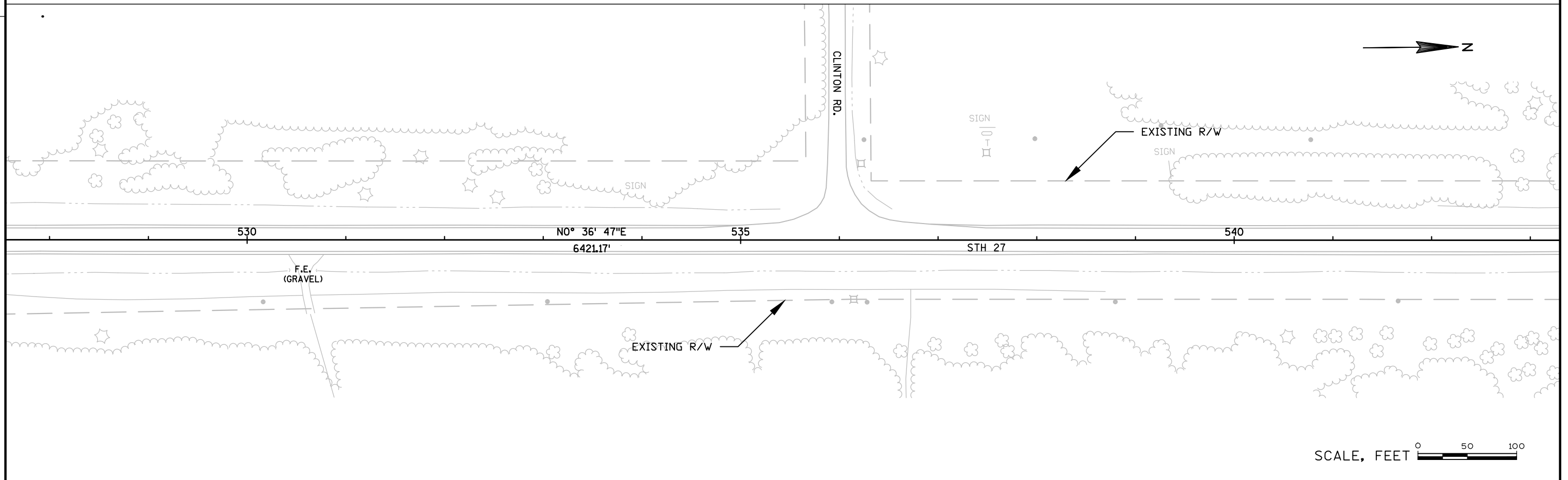
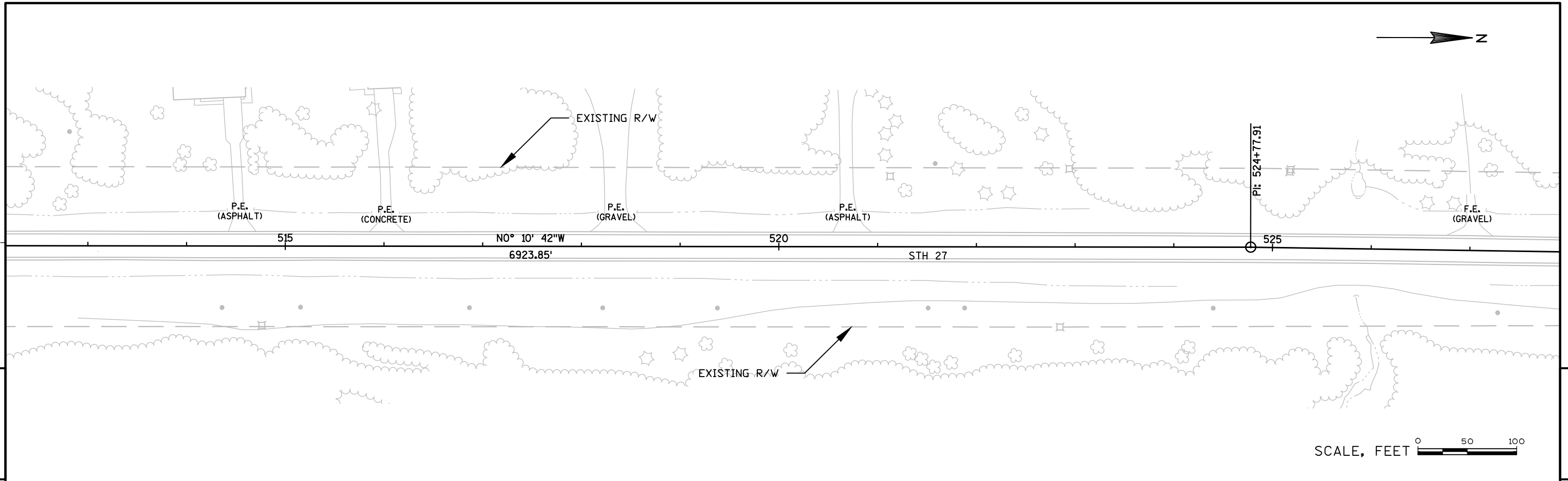




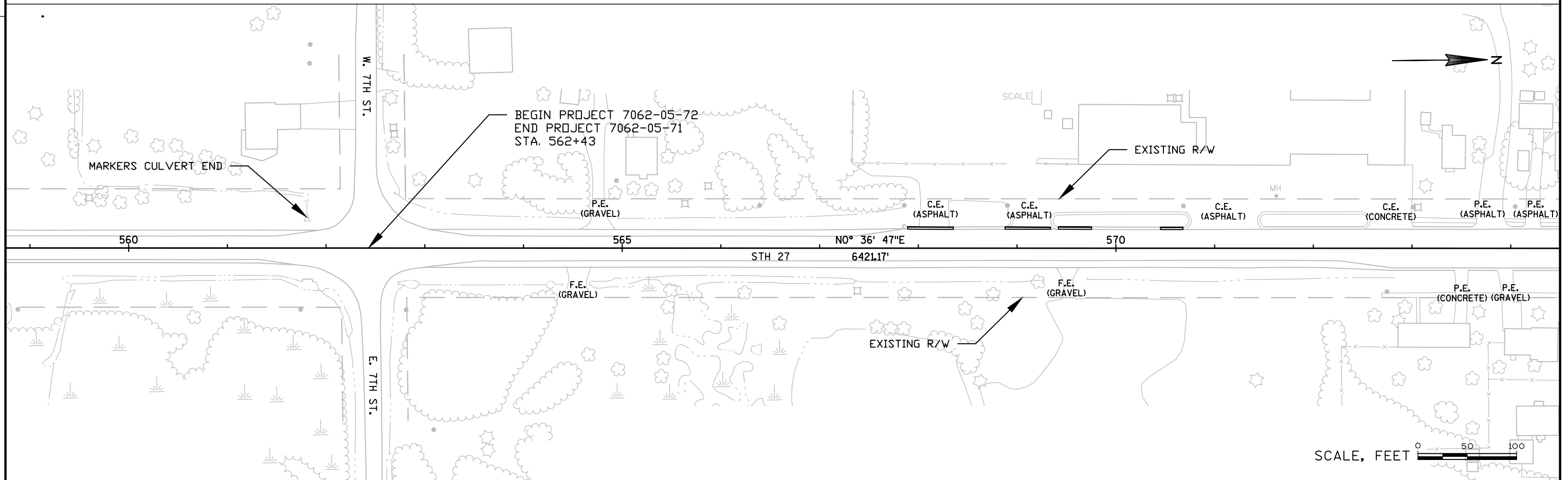
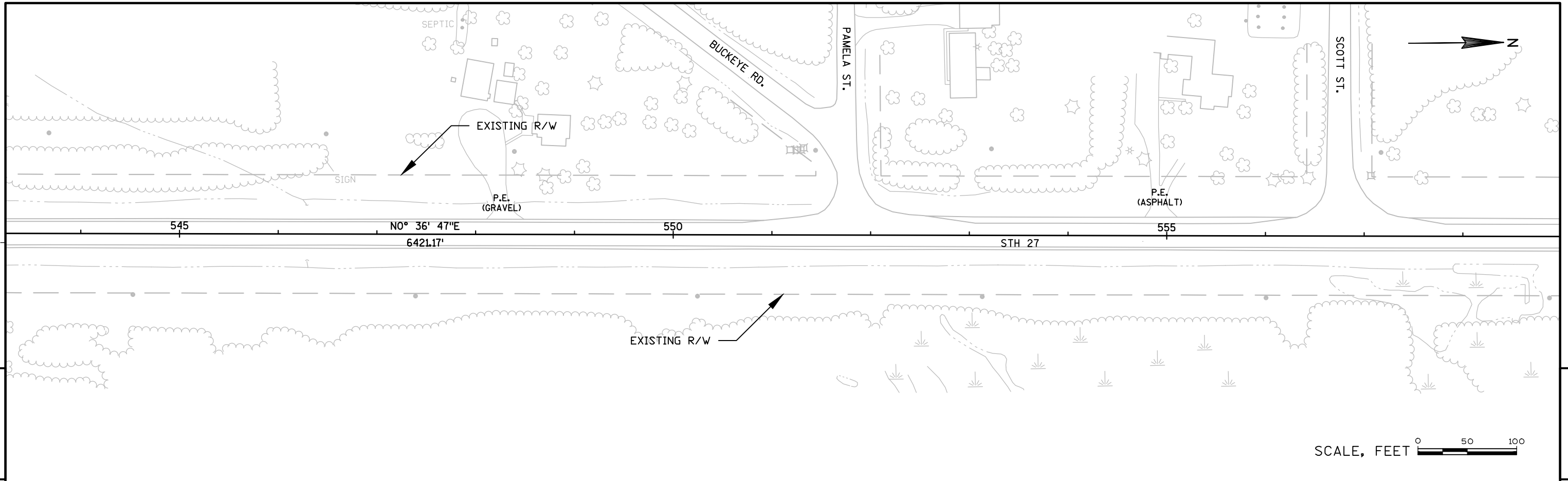




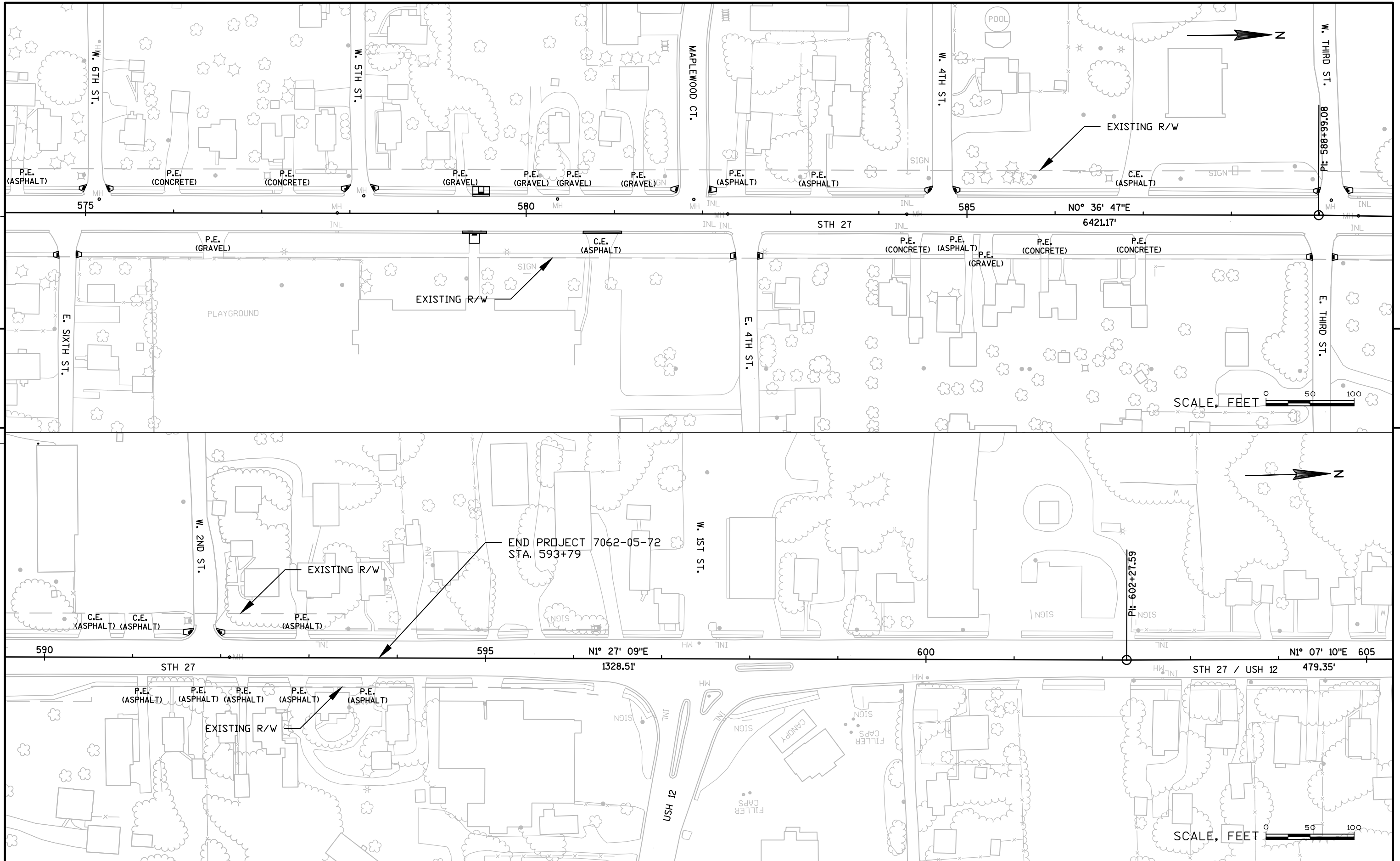




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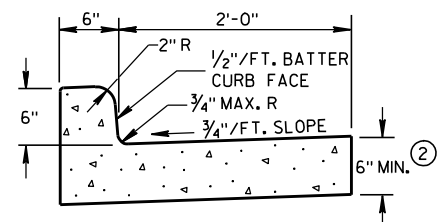
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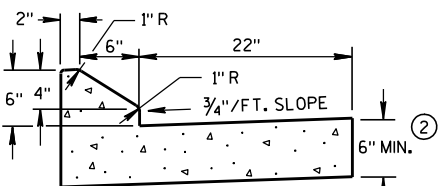
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Standard Detail Drawing List

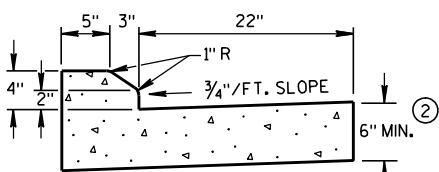
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08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B15-08A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-08B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-08C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B20-11A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-11E	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"
14B24-08A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-08B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-08C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	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)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C06-07	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-02A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-02B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-02C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TYPES A & D ①



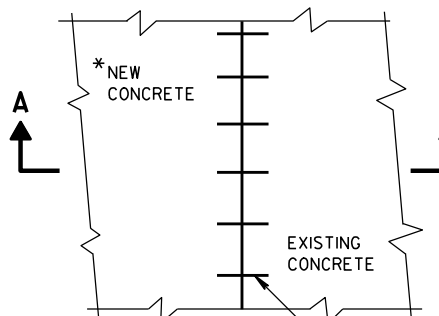
6" SLOPED CURB TYPES G & J ①



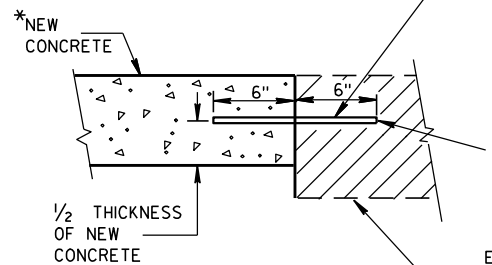
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

* NEW CURB & GUTTER,
SURFACE DRAINS,
CONCRETE PAVEMENT
OR OTHER NEW CONCRETE.



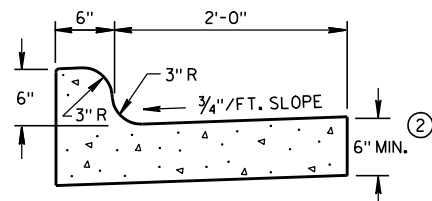
PLAN VIEW

SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

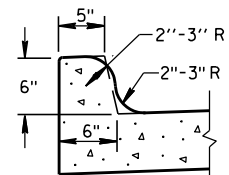
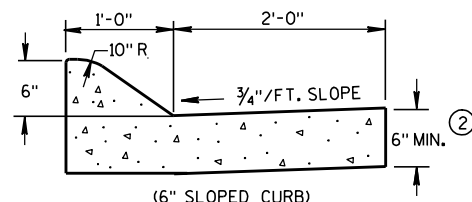
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

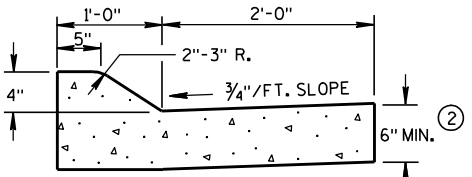
EXISTING
CONCRETE



TYPES K & L ①

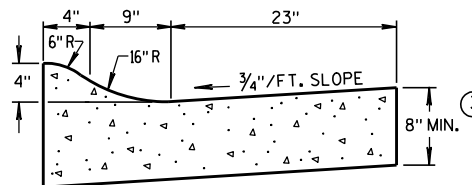
OPTIONAL CURB SHAPE
FOR TYPES K & L ①

(6" SLOPED CURB)



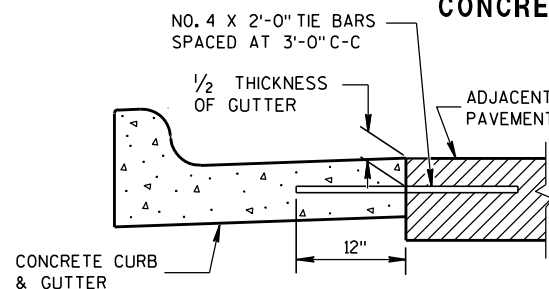
(4" SLOPED CURB)

TYPES A & D ①

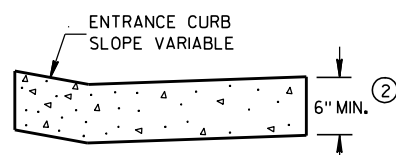


4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

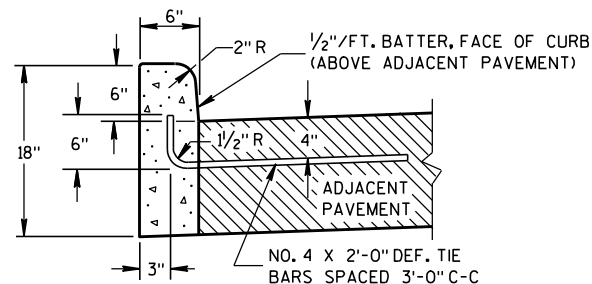


TYPICAL TIE BAR LOCATION ①



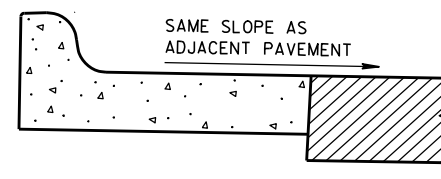
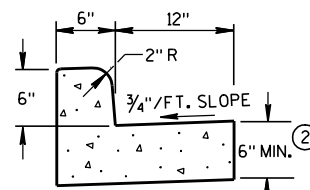
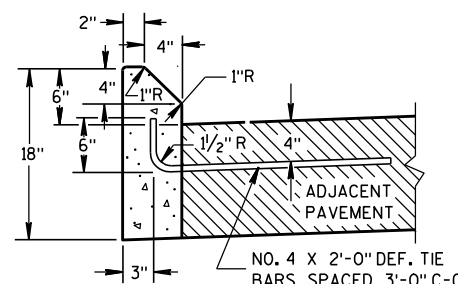
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A & D ①

CONCRETE CURB

REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)TYPES A & D
CONCRETE CURB & GUTTER 18"

TYPES G & J ①

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

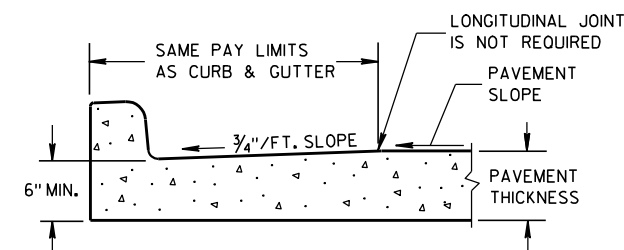
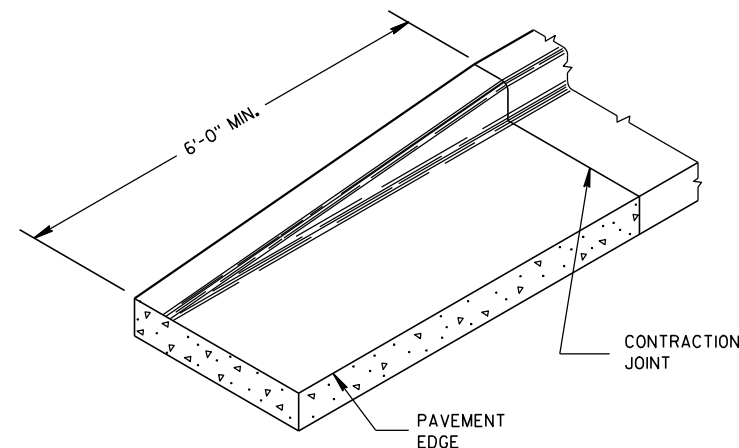
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08

DATE

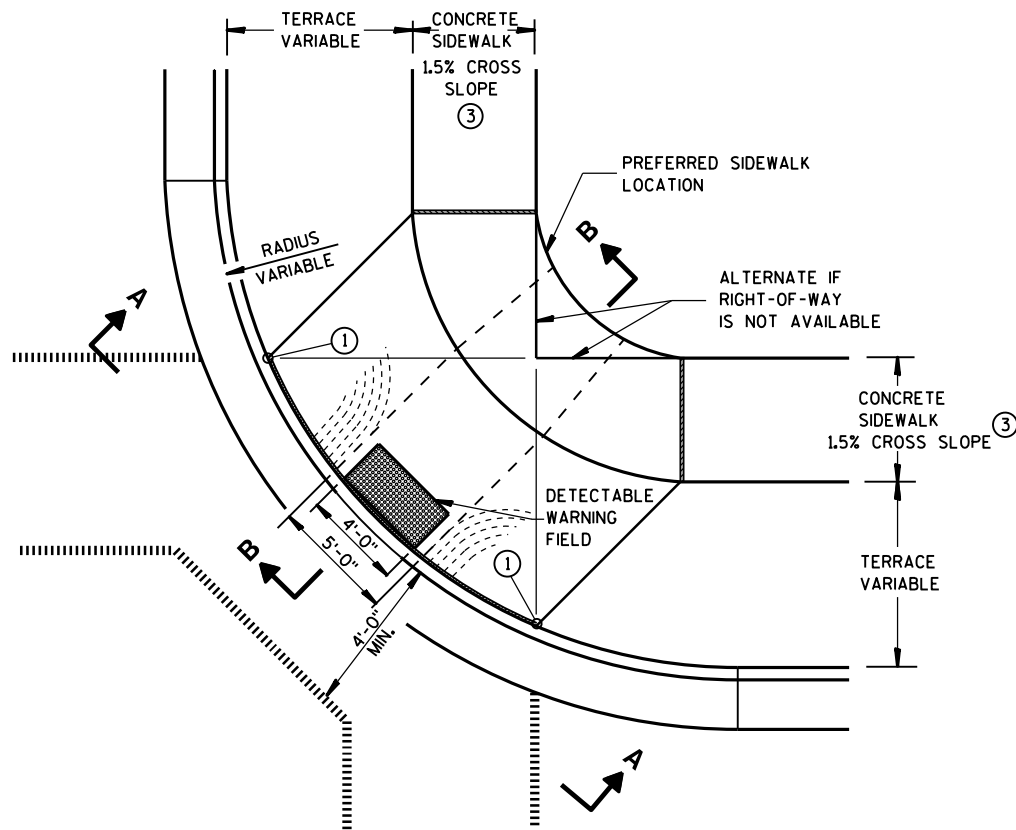
FHWA

/S/ Jerry H. 7

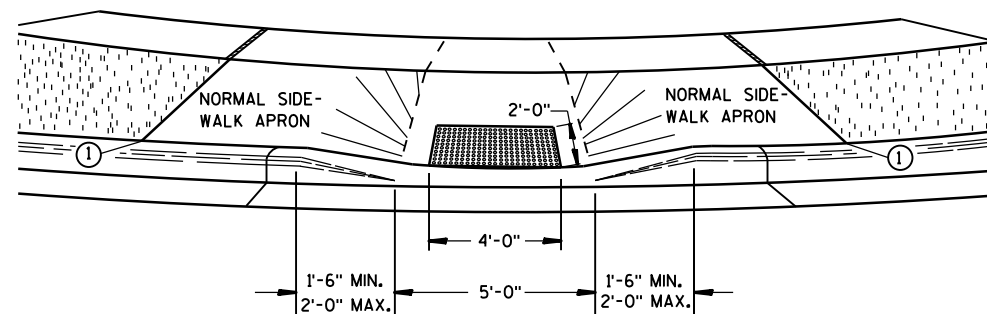
ROADWAY STANDARDS 96

ENGINEER

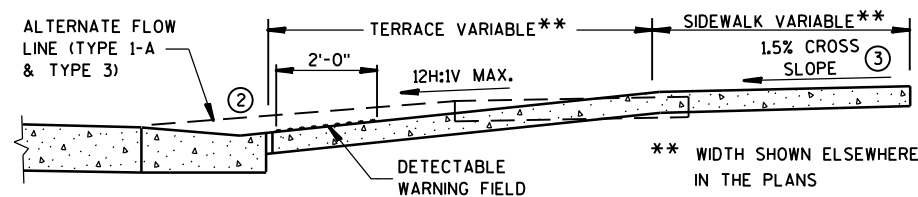
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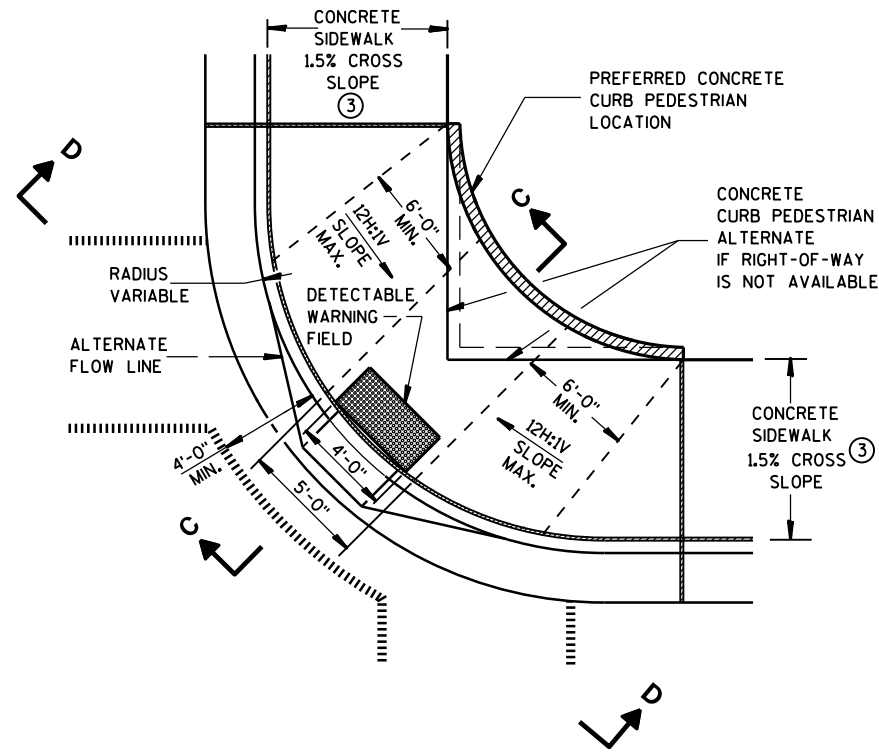
**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)



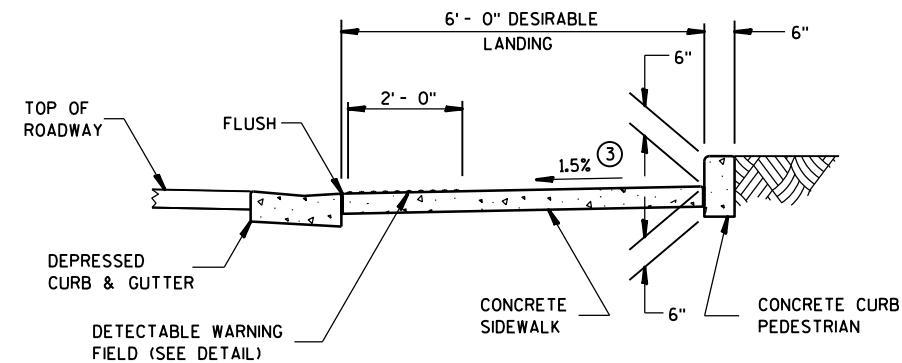
VIEW A-A



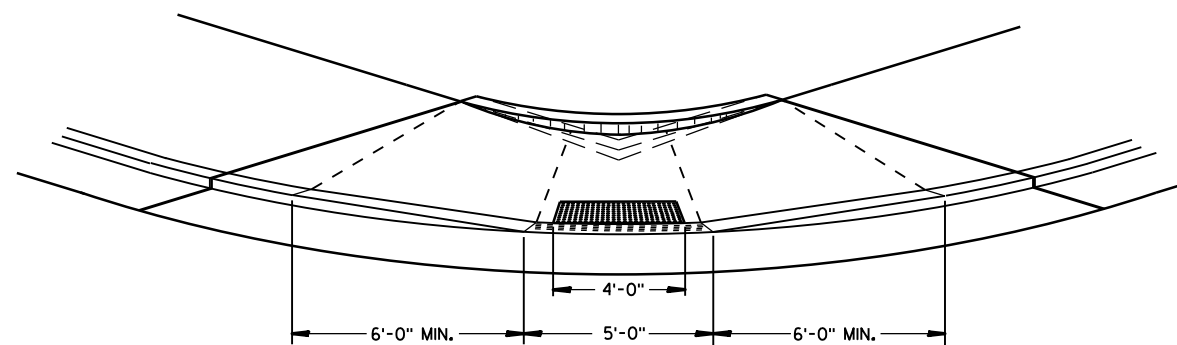
SECTION B-B



**PLAN VIEW
TYPE 1-A RAMP**
(NO TERRACE)



SECTION C-C



VIEW D-D

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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

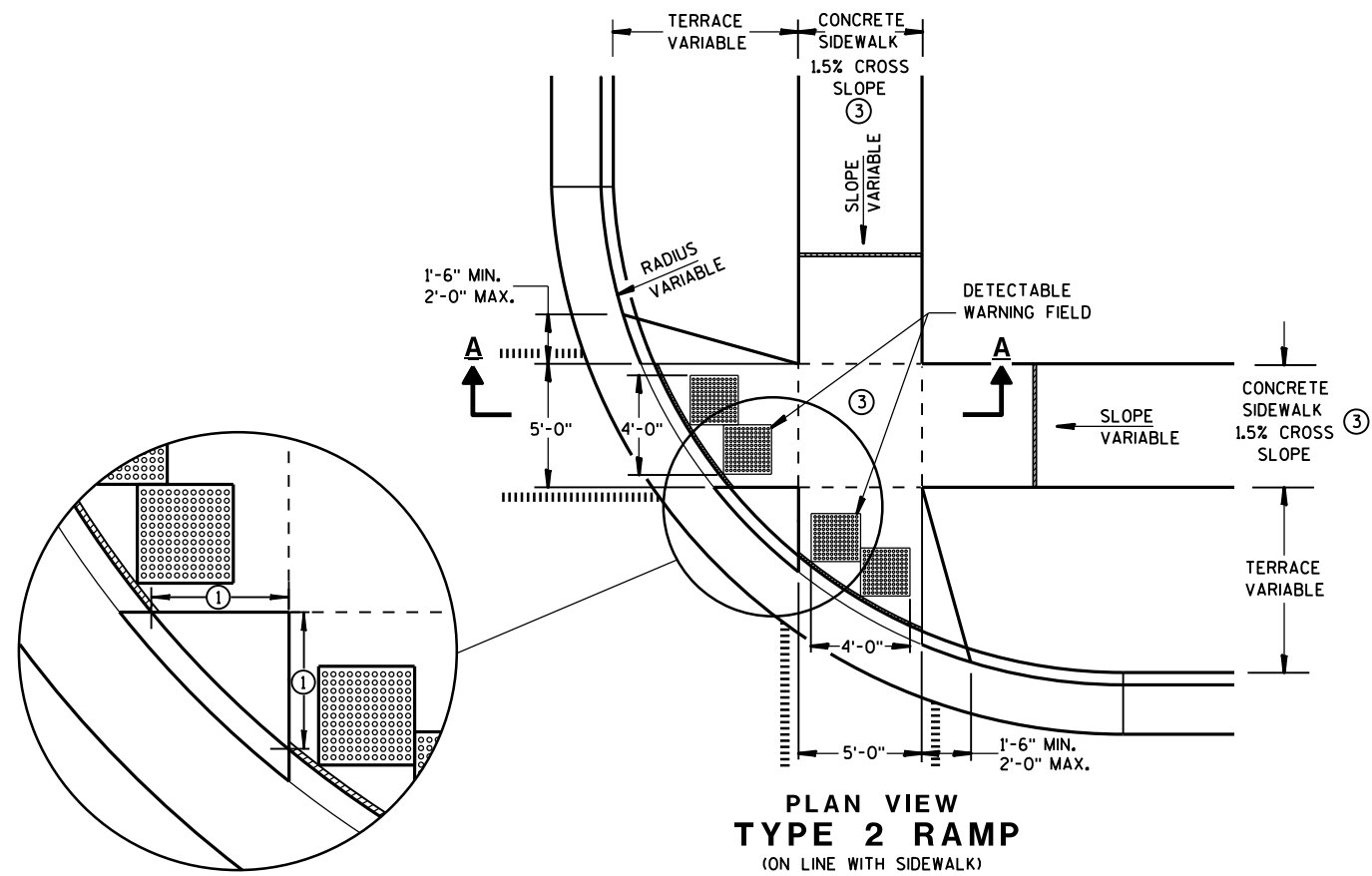
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

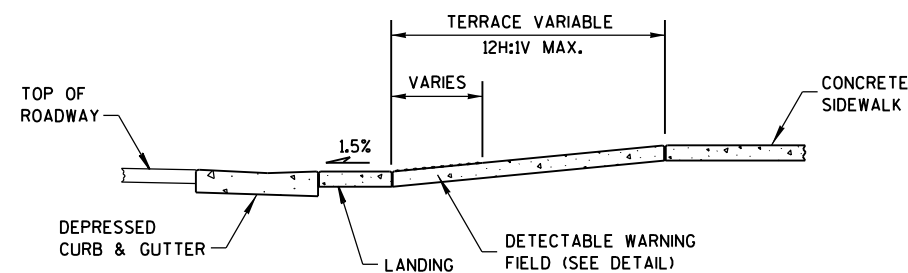
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

**CURB RAMPS
TYPES 1 AND 1-A**

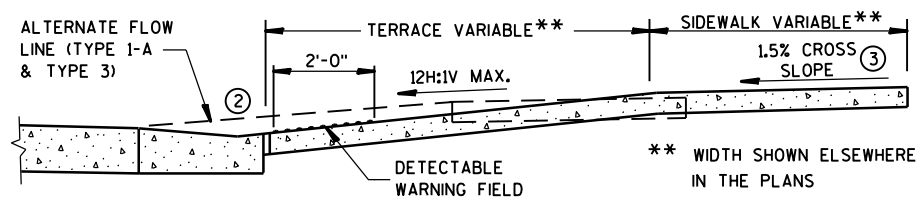
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**PLAN VIEW
TYPE 2 RAMP**
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

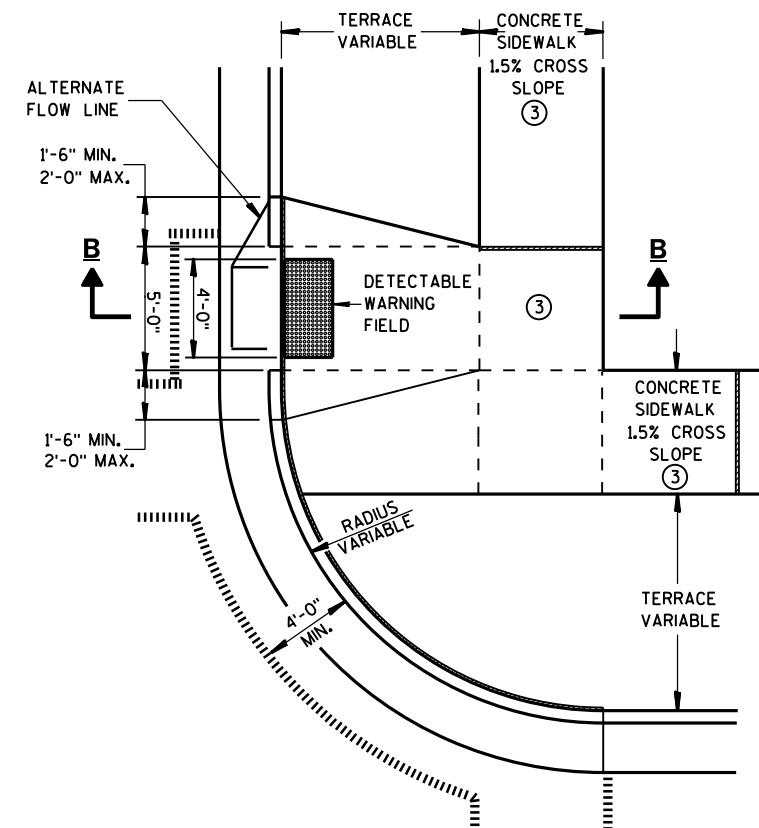
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



**PLAN VIEW
TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS
TYPES 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A



INTERMEDIATE RADII CAN BE INTERPOLATED



AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

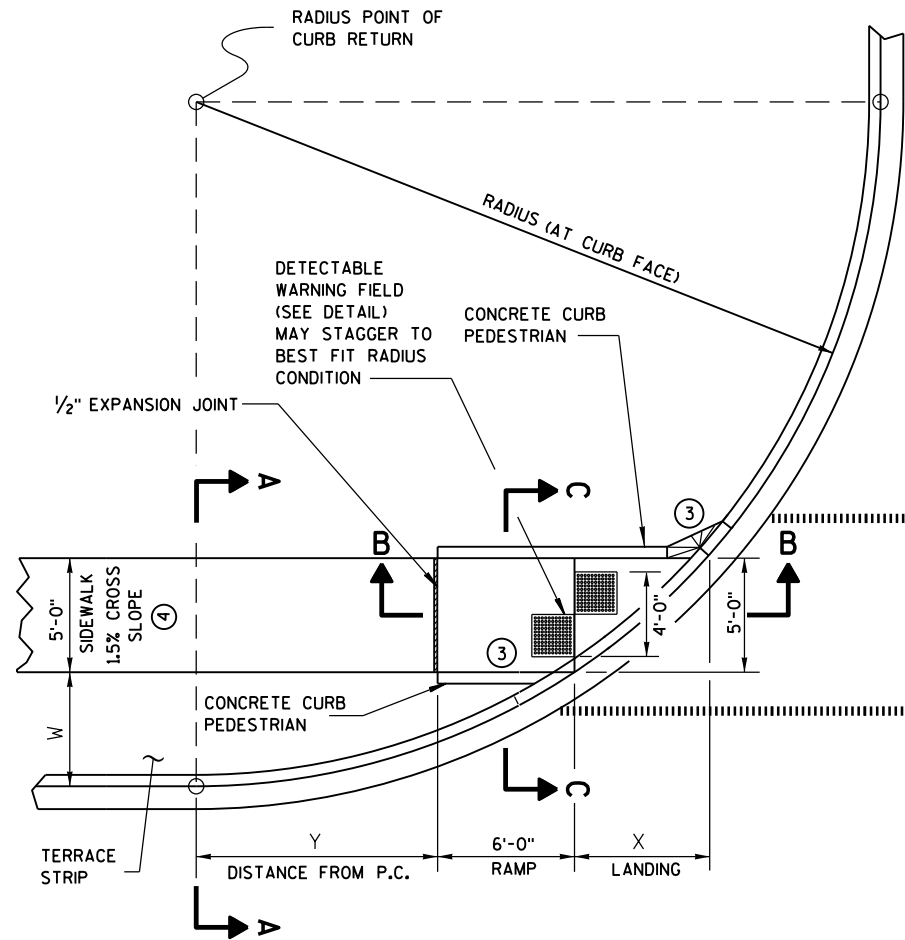
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.
- ④ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

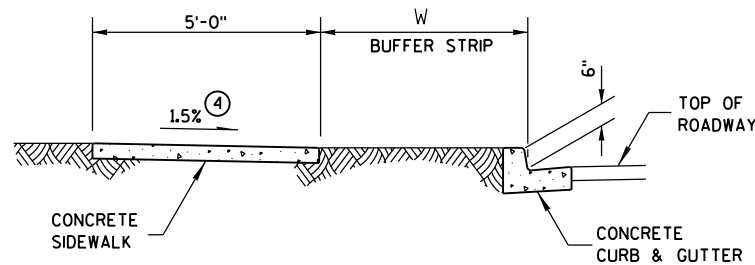


=====	1/2" EXPANSION JOINT-SIDEWALK
- - - -	CONTRACTION JOINT FIELD LOCATED
	PAVEMENT MARKING CROSSWALK (WHITE)

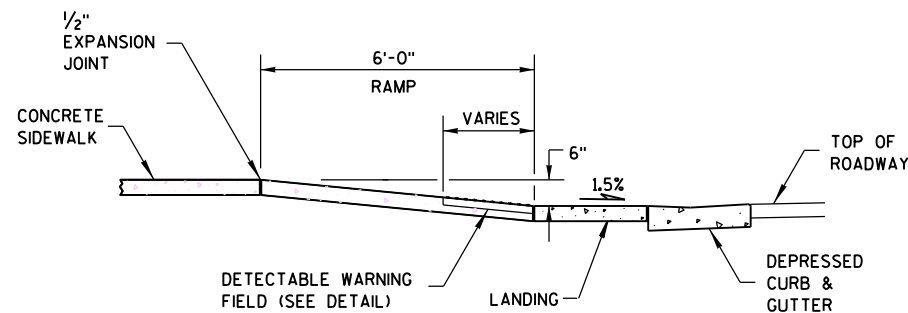
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION⁹⁹



**CURB RAMP TYPE 4B
PLAN VIEW**



SECTION A-A FOR TYPE 4B

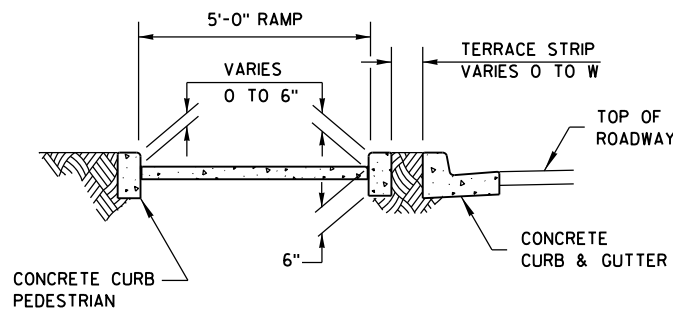


SECTION B-B FOR TYPE 4B

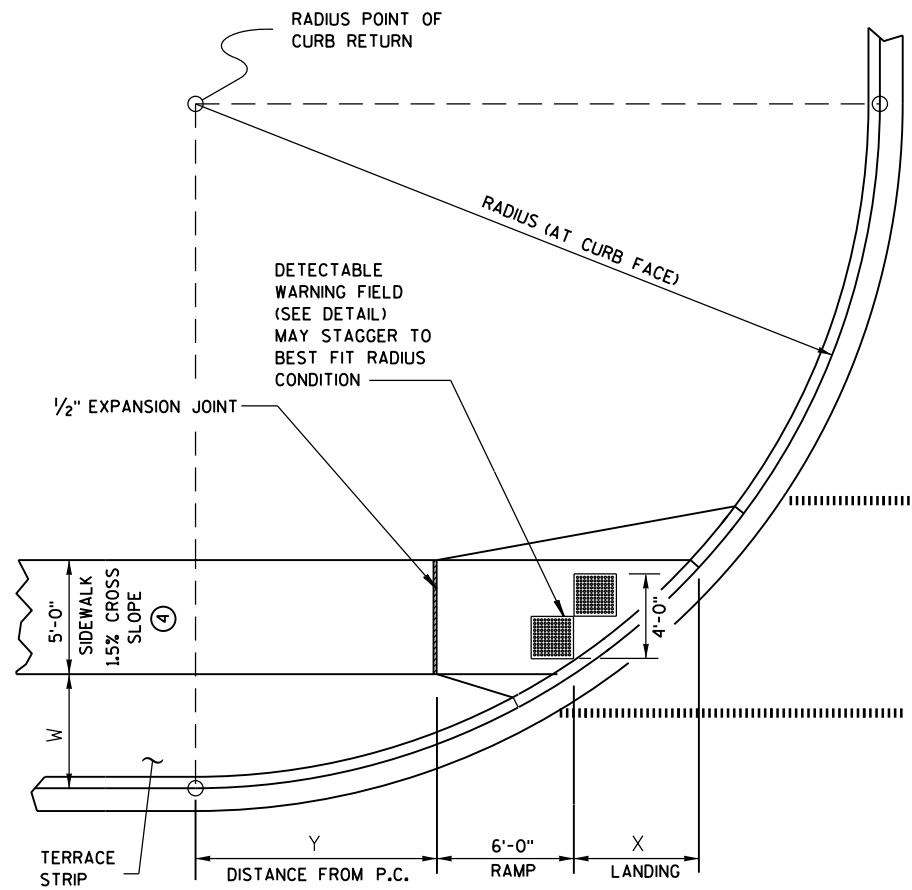
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - - - CONTRACTION JOINT FIELD LOCATED
 - ===== PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B



**CURB RAMP TYPE 4B1
PLAN VIEW**

GENERAL NOTES

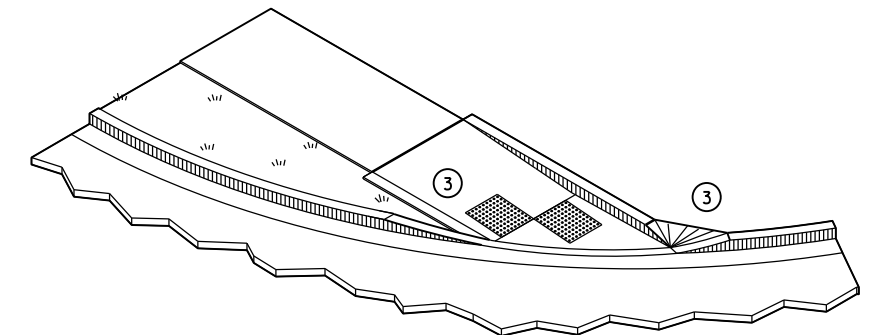
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

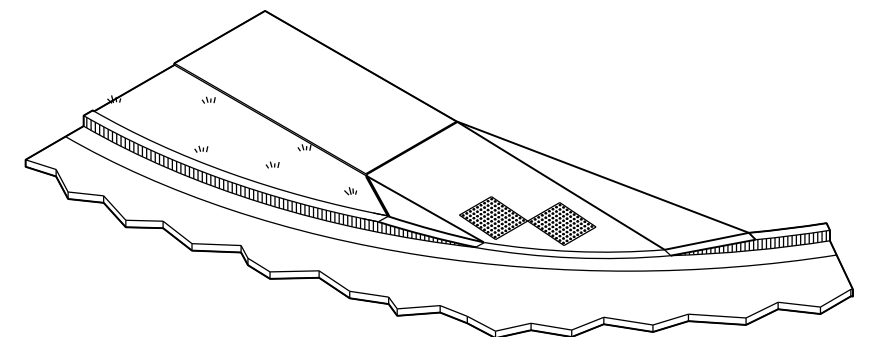
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



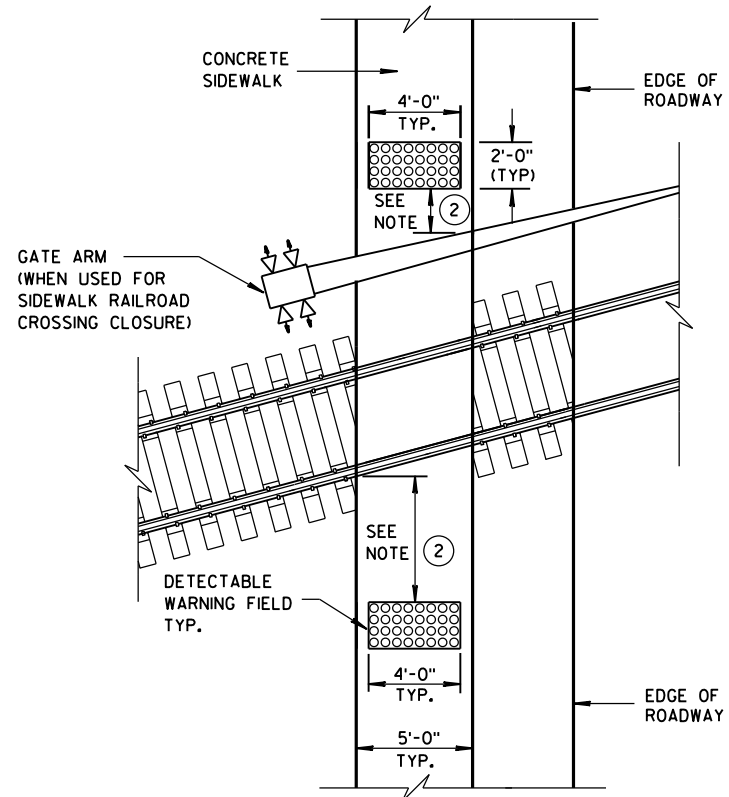
ISOMETRIC VIEW FOR TYPE 4B



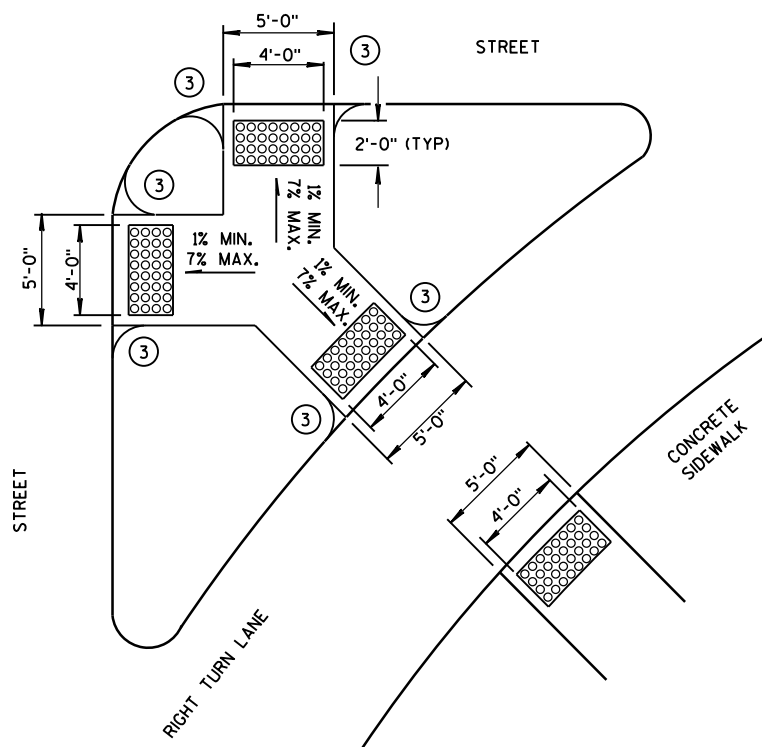
ISOMETRIC VIEW FOR TYPE 4B1

**CURB RAMPS
TYPE 4B AND 4B1**

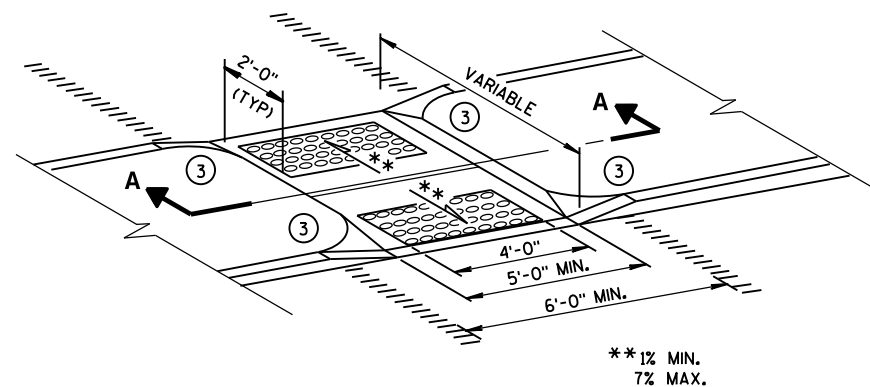
STATE OF WISCONSIN
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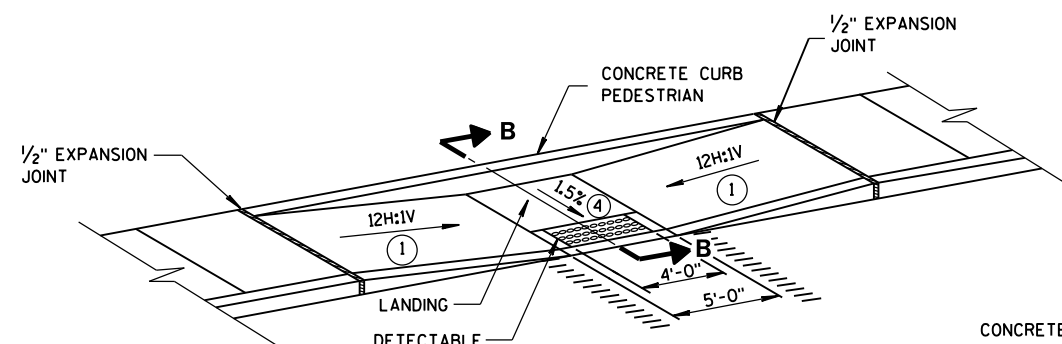
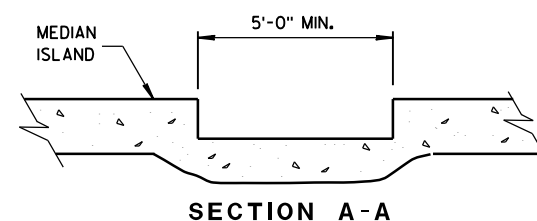
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



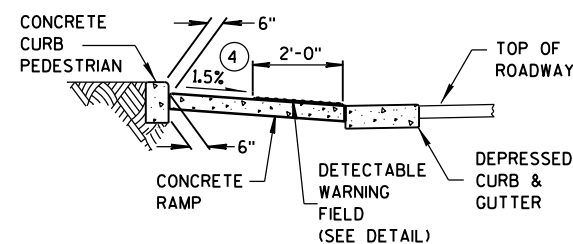
TYPE 6
DETECTABLE WARNING AT ISLANDS



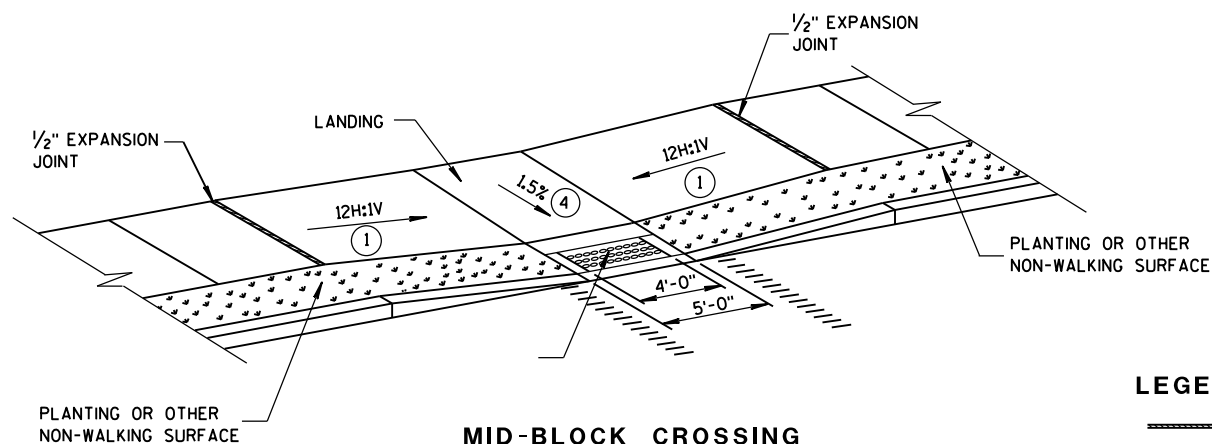
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

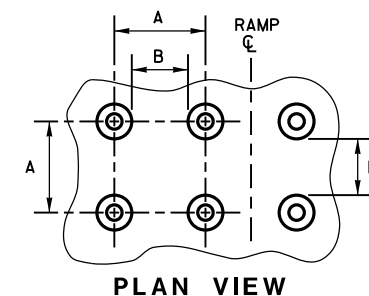
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

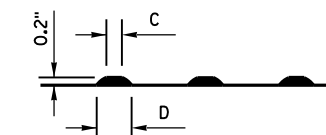
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.
- 4 $\pm$ 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



PLAN VIEW

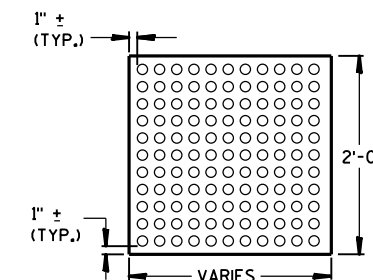


ELEVATION VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

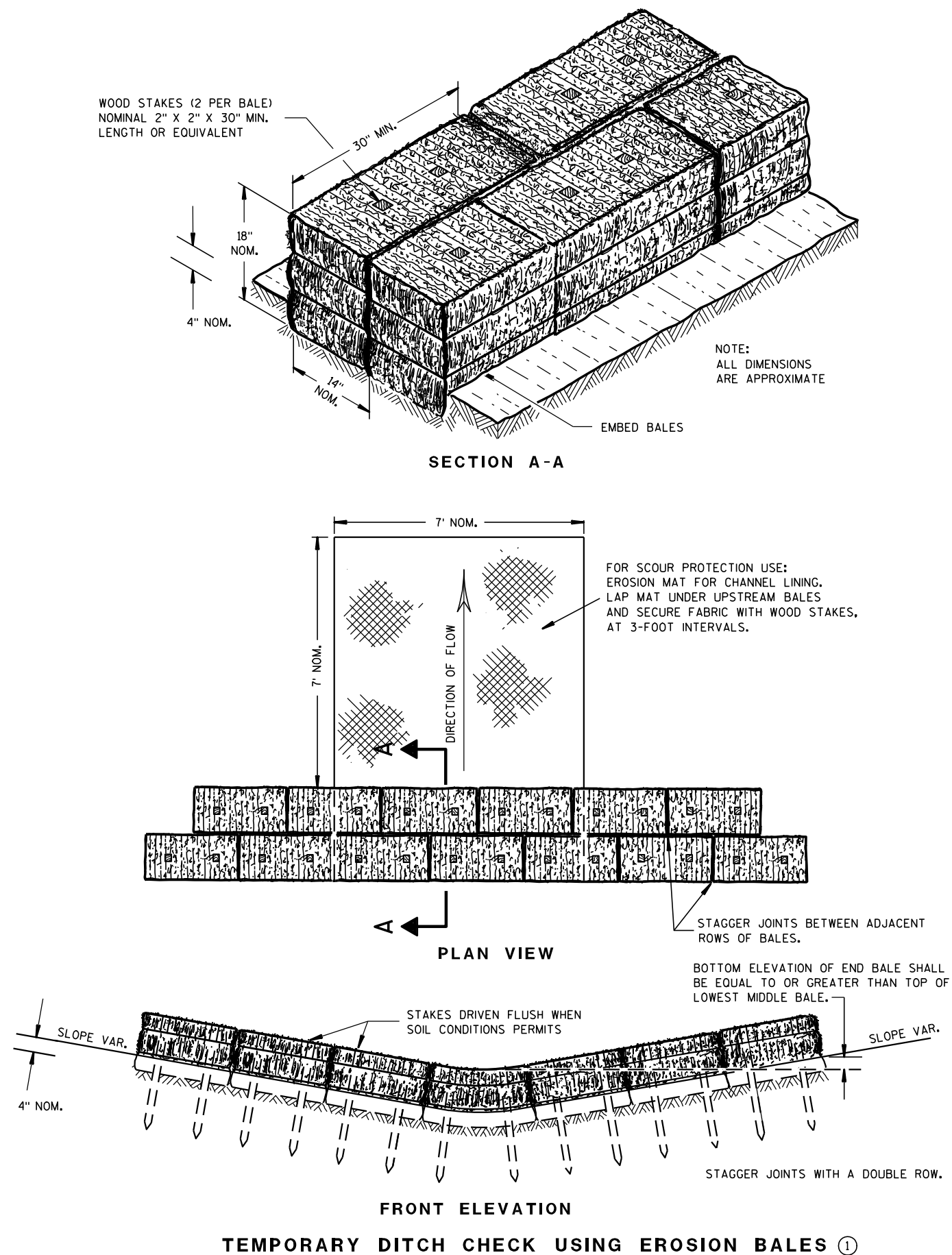
2-6-2013
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

101

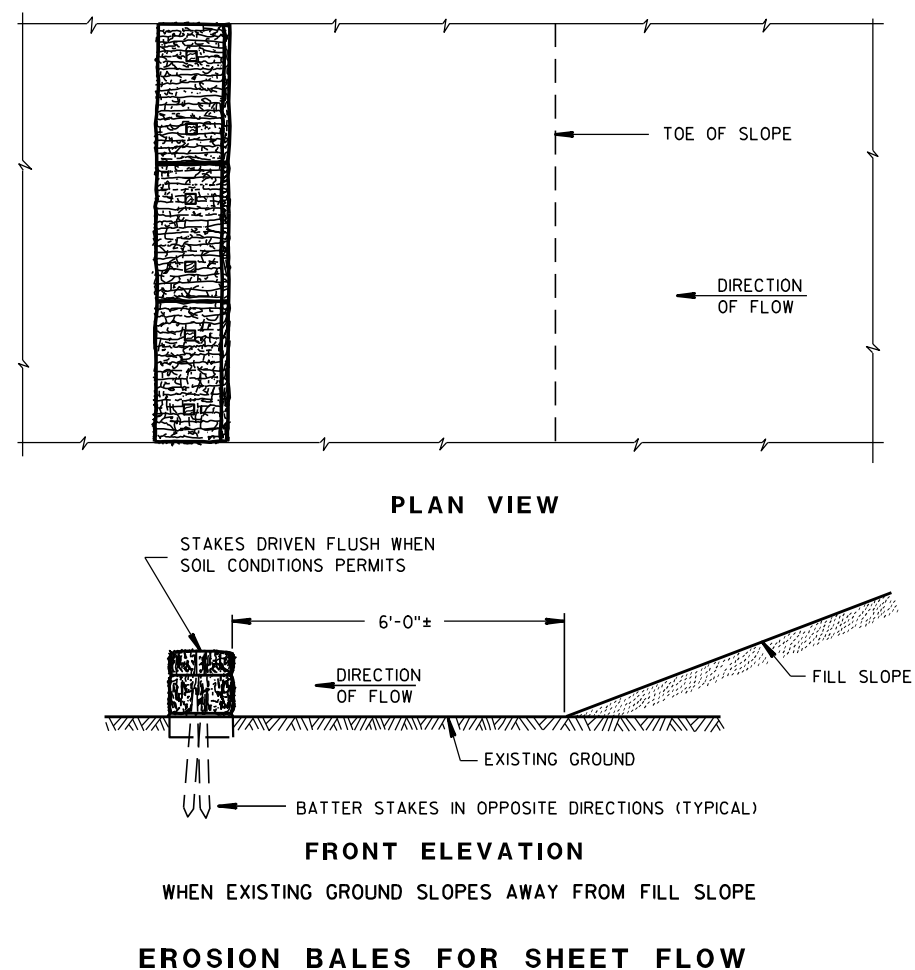
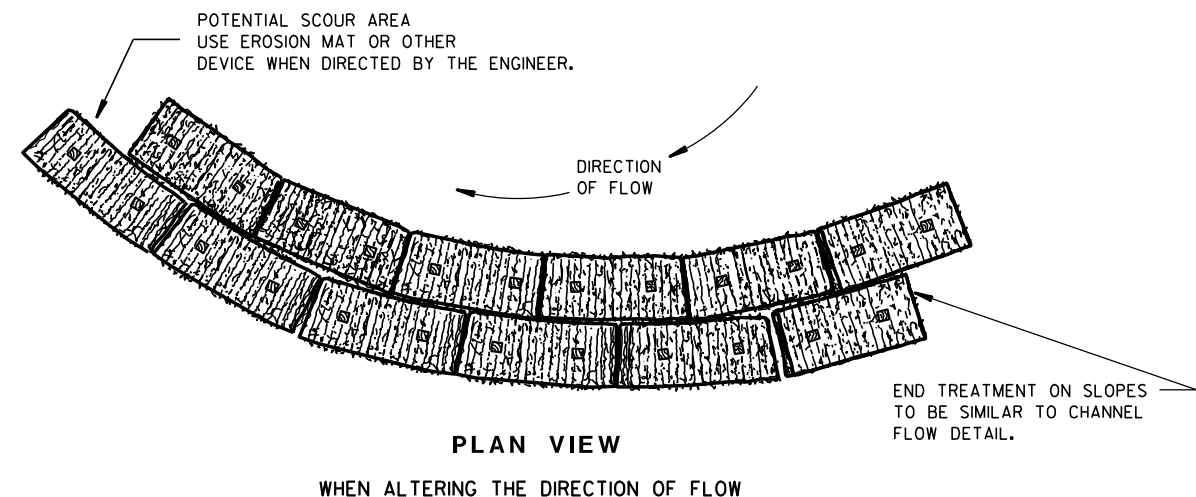
INT



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.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

/S/ Beth Conn-----
CHIEF ROADWAY DEVELOPER 102 ENGINEER

FHWA



- 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 1½" X 1½" 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.

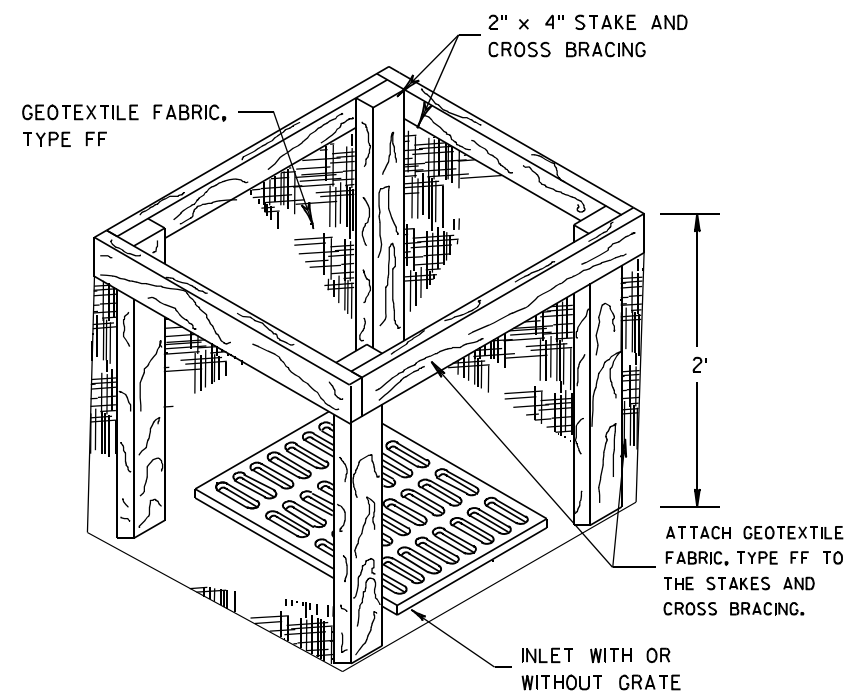
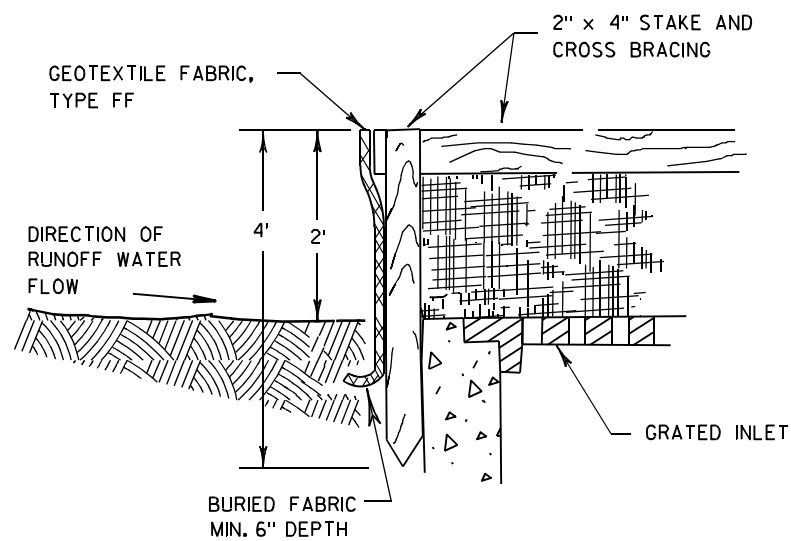


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 /S/ Beth Connolly
DATE CHIEF ROADWAY DEVELOPMENT 103 JINEER

FHWA



INLET PROTECTION, TYPE A

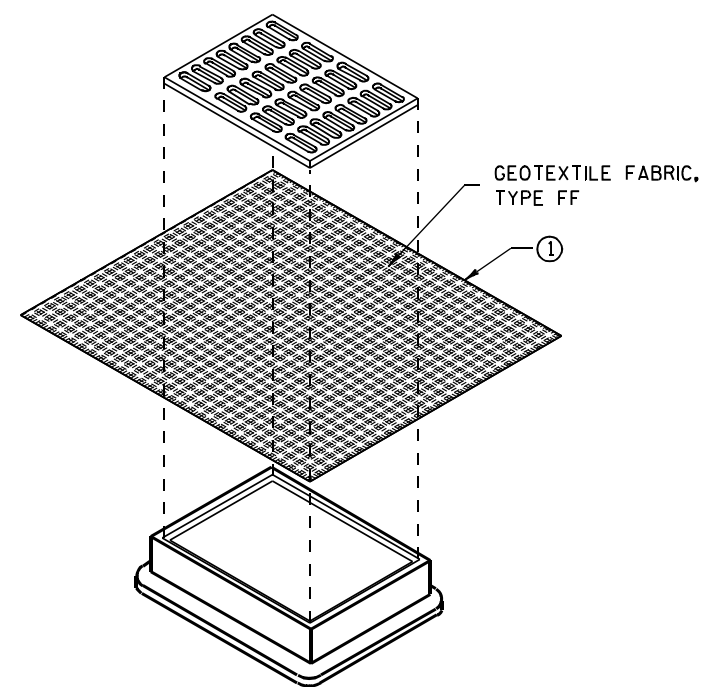
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

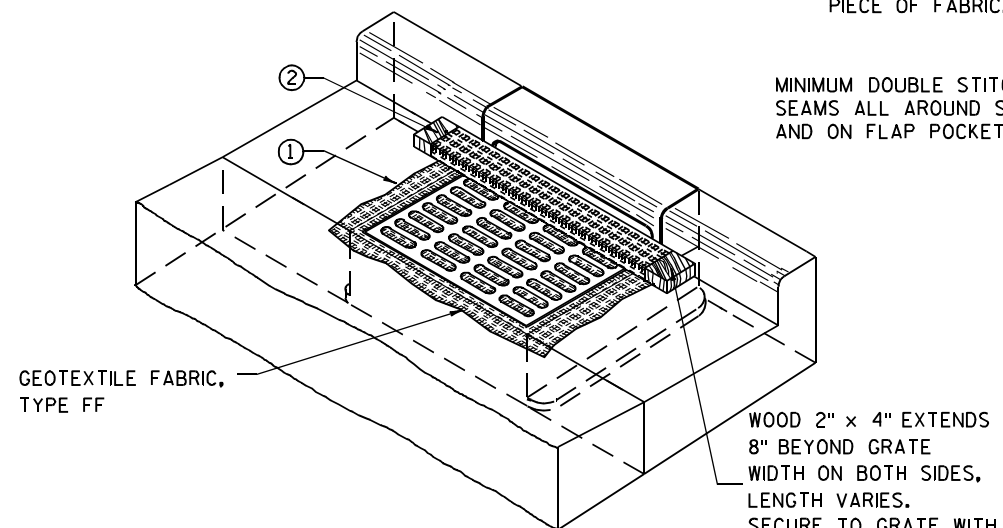
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

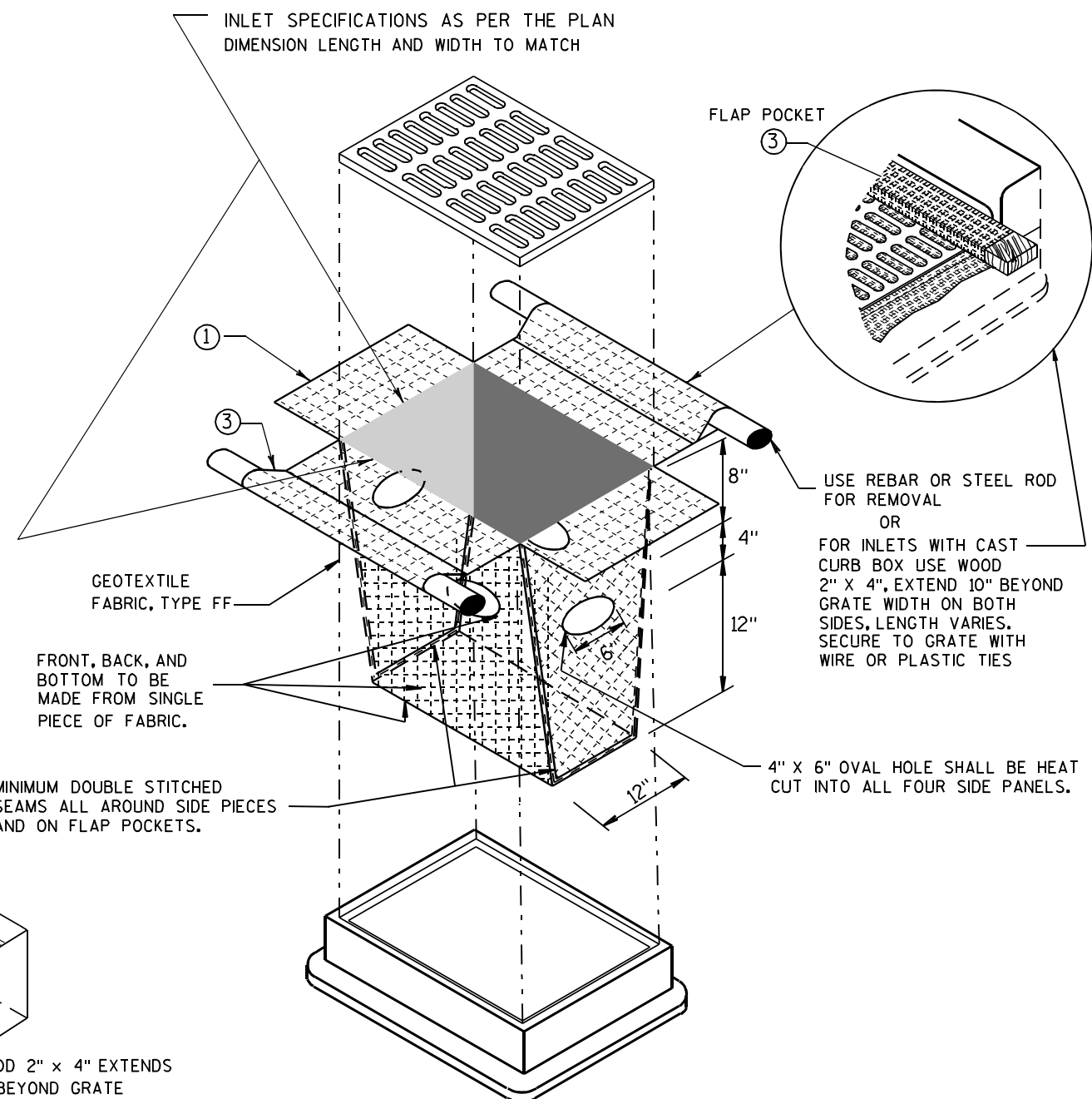
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLower THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

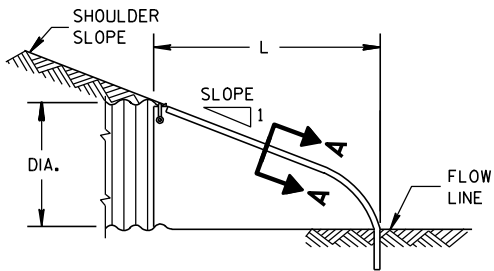
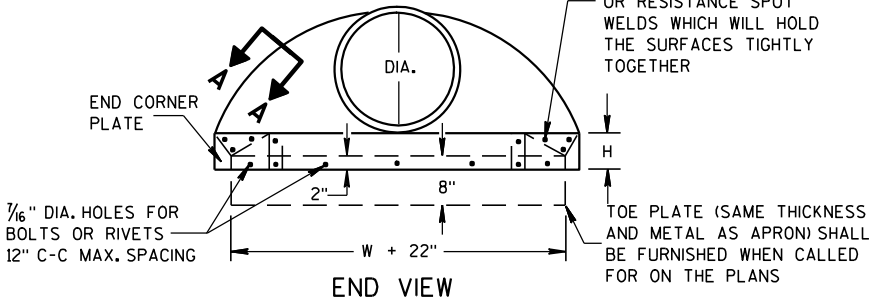
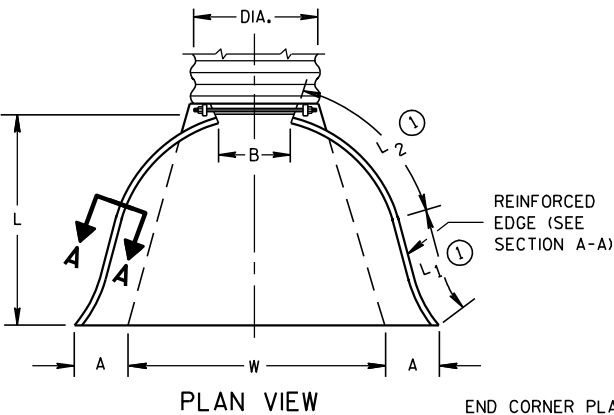
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 104
FHWA 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")	L ₁ ①	L ₂ ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.	
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.	
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.	
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.	
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.	
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 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.	

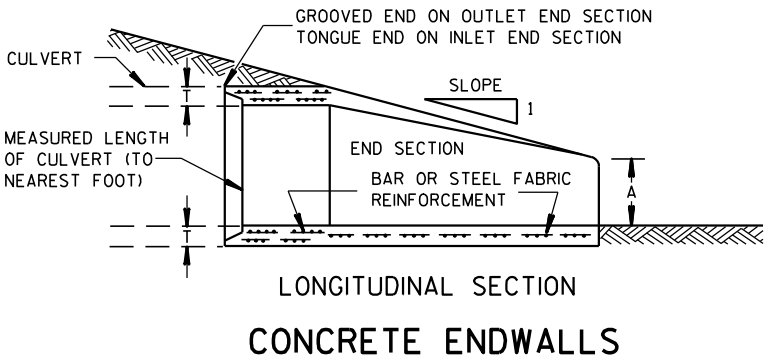
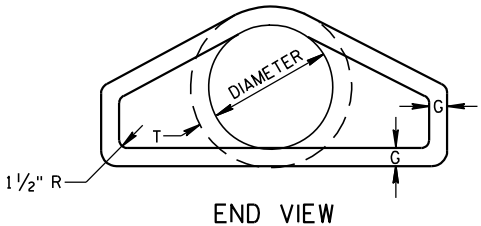
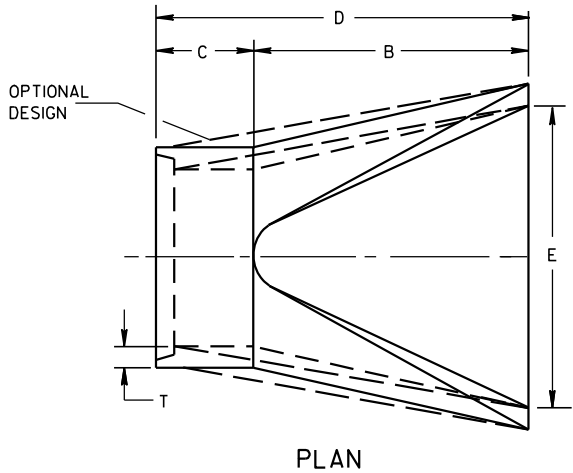
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

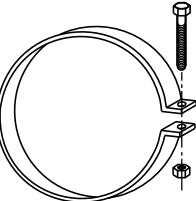
REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ¹ / ₈	72 ¹ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ¹ / ₂	9	27	46	73	36	2 ¹ / ₂	3 to 1
21	2 ³ / ₄	9	36	37 ¹ / ₂	73 ¹ / ₂	42	2 ³ / ₄	3 to 1
24	3	9 ¹ / ₂	43 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

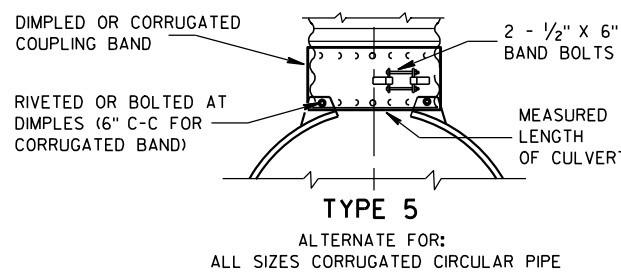
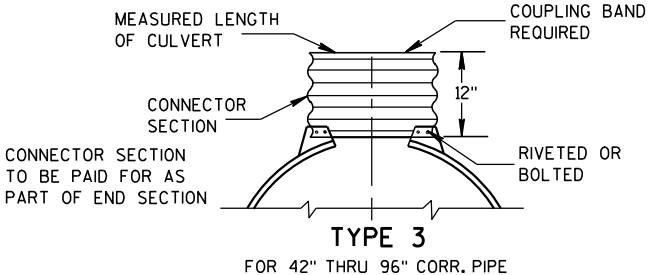
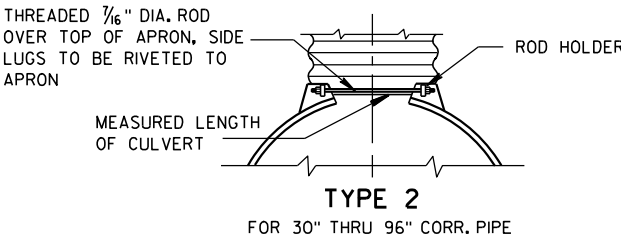
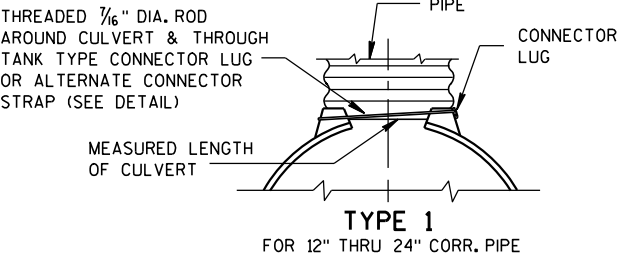


LONGITUDINAL SECTION
CONCRETE ENDWALLS

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



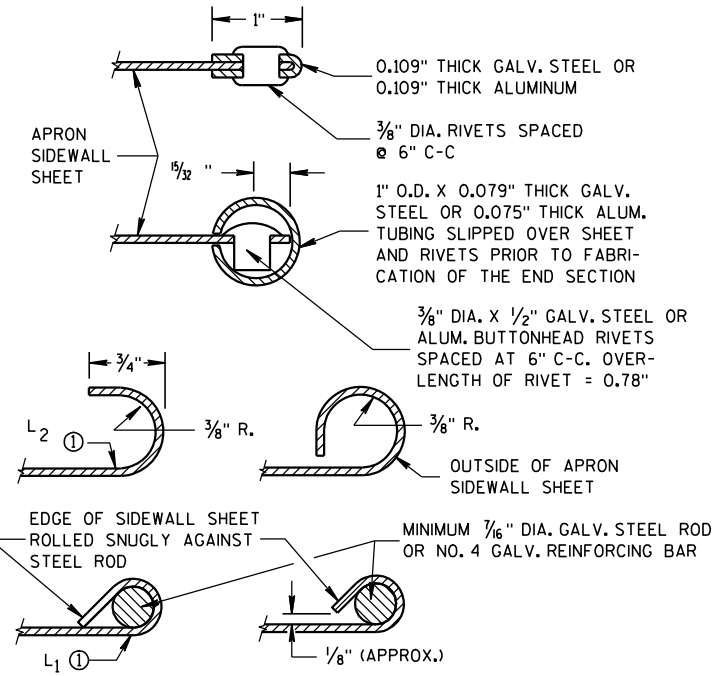
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

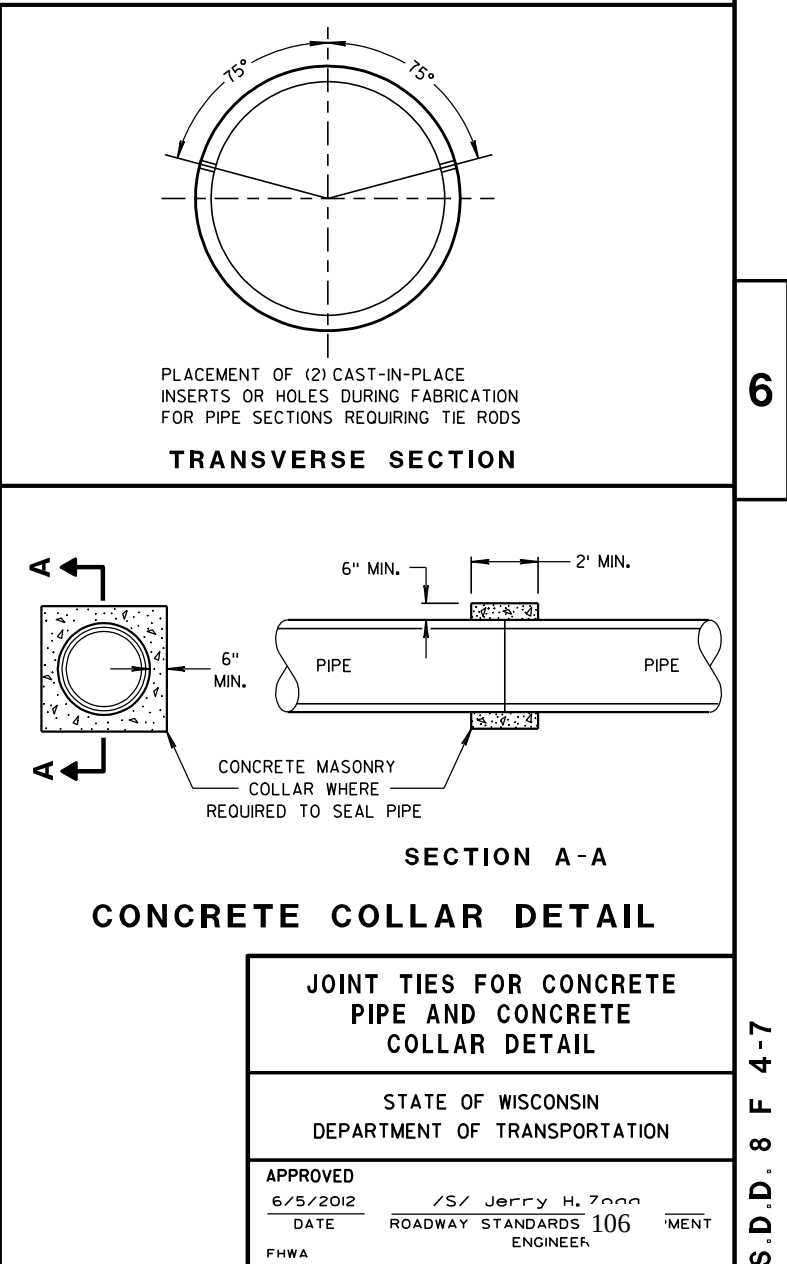
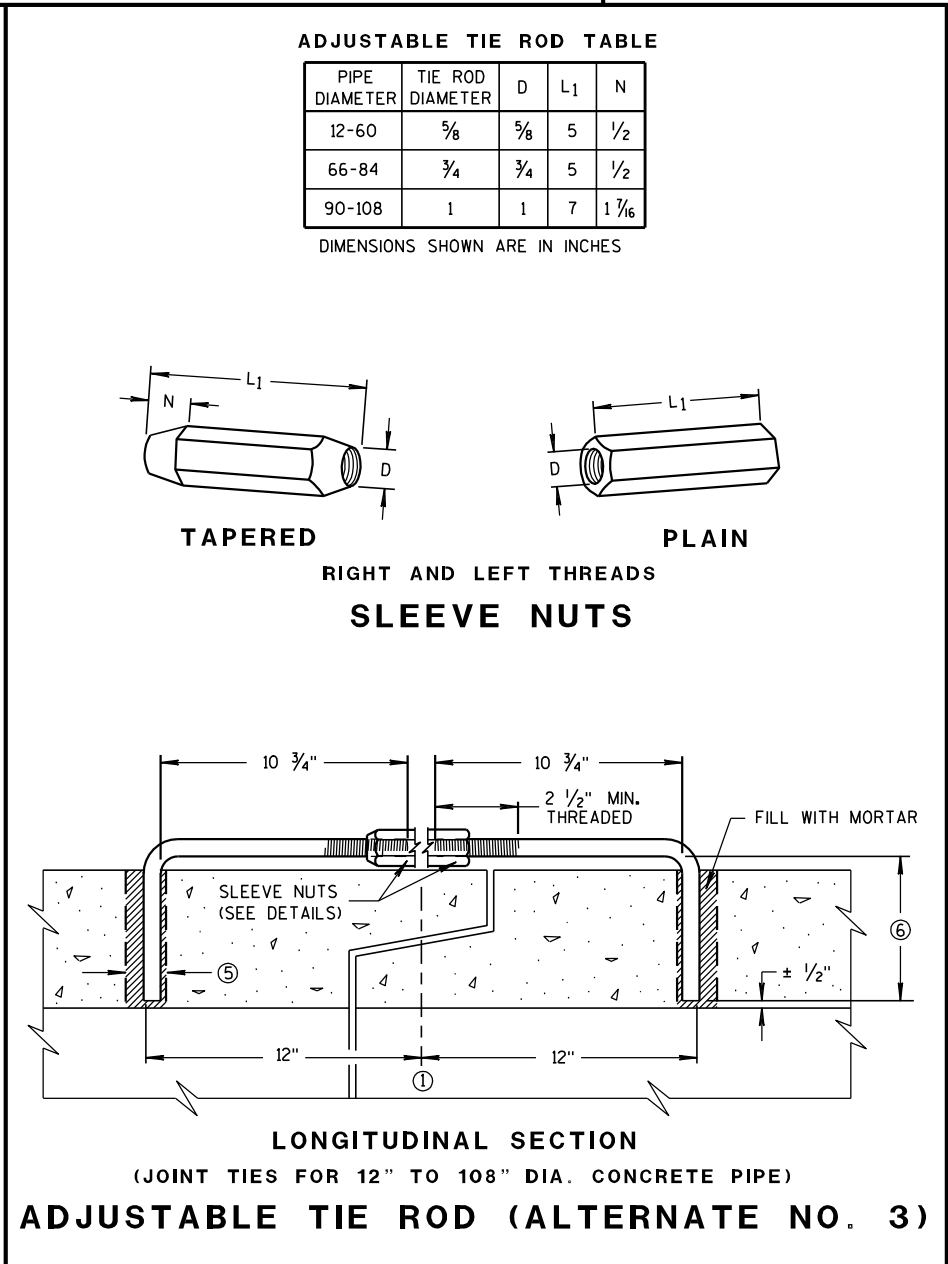
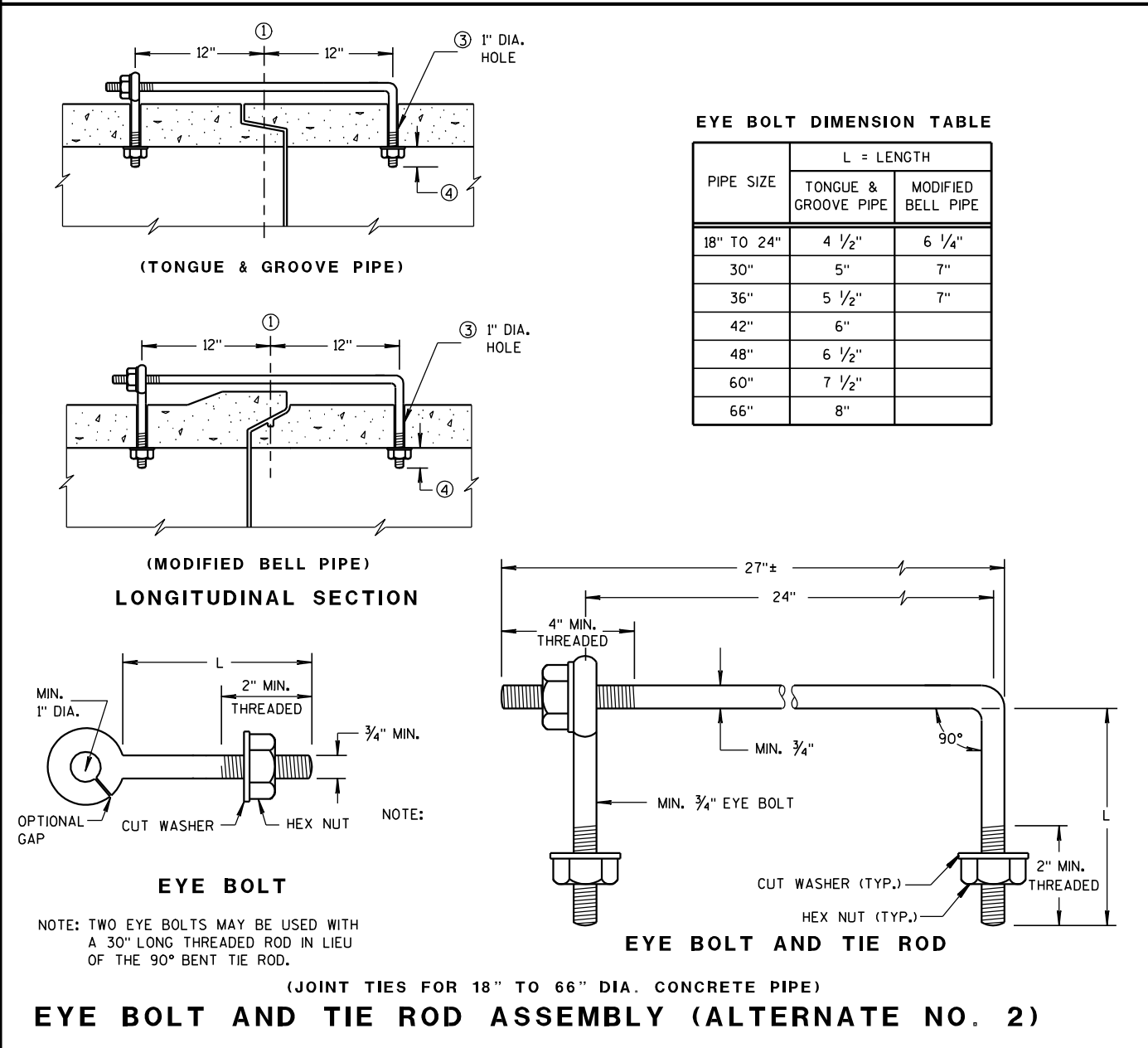
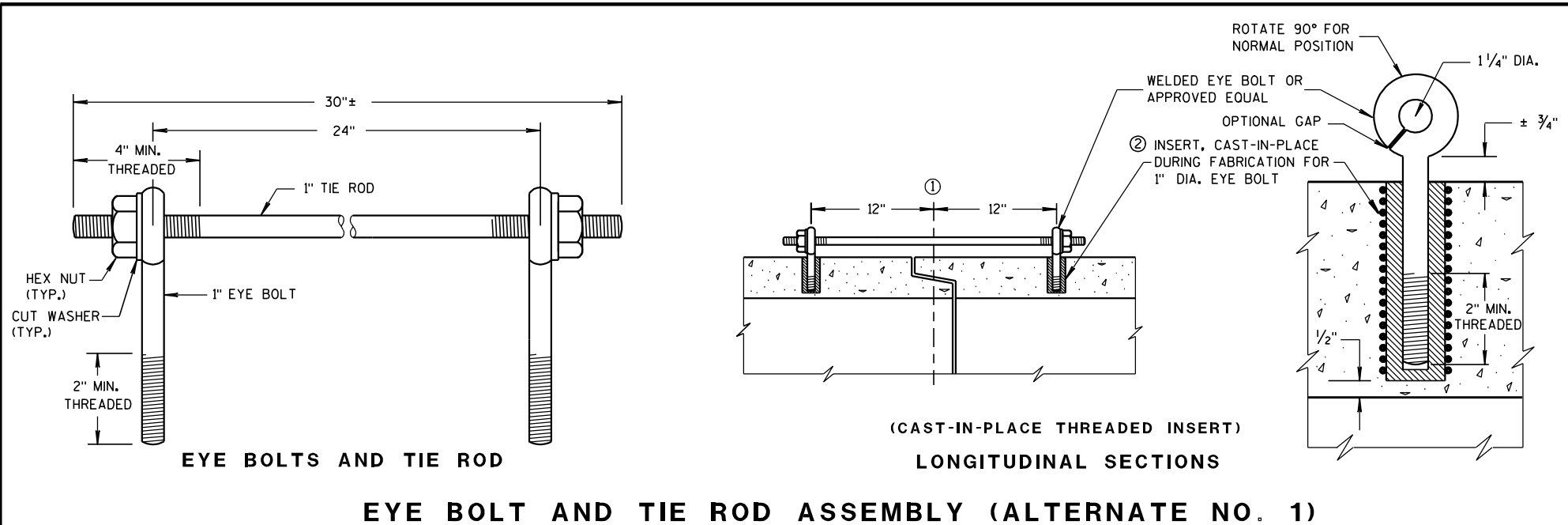
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT 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. Rhinehart CHIEF ROADWAY DEVELOP	105	NEER
FHWA			



GENERAL NOTES

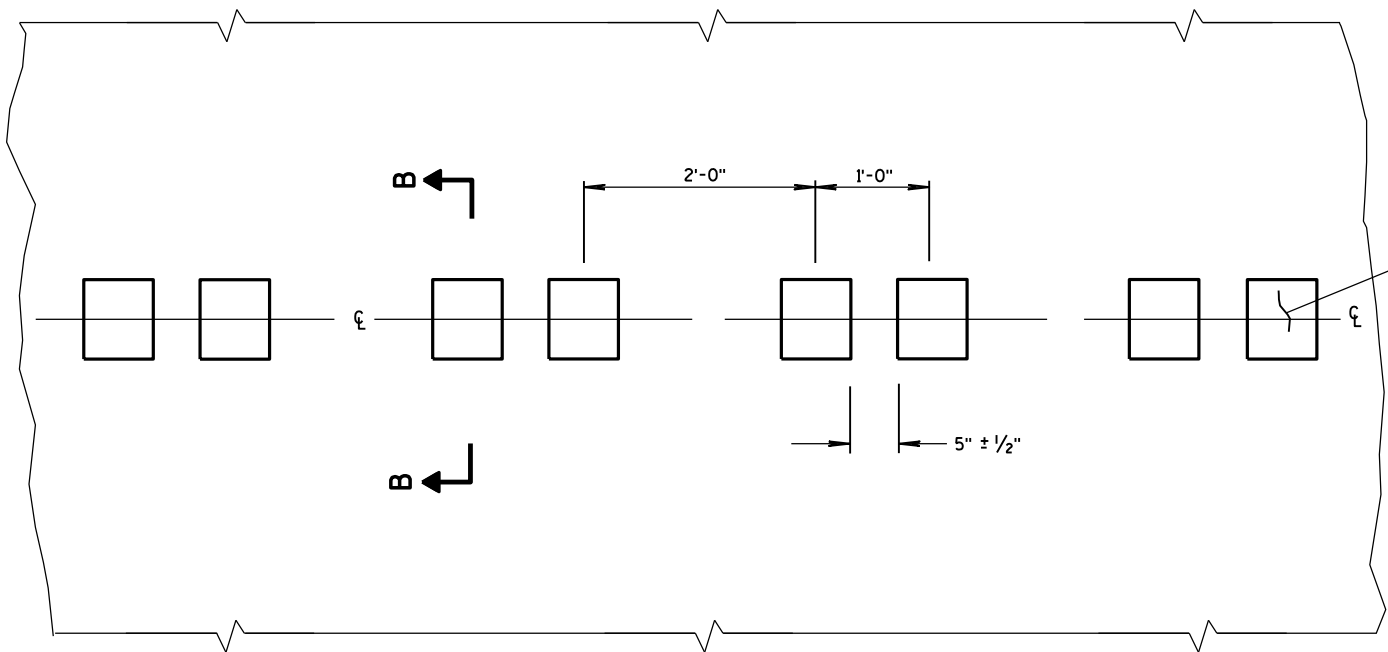
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

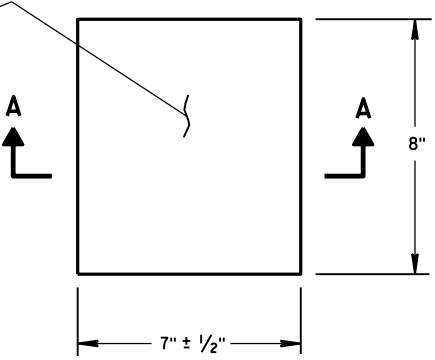
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

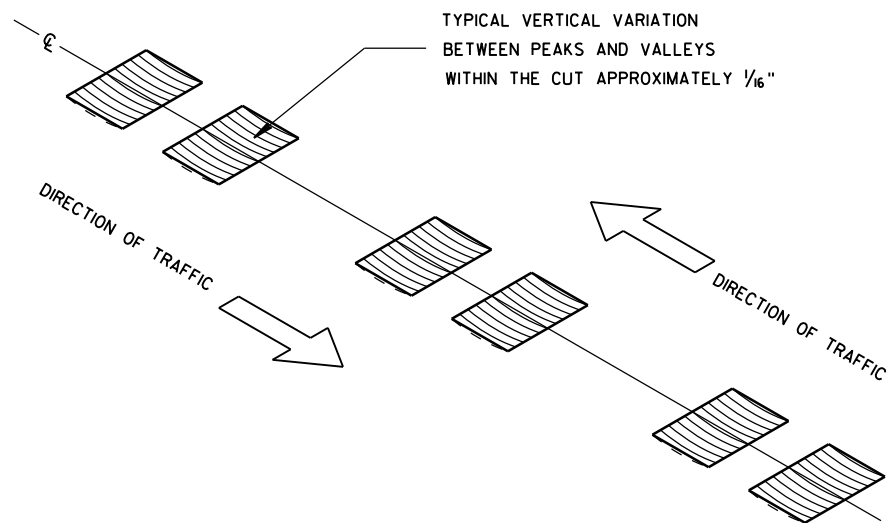
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



PLAN VIEW
CENTER LINE WITH GROOVES

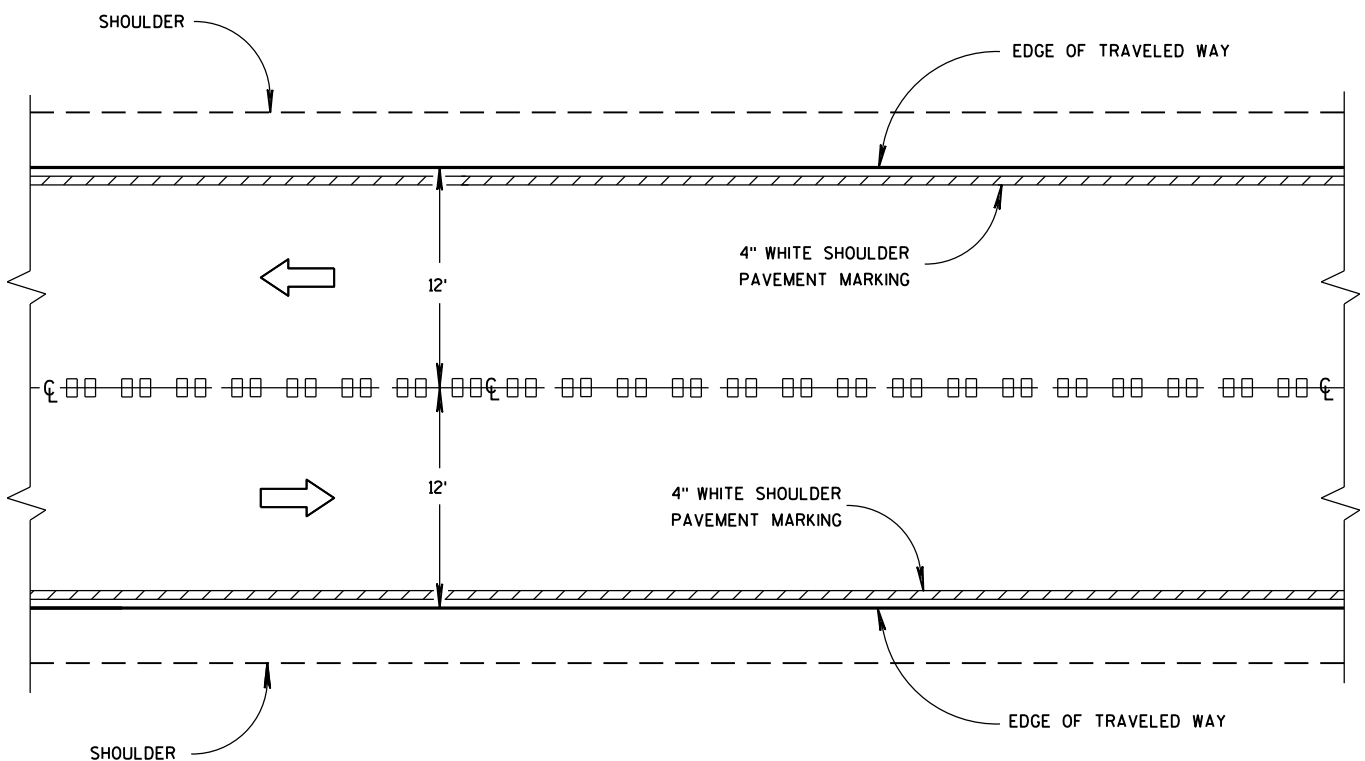


PLAN VIEW
(SINGLE GROOVE)

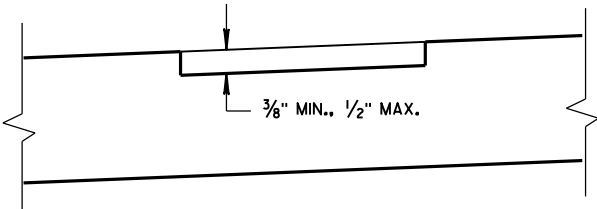


ISOMETRIC

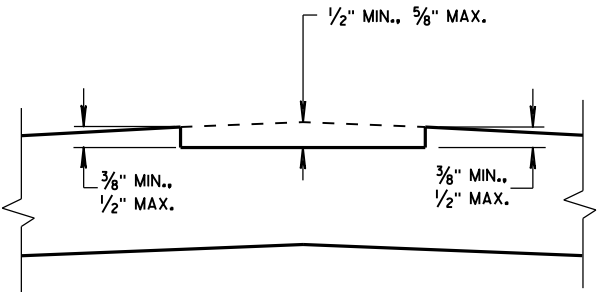
PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



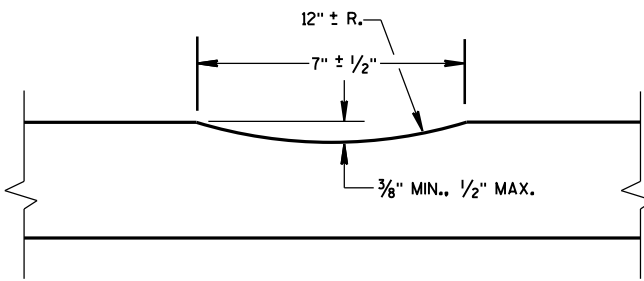
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY

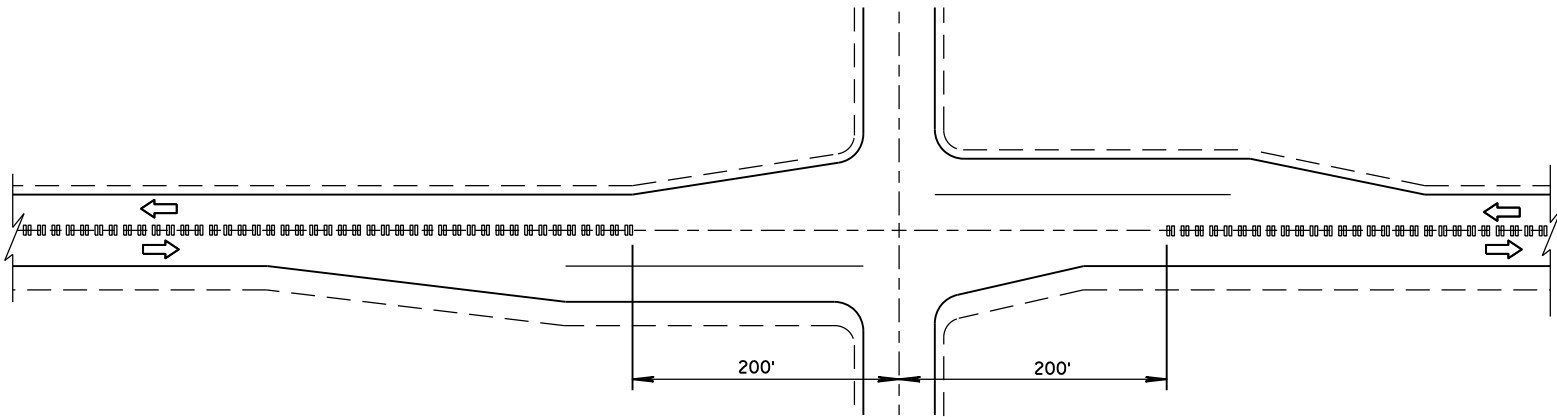


SECTION A-A

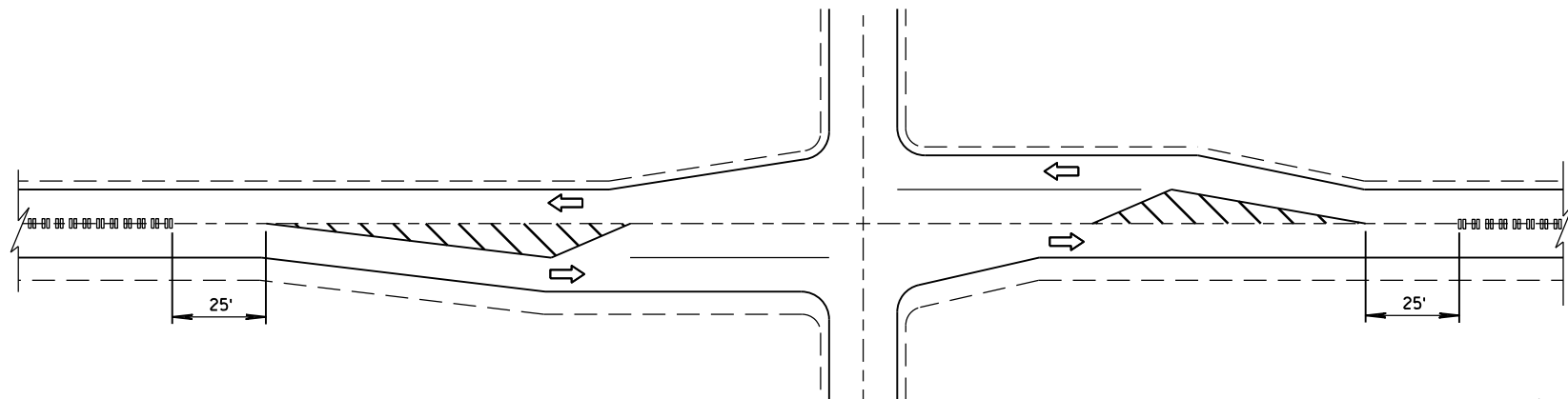
2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

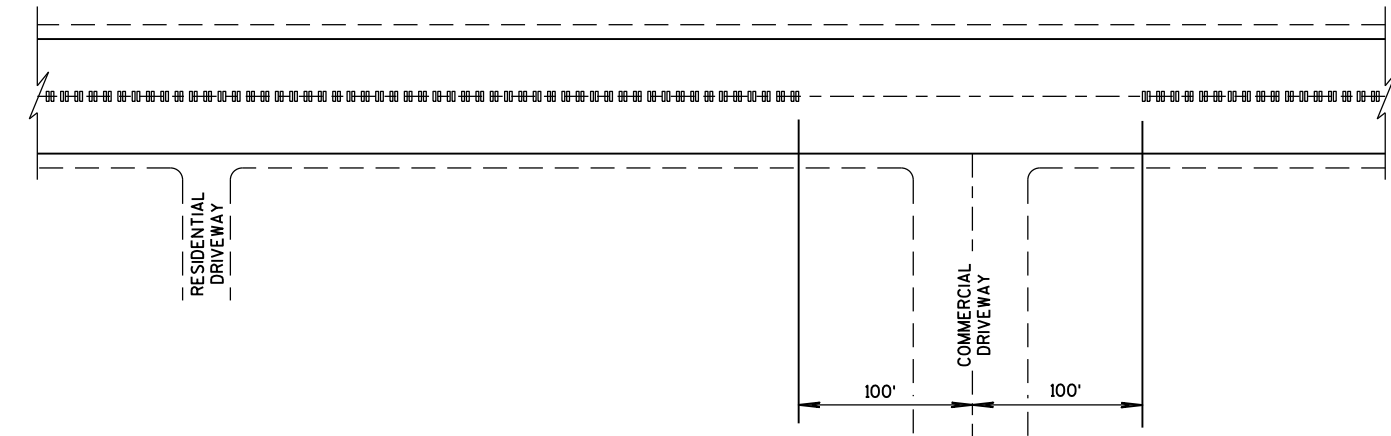
107



CENTER LINE GROOVES AT INTERSECTIONS

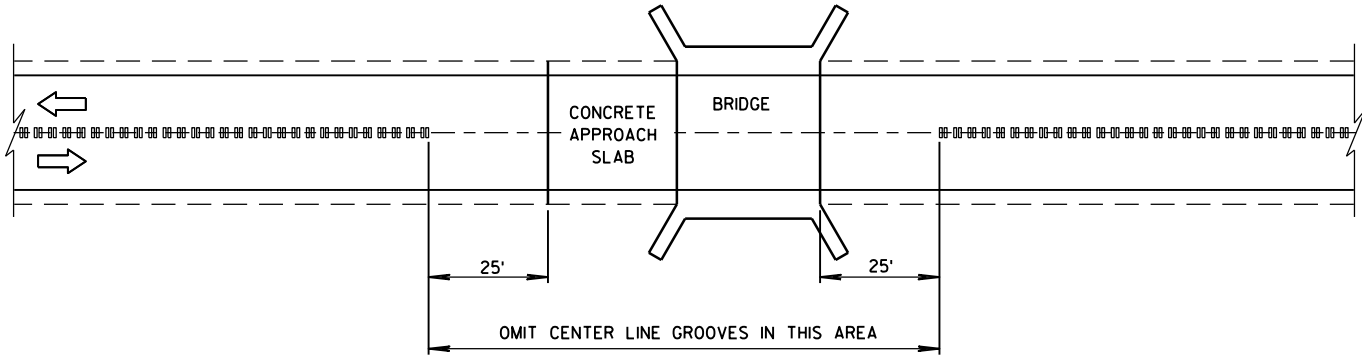


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

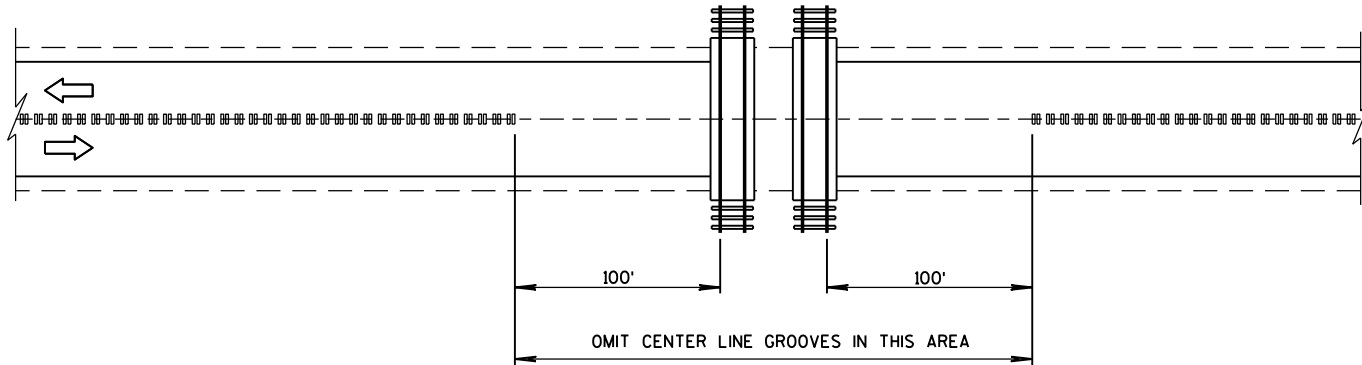


CENTER LINE GROOVES AT DRIVEWAYS¹

¹ CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

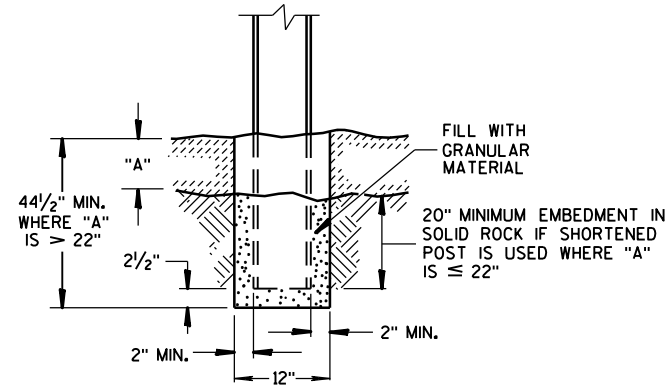
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 5/15/2013	/S/ Jerry H. Zoog ROADWAY STANDARDS ENGINEER 108 NT
FHWA	

GENERAL NOTES

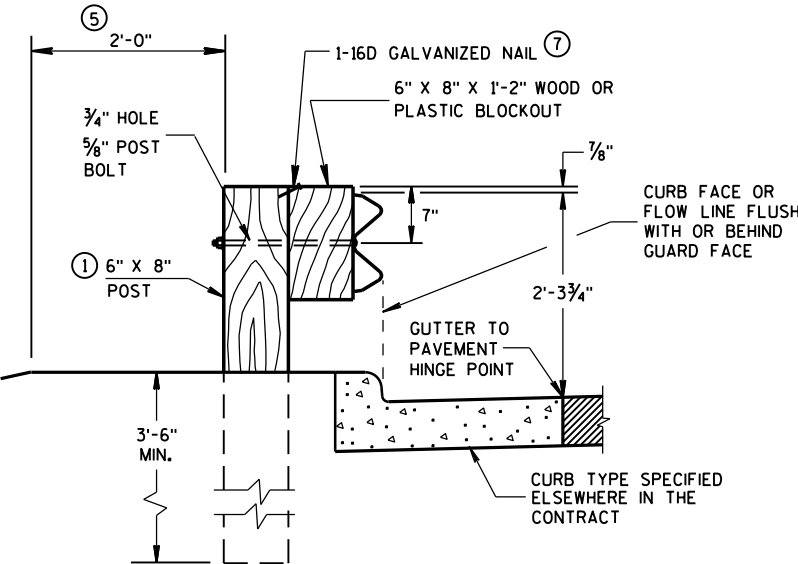
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

- ① W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS. DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- ② USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111 EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
- ③ INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ④ USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- ⑤ IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
- ⑥ IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.
- ⑦ WHEN USING STEEL POSTS 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.

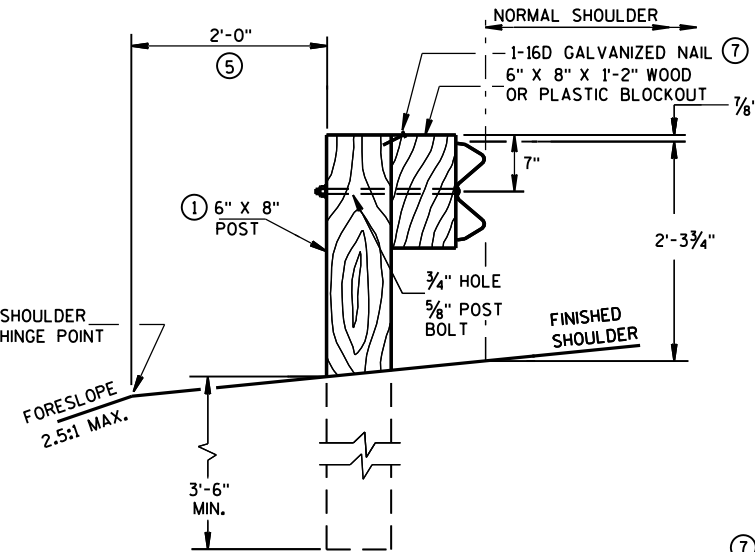
INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



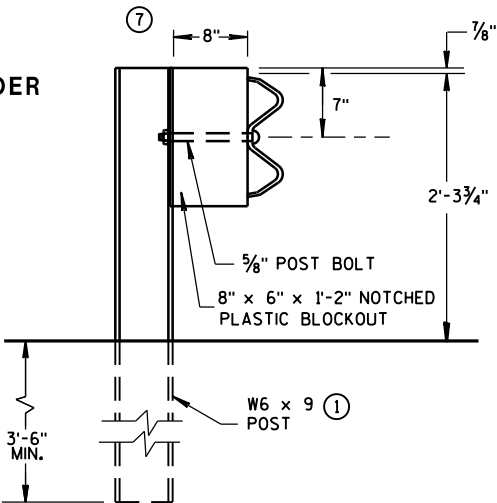
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥



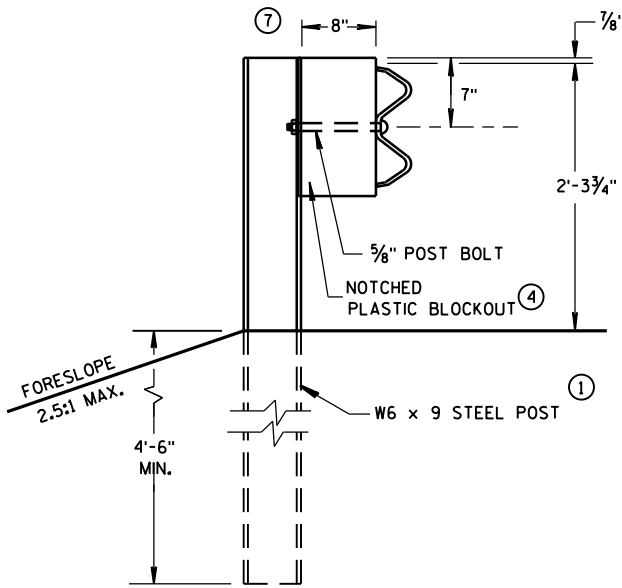
END VIEW
LOCATED ALONG A CURBED ROADWAY



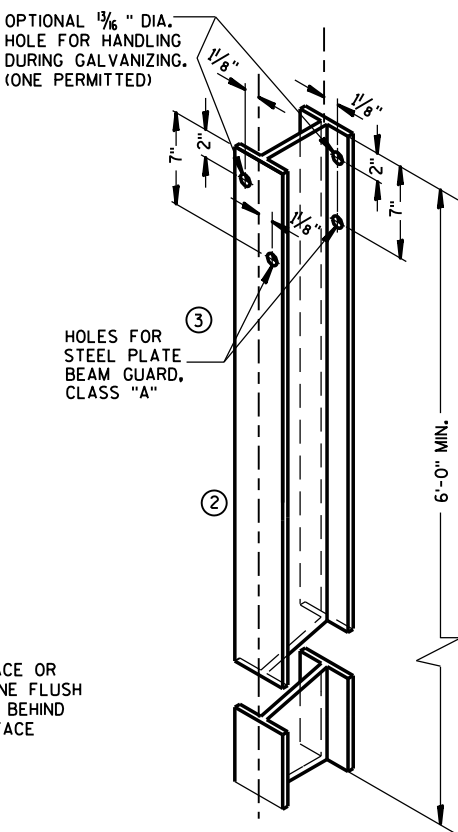
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



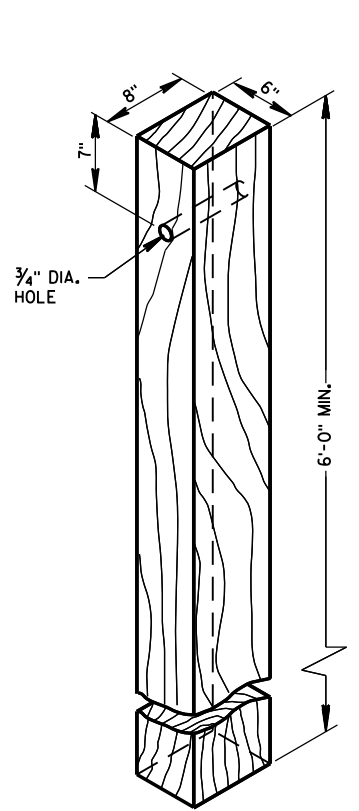
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



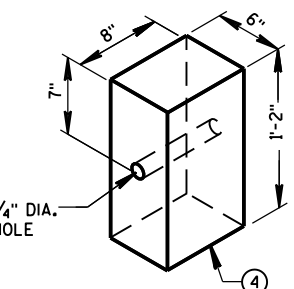
END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



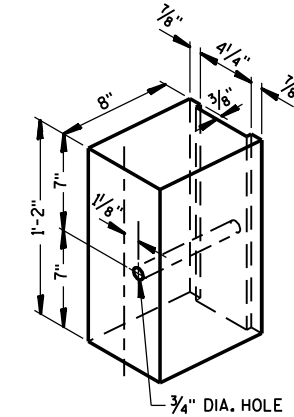
STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



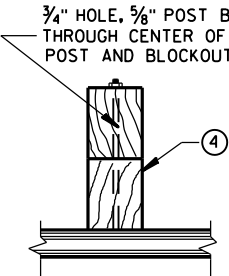
WOOD POST
(6" X 8") NOMINAL



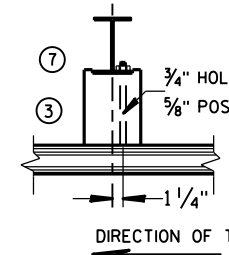
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS ①



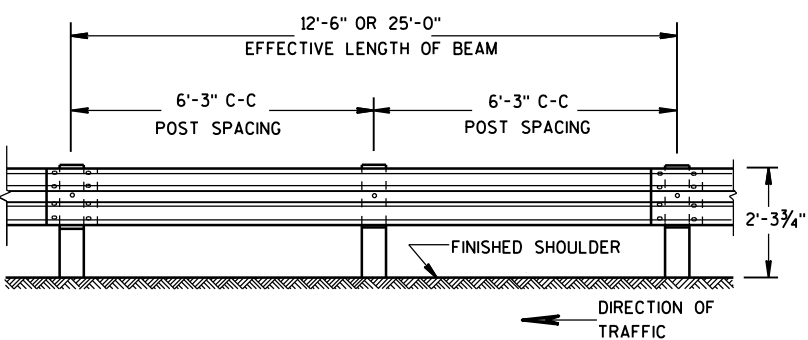
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

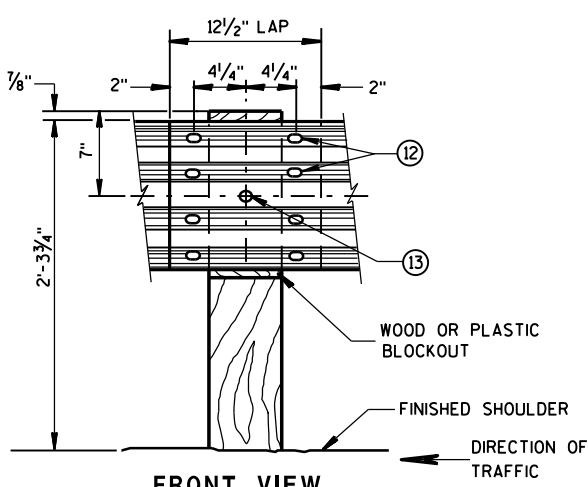
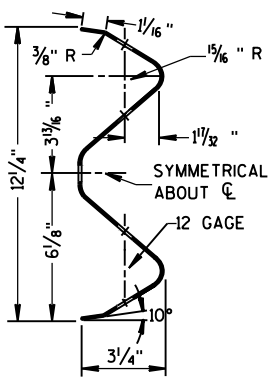
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 109



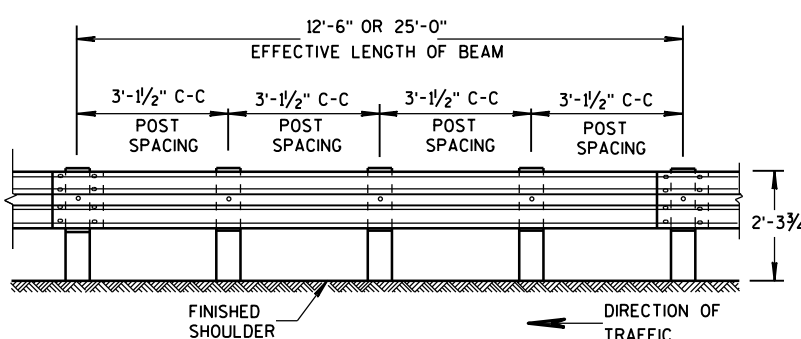
FRONT VIEW

POST SPACING STANDARD INSTALLATION

SECTION THRU W BEAM

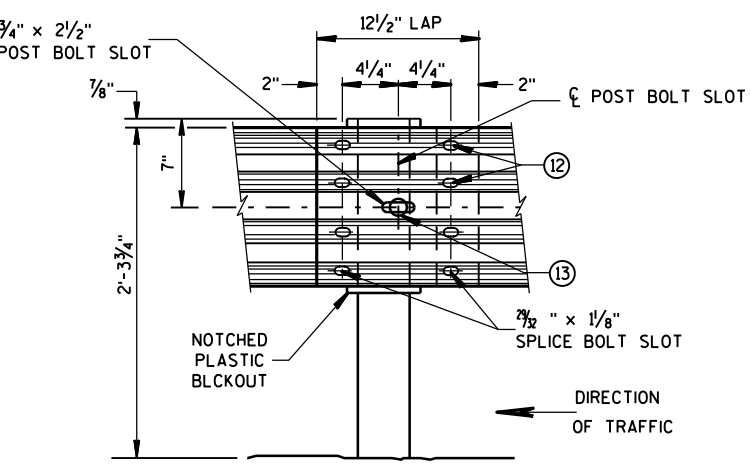


FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL

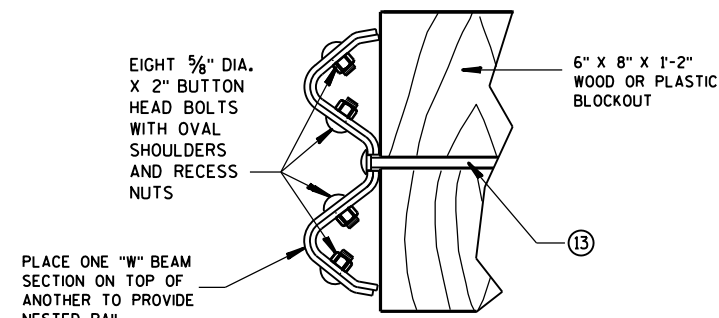


FRONT VIEW

POST SPACING FOR LONGER POST
AT HALF POST SPACING W BEAM (LHW)



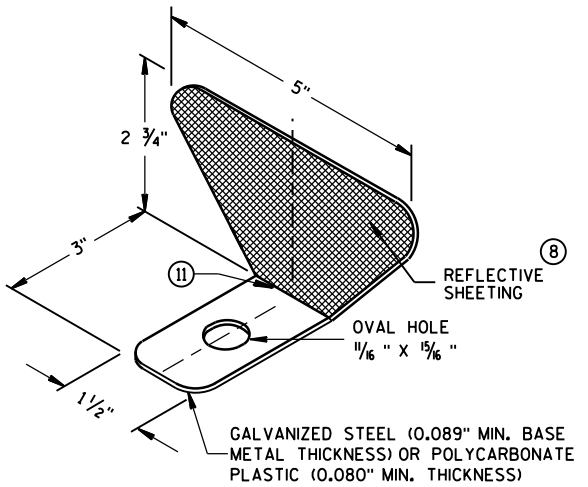
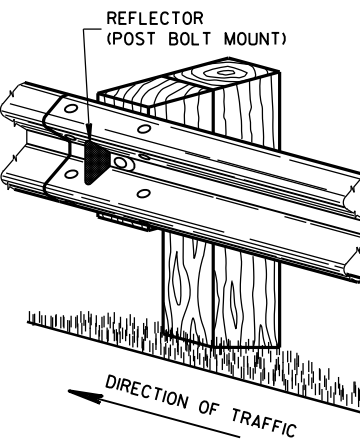
FRONT VIEW
BEAM SPLICE AT STEEL POST
TYPICAL SPLICING DETAILS
OF STEEL PLATE BEAM GUARD



NESTED W BEAM (NW)
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR
CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING^⑨

	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 ^⑩	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ^⑪	3
	> 200'	100' C-C	2	



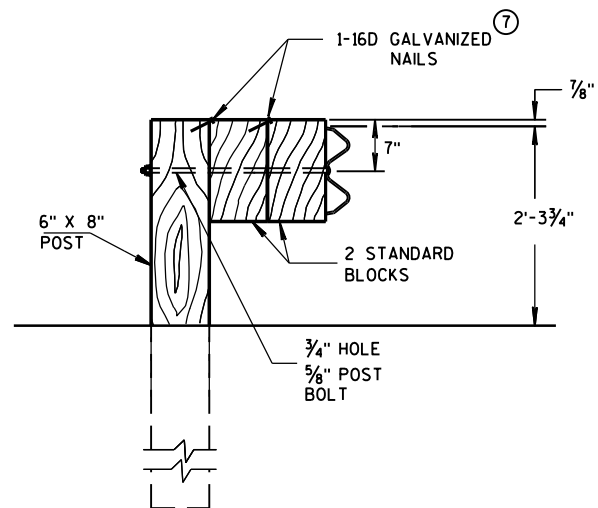
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

- ⑧ 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.
- ⑨ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ⑩ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ⑪ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
- ⑫ 8 - 5/8" Ø X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑬ 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.

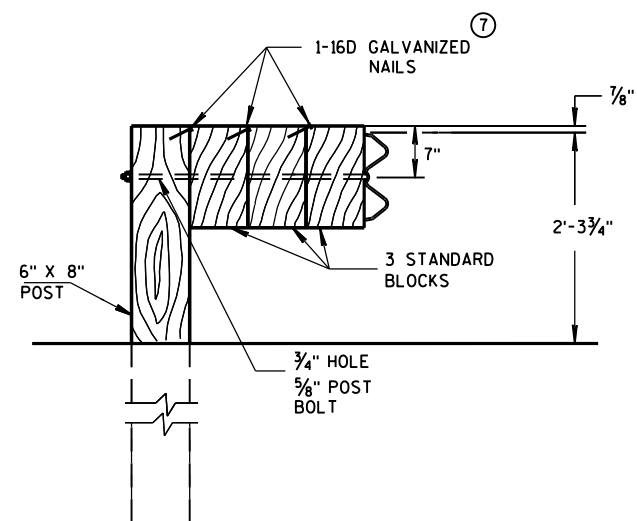
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS
WITHIN A BARRIER RUN IS UNLIMITED

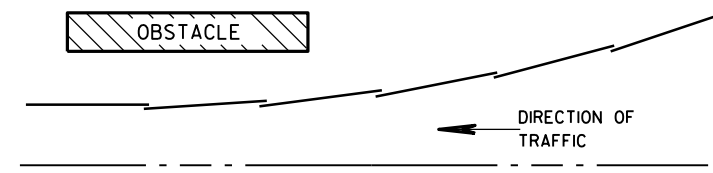


DETAIL FOR TRIPLE BLOCKS

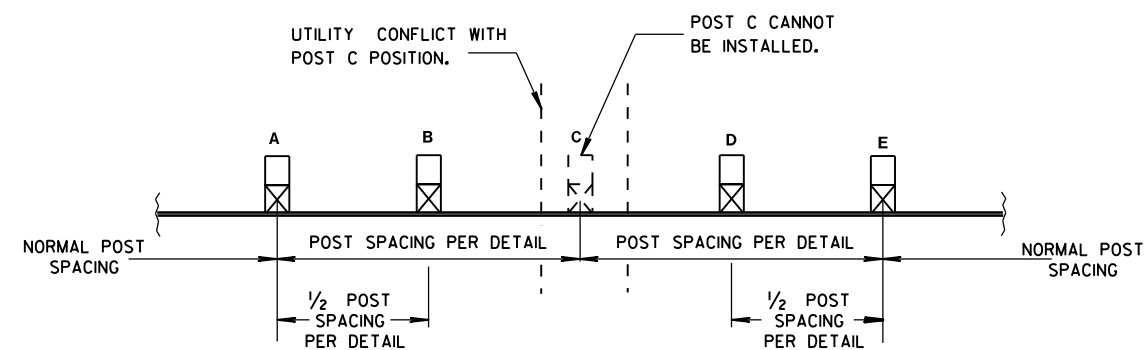
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES
PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.



PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2014

DATE

FHWA

/S/ Jerry H. Zogg

ROADWAY STANDARDS ENGINEER

111

INT

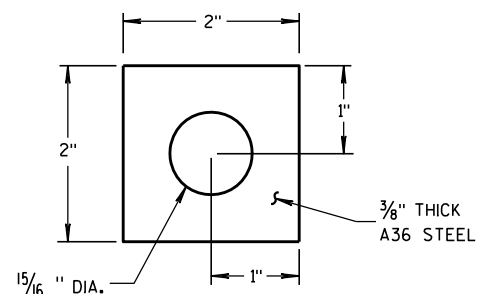
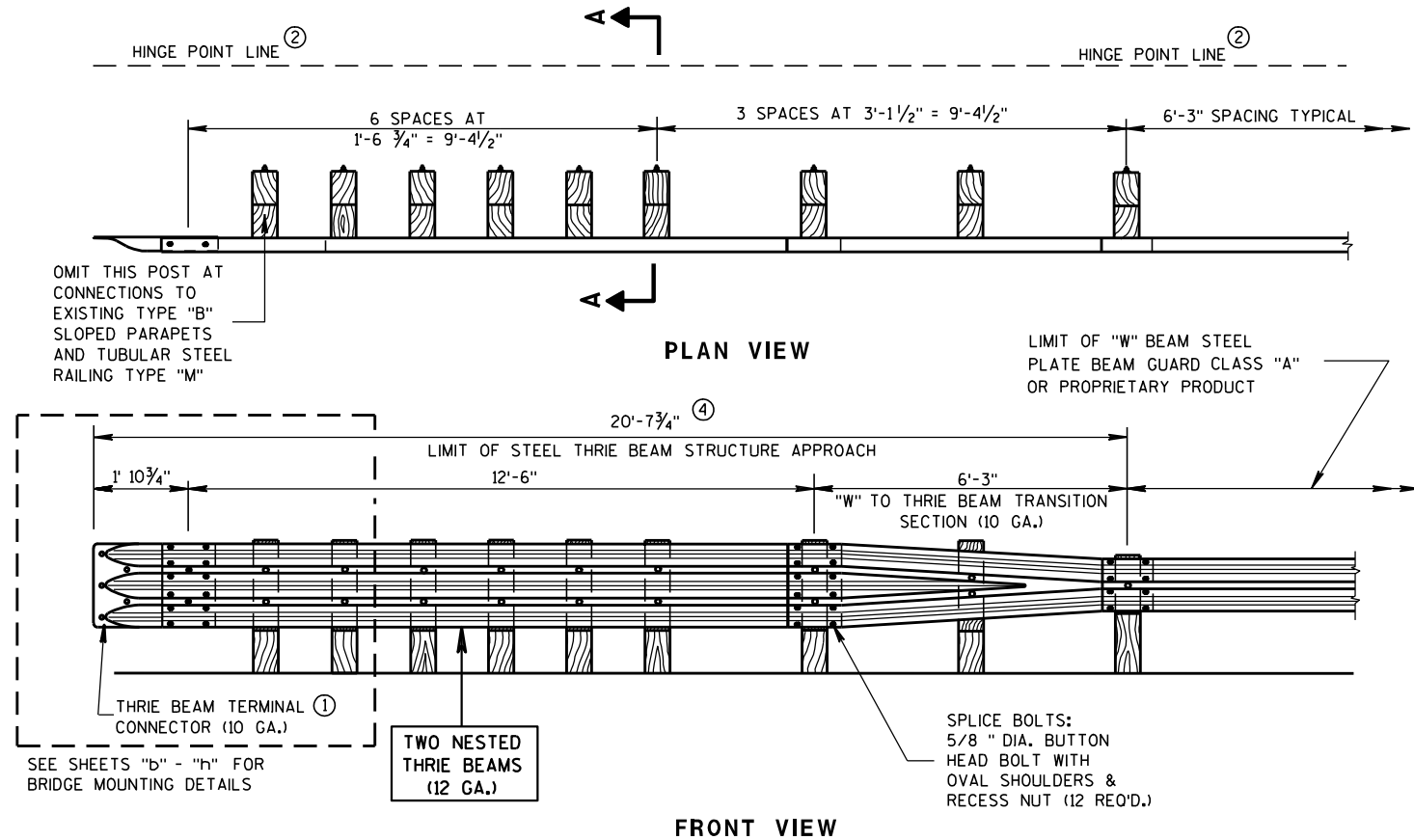


PLATE WASHER DETAIL

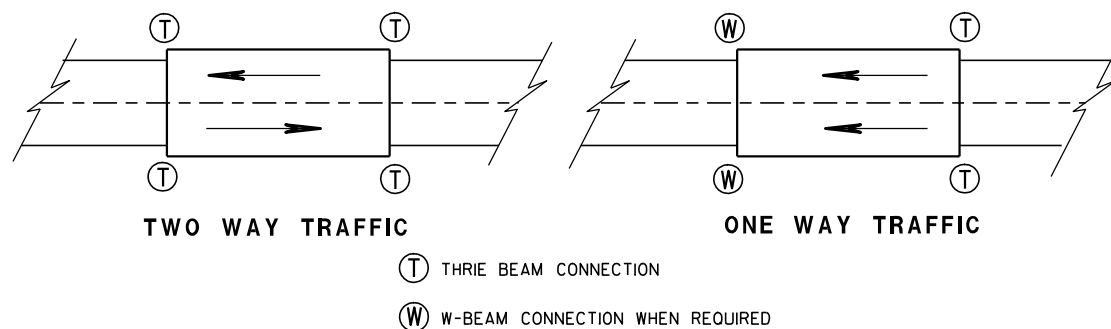
GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

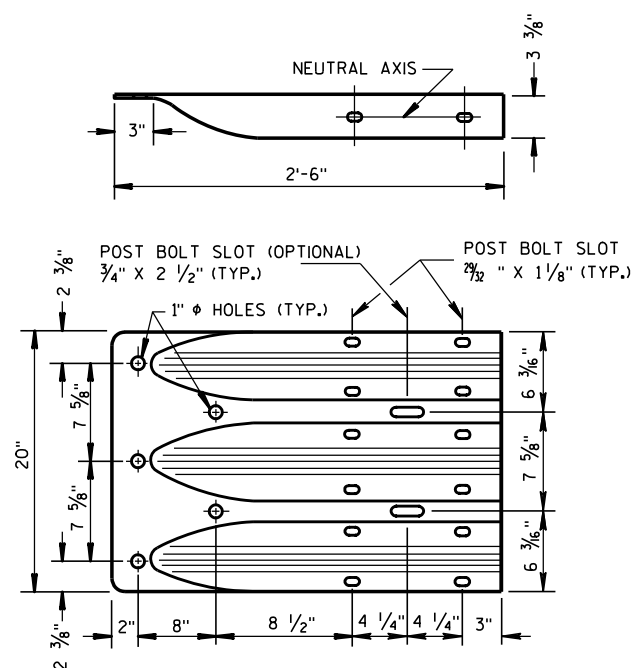
DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2", AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

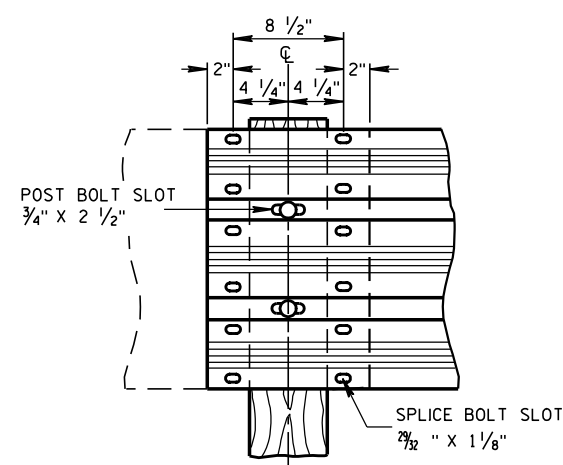
- ① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.
- ② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.
- ③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.
- ④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



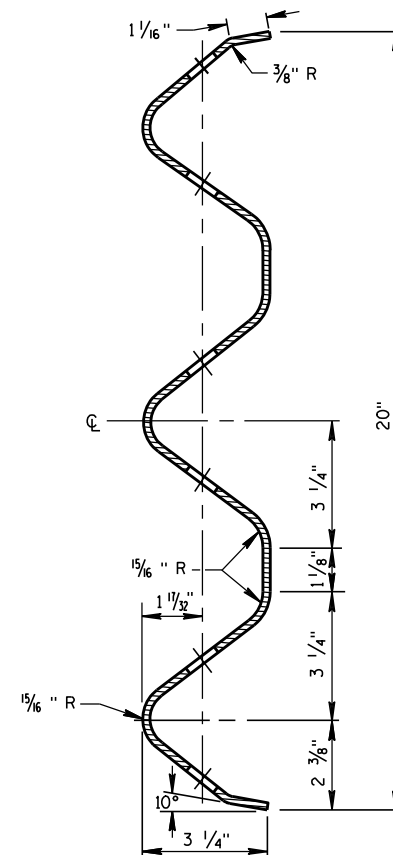
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE



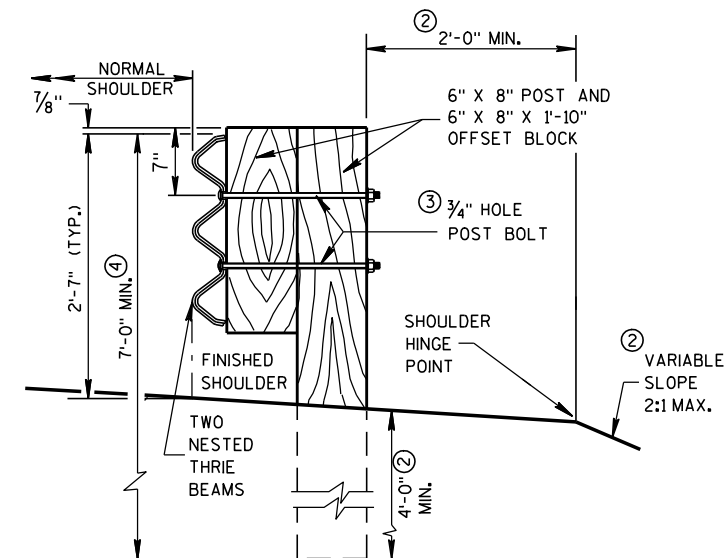
THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE



SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION A-A

STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012

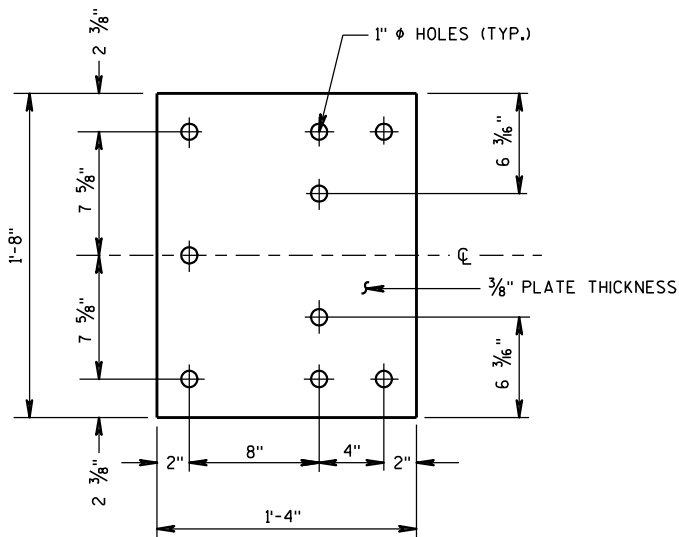
DATE

/s/ Jerry H. Zoon

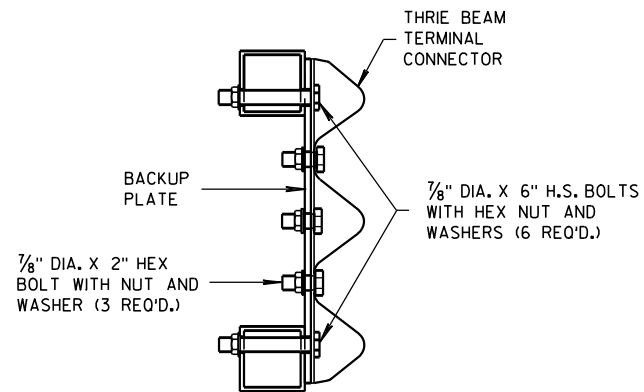
ROADWAY STANDARDS 112

ENGINEER

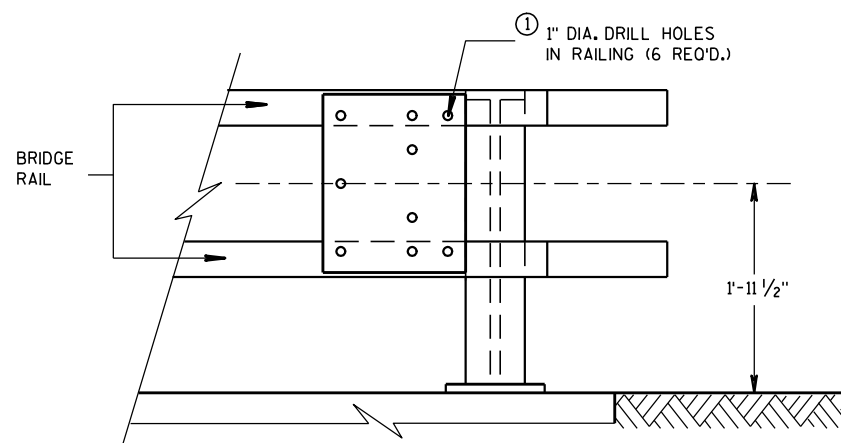
FHWA



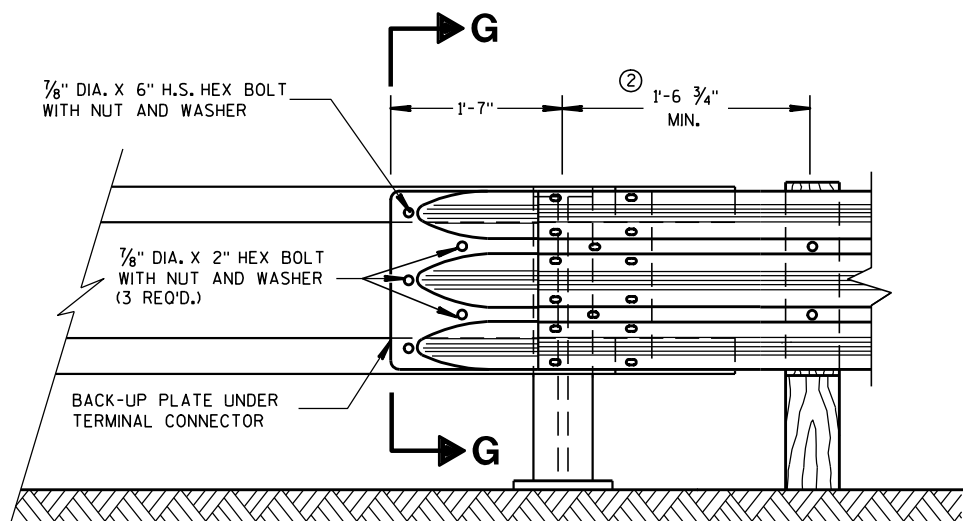
BACK-UP PLATE DETAIL



SECTION G-G

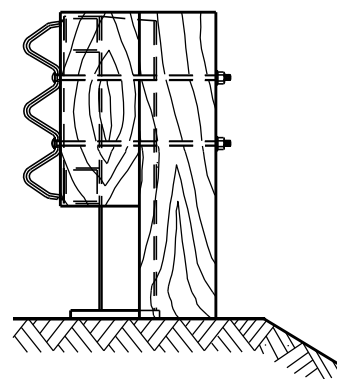


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



FRONT VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

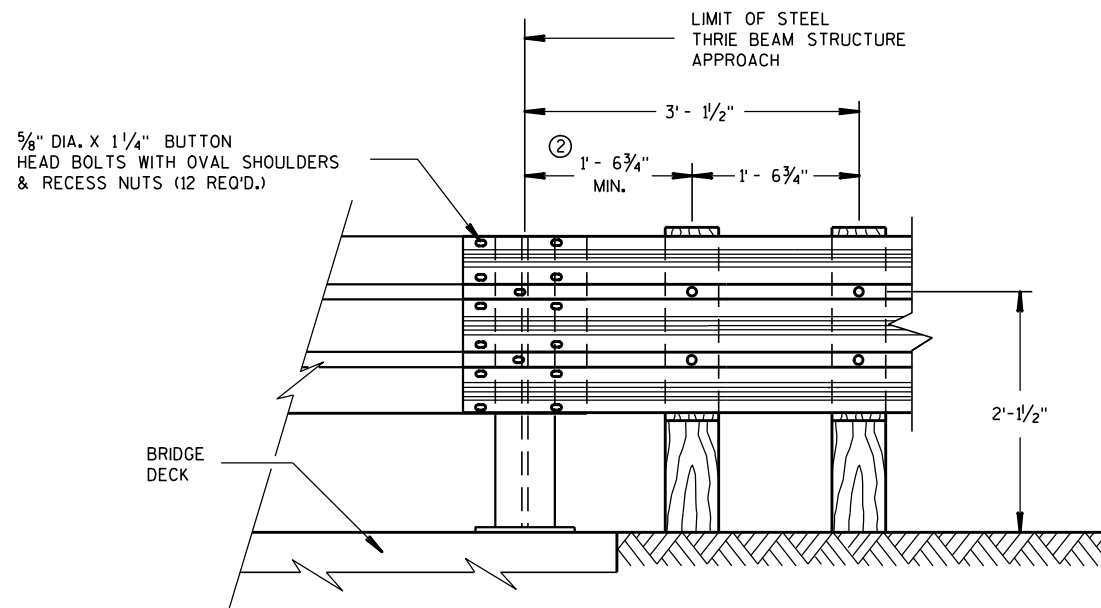


END VIEW

GENERAL NOTES

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL AS CLOSE AS FEASIBLE TO THE STEEL END POST.



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012
DATE

FHWA

/S/ Jerry H. Zapp
ROADWAY STANDARDS 113 ENT
ENGINEER

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	**	STEEL TUBE: OPTION 1 - QUANTITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANTITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG
③	2	SOIL PLATE: 2'-0" X 1'-6" X 1/4" **
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6 1/2" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑮	1	E.A.T. MARKER POST

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS, IF NONE ARE AVAILABLE, INSTALL 3/8" ϕ X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

(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) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(E) THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE 3/4" ABOVE THE FINISHED GROUND LINE.

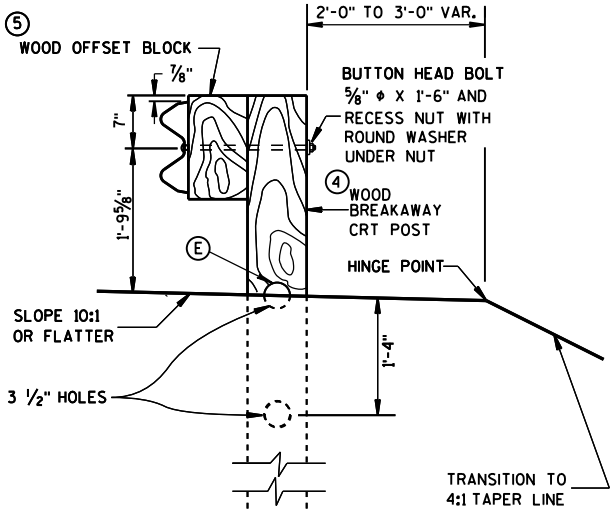
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

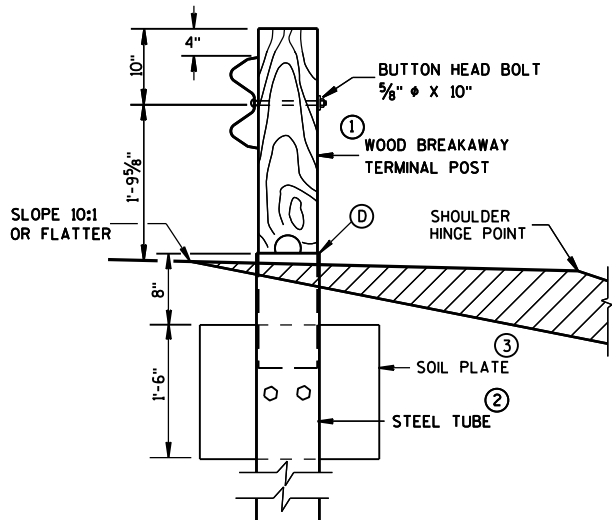
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

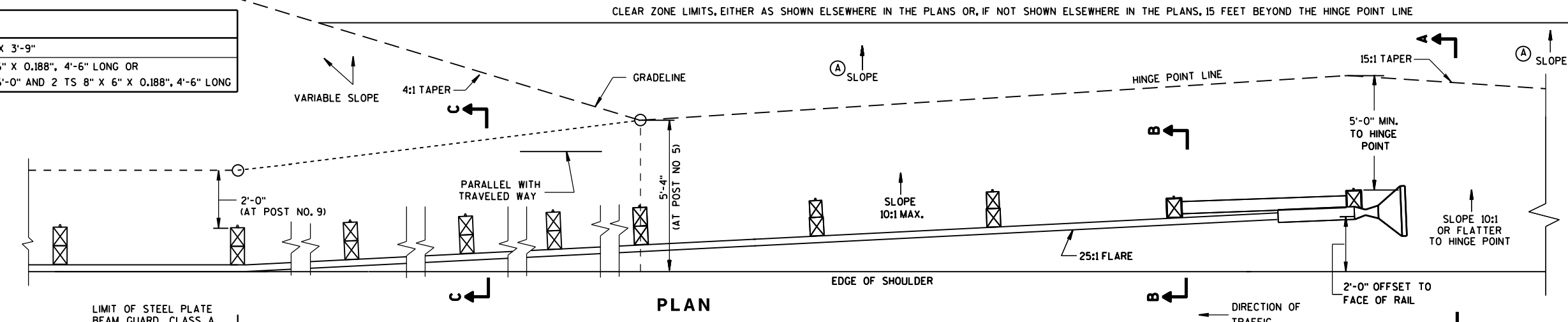
** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH SOIL TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.



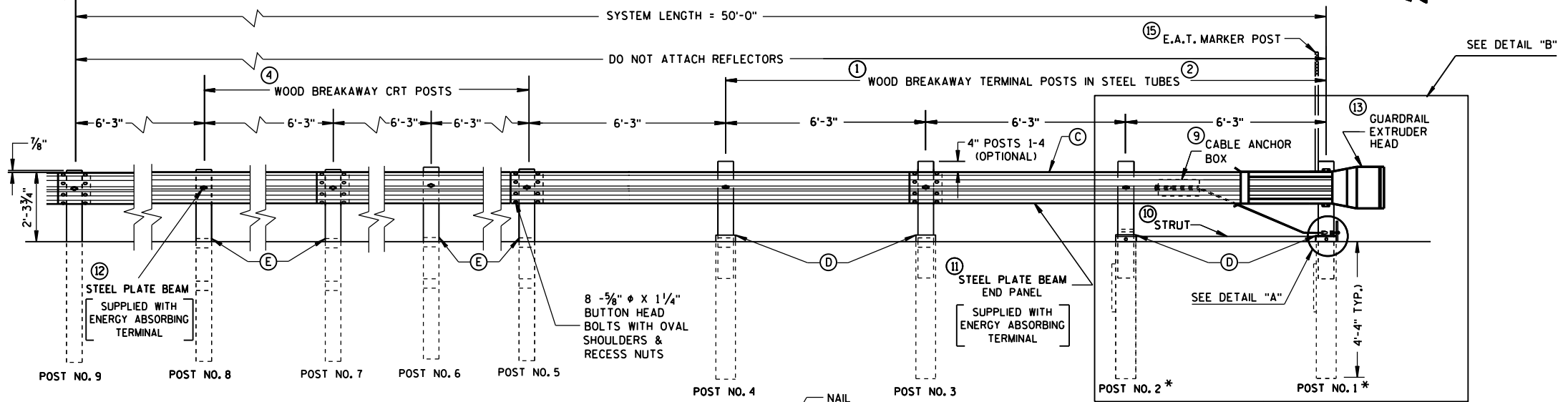
SECTION C-C
TYPICAL AT POST NOS. 6, 8



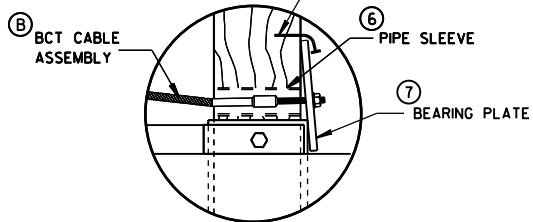
SECTION B-B
TYPICAL AT POST NO. 2 *



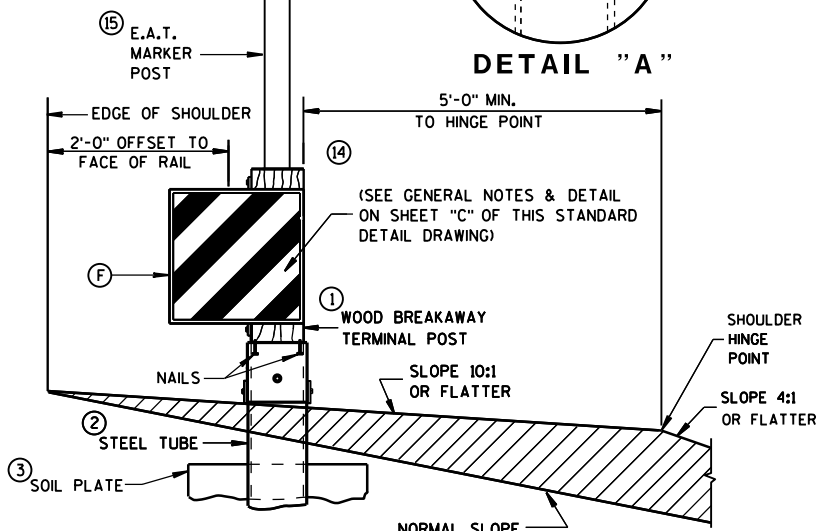
PLAN



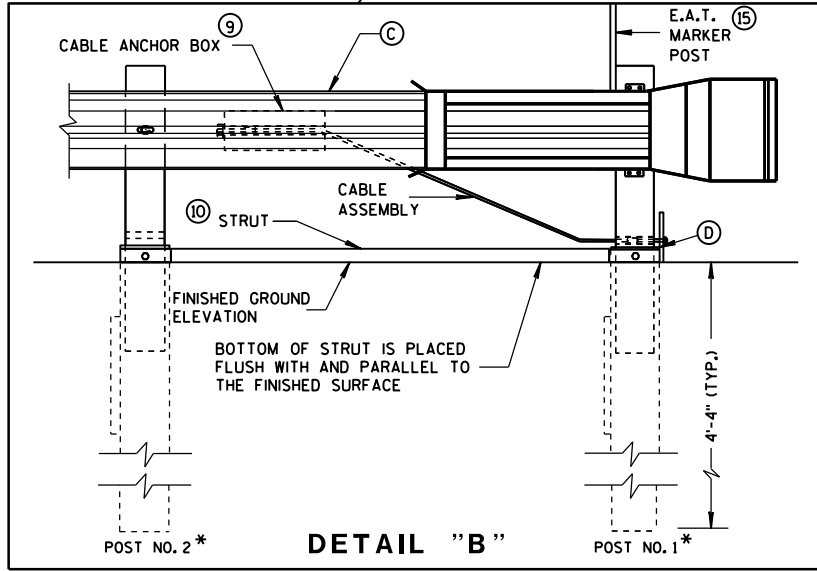
ELEVATION



DETAIL "A"



SECTION A-A
TYPICAL AT POST NO. 1 *

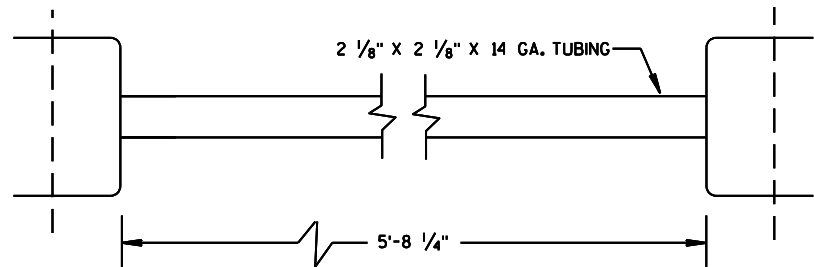


DETAIL "B"

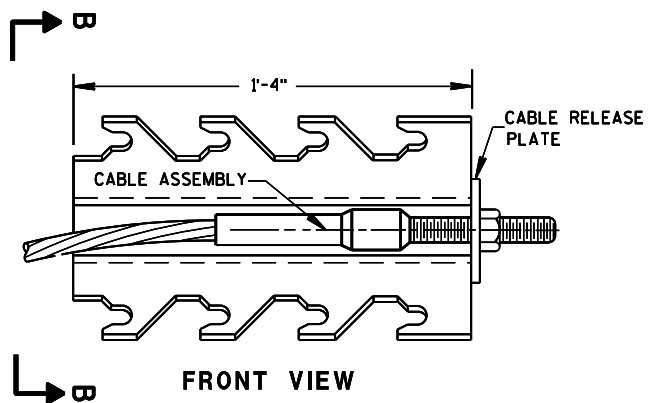
STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
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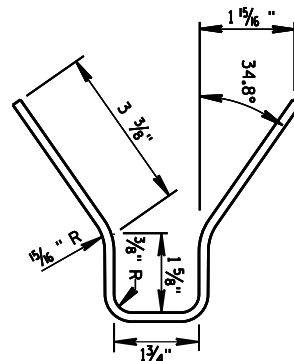
114



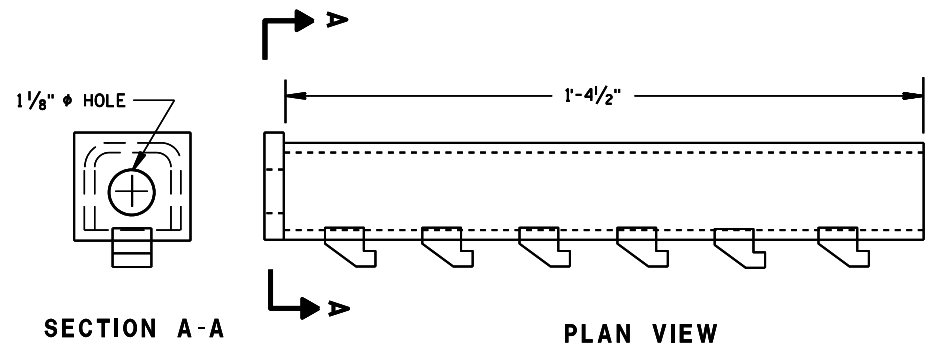
⑩ STRUT DETAIL (SKT-350)



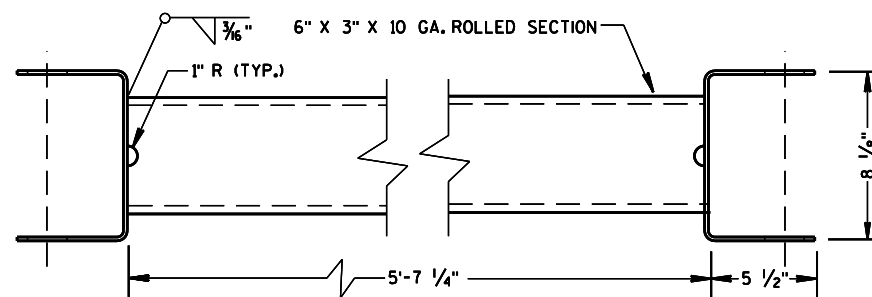
⑨ CABLE ANCHOR BOX (SKT-350)
(SKT-350)



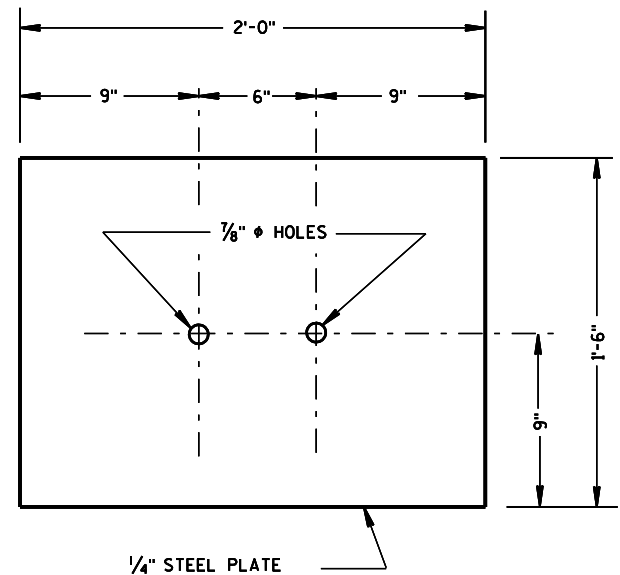
SECTION B-B



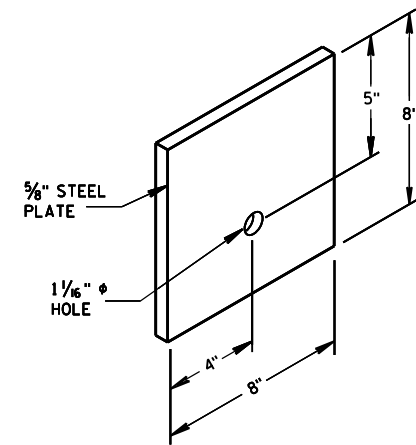
⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)
(ET-2000/ET-2000 PLUS)



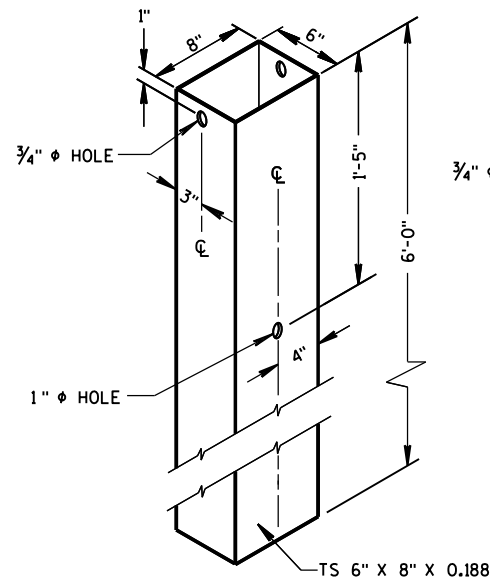
③ SOIL PLATE
(SKT-350, ET-2000/ET-2000 PLUS)



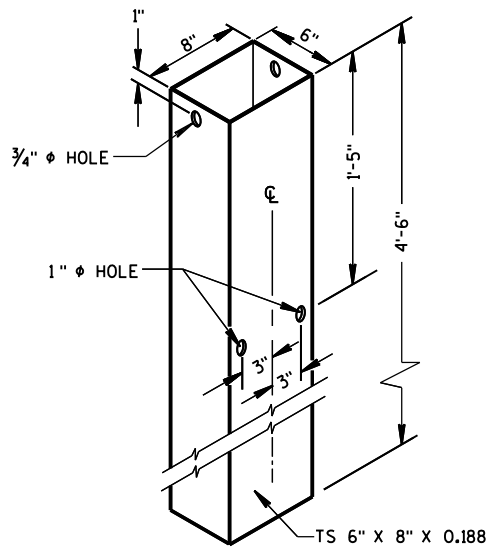
⑦ STEEL BEARING PLATE
(SKT-350, ET-2000/ET-2000 PLUS)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

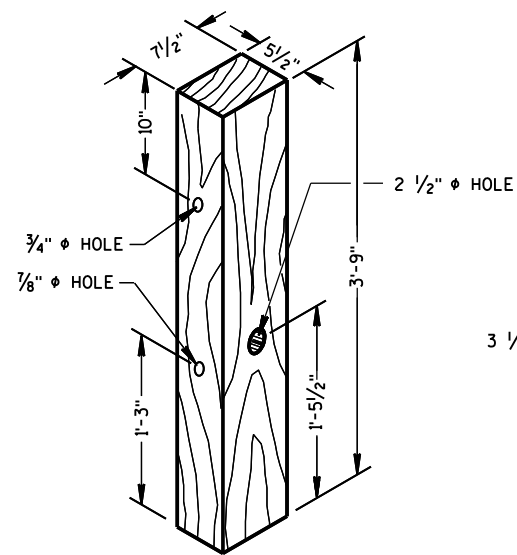
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 115



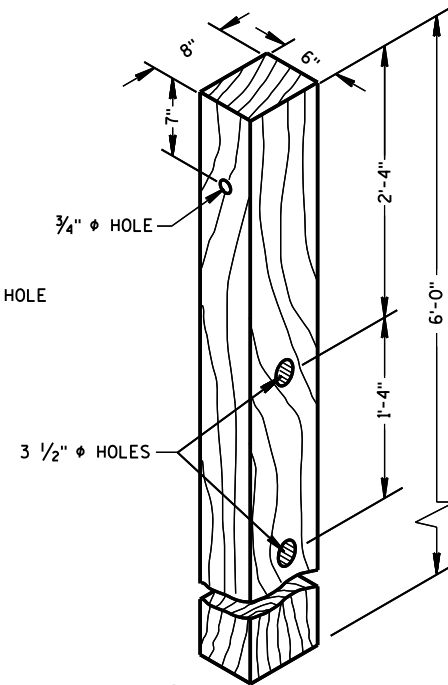
② 72" STEEL TUBE
(POSTS NO. 1-4)



② 54" STEEL TUBE
(POSTS NO. 1-4)

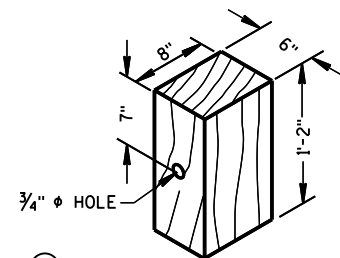


① TERMINAL POST
(POSTS NO. 1-4)



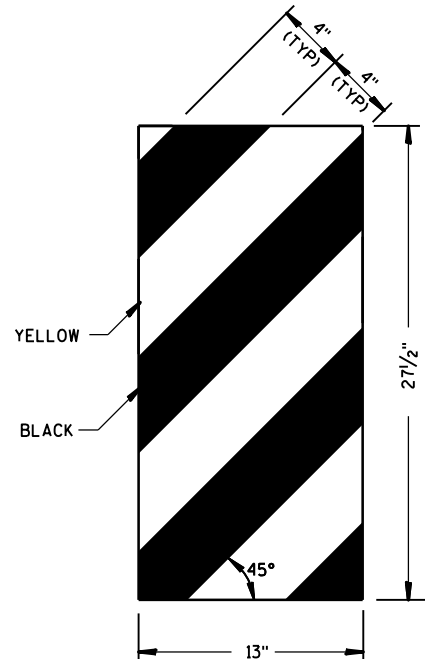
④ CRT POST
(POSTS NO'S 5-8)

WOOD BREAKAWAY POSTS



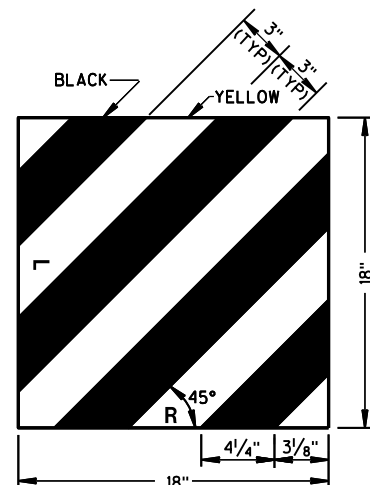
⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

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

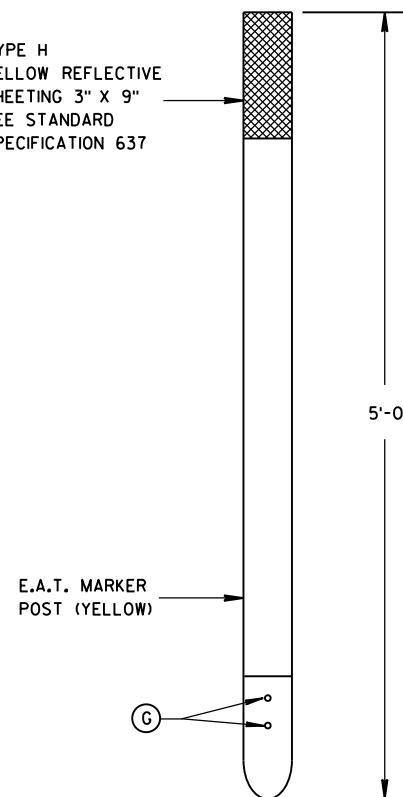


ET-2000 PLUS ONLY

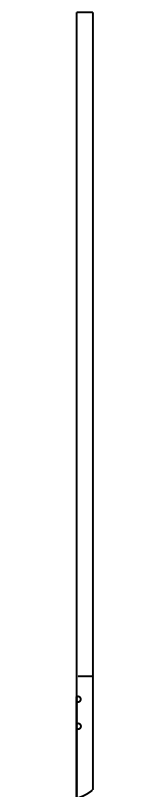
⑭ REFLECTIVE SHEETING DETAILS



ET-2000 AND SKT-350



FRONT VIEW



SIDE VIEW

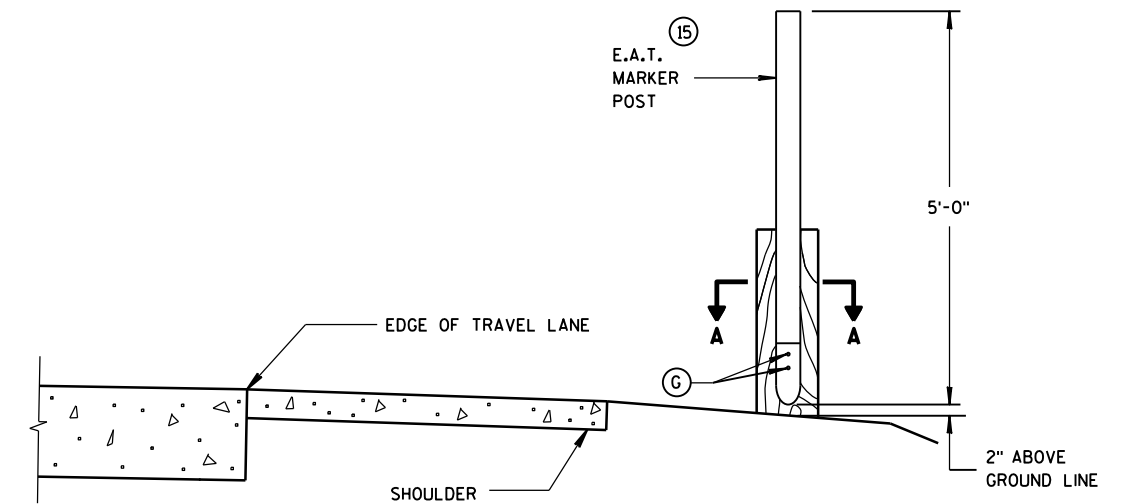
⑮ E.A.T. MARKER POST

GENERAL NOTES

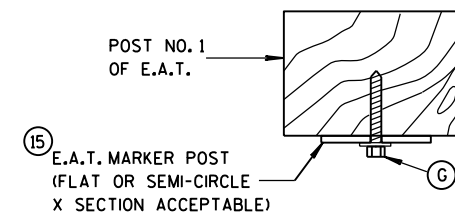
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

SEE APPROVED PRODUCTS LIST FOR ACCEPTABLE E. A. T. MARKER POST.

⑮ 1/2" DIA. X 3" LAG BOLT WITH WASHER.



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



SECTION A-A

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE

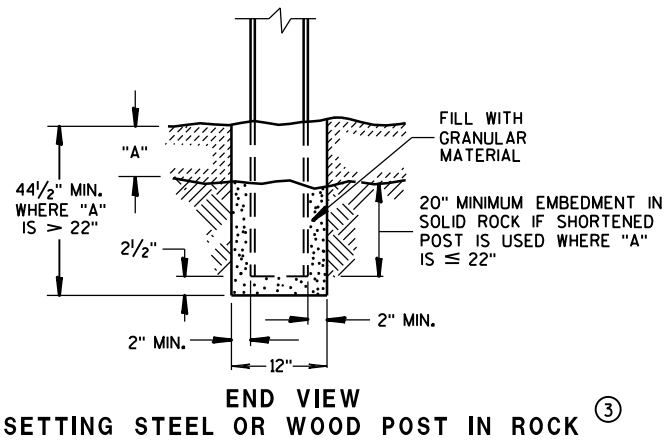
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

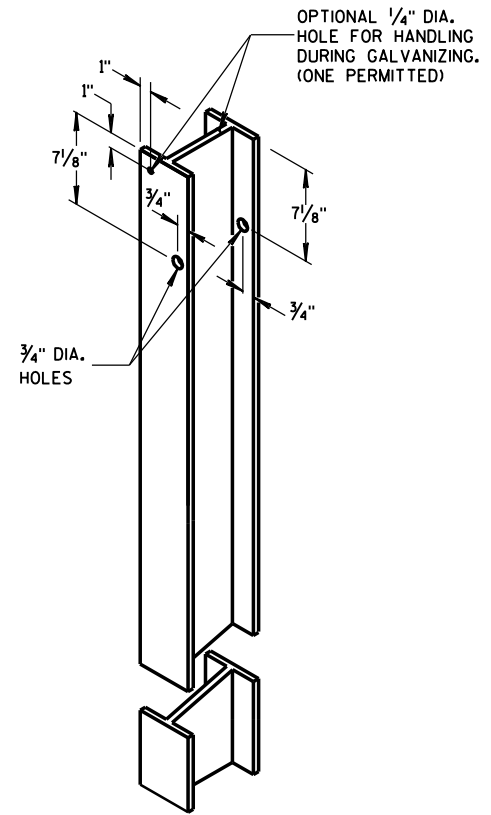
S.D.D. 14 B 24-8c

GENERAL NOTES

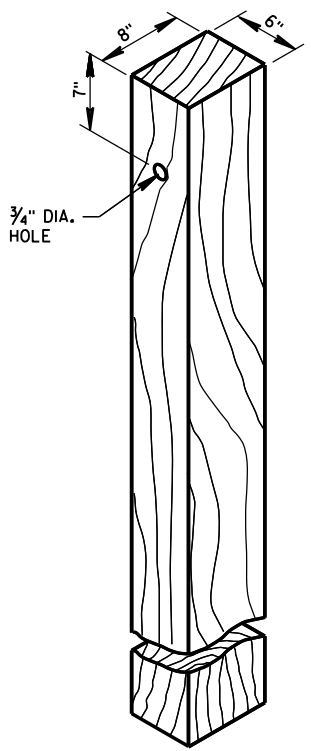
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. 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 1/2 INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO 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 ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 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.



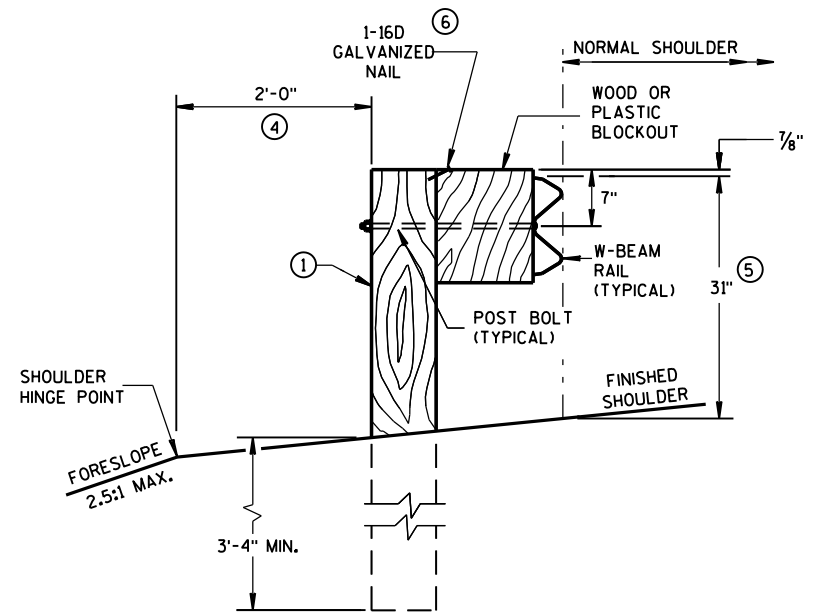
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



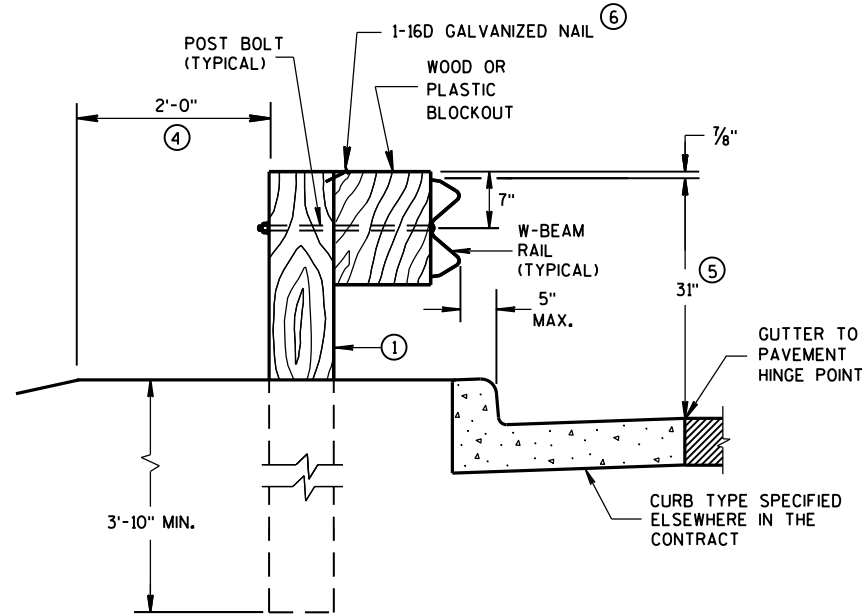
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



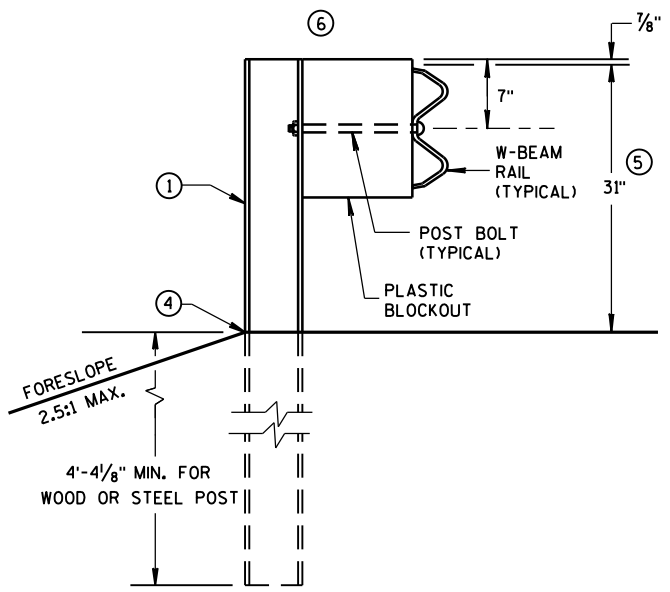
WOOD POST
(6" X 8") NOMINAL ①



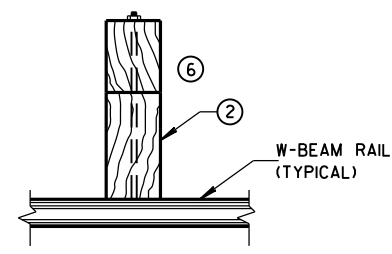
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



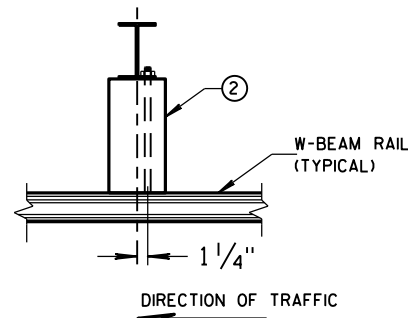
END VIEW
LOCATED ALONG A CURBED ROADWAY



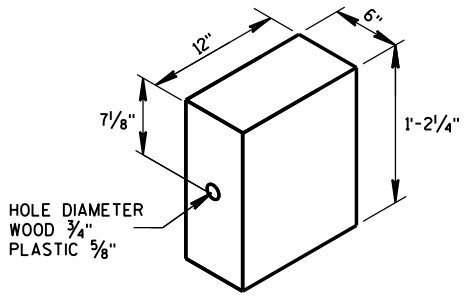
END VIEW
MGS LONGER POST AT HALFPST SPACING W BEAM (K)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



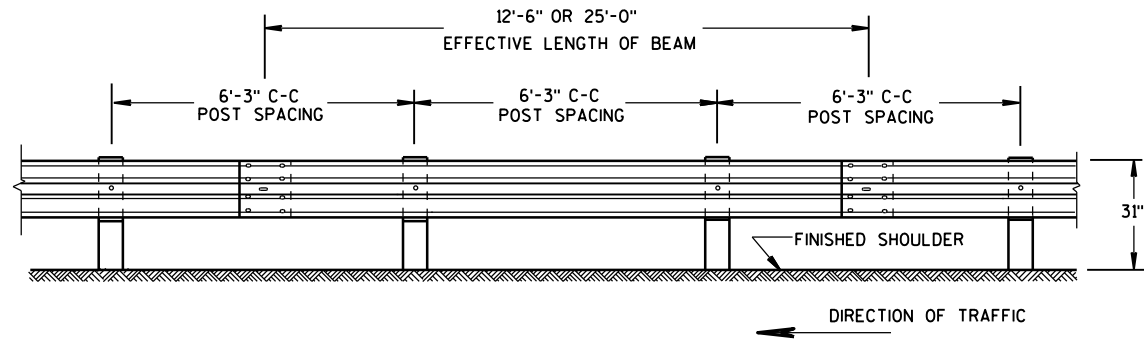
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

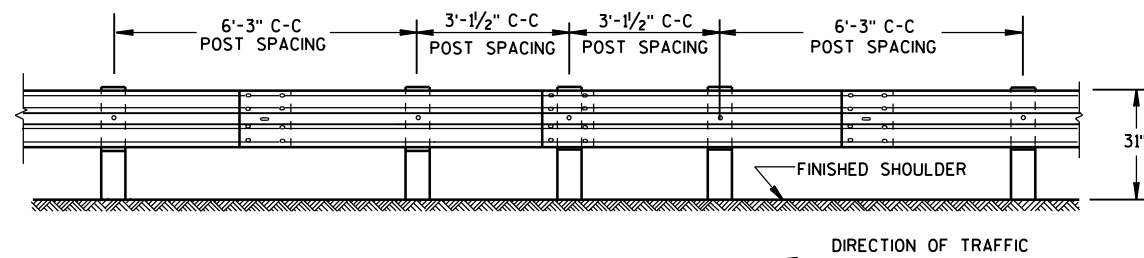
MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 117



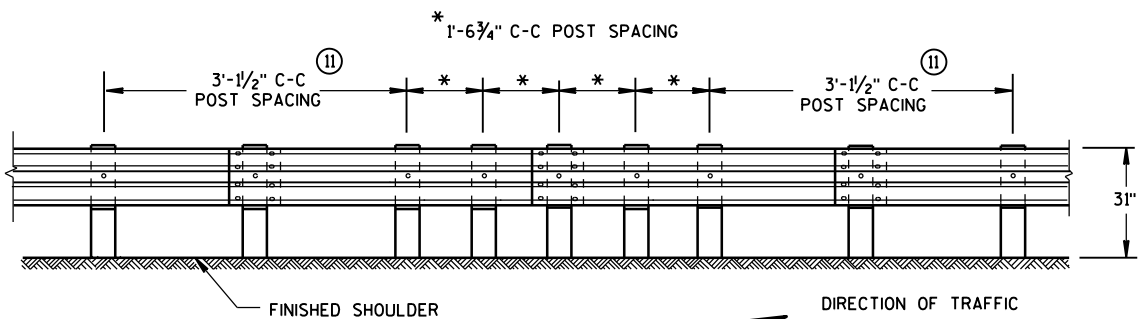
FRONT VIEW

POST SPACING STANDARD INSTALLATION



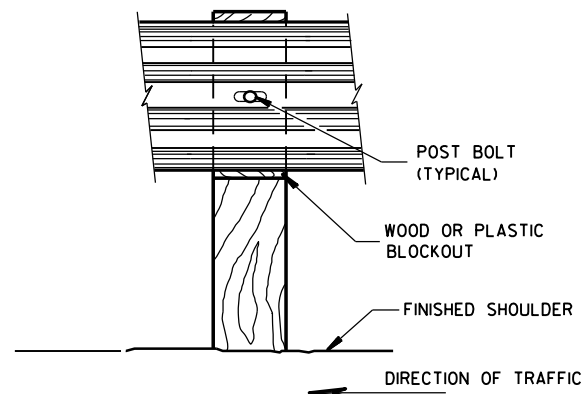
FRONT VIEW

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

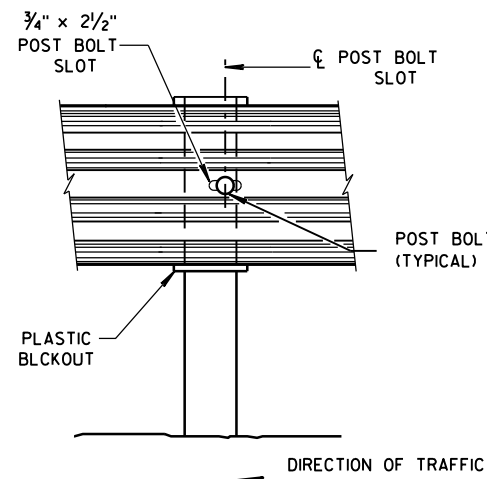


FRONT VIEW

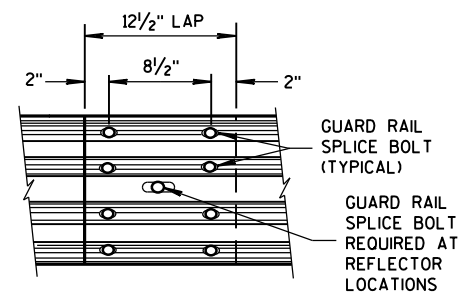
QUARTER POST SPACING (QS)



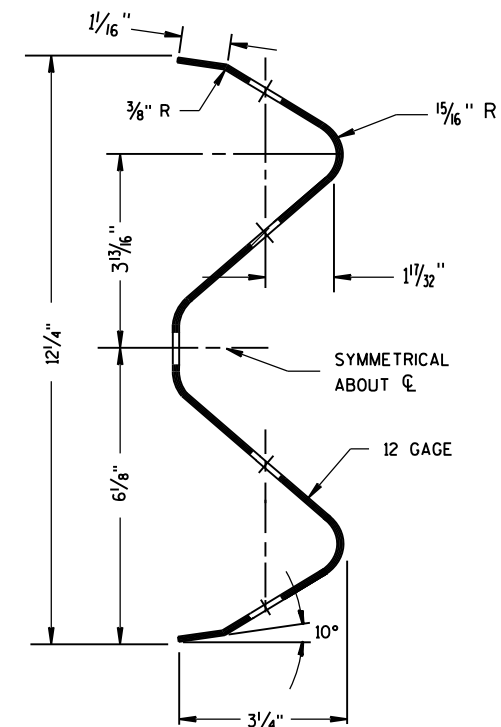
FRONT VIEW AT WOOD POST



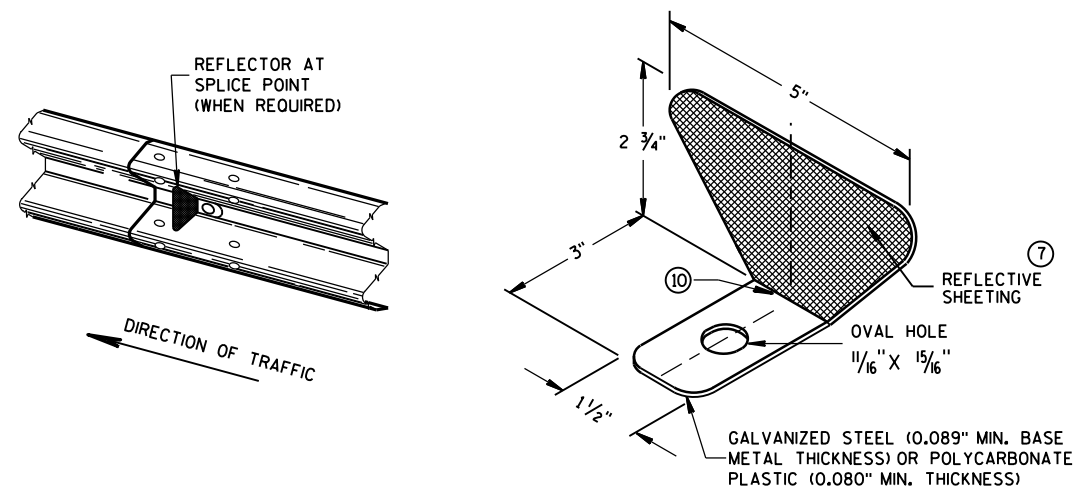
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

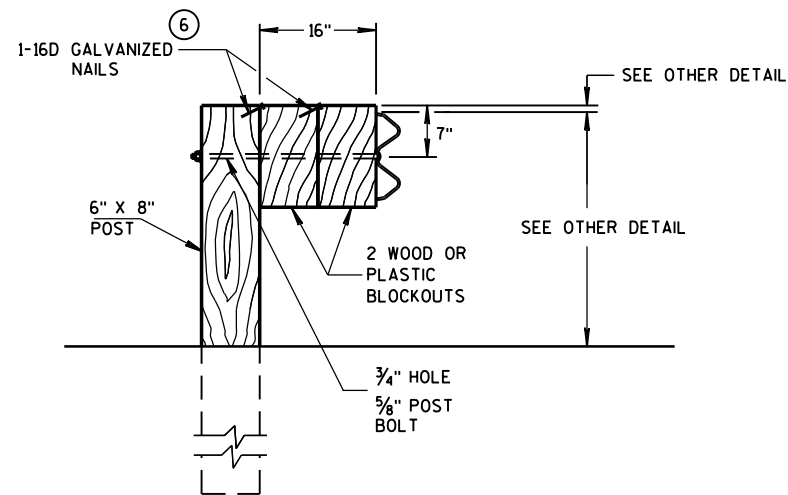
GENERAL NOTES

- 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 ^⑧				
	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	

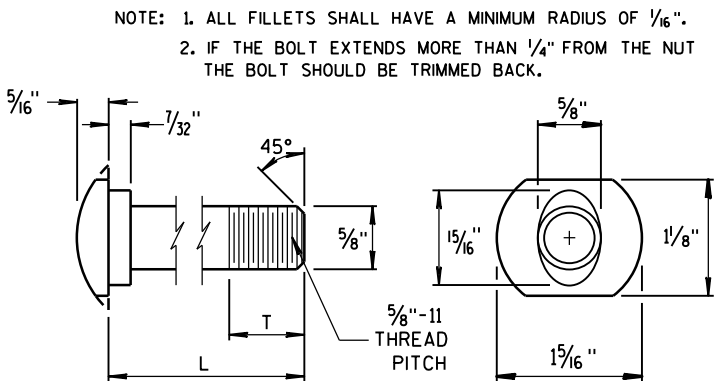
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION¹¹⁸

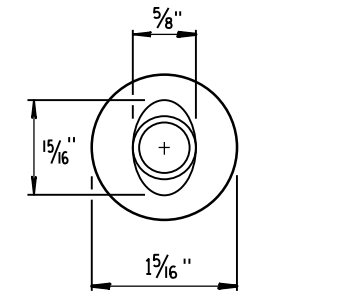


DETAIL FOR 16" BLOCKOUT DEPTH

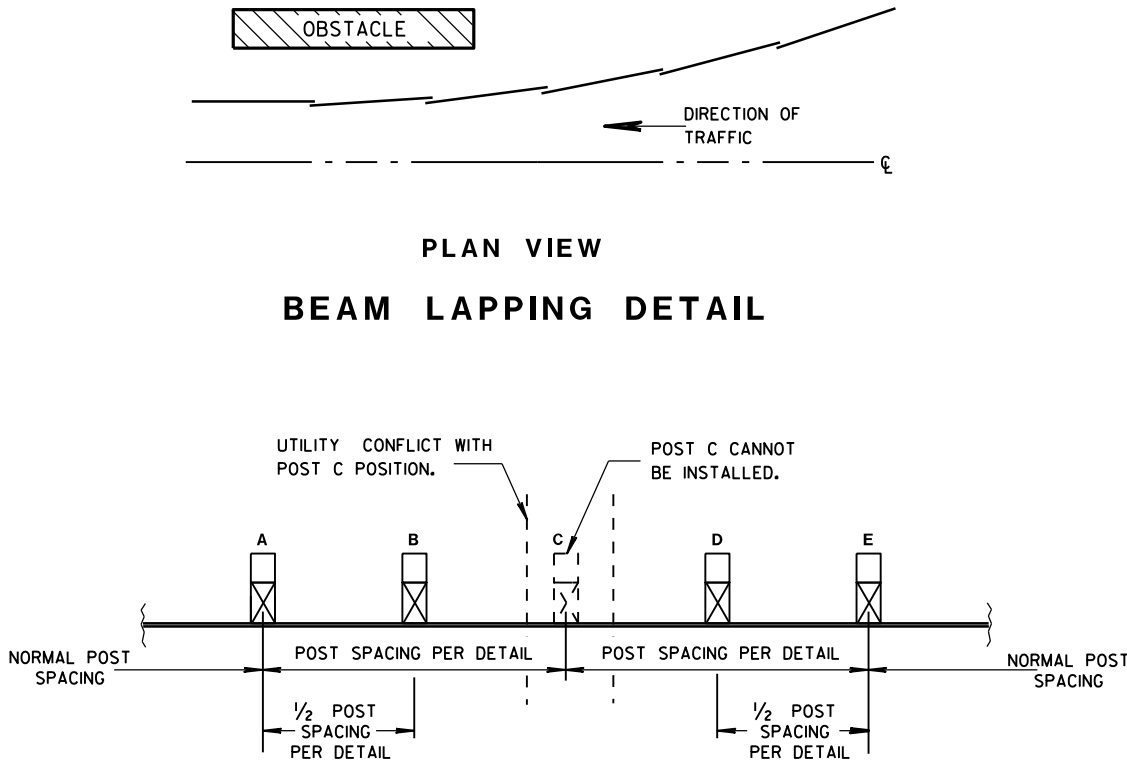
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



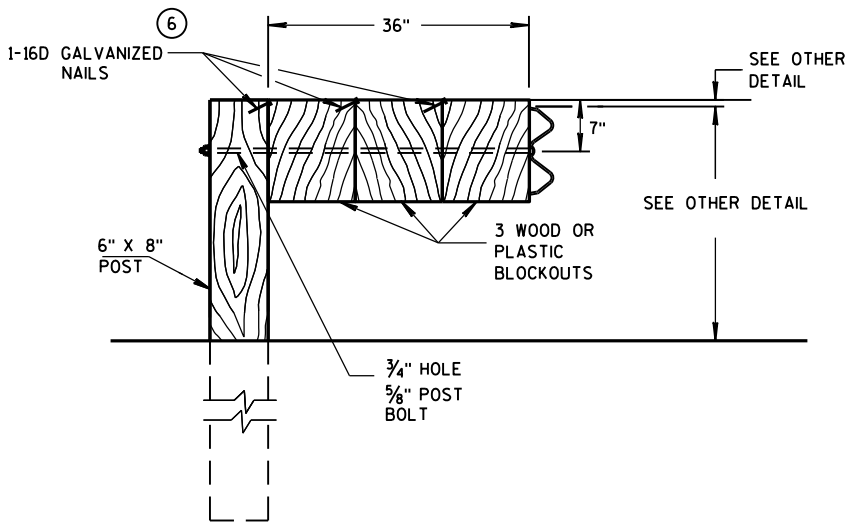
POST BOLT TABLE



ALTERNATE BOLT HEAD



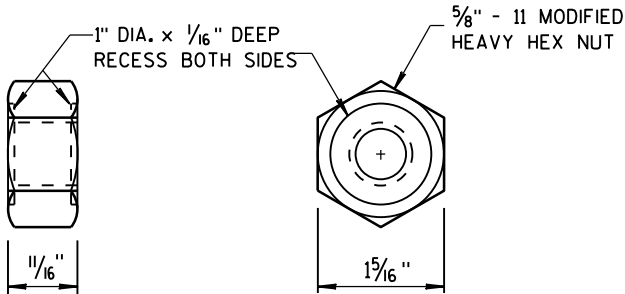
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



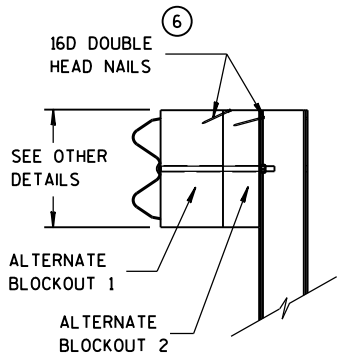
DETAIL FOR 36" BLOCKOUT DEPTH

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.

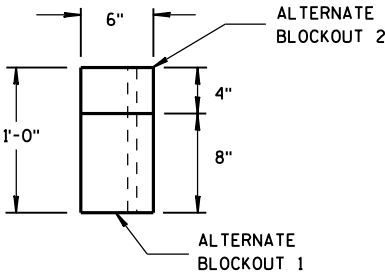
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



POST BOLT AND RECESS NUT



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS (119) ENT
ENGINEER

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.

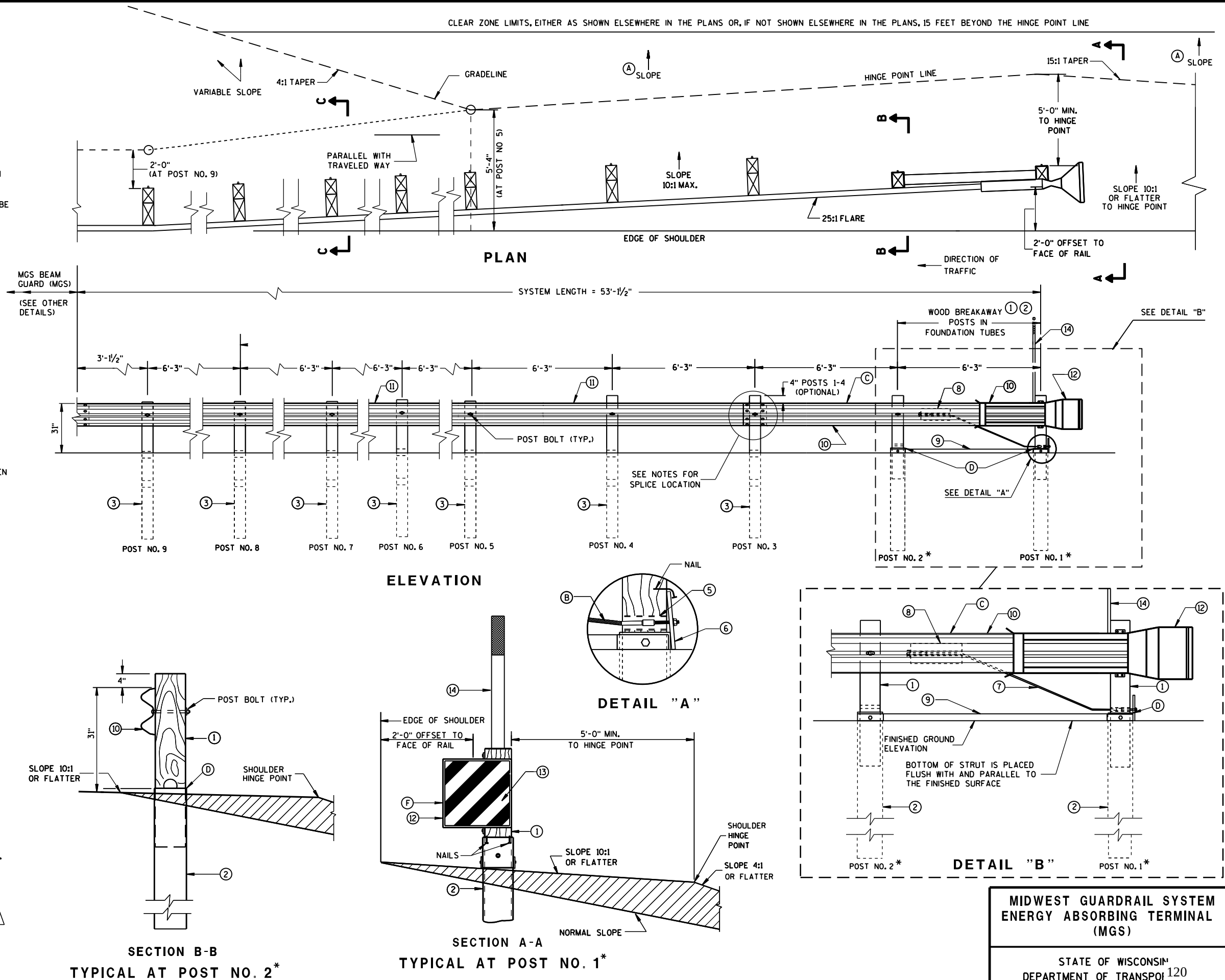
SEE SDD 14B42 FOR MORE INFORMATION.

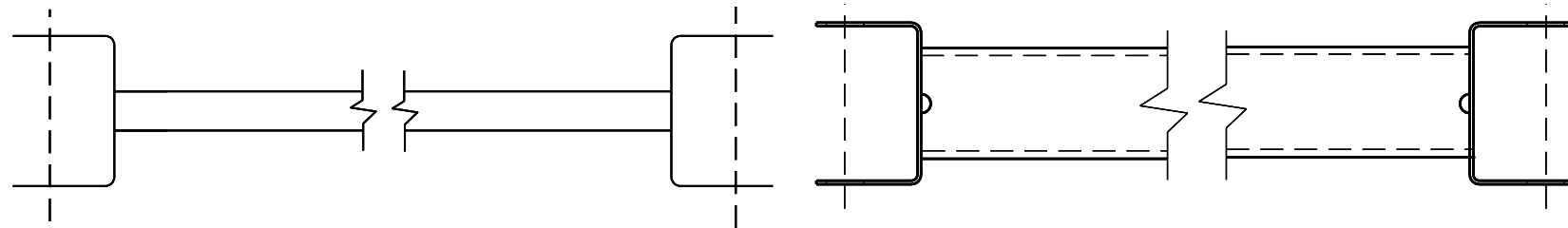
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

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

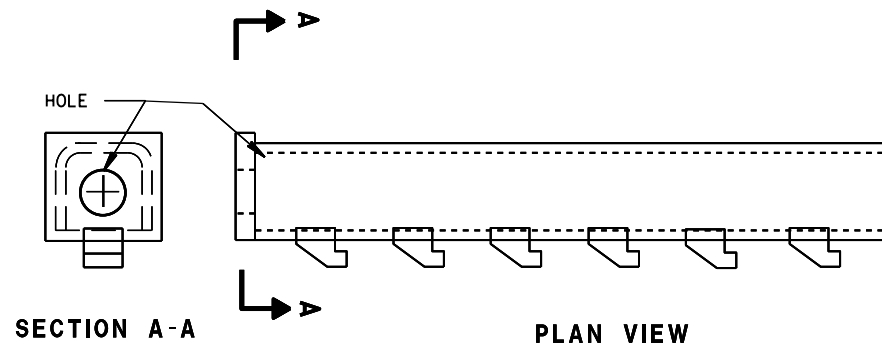
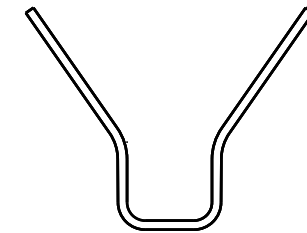
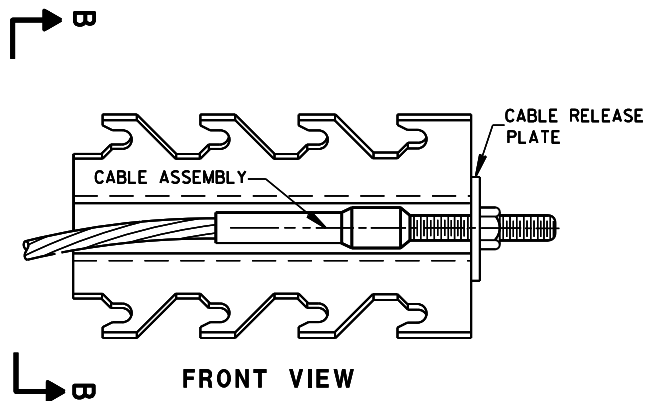
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

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.





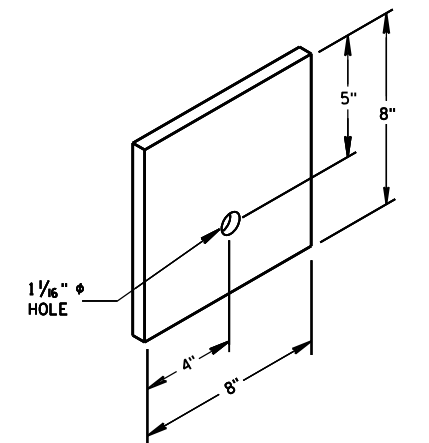
GENERIC GROUND STRUT (9) (H)



GENERIC ANCHOR CABLE BOX (8) (H)

BILL OF MATERIALS

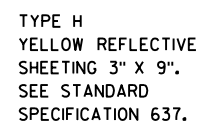
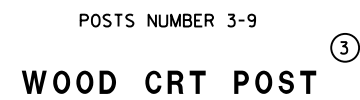
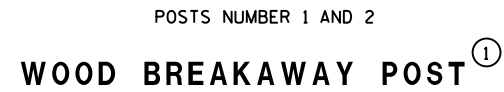
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR 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)



BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

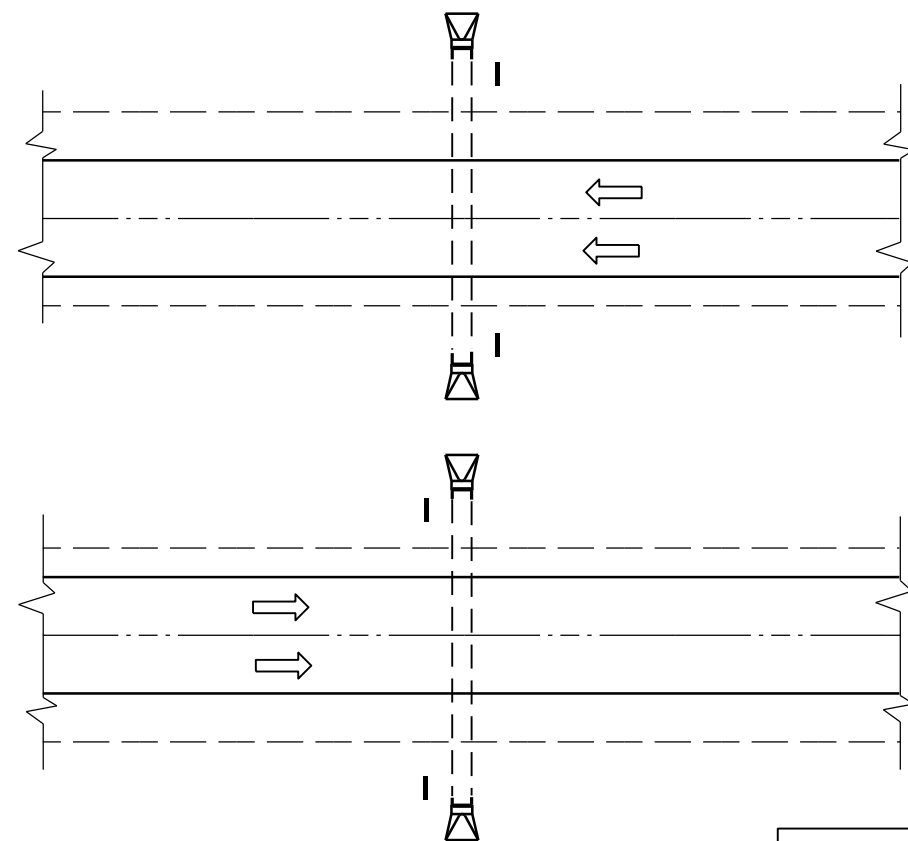
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 121



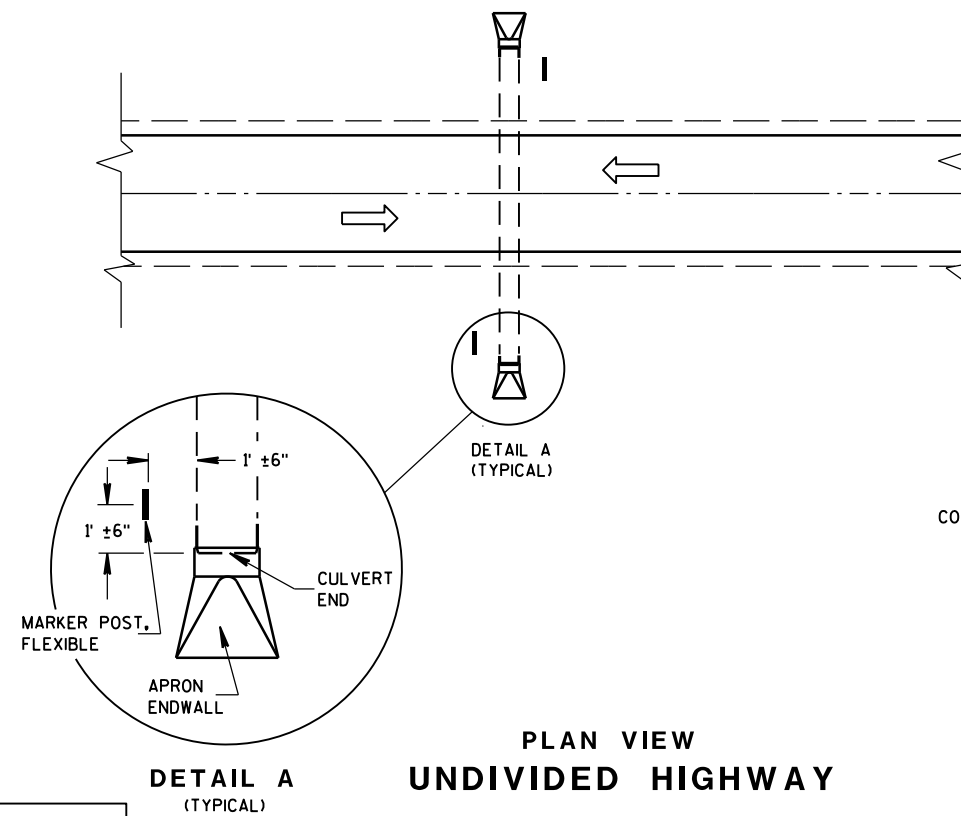
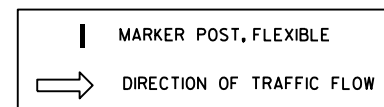
**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 122 ENT
FHWA ENGINEER



PLAN VIEW
DIVIDED HIGHWAY

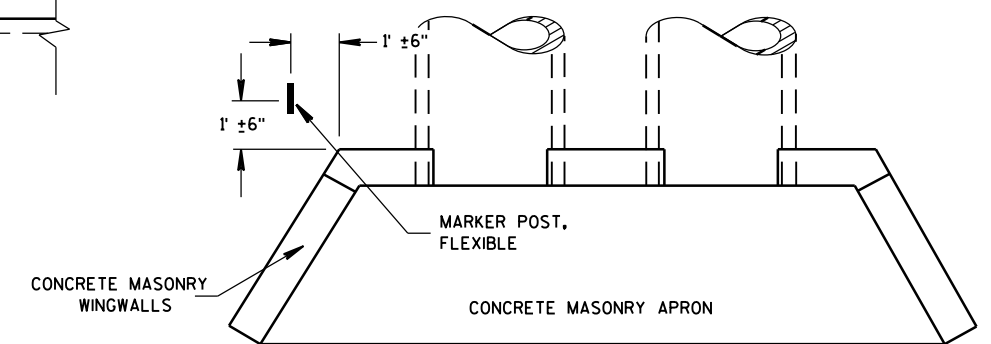


PLAN VIEW
UNDIVIDED HIGHWAY

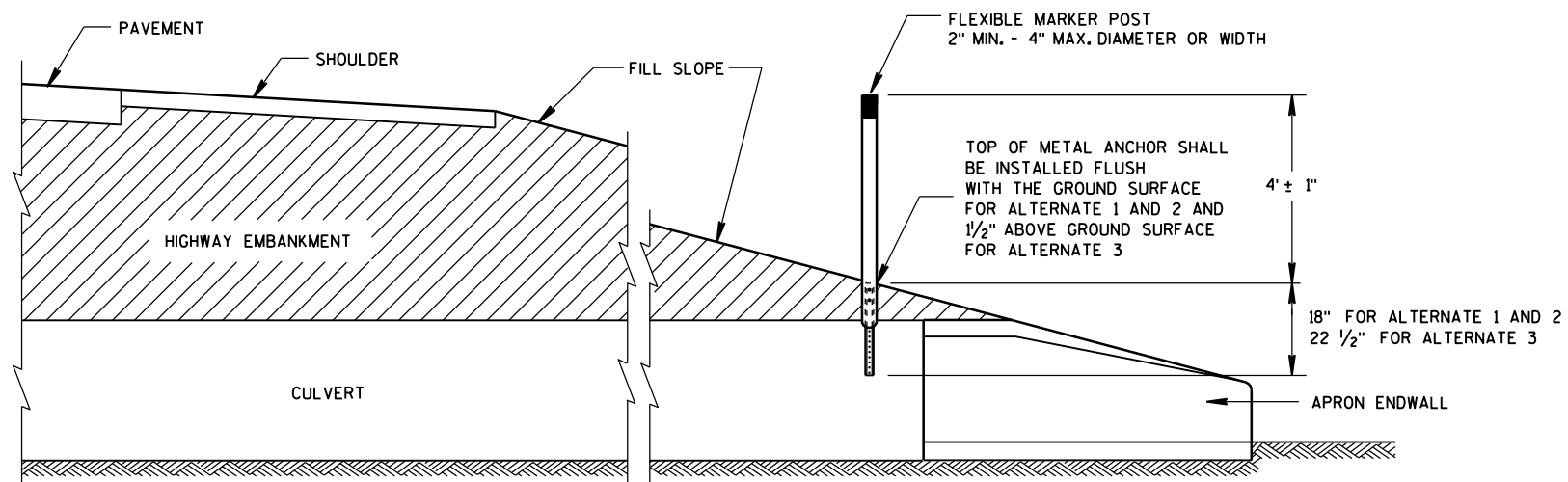
FLEXIBLE MARKER POST LOCATION

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.



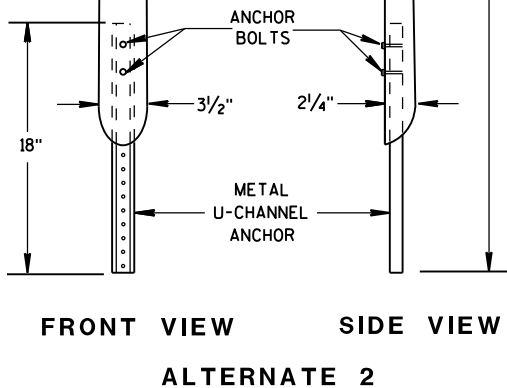
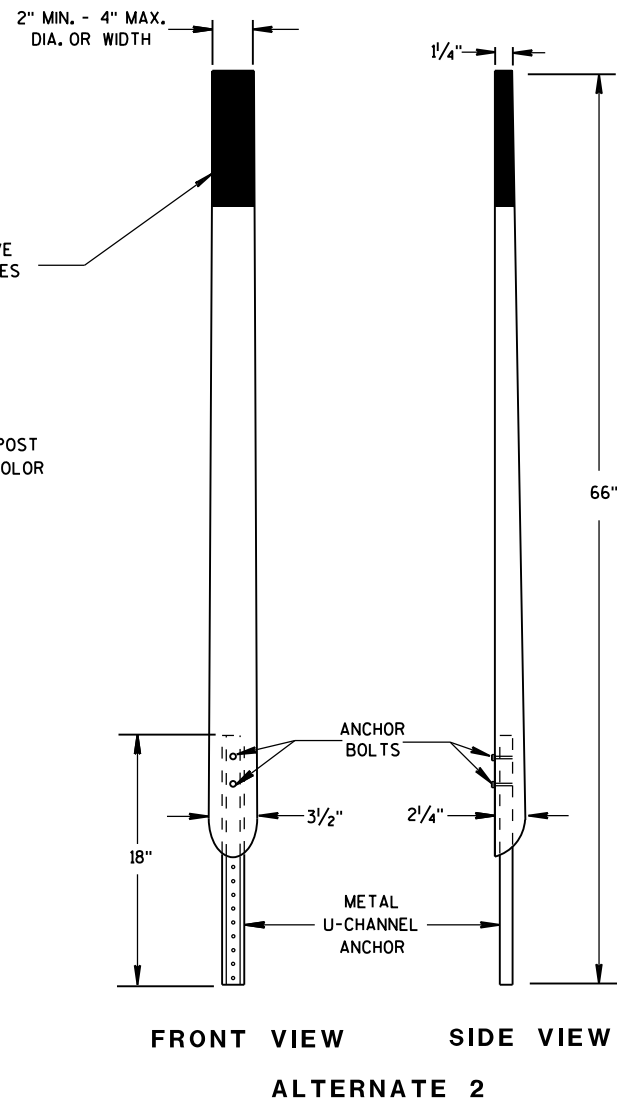
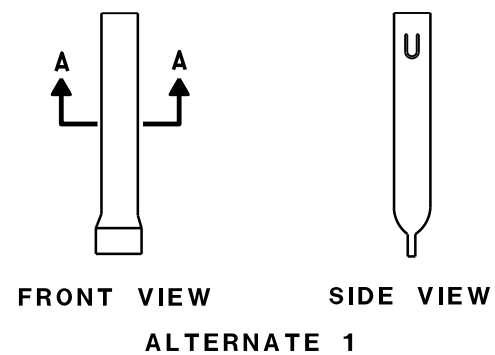
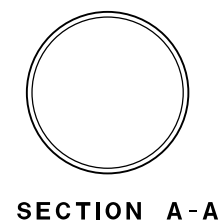
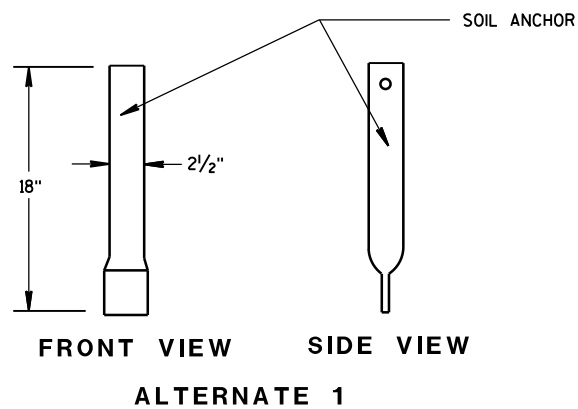
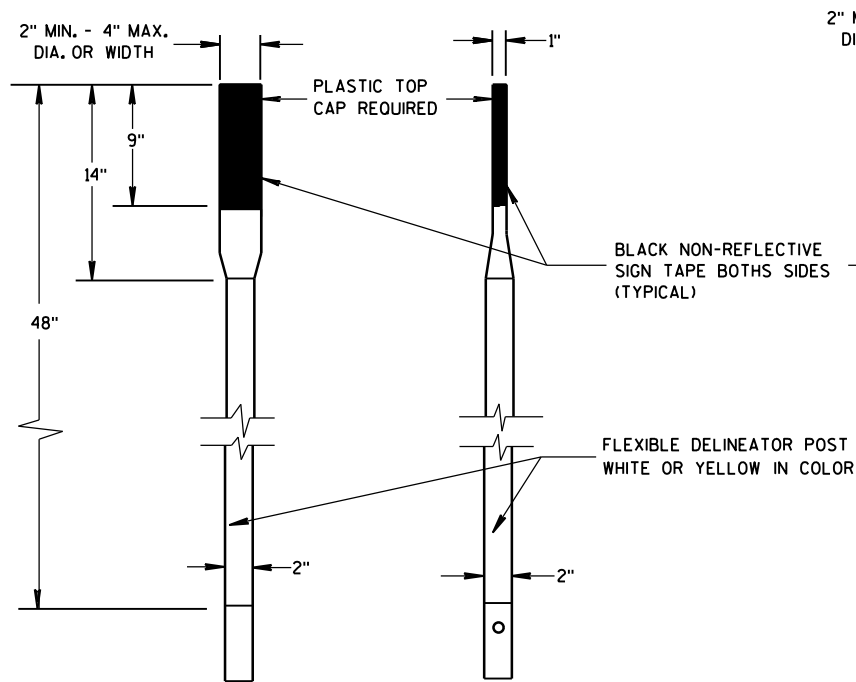
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



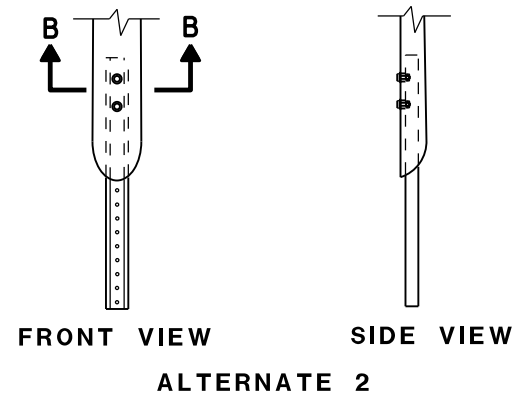
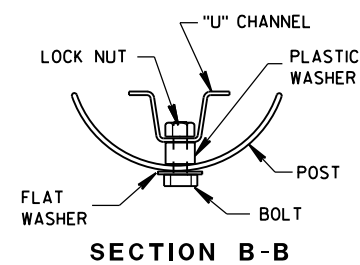
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

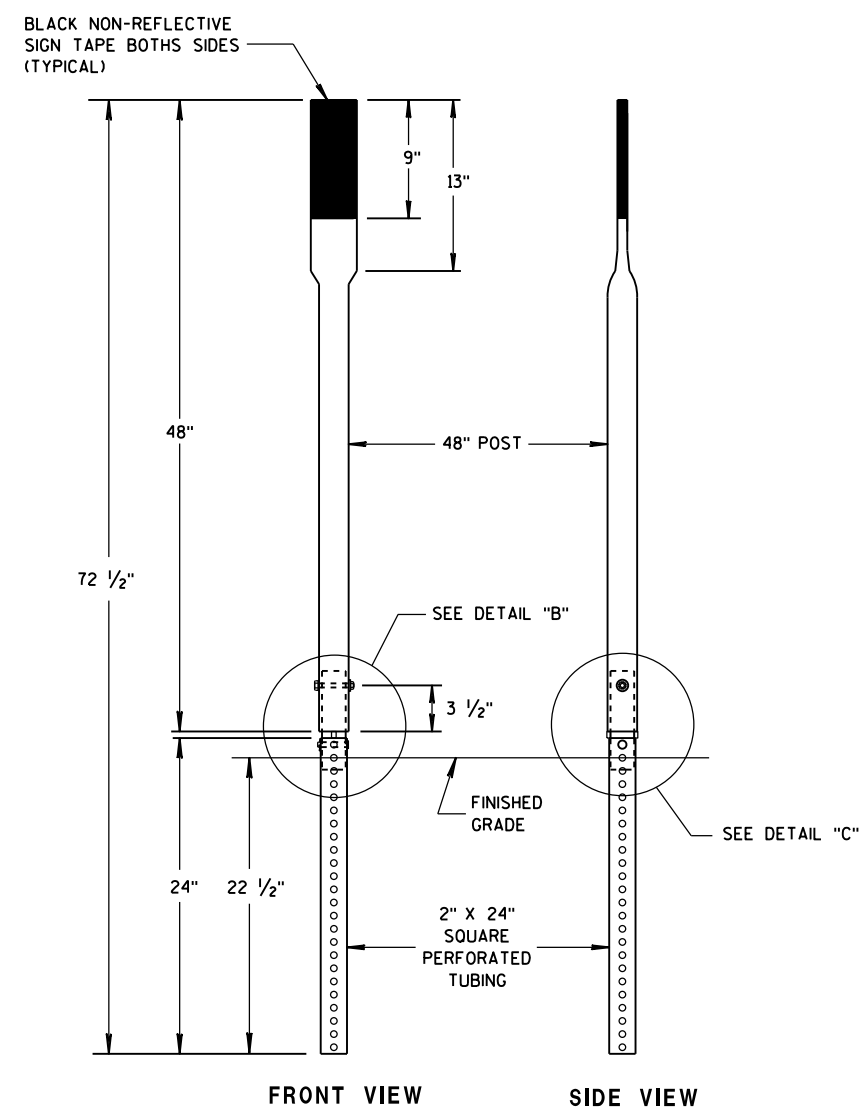
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 123



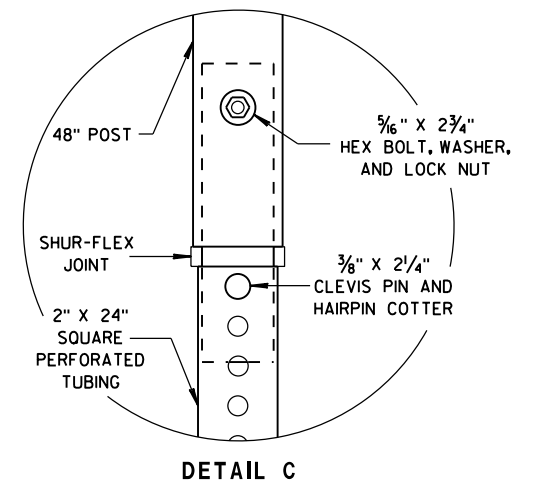
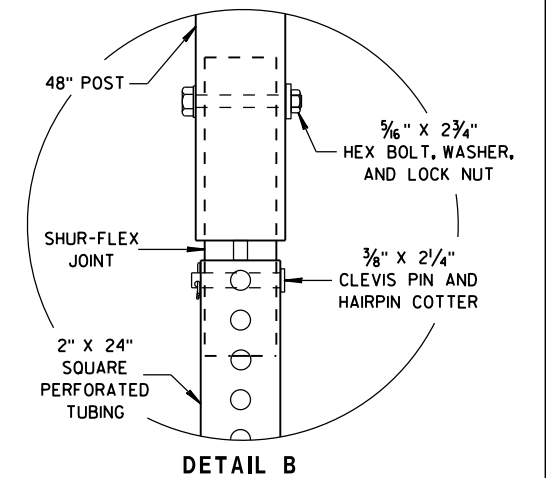
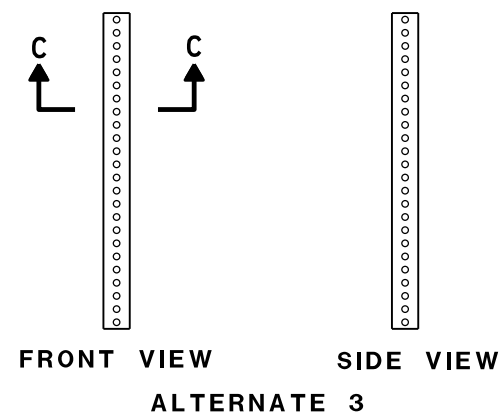
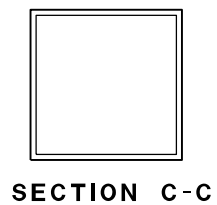
FLEXIBLE MARKER POSTS



FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW
ALTERNATE 3



FLEXIBLE MARKER POST FOR CULVERT END

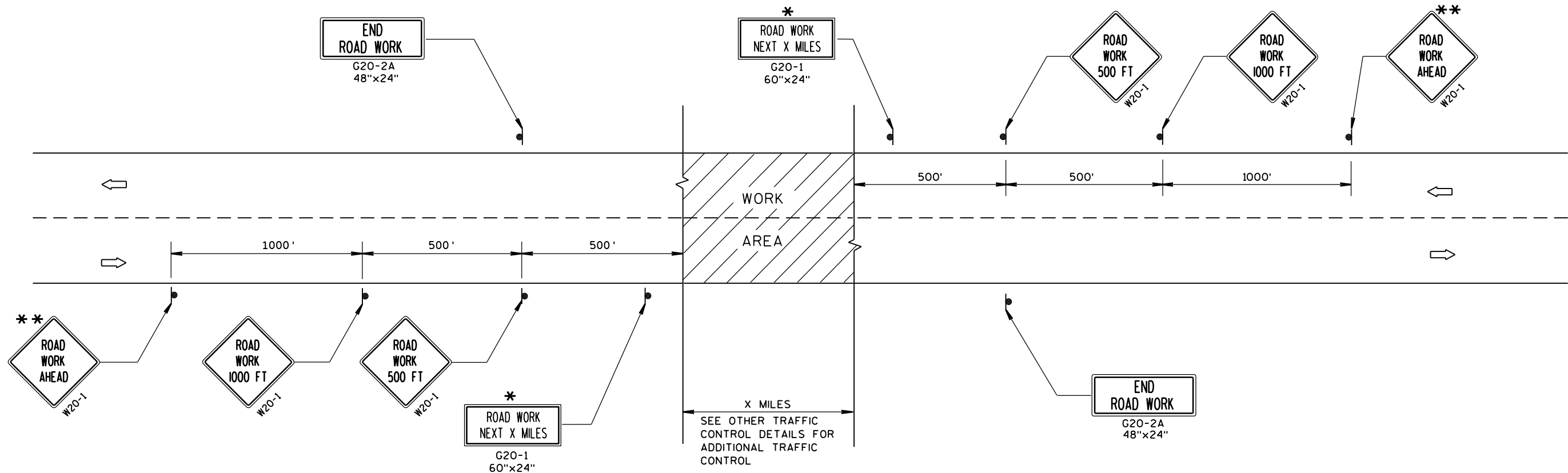
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/2012
DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER 124 IGN



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.

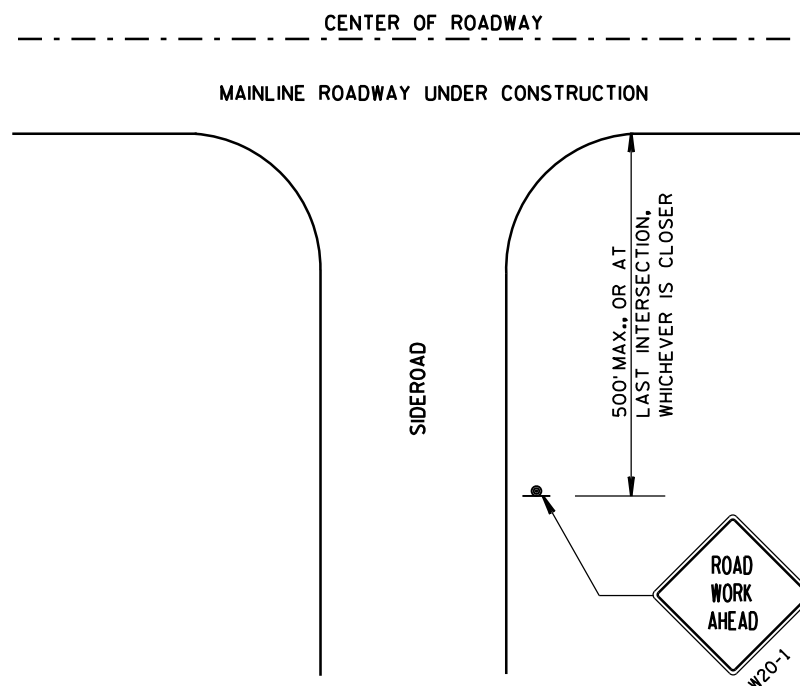
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

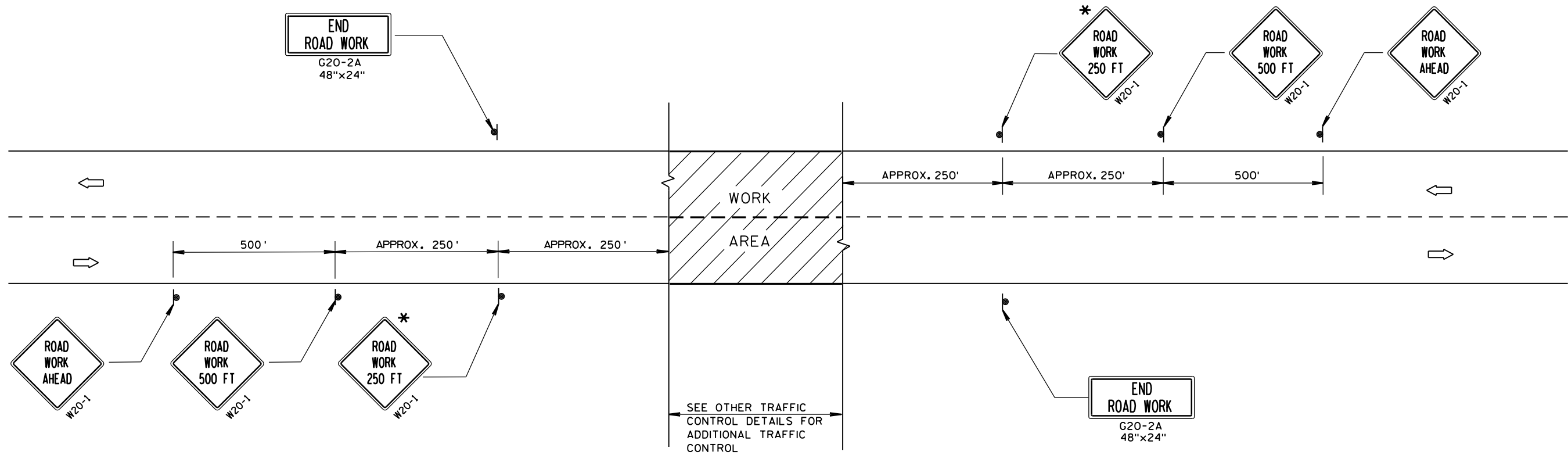
** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



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 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER 125	SIGN
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.

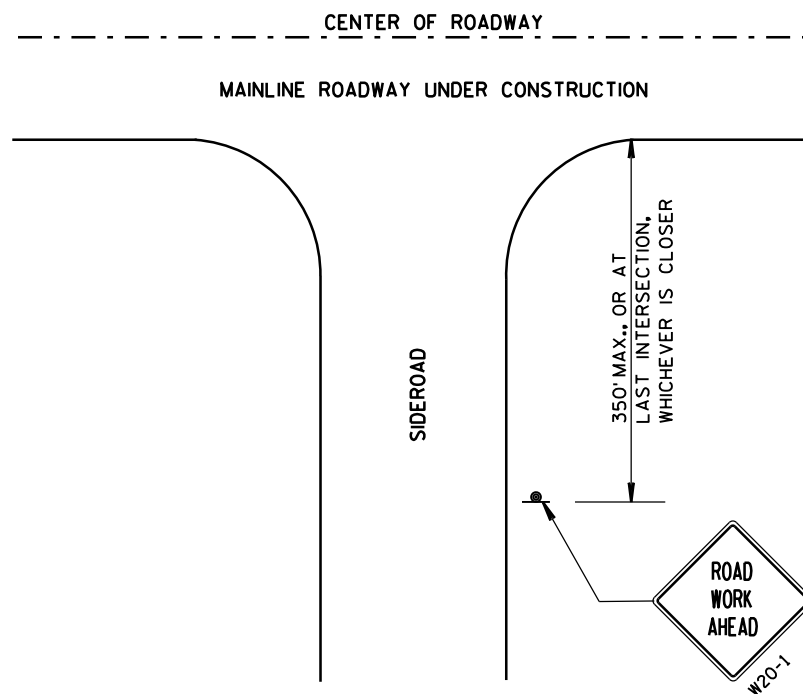
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



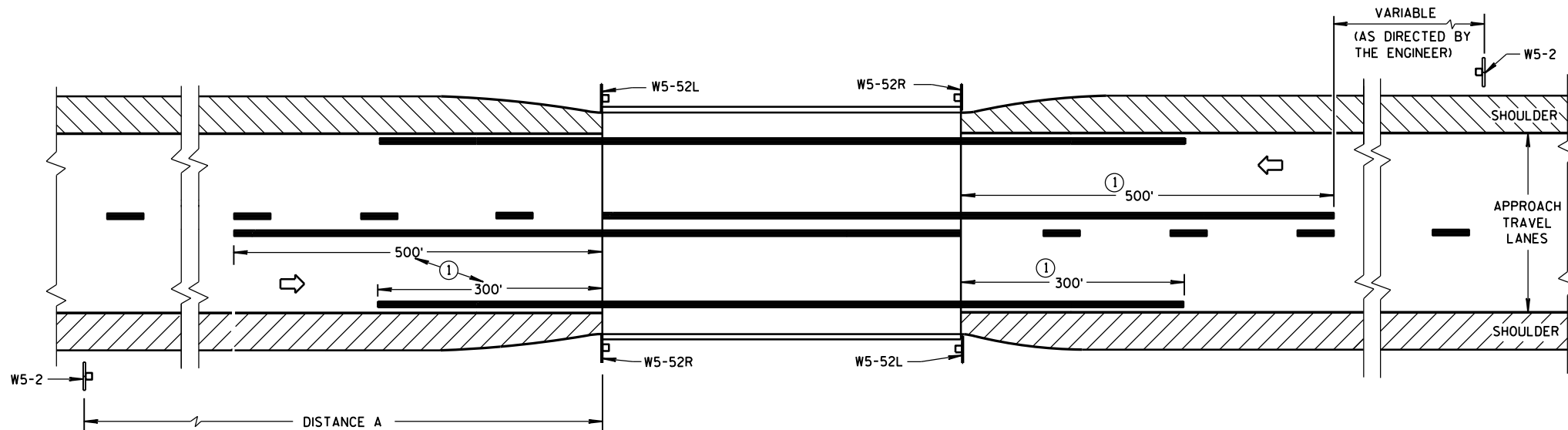
LEGEND

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

TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 40 M.P.H.
OR LESS TWO-WAY UNDIVIDED
ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER 126 SIGN
FHWA



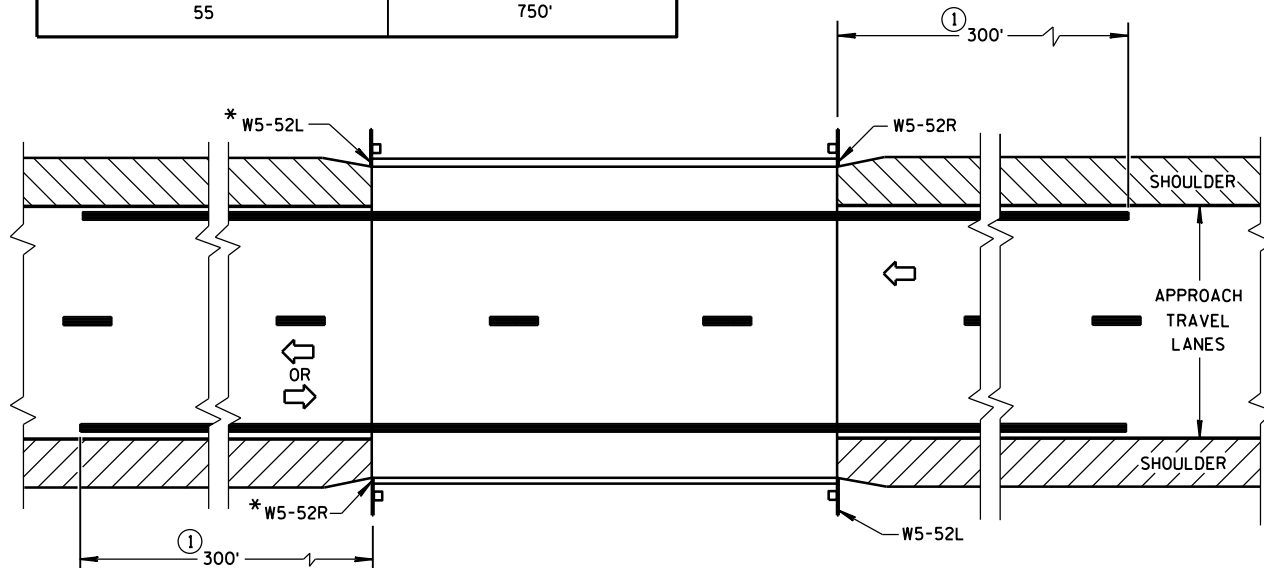
SITUATION 1

WARRANTING CRITERIA:

BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

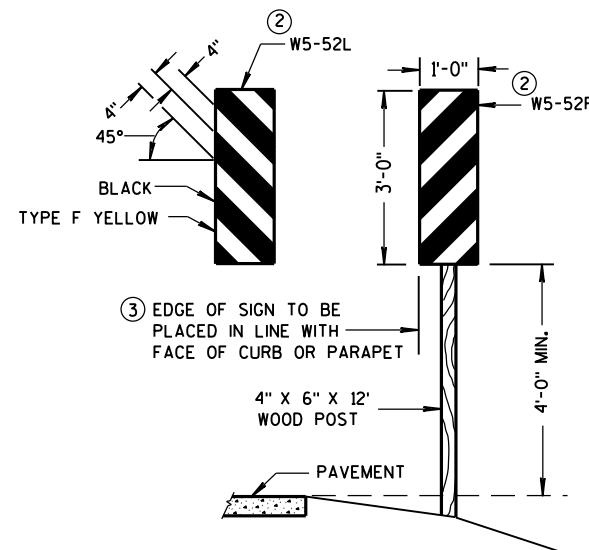


*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.



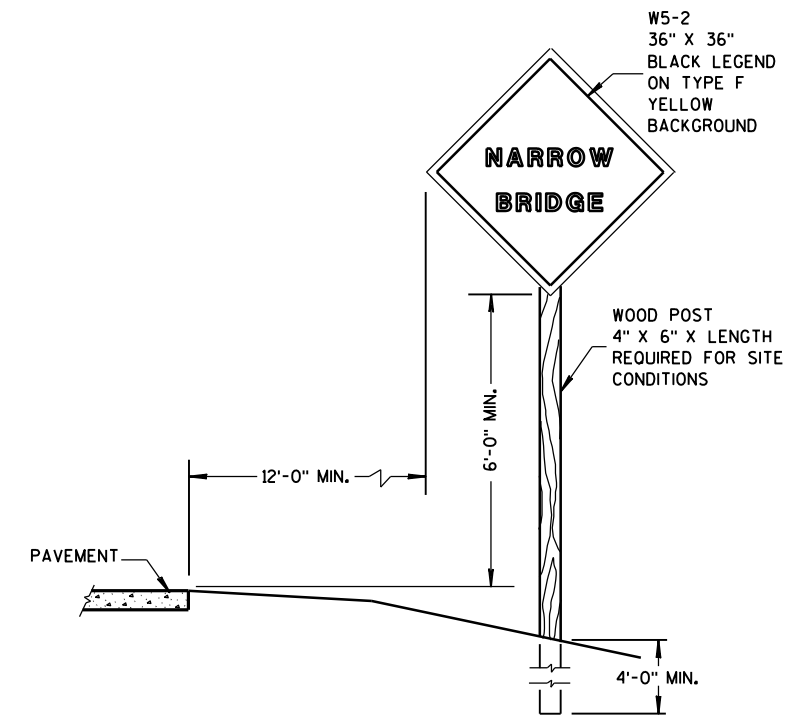
OBJECT MARKER PLACEMENT

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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

- ① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.
- ② FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.
- ③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.



SIGN PLACEMENT

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE

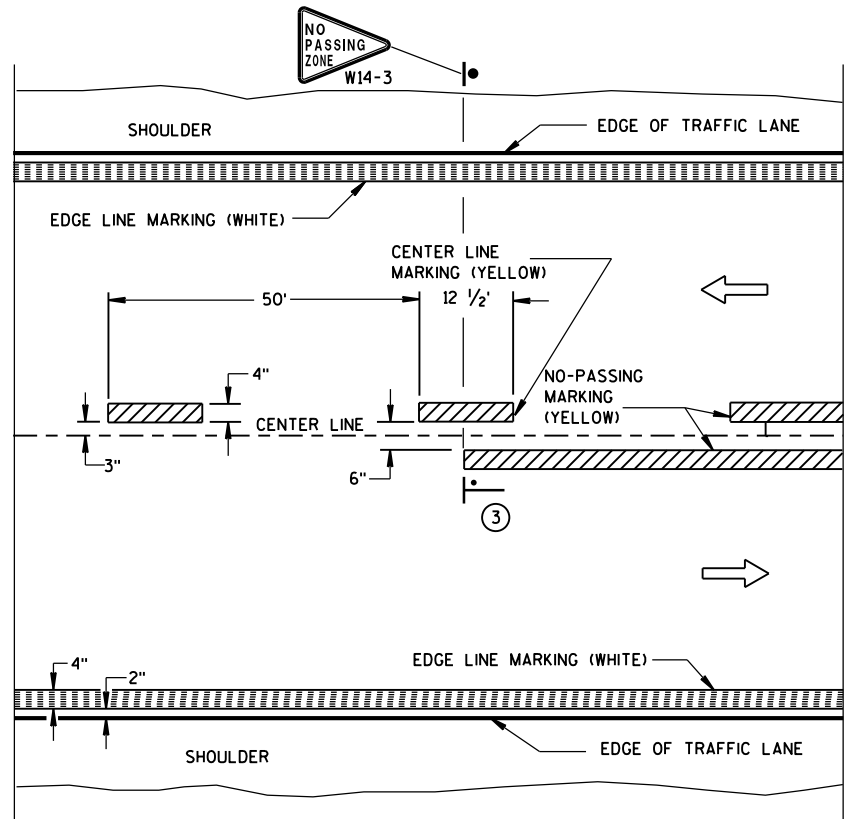
3-2014

FHWA

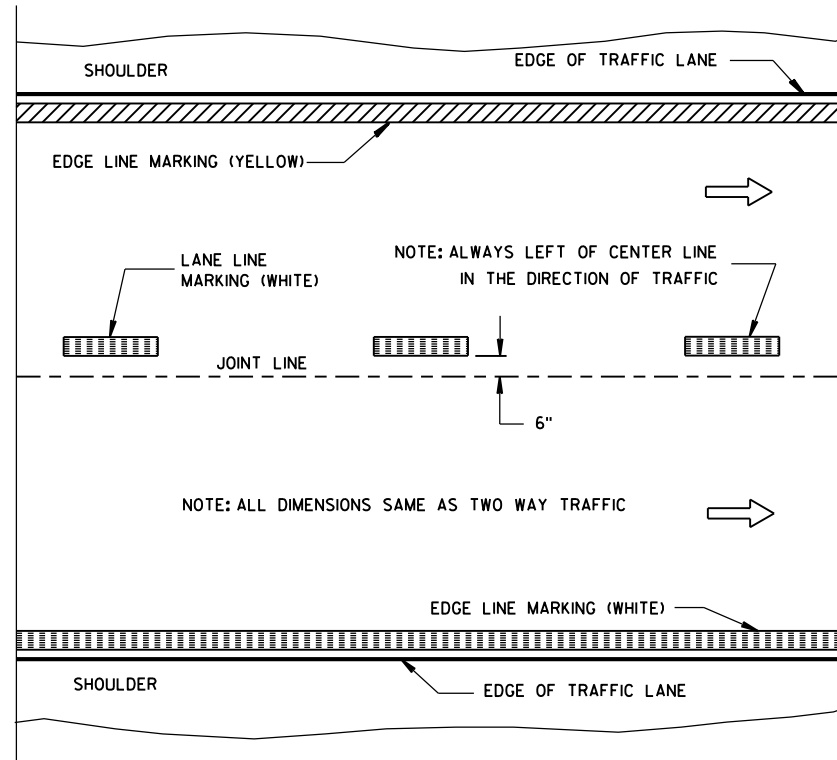
/S/ Travis Feltz

STATE TRAFFIC ENGINEER

127 JGN

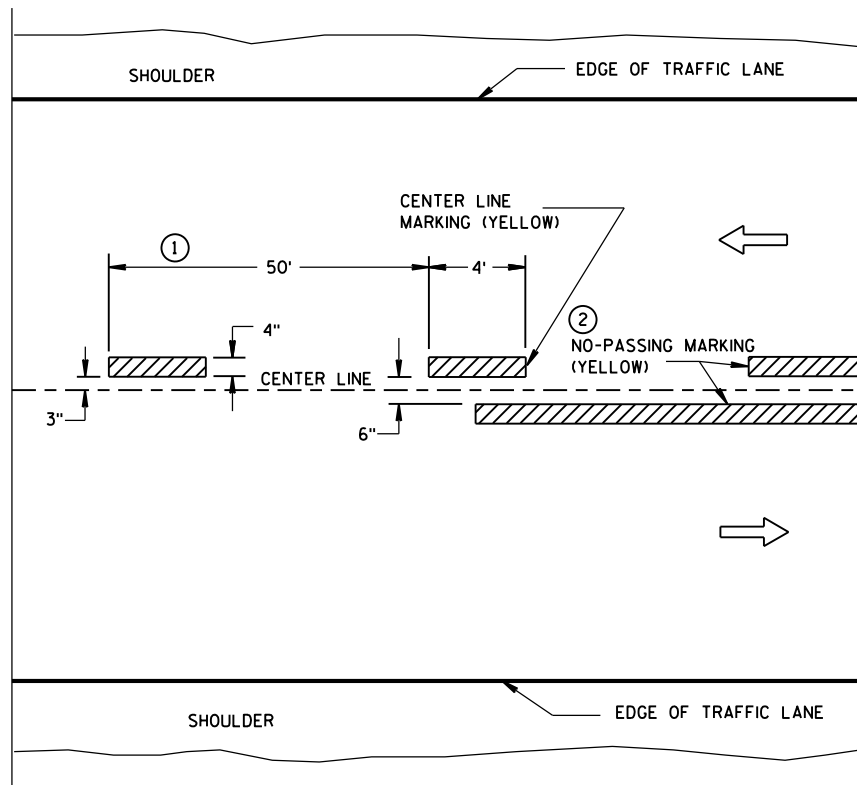


TWO WAY TRAFFIC

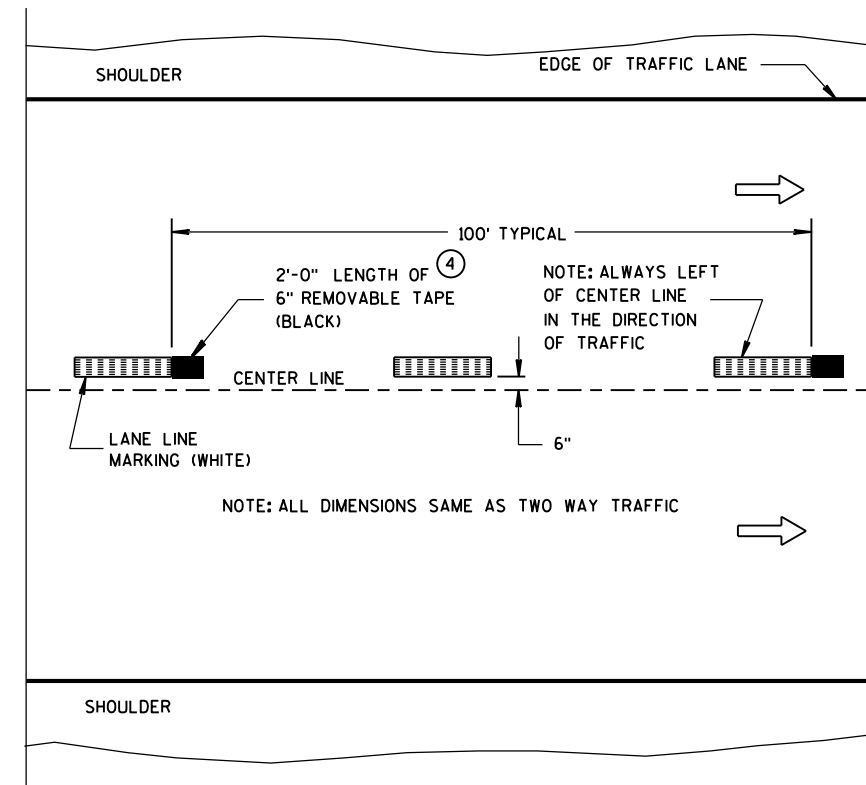


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

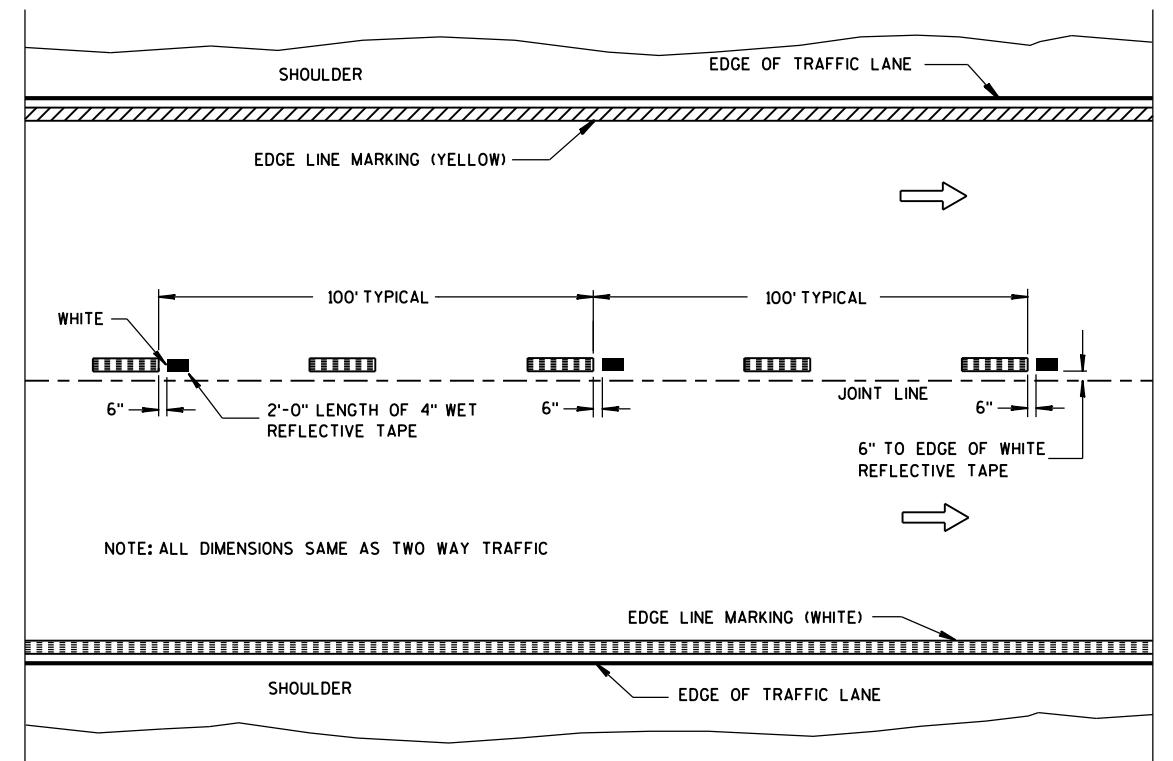
GENERAL NOTES

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

- 1 HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- 2 NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- 3 NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- 4 CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

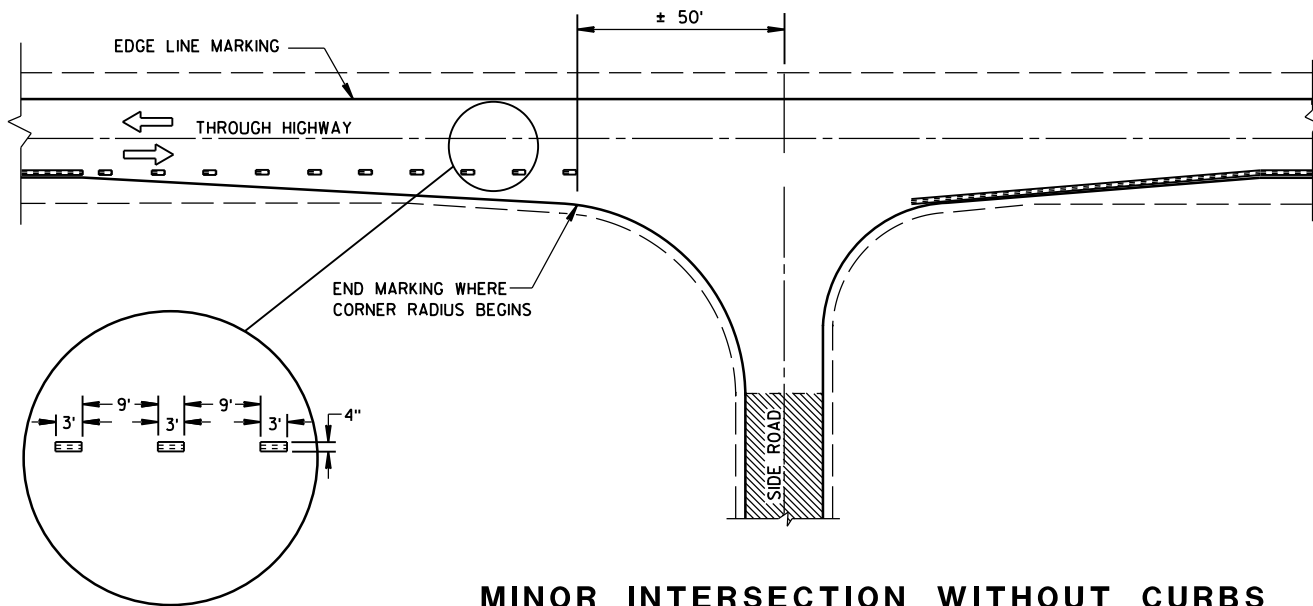
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

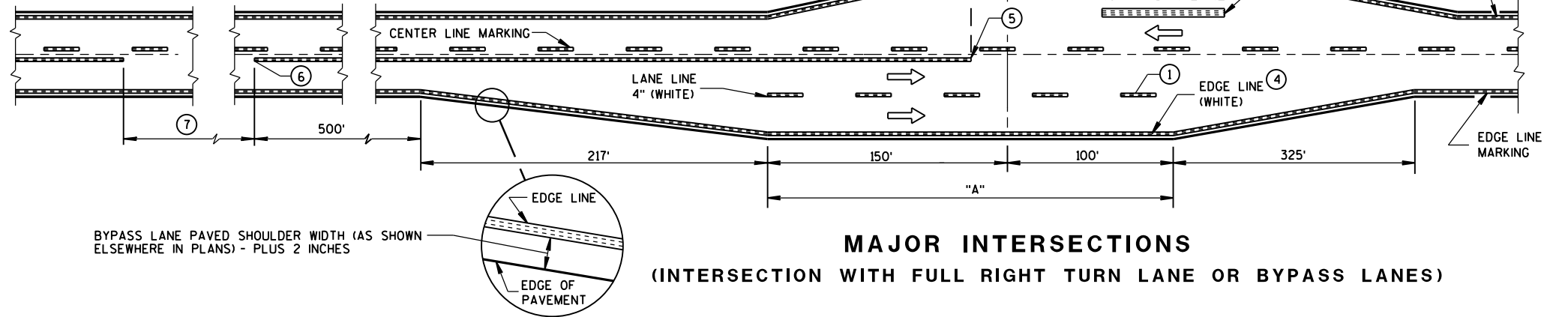
APPROVED
5-13-2013 /S/ Travis Feltes
DATE STATE TRAFFIC E 128
FHWA



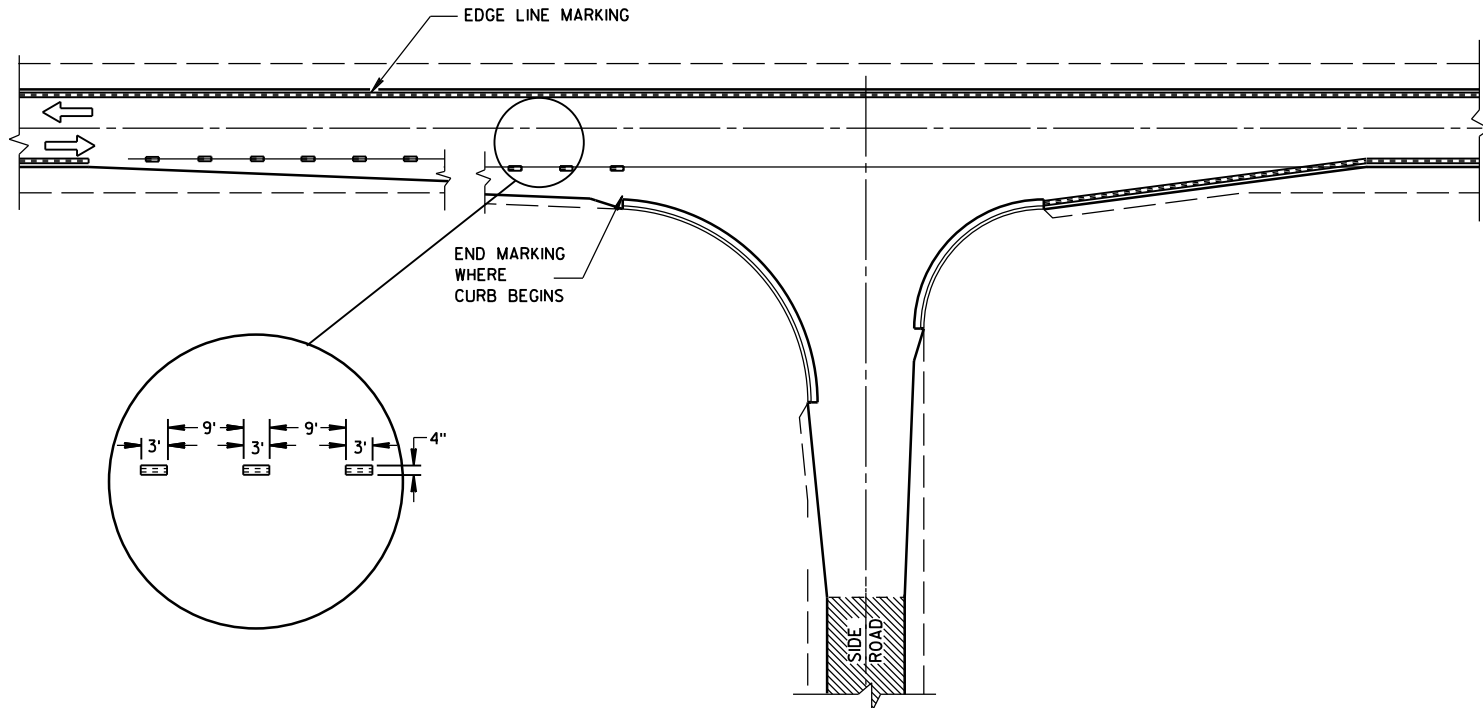
MINOR INTERSECTION WITHOUT CURBS

⑦

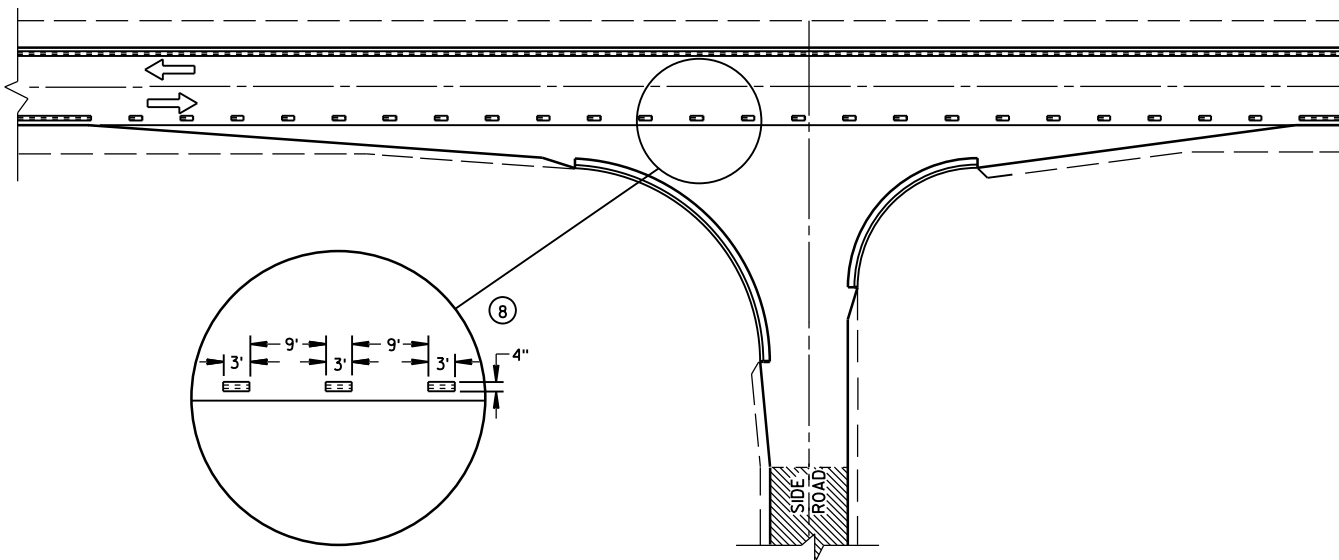
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



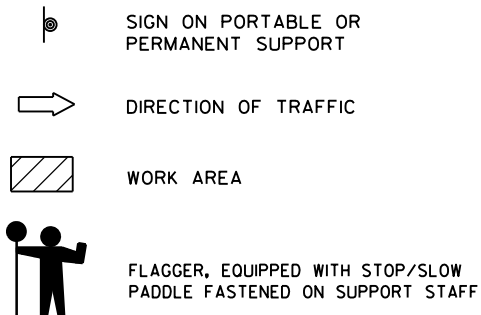
MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

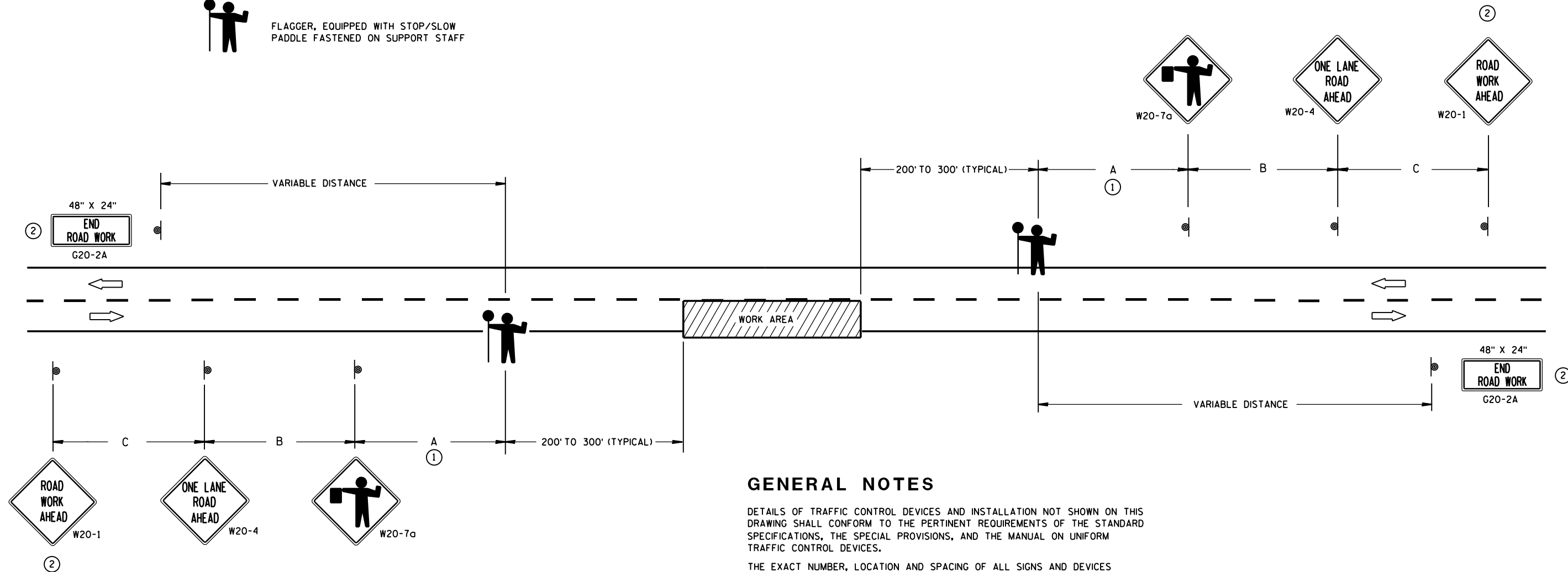
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND**SIGN SPACING TABLE**

SPEED LIMIT	SIGN SPACING A,B,C
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 W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 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.

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.

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.

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, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

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

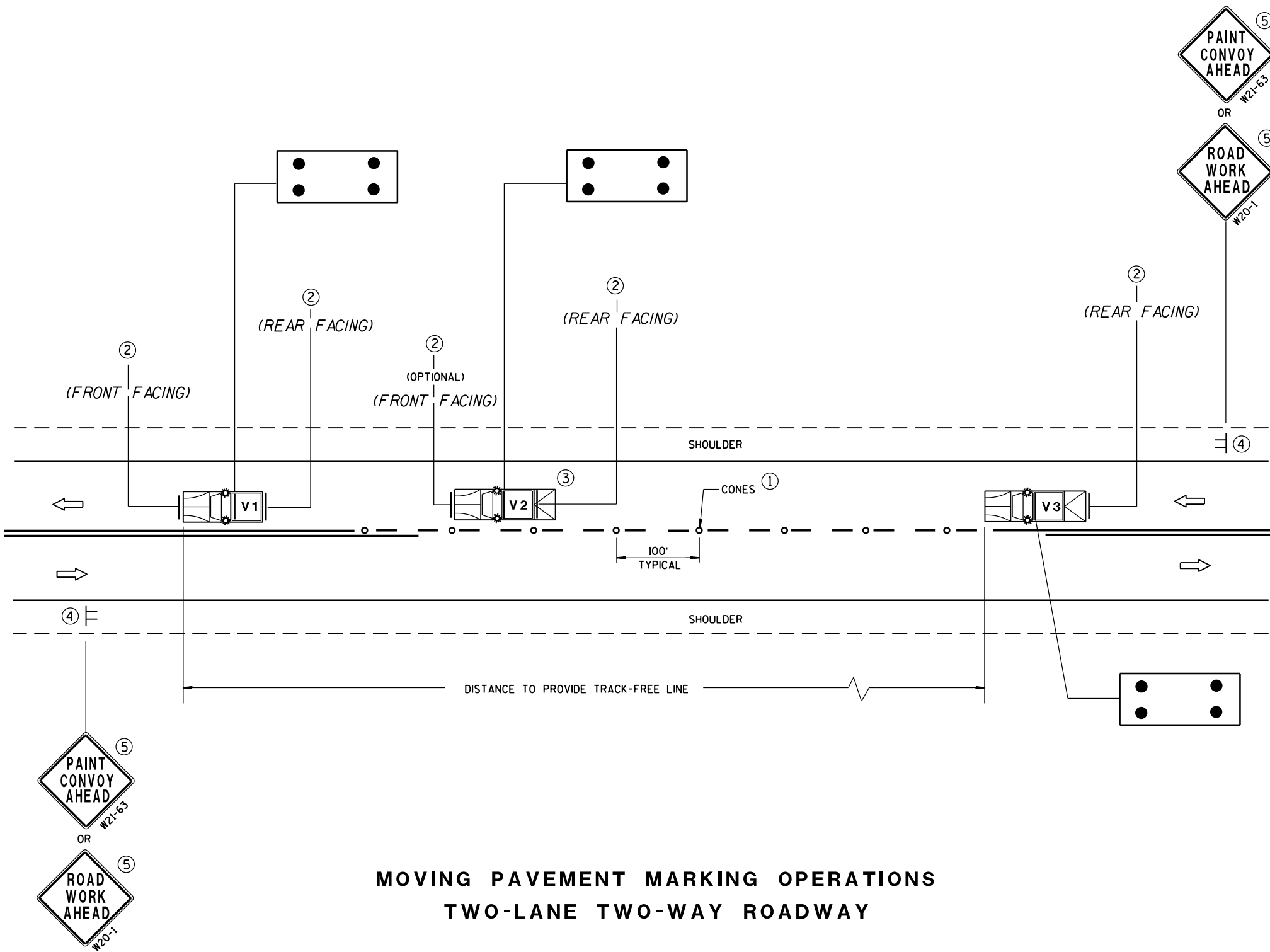
**TRAFFIC CONTROL FOR LANE
CLOSURE (SUITABLE FOR
MOVING OPERATIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 130 SIGN

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.
 OR 
W21-64 W21-64
- 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.

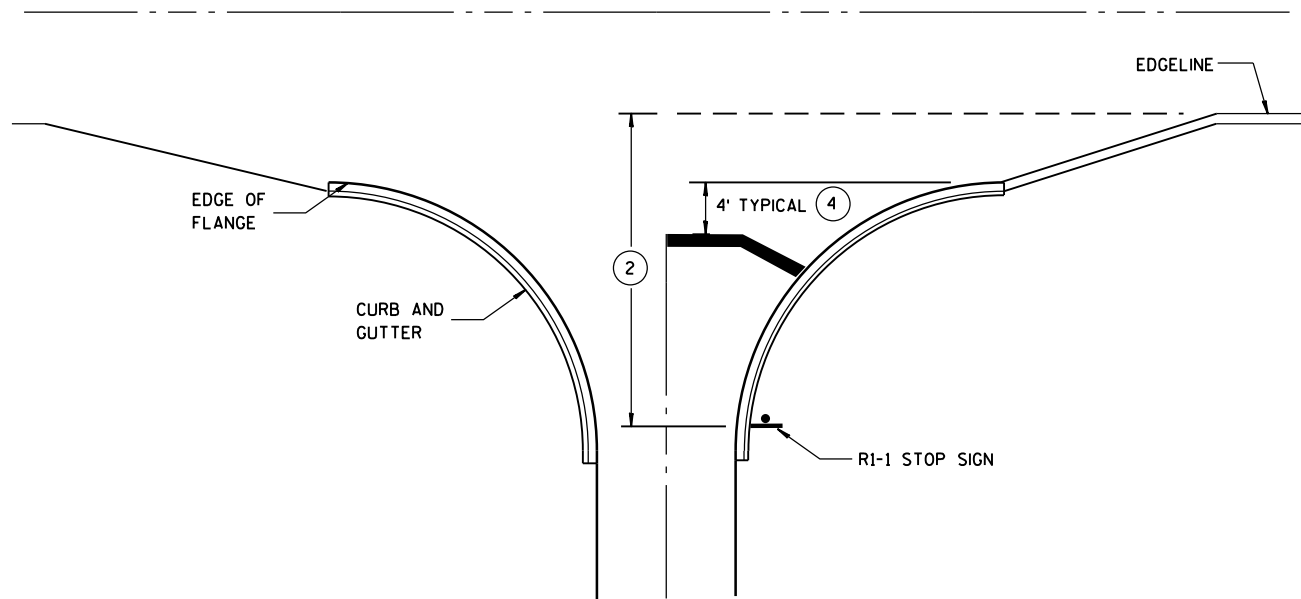
LEGEND

- 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)

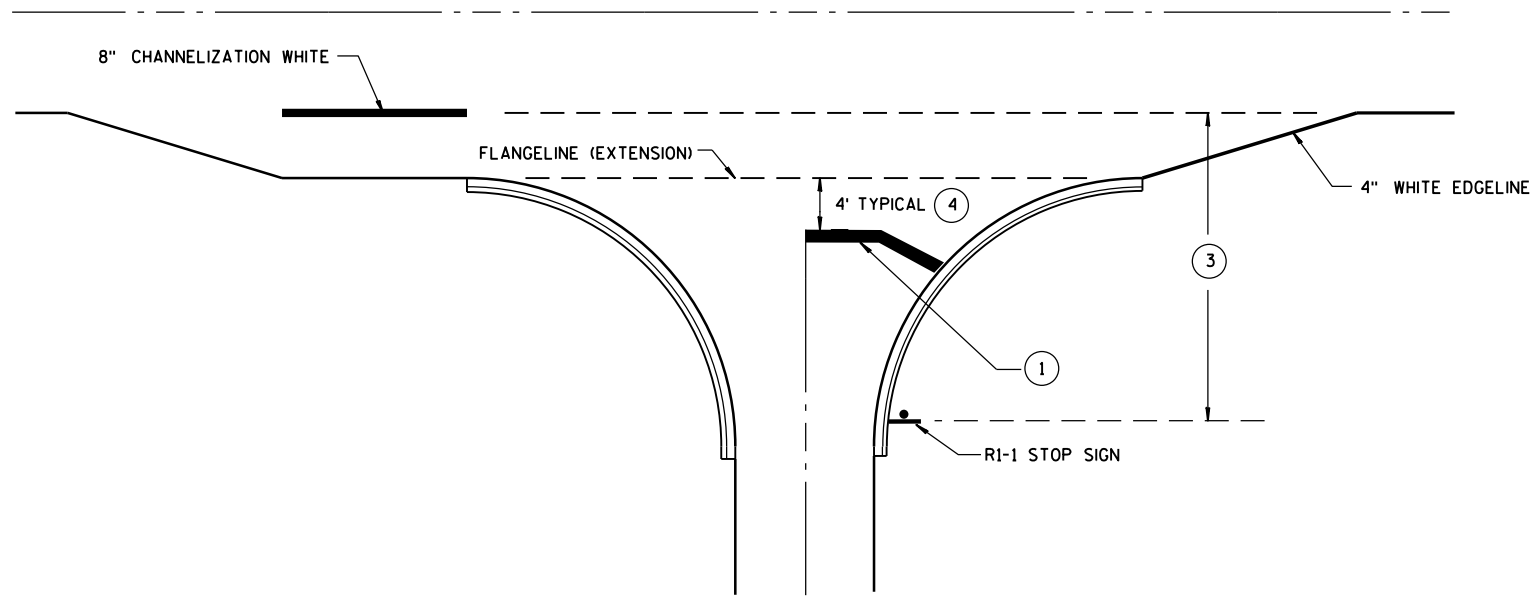
MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

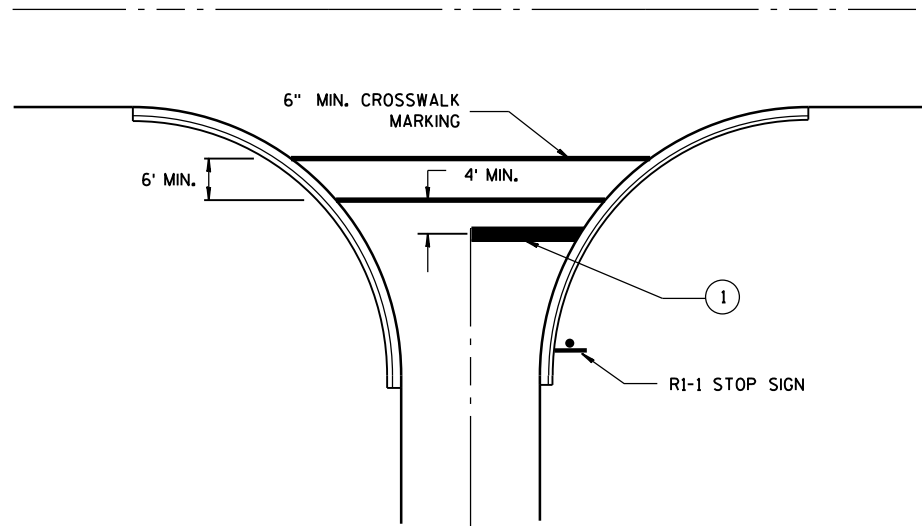
APPROVED
5/3/2013 /S/ Travis Feltes
DATE STATE TRAFFIC E 131
FHWA



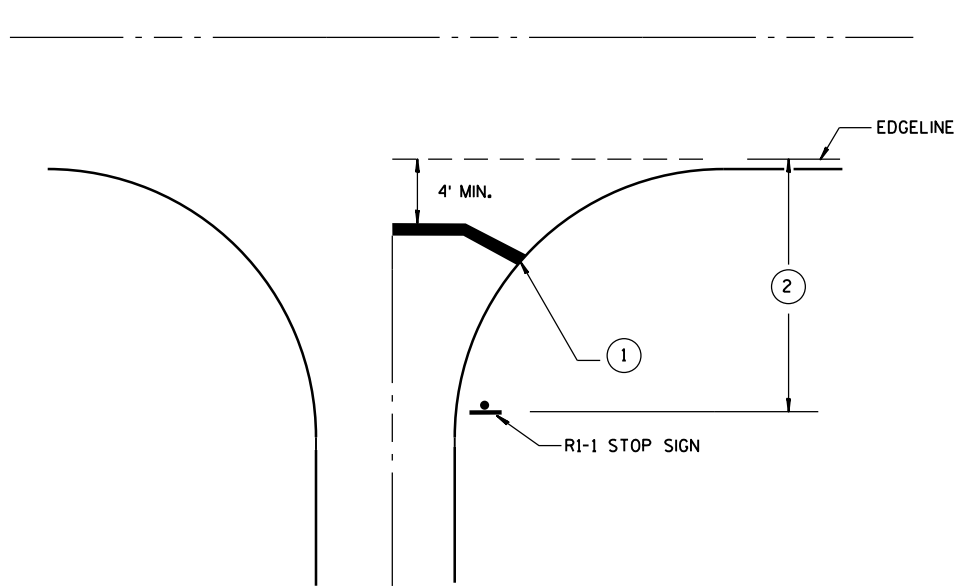
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 4/30/2013	/S/ Travis Feltes STATE TRAFFIC ENGINEER 132
FHWA	

GENERAL NOTES

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

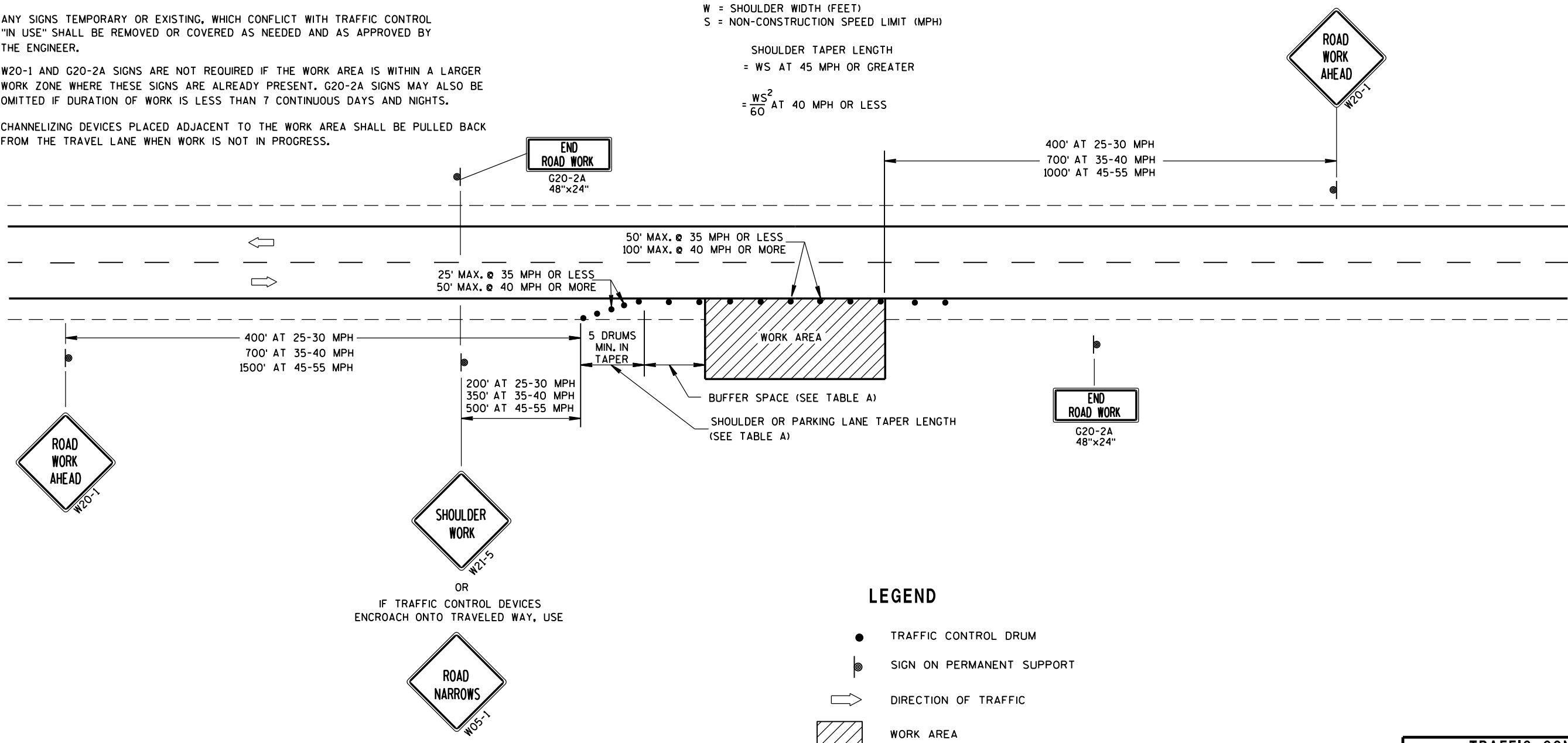
TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

= $\frac{WS^2}{60}$ AT 40 MPH OR LESS



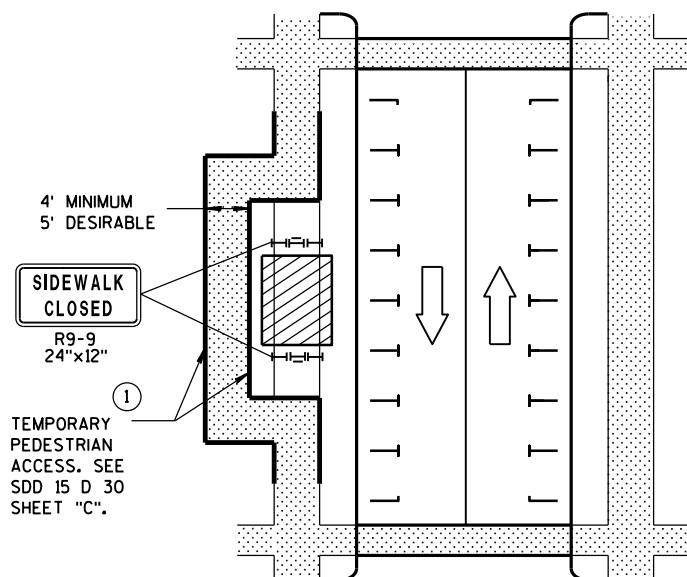
LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

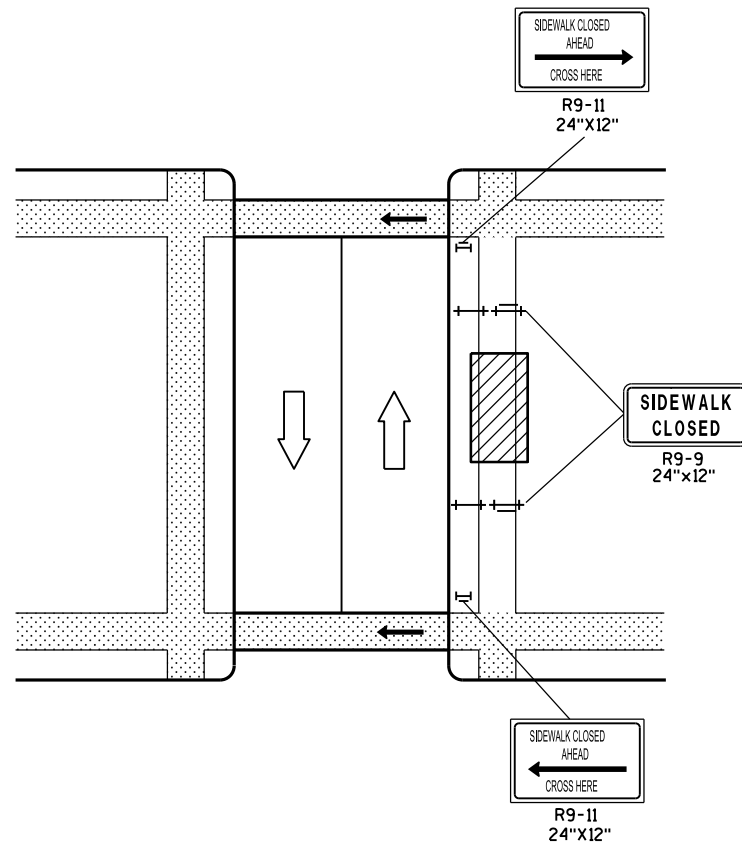
TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINE 133	ESIGN
FHWA		

Diagram illustrating a temporary pedestrian access crossing. The diagram shows a street with a sidewalk and a crossing area. A hatched rectangular area represents the "SIDEWALK CLOSED" zone, with dimensions "R9-9" and "24\" x 12\"". Arrows indicate traffic flow: a downward arrow on the left and an upward arrow on the right. A callout box specifies "4' MINIMUM 5' DESIRABLE" for the width of the crossing area. A callout box labeled "1" indicates "TEMPORARY PEDESTRIAN ACCESS. SEE SDD 15 D 30 SHEET 'C'". A callout box labeled "4" points to the crossing area. A callout box labeled "5" points to the crossing area.

NOTE: LAYOUT SAME AS ABOVE.



6



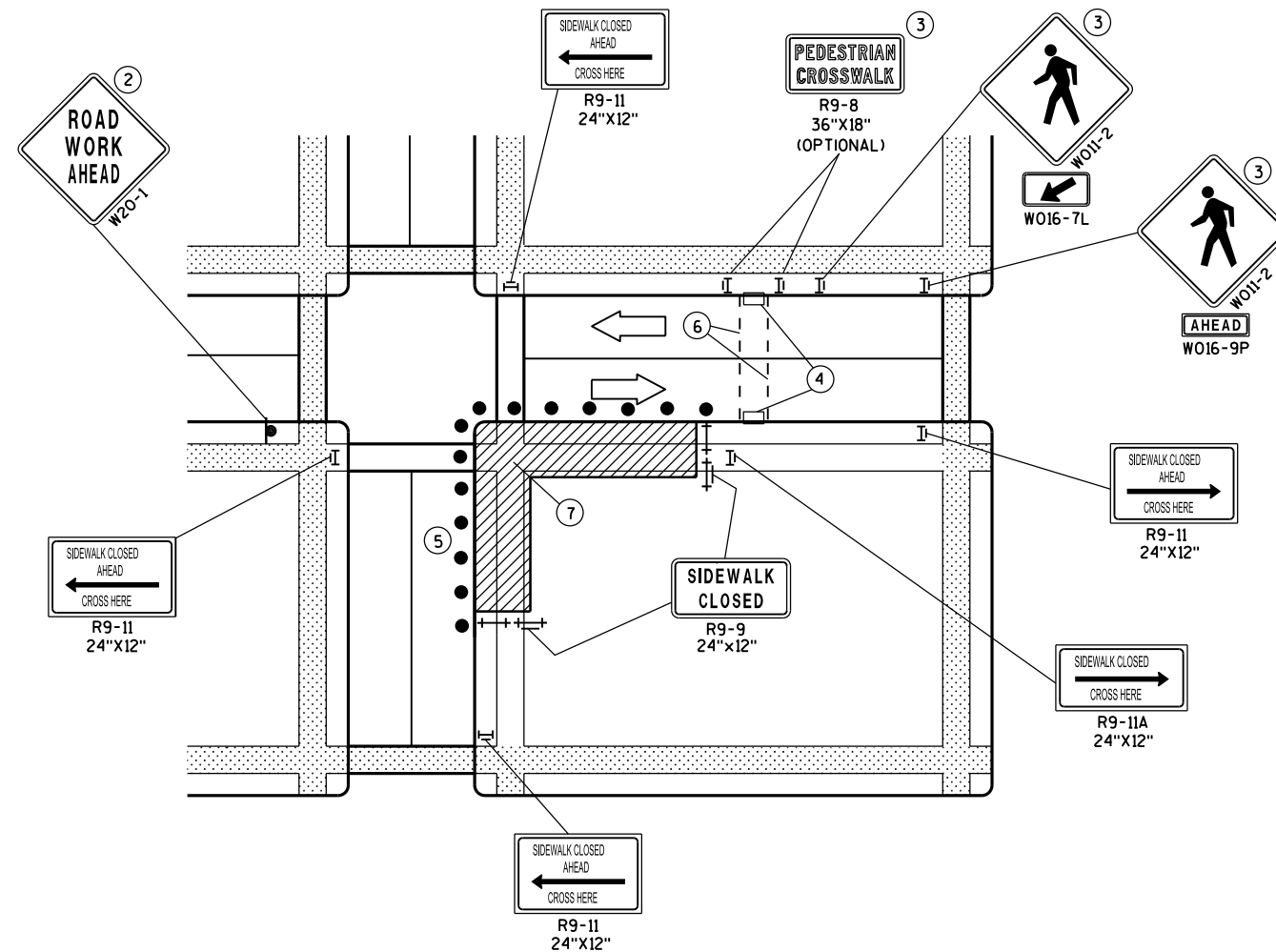
GENERAL NOTES

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

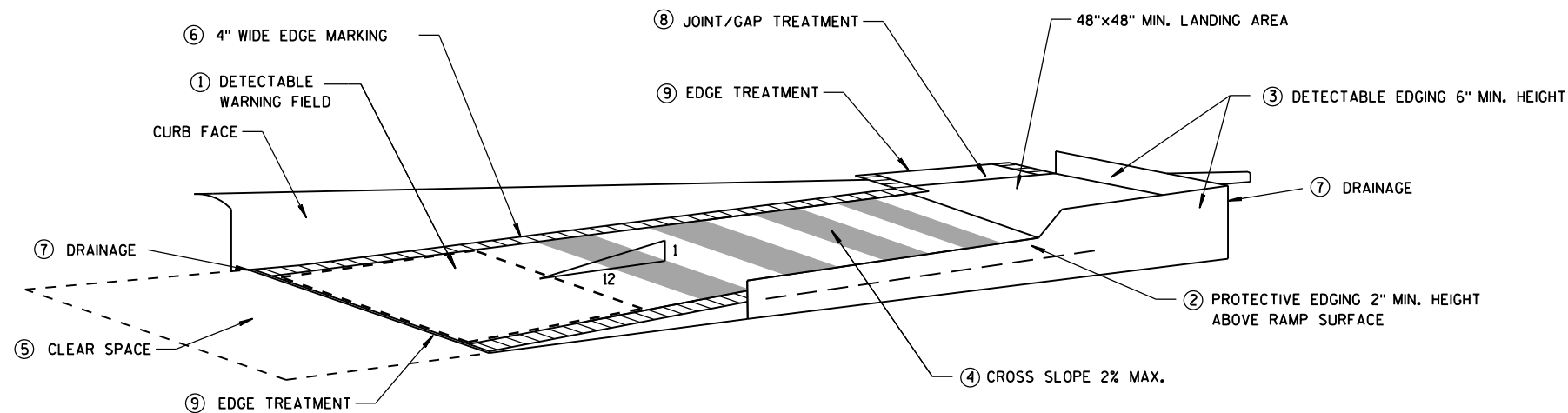
- ① IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.
- ② "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- ③ IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- ④ TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".
- ⑤ DRUMS OR BARRICADES AT 25 FOOT SPACING, STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ⑥ TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ⑦ LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.



LEGEND

- | | | | |
|---|--|---|-------------------------|
|  | SIGN ON PERMANENT
SUPPORT |  | DIRECTION OF
TRAFFIC |
|  | UNDER PEDESTRIAN
TRAFFIC |  | TRAFFIC CONTROL
DRUM |
|  | WORK AREA | | |
|  | PEDESTRIAN
CHANNELIZATION
DEVICE | | |
|  | TYPE II BARRICADE
WITH/WITHOUT SIGN (ALL
WITH ONE WARNING
LIGHT, TYPE A, LOW-
INTENSITY FLASHING) | | |
|  | TYPE III BARRICADE
WITH/WITHOUT SIGN (ALL
WITH ONE WARNING
LIGHT, TYPE A, LOW-
INTENSITY FLASHING) | | |

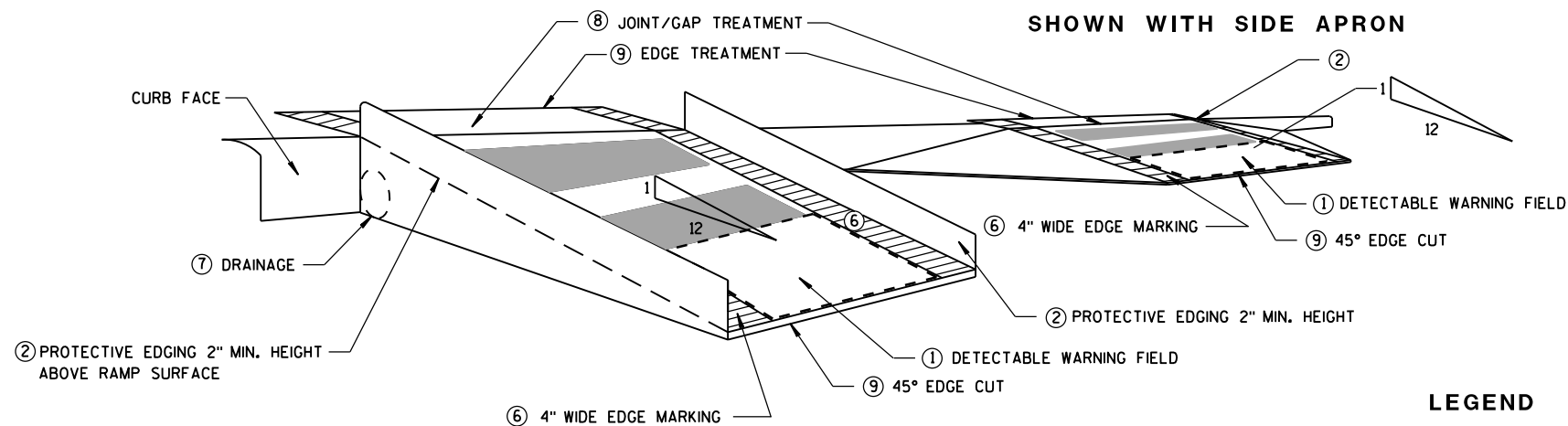
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 134



TEMPORARY CURB RAMP
PARALLEL TO CURB

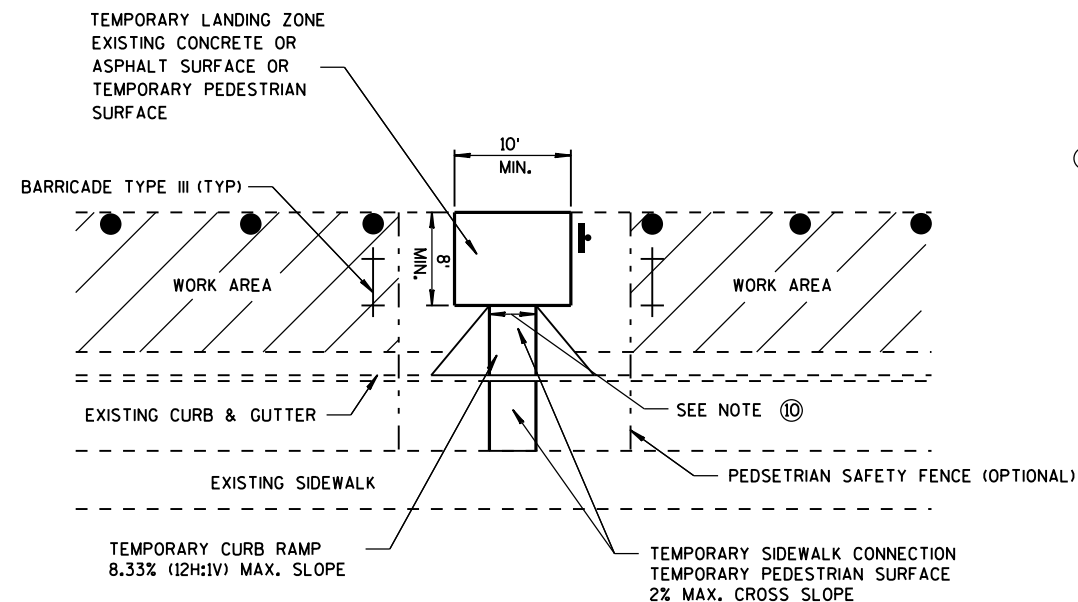
GENERAL NOTES

- NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.
- ① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".
 - ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
 - ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
 - ④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
 - ⑤ CLEAR SPACE OF 48"x48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
 - ⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
 - ⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
 - ⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
 - ⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
 - ⑩ 5' WIDE MIN. WITH PEDESTRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



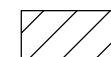
SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP
PERPENDICULAR TO CURB



TEMPORARY BUS STOP PAD

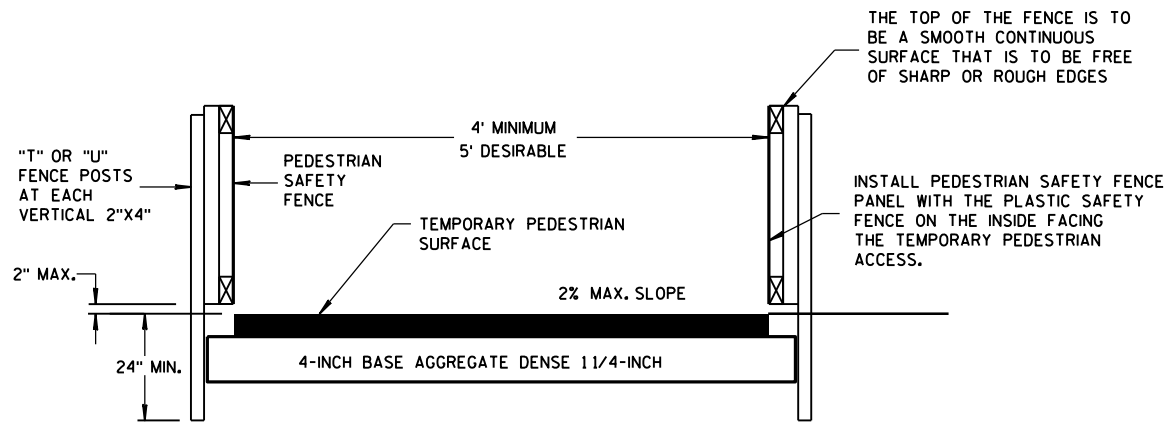
LEGEND

-  WORK AREA
-  TYPE III BARRICADE
-  TRAFFIC CONTROL DRUM

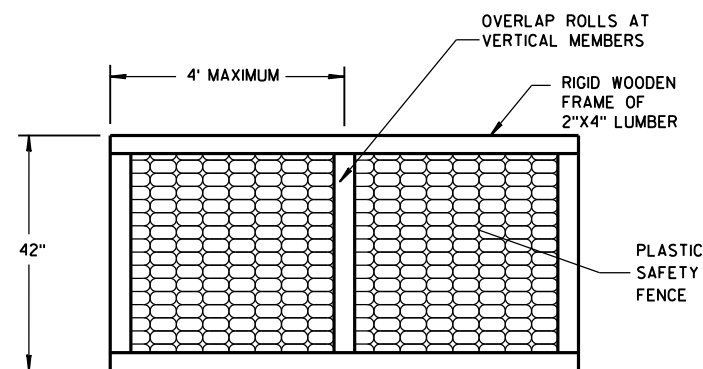
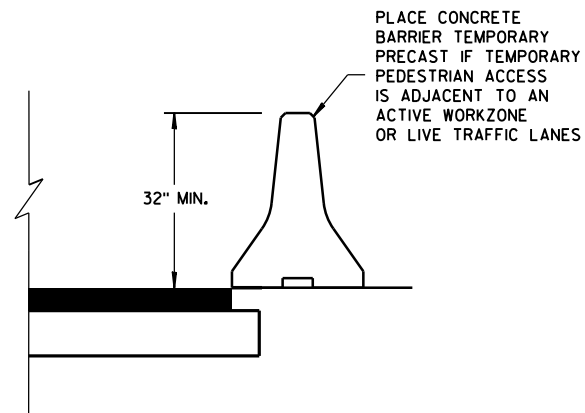
TRAFFIC CONTROL,
TEMPORARY ADA COMPLIANT
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

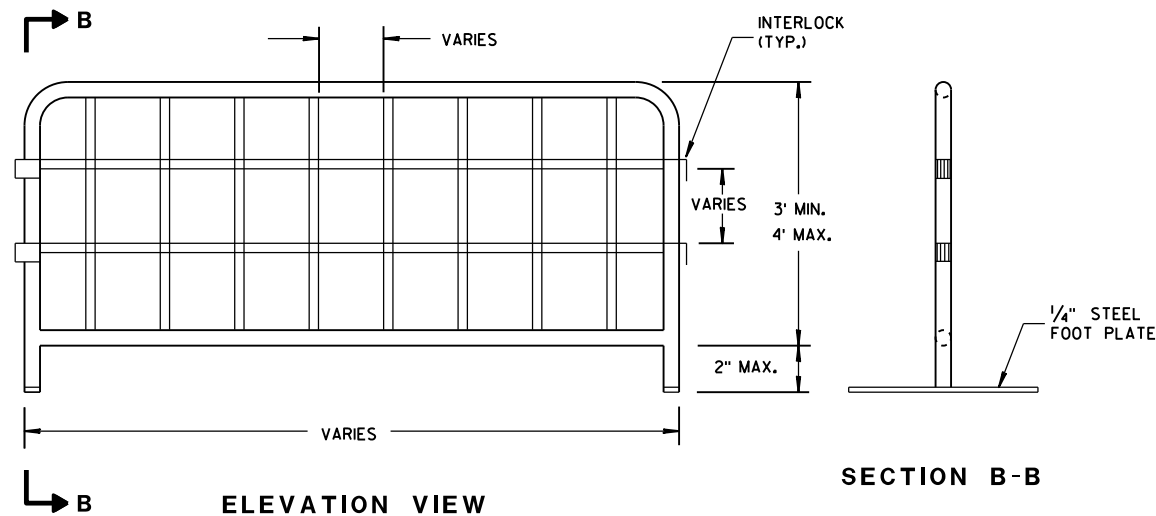
APPROVED
March 2015 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER 135 SIGN
FHWA



TEMPORARY PEDESTRIAN ACCESS

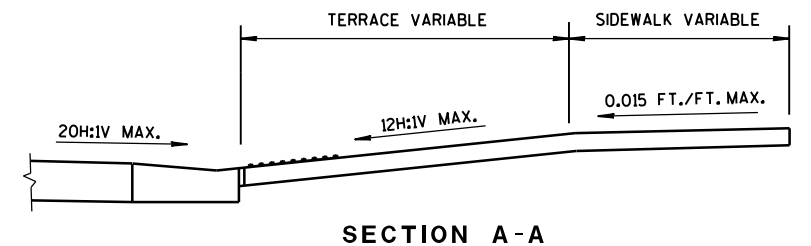


PEDESTRIAN SAFETY FENCE

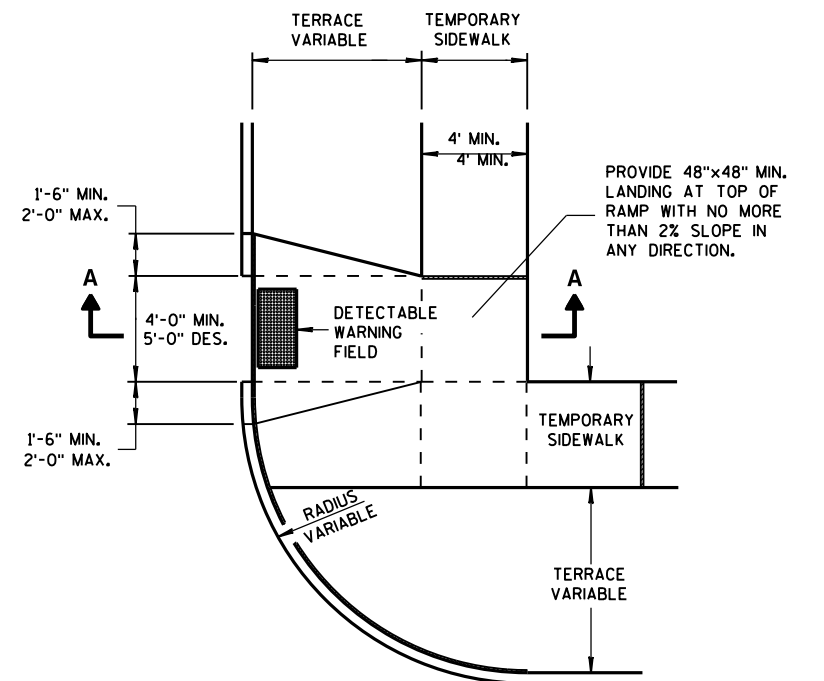


TEMPORARY PEDESTRIAN STEEL BARRICADE

GENERAL NOTES
① INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.

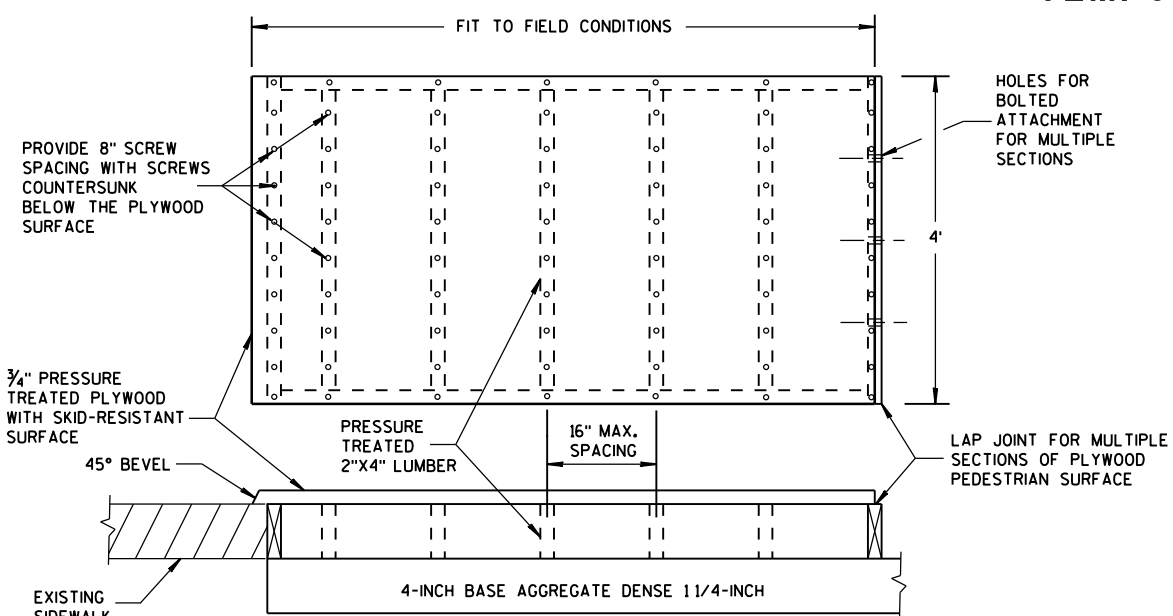


SECTION A-A

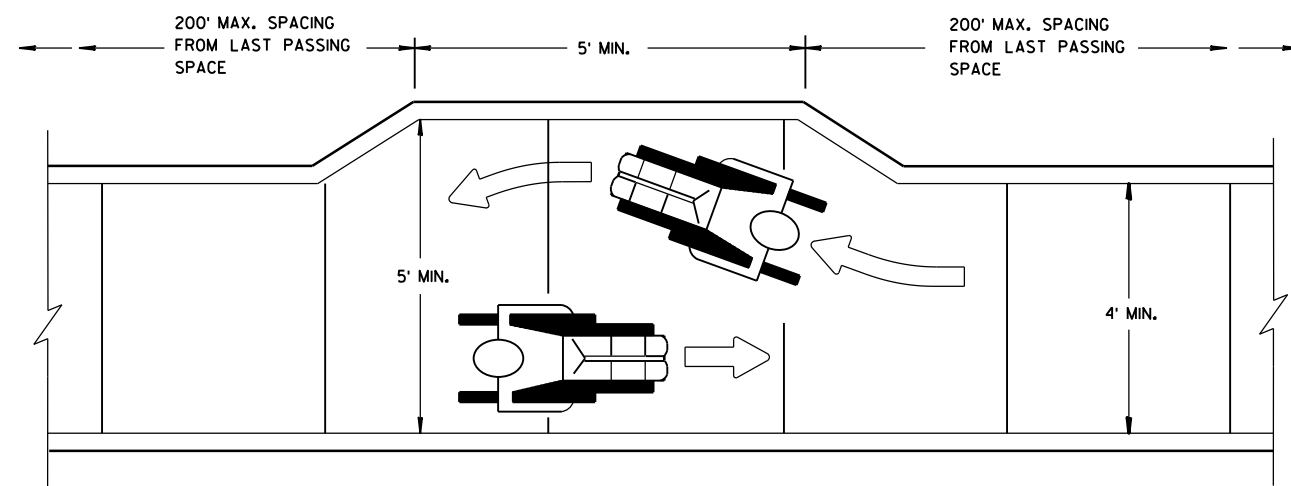


PLAN VIEW

TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD

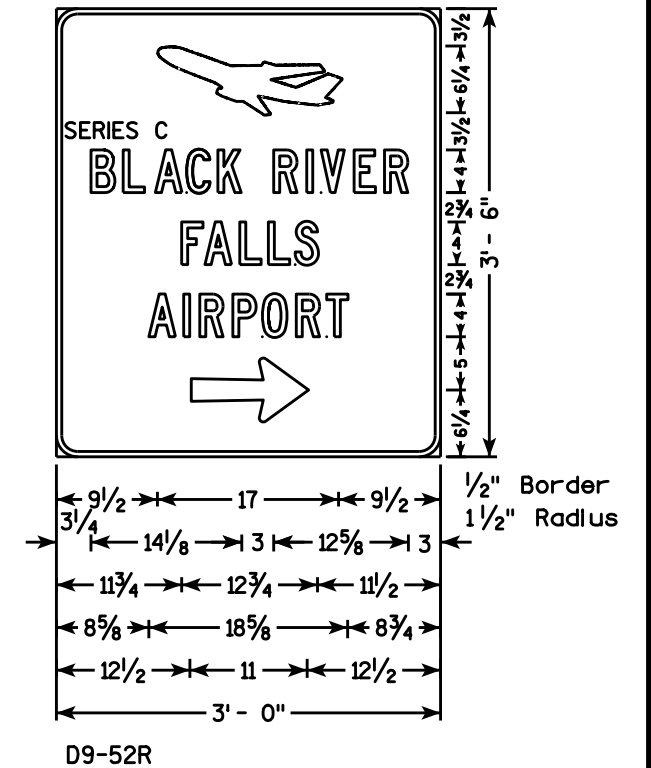
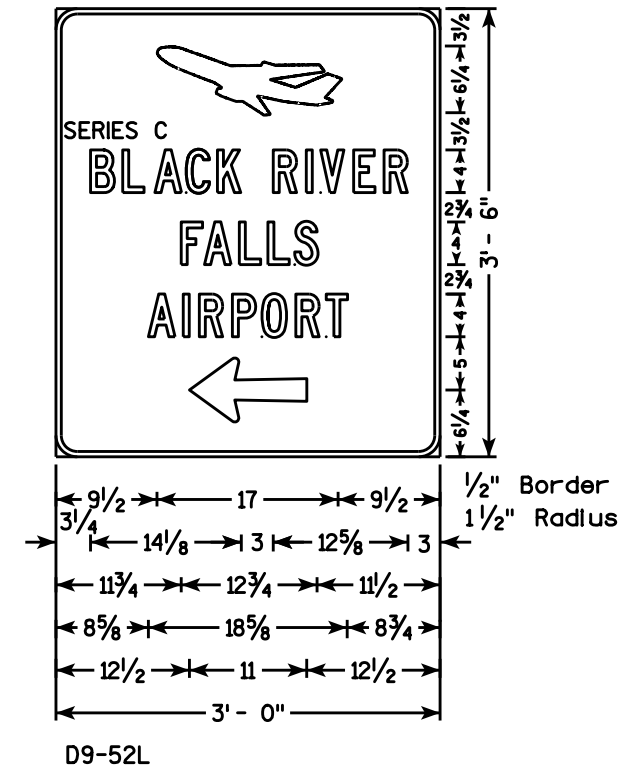
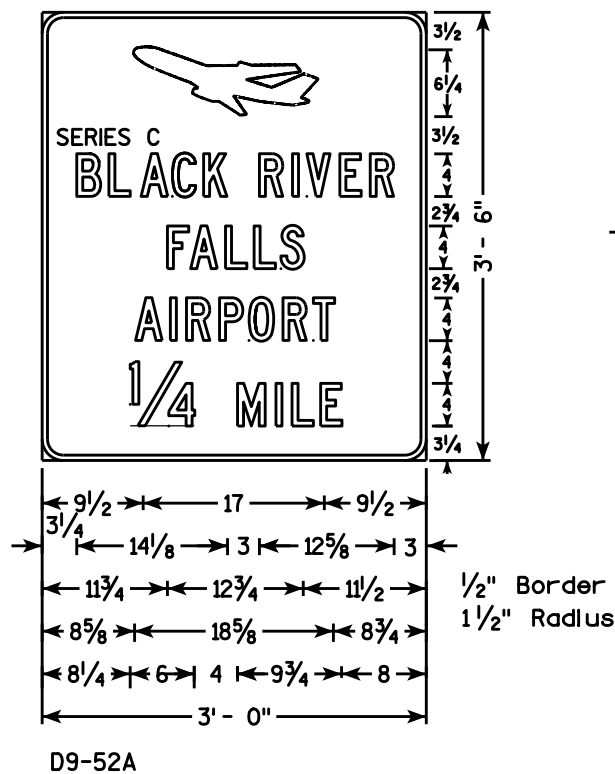
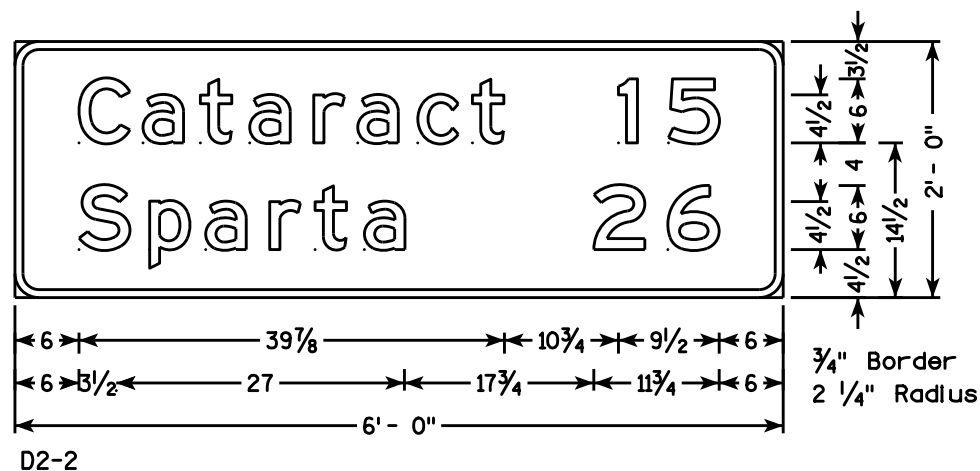
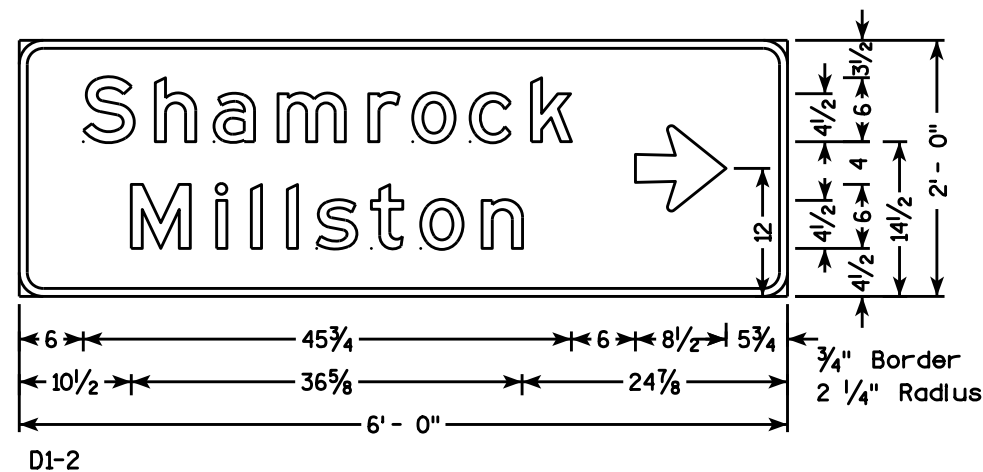
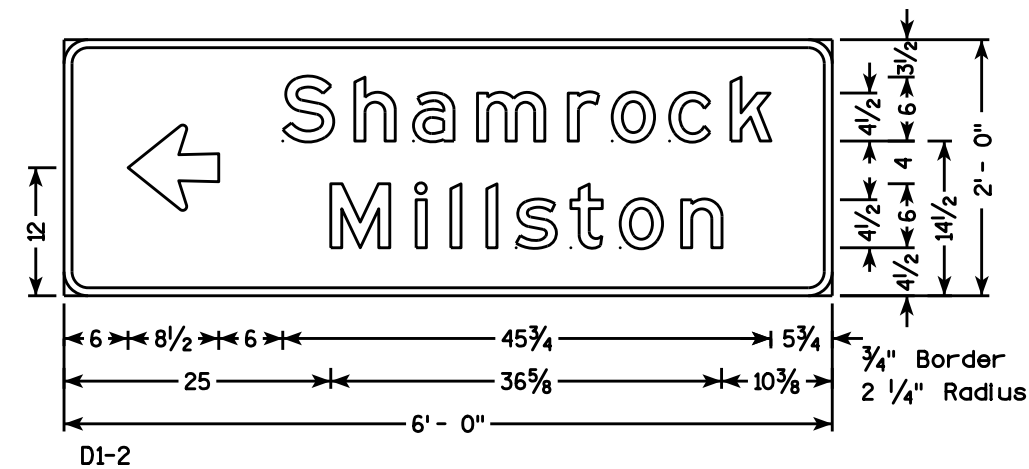
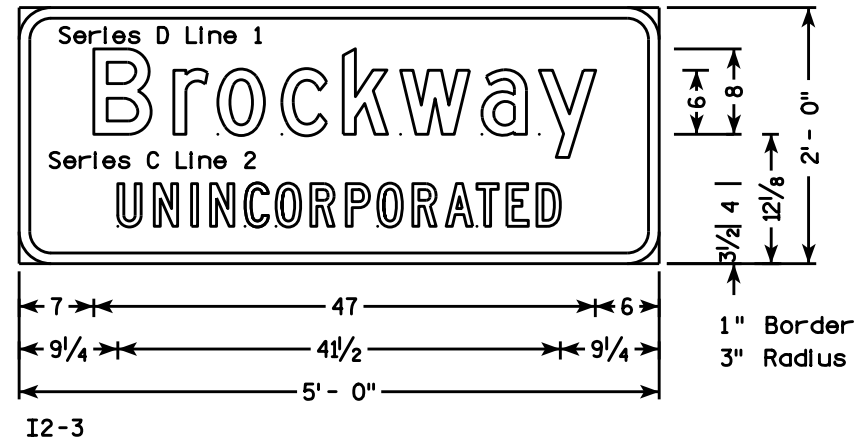
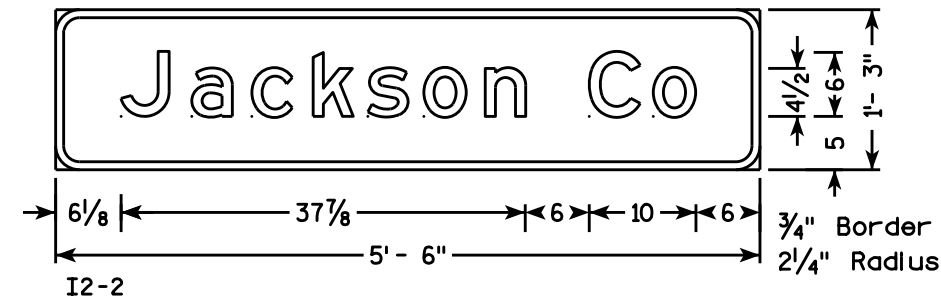


NARROW SIDEWALK PASSING DETAIL

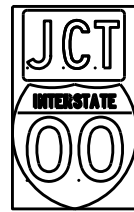
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2015 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER 136 SIGN
FHWA	

NOTES

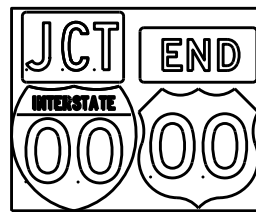
1. All Signs Type II - Type H Reflective
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E except as Shown



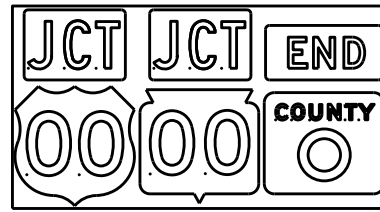
TYPICAL ASSEMBLIES



J1-1



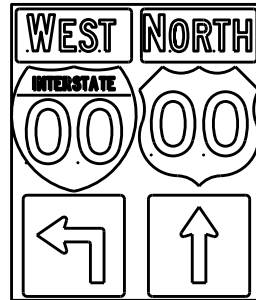
J1-2



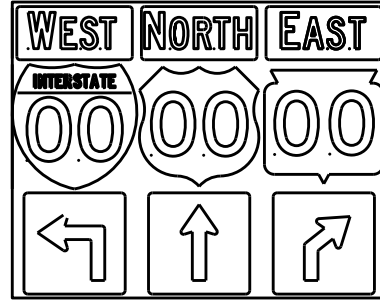
J1-3



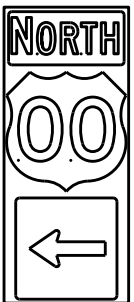
J2-1



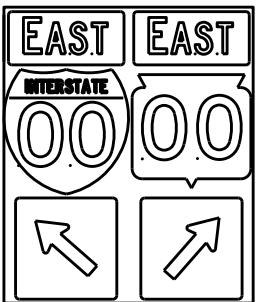
J2-2



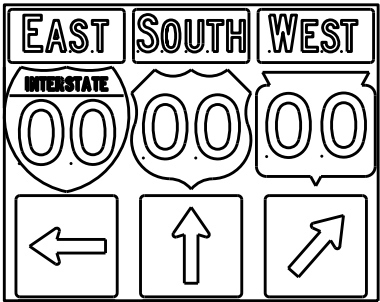
J2-3



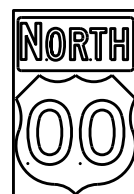
J3-1



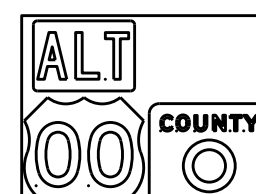
J3-2



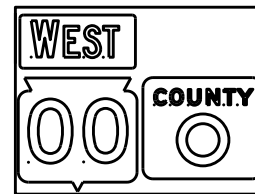
J3-3



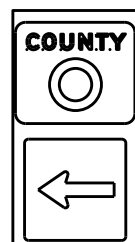
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

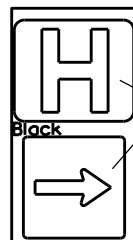


J22-1



JV

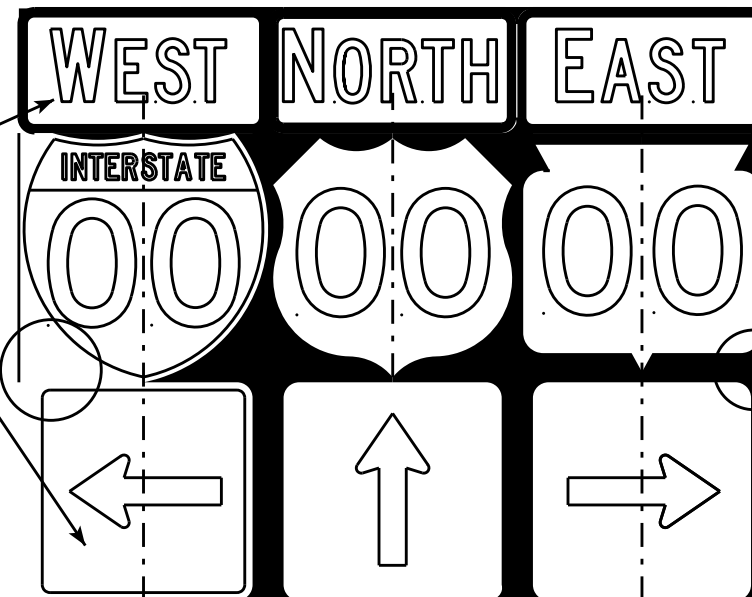
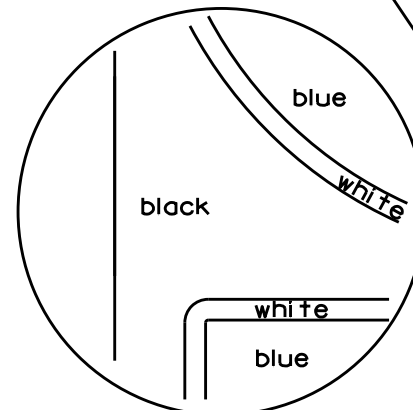
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

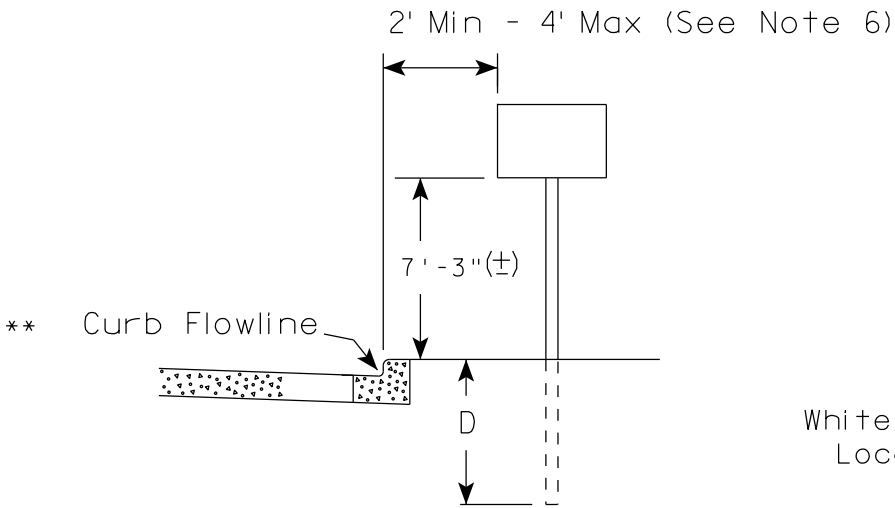
DATE 2/06/14 PL 138 A2-1S.8

SHEET NO: E

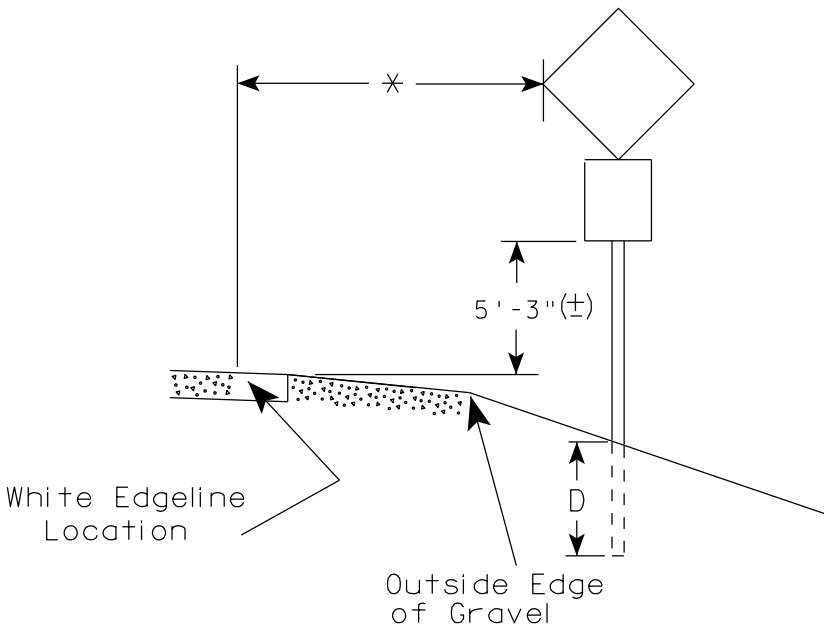
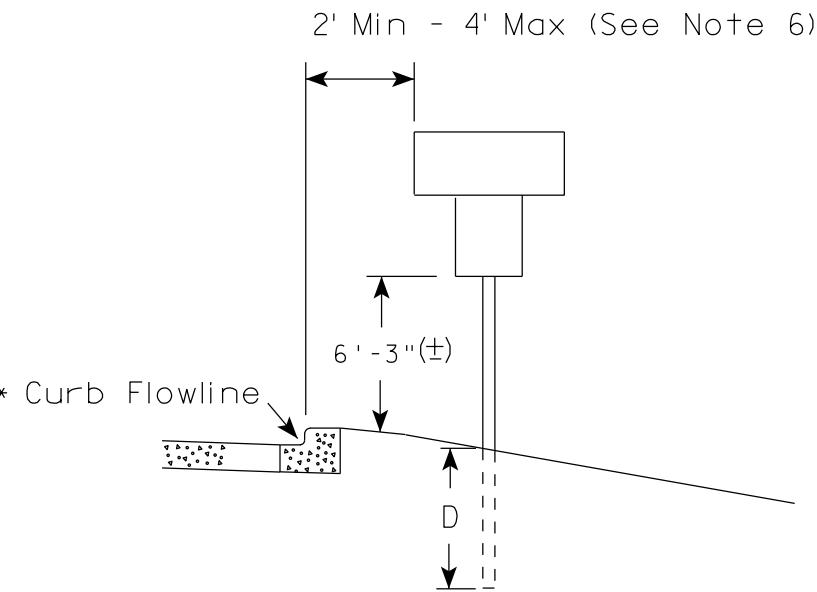
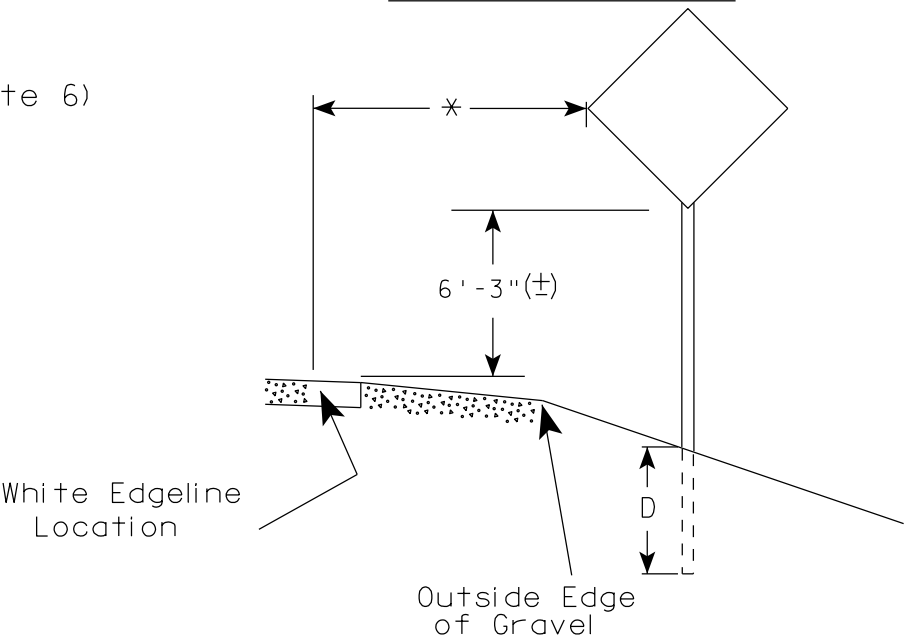
NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Black Non-reflective
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

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.

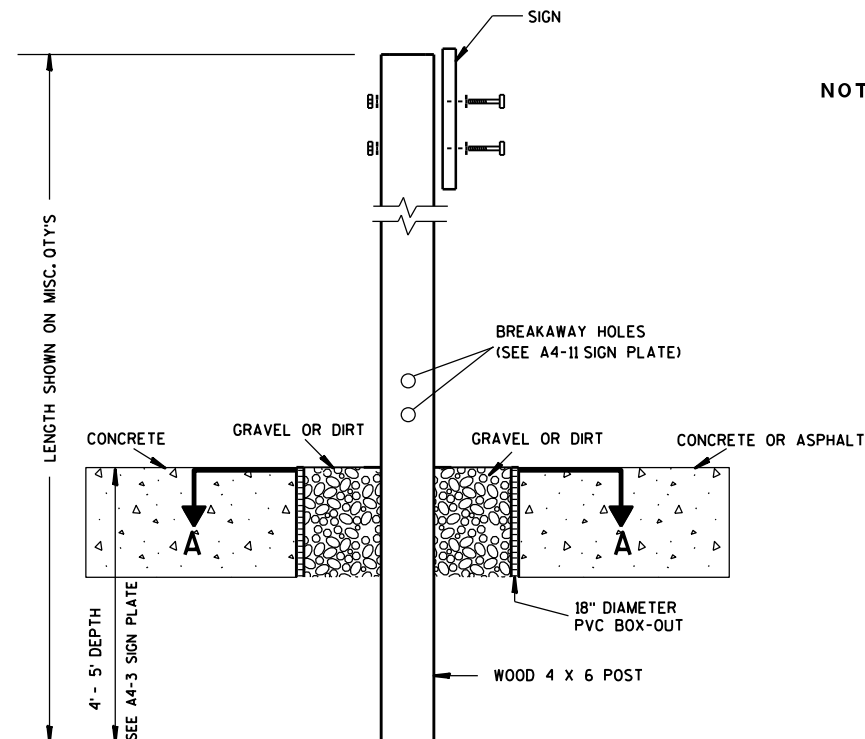
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

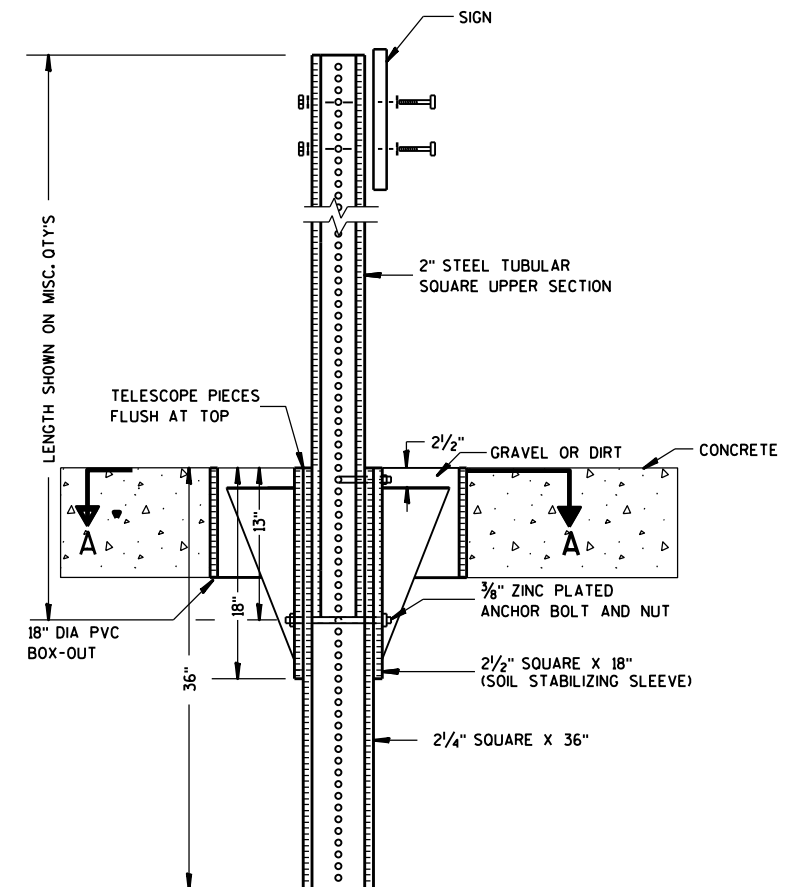
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

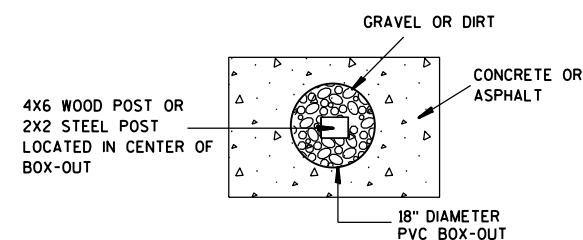
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLAT 140 A4-3B.1

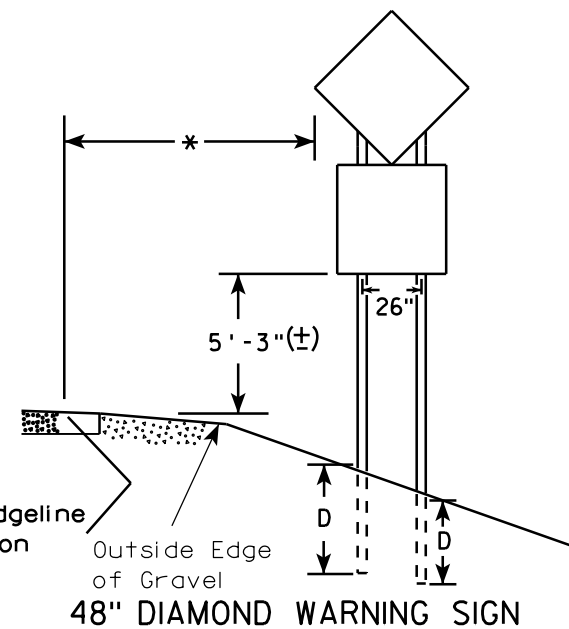
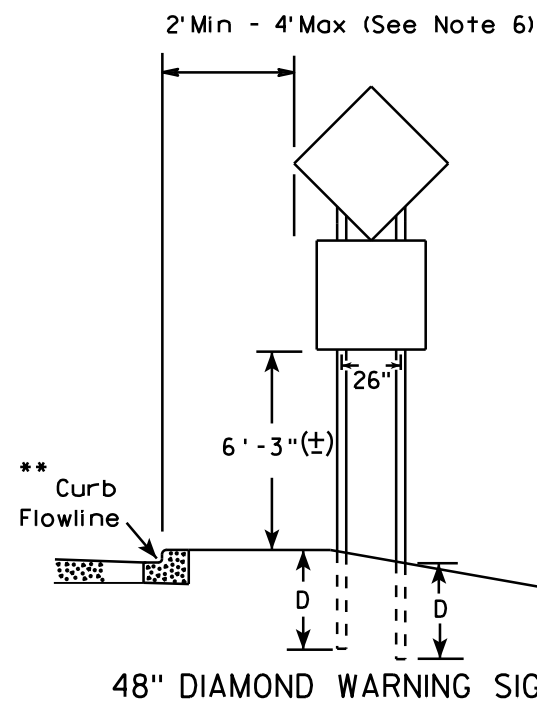
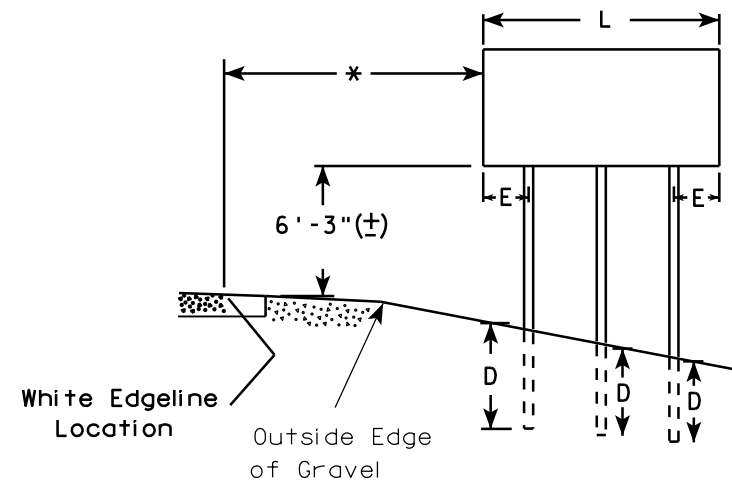
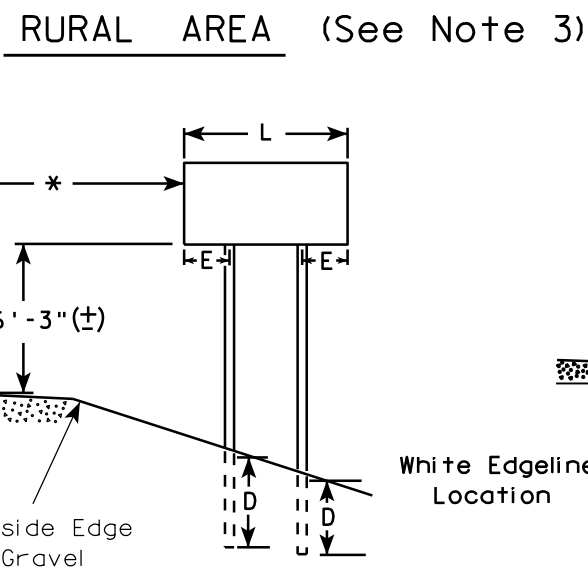
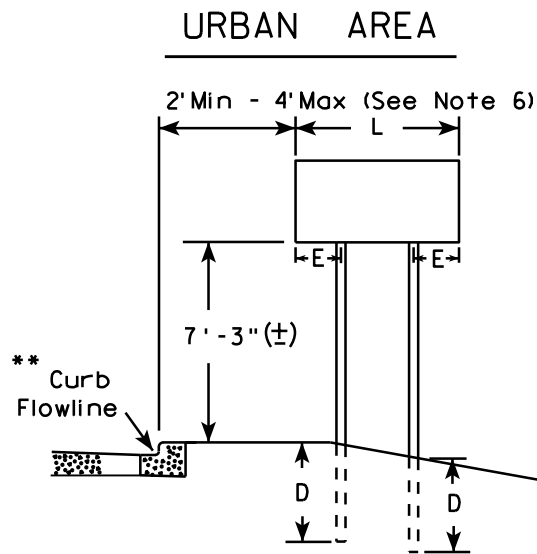
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



- 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

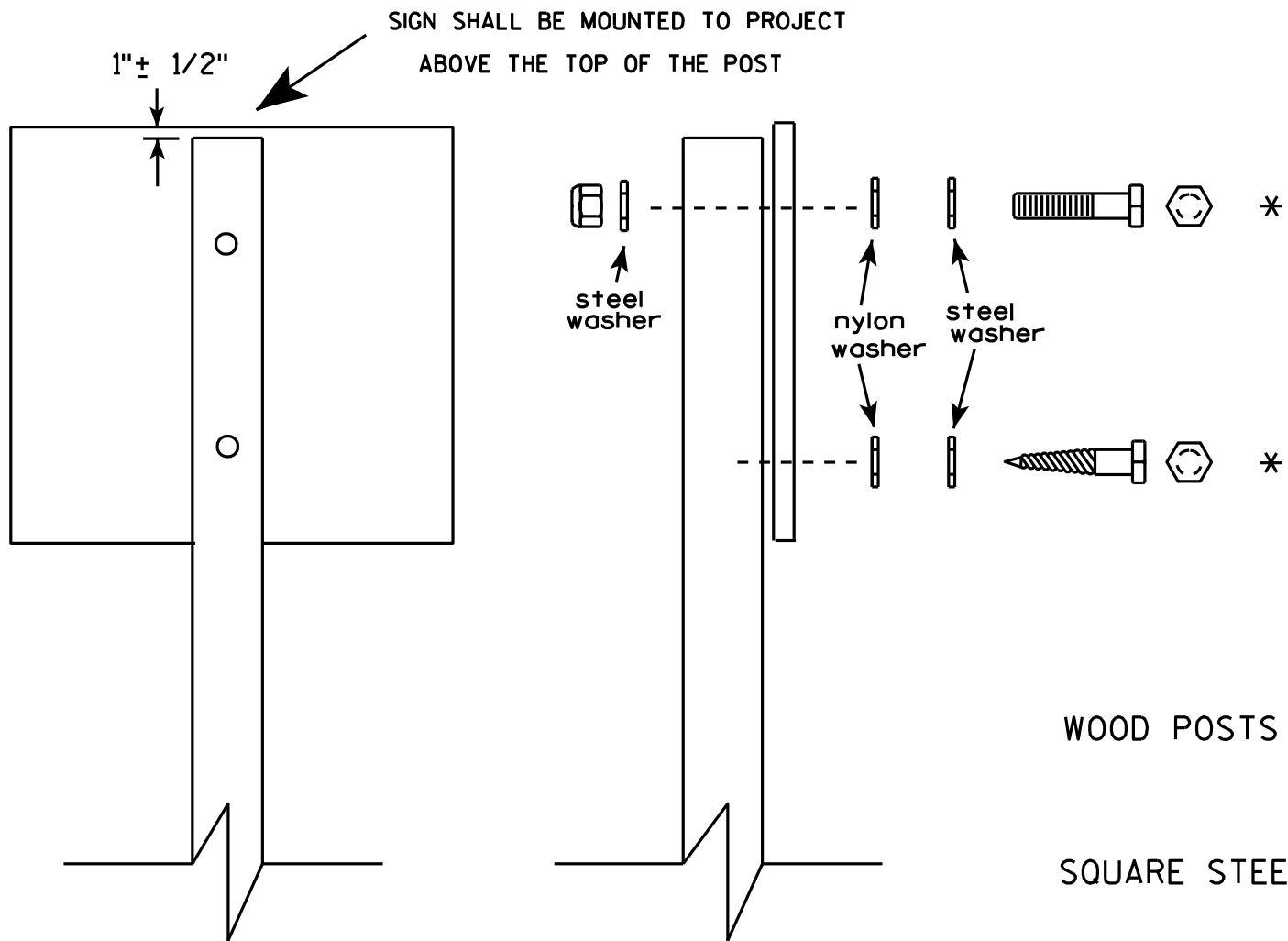
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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. 141 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.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")

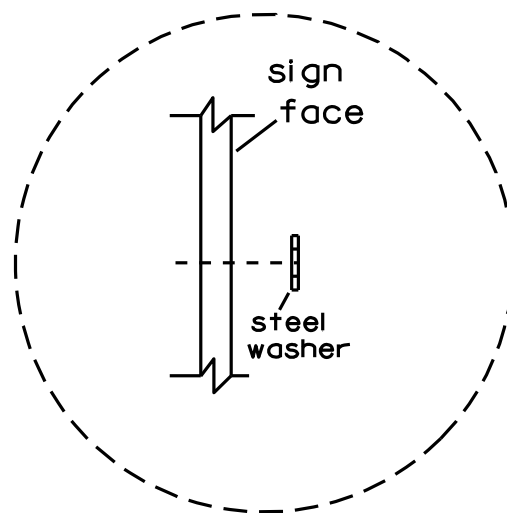
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts

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 for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* 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

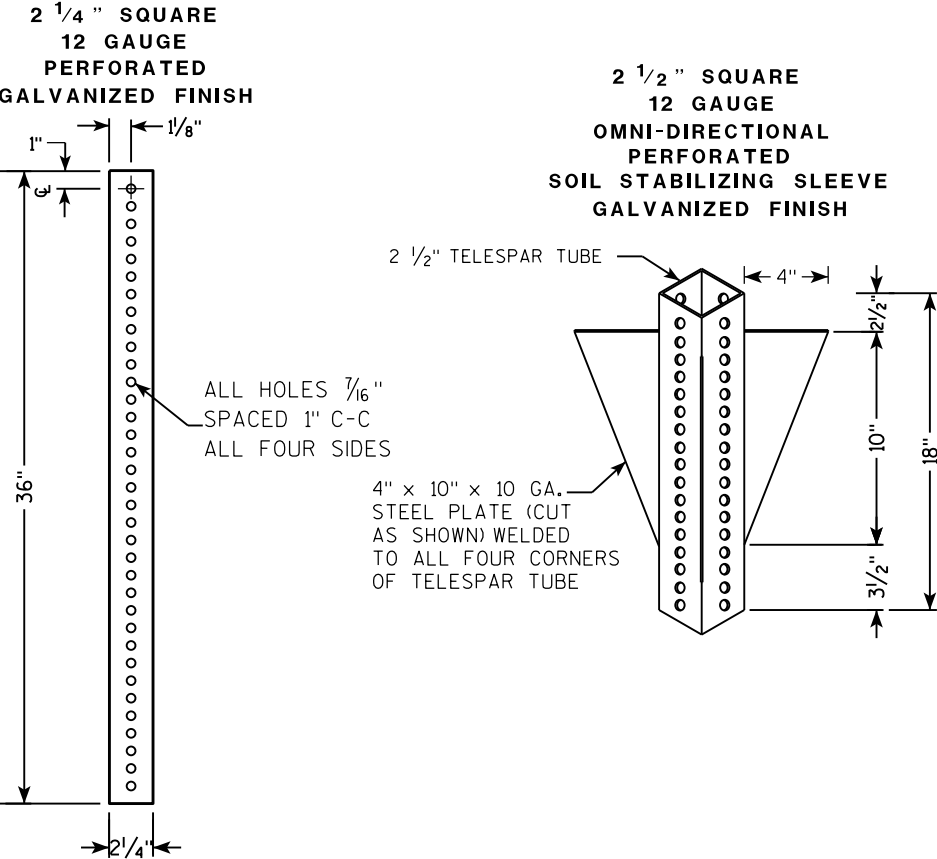
DATE 3/23/10 PLATE NO. A4-8.7

PROJECT NO:

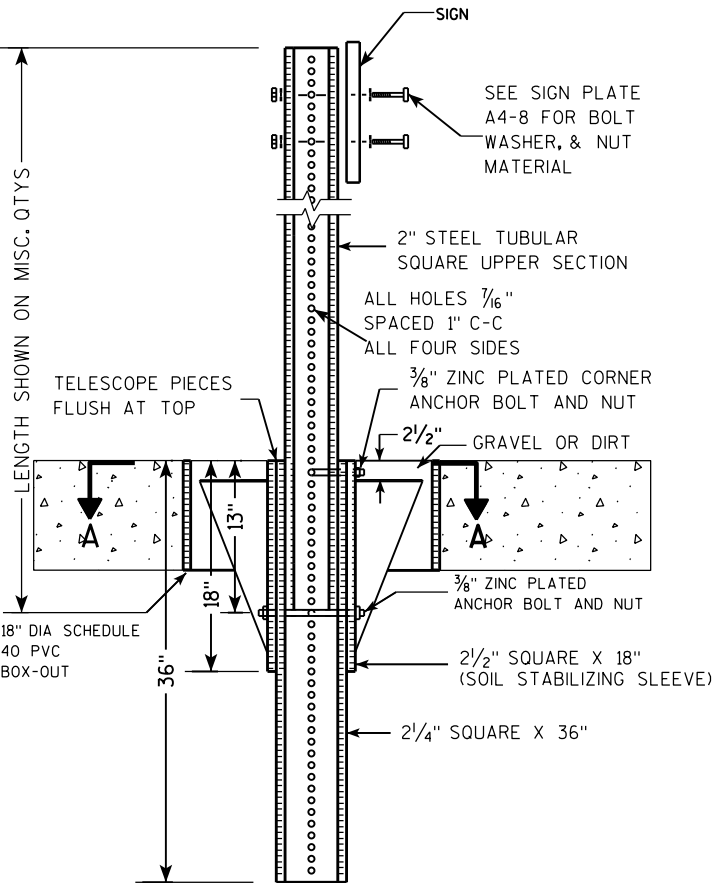
SHEET NO: 142

E

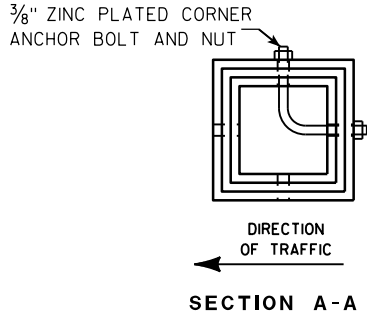
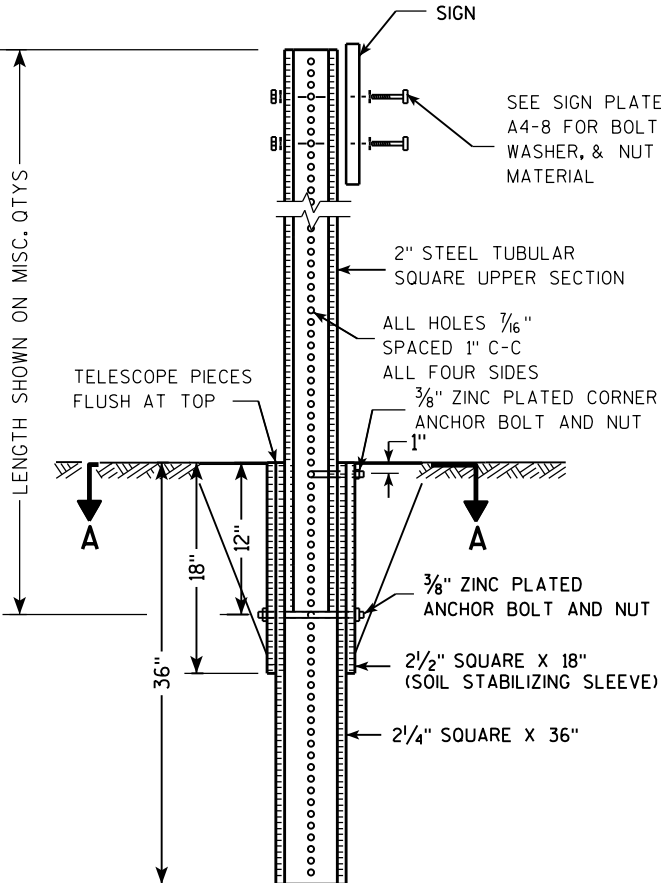
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



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).

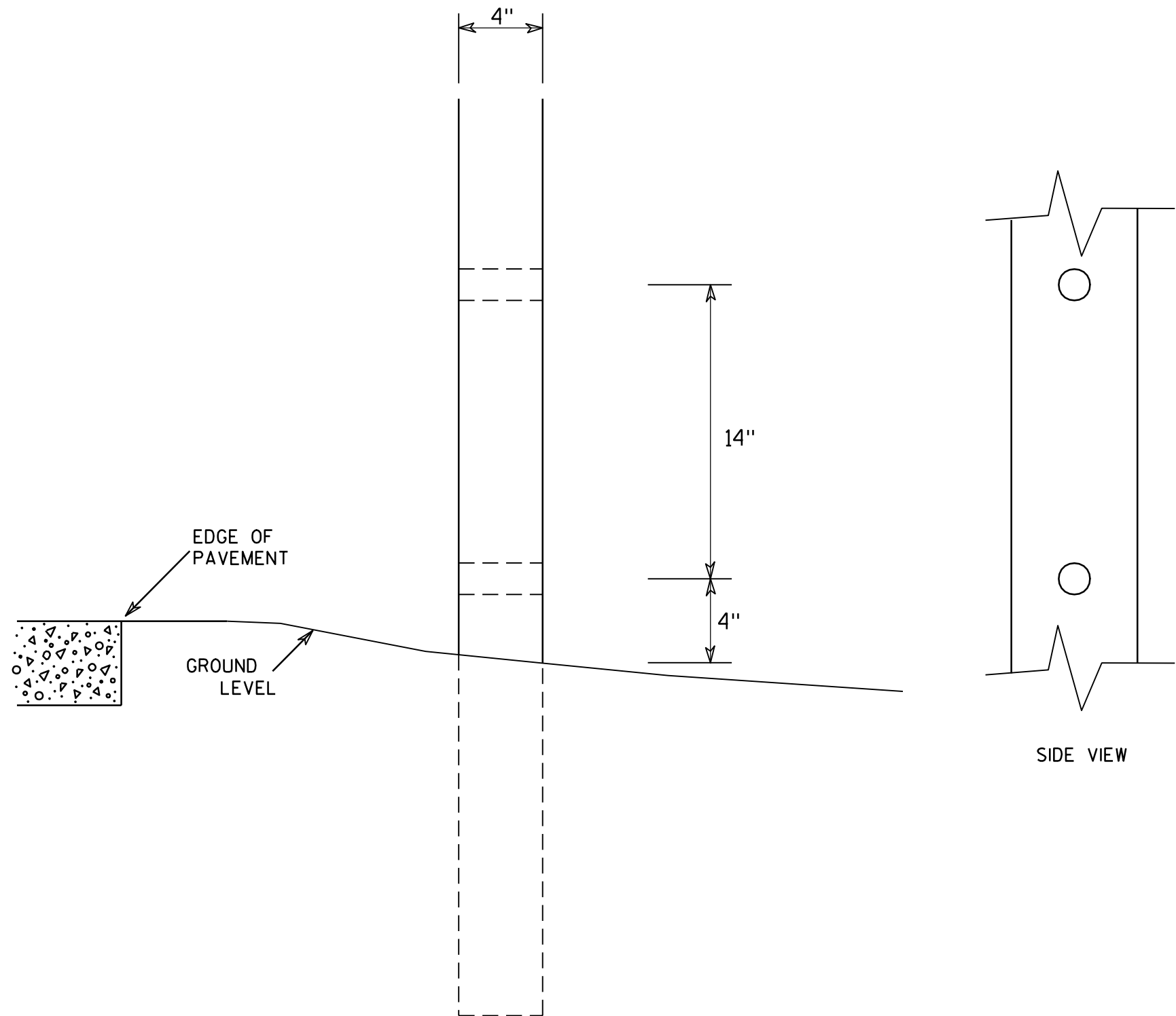
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLAT 143 14-9.9

7



GENERAL NOTES

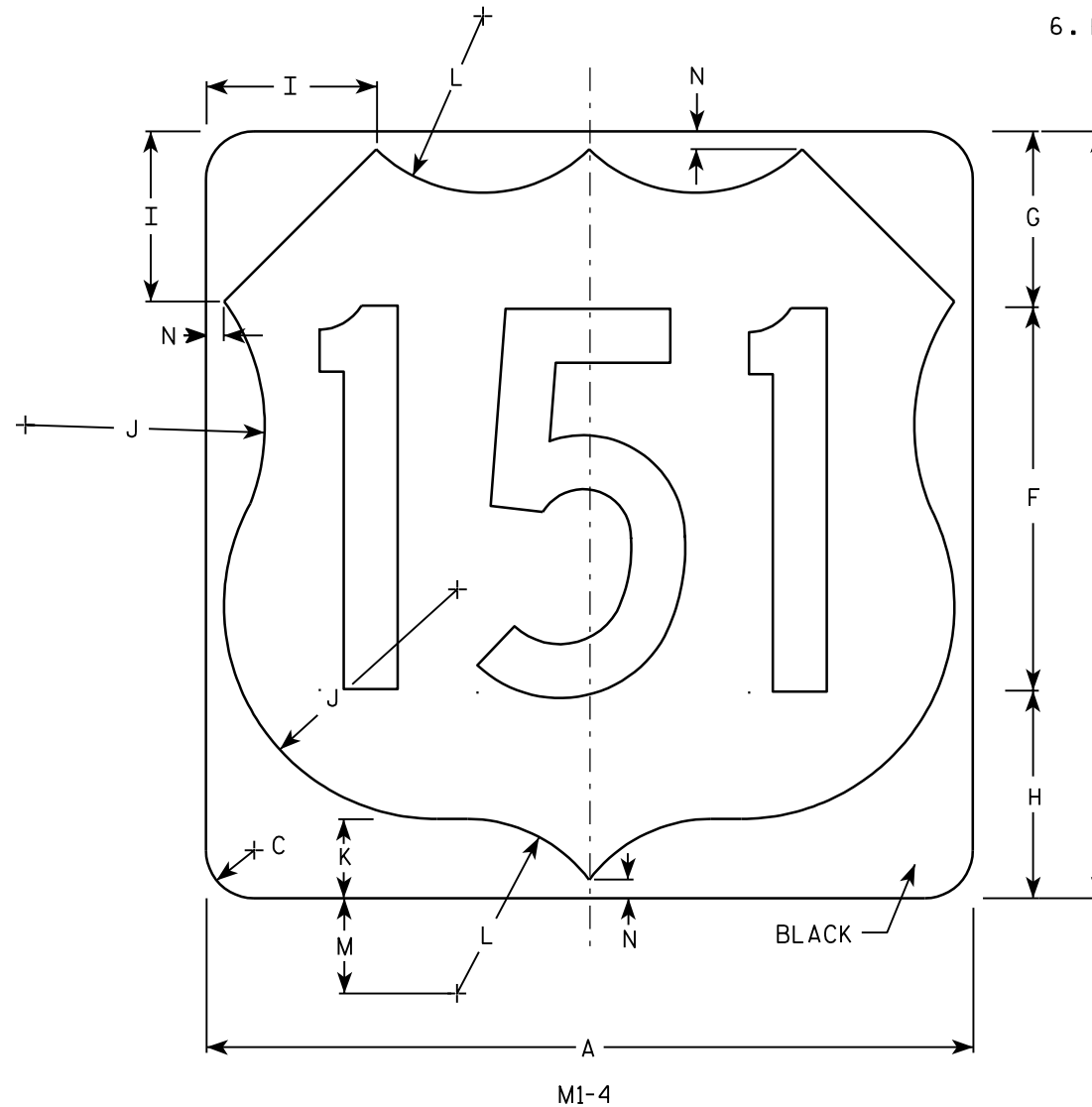
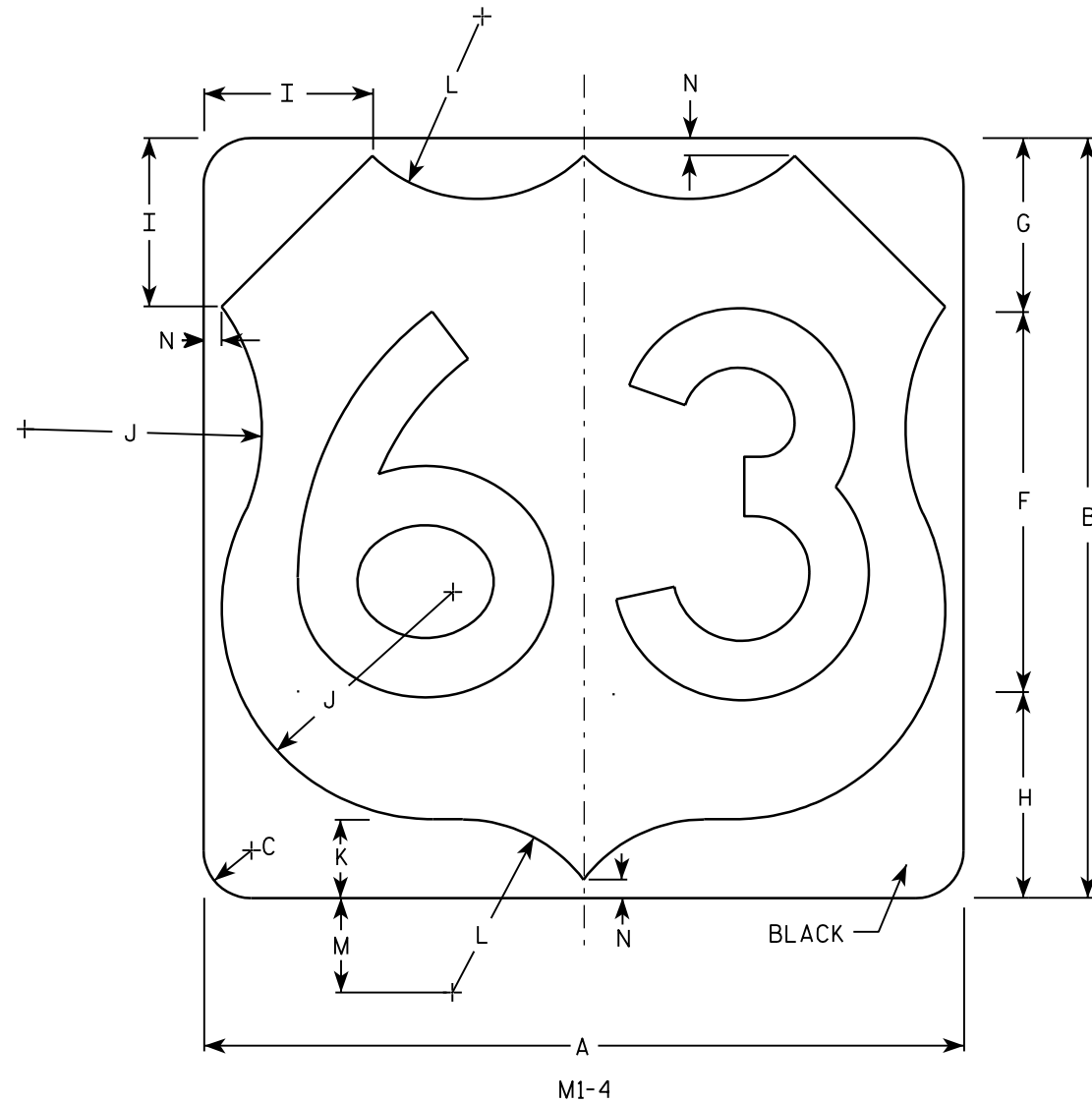
1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

4 X 6 WOOD POST MODIFICATIONS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Chester J. Spang</i> for State Traffic Engineer
DATE 3/27/97	PLATE NO. A4-11.2

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
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 adjust
spacing as per Plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or other temporary signs
Background - Reflective



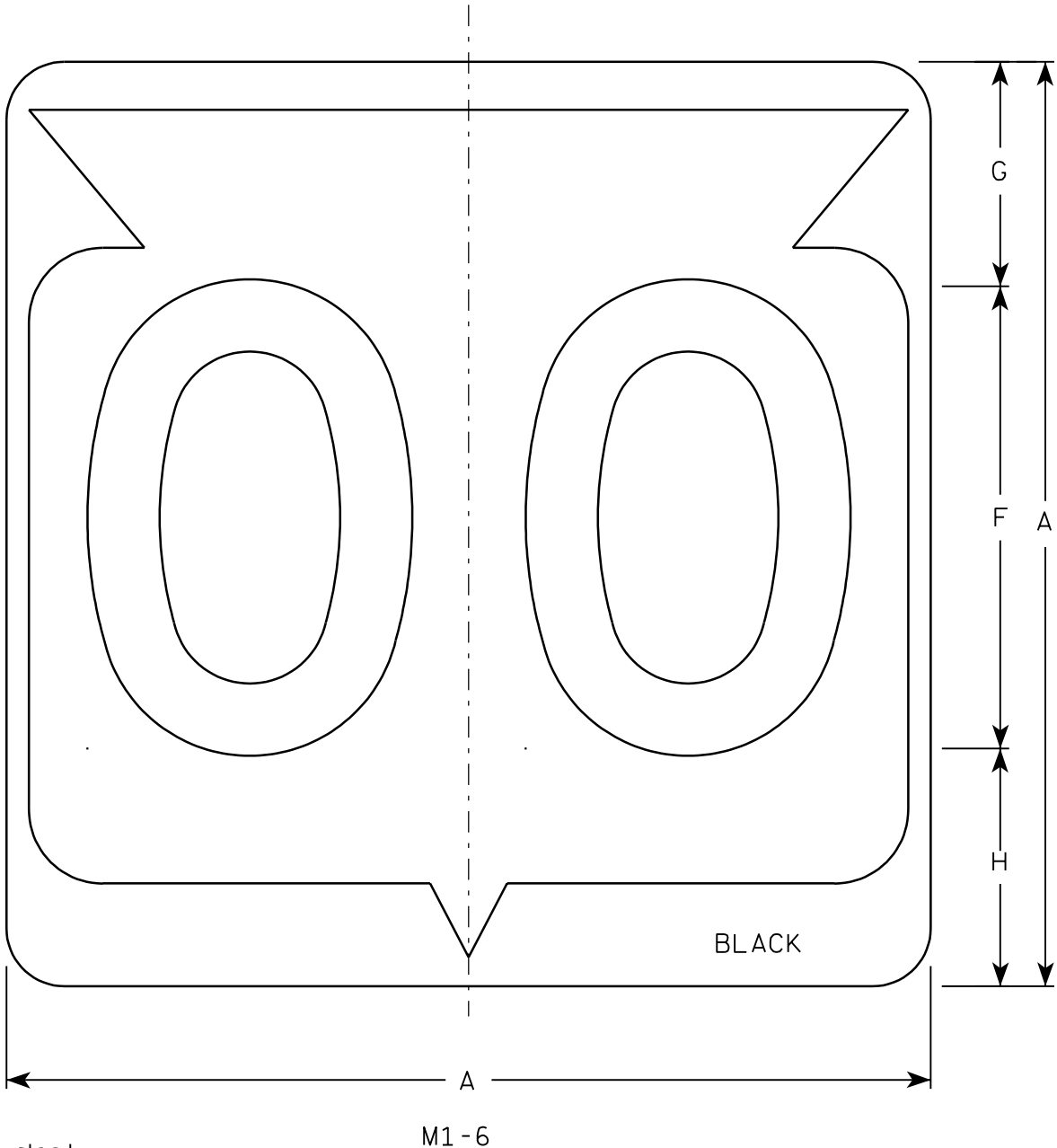
Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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	Areq sq. ft.	Area m ²
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

PROJECT NO: HWY: COUNTY: SHEET NO: 145 E

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

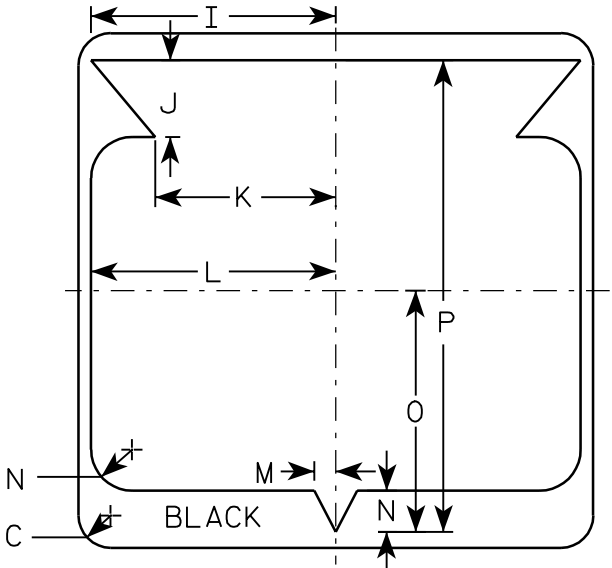
COUNTY:

SHEET NO: 146

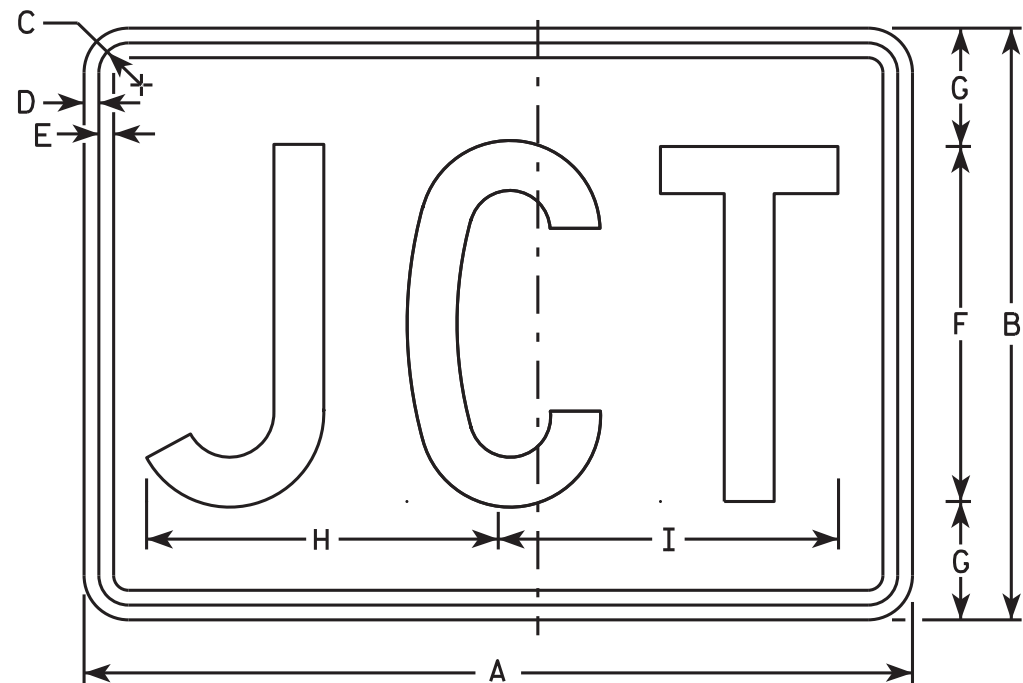
E

NOTES

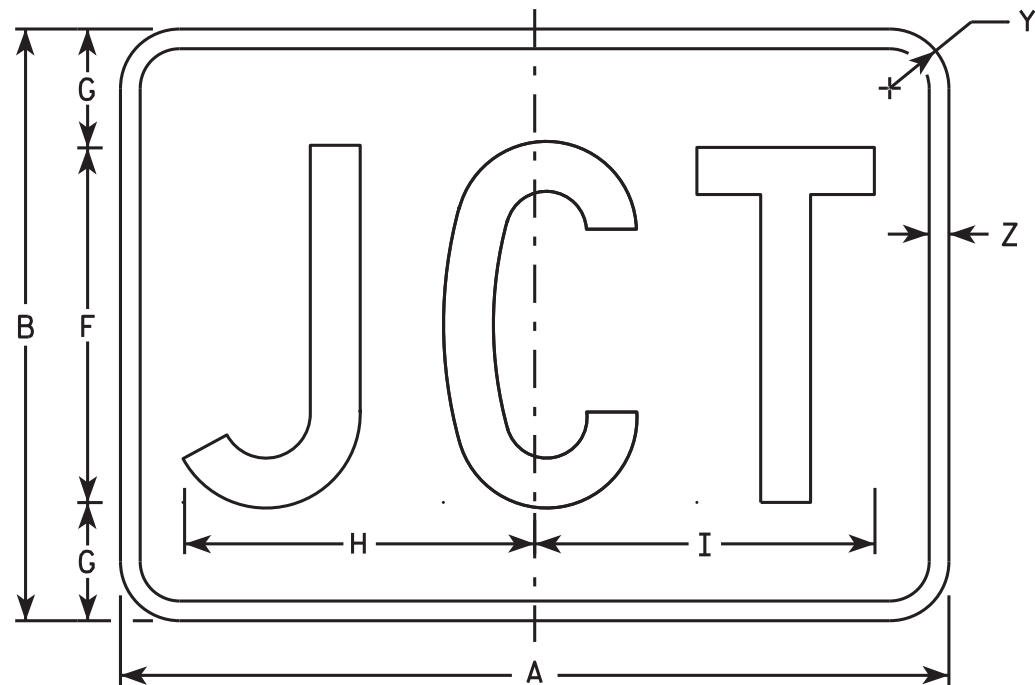
- Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 6
Message - Black
- Message Series - See note 5
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
- Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



7



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
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.
5. M2-1 Background - White
Message - Black
MB2-1 Background - Blue
Message - White
MK2-1 Background - Green
Message - White
MM2-1 Background - White
Message - Green
MN2-1 Background - Brown
Message - White
MP2-1 Background - White
Message - Blue
MR2-1 Background - Brown
Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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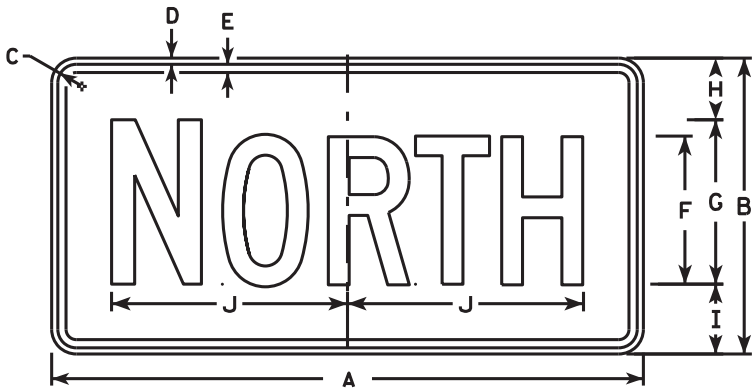
STANDARD SIGN

M2 - 1

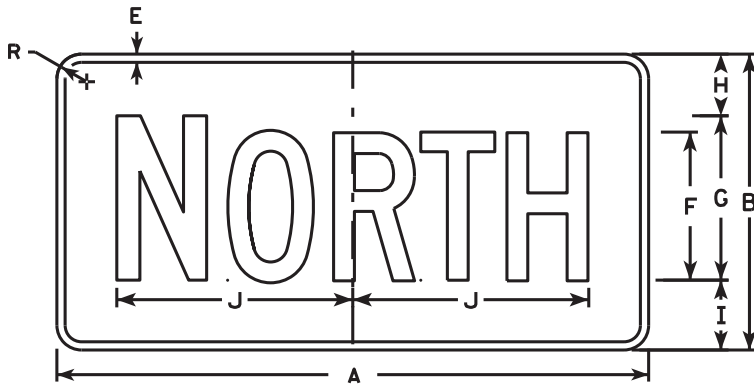
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Raush*
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M2-1.12



M3-1
MM3-1
MP3-1



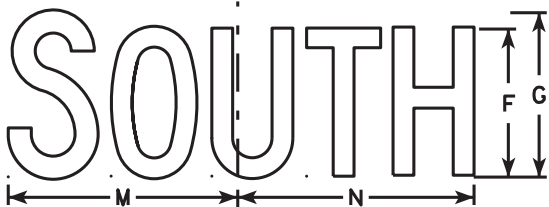
MB3-1
MK3-1
MN3-1



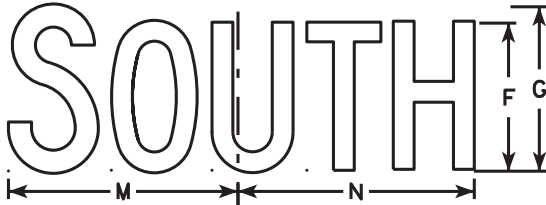
M3-2
MM3-2
MP3-2



MB3-2
MK3-2
MN3-2



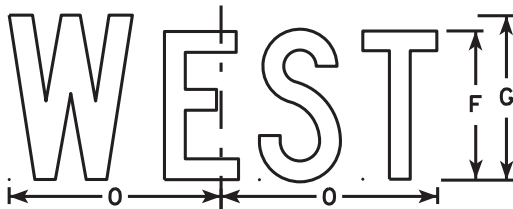
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
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.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

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																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

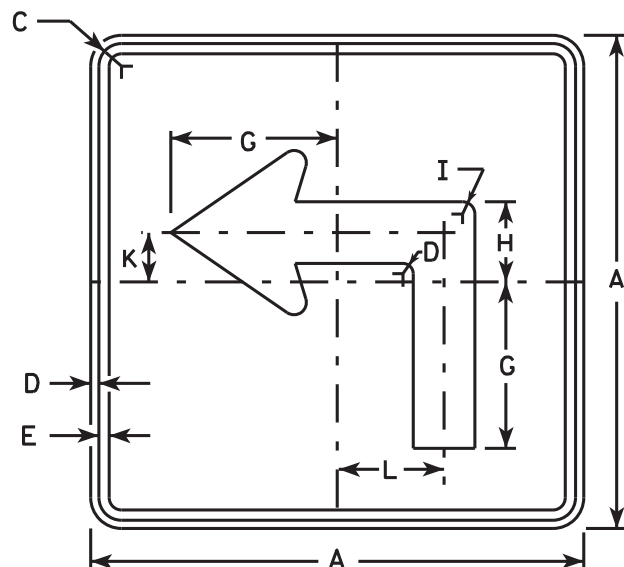
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGNS
M3-1 thru M3-4
SERIES

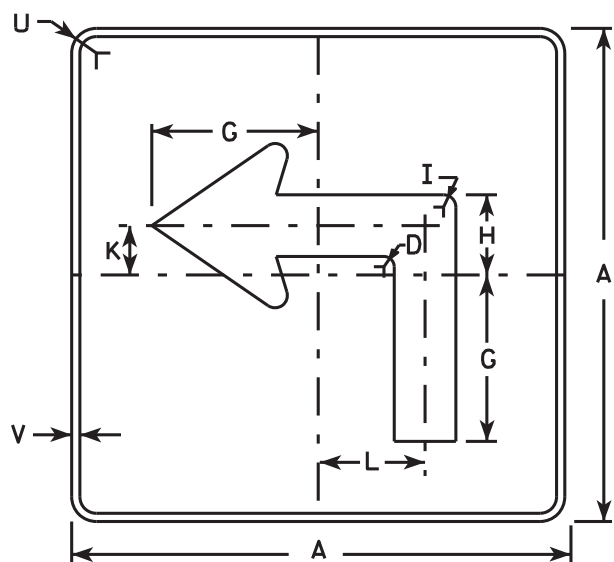
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

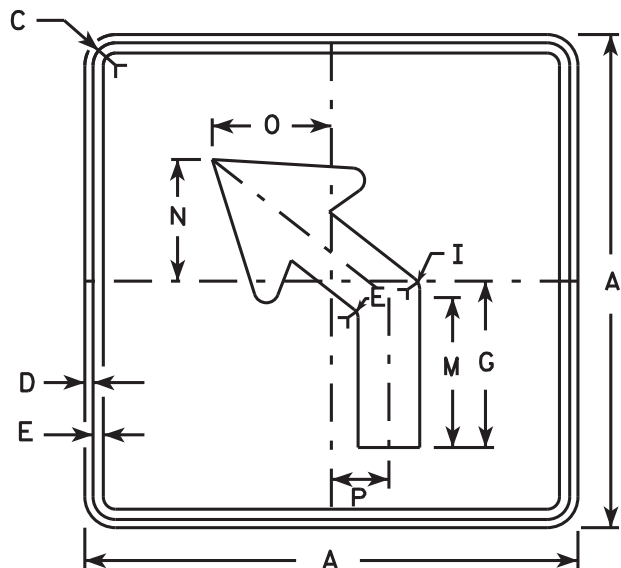
DATE 10/15/15 PLATE NO. M3-1.14



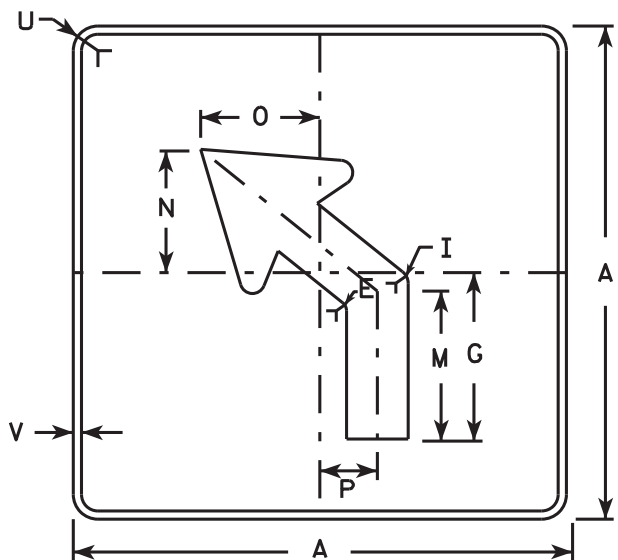
M5-1L
MM5-1L
M05-1L
MP5-1L



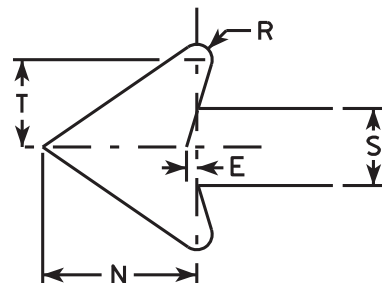
MB5-1L
MK5-1L
MN5-1L
MR5-1L



M5-2L
MM5-2L
M05-2L
MP5-2L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 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.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

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																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

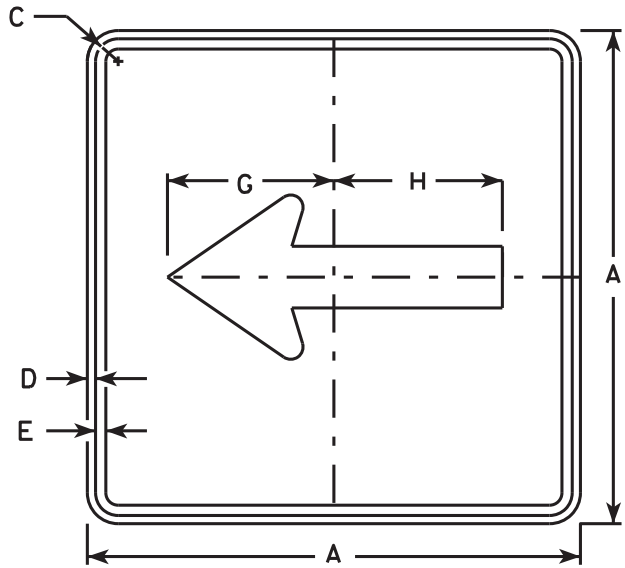
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

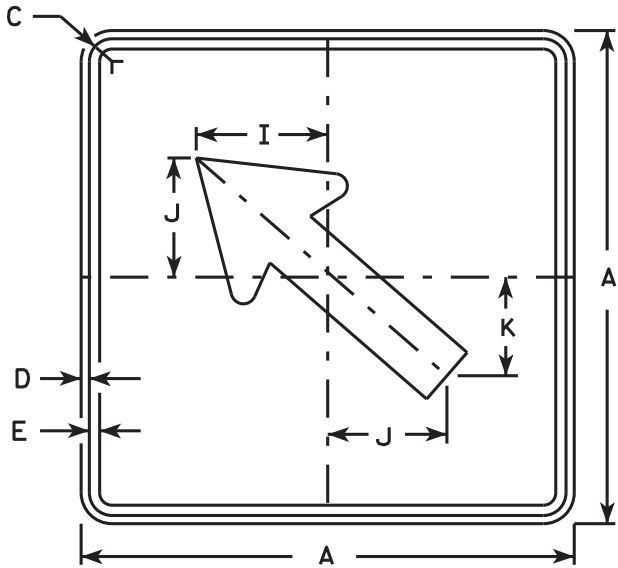
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

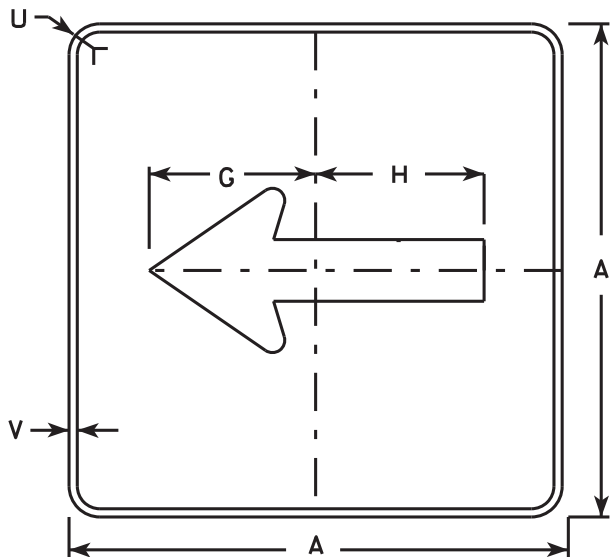
DATE 10/15/15 PLATE NO. M5-1.13



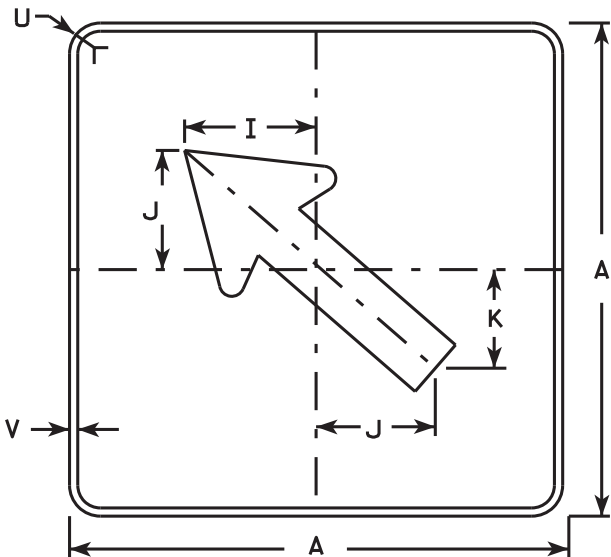
M6 - 1
MM6 - 1
MO6 - 1
MP6 - 1



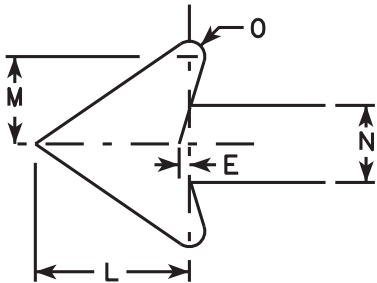
M6 - 2
MM6 - 2
MO6 - 2
MP6 - 2



MB6 - 1
MK6 - 1
MN6 - 1
MR6 - 1



MB6 - 2
MK6 - 2
MN6 - 2
MR6 - 2



NOTES

- 1. Signs are Type II - Type H except as Shown
- 2. Color:
 - Background - See note 4
 - Message - See note 4
- 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. M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
MO6-1 and MO6-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

PROJECT NO:

HWY:

COUNTY:

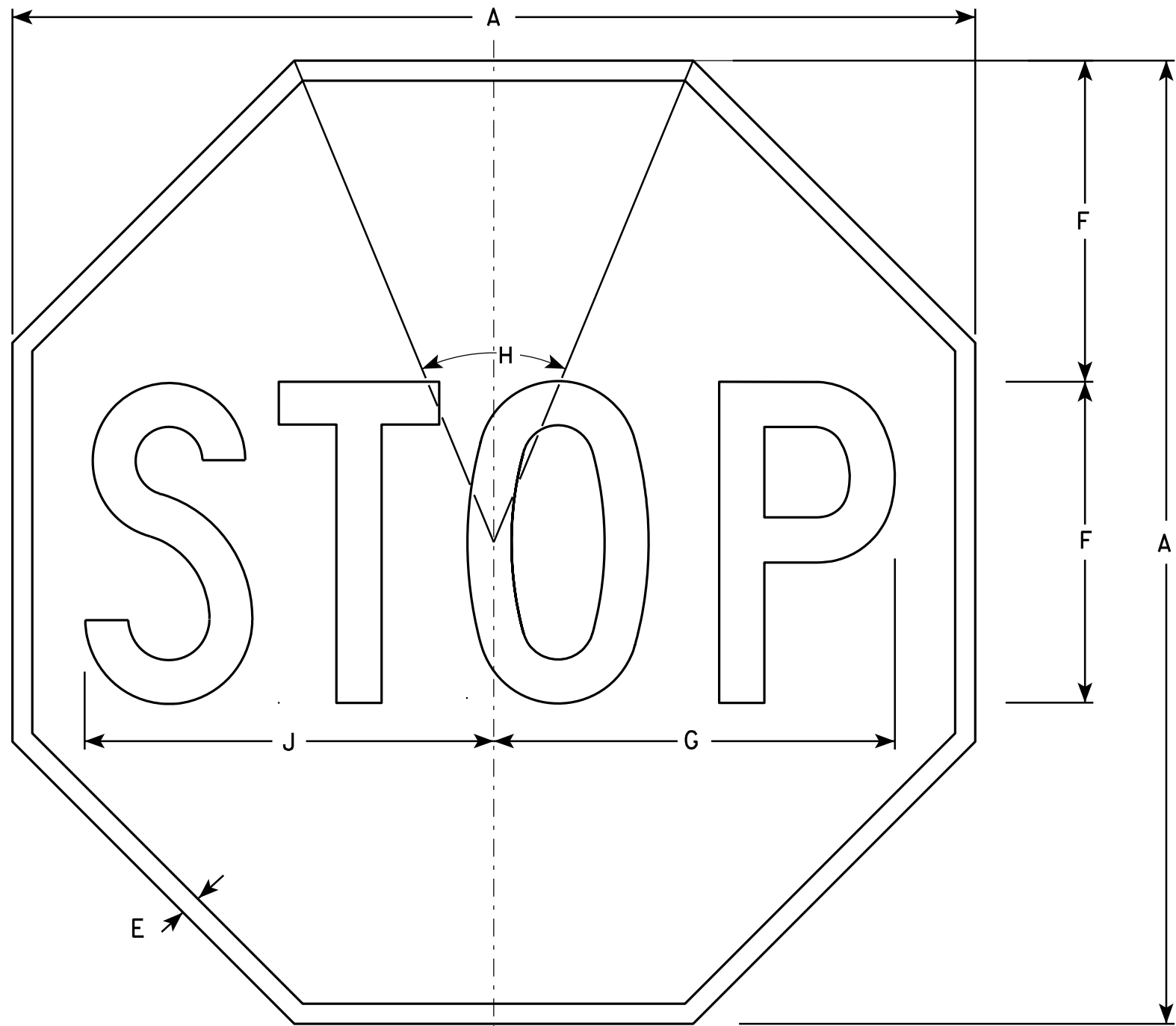
SHEET NO: E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



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

R1-1

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				3/8	8	10	45°		10 1/4																	3.31
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

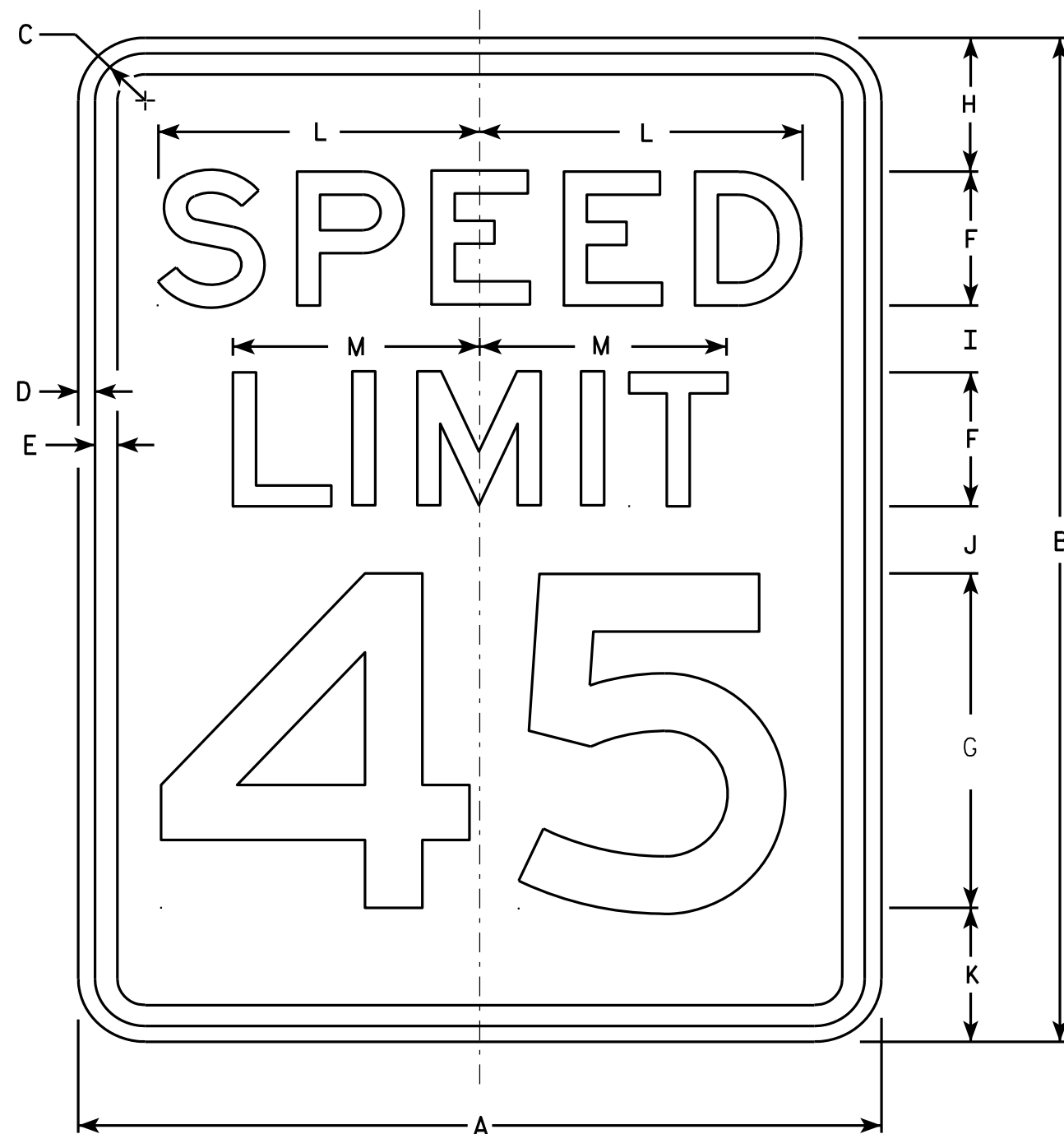
DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 151



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.

R2-1

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: 152 E



R2-6P

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 - 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																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

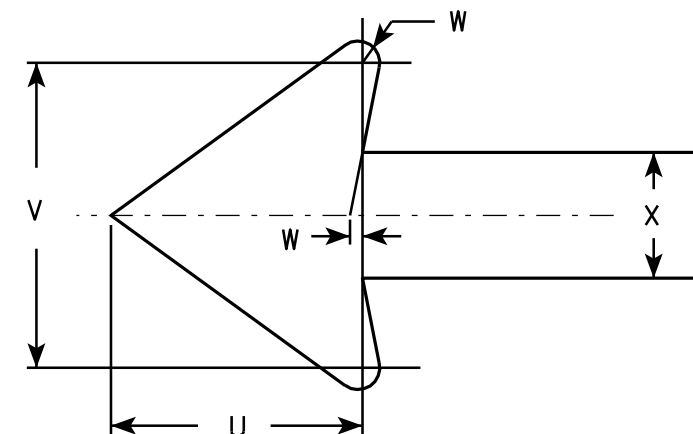
DATE 12/20/10 PLATE NO. R2-6P.2



R7-1

NOTES

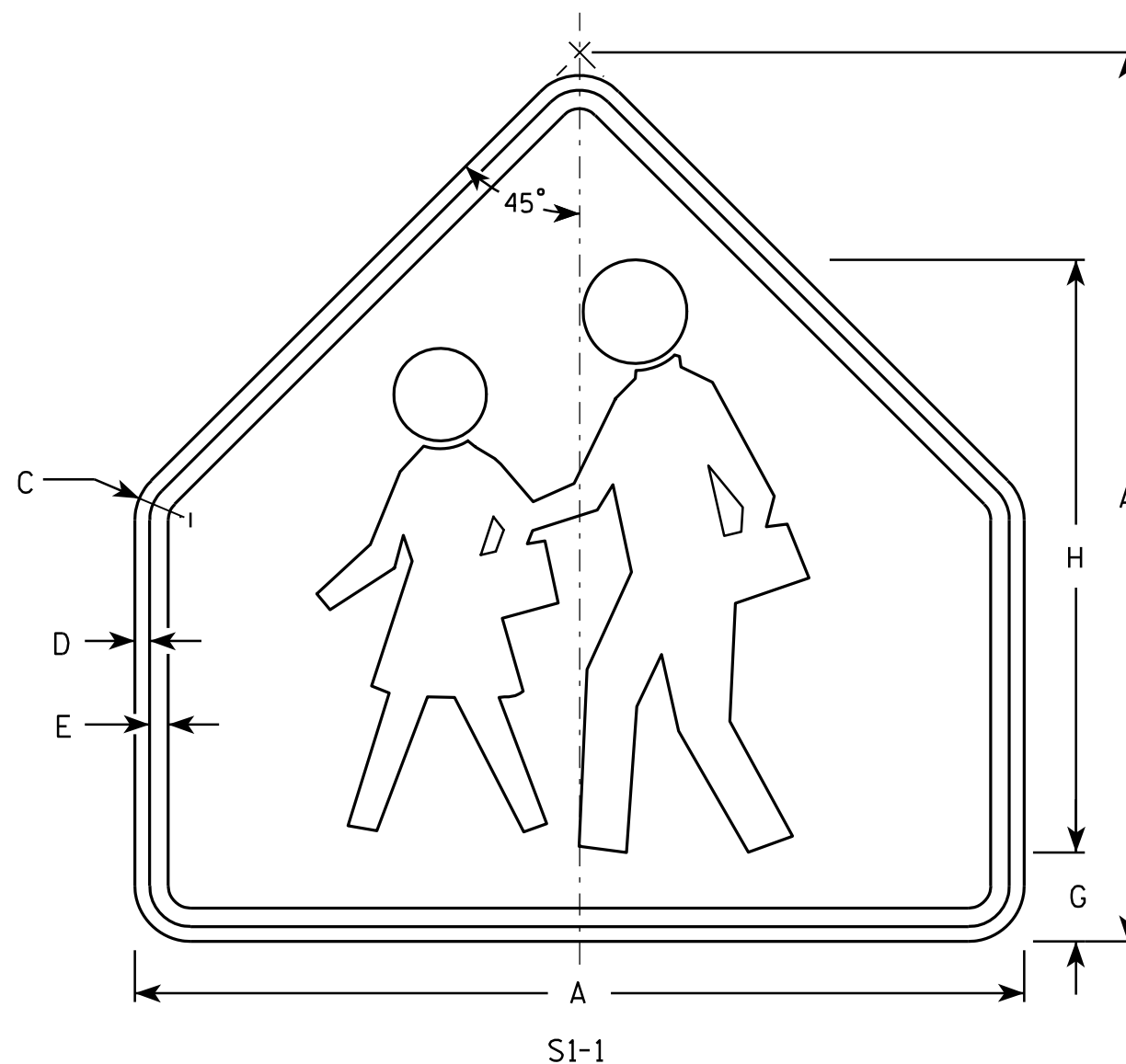
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
R7-1L (left arrow)
R7-1R (right arrow)



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN R7-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/31/2011	PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 154	E
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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-Green
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.

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		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN S1-1

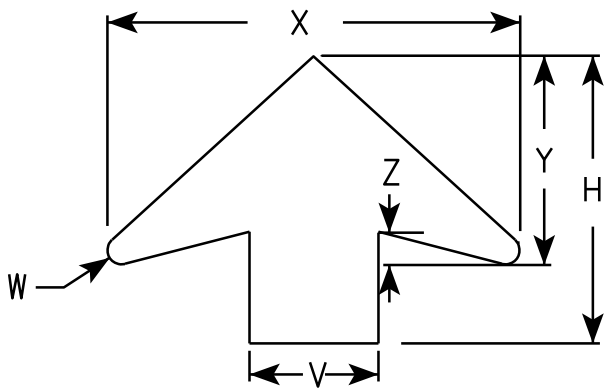
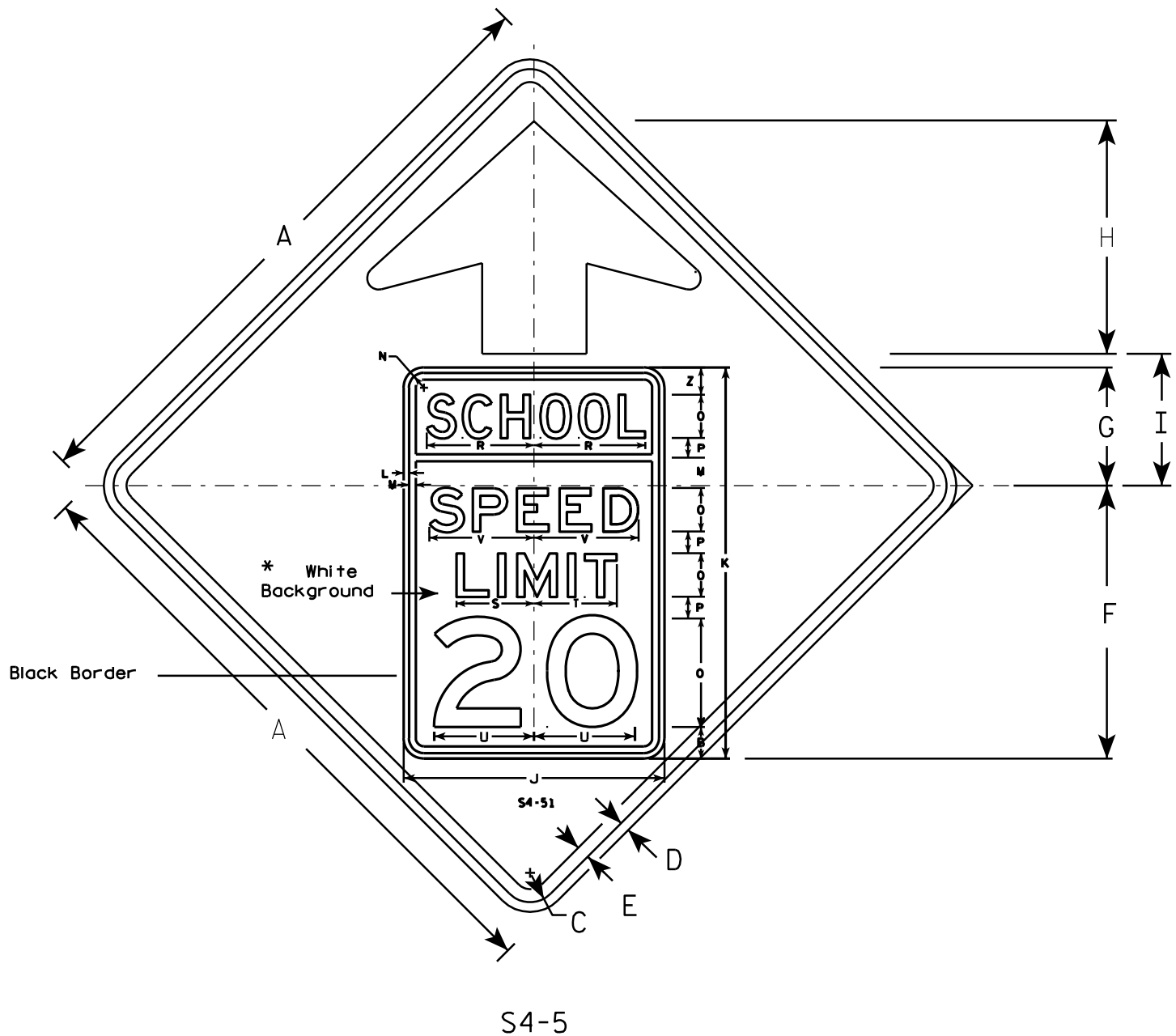
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO: HWY: COUNTY: SHEET NO: 155 E

NOTES

- 1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color: See Note 5
Background - Flourescent Yellow Green
Message - BLACK
- 3. Message Series - See note 6
- 4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance
- 5. SCHOOL background - Yellow Green -Type F Reflective.
Speed Limit panel background - White -Type H Reflective.
- 6. From top to bottom:
School is series D
All other lines are series E
- 7. 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.



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																											
2	36	1 7⁄8	1 5⁄8	5⁄8	3⁄4	15 3⁄4	6 3⁄4	13 3⁄8	7 5⁄8	15	22 1⁄2	1⁄4	3⁄8	7⁄8	6 1⁄4	1 1⁄4	2 1⁄2	6 3⁄8	4 1⁄2	4 3⁄4	5 3⁄4	6	5⁄8	19 1⁄4	9 3⁄4	1 5⁄8	9.0
3	48	2 3⁄8	2 1⁄4	3⁄4	1	18 3⁄4	10 1⁄8	17 7⁄8	10 1⁄8	20	30	3⁄8	1⁄2	1 1⁄8	8 3⁄8	1 5⁄8	3 3⁄8	8 1⁄2	5 7⁄8	6 3⁄8	7 3⁄4	8	7⁄8	25 5⁄8	13	2	16.0
4	48	2 3⁄8	2 1⁄4	3⁄4	1	18 3⁄4	10 1⁄8	17 7⁄8	10 1⁄8	20	30	3⁄8	1⁄2	1 1⁄8	8 3⁄8	1 5⁄8	3 3⁄8	8 1⁄2	5 7⁄8	6 3⁄8	7 3⁄4	8	7⁄8	25 5⁄8	13	2	16.0
5																											

STANDARD SIGN
S4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/21/10 PLATE NO. S4-5.3

Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 1200 mm
3	900 mm X 1800 mm
4	
5	

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.	Area m ²
1																												
2	24	48	1 ⅜	½	⅝	4	10	2	2 ½	1 ¾	3	1 ¼	3 ¾	9 ⅞	10 ¼	9 ⅝	7 ⅛	7 ⅝	3 ½	3 ⅜	6 ⅝	6 ⅜	9 ¼	9 ⅜			8.00	0.72
3	36	72	2 ¼	¾	1	6	15	3	3 ¾	2 ¾	4 ½	1 ⅞	5 ½	15	15 ¼	14 ½	11 ¼	11 ½	5 ½	5 ¾	10	9 ¾	14	14 ⅛			18.00	1.62
4																												
5																												

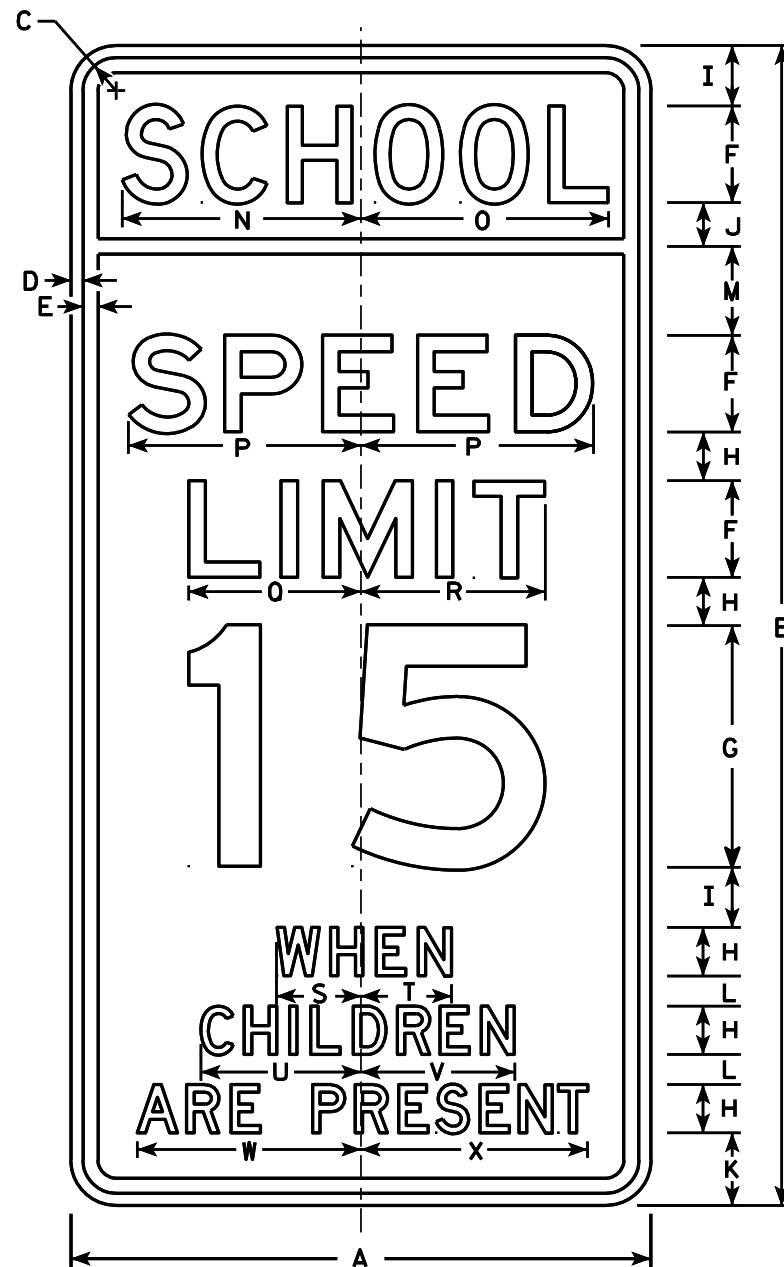
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 157

E



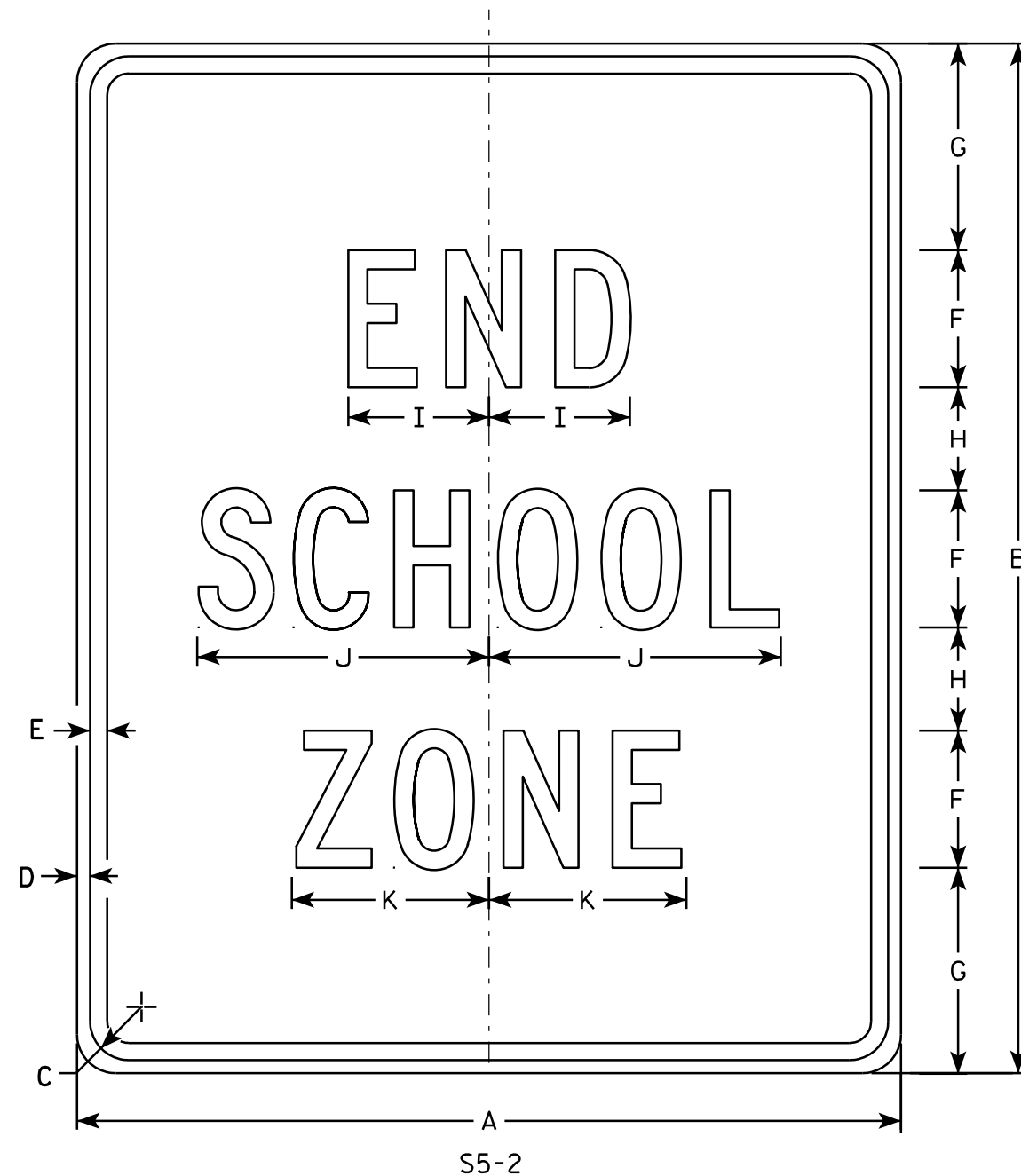
S4-51

NOTES

- Sign is Type II - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition. (See note 5).
- Color:
Background - See note 5
Message - Black
- Message Series - See note 6
- 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.
- Top panel (SCH00L) background - Yellow Green -Type F Reflective.
Lower panel background - White -Type H Reflective.
- From top to bottom:
Lines 1, 5, 6 & 7 are series D
Lines 2, 3 & 4 are series E
- Line 4 substitute appropriate numerals and
adjust spacing to achieve proper balance.

STANDARD SIGN
S4-51

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 4/26/10 PLATE NO. S4-51.9



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 - 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.

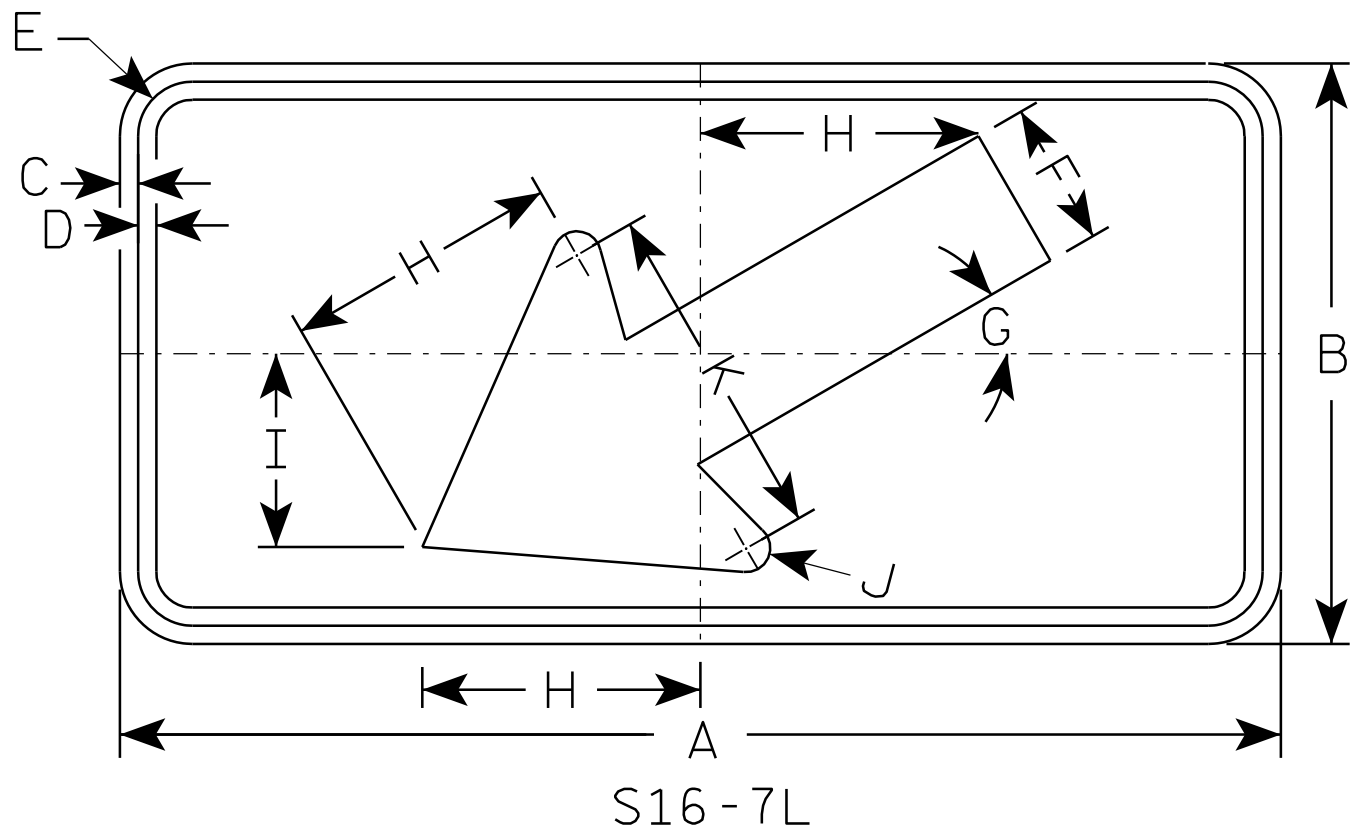
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	30	1 1/8	3/8	1/2	4	6	3	4 1/8	8 1/2	5 3/4																5.0
3	36	42	1 5/8	5/8	3/4	6	7	5	6 1/8	12 5/8	8 5/8																10.5
4																											
5																											

STANDARD SIGN S5-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/8/11	PLATE NO. S5-2.2

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 158	E
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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-Green
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. S16-7R are the same as
S16-7L except the arrow is reversed along
the vertical centerline.



7

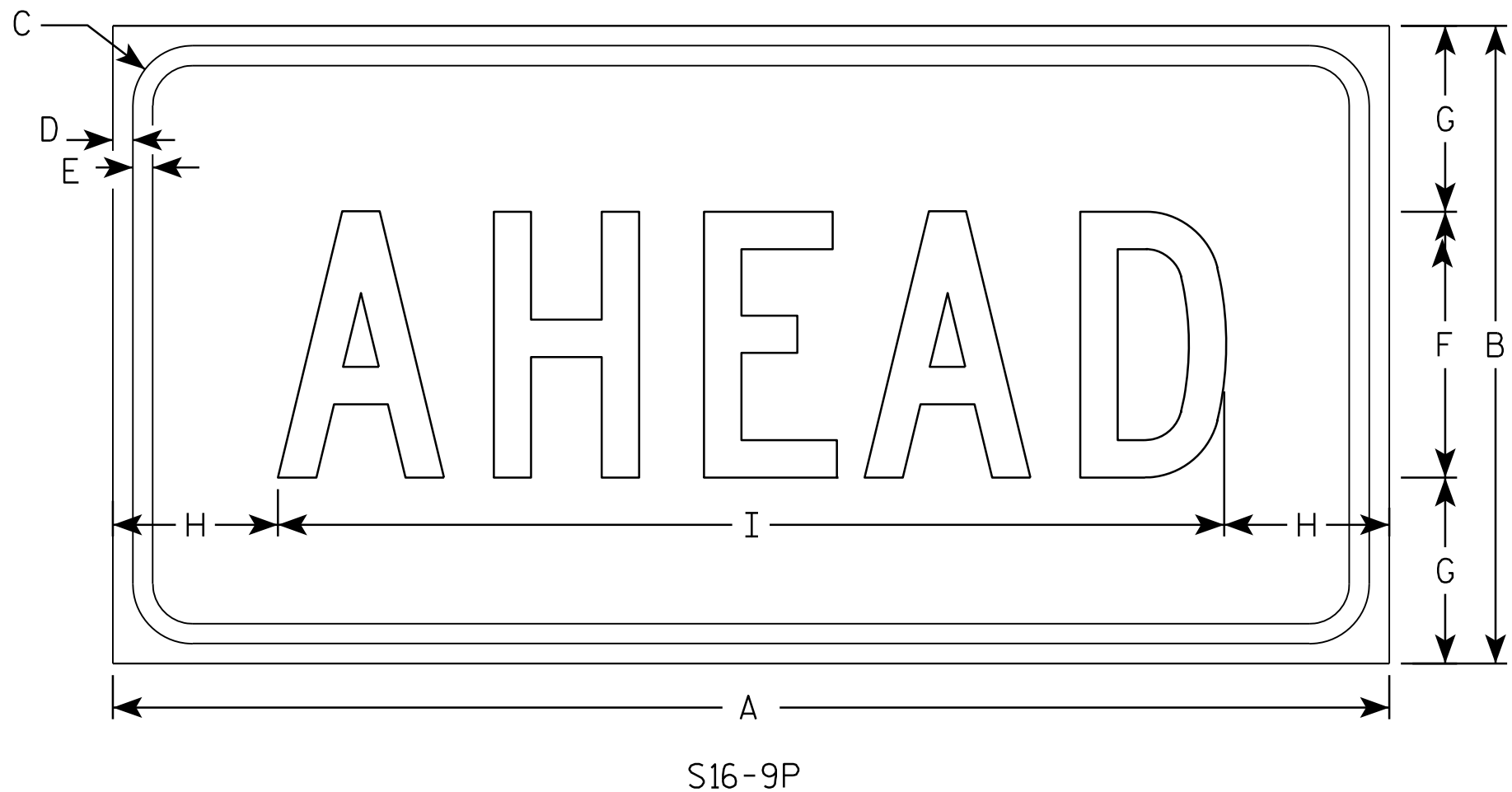
7

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	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN	
S16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/22/13	PLATE NO. S16-7.1

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 159	E
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7



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-Green
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.

7

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	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2S	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN

S16-9P

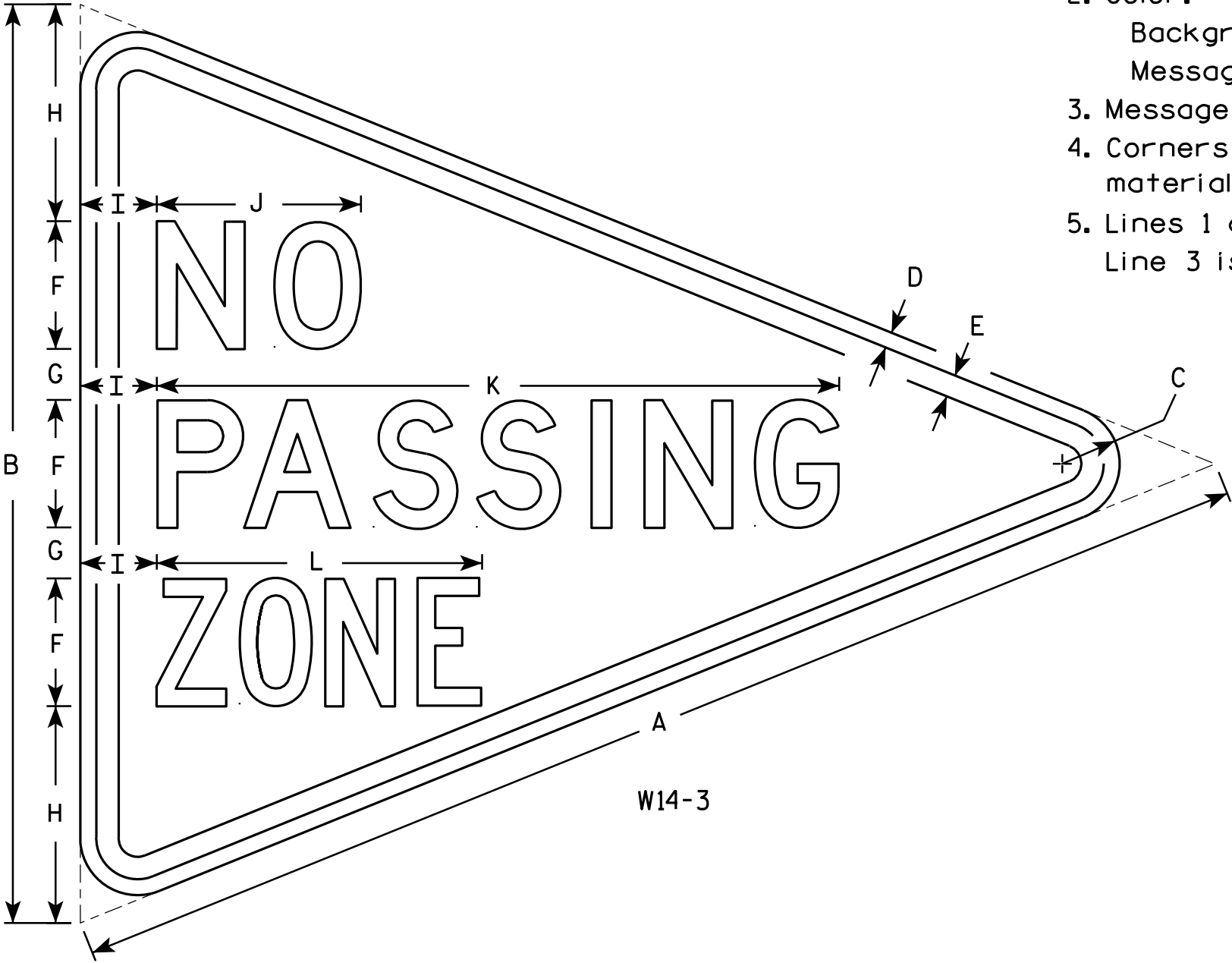
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/22/13 PLATE NO. S16-9P.1

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 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

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															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

CULVERT GRADING (STA. 341+00 - 341+60, RT.)								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut	Expanded Fill	
				(1)		1.00 (1)	1.20 (2)	(3)
341+00	0.00	0.00	0.00	0	0	0	0	0.00
341+13	13.00	0.00	0.39	0	0	0	0	-0.11
341+25.5	12.50	13.82	6.51	3	2	3	2	1.17
341+29	3.50	19.49	12.62	2	1	5	4	1.84
341+32.5	3.50	13.99	7.89	2	1	8	5	2.42
341+50	17.50	0.00	0.30	5	3	12	8	3.77
341+60	10.00	0.00	0.00	0	0	12	8	3.70
			Column Totals	12	7			
	Notes:	1) Cut includes Salvaged/Unusable Pavement Material.						
		2) Expanded Fill = Incremental Fill Volume x 1.20.						
		3) Mass Ordinate = Cumulative Cut Volume - Expanded Fill Volume.						

CULVERT GRADING (STA. 409+60 - 410+20, LT.)								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut	Expanded Fill	
				(1)		1.00 (1)	1.20 (2)	(3)
409+60	0.00	0.00	0.00	0	0	0	0	0.00
409+73	13.00	0.00	0.97	0	0	0	0	-0.28
409+86	13.00	15.36	7.94	4	2	4	3	0.84
409+90	4.00	19.81	18.15	3	2	6	5	1.13
409+94	4.00	15.49	9.56	3	2	9	8	1.28
410+00	6.00	0.00	3.47	2	1	11	9	1.26
410+20	20.00	0.00	0.00	0	1	11	11	-0.28
			Column Totals	11	9			
	Notes:	1) Cut includes Salvaged/Unusable Pavement Material.						
		2) Expanded Fill = Incremental Fill Volume x 1.20.						
		3) Mass Ordinate = Cumulative Cut Volume - Expanded Fill Volume.						

CULVERT GRADING (STA. 409+60 - 410+20, RT.)

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00 (1)	Expanded Fill 1.20 (2)	
409+60	0.00	0.00	0.00	0	0	0	0	0.00
409+73	13.00	0.01	0.52	0	0	0	0	-0.15
409+86	13.00	15.35	4.56	4	1	4	2	2.08
409+90	4.00	20.55	17.59	3	2	6	4	2.77
409+94	4.00	15.02	2.44	3	1	9	5	3.62
410+00	6.00	0.02	1.17	2	0	11	6	4.81
410+20	20.00	0.00	0.00	0	0	11	6	4.30

Column Totals	11	5
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Notes: 1) Cut includes Salvaged/Unusable Pavement Material.
2) Expanded Fill = Incremental Fill Volume x 1.20.
3) Mass Ordinate = Cumulative Cut Volume - Expanded Fill Volume.

CULVERT GRADING (STA. 439+04 - 439+68, LT.)

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00 (1)	Expanded Fill 1.20 (2)	
439+04	0.00	0.00	0.00	0	0	0	0	0.00
439+17	13.00	0.00	0.82	0	0	0	0	-0.24
439+30.5	13.50	15.42	5.06	4	1	4	2	1.85
439+36	5.50	20.05	13.54	4	2	7	4	3.19
439+41.5	5.50	15.32	5.79	4	2	11	7	4.43
439+50	8.50	0.00	1.57	2	1	13	8	5.46
439+68	18.00	0.00	0.00	0	1	13	9	4.83

Column Totals	13	7
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Notes: 1) Cut includes Salvaged/Unusable Pavement Material.
2) Expanded Fill = Incremental Fill Volume x 1.20.
3) Mass Ordinate = Cumulative Cut Volume - Expanded Fill Volume.

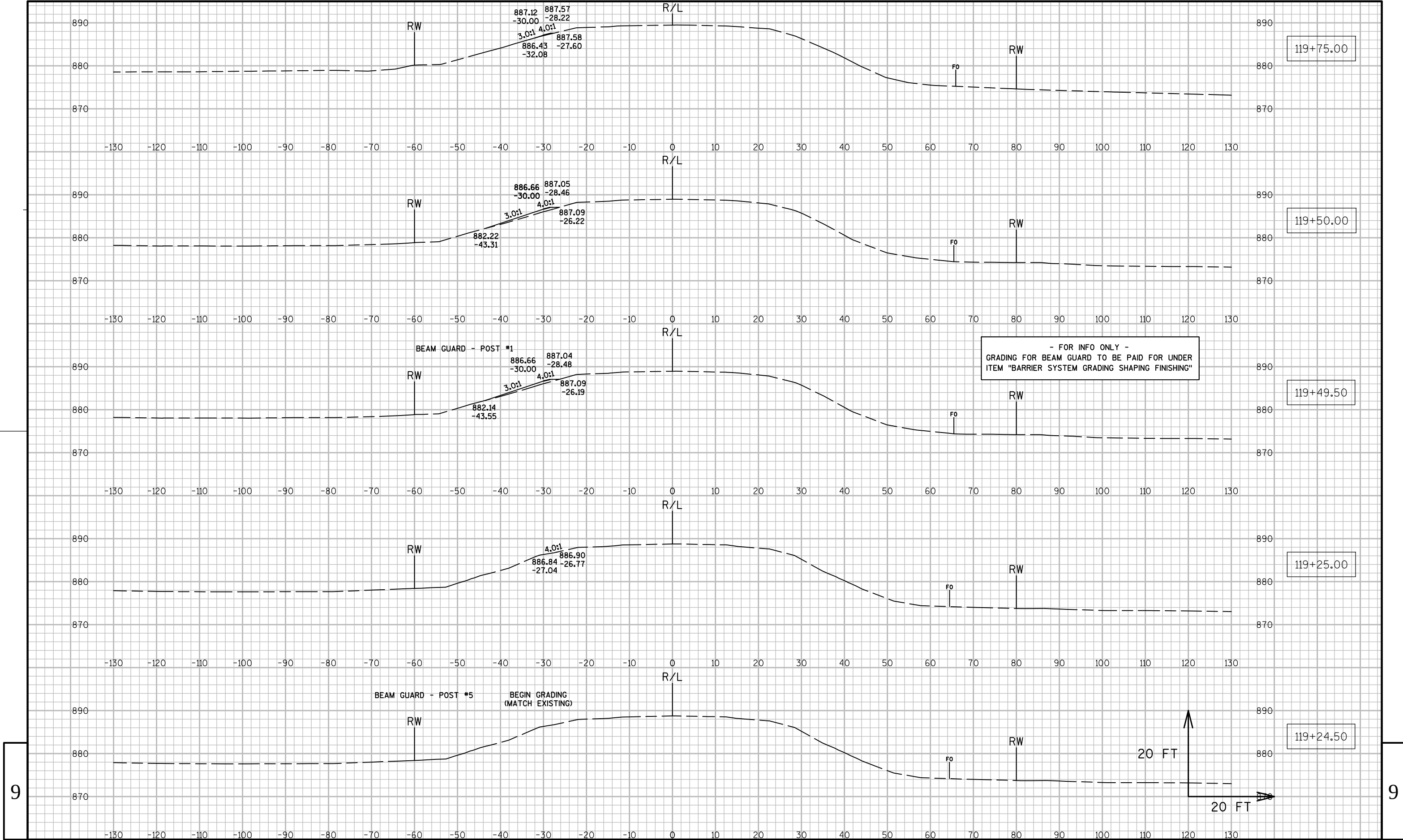
CULVERT GRADING (STA. 439+04 - 439+68, RT.)								
		AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		
STATION	Distance	Cut	Fill	Cut	Fill	Cut	Expanded Fill	Mass Ordinate
				(1)		1.00 (1)	1.20 (2)	(3)
439+04	0.00	0.00	0.00	0	0	0	0	0.00
439+17	13.00	0.00	1.44	0	0	0	0	-0.42
439+30.5	13.50	14.38	5.64	4	2	4	3	1.05
439+36	5.50	20.02	13.85	4	2	7	5	2.17
439+41.5	5.50	15.41	7.32	4	2	11	8	3.20
439+50	8.50	0.00	2.88	2	2	13	9	3.70
439+68	18.00	0.00	0.00	0	1	13	11	2.54
			Column Totals	13	9			
	Notes:	1) Cut includes Salvaged/Unusable Pavement Material.						
		2) Expanded Fill = Incremental Fill Volume x 1.20.						
		3) Mass Ordinate = Cummulative Cut Volume - Expanded Fill Volume.						

DRIVEWAY REMOVAL (471+60, RT.)								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut	Expanded Fill	
				(1)		(1)	(2)	(3)
471+30	0.00	12.30	0.00	0	0	0	0	0.00
471+40	10.00	14.37	0.01	5	0	5	0	4.94
471+50	10.00	25.99	0.00	7	0	12	0	12.41
471+60	10.00	25.13	0.00	9	0	22	0	21.87
471+70	10.00	15.71	0.00	8	0	29	0	29.44
471+80	10.00	8.22	0.00	4	0	34	0	33.87
			Column Totals	34	0			
	Notes:	1) Cut includes Salvaged/Unusable Pavement Material.						
		2) Expanded Fill = Incremental Fill Volume x 1.20.						
		3) Mass Ordinate = Cummulative Cut Volume - Expanded Fill Volume.						

DRIVEWAY REMOVAL (STA. 480+36, RT.)								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.20	
480+10	0.00	10.56	0.00	0	0	0	0	0.00
480+20	10.00	23.38	0.00	6	0	6	0	6.28
480+30	10.00	40.36	0.00	12	0	18	0	18.09
480+40	10.00	43.32	0.00	15	0	34	0	33.59
480+50	10.00	29.43	0.00	13	0	47	0	47.06
480+60	10.00	26.72	0.00	10	0	57	0	57.45
480+70	10.00	13.26	0.00	7	0	65	0	64.86
			Column Totals	65	0			
	Notes:	1) Cut includes Salvaged/Unusable Pavement Material.						
		2) Expanded Fill = Incremental Fill Volume x 1.20.						
		3) Mass Ordinate = Cumulative Cut Volume - Expanded Fill Volume.						

EARTHWORK SUMMARY

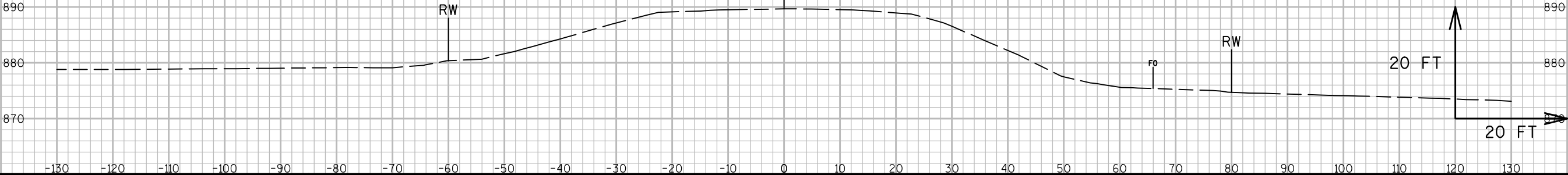
Division	Station - Station	Location	Common Excavation (1)	(item # 205.0100)	Salvaged / Un usable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13)	Mass Ordinate + / - (14)	Waste
			Cut (2)	EBS Excavation				Factor 1.20		
Division 1										
DRIVEWAY REMOVAL	180+70 - 181+30	LT.	56	0	0	56	0	0	56	56
CULVERT GRADING	237+95 - 238+08	LT.	4	0	0	4	0	0	4	4
CULVERT GRADING	341+00 - 341+60	RT.	12	0	0	12	7	8	4	4
CULVERT GRADING	409+60 - 410+20	LT.	11	0	0	11	9	11	0	0
CULVERT GRADING	409+60 - 410+20	RT.	11	0	0	11	5	6	5	5
CULVERT GRADING	439+04 - 439+68	LT.	13	0	0	13	7	8	5	5
CULVERT GRADING	439+04 - 439+68	RT.	13	0	0	13	9	11	2	2
DRIVEWAY REMOVAL	471+30 - 471+80	RT.	34	0	0	34	0	0	34	34
DRIVEWAY REMOVAL	480+10 - 480+70	RT.	65	0	0	65	0	0	65	65
Division 1 Subtotal			219	0	0	219	37	44	175	175
Grand Total			219	0	0	219	37	44	175	175
		Total Common Exc		219						
1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100										
2) Salvaged/Unusable Pavement Material is included in Cut.										
4) Salvaged/Unusable Pavement Material										
5) Available Material = Cut - Salvaged/Unusable Pavement Material										
13) Expanded Fill. Factor = 1.20										
Expanded Fill = Unexpanded Fill * Fill Factor										
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.										



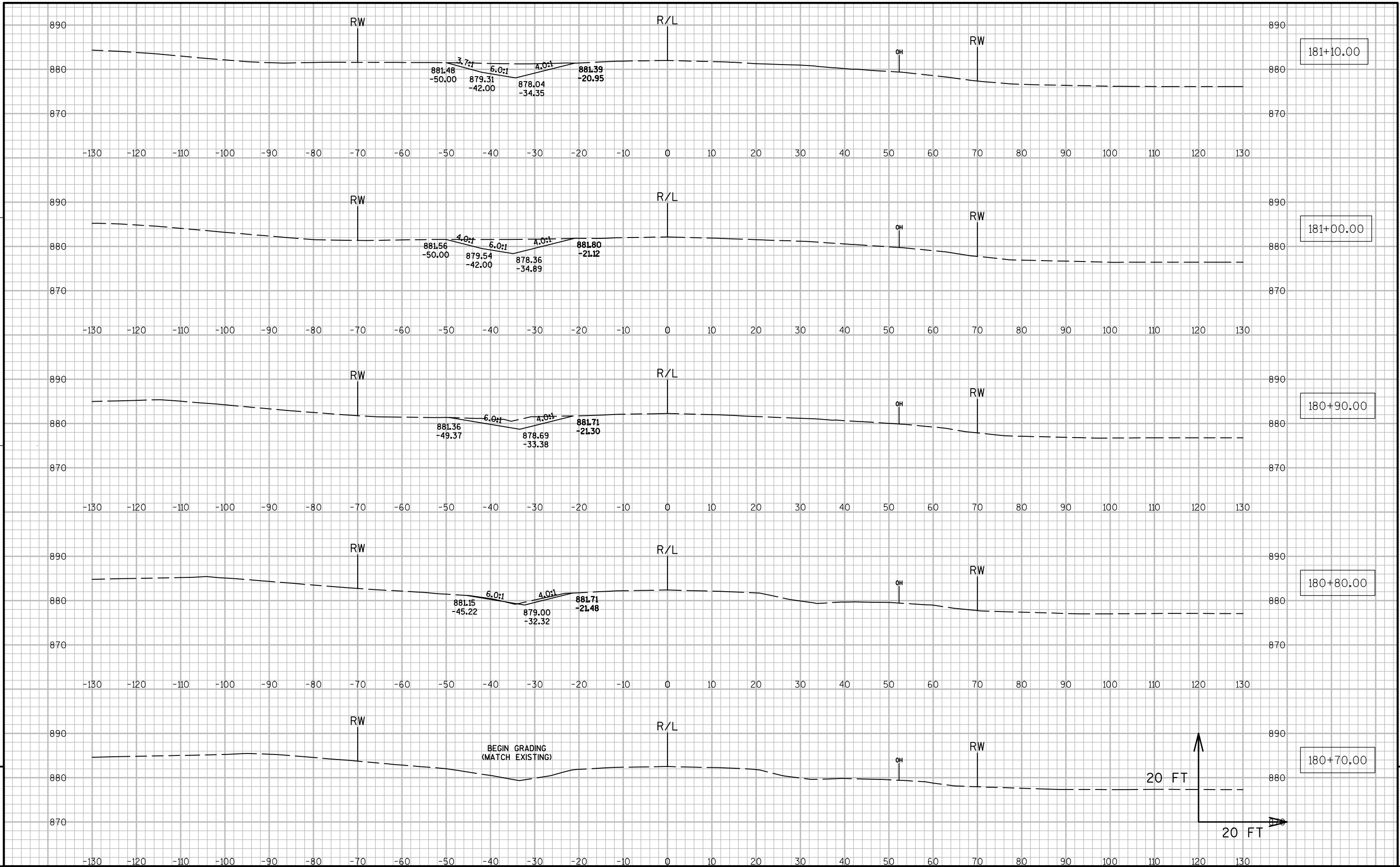
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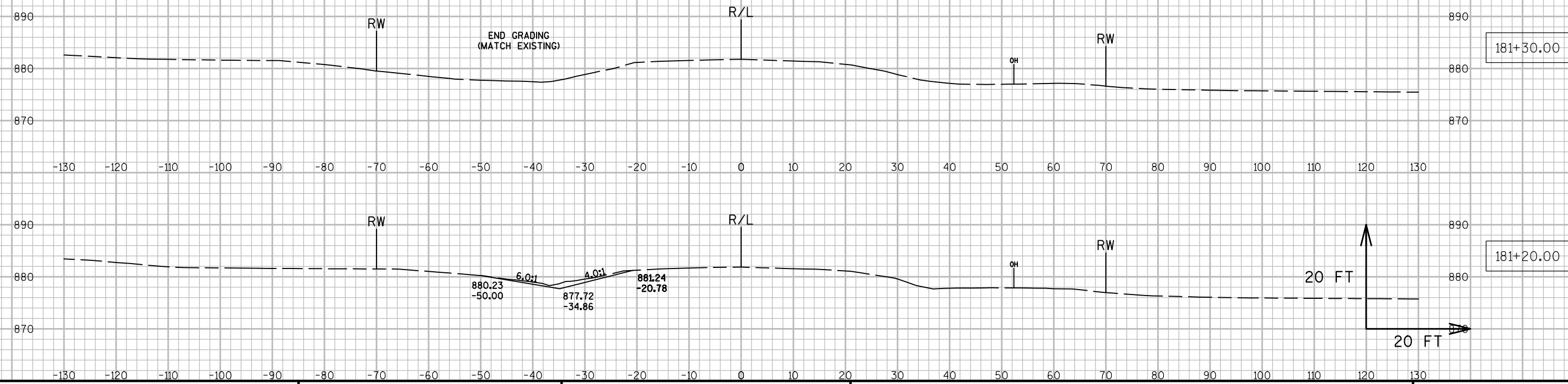
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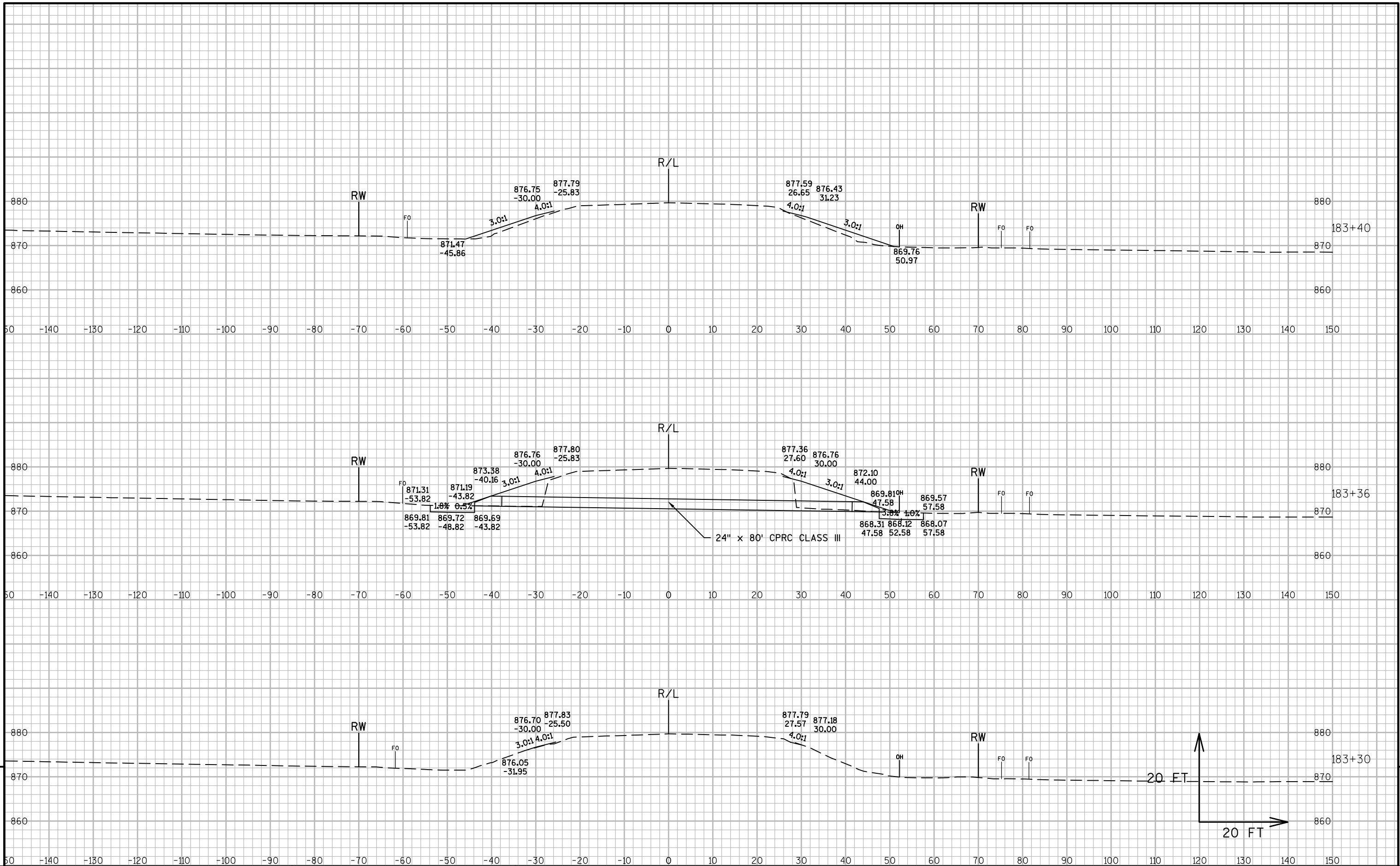
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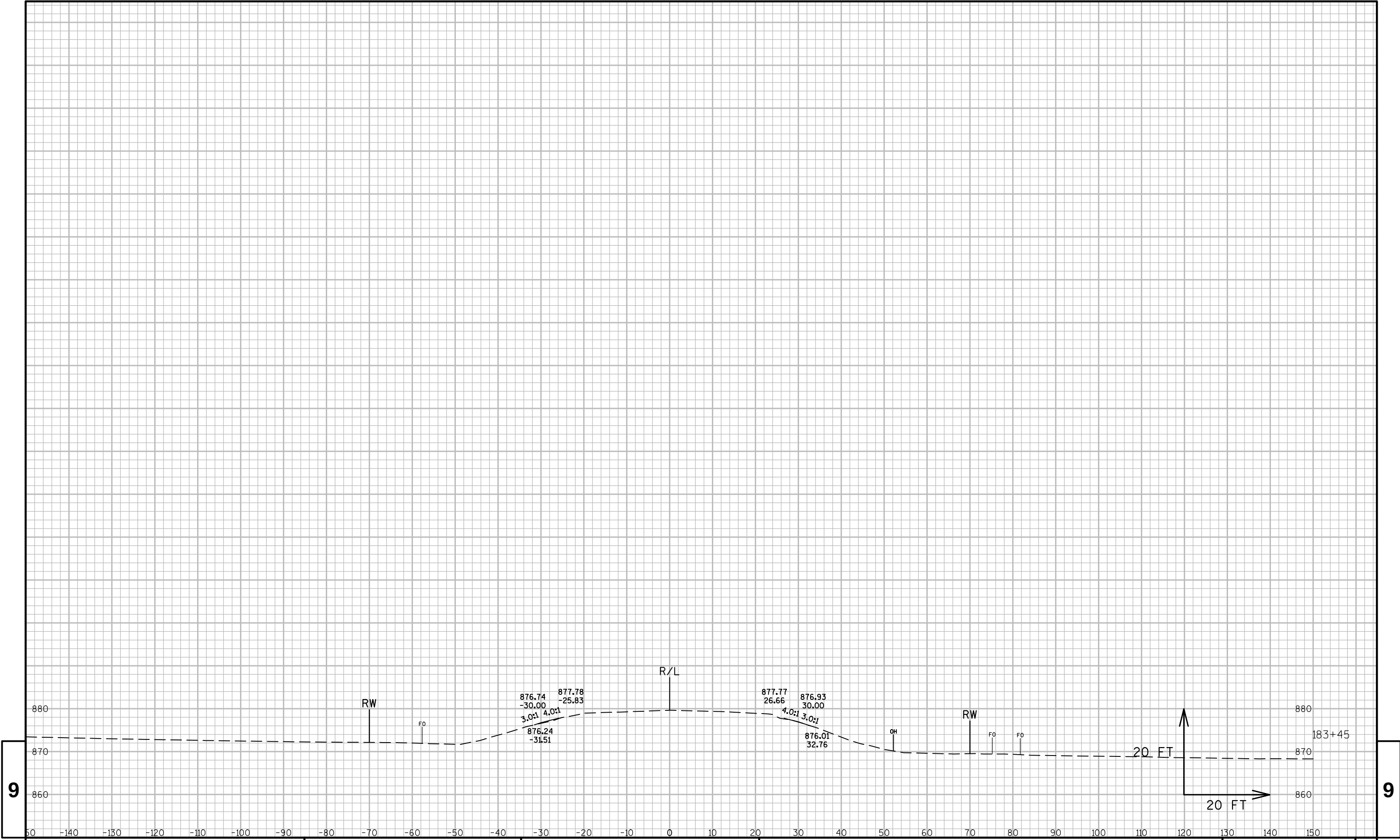


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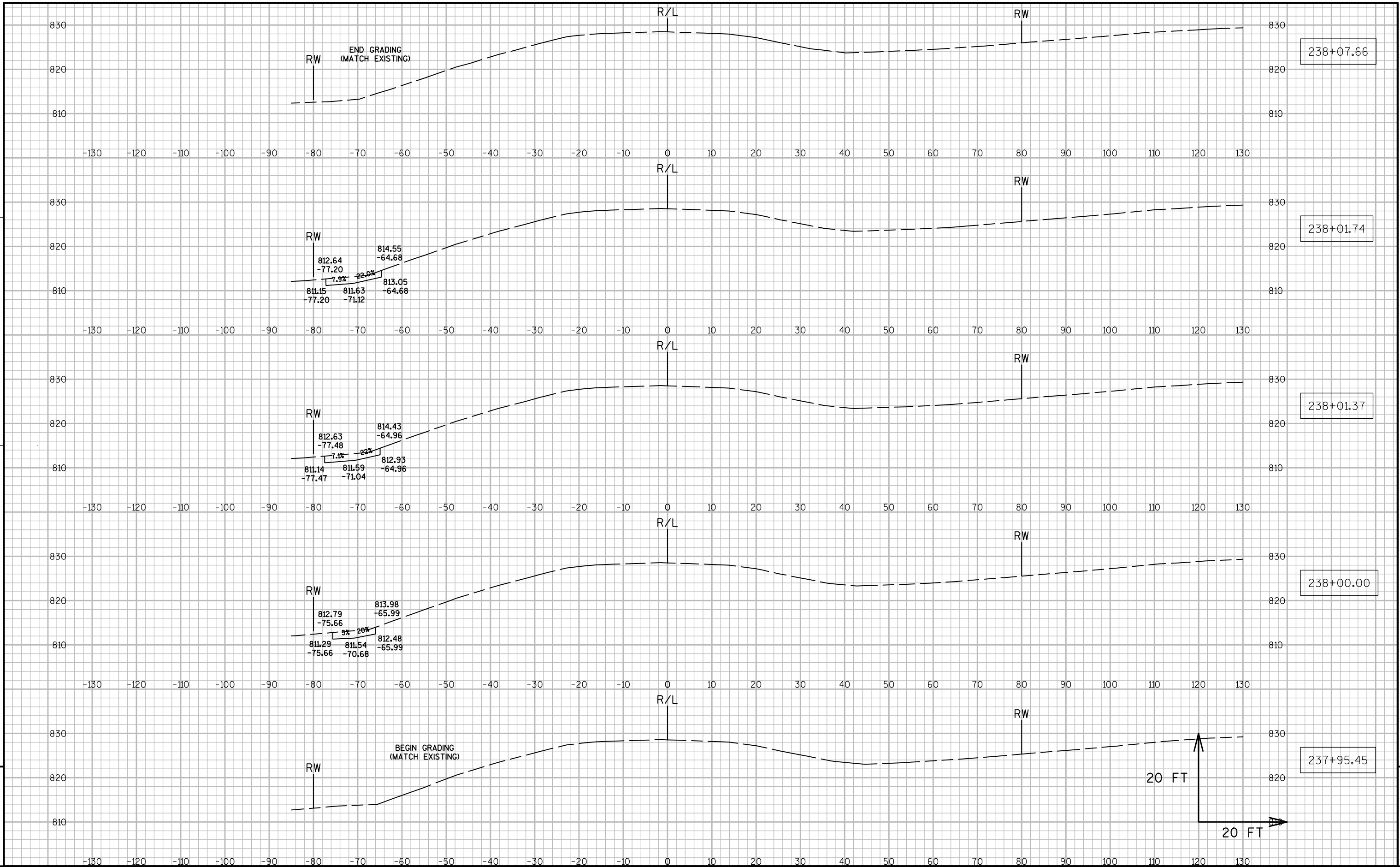


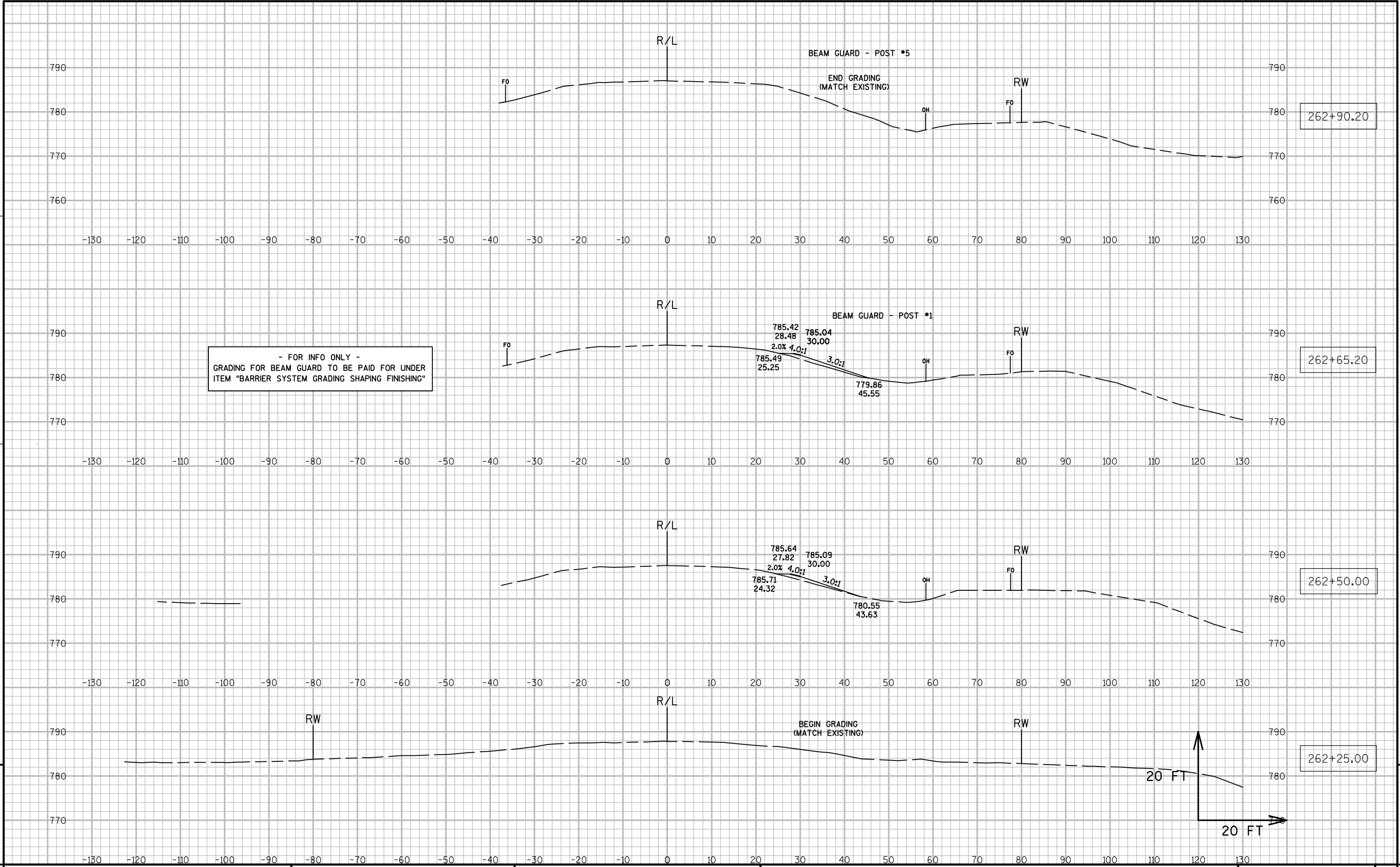


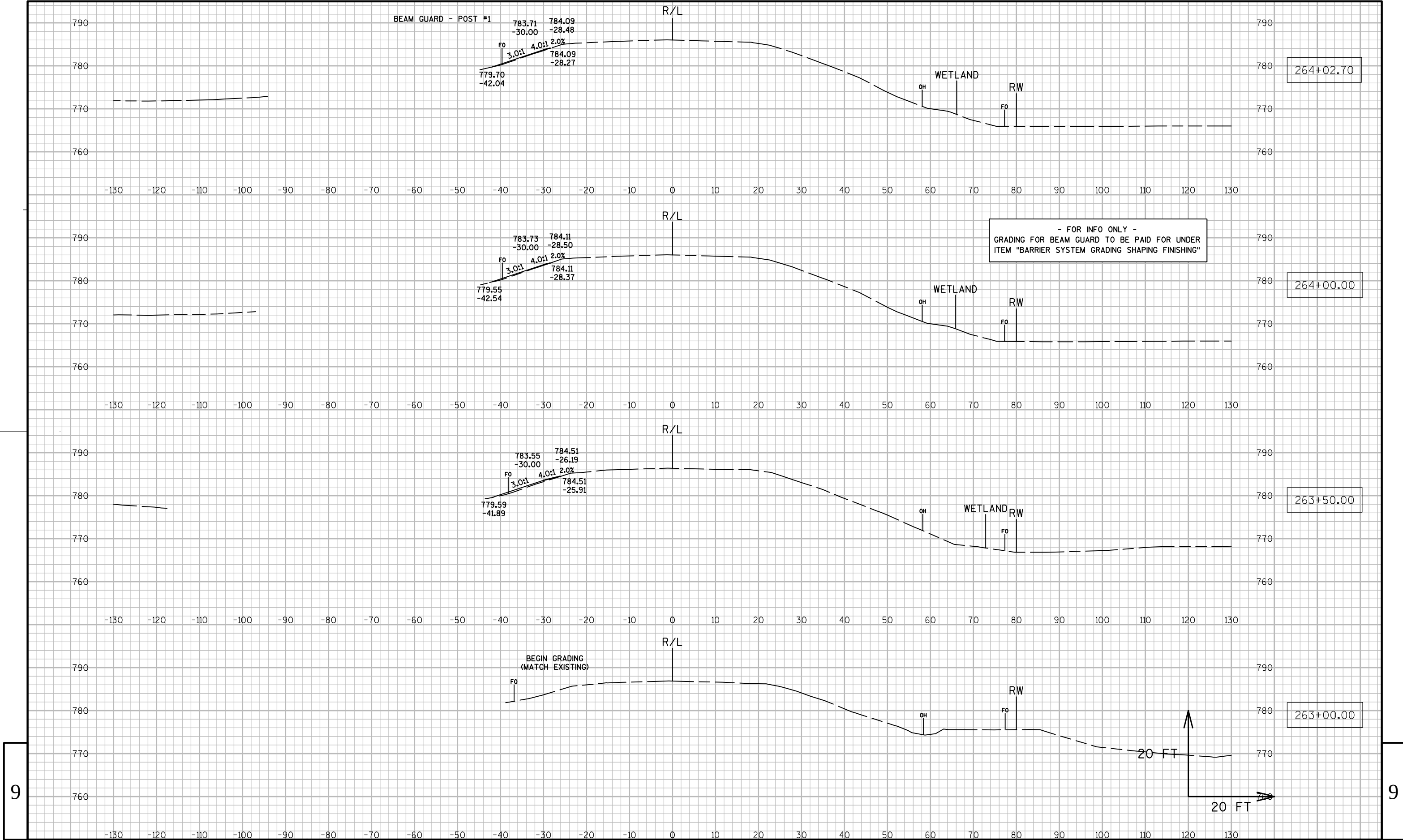
PROJECT NO: 7062-05-71										HWY: STH 27										COUNTY: JACKSON										CROSS SECTIONS: CROSS SECTIONS: (CULVERT GRADING)										SHEET 173										E
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The diagram illustrates a cross-section of a culvert structure. The horizontal axis represents stationing, ranging from 50 to 150. The vertical axis represents elevation, with marked values at 860 and 870. A dashed line represents the ground surface, which is relatively flat at an elevation of approximately 870. A solid line represents the culvert structure, which is a rectangular box with a width of 20 feet. The culvert is located between station 120 and 140. The elevation of the culvert structure is 860. A dimension line indicates a width of 20 feet for the culvert. A dimension line indicates a height of 32.76 feet for the culvert structure. The culvert is labeled with '20 FT' and '32.76'. The diagram is labeled with '9' at both ends, indicating the cross-section is taken at station 9.

Station	Elevation	Feature
50	860	Left Boundary
120	860	Culvert Start
140	860	Culvert End
150	860	Right Boundary



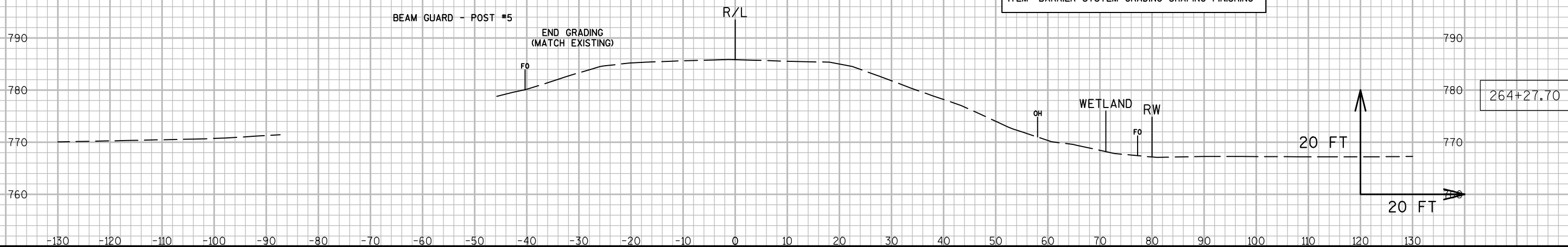




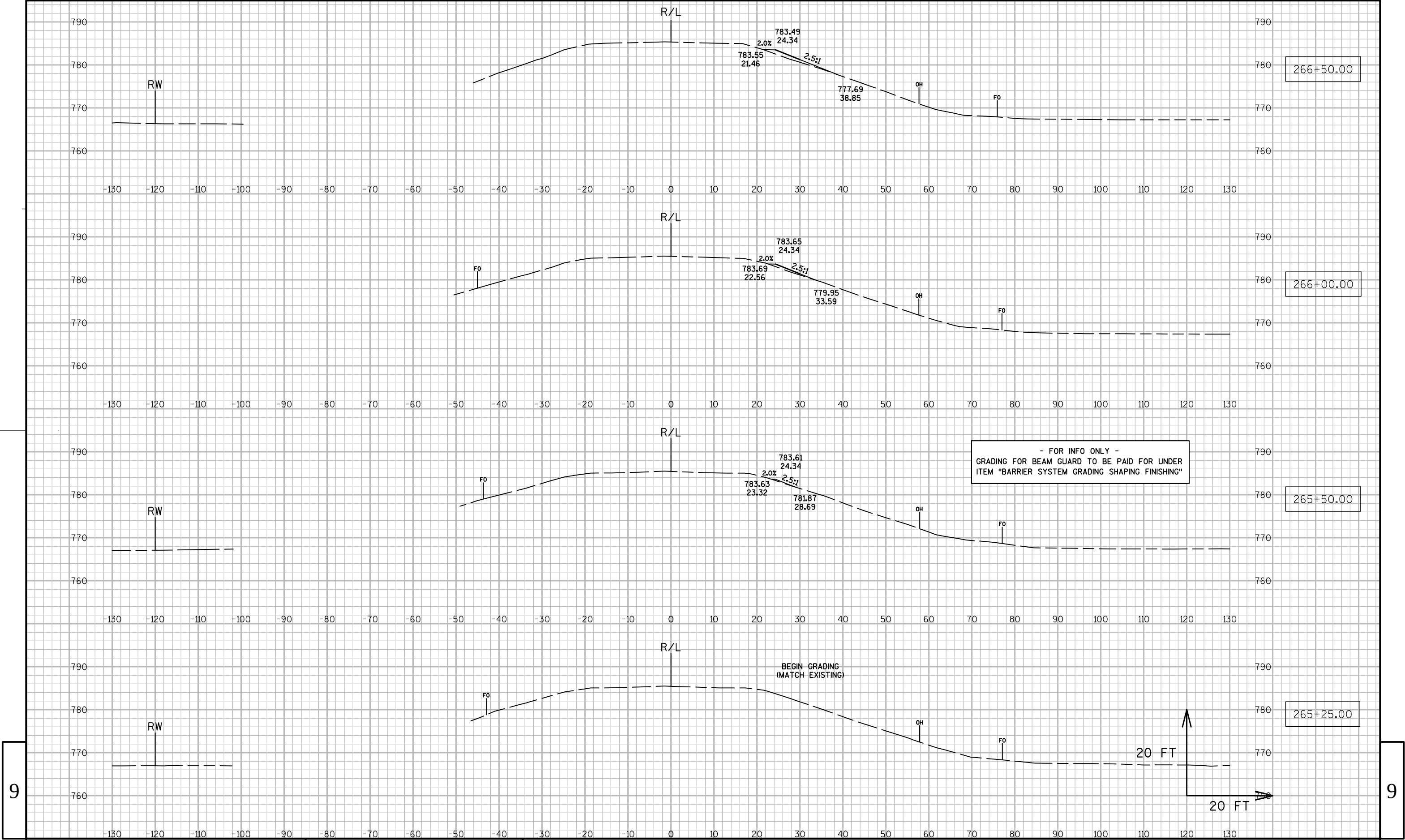
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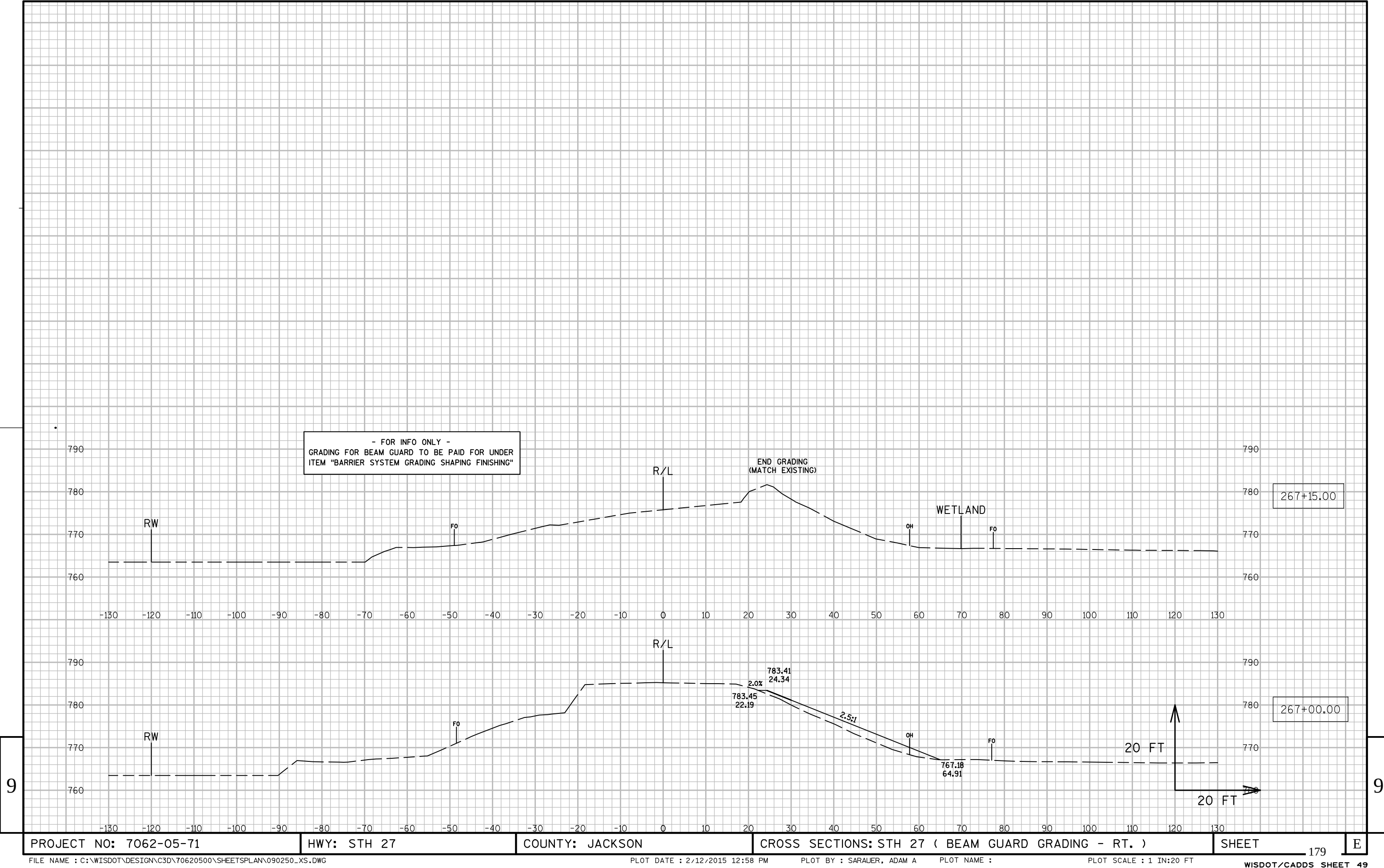


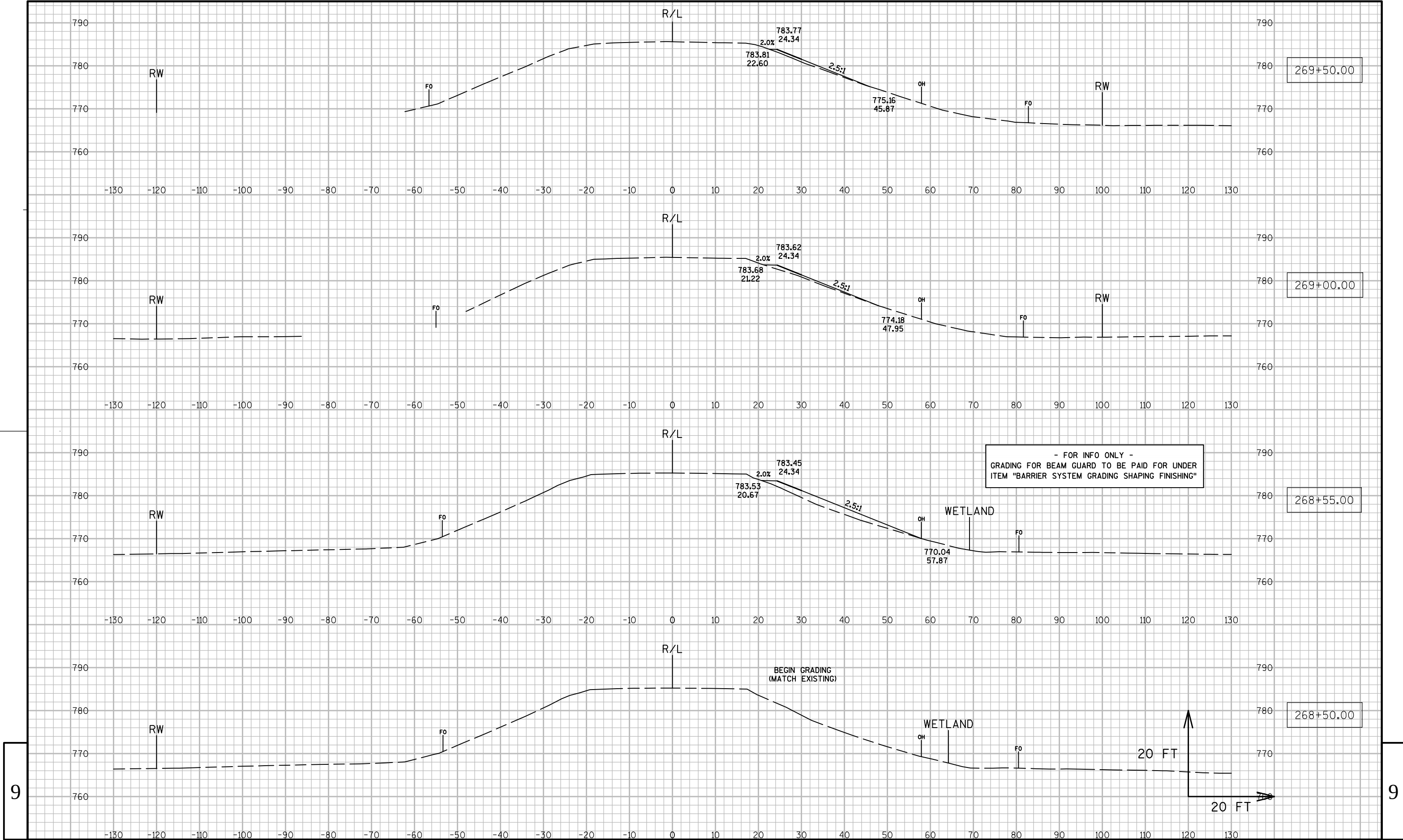
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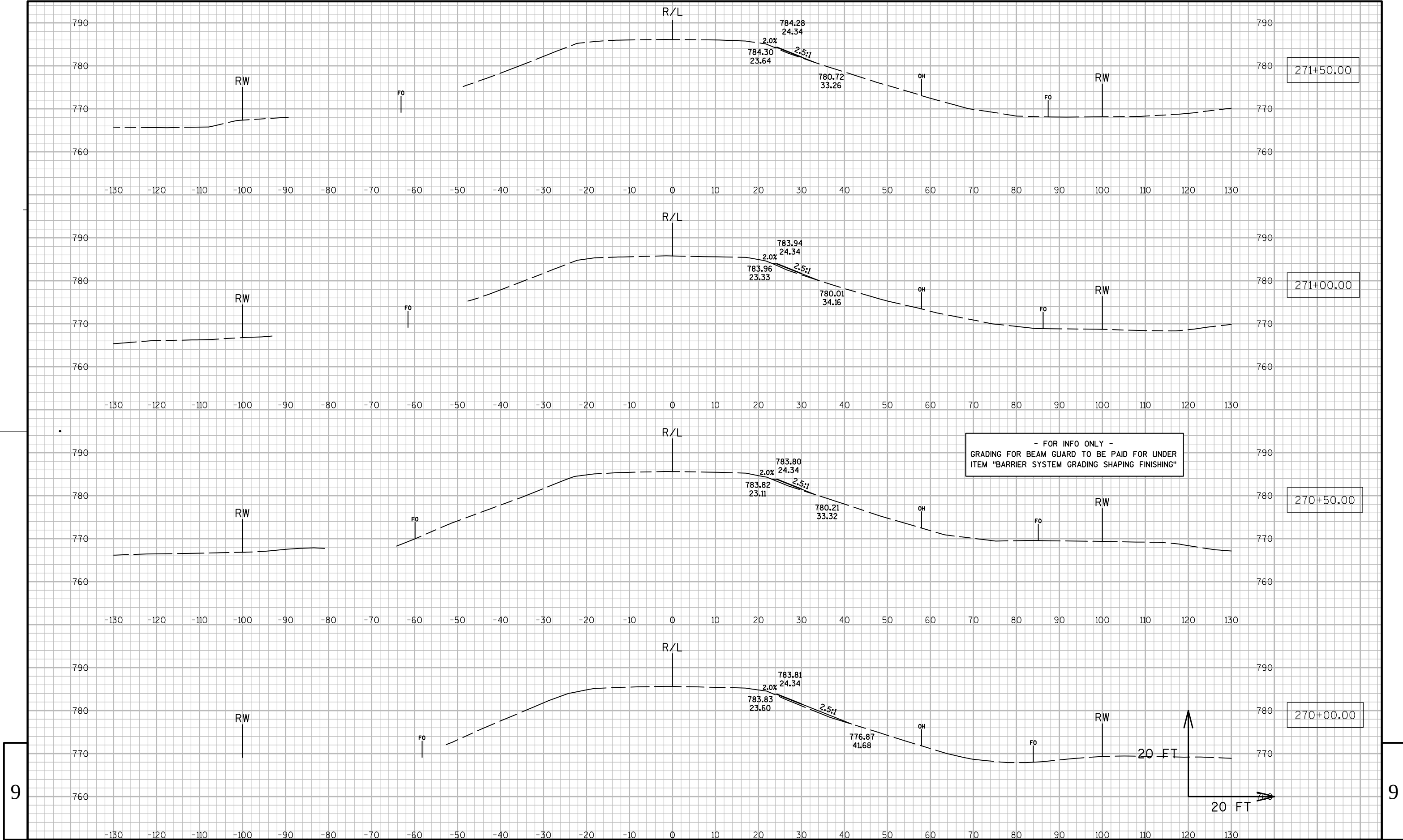


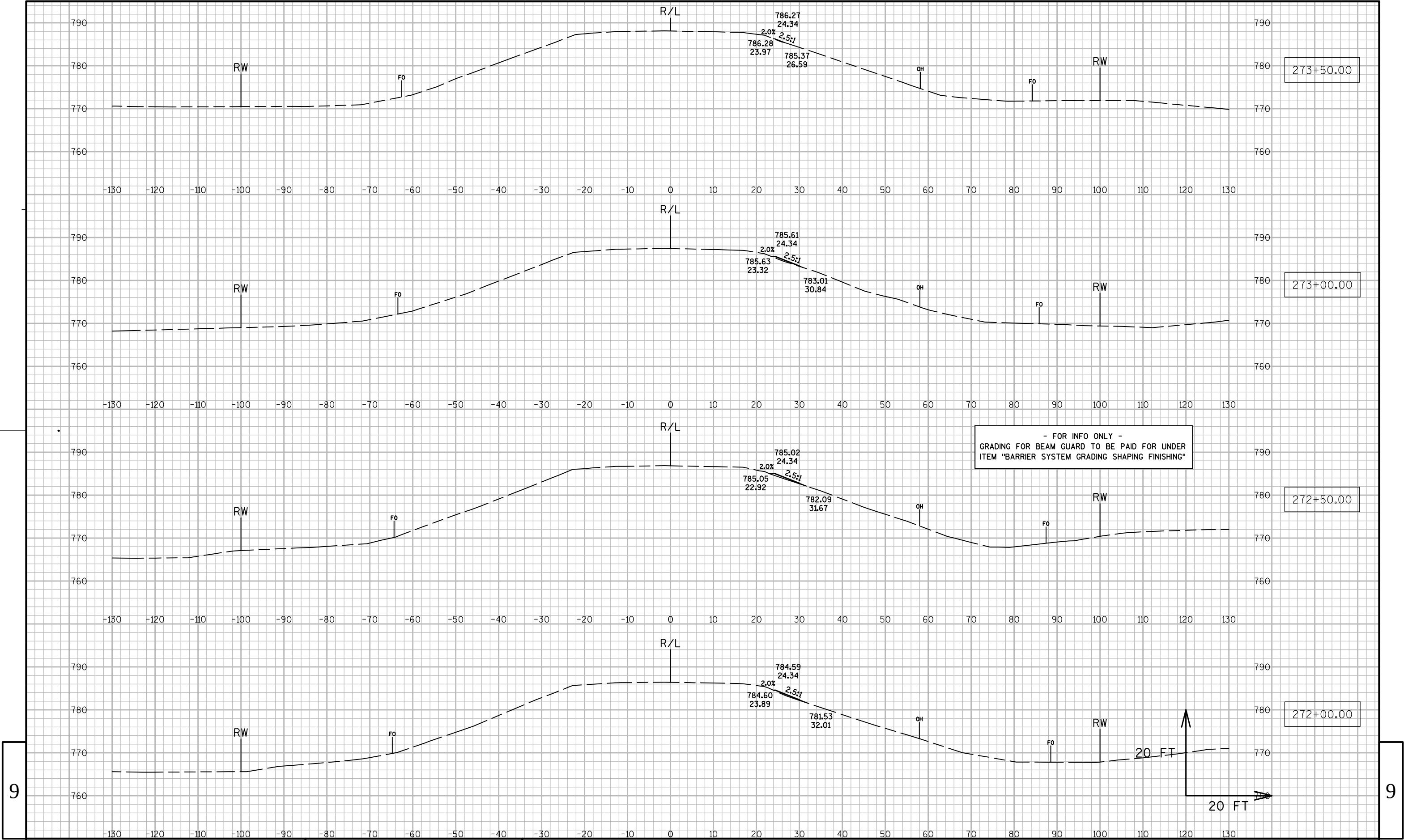
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PROJECT NO: 7062-05-71

HWY: STH 27

COUNTY: JACKSON

CROSS SECTIONS: STH 27 (BEAM GUARD GRADING - RT.)

SHEET

182

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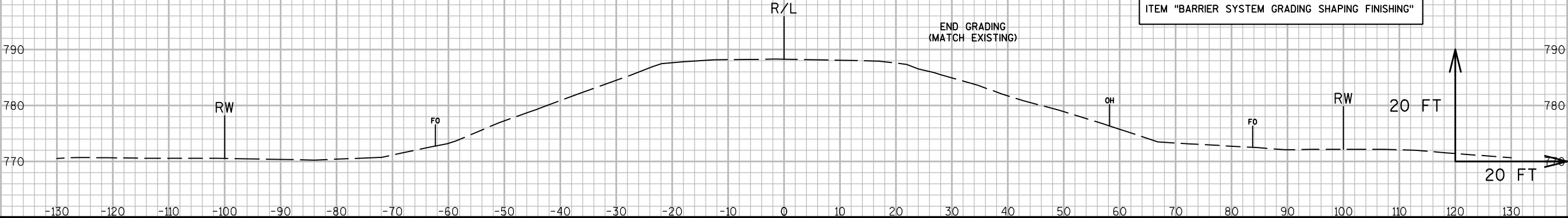
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PLOT NAME :

PLOT SCALE : 1 IN:20 FT

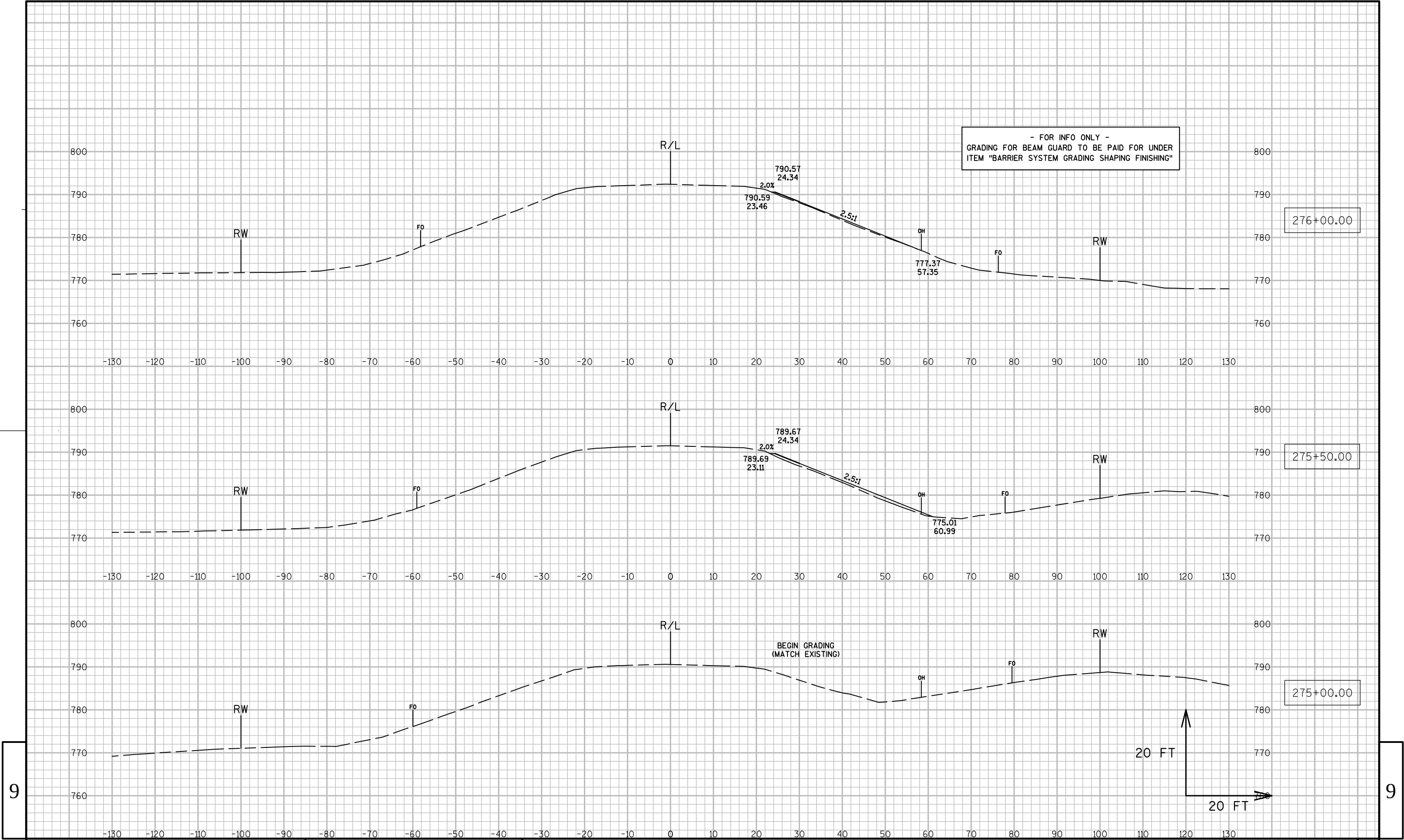
WISDOT/CADDs SHEET 49

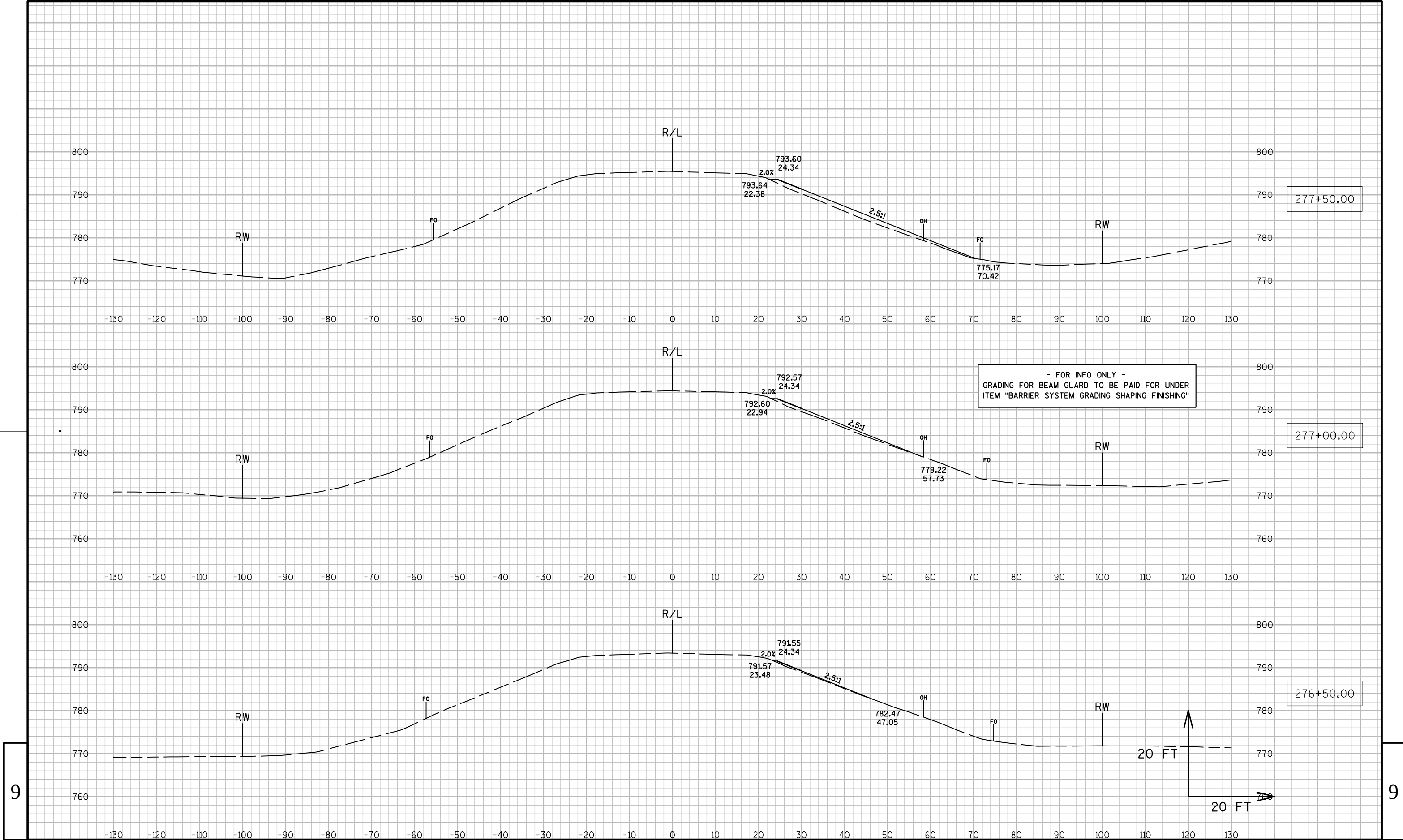
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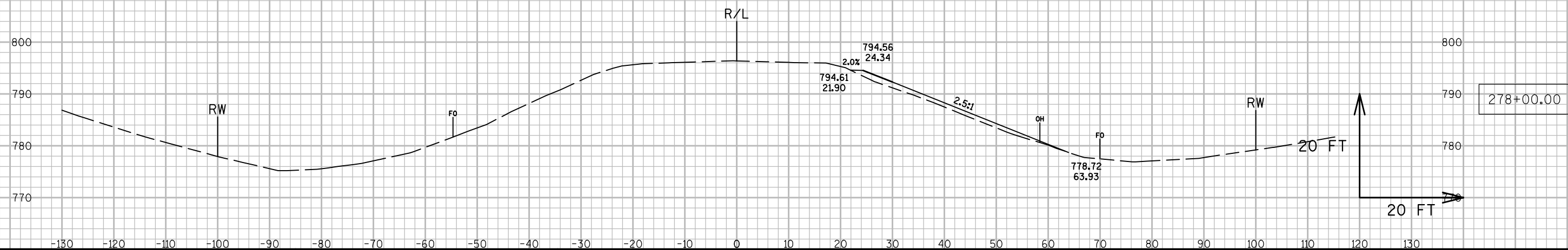
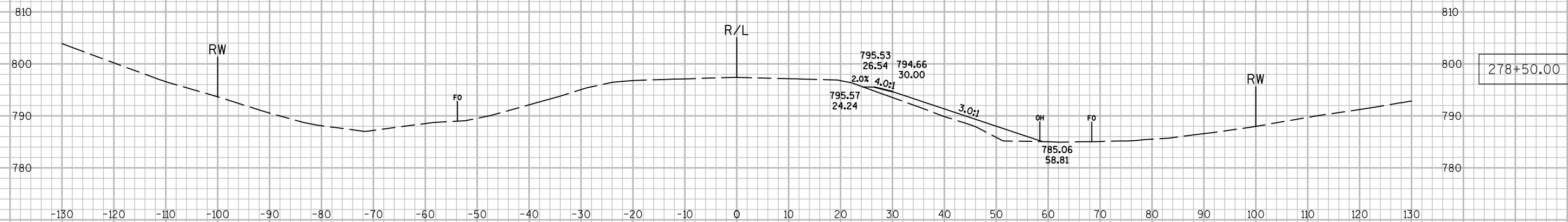
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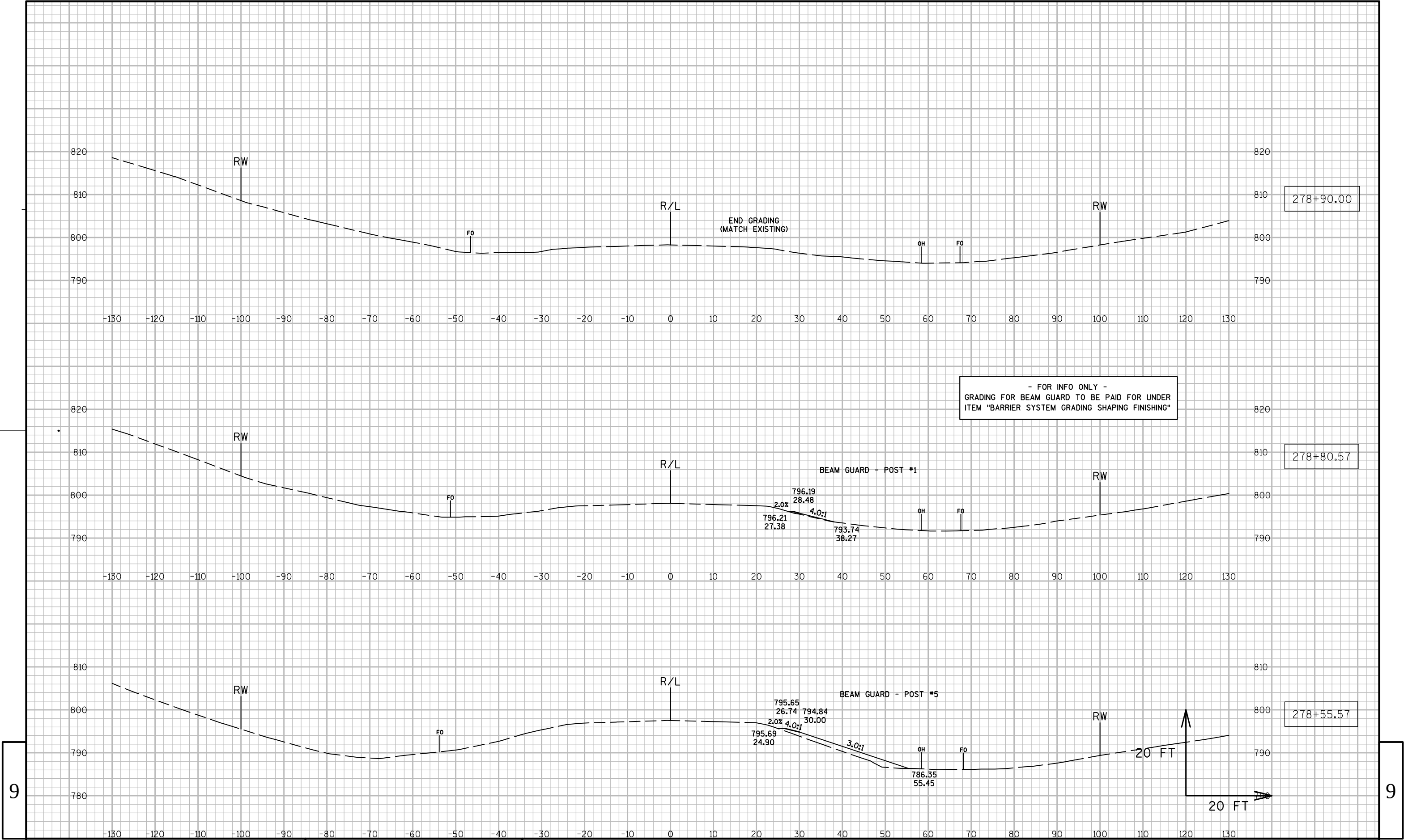




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ITEM "BARRIER SYSTEM GRADING SHAPING FINISHING"

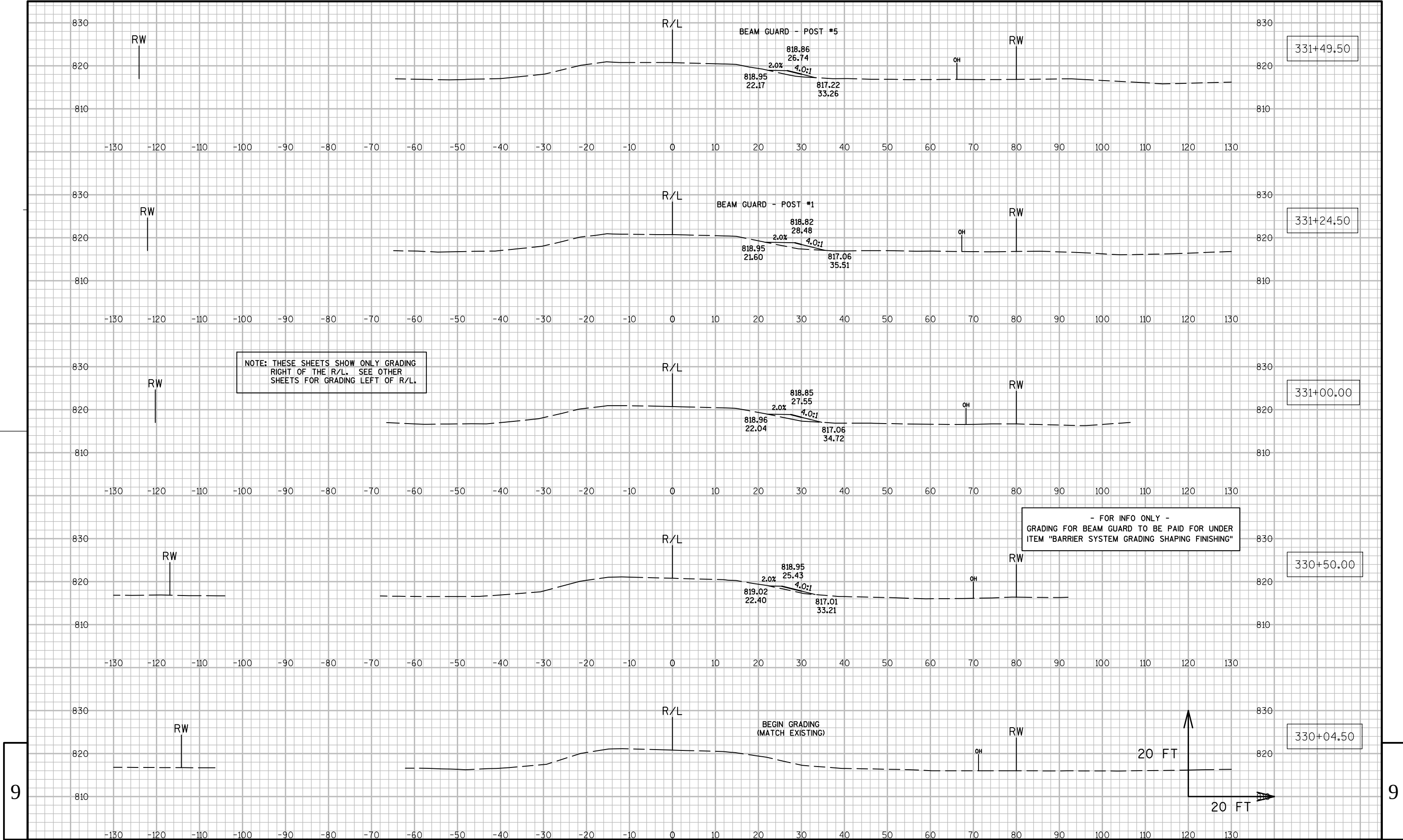
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ITEM "BARRIER SYSTEM GRADING SHAPING FINISHING"





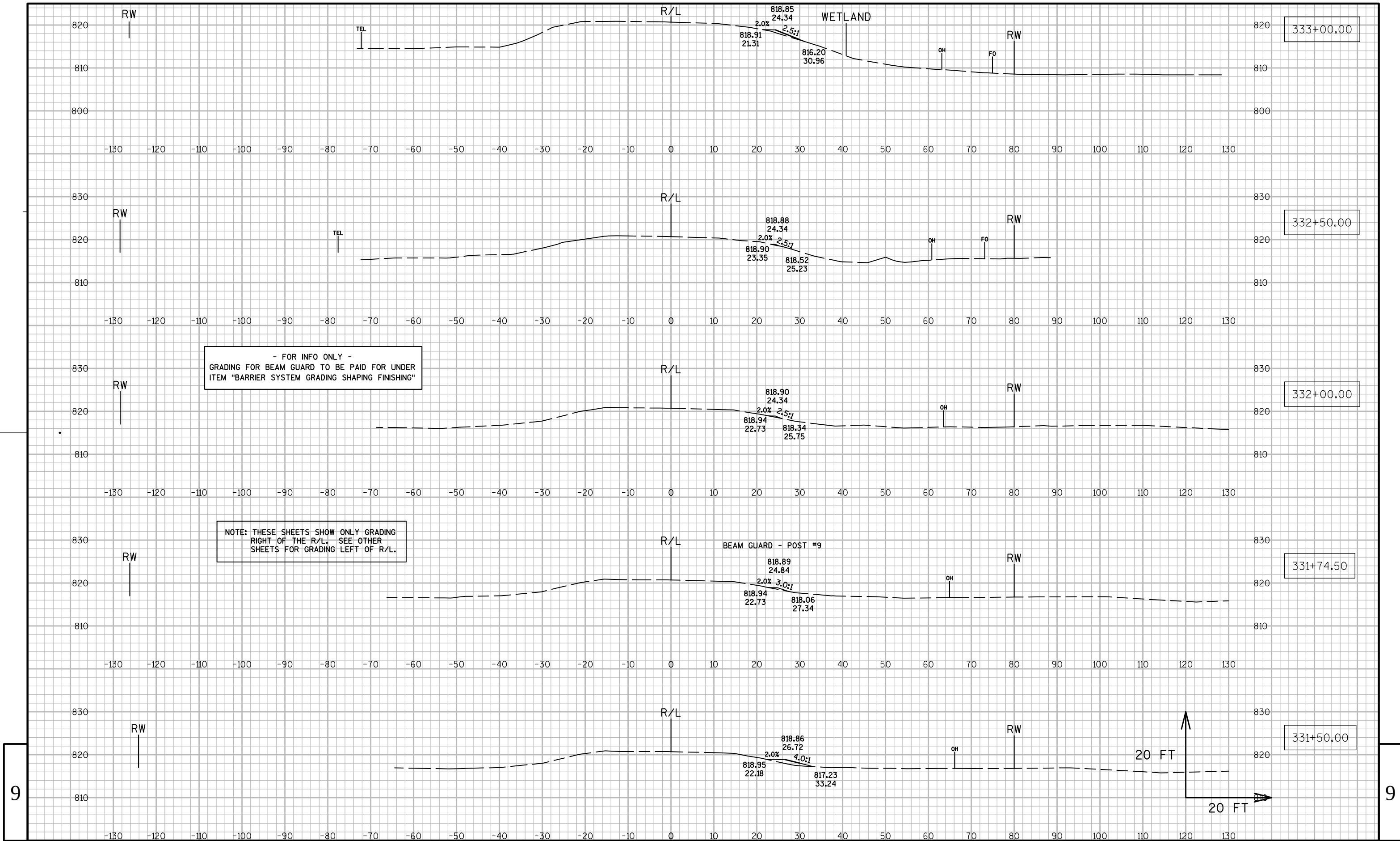
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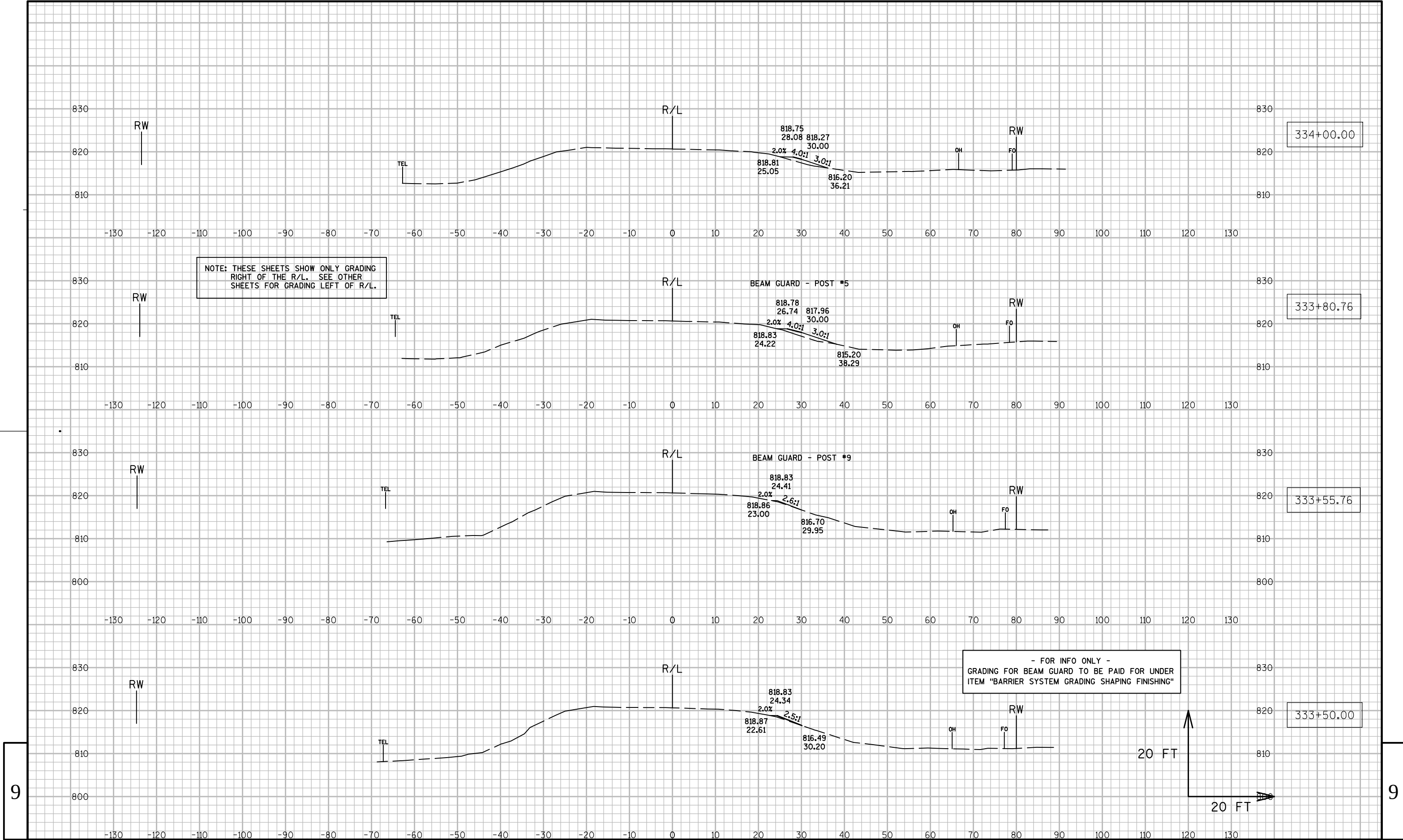
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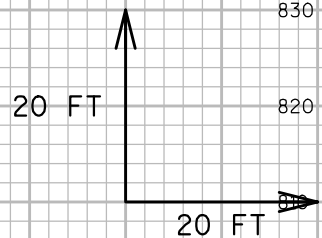
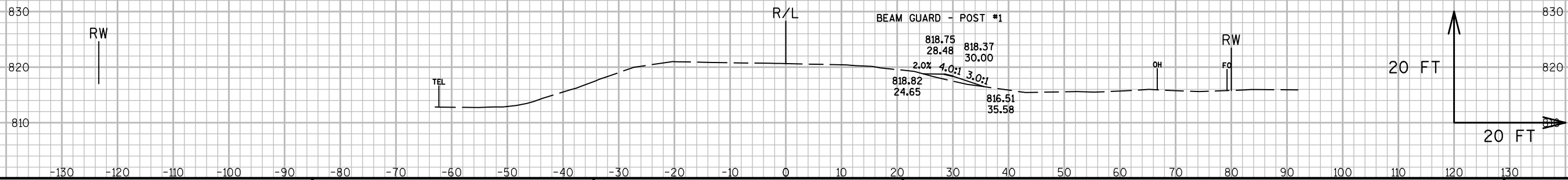
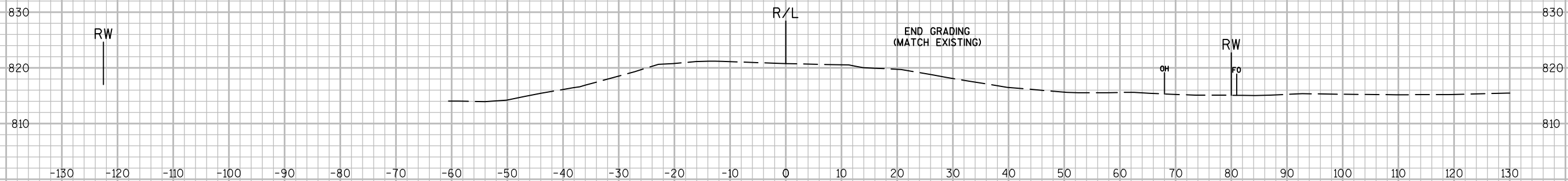


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GRADING FOR BEAM GUARD TO BE PAID FOR UNDER
ITEM "BARRIER SYSTEM GRADING SHAPING FINISHING"



PROJECT NO: 7062-05-71

HWY: STH 27

COUNTY: JACKSON

CROSS SECTIONS: STH 27 (BEAM GUARD GRADING - RT.)

SHEET

191

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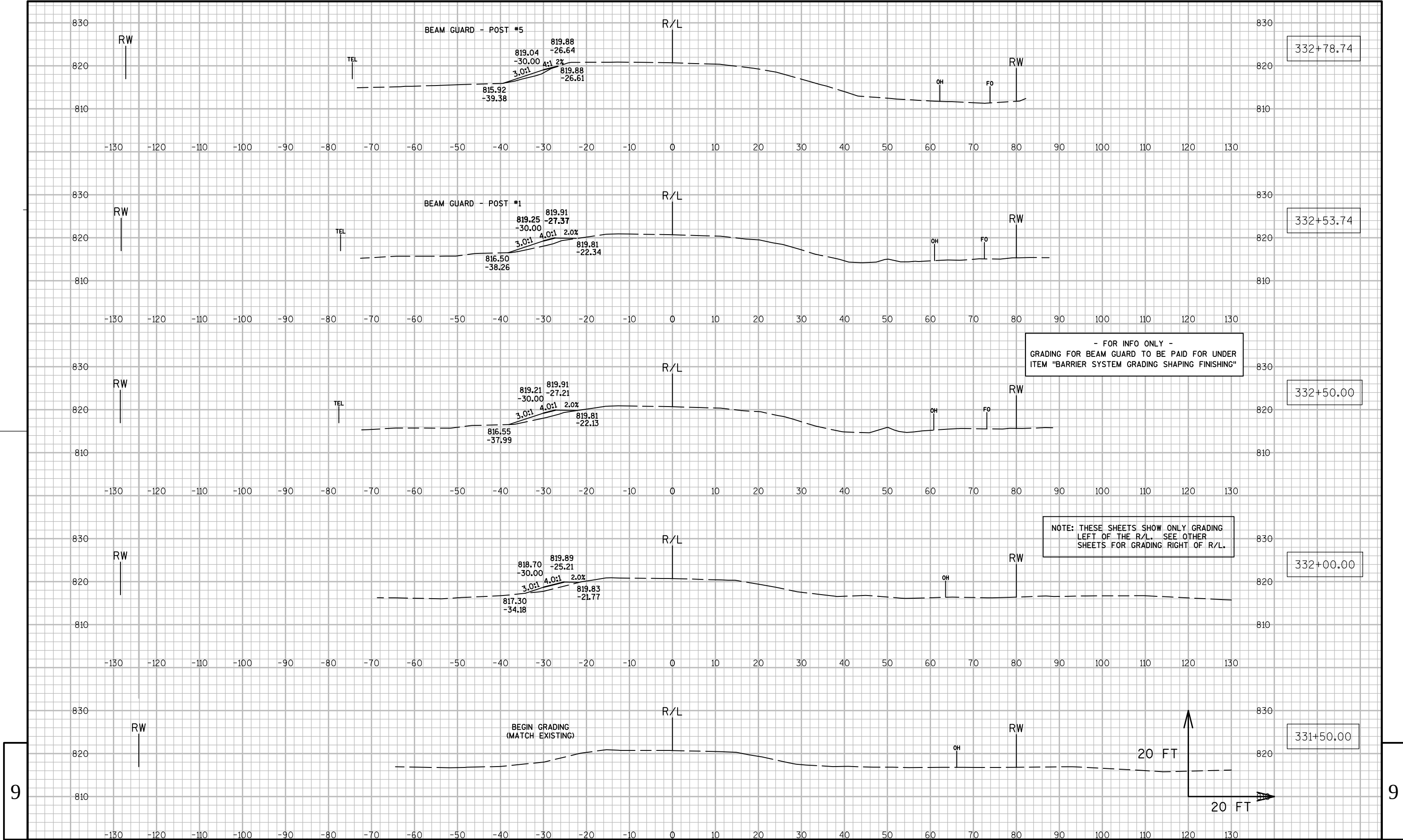
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PLOT BY : SARAUER, ADAM A

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

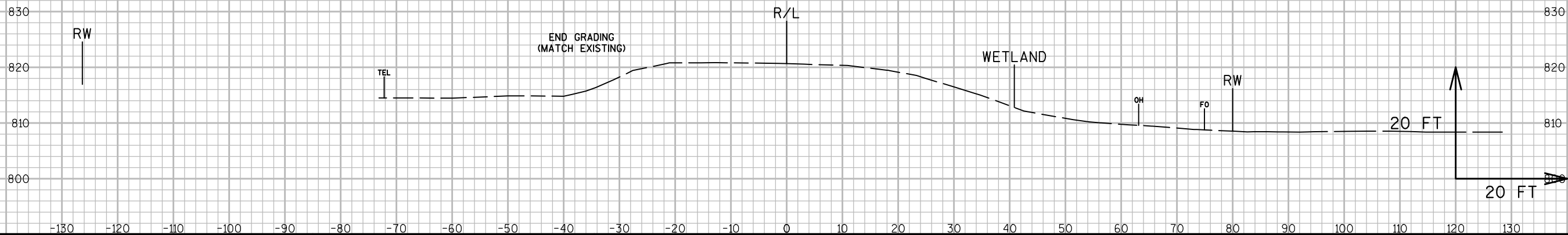
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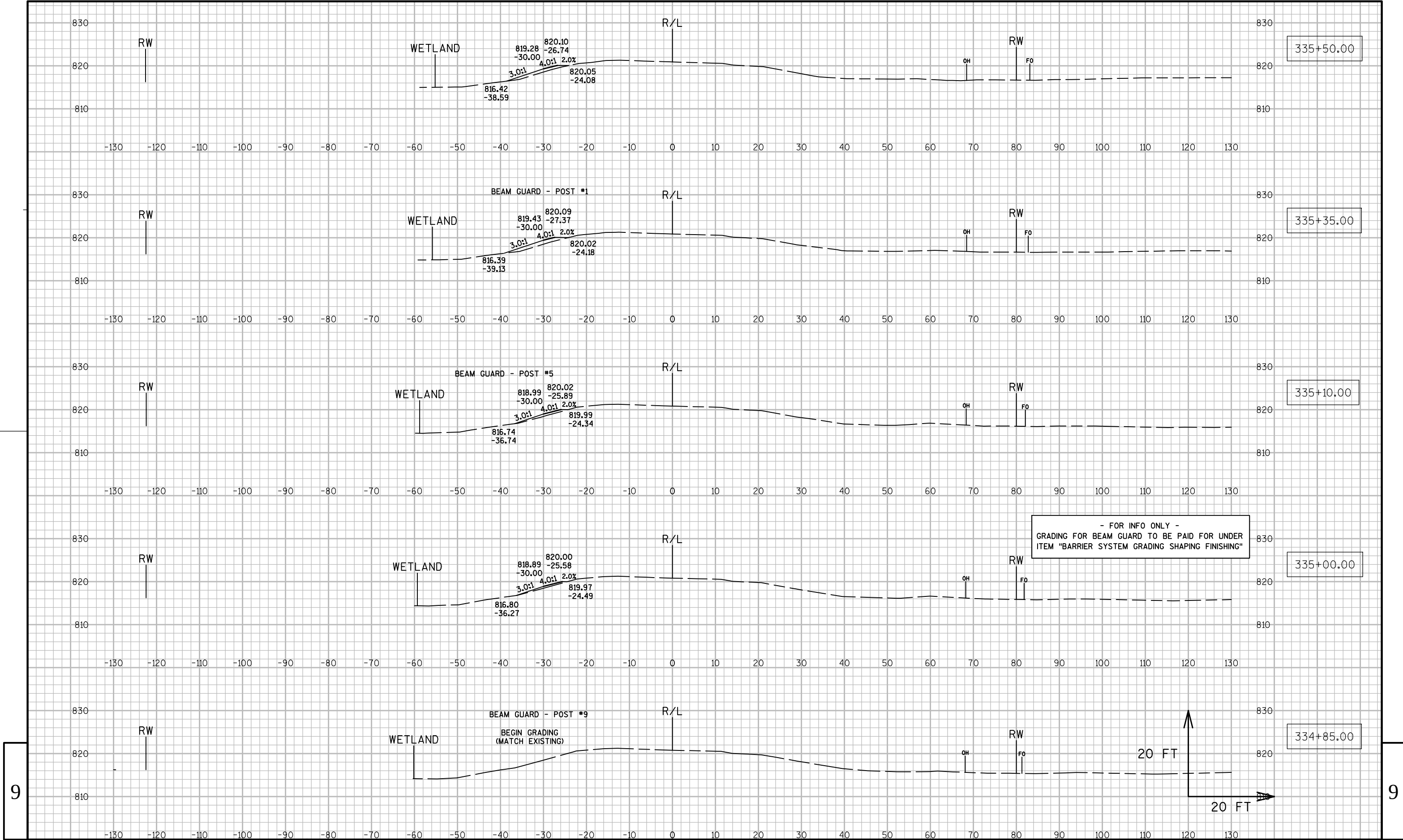
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ITEM "BARRIER SYSTEM GRADING SHAPING FINISHING"

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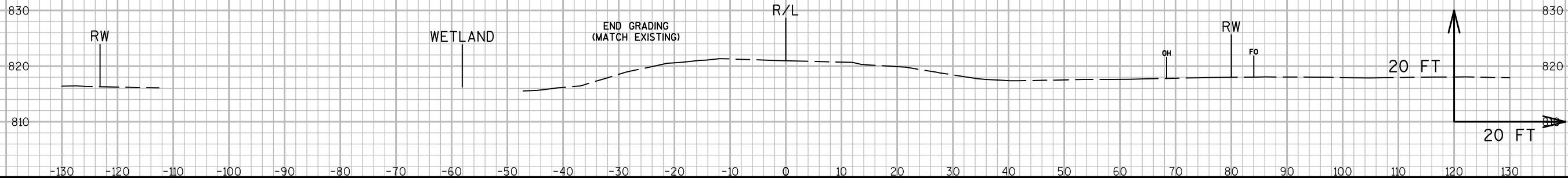
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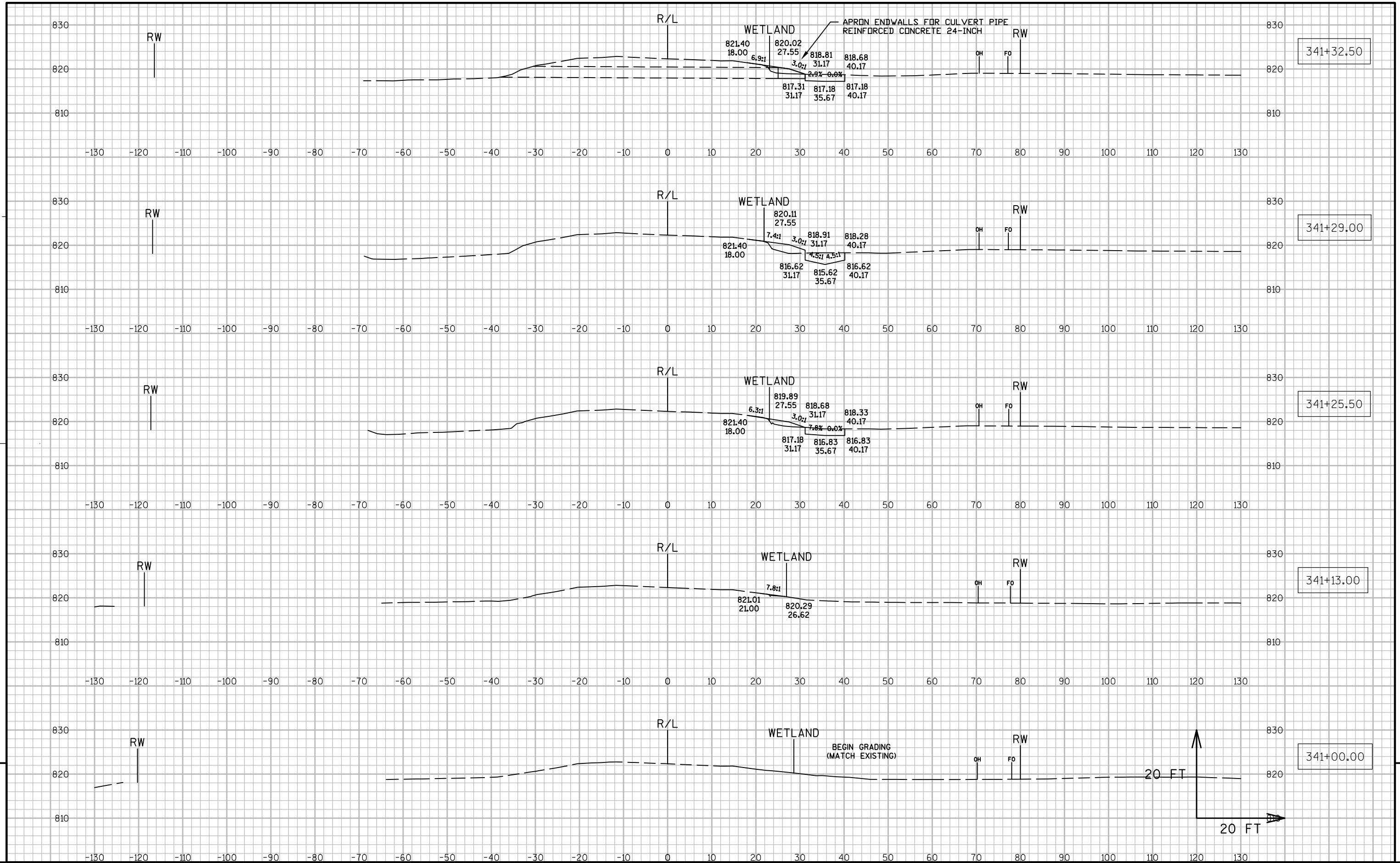
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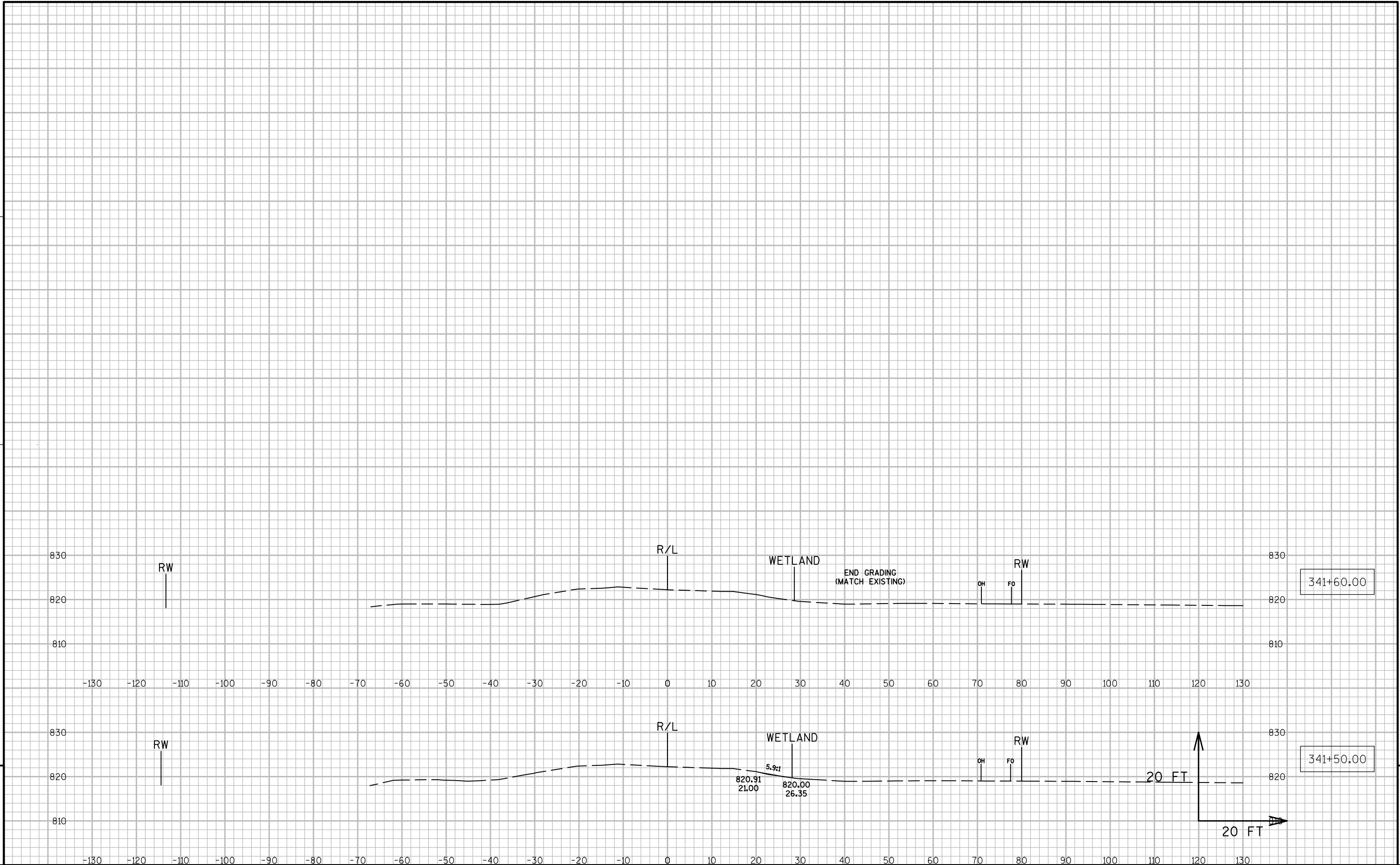
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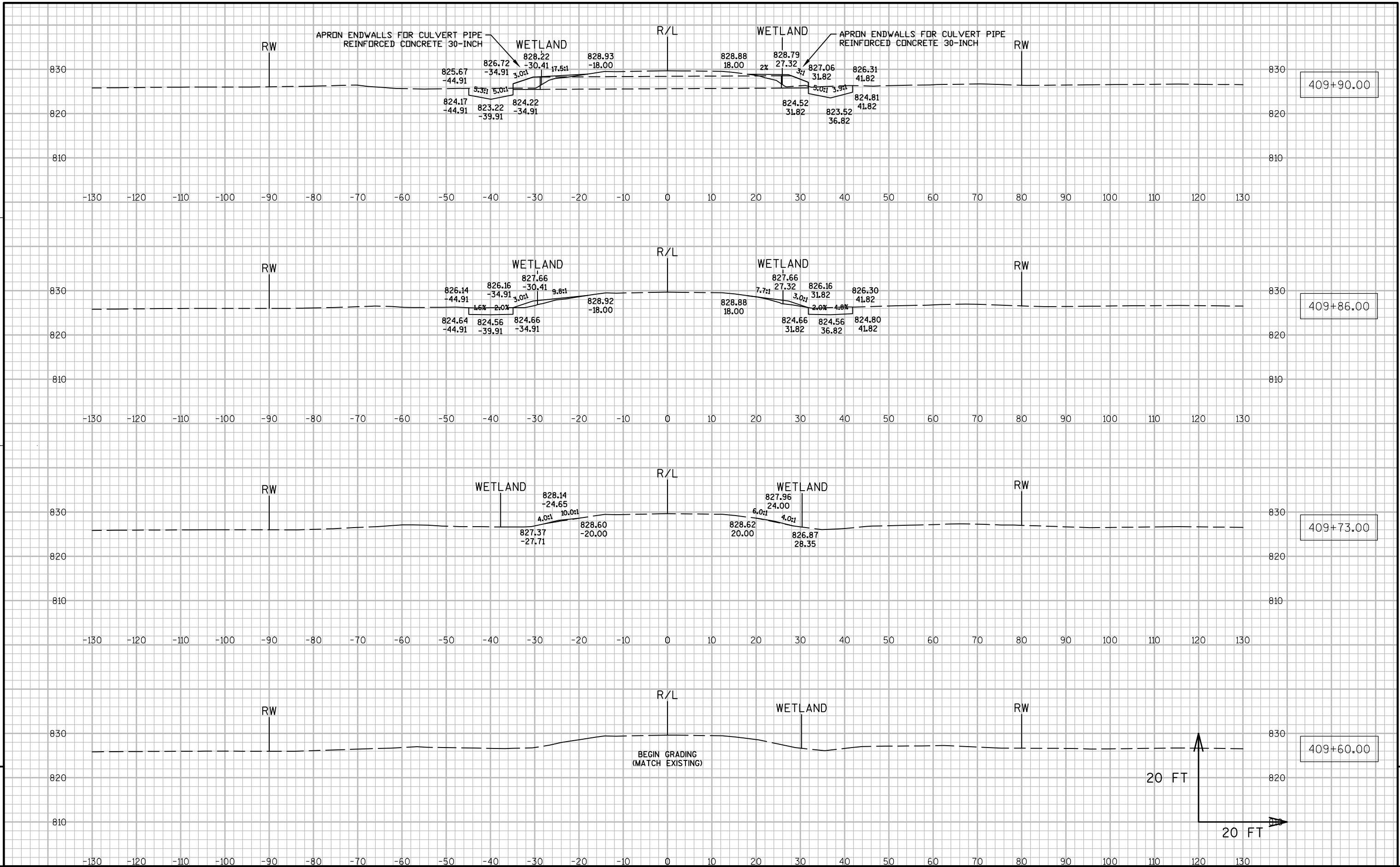
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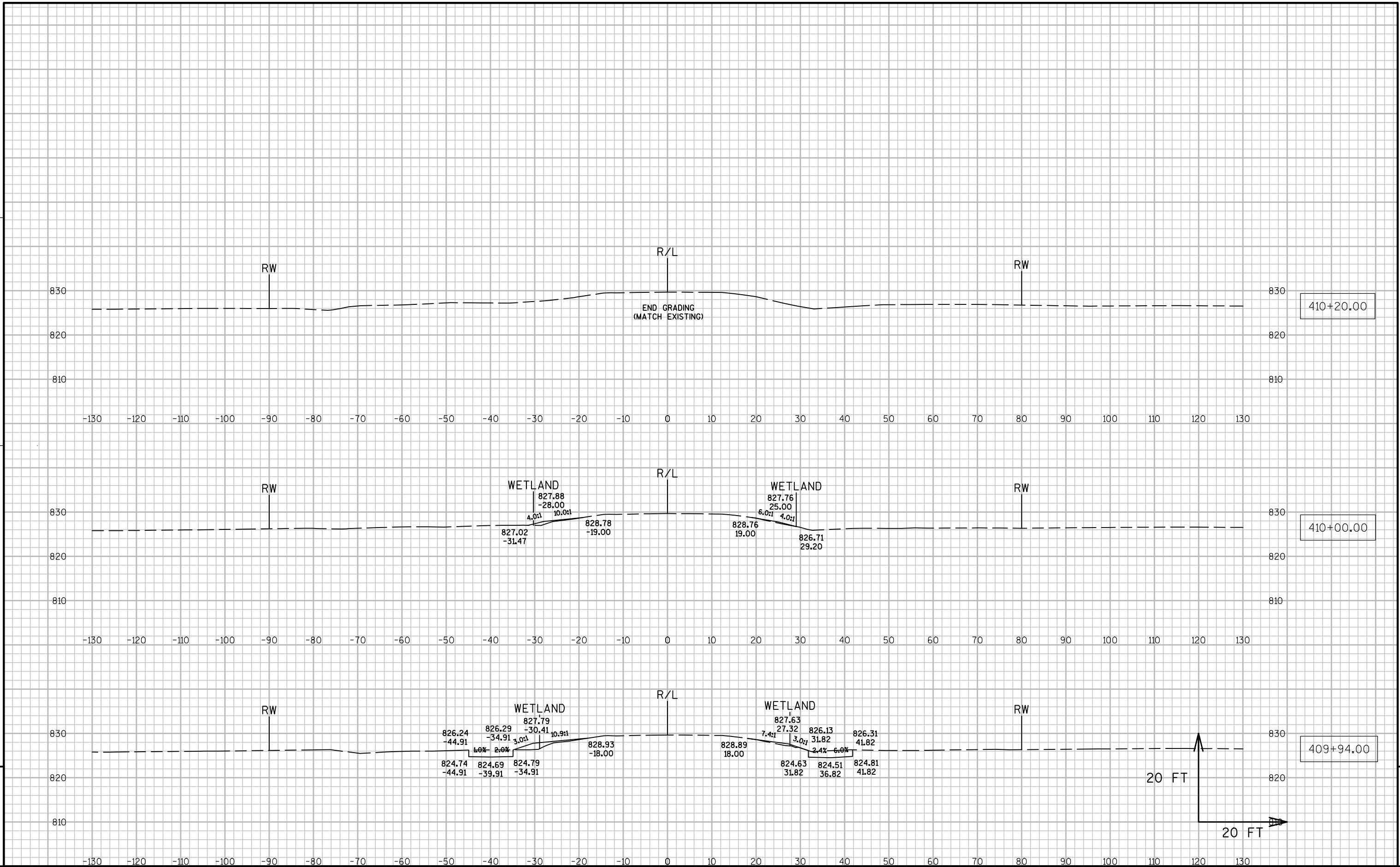


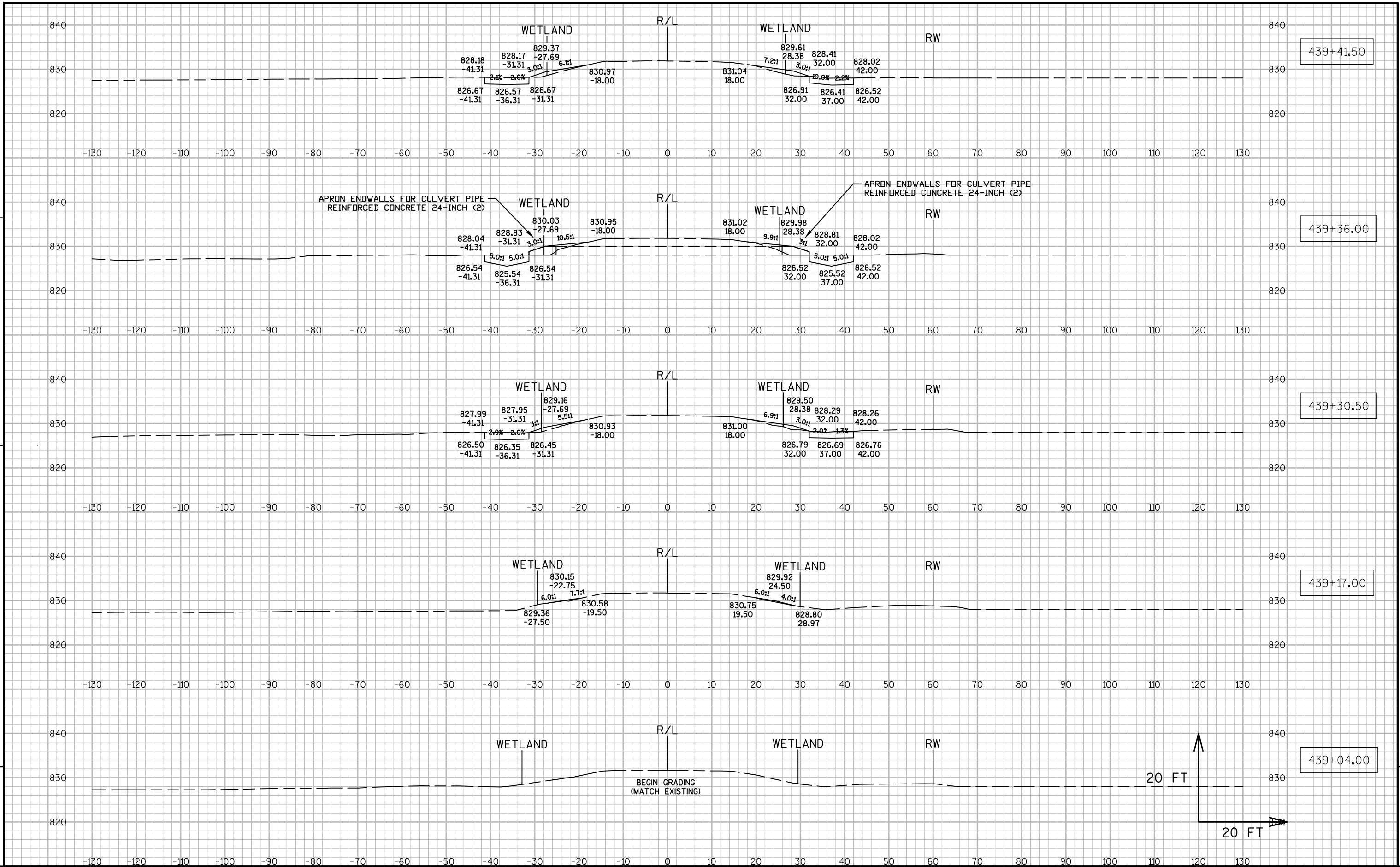


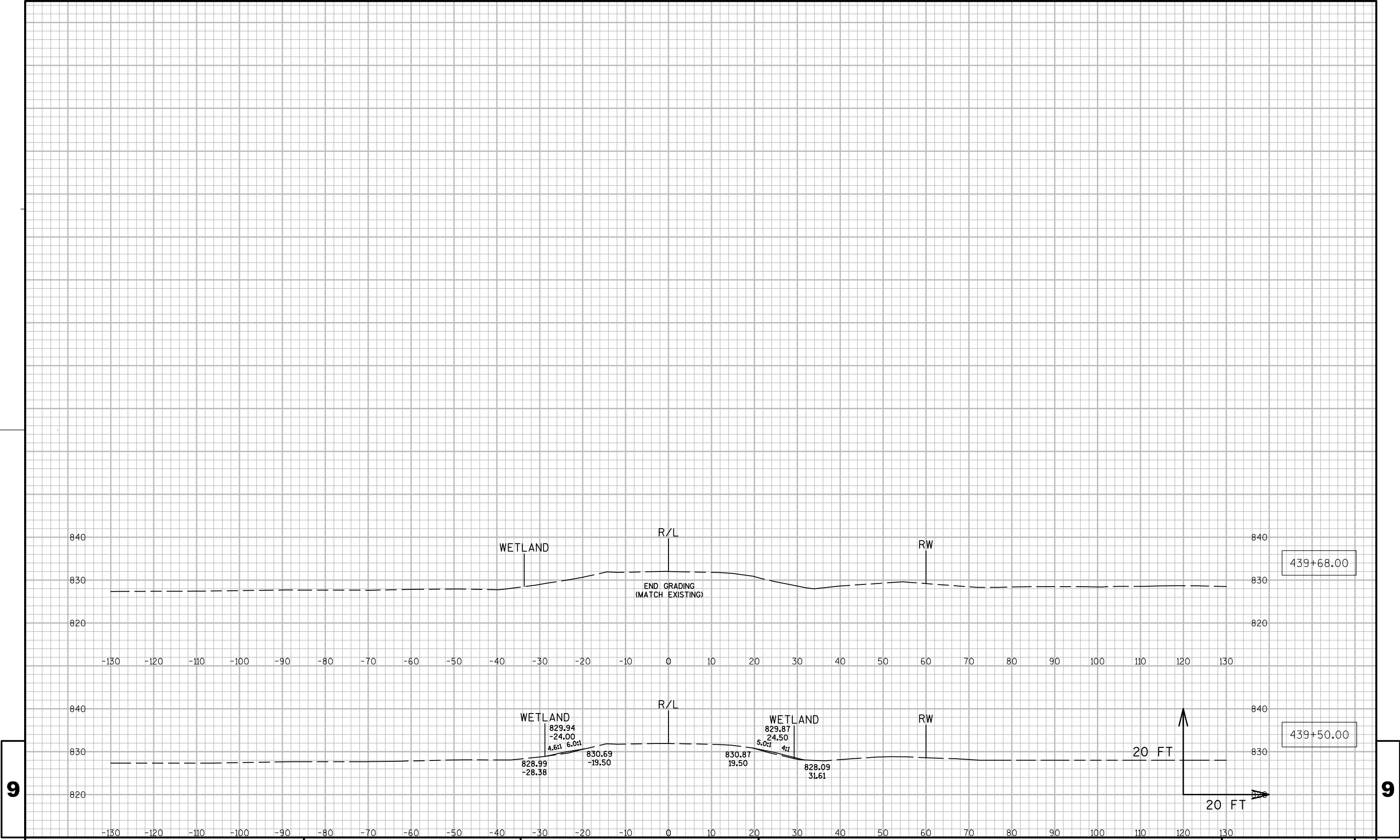
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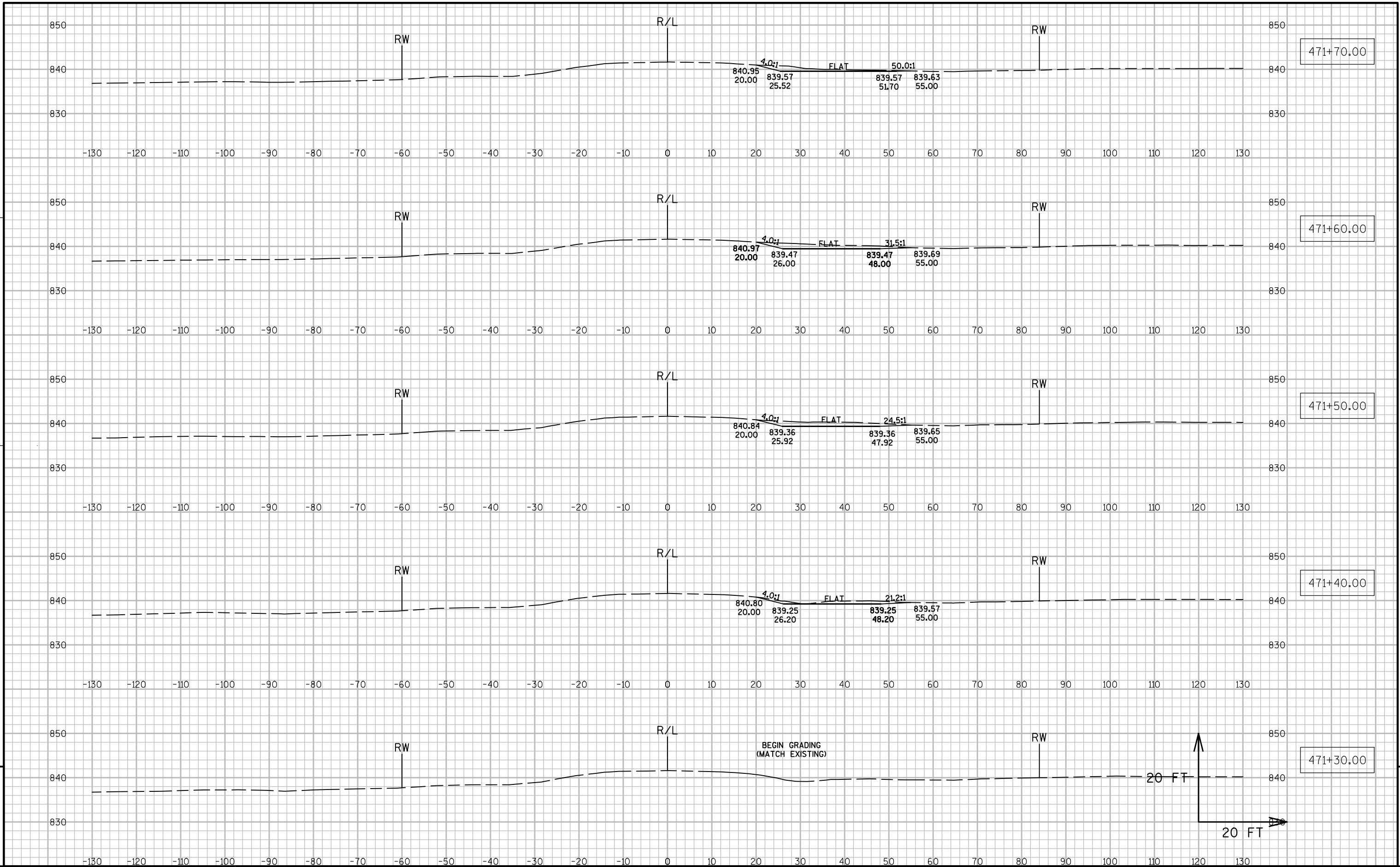




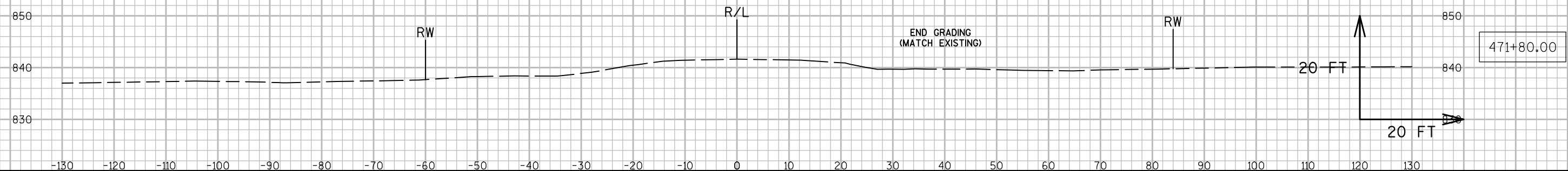


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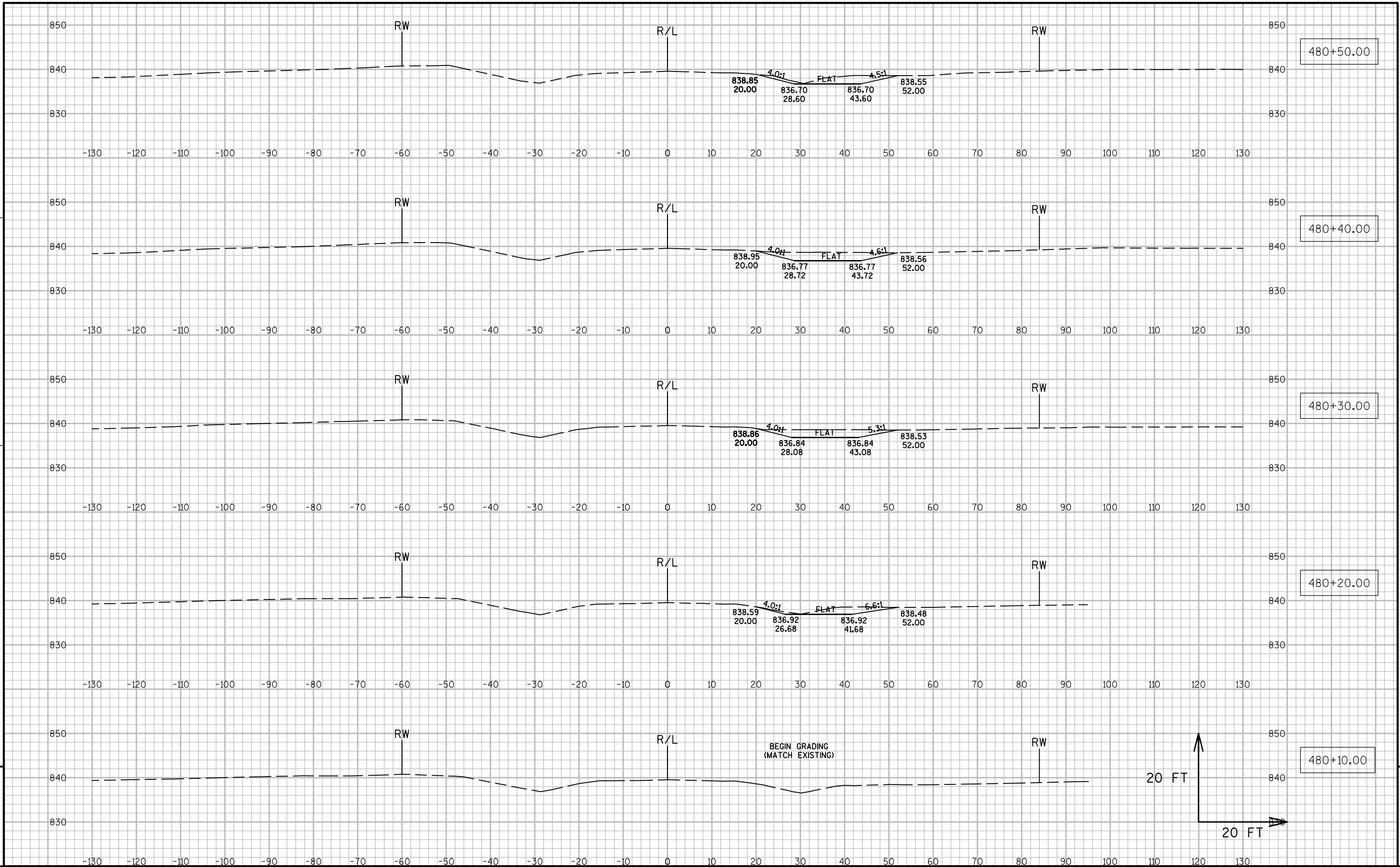
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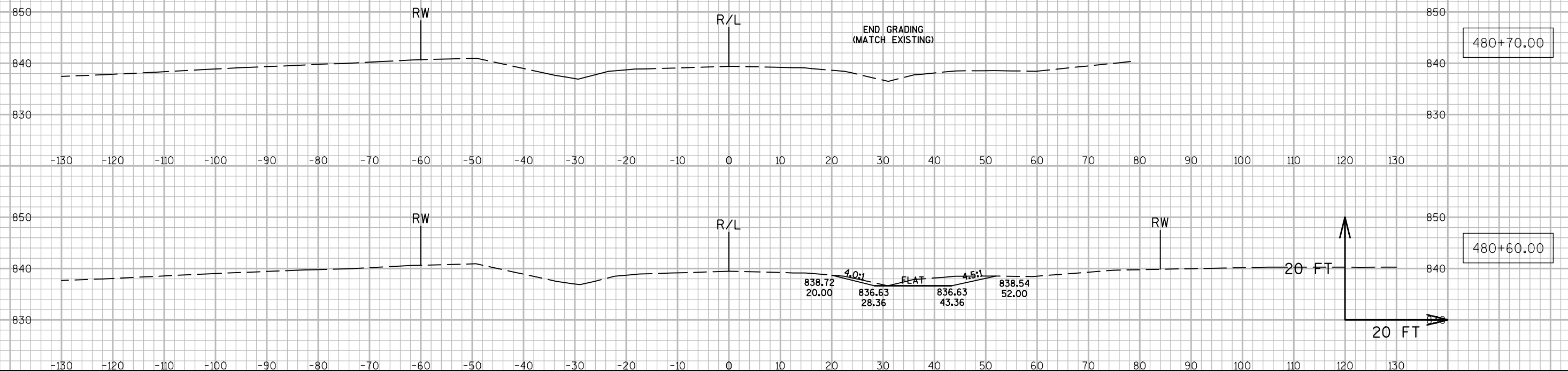
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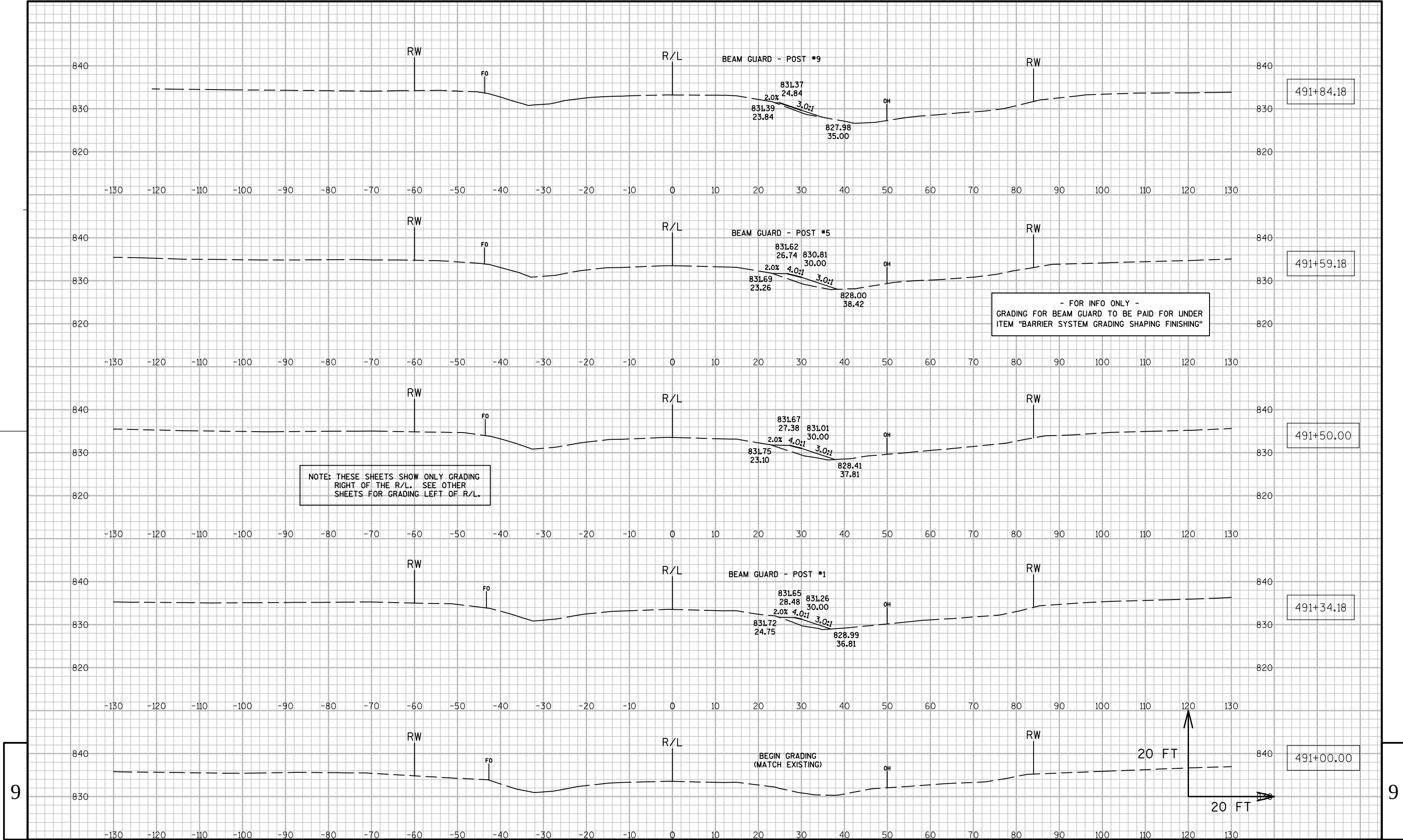


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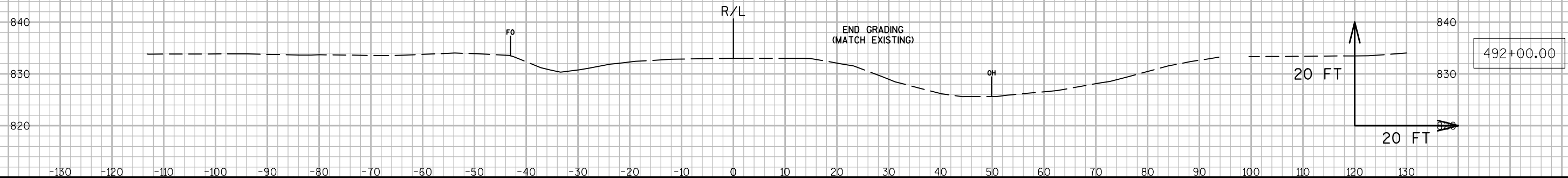


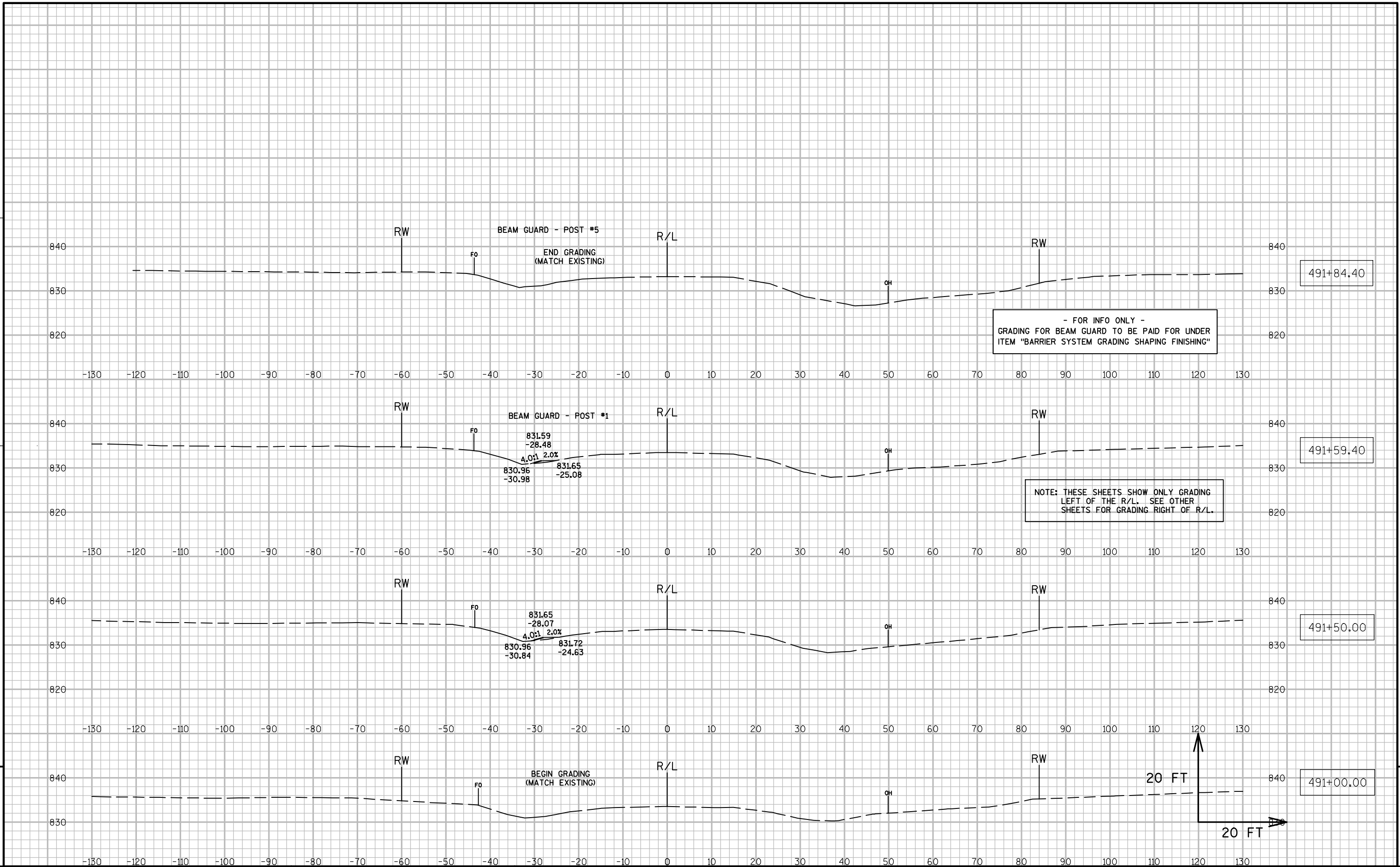
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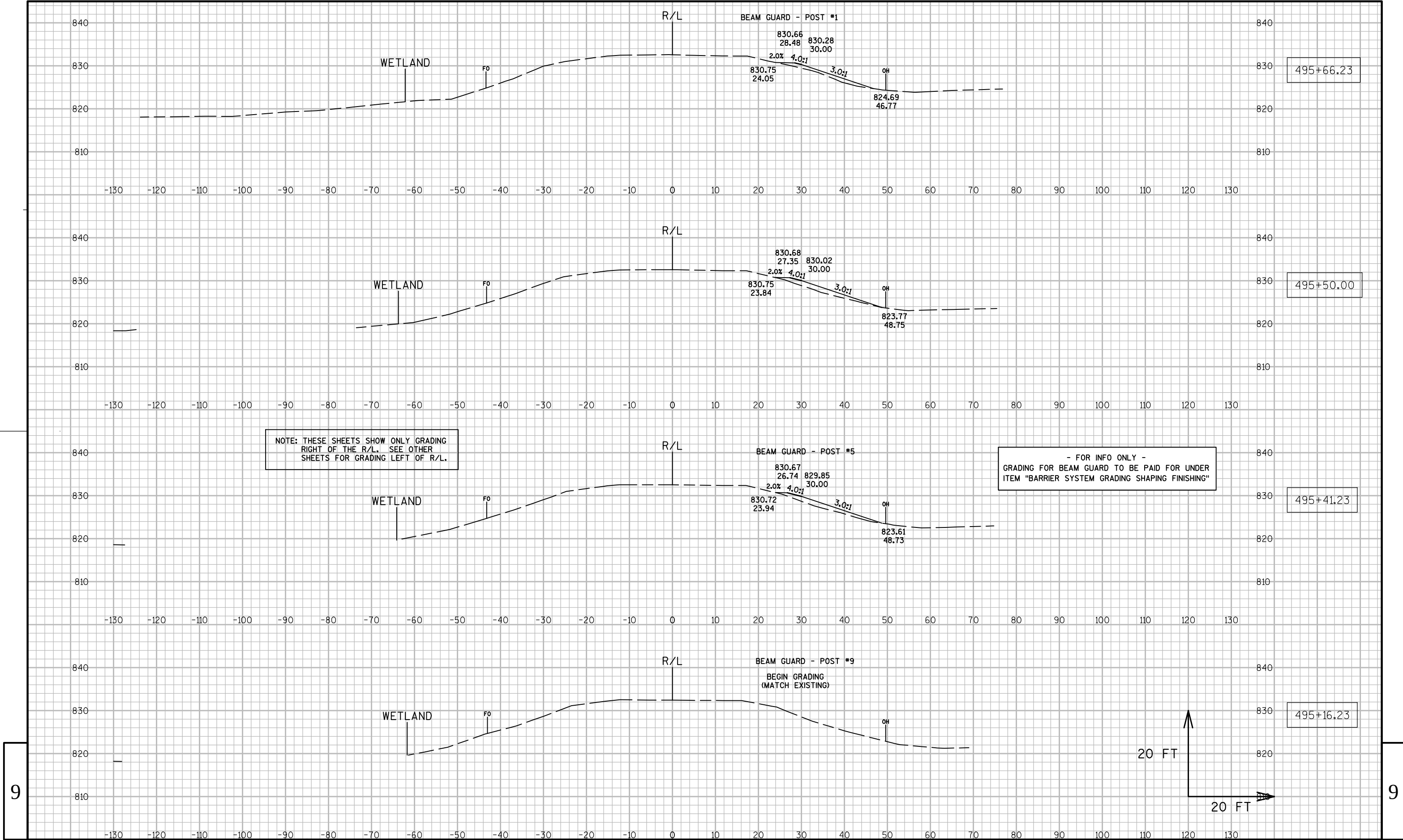
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ITEM "BARRIER SYSTEM GRADING SHAPING FINISHING"



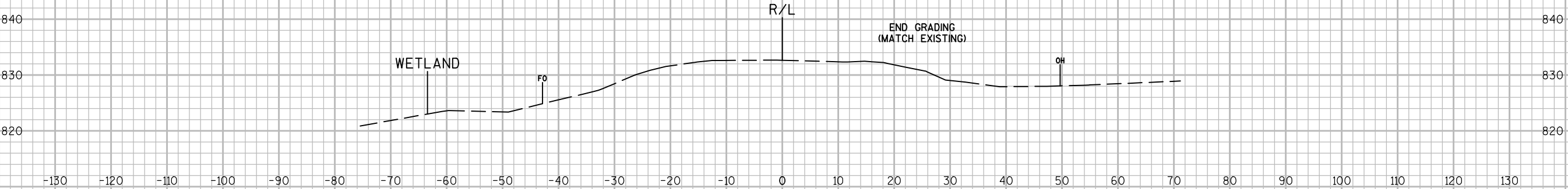




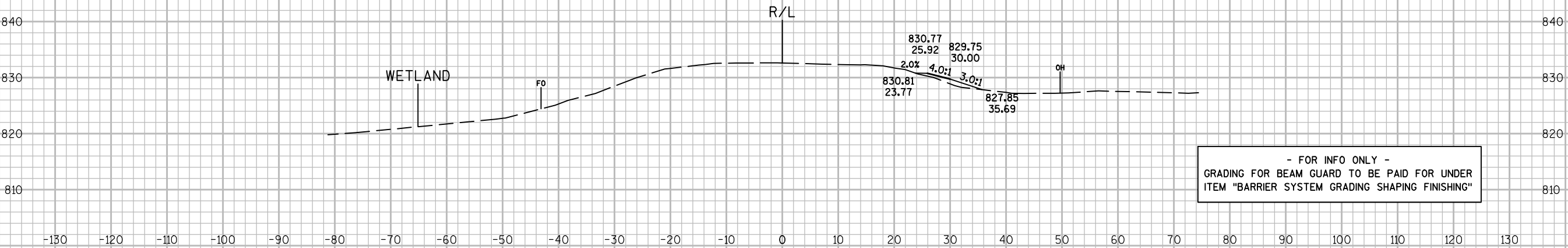
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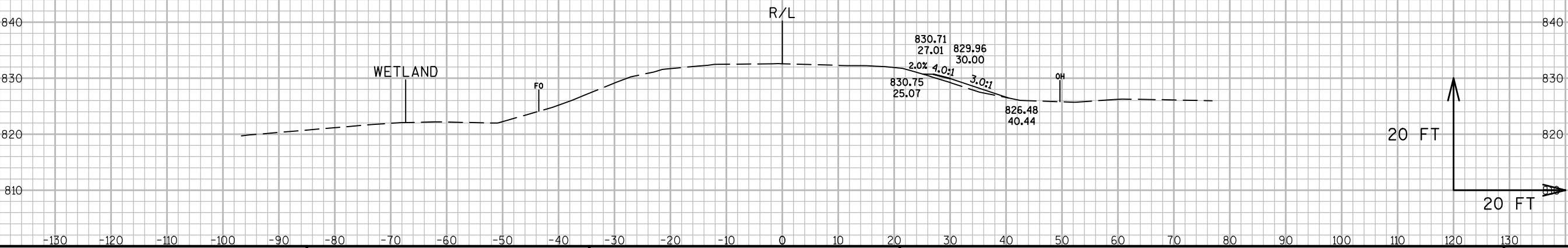
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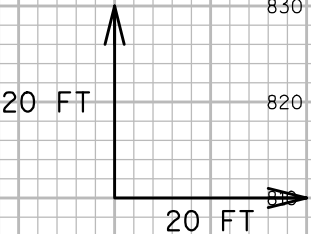
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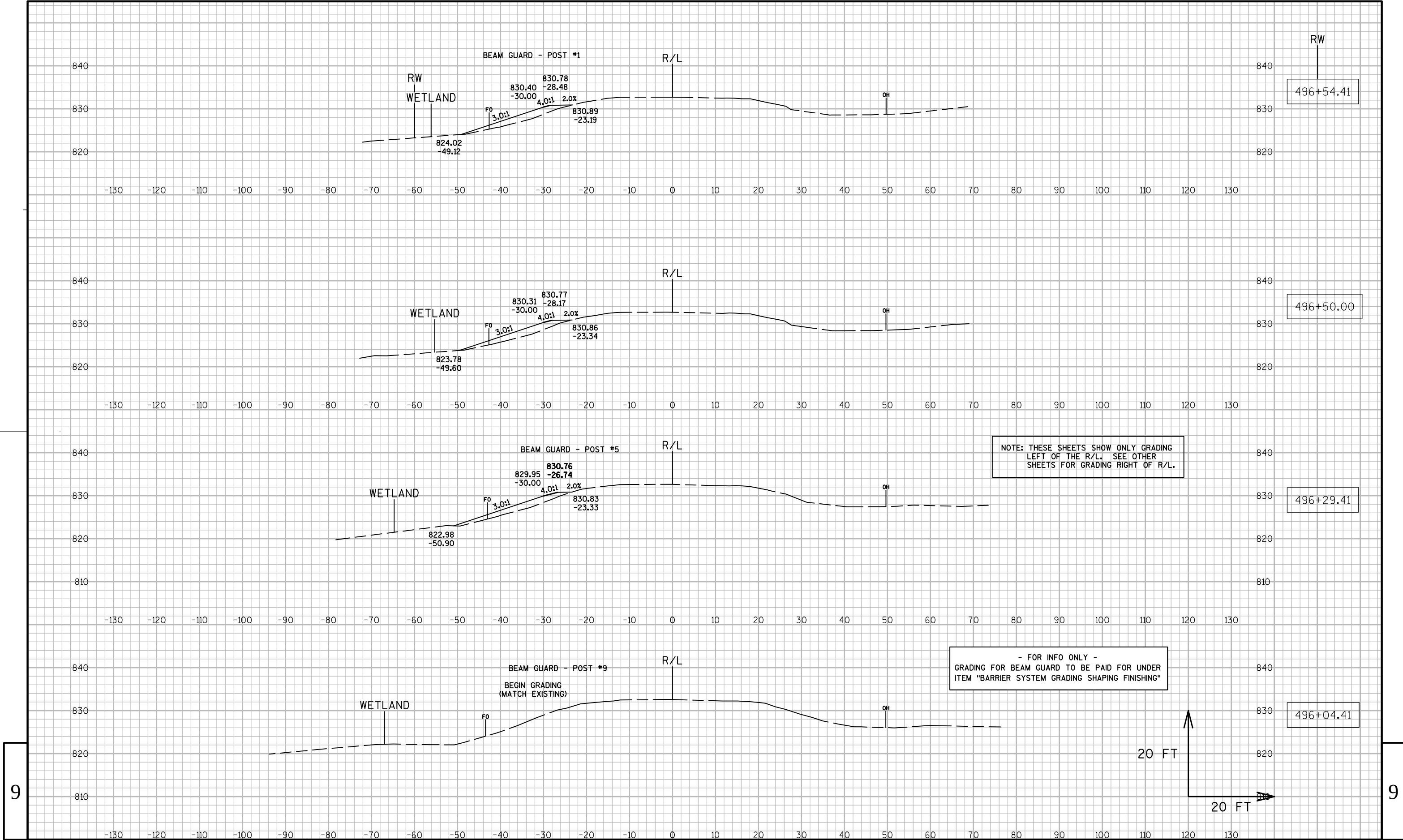


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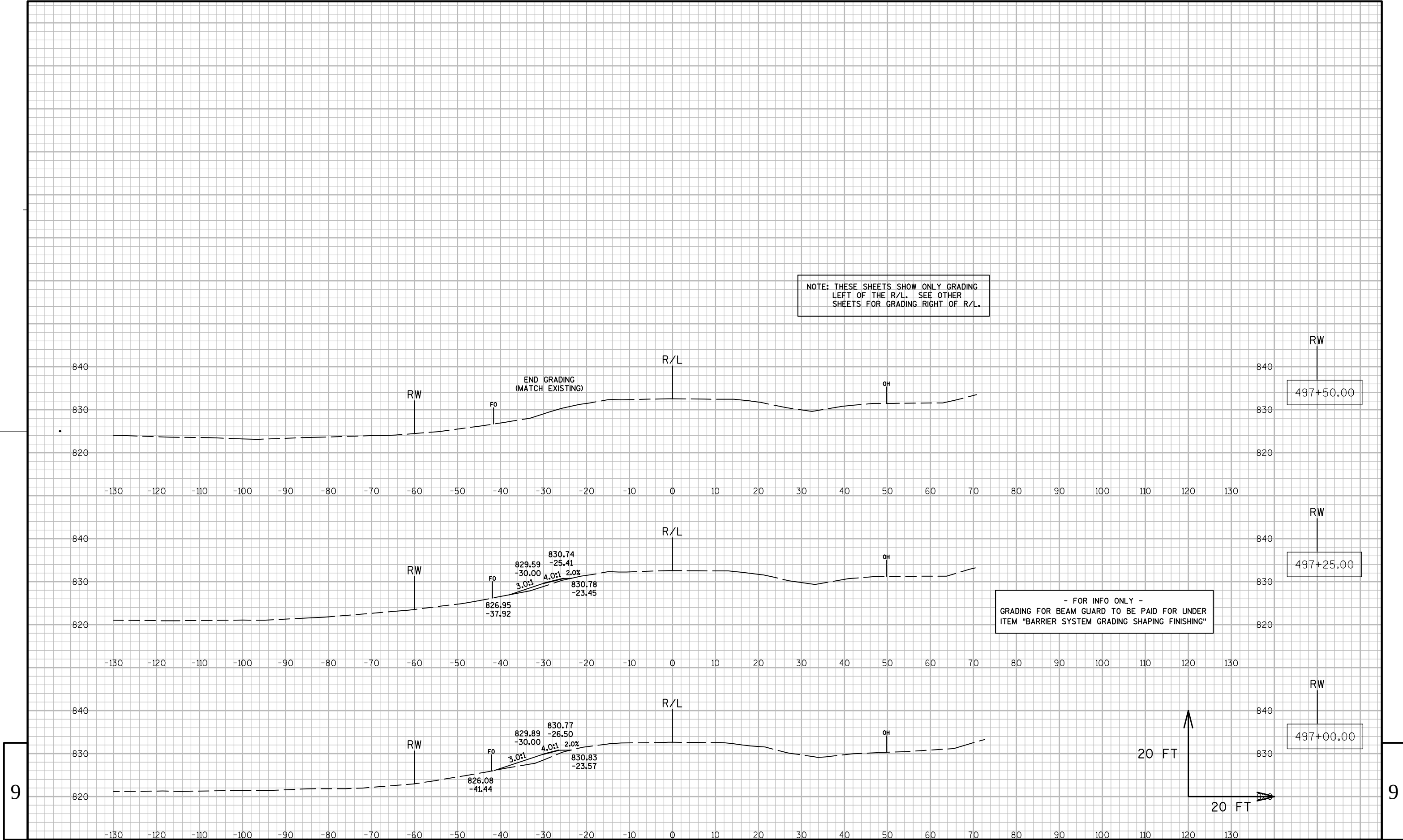
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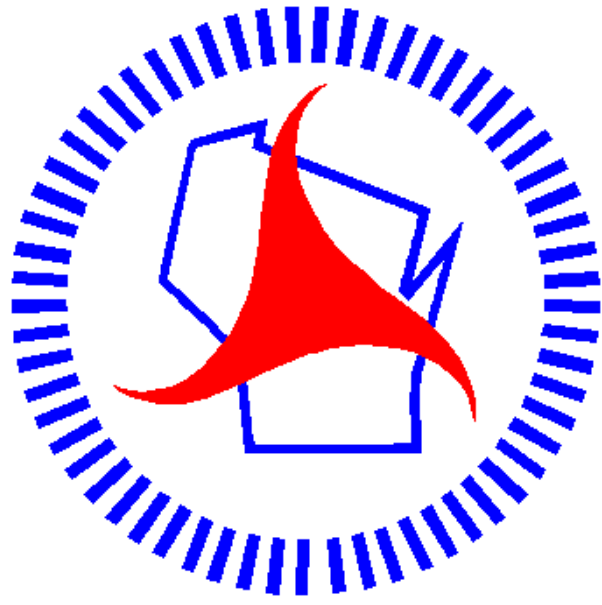


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Notes



Wisconsin Department of Transportation

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