SEPTEMBER 2020

ORDER OF SHEETS

Section No. 1 Section No. 2 Typical Sections and Details

Estimate of Quantities Section No. 3 Section No. 3 Miscellaneous Quantities

Standard Detail Drawings Sign Plates

TOTAL SHEETS = 96

DESIGN DESIGNATION _ STH 67 TO

A.A.D.T. 2019 = 3,600-4,400 A.A.D.T. = 4,500-5,500 D.H.V. = 533-651 = 60/40

= 7.3% DESIGN SPEED = 60 MPH **ESALS**

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

WOODED OR SHRUB AREA

MARSH AREA

PROFILE GRADE LINE ORIGINAL GROUND MARSH OR ROCK PROFILE (To be noted as such) SPECIAL DITCH GRADE ELEVATION CULVERT (Profile View) UTILITIES

WATER

UTILITY PEDESTAL

TELEPHONE POLE

POWER POLE

ELECTRIC FIBER OPTIC SANITARY SEWER STORM SEWER TELEPHONE

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BEGIN PROJECT 3130-06-60

STA 20+45

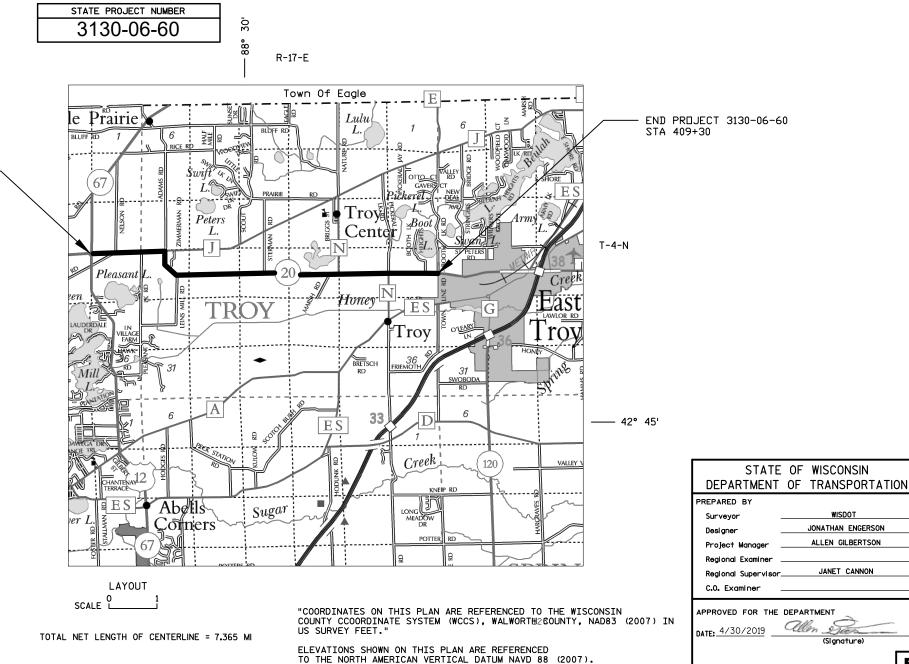
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WHITEWATER - EAST TROY

STH 67 TO TOWNLINE ROAD

STH 20 WALWORTH COUNTY



FILE NAME: N:\PDS\C3D\CAD\31300630\010101_TI.DWG

E

JONATHAN ENGERSON

STATE OF WISCONSIN

FEDERAL PROJECT

CONTRACT

PROJECT

WISC 2020140

STATE PROJECT

3130-06-60

UTILITY AND GENERAL CONTACTS:

MS. NICOLE SMULLEN

WE ENERGIES (ELECTRIC) 333 W. EVERETT ST - A299 MILWAUKEE, WI 53203

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NICOLE.SMULLEN@WECENERGYGROUP.COM

MS. EILEEN SUHM, VILLAGE CLERK

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EAST TROY, WI 53120 0166 PHONE: (262) 642-6255 EXT. 1482

FAX: (262) 642-6259

MR. DERRIN WOLFORD, SIGNAL OPERATIONS LEAD WORK

WISDOT SIGNALS 141 NW BARSTOW PO BOX 798

WAUKESHA, WI 53187 0798 PHONE: (262) 521-4409

DERRIN.WOLFORD@DOT.WI.GOV

MS. MICHELE STUTE, TOWN CLERK

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CLERKTREAS@TOWNOFTROY.COM

MR. STEVE CRAMER, UTILITY COORD.

CHARTER COMMUNICATIONS
1320 N. MARTIN LUTHER KING JR. DR.

MILWAUKEE, WI 53212 PHONE: (414) 277-4045 FAX: (414) 277-0638

WIS.ENGINEERING@CHARTER.COM

OTHER CONTACTS

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CRAIG WEBSTER
DNR SERVICE CENTER

DNR SERVICE CENTER 141 NW BARSTOW STREET

ROOM 180

WAUKESHA, WI 53188 PHONE: (262) 574-2141

CRAIG.WEBSTER@WISCONSIN.GOV

SEWRPC CONTACT
JOHN WASHBURN
W239 N1812 ROCKWOOD DR.

PO BOX 1607

WAUKESHA, WI 53187-1607 PHONE : (262) 547-6721 CELL: (262) 953-4295

JWASHBURN@SEWRPC.ORG

HMA PAVING

2" HMA PAVEMENT

2" - 4LT 58-28 S

UPPER LAYER

<u>6" HMA BASE PATCHING ASPHALTIC</u>

HMA ASPHALTIC SURFACE TO BE PLACED WITH MAX OF 6" LIFTS

GENERAL NOTES

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

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

THE LOCATIONS OF JOINTS IN THE HMA PAVEMENT SHALL BE APPROVED BY THE ENGINEER.

THE CONTRACTOR WILL MAINTAIN ACCESS TO ALL DRIVEWAYS AND BUSINESSES AT ALL TIMES.

VERTICAL BUTT JOINTS WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE. BUTT JOINTS SHALL BE INCIDENTAL TO ASPHALTIC SURFACE MILLING AND WILL NOT BE PAID SEPERATELY AS SAWED JOINTS.

TRAFFIC CONTROL LOCATIONS AS SHOWN IN THE PLAN ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

NO TREES OR SHRUBS SHALL BE REMOVED UNLESS DESIGNATED FOR REMOVAL BY THE ENGINEER.

COORDINATE WITH SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC) FOR THE PERPETUATION OF SECTION CORNER (PUBLIC LAND SURVEY SYSTEM - PLSS) MONUMENTS. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH SEWRPC AND THE WISDOT PROJECT MANAGER THROUGHOUT THE PERPETUATION PROCESS. THE CONTRACTOR WILL CONTACT SEWRPC AT (262) 953-4295 AT LEAST TWO WEEKS BEFORE STARTING CONSTRUCTION OPERATIONS OR THE PRECONSTRUCTION MEETING TO ALLOW FOR SECTION CORNER MONUMENT PERPETUATION COORDINATION.

SECTION CORNERS WITHIN THE ROADWAY WILL BE ADDRESSED WITH PAVING RINGS OR FULL DEPTH REPLACEMENT OF THE MONUMENT. THE SEWRPC REPRESENTATIVE WILL MAKE THE DETERMINATION OF THE EXTENT OF THE WORK INVOLVED WITH THE SECTION CORNER MONUMENTS BASED ON INSPECTION DURING CONSTRUCTION.

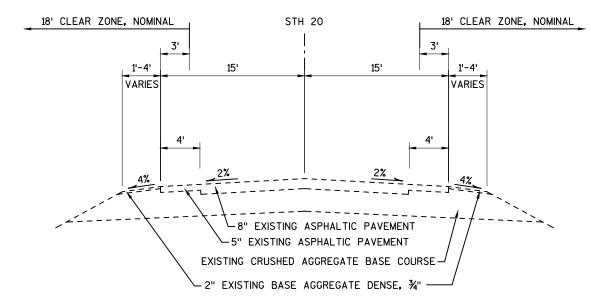


PLOT SCALE : 1:1

PROJECT NO: 3130-06-60 HWY: STH 20 COUNTY: WALWORTH GENERAL NOTES SHEET: E

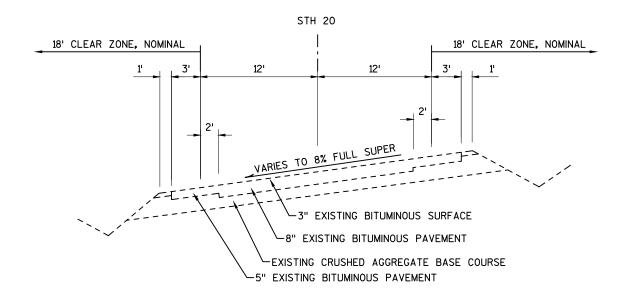
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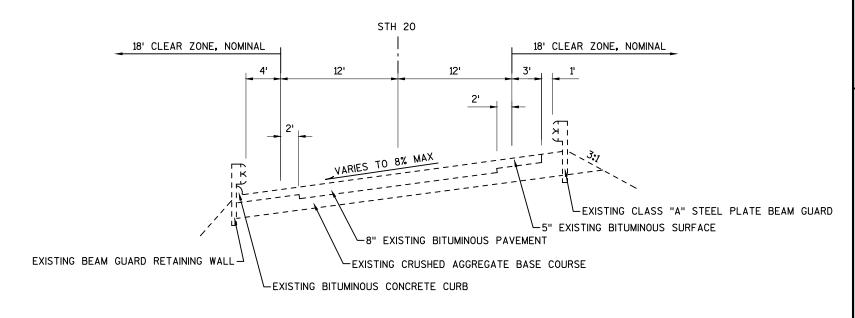
TYPICAL EXISTING SECTION STH 20 - (GENERAL)

STH 67 TO TOWNLINE ROAD STA 20+00 - STA 403+00



TYPICAL EXISTING SECTION STH 20

STA 125+92.90 - STA 134+54.0



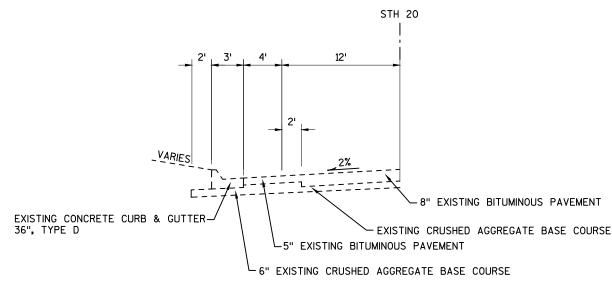
TYPICAL EXISTING SECTION

STH 20

STA 111+00 - STA 115+00

TRANSITIONS FROM STA 110+00 - STA 111+00

STA 115+00 - STA 116+00



TYPICAL EXISTING SECTION (HALF SECTION) STH 20 - CURB & GUTTER IN CUT AREAS

STA 233+00 - STA 236+50, LT STA 233+00 - STA 237+25, RT STA 239+75 - STA 240+75, RT STA 241+50 - STA 246+00, LT STA 268+00 - STA 273+00, RT STA 272+00 - STA 273+00, LT STA 396+00 - STA 398+75, RT

PROJECT NO:3130-06-60 HWY:STH 20 COUNTY:WALWORTH TYPICAL SECTION

.

SHEET

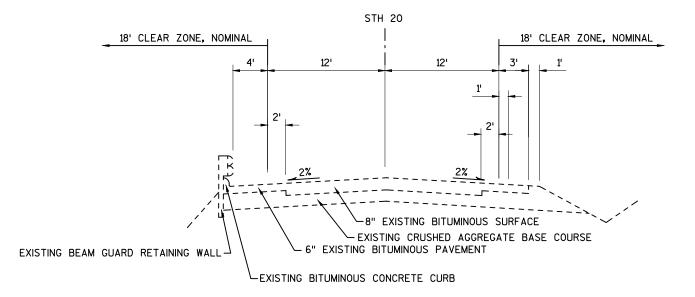
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PLOT DATE: 4/30/2019 5:24 PM

PLOT BY: ENGERSON, JONATHAN MPLOT NAME:

E

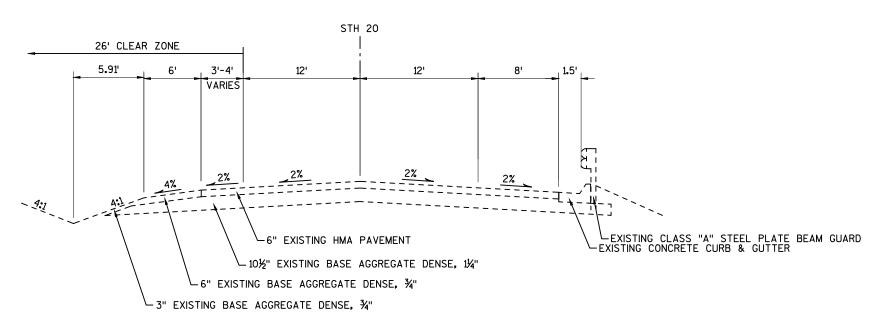
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TYPICAL EXISTING SECTION

STH 20

STA 237+30 - STA 240+00 TRANSITION SHOULDER WIDTHS: STA 240+00 - STA 241+00 STA 236+30 - STA 237+30

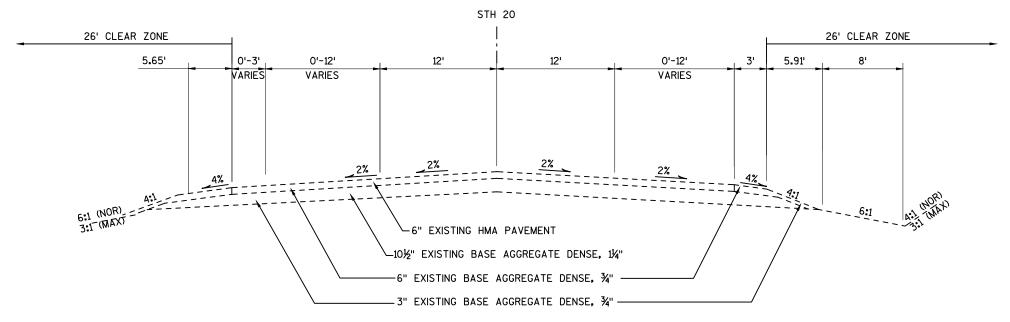


TYPICAL EXISTING SECTION STH 20

STA 395+00 - STA 400+25

PROJECT NO:3130-06-60 HWY:STH 20 COUNTY:WALWORTH TYPICAL SECTION SHEET **E**

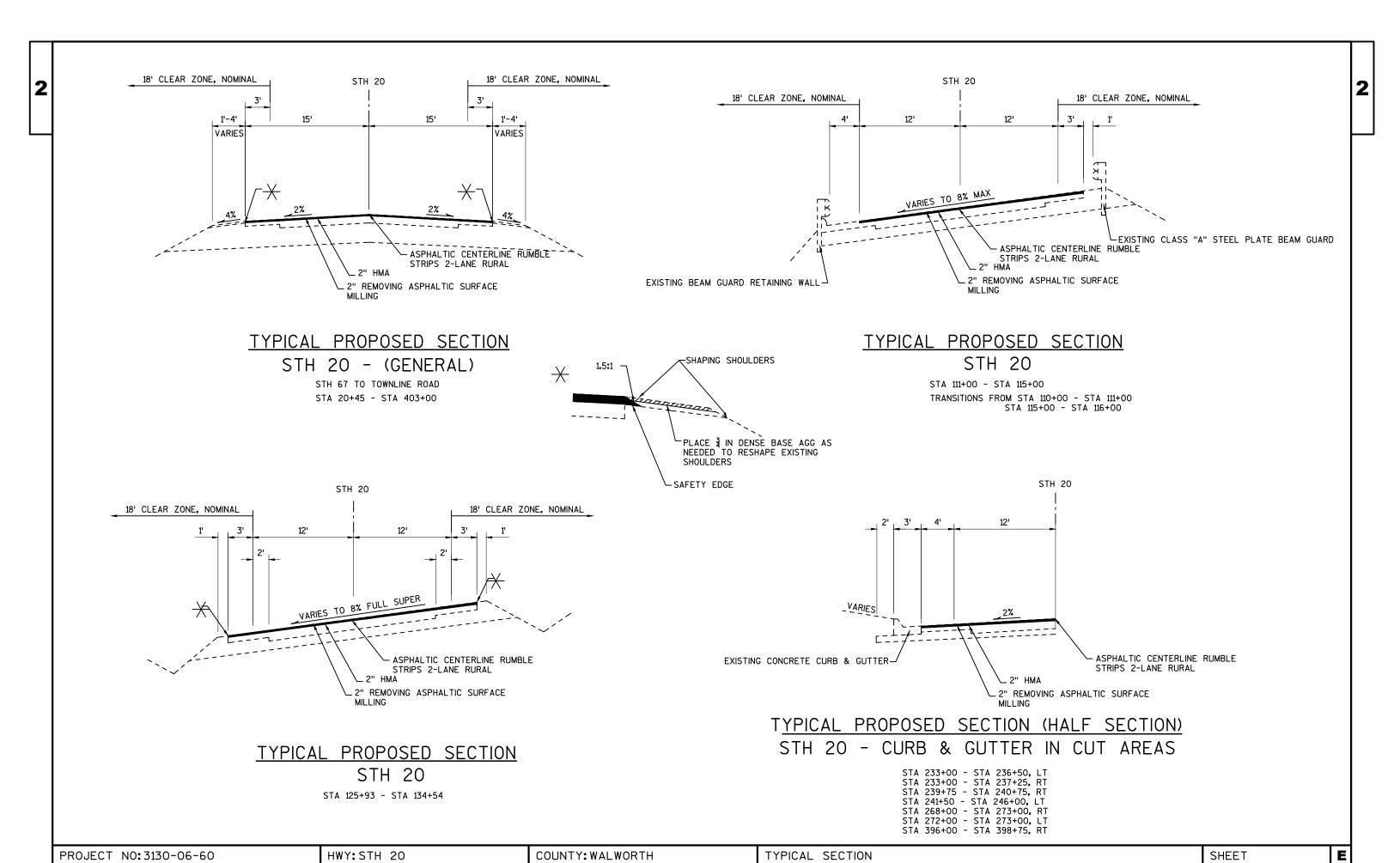
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TYPICAL EXISTING SECTION STH 20

STA 402+79 - STA 409+30

PROJECT NO:3130-06-60 HWY:STH 20 COUNTY:WALWORTH TYPICAL SECTION SHEET **E**



PLOT SCALE : 1 IN:10 FT

18' CLEAR ZONE, NOMINAL

18' CLEAR ZONE, NOMINAL

12'

ASPHALTIC CENTERLINE RUMBLE

2" REMOVING ASPHALTIC SURFACE

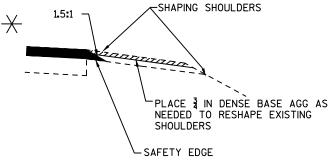
MILLING

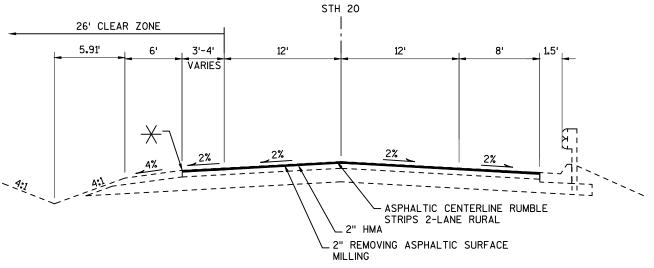
STH 20

TYPICAL PROPOSED SECTION

STH 20

STA 237+30 - STA 240+00 TRANSITION SHOULDER WIDTHS: STA 240+00 - STA 241+00 STA 236+30 - STA 237+30





TYPICAL PROPOSED SECTION

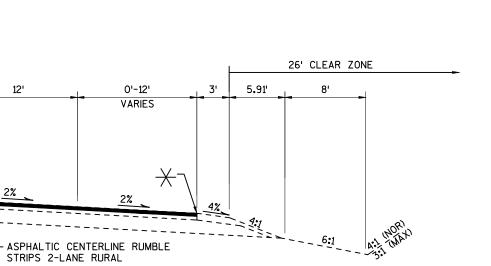
STH 20

STA 395+00 - STA 400+25

PROJECT NO:3130-06-60 HWY:STH 20 COUNTY:WALWORTH TYPICAL SECTION SHEET **E**

2





TYPICAL PROPOSED SECTION STH 20

MILLING

_ 2" REMOVING ASPHALTIC SURFACE

STH 20

12'



└SAFETY EDGE

1.5:1

SHAPING SHOULDERS

26' CLEAR ZONE

5.65

0'-12'

VARIES

0'-3'

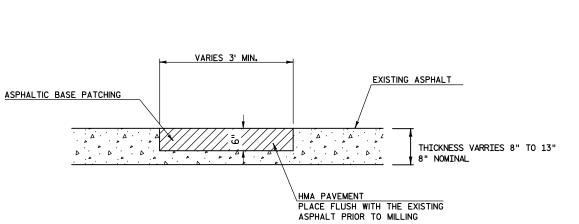
VARIES

STA 402+79 - STA 409+30

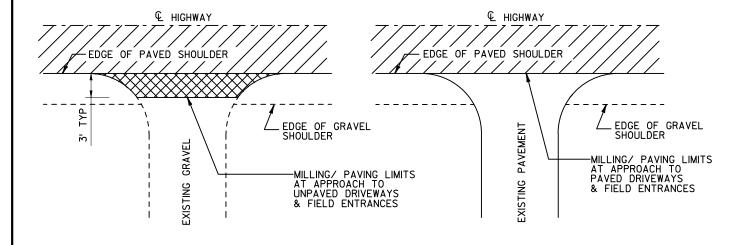
PROJECT NO:3130-06-60 HWY:STH 20 COUNTY:WALWORTH TYPICAL SECTION SHEET **E**

2





BASE PATCHING ASPHALTIC DETAIL (TYPICAL) LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD



PLAN VIEW

PLAN VIEW

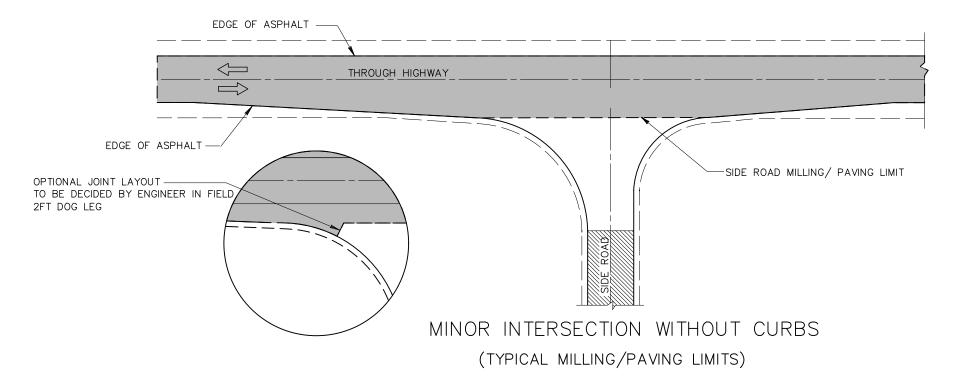
RURAL DRIVEWAY DETAIL

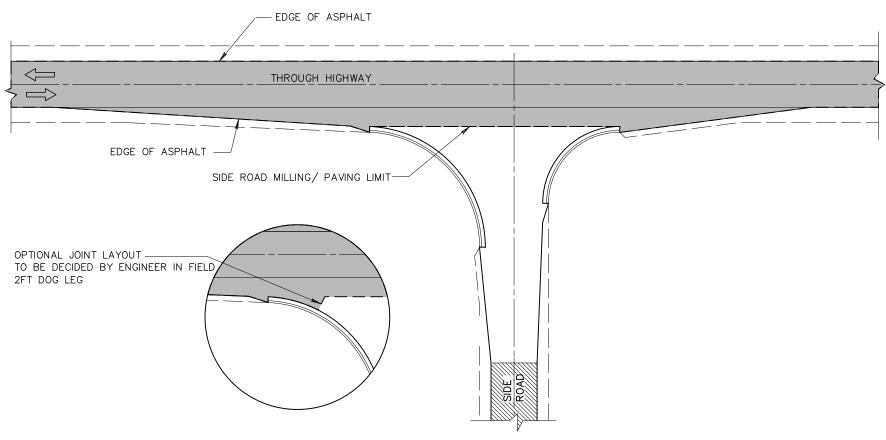
HMA PAVEMENT

2" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

PROJECT NO: 3130-06-60 HWY:STH 20 COUNTY: WALWORTH SHEET E CONSTRUCTION DETAIL

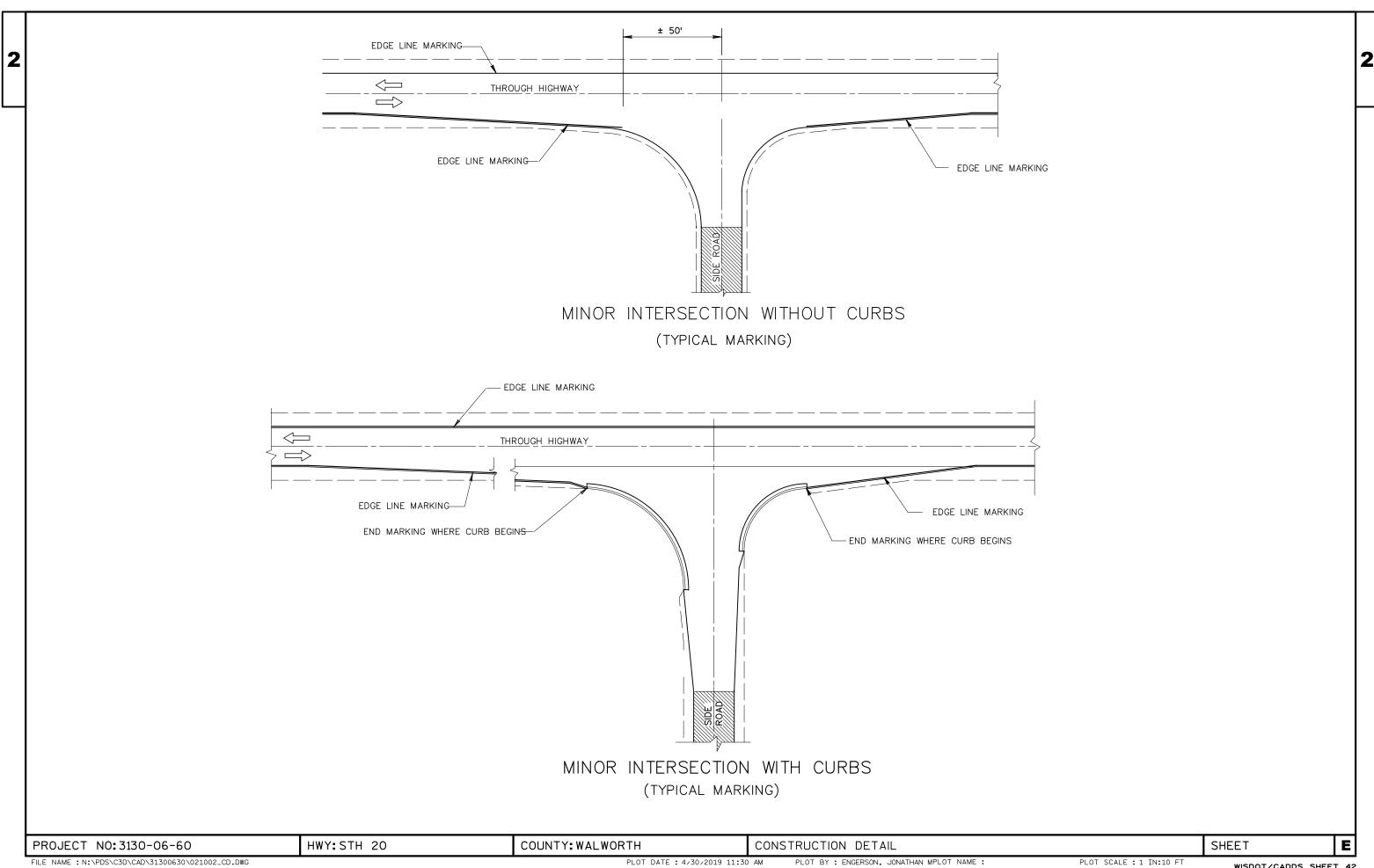
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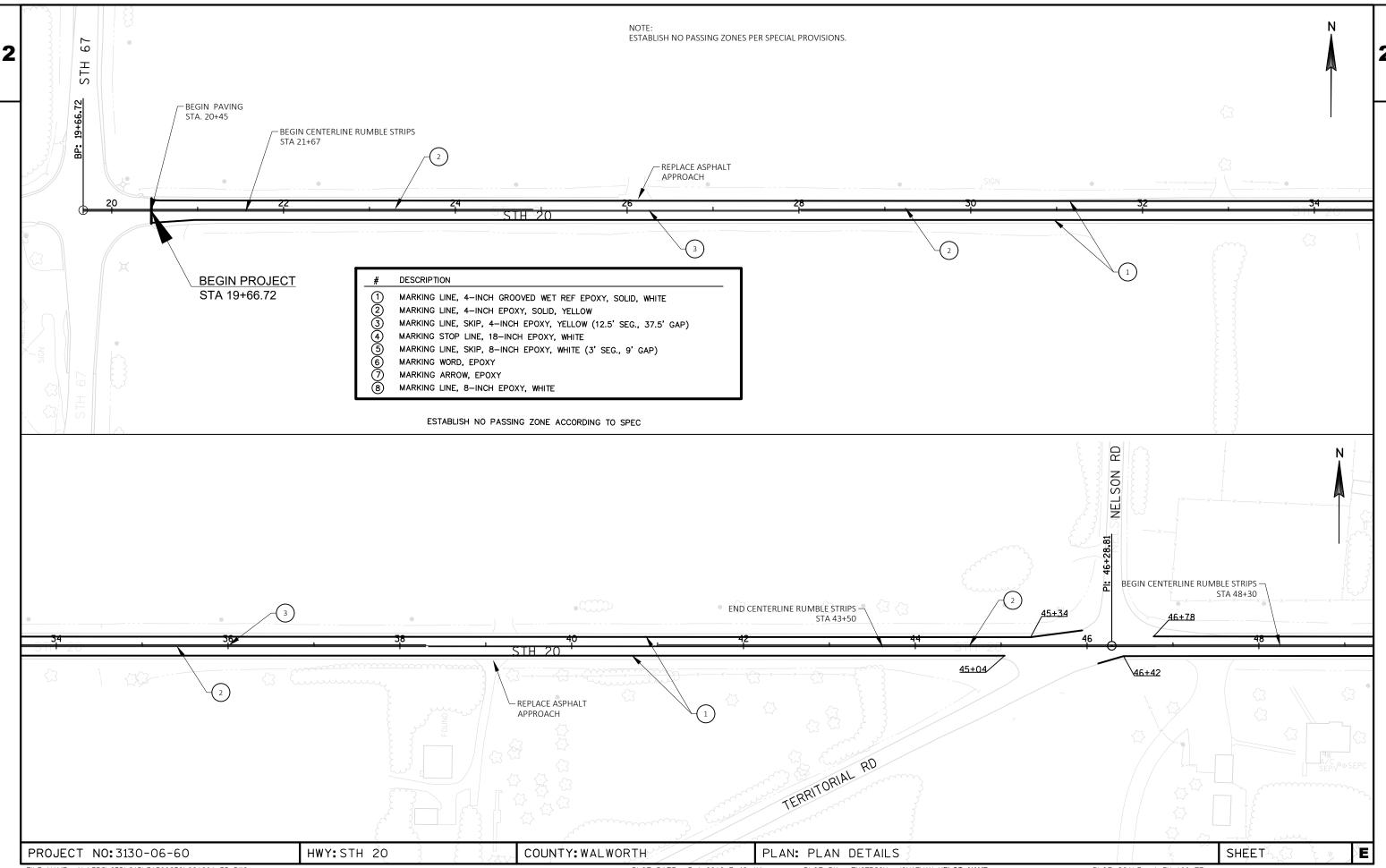
MINOR INTERSECTION WITH CURBS (TYPICAL MILLING/ PAVING LIMITS)

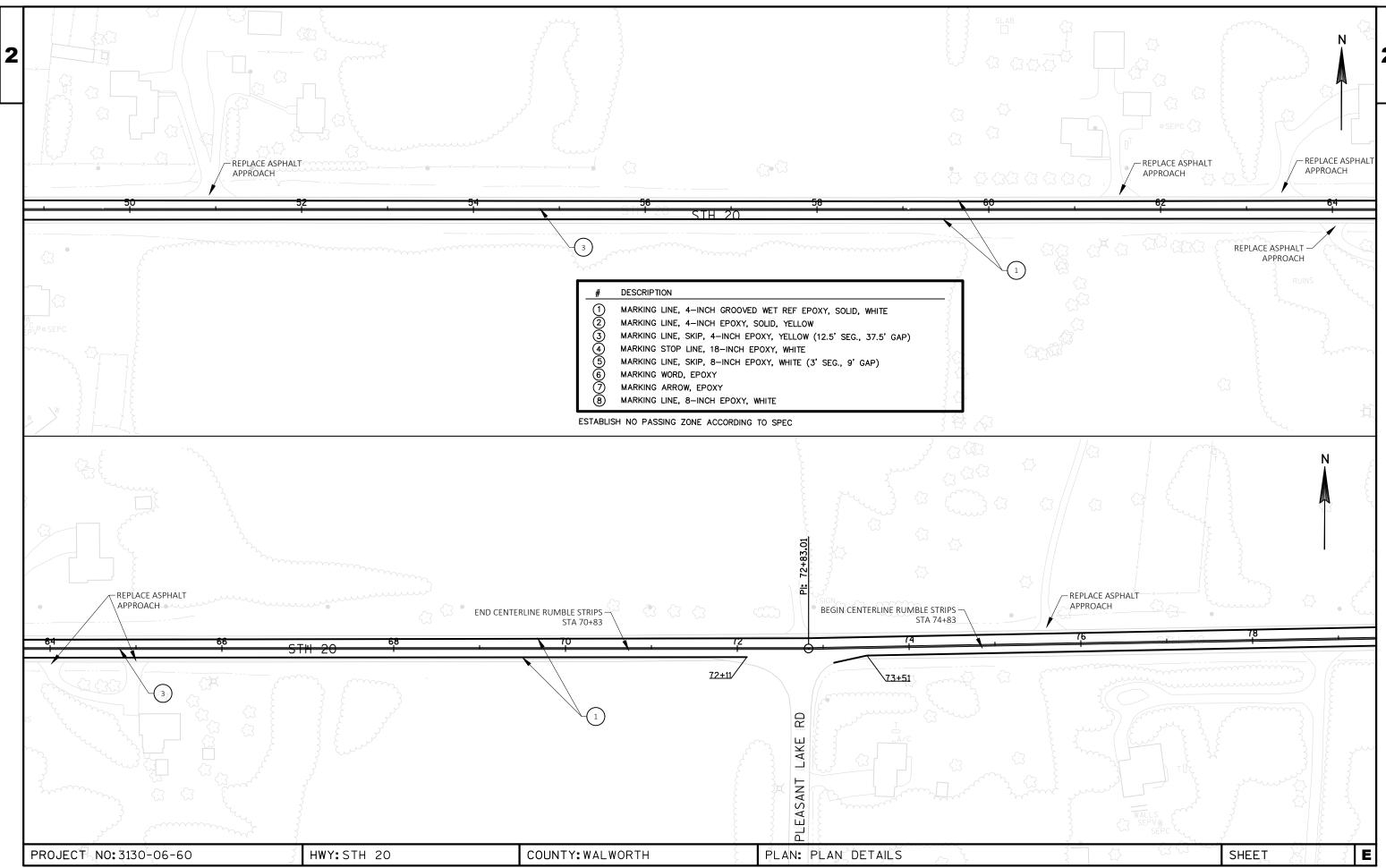
PROJECT NO:3130-06-60 HWY:STH 20 COUNTY:WALWORTH CONSTRUCTION DETAILS SHEET **E**

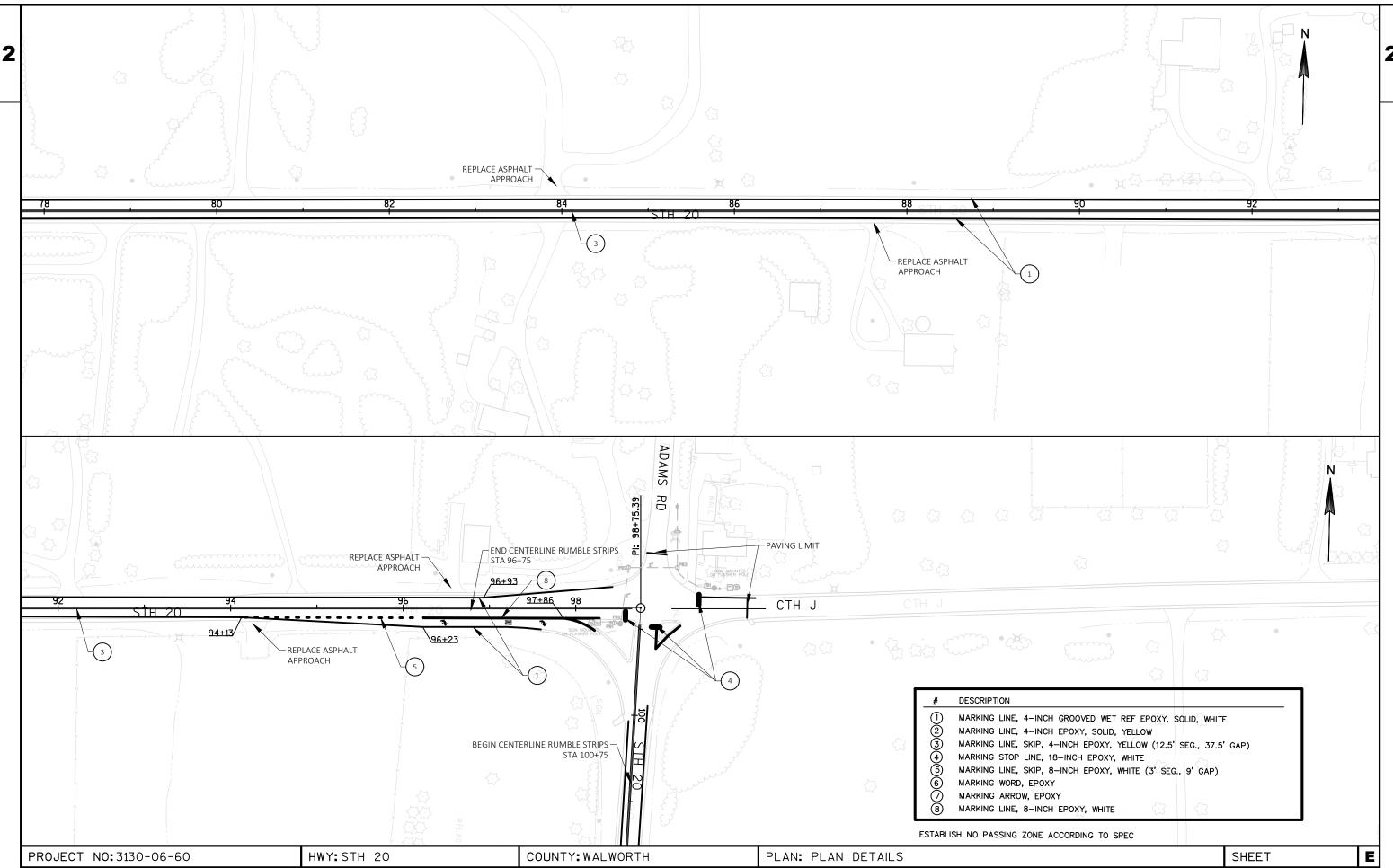


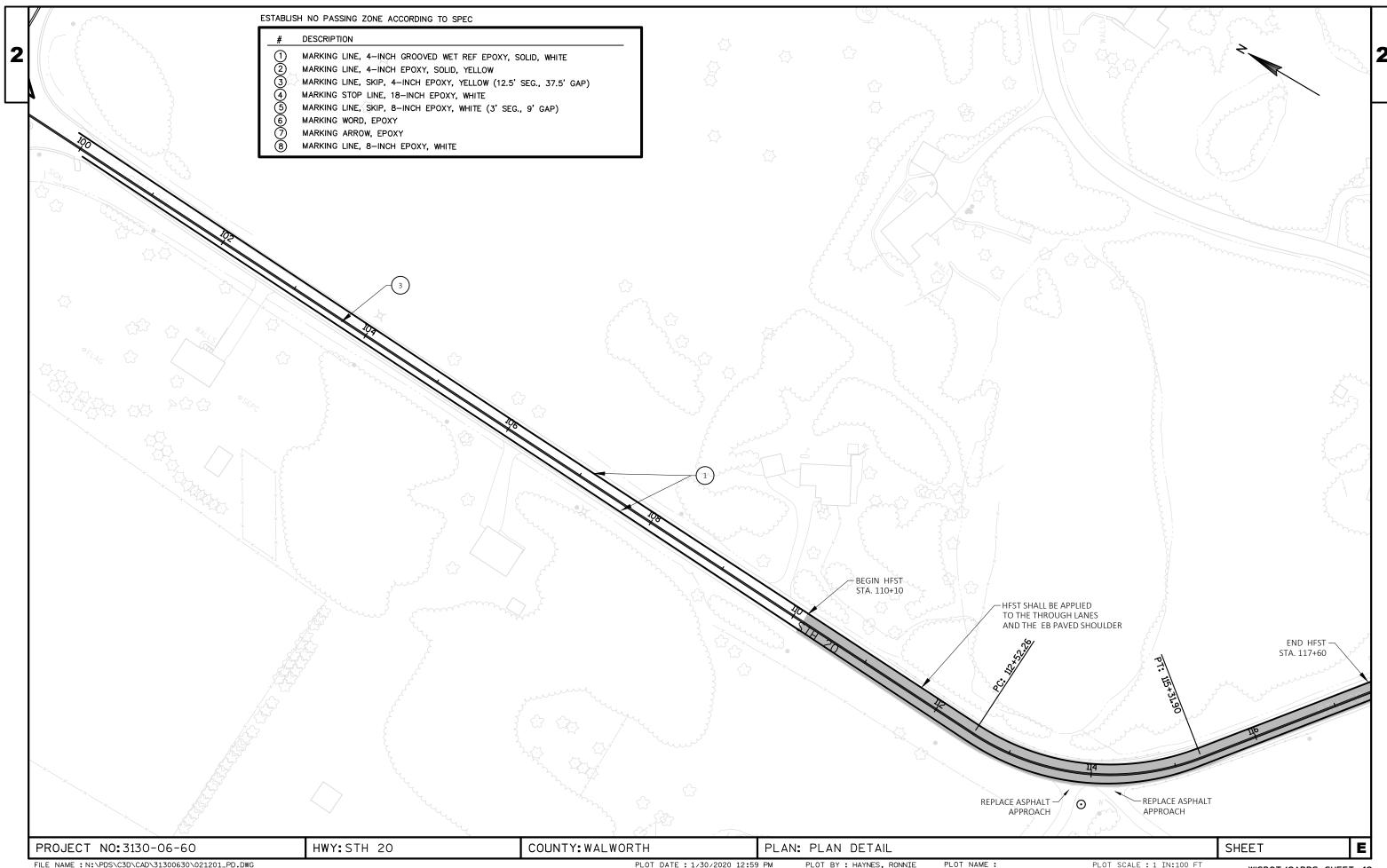
-WORK ZONE WARNING SIGN 2' BEHIND FACE OF CURB OR 6'-12' OFFSET FROM EDGE OF SHOULDER - NO CURB GENERAL NOTES FOR TRAFFIC CONTROL 1. TRAFFIC CONTROL DRUMS IN TAPERS, SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE "C", ONE WAY LIGHTS IN TAPERS ONLY, UNLESS OTHERWISE SHOWN. 2. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS. 3. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS 2-2X2 TUBULAR STEEL POSTS REFLECTIVE ORANGE. OR 1- 4X4 WOOD POST 4. ALL TRAFFIC CONTROL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS. 5. BARRICADE STRIPES ARE TO BE SLOPED DOWNWARD IN THE DIRECTIOIN OF TRAFFIC FLOW. EDGELINE PAVEMENT MARKING-TYPICAL TEMPORARY TRAFFIC CONTROL DETAIL MOUNTING ON FIXED SUPPORT LONG TERM 7 DAYS OR MORE

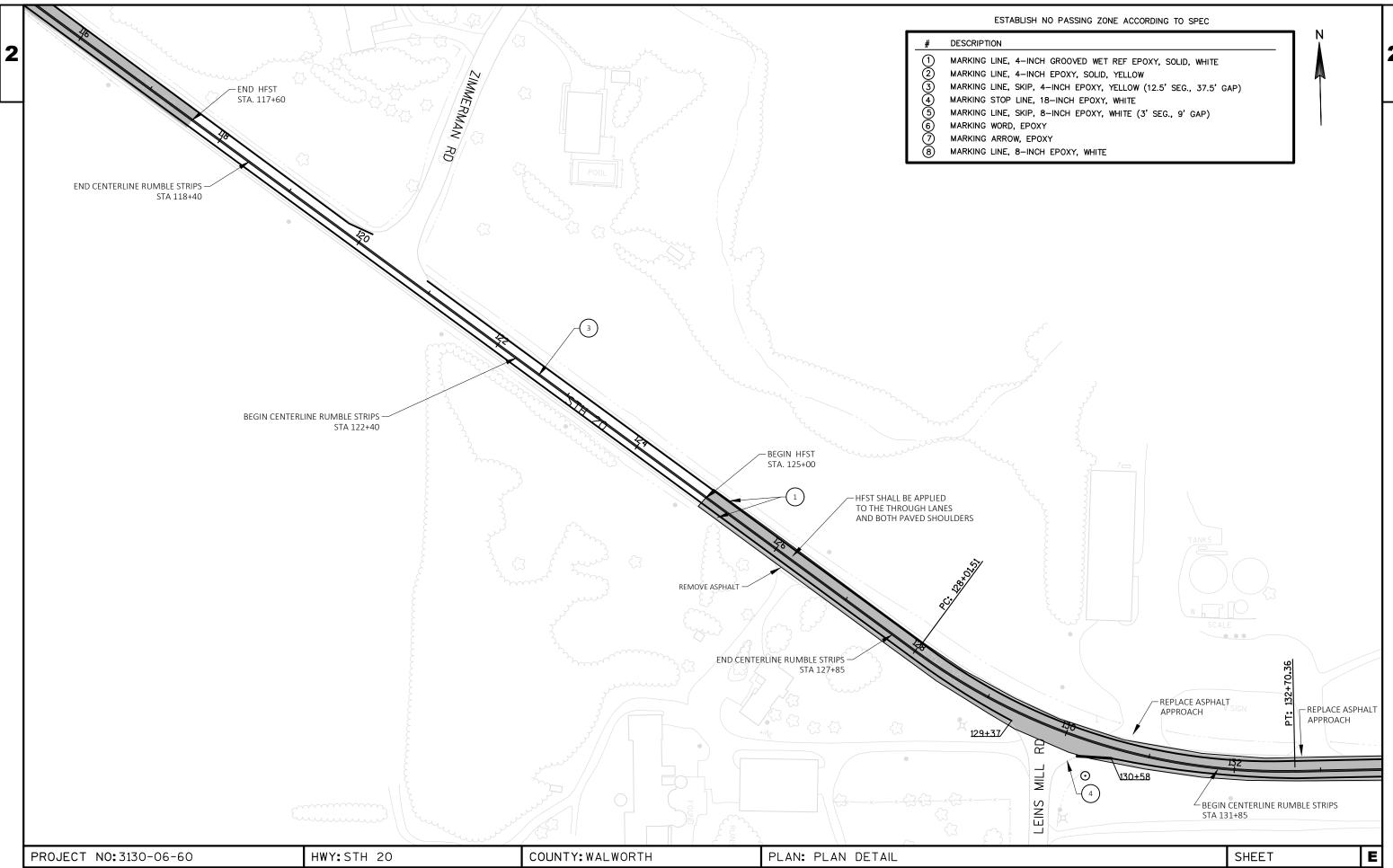
PROJECT NO: 3130-06-30 HWY:STH 20 COUNTY: WALWORTH E TRAFFIC CONTROL DETAIL SHEET

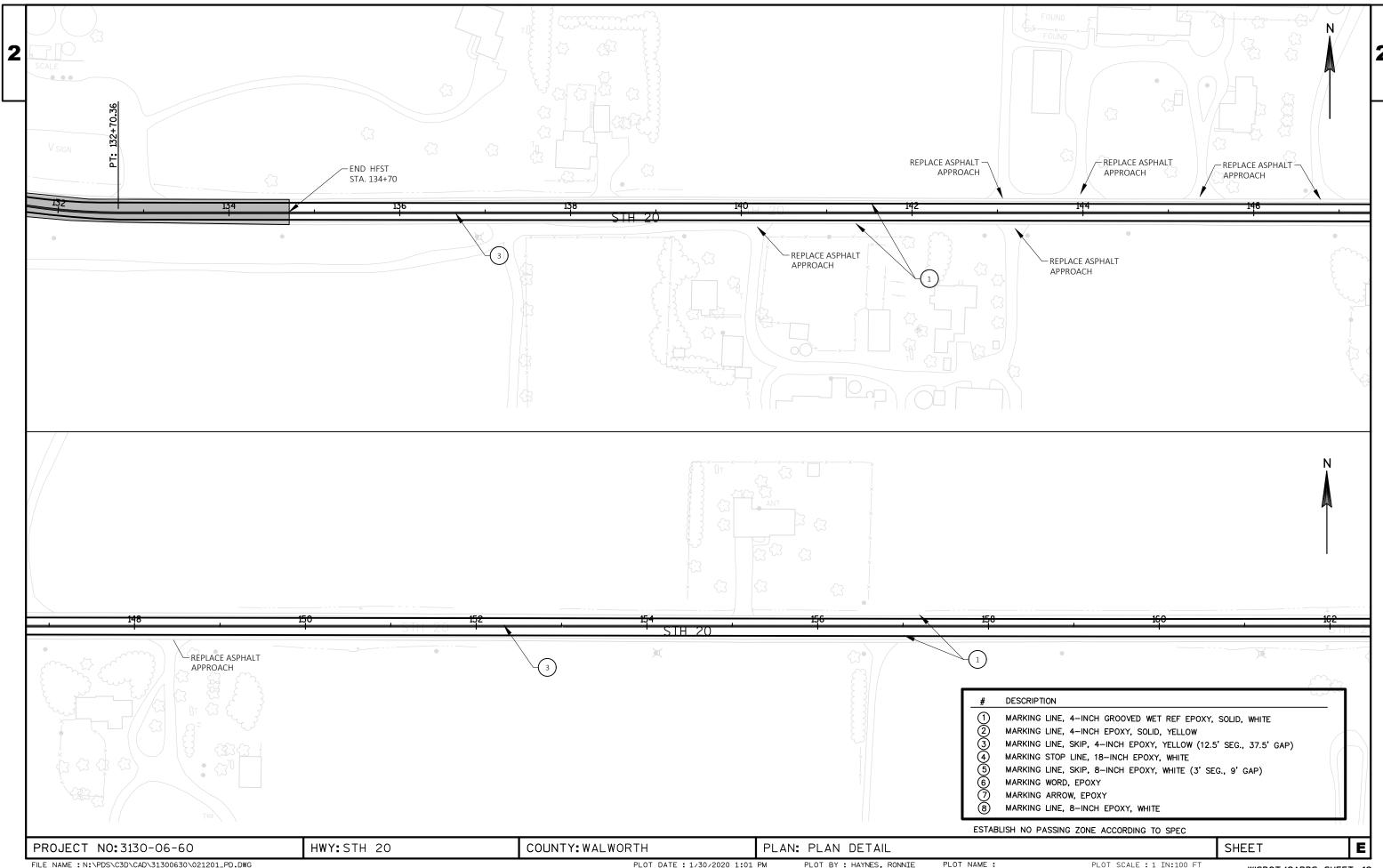












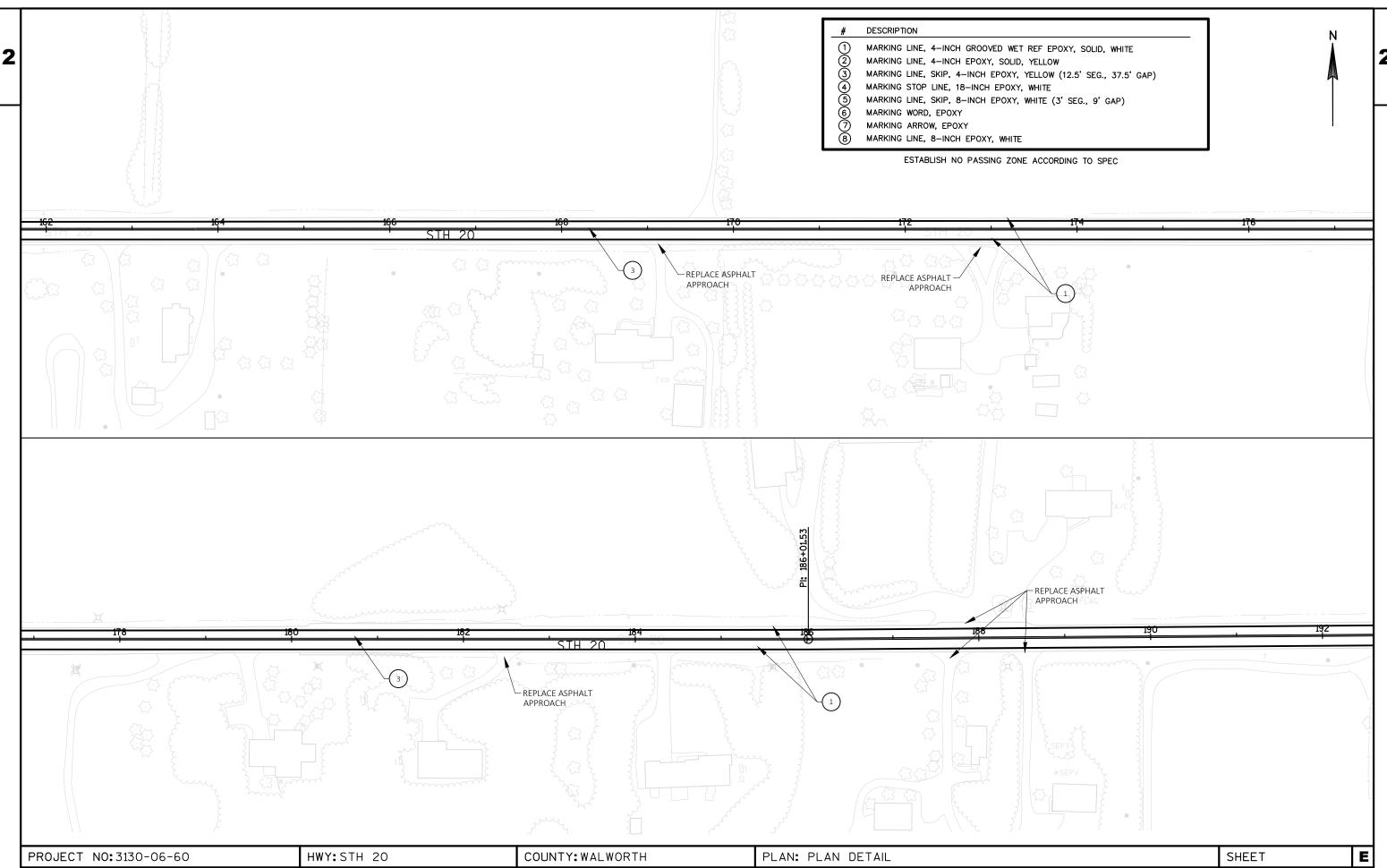
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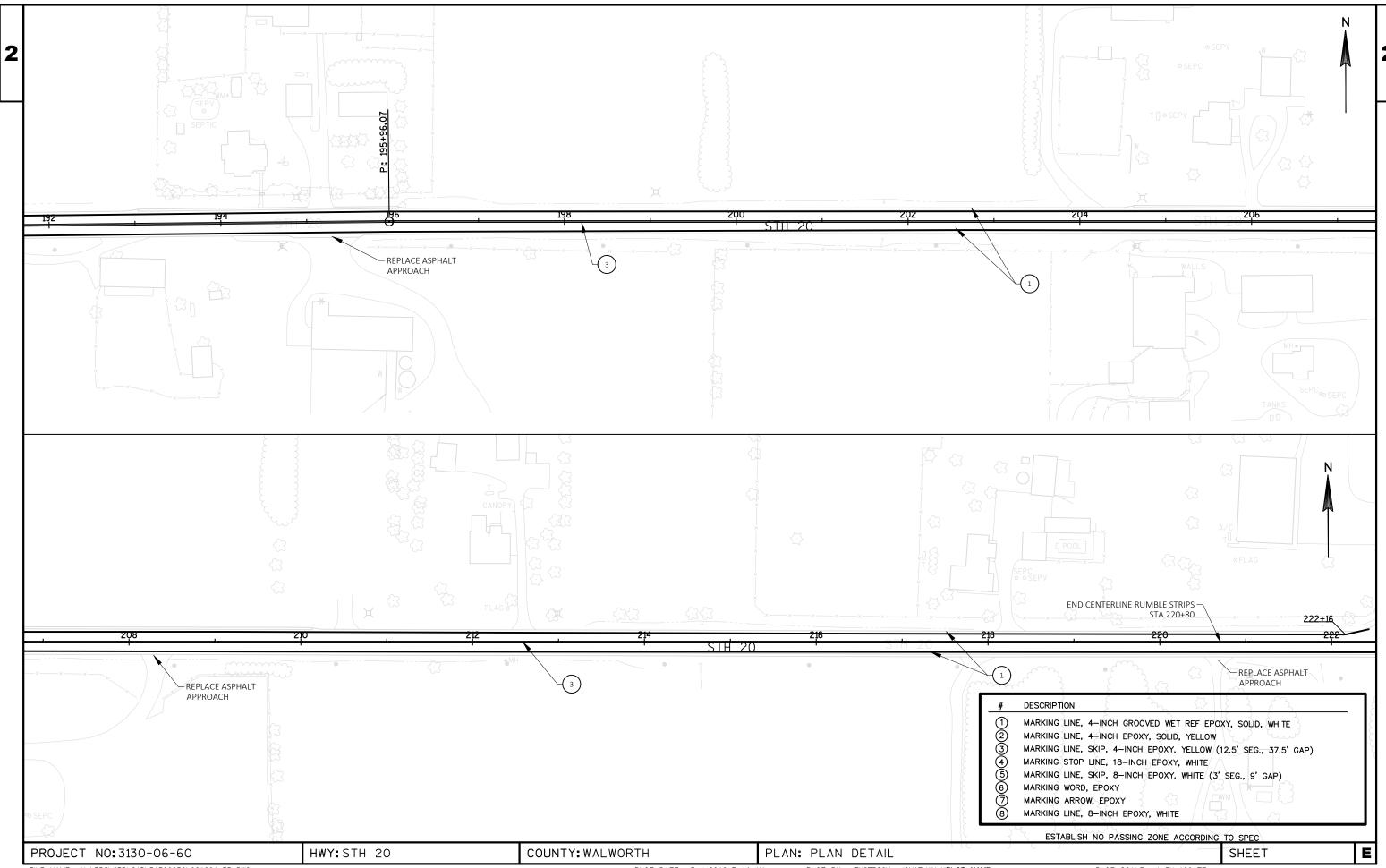
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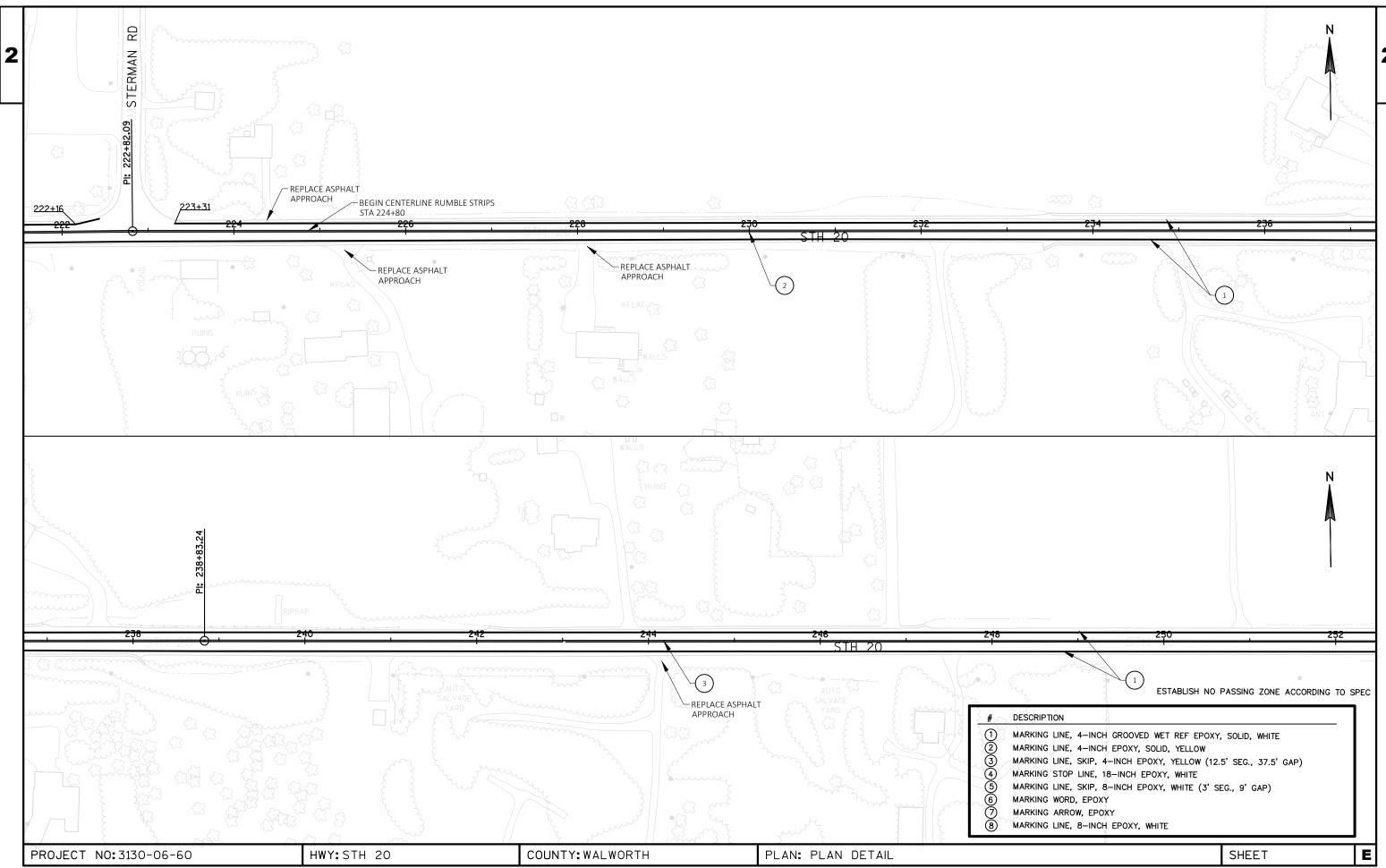
PLOT BY : HAYNES, RONNIE

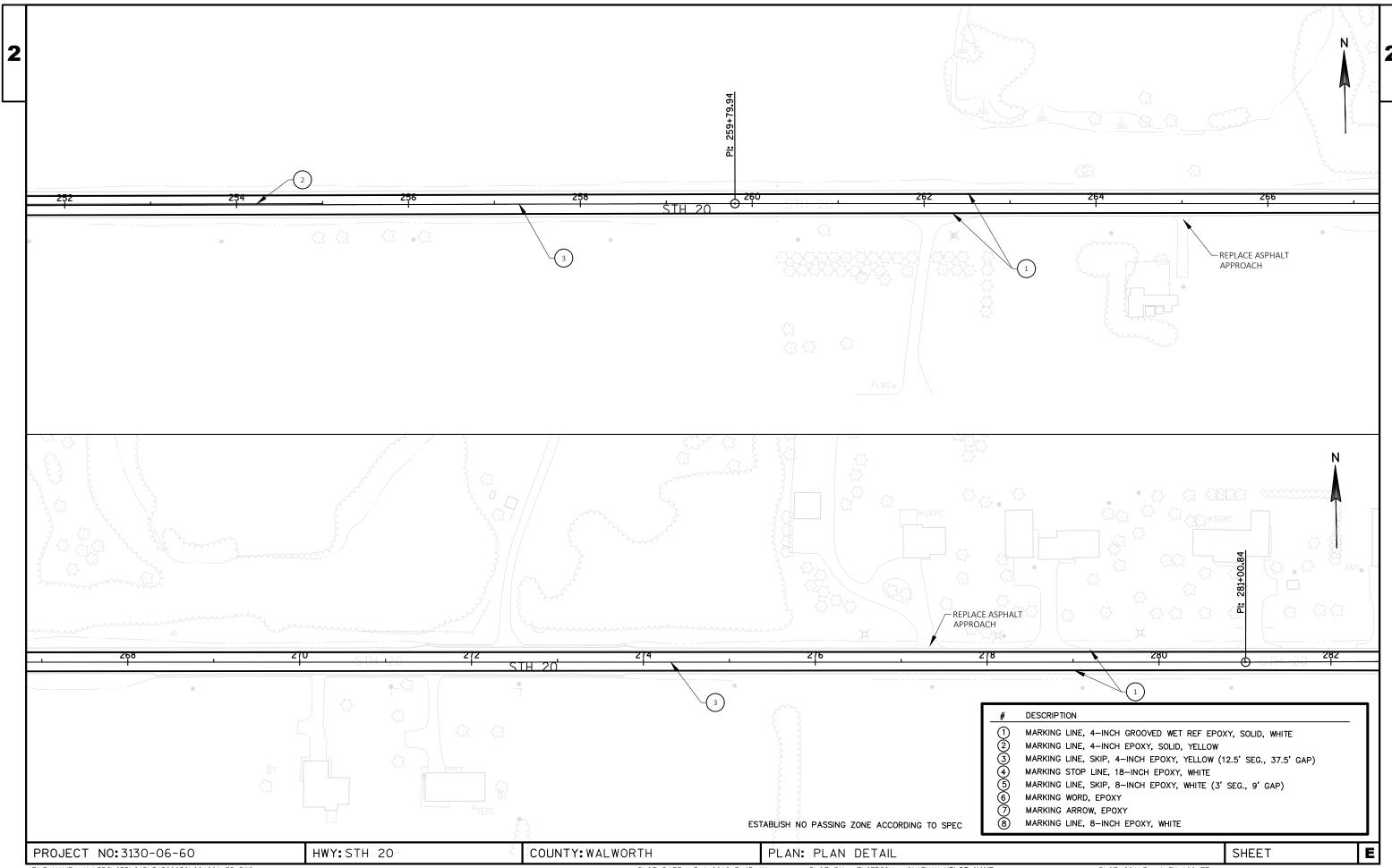
PLOT SCALE : 1 IN:100 FT

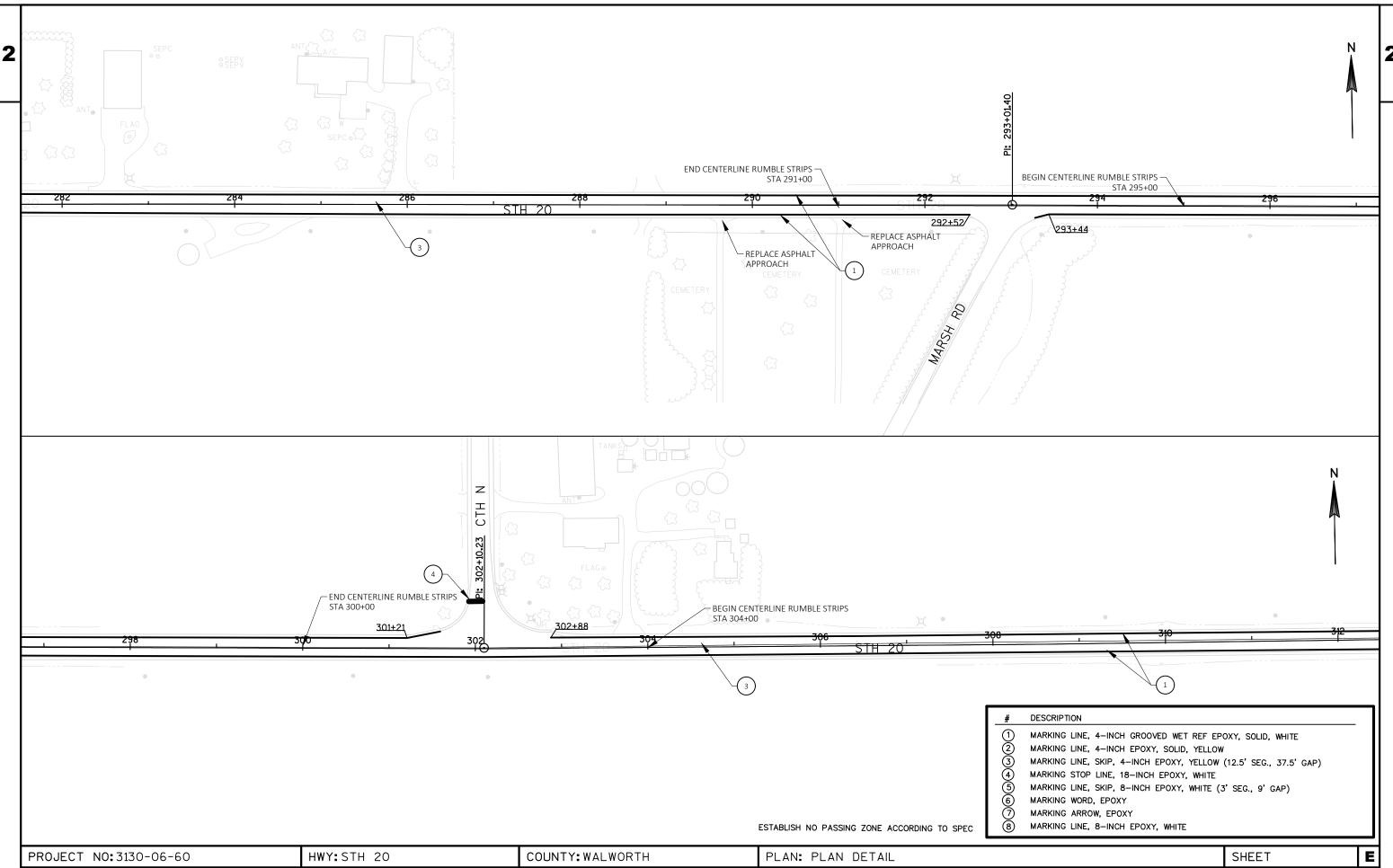
WISDOT/CADDS SHEET 42

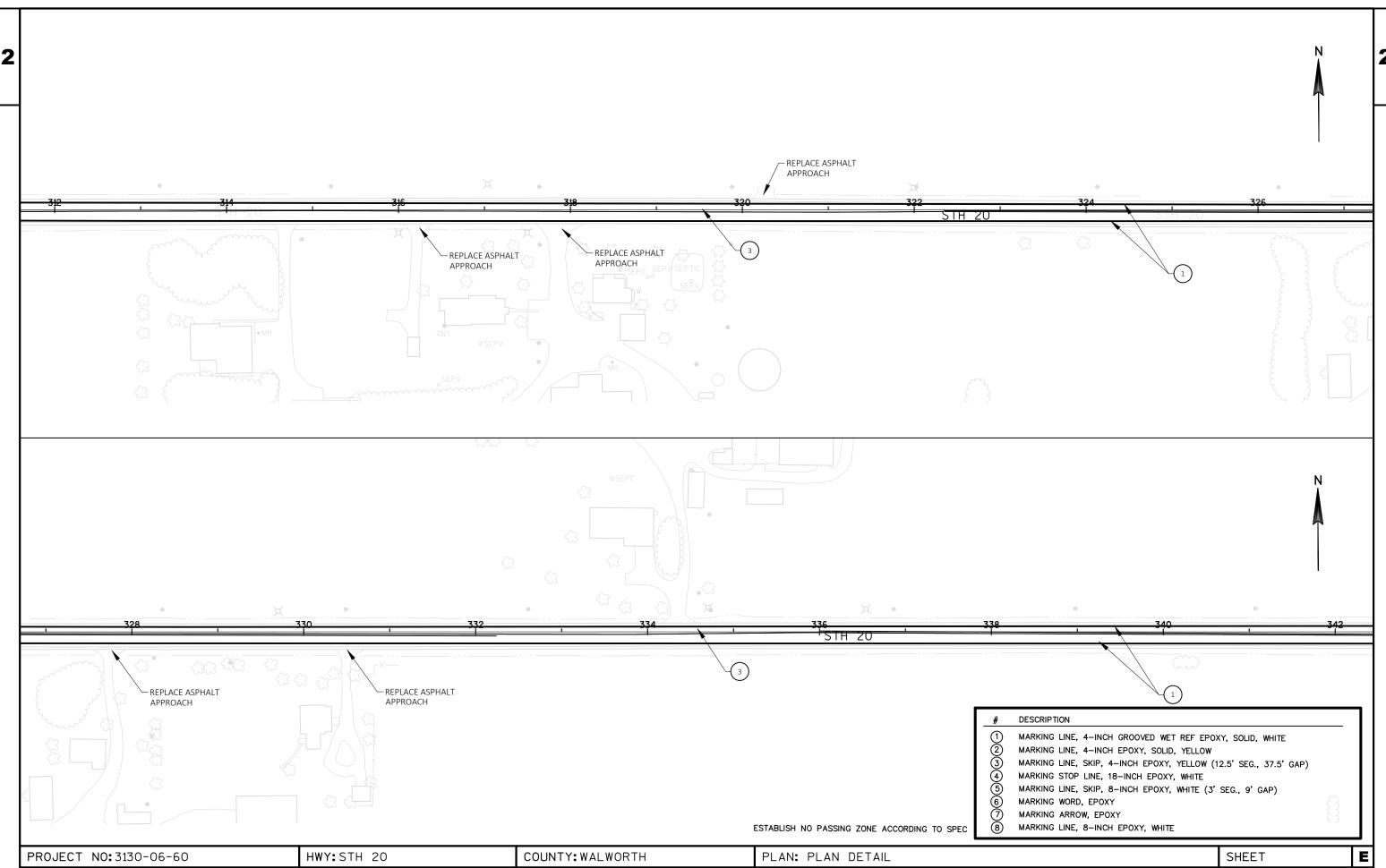


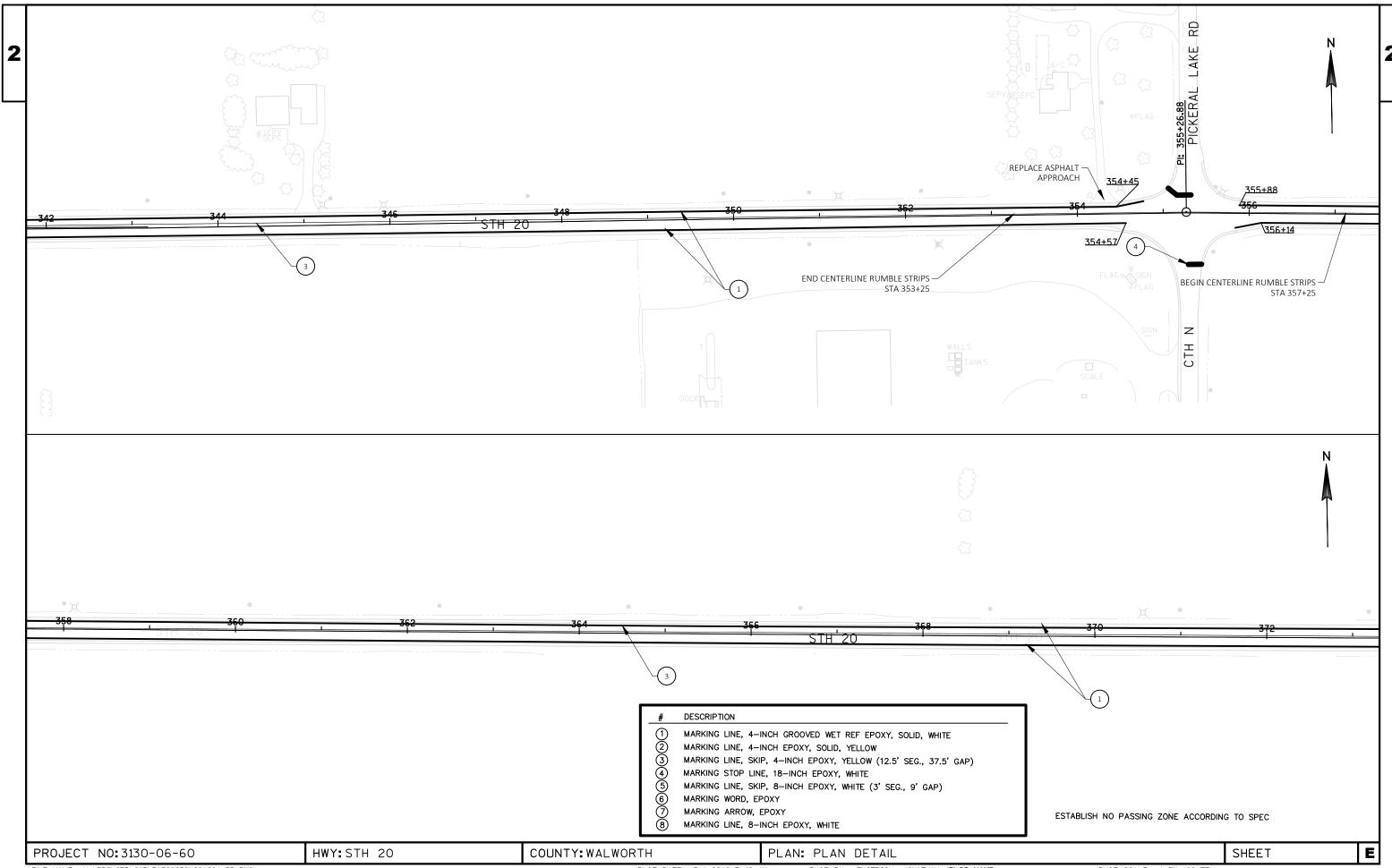


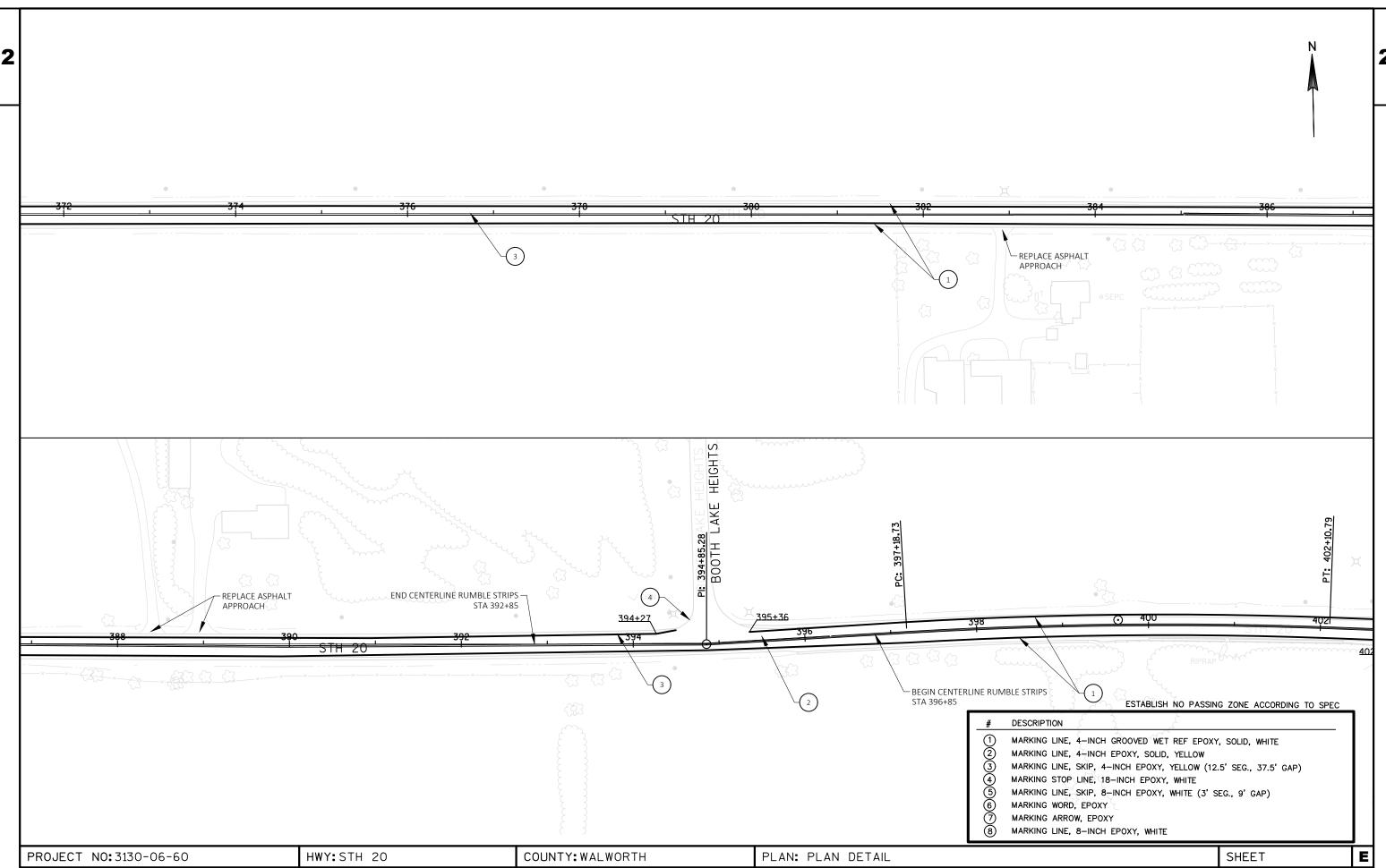


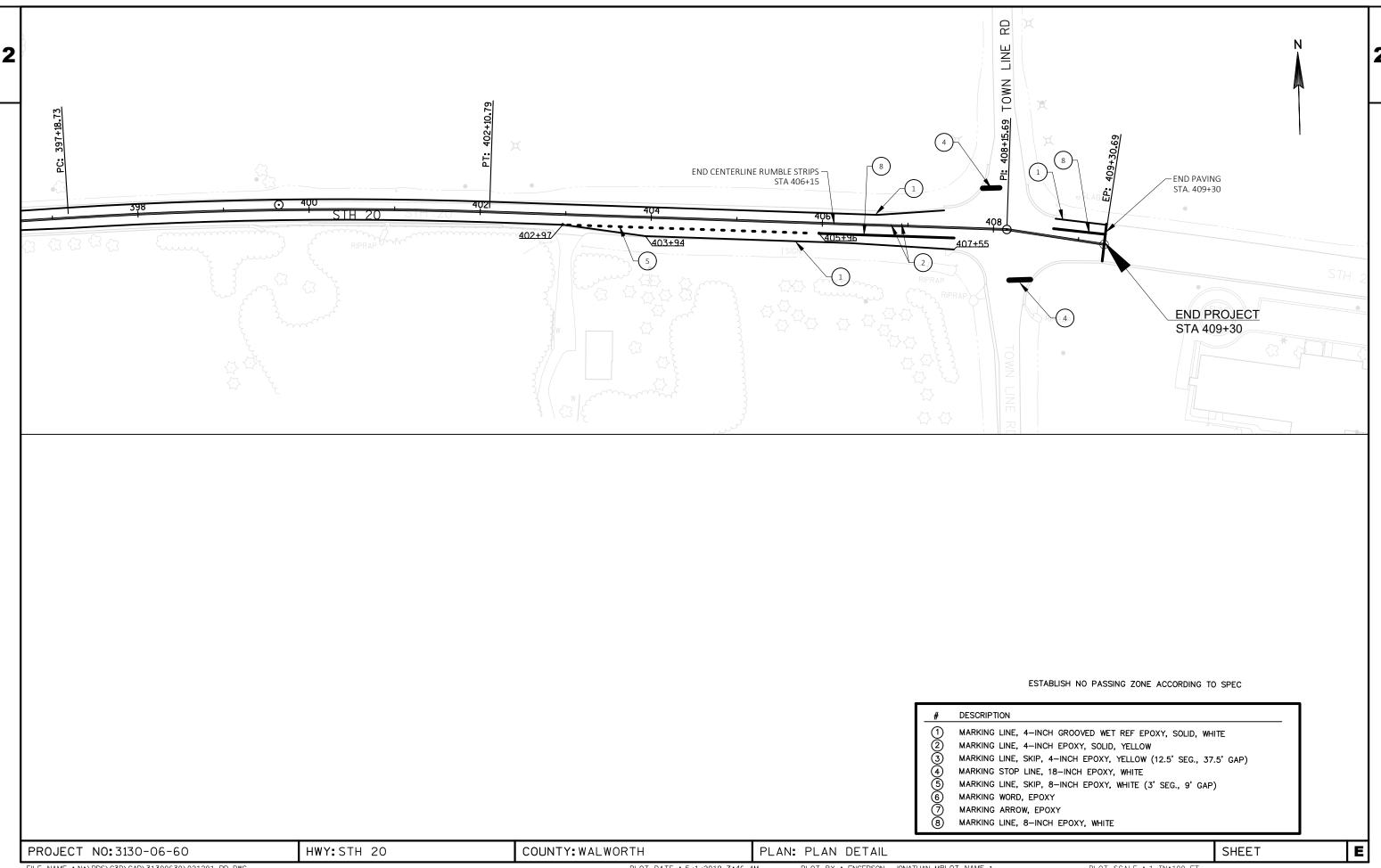


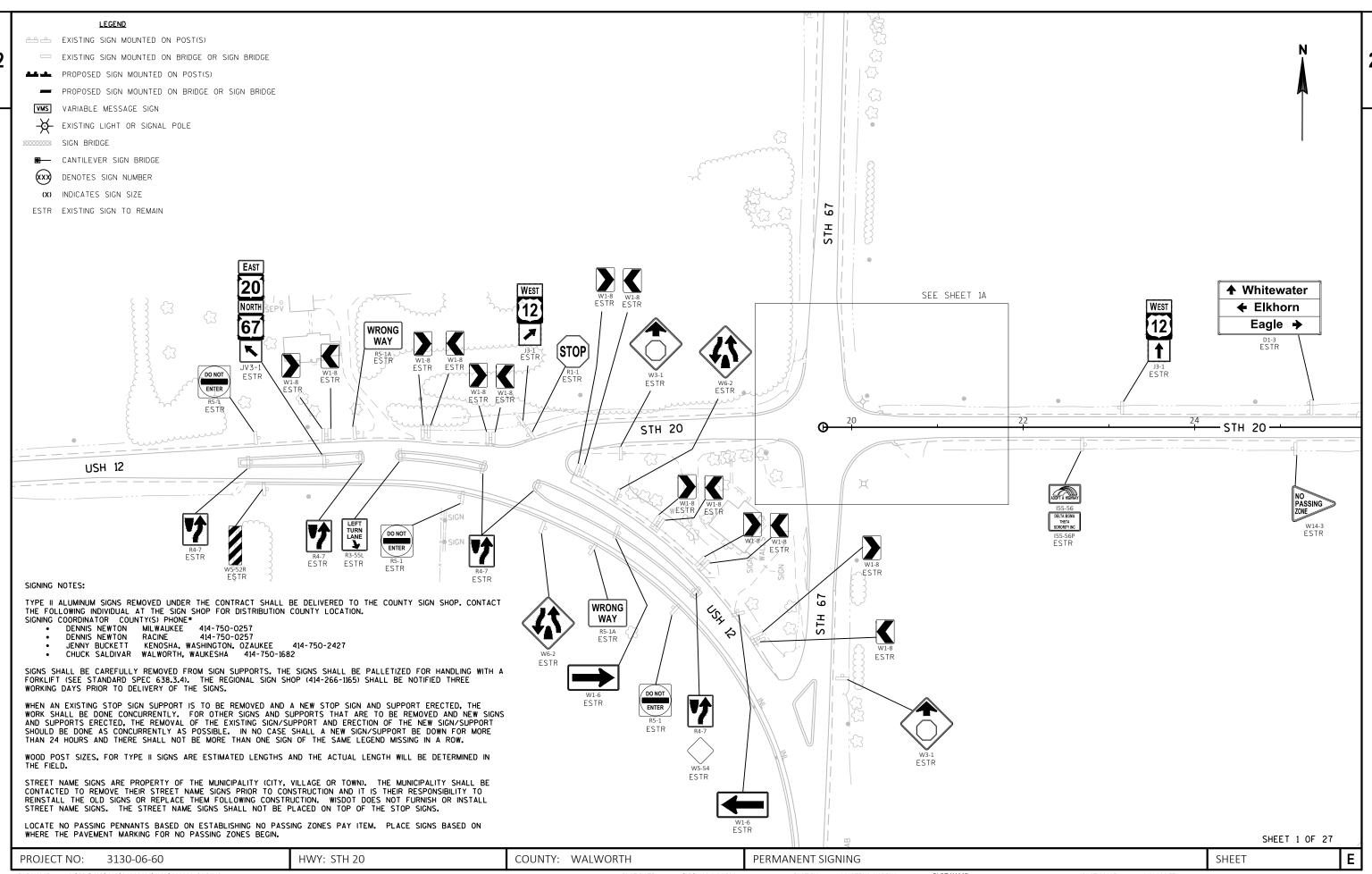






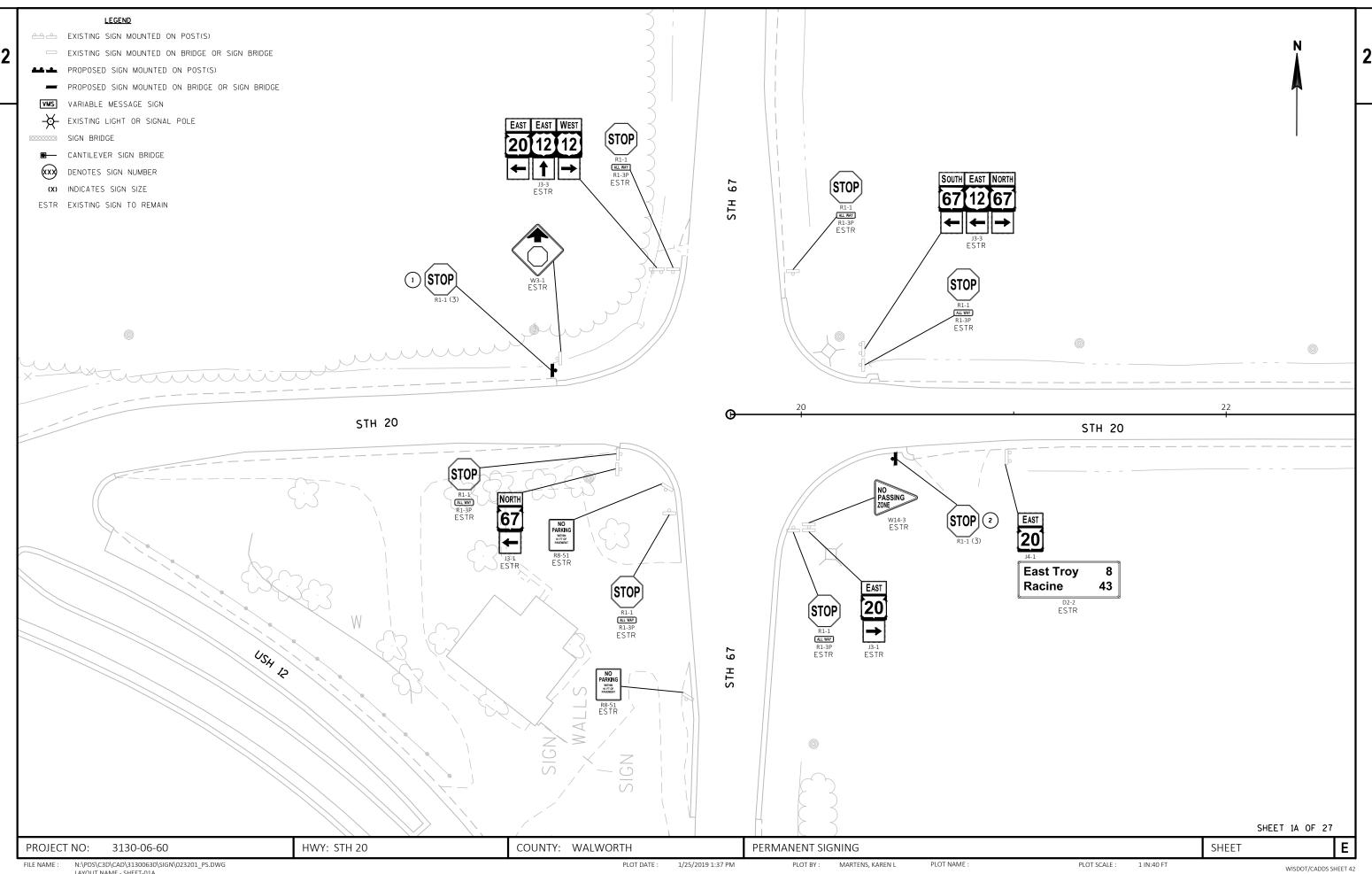




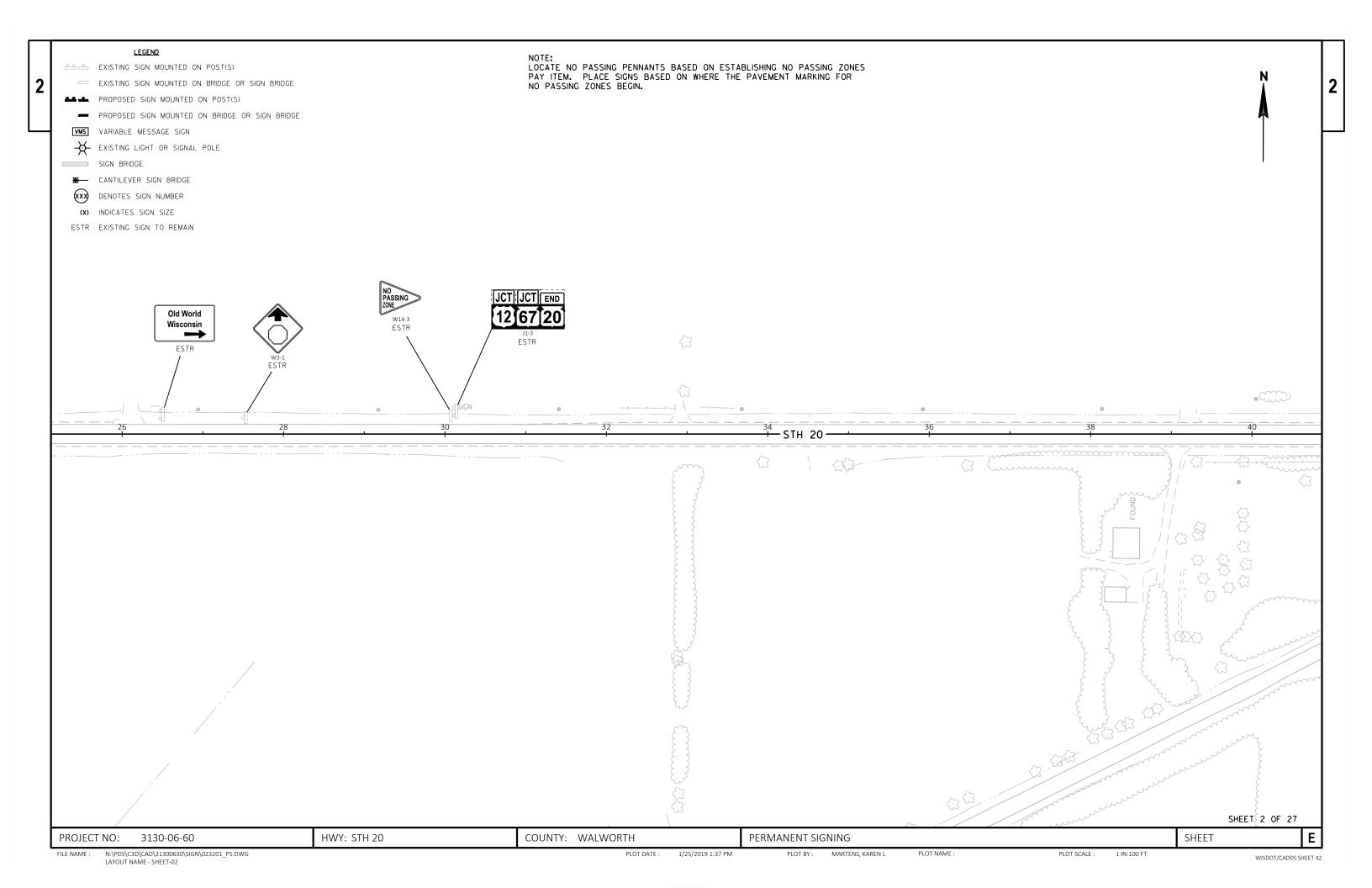


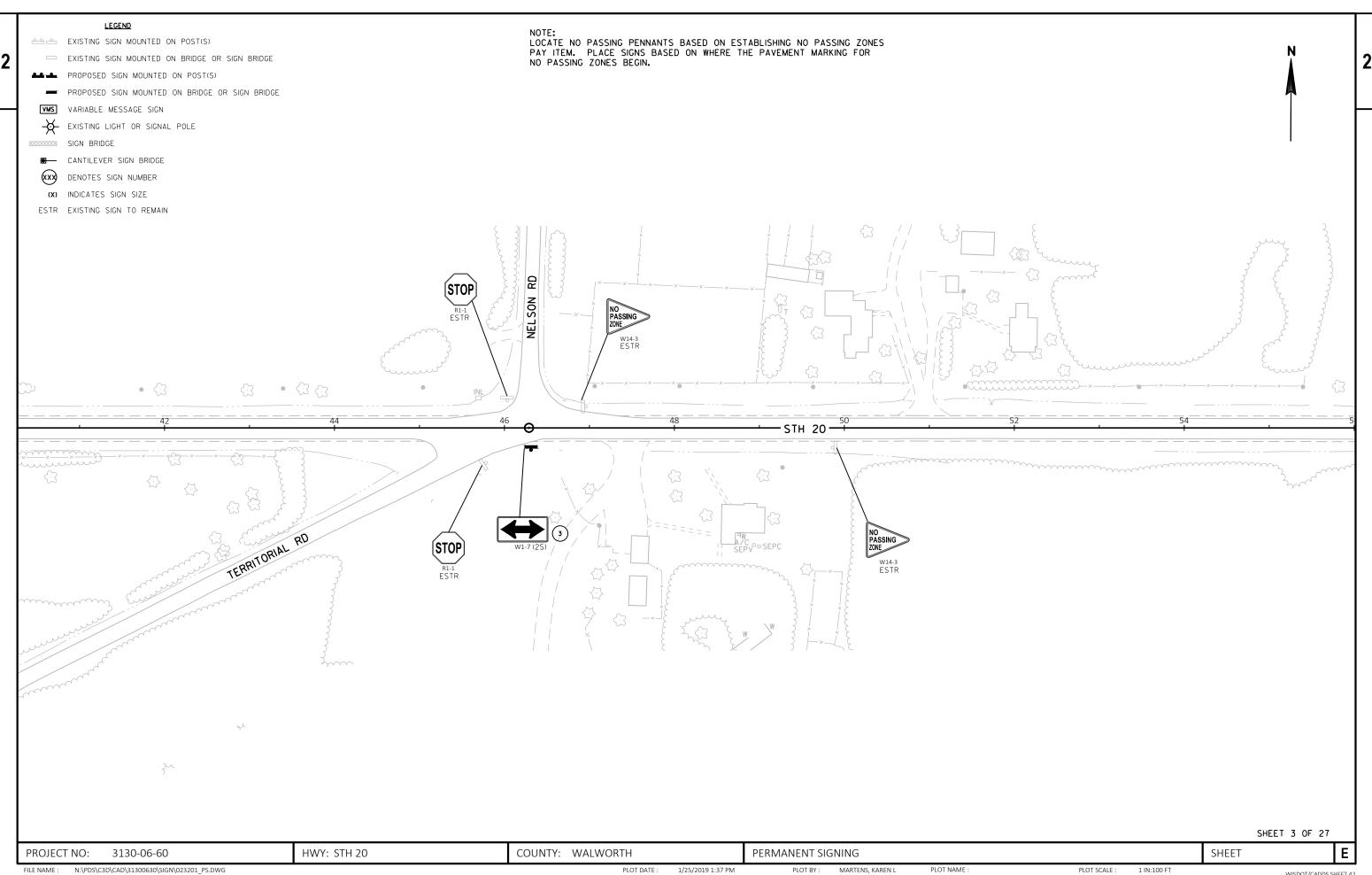
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LAYOUT NAME - SHEET-01



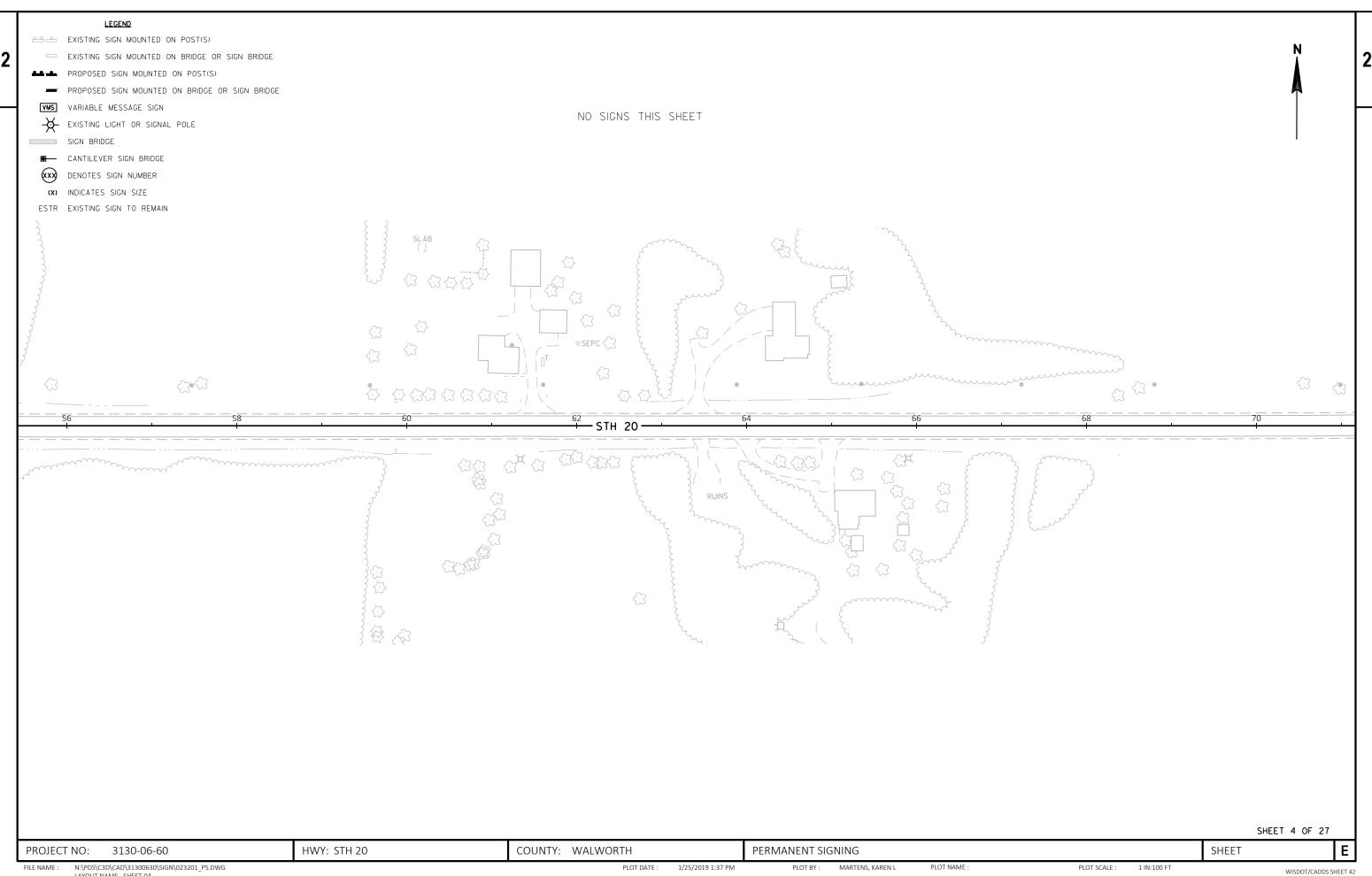
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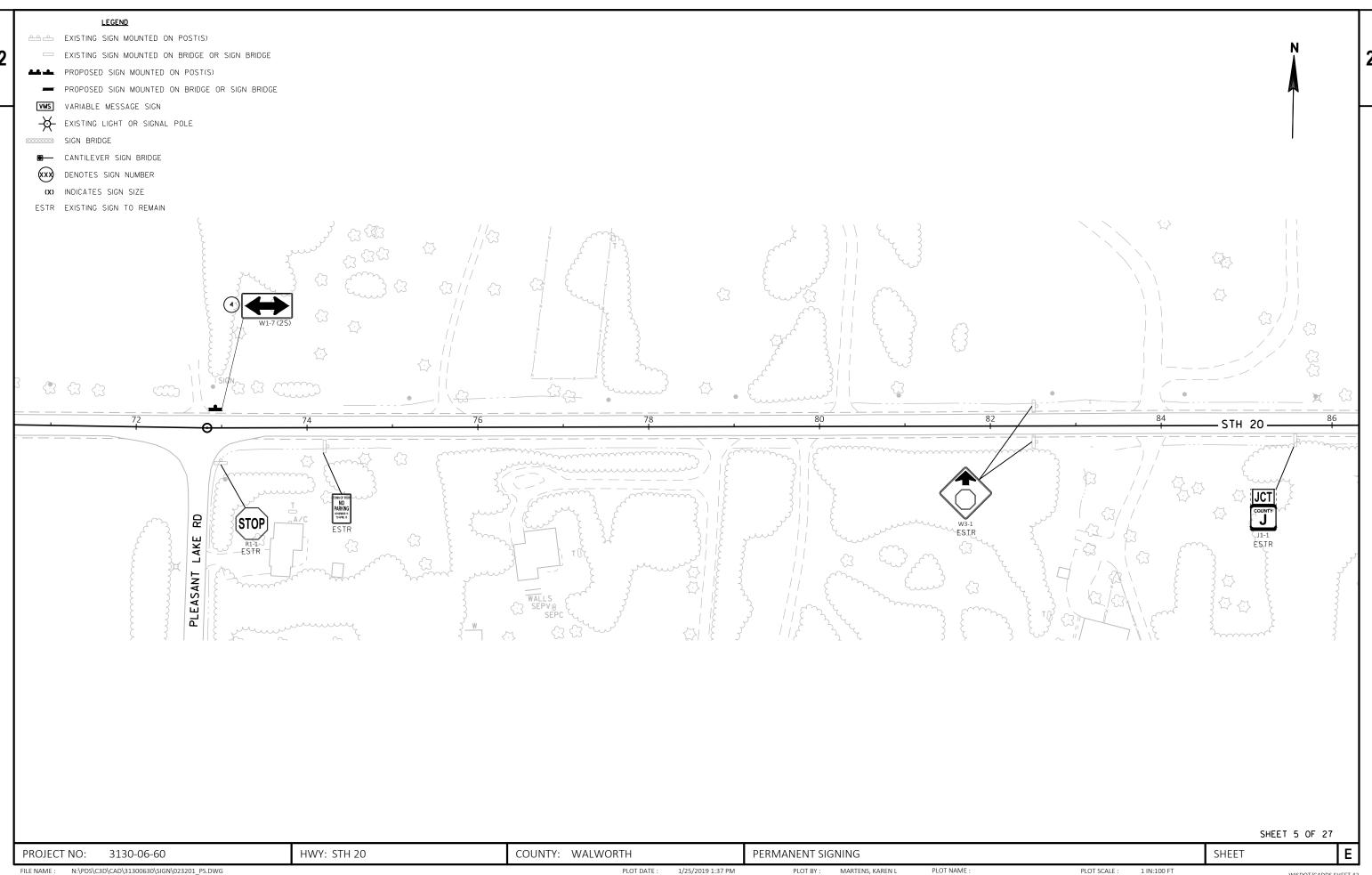


LAYOUT NAME - SHEET-03

WISDOT/CADDS SHEET 42



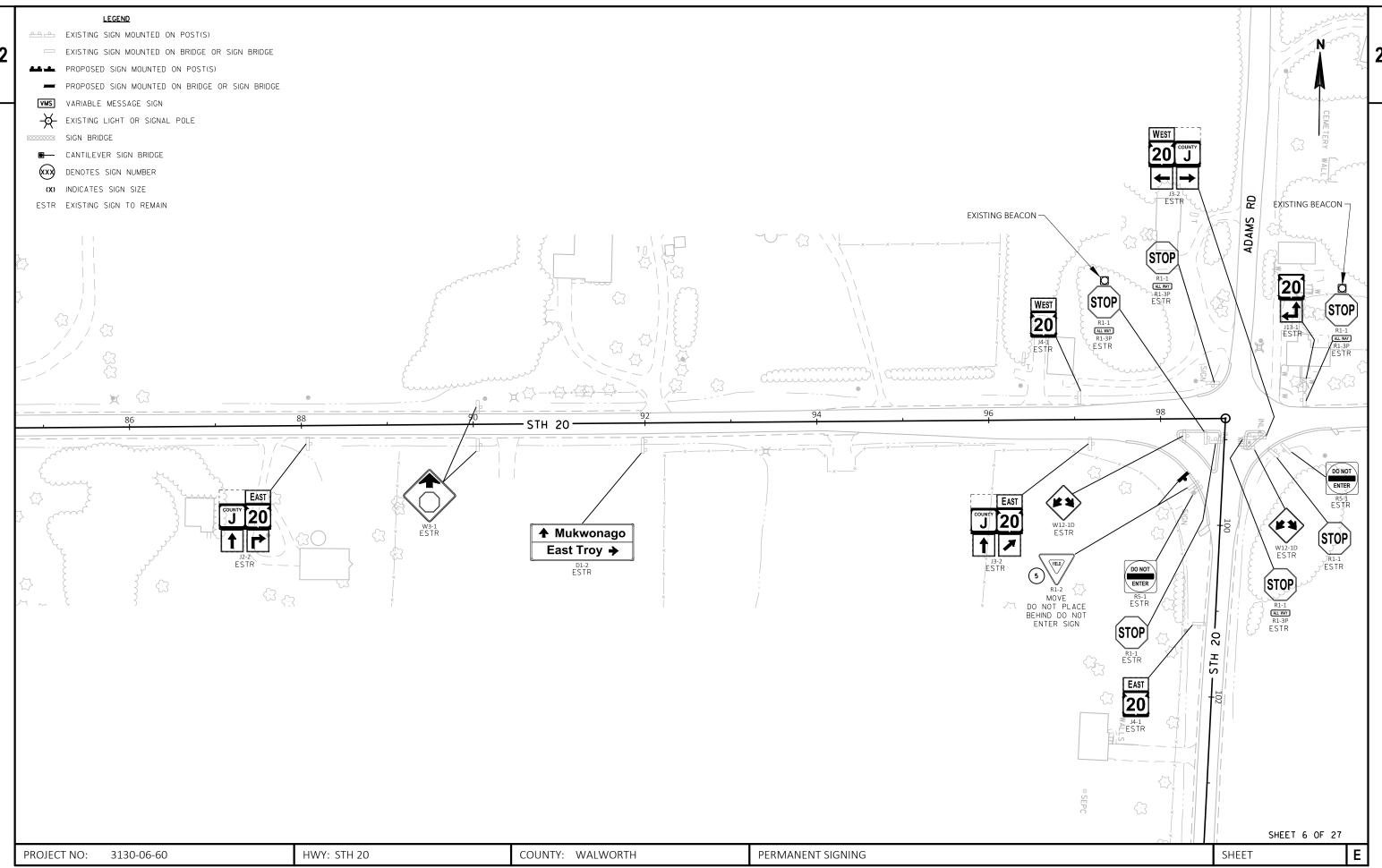
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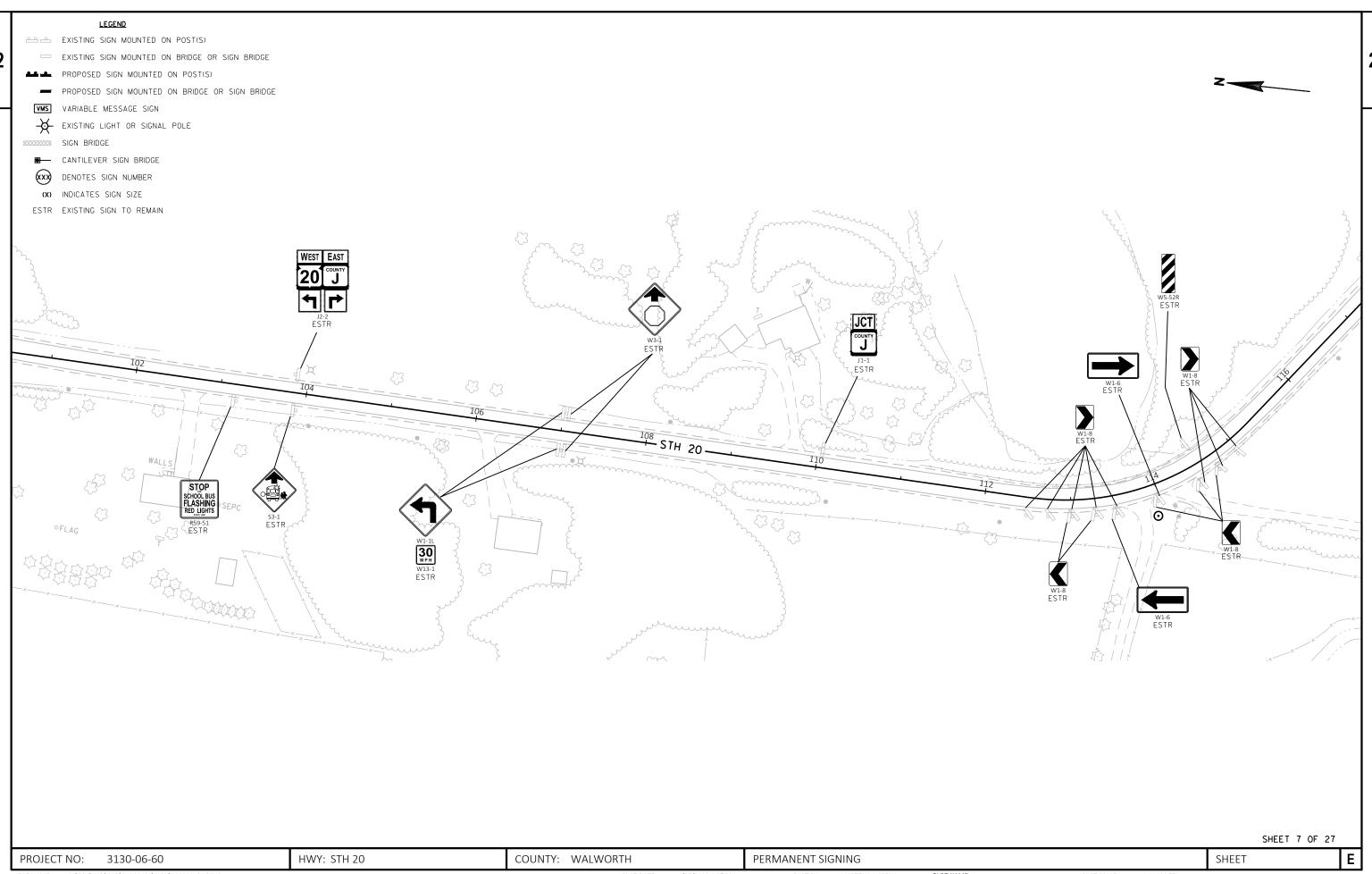
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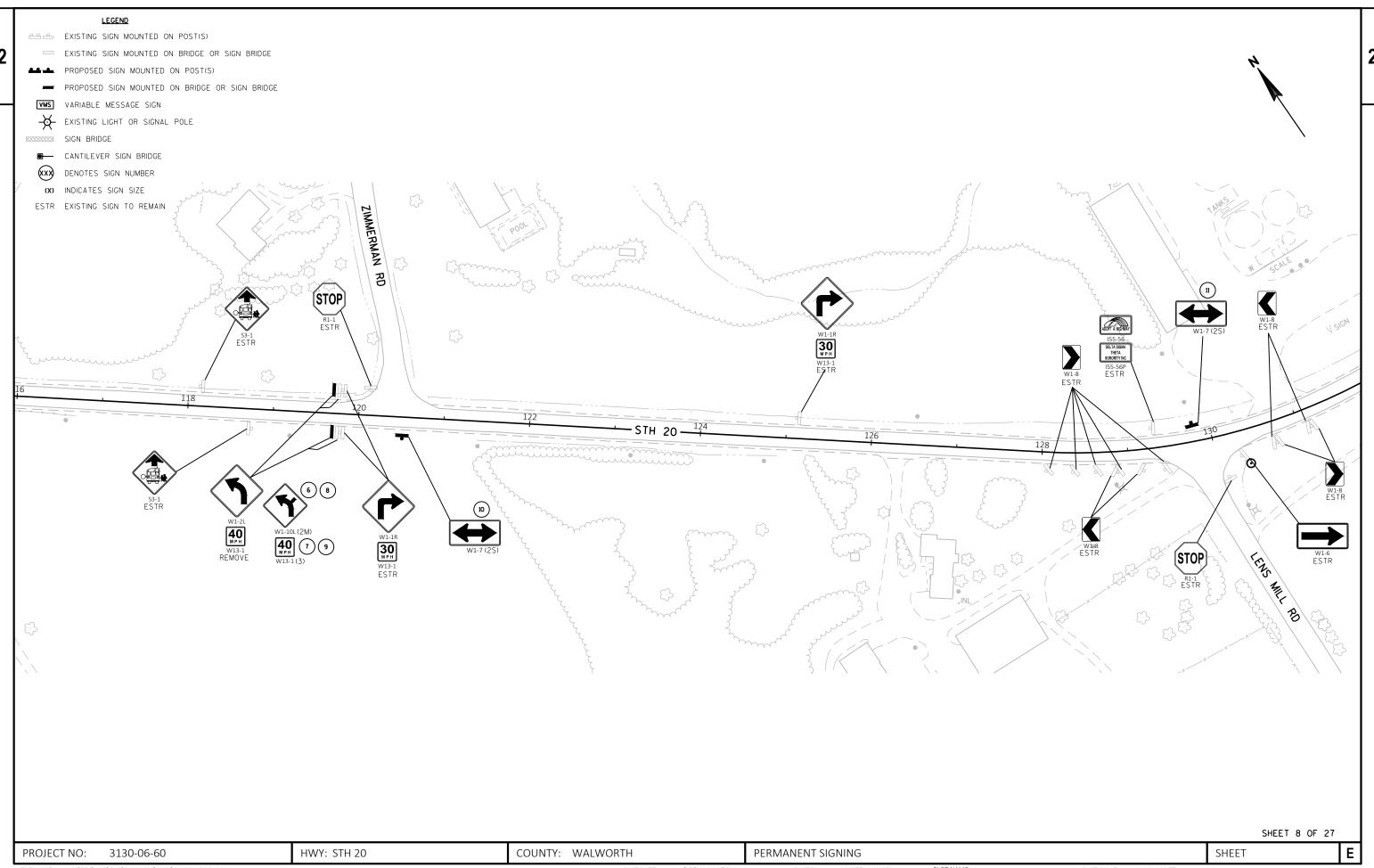
WISDOT/CADDS SHEET 42



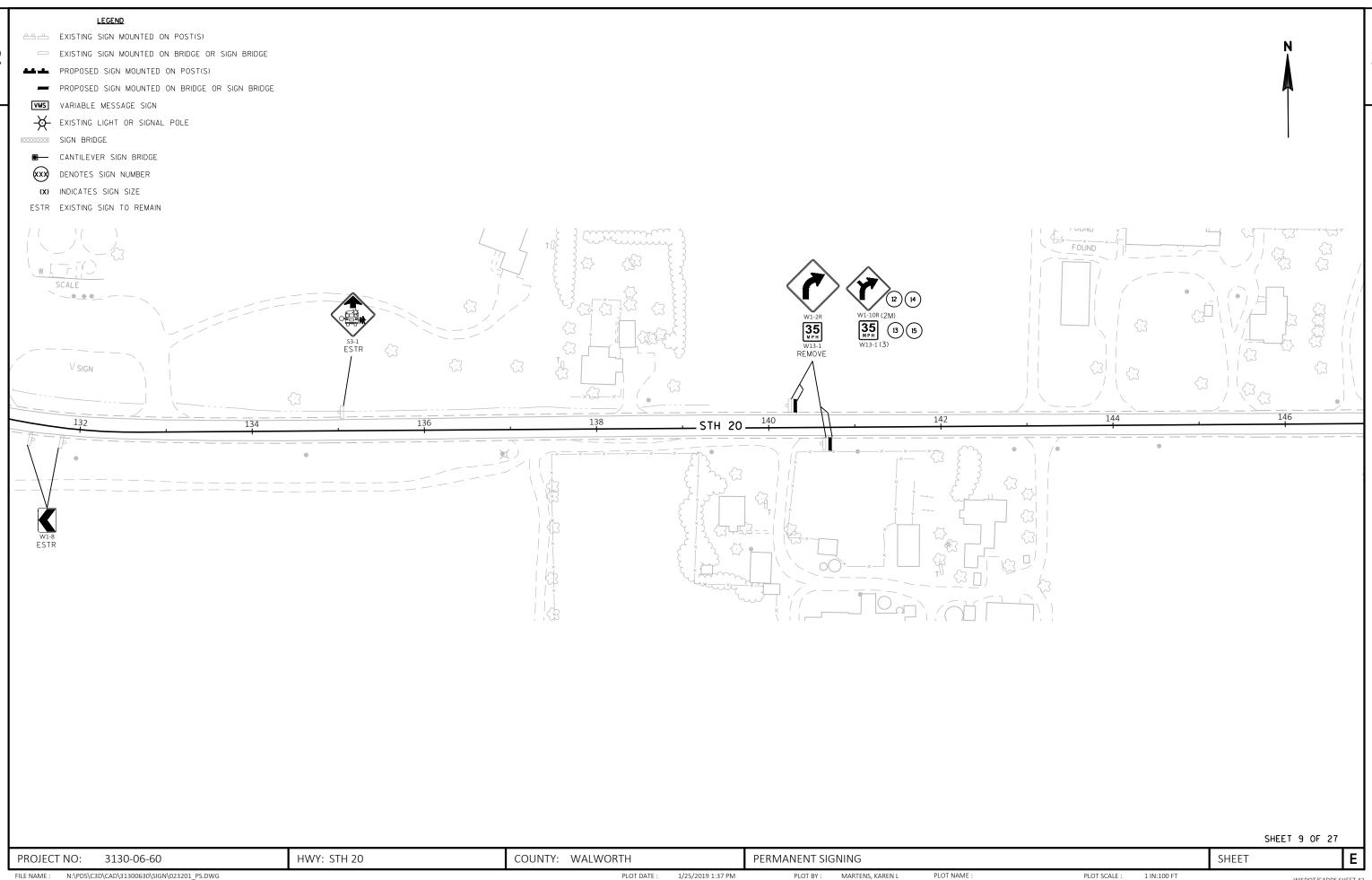
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LAYOUT NAME - SHEET-08

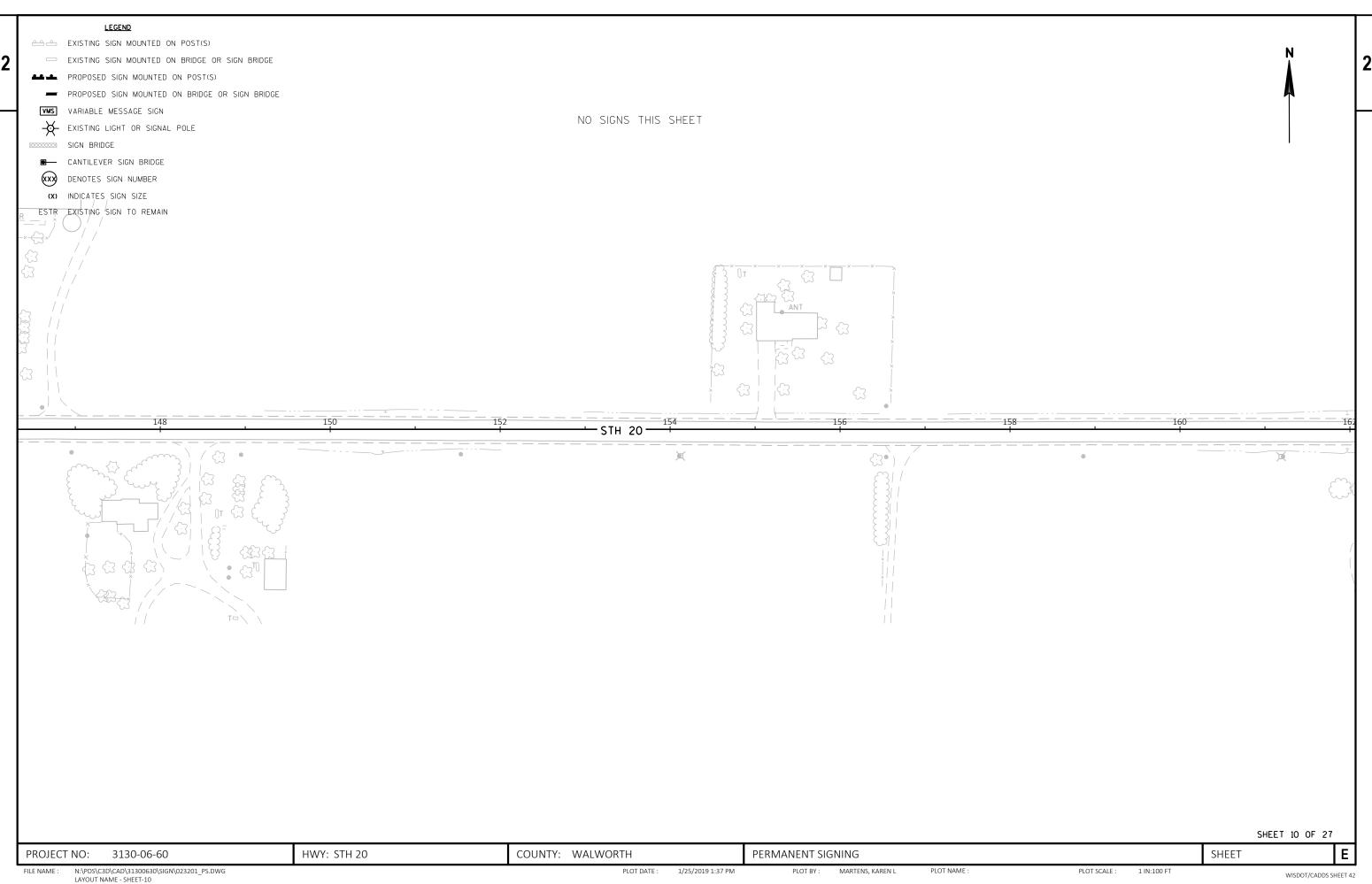


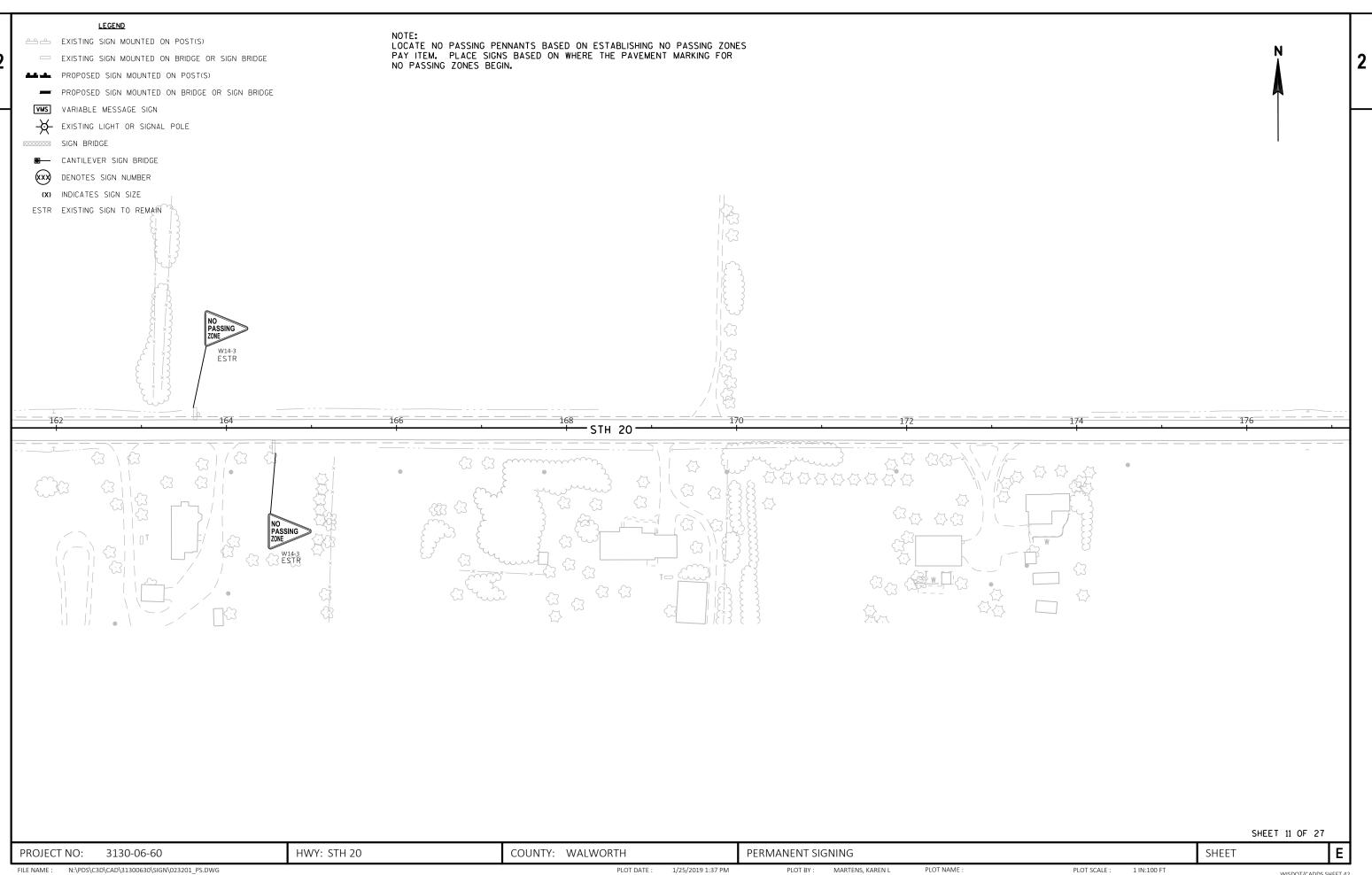
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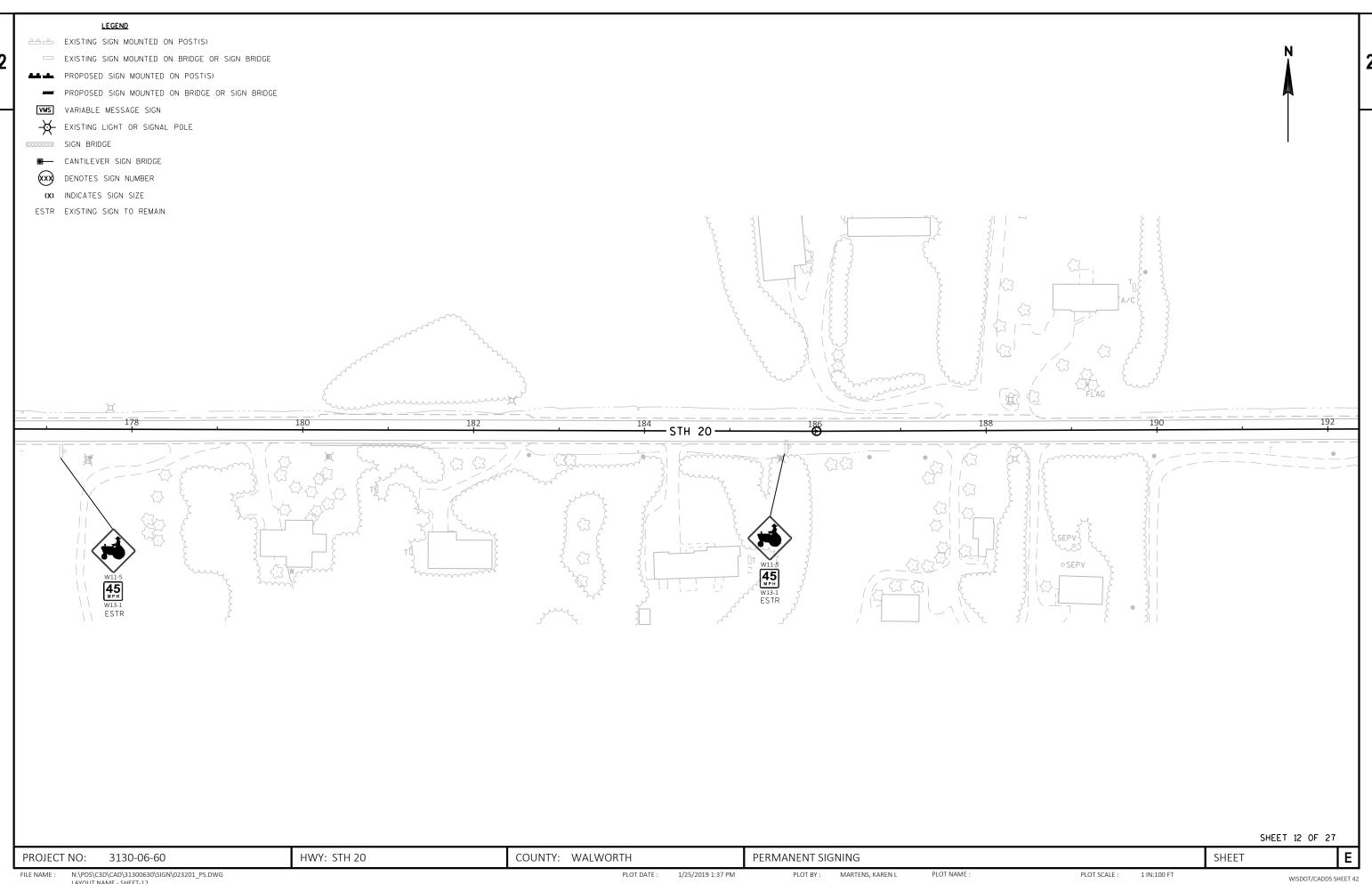
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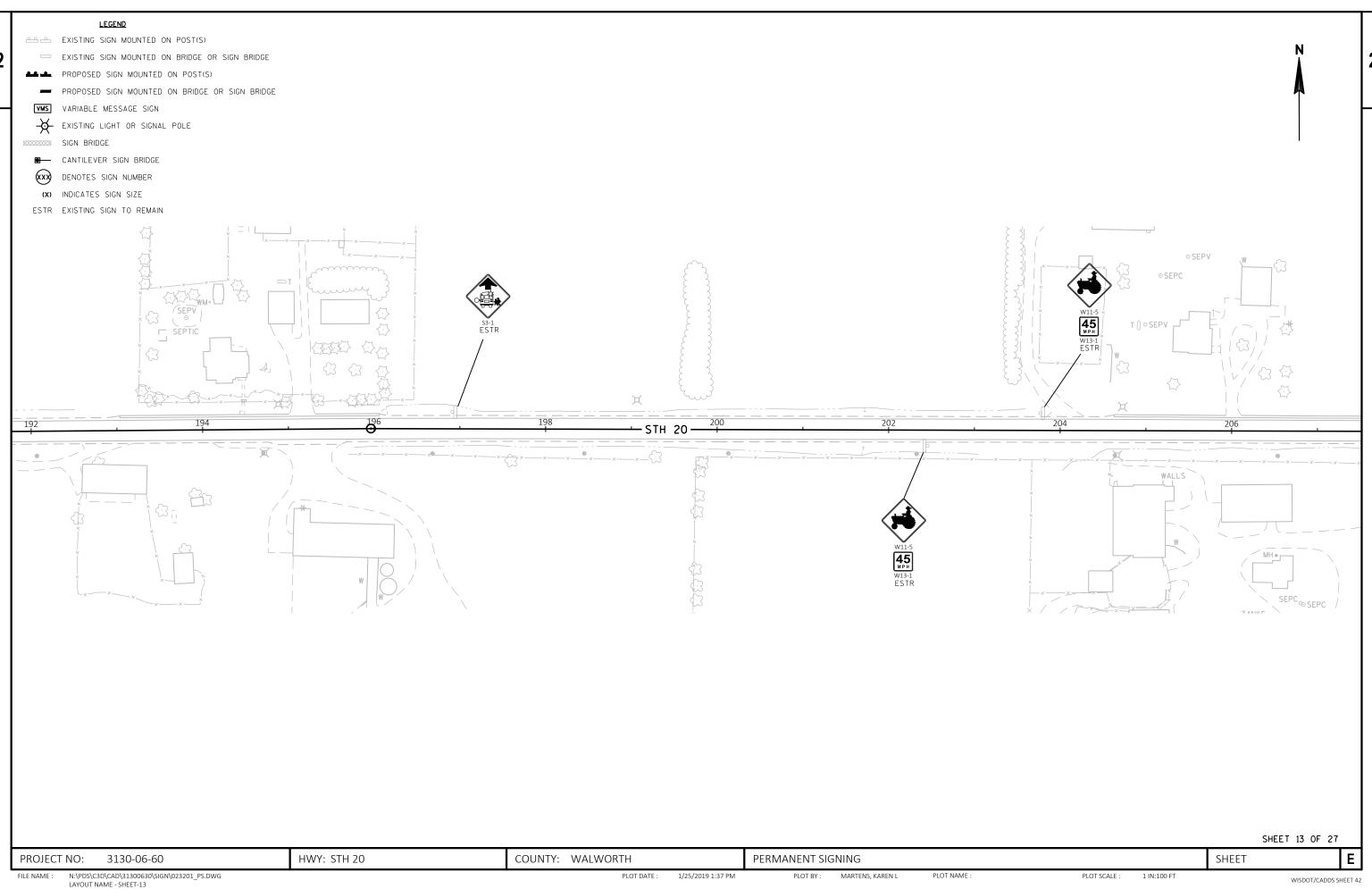


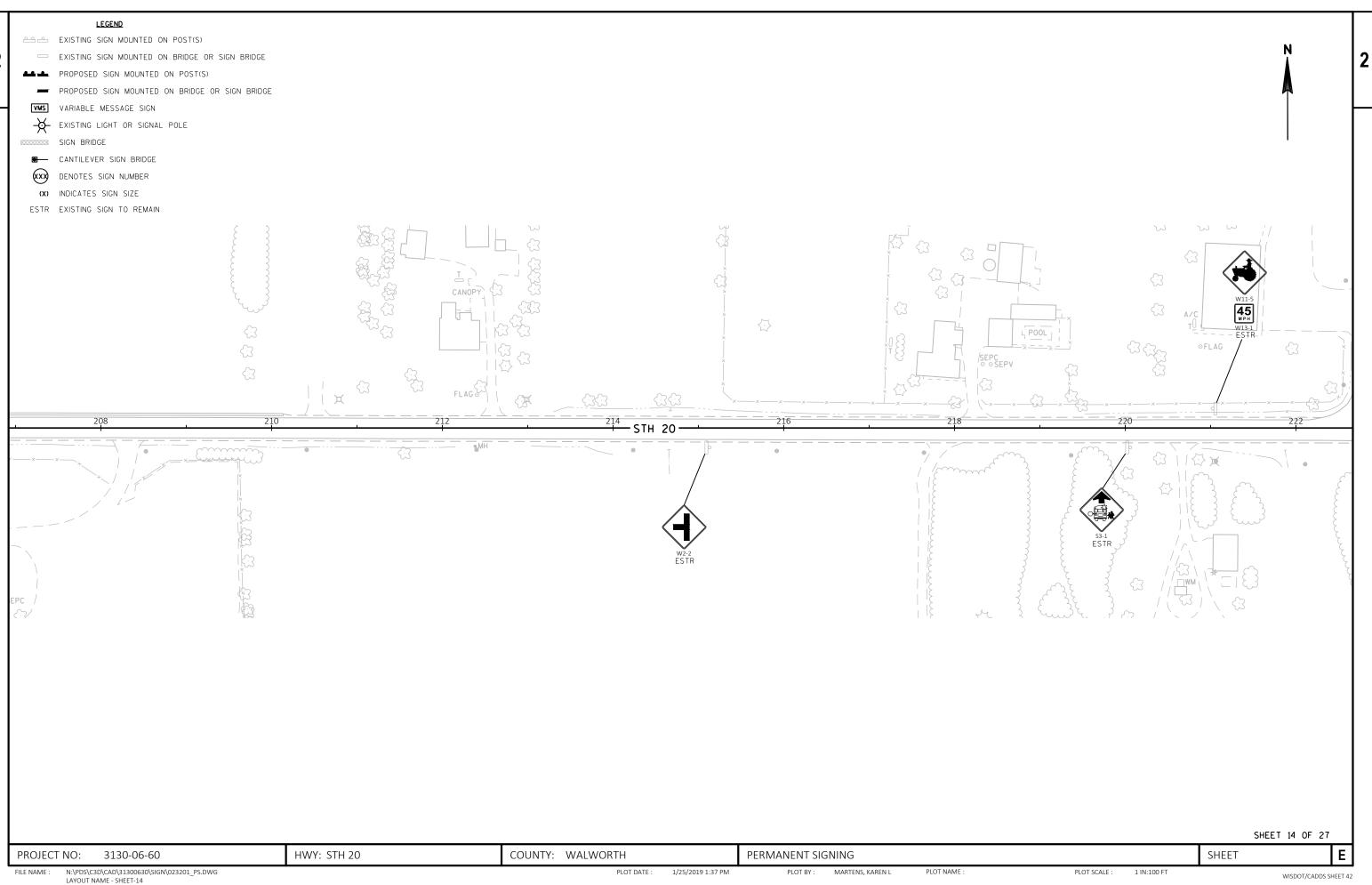
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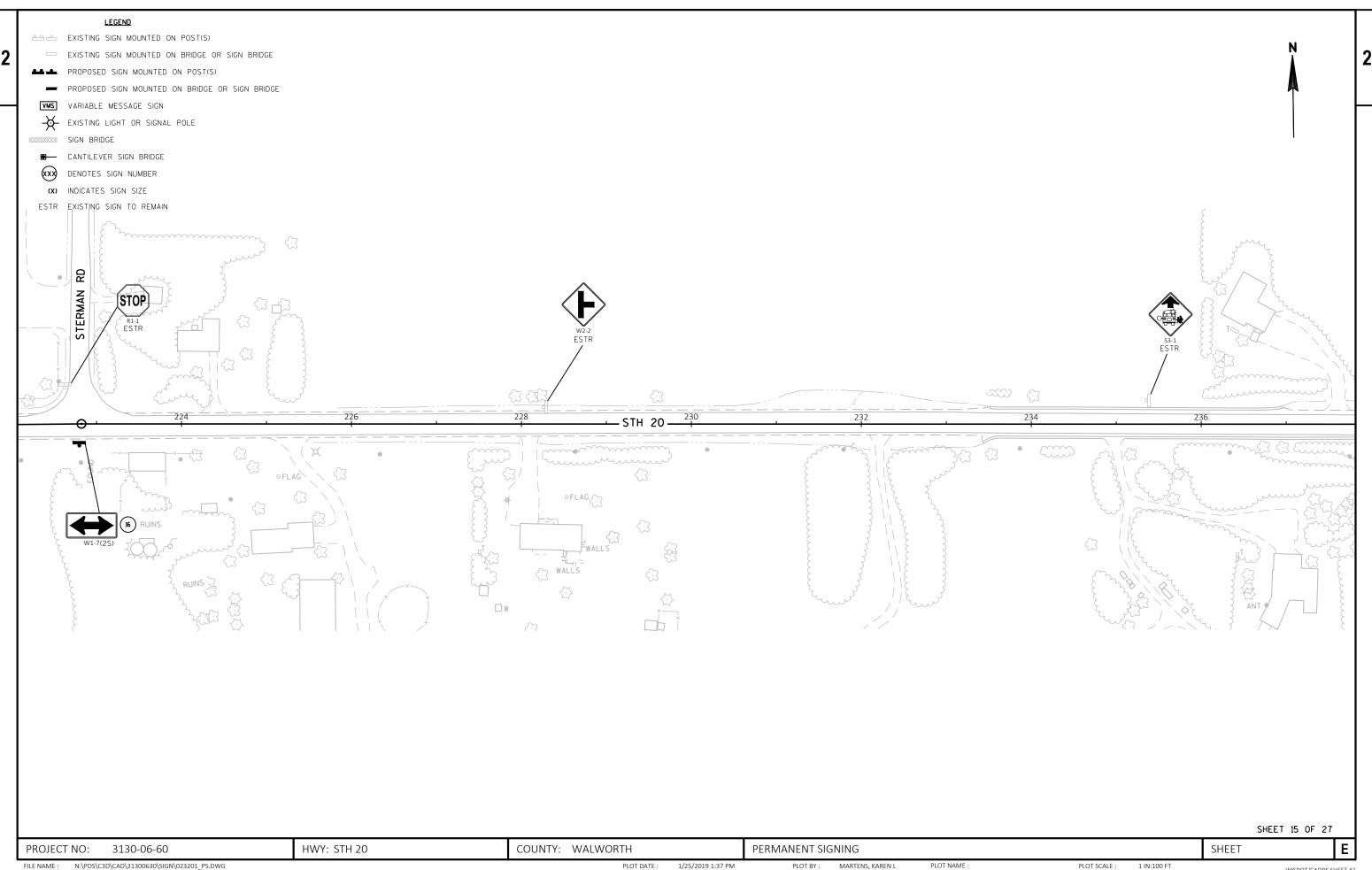
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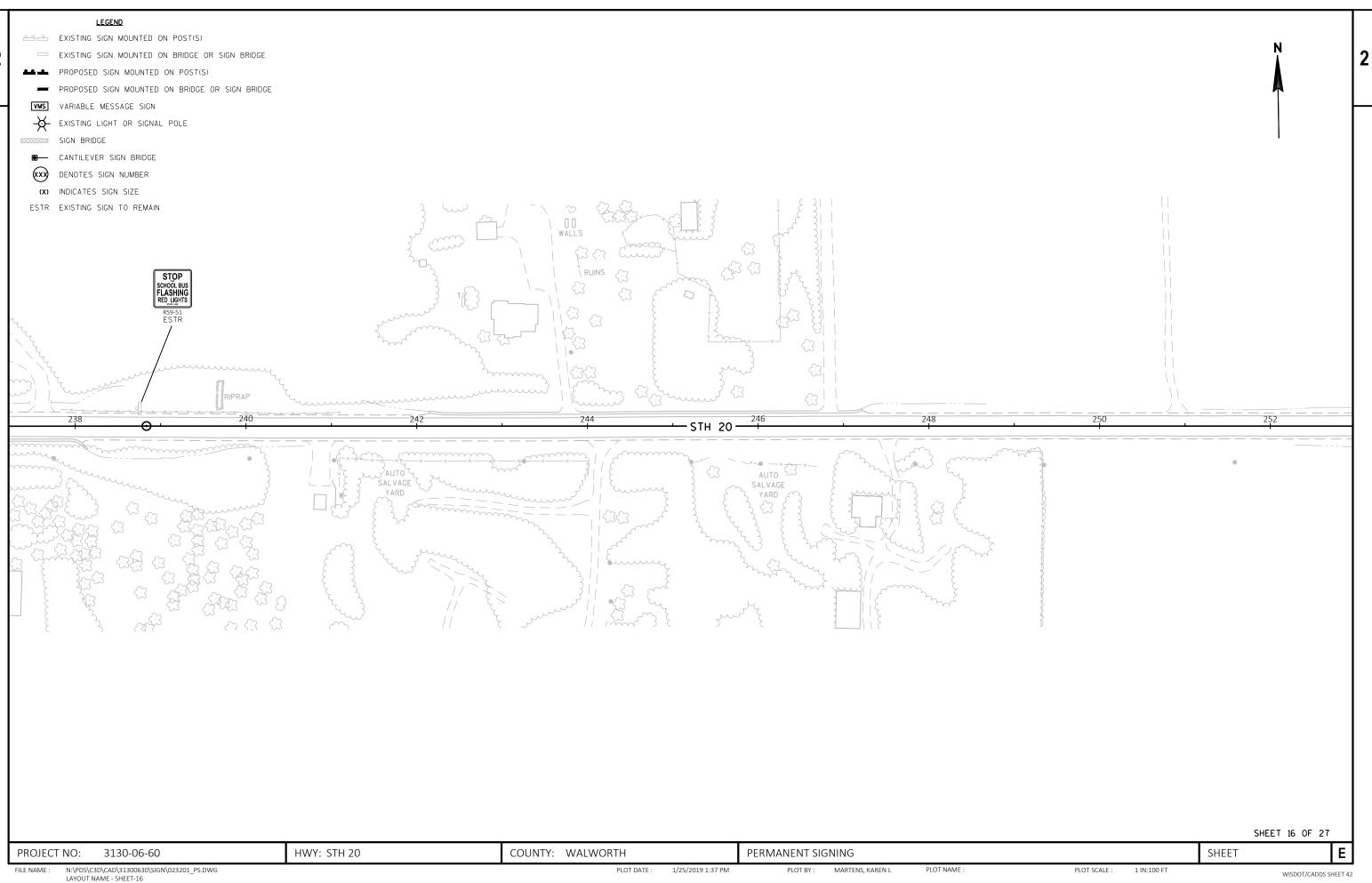
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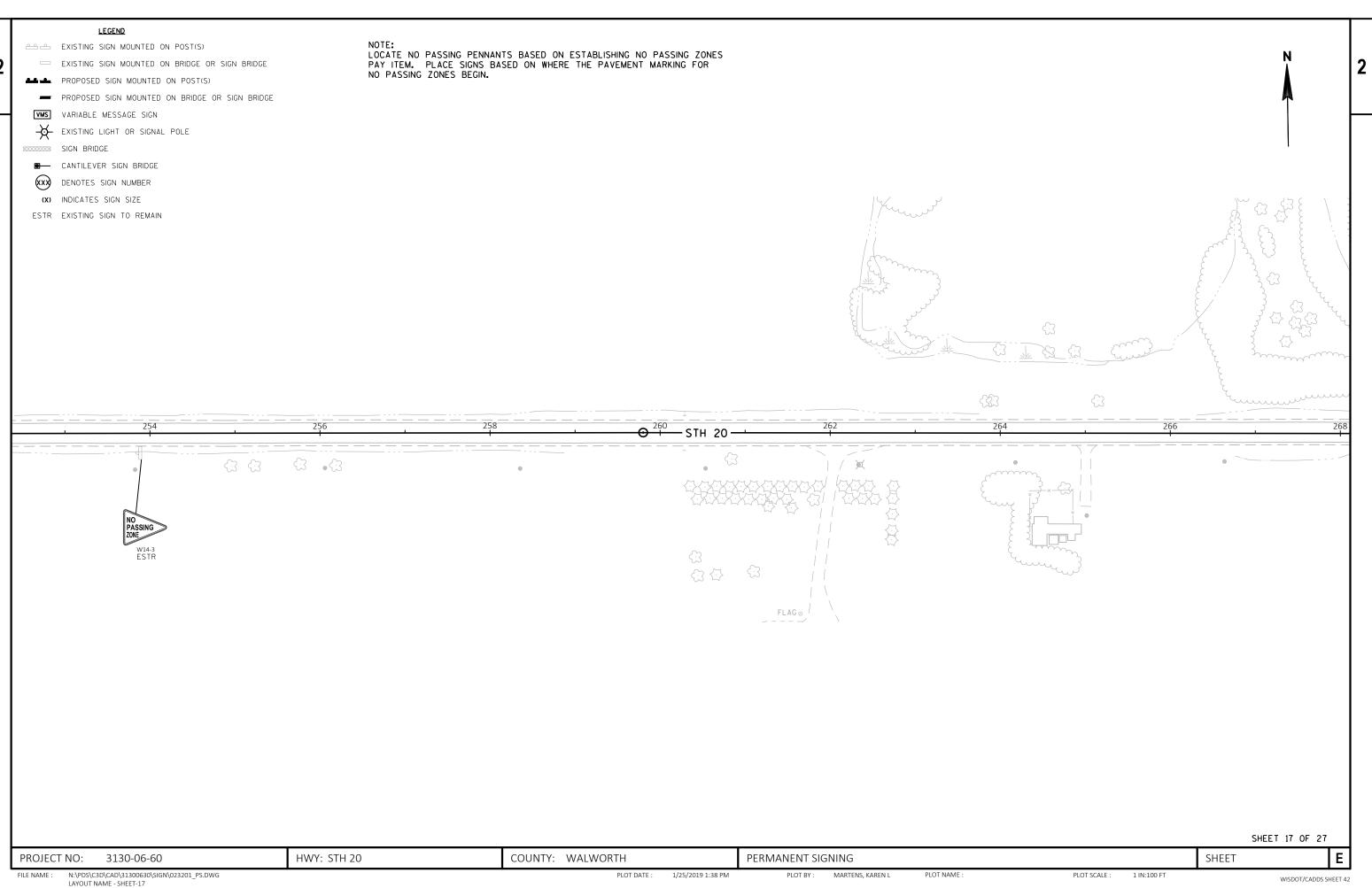


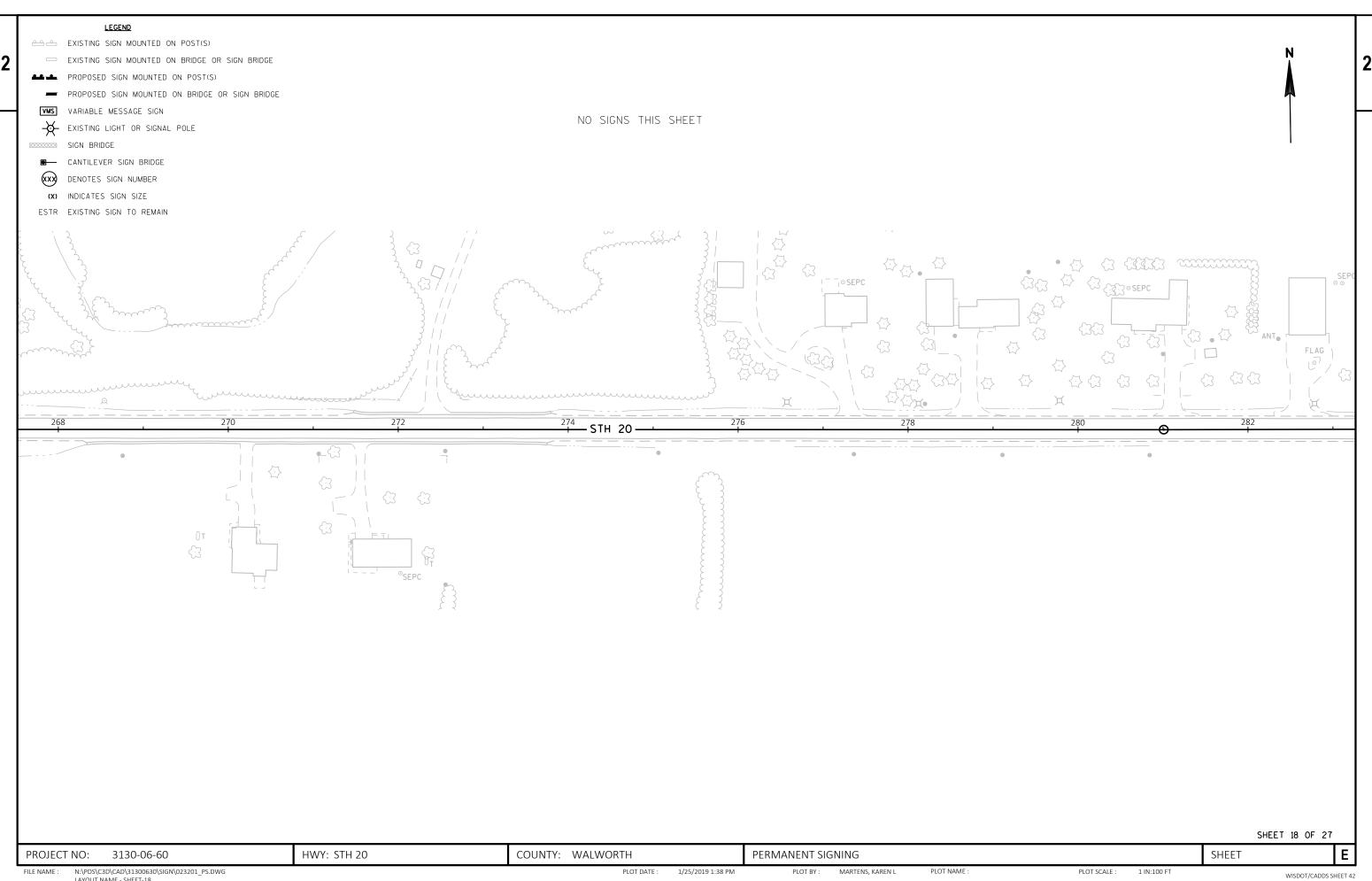




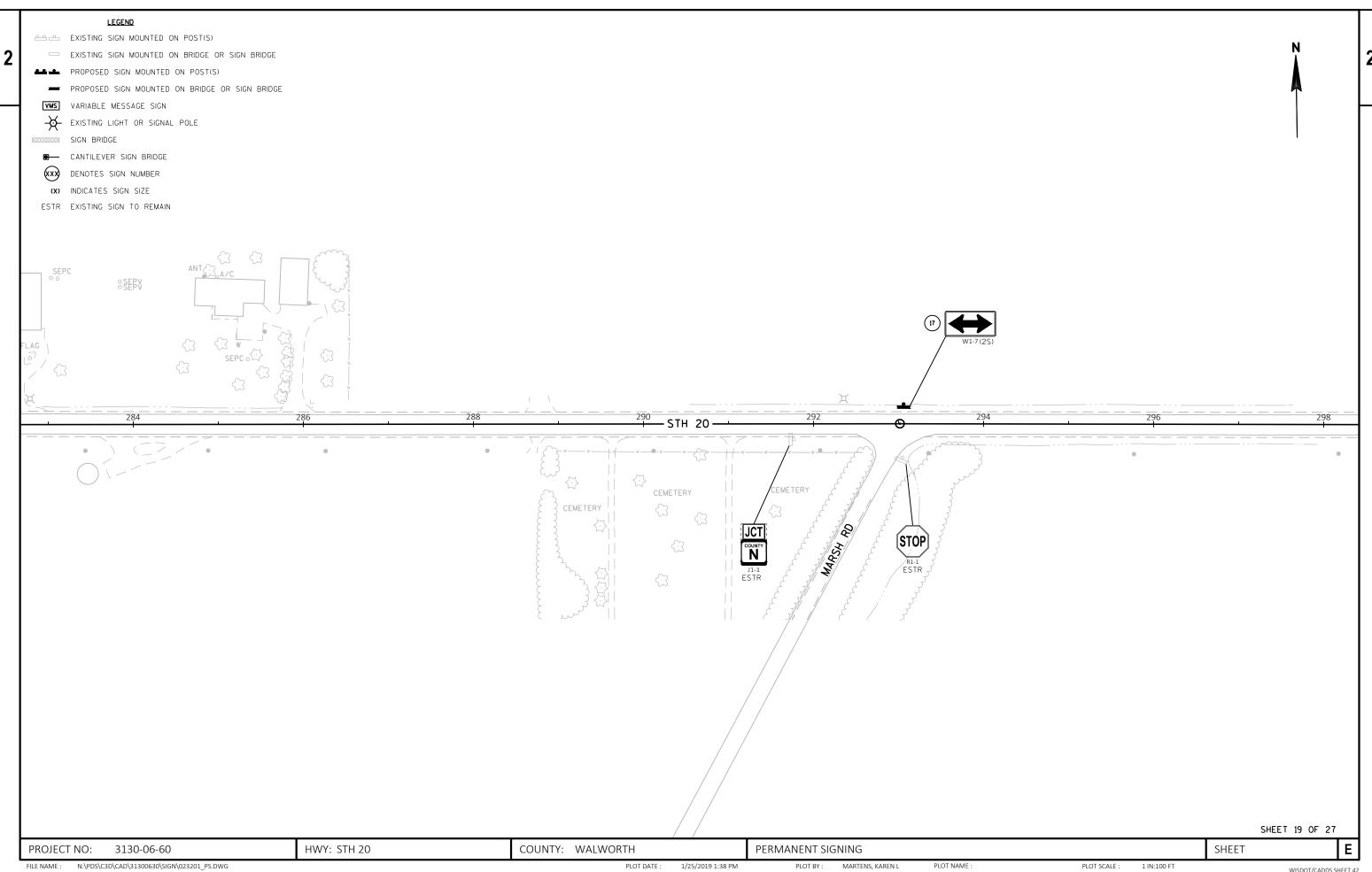
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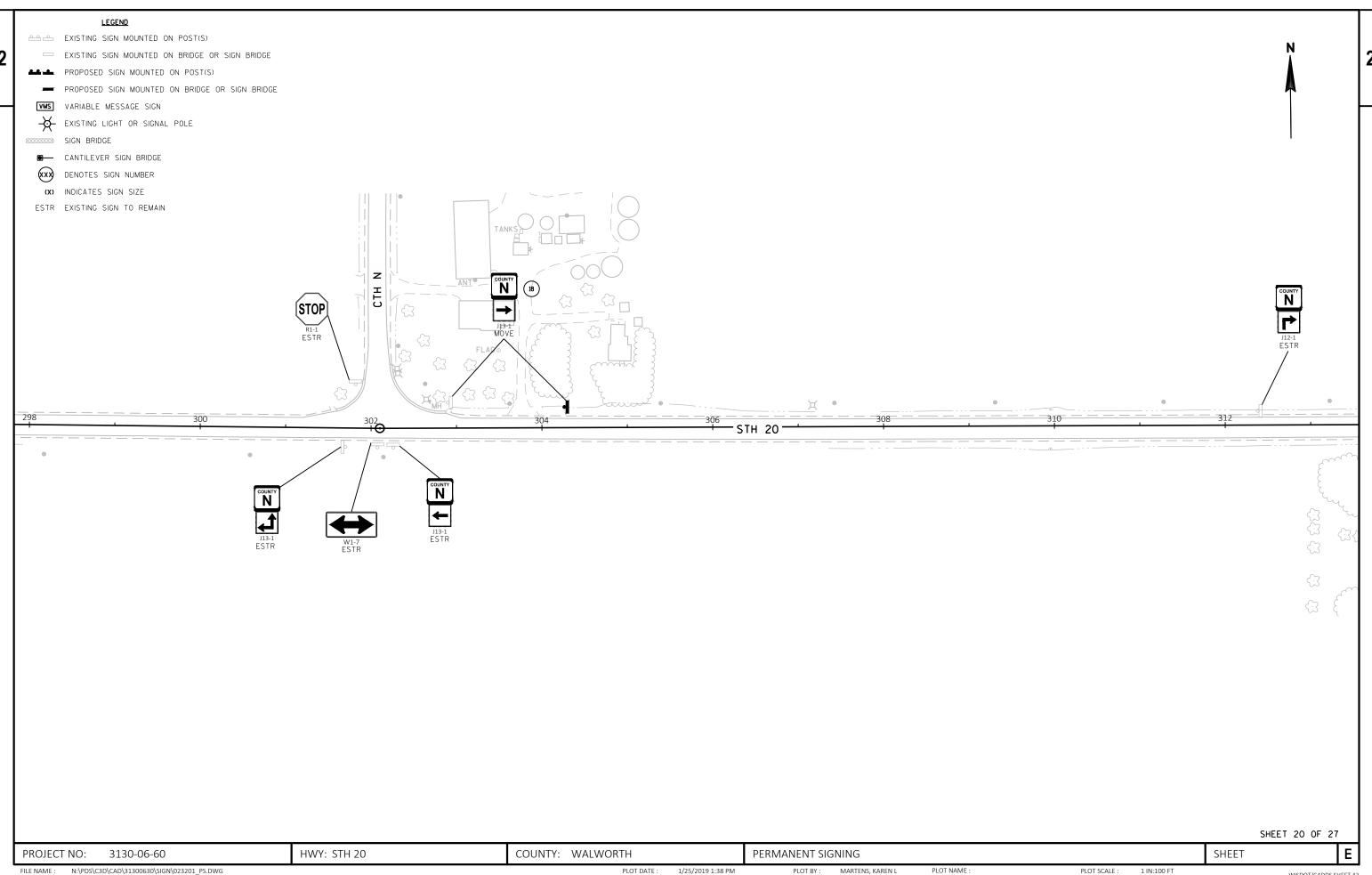




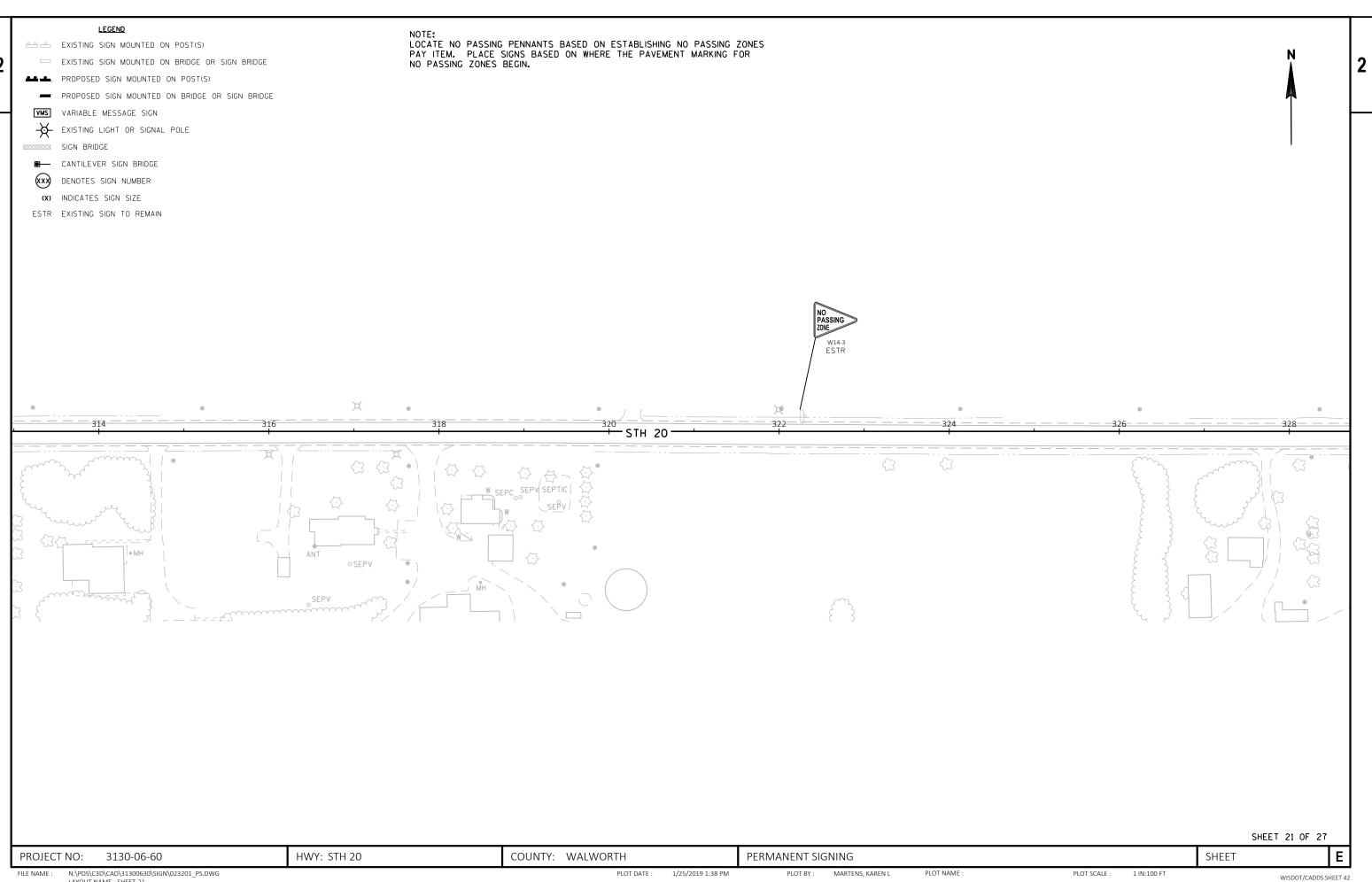
N:\PDS\C3D\CAD\31300630\SIGN\023201_PS.DWG LAYOUT NAME - SHEET-18

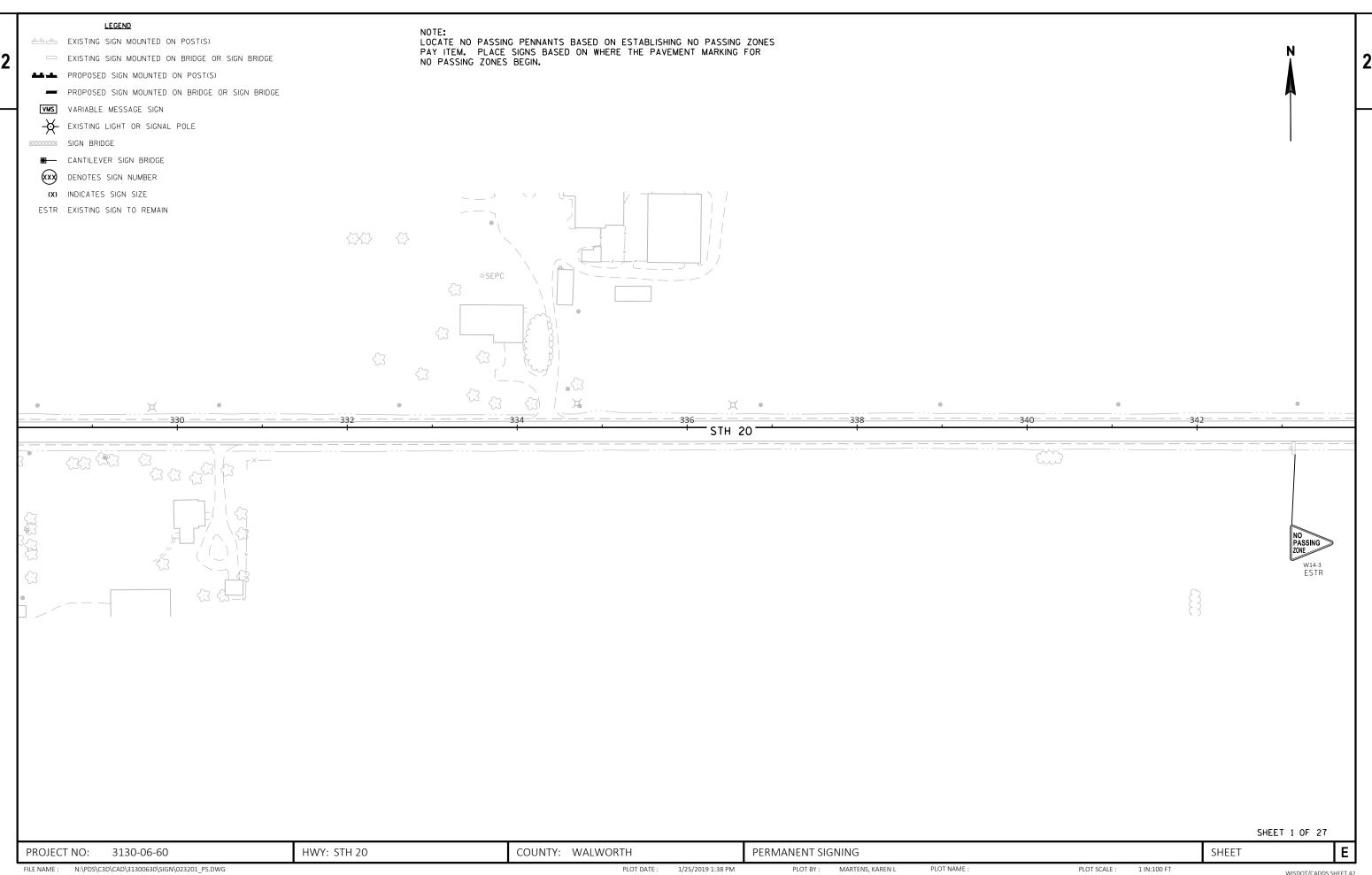


LAYOUT NAME - SHEET-19

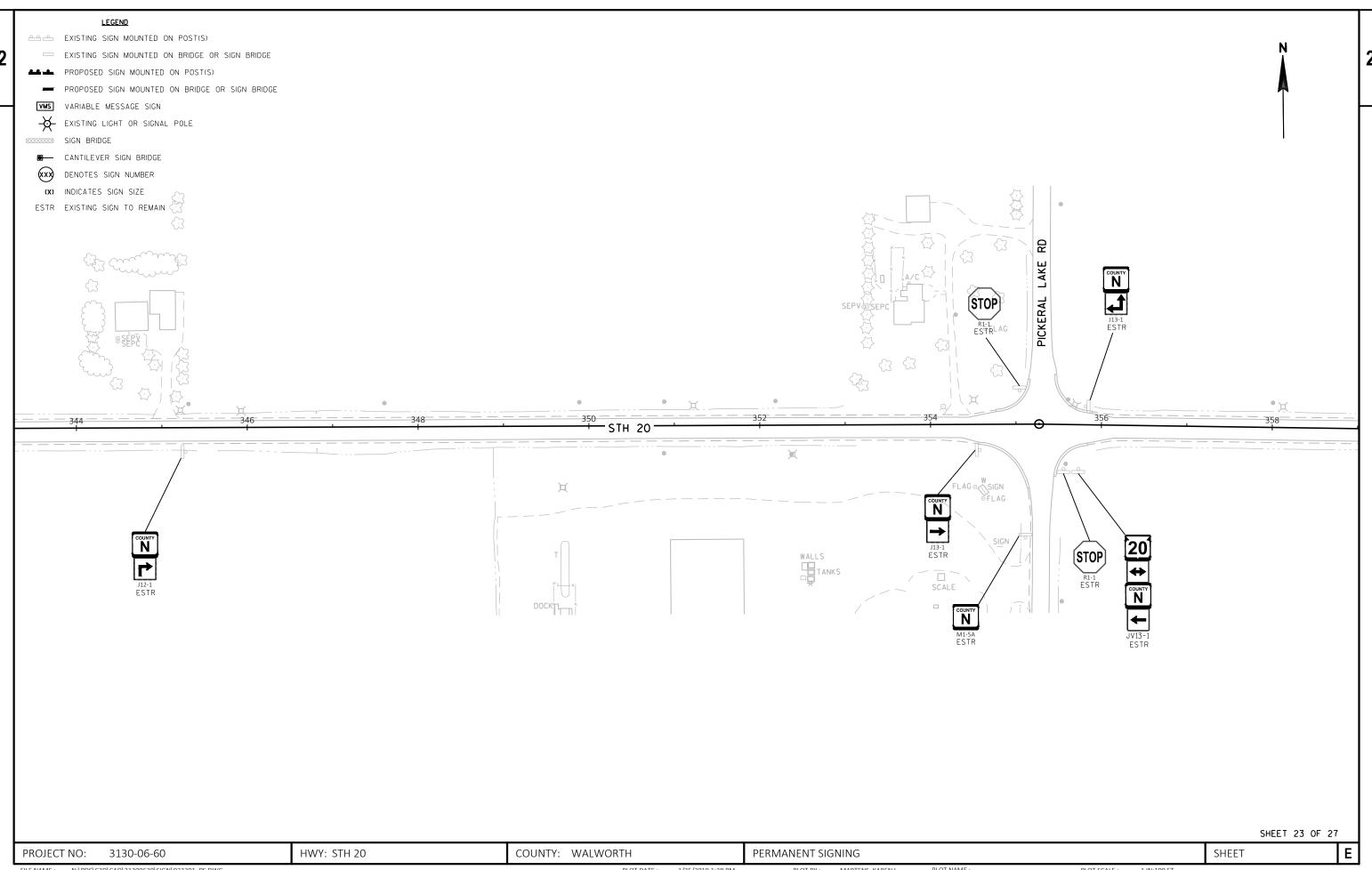


N:\PDS\C3D\CAD\31300630\SIGN\023201_PS.DWG LAYOUT NAME - SHEET-20 PLOT DATE : 1/25/2019 1:38 PM 1 IN:100 FT WISDOT/CADDS SHEET 42

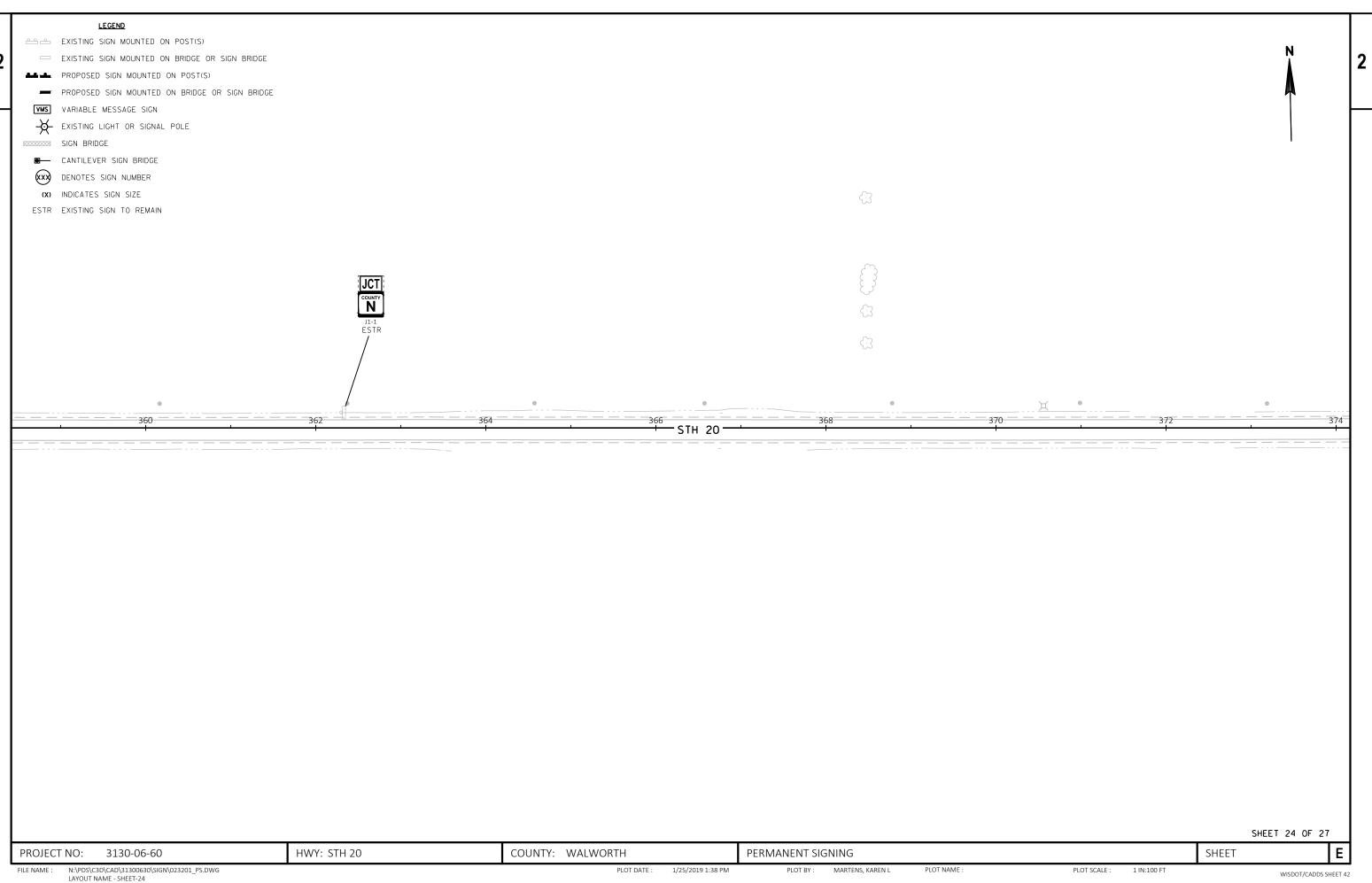


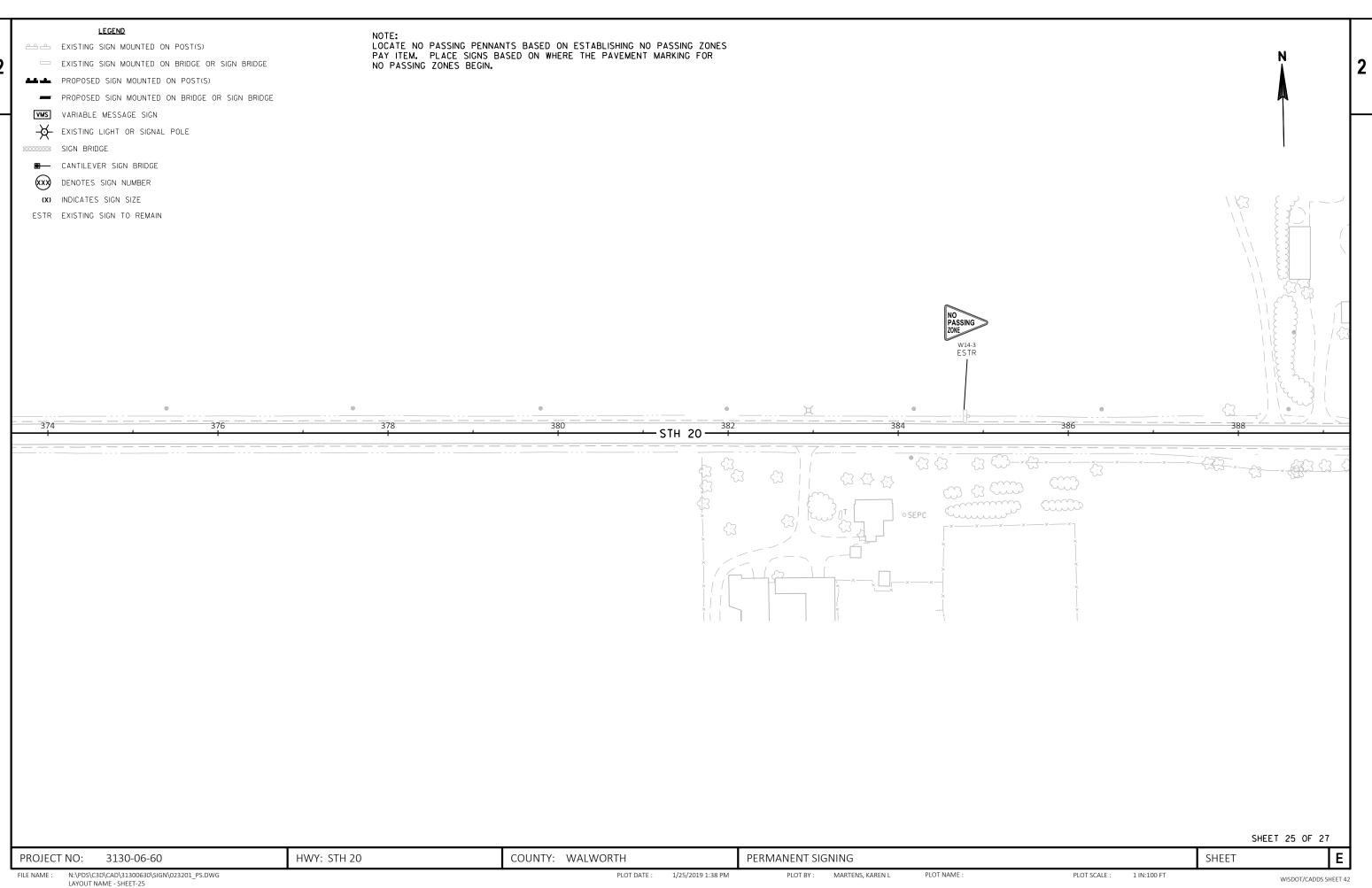


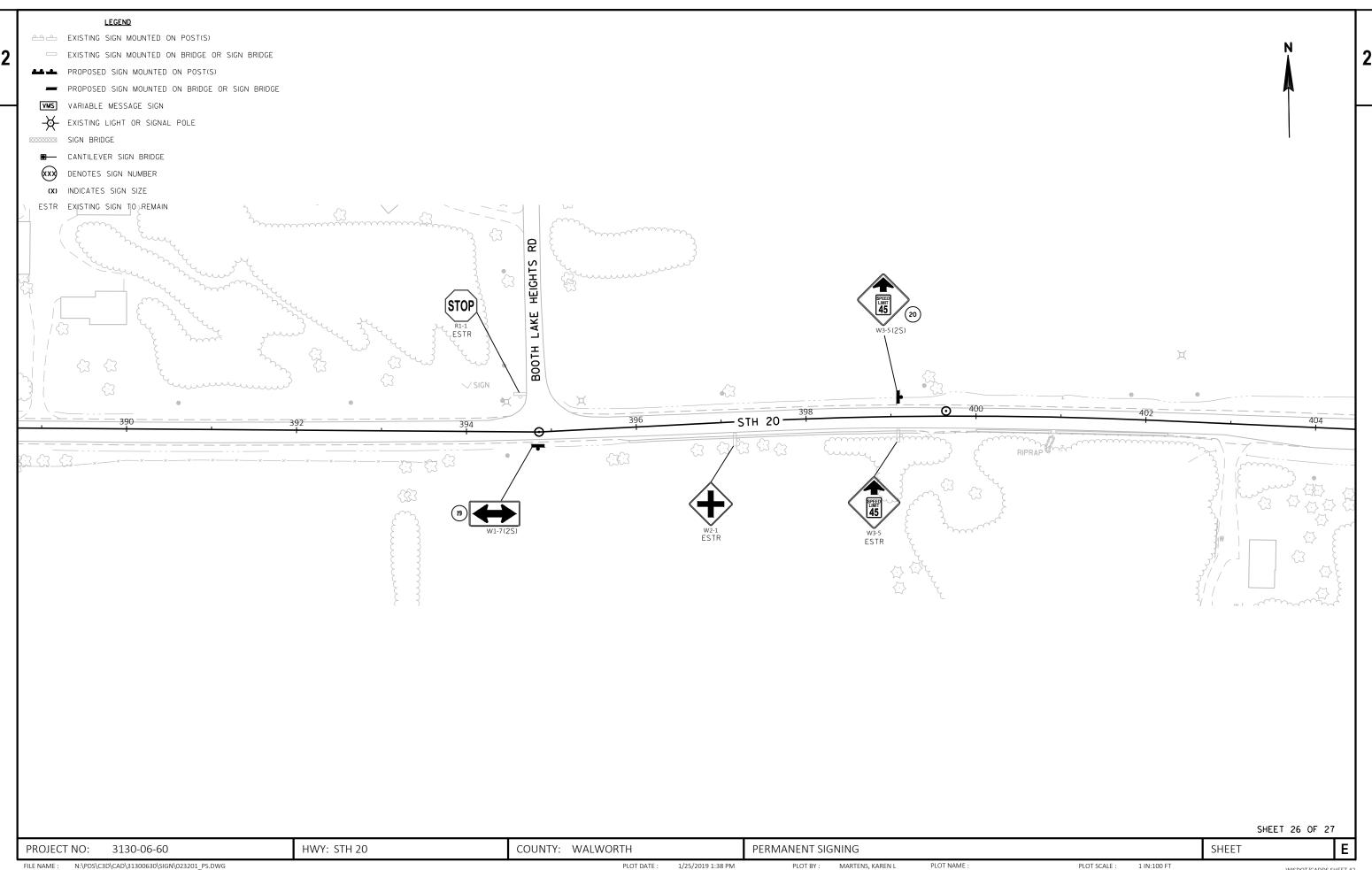
LAYOUT NAME - SHEET-22



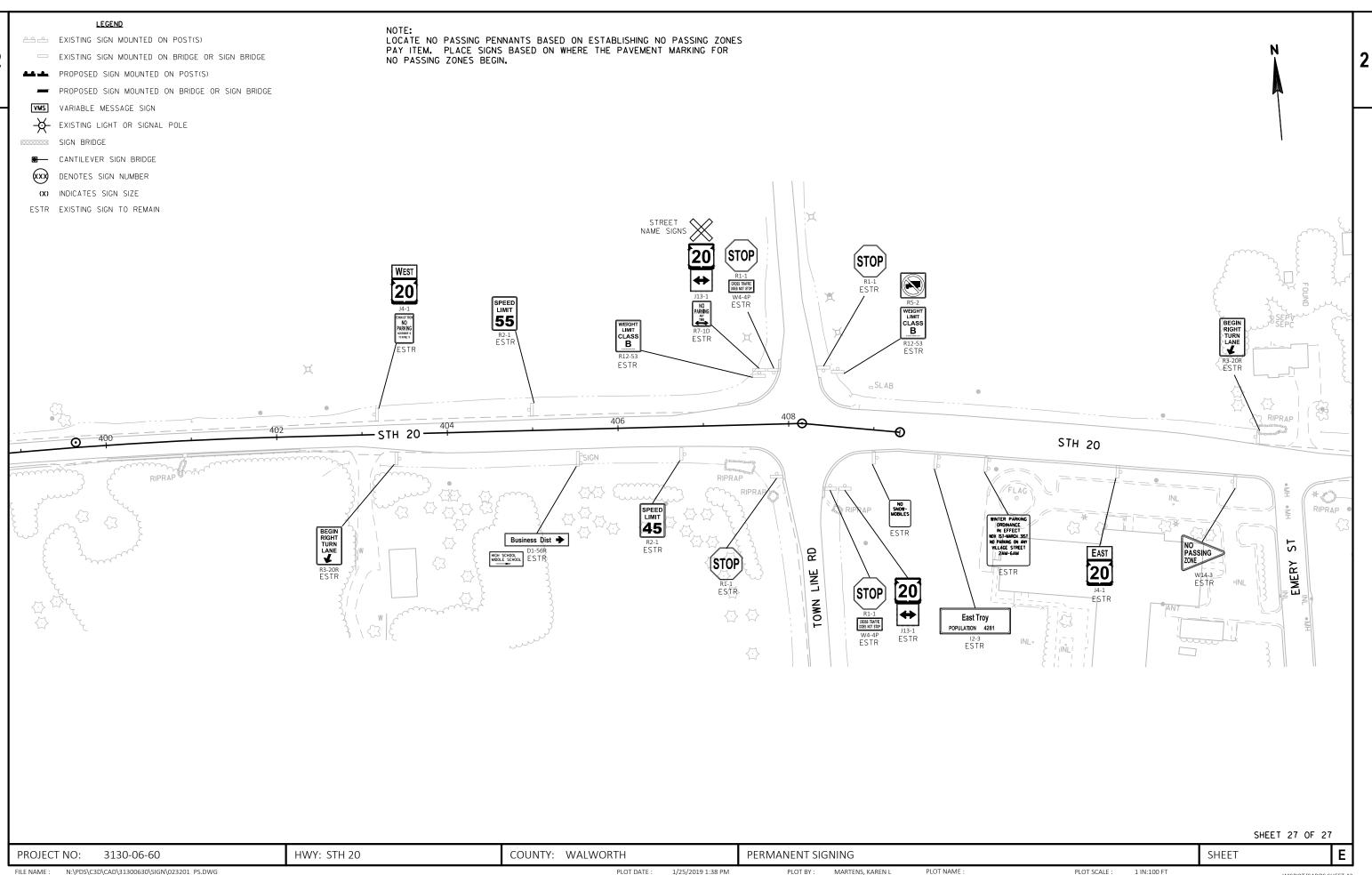
FILE NAME: N:\PDS\C3D\CAD\31300630\Sign\\023201_PS.DWG PLOT DATE: 1/25/2019 1:38 PM PLOT BY: MARTENS, KAREN L PLOT NAME: PLOT SCALE: 1 IN:100 FT WISDOT/CADDS SHEET 42 LAYOUT NAME - SHEET-23



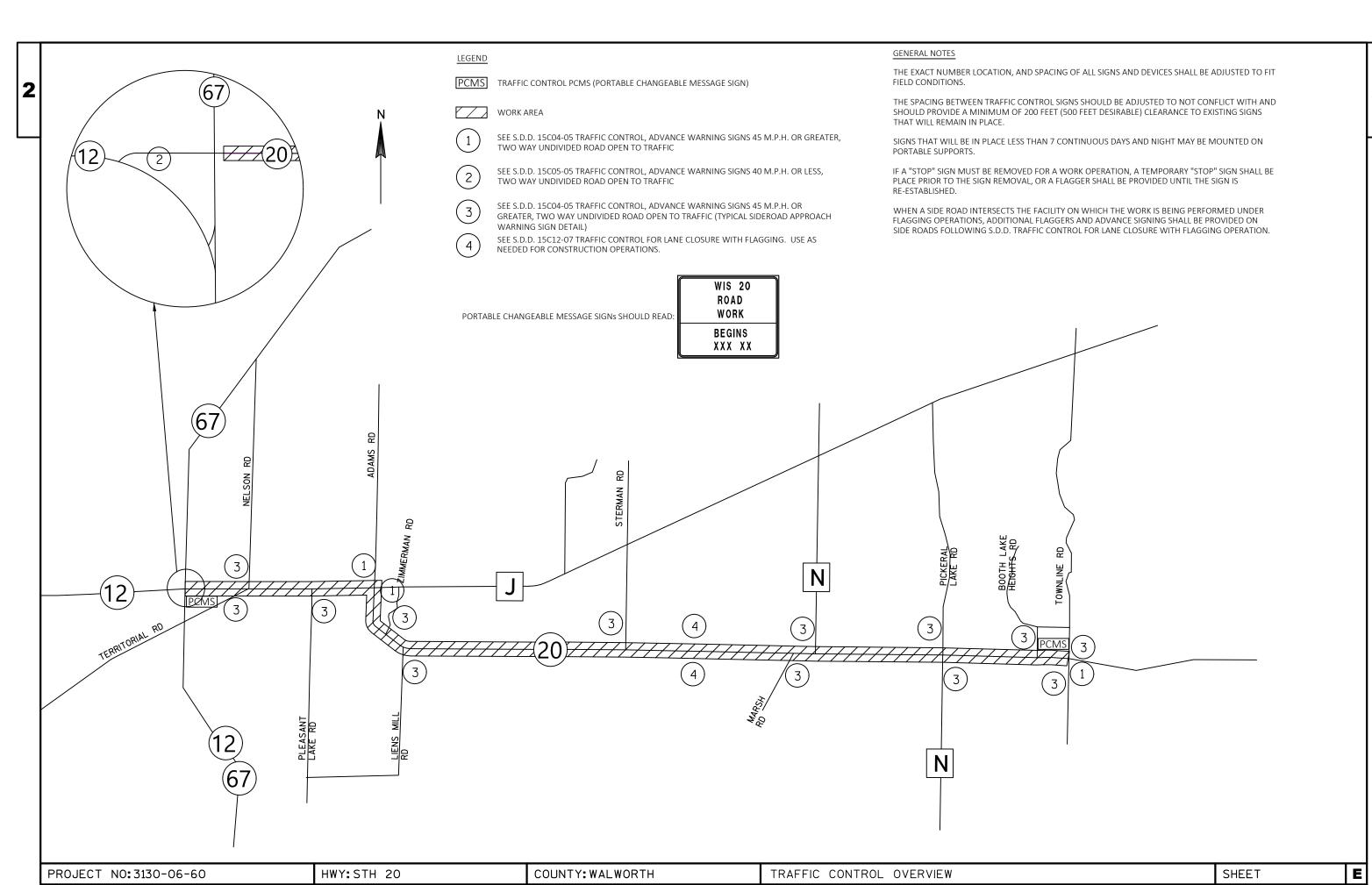


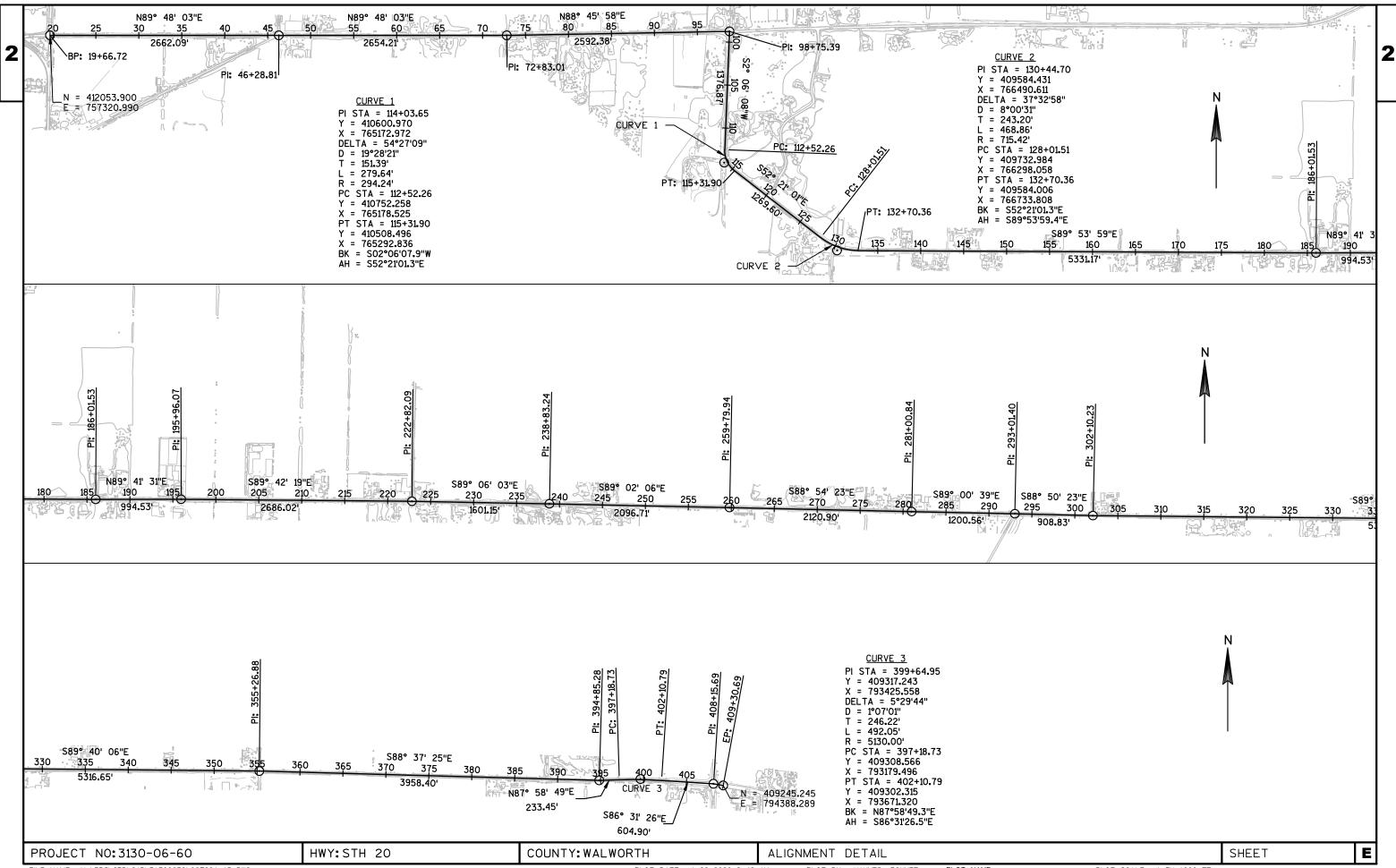


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N:\PDS\C3D\CAD\31300630\SIGN\023201_PS.DWG PLOT DATE : PLOT BY: MARTENS, KAREN L FILE NAME : 1/25/2019 1:38 PM PLOT NAME : LAYOUT NAME - SHEET-27





					3130-06-60
Line	Item	Item Description	Unit	Total	Qty
0002	204.0120	Removing Asphaltic Surface Milling	SY	130,946.000	130,946.000
0004	213.0100	Finishing Roadway (project) 01. 3130-06-60	EACH	1.000	1.000
0006	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,462.000	3,462.000
0008	305.0500	Shaping Shoulders	STA	776.000	776.000
0010	390.0203	Base Patching Asphaltic	SY	777.000	777.000
0012	455.0605	Tack Coat	GAL	9,113.000	9,113.000
0014	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetric		1.000	1.000
0016	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0018	460.2005	Incentive Density PWL HMA Pavement	DOL	13,765.000	13,765.000
0020	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	15,886.000	15,886.000
0022	460.2010	Incentive Air Voids HMA Pavement	DOL	17,283.000	17,283.000
0024	460.5224	HMA Pavement 4 LT 58-28 S	TON	17,283.000	17,283.000
0026	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	168.000	168.000
0028	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	34,300.000	34,300.000
0030	618.0100	Maintenance And Repair of Haul Roads (project) 01.	EACH	1.000	1.000
0030	010.0100	3130-06-60	EACH	1.000	1.000
0032	619.1000	Mobilization	EACH	1.000	1.000
0034	624.0100	Water	MGAL	52.000	52.000
0036	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	15.000	15.000
0038	637.2210	Signs Type II Reflective H	SF	14.920	14.920
0040	637.2230	Signs Type II Reflective F	SF	117.000	117.000
0042	638.2102	Moving Signs Type II	EACH	7.000	7.000
0044	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0046	642.5001	Field Office Type B	EACH	1.000	1.000
0048	643.0300	Traffic Control Drums	DAY	2,880.000	2,880.000
0050	643.0900	Traffic Control Signs	DAY	4,334.000	4,334.000
0052	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0054	643.5000	Traffic Control	EACH	1.000	1.000
0056	646.1020	Marking Line Epoxy 4-Inch	LF	5,400.000	5,400.000
0058	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	73,405.000	73,405.000
0060	646.3020	Marking Line Epoxy 8-Inch	LF	593.000	593.000
0062	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	46,539.000	46,539.000
0064	646.5020	Marking Arrow Epoxy	EACH	2.000	2.000
0066	646.5120	Marking Word Epoxy	EACH	1.000	1.000
0068	646.6120	Marking Stop Line Epoxy 18-Inch	LF	142.000	142.000
0070	648.0100	Locating No-Passing Zones	MI	7.360	7.360
0070	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	5,400.000	5,400.000
0072	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	5,400.000	5,400.000
0074	649.0770	Temporary Marking Raised Pavement Marker Type II	EACH	820.000	820.000
		Construction Staking Resurfacing Reference			
0078	650.8000	Construction Staking Resultacing Reference	LF	38,965.000	38,965.000

Estimate Of Quantities Page 2

					3130-06-60
Line	Item	Item Description	Unit	Total	Qty
0800	650.9910	Construction Staking Supplemental Control (project) 01. 3130-06-60	LS	1.000	1.000
0082	740.0440	Incentive IRI Ride	DOL	29,458.000	29,458.000
0084	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0086	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	250.000	250.000
8800	SPV.0060	Special 01. Section Corner Monuments	EACH	14.000	14.000
0090	SPV.0180	Special 01. Resin Binder High Friction Surface Treatment Modified	SY	5,483.000	5,483.000

ASPHALTIC SURFACE

	REMOVING ASPHALTIC SURFACE MILLING	BASE AGGREGATE DENSE 3/4-INCH	SHAPING SHOULDERS	BASE PATCHING ASPHALTIC	TACK COAT	HMA PAVMENT TYPE 4LT 58-28S	DRIVEWAYS AND FIELD ENTRANCES	ASPHALTIC CENTERLINE RUMBLE STRIPS	WATER
	204.0120	305.0110	305.0500	390.0203	455.0605	460.5224	465.0120	465.0475	624.0100
LOCATION	SY	TON	STA	SY	GAL	TON	TON	LF	MGAL
20+45 TO 98+75	26257	703	158	38	1827	3465	35	6575	11
98+75 TO 409+30	104689	2759	618	740	7286	13818	133	27725	41
TOTAL	130946	3462	776	777	9113	17283	168	34300	52

ASPHALT PWL

HMA PAVEMENT HMA PAVEMENT PWL TES STRIP PWL TEST STRIP VOLUMETRICS DENSITY 460.0105.S 460.0110.S EACH EACH LOCATION STA 20+45 TO 409+30 1 1 **TOTAL** 1

TRAFFIC CONTROL

643.0300 649.0770 643.0900 643.1050 TEMPORARY MARKING RAISED DRUMS SIGNS SIGNS PCMS PAVEMENT MARKER TYPE II EACH EACH DAY DAY EACH DAY EACH 484 2880 4334 14 820 3130-06-60 128 2 14 TOTAL 2880 4334 820

NOTE: UNLESS OTHERWISE NOTED, ALL ITEMS ARE CATEGORY 0010

Е SHEET: PROJECT NO: 3130-06-60 HWY: STH 20 COUNTY: WALWORTH MISCELLANEOUS QUANTITIES FILE NAME :

PLOT DATE : PLOT NAME : ___ PLOT SCALE: 1:1

PWL Mixture Use Table

The following acceptance criteria are applicable for this project:

							Quality Management	Program to be used for:
Location	Station	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness	Mixture Acceptance	Density Acceptance
Mainline	20+45 to 98+75	Upper Layer	Milled Existing HMA Surface	4LT 58-28S	2772		PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Shoulders & Turn Lanes	20+45 to 98+75	Upper Layer	Milled Existing HMA Surface	4LT 58-28S	693	2 "	PWL Incentive Air Voids HMA Pavement 460.2010	QMP as per SS 460
Mainline	98+75 to 409+30	Upper Layer	Milled Existing HMA Surface	4LT 58-28S	10993	2 "	PWL Incentive Air Voids HMA Pavement 460.2010	Incentive Density PWL HMA Pavement 460.2005
Shoulders & Turn Lanes	98+75 to 409+30	Upper Layer	Milled Existing HMA Surface	4LT 58-28S	2825	2 "	PWL Incentive Air Voids HMA Pavement 460.2010	QMP as per SS 460
Various		Base Patch	Milled Existing HMA Surface	Asphaltic Surface	103	6"	QMP as per SS 390	Acceptance by ordinary compaction
Various		Driveways and Field Entrances	Milled Existing HMA Surface	Asphaltic Surface	164	4"	QMP as per SS 465	Acceptence by ordinary compaction

NOTE: UNLESS OTHERWISE NOTED, ALL ITEMS ARE CATEGORY 0010

Е HWY: STH 20 SHEET: PROJECT NO: 3130-06-60 COUNTY: WALWORTH MISCELLANEOUS QUANTITIES PLOT SCALE : 1:1

FILE NAME : PLOT NAME : ___

•	l
3	l

AVEMENT MARKINGS

	646.1040	646.3020		646.4520		646.5020	646.5120	646.6120	648.0100
						MARKING	MARKING	MARKING	
	MARKING LINE GROOVED	MARKI	MARKING LINE		MARKING LINE SAME DAY		WORD	STOP LINE	LOCATE NO
	WET REF EPOXY 4-INCH	OXY 4-INCH EPOXY 8-INCH		EPOX	Y 4-INCH	EPOXY	EPOXY	INCH	PASSING ZONES
	(WHITE)	(WHITE)	(WHITE)	(YELLOW)	(YELLOW)	(WHITE)	(WHITE)	(WHITE)	
			3' SKIPS		12.5' SKIPS		"ONLY"		
 LOCATION	LF	LF	LF	LF	LF	EACH	EACH	LF	
 20+40 TO 98+75	15285	307	53	11683	866	2	1	24	1.48
 98+75 TO 409+30	58121	158	75	29651	4,339			118	5.88
 TOTAL	73,405	593		46,539		2	1	142	7.36

PAVEMENT MARKINGS HFST

TOTAL	5,4			400	5,400		
STA 125+00 TO 135+00	1000	2000	1000	2000	1000	2000	
STA 109+00 TO 117+00	800	1600	800	1600	800	1600	
HFST AREA							
LOCATION	LF	LF	LF	LF	LF	LF	
	(WHITE)	(YELLOW)	(WHITE)	(YELLOW)	(WHITE)	(YELLOW)	
_	EPOXY 4	4-INCH	EPOXY	4-INCH	REMOVABLE TAPE 4-INCH		
	MARKIN	IG LINE	TEMPORARY	MARKING LINE	TEMPORARY MARKING LINE		
	646.1	1020	649	.0120	649.0150		

^{*}NOTE: ADDITIONAL PAVEMENT MARKING MOBILZATIONS REQUIRED

NOTE: UNLESS OTHERWISE NOTED, ALL ITEMS ARE CATEGORY 0010

Е PROJECT NO: 3130-06-60 HWY: STH 20 COUNTY: WALWORTH MISCELLANEOUS QUANTITIES SHEET: PLOT SCALE : 1:1

FILE NAME : ___ PLOT DATE : _ PLOT BY : _____ PLOT NAME : ____ TYPE II PERMANENT SIGNING - 3130-06-60 STH 20

						637.2210	637.2230	638.3000	634.0618	638.2102		
						SIGNS	SIGNS	REMOVING				
	SIGN			SIGN		TYPE II	TYPE II	SMALL	WOOD	MOVE	MOUNT	
SIGN	CODE	SIGN		SIZE		REFLC	REFLC	SIGN	POSTS	SIGNS	ON SAME	
NO.	& SIZE	MESSAGE	W	Х	Н	Н	F	SUPPORTS	4"X 6"x18'	TYPE II	POST AS	
			[IN.]	Х	[IN.]	[SF]	[SF]	[EA]	[EA]	[EA]	SIGN#	REMARKS / NEW SIGN LOCATION
1	R1-1(3)		36	Х	36	7.460			1			SHEET 1A
2	R1-1(3)		36	х	36	7.460			1			SHEET 1A
3	W1-7(2S)		48	х	24		8.000		1			SHEET 3
4	W1-7(2S)		48	Х	24		8.000		1			SHEET 5
5	R1-2			х					1	1		SHEET 6
6	W1-10L(2M)		36	Х	36		9.000					SHEET 8
7	W13-1(3)		24	Х	24		4.000				#6	
8	W1-10L(2M)		36	X	36		9.000					
9	W13-1(3)		24	X	24		4.000				#8	
10	W1-7(2S)		48	Х	24		8.000					
11	W1-7(2S)		48	X	24		8.000					
12	W1-10R(2M)		36	X	36		9.000					SHEET 9
13	W13-1(3)		24	X	24		4.000				#12	
14	W1-10R(2M)		36	X	36		9.000					
15	W13-1(3)		24	Х	24		4.000				#14	
16	W1-7(2S)		48	X	24		8.000		1			SHEET 15
17	W1-7(2S)		48	X	24		8.000		1			SHEET 19
18	J13-1			X				1	1	1		SHEET 20
19	W1-7(2S)		48	X	24		8.000		1			SHEET 26
20	W3-5(2S)	45 MPH	36	Х	36		9.000		1			
				Х								
		ED (NO PASSING ZONE)		Х				5	5	5		
	TOTALS					14.920	117.000	6	15	7		

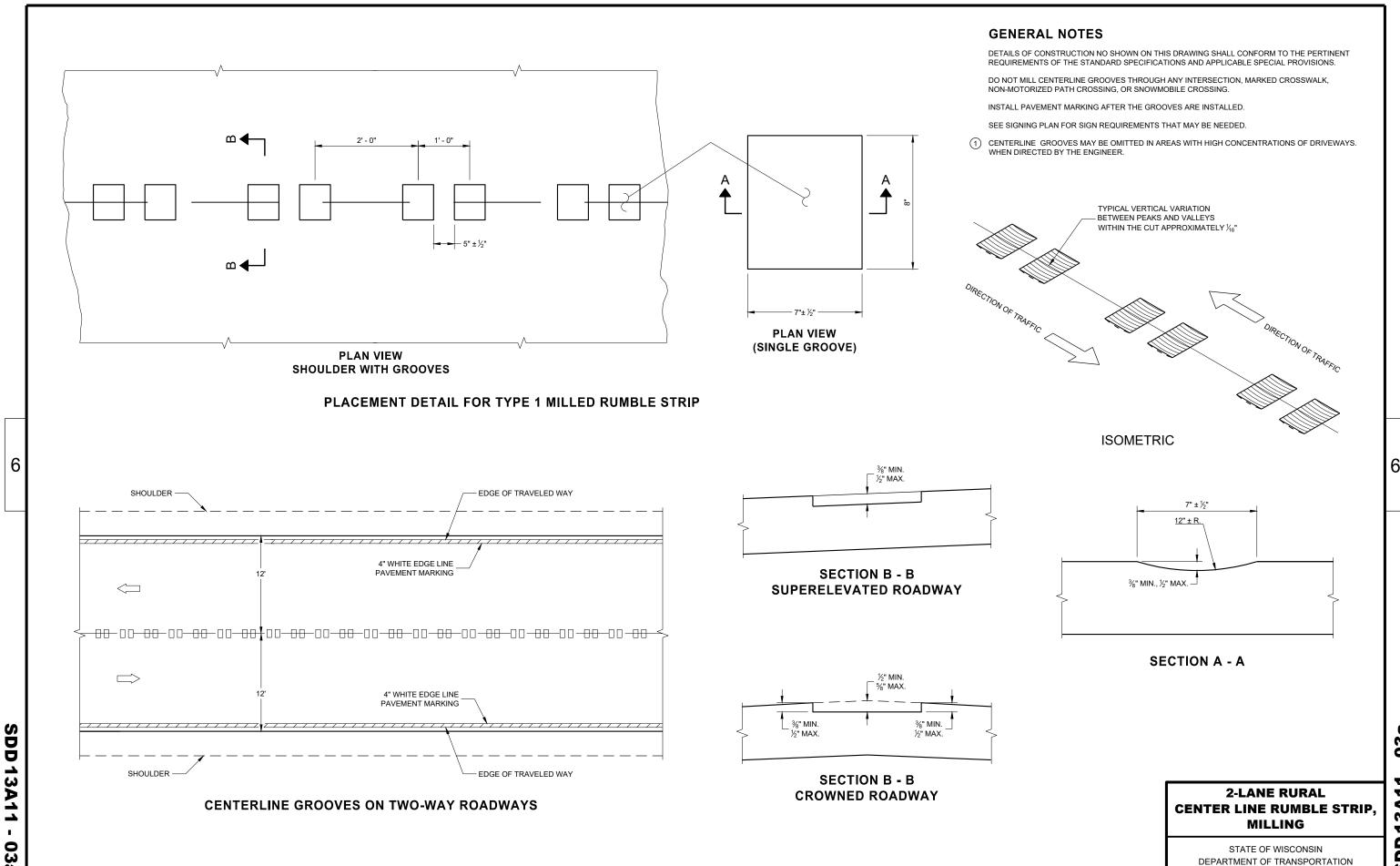
SHEET 1 OF 1

PROJECT NO: 3130-06-60 HWY: STH 20 COUNTY: WALWORTH MISCELLANEOUS QUANTITIES – PERMANENT SIGNING SHEET: **E**

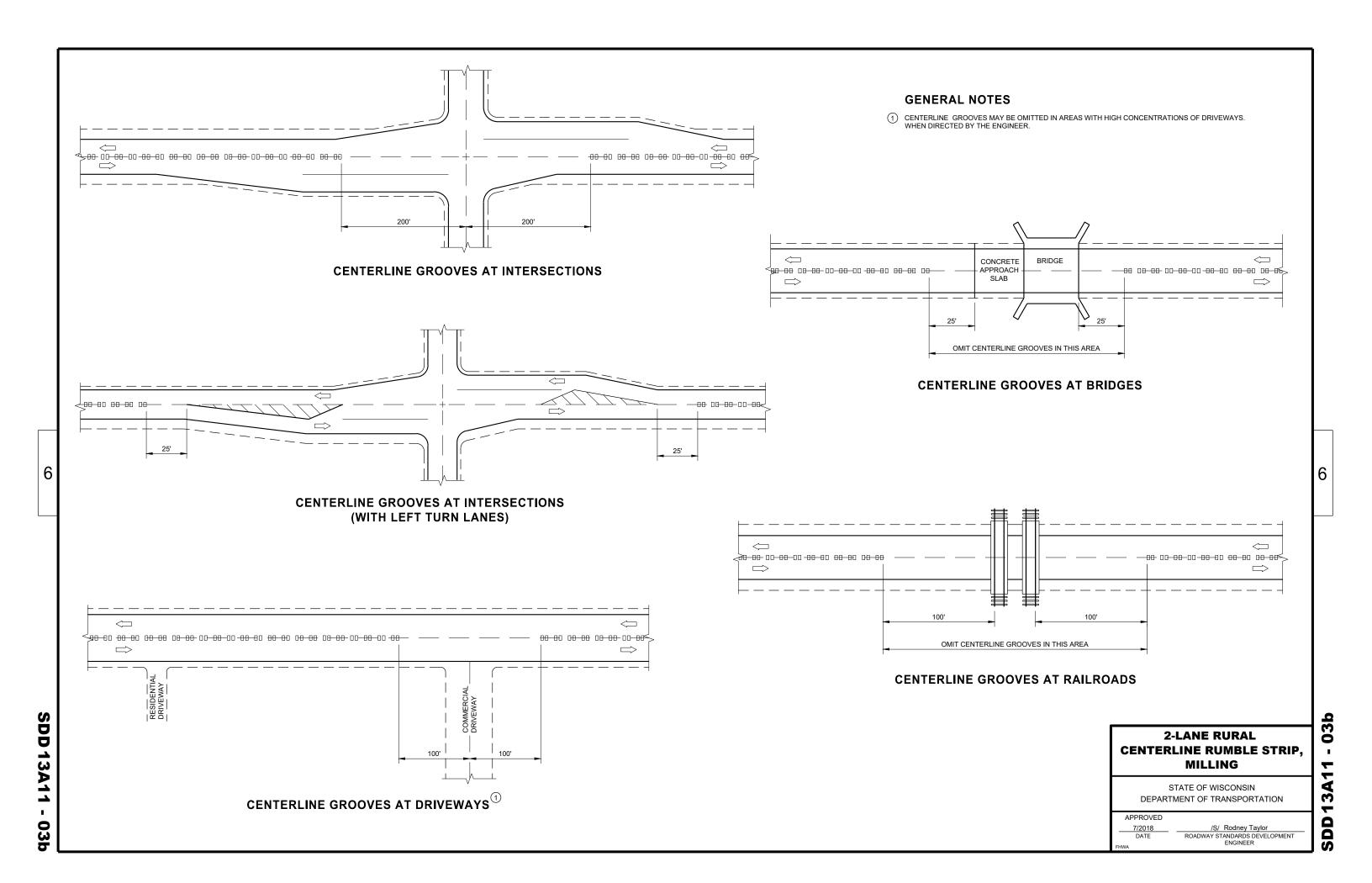
Standard Detail Drawing List

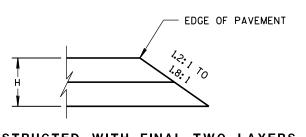
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B29-01	SAFETY EDGE
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C34-03	STANDARD APPLICATION FOR TEMPORARY RAISED PAVEMENT MARKER, TYPE 2
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

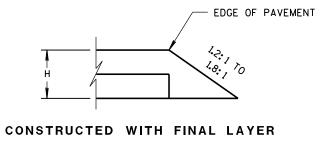
6



SDD



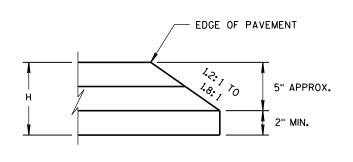


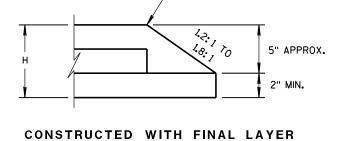


FOR H 5" OR LESS

CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS





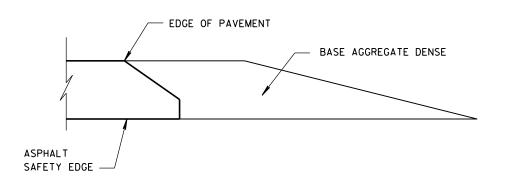
FOR H GREATER THAN 5"

EDGE OF PAVEMENT

CONSTRUCTED WITH FINAL TWO LAYERS

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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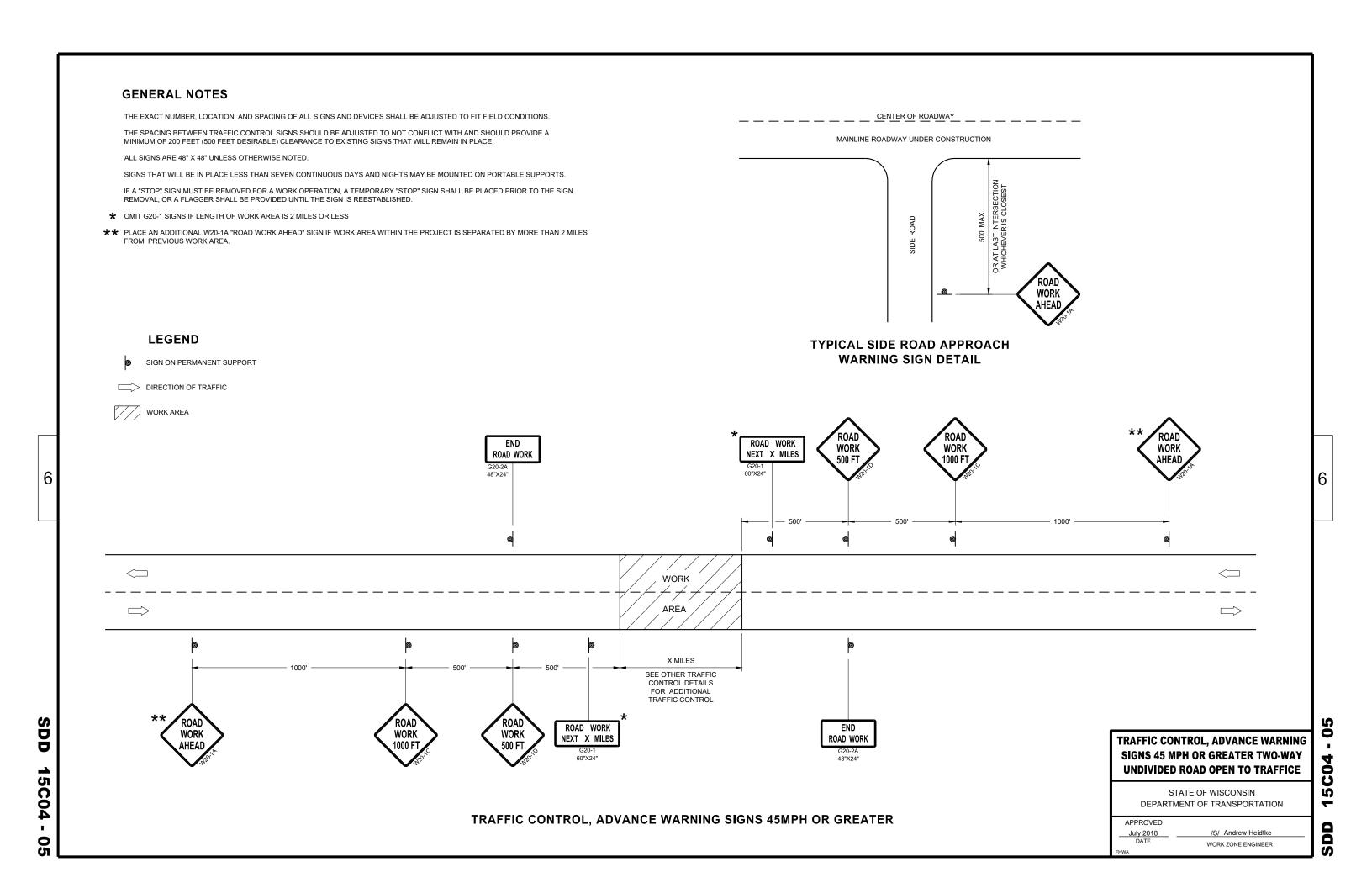
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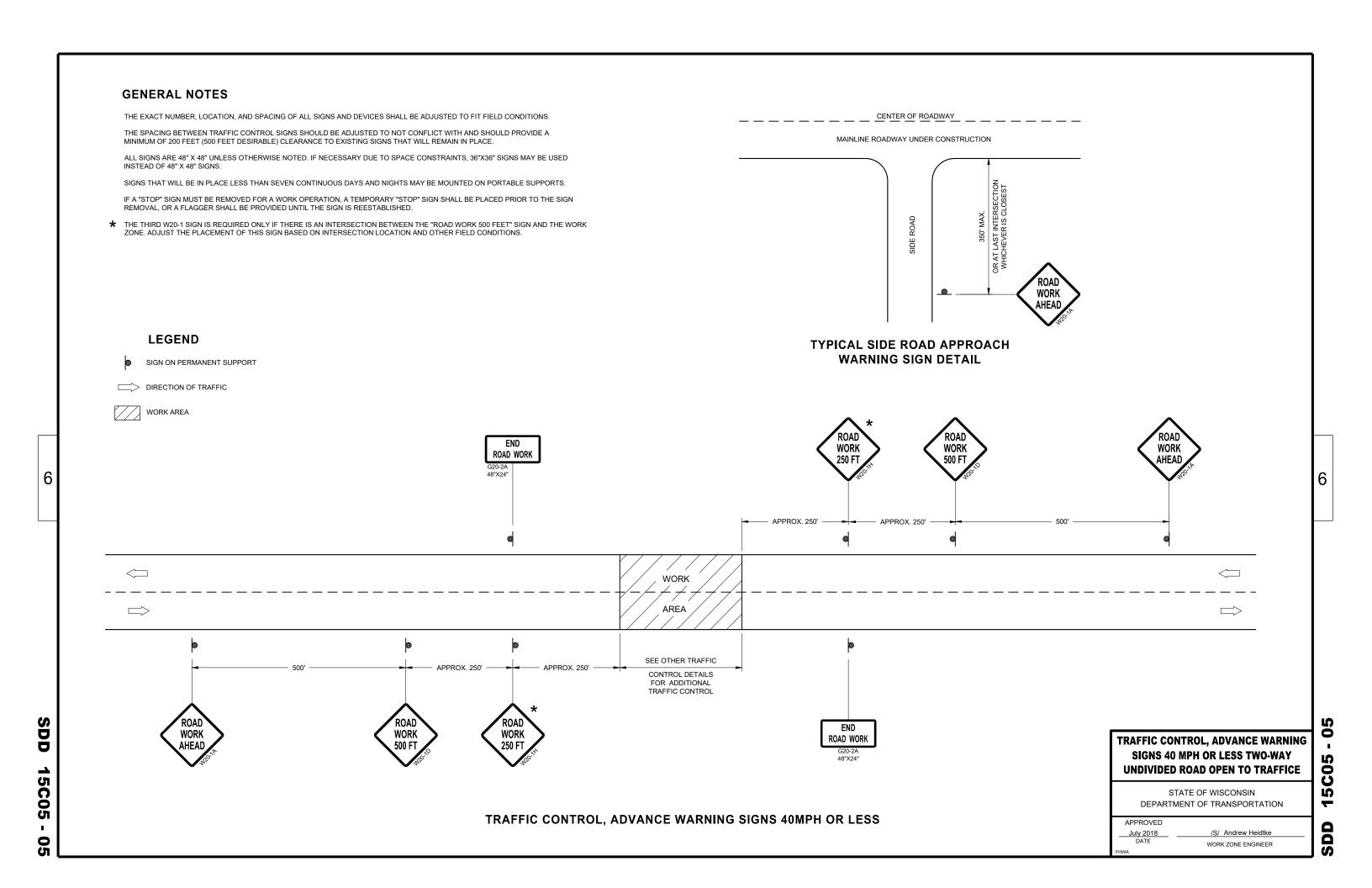
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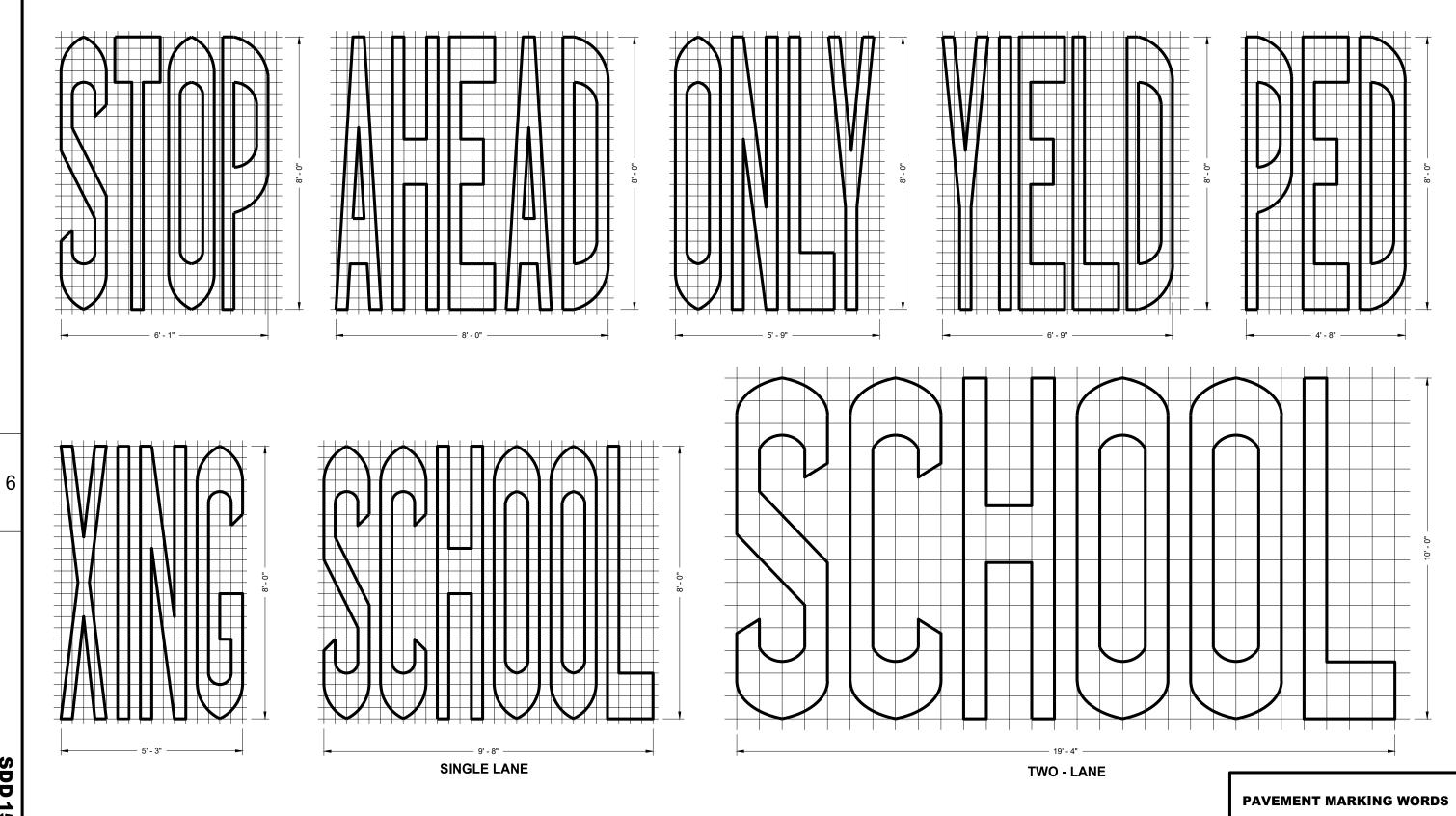
APPROVED

DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER

6







SDD 15C07 15b

GENERAL NOTES

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

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

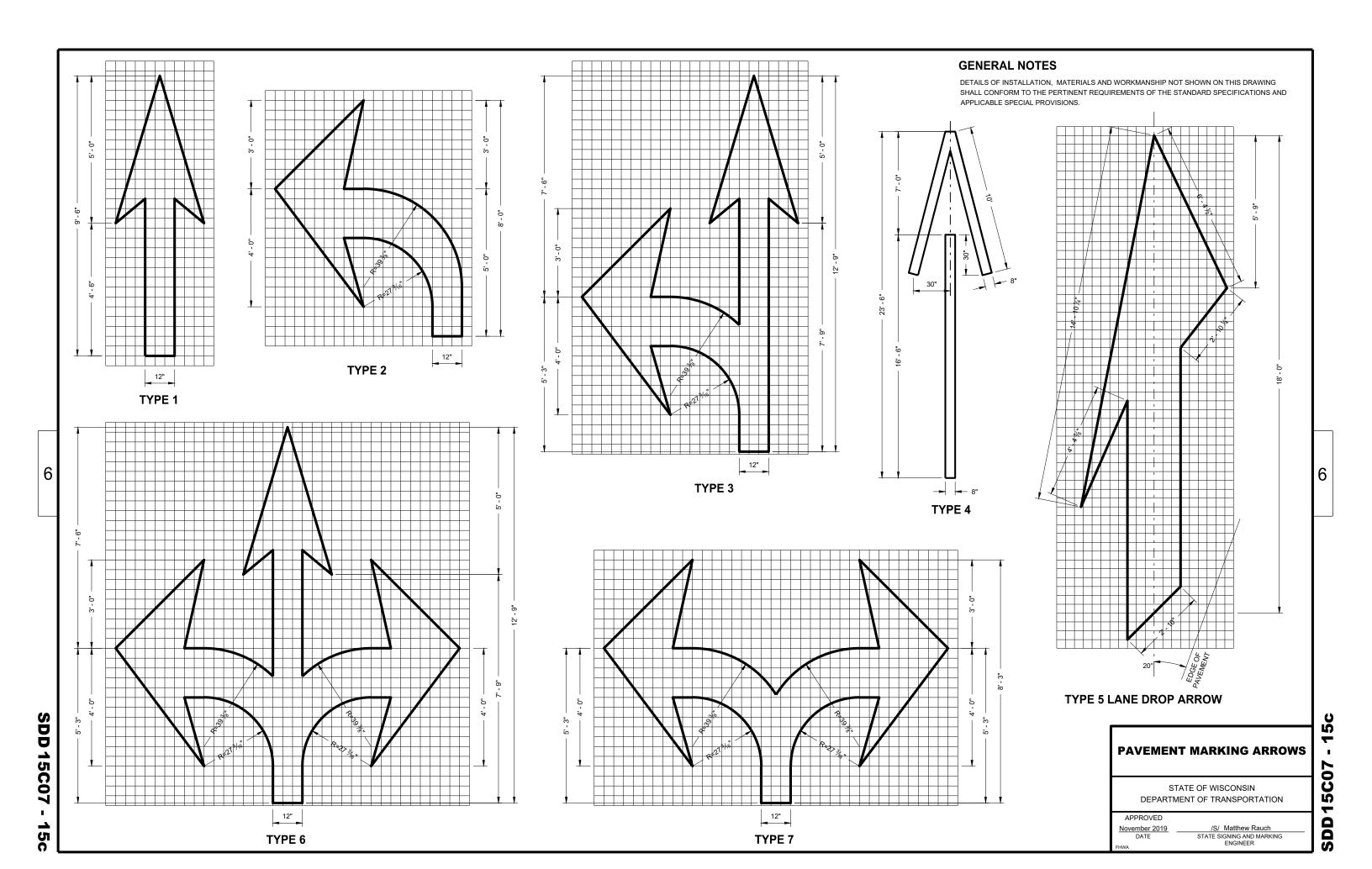
APPROVED

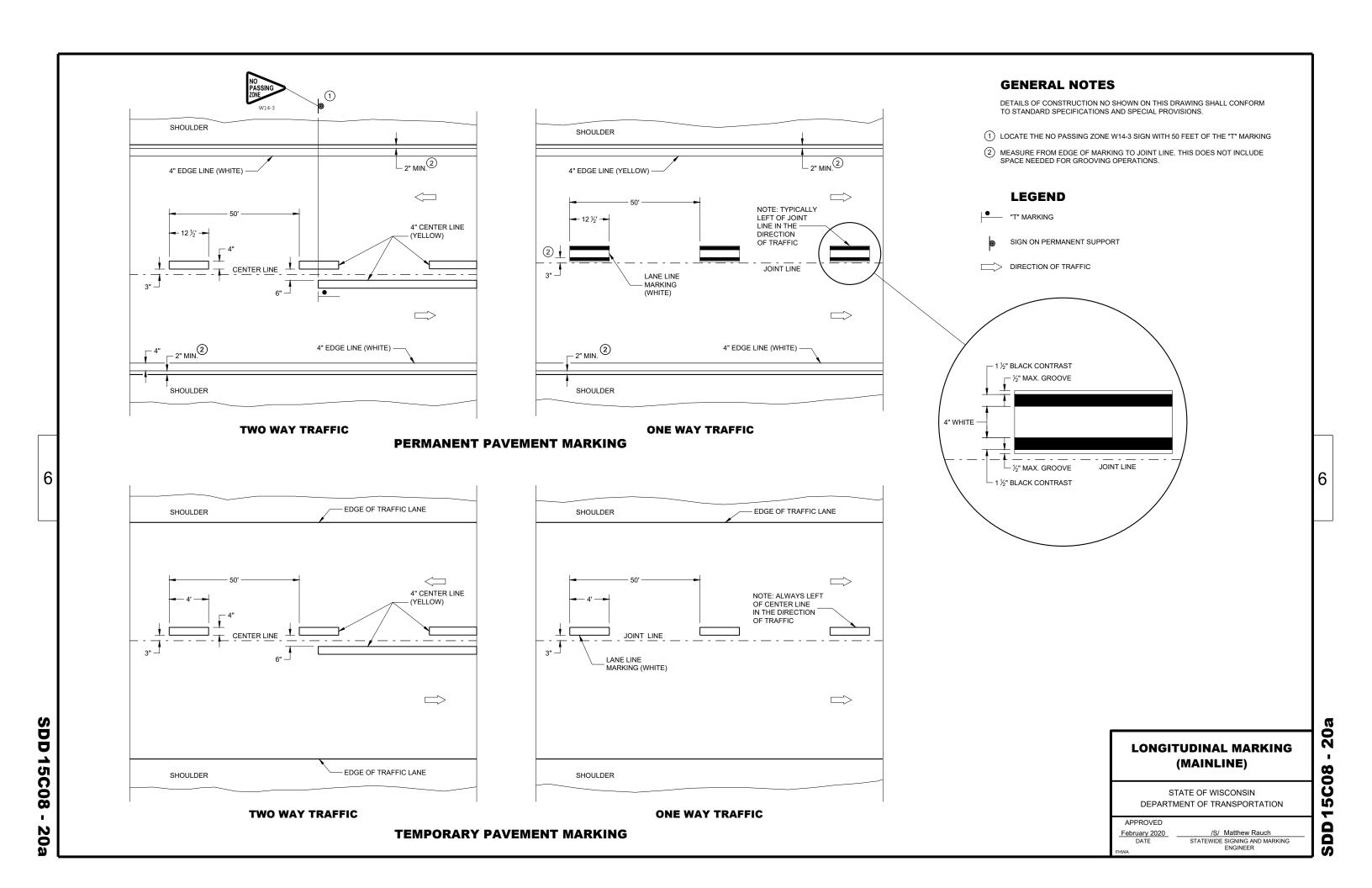
November 2019 ____ /S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

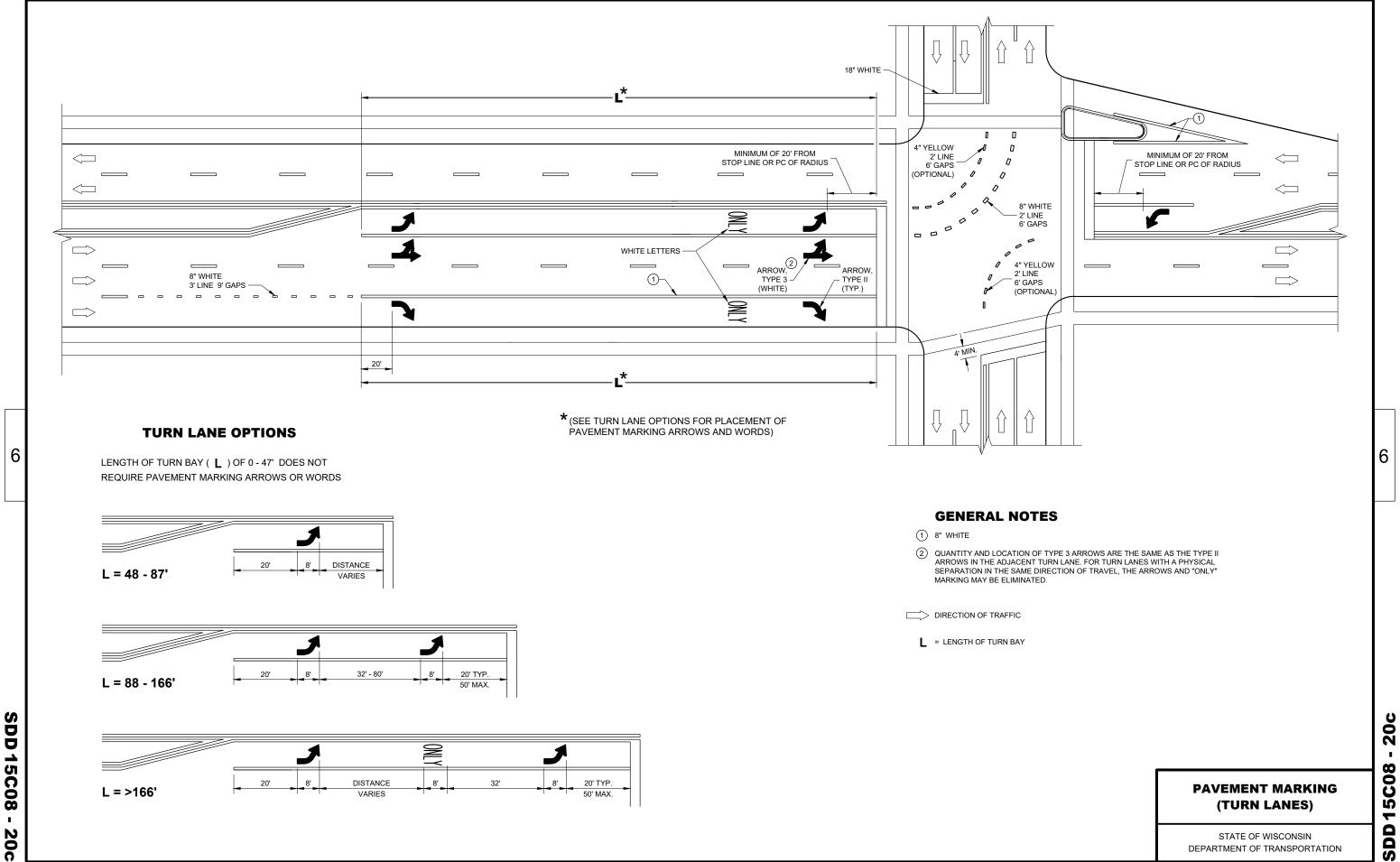
6

5b

SDD15C07



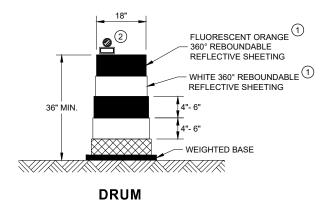


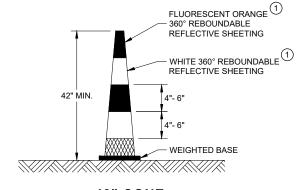


DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

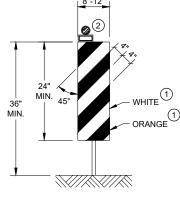
- (1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- (2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.





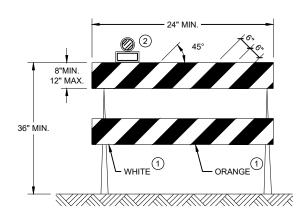
42" CONE DO NOT USE IN TAPERS

½ SPACING OF DRUMS



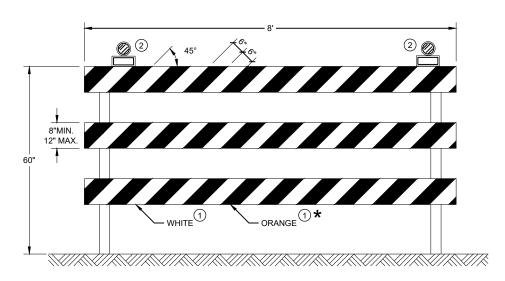
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 07

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SDD

APPROVED	
June 2017	/S/ Andrew Heidtke
DATE	WORK ZONE ENGINEER
FHWA	

RUMBLE

STRIPS

ROAD

WORK

GENERAL NOTES FLAGGING LEGEND FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE SIGN ON PORTABLE OR PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PERMANENT SUPPORT PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING. UNIFORM TRAFFIC CONTROL DEVICES. ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING TEMPORARY PORTABLE RUMBLE WORK OPERATION OR AS APPROVED BY THE ENGINEER. STRIP ARRAY "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE. SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE DIRECTION OF TRAFFIC ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER. WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED. THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP WORK AREA **TEMPORARY PORTABLE RUMBLE STRIPS** WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS. TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER. FLAGGER, EQUIPPED WITH STOP/SLOW EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S PADDLE FASTENED ON SUPPORT STAFF RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN. ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST. INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS. DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS. **SIGN AND TEMPORARY RUMBLE** STRIP ARRAY SPACING TABLE 5' MIN BE SPEED LIMIT SPACING "A" USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, PREPARED THIS SIGN SHALL BE LOCATED BETWEEN THE 25-30 MPH TO STOP W20-7A AND W20-4A SIGNS, USING SPACING "A" 35-40 MPH STOP/SLOW PADDLE ŔUMBLĖ 45-55 MPH 500' WO3-4 WORK **ON SUPPORT STAFF** ROAD STRIPS 1 VARIABLE DISTANCE - 200' - 300' (TYP.) END ROAD WORK |||3 WORK AREA A/2 END ROAD WORK 200' - 300' (TYP.) VARIABLE DISTANCE

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

FLAGGING OPERATION STATE OF WISCONSIN

TRAFFIC CONTROL FOR

LANE CLOSURE WITH

2

S

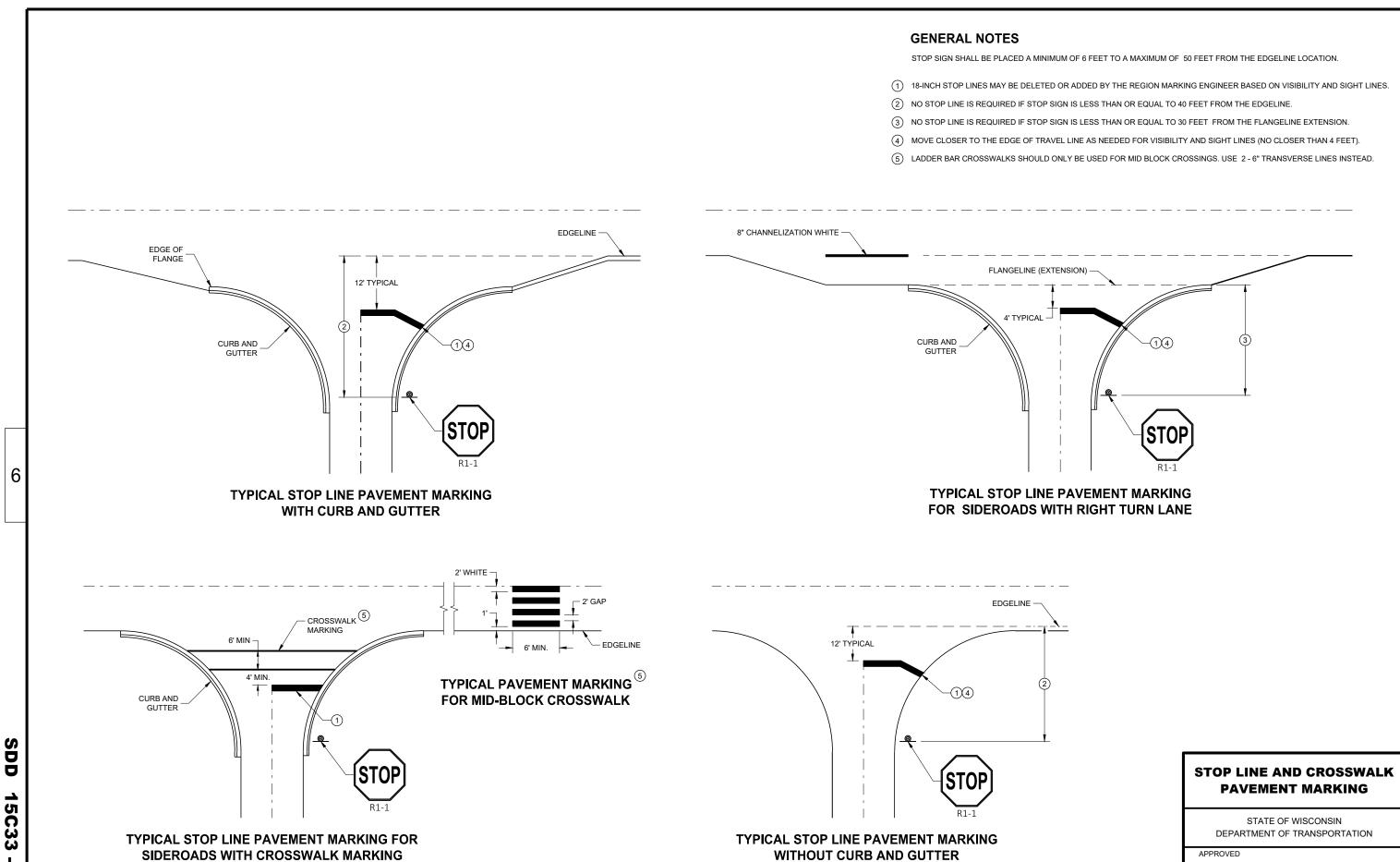
DEPARTMENT OF TRANSPORTATION

APPROVED May 2019 DATE WORK ZONE ENGINEER

Ŏ 0 Ŋ

WORK ZONE ENGINEER

6

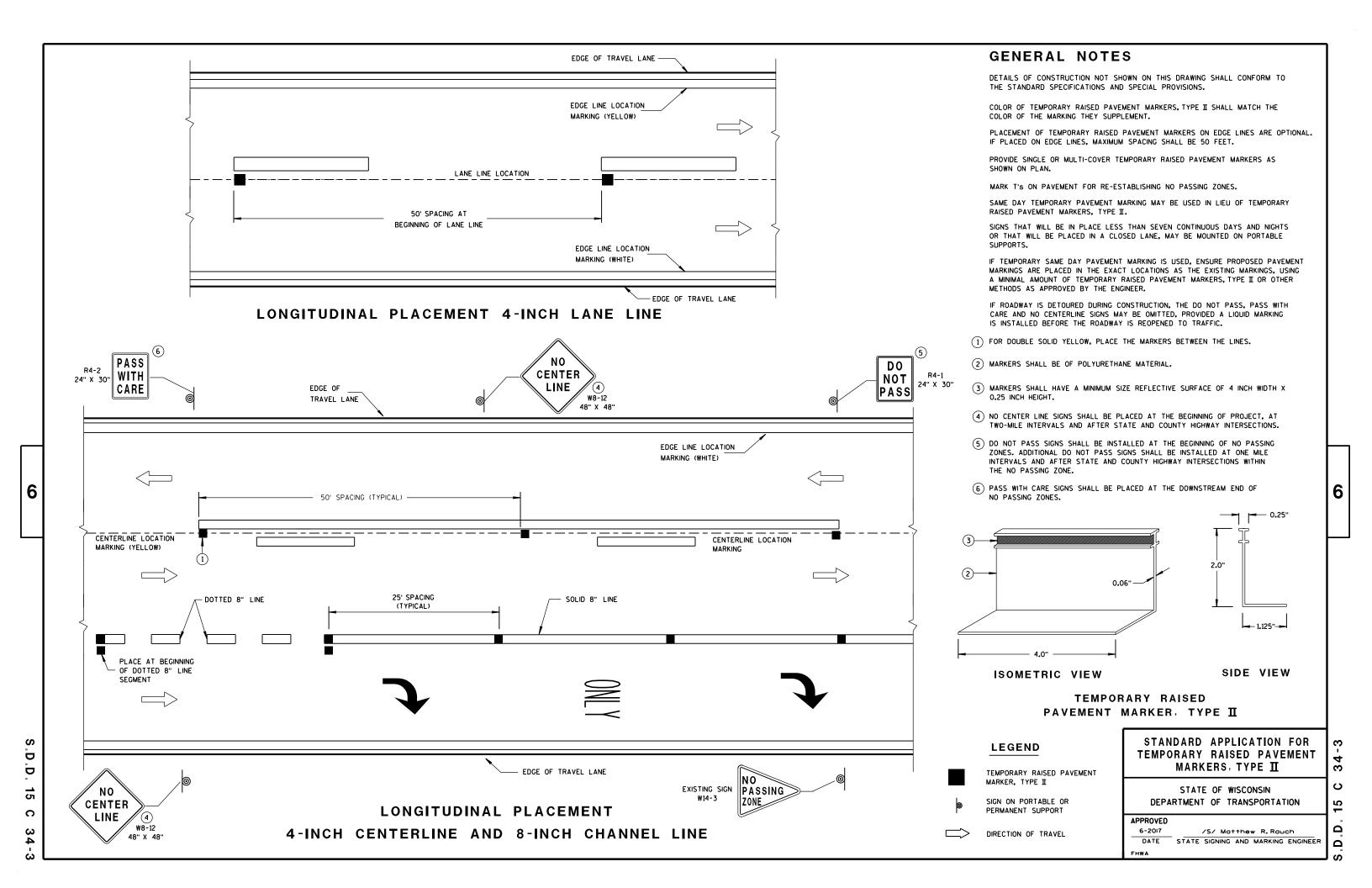


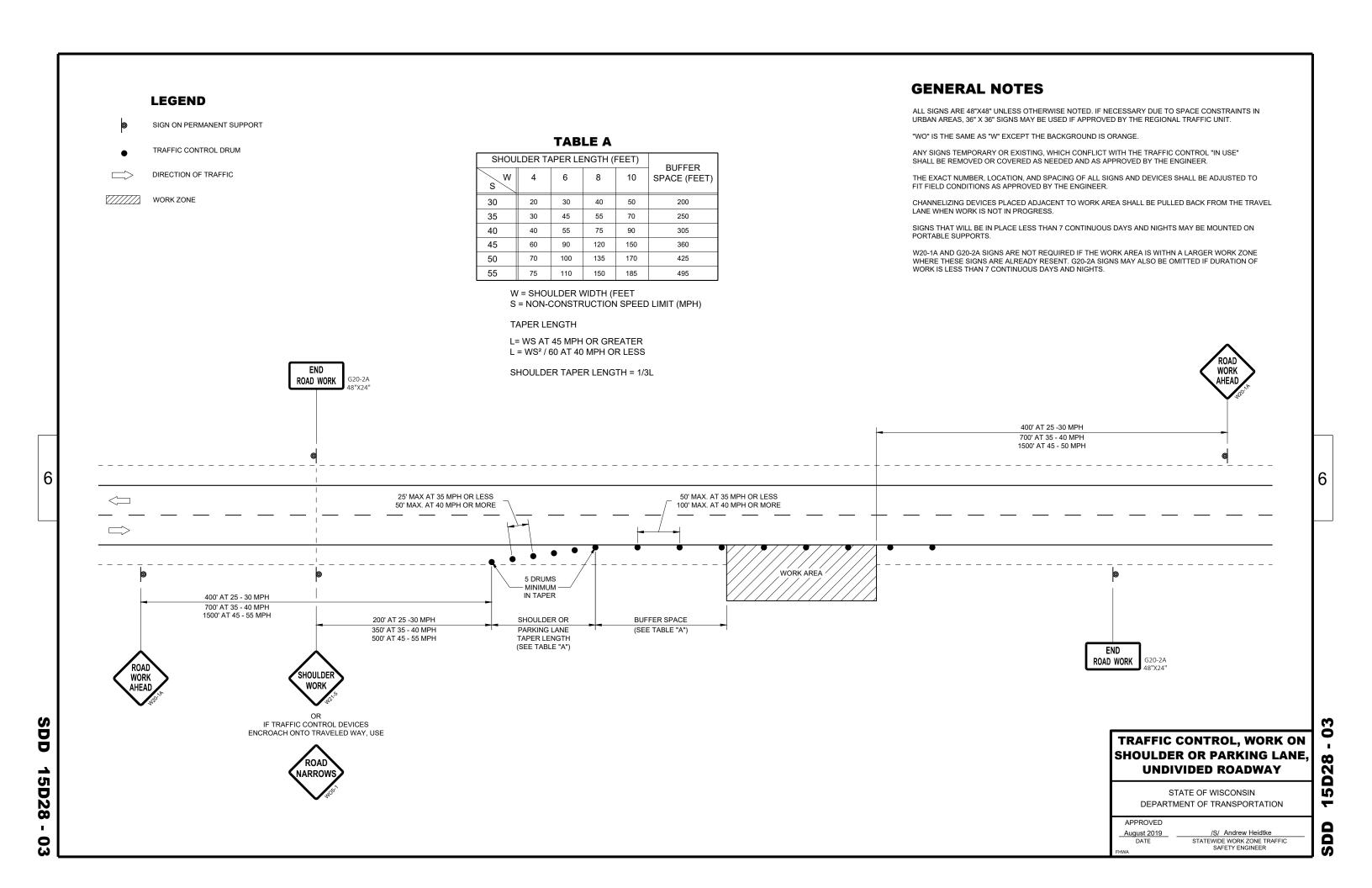
C33 15(

SDD

/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

November 2019 DATE







TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SO. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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 SO.FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE). SIGNS LARGER THAN 27 SO.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST **EMBEDMENT DEPTH**

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREM	MENTS	NUMBER OF	
L	E	WOOD POSTS REQUIRED	
48" OR LESS AND LESS THAN 20 SO.FT.	-	1	
LESS THAN 60"	12"	2	٤
60" TO 120"	L/5	2	
GREATER THAN 120" LESS THAN 168"	12"	3	
168" AND GREATER	12"	4	

SEE NOTE (3)

RURAL AREA

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

-11

D 15 D ∞

6

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6

- 11/2" DIAMETER HOLES

Ω

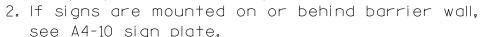
Ω

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

> /S/ Andrew Heidtke WORK ZONE ENGINEER

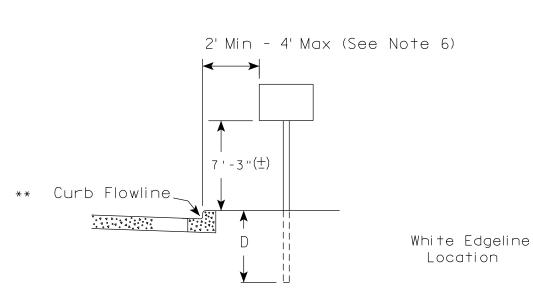
APPROVED

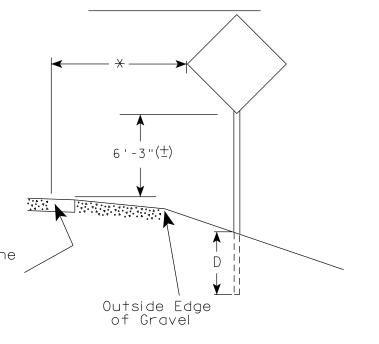
June 2017 DATE



The Double Arrow sign (W12-1D) 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'' ($\frac{+}{-}$).

- 3. For expressways and freeways, mounting height is $7'-3''(\pm)$ or 6'-3'' (\pm) depending upon existence of a sub-sign.
- 4. Minimum mounting height for signs mounted on traffic signal poles is $5' - 3'' \stackrel{(\pm)}{-}$.
- 5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
- 6. The (+) tolerance for mounting height is 3 inches.
- 7. Folding signs shall be mounted at a height of 5'-3'' (\pm) or as directd by the Engineer.





2' Min - 4' Max (See Note 6) 6'-3"(±) ** Curb Flowline D

5'-3"(士) White Edgeline $D \parallel$ Location Outside Edge of Gravel

** 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.

HWY:

* 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.

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED For State Traffic Engineer

DATE 5/13/2020

SHEET NO:

Ε

PROJECT NO: FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.dgn COUNTY:

PLOT BY: mscj9h

PLOT NAME :

PLOT SCALE: \$\$.....plo†scale.....\$\$ WISDOT/CADDS SHEET 42

PLOT DATE: 13-MAY 2020 1:04



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



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

HWY:



PLAN VIEW

COUNTY:

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

For State Traffic Engineer

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

SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN

PROJECT NO:

PLOT DATE: 27-JAN-2014 09:48

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 13.659812:1.000000

APPROVED

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. J-Assemblies are considered to be one sign for mounting height.
- 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'' (\pm) 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.

POST EMBEDMENT DEPTH

D
(Min)
4'
5'

WISCONSIN DEPT OF TRANSPORTATION APPROVED For State Traffic Engineer DATE 8/21/17 PLATE NO. <u>A4-4.15</u>





	SIGN SHAPE OTHER THAN (TWO POSTS REQUIRE)		
	L	E	
***	Greater than 48" Less than 60"	12"	
	60" to 108"	L/5	

HWY:

SIGN SHAPE OTHER THAN (THREE POSTS REQUIR	
L	E
Greater than 108" to 144"	12''

COUNTY:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN

PROJECT NO:

PLOT DATE: 21-AUG-2017 15:54

PLOT SCALE: 108.188297:1.000000

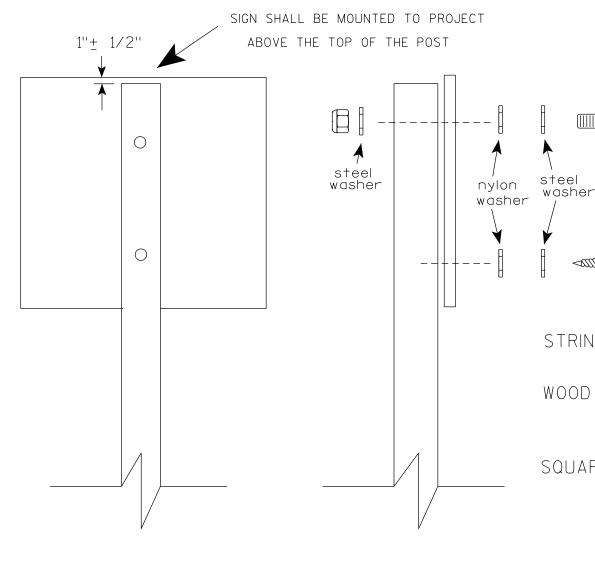
WISDOT/CADDS SHEET 42

OF TYPE II SIGNS ON MULTIPLE POSTS

TYPICAL INSTALLATION

SHEET NO:

PLOT BY: \$\$...plotuser...\$\$ PLOT NAME:



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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts

WOOD POSTS $(4'' \times 6'')$

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN) 3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN) 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 3/32 " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

APPROVED

DATE 4/1/2020

PLATE NO. <u>A4-8.9</u>

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN

PROJECT NO:

PLOT DATE: 01-APRIL-2020

PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

Ε

WISCONSIN DEPT OF TRANSPORTATION

Matther ≠or State Traffic Engineer

SHEET NO:



PROJECT NO: HWY: COUNTY: SHEET NO: FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE: 05-FEB-2015 17:09 PLOT BY: mscsja PLOT NAME : PLOT SCALE: 13.659812:1.000000

DATE 2/05/15

PLATE NO. <u>A4-9.9</u>

For State Traffic Engineer



BANDING



SINGLE SIGN





WASHER PLACEMENT



HWY:

WASHERS (ALL POSTS) -

1-1/4" O.D. X³/₈" I.D. X¹/₁₆" STEEL 1-1/4" O.D. $\times \frac{3}{8}$ " I.D. \times .080 NYLON FOR ALL TYPE H SIGNS

CHANNEL

GENERAL NOTES

- 1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
- 2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
- 3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.
- 4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

SHEET NO:

APPROVED

DATE 6/10/19

PLATE NO. A5-9.4

Ε

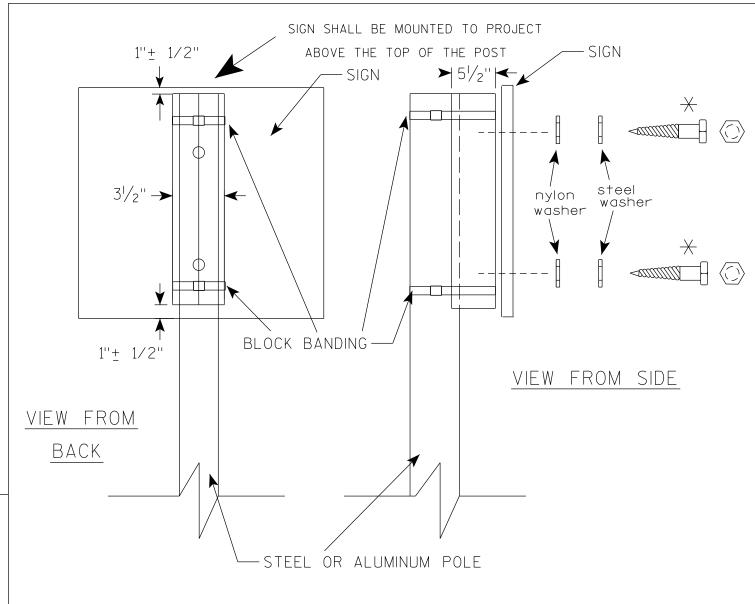
State Traffic Engineer

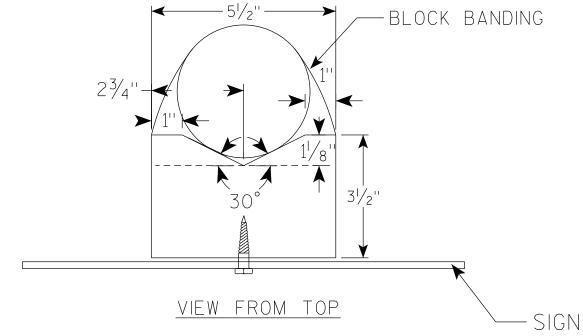
COUNTY:

PLOT NAME :

PLOT SCALE: \$\$.....plotscale.....\$\$ WISDOT/CADDS SHEET 42

PROJECT NO:





GENERAL NOTES

- 1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
- 2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
- 3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS.

 SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
- 4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
- 5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation: B 633, TYPE III, SC 3
- 6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
- 7. STEEL WASHERS SHALL BE $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
- 8. NYLON WASHERS SHALL BE $1^{1}/_{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

 \rightarrow LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

Matthew R

APPROVED

For State Traffic Engineer

SHEET NO:

DATE <u>6/10/19</u>

PLATE NO. <u>A5-10.2</u>

PROJECT NO:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A510.dgn

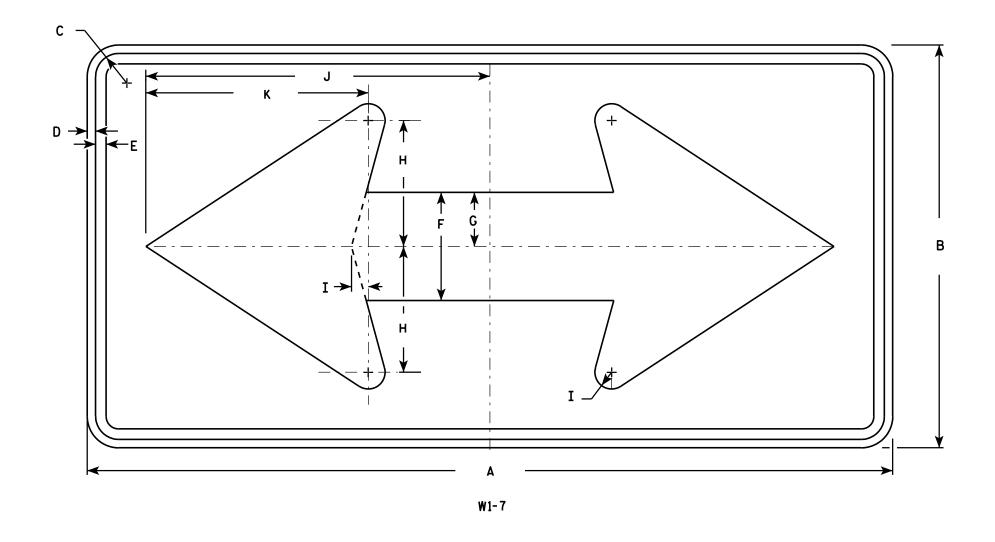
PLOT DATE: 10-JUN 2019 4:15

PLOT BY : mscj9h

- 1. Sign is Type II Type F Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - Yellow Message - Black

3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	Α	В	С	D	Е	F	G	Н	I	J	K	L	M	N	0	Р	0	R	S	T	-	٧	W	X	Y	Z	Areg sq. ft.
1	36	18	1 1/8	3⁄8	1/2	5	2 1/2	5 ¾	₹4	15 %	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 %	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

COUNTY:

STANDARD SIGN W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Raw

For State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W17.DGN

PROJECT NO:

HWY:

PLOT DATE: 07-JUN-2010 12:35

PLOT BY : ditjph

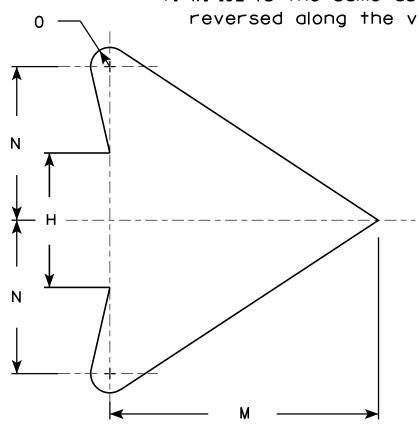
PLOT NAME :

PLOT SCALE: 5.720679:1.000000

- 1. Sign is Type II Type F Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - Yellow Message - Black

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W1-10L is the same as W1-10R except the arrow is reversed along the vertical centerline.



ARROW	DETAIL

SIZE	Α	В	С	D	ш	F	G	Н	I	7	K	L	М	N	0	Р	0	R	S	T	J	v	W	X	Y	Z	Areo sq. fi.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2	2 %	6 %	2 1/8	4 1/2	45°							4.0
25	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 %	2 1/4	3	9 1/8	8 3/4	5	5/8	3 %	8 %	2 %	5 ¾	45°							6.25
2M	36		1 %	5/8	3/4		12 3/8	5 1/4	6 ¾	2 %	3 1/2	10 1/8	10 1/2	6	₹4	4	10	3 1/4	6 %	45°							9.0
3	36		1 %	5/8	3/4		12 3/8	5 1/4	6 ¾	2 %	3 1/2	10 %	10 1/2	6	₹4	4	10	3 1/4	6 %	45 °							9.0
4	36		1 %	5/8	3/4		12 3/8	5 1/4	6 3/4	2 %	3 1/2	10 1/8	10 1/2	6	3/4	4	10	3 1/4	6 %	45°							9.0
5	48		2 1/4	₹4	1		16 1/2	7	9	3 1/2	4 %	14 1/2	14	8	1	5	13 1/4	4 1/4	9 1/8	45°							16.0

COUNTY:

STANDARD SIGN W1 - 10

WISCONSIN DEPT OF TRANSPORTATION

SHEET NO:

For State Traffic Engineer

DATE <u>5/17/12</u>

PLATE NO. W1-10.3

PROJECT NO:

.|← H →|← P→

HWY:

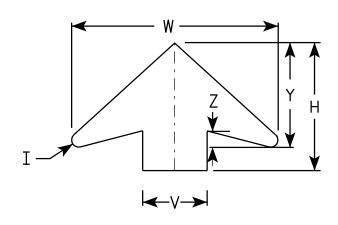
W1-10R

- 1. Sign is Type II Type F Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color: *

 Background YELLOW*

 Message BLACK
- 3. Message Series C for numbers Series E for wording
- 4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1																											
25	36		1 %	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3∕8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 %	9.0
2M	36		1 %	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 ¾	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 %	9.0
3	36		1 %	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 %	9.0
4	48		2 1/4	3/4	1	19 1/4	10 ¾	17 3/8	%	30	2 1/4	4	1 1/4	15	10	1 %	1/2	8	9 1/4	9	12	8	25 %	3∕8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 ¾	17 3/8	1 / ₈	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9	12	8	25 %	3/8	13	2	16.0

STANDARD SIGN W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matther R Rauch

DATE 5/29/12 PLATE NO. W3-5.5

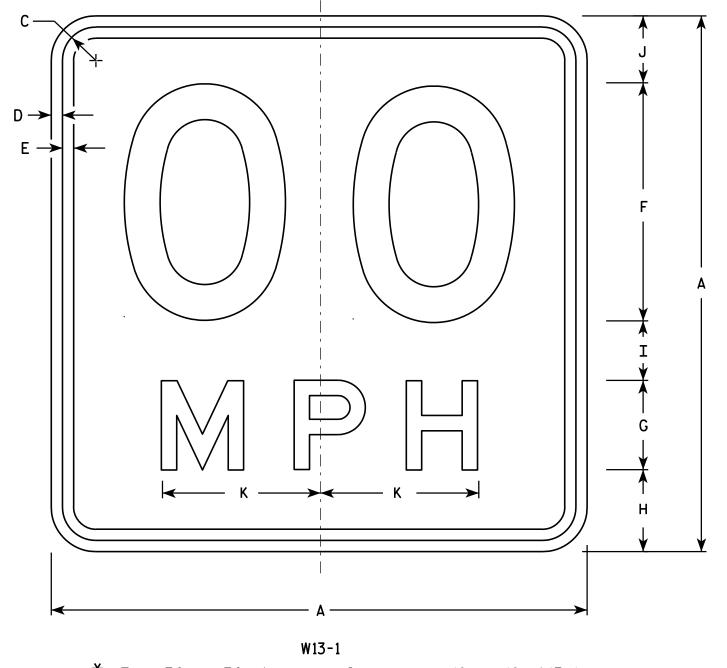
SHEET NO:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W35.DGN

PROJECT NO:

PLOT DATE: 29-MAY-2012 10:52

PLOT BY: mscsja



- 1. Sign is Type II Type F Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

Background - Yellow Message - Black

- 3. Message Series See Note 6
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
- 6. Line 1 is Series D Line 2 is Series E

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

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 %																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 1/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 %																9.00
5	36		1 %	5/8	3/4	16	6	5 1/2	4	4 1/2	10 %																9.00

STANDARD SIGN W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R

For State Traffic Engineer

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

SHEET NO:

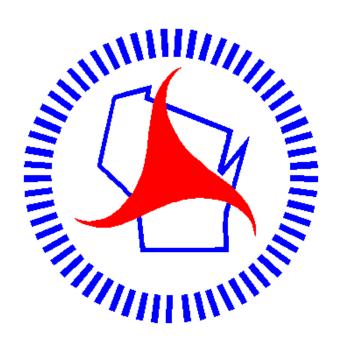
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W131.DGN

PLOT DATE: 31-MAY-2012 10:57

PLOT BY: mscsja

PLOT NAME :

PLOT SCALE: 3.225232:1.000000



Wisconsin Department of Transportation

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