GRE MAY 2013

ORDER OF SHEETS

Section No. 1 Section No. 2 Typical Sections and Details Estimate of Quantities Section No. 3 Section No. 3 Miscellaneous Quantities Section No. 5 Plan and Profile Section No. 6 Standard Detail Drawings Section No. 7 Sign Plates

TOTAL SHEETS = 68

DESIGN DESIGNATION

A.A.D.T.	2009	=	5,200
A.A.D.T.	2034	-	6,900
D.H.V.	2034	-	505
D.D.		-	61/39
Τ.		-	11.1
DESIGN S	SPEED	-	60 MPH
ESALS		=	1,576,800

CONVENTIONAL SYMBOLS

PLAN

MARSH AREA

CORPORATE LIMITS	<u>///////</u>
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	L———
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	+= =
PROPOSED CULVERT (Box or Pipe)	_
COMBUSTIBLE FLUIDS	-CAUTION-

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

POWER POLE

TELEPHONE POLE

PROFILE

STORM SEWER TELEPHONE

LABEL _ _

UTILITY PEDESTAL

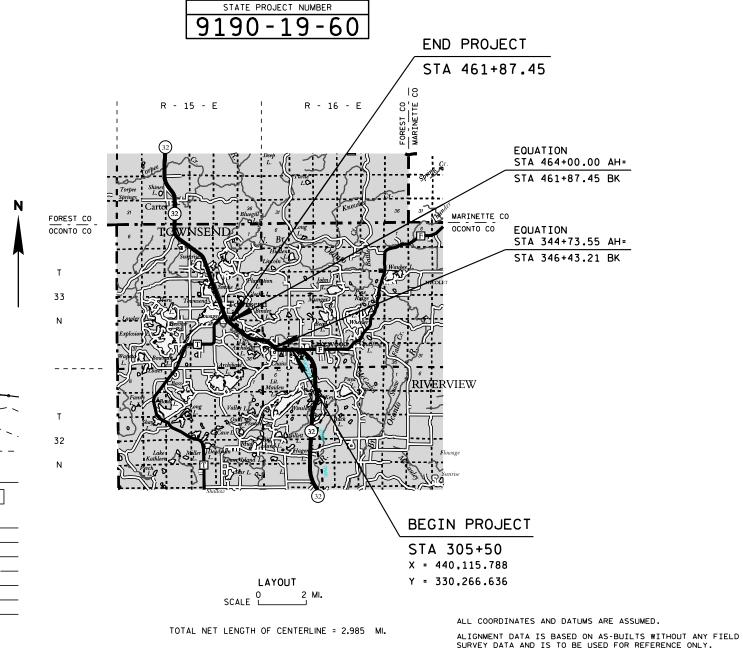
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PREVENTATIVE MAINTENANCE PROJECT

LAKEWOOD - TOWNSEND

BIG HILL ROAD - BOBCAT LANE

STH 32 OCONTO COUNTY



FEDERAL PROJECT STATE PROJECT PROJECT CONTRACT 9190-19-60 WISC 2013280

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PREPARED BY WISDOT NE REGION Surveyor B. A. FECHHELM Designer P. R. ZOELLNER Project Manager Regional Examiner Regional Supervisor D. J. SEGERSTROM

C.O. Examiner

WOODED OR SHRUB AREA

2

UTILITIES

RICK KLUSSENDORF CENTURYLINK COMMUNICATION LINE P.O. BOX 260 WAUSAUKEE, WI 54177

(920) 843-1475

ELECTRICITY
700 N ADAMS ST
P.O. BOX 19001
GREEN BAY, WI54307-9001
(920) 433-1703

GREEN BAY, WI54307-9001

(920) 433-1703

PAUL MEYERS

LAKEWOOD SANITARY DISTRICT

LAKEWOOD SANITARY DISTRICT SEWER 15280 E FORRESTER RD

LAKEWOOD, WI 54138 (715) 276-1830

CHAD KAY
PACKERLAND BROADBAND
COMMUNICATION LINE
105 KENT ST
IRON MOUNTAIN, MI 49801
(906) 776-2819

LORIBUTRY
WISCONSIN PUBLIC SERVICE CORPORATION
GAS/PETROLEUM
700 N ADAMS ST
P.O. BOX 19001

WISCONSIN PUBLIC SERVICE CORPORATION

EMERGENCY CONTACT NUMBERS FOR WISCONSIN PUBLIC SERVICE

ELECTRIC 24 HOUR EMERGENCY SERVICE: 1-800-450-7240 GAS 24 HOUR EMERGENCY SERVICE: 1-800-450-7280



Call 811 3 Work Days Before You Dig or Toll Free (800) 242-8511 Hearing Impaired TDD (800) 542-2289 www.DiggersHotline.com

GENERAL NOTES

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, WILL BE FERTILIZED, SEEDED, AND MULCHED.

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

WHEN THE QUANTITY OF BASE AGGREGATE DENSE ¾-INCH IS MEASURED FOR PAYMENT BY THE TON, THE THICKNESS AS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION AS DIRECTED BY THE ENGINEER IN THE FIELD.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DRIVEWAYS SHALL BE REPLACED IN KIND. BASE AGGREGATE DENSE WILL BE USED UNDER ALL DRIVEWAYS.

COUNTY SURVEYOR OR SURVEYS CONTACT PERSON

MARK TEUTEBERG - OCONTO COUNTY
OCONTO COUNTY COURT HOUSE
301 WASHINGTON STREET
OCONTO, WI 54153
920-834-6827
mark.teuteberg@co.oconto.wi.us

DNR AREA LIAISON

JAMES DOPERALSKI JR
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
GREEN BAY, WI 54313
920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV

PROJECT NO:9190-19-60 HWY:STH 32 COUNTY:OCONTO GENERAL NOTES SHEET SHEET SHEET

FILE NAME: F:\d3_919019\020101_gn.dgn

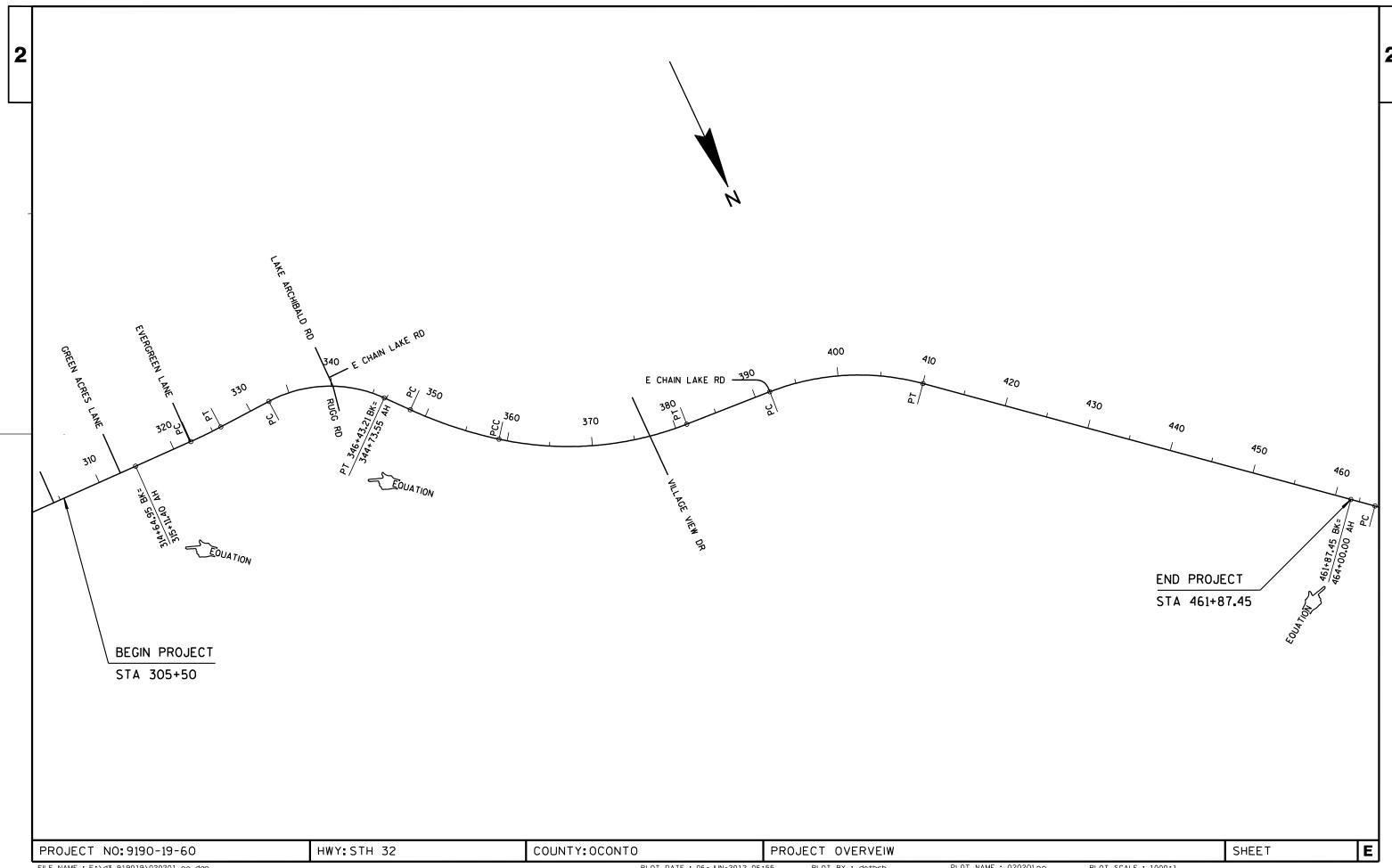
PLOT DATE: 06-JUN-2012 06:55

PLOT BY: dotbrb

PLOT NAME: 020101 gn

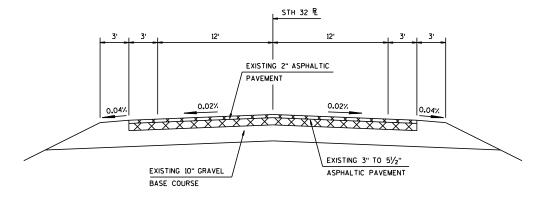
PLOT SCALE: 10:1

WISDOT/CADDS SHEET 42



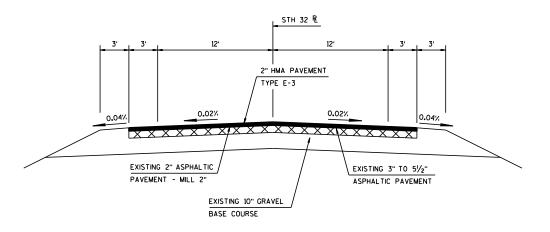
FILE NAME : F:\d3_919019\020201_po.dgn PLOT BY : dotbrb PLOT DATE: 06-JUN-2012 06:55 PLOT NAME: 020201po PLOT SCALE: 1000:1 WISDOT/CADDS SHEET 42

|2



EXISTING TYPICAL CROSS SECTION FOR STH 32

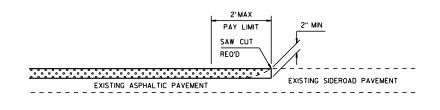
STA 305+50 TO 461+87.45



FINISHED TYPICAL CROSS SECTION FOR STH 32

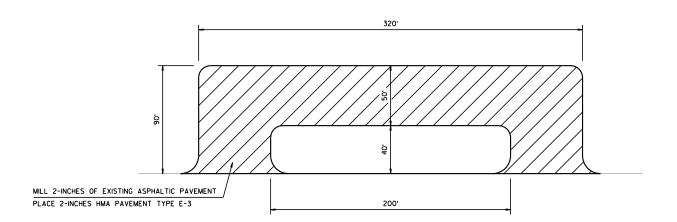
STA 305+50 TO 461+87.45

PROJECT NO:9190-19-60 HWY:STH 32 COUNTY:OCONTO TYPICAL CROSS SECTIONS SHEET **E**

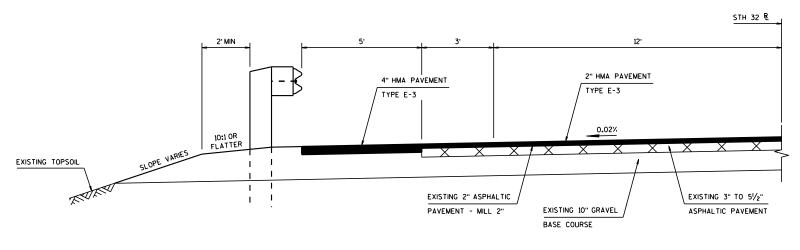


MILLED ASPHALTIC SURFACE

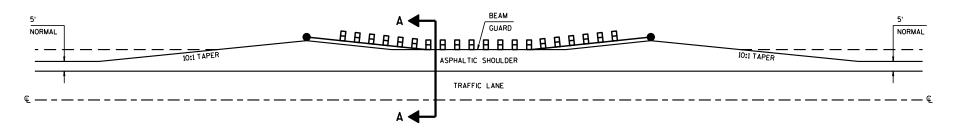
BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS



SCENIC OVERLOOK PARKING LOT



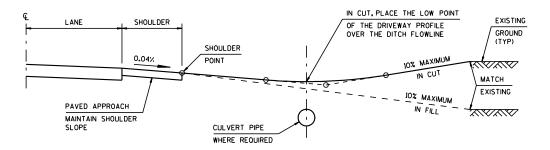
SECTION A-A



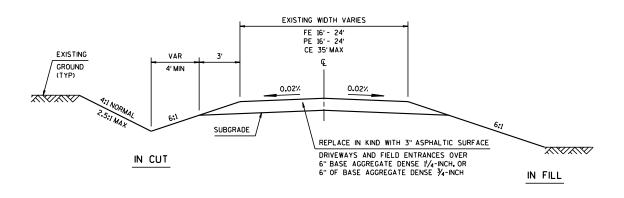
DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL

STA 450+00 TO 461+87 LT

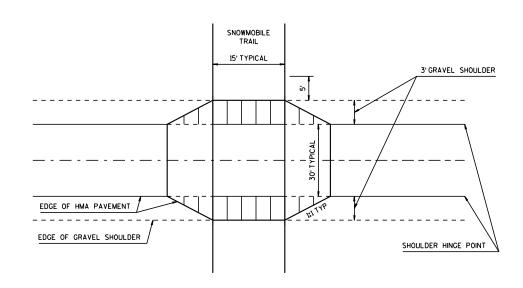
PROJECT NO:9190-19-60 HWY:STH 32 COUNTY:OCONTO CONSTRUCTION DETAILS SHEET **E**



TYPICAL DRIVEWAY PROFILES



TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE



HMA PAVEMENT TYPE E-3
MATCH ADJACENT SHOULDER HMA THICKNESS

SNOWMOBILE TRAIL CROSSING DETAIL

STA 313+00

PROJECT NO:9190-19-60 HWY:STH 32 COUNTY:OCONTO CONSTRUCTION DETAILS SHEET **E**

FILE NAME: F:\d3_919019\021001_cd.dgn

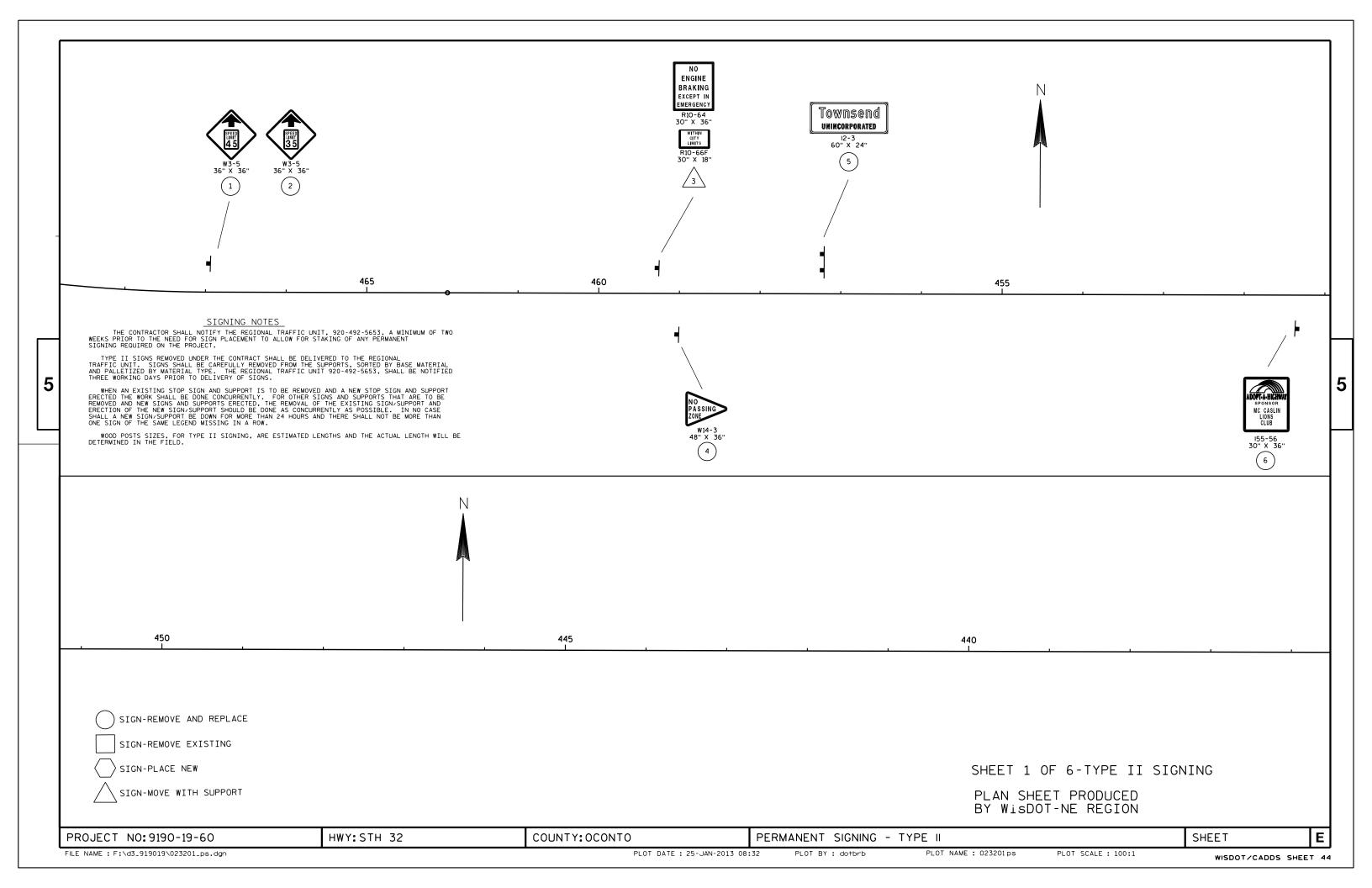
PLOT DATE: 06-JUN-2012 06:55

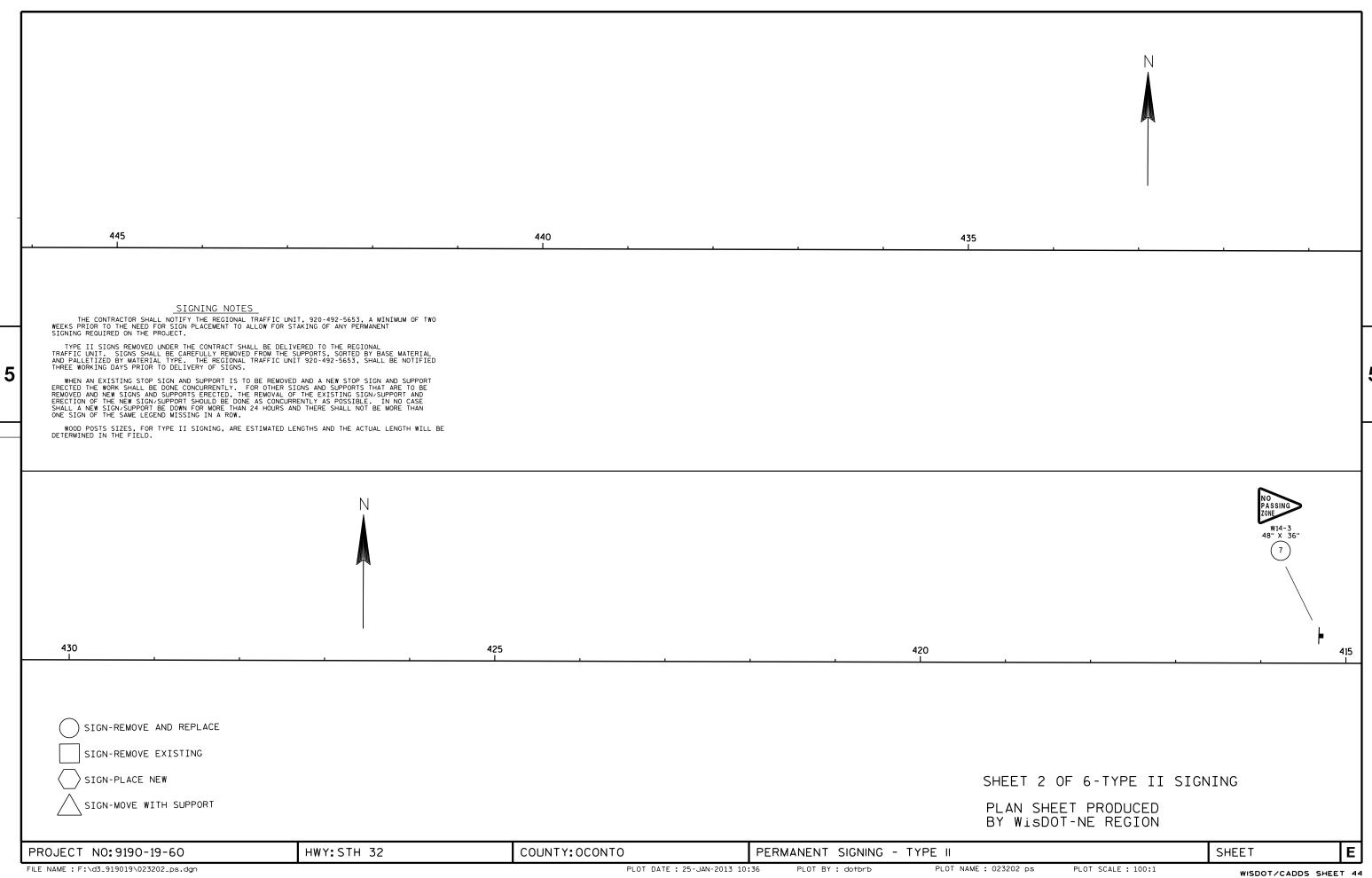
PLOT BY: dotbrb

PLOT NAME: 021001cd 2

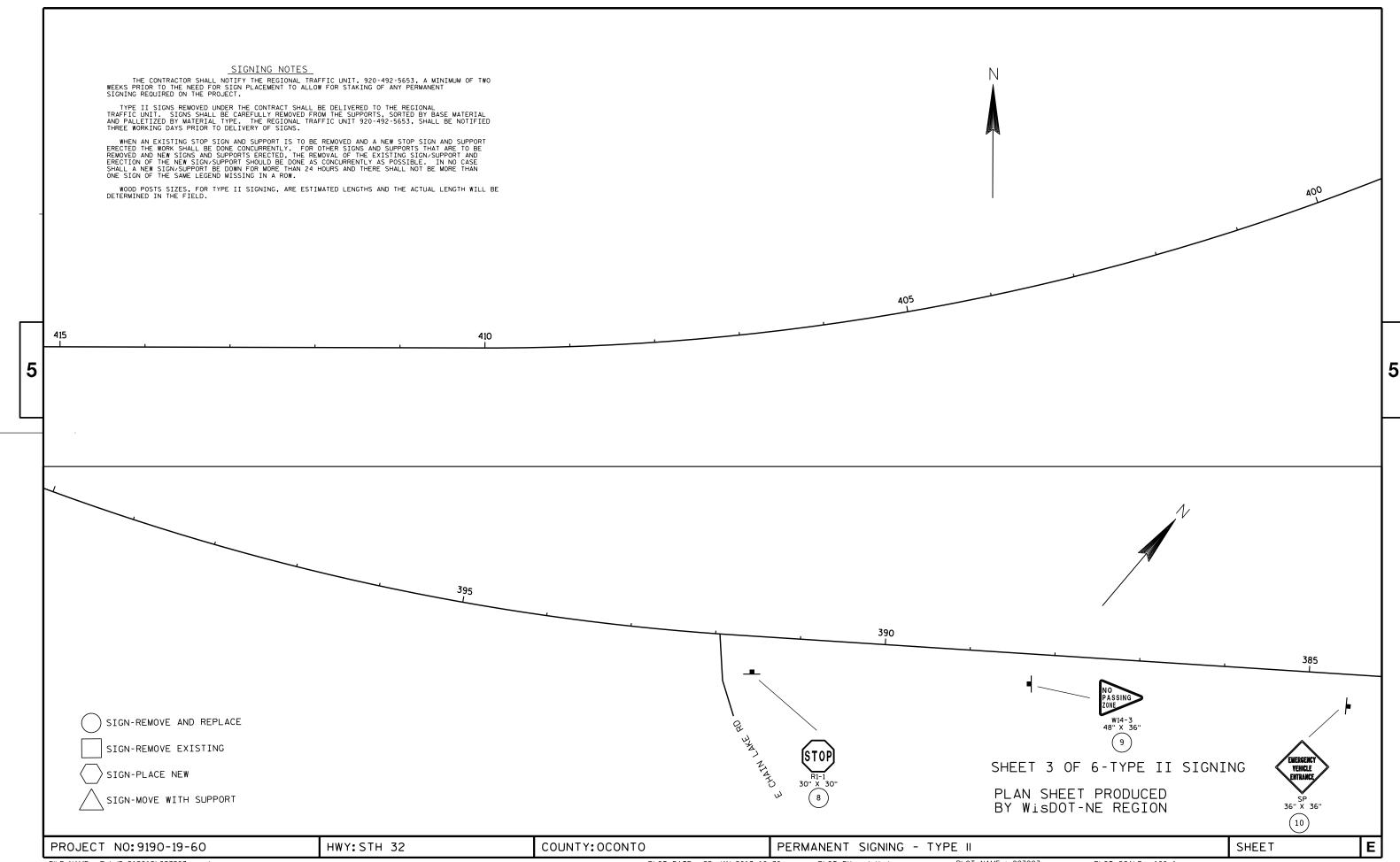
PLOT SCALE: 200:1

WISDOT/CADDS SHEET 42





FILE NAME : F:\d3_919019\023202_ps.dgn PLOT DATE: 25-JAN-2013 10:36 PLOT BY : dotbrb PLOT NAME: 023202 ps PLOT SCALE : 100:1



FILE NAME: F:\d3_919019\023203_ps.dgn

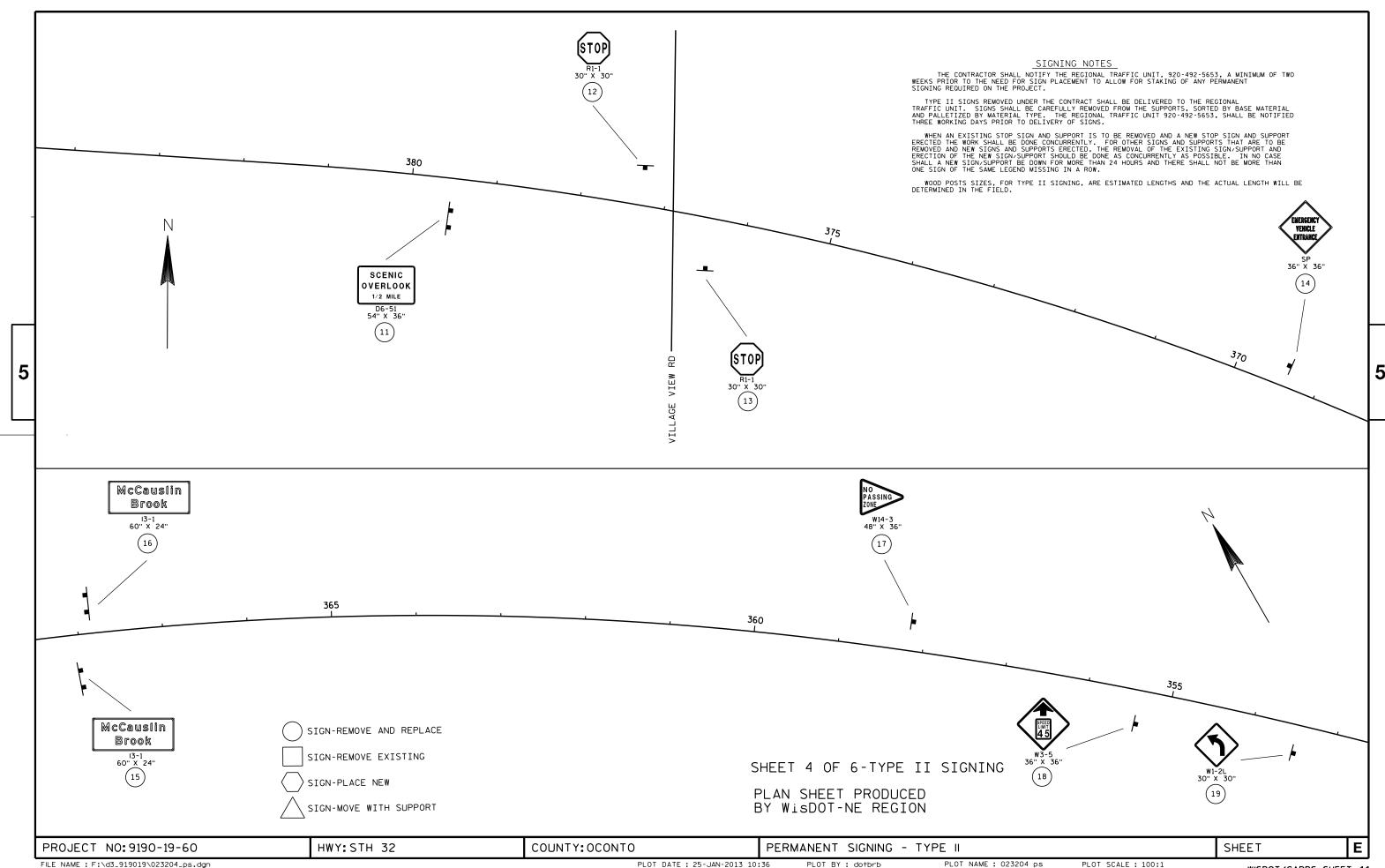
PLOT DATE: 25-JAN-2013 10:36

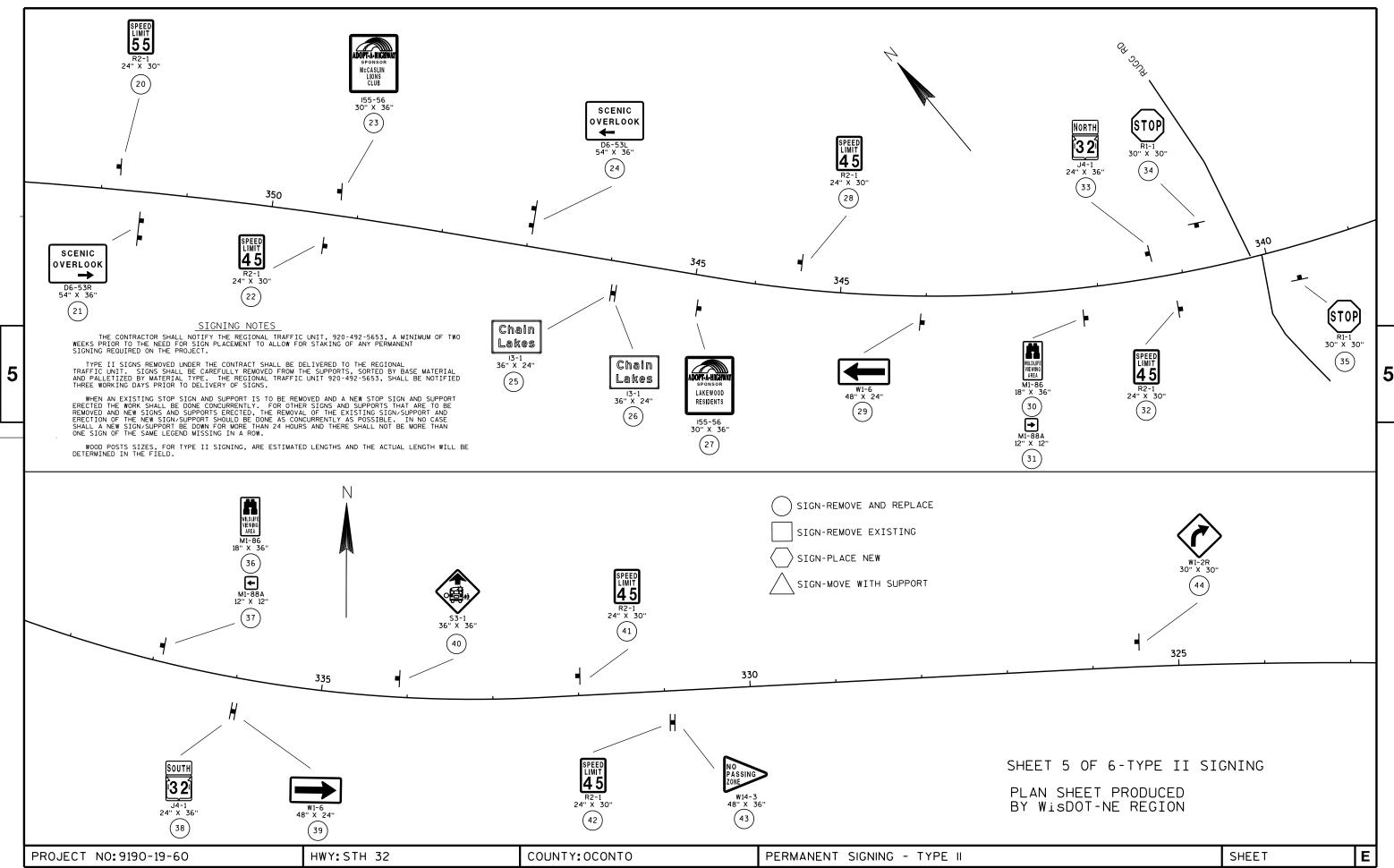
PLOT BY: dotbrb

PLOT NAME: 023203 ps

PLOT SCALE: 100:1

WISDOT/CADDS SHEET 44





FILE NAME: F:\d3_919019\023205_ps.dgn

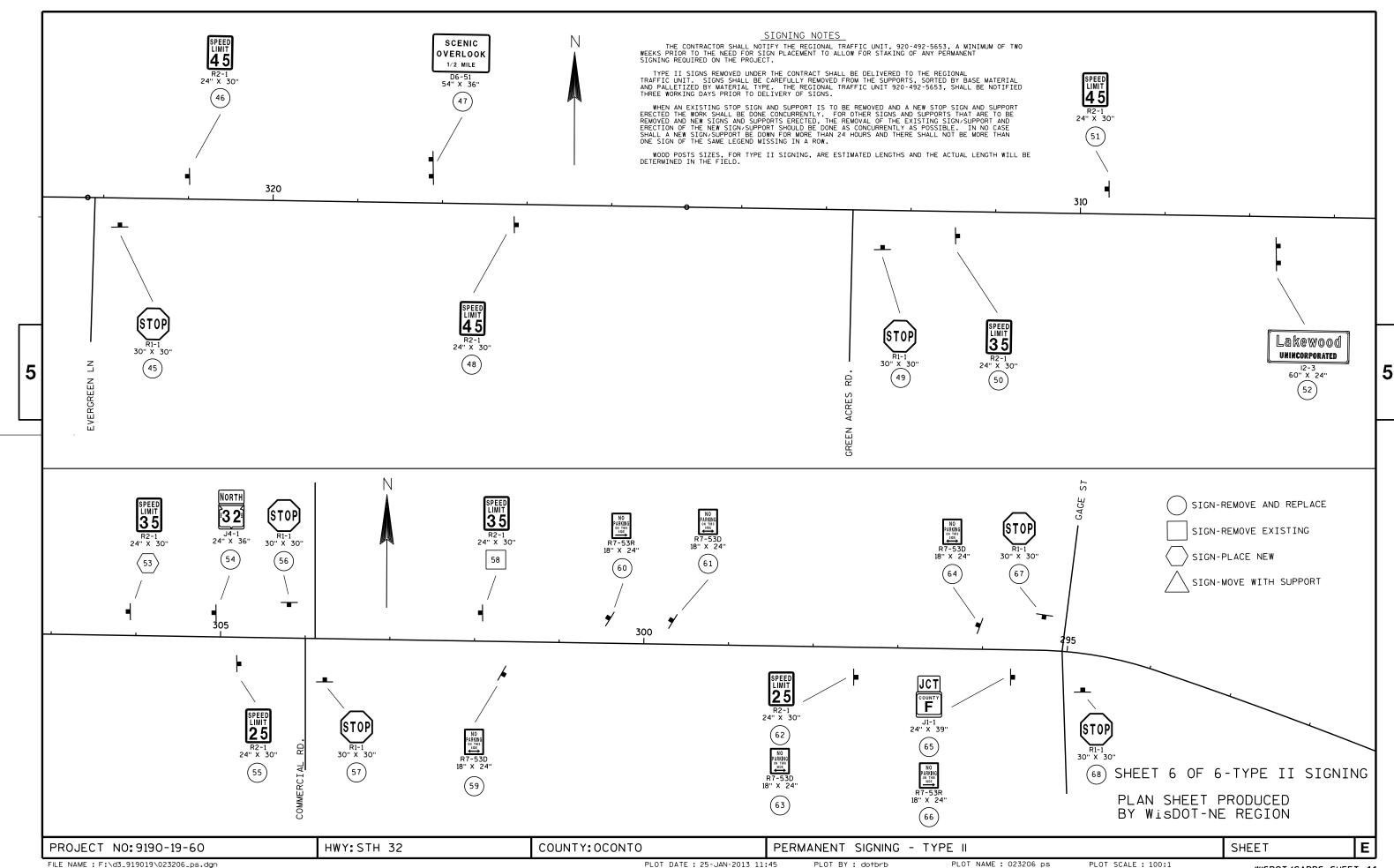
PLOT DATE: 25-JAN-2013 11:45

PLOT BY: dotbrb

PLOT NAME: 023205 ps

PLOT SCALE: 100:1

WISDOT/CADDS SHEET 44



PLOT DATE: 25-JAN-2013 11:45 PLOT BY : dotbrb PLOT NAME: 023206 ps PLOT SCALE : 100:1 WISDOT/CADDS SHEET 44

DATE 12	2MAR13	E S	TIMAT	E O F Q U A N	
LI NE NUMBER	LTEM	ITEM DESCRIPTION	UNI T	TOTAL	9190-19-60 QUANTI TY
0010	204. 0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	180. 000	180. 000
0020	204. 0120	REMOVING ASPHALTIC SURFACE MILLING	SY	59, 700. 000	59, 700. 000
0030	211. 0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 9190-19-60	LS	1. 000	1.000
0040	211. 0400	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	STA	12. 000	12.000
0050	213. 0100	FINISHING ROADWAY (PROJECT) 01.	EACH	1. 000	1. 000
		9190-19-60			
0060	305. 0110	BASE AGGREGATE DENSE 3/4-INCH	TON	20. 000	20. 000
0070	305.0500	SHAPI NG SHOULDERS	STA	318. 000	318.000
0800	455. 0105	ASPHALTIC MATERIAL PG58-28	TON	400.000	400.000
0090	455. 0605	TACK COAT	GAL	1, 520. 000	1, 520. 000
0100	460. 1103	HMA PAVEMENT TYPE E-3	TON	7, 185. 000	7, 185. 000
0110	460. 2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	4, 378. 000	4, 378. 000
0120		S REHEATING HMA LONGITUDINAL JOINTS	LF	15, 700. 000	15, 700. 000
0130	465. 0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	55. 000	55. 000
0140	465. 0475. \$	ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL	LF	13, 600. 000	13, 600. 000
0150	520. 0700. 5	S CULVERT PIPE LINERS (INCH) 01. 32-INCH	LF	80.000	80. 000
0160	520. 7000	CLEANING CULVERT PIPES	EACH	1. 000	1. 000
0170	521. 1024	APRON ENDWALLS FOR CULVERT PIPE STEEL	EACH	1. 000	1. 000
0180	521. 1036	24-INCH APRON ENDWALLS FOR CULVERT PIPE STEEL	EACH	1. 000	1. 000
	,	36-INCH		555	223
0190	618. 0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 9190-19-60	EACH	1. 000	1. 000
0200	619. 1000	MOBILIZATION	EACH	1. 000	1.000
0210	625. 0100	TOPSOI L	SY	20. 000	20. 000
0220	628. 1504	SILT FENCE	LF	50. 000	50. 000
0230	628. 1520	SILT FENCE MAINTENANCE	LF	15. 000	15. 000
0230	628. 1905	MOBILIZATIONS EROSION CONTROL	EACH	2. 000	2. 000
0250	628. 1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	1. 000	1. 000
0260	628. 2004	EROSION MAT CLASS I TYPE B	SY	20. 000	20. 000
0270	628. 7504	TEMPORARY DITCH CHECKS	LF	36. 000	36. 000
0280	629. 0210	FERTILIZER TYPE B	CWT	1. 000	1. 000
0290	630. 0130	SEEDING MIXTURE NO. 30	LB	1. 000	1. 000
0300	633. 5200	MARKERS CULVERT END	EACH	3. 000	3. 000
0310	634. 0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	69. 000	69. 000
0320	634. 0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	2. 000	2. 000
0330	637. 0202	SIGNS REFLECTIVE TYPE II	SF	421. 980	421. 980
0340	638. 2102	MOVING SIGNS TYPE II	EACH	2. 000	2. 000
0350	638. 2602	REMOVING SIGNS TYPE II	EACH	65. 000	65. 000
0360	638. 3000	REMOVING SMALL SIGN SUPPORTS	EACH	62. 000	62. 000
0370	638. 4000	MOVING SMALL SIGN SUPPORTS	EACH	1. 000	1. 000
0380	642. 5001	FIELD OFFICE TYPE B	EACH	1. 000	1. 000
0390	643. 0100	TRAFFIC CONTROL (PROJECT) 01. 9190-19-60		1.000	1.000
0400	643. 0300	TRAFFIC CONTROL DRUMS	DAY	210. 000	210. 000
0410	643. 0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	84.000	84. 000
0420	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	168. 000	168. 000
0430	643. 0900	TRAFFIC CONTROL SIGNS	DAY	417. 000	417. 000
0440	646. 0106	PAVEMENT MARKING EPOXY 4-INCH	LF	43, 200. 000	43, 200. 000
0450	647. 0656	PAVEMENT MARKING PARKING STALL EPOXY	LF	600.000	600. 000
0460	649. 0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	15, 500. 000	15, 500. 000

DATE 12	DATE 12MAR13 E S			OF QUAN	TITIES	
LINE					9190-19-60	
NUMBER	ITEM	ITEM DESCRIPTION	UNI T	TOTAL	QUANTI TY	
0470	650.8000	CONSTRUCTION STAKING RESURFACING	LF	15, 750. 000	15, 750. 000	
		REFERENCE				
0480	650. 9910	CONSTRUCTION STAKING SUPPLEMENTAL	LS	1.000	1.000	
		CONTROL (PROJECT) 01. 9190-19-60				
0490	690. 0150	SAWING ASPHALT	LF	710.000	710.000	
0500	ASP. 1TOA	ON-THE-JOB TRAINING APPRENTICE AT \$5.	HRS	300.000	300.000	
		00/HR				
0510	ASP. 1T0G	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	600.000	600.000	
0520	SPV. 0090	SPECIAL 01. 4-INCH EPOXY YELLOW	LF	8, 300. 000	8, 300. 000	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

			204. 0115	
CATEGORY	STATI ON	LOCATI ON	SY	REMARKS
0010	305+50	STH 32	7	PROJECT LIMITS
0010	461+87. 45	STH 32	7	PROJECT LIMITS
0010	312+80 LT	GREEN ACRES RD	19	*
0010	322+18 LT	EVERGREEN LANE	14	*
0010	340+00 LT	E. CHAIN LAKE RD/ LAKE ARCHIBALD RD	8	*
0010	340+40 RT	RUGG LANE	8	*
0010	376+90 RT	VILLAGE VIEW DRIVE	6	*
0010	376+90 LT	S. VILLAGE VIEW DRIVE	6	*
0010	391+80 LT	E. CHAIN LAKE RD	7	*
0010	307+00 RT	DRI VEWAY	17	
0010	311+80 RT	DRI VEWAY	6	
0010	312+50 RT	DRI VEWAY	6	
0010	315+75 LT	DRI VEWAY	8	
0010	316+80 RT	DRI VEWAY	8	
0010	320+15 LT	DRI VEWAY	8	
0010	323+75 LT	DRI VEWAY	6	
0010	329+00 RT	DRI VEWAY	10	
0010	333+15 RT	DRI VEWAY	6	
0010	335+00 RT	DRI VEWAY	9	
0010	337+50 LT	DRI VEWAY	14	

TOTAL

180

3/4" BASE AGGREGATE DENSE SUMMARY*

		305. 0110	
		BASE	
		AGGREGATE	
		DENSE	
		3/4 INCH	
CATEGORY	LOCATI ON	TON	REMARKS
0010	UNDI STRI BUTED	20	DRI VEWAYS

TOTALS

PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 9190-19-60

		211. 0100	
CATEGORY	LOCATI ON	LS	REMARKS
0010	PROJECT 01. 9190-19-60	1	STA 305+50 - 461+87.45
			NB & SB STH 32

TOTAL

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

		211. 0400	
CATEGORY	LOCATI ON	STA	REMARKS
0010	450+30 LT - 461+87.45 LT	12	BEAM GUARD AREA
-		-	

TOTAL

12

FINISHING ROADWAY (PROJECT) 01. 9190-19-60

		213. 0100
CATEGORY	LOCATI ON	EACH
0010	PROJECT 9190-19-60	1

TOTAL

1

PROJECT NO: 9190-19-60 HWY: STH 32 COUNTY: OCONTO MISCELLANEOUS QUANTITIES SHEET: **E**

_E NAME : ______ PLOT BY : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1

^{*} See Removing Asphaltic Surface Milling for Limits

^{*} Water is Incidental to this Item

REMOVING ASPHALTIC SURFACE MILLING

==					204. 0120	REMARKS
CATEGORY	STATION MAINLIN	TO	STATI ON	LOCATI ON	SY	
0010			044 (4 05	CTU 00	0.4.40	CTATION FOUNTION 044 /4 05 045 44 40
0010	305+50	-	314+64. 95	STH 32	2440	STATION EQUATION: 314+64. 95=315+11. 40
0010	315+11. 40	-	346+43. 21	STH 32	8350	STATI ON EQUATI ON: 346+43. 21=344+73. 55
0010	344+73. 55 SHOULDE	- -	461+87. 45	STH 32	31230	
0010		: K2	214 (4 05	CTIL 22 CHOILI DED DT	205	
0010	305+50		314+64. 95	STH 32 SHOULDER RT	305	
0010	315+11. 40	-	346+43. 21	STH 32 SHOULDER RT	1044	
0010	344+73. 55	-	461+87. 45	STH 32 SHOULDER RT	3905	
0010	305+50	-	314+64. 95	STH 32 SHOULDER LT	305	
0010	315+11. 40		346+43. 21	STH 32 SHOULDER LT	1044	
0010	344+73. 55	-	461+87. 45	STH 32 SHOULDER LT	3905	ADDITIONAL DAVED CHOULDED IN OURD AND OUTTED AREA
0010	335+00 SCENIC OVE	-	339+65	STH 32 SHOULDER RT	155	ADDITIONAL PAVED SHOULDER IN CURB AND GUTTER AREA
0010	347+40	-	350+90	SCENI C OVEDI OOK	2880	Mill 2 Inches
0010	SIDE RO		350+90	SCENI C OVERLOOK	2880	Mill 2-Inches
0010		2+80 l	T	GREEN ACRES RD	50	Mill Limits 8' from Edge of Travel Lane
0010		2+00 l		EVERGREEN LANE	74	Mill Limits 11' from Edge of Travel Lane
0010		0+00 l		E. CHAIN LAKE RD/ LAKE ARCHI BALD RD	715	Mill Limits 10' from Edge of Travel Lane
0010		0+40 F		RUGG LANE	383	Mill Limits 56' from Edge of Travel Lane
0010		6+90 F		VILLAGE VIEW DRIVE	851	Mill Limits 41' from the Edge of Travel Lane
0010		6+90 I		S. VILLAGE VIEW DRIVE	819	Mill Limits 10' from Edge of Travel Lane
0010		0+90 I			799	
0010	DRI VEWA		_ !	E. CHAIN LAKE RD	199	Mill Limits 27' from Edge of Travel Lane
0010		7+00 F	RT	STH 32	100	
0010		1+80 F		STH 32	28	
0010		2+50 F		STH 32	20	
0010		5+75 L		STH 32	40	
0010	316+80 RT			STH 32	25	
0010				STH 32	25	
0010				STH 32	43	
0010				STH 32	32	
0010				STH 32	45	
0010		5+00 F		STH 32	48	
0010		7+50 L		STH 32	41	
				1 1	-	ļ

TOTAL 59700

PROJECT NO: 9190-19-60 HWY: STH 32 COUNTY: OCONTO MISCELLANEOUS QUANTITIES SHEET: **E**

| LE NAME : _____ PLOT DATE : ____ PLOT BY : ____ PLOT NAME : ____ PLOT SCALE : 1:1

^{*} Both Lanes Included in the Calculation

SHAPING SHOULDERS

			_		305. 0500
CATEGORY	STATI ON	T0	STATI ON	LOCATI ON	STA
0010	305+50	-	314+64. 95	STH 32 SHOULDER RT	10
0010	315+11. 40	-	336+25	STH 32 SHOULDER RT	22
0010	339+75	-	346+43. 21	STH 32 SHOULDER RT	8
0010	344+73. 55	-	461+87. 45	STH 32 SHOULDER RT	118
0010	305+50	-	314+64. 95	STH 32 SHOULDER LT	10
0010	315+11. 40	_	346+43. 21	STH 32 SHOULDER LT	32
0010	344+73. 55	_	461+87. 45	STH 32 SHOULDER LT	118

TOTAL

318

HMA SUMMARY

	1				•		_
				455. 0105	455. 0605	460. 1103	
				ASPHALTI C	TACK	HMA	
				MATERI AL	COAT	PAVEMENT	
				PG58-28		TYPE E-3	
CATEGORY	STATION TO	STATI ON	LOCATI ON	TON	GAL	TON	REMARKS
	MAINLINE						
0010	305+50 -	011101170	NB STH 32	8	31	146	Mai nl i ne
0010	315+11.40 -		NB STH 32	28	104	501	п
0010	344+73.55 -	461+87. 45	NB STH 32	104	391	1874	II .
0010	305+50 -	314+64. 95	SB STH 32	8	31	146	п
0010	315+11. 40 -	346+43. 21	SB STH 32	28	104	501	п
0010	344+73.55 -	461+87. 45	SB STH 32	104	392	1874	п
	SIDE ROADS						
0010			GREEN ACRES RD	1	1	6	
0010			EVERGREEN LANE	1	2	9	
0010			E. CHAIN LAKE RD/ LAKE ARCHIBALD RD	5	18	85	
0010			RUGG LANE	3	10	46	
0010			VILLAGE VIEW DRIVE	6	21	102	
0010			S. VILLAGE VIEW DRIVE	5	20	98	
0010			E. CHAIN LAKE RD	5	40	96	
	SHOULDERS						
0010	305+50 -	314+64. 95	STH 32 Shoulder RT	2	8	37	Station Equation
0010	315+11.40 -	336+25	STH 32 Shoulder RT	7	26	125	
0010	339+75 -	346+43. 21	STH 32 Shoul der RT	26	98	469	Station Equation
0010	344+73.55 -	461+87. 45	STH 32 Shoulder RT	2	8	37	
0010	305+50 -	314+64. 95	STH 32 Shoul der LT	7	26	125	Station Equation
0010	315+11. 40 -	346+43. 21	STH 32 Shoul der LT	26	98	469	Stati on Equati on
0010	344+73.55 -		STH 32 Shoul der LT	4	15	74	,
0010	450+80 -		STH 32 Shoul der LT	1	4	19	Beam Guard
0010	312+92 -		STH 32 Shoul der RT	1	1	1	Snowmobile Crossing RT Side Only
	SCENIC OVERLO						
0010	347+40 -	350+90	Scenic Overlook Parking Lot	19	72	345	Pave 2-Inches

TOTALS 400 1520 7185

PROJECT NO: 9190-19-60 HWY: STH 32 COUNTY: OCONTO MISCELLANEOUS QUANTITIES SHEET: **E**

E NAME : _____ PLOT DATE : ____ PLOT BY : ____ PLOT NAME : ____ PLOT SCALE : 1:1

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

					460. 4110. S	
CATEGORY	STATI ON	T0	STATI ON	LOCATI ON	LF	REMARKS
0010	305+50	-	461+87. 45	STH 114 EB	15700	STH 32

TOTAL 15700

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

			465. 0120 ASPHALTI C SURFACE DRI VEWAYS AND FIELD ENTRANCES
CATEGORY	STATI ON	LOCATI ON	TON
0010	307+00	STH 32 RT	12
0010	311+80	STH 32 RT	4
0010	312+50	STH 32 RT	2
0010	315+75	STH 32 LT	5
0010	316+80	STH 32 RT	3
0010	320+15	STH 32 LT	3
0010	323+75	STH 32 LT	5
0010	329+00	STH 32 RT	4
0010	333+15	STH 32 RT	5
0010	335+00	STH 32 RT	6
0010	337+50	STH 32 LT	5

TOTAL 55

CLEANING CULVERT PIPES

CATEGORY	STATI ON	LOCATI ON	520. 7000* EACH	Remarks
0010	354+50	STH 32	1	LT ENDWALL OF CULVERT PIPE COULD NOT BE LOCATED

TOTAL

* LOCATING THE ENDWALL IS INCIDENTAL TO THE BID ITEM

CULVERT PIPE LINERS 32-INCH

			520. 0700. S CULVERT PI PE	
			LINERS 32-INCH	
CATEGORY	STATI ON	LOCATI ON	LF	Remarks
				SLOPE IS 0.80 %, VERIFY
0010	332+80	STH 32	80	Existing Type: 36-Inch CSCP
				Existing Full Flow Capacity: 175.13 cfs

TOTAL 80

APRON ENDWALLS FOR CULVERT PIPE STEEL SUMMARY

			521. 1024	521. 1036	
			APRON ENDWALLS	APRON ENDWALLS	
			FOR CULVERT PIPE	FOR CULVERT PIPE	
			STEEL	STEEL	
			24-I NCH	36-I NCH	
CATEGORY	STATI ON	LOCATI ON	EACH	EACH	REMARKS
0010	354+50	STH 32 LT	1	-	LT ENDWALL COULD NOT BE LOCATED
0010	332+80	STH 32 RT	_	1	

TOTALS 1

PROJECT NO: 9190-19-60 HWY: STH 32 COUNTY: OCONTO MISCELLANEOUS QUANTITIES SHEET: I

E NAME : ______ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

TOPSOIL, MULCHING, FERTILIZER, AND SEED SUMMARY

					625. 0105	629. 0210	630. 0130	
					TOPSOI L	FERTI LI ZER	SEEDI NG	
						TYPE B	MI XTURE	
							NO. 30	
CATEGORY	STATI ON	T0	STATI ON	LOCATI ON	SY	CWT	LB	REMARKS
0010				UNDI STRI BUTED	20	1	1	CULVERT PIPE AREAS
			•			-		
				TOTALS	20	1	1	

MOBILIZATION

		619. 1000
CATEGORY	LOCATI ON	EACH
0010	PROJECT 9190-19-60	1

TOTAL

MOBILIZATIONS EROSION CONTROL AND MOBILIZATIONS EMERGENCY EROSION CONTROL

					628. 1905	628. 1910
					MOBI LI ZATI ONS	MOBI LI ZATI ONS
					EROSI ON	EMERGENCY
					CONTROL	EROSI ON
						CONTROL
CATEGORY	STATI ON	T0	STATI ON	LOCATI ON	EACH	EACH
0010	305+50	-	461+87. 45	PROJECT	2	1
				TOTALS	2	1

					628. 1504	628. 1520
					SLLT FENCE	SILT FENCE
						MAI NTENANCE
CATEGORY	STATI ON	T0	STATI ON	LOCATI ON	LF	LF
0010		-		Pipe Lining & Cleaning Areas	50	15
				TOTALS	50	15

SILT FENCE SUMMARY

ASPHALTIC CENTERLINE RUMBLE STRIP 2-LANE RURAL

CATECODY	STATION STATION	DOADWAY	465. 0475. S ASPHALT CENTERLINE RUMBLE STRIP 2-LANE RURAL	DEMADIAS
CATEGORY	STATION - STATION	ROADWAY	LF	REMARKS
0010	305+50 - 310+80	STH 32	530	
0010	314+80 - 320+18	STH 32	540	
0010	324+18 - 338+00	STH 32	1382	
0010	342+40 - 374+90	STH 32	3250	
0010	378+90 - 389+80	STH 32	1090	
0010	393+80 - 461+87.45	STH 32	6808	

TOTALS 13600

PROJECT NO: 9190-19-60 HWY: STH 32 COUNTY: OCONTO MISCELLANEOUS QUANTITIES SHEET: **E**

E NAME : ______ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

1				/27 0202	/24 0/14	/24 0/1/	(20, 2/02	/20 2000	<u> </u>
				637. 0202	634.0614	634. 0616	638. 2602	638. 3000 REMOVI NG	
				SI GNS	POSTS	DOCTO	REMOVI NG		
				REFLECTI VE	W00D	W00D	SI GNS	SIGN	
SIGN		SI GN		TYPE II	4x6x14	4x6x16	TYPE II	SUPPORTS	
NO.	LOCATI ON	CODE	WXH	S. F.	EACH	EACH	EACH	EACH	REMARKS
1	WEST OF E. CHAIN LAKE RD	W3-5	36" X 36"	9. 00	1	LACIT	1	1	45 MPH
2	WEST OF E. CHAIN EARE RD	W3-5	36" X 36"	9. 00	1		'	'	35 MPH, GIVE TO TOWN OF TOWNSEND, FOR HOLIDAY WEEKENDS
3	SEE MOVING SIGNS	W3-3	30 X 30	7.00	'				33 MITH, GIVE TO TOWN OF TOWNSEND, TOK HOLIDAT WEEKENDS
4	WEST OF E. CHAIN LAKE RD	W14-3	48" X 36"	6. 00	1		1	1	
5	WEST OF E. STATE RE	12-3	60" X 24"	10. 00	2		1	<u>·</u> 1	SEE SIGN DETAIL
6	п	155-56		7. 50	1		1	1	SEE PLAN SHEET
7	п	W14-3	48" X 36"	6. 00	1		1	<u>·</u> 1	
8	E. CHAIN LAKE RD	R1-1	30" X 30"	5. 18	1		1	1	
9	EAST OF E. CHAIN LAKE RD	W14-3	48" X 36"	6. 00	1		1	1	
10	u	SP	36" X 36"	9. 00	1		1	1	SEE SIGN DETAIL & PLAN
11	п	D6-51	54" X 36"	13. 50	2		1	1	
12	VILLAGE VIEW DR	R1-1	30" X 30"	5. 18	1		1	1	
13	п	R1-1	30" X 30"	5. 18	1		1	1	
14	EAST OF VILLAGE VIEW DR	SP	36" X 36"	9. 00	1		1	1	SEE SIGN DETAIL & PLAN
15	п	I 3-1	60" X 24"	10.00	2		1	1	SEE SIGN DETAIL
16	п	13-1	60" X 24"	10.00	2		1	1	SEE SIGN DETAIL
17	WEST OF RUGG RD	W14-3	48" X 36"	6. 00	1		1	1	
18	п	W3-5	36" X 36"	9. 00	1		1	1	45 MPH
19	п	W1-2L	30" X 30"	6. 25	1		1	1	
20	п	R2-1	24" X 30"	5. 00	1		1	1	55 MPH
21	п	D6-53R	54" X 36"	13. 50	2		1	1	
22	п	R2-1	24" X 30"	5. 00	1		1	1	45 MPH
23	п	I 55-56	30" X 36"	7. 50	1		1	1	SEE PLAN SHEET
24	п	D6-53L	54" X 36"	13. 50	2		1	1	
25	п		36" X 24"	6. 00	1		1	1	SEE SIGN DETAIL
26	п		36" X 24"		1		1		MOUNT ON BACK OF SIGN #25, SEE SIGN DETAIL
27	п	155-56		7. 50	1		1	1	SEE PLAN SHEET
28	п	R2-1	24" X 30"	5. 00	1		1	1	45 MPH
29	п	W1-6	48" X 24"	8. 00	1		1	1	
30	п	M1-86		4. 50	ļ	1	1	1	
31	п		12" X 12"	1. 00			1		MOUNT BELOW SIGN #30
32	п		24" X 30"		1		1	1	45 MPH
33	п	J4-1	24" X 36"	6. 00	1		1	1	STH 32, SEE PLAN SHEET
34	RUGG RD	R1-1	30" X 30"	5. 18	1		1	1	
35	п	R1-1	30" X 30"	5. 18	1		1	1	
36	EAST OF RUGG RD	M1-86		4. 50		1	1	1	
37	n		12" X 12"				1		MOUNT BELOW SIGN #36
38	"		24" X 36"		1		1	1	STH 32, SEE PLAN SHEET
39	PROJECT SUBTOTALS	W1-6	48" X 24"	8. 00 265. 15			1		MOUNT ON BACK OF SIGN #38

PROJECT NO: 9190-19-60 HWY: STH 32 COUNTY: OCONTO MISCELLANEOUS QUANTITIES SHEET: **E**

FILE NAME : _____ PLOT DATE : ____ PLOT BY : ____ PLOT NAME : ____ PLOT SCALE : 1:1

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

				637, 0202	634. 0614	634, 0616	638, 2602	638. 3000	
				007.0202			000.2002	REMOVI NG	
				SI GNS	POSTS	POSTS	REMOVI NG		
				REFLECTI VE	WOOD	WOOD	SIGNS	SIGN	
SIGN		SIGN		TYPE II	4x6x14	4x6x16		SUPPORTS	
NO.	LOCATI ON	CODE	WХН	S. F.	EACH	EACH	EACH	EACH	REMARKS
40	WEST OF EVERGREEN LN	S3-1	36" X 36"	9. 00	1		1	1	
41	п	R2-1	24" X 30"	5. 00	1		1	1	45 MPH
42	п	R2-1	24" X 30"	5. 00	1		1	1	45 MPH
43	п	W14-3	48" X 36"	6. 00	1		1	1	MOUNT ON BACK OF SIGN #43
44	п	W1-2R	30" X 30"	6. 25	1		1	1	
45	EVERGREEN LN	R1-1	30" X 30"	5. 18	1		1	1	
46	EAST OF EVERGREEN LN	R2-1	24" X 30"	5. 00	1		1	1	45 MPH
47	ш	D6-51	54" X 36"	13. 50	2		1	1	
48	п	R2-1	24" X 30"	5. 00	1		1	1	45 MPH
49	GREEN ACRES RD	R1-1	30" X 30"	5. 18	1		1	1	
50	EAST OF GREEN ACRES RD	R2-1	24" X 30"	5. 00	1		1	1	35 MPH
51	п	R2-1	24" X 30"	5. 00	1		1	1	45 MPH
52	п	12-3	60" X 24"	10. 00	2		1	2	SEE SIGN DETAIL
53	WEST OF COMMERCIAL RD	R2-1	24" X 30"	5. 00	1		1	1	35 MPH
54	п	J1-1	24" X 39"	6. 50	1		1	1	STH 32, SEE SIGN PLAN
55	п	R2-1	24" X 30"	5. 00	1		1	1	25 MPH
56	COMMERCIAL RD	R1-1	30" X 30"	5. 18	1		1	1	
57	п	R1-1	30" X 30"	5. 18	1		1	1	
58	EAST OF COMMERCIAL RD	R2-1	24" X 30"	5. 00					
59	п	R7-53D	18" X 24"	3. 00	1		1	1	
60	п	R7-53R	18" X 24"	3.00	1		1	1	
61	п	R7-53D	18" X 24"	3. 00	1		1	1	
62	WEST OF GAGE ST	R2-1	24" X 30"	5. 00	1		1	1	25 MPH
63	п	R7-53D	18" X 24"	3. 00	1		1	1	MOUNT BELOW SIGN #62
64	п	R7-53D	18" X 24"	3. 00	1		1	1	
65	п	J1-1	24" X 39"	6. 50	1		1	1	CTH F, SEE SIGN PLAN
66	п	R7-53R	18" X 24"	3. 00	1		1	1	MOUNT BELOW SIGN #65
67	GAGE ST	R1-1	30" X 30"	5. 18	1		1	1	
68	п	R1-1	30" X 30"	5. 18	1		1	1	
	PROJECT SUBTOTALS			156. 83	30	0	28	29	

PROJECT TOTALS

421. 98

62

MOVING SIGNS TYPE II

638. 2102 638. 4000 MOVING SIGNS MOVING SMALL TYPE II SIGN SUPPORTS SI GN LOCATI ON EACH EACH REMARKS W. OF E. CHAIN LAKE RD CONTACT TOWNSEND TO VERIFY TOWN ORDIANCES AND MOVE 2 1

2

PROJECT TOTALS

Е COUNTY: OCONTO SHEET: HWY: STH 32 PROJECT NO: 9190-19-60 MISCELLANEOUS QUANTITIES

PLOT SCALE: 1:1

TEMPORARY DITCH CHECKS

			628. 7504
CATEGORY	STATI ON	LOCATI ON	LF
0010		Pipe Lining & Cleaning Areas	36

TOTAL 36

EROSION MAT SUMMARY

					628. 2004	
					EROSION MAT	
					CLASS I	
					TYPE B	
CATEGORY	STATI ON	TO	STATI ON	LOCATI ON	SY	REMARKS
0010				UNDI STRI BUTED	50	CULVERT PIPE AREAS

TOTALS

50

PAVEMENT MARKING SUMMARY

					646. 0106 4-I NCH	SPV. 0090. 01 4-I NCH	646. 0106 4-I NCH	647. 0656 PARKI NG	649.0100 TEMPORARY	
					EPOXY YELLOW	EPOXY YELLOW	EPOXY WHITE	STALL EPOXY	4-I NCH	
CATEGORY	STATI ON	T0	STATI ON	LOCATI ON	LF	LF	LF	LF	LF	REMARKS
0010	305+50	-	461+87. 45	STH 32	2800	8300				CENTERLI NE
0010	305+50	-	461+87. 45	STH 32			15840			RIGHT EDGELINE
0010	305+50	-	461+87. 45	STH 32			16260			LEFT EDGELINE
0010	347+40	-	350+90	SCENI C OVERLOOK				600		
0010	305+50	-	461+87. 45	STH 32					15500	

2800

TRAFFIC CONTROL SUMMARY

8300

32100

600

15500

			643.	0300	643. (0420	643. (0705	643.	0900	
		APPROX.	DRU	JMS	BARRI (CADES	WARNI NG	LI GHTS	SIC	GNS	
		SERVI CE			TYPE	111	TYPI	ΞA			
		PERI OD	NO. IN		NO. IN		NO. IN		NO. IN		
CATEGORY	LOCATI ON	DAYS	SERVI CE	DAYS	SERVI CE	DAYS	SERVI CE	DAYS	SERVI CE	DAYS	REMARKS
0010	STH 32	21							10	210	ADVANCED WARNING
0010	GREEN ACRES RD	21							1	21	ADVANCED WARNING
0010	EVERGREEN LANE	21							1	21	ADVANCED WARNING
0010	E. CHAIN LAKE RD/ LAKE ARCHIBALD RD	21							1	21	ADVANCED WARNING
0010	RUGG LANE	21							1	21	ADVANCED WARNING
0010	VILLAGE VIEW DRIVE	21							1	21	ADVANCED WARNING
0010	S. VILLAGE VIEW DRIVE	21							1	21	ADVANCED WARNING
0010	E. CHAIN LAKE RD	21							1	21	ADVANCED WARNING
0010	STH 32	10							6	60	MOBILE FLAGGING OPERATION
0010	UNDI STRI BUTED	21	10	210	4	84	8	168			

TOTALS 210 84 168 417

PROJECT NO: 9190-19-60	HWY: STH 32	COUNTY: OCONTO	MISCELLANEOUS QUANTITIES	I SHEET:	Εĺ
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_E NAME : ______ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

TOTALS

CONSTRUCTION STAKING SUMMARY

l						650. 8000	650. 9910	
ł						CONSTRUCTI ON	CONSTRUCTI ON	
						STAKI NG	STAKI NG	
l						RESURFACI NG	SUPPLEMENTAL	
l						REFERENCE	CONTROL	
	CATEGORY	STATI ON	T0	STATI ON	LOCATI ON	LF	LS	REMARKS
	0010	305+50	-	314+64. 95	STH 32	910	-	STATION EQUATION: 314+64.95=315+11.40
	0010	315+11. 40	_	346+43. 21	STH 32	3130	-	STATI ON EQUATI ON: 346+43. 21=344+73. 55
1	0010	344+73. 55	-	461+87. 45	STH 32	11710	-	
l	0010				PROJECT	-	1	PROJECT

15750

FIELD OFFICE TYPE B

		642. 5001
CATEGORY	LOCATI ON	EACH
0010	PROJECT 01. 9190-19-60	1
0010	1103EC1 01: 7170-17-00	ı

TOTAL 1

SAWING SUMMARY

TOTAL

			690. 0150	
			SAWI NG	
			ASPHALT	
CATEGORY	STATI ON	LOCATI ON	LF	REMARKS
0010	305+50	STH 32	30	Project Limits
0010	461+87. 45	STH 32	30	Project Limits
0010	312+80 LT	GREEN ACRES RD	35	
0010	322+18 LT	EVERGREEN LANE	35	
0010	340+00 LT	E. CHAIN LAKE RD/ LAKE ARCHIBALD RD	34	
0010	340+40 RT	RUGG LANE	35	
0010	376+90 RT	VILLAGE VIEW DRIVE	28	
0010	376+90 LT	S. VILLAGE VIEW DRIVE	25	
0010	391+80 LT	E. CHAIN LAKE RD	32	
0010	307+00 RT	DRI VEWAY	75	
0010	311+80 RT	DRI VEWAY	26	
0010	312+50 RT	DRI VEWAY	26	
0010	315+75 LT	DRI VEWAY	37	
0010	316+80 RT	DRI VEWAY	33	
0010	320+15 LT	DRI VEWAY	33	
0010	323+75 LT	DRI VEWAY	26	
0010	329+00 RT	DRI VEWAY	42	
0010	333+15 RT	DRI VEWAY	27	
0010	335+00 RT	DRI VEWAY	40	
0010	337+50 LT	DRI VEWAY	61	

TOTALS 710

MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 9190-19-60

		618. 0100
CATEGORY	LOCATI ON	EACH
0010	PROJECT 01. 9190-19-60	1

TOTAL

TRAFFIC CONTROL (PROJECT) 9190-19-60

		643. 0100
CATEGORY	LOCATI ON	EACH
0010	PROJECT 01. 9190-19-60	1

TOTAL

MARKERS CULVERT END

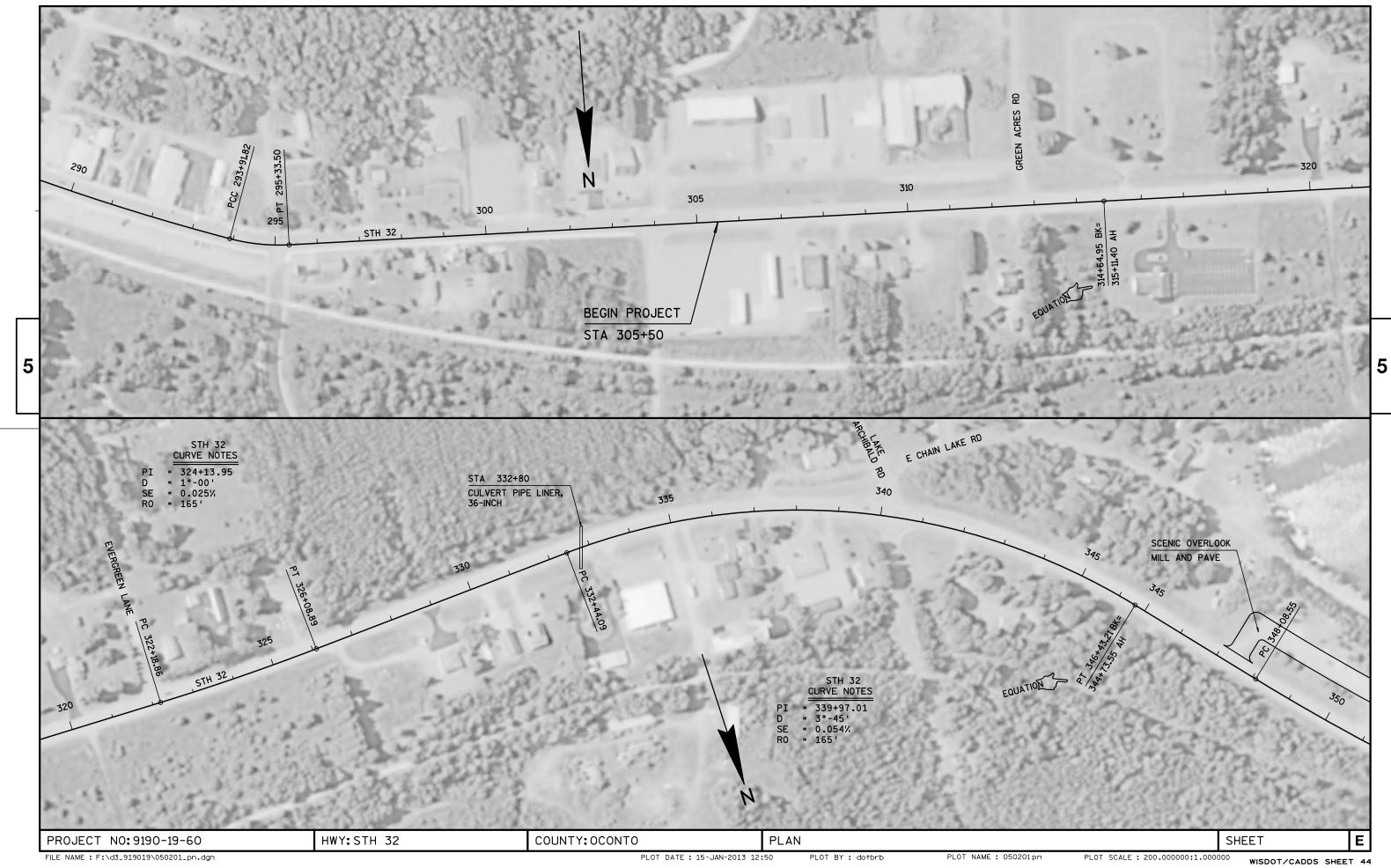
			633. 5200
CATEGORY	STATI ON	LOCATI ON	EACH
0010	332+80	STH 32 RT	1
0010	354+50	STH 32 LT & RT	2

TOTAL

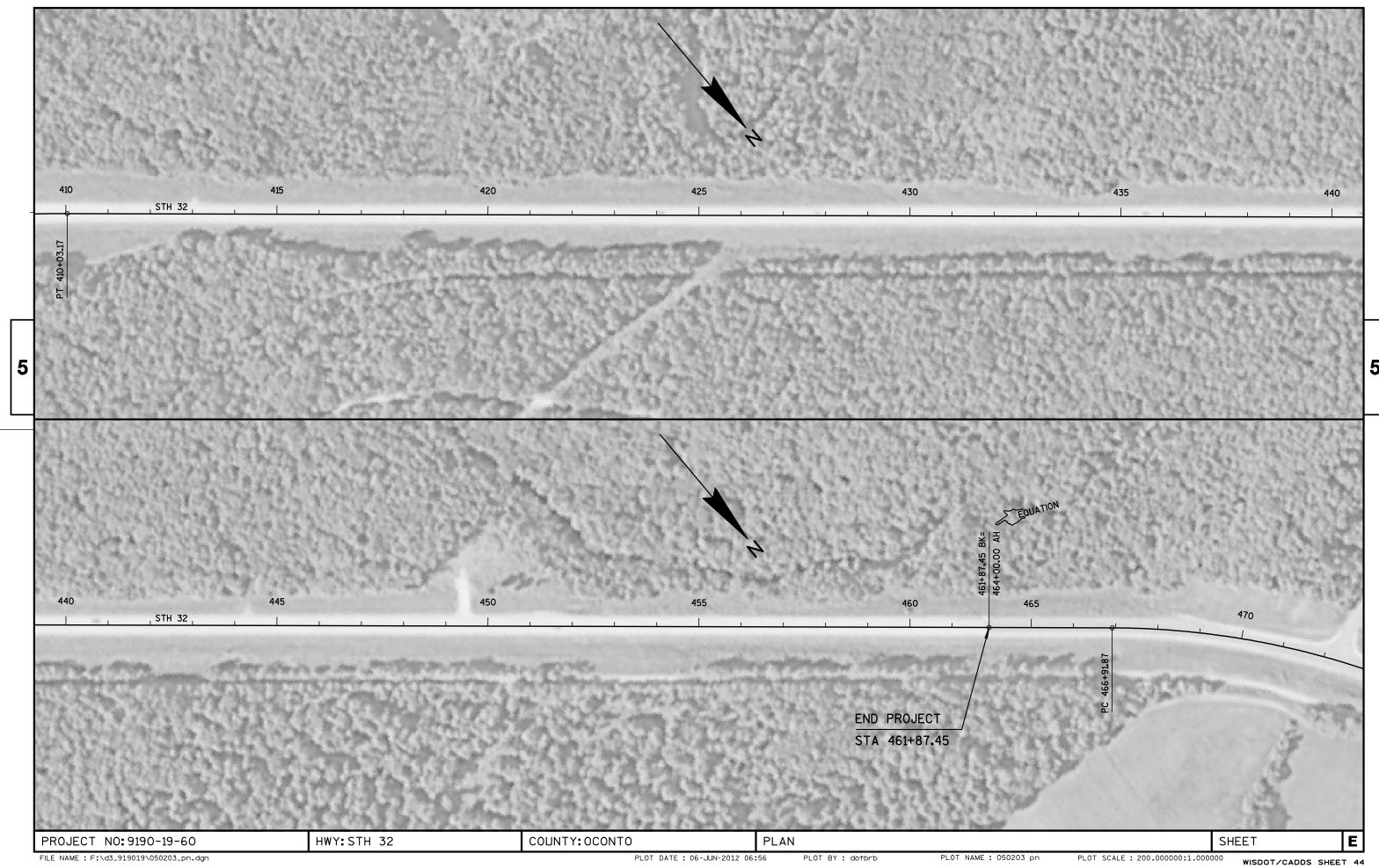
3

PROJECT NO: 9190-19-60 HWY: STH 32 COUNTY: OCONTO MISCELLANEOUS QUANTITIES SHEET: **E**

_E NAME : ______ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1







Standard Detail Drawing List

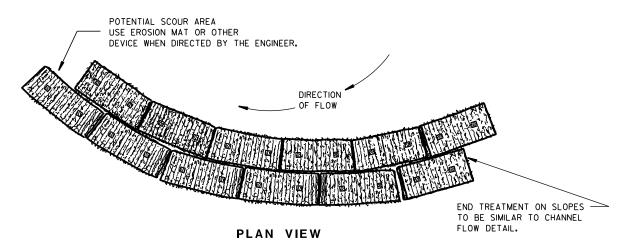
08E08-03 08E09-06	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
13A11-01A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-01B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-01A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

6

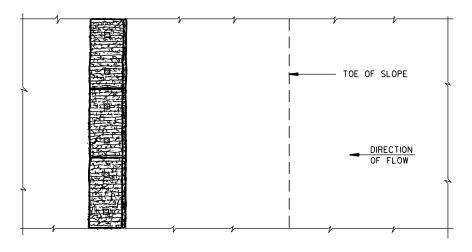
GENERAL NOTES

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.

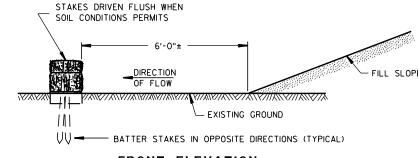
TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.



WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF **EROSION BALES / TEMPORARY** DITCH CHECKS

6

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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 /S/ Beth Connestro
CHIEF ROADWAY DEVELOPMENT ENGINEER

6

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TYPICAL APPLICATION OF SILT FENCE

6

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PLAN VIEW SILT FENCE AT MEDIAN SURFACE DRAINS



GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- 2 FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- 3 WOOD POSTS SHALL BE A MINIMUM SIZE OF 11/8" X 11/8" OF OAK OR HICKORY.
- 4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- (5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)



SILT FENCE

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METAL APRON ENDWALLS											
PIPE	MIN. THICK.		DIMENSIONS (Inches)							APPROX.	
DIA.			A	В	Н	L	Li	L 2	W	SLOPE	BODY
(IN.)	STEEL	ALUM.	(±]")	(MAX.)	(±]")	(±1½")	①	0	(±2")		
12	.064	.060	6	6	6	21	12	171/2	24	21/2+o 1	1Pc.
15	.064	.060	7	8	6	26	14	213/4	30	2½+o 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 ¹ / ₄	36	2½+o 1	1Pc.
21	.064	.060	9	12	6	36	18	29%	42	21/2+o 1	1Pc.
24	.064	. 075	10	13	6	41	18	371/4	48	$2\frac{1}{2}$ to 1	1Pc.
30	.079	. 075	12	16	8	51	18	521/4	60	$2\frac{1}{2}$ to 1	1Pc.
36	.079	. 105	14	19	9	60	24	59¾	72	$2\frac{1}{2}$ to 1	2 Pc.
42	.109	. 105	16	22	11	69	24	75 1/8	84	$2\frac{1}{2}$ to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 ¹ / ₄ +o 1	3 Pc.
54	.109	. 105	18	30	12	84	30	851/2	102	21/4+0 1	3 Pc.
60	.109×	.105×	18	33	12	87	_	_	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	_	_	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	_	_	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	_	_	132	11/2+0 1	3 Pc.
84	.109×		18	45	12	87	_	_	138	1/2+0 1	3 Pc.
90	.109×	.105×	18	37	12	87	_	_	144	11/2+0 1	3 Pc.
96	.109×	.105×	18	35	12	87	_		150	11/2+0 1	3 Pc.

* EXCEPT CENTER PANEL

SEE GENERAL NOTES

PLAN VIEW

END VIEW

SIDE ELEVATION

METAL ENDWALLS

SHOULDER

SLOPE

	REINFORCED CONCRETE APRON ENDWALLS											
PIPE		APPROX.										
DIA.	Т	A	В	С	D	E	G	SLOPE				
12	2	4	24	48 1/8	721/8	24	2	3 to 1				
15	21/4	6	27	46	73		21/4	3 to 1				
18	21/2	9	27	46 73		36	21/2	3 to 1				
21	23/4	9	36	371/2	731/2	42	23/4	3 to 1				
24	3	91/2	431/2	30	731/2	48	3	3 to 1				
27	31/4	101/2	$49^{1}/_{2}$	24	731/2	54	31/4	3 to 1				
30	$3\frac{1}{2}$	12	54	193⁄4	731/2	60	31/2	3 to 1				
36	4	15	63	34¾	97¾	72	4	3 to 1				
42	$4\frac{1}{2}$	21	63	35	98	78	41/2	3 to 1				
48	5	24	72	26	98	84	5	3 to 1				
54	51/2		65	* ** 33 ¹ / ₄ -35	* 98 ¹ / ₄ - 100	90	51/2	2% to 1				
60	6	* ** 30-35	60	39	99	96	5	2 to 1				
66	61/2		* ** 72-78	* * * 21-27	99	102	51/2	2 to 1				
72	7	* ** 24-36	78	21	99	108	6	2 to 1				
78	71/2	* ** 24-36	78	21	99	114	61/2	2 to 1				
84	8	36	901/2	21	1111/2	120	61/2	11/2+0 1				
90	81/2	41	871/2	24	1111/2	132	61/2	11/2+0 1				

*MINIMUM

PLAN

END VIEW

END SECTION

GROOVED END ON OUTLET END SECTION TONGUE END ON INLET END SECTION

BAR OR STEEL FABRIC

REINFORCEMENT

LONGITUDINAL SECTION

CONCRETE ENDWALLS

OPTIONAL

1 1/2" R

CULVERT

MEASURED LENGTH

OF CULVERT (TO-

NEAREST FOOT)

DESIGN

REINFORCED

SECTION A-A)

END CORNER PLATES MAY

BE FASTENED TO APRON

THE SURFACES TIGHTLY

TOGETHER

PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD

TOE PLATE (SAME THICKNESS

AND METAL AS APRON) SHALL

BE FURNISHED WHEN CALLED

FOR ON THE PLANS

FDGE (SFE

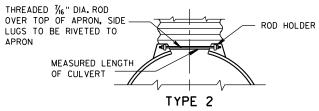
END SECTION CONNECTOR STRAP LUG

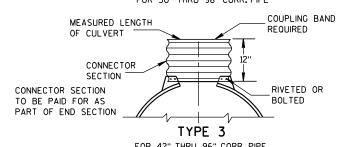
1" WIDE, 12 GA. (0.109"

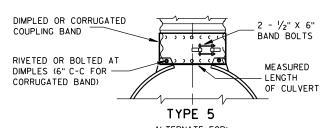
THICK) GALVANIZED STRAP

WITH STANDARD 6" X 1/2" BAND BOLT AND NUT

TYPE 1 FOR 12" THRU 24" CORR. PIPE





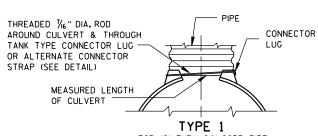


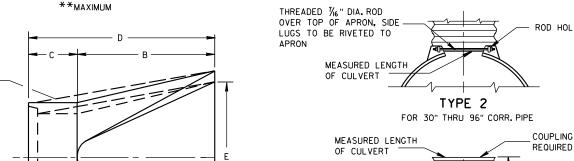
ALTERNATE FOR: ALL SIZES CORRUGATED CIRCULAR PIPE

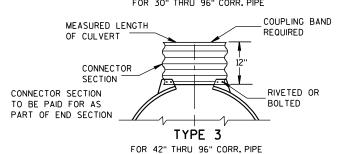
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

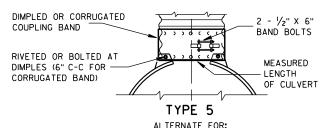
CONNECTION DETAILS 1, 2 OR 5.

ALTERNATE FOR TYPE 1 CONNECTION







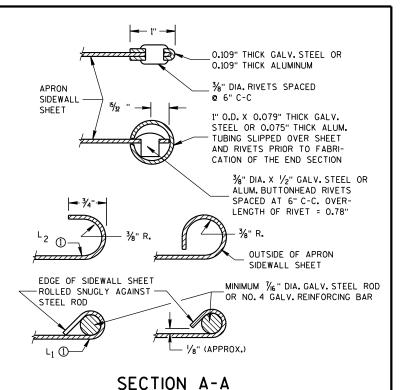


FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5

FOR HELICALLY CORRUGATED PIPE USE ENDWALL

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

CONNECTION DETAILS



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

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

11/30/94 /S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER

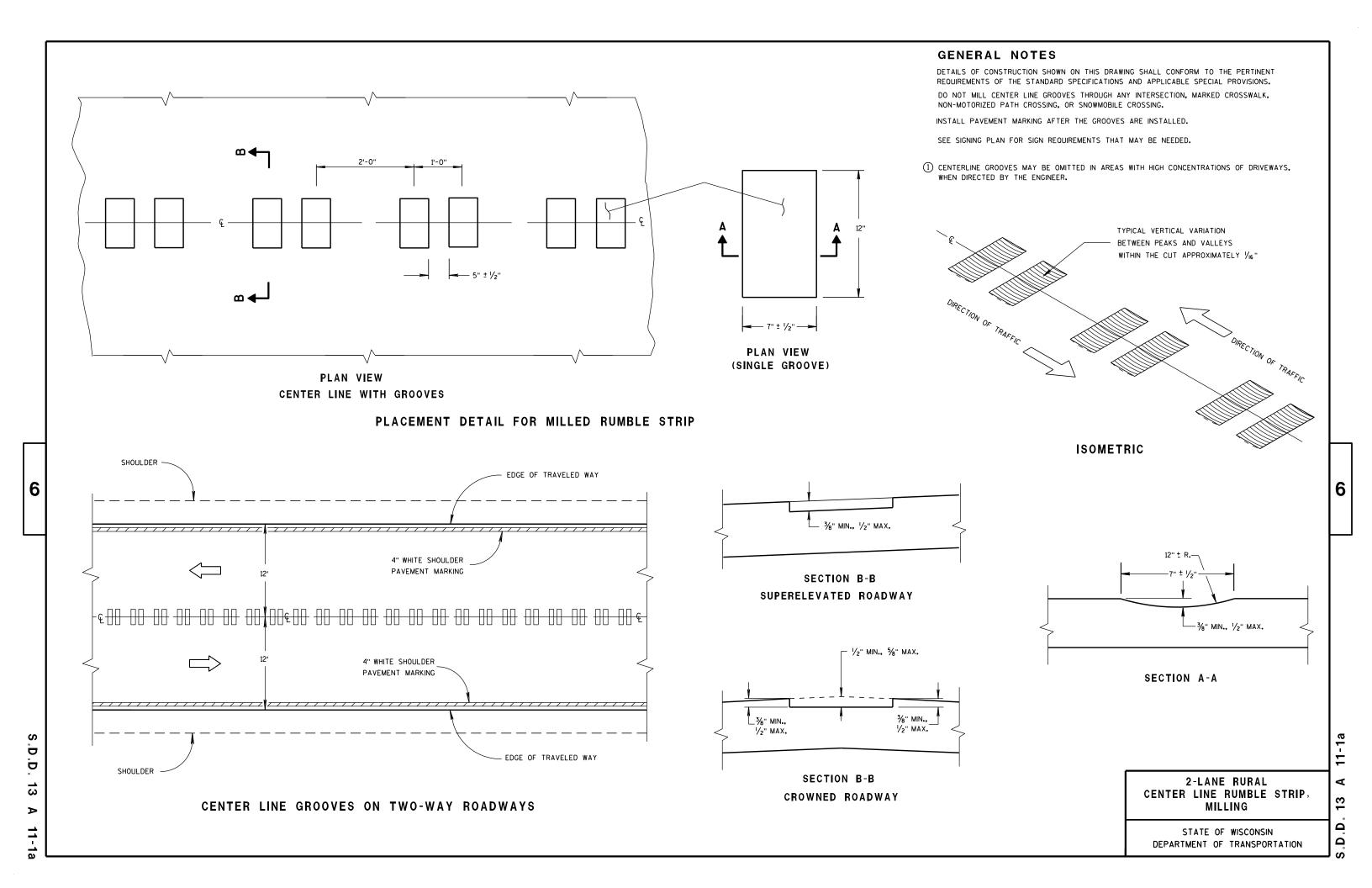
END CORNER

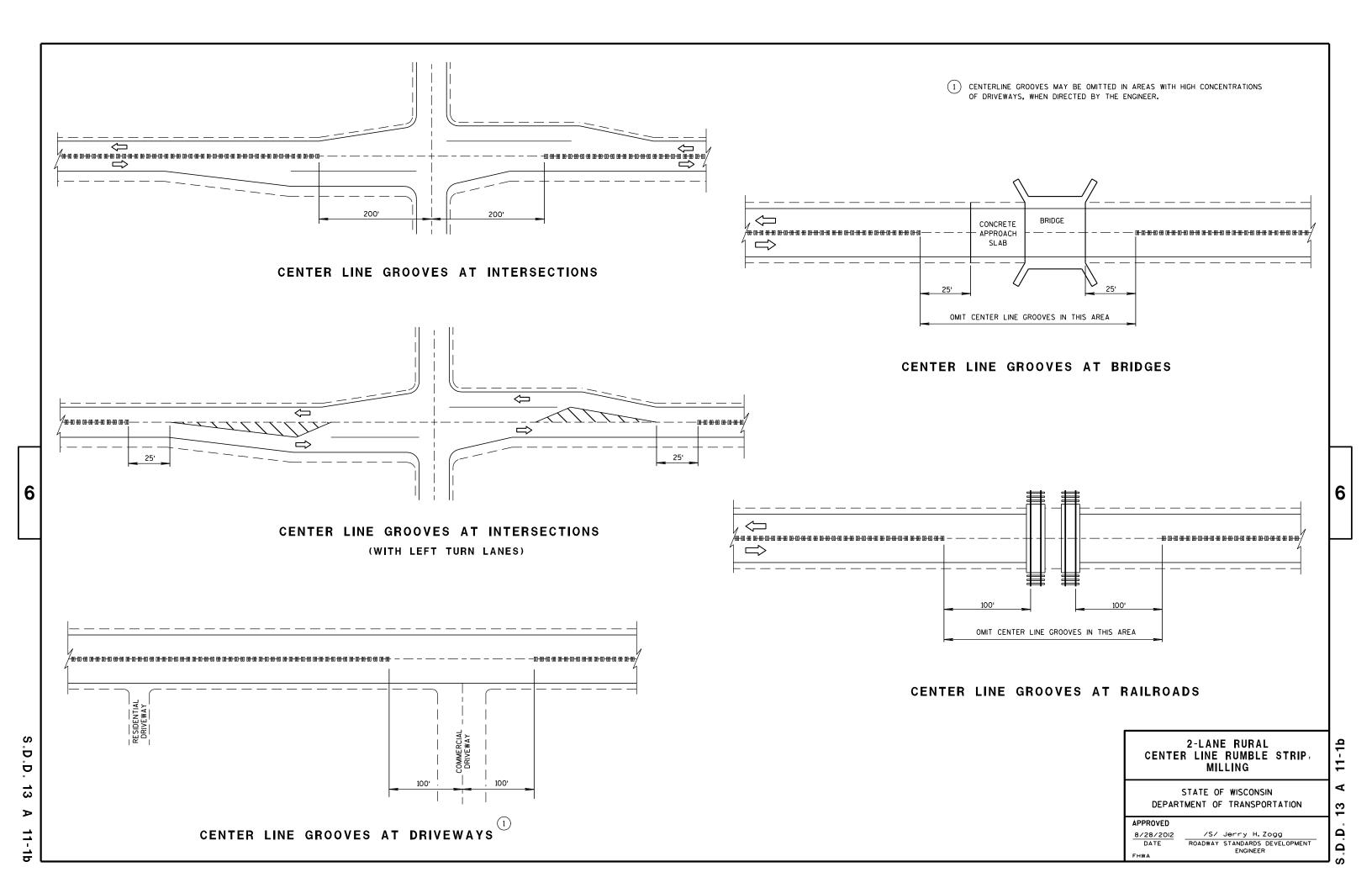
1/16" DIA. HOLES FOR

BOLTS OR RIVETS -

12" C-C MAX. SPACING

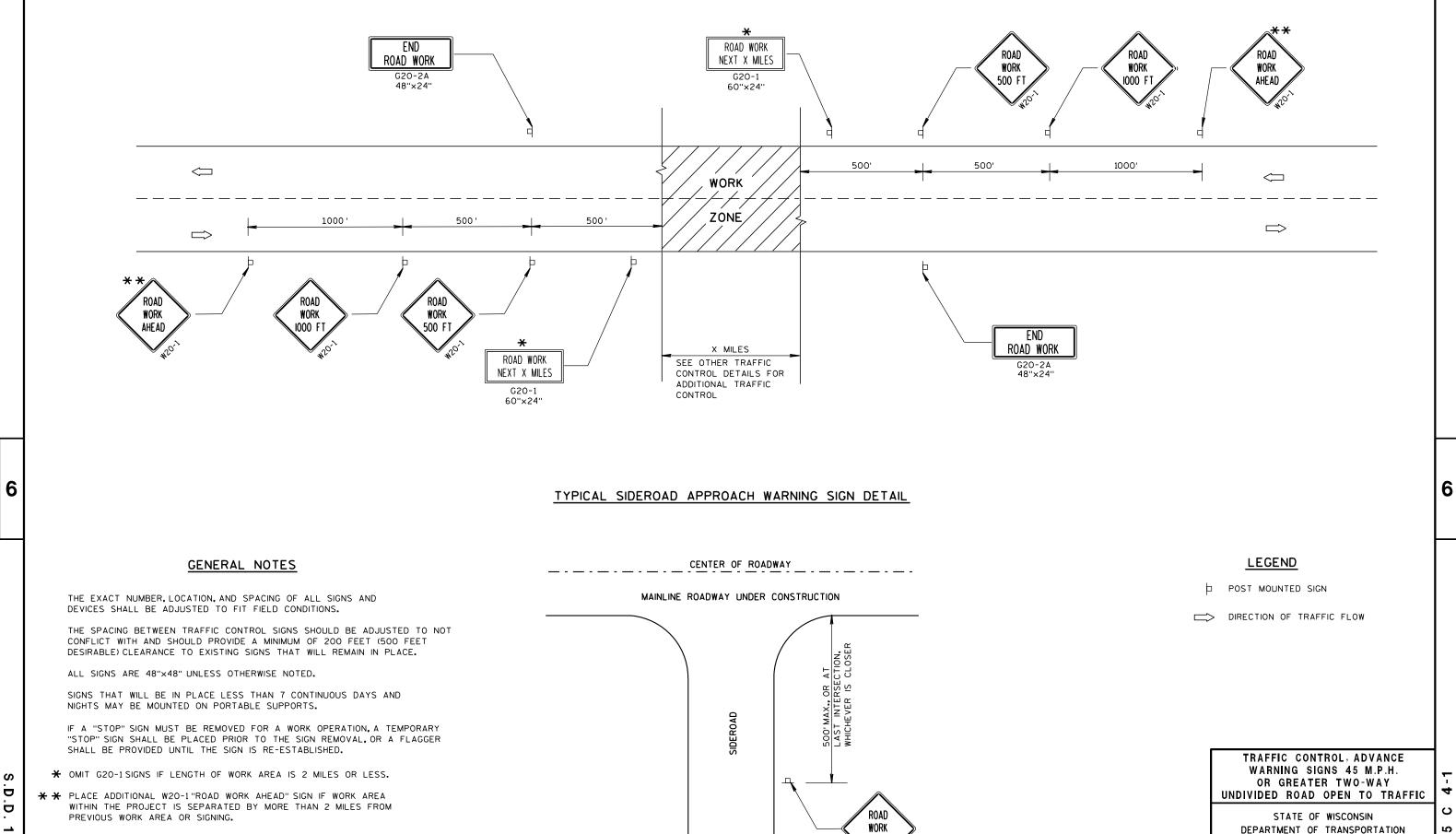
6











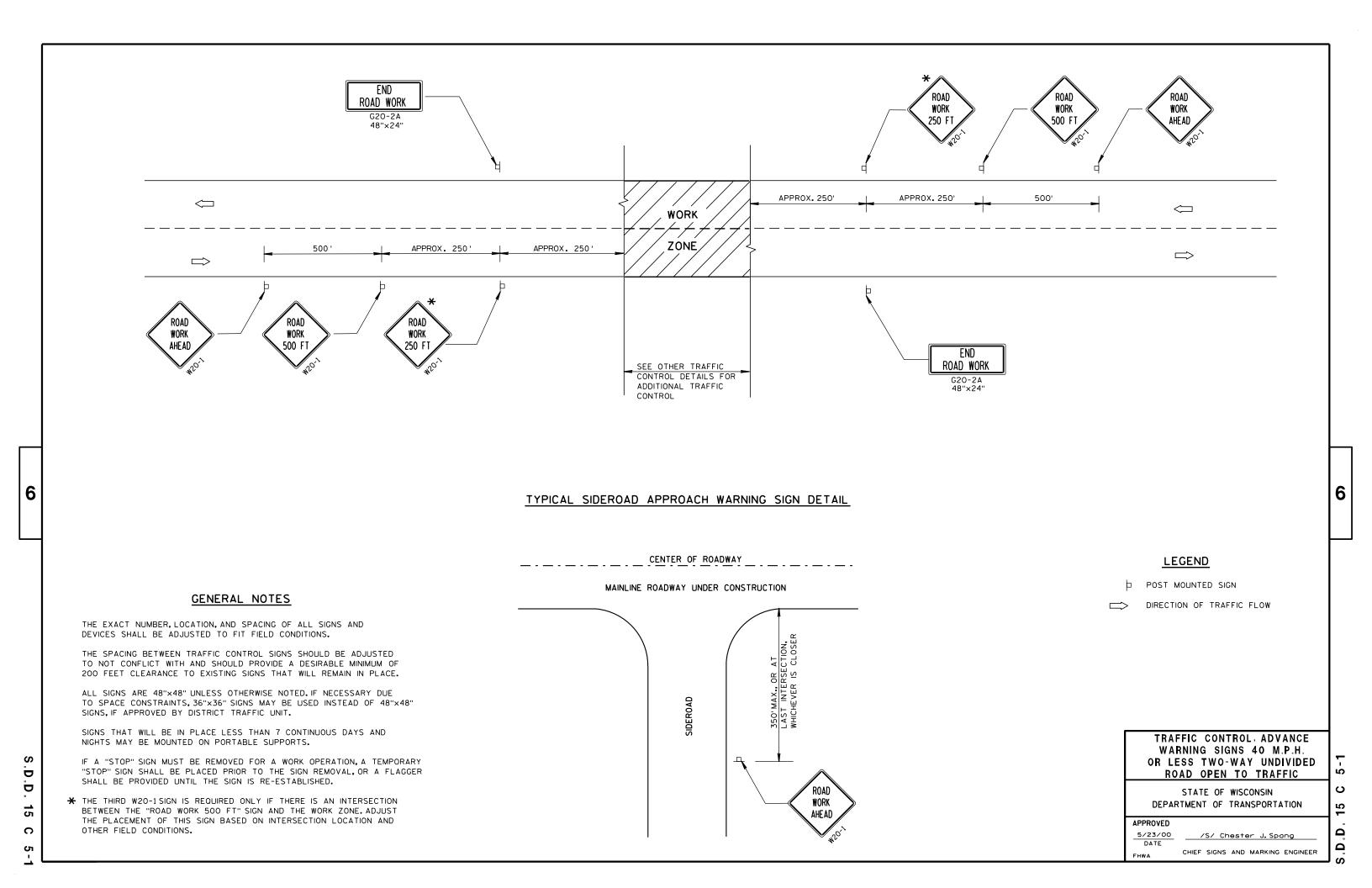
APPROVED

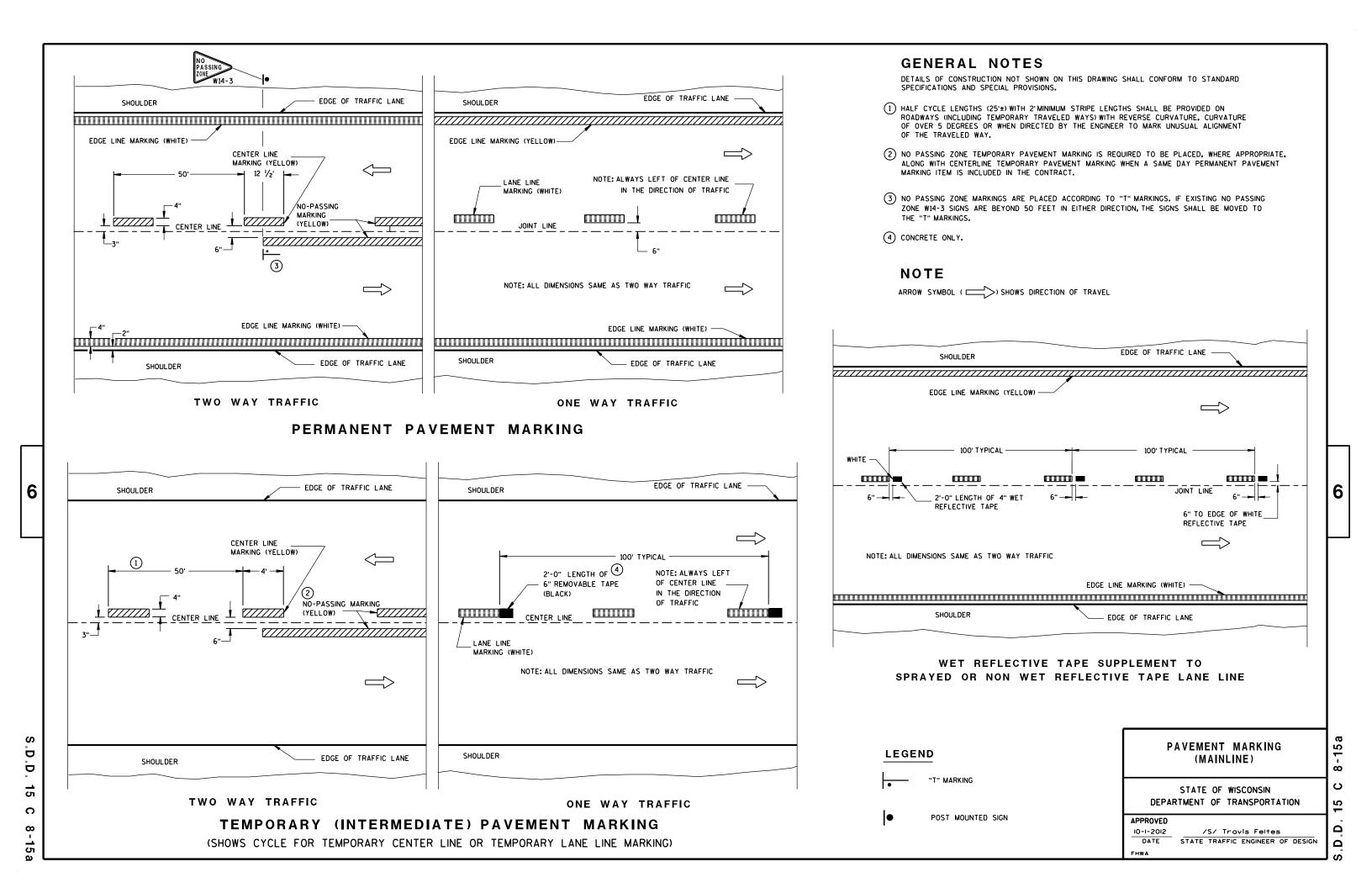
5/23/00

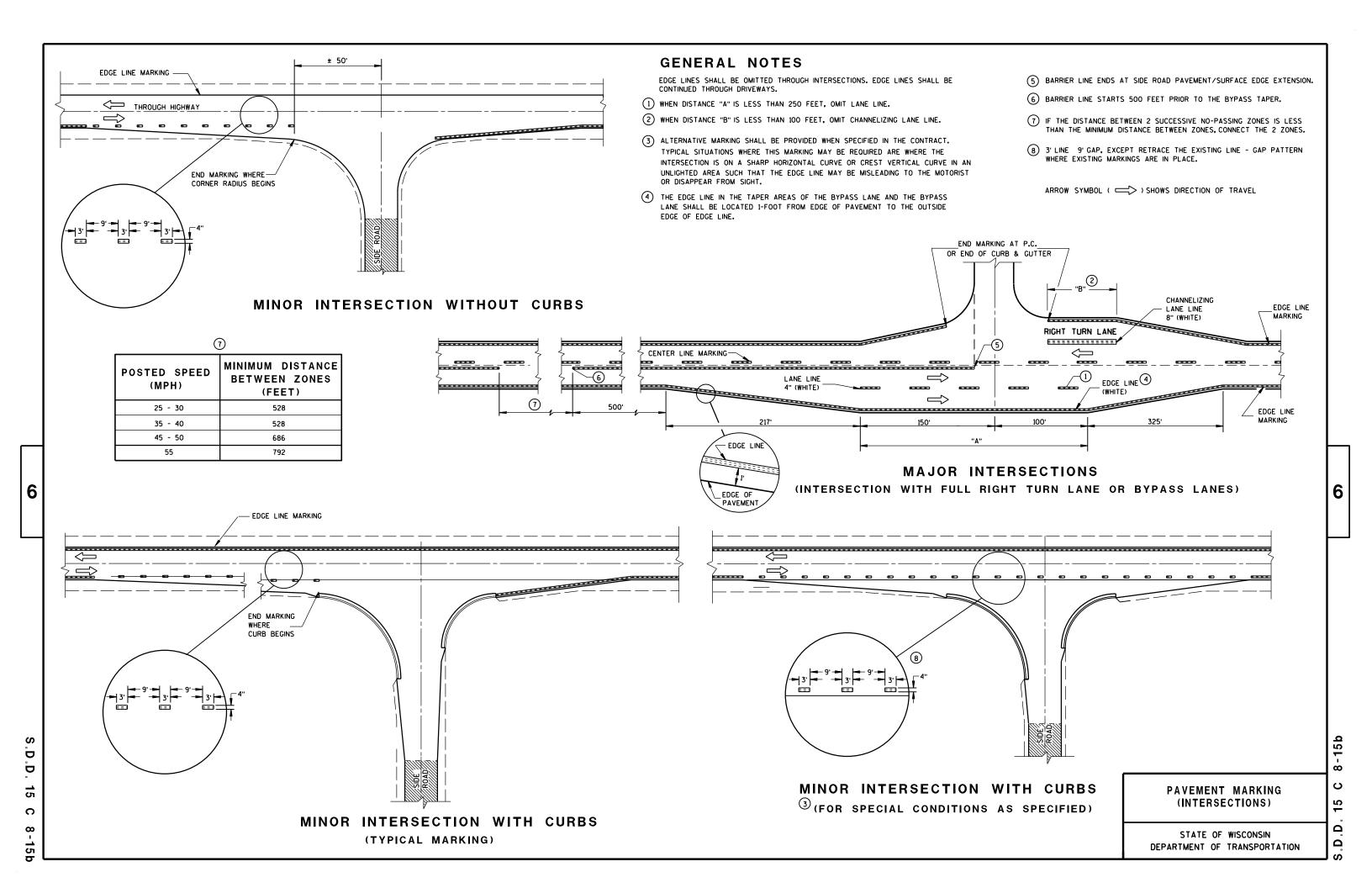
Ω

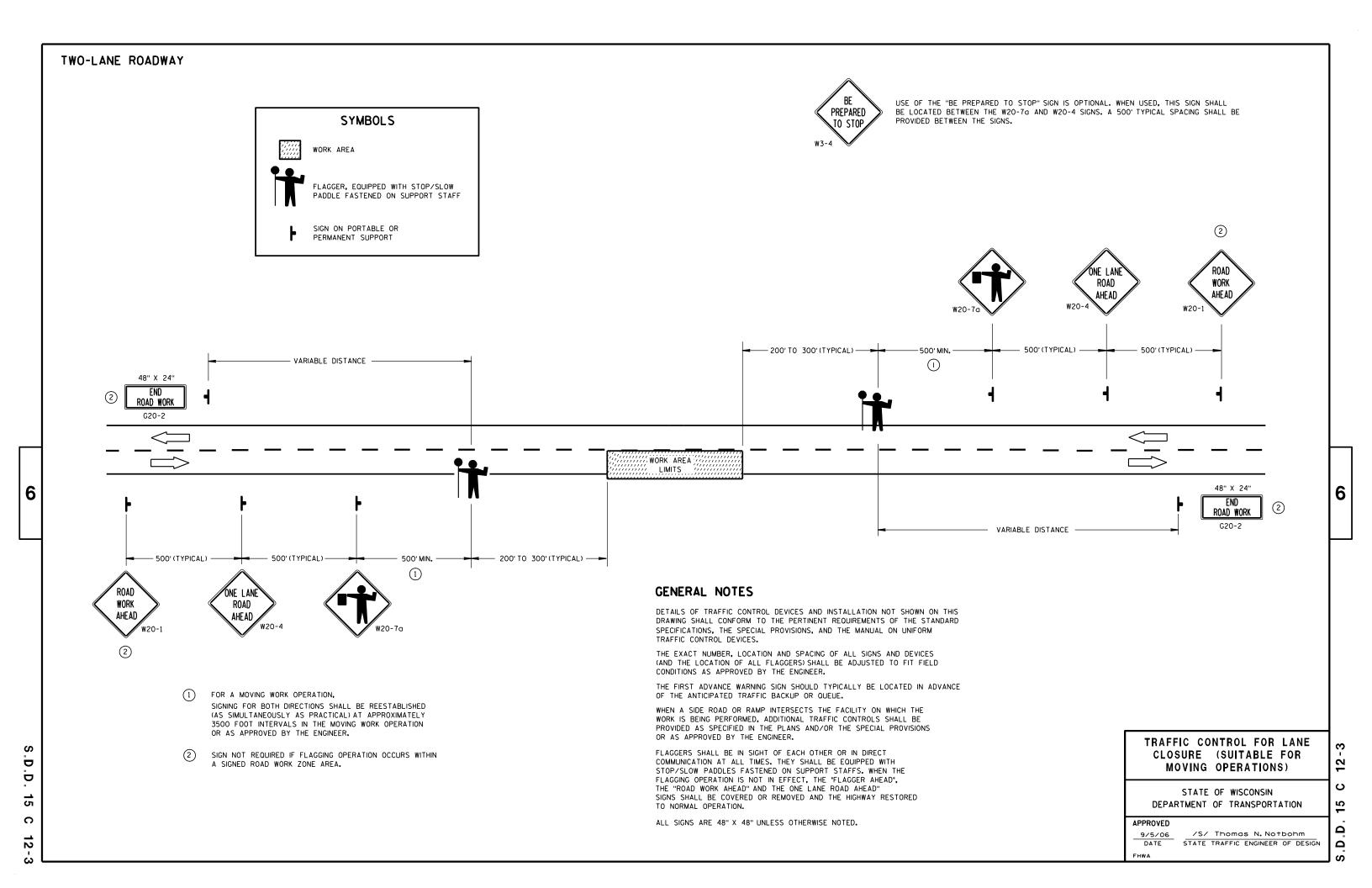
Ω

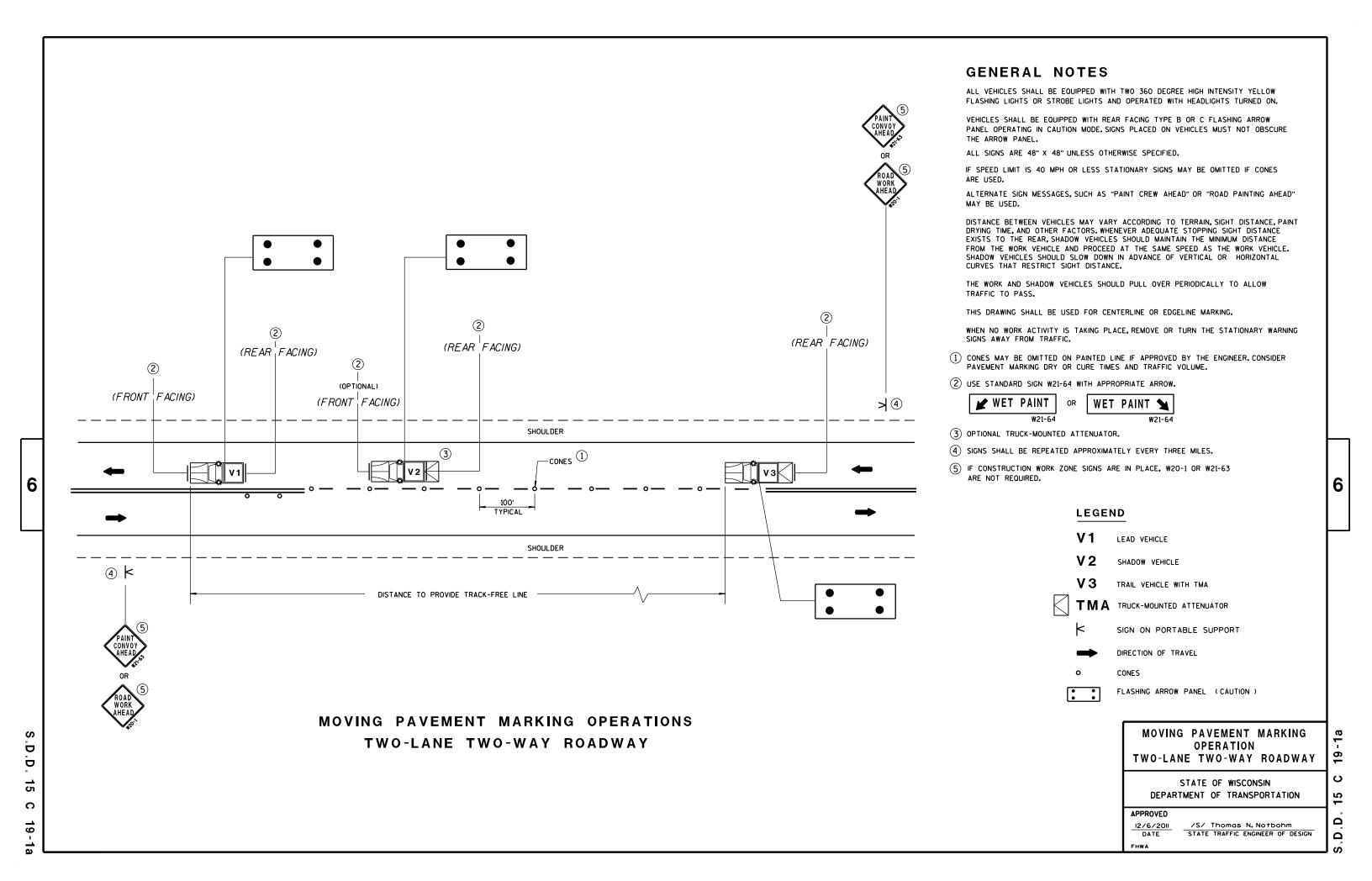
/S/ Chester J. Spang
CHIEF SIGNS AND MARKING ENGINEER

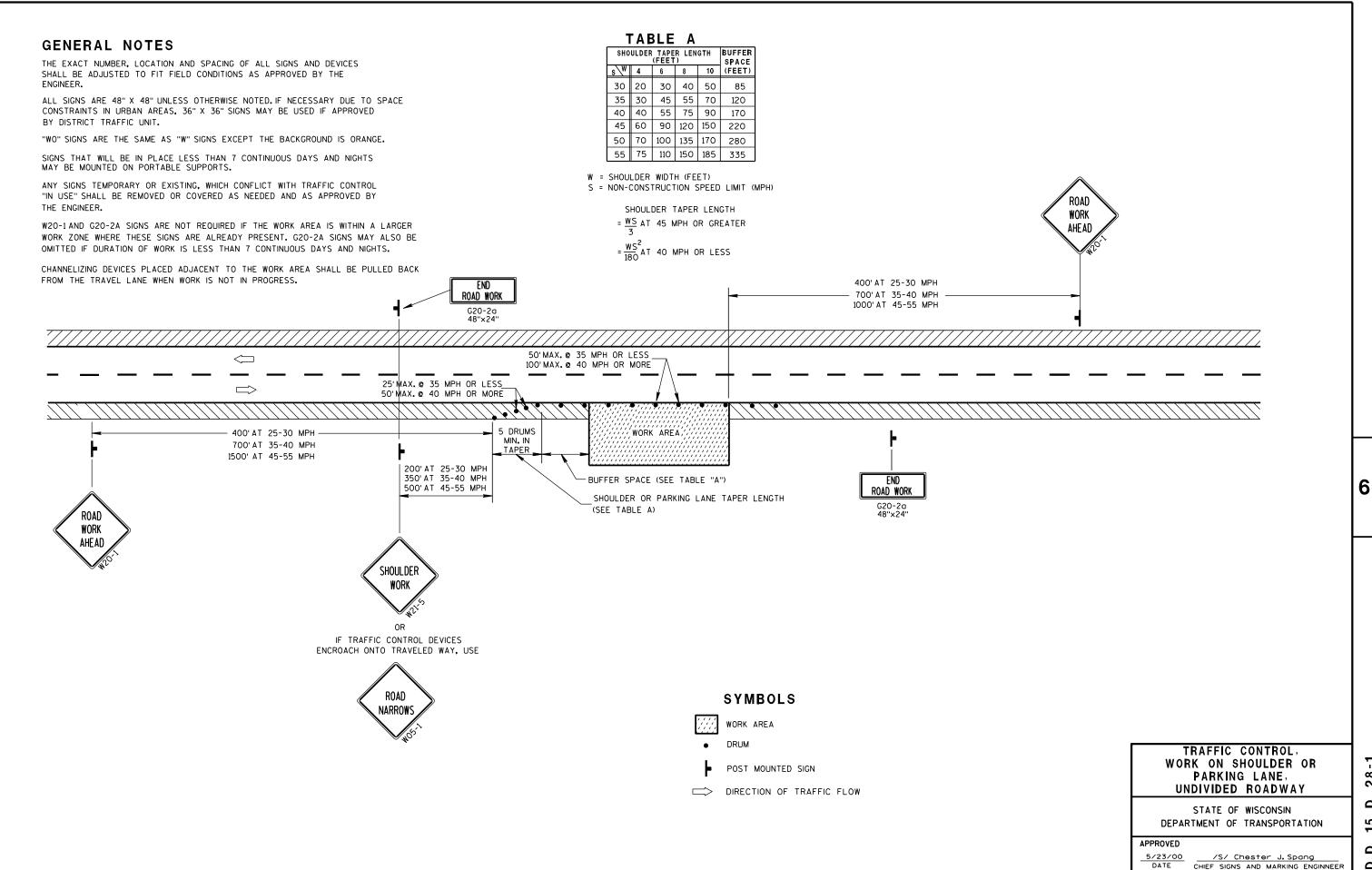












6

Ö

Ō

D

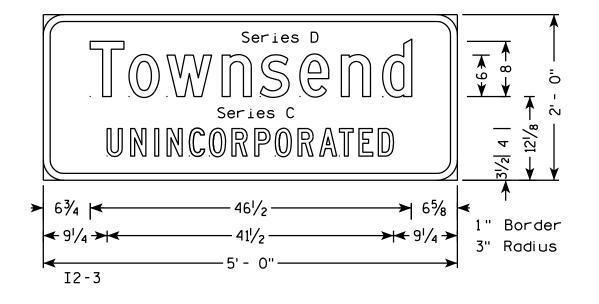
Ω S

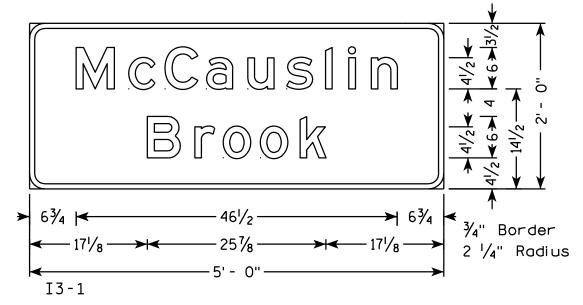
N Ω

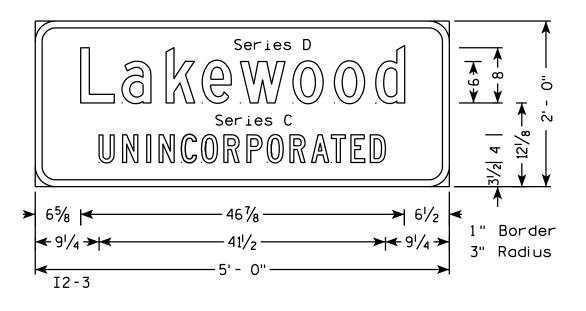
- 1. All Signs Type II Type H Reflective reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

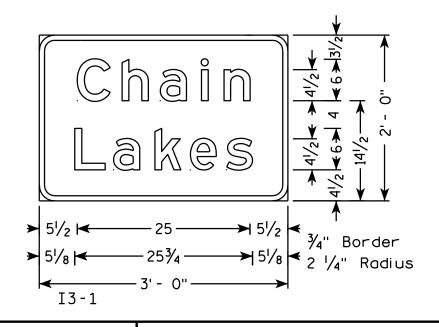
Background - Green Message - White

3. Message Series - E except as noted









PROJECT NO: 9190-19-60 HWY: STH 32 COUNTY: OCONTO PERMANENT SIGNING FILE NAME: C:\Users\PROJECTS\tr_d3\3422a310.dgn PLOT BY: ditjph

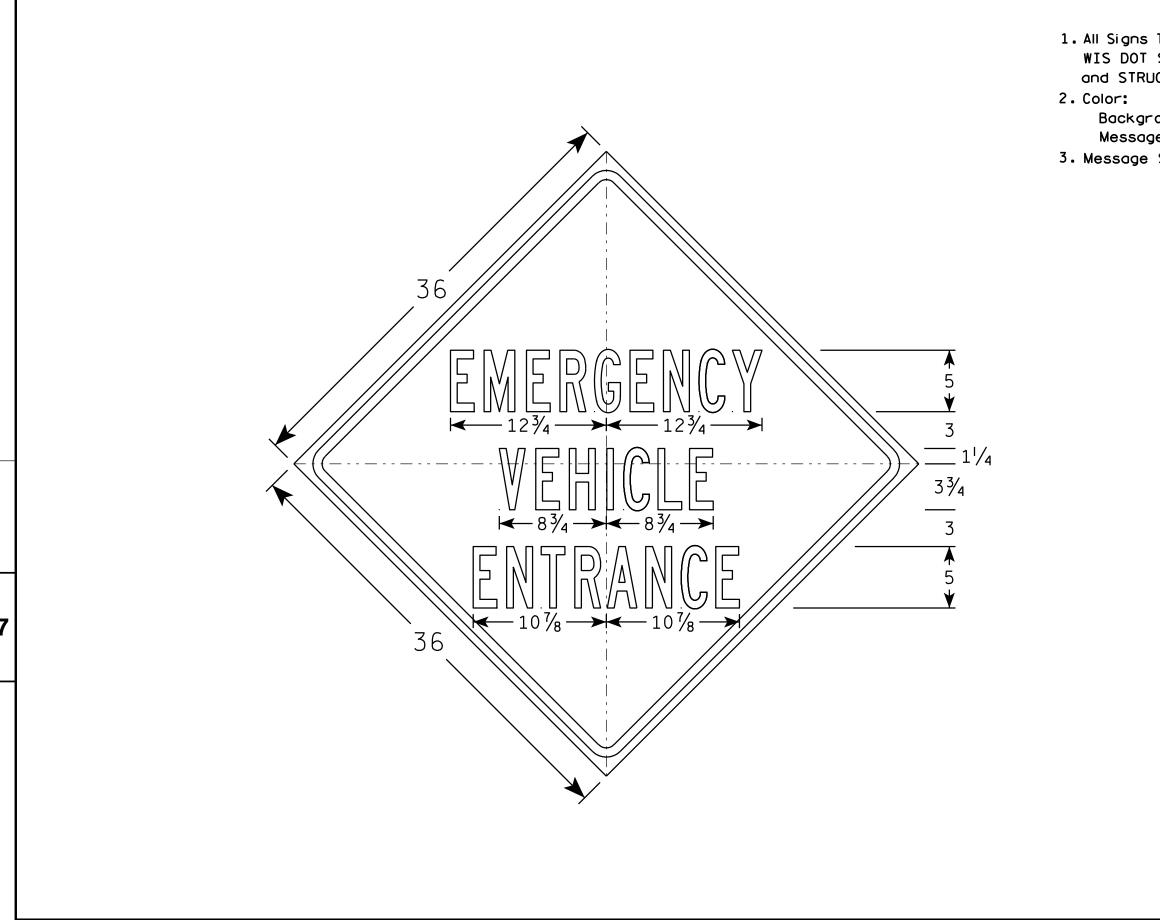
PLOT DATE: 09-MAR-2010 09:22

PLOT NAME :

PLOT SCALE: 13.904435:1.000000

WISDOT/CADDS SHEET 42

SHEET NO:



1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.

Background - Yellow Message - Black

3. Message Series - B

HWY: STH 32 COUNTY: OCONTO SHEET NO: PROJECT NO: 9190-19-60 PERMANENT SIGNING

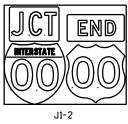
FILE NAME: C:\Users\PROJECTS\tr_d3\3422a310.dgn PLOT DATE: 09-MAR-2010 09:22 PLOT BY : ditjph PLOT NAME : PLOT SCALE: 7.821246:1.000000 WISDOT/CADDS SHEET 42

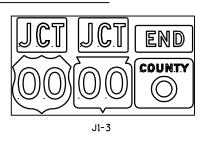
TYPICAL ASSEMBLIES



North

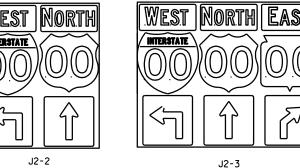
INTERSTATE

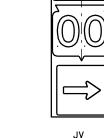




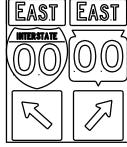


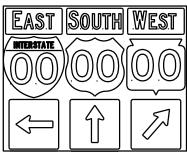






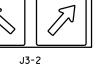
J2-1

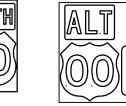


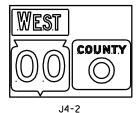


J3-3













EAST

J32-1

IMTERSTATE





J33-1





J23-1

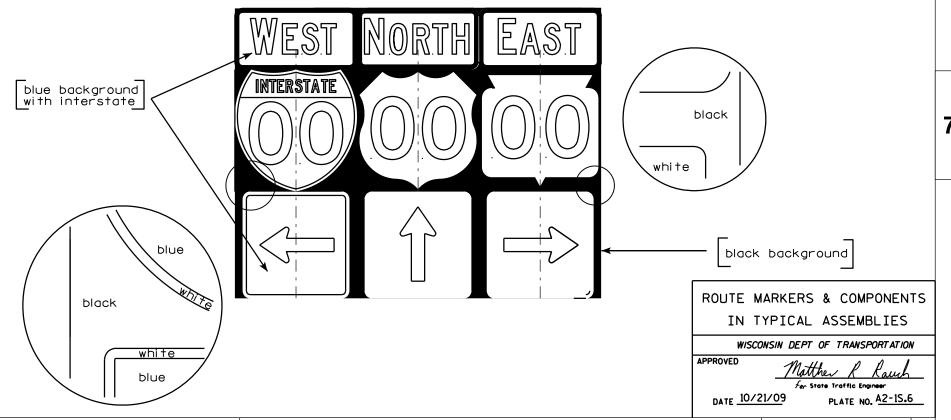


NOTES

- 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 since base material is plywood.
- 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 inchs (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.



PROJECT NO:

J13-1

COUNTY

FRONTAGE

ROAD

SHEET NO:

Ε



urban area

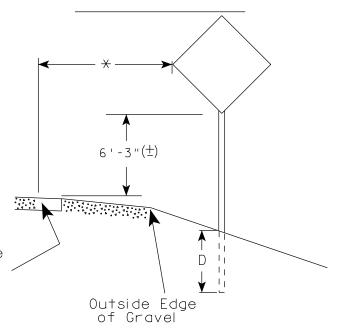
2' Min - 4' Max (See Note 5)

** Curb Flowline

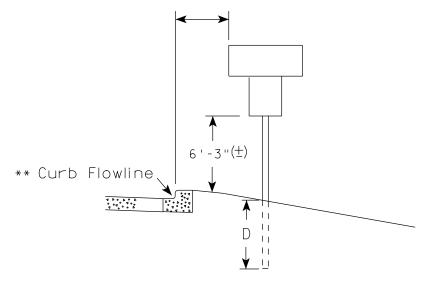
D

White Edgeline
Location

RURAL AREA (See Note 2)



2' Min - 4' Max (See Note 5)



White Edgeline
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.

* 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.

GENERAL NOTES

- 1. Signs wider than 4 feet or larger than 20 sq. ft. 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 (A4-5) is 7'-3'' (\pm) or 6'-3'' (\pm) per urban or rural detail respectively.
- 5. Minimum mounting height for signs mounted on traffic signal poles is 5' 3" (\pm) .
- 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 stop signs (R1-1F) shall be mounted at a height of 5'-3" (\pm) 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), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

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

SHEET NO:

APPROVED

Matther R Raul For State Traffic Engineer

DATE <u>9/21/2011</u>

PLATE NO. <u>A4-3.16</u>

PROJECT NO:

HWY:

COUNTY:

PLOT DATE: 21-SEP-2011 13:33 PLOT BY: mscs id

PLOT NAME :

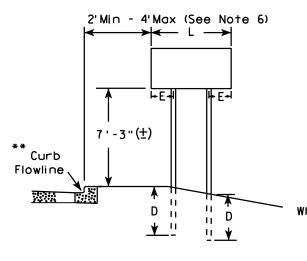
PLOT SCALE: 101.303739:1.000000

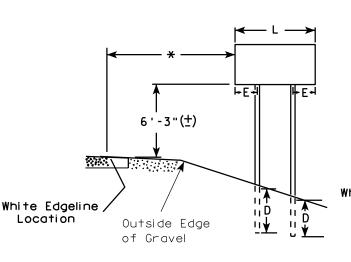
WISDOT/CADDS SHEET 42

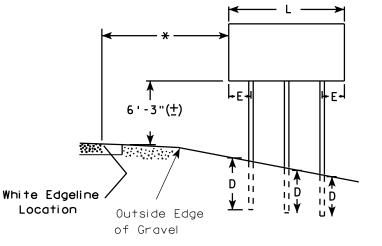
FILE NAME : C:\Users\PROJECTS\tr_stdplate\A43.DGN

URBAN AREA

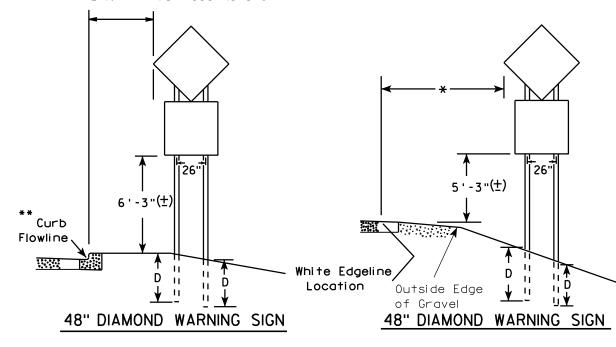
RURAL AREA (See Note 3)







2' Min - 4' Max (See Note 6)



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

COUNTY:

SIGN SHAPE OTHER THAN (FOUR POSTS REQUIRE	
L	E
168" and greater	12"

GENERAL NOTES

- 1. For multiple 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 (A4-5) 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 stop signs (R1-1F) 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) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (\pm).
- * 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 or 20 S.F. or less in area.

POST EMBEDMENT DEPTH

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

PLOT NAME :

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS WISCONSIN DEPT OF TRANSPORTATION

APPROVED

For State Traffic Engineer

PLATE NO. 44-4.11 DATE 9/21/2011

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\A44.DGN

Greater than 48"

Less than 60"

60" to 120"

* * *

PROJECT NO:

SIGN SHAPE OTHER THAN DIAMOND

Ε

12"

L/5

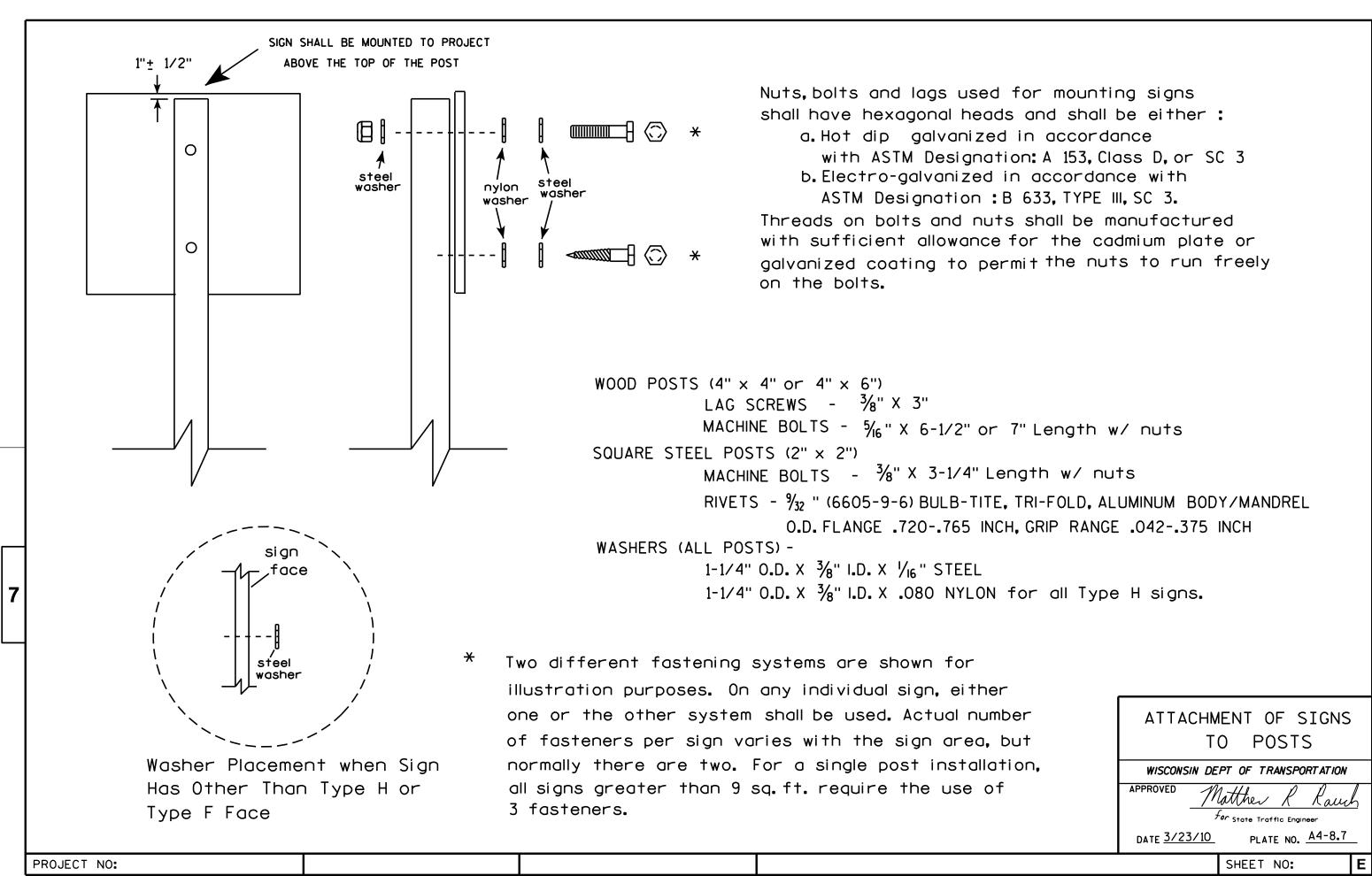
HWY:

(TWO POSTS REQUIRED)

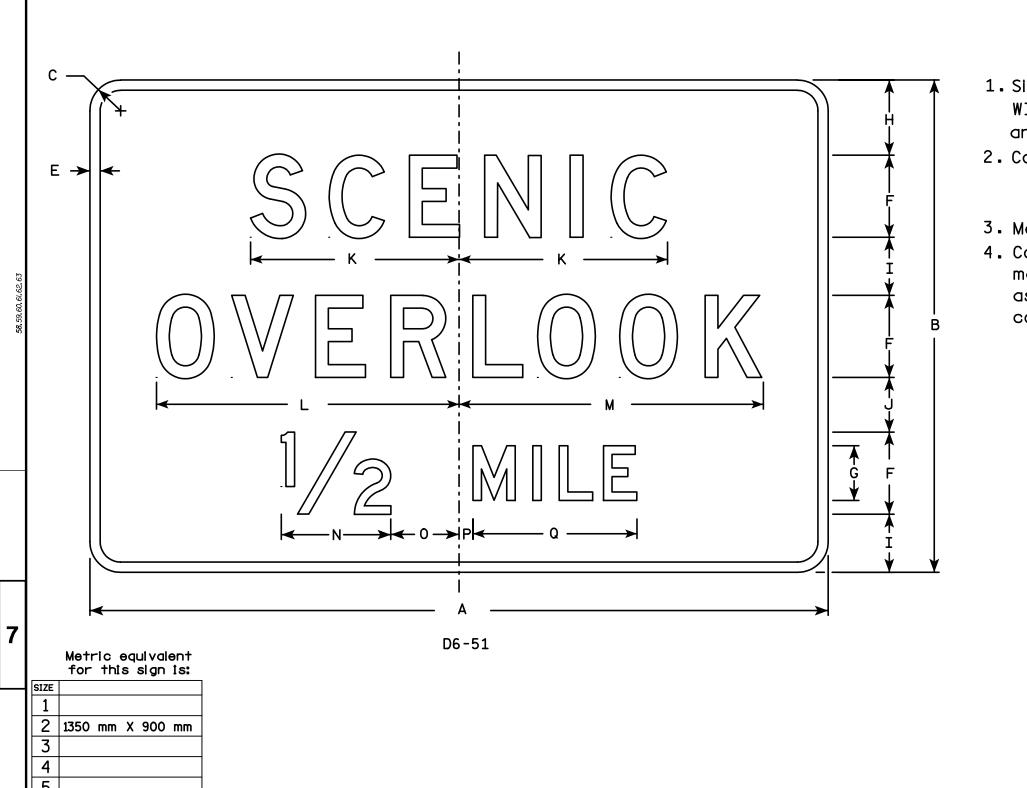
PLOT DATE: 21-SEP-2011 13:36

PLOT BY: mscsia

PLOT SCALE: 109.249131:1.000000







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

Background - Blue Message - White - Type H Reflective

- 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.

STANDARD SIGN D6-51

WISCONSIN DEPT OF TRANSPORTATION

DATE 1/10/02

SHEET NO:

FILE NAME : C:\Users\Projects\tr_stdplate\D651.DGN

С

54 | 36 | 2 1/4

STATE PROJECT NUMBER:

2

3 4

5

PLOT DATE: 22-JAN-2002 07:47

15 1/4 22 1/8 22 1/4 8

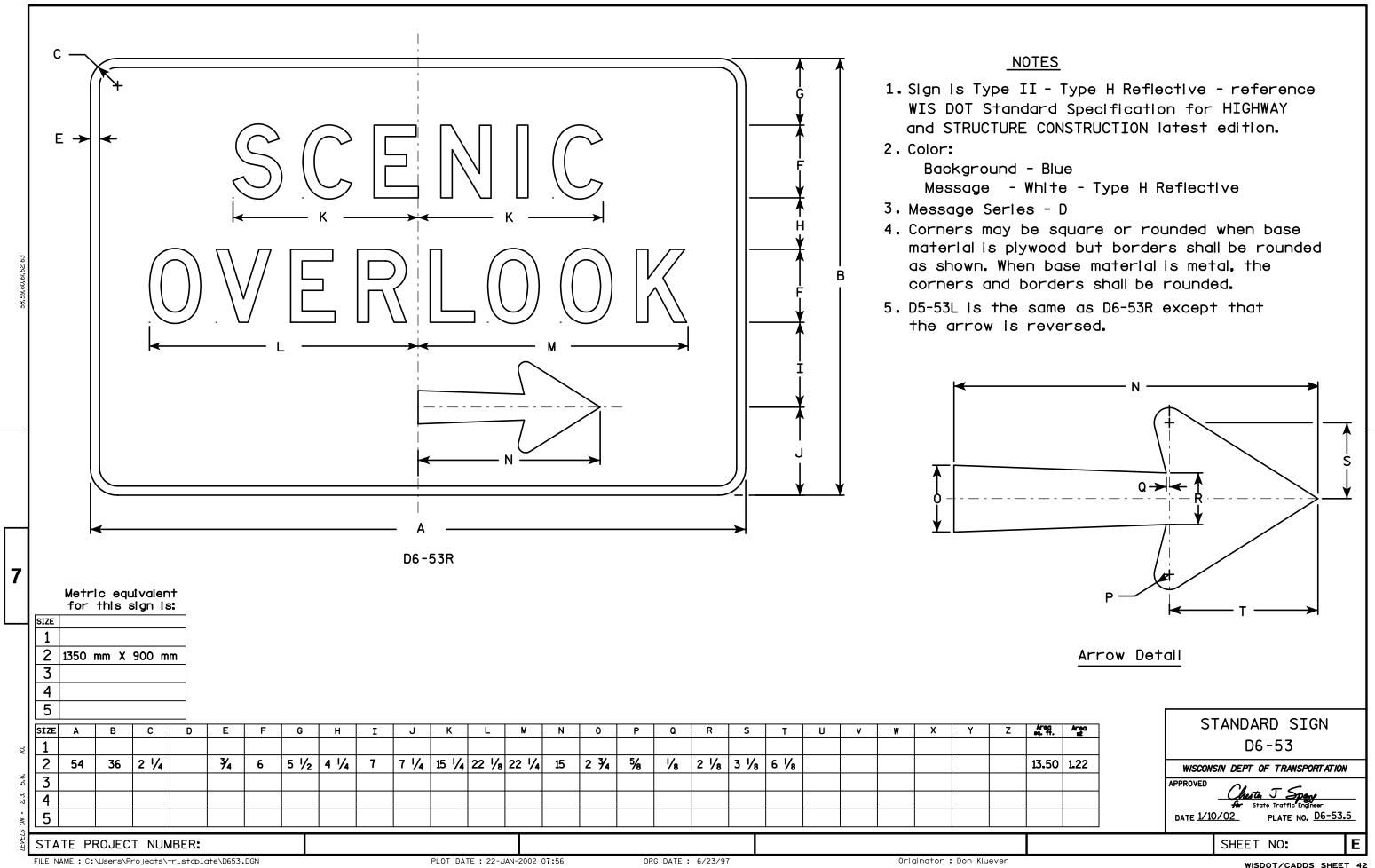
5 1/2 4 1/4 4

ORG DATE: 6/23/97

Originator : Don Kluever

Z Ared Ared

13.50 1.22



E → SPONSOR A F Y G Z F Z A F X A

HWY:

Background Colors of Symbol*

₽ 4

* VARIES

White Black Green Orange

 * $\!\!\!/_4$ " Black Border between each color of rainbow and border of rainbow

I 2 36 | 1 1/2 | 1/2 5/8 3 1/2 2 7/8 | 2 1/8 | 11 1/4 | 11 1/8 | 9 3/8 | 1 1/4 3/4 12 % 7 1/2 30 7.5 3 4 5

COUNTY:

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 - (See Note 5)

- 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. Border Blue

Line 1 - Red

Line 2 - Black

Line 3-5 - Blue

6. Line 1 - Dutch 8011L

Line 2 - Series E

Line 3-5 - Series C

7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

> STANDARD SIGN I55-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED for State Traffic Engineer

DATE 4/27/11 PLATE NO. 155-56.3

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\I5556.DGN

PROJECT NO:

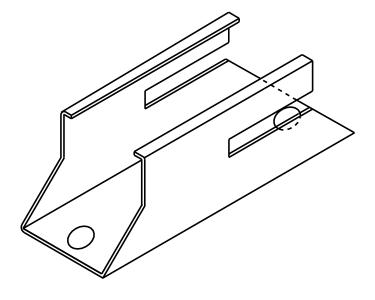
PLOT DATE: 27-APR-2011 10:05

PLOT BY: mscj9h

PLOT NAME :

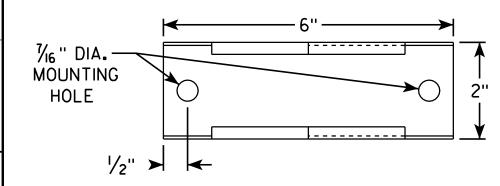
PLOT SCALE: 7.945391:1.000000

ISOMETRIC VIEW

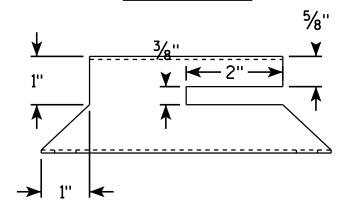


TOP VIEW

HWY:



SIDE VIEW

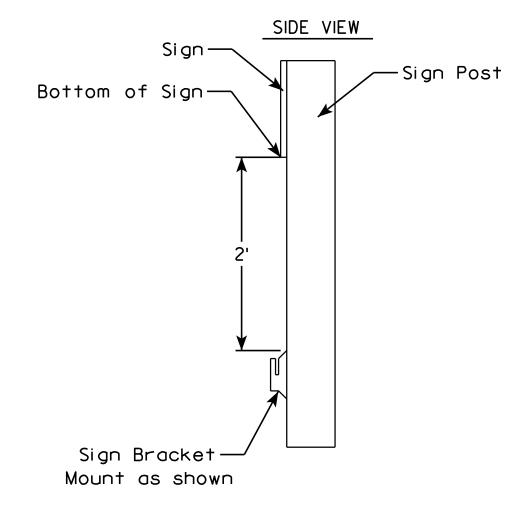


END VIEW **←** 2" →

COUNTY:

NOTES

- 1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
- 2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
- 3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
- 4. Shall have rounded edges with at least $\frac{1}{8}$ " radii.
- 5. Shall not have unrounded and uncoated metaledges which can contact the back surface of the roll-up sign.
- 6. Top of bracket shall be mounted 2' below the bottom of the 155-56 sign.
- 7. Cost of bracket and fastening hardware shall be incidental to the 155-56 sign.



ROLLUP SIGN BRACKET I55-56B

WISCONSIN DEPT OF TRANSPORTATION APPROVED

SHEET NO:

for State Traffic Engineer DATE 2/5/10 PLATE NO. 155-56B.1

PLOT NAME :

PLOT SCALE: 1.986348:1.000000

FILE NAME : C:\Users\PROJECTS\tr_stdplate\I5556B.DGN

PROJECT NO:

PLOT DATE: 01-MAR-2010 15:34

PLOT BY : ditjph

- Sign is Type II see Note 7 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:

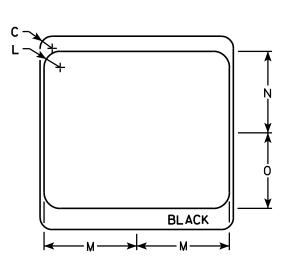
Background - White & Black - See Note 7 Message - Black

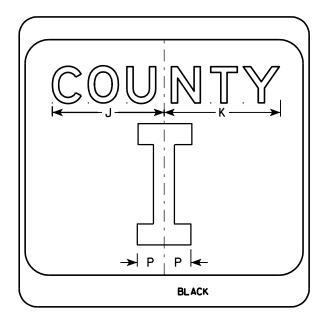
- 3. Message Series see Note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Message Series E for 1 letter.

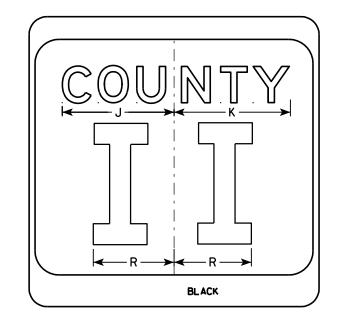
 Message Series D for 2 letters unless
 message is too big then Series C.

 Message Series C for 3 letters unless
 message is too big then Series B.
- 6. Substitute appropriate letters & optically center to achieve proper balance.
- 7. Permanent Signs

Background - Type H Reflective Detour or temporary Signs Background - Reflective







PLOT NAME :

SIZE	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	0	R	S	Т	U	V	W	Х	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 %									4.0
3	36		2 1/4			16	4	7 %	5 %	12 1/4	12 1/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 %	5 %	12 1/4	12 1/8	3	17 1/8	15 1/4	14	3 %		10									9.0
5	36		2 1/4			16	4	7 5/8	5 %	12 1/4	12 1/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
DDO	IECT	NO.					111	/V.					COUN	TV.													
FRU	JECT	NO.					HV	V I .						I I .					I								

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

PROVED

Matthew Rauch

Forstate Traffic Engineer

MATE 9/27/11 PLATE NO. M1-5A.8

DATE 9/27/11

SHEET NO:

BLACK

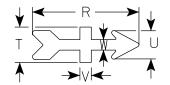
M1-5A

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

Background - White & Black Message - Black Arrow - Type H Reflective Red

- 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.

32nd DIVISION ARROW ACTUAL SIZE



Metric equivalent for this sign is:

SIZE					
1					
2	600	mm	Χ	600	mm
3	900	mm	Χ	900	mm
4	900	mm	Χ	900	mm
5	900	mm	Х	900	mm

SIZE	A	В	С	D	E	F	G	Н	I	7	K	L	M	Z	0	Р	0	R	S	T	U	٧	W	X	Y	Z	Area sq. ft.	Area =2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 %	11 ½	1	1 1/8	11 1/4	21 7/8		5 1/8	3/4	1 1/8	1 1/2	5/8	5/8	9	1/2	10 1/2	4.0	. 36
3	36		2 1/4			18	8 3/4	9 1/4	15 ¾	5	12 %	17 1/8	1 1/2	2 1/8	16 1/8	33		7 1/2	1 1/2	2 1/2	2	7 /8	3/4	13 1/2	3/4	15 ½	9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 %	17 1/8	1 1/2	2 1/8	16 1/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 ½	9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5	12 %	17 1/8	1 1/2	2 1/8	16 1/8	33		7 1/2	1 1/2	2 1/2	2	7/8	3/4	13 1/2	3/4	15 ½	9.0	. 81

COUNTY:

BLACK

M1-6B

HWY:

STATE ROUTE MARKER"32" M1-6B FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

For State Traffic Engineer

DATE 12/5/05 PLATE NO. M1-6B.2

SHEET NO:

PLOT NAME :

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

2. Color:

Background - Brown

Message - White - Type H Reflective

- 3. Message Series B
- 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.

G → N ←0→P||P|←0→ N ← Ι $\overline{\uparrow}$ J J M1 - 86

7

Metric equivalent for this sign is:

SIZE					
1					
2	450	mm	Х	900	mm
3					
4					
5					

PROJECT NO:

SIZE С Area sq. ft. Α В D Ε G 2 1 1/8 3/8 13 3/4 2 1/2 1 5/8 7 1/4 4 3/8 | 1 3/4 | 2 5/8 1/4 3/4 5 1/8 2 1/8 4.5 18 36 4 2 .41 3 4

STANDARD SIGN M1-86

WISCONSIN DEPT OF TRANSPORTATION

SHEET NO:

APPROVED

For

DATE 1/30/02

O2 PLATE NO. M1-86.3

HWY:

COUNTY:

PLOT DATE: 13-OCT-2005 15:31 PLOT BY: DITJPH

PLOT NAME :

PLOT SCALE : 5.960833:1.000000

$D \rightarrow \longleftarrow$

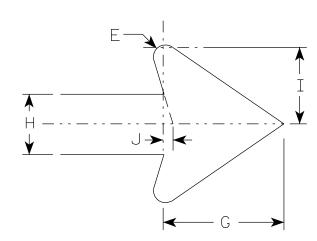
M1-88A

NOTES

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

Background - Brown Message - White - Type H Reflective

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.



Metric equivalent for this sign is:

SIZE					
1					
2	300	mm	X	300	mm
3					
4					
5					

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	T	U	٧	W	Х	Y	Z .	Area q. ft.	Area m2
1																												
2	12		1 1/8				3 3/4	1 %	2 3/8	5/16																	1.0	.09
3																												
4																												
5																												

STANDARD SIGN M1-88A

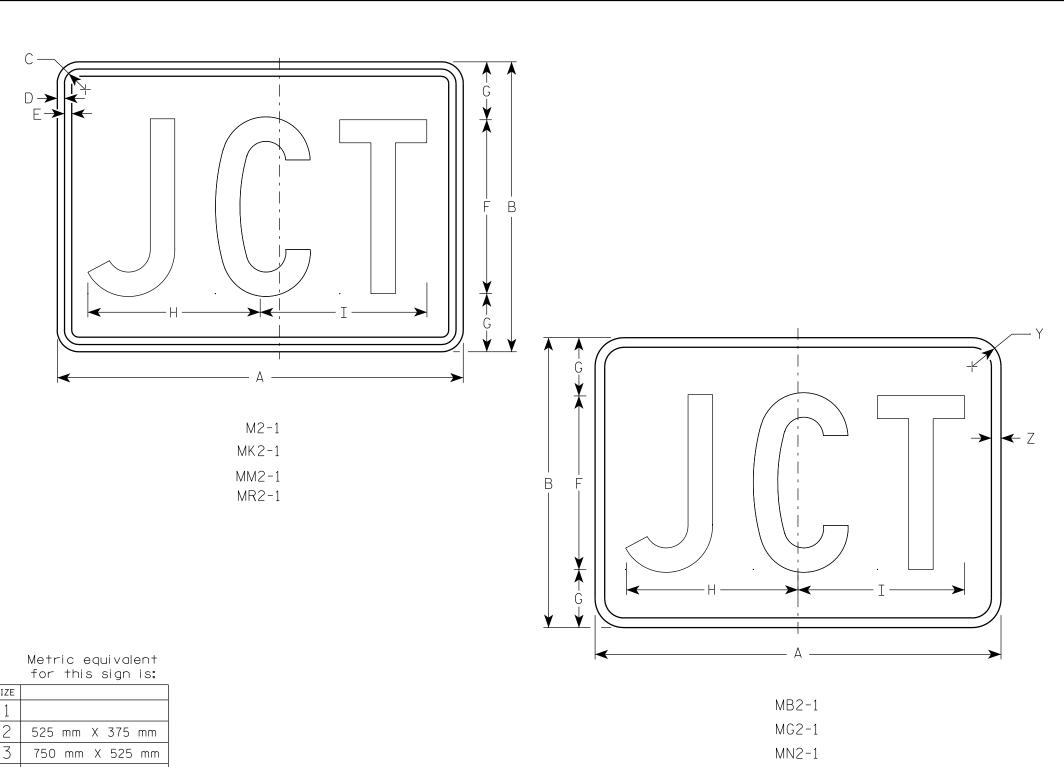
WISCONSIN DEPT OF TRANSPORTATION

DATE 1/30/02

PLATE NO. M1-88A.2

SHEET NO:

PLOT NAME :



- 1. Sign is Type II See Note 5 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 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 Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
 - MB2-1 Background Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
 - MG2-1 Background Green Message - White - Type H Reflective
 - MK2-1 Background Green Message - White - Type H Reflective
 - MM2-1 Background White Type H Reflective Message - Green
 - MN2-1 Background Brown Message - White - Type H Reflective
 - MR2-1 Background Brown Message - Yellow - Type H Reflective

750 mm X 525 mm 750 mm X 525 mm

PROJECT NO:

SIZE	Ξ.	А	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	Q	R	S	Т	U	٧	W	X	Y	Z	Area sq. ft.	Area m2
1																													
2	2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 %																1 1/2	1/2	2.20	0.20
3	3	30	21	1 1/8	3/8	3/8	13	4	12 1/8	12 3/8																1 1/2	1/2	4.40	0.20
4	-	30	21	1 1/8	3/8	3/8	13	4	12 1/8	12 3/8																1 1/2	1/2	4.40	0.20
5	-	30	21	1 1/8	3/8	3/8	13	4	12 1/8	12 3/8																1 1/2	1/2	4.40	0.20

COUNTY:

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

 f_{or} State Traffic Engineer

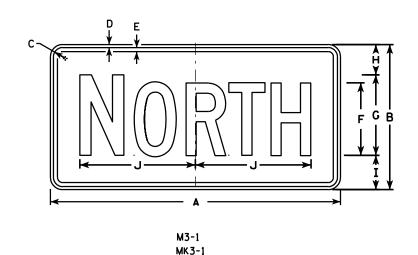
DATE 3/16/10

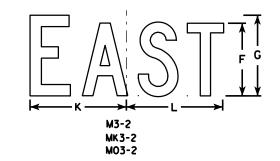
PLATE NO. M2-1.10 SHEET NO:

WISDOT/CADDS SHEET 42

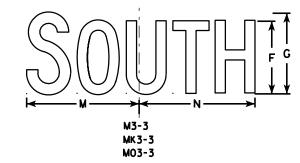
PLOT NAME : PLOT DATE: 16-MAR-2010 09:49 PLOT SCALE: 4.965868:1.000000 PLOT BY: dotsja

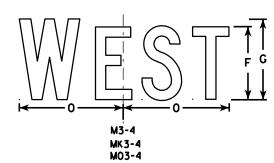
HWY:



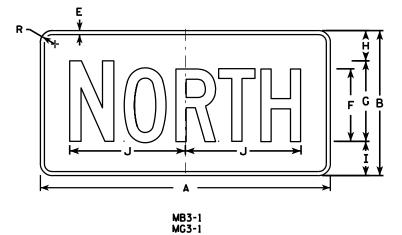


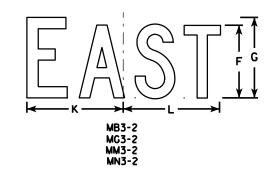
MO3-1





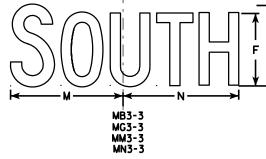
HWY:

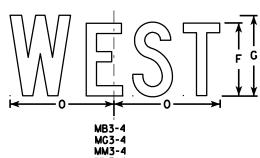




MM3-1

MN3-1





<u>NOTES</u>

- 1. All Signs Type II See Note 5 reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 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 Type H Reflective (Detour or temporary signs Reflective) Message Black
 - MB3-1 thru MB3-4 Background Blue Message - White - Type H Reflective (Detour or temporary signs - Reflective)
 - MG3-1 thru MG3-4 Background Green

 Message White Type H Reflective
 - MK3-1 thru MK3-4 Background Green

 Message White Type H Reflective
 - MM3-1 thru MM3-4 Background White Type H Reflective Message Green
 - MN3-1 thru MN3-4 Background Brown
 Message White Type H Reflective
 - M03-1 thru M03-4 Background Orange Reflective Message Black
- 6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	כ	٧	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 1/8	8 3/8	10 1/4	9 3/4	8 ¾			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

COUNTY:

STANDARD SIGNS M3-1 thur M3-4 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

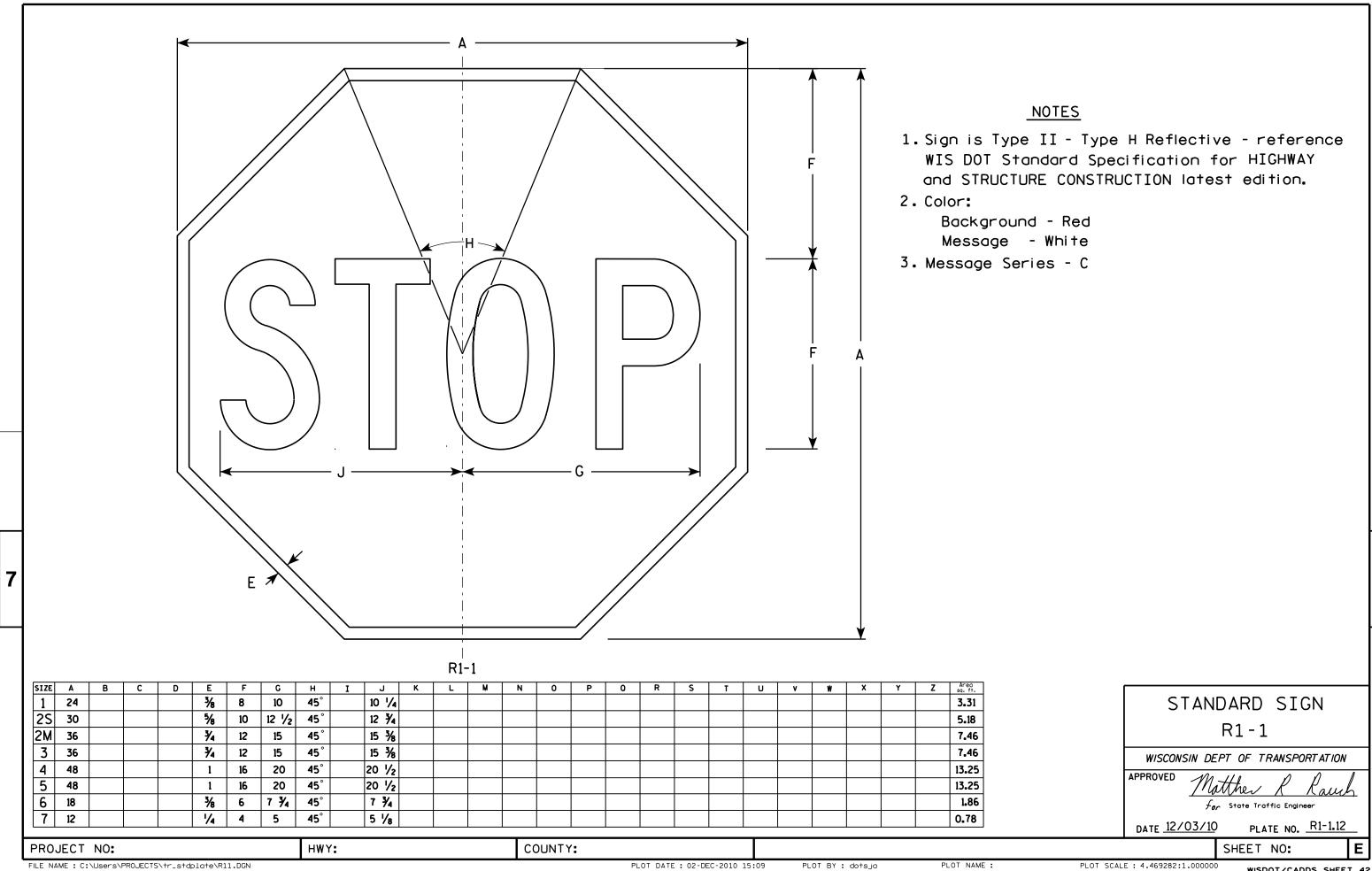
For State Traffic Engineer

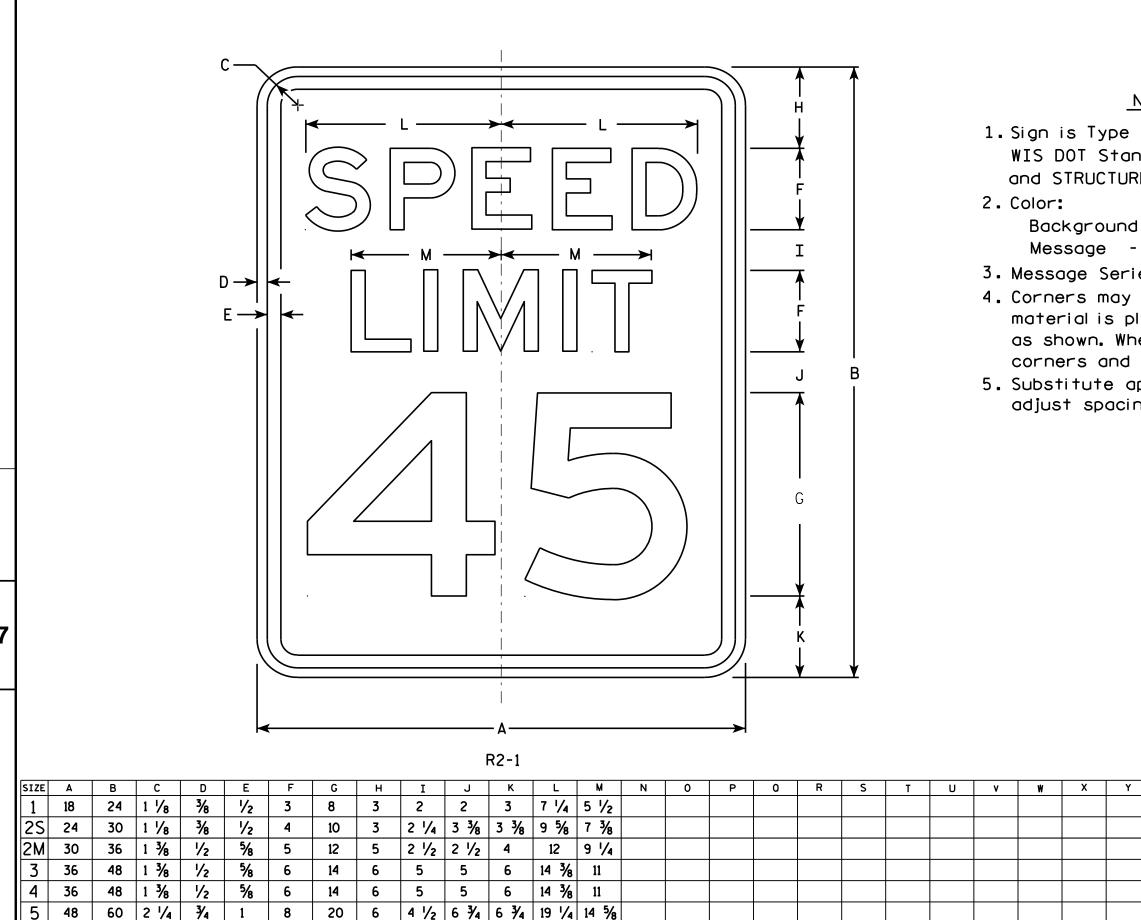
DATE 11/10/10 PLATE NO. M3-1.12

SHEET NO: E

PROJECT NO:

PLOT NAME :





COUNTY:

NOTES

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

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.

3.0

5.0

7.5

12.0

12.0

20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matther R Raus

For State Traffic Engineer DATE <u>5/26/1</u>0 PLATE NO. R2-1.13

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN

PROJECT NO:

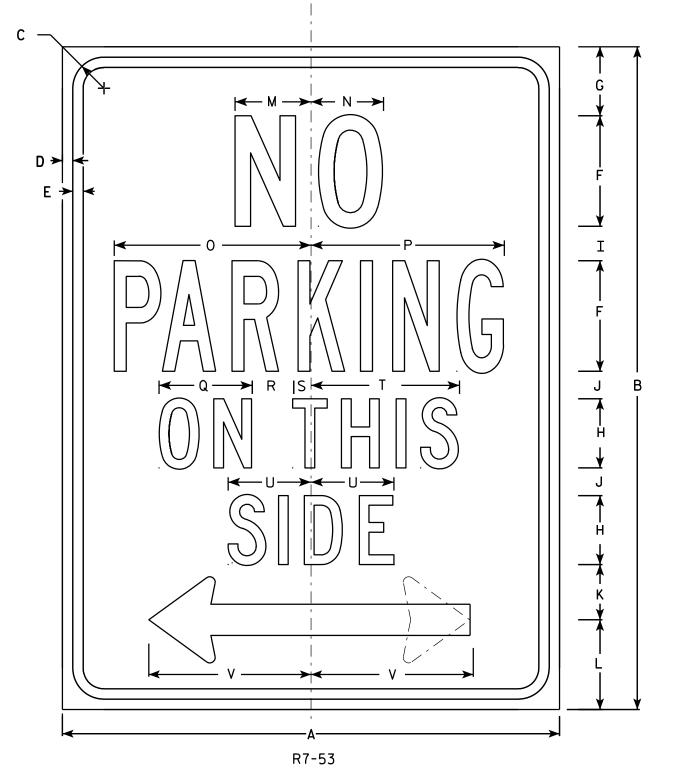
HWY:

PLOT DATE: 28-MAY-2010 08:32

PLOT BY : ditjph

PLOT NAME :

PLOT SCALE: 4.717577:1.000000



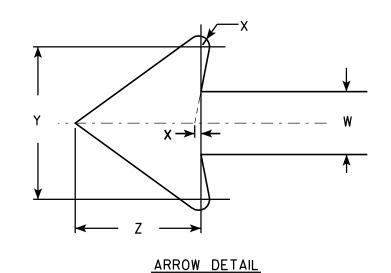
COUNTY:

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. R7-53D (double arrow) R7-53L (left arrow) R7-53R (right arrow)



J	K	L	М	N	0	Р	0	R	S	Т	U	٧	W	X	Y	Z	Area sq. ft.
5/8	1 1/2	2 1/2	2	2	4 %	4 1/8	2 %	1 3/4	1/4	4 1/2	2 3/8	3 %	3/4	1/8	1 3/4	1 1/2	1.5
1	2	3 1/4	2 3/4	2 %	7 1/8	7	3 3/8	1 1/2	5/8	5 3/8	3	5 %	1 1/8	1/4	2 %	2 1/4	3.0
1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 %	3 %	7 3/4	1 1/2	1/4	3 ½	3	5.0
1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6	3 %	7 3/4	1 1/2	1/4	3 1/2	3	5.0

APPROVED

for State Traffic Engineer

DATE 3/31/2011

PLATE NO. R7-53.6 SHEET NO:

STANDARD SIGN

WISCONSIN DEPT OF TRANSPORTATION

R7-53

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R753.DGN

1 1/8

1 1/8

1 1/8

30 1 1/8

24

30

3⁄8

3/8

3/8

3/8

3/8

1/2

1/2

1/2

3

4

5

5

1 1/8

3

3

2

2 1/2 2 1/2 1 1/4

3

3

HWY:

1∕8

2

2

SIZE

2S

2M

3

4

5

12

18

24

24

PROJECT NO:

PLOT DATE: 31-MAR-2011 13:28

PLOT NAME :

PLOT BY: mscsja

PLOT SCALE: 3.476110:1.000000

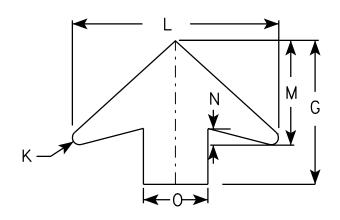
00 S3-1

NOTES

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

Background - YELLOW-GREEN Message - BLACK except as noted Circles except PEDS- RED BACKGROUND

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



A DDOW	
ARROW	DETAIL

SIZE	Α	В	С	D	E	F	G	н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	٧	W	Х	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 ½	1/2	16	8	1 1/4	5	1 1/2		6 %	5 %	10 %							6.25
2	36		1 %	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 %	6	1 1/8		7 1/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 1/8	20 1/8	8 %	8 ¾	7 ⁄8	25 %	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 1/8	20 1/8	8 3/8	8 3/4	7/8	25 %	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN S3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

for State Traffic Engineer DATE <u>6/8/10</u>

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\S31.DGN

PROJECT NO:

PLOT DATE: 08-JUN-2010 15:30

PLOT BY: ditjph

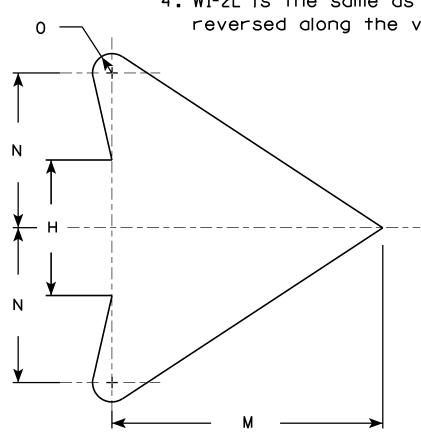
WISDOT/CADDS SHEET 42

PLATE NO. <u>\$3-1.6</u>

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

Background - Yellow Message - Black

- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



ARROW	DETAIL

								W	1-2R															DEIA	<u>-</u>		
SIZE	Α	В	С	D	E	F	G	Н	I	J	К	L	М	N	0	Р	0	R	S	Т	U	v	W	×	Y	Z	Areo sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
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												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 %	3 1/2	10 %	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 %	3 1/2	10 %	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 %	3 1/2	10 1/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 %	14 1/2	14	8	1												16.0

COUNTY:

STANDARD SIGN W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R Rawh

DATE <u>5/15/12</u>

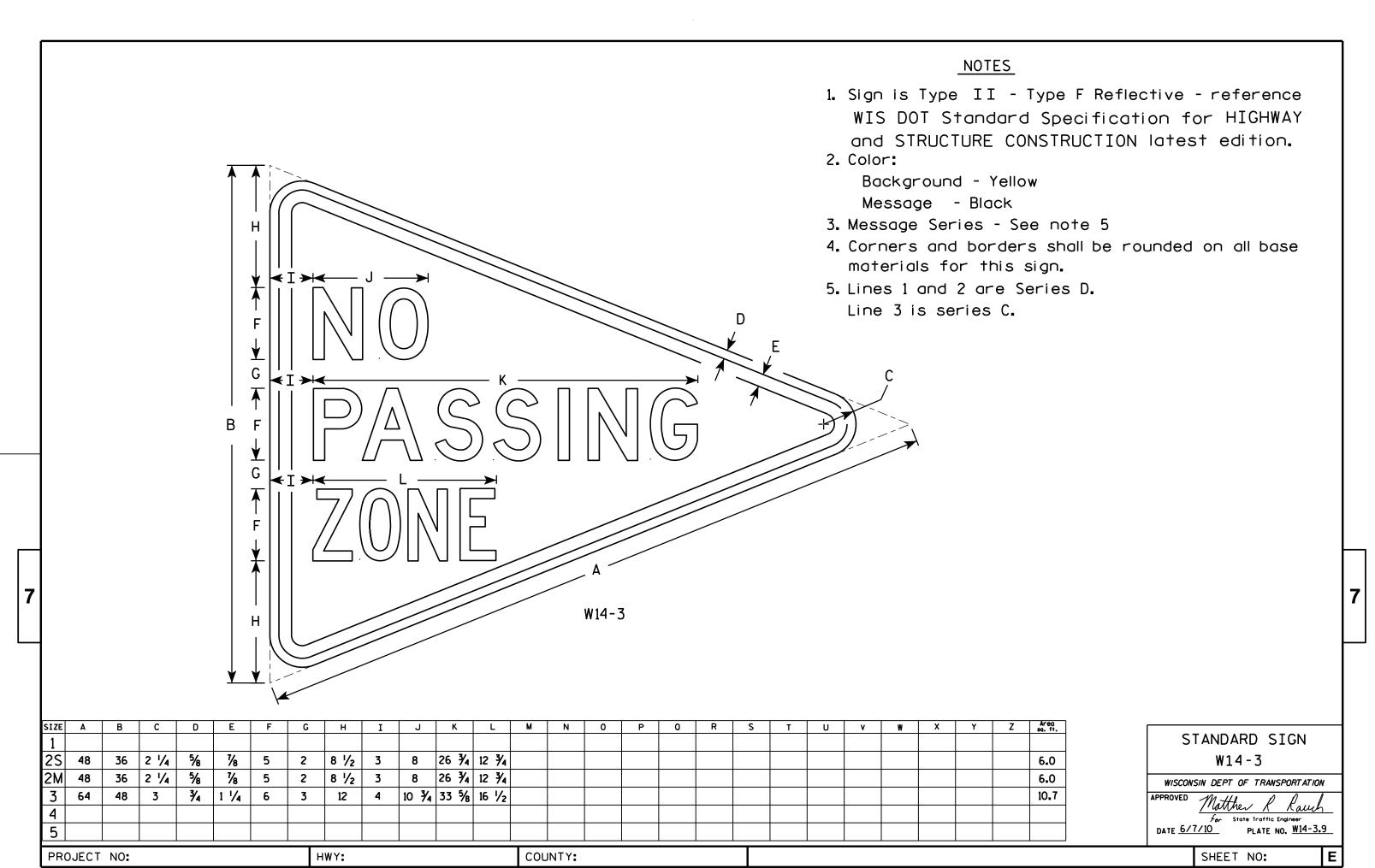
PLATE NO. W1-2.10

SHEET NO:

PROJECT NO:

← H →

HWY:



FILE NAME : C:\Users\PROJECTS\tr_stdplate\W143.DGN

PLOT DATE: 07-JUN-2010 13:11

PLOT BY: ditjph

PLOT NAME :

PLOT SCALE: 5.710749:1.000000

- 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.

c —	A A
	G
	<u>↓</u> ★ B
N + H - H	
A	
W1-6	

SIZE	Α	В	С	D	E	F	G	Н	I	J	K	L	М	N	0	Р	0	R	S	Т	U	٧	W	Х	Y	Z	Areo sq. ft.
1	36	18	1 1/8	3∕8	3/8		9	10	3/4	5 %	4 3/4	2 3/8	14 %	29 1/4													4.5
25	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 ¾													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 ¾													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

COUNTY:

STANDARD SIGN W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Ma

For State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

SHEET NO:

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W16.DGN

HWY:

PROJECT NO:

PLOT DATE: 07-JUN-2010 10:37

PLOT BY : ditjph

PLOT NAME :

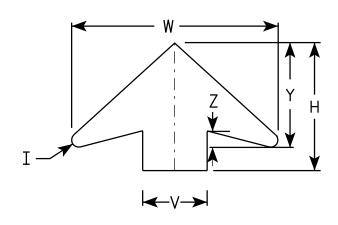
PLOT SCALE: 5.959043:1.000000

- 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. 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 ¾	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:

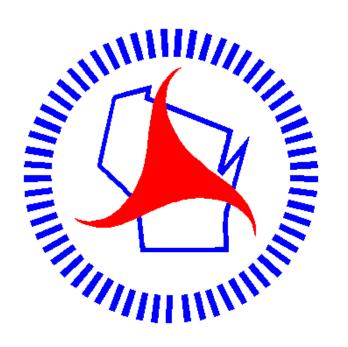
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W35.DGN

PROJECT NO:

PLOT DATE: 29-MAY-2012 10:52

PLOT BY: mscsja

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

http://www.dot.wisconsin.gov