

WIS MAR 13

PROJECT ID: 1009-41-66
WITH: NA

COUNTIES: LINCOLN, MARATHON, MARQUETTE, PORTAGE
PRICE, SHAWANO, VILAS, WAUSHARA

ORDER OF SHEETS

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

TOTAL SHEETS = 42



DESIGN DESIGNATION

A.A.D.T.	=	NA
A.A.D.T.	=	NA
D.H.V.	=	NA
D.D.	=	NA
T.	=	NA
DESIGN SPEED	=	NA
ESALS	=	NA

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

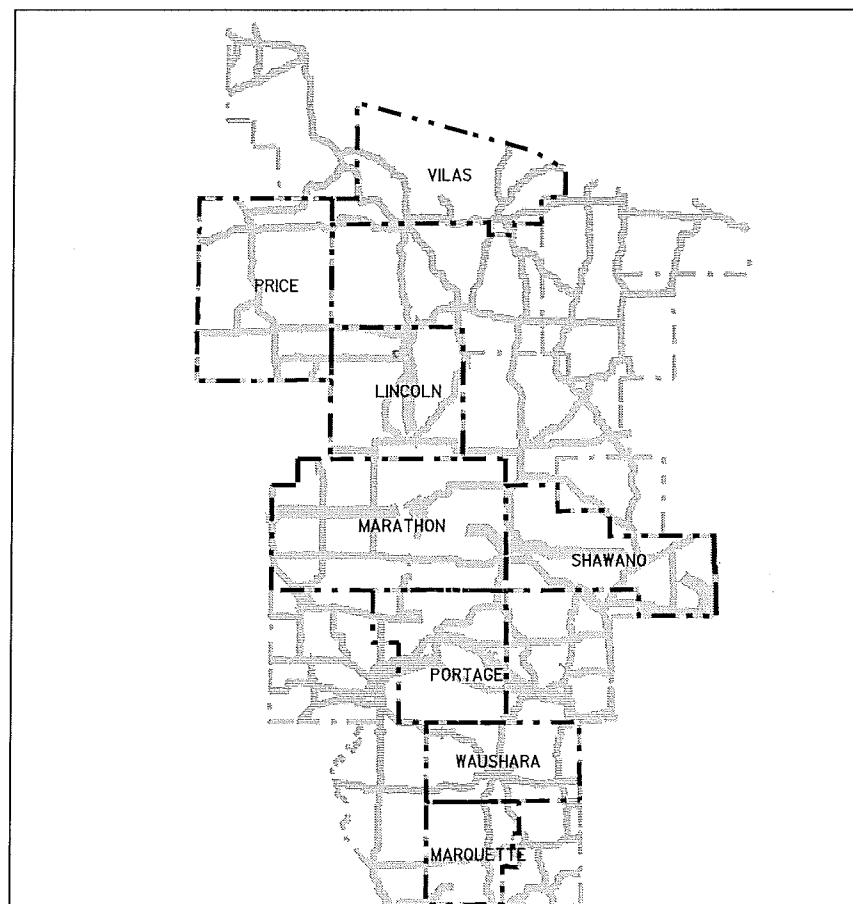
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

NC REGION, EPOXY PAVEMENT MARKING

WISCONSIN RAPIDS & RHINELANDER OFFICES
VARIOUS HIGHWAYS
NORTH CENTRAL REGION WIDE

STATE PROJECT NUMBER
1009-41-66



LAYOUT
SCALE 0 20 MI.
TOTAL NET LENGTH OF CENTERLINE = 0 MI.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1009-41-66	WISC 2013086	1

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	NA
Designer	REBECCA OLSEN
Project Manager	JEFF STEWART
Regional Examiner	NA
Regional Supervisor	MICHAEL KRETSCHMER
C.O. Examiner	WISDOT BPD
APPROVED FOR THE DEPARTMENT	
DATE: 10/31/12	(Signature)

E

GENERAL NOTES

LOCATIONS ON THE PLAN ARE APPROXIMATE.

CONTRACTOR SHALL REPAINT ALL MARKINGS ON PLAN ACCORDING TO STANDARD DETAIL DRAWINGS, EXCEPT WHERE WET REFLECTIVE TAPE IS IDENTIFIED, USE EPOXY INSTEAD.

THERE MAY BE UTILITIES IN THE PROJECT THAT ARE NOT SHOWN.

NO EXCAVATION IS REQUIRED AND NO CONFLICTS ARE ANTICIPATED.

DNR LIAISON

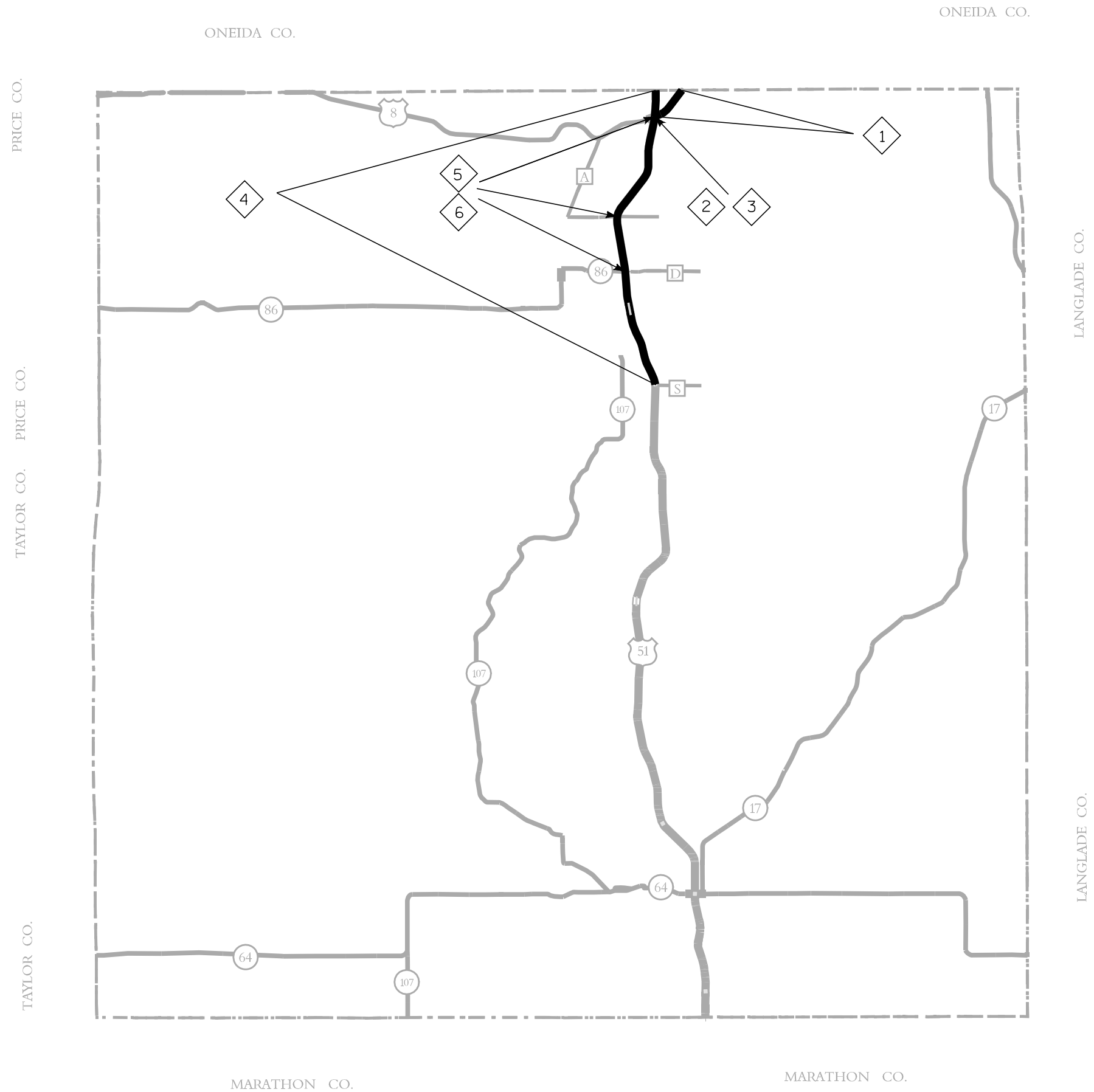
JON SIMONSEN (715)365-8916
jonathan.simonsen@wisconsin.gov
COUNTIES: LINCOLN, PRICE, VILAS

MARC HERSHFIELD (715)421-7867
marc.hershfield@wisconsin.gov
COUNTIES: MARATHON, PORTAGE

BOBBI JO FISCHER (920)787-3015
bobbi.fischer@wisconsin.gov
COUNTIES: MARQUETTE, WAUSHARA

JIM DOPERALSKI JR (920)662-5119
james.doperalski@wisconsin.gov
COUNTIES: SHAWANO

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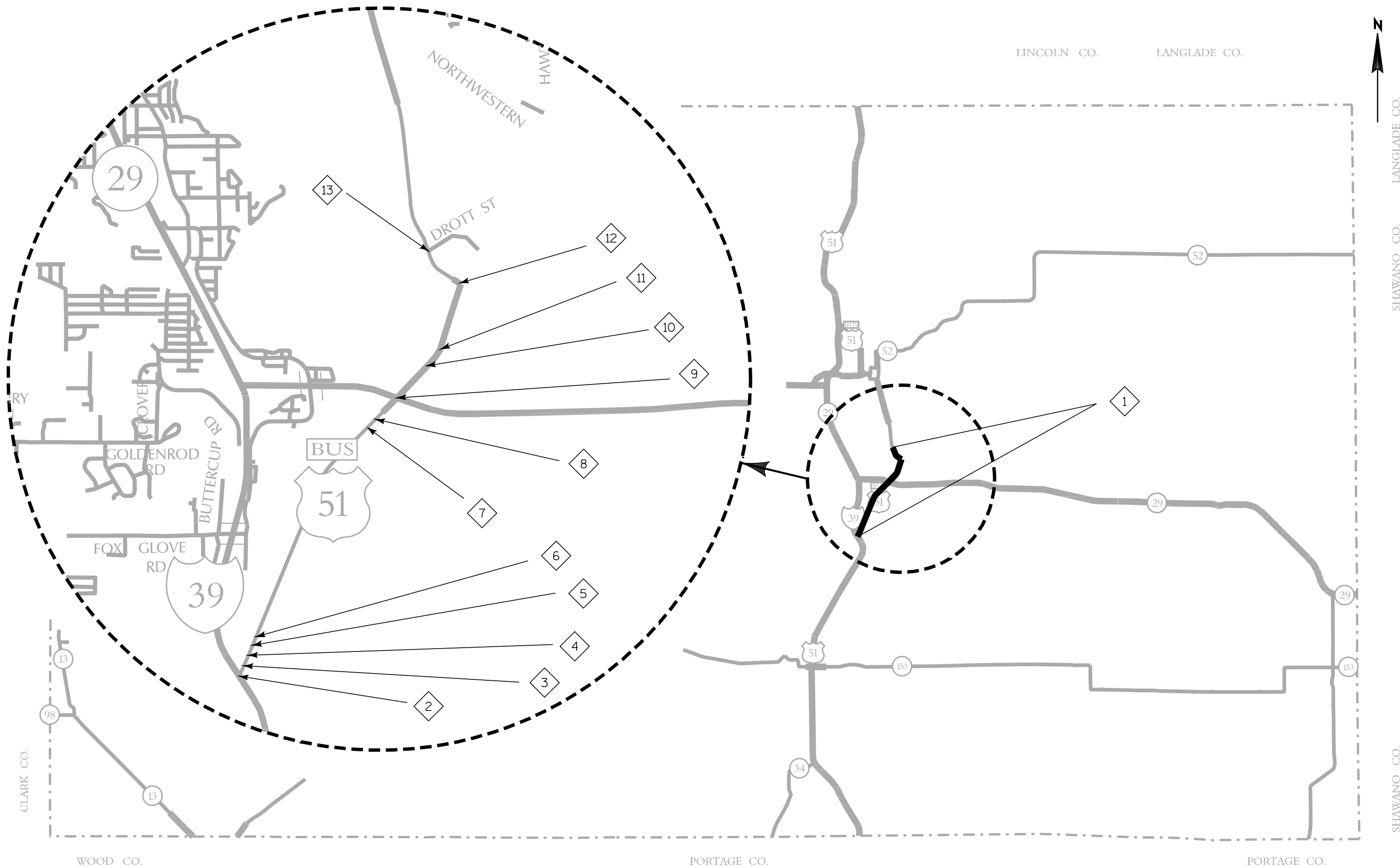


PAVEMENT MARKING

LINCOLN COUNTY LOCATIONS	646.0106 EPOXY 4-INCH		646.0126 EPOXY 8-INCH		REMARKS
	YELLOW LF	WHITE LF	YELLOW LF	WHITE LF	
1. USH 8 FROM SOUTH KLADE ROAD (JCT USH 51) TO ONEIDA COUNTY LINE	10777	16742			EDGELINES, CENTERLINES
2. USH 8 JCT USH 51 (BOTH ENDS OF 4 LANE)	---	---	1570	---	
3. USH 8 UNDER USH 51	---	---	---	549	TURNING LANES
4. USH 51 (SOUTHBOUND ONLY) FROM CTH S (BUTT JOINT) TO ONEIDA COUNTY LINE	64620	82444	---	---	EDGELINES, CENTERLINES
5. USH 51 (SOUTHBOUND) RAMPS AT USH 8, CTH A AND CTH D	---	---	---	7832	
6. **USH 51 (NORTHBOUND) RAMPS AT USH 8, CTH A AND CTH D	---	---	---	2682	
SUBTOTALS:	75397	99186	1570	11063	
LINCOLN COUNTY TOTALS:	174,583		12,633		

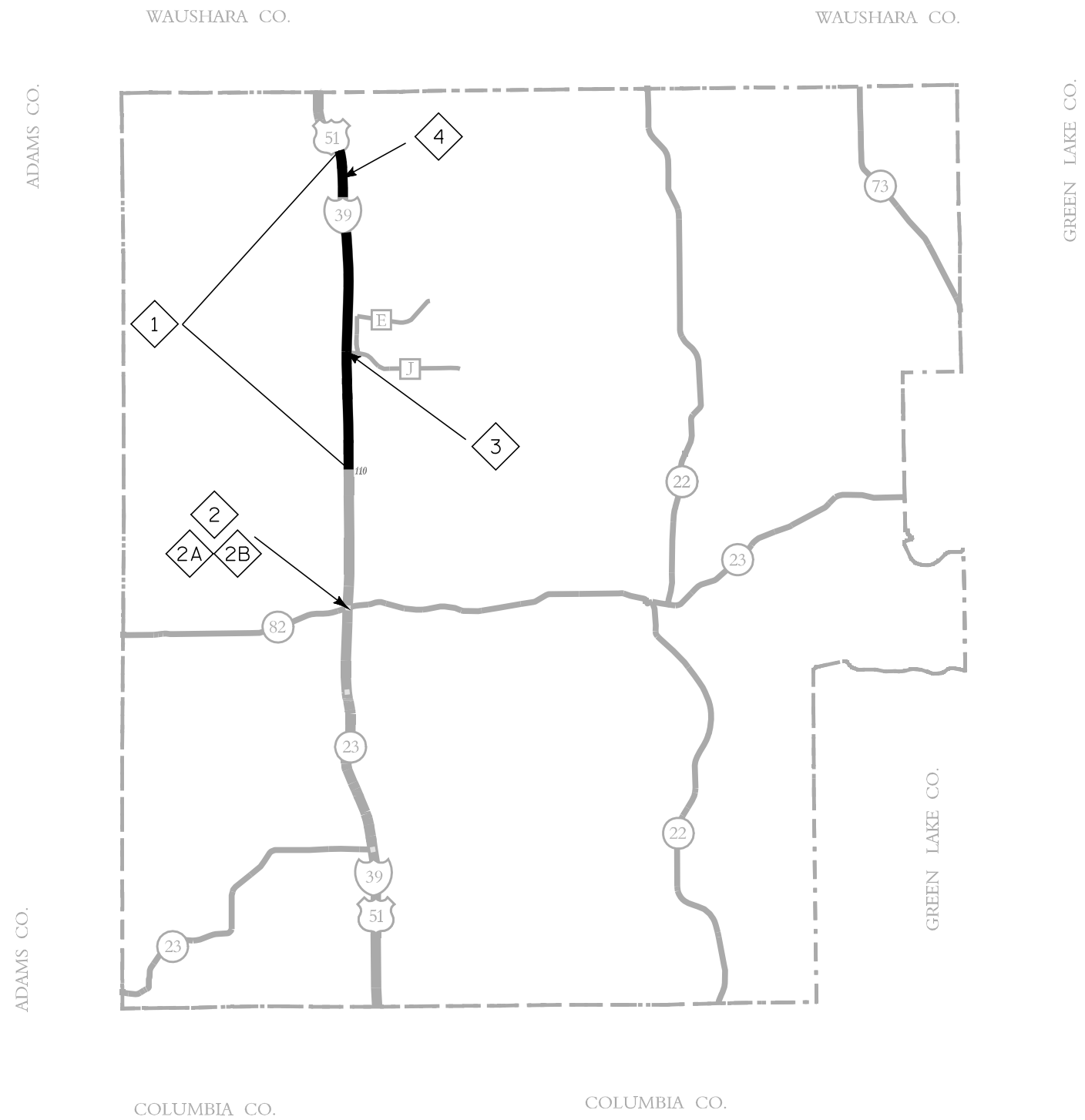
**NOTE: INSTALL 4-INCH YELLOW/WHITE EDGELINE & GORES ON THESE RAMPS
(INCLUDED IN QUANTITIES LISTED ON LINE #4 UNDER BID ITEM 646.0106)

ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON THE PLAN



PAVEMENT MARKING									
MARATHON COUNTY LOCATIONS	646.0106 EPOXY 4-INCH		646.0126 EPOXY 8-INCH	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0356 WORDS EPOXY "ONLY WHITE EACH	647.0566 STOPLINE EPOXY 18-INCH WHITE LF	647.0726 DIAGONAL EPOXY 12-INCH		REMARKS
	YELLOW LF	WHITE LF	WHITE LF				YELLOW LF	YELLOW LF	
1. BUS 51 FROM DROTT STREET TO I-39 (ROTHSCHILD)	39398	19285	4232			---			
2. BUS 51 JCT I-39	---	---	---	4	2	---		15	ARROWS: 2-LEFT, 2-RIGHT
3. BUS 51 JCT FOREMOST DRIVE	---	---		4	1	58			ARROWS: 2-LEFT, 2-RIGHT
4. BUS 51 JCT CTH XX	---	---			5			30	
5. BUS 51 JCT CTH L	---	---		2	2	48	980	270	ARROWS: 2-LEFT
6. BUS 51 JCT BECKER STREET	---	---							
7. BUS 51 APPROXIMATELY 800 FT SOUTH OF ALEXANDER DRIVE				2					ARROWS: 2-RIGHT
8. BUS 51 DOMTAR TRUCK ENTRANCE				2	1				ARROWS: 2-RIGHT
9. BUS 51 JCT STH 29 RAMPS						184			
10. BUS 51 JCT ELLEN STREET			120			62			
11. BUS 51 JCT JELINEK AVENUE						66			
12. BUS 51 JCT CTH JJ				5					ARROWS: 5-LEFT
13. BUS 51 JCT DROTT STREET				10	6	250			ARROWS: 10-LEFT
	39398	19285					980	315	
MARATHON COUNTY TOTALS:	58,683		4352	29	17	668	1,295		

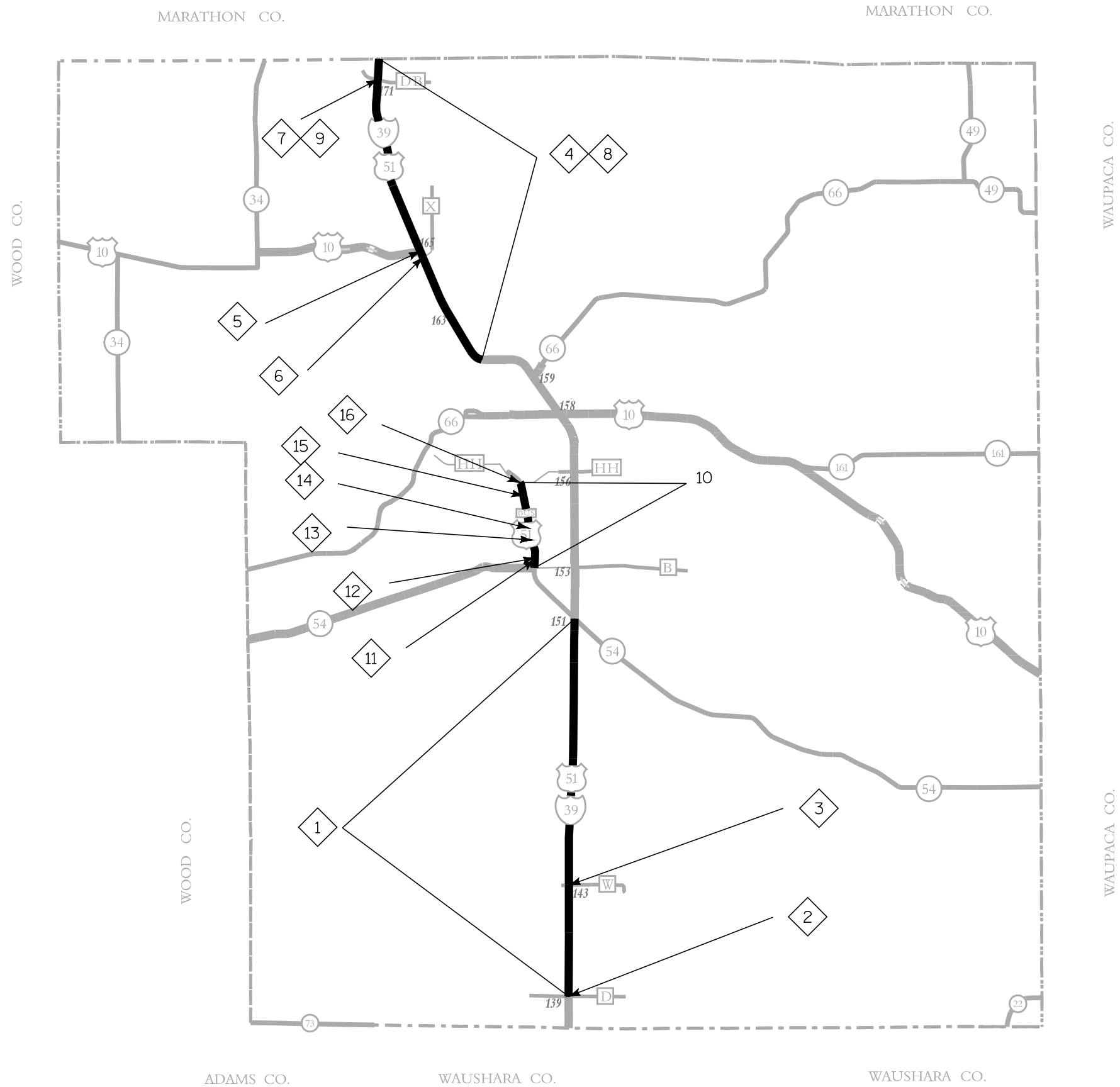
ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON THE PLAN



PAVEMENT MARKING

MARQUETTE COUNTY LOCATIONS	646.0106 EPOXY 4-INCH		646.0126 EPOXY 8-INCH	647.0256 SYMBOLS EPOXY WHITE EACH	647.0566 STOPLINE EPOXY 18-INCH WHITE LF	647.0746 DIAGONAL EPOXY 24-INCH WHITE LF	REMARKS
	YELLOW LF	WHITE LF	WHITE LF				
1. I-39 (NB) MILE MARKER 110 TO 1100 FT NORTH MILE MARKER 118	120468	137051	9155	---	---	---	
2. I-39 (NB) JCT STH 23/82	---	---	---	---	---	209	
2A. I-39 (NB) JCT STH 23 (EB)	---	---	---	---	15	---	
2B. I-39 (NB) JCT STH 82 (WB)	---	---	---	---	50	---	
3. I-39 (NB) JCT CTH E/CTH J	---	---	---	---	17	191	
4. I-39 (NB) REST AREA	---	---	---	4	---	780	HANDICAP
SUBTOTALS:	120468	137051					
MARQUETTE COUNTY TOTALS:	257,519		9155	4	82	1180	

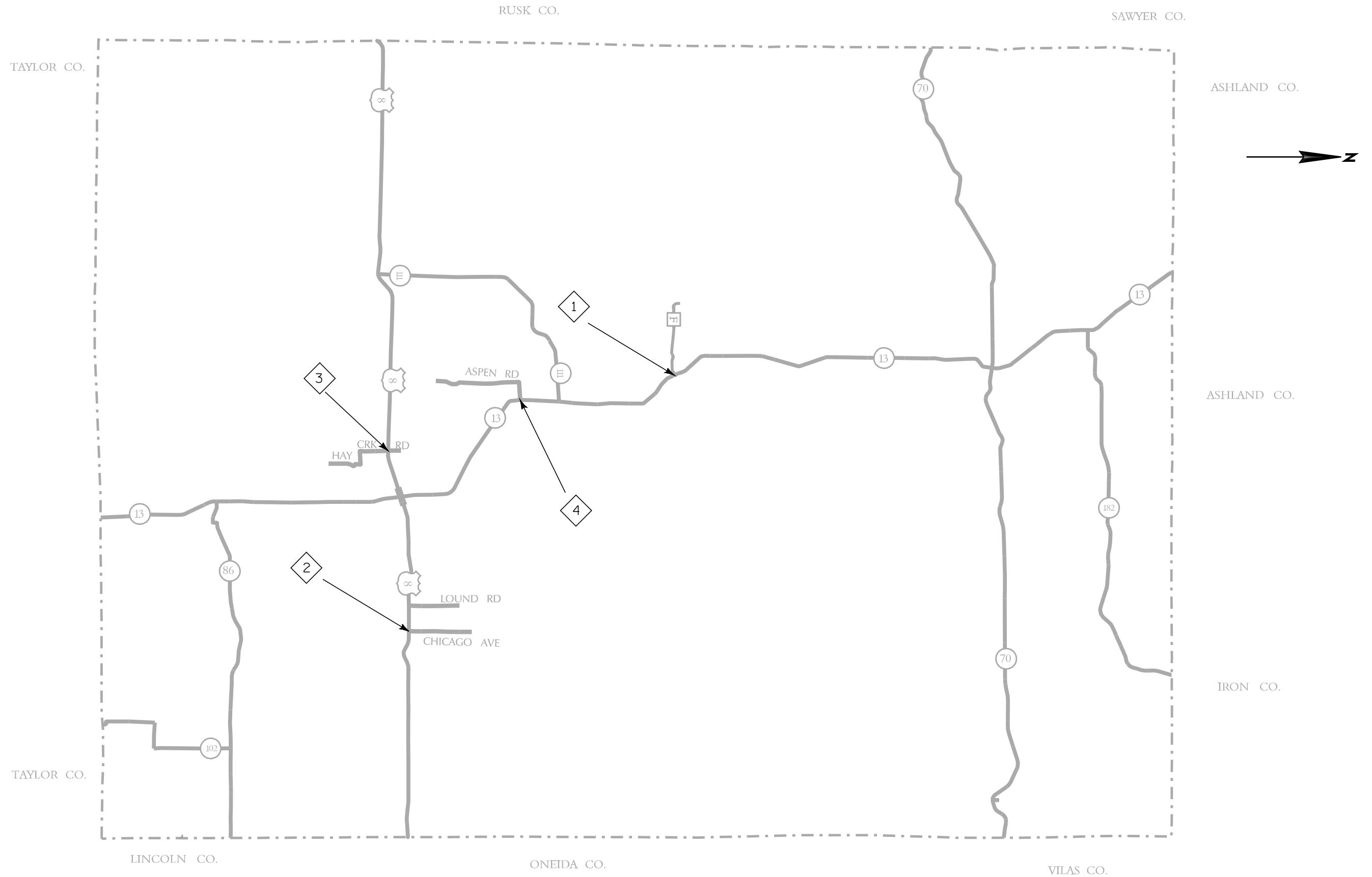
ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON THE PLAN



PAVEMENT MARKING

PORTAGE COUNTY LOCATIONS	646.0106 EPOXY 4 INCH		646.0126 8-INCH WHITE LF	647.0110 RR CROSSING EPOXY EACH	647.0166 ARROWS EPOXY TYPE 2 WHITE EACH	647.0186 ARROWS EPOXY TYPE 4 WHITE EACH	647.0356 WORDS EPOXY "ONLY" WHITE EACH	647.0566 STOPLINE EPOXY 18-INCH WHITE LF	647.0746 DIAGONAL EPOXY 24-INCH WHITE LF	REMARKS
	YELLOW LF	WHITE LF								
1. I-39 (NB) FROM MILE MARKER 139 (CTH D) TO MILE MARKER 151 (STH 54)	69603	83812	4625	---	---	---	---	---	---	LANELINES, EDGELINES, RAMPS, GORES
2. I-39 (NB) INTERSECTION CTH D	---	---	---	---	---	1	---	49	192	
3. I-39 (NB) INTERSECTION CTH W	---	---	---	---	---	1	---	48	193	
4. I-39 (NB) FROM MILE MARKER 161 TO MILE MARKER 175	68784	89648	4758	---	---	---	---	---	---	LANELINES, EDGELINES, RAMPS, GORES
5. I-39 (NB) AT CASMIR RD	---	---	---	---	---	1	---	---	52	
6. I-39 (NB) AT CTH X	---	---	---	---	---	---	---	38	110	
7. I-39 (NB) AT CTH DB	---	---	---	---	---	---	---	43	100	
8. I-39 (SB) FROM MILE MARKER 175 TO MILE MARKER 161	46766	57157	1372	---	---	---	---	---	---	LANELINES, EDGELINES, RAMPS,GORES
9. I-39 (SB) AT CTH DB	---	---	---	---	---	---	---	48	70	
10. BUS 51 (NB) FROM CTH B TO CTH HH	28037	8027	1165	---	---	---	---	---	---	LANELINES, EDGELINES, CENTERLINES TURNLANES, GORES
11. BUS 51 (NB) 1/4 MILE NORTH OF CTH B (PLOVER)	---	---	---	4	---	---	---	---	---	
12. BUS 51 (NB AND SB) AT CHESTNUT STREET	---	---	---	---	---	---	---	48	---	
13. BUS 51 (NB AND SB) AT ROOSEVELT DRIVE	---	---	---	---	---	---	---	48	---	
14. BUS 51 (NB AND SB) AT PLOVER SPRINGS DRIVE	---	---	---	---	2		2	70	---	ARROWS: LEFT
15. BUS 51 (NB AND SB) AT PORTER DRIVE	---	---	---	---	---	---	---	80	---	
16. BUS 51 (NB AND SB) AT CTH HH	---	---	---	---	---	---	---	80	---	
SUBTOTALS:	213190	238644								
PORTAGE COUNTY TOTALS:	451,834		11920	4	2	3	2	552	717	

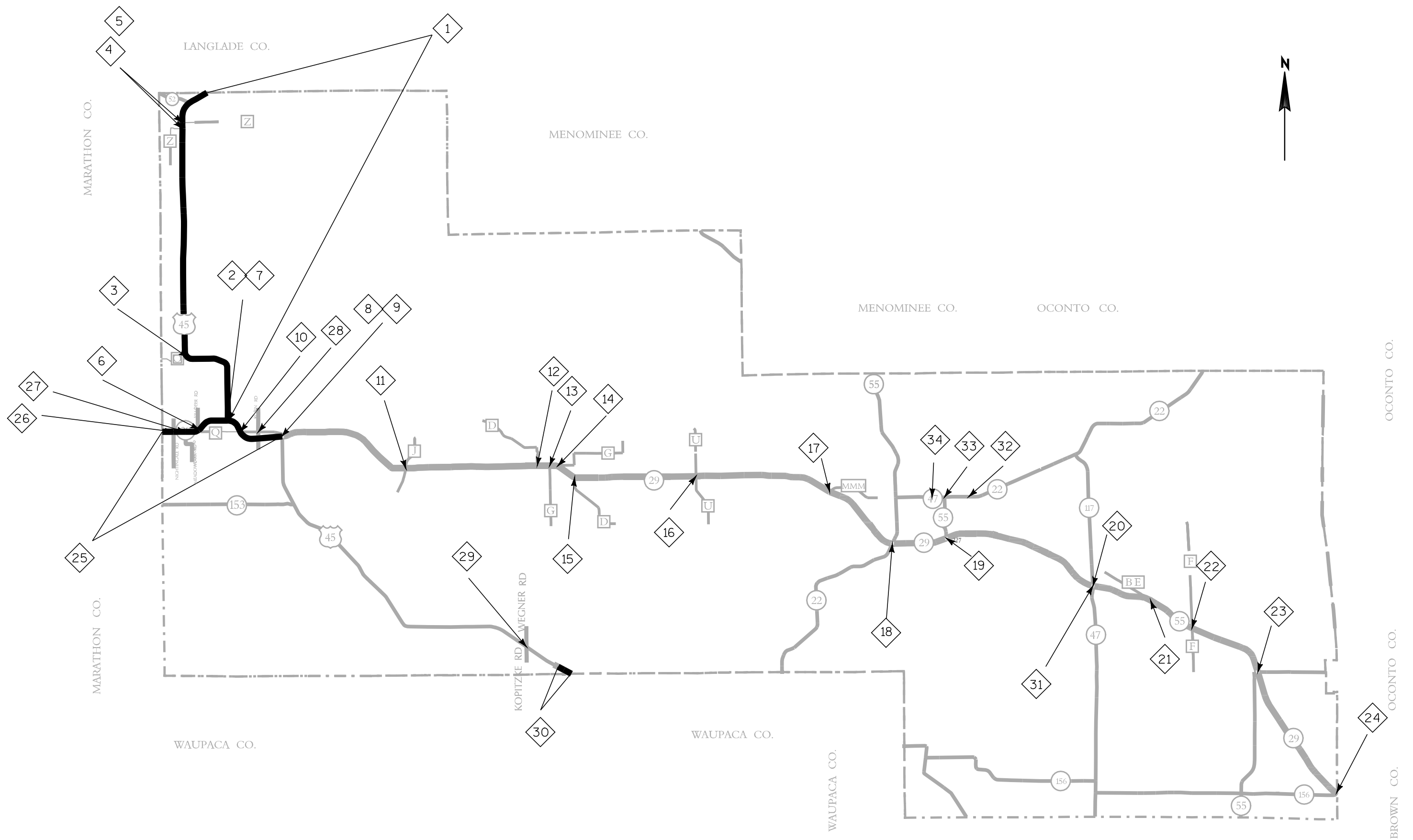
ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON THE PLAN



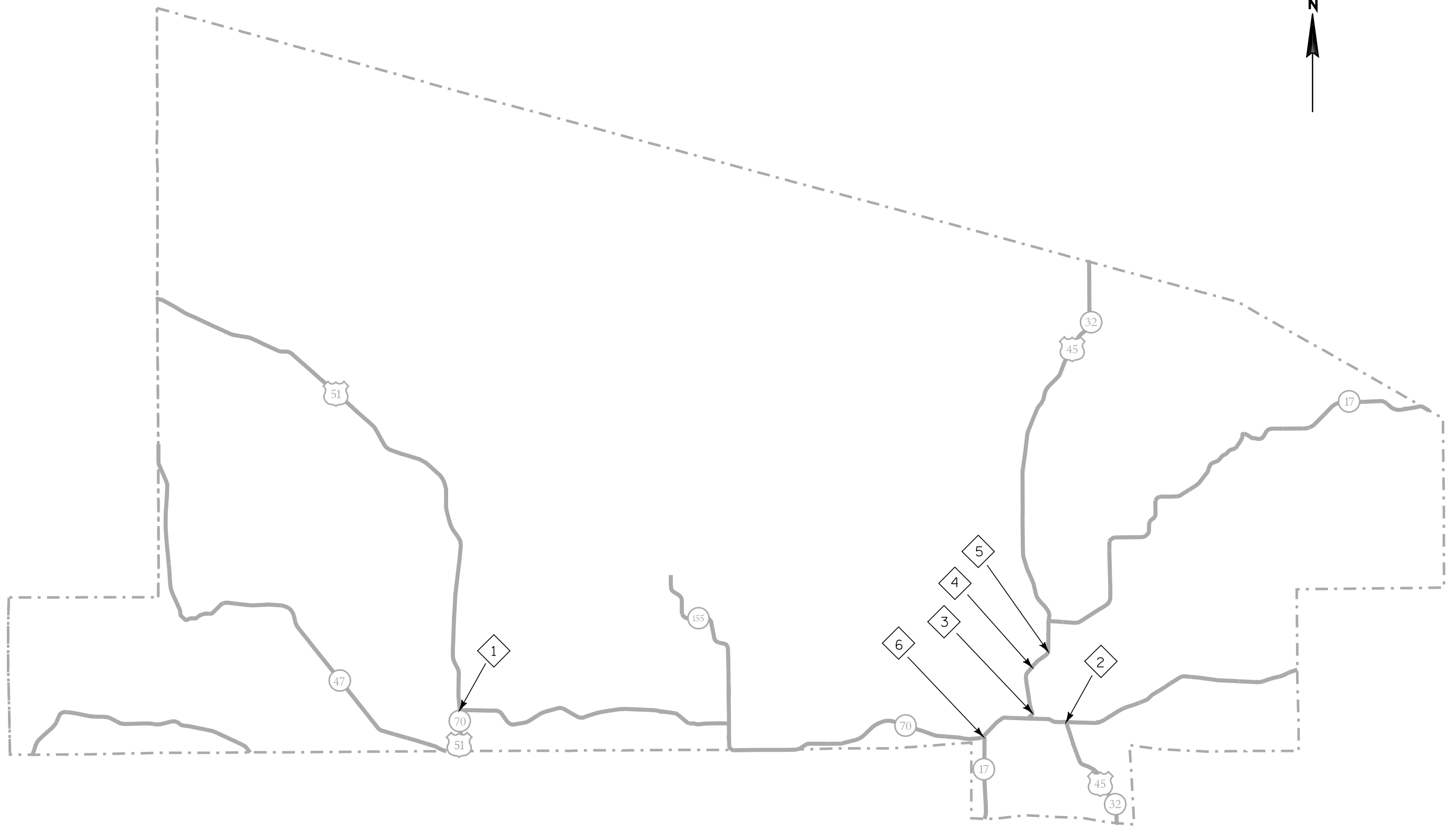
PAVEMENT MARKING

	647.0726 DIAGONAL EPOXY 12-INCH		647.0803 AERIAL ENFORCE BARS EPOXY 24-INCH WHITE
	YELLOW LF	WHITE LF	WHITE LF
<u>PRICE COUNTY LOCATIONS</u>			
1. STH 13 AT CTH F	387	59	---
2. USH 8 FROM CHICAGO ROAD TO LOUND ROAD	---	---	60
3. USH 8 WEST OF STH 13 (HAYCREEK ROAD)	---	---	60
4. STH 13 SOUTH OF ASPEN ROAD	---	---	60
	<i>SUBTOTALS:</i>	<i>387</i>	<i>59</i>
	PRICE COUNTY TOTALS:	446	180

ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON THE PLAN



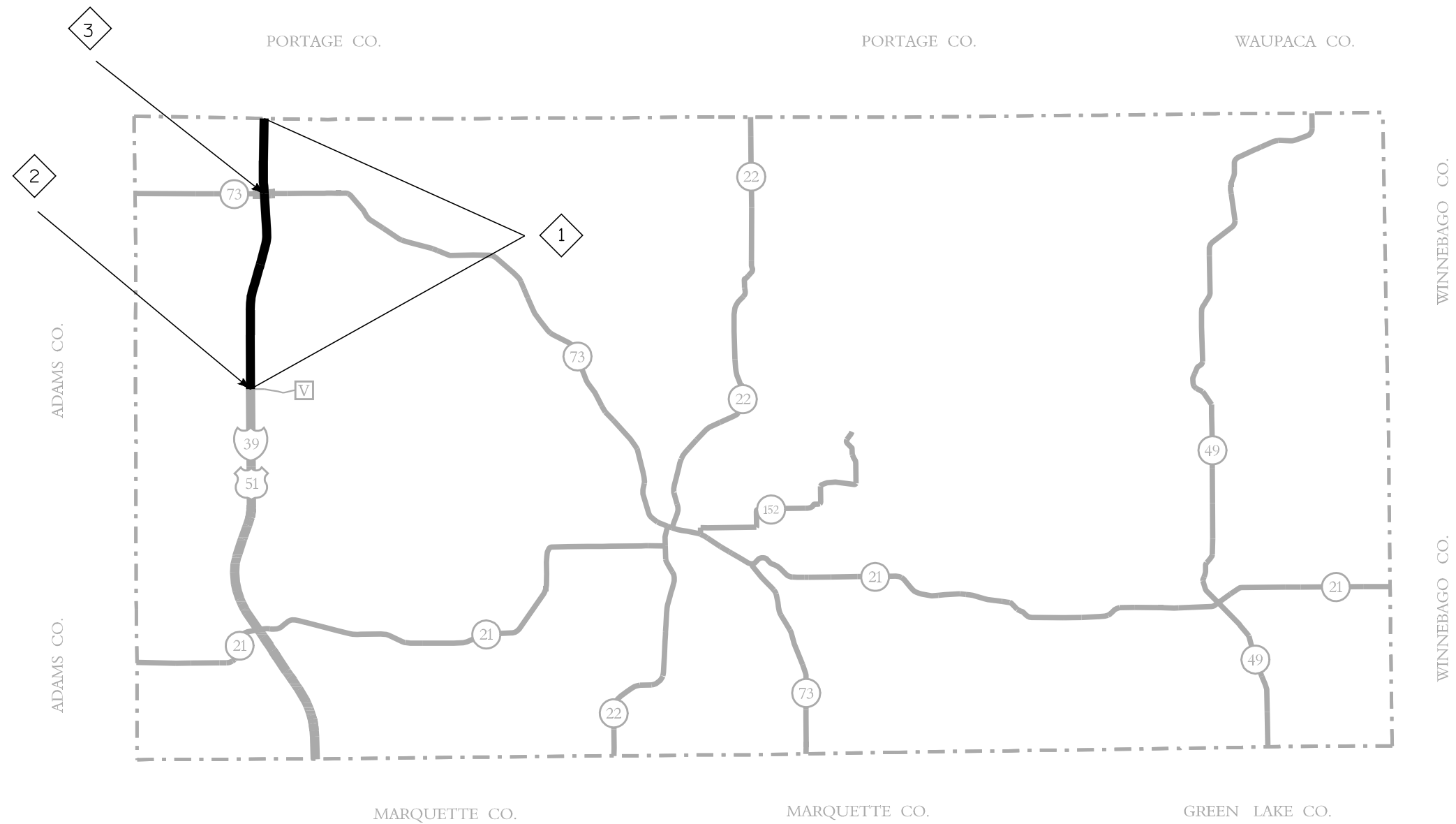
PAVEMENT MARKING																				
	646.0106 EPOXY 4-INCH		646.0126 EPOXY 8-INCH		647.0166 ARROWS TYPE 2 EPOXY WHITE EACH	647.0186 ARROWS TYPE 4 EPOXY WHITE EACH	647.0356 WORDS EPOXY "ONLY" WHITE EACH	647.0456 CURB EPOXY YELLOW LF	647.0566 STOP LINE EPOXY 18-INCH WHITE LF	647.0606 ISLAND NOSE EPOXY YELLOW EACH	647.0726 DIAGONAL EPOXY 12-INCH		647.0746 DIAGONAL EPOXY 24-INCH		647.0803 AERIAL ENFORCE BARS EPOXY 24-INCH WHITE LF		647.0856 CONCRETE CORRUGATED MEDIAN EPOXY YELLOW SF		REMARKS	
	YELLOW LF	WHITE LF	YELLOW LF	WHITE LF							YELLOW LF	WHITE LF	YELLOW LF	WHITE LF						
SHAWANO COUNTY LOCATIONS																				
1. USH 45 FROM STH 29 (SB ON-RAMP) WITTENBERG TO LANGLADE COUNTY LINE	80779	159383	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
2. USH 45 JCT STH 29	---	---	---	1232	---	---	---	---	---	---	---	---	---	---	---	---	---			
3. USH 45 JCT CTH O	---	---	---	208	---	---	---	---	---	---	---	---	---	---	---	---	---			
4. USH 45 JCT CTH Z	---	---	---	398	---	---	---	---	---	---	---	---	---	---	---	---	---			
5. USH 45 JCT STH 52	---	---	---	166	---	---	---	---	---	---	---	---	---	---	---	---	---			
6. STH 29 JCT (WEST) CTH Q AND KILLDEER ROAD	---	---	---	1110	---	---	---	---	23	---	---	---	---	---	---	---	---			
7. STH 29 JCT USH 45 NORTH (EXIT 195 EAST/WEST AND USH 45 MEDIAN)	---	---	---	2724	---	2	---	229	56	2	---	45	---	133	---	---	---	THREE SEPARATE STOP LINE LOCATIONS		
8. STH 29 WEST OF EXIT 198 (EAST AND WEST LANES)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	120	---	---			
9. STH 29 JCT USH 45 SOUTH (EXIT 198 EAST/WEST AND USH 45 MEDIAN)	---	---	---	4180	---	2	---	285	48	3	---	64	---	224	---	---	---	THREE SEPARATE STOP LINE LOCATIONS		
10. STH 29 JCT (EAST) CTH Q	---	---	---	1776	---	---	---	---	24	---	---	---	---	---	---	---	---			
11. STH 29 JCT CTH J (NORTH AND SOUTH)	---	---	---	---	---	---	---	---	44	---	---	---	---	---	---	---	---	TWO SEPARATE STOP LINE LOCATIONS		
12. STH 29 JCT (WEST) CTH D	---	---	---	---	---	---	---	---	23	---	---	---	---	---	---	---	---			
13. STH 29 JCT (WEST) CTH G	---	---	---	---	---	---	---	---	21	---	---	---	---	---	---	---	---			
14. STH 29 JCT (EAST) CTH G	---	---	---	---	---	---	---	---	21	---	---	---	---	---	---	---	---			
15. STH 29 JCT (EAST) CTH D	---	---	---	---	---	---	---	---	24	---	---	---	---	---	---	---	---			
16. STH 29 JCT CTH U (NORTH AND SOUTH)	---	---	---	---	---	---	---	---	56	---	---	---	---	---	---	---	---	TWO SEPARATE STOP LINE LOCATIONS		
17. STH 29 JCT CTH MMM	---	---	---	---	---	---	---	---	18	---	---	---	---	---	---	---	---			
18. STH 29 JCT STH 22 (EXIT 225 EAST/WEST AND STH 22 MEDIAN)	---	---	---	---	---	2	---	258	58	6	258	---	---	390	---	---	---			
19. STH 29 JCT STH 47/STH 55 (EXIT 227 EAST/WEST AND STH 47/STH 55 MEDIAN)	---	---	---	---	4	4	2	193	51	6	95	---	---	389	120	---	---	TWO SEPARATE STOP LINE LOCATIONS		
20. STH 29 JCT STH 47/STH 117 (EXIT 234 EAST/WEST AND MEDIAN ON STH 47/STH117)	---	---	---	---	---	2	---	181	78	5	---	588	66	331	120	785	---	FOUR SEPARATE STOP LINE LOCATIONS		
21. STH 29 (EB) JCT CTH BE	---	---	---	---	---	---	---		25	---	---	---	---	---	---	---	---			
22. STH 29 JCT CTH F (NORTH AND SOUTH)	---	---	---	---	---	---	---		34	---	---	---	---	---	---	---	---	TWO SEPARATE STOP LINE LOCATIONS		
23. STH 29 JCT STH 55/STH 160 (EXIT 242 EAST/WEST AND STH 55/STH 160 MEDIAN)	---	---	---	---	---	2	---	268	79	5	---	---	---	393	---	636	---	TWO SEPARATE STOP LINE LOCATIONS		
24. STH 29 JCT STH 156 (BROWN COUNTY LINE)	---	---	---	---	---	---	---	---	19	---	---	---	---	---	---	---	---			
25. STH 29 FROM MARATHON COUNTY LINE TO EASTBOUND ON RAMP AT SOUTH JCT USH 45	73320	88353	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
26. STH 29 JCT NIGHTINGALE ROAD	---	---	---	796	---	---	---	---	---	---	---	---	---	---	---	---	---			
27. STH 29 JCT MEADOWLARK ROAD	---	---	---	794	---	---	---	---	---	---	---	---	---	---	---	---	---			
28. STH 29 JCT ROBIN ROAD	---	---	---	786	---	---	---	---	---	---	---	---	---	---	---	---	---			
29. USH 45 NORTH AND SOUTH OF KOPIZE RD AND WEGNER RD	---	---	---	---	---	---	---	---	---	---	---	---	---	---	48	---	---			
30. USH 45 SPLIT TO 5 LANE (MARION) TO COUNTY LINE	---	---	---	---	---	---	---	---	---	---	334	---	---	---	---	---	---			
31. STH 47 SOUTH END OF BONDUEL (5TH LANE)	---	---	---	---	---	---	---	---	---	---	275	---	---	---	---	---	---			
32. STH 22 APPROXIMATELY 1 MILE EAST OF AIRPORT ROAD (SHAWANO)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	564			
33. STH 22 JCT AIRPORT ROAD (SHAWANO)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	335			
34. STH 22 JCT EBERLEIN PARK AVENUE (SHAWANO)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	368			
SUBTOTALS:	154099	247736	0	14170							962	697	66	1860						
SHAWANO COUNTY TOTALS:	401,835		14,170		4	14	2	1414	702	27	1,659		1,926		408		2,688			
ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON THE PLAN																				
PROJECT NO: 1009-41-66				HWY: VARIOUS				COUNTY: SHAWANO				PAVEMENT MARKING				SHEET:				E



PAVEMENT MARKING

VILAS COUNTY LOCATIONS	646.0126 EPOXY 8-INCH WHITE EACH	647.0726 DIAGONAL EPOXY 12-INCH		647.0746 DIAGONAL EPOXY 24-INCH		647.0856 CONCRETE CORRUGATED MEDIAN EPOXY	
		YELLOW LF	WHITE LF	YELLOW LF	WHITE LF	YELLOW SF	WHITE SF
1. USH 51 JCT STH 70	---	21	---	---	---	2133	---
2. USH 45 JCT STH 70 (STH 17 AND BRIDGE STREET)	33		---	---	---	---	---
3. USH 45 JCT STH 17 AND WALL STREET	44	---	---	---	---	---	---
4. USH 45 JCT STH 17 AND HOSPITAL STREET	---	---	---	194	---	---	---
5. USH 45 JCT STH 17 AND CHAIN-O-LAKES ROAD	---	---	---	675	---	---	---
6. STH 17 JCT STH 70	---	---	336	---	---	---	---
SUBTOTALS:		21	336	869	0	2133	0
VILAS COUNTY TOTALS:	77	357		869		2,133	

ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON THE PLAN



PAVEMENT MARKING

WAUSHARA COUNTY LOCATIONS	646.0106 EPOXY 4 INCH		646.0126	647.0186	647.0566	647.0746
	YELLOW L.F.	WHITE L.F.	EPOXY 8-INCH WHITE LF	ARROWS EPOXY TYPE 4 WHITE EACH	STOPLINE EPOXY 18-INCH WHITE LF	DIAGONAL EPOXY 24-INCH WHITE LF
1. I-39 (NB) CTH V TO PORTAGE COUNTY LINE	77849	84111	3890	---	---	---
2. I-39 (NB) @ CTH V	---	---	---	---	50	72
3. I-39 (NB) @ STH 73	---	---	---	1	48	78
SUBTOTALS:	77849	84111				
WAUSHARA COUNTY TOTALS:	161,960		3890	1	98	150

ADDITIONAL QUANTITIES SHOWN ELSEWHERE ON THE PLAN

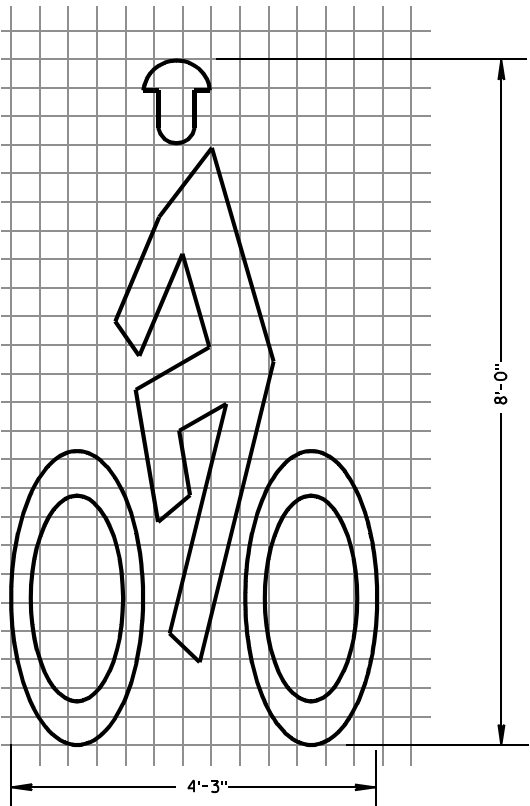
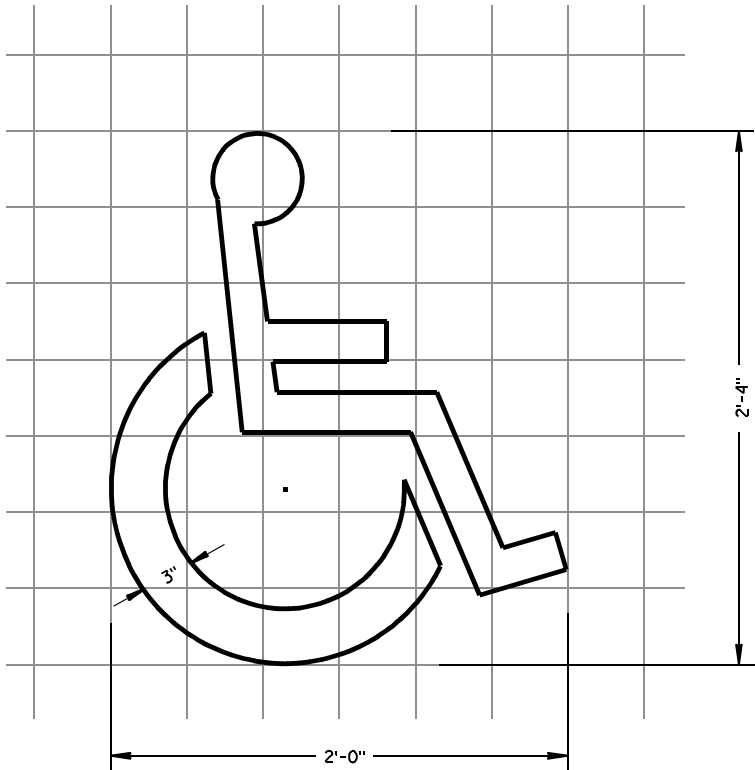
DATE 16JAN13			E S T I M A T E O F Q U A N T I T I E S		
LINE					1009-41-66
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	619.1000	MOBILIZATION	EACH	1.000	1.000
0020	643.0100	TRAFFIC CONTROL (PROJECT) 01.	EACH	1.000	1.000
0030	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	1,345,587.000	1,345,587.000
0040	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	56,197.000	56,197.000
0050	647.0110	PAVEMENT MARKING RAILROAD CROSSINGS EPOXY	EACH	4.000	4.000
0060	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	45.000	45.000
0070	647.0186	PAVEMENT MARKING ARROWS EPOXY TYPE 4	EACH	4.000	4.000
0080	647.0256	PAVEMENT MARKING SYMBOLS EPOXY	EACH	4.000	4.000
0090	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	21.000	21.000
0100	647.0456	PAVEMENT MARKING CURB EPOXY	LF	1,414.000	1,414.000
0110	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	2,102.000	2,102.000
0120	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	27.000	27.000
0130	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	3,311.000	3,311.000
0140	647.0746	PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	LF	4,842.000	4,842.000
0150	647.0803	PAVEMENT MARKING AERIAL ENFORCEMENT BARS EPOXY 24-INCH	LF	588.000	588.000
0160	647.0856	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY	SF	4,821.000	4,821.000

PAVEMENT MARKING
PROJECT SUMMARY

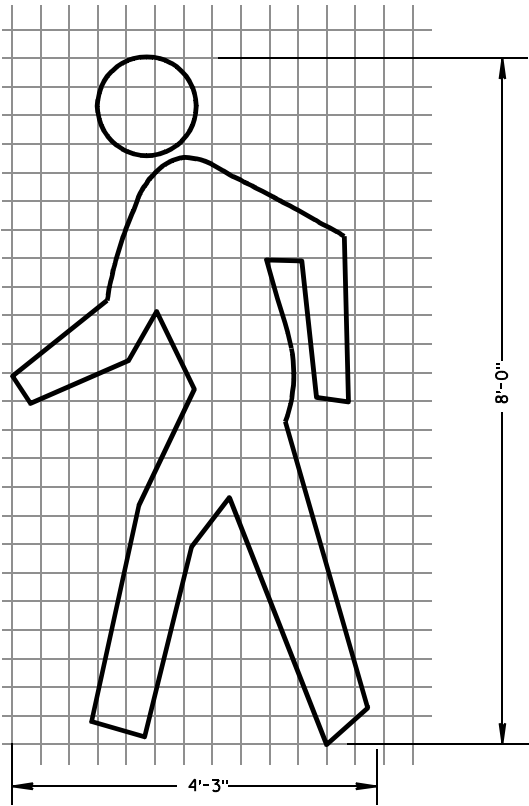
LOCATIONS	646.0106 EPOXY 4 INCH		646.0126 EPOXY 8-INCH		647.0110 R R CROSSING EPOXY WHITE	647.0166 ARROWS TYPE 2 EPOXY WHITE EACH	647.0186 ARROWS TYPE 4 EPOXY WHITE EACH	647.0256 SYMBOLS EPOXY WHITE EACH	647.0356 WORDS EPOXY WHITE EACH	647.0456 CURB EPOXY YELLOW LF	647.0566 STOP LINE EPOXY 18-INCH WHITE LF	647.0606 ISLAND NOSE EPOXY YELLOW EACH	647.0726 DIAGONAL EPOXY 12-INCH		647.0746 DIAGONAL EPOXY 24-INCH		647.0803 AERIAL ENFORCE BARS EPOXY 24-INCH WHITE LF	647.0856 CONCRETE CORRUGATED MEDIAN EPOXY	
	YELLOW LF	WHITE LF	YELLOW LF	WHITE LF									YELLOW LF	WHITE LF	YELLOW LF	WHITE LF	WHITE LF	YELLOW SF	WHITE SF
	LINCOLN COUNTY	75497	99286	1570	11063			---	---	---	---	---	---	---	---	---	---	---	---
MARATHON COUNTY	39398	19285		4352		29			17		668		1025	270					
MARQUETTE COUNTY	120468	137051		9155				4			82					1180			
PORTAGE COUNTY	213190	238644		11920	4	2	3		2		552					717			
PRICE COUNTY	387	59															180		
SHAWANO COUNTY	80779	159583		14170		14			2	1414	702	27	962	697	66	1860	408	2688	
VILAS COUNTY				77									21	336	869			2133	
WAUSHARA COUNTY	77849	84111		3890			1				98					150			
SUBTOTALS:	607568	738019	1570	54627									2008	1303	935	3907		4821	0
PROJECT TOTALS:	1,345,587		56,197		4	45	4	4	21	1414	2102	27	3,311		4,842		588	4,821	

Standard Detail Drawing List

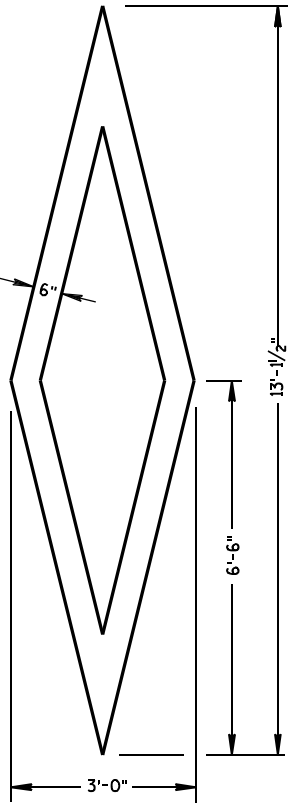
15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-15D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-15E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C14-01	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C18-03	MEDIAN ISLAND MARKING
15C19-01A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-01B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-01C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-04	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-01D	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP



BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL
LANE SYMBOL

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.

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

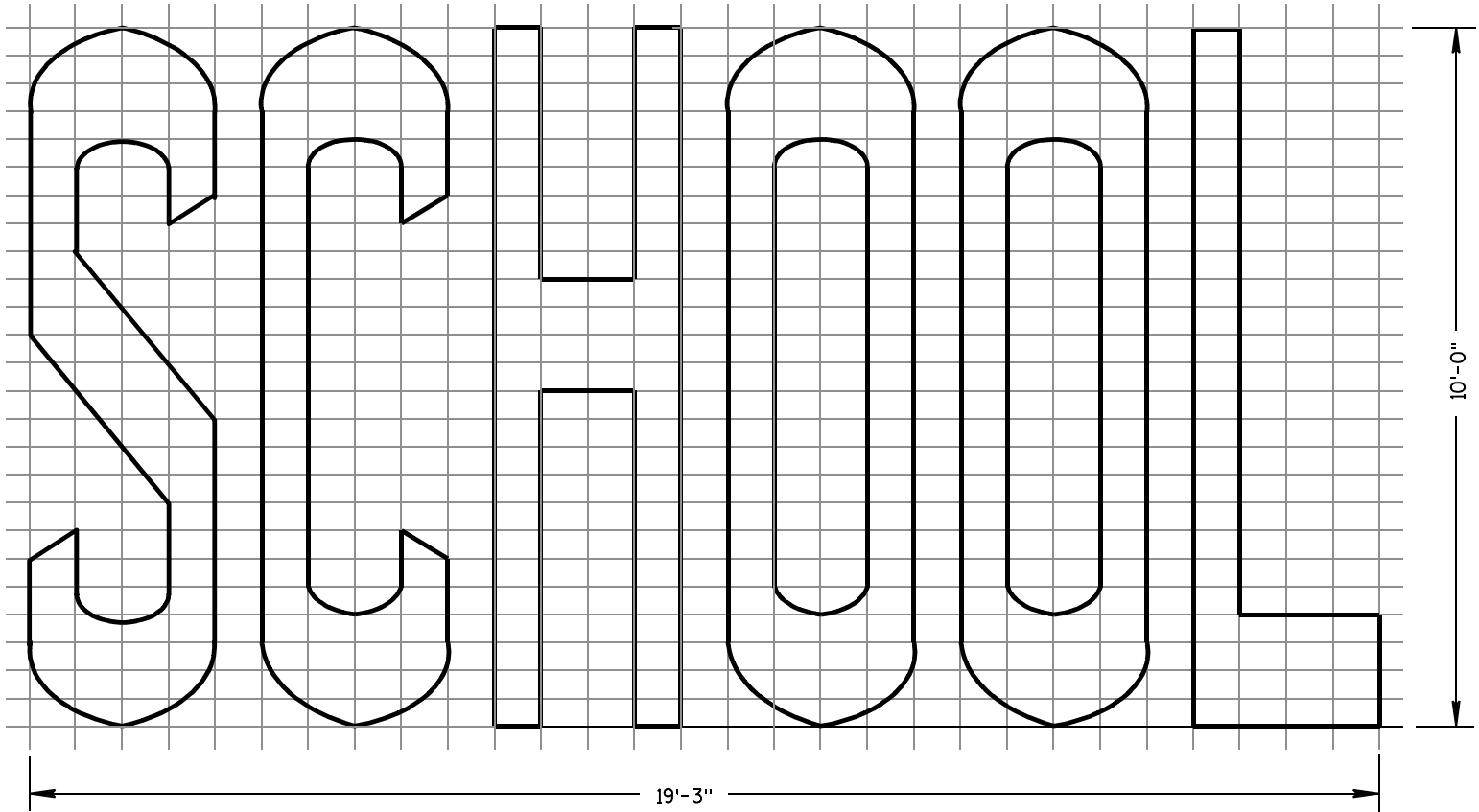
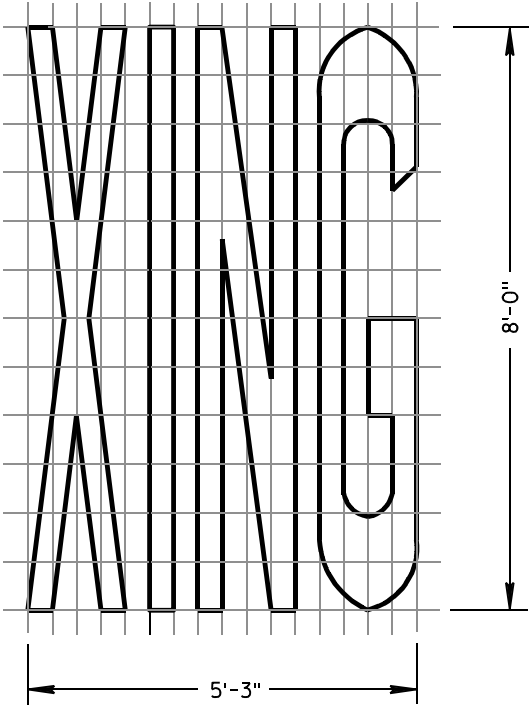
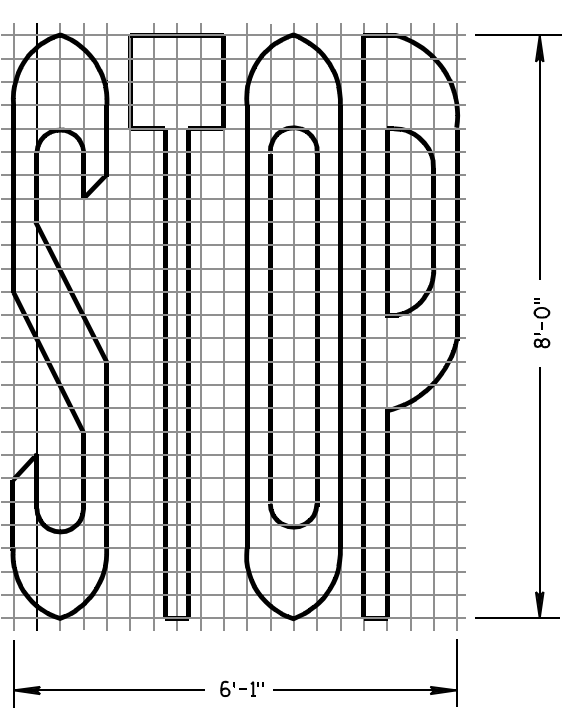
A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

PAVEMENT MARKING SYMBOLS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7/1/11 DATE	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

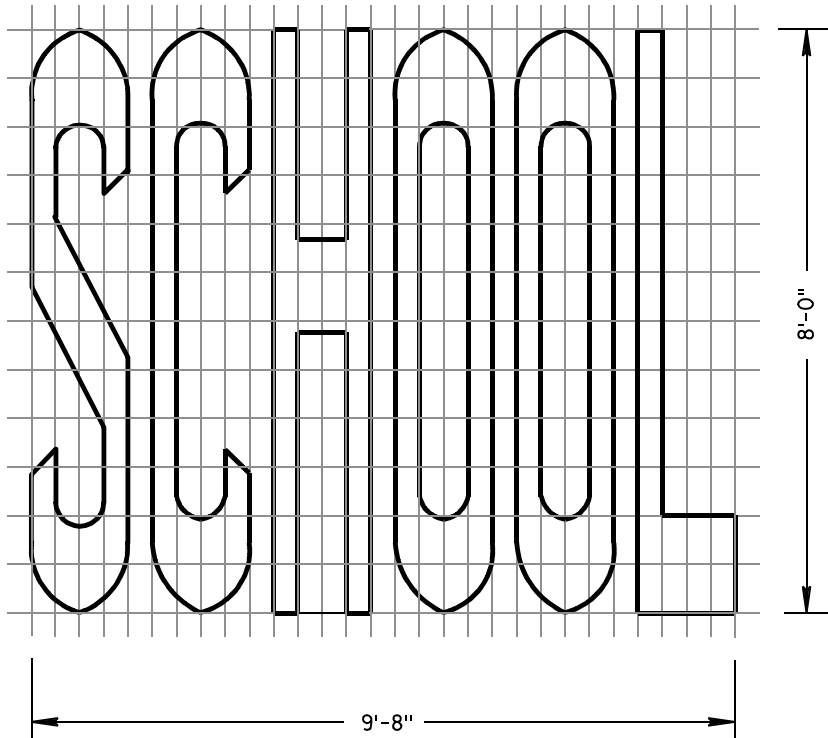
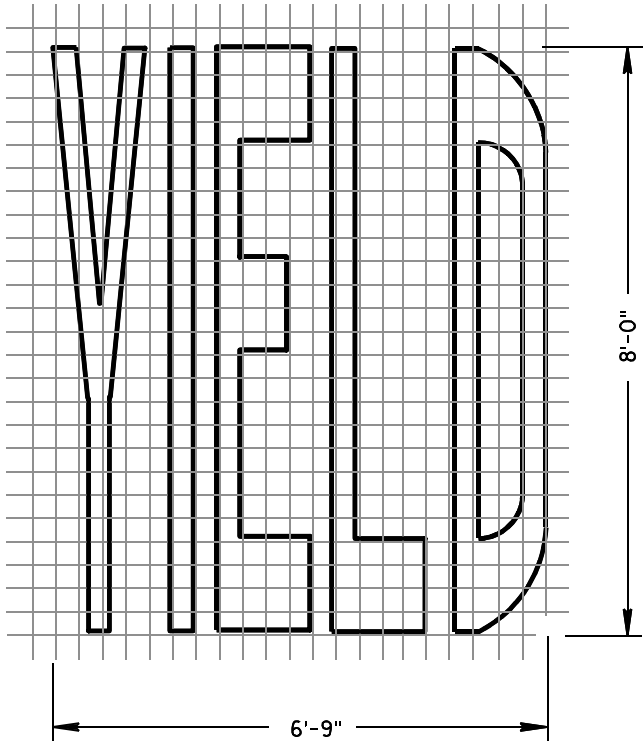
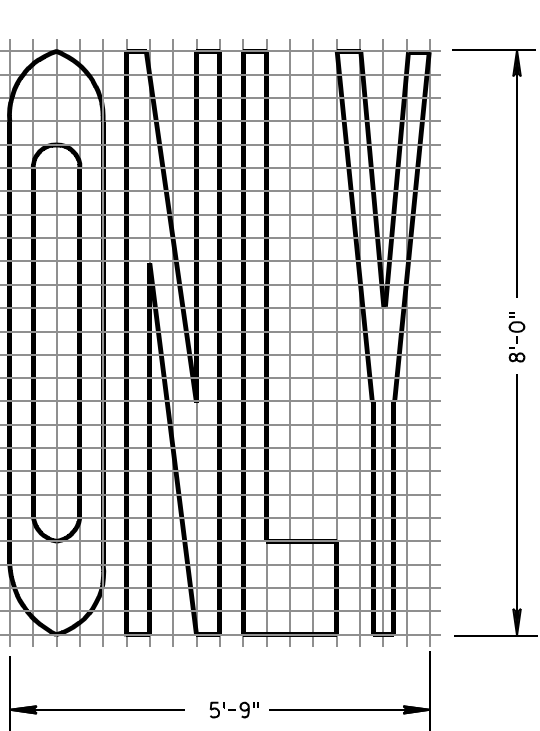
GENERAL NOTES

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.

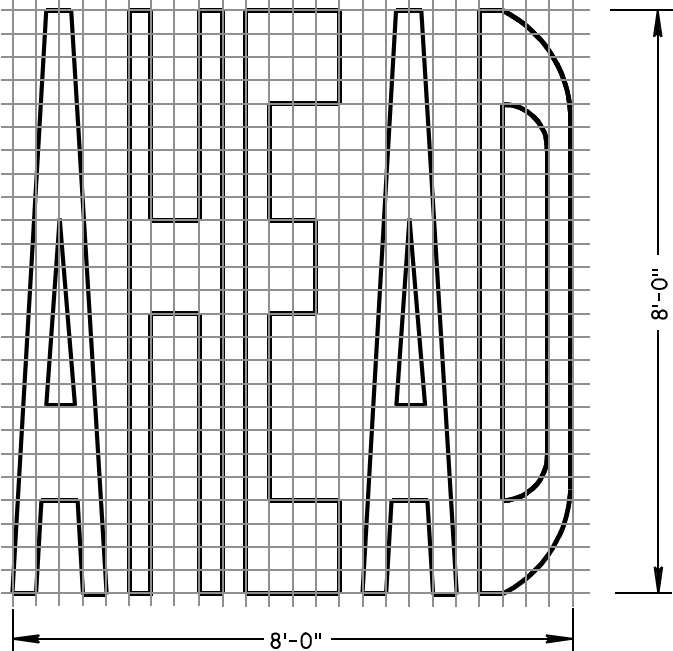
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TWO-LANE



SINGLE-LANE



PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

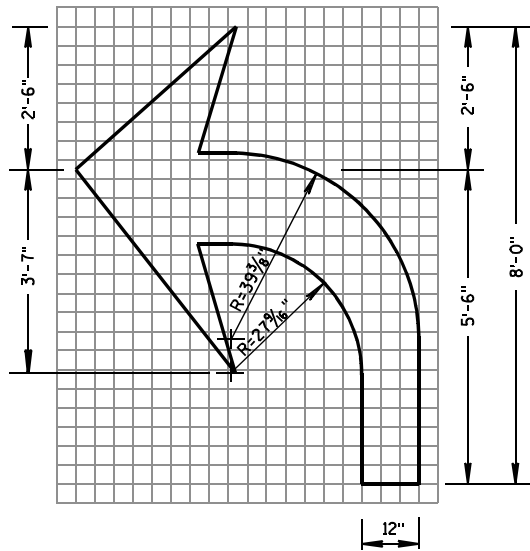
APPROVED

7-1-11

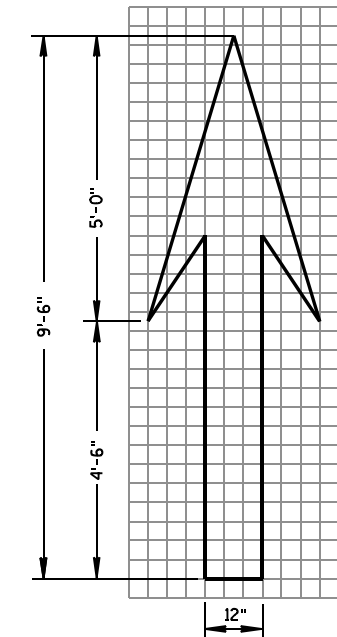
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

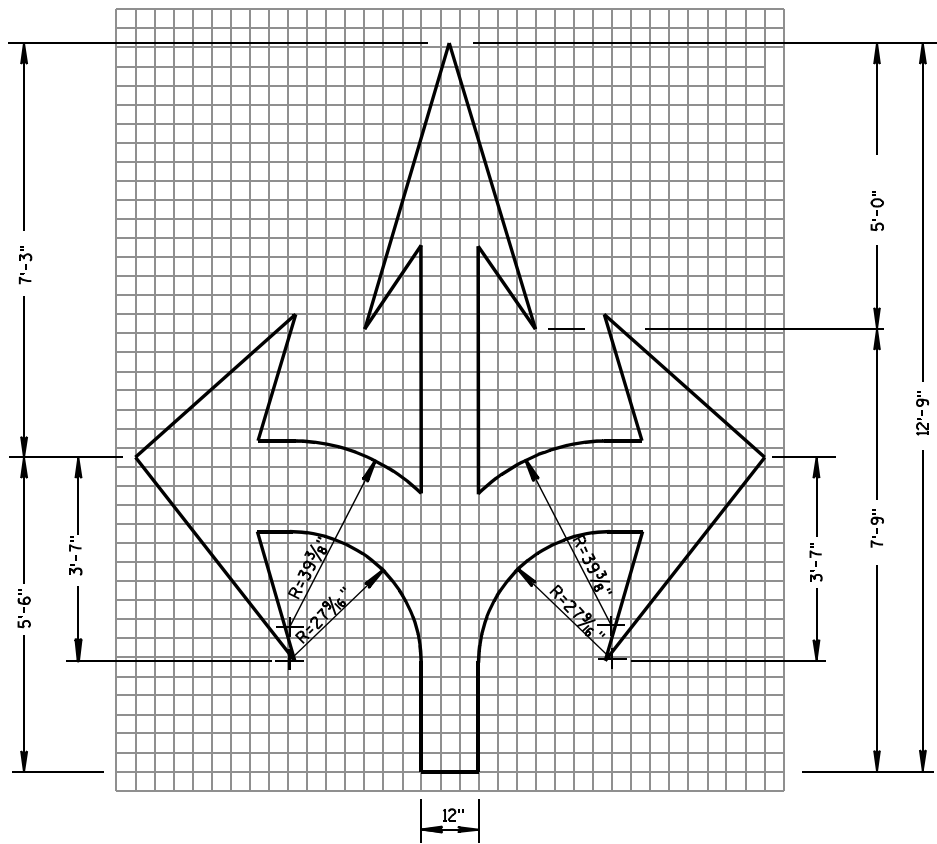
FHWA



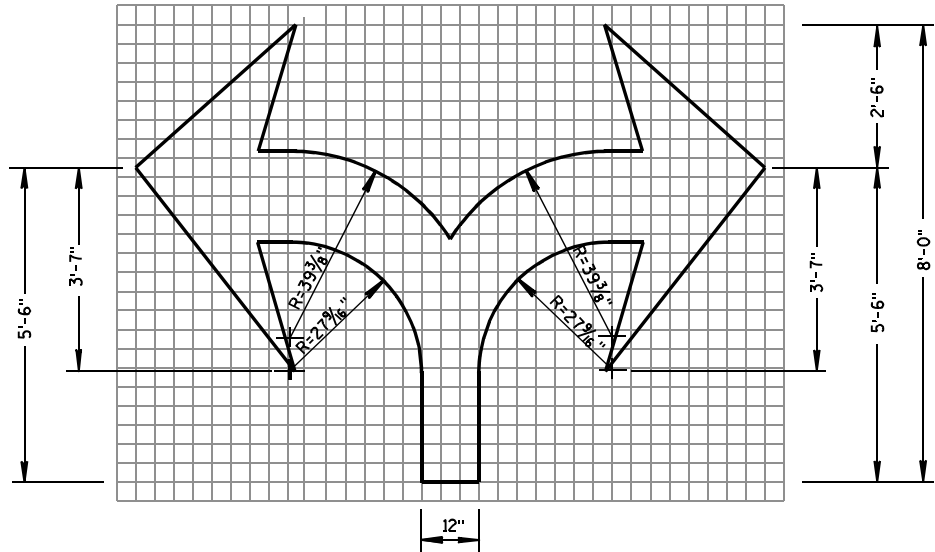
TYPE 2



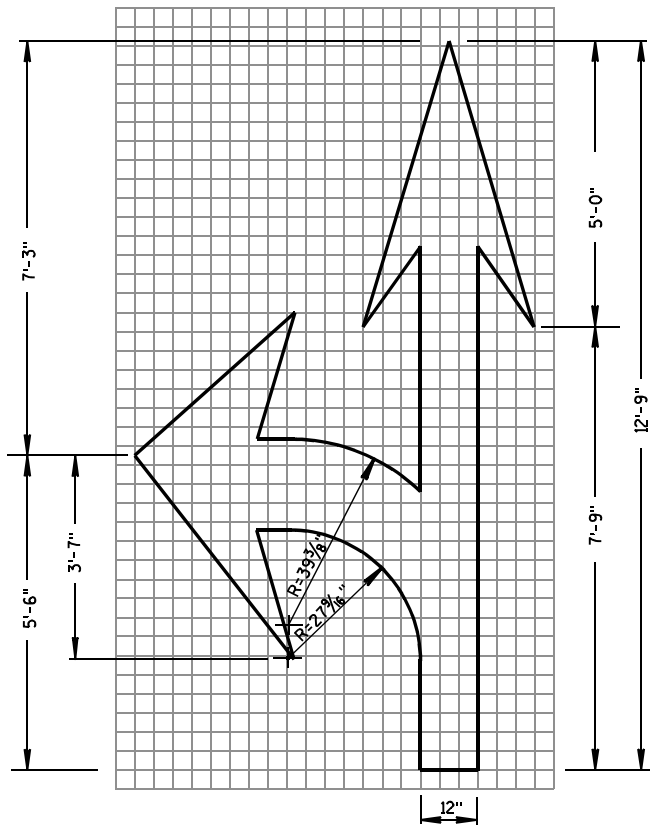
TYPE 1



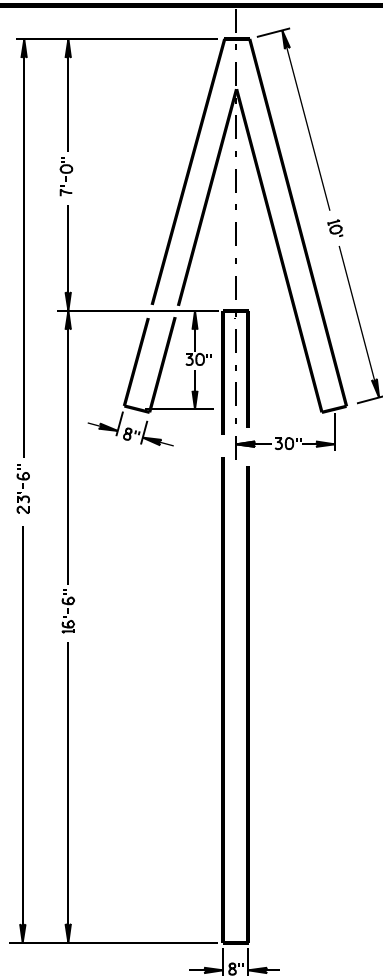
TYPE 6



TYPE 7



TYPE 3

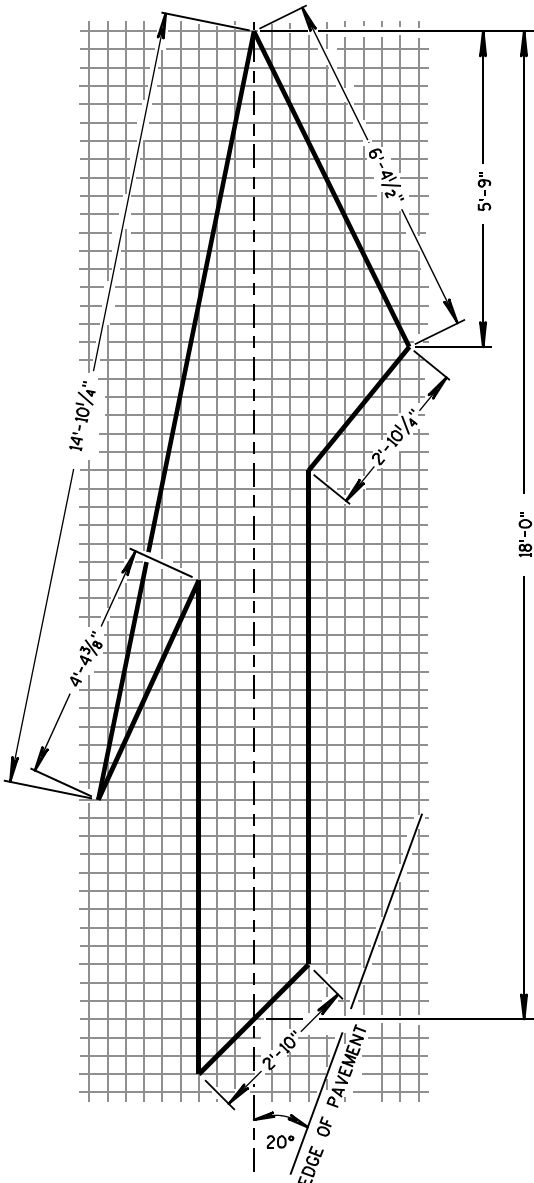


TYPE 4

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.

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TYPE 5 LANE DROP ARROW

PAVEMENT MARKING ARROWS

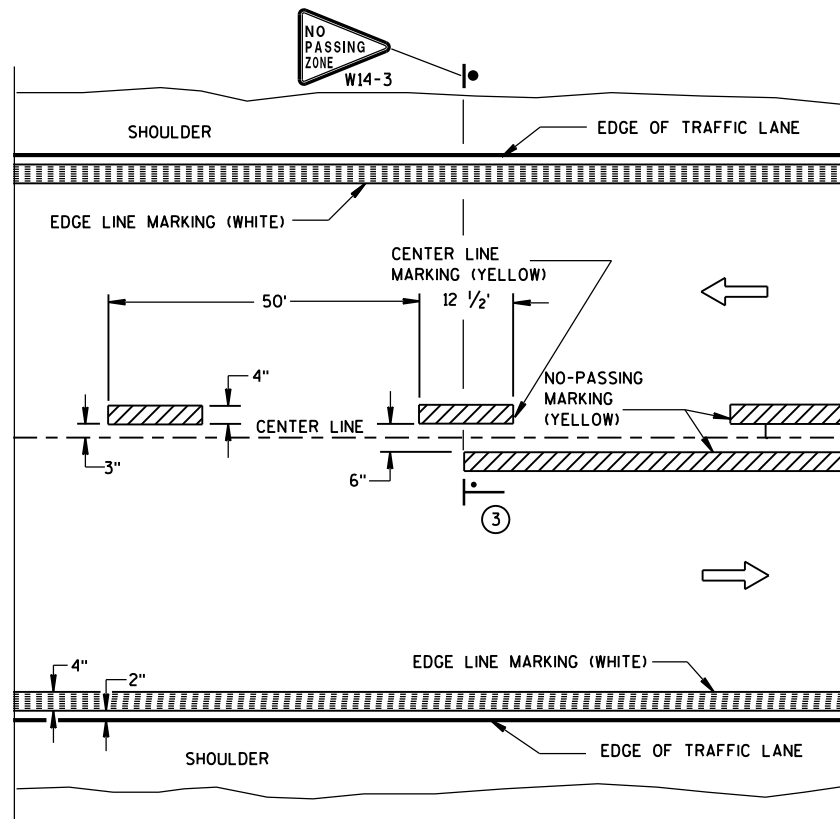
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

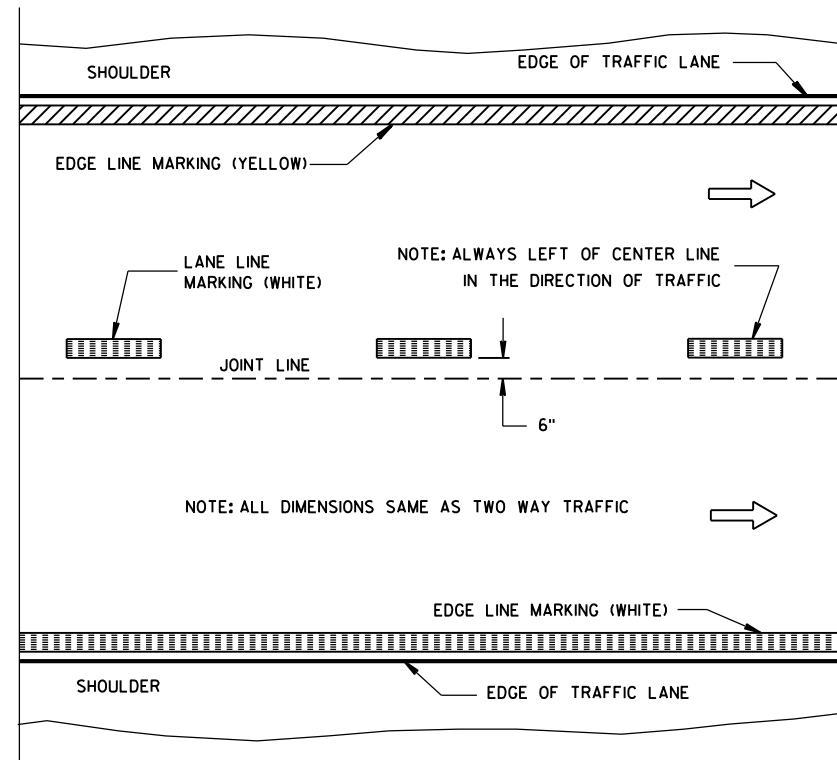
7/1/11
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

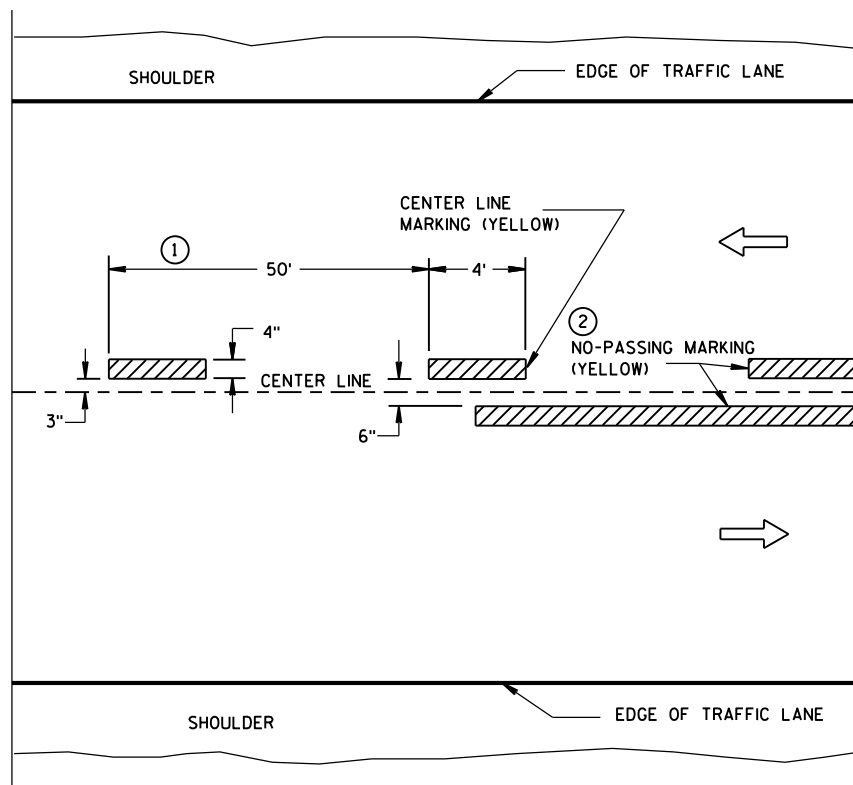


TWO WAY TRAFFIC

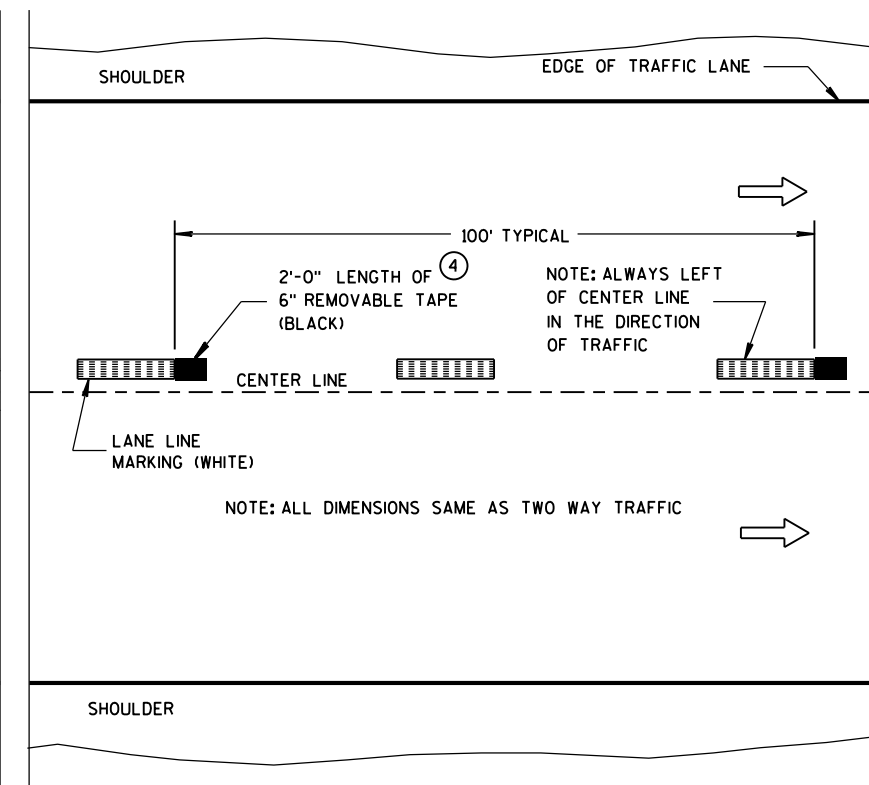


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

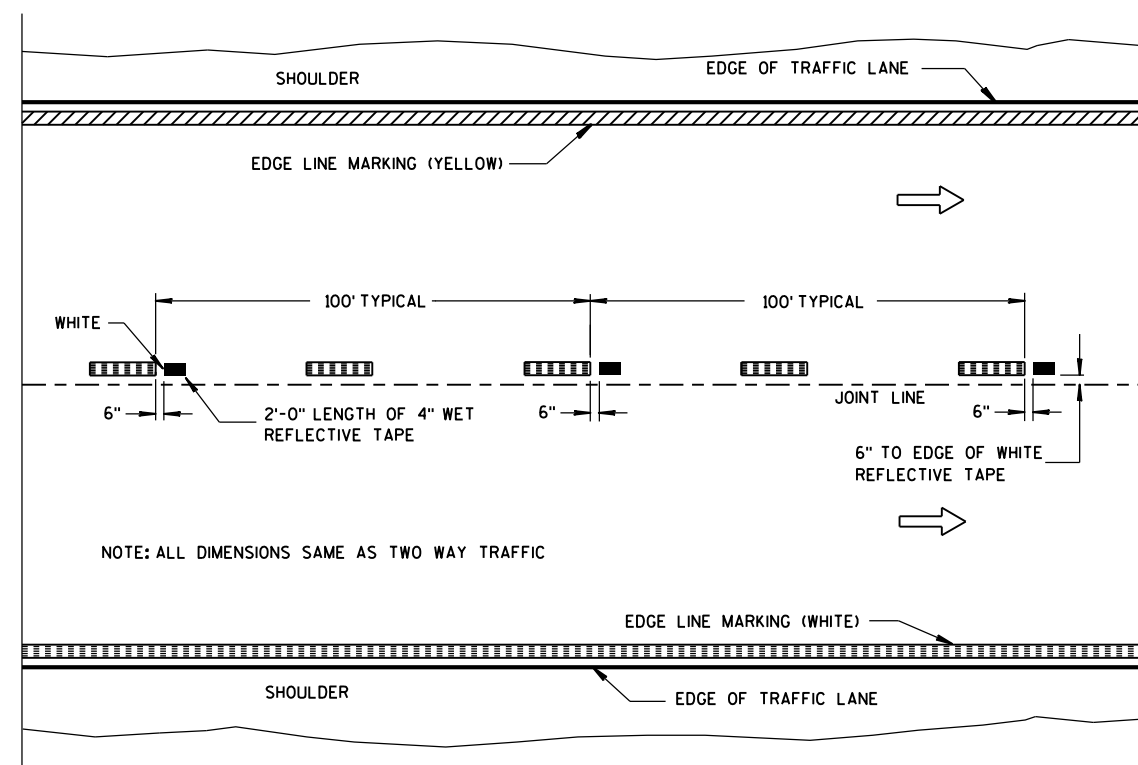
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

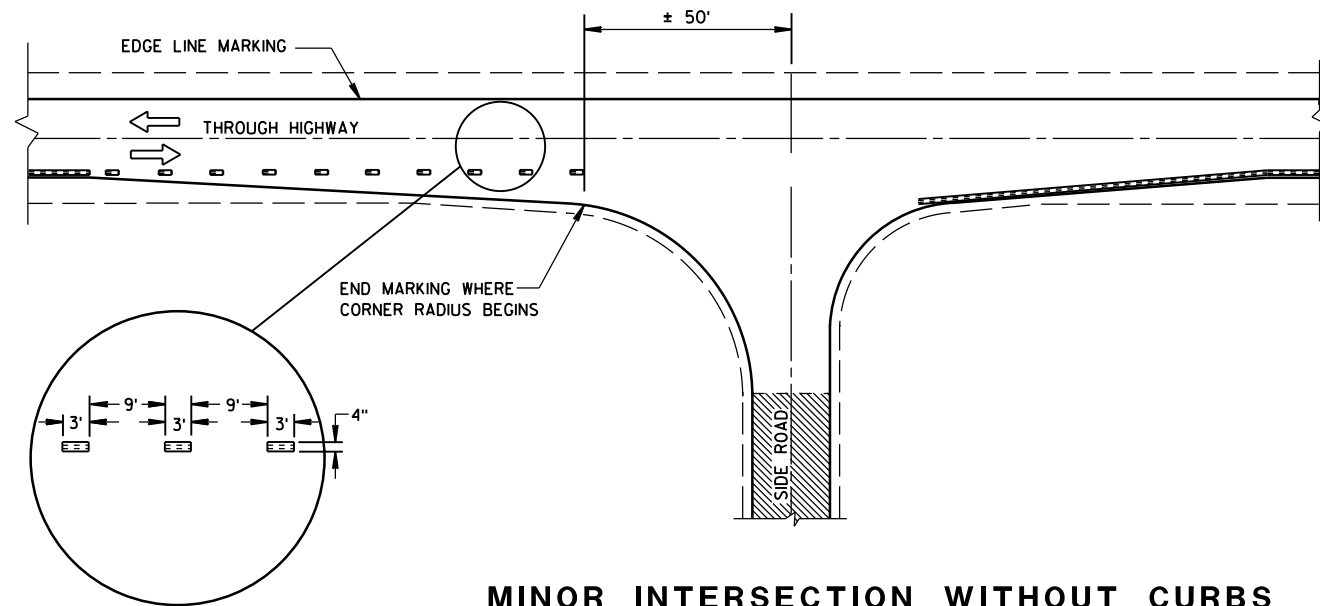
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

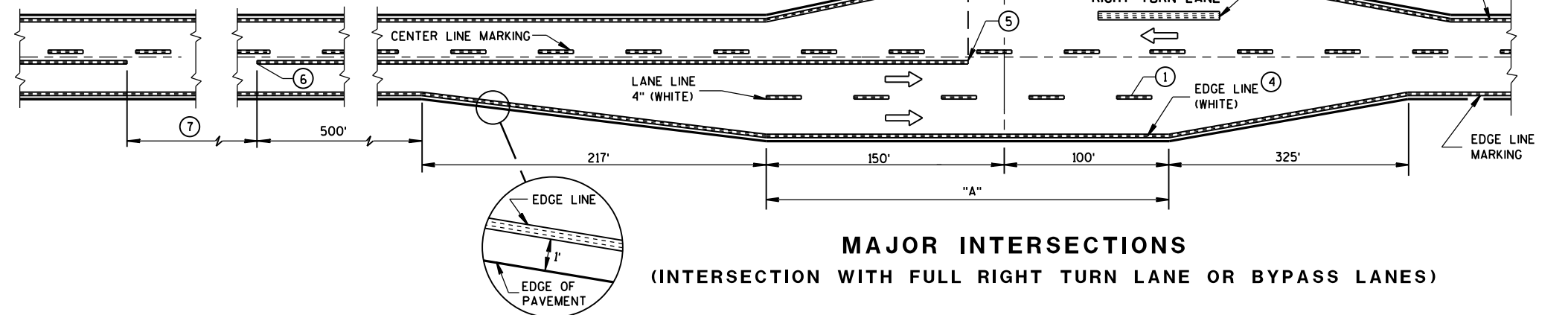
APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



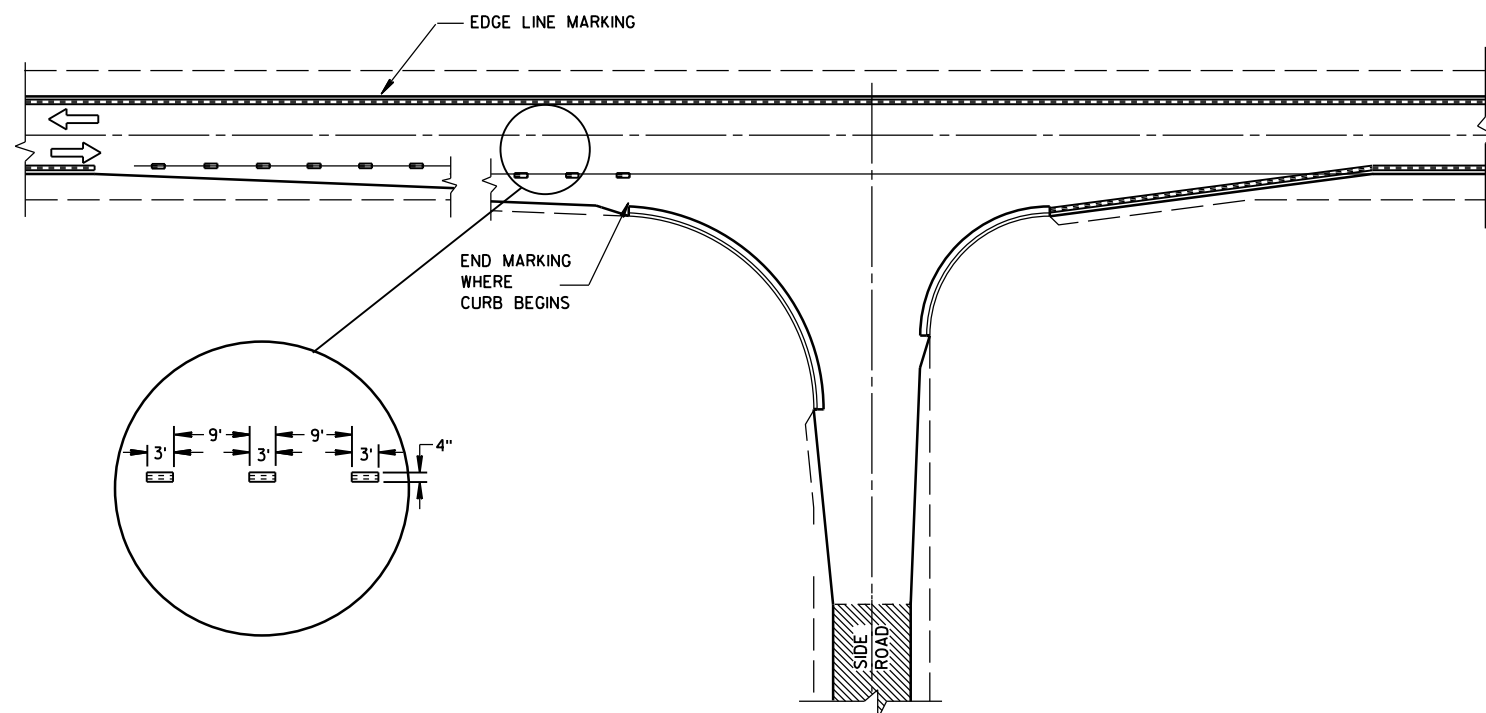
MINOR INTERSECTION WITHOUT CURBS

⑦

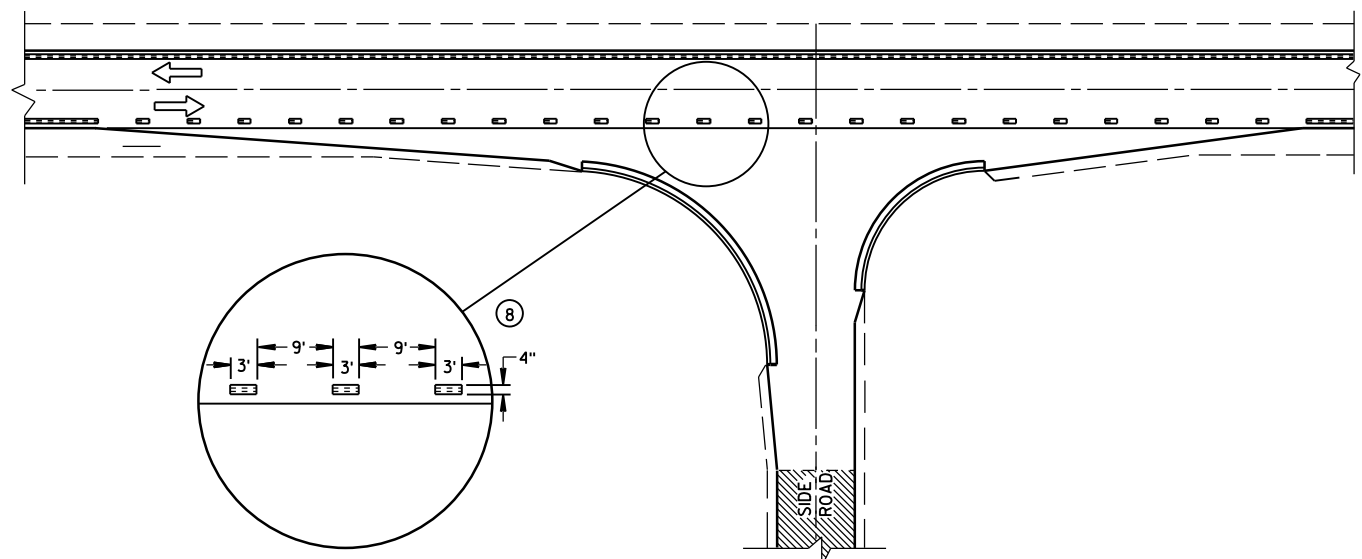
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



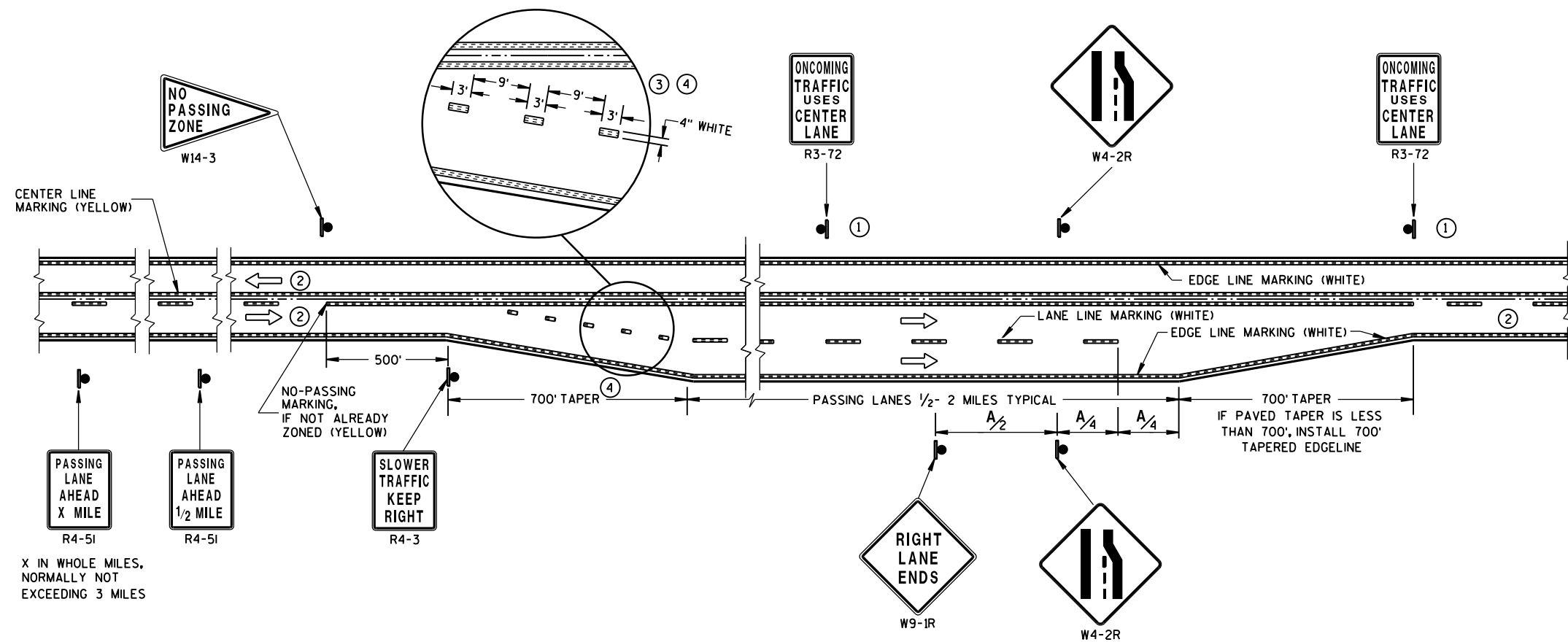
MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

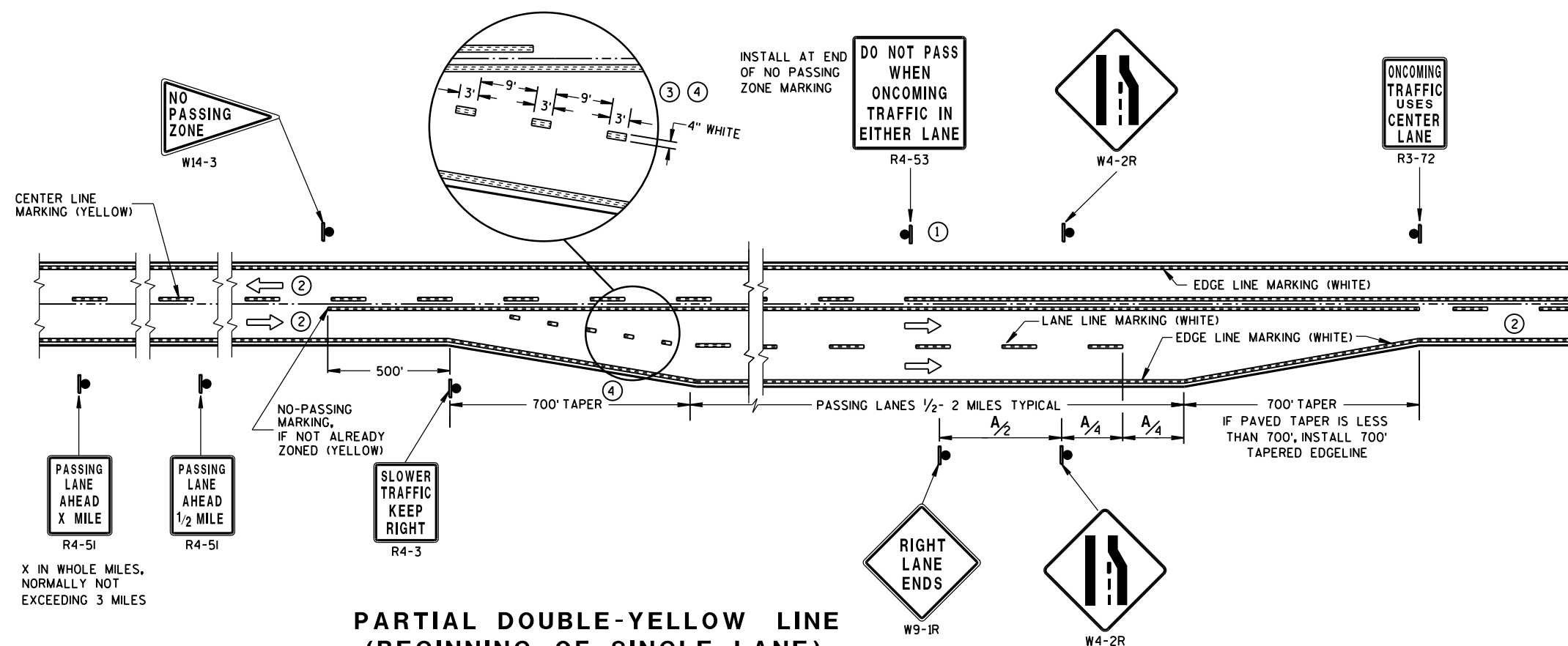
- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE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

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**SOLID DOUBLE-YELLOW LINE
(THROUGHOUT ENTIRE PASSING/CLIMBING LANE)**



**PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)**

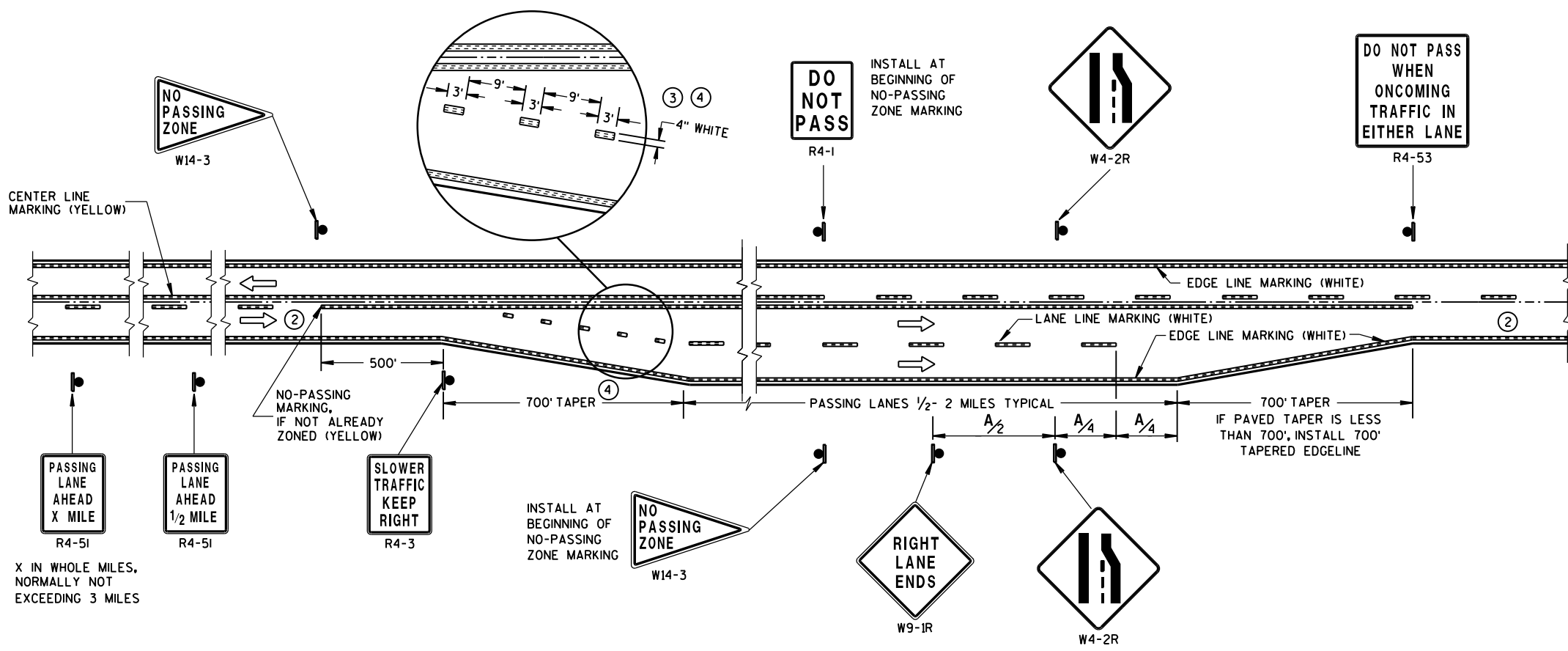
GENERAL NOTES

- ① SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (\Rightarrow) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

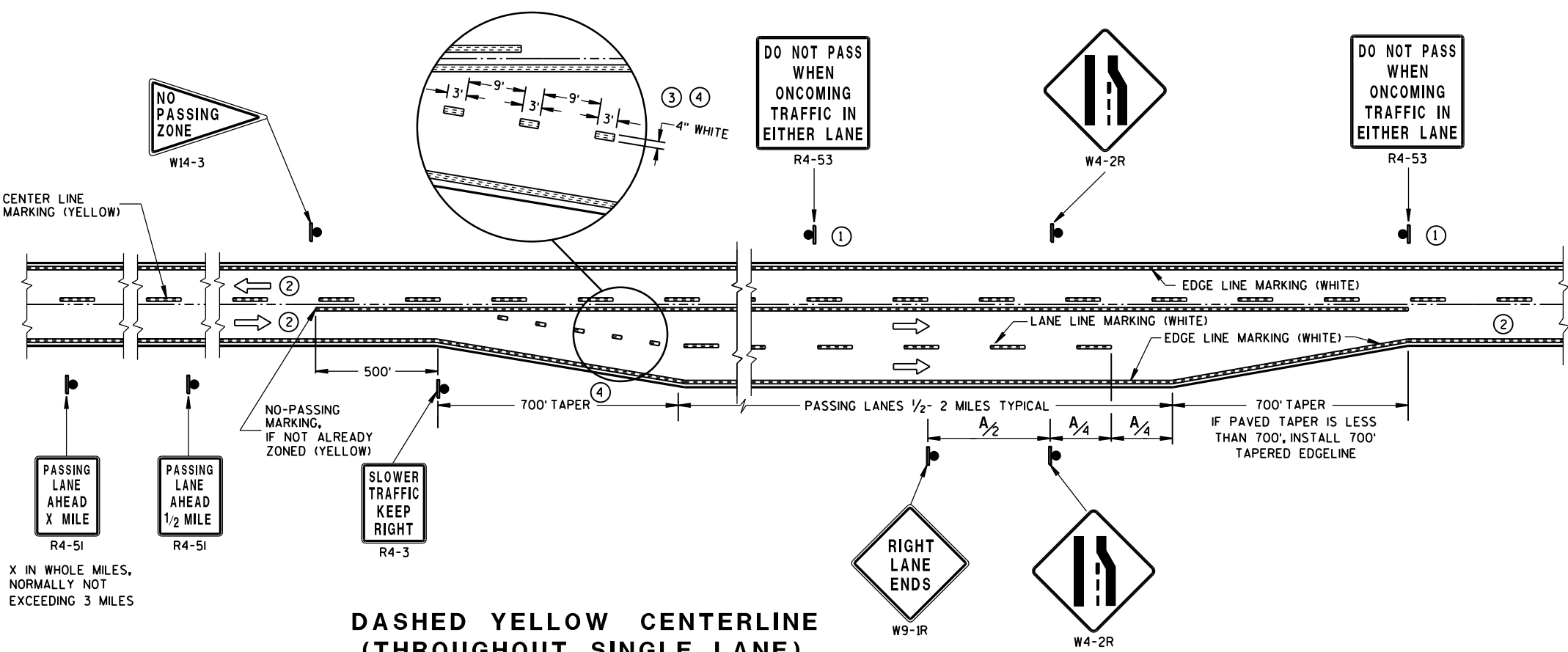


**SOLID DOUBLE-YELLOW LINE
(END OF SINGLE LANE)**

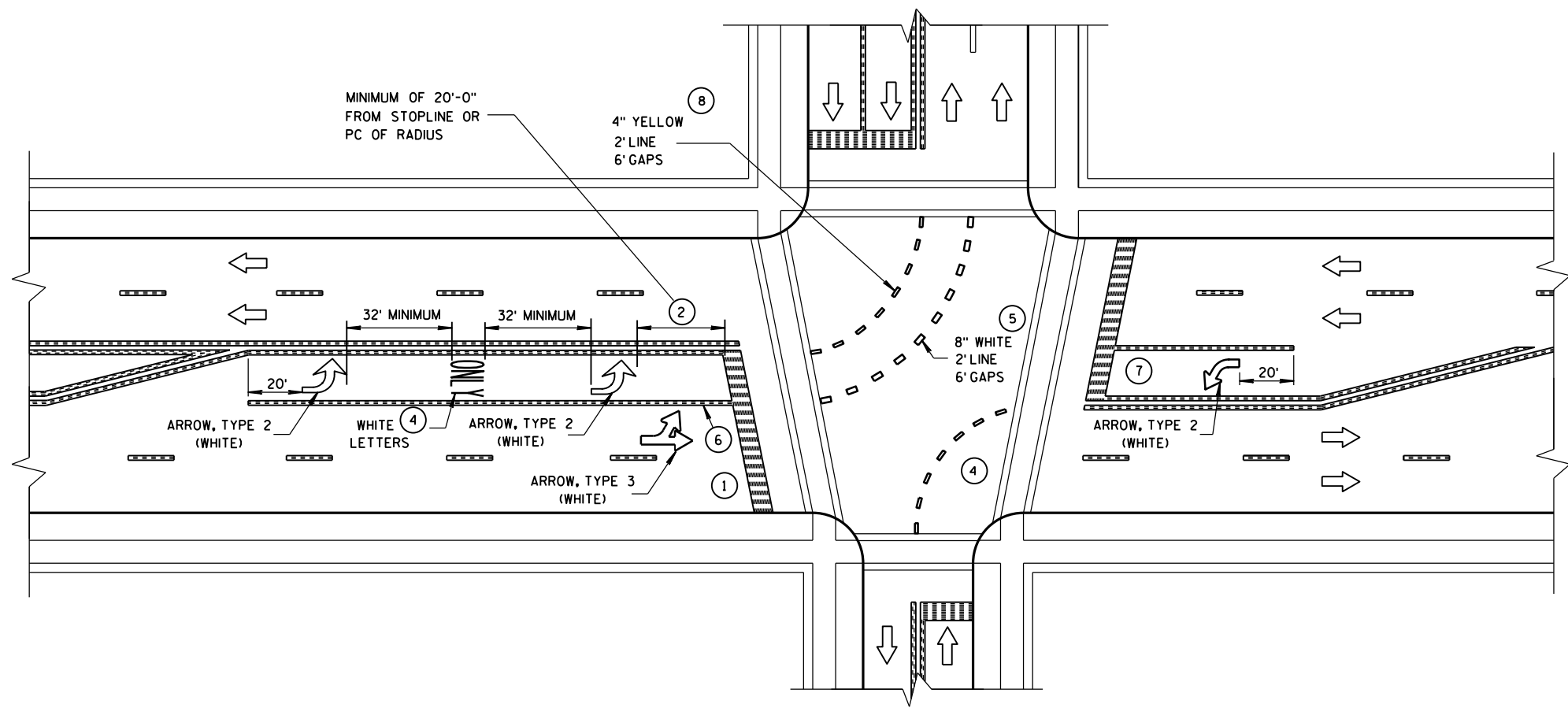
- GENERAL NOTES**
- ① SIGN SHALL BE REPEATED AT 1/2 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
 - ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
 - ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
 - ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING/CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE	
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950



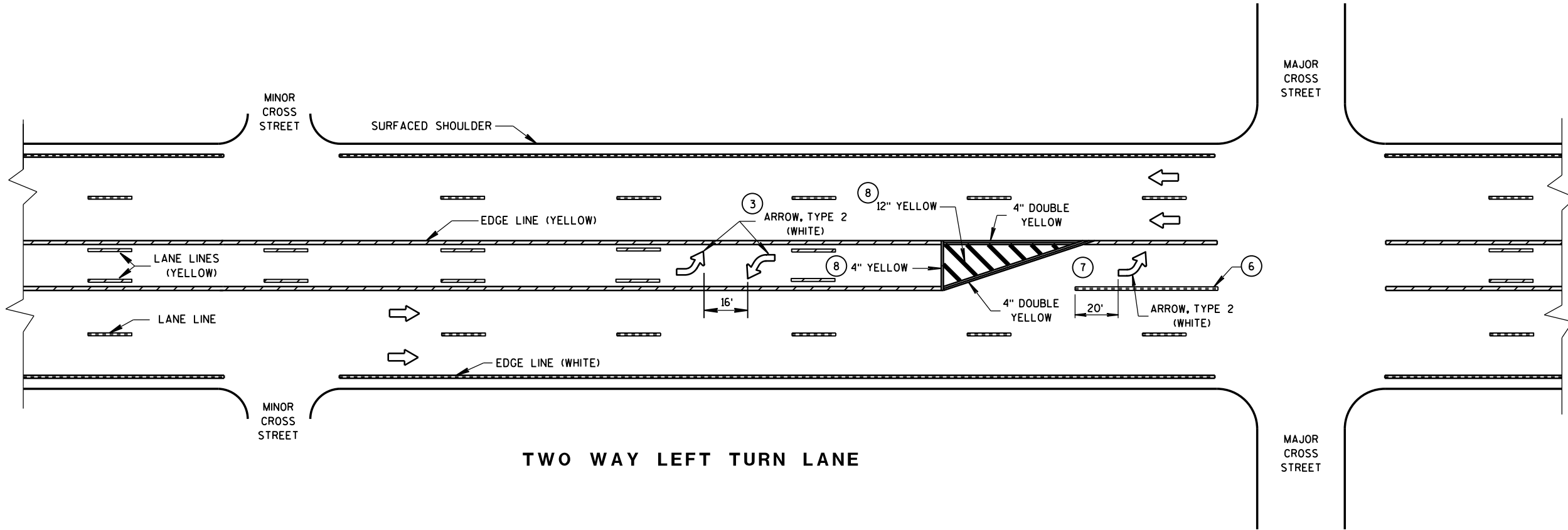
**DASHED YELLOW CENTERLINE
(THROUGHOUT SINGLE LANE)**



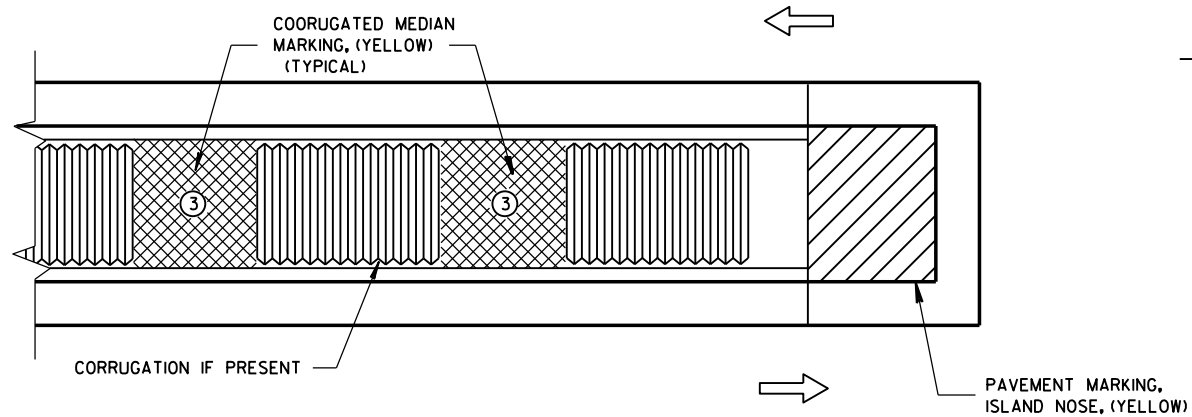
GENERAL NOTES

- ① STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES, AS APPROVED BY THE ENGINEER.
- ③ A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ④ ADD EXTRA ARROW AND ONLY PER 160' OR WHEN ON A CURVE.
- ⑤ 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
- ⑥ 8" WHITE
- ⑦ ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108'.
- ⑧ REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

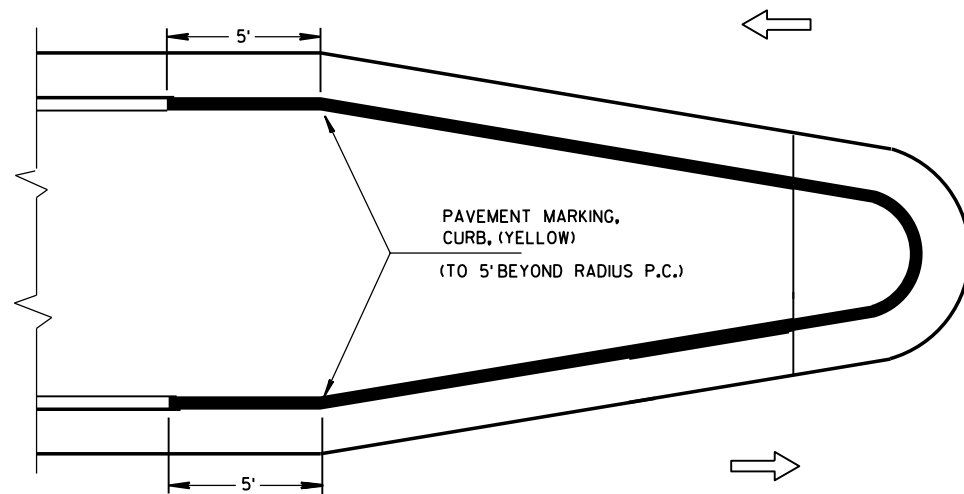
NOTE:
ARROW SYMBOL (➡)
SHOWS DIRECTION OF TRAVEL



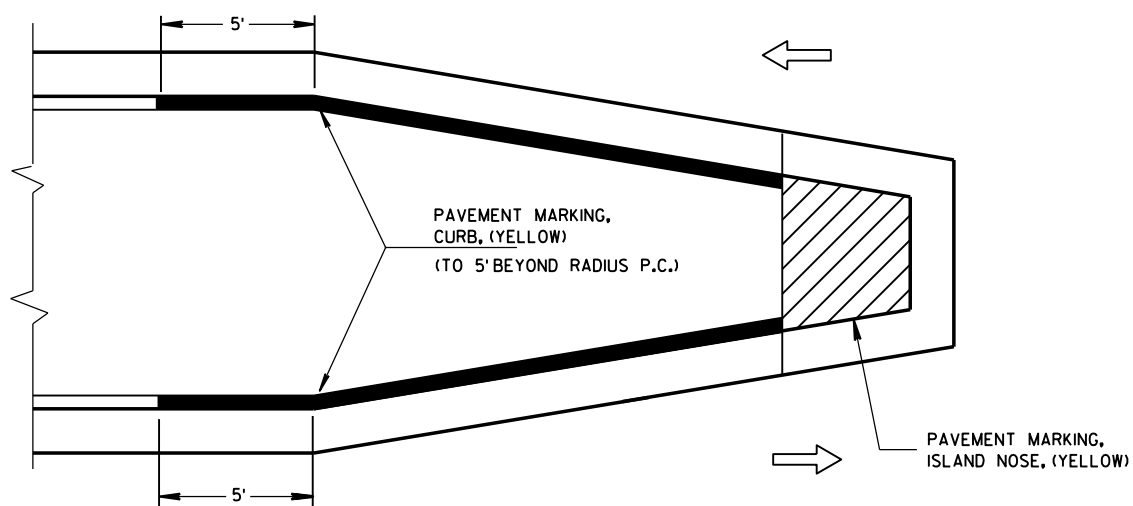
PAVEMENT MARKING (LEFT TURN LANE)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

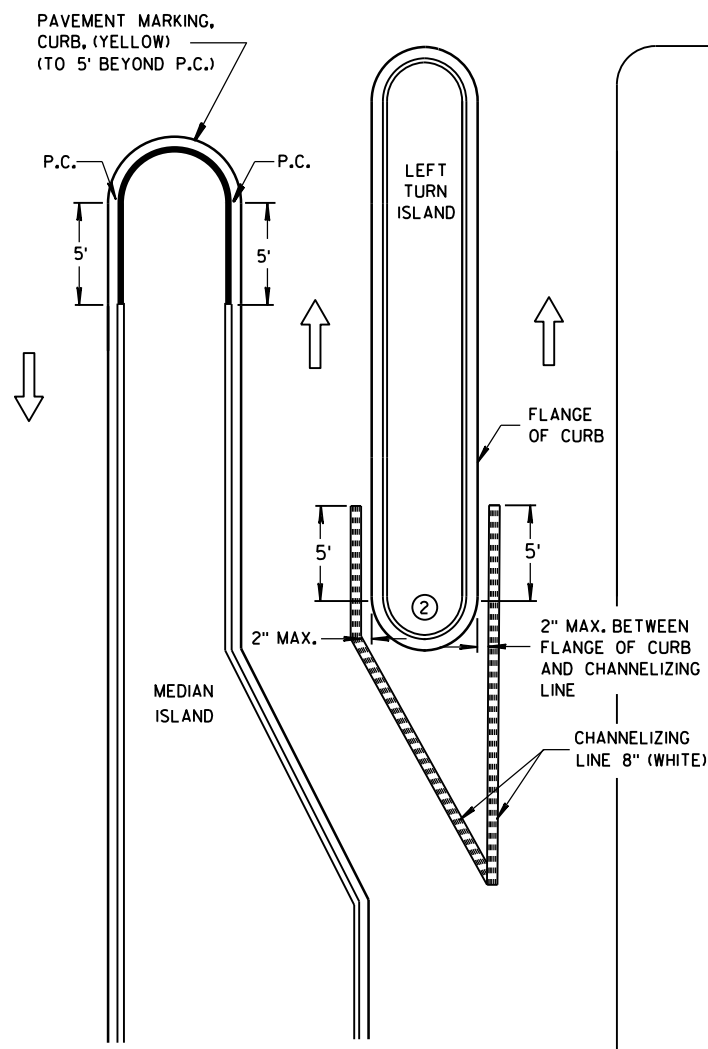


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

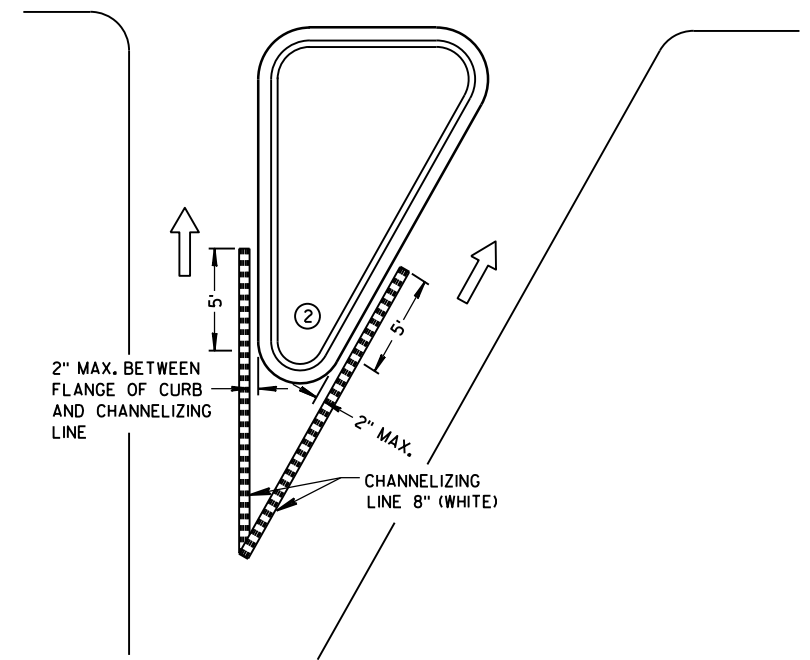
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

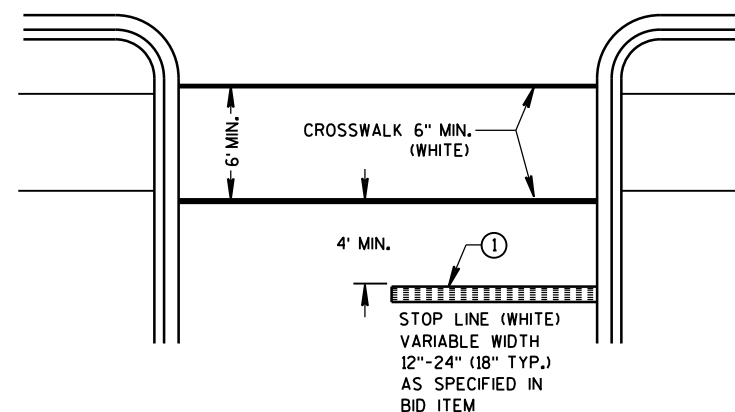
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

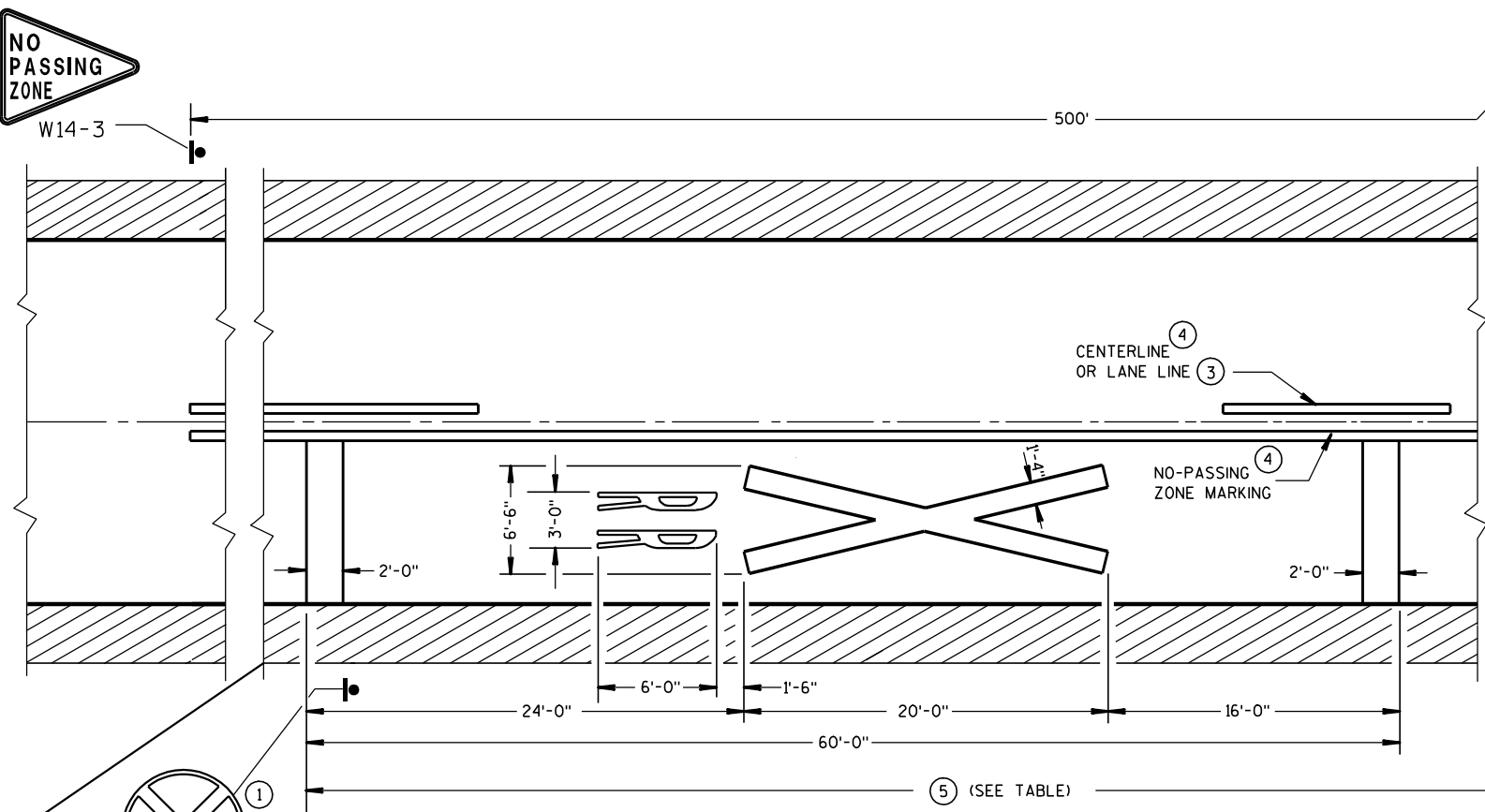
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL



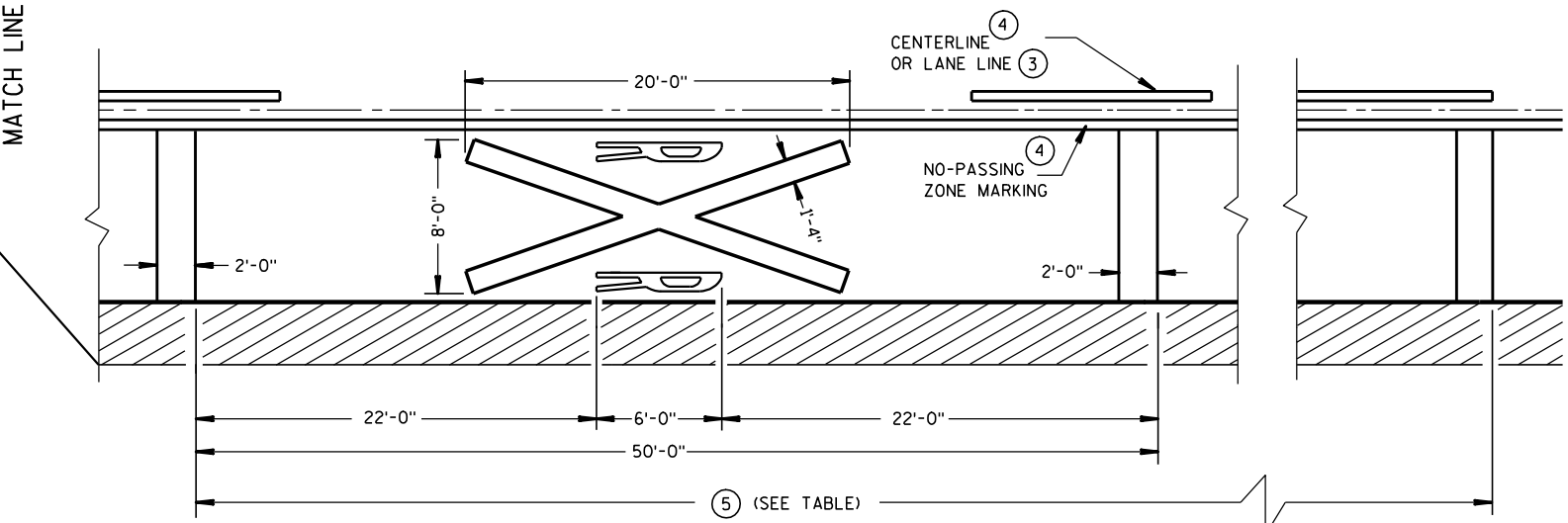
STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



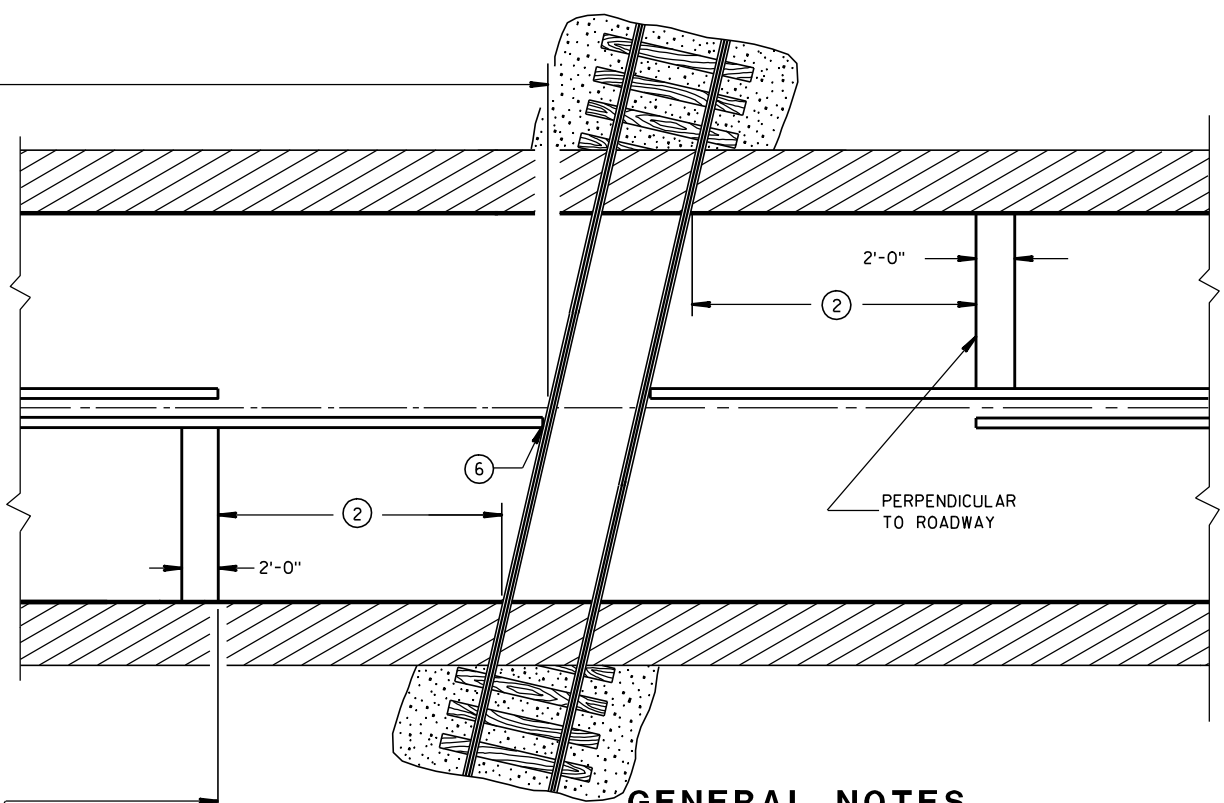
PREFERRED PAVEMENT MARKING



ALTERNATE PAVEMENT MARKING

Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.



GENERAL NOTES

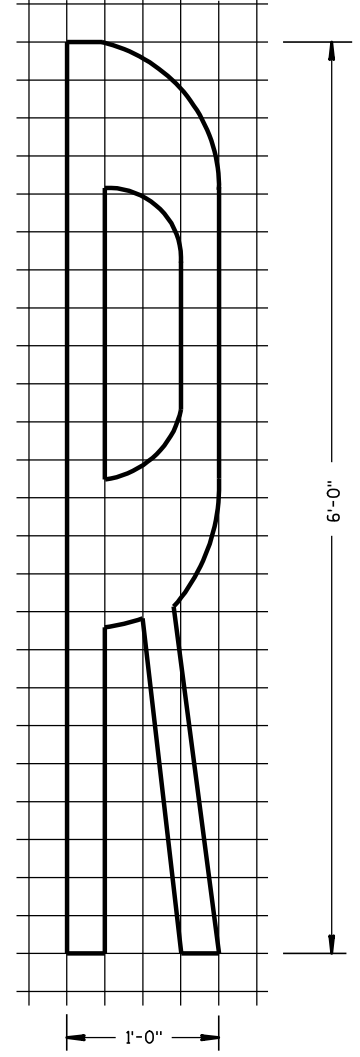
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

- ① A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
- ② MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
- ③ REFLECTIVE WHITE.
- ④ REFLECTIVE YELLOW 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
- ⑤ TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ⑥ FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.




SIGNING AND PAVEMENT MARKING
DETAILS FOR RAILROAD-HIGHWAY
GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION


APPROVED
1-9-2012 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

TWO-LANE ROADWAY


SYMBOLS



WORK AREA



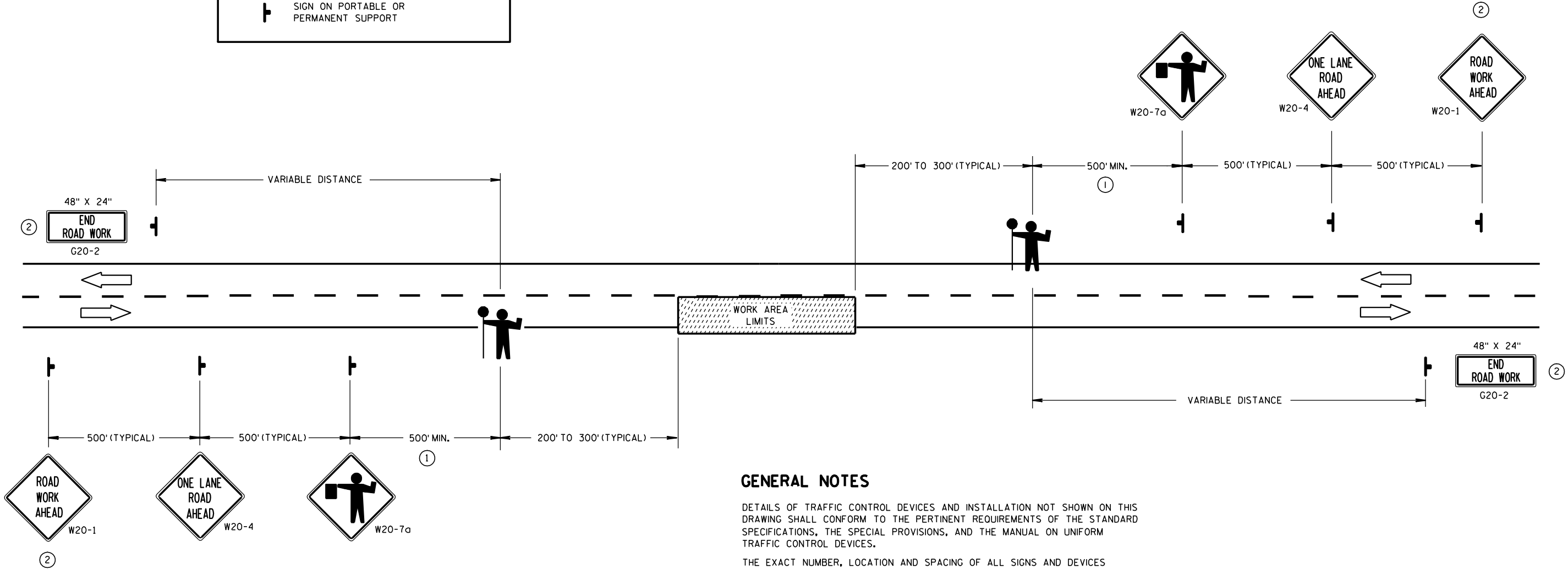
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

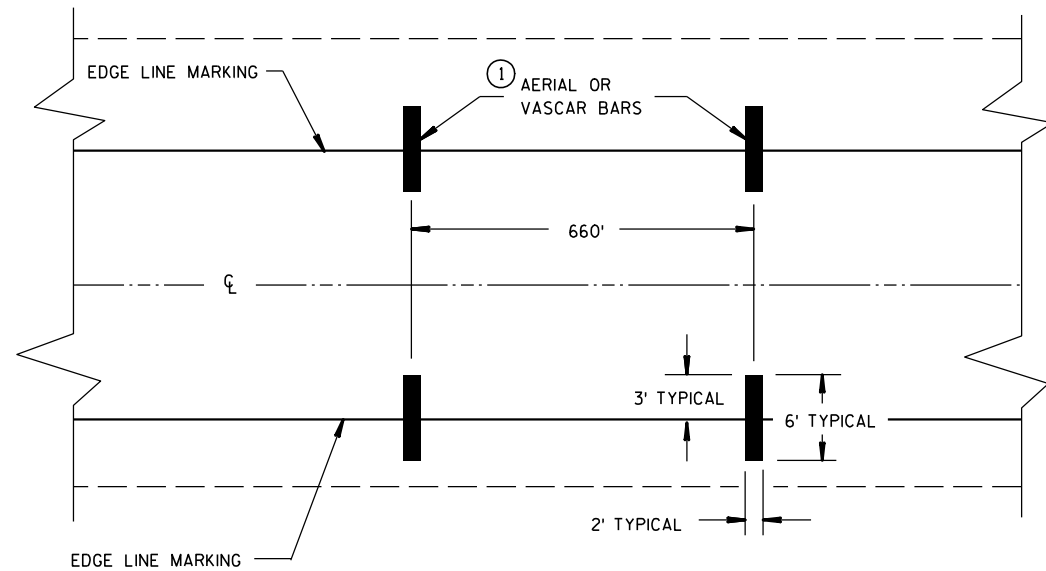
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

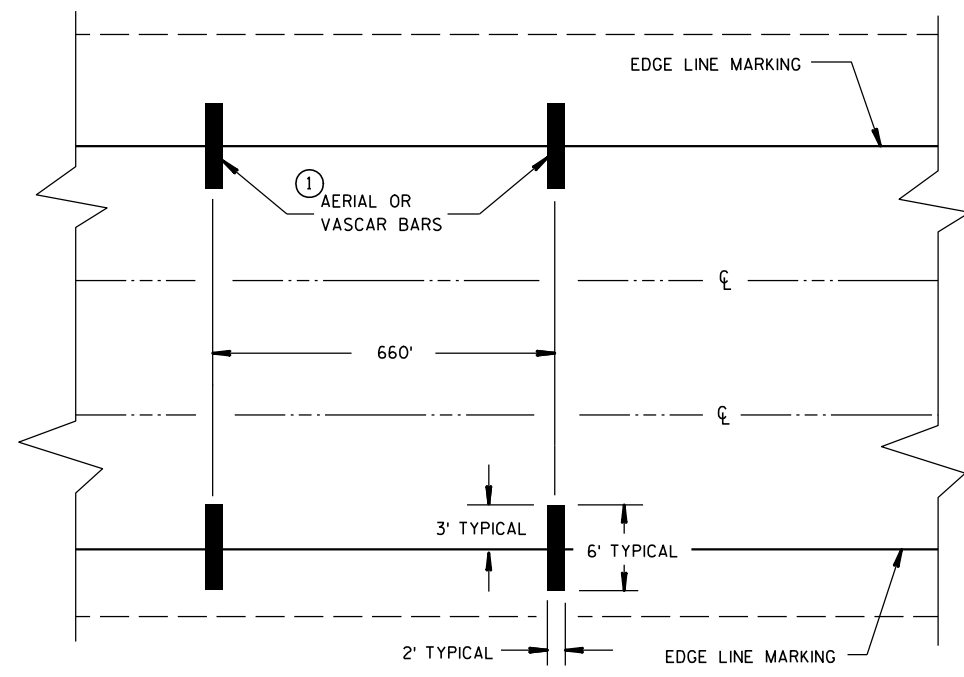
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/5/06 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

GENERAL NOTES

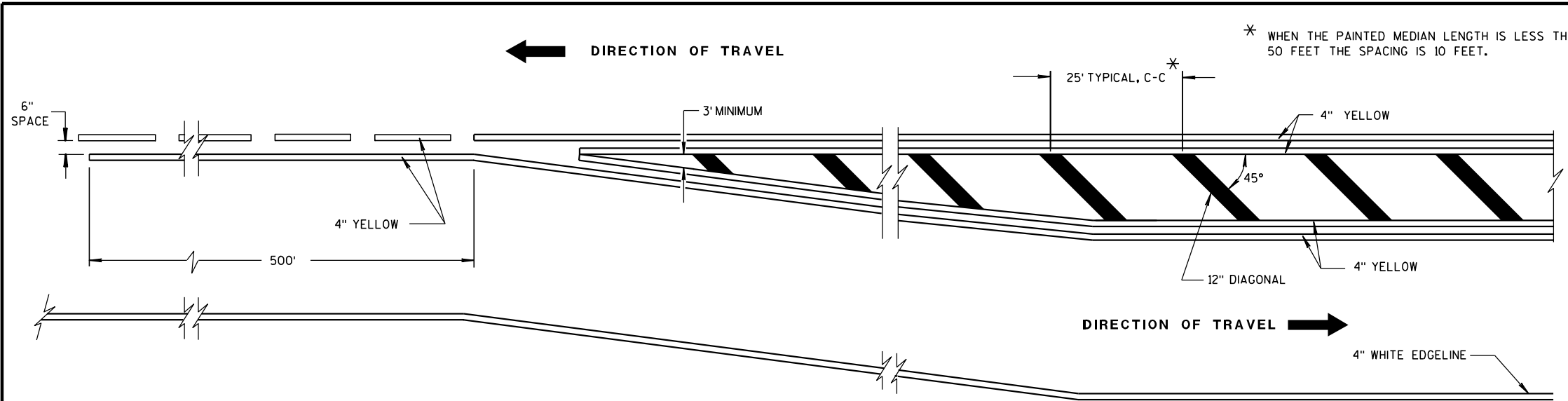
① NUMBER OF VASCAR OR AERIAL BARS SHALL BE A MINIMUM OF 2 OR A MAXIMUM OF 5 AT 660' SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.

AERIAL ENFORCEMENT BARS
PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

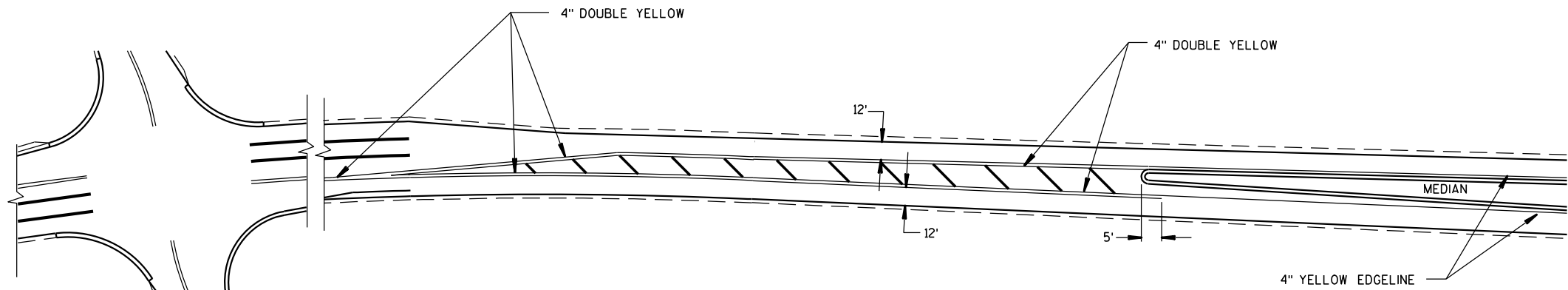
APPROVED
4/23/01 /S/ Chester J. Spang
DATE CHIEF SIGNS AND MARKING ENGINEER
FHWA



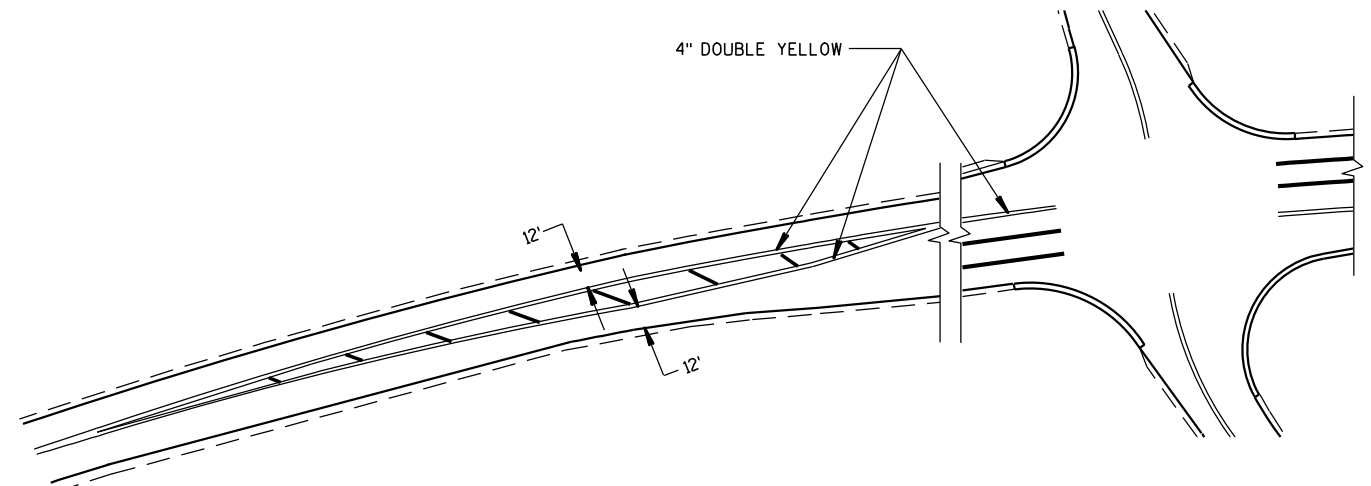
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

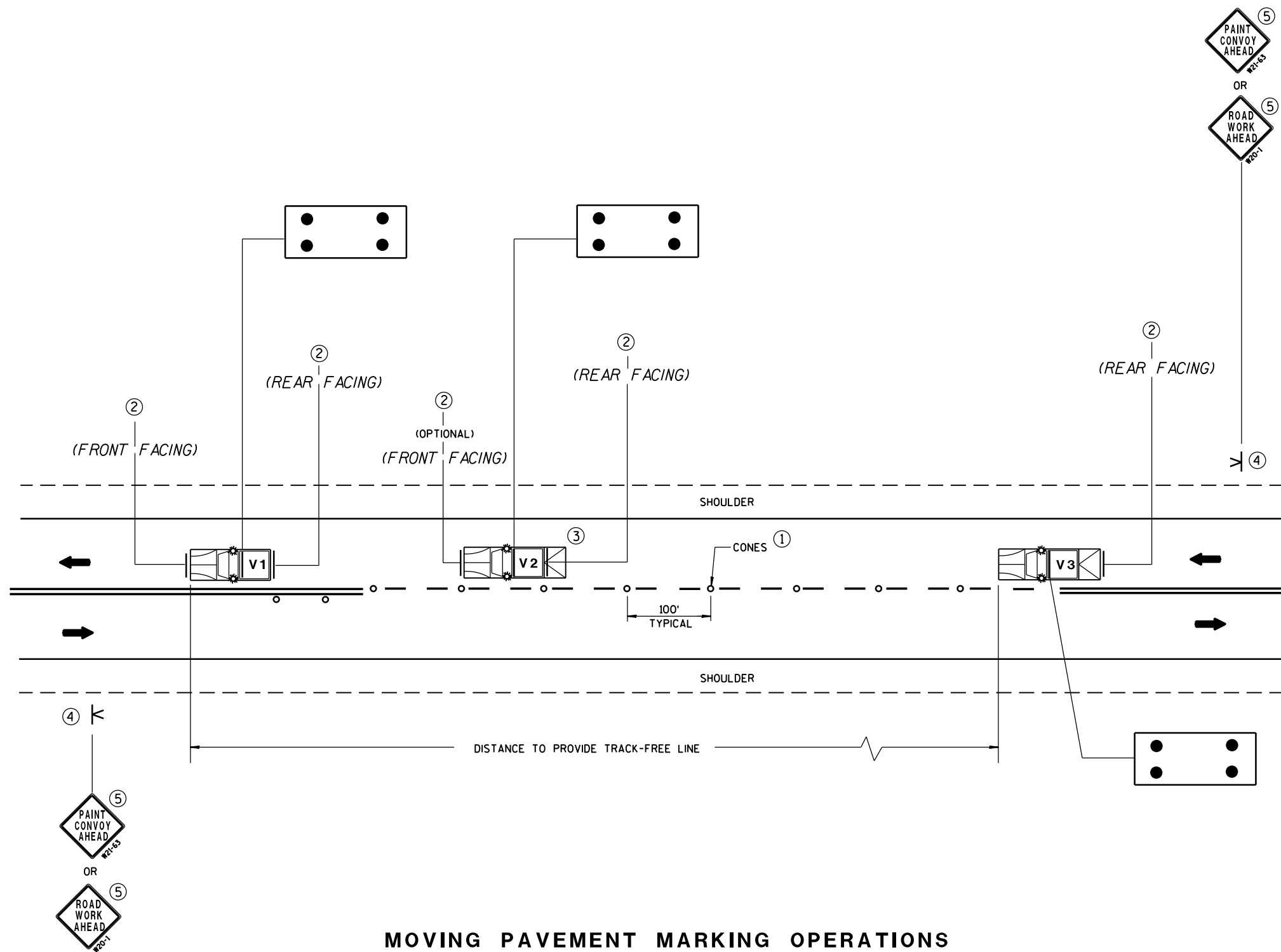


APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

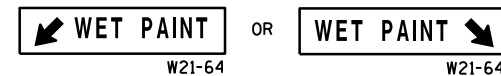
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

K SIGN ON PORTABLE SUPPORT

→ DIRECTION OF TRAVEL

○ CONES

⋮ FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

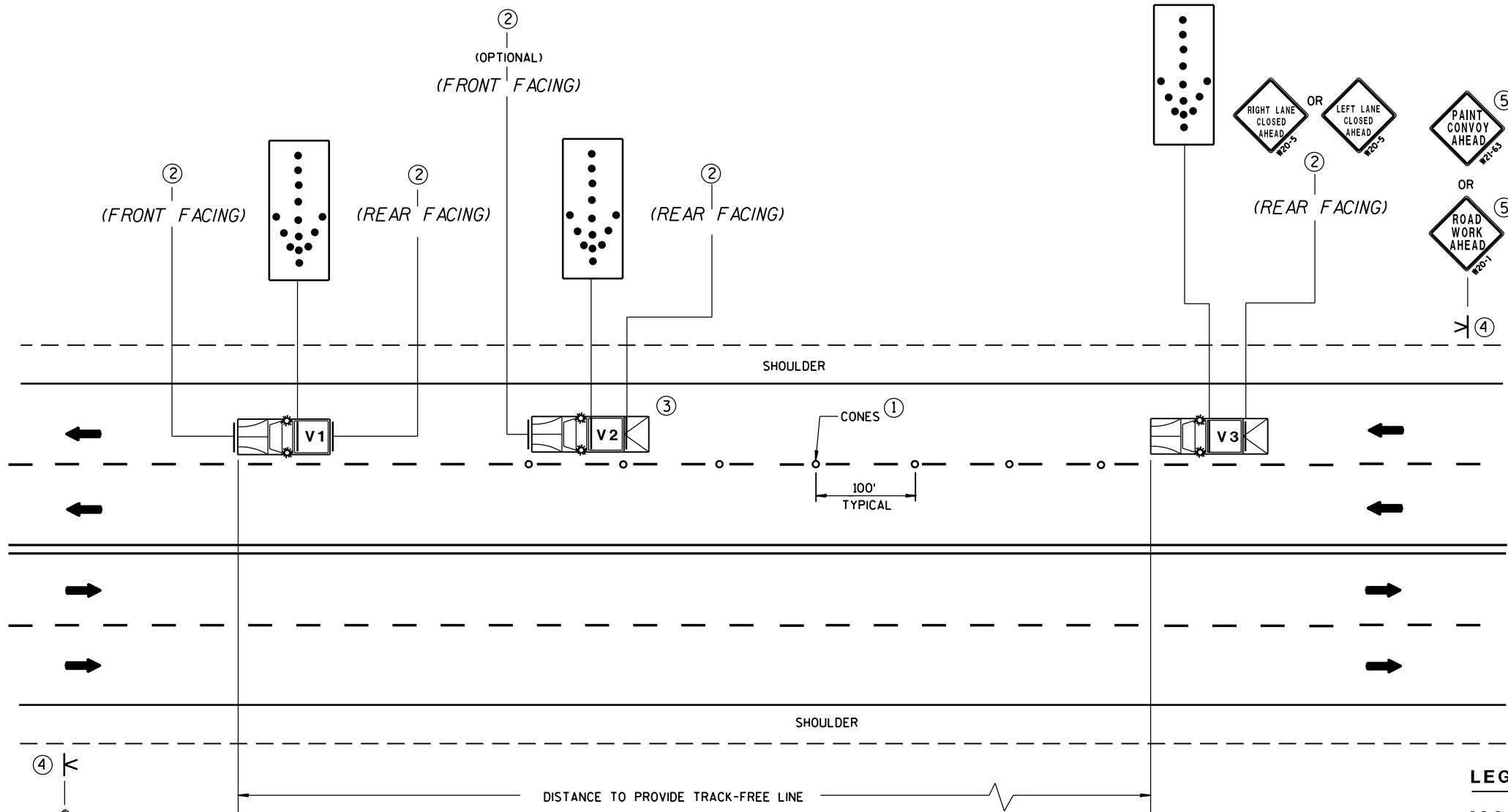
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/6/2011
DATE

FHWA

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE UNDIVIDED ROADWAY

GENERAL NOTES

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

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

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

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

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

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

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH.

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE OR LANELINE MARKING FOR MULTILANE UNDIVIDED ROADWAYS.

- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.
 W21-64 OR W21-64
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

Sign on portable support

DIRECTION OF TRAVEL

CONES

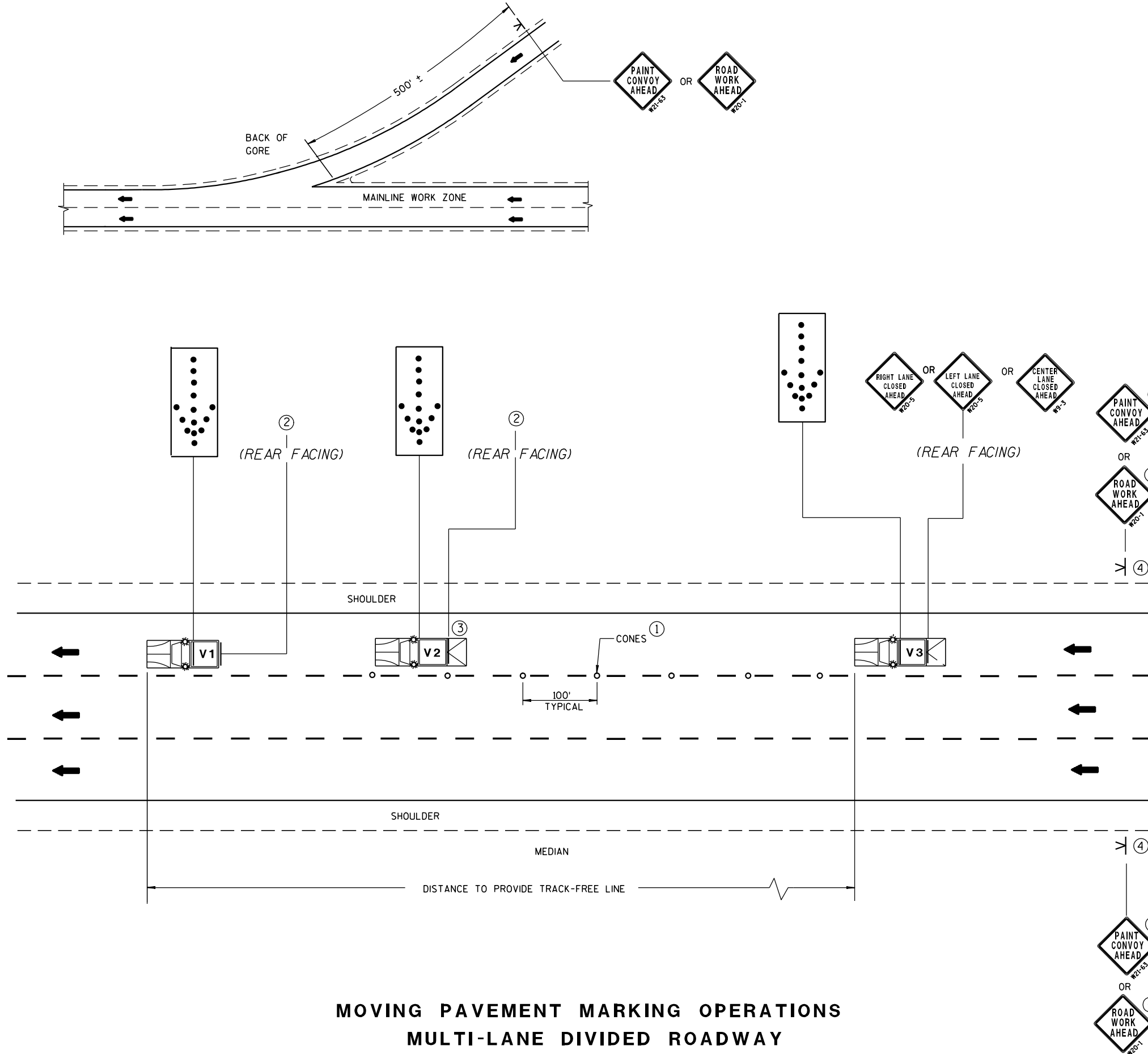
FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING
OPERATION
MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/6/2011 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER OF DESIGN

FHWA



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

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

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

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

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

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

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

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.



WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.






USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

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

THIS DRAWING SHALL BE USED FOR EDGELINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.
 OR 
W21-64 W21-64
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

- LEGEND**
- V1** LEAD VEHICLE
 - V2** SHADOW VEHICLE
 - V3** TRAIL VEHICLE WITH TMA
 -  **TMA** TRUCK-MOUNTED ATTENUATOR
 -  SIGN ON PORTABLE SUPPORT
 -  DIRECTION OF TRAVEL
 -  CONES
 -  FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/6/2011 DATE	/S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

GENERAL NOTES

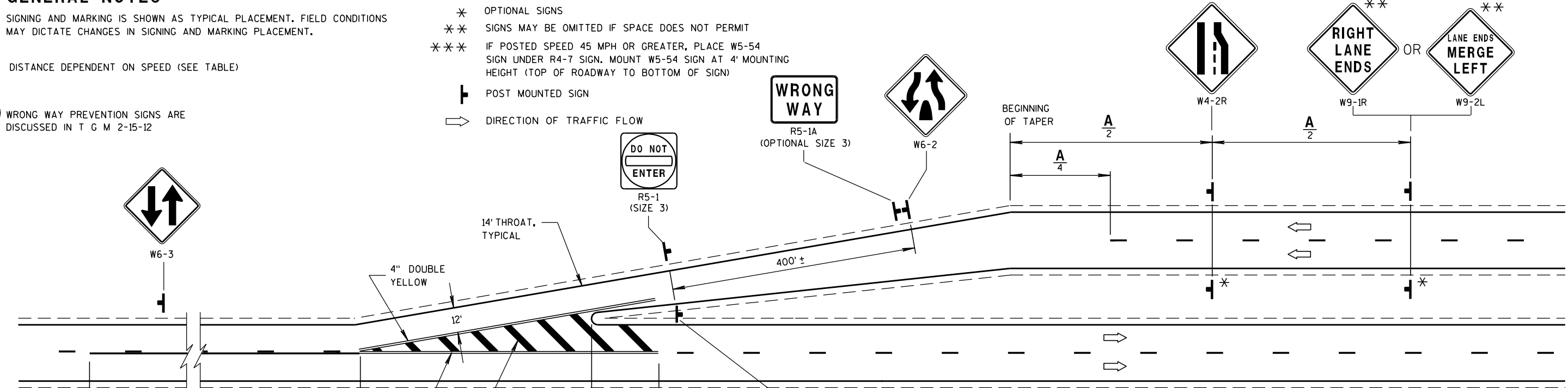
SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

1 WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

SYMBOLS

- * OPTIONAL SIGNS
- ** SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT
- *** IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)
- ┐ POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

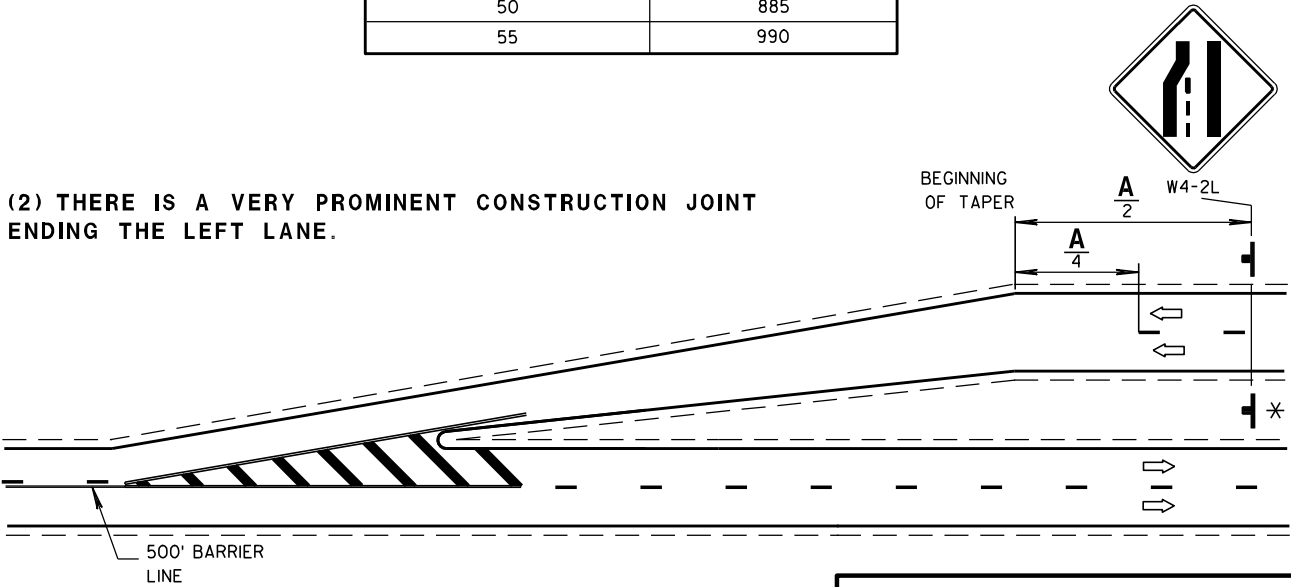
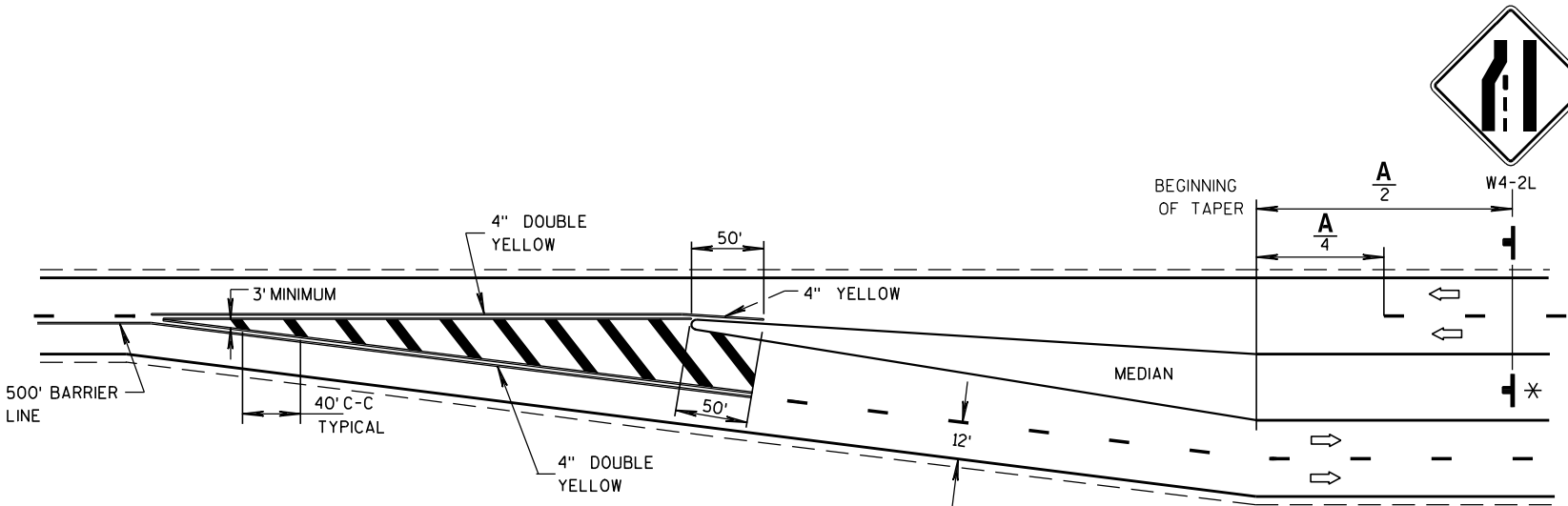


DISTANCE TABLE	
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

USE W4-2L IF :
OR

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.



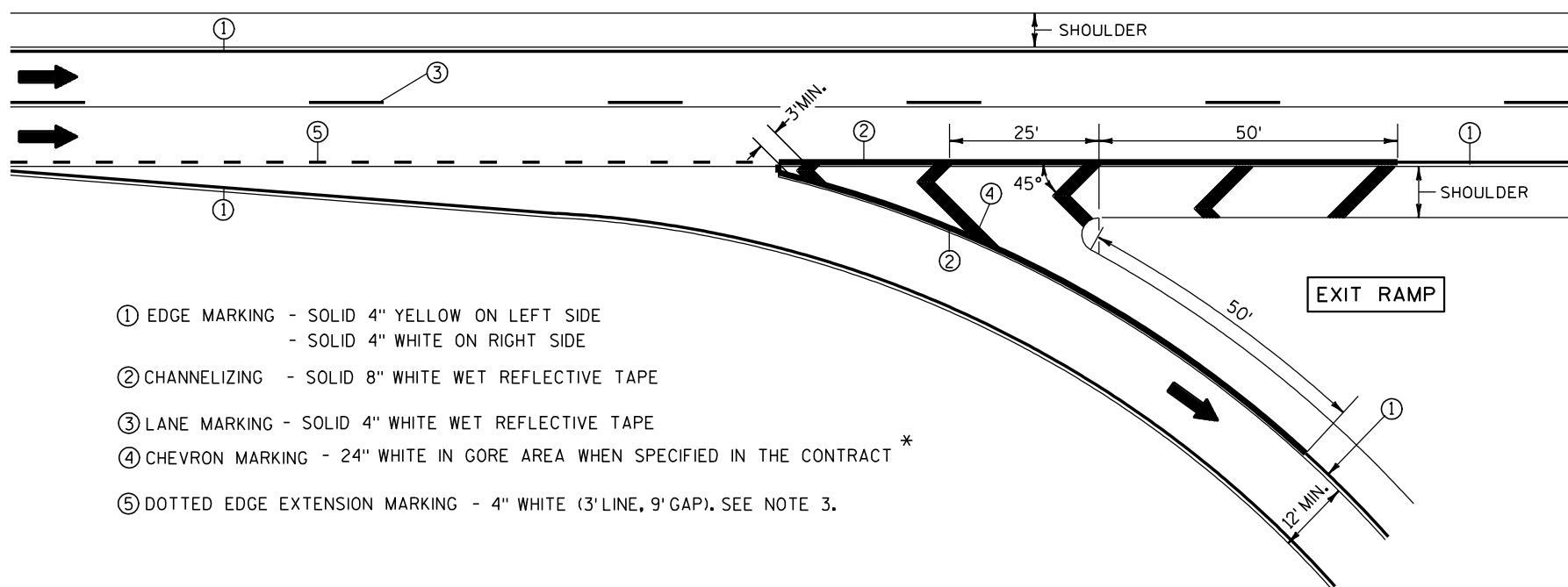
SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/27/2011
DATE

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

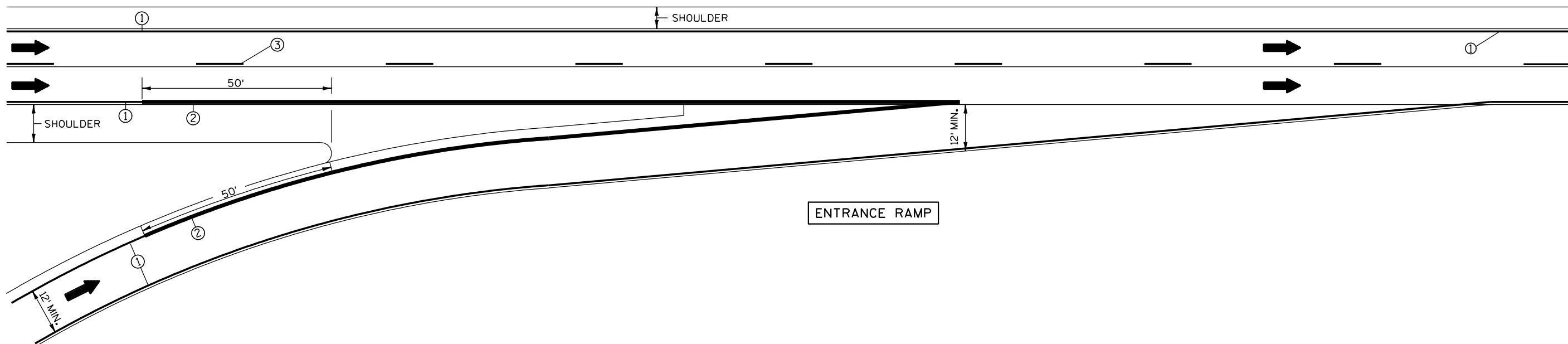


- ① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE
- ② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE
- ③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE
- ④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *
- ⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

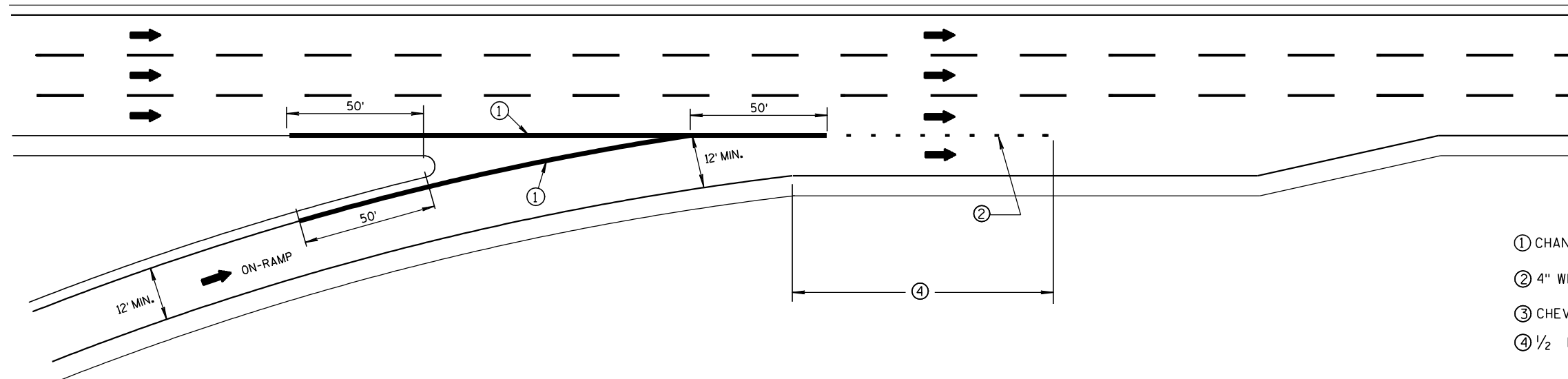
- 1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
- 2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
- 3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

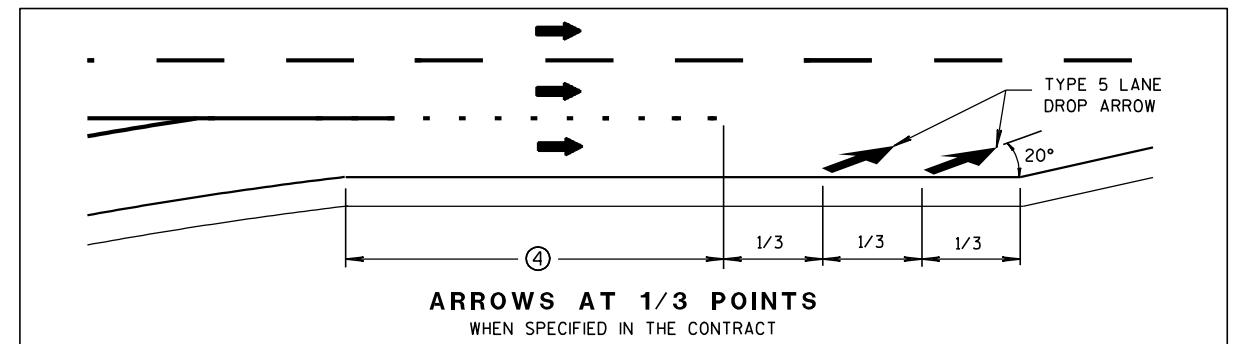
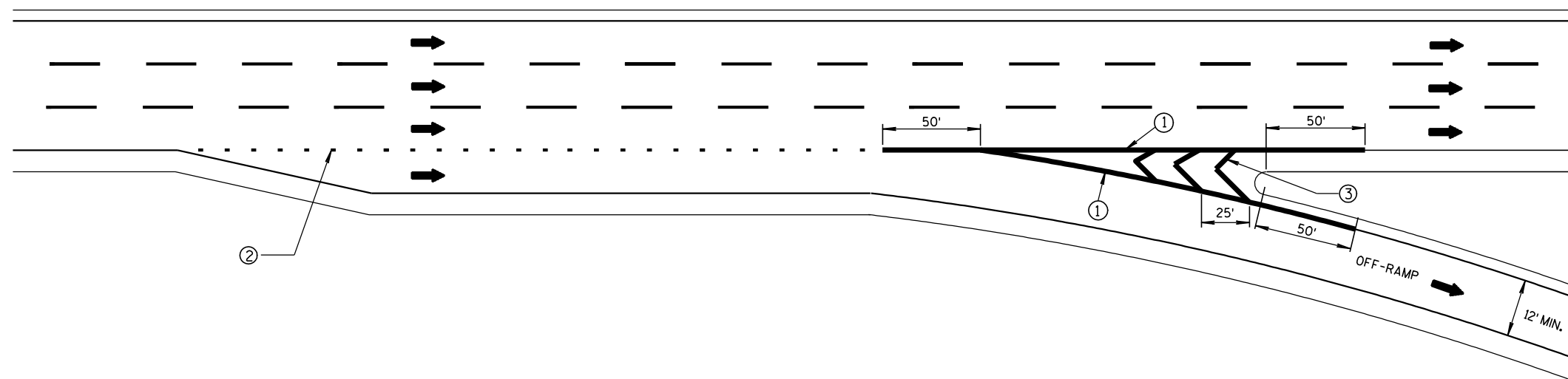


SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

NOTES:

1. AHEAD ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
3. RETRACE EXISTING DIAGONAL MARKINGS.

- ① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA.
- ② 4" WHITE (3' LINE, 9' GAP).
- ③ CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.
- ④ ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

ARROWS AT 1/3 POINTS
WHEN SPECIFIED IN THE CONTRACT

SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

PAVEMENT MARKING FOR
PARALLEL ON-RAMP AND
PARALLEL OFF-RAMPSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/23/2011

DATE

FHWA

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>