

ORDER OF SHEETS

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

TOTAL SHEETS = 28



09

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

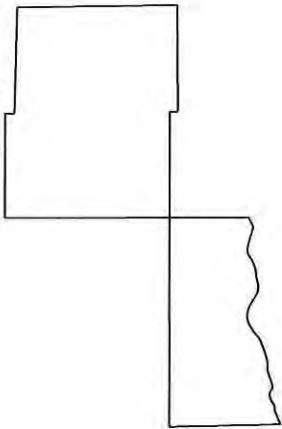
EPOXY PAVEMENT MARKING - 2014

VARIOUS HIGHWAYS
SE REGION WIDE

STATE PROJECT NUMBER
1000-77-11



WASHINGTON COUNTY

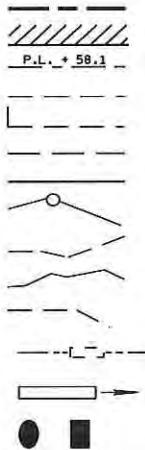


MILWAUKEE COUNTY

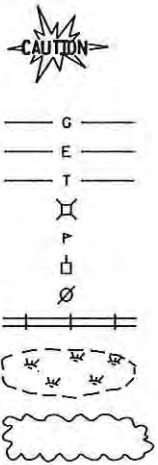


CONVENTIONAL SIGNS

- COUNTY LINE
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SURVEY LINE
- SLOPE INTERCEPT
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- CULVERT (Profile View)



- COMBUSTIBLE FLUIDS
- UNDERGROUND UTILITIES
- GAS
- ELECTRIC
- TELEPHONE OR TELEGRAPH
- SERVICE PEDESTAL
- CABLE MARKER
- POWER POLE
- TELEPHONE POLE
- RAILROAD
- MARSH AREA
- WOODED OR SHRUB AREA



LAYOUT

SCALE

PROJECT ID 1000-77-11 = 55.000 MI.

STATE PROJECT

FEDERAL PROJECT

PROJECT

CONTRACT

1000-77-11

WISC 2014101

1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor
Designer DONALD STEEL
Project Manager DON STEEL
Regional Examiner TOM HEYDEL
Regional Supervisor HANS HIGDON
C.O. Examiner

APPROVED FOR THE DEPARTMENT

DATE: 10/29/13
(Signature)

E

CONTACTS:

DNR- SPILL HOTLINE (24HR)

1-800-943-0003



Call 811 3 Work Days Before You Dig
Or Toll Free (800) 242-8511

Hearing Impaired TDD (800) 542-2289

www.DiggersHotline.com





DODGE
COUNTY

FOND DU LAC
COUNTY

US 45 (17.2 MILE)

US 41- SPLIT
TO
CTH H WEST JUNCTION (MOHAWK RD)
LANELINE, EDGELINE, 8" GORE, SHORT SKIPS AND CENTER LINE

OZAUKEE
COUNTY

WASHINGTON
COUNTY

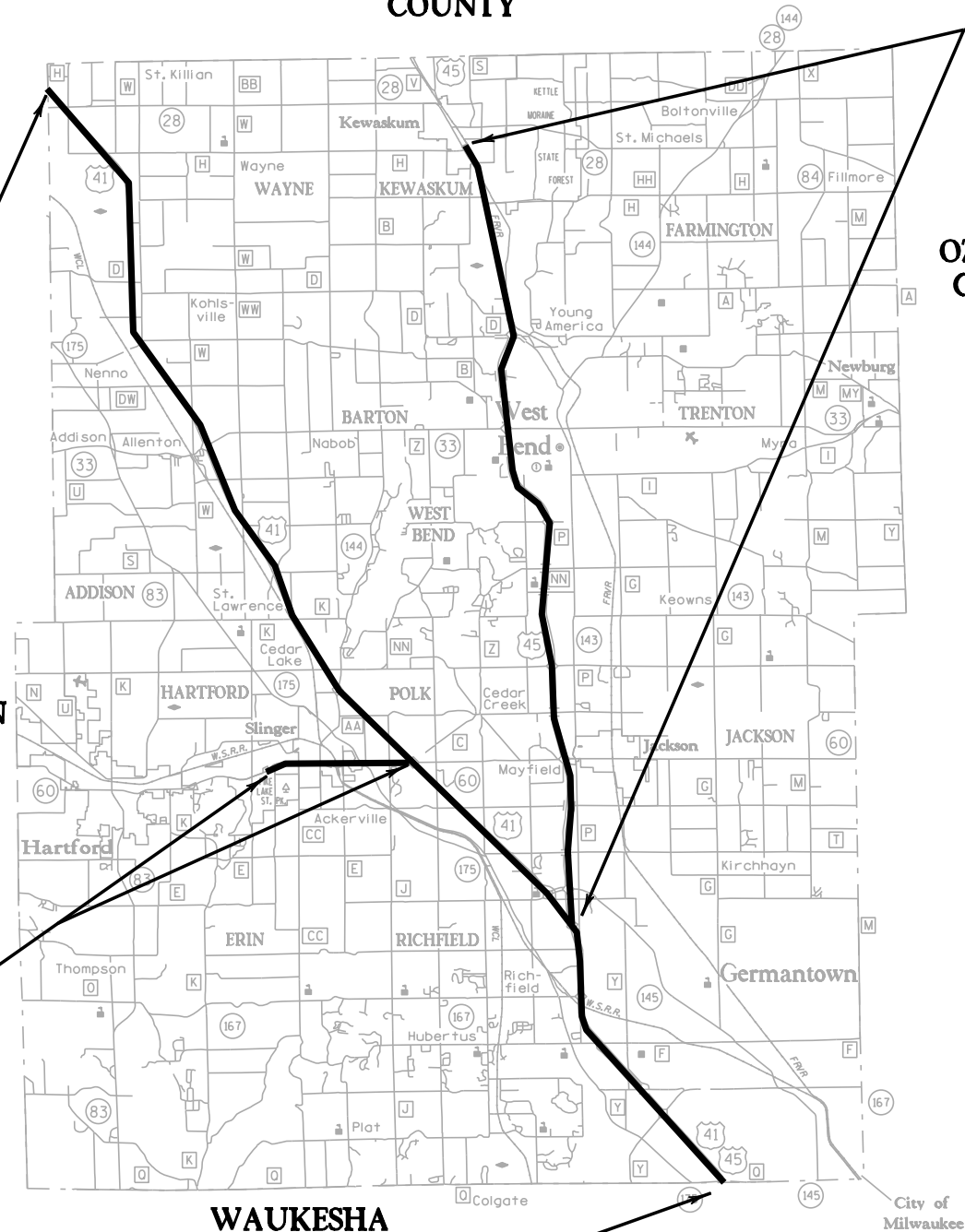
STH 60 (3.2 MILE)

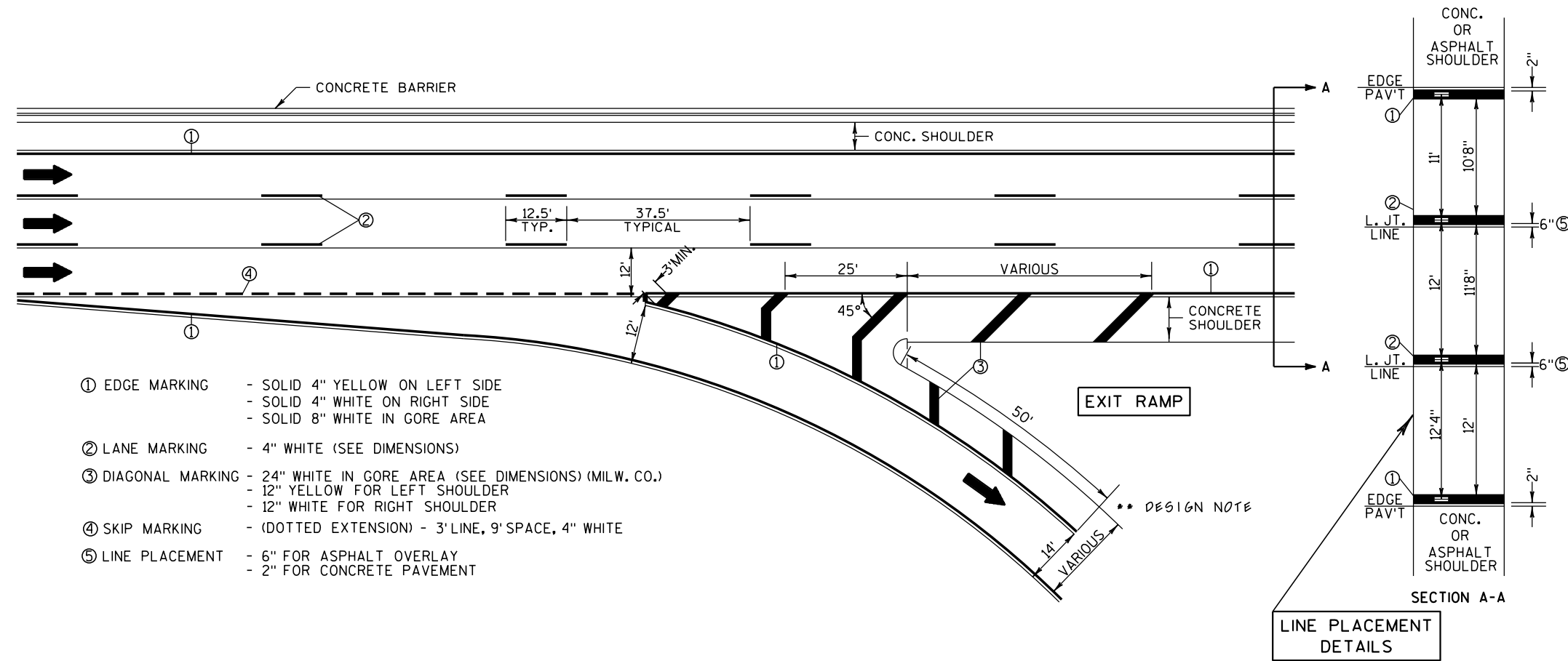
US 41
TO
POWDER HILL RD
LANELINE, EDGELINE

US 41 (28.4 MILE)

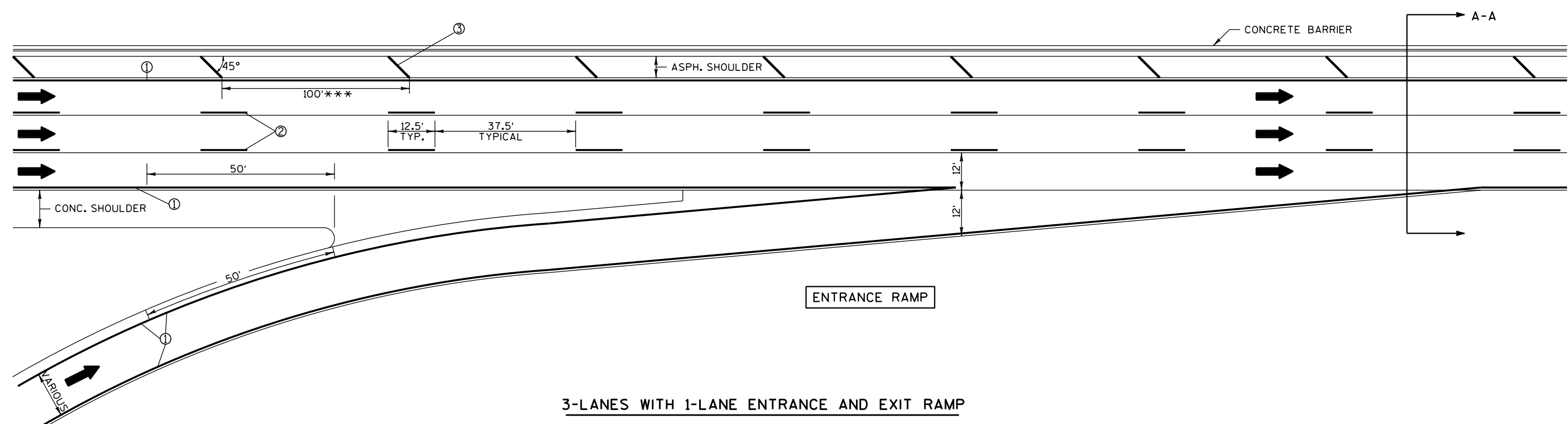
WAUKESHA COUNTY LINE (CTH Q)
TO
DODGE COUNTY (STH 28)
LANELINE, EDGELINE, 8" GORE,
SHORT SKIPS

WAUKESHA
COUNTY



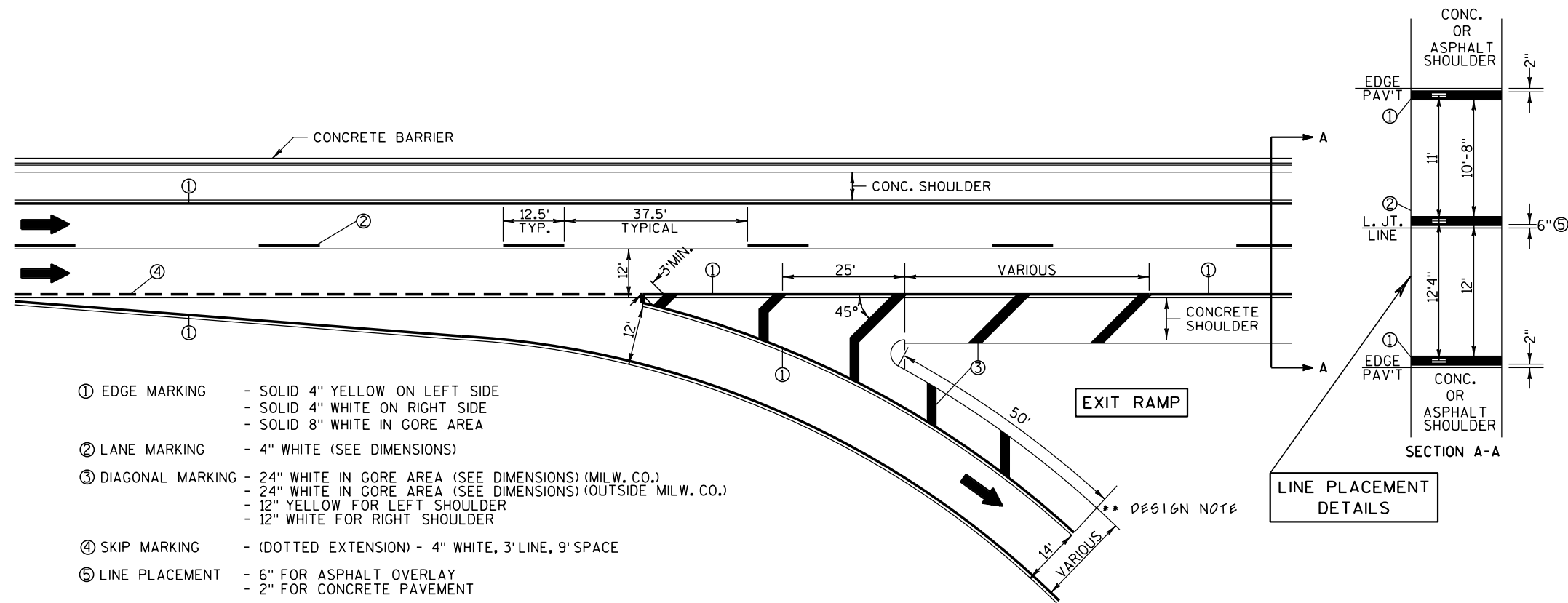


- NOTES:
1. THE 12" WIDE DIAGONAL SHOULDER MARKING SHALL BE USED ONLY WHERE THE ASPHALTIC CONCRETE SHOULDER ABUTS ASPHALTIC CONC. PAV'T. IF THERE ARE CONTINUOUS RUMBLE STRIPS, DO NOT USE DIAGONAL SHOULDER MARKING.
 2. WHERE THE DOTTED EXTENSION OF THE RIGHT EDGE LINE IS SHOWN ON THE PLAN, IT SHALL BE 4" WIDE, WITH A LINE SKIP PATTERN CONSISTING OF A 3' LONG LINE AND A 9' SKIP.
 3. PAVEMENT LANE MARKINGS SHALL BE LOCATED 6" OFF THE LONGITUDINAL JOINT OF THE UNDERLYING CONC. PAVEMENT.
 4. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
 5. SPOTTING FOR PAVEMENT LANE MARKINGS AND EDGE LINES SHALL BE 4"x4" PIECES OF REFLECTORIZED PAV'T MARKING TAPE SPACED AT 50' INTERVALS, INCIDENTAL TO PAV'T MARKING.
 6. SEE STANDARD DETAIL DRAWING FOR RAISED PAVEMENT MARKERS IN GORE AND LINE WIDTH TOLERANCES.



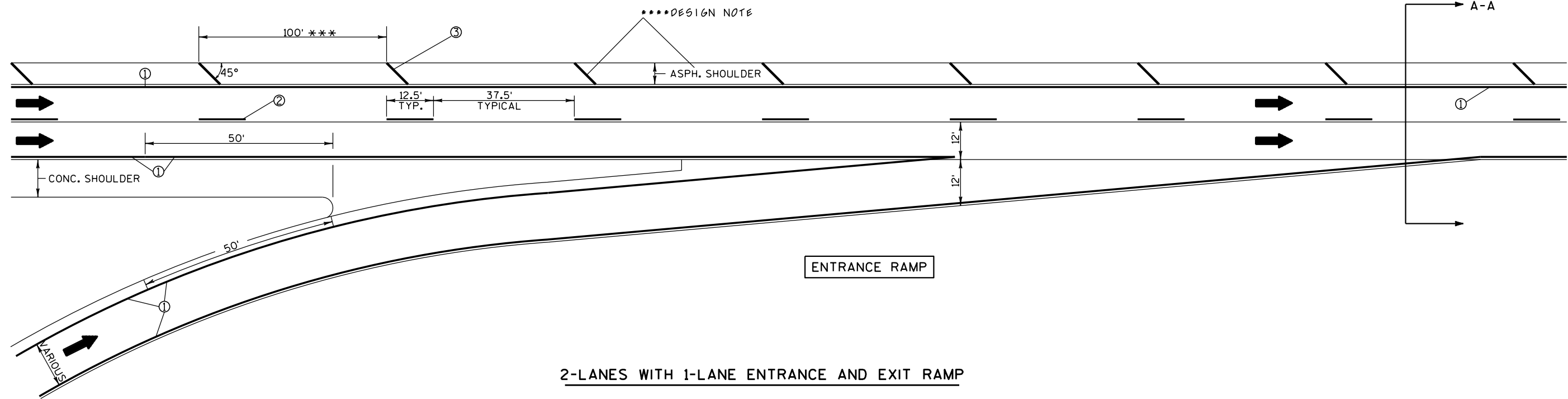
3-LANES WITH 1-LANE ENTRANCE AND EXIT RAMP

DESIGN NOTES ARE LOCATED ON LEVEL 63
GORES, FREEWAYS, & EXPRESSWAYS (EPOXY)



NOTES:

1. THE 12" WIDE DIAGONAL SHOULDER MARKING SHALL BE USED ONLY WHERE THE ASPHALTIC CONCRETE SHOULDER ABUTS ASPHALTIC CONC. PAV'T. IF THERE ARE CONTINUOUS RUMBLE STRIPS, DO NOT USE DIAGONAL SHOULDER MARKING.
2. WHERE THE DOTTED EXTENSION OF THE RIGHT EDGE LINE IS SHOWN ON THE PLAN, IT SHALL BE 4" WIDE, WITH A LINE SKIP PATTERN CONSISTING OF A 3' LONG LINE AND A 9' SKIP.
3. PAVEMENT LANE MARKINGS SHALL BE LOCATED 6" OFF THE LONGITUDINAL JOINT OF THE UNDERLYING CONC. PAVEMENT.
4. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
5. SPOTTING FOR PAVEMENT LANE MARKINGS AND EDGE LINES SHALL BE 4"x4" PIECES OF REFLECTORIZED PAV'T MARKING TAPE SPACED AT 50' INTERVALS, INCIDENTAL TO PAV'T MARKING.
6. SEE STANDARD DETAIL DRAWING FOR RAISED PAVEMENT MARKERS IN GORE AND LINE WIDTH TOLERANCES.



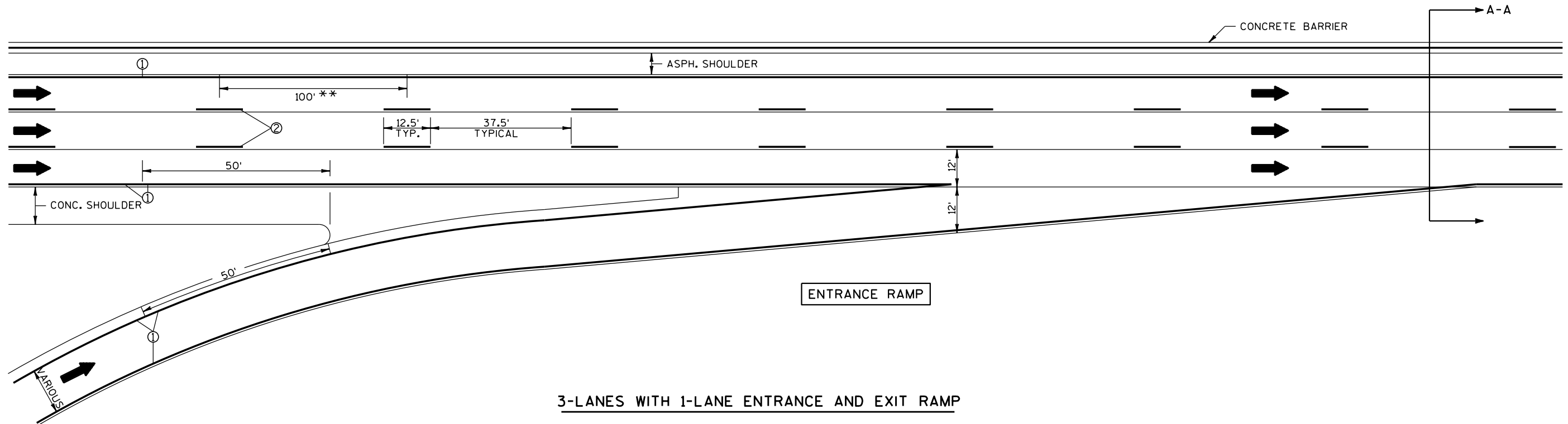
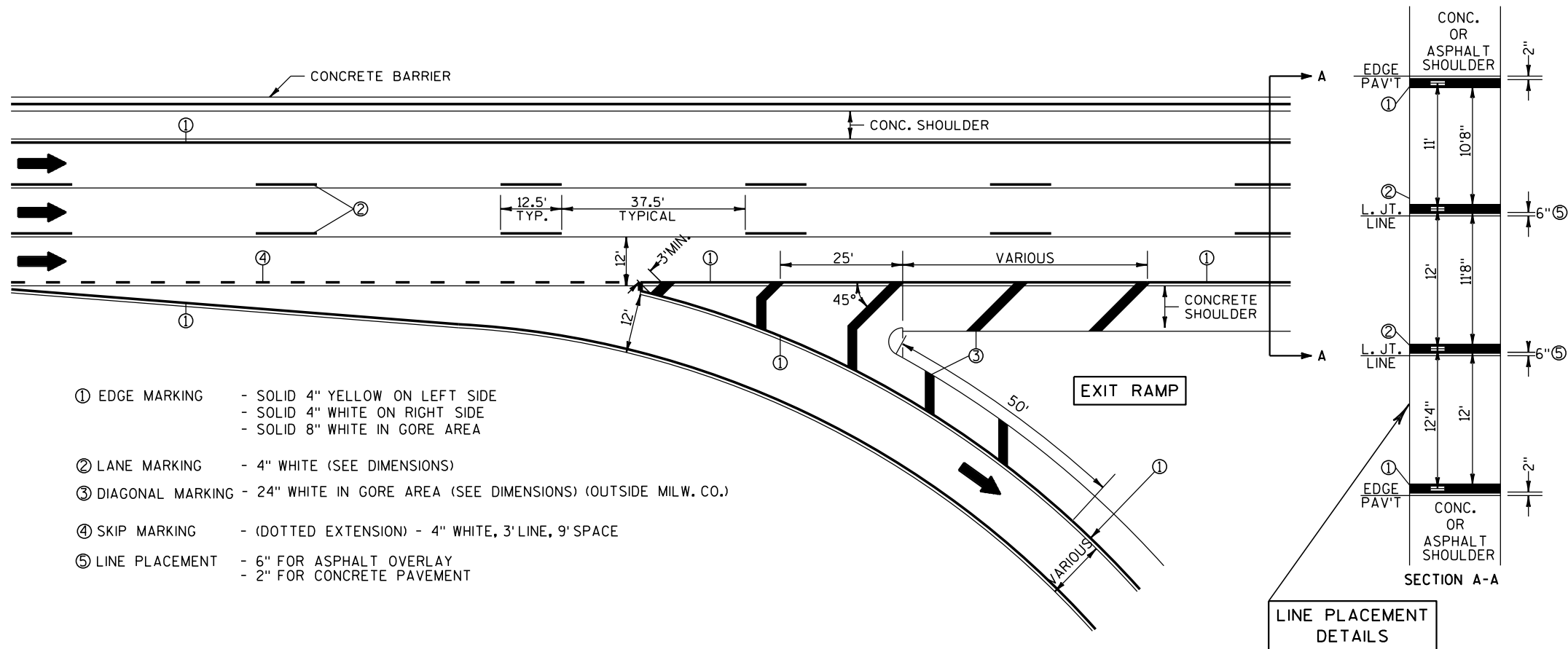
2-LANES WITH 1-LANE ENTRANCE AND EXIT RAMP

GORES, FREEWAYS, & EXPRESSWAYS (EPOXY)

RACINE, KENOSHA, WALWORTH, WALKESHA,
FOND DU LAC, OZAUKEE & WASHINGTON
COUNTIES

NOTES:

1. WHERE THE DOTTED EXTENSION OF THE RIGHT EDGE LINE IS SHOWN ON THE PLAN, IT SHALL BE 4" WIDE, WITH A LINE SKIP PATTERN CONSISTING OF A 3' LONG LINE AND A 9' SKIP.
2. PAVEMENT LANE MARKINGS SHALL BE LOCATED 6" OFF THE LONGITUDINAL JOINT OF THE UNDERLYING CONC. PAVEMENT.
3. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
4. SPOTTING FOR PAVEMENT LANE MARKINGS AND EDGE LINES SHALL BE 4"x4" PIECES OF REFLECTORIZED PAV'T MARKING TAPE SPACED AT 50' INTERVALS, INCIDENTAL TO PAV'T MARKING.
5. SEE STANDARD DETAIL DRAWING FOR RAISED PAVEMENT MARKERS IN GORE AND LINE WIDTH TOLERANCES.



GORES, FREEWAYS, & EXPRESSWAYS

PROJECT NO: 1000-77-11

HWY: VARIOUS

COUNTY: OUTSIDE MILWAUKEE CO.

EPOXY PAVEMENT MARKING, RAMPS

SHEET

E

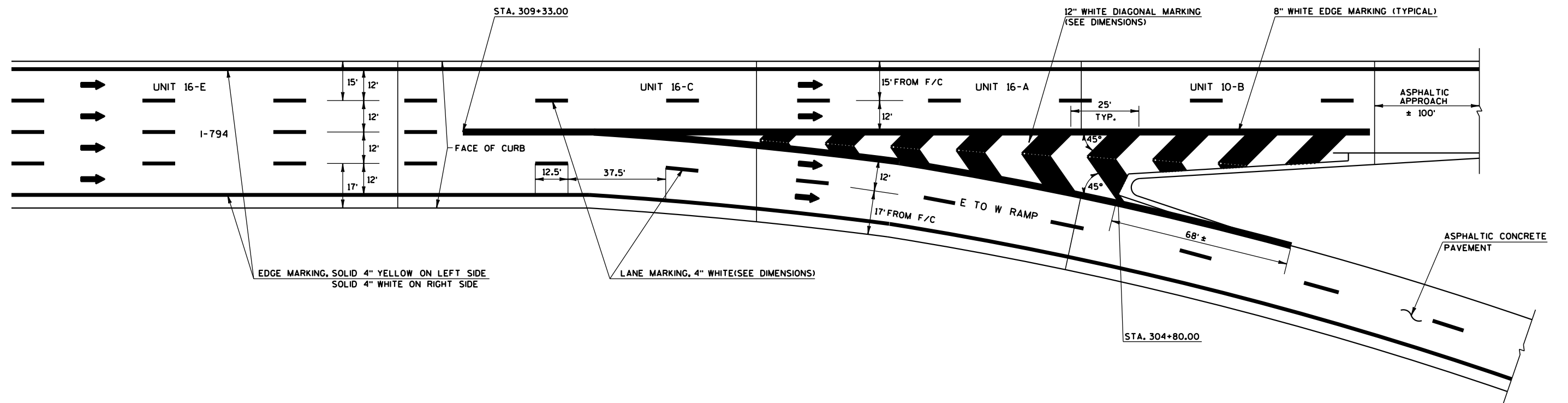
NOTES: PAVEMENT LANE MARKINGS AND EDGE LINES SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE "WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

GORE MARKING SHALL BE PROVIDED AT ALL LOCATIONS AND SHALL DUPLICATE THE EXISTING GORE MARKINGS BEFORE RESURFACING OR AS DIRECTED BY THE ENGINEER.

ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

SPOTTING FOR PAVEMENT LANE MARKINGS AND EDGE LINES SHALL BE 4" X 4" PIECES OF REFLECTORIZED PAV'T MARKING TAPE SPACED AT 50' INTERVALS.

TEMPORARY PAVEMENT MARKING SHALL BE IN PLACE PRIOR TO COMPLETION OF FINAL ROLLING OF THE BINDER COURSE.



MAJOR SPLIT FREEWAY TO FREEWAY

PROJECT NO:1000-77-11

HWY: VARIOUS

COUNTY: WASHINGTON

EPOXY PAVEMENT MARKING DETAIL

SHEET

E

FILE NAME : J:\projects\d2_pavmark\d2_10007711\PMGORE-DETAILS.DGN

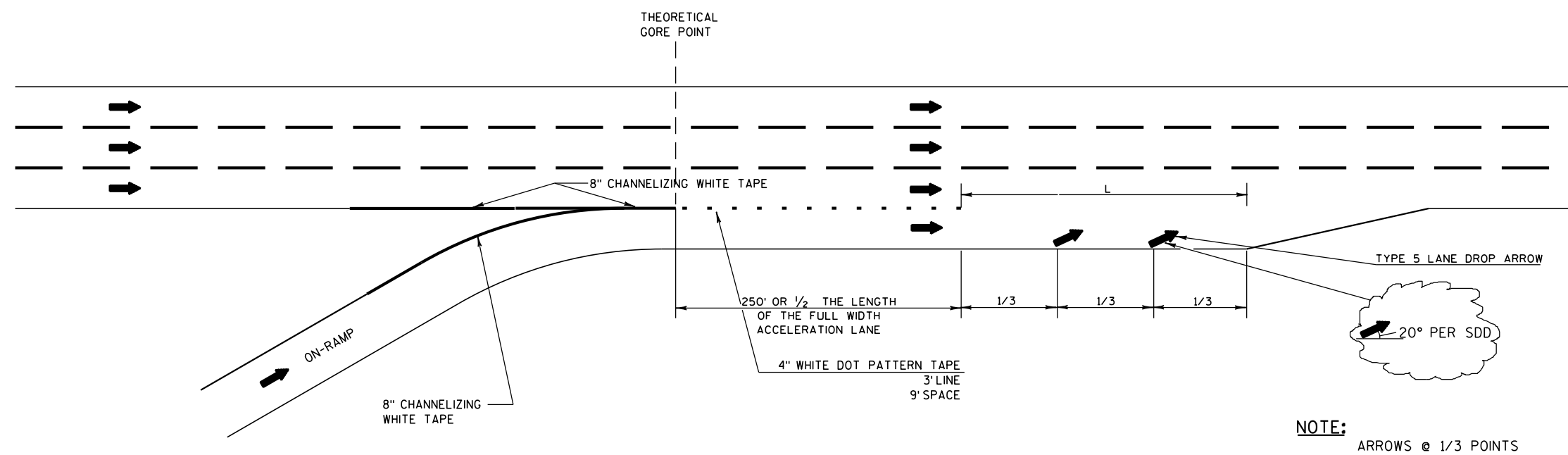
PLOT DATE : 29-OCT-2013 07:25

PLOT BY : mscpp1

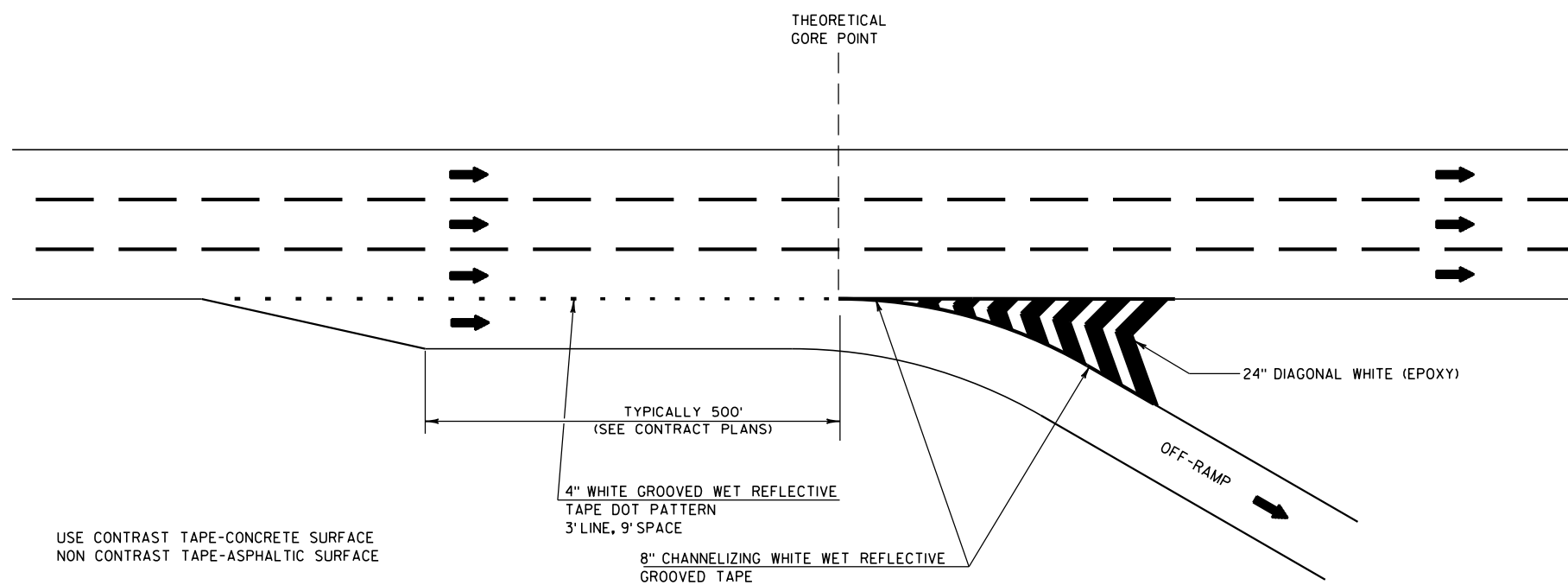
PLOT NAME :

PLOT SCALE : 200:1

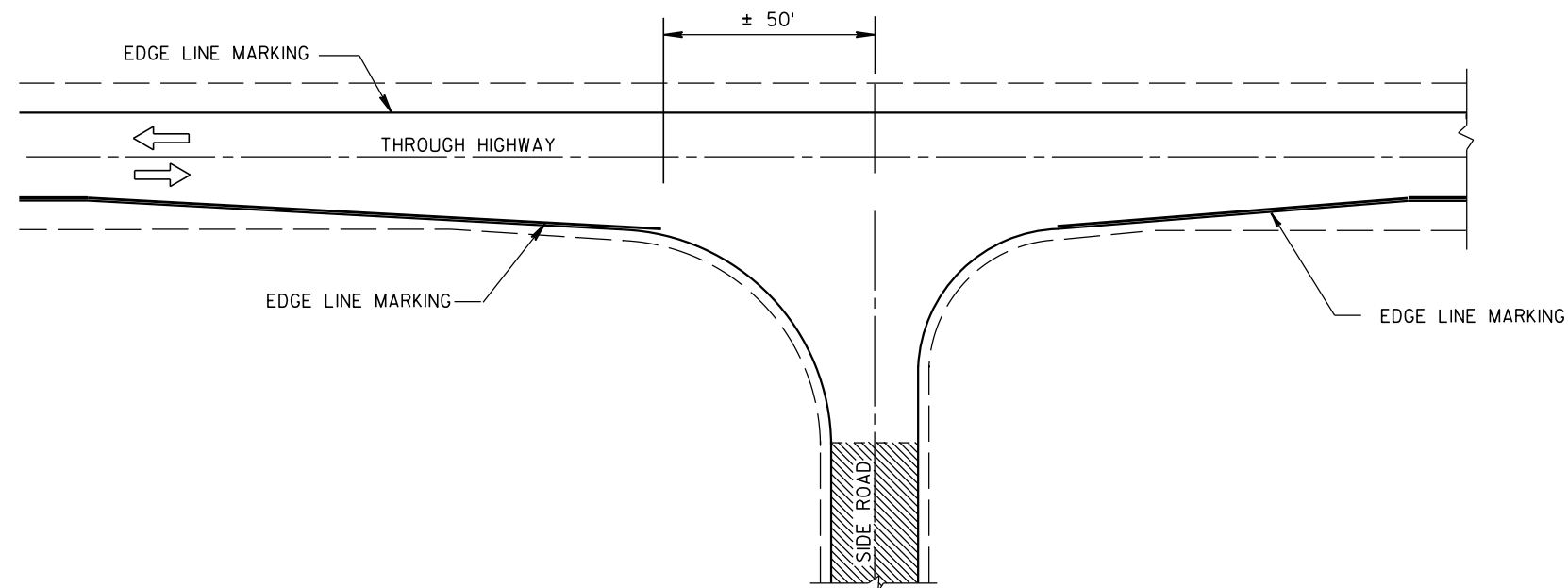
WISDOT/CADDS SHEET 42



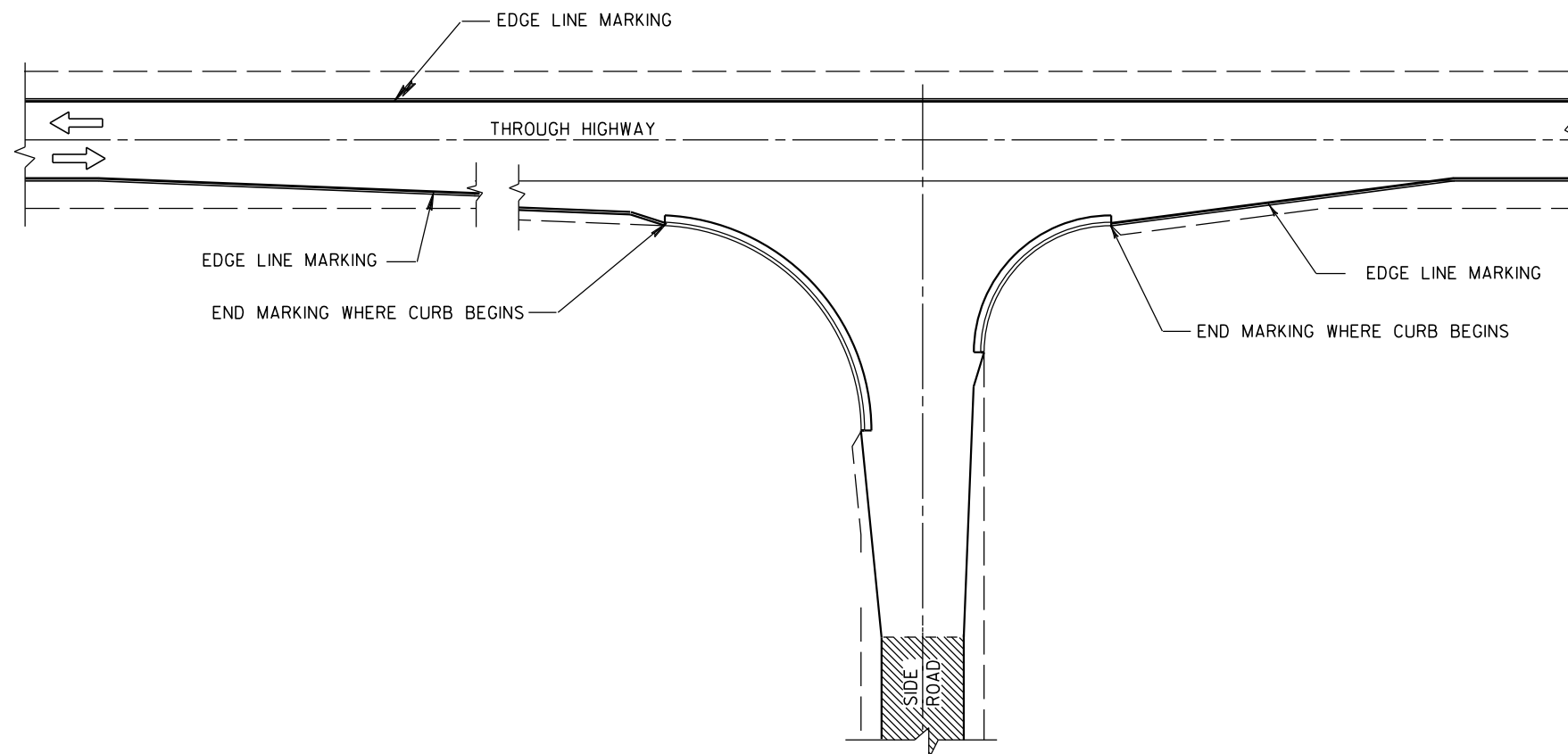
SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ON-RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL OFF-RAMP

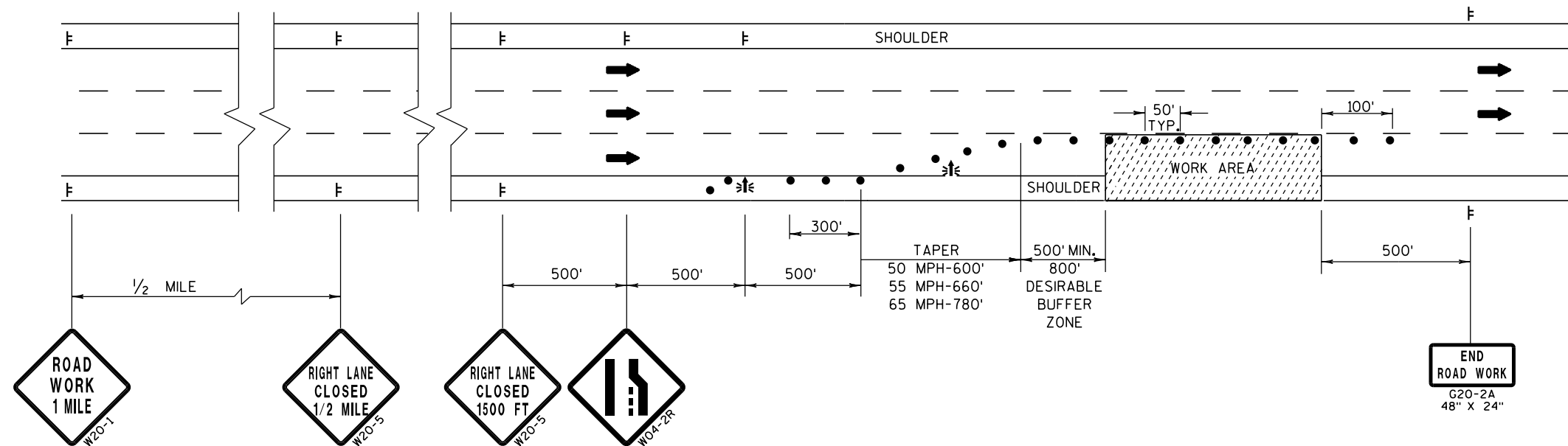


MINOR INTERSECTION WITHOUT CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)

TYPICAL ONE-LANE CLOSURE LESS THAN 7 DAYS



TRAFFIC CONTROL NOTES

RIGHT LANE CLOSURE SHOWN, LEFT LANE CLOSURE SIMILAR.

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

FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A WARNING LIGHT, TYPE C (STEADY BURN).

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

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

WHEN A 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 DIRECTED BY THE ENGINEER.

ALL SHORT TERM LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROWBOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

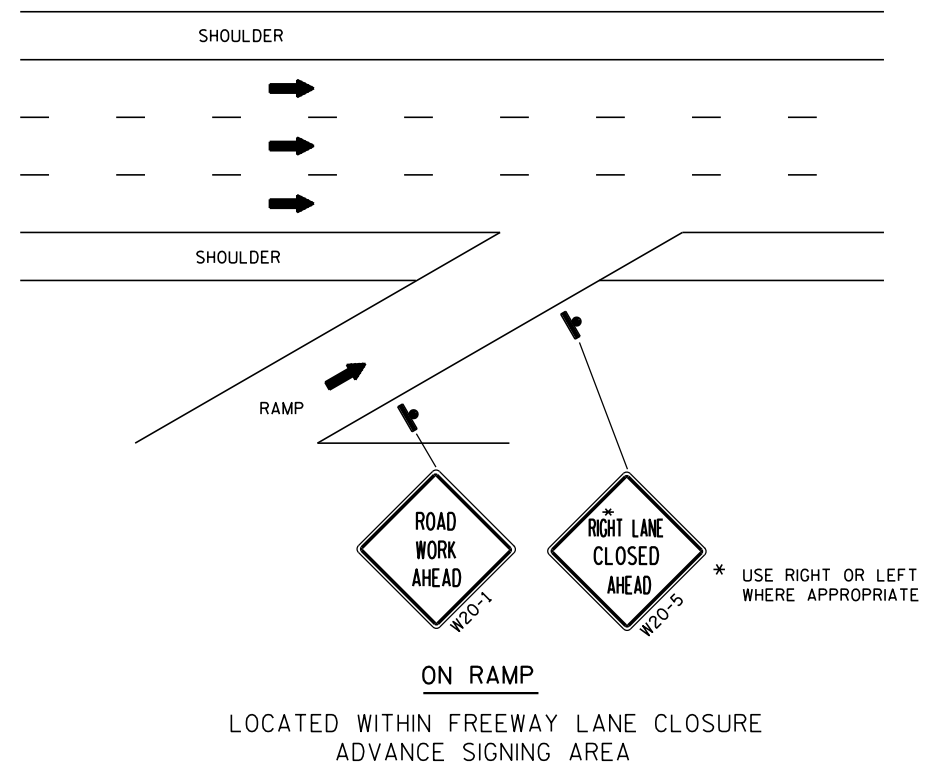
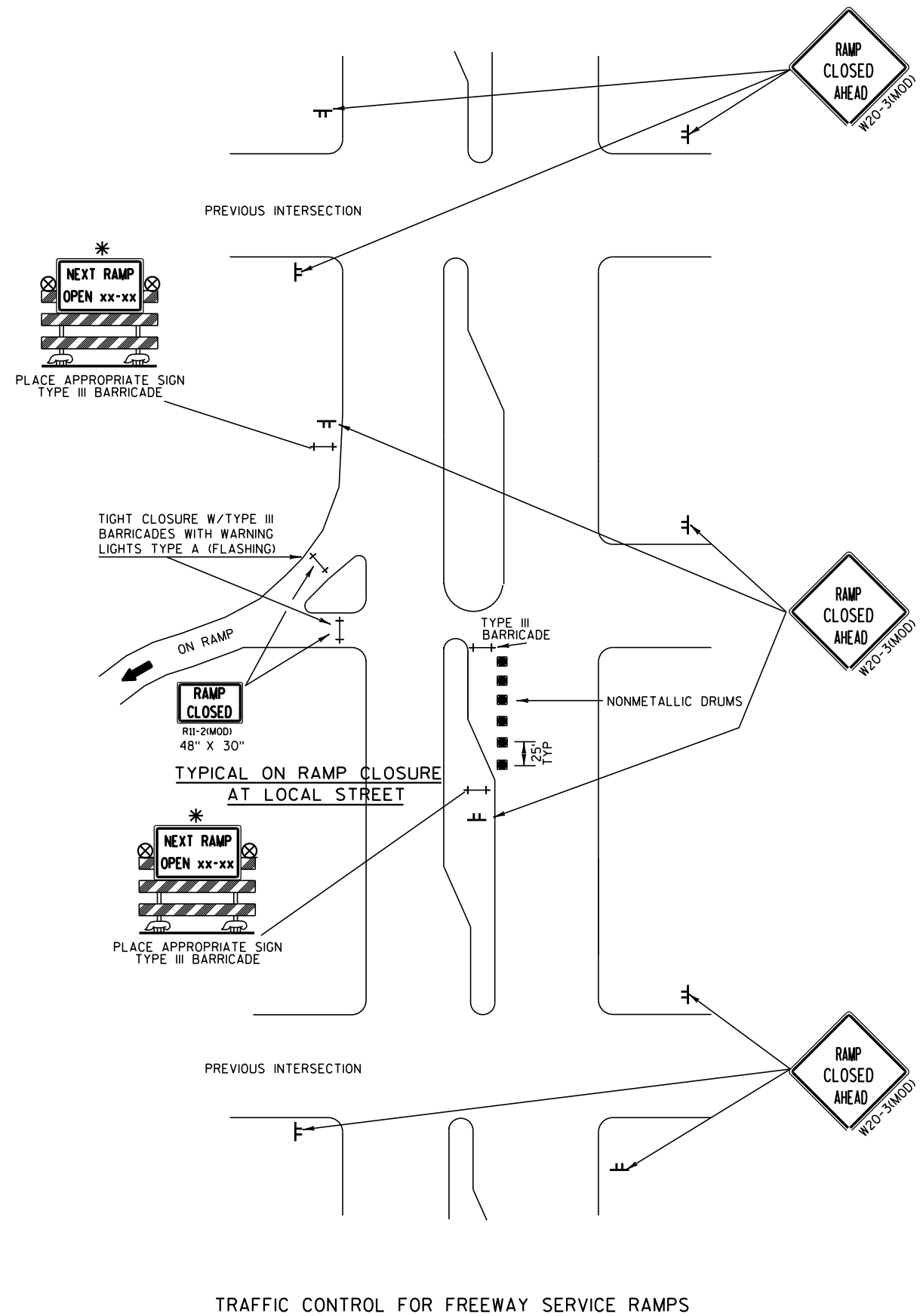
IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROWBOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500' IN FRONT OF DRUMS.

LEGEND

- DRUM
- ⌈ SIGN ON TEMPORARY SUPPORT
- ➔ ARROW BOARD
- ➔ DIRECTION OF TRAFFIC
- ▨ WORK AREA

SPEEDS 45 OR GREATER

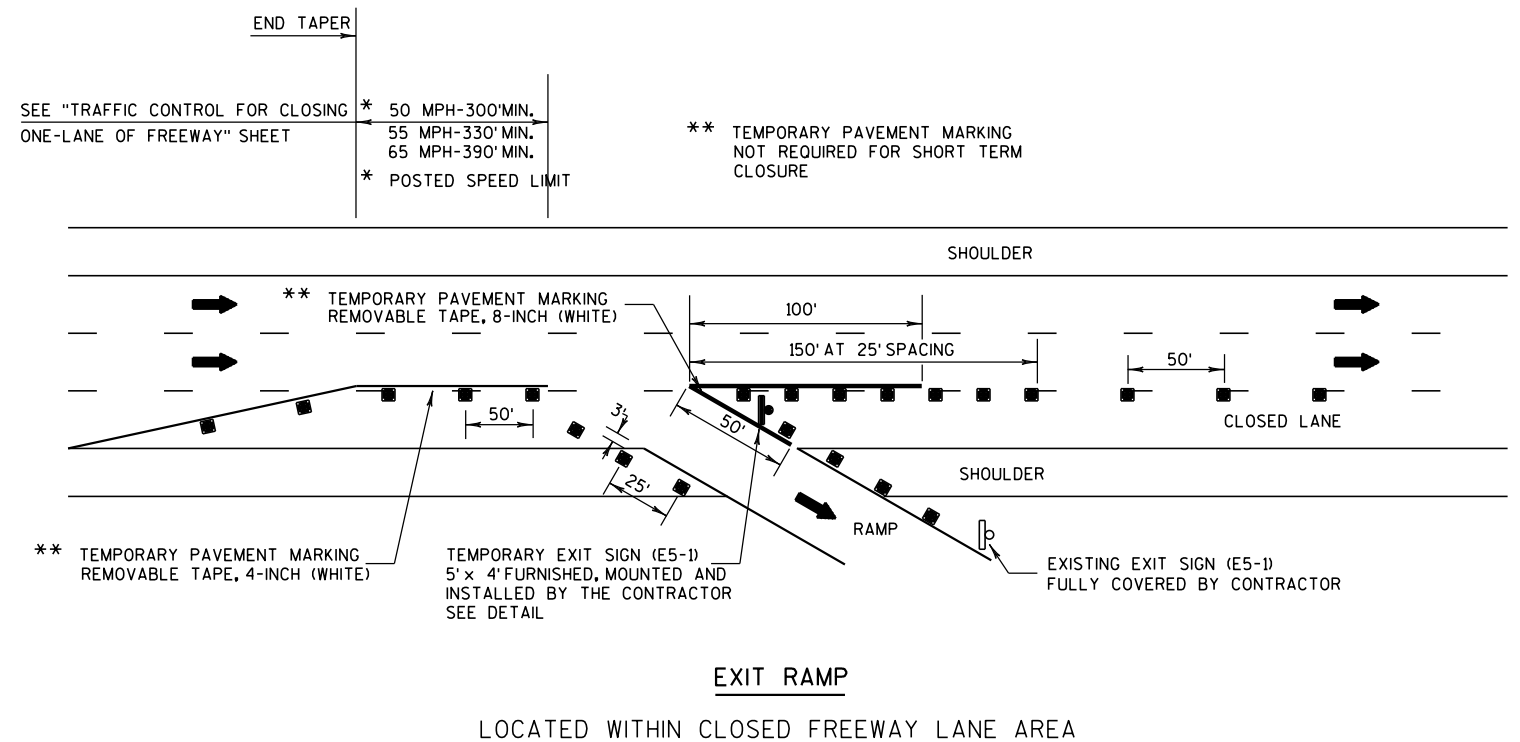
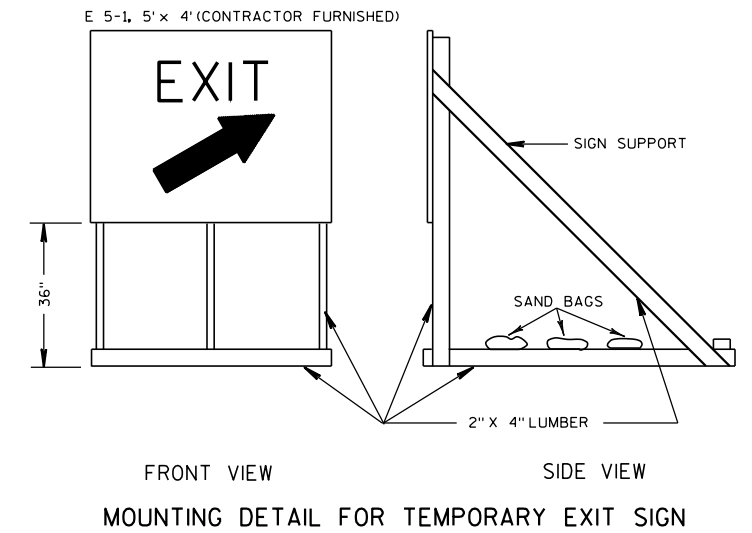


LEGEND

- — DRUM
- ⌋ — SIGN ON FIXED SUPPORT
- ⊗ — WARNING LIGHT, TYPE A (FLASHING)

GENERAL NOTES

1. ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.
2. FOR SHORT TERM (3 DAYS OR LESS) FREEWAY LANE CLOSURES TEMPORARY SIGN SUPPORTS MAY BE USED. REMOVE OR COVER SIGNS WHEN NOT IN USE.



GENERAL NOTES FOR TRAFFIC CONTROL

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

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

WHEN A 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 DIRECTED BY THE ENGINEER.

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

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

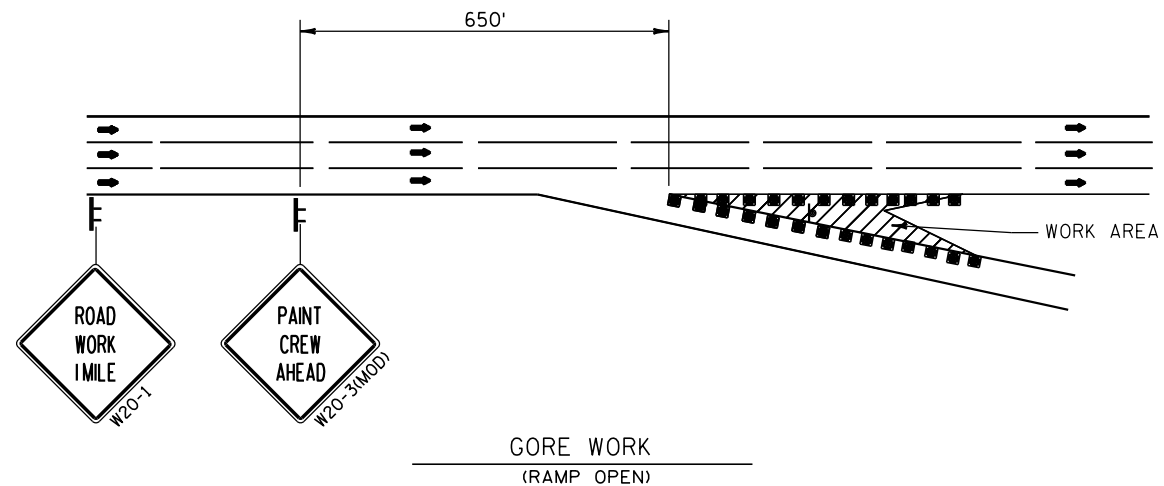
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROWBOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500' IN FRONT OF DRUMS.

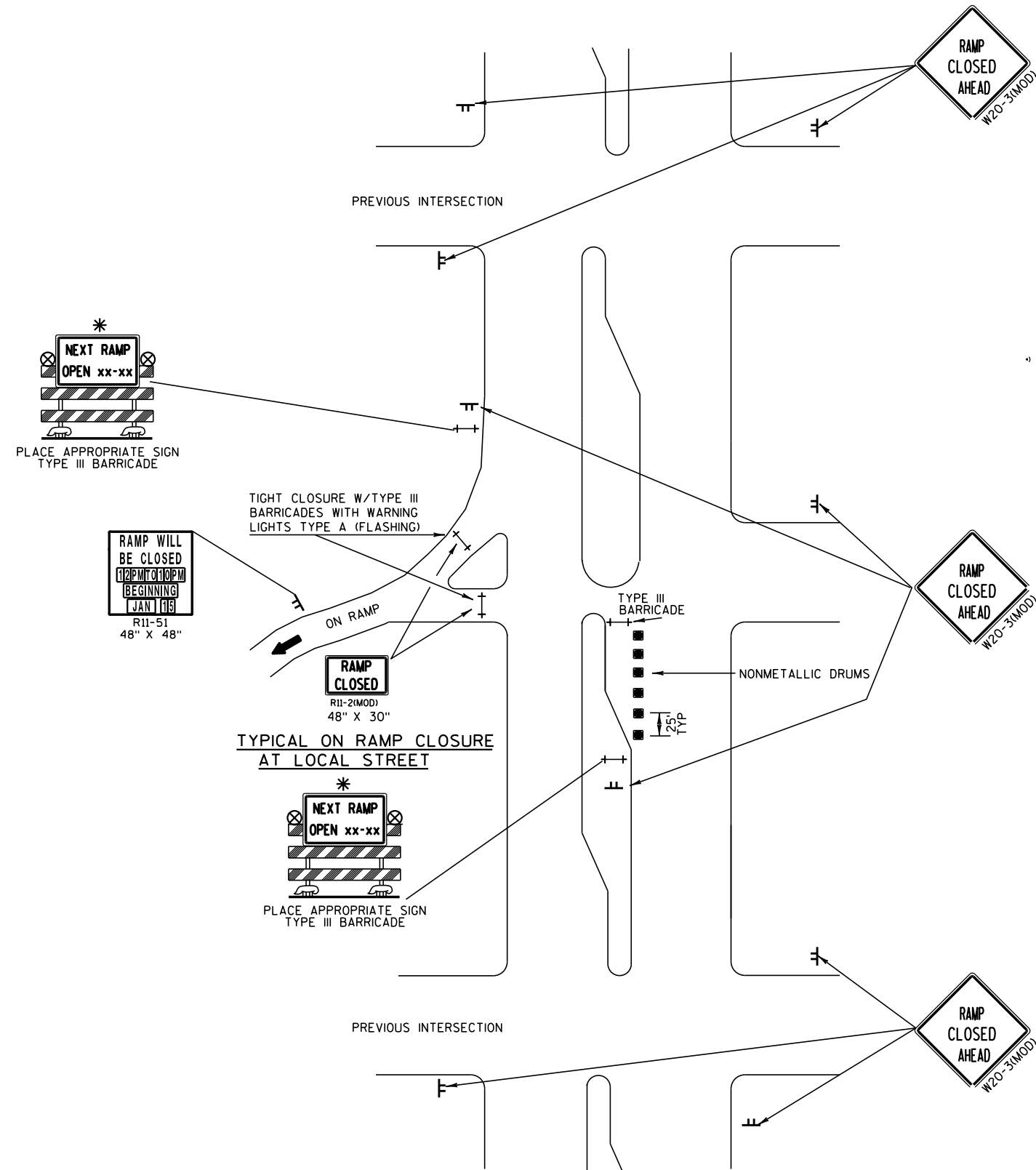
SPECIAL APPLICATION NOTES

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROWBOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

LEGEND

- ┌ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DEVICE



**TRAFFIC CONTROL NOTES**

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

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

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

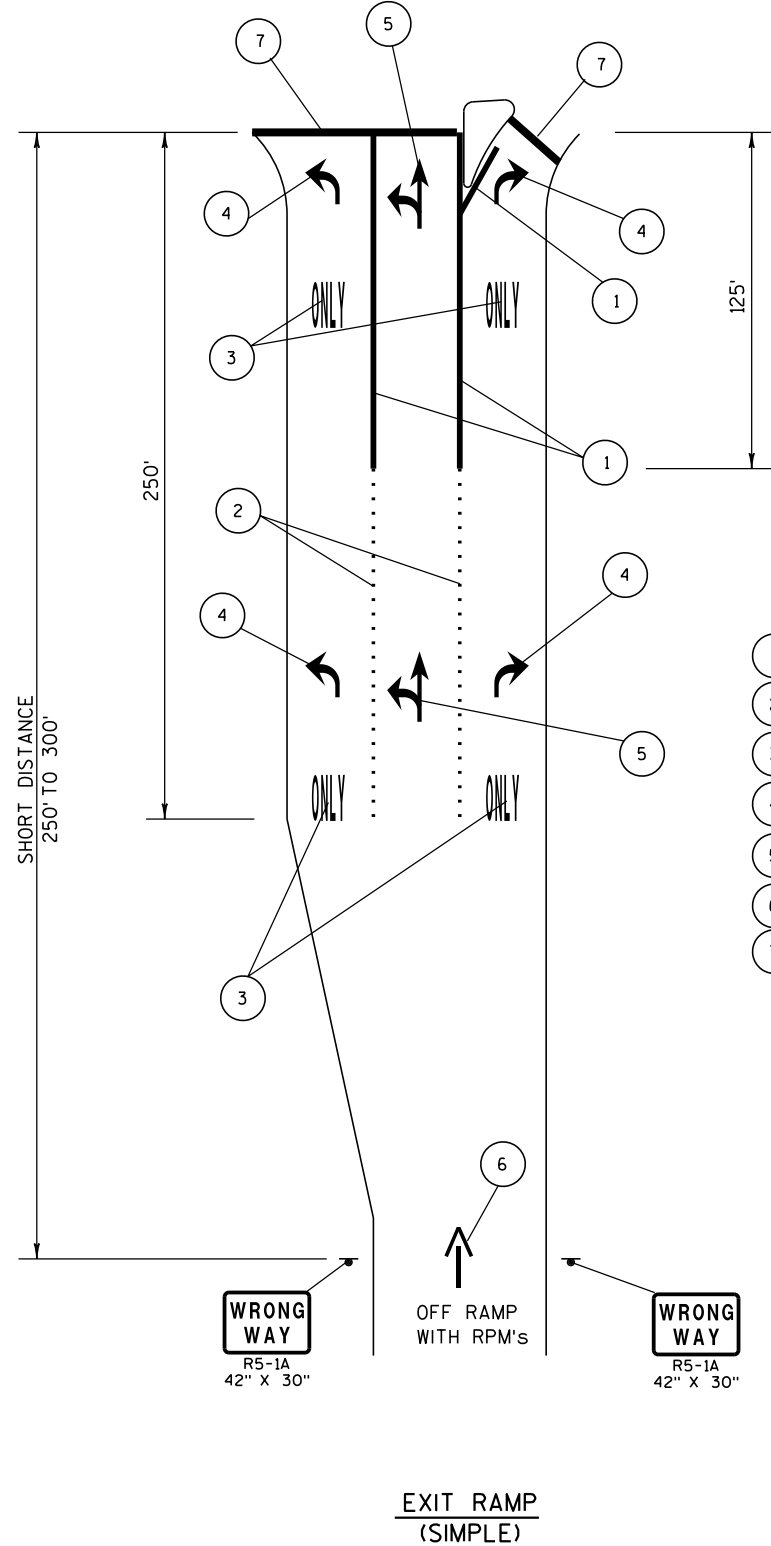
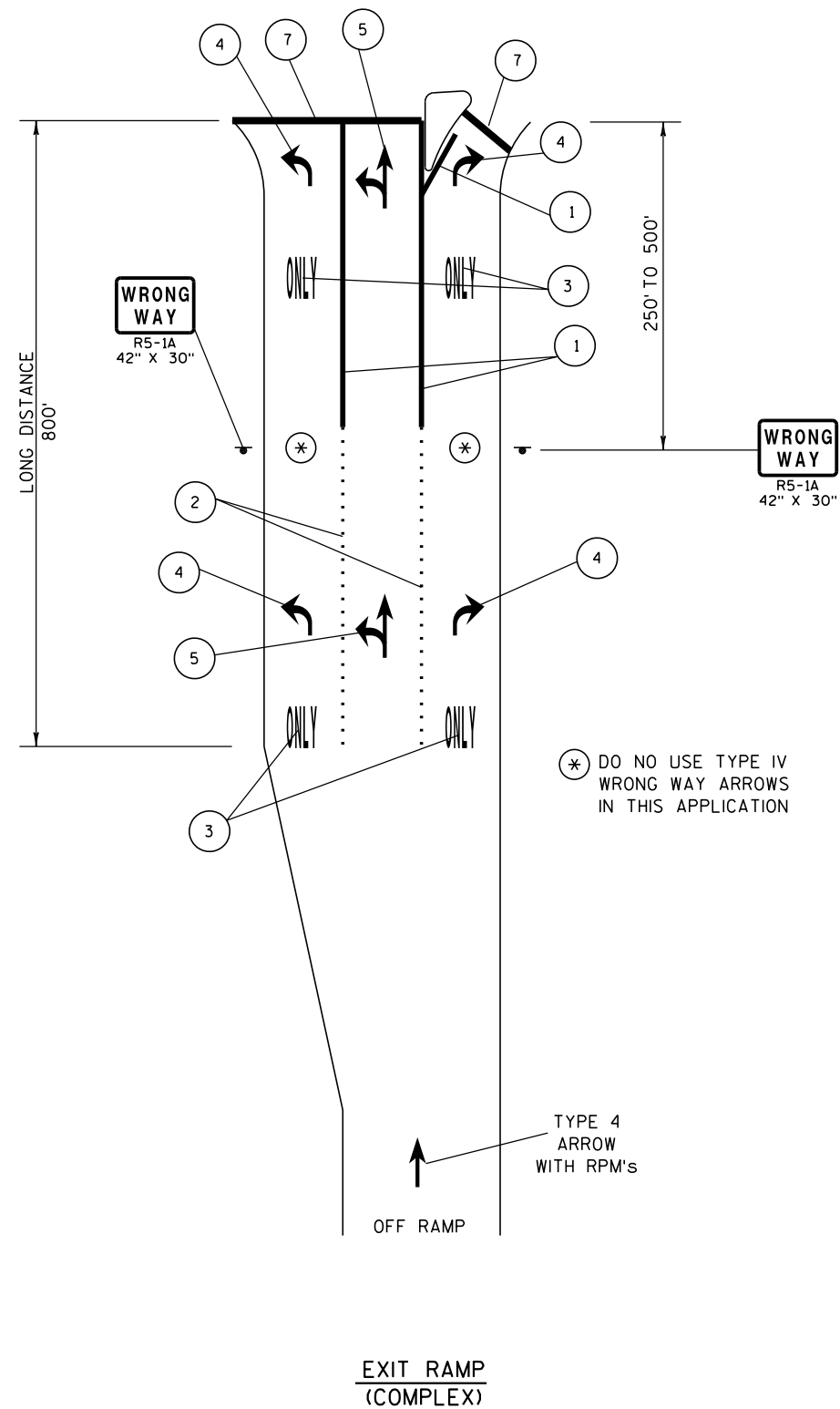
*** DESIGNER NOTE:**

CONTACT TRAFFIC OPERATIONS FOR FIXED MESSAGE SIGN REQUIREMENTS.

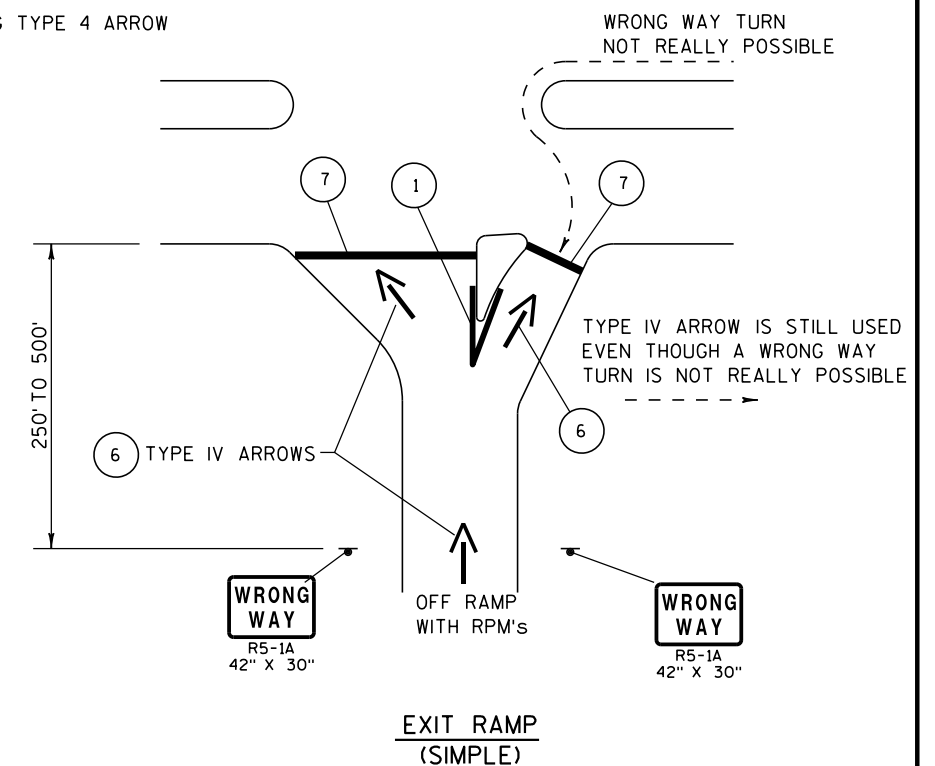
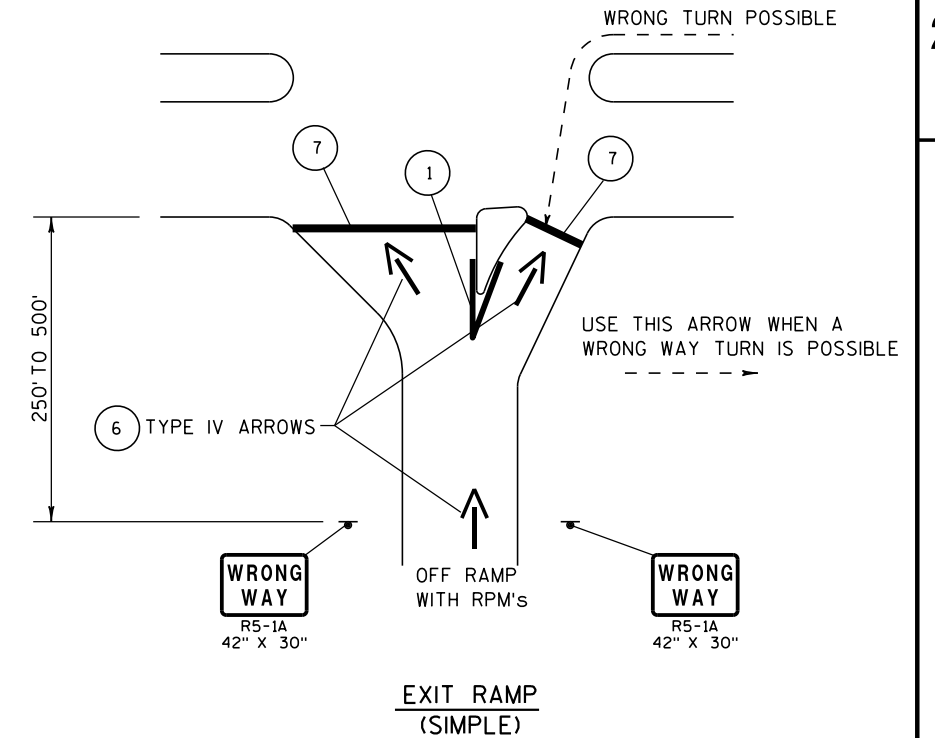
LEGEND

- DRUM WITH WARNING LIGHT, TYPE C
- DRUM
- ⊥ SIGN ON TEMPORARY SUPPORT FOR SHORT TERM 3 DAYS OR LESS
- ⊥ TYPE III BARRICADE
- ⊗ WARNING LIGHT, TYPE A (FLASHING)

TRAFFIC CONTROL FOR ON-RAMP CLOSURE (SHORT TERM ONLY)



- LEGEND**
- 1 PAVEMENT MARKING 8" CHANNELIZING WHITE
 - 2 PAVEMENT MARKING 8" WHITE (3' LINE, 9' SPACE)
 - 3 PAVEMENT MARKING WORDS
 - 4 PAVEMENT MARKING TYPE 2 ARROW
 - 5 PAVEMENT MARKING TYPE 3 ARROW
 - 6 PAVEMENT MARKING TYPE 4 ARROW
 - 7 18" STOP BAR



DATE 11FEB14			E S T I M A T E O F Q U A N T I T I E S		
LINE			1000-77-11		
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	619.1000	MOBILIZATION	EACH	1.000	1.000
0020	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1000-77-11	EACH	1.000	1.000
0030	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	1,366,135.000	1,366,135.000
0040	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	114,283.000	114,283.000
0050	646.0600	REMOVING PAVEMENT MARKINGS	LF	1,000.000	1,000.000

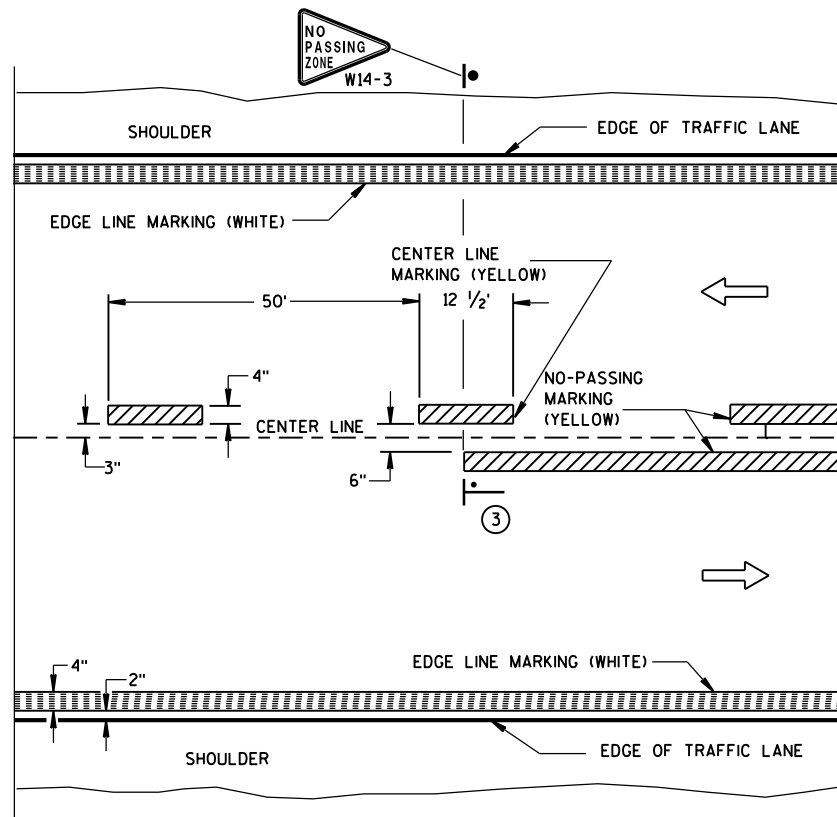
EPOXY PAVEMENT MARKING - 2014 VAR. HWY (1000-77-11) SE REGION				Category: 0010							
				646.0106			646.0126				
				EPOXY PAVEMENT MARKING				EPOXY	EPOXY		
				4-INCH	4-INCH	4-INCH	4-INCH	8-INCH	8-INCH		
				YELLOW	WHITE	LANE	MINI	--	--		
				EDGE LINE	EDGE LINE	LINE	SKIPS	GORES	GORES		
				L.F.	L.F.	L.F.	L.F.	L.F.	L.F.		
County	Hwy	Location	Total Miles	MAIN LINE		RAMPS		MAIN LINE	INFORMATION		
Washington Co	US 41	Wauk Co (CTH Q) to Dodge Co (STH 28)	28.4	257,873	300,696	88,212					
		Interchanges									
		CTH Q		1,743	4,013	127	1,901				
		STH 167 East		3,115	7,603	296	3,908				
		STH 167 West		3,168	7,920	296	4,435				
		STH 45					3,802				
		STH 145		3,591	8,501	243	4,541				
		STH 60		3,700	9,724	201	4,858				
		** STH 144		0	0	0	0	** Exclude STH 144 Interchange 2014 Construction			
		* CTH K		5,227	10,137	64	6,336	* 1.2 miles S of K to1.4 miles N of K Skips are Tape Do Not Epoxy 4" Skips in this section			
								Both directions			
		STH 33		4,434	9,029	84	6,018				
		CTH D		5,175	10,613	74	6,969				
A. SUBTOTALS			28.4	288,026	368,236	88,212	1,385	42,768	0		
									INFORMATION		
Washington Co	US 45	US 41 to CTH H-West Jct (Mohawk Rd)	17.2	177,248	149,180	41,946		4,859	** Mohawk Rd to Friendly Dr - Skips are Tape Do Not Epoxy 4" Skips in this section Both directions		
		Interchanges									
		CTH D		4,540	8,819	272	4,224				
		STH 33		3,485	8,236	232	4,646				
		Paradise Rd		4,488	9,346	211	4,858				
		CTH PV		4,277	8,976	264	3,802				
		STH 60		3,432	8,184	243	4,646				
		STH 145		3,485	8,342	243	4,330				
		B. SUBTOTALS			17.2	200,955	201,083	41,946	1,465	26,506	4,859
PROJECT NO:1000-77-11		HWY:VARIOUS		COUNTY: MILWAUKEE \ WASHINGTON		PAVEMENT MARKING QUANTITIES			SHEET:	E	

EPOXY PAVEMENT MARKING - 2014										Category: 0010
VAR. HWY (1000-77-11)										
SE REGION										
				646.0106		646.0126				
				EPOXY PAVEMENT MARKING				EPOXY	EPOXY	
				4-INCH	4-INCH	4-INCH	4-INCH	8-INCH	8-INCH	
				YELLOW	WHITE	LANE	MINI	--	--	
				EDGE LINE	EDGE LINE	LINE	SKIPS	GORES	GORES	
				L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	
County	Hwy	Location	Total Miles	MAIN LINE		RAMPS		MAIN LINE	INFORMATION	
INFORMATION										
Milwaukee Co.	US 41	900' S. of Good Hope Rd to Wauk Co. Line (124 str.)	1.3	7,656	6,284	4,475	Start 4" Skips, Yellow & White Edgelines with Good Hope Rd Gores Both directions			
		Interchanges								
		CTH D		3,446	14,419		433	4,012		
		STH 33		3,802			243	3,167		
C. SUBTOTALS			1.3	14,904	20,703	4,475	676	7,179	0	
INFORMATION										
Milwaukee Co.	STH 341	I-94 (South End) to STH 59 (W National Ave)	.9	10,296	11,327	4,313				
		Miller Way		1,420			638	2218		
		I-94					275	3,011		
		STH 59			275				317	
D. SUBTOTALS			.9	11,716	11,602	4,313	913	5,229	317	
INFORMATION										
Milwaukee Co.	STH181	Florist Ave to Milw Co. (Co. Line Rd)	4.5	4,805	12,355	19,576	171	20,891		
E. SUBTOTALS			4.5	4,805	12,355	19,576	171	0	20,891	
INFORMATION										
Washington Co	STH 60	US 41 to Powder Hill Rd	3.2	19,221	28,989	20271	137	1690	4844	All Markings
Include bridge deck over 41										
F. SUBTOTALS			3.2	19,221	28,989	20,271	137	1,690	4,844	

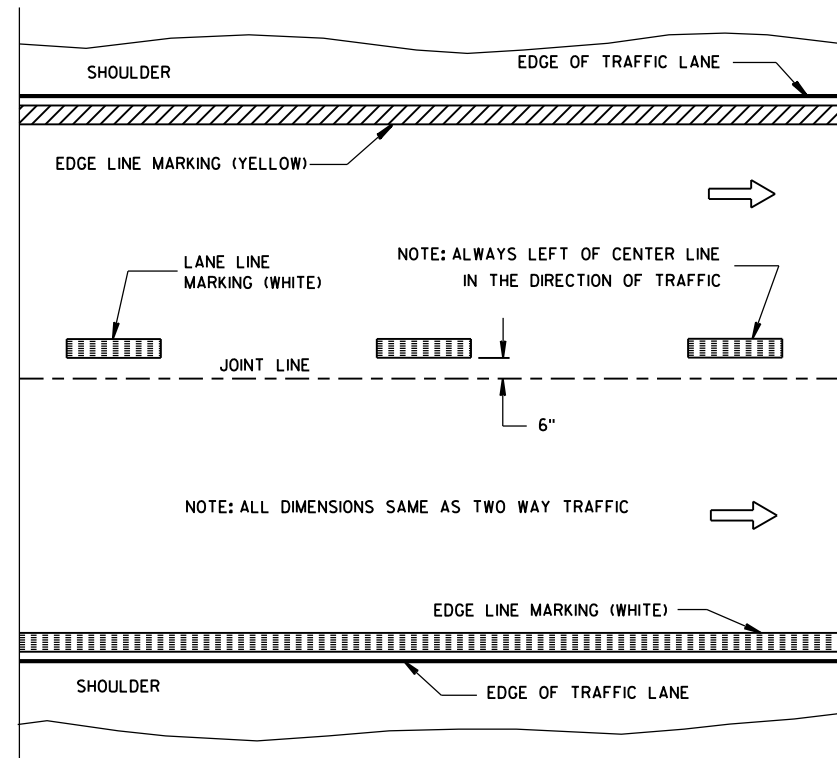
Epoxy Pavement Marking 2014 Var. Hwy (1000-77-11) SE Region				646.0106				646.0126		Category : 0010
				EPOXY PAVEMENT MARKING				EPOXY	EPOXY	
				4-INCH	4-INCH	4-INCH	4-INCH	8-INCH	8-INCH	
				YELLOW	WHITE	LANE	MINI	--	--	
				EDGE LINE	EDGE LINE	LINE	SKIPS	GORES	GORES	
County	Hwy	Location	Miles	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	
Washington Co	US 41	Wauk Co (CTH Q) to Dodge Co (STH 28)	28.4	288,026	368,236	88,212	1,385	42,768	0	A. SUBTOTALS
Washington Co	US 45	US 41 to CTH H-West Jct (Mohawk Rd)	17.2	200,955	201,083	41,946	1,465	26,506	4,859	B. SUBTOTALS
Milwaukee Co.	US 41	900' S.of GoodHope Rd to Wauk Co.Line(124str)	1.3	14,904	20,703	4,475	676	7,179	0	C. SUBTOTALS
Milwaukee Co.	STH 341	I-94 (South End) to STH 59 (W National Ave)	.9	11,716	11,602	4,313	913	5,229	317	D. SUBTOTALS
Milwaukee Co.	STH181	Florist Ave to Milw Co. (Co. Line Rd)	4.5	4,805	12,355	19,576	171	0	20,891	E. SUBTOTALS
Washington Co	STH 60	US 41 to Powder Hill Rd	3.2	19,221	28,989	20271	137	1690	4844	F. SUBTOTALS
SUBTOTALS			55.5	539,627	642,968	178,793	4,747	83,372	30,911	
FINAL TOTALS				1,366,135				114,283		

Standard Detail Drawing List

15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C19-02B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-02C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-01C	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY

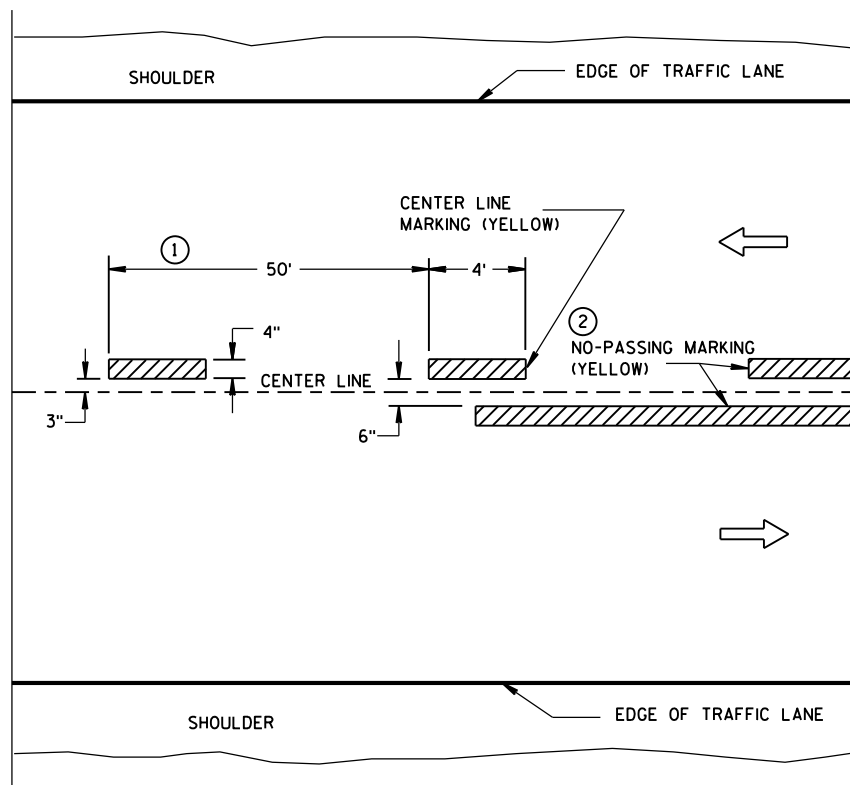


TWO WAY TRAFFIC

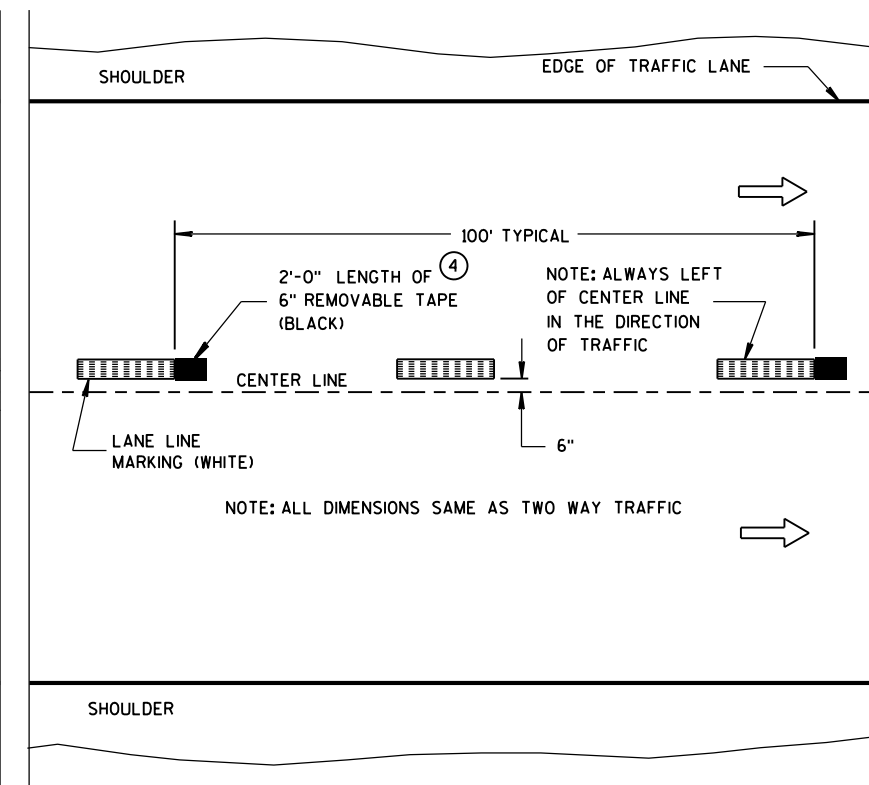


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

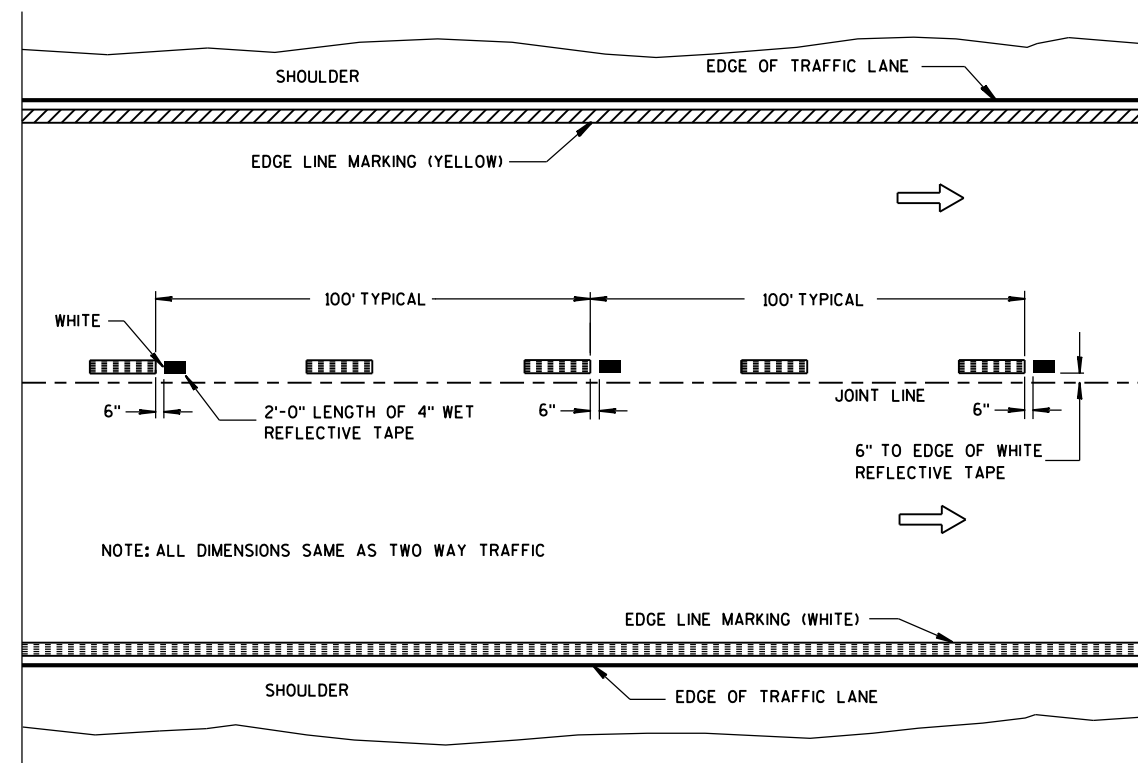
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

LEGEND

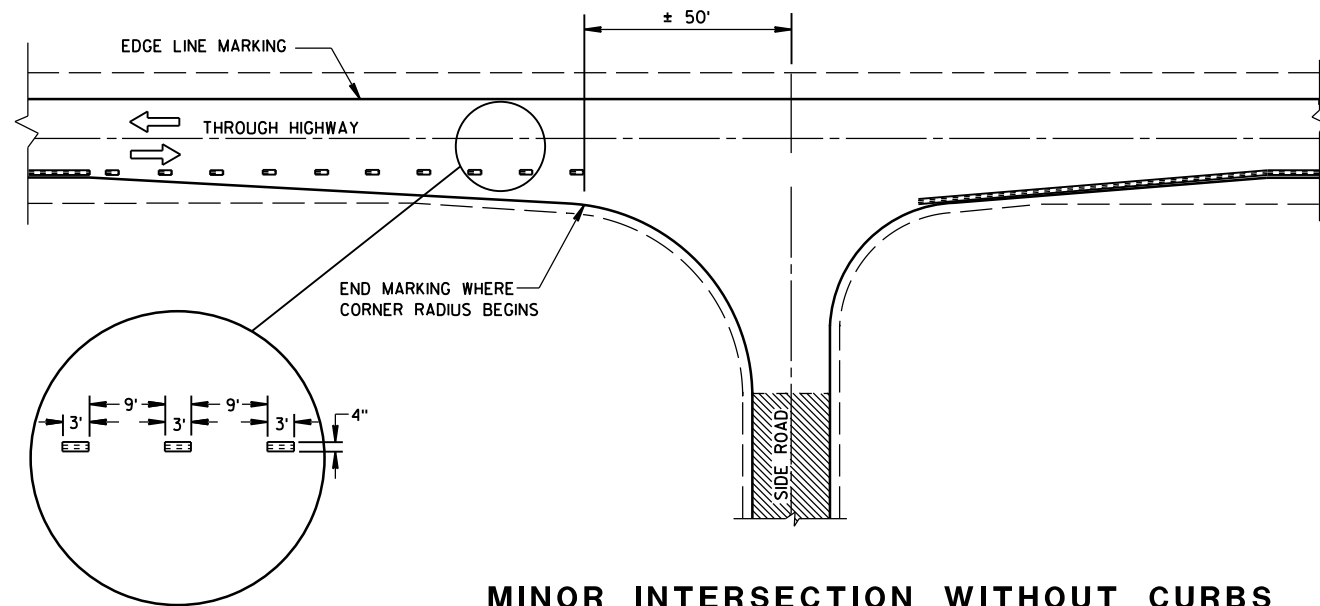
- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013
DATE
FHWA

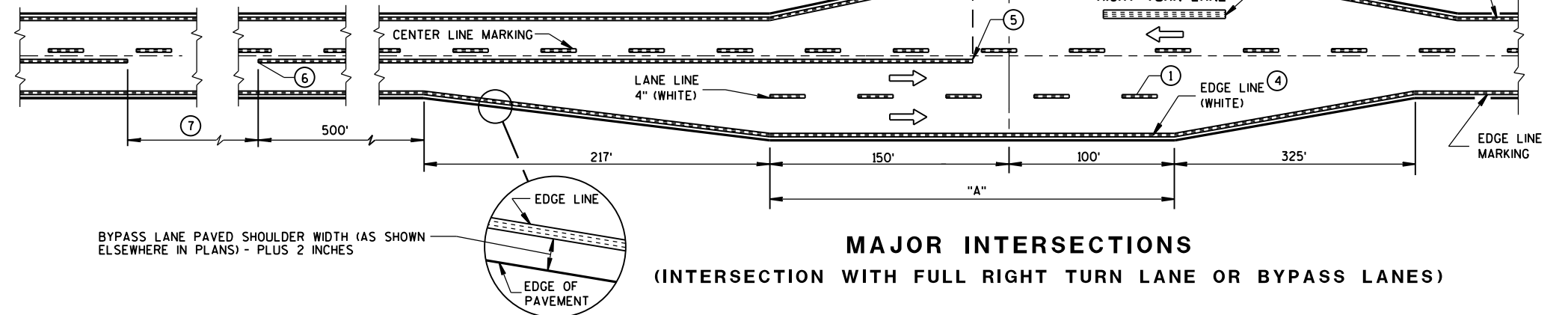
/S/ Travis Feltes
STATE TRAFFIC ENGINEER



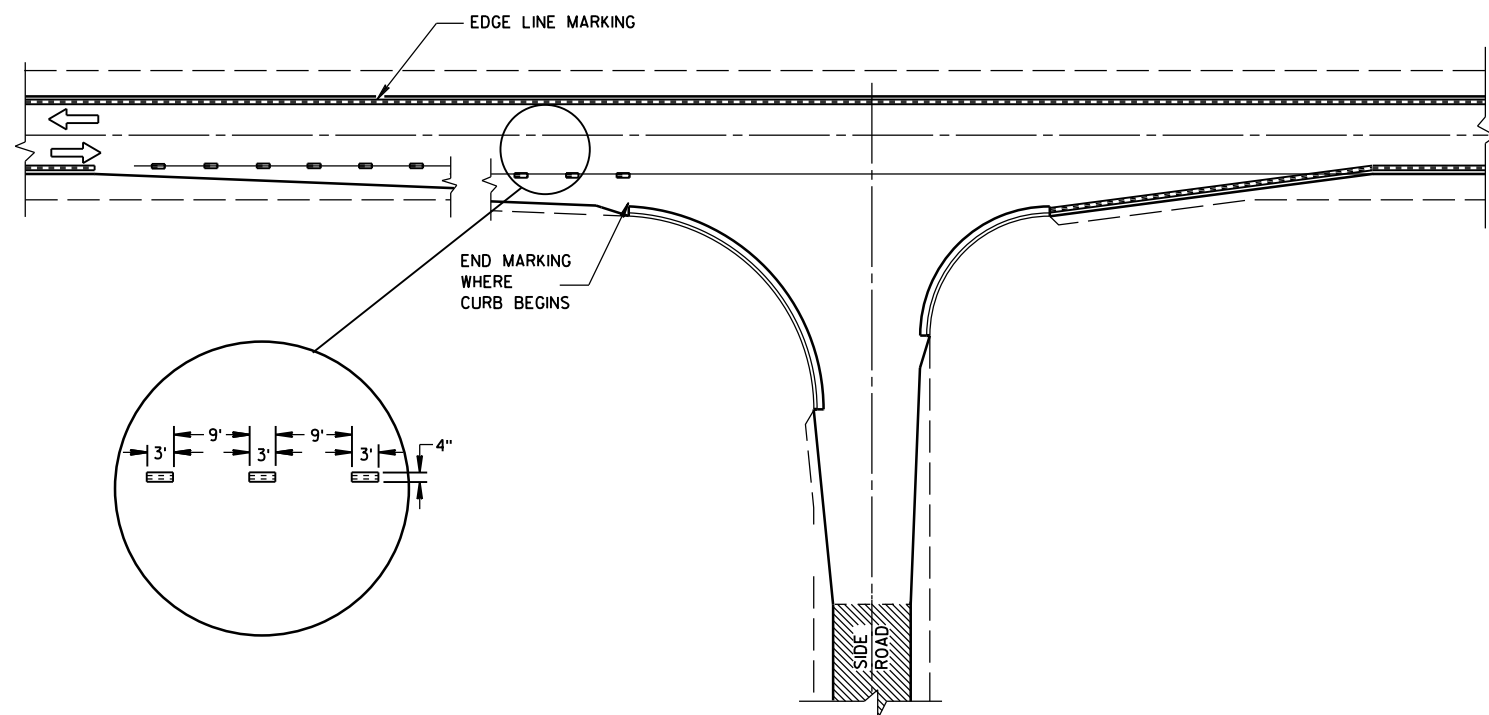
MINOR INTERSECTION WITHOUT CURBS

⑦

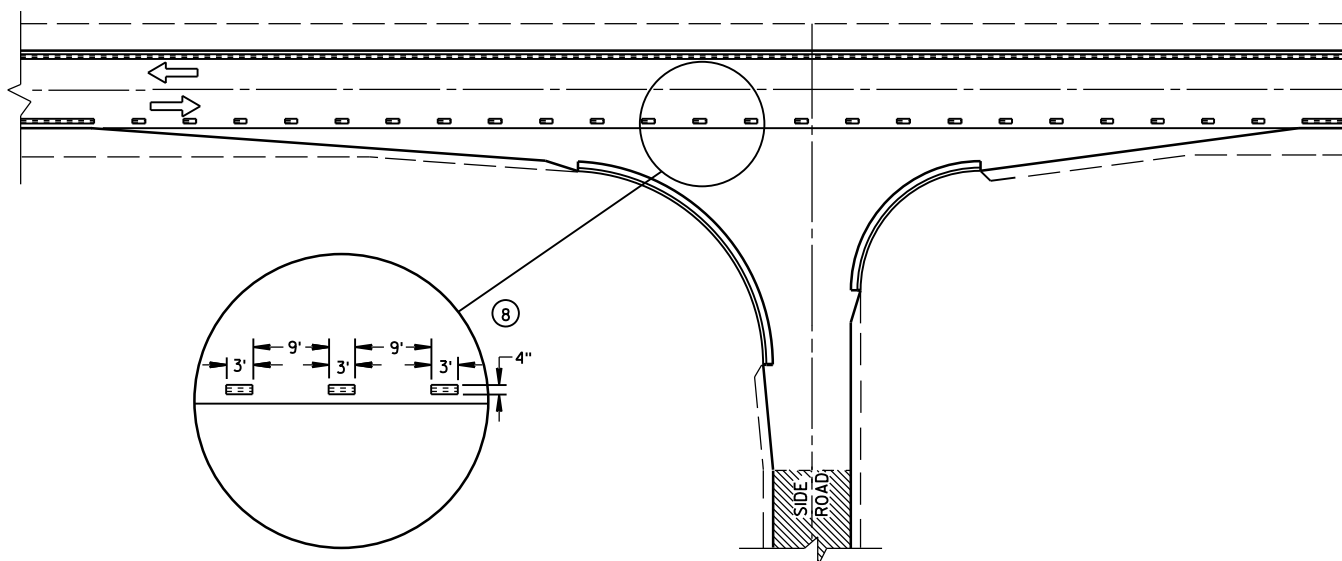
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



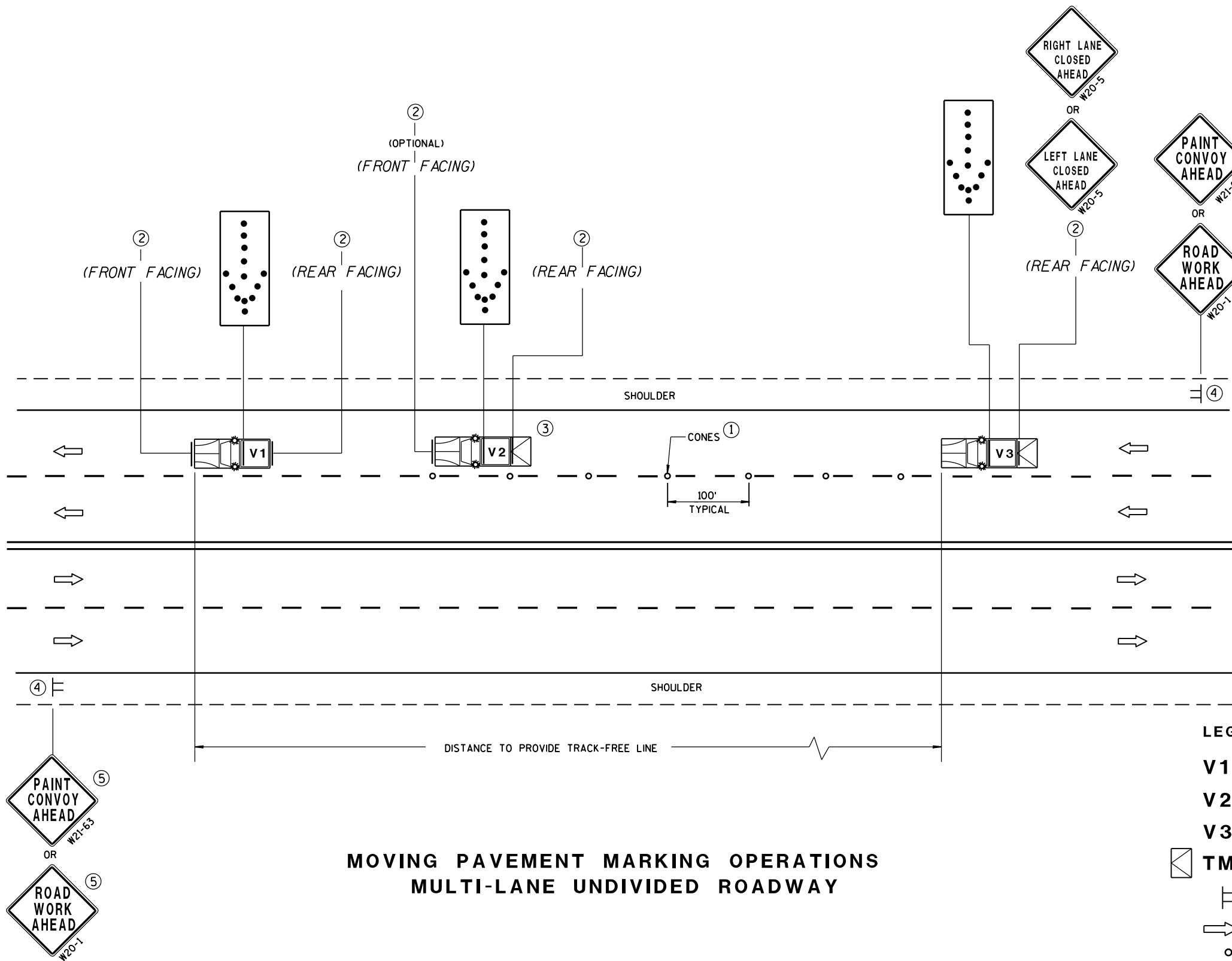
MINOR INTERSECTION WITH CURBS
⑧ (FOR SPECIAL CONDITIONS AS SPECIFIED)

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

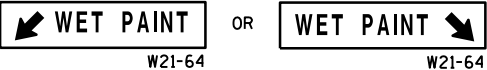


MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE UNDIVIDED ROADWAY

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.
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.



LEGEND

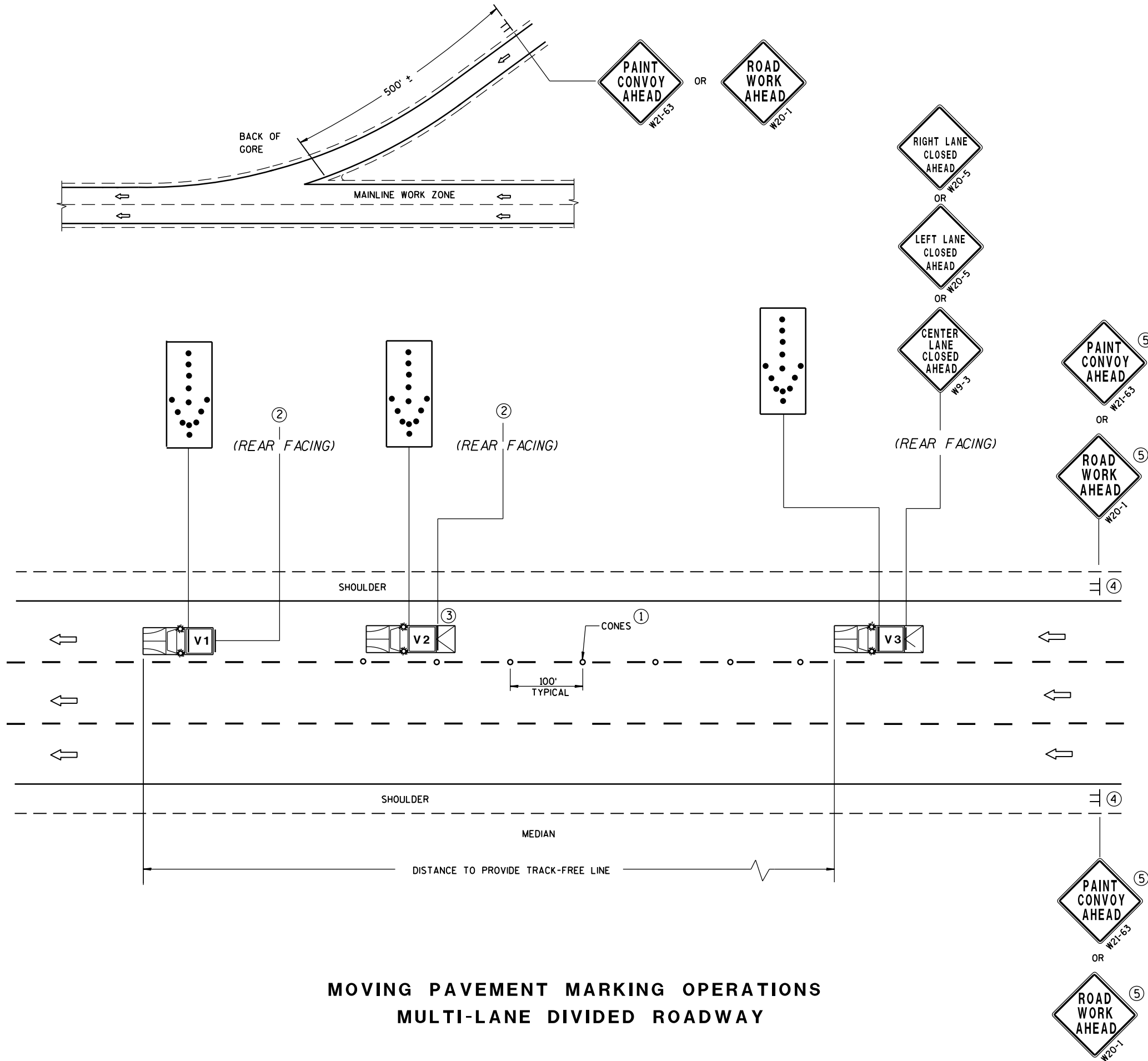
- V1 LEAD VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE WITH TMA
- TMA TRUCK-MOUNTED ATTENUATOR
- Sign on temporary support
- Direction of traffic
- Cones
- Flashing arrow panel (merge)

MOVING PAVEMENT MARKING
OPERATION
MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/3/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER

FHWA



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 EDGE LINE 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.

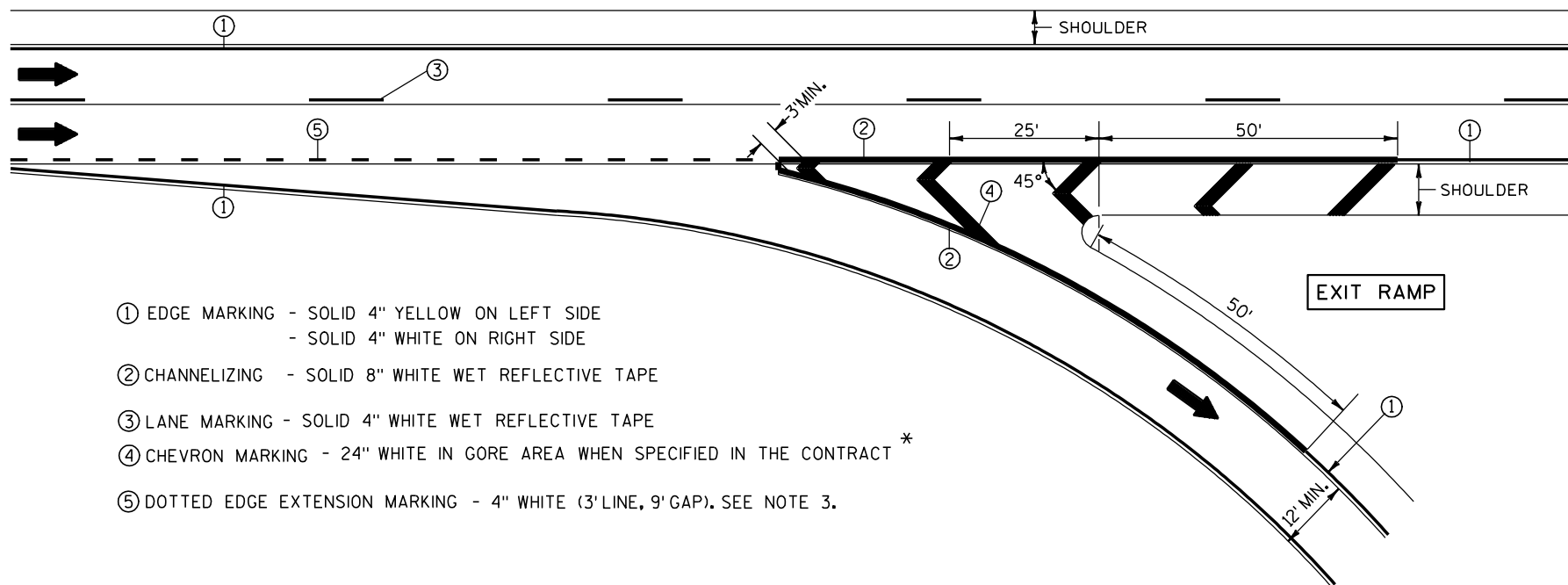
THIS DRAWING SHALL BE USED FOR EDGE LINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

- 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.
- 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 TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- CONES
- FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER
FHWA	

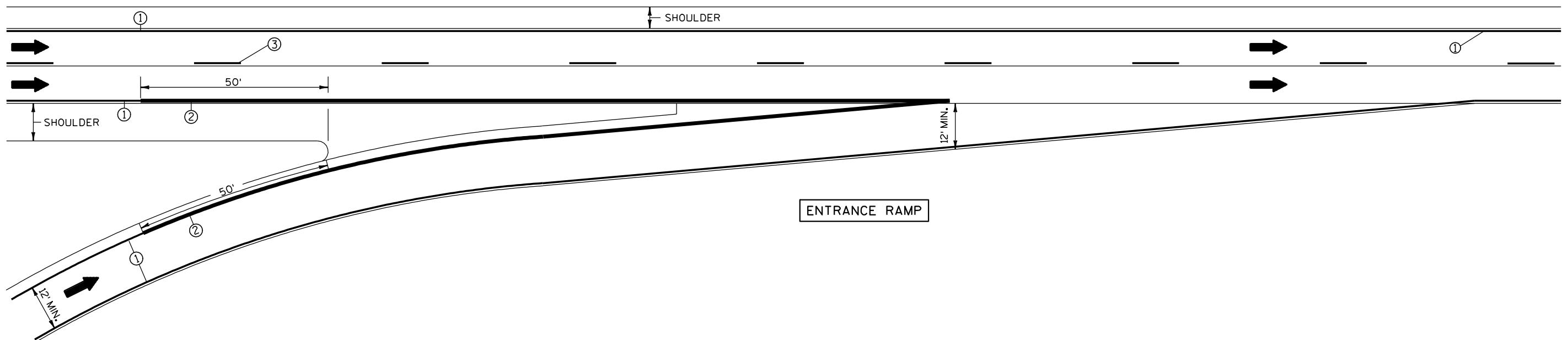


- ① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE
- ② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE
- ③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE
- ④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *
- ⑤ DOTTED EDGE EXTENSION MARKING -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

NOTES:

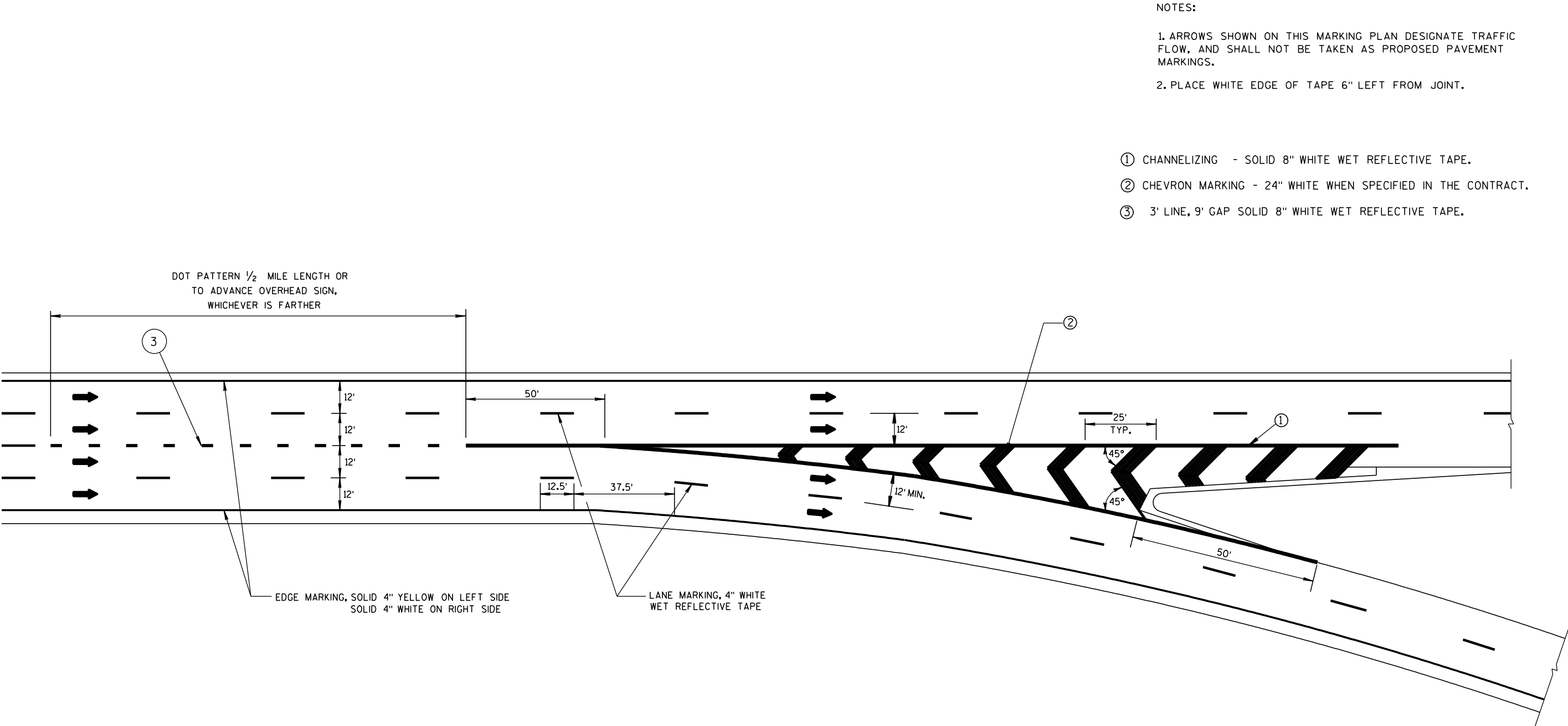
- 1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
- 2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
- 3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4. RETRACE EXISTING DIAGONAL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

* REFER TO DESIGN NOTES.



PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PAVEMENT MARKING
MAJOR SPLIT
FREEWAY TO FREEWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



Wisconsin Department of Transportation

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