

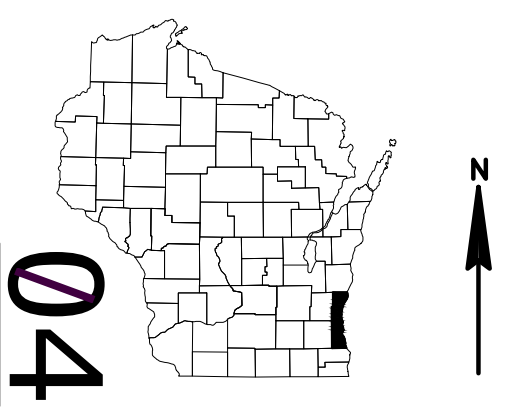
WKE AUGUST 2016

PROJECT ID: 1228-03-63

COUNTY: MILWAUKEE/OZAUKEE

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 = 22



DESIGN DESIGNATION

A.A.D.T.	2014	=	98,600
A.A.D.T.	2034	=	132,800
D.H.V.		=	
D.D.		=	
T.		=	
DESIGN SPEED		=	
ESALS		=	

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		OVERHEAD UTILITY	
PROPOSED CULVERT (Box or Pipe)		FIBER OPTIC	
COMBUSTIBLE FLUIDS		GAS	
		SANITARY SEWER	
MARSH AREA		STORM SEWER	
		TELEPHONE	
WOODED OR SHRUB AREA		WATER	
		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

ROADWAY MAINTENANCE PROJECT

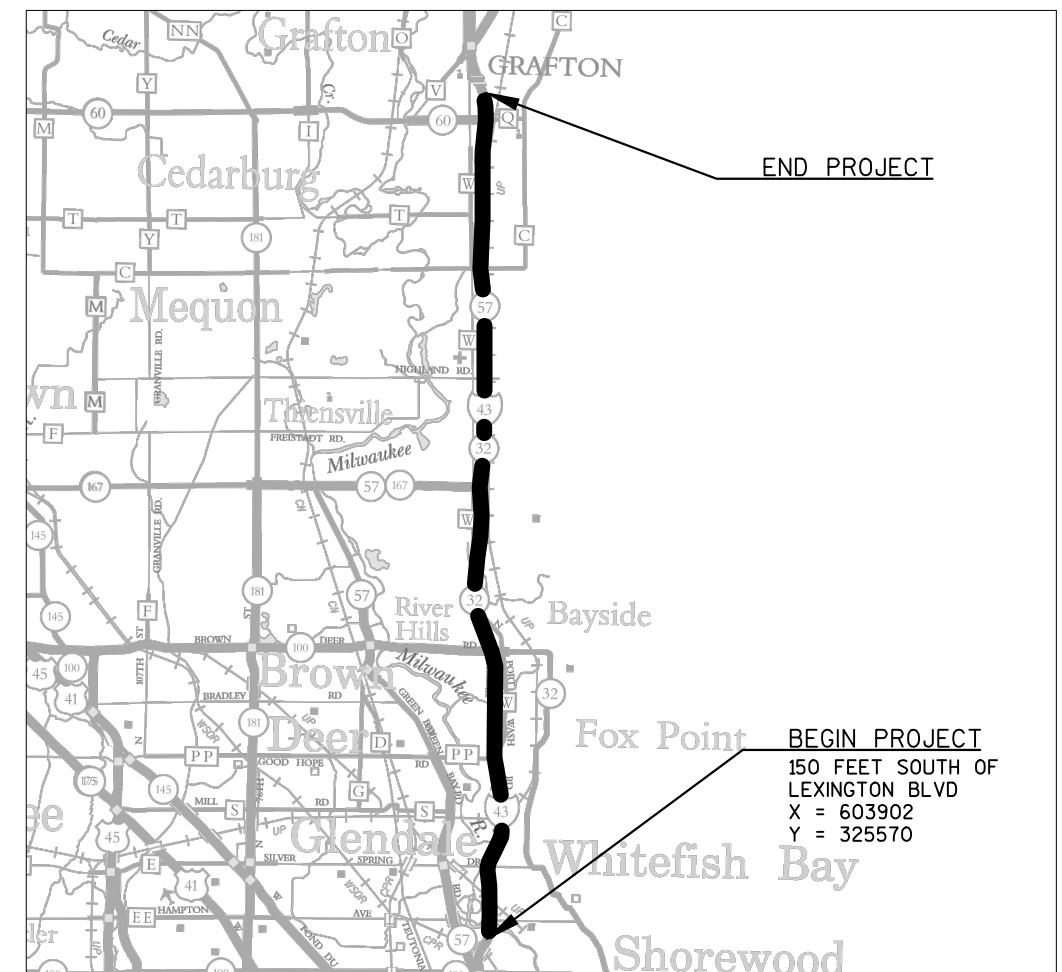
NORTH - SOUTH FREEWAY

LEXINGTON BLVD TO STH 32

IH-43

MILWAUKEE AND OZAUKEE COUNTY

STATE PROJECT NUMBER
1228-03-63



LAYOUT

SCALE 0 0.000 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, COUNTY COUNTY, NAD83 (YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1228-03-63	_____	—

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	_____
Surveyor	WISDOT
Designer	PRIYA MITRA
Project Manager	DOUGLAS CAIN
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	BENEDICT ERUCHALU
APPROVED FOR THE DEPARTMENT	
DATE: 05/24/16	

CONTACTS:

WISDOT MAINTAINENCE

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WISDOT SE REGION
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MILWAUKEE (SOUTH)

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141 NW BARSTOW STREET, WAUKESHA
WAUKESHA, WI 53188
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OZAUKEE COUNTY

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MILWAUKEE COUNTY HIGHWAY COMMISSIONER

BRIAN DRANZIK
MC RESEARCH PARK-TIC BLDG
10437 INNOVATION DRIVE,5TH FLOOR
WAWUTOSA, WI-53226
BRIAN DRANZIK@MILWAUKEECOUNTYWI.GOV
PHONE:(414) 257-5952

MILWAUKEE COUNTY SHERIFF

DAVID A.CLARKE,
821 WEST STATE STREET,ROOM 107
MILWAUKEE, WI 53233
PHONE:(414) 278-4766

OZAUKEE COUNTY SHERIFF

JAMES JOHNSON
1201 SOUTH SPRING STREET
PORT WASHINGTON
PHONE:(262) 284-8436

OZAUKEE COUNTY HIGHWAY COMMISSIONER

ROBERT DREBLOW
410 SOUTH SPRING STREET
PORT WASHINGTON ,
WISCONSIN-53074 -0994
BDREBLOW@CO.OZAUKEE.WI.US
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DNR CONTACT

KRISTINA BETZHOLD
WDNR - SE REGION
2300 N.MARTIN LUTHER KING DR.
MILWAUKEE-53212
KRISTINA.BETZHOLD@WISCONSIN.GOV
PHONE: (414) 263-8517

CONTACTS

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WISDOT PROJECT MANAGER
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DOUGLAS.CAIN@DOT.WI.GOV
PHONE: (262) 548-5603

GENERAL NOTES

NO UTILITY FACILITIES ARE EXPECTED TO BE IMPACTED WITHIN THE PROJECT LIMITS.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE UTILITIES.

IDENTIFY ALL UTILITIES IN THE AREA BY CONTACTING DIGGERS HOTLINE.

NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINES.

QUANTITY FOR ROUTE AND SEAL IS ESTIMATED AT 3 LF PER 1 LB OF MATERIAL.

QUANTITY FOR CRACK SEALING IS ESTIMATED AT 4 LF PER 1 LB OF MATERIAL.


EXISTING EDGELINE PAVEMENT MARKINGS WILL BE REPLACED WITH GROOVED WET REFLECTIVE EPOXY PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS.

ROUTE AND SEAL AND CRACK SEALING LOCATIONS ARE APPROXIMATE AND WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

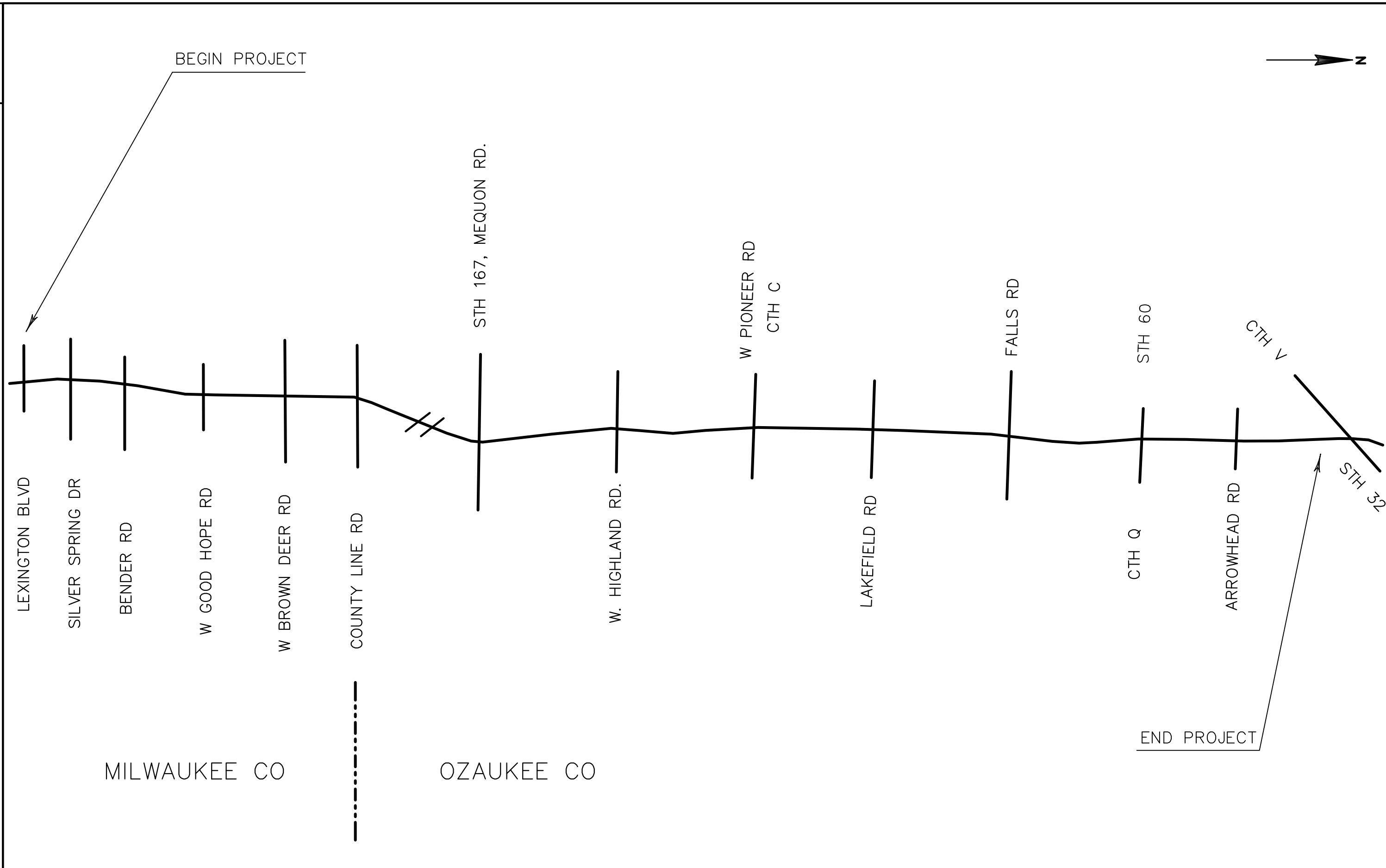
ROUTE AND SEAL AND CRACK SEALING AREA INCLUDES MAINLINE TRAVEL LANES, TURNLANES, AUXILLARY LANES AND TAPER SECTIONS AND RAMPS.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

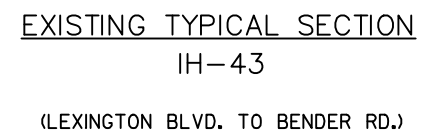


Dial  or (800) 242-8511

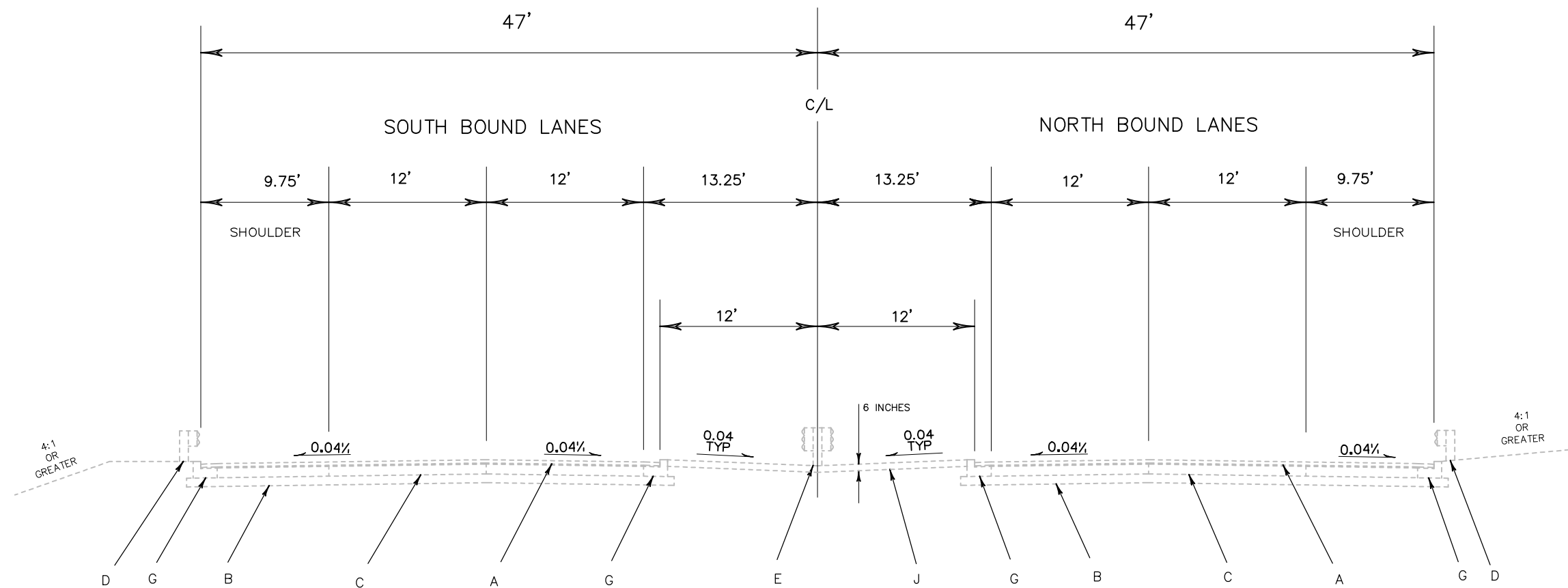
www.DiggersHotline.com



PROJECT NO:1228-03-63	HWY:IH-43	COUNTY:MILWAUKEE/OZAUKEE	PROJECT OVERVIEW	SHEET	E
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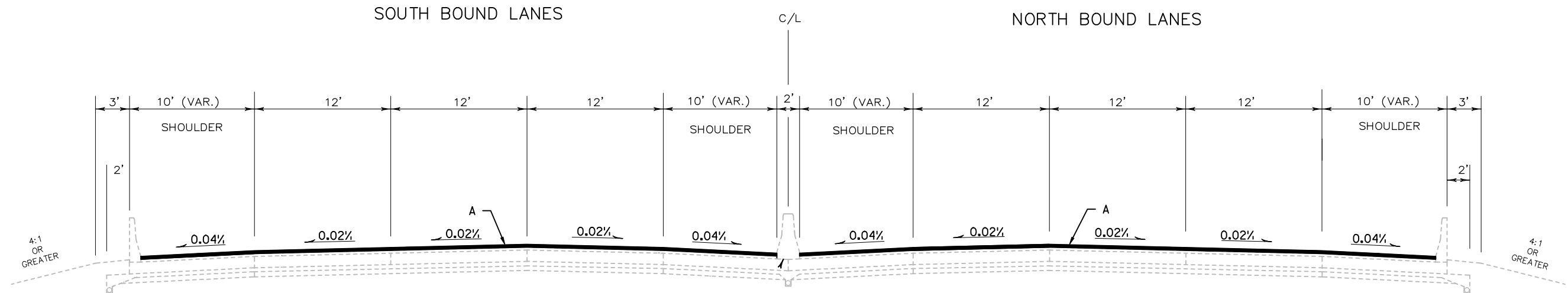
- A EXISTING 2 INCHES OF HMA E-30
B EXISTING 4 INCHES BASE AGGREGATE OPEN GRADED
C EXISTING 4 INCHES BASE AGGREGATE DENSE
D EXISTING 10 INCHES CONCRETE PAVEMENT, DOWELED
E EXISTING SINGLE FACED CONCRETE BARRIER
G EXISTING DOUBLE FACED CONCRTE BARRIER
H EXISTING 4 INCH PIPE UNDERDRAIN, WRAPPED



EXISTING TYPICAL SECTION
IH-43

(BENDER RD. TO STH 32)

- A EXISTING PLACE 2 INCHES HMA E-30
- B EXISTING 8 INCHES BASE AGGREGATE DENSE
- C EXISTING 9 INCHES REINFORCED CONCRETE PAVEMENT
- D EXISTING MGS GUARDRAIL 3, SEE SDD
- E EXISTING STEEL THRIE BEAM, DOUBLE-FACED
- G EXISTING 22 INCH CURB AND GUTTER
- J REMOVE 6 INCHES EXISTING TOPSOIL, PLACE SALVAGED ASPHALTIC PAVEMENT, SPECIAL 6 INCHES

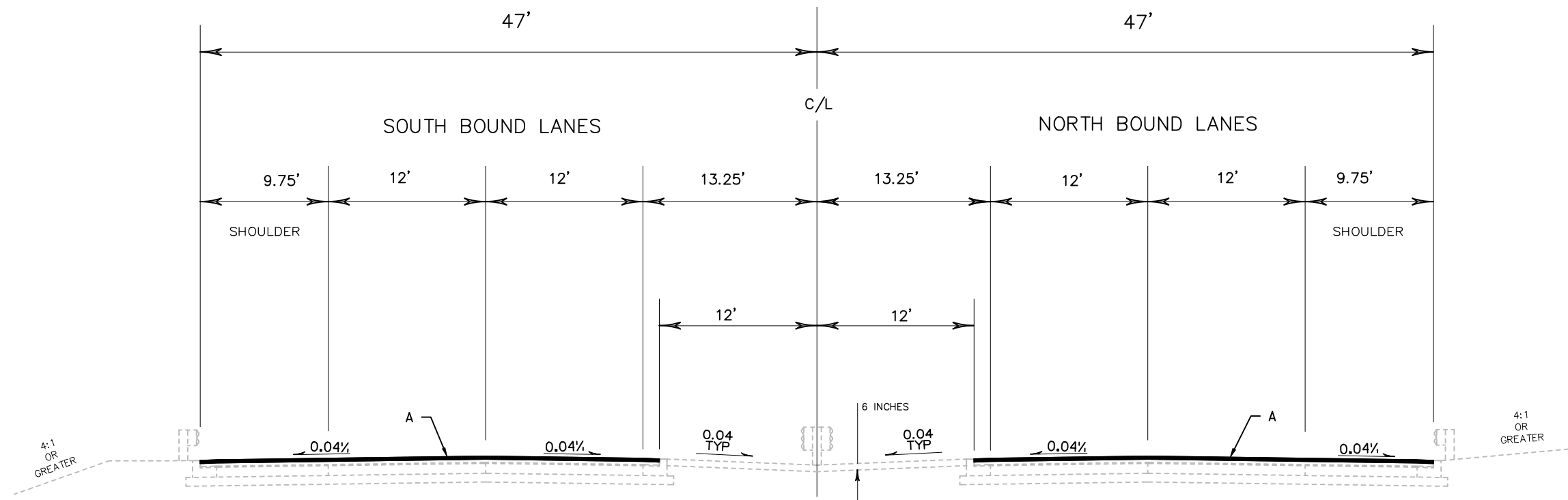


PROPOSED TYPICAL SECTION

IH-43

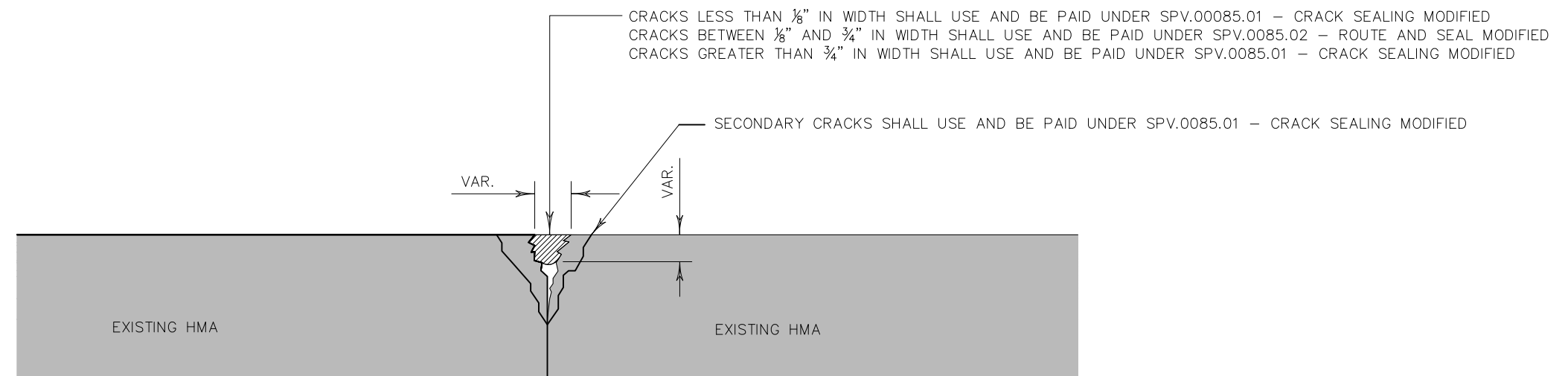
(LEXINGTON BLVD. TO BENDER RD.)

A ROUTE AND SEAL AND CRACK SEALING



PROPOSED TYPICAL SECTION
IH-43
(BENDER RD. TO STH 32)

A ROUTE AND SEAL AND CRACK SEALING



LONGITUDINAL AND / OR TRANSVERSE
ROUTE AND SEAL AND CRACK SEALING – DETAIL

DATE 31MAY16		E S T I M A T E O F Q U A N T I T I E S				
LINE						1228-03-63
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTI TY	
0010	213.0100	Finishing Roadway (project) 01. 1228-03-63	EACH	1.000	1.000	
0020	619.1000	Mobilization	EACH	1.000	1.000	
0030	624.0100	Water	MGAL	15.000	15.000	
0040	643.0100	Traffic Control (project) 01. 1228-03-63	EACH	1.000	1.000	
0050	643.0300	Traffic Control Drums	DAY	3,410.000	3,410.000	
0060	643.0420	Traffic Control Barricades Type III	DAY	220.000	220.000	
0070	643.0715	Traffic Control Warning Lights Type C	DAY	242.000	242.000	
0080	643.0800	Traffic Control Arrow Boards	DAY	44.000	44.000	
0090	643.0900	Traffic Control Signs	DAY	242.000	242.000	
0100	643.1050	Traffic Control Signs PCMS	DAY	22.000	22.000	
0110	646.0841.S	Pavement Marking Grooved Wet Reflective Contrast Tape 4-Inch	LF	3,723.000	3,723.000	
0120	646.0843.S	Pavement Marking Grooved Wet Reflective Contrast Tape 8-Inch	LF	2,500.000	2,500.000	
0130	646.2304.S	Pavement Marking Grooved Wet Reflective Epoxy 4-Inch	LF	74,461.000	74,461.000	
0140	647.0746	Pavement Marking Diagonal Epoxy 24-Inch	LF	500.000	500.000	
0150	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	2,500.000	2,500.000	
0160	SPV.0085	Special 01. Crack Sealing Modified	LB	9,982.000	9,982.000	
0170	SPV.0085	Special 02. Route and Seal Modified	LB	85,781.000	85,781.000	

ROUTE AND SEAL/ CRACK SEALING

STA	--	STA	HIGHWAY	NUMBER OF LANES	LENGTH (LF)	SPV.0085.02 ROUTE AND SEAL MODIFIED (LB)	SPV.0085.01 CRACK SEALING MODIFIED (LB)	624.0100 WATER (MGAL)
1500 FT SOUTH OF LEXINGTON BLVD	--	725 FT SOUTH OF BENDER RD	IH 43 NB	3	6,825	5,219	552	--
725 FT SOUTH OF BENDER RD	--	800 FT NORTH OF BENDER RD	IH 43 NB	2	1,475	1,060	107	--
800 FT NORTH OF BENDER ROAD	--	1750 FT SOUTH OF W. GOOD HOPE RD	IH 43 NB	2	4,150	2,854	276	--
1750 FT SOUTH OF GOOD HOPE RD	--	2400 FT SOUTH OF W. OF BROWN DEER RD	IH 43 NB	2	6,900	4,319	379	--
2400 FT SOUTH OF W. BROWN DEER RD	--	COUNTY LINE RD	IH 43 NB	2	3,200	2,003	176	--
COUNTY LINE RD	--	950 FT NORTH OF ARROWHEAD RD	IH 43 NB	2	51,911	21,102	2,849	--
SILVERSPRING DR			NB OFF-RAMP		1,723	244	--	--
SILVERSPRING DR			NB OFF-RAMP		2,380	337	--	--
SILVERSPRING DR			NB OFF-RAMP		621	88	--	--
SILVERSPRING DR			NB ON-RAMP		2,077	294	--	--
GOOD HOPE RD			NB OFF-RAMP		1,100	156	--	--
GOOD HOPE RD			NB ON-RAMP		1,200	170	--	--
BROWN DEER RD			NB OFF-RAMP		720	102	--	--
BROWN DEER RD			NB OFF-RAMP		1,000	141	--	--
BROWN DEER RD			NB ON-RAMP		820	116	--	--
BROWN DEER RD			NB ON-RAMP		1,280	181	--	--
PORT WASHINGTON RD			NB OFF-RAMP		600	85	--	--
STH 167, MEQUON RD.			NB OFF-RAMP		950	134	--	--
STH 167, MEQUON RD.			NB ON-RAMP		1,030	146	--	--
CTH C, PIONEER RD.			NB OFF-RAMP		725	103	--	--
CTH C, PIONEER RD.			NB ON-RAMP		1,200	170	--	--
STH 60, CTH Q			NB OFF-RAMP		660	93	--	--
STH 60, CTH Q			NB ON-RAMP		900	127	--	--
1500 FT SOUTH OF LEXINGTON BLVD	--	725 FT SOUTH OF BENDER RD	IH 43 SB	3	6,825	2,951	507	--
725 FT SOUTH OF BENDER RD	--	800 FT NORTH OF BENDER RD	IH 43 SB	2	1,475	622	98	--
800 FT NORTH OF BENDER ROAD	--	1750 FT SOUTH OF W. GOOD HOPE RD	IH 43 SB	2	4,150	1,721	253	--
1750 FT SOUTH OF GOOD HOPE RD	--	2400 FT SOUTH OF W. OF BROWN DEER RD	IH 43 SB	2	6,900	2,763	348	--
2400 FT SOUTH OF W. BROWN DEER RD	--	COUNTY LINE RD	IH 43 SB	2	3,200	1,282	161	--
COUNTY LINE RD	--	950 FT NORTH OF ARROWHEAD RD	IH 43 SB	2	51,911	20,791	2,615	--
SILVERSPRING DR			SB OFF-RAMP		1,000	141	--	--
SILVERSPRING DR			SB ON-RAMP		1,330	188	--	--
GOOD HOPE RD			SB OFF-RAMP		1,170	165	--	--
GOOD HOPE RD			SB ON-RAMP		1,130	160	--	--
BROWN DEER RD			SB OFF-RAMP		760	107	--	--
BROWN DEER RD			SB OFF-RAMP		1,060	150	--	--
BROWN DEER RD			SB ON-RAMP		900	127	--	--
BROWN DEER RD			SB ON-RAMP		1,176	166	--	--
COUNTY LINE RD			SB ON-RAMP		820	116	--	--
STH 167, MEQUON RD.			SB OFF-RAMP		920	130	--	--
STH 167. MEQUON RD.			SB ON-RAMP		1,030	146	--	--
CTH C, PIONEER RD.			SB OFF-RAMP		900	127	--	--
CTH C, PIONEER RD.			SB ON-RAMP		750	106	--	--
STH 60, CTH Q			SB OFF-RAMP		900	127	--	--
STH 60, CTH Q			SB OFF-RAMP		1,100	156	--	--
UNDISTRIBUTED						14,297	1,664	15
TOTAL					182,854	85,781	9,982	15

TRAFFIC CONTROL

LIMIT		--	LIMIT	HIGHWAY	LANES BEING CLOSED	PROJECT LENGTH (LF)	APPROX. DAYS CLOSED	643.0300 DRUMS (DAY)	643.0420 BARRICADES TYPE III (DAY)	643.0715 WARNING LIGHTS TYPE C (DAY)	643.0800 ARROW BOARDS (DAY)	643.0900 SIGNS (DAY)	643.1050 SIGNS PCMS (DAY)
1500 FT SOUTH OF LEXINGTON BLVD	--		725 FT SOUTH OF BENDER RD	IH-43 NB	1	6,825	1	155	10	11	2	11	1
725 FT SOUTH OF BENDER RD	--		800 FT NORTH OF BENDER RD	IH-43 NB	1	1,475	1	155	10	11	2	11	1
800 FT NORTH OF BENDER ROAD	--		1750 FT SOUTH OF W. GOOD HOPE RD	IH-43 NB	1	4,150	1	155	10	11	2	11	1
1750 FT SOUTH OF GOOD HOPE RD	--		2400 FT SOUTH OF W. OF BROWN DEER RD	IH-43 NB	1	6,900	1	155	10	11	2	11	1
2400 FT SOUTH OF W. BROWN DEER RD	--		COUNTY LINE RD	IH-43 NB	1	3,200	1	155	10	11	2	11	1
COUNTY LINE RD	--		950 FT NORTH OF ARROWHEAD RD	IH-43 NB	1	51,911	6	930	60	66	12	66	6
1500 FT SOUTH OF LEXINGTON BLVD	--		725 FT SOUTH OF BENDER RD	IH-43 SB	1	6,825	1	155	10	11	2	11	1
725 FT SOUTH OF BENDER RD	--		800 FT NORTH OF BENDER RD	IH-43 SB	1	1,475	1	155	10	11	2	11	1
800 FT NORTH OF BENDER ROAD	--		1750 FT SOUTH OF W. GOOD HOPE RD	IH-43 SB	1	4,150	1	155	10	11	2	11	1
1750 FT SOUTH OF GOOD HOPE RD	--		2400 FT SOUTH OF W. OF BROWN DEER RD	IH-43 SB	1	6,900	1	155	10	11	2	11	1
2400 FT SOUTH OF W. BROWN DEER RD	--		COUNTY LINE RD	IH-43 SB	1	3,200	1	155	10	11	2	11	1
COUNTY LINE RD	--		950 FT NORTH OF ARROWHEAD RD	IH-43 SB	1	51,911	6	930	60	66	12	66	6
TOTALS							22	3,410	220	242	44	242	22

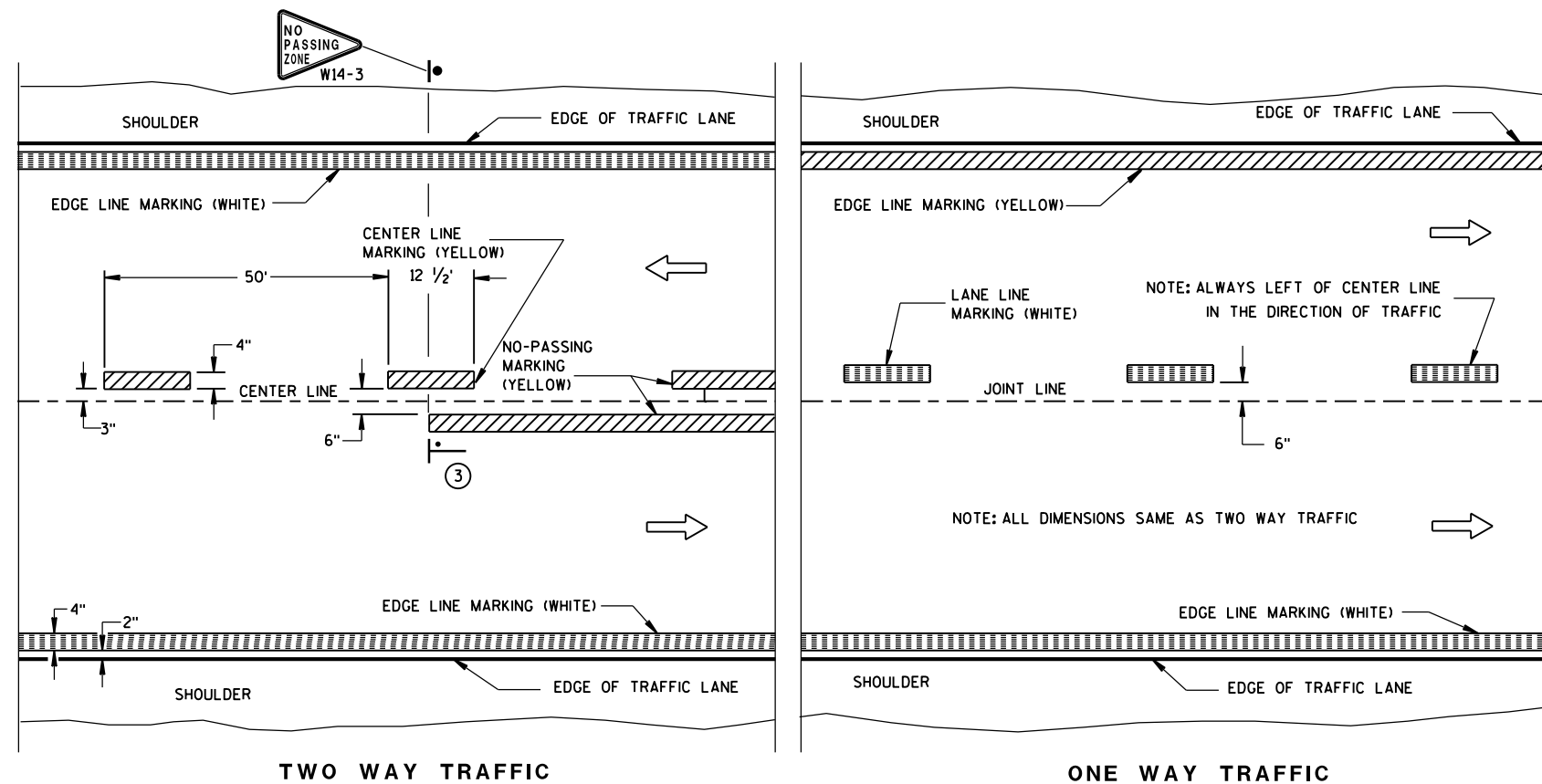
Traffic Control quantities can vary in the field due how contractor chooses to carry out working operations

PAVEMENT MARKING ITEMS

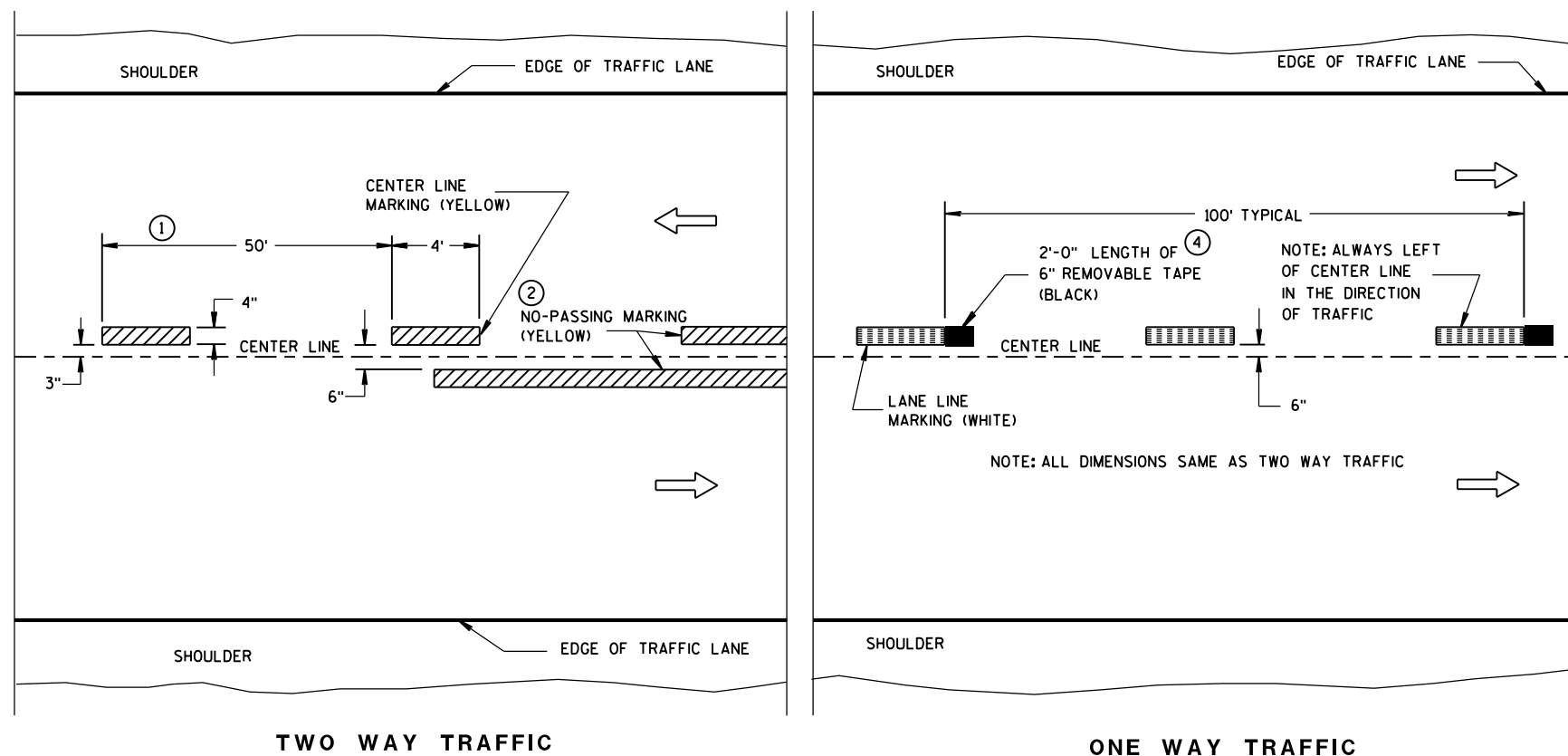
						646.2304.S PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID WHITE)	646.2304.S PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH (SOLID YELLOW)	646.0841.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4- INCH (DASHED WHITE)	646.0843.S PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8- INCH (SOLID WHITE)	647.0746 PAVEMENT MARKING DIAGONAL EPOXY 24-INCH (WHITE)	649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4- INCH (SOLID WHITE)
LIMIT	--	LIMIT	HIGHWAY	NUMBER OF LANES	LF	LF	LF	LF	LF	LF	LF
1500 FT SOUTH OF LEXINGTON BLVD	--	725 FT SOUTH OF BENDER RD	IH 43 NB	3	1,706	1,706	--	--	--	--	--
725 FT SOUTH OF BENDER RD	--	800 FT NORTH OF BENDER RD	IH 43 NB	2	369	369	--	--	--	--	--
800 FT NORTH OF BENDER ROAD	--	1750 FT SOUTH OF W. GOOD HOPE RD	IH 43 NB	2	1,038	1,038	--	--	--	--	--
1750 FT SOUTH OF GOOD HOPE RD	--	2400 FT SOUTH OF W. OF BROWN DEER RD	IH 43 NB	2	1,725	1,725	--	--	--	--	--
2400 FT SOUTH OF W. BROWN DEER RD	--	COUNTY LINE RD	IH 43 NB	2	800	800	--	--	--	--	--
COUNTY LINE RD	--	950 FT NORTH OF ARROWHEAD RD	IH 43 NB	2	12,978	12,978	--	--	--	--	--
1500 FT SOUTH OF LEXINGTON BLVD	--	725 FT SOUTH OF BENDER RD	IH 43 SB	3	1,706	1,706	--	--	--	--	--
725 FT SOUTH OF BENDER RD	--	800 FT NORTH OF BENDER RD	IH 43 SB	2	369	369	--	--	--	--	--
800 FT NORTH OF BENDER ROAD	--	1750 FT SOUTH OF W. GOOD HOPE RD	IH 43 SB	2	1,038	1,038	--	--	--	--	--
1750 FT SOUTH OF GOOD HOPE RD	-	2400 FT SOUTH OF W. OF BROWN DEER RD	IH 43 SB	2	1,725	1,725	--	--	--	--	--
2400 FT SOUTH OF W. BROWN DEER RD	--	COUNTY LINE RD	IH 43 SB	2	800	800	--	--	--	--	--
COUNTY LINE RD	--	950 FT NORTH OF ARROWHEAD RD	IH 43 SB	2	12,978	12,978	--	--	--	--	--
SUB-TOTAL					37,231	37,231	--	--	--	--	--
UNDISTRIBUTED							3,723	2,500	500	2,500	
TOTALS					74,461		3,723	2,500	500	2,500	

Standard Detail Drawing List

15C08-16A	PAVEMENT MARKING (MAINLINE)
15C19-03C	MOVING PAVEMENT MARKING OPERATION MULTI -LANE DIVIDED ROADWAY
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-01D	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D14-03	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-02	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-03	TRAFFIC CONTROL, EXI T RAMP CLOSURE



PERMANENT PAVEMENT MARKING




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

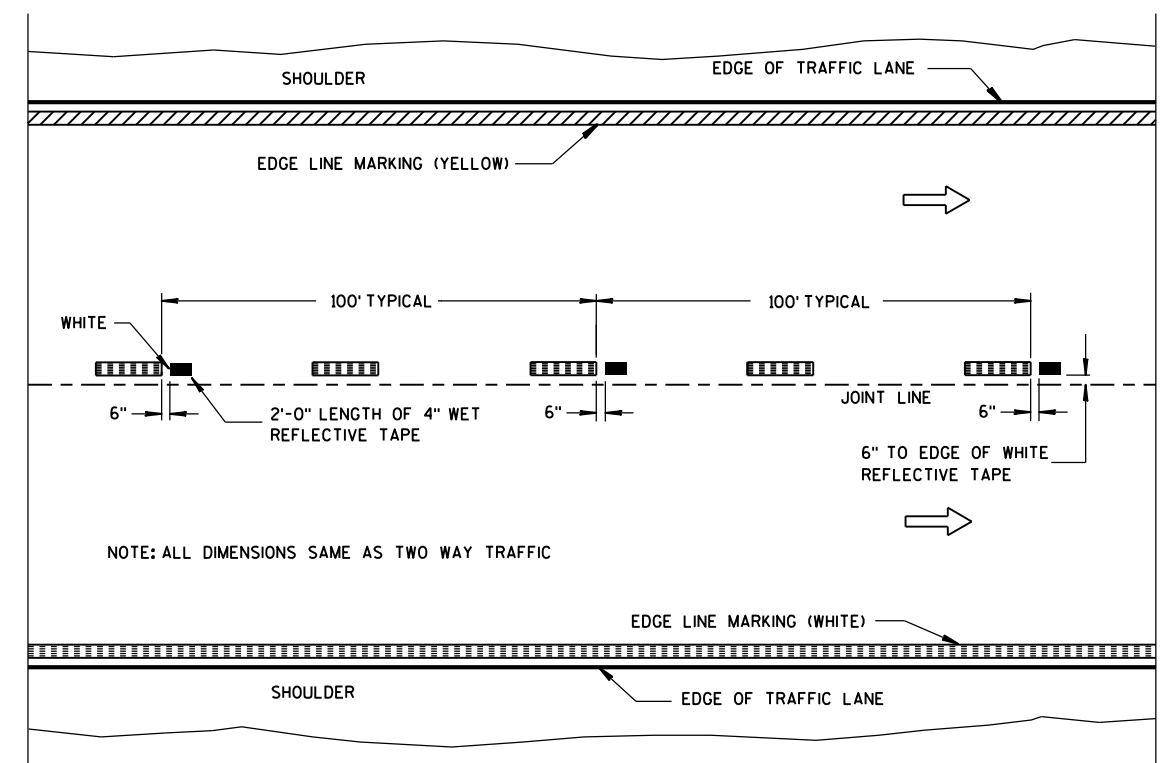
GENERAL NOTES

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

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



NOTE

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL



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

LEGEND

-  "T" MARKING
-  POST MOUNTED SIGN

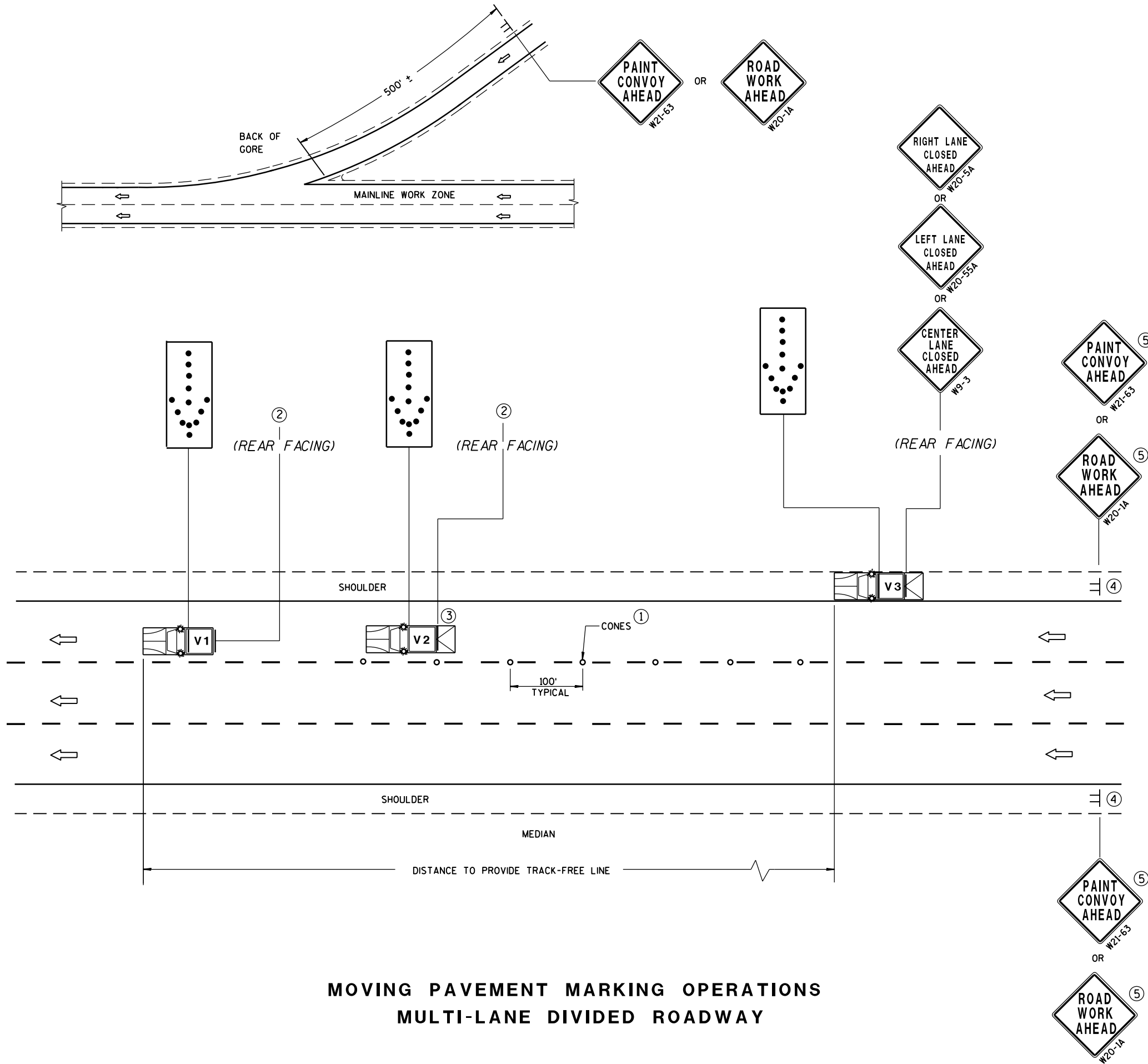
PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER

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 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.

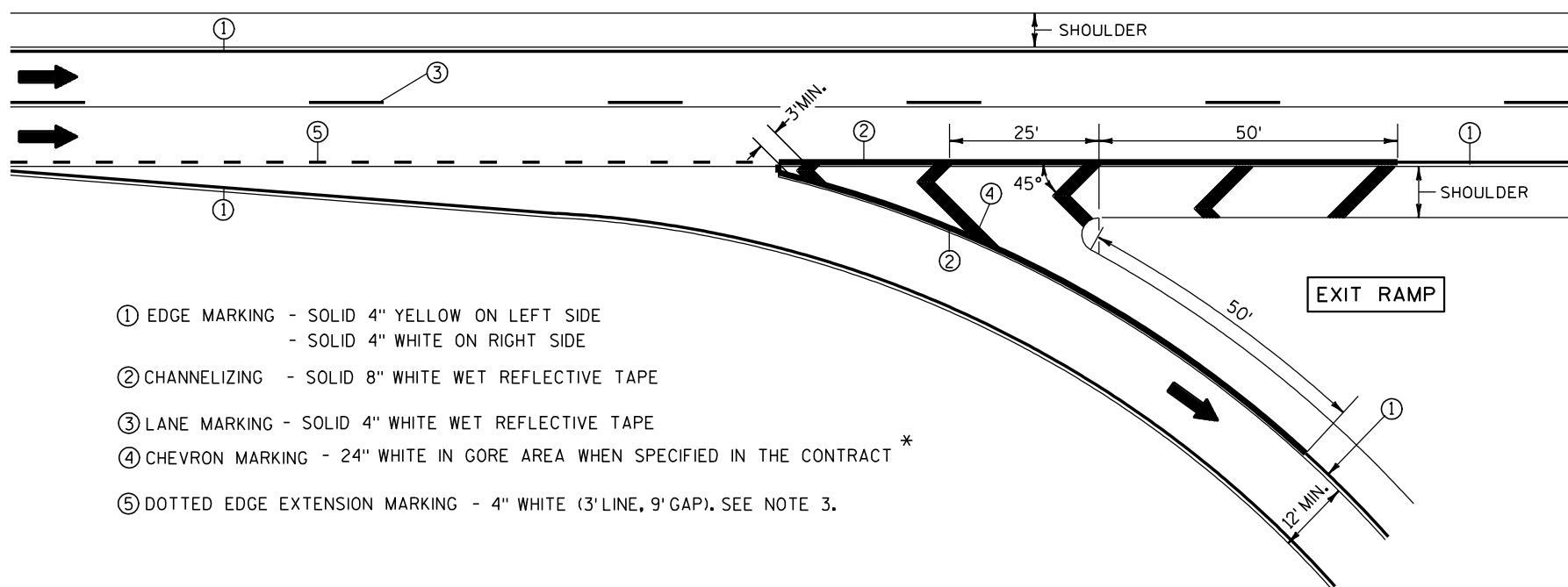
LEGEND

- 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
Sept. 2015 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

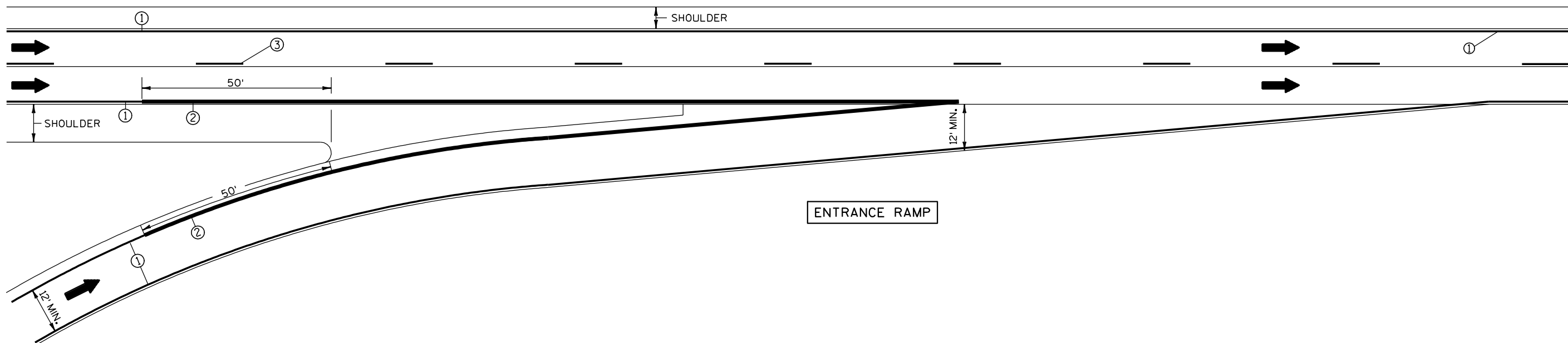


- ① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE
- ② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE
- ③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE
- ④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *
- ⑤ DOTTED EDGE EXTENSION MARKING -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

NOTES:

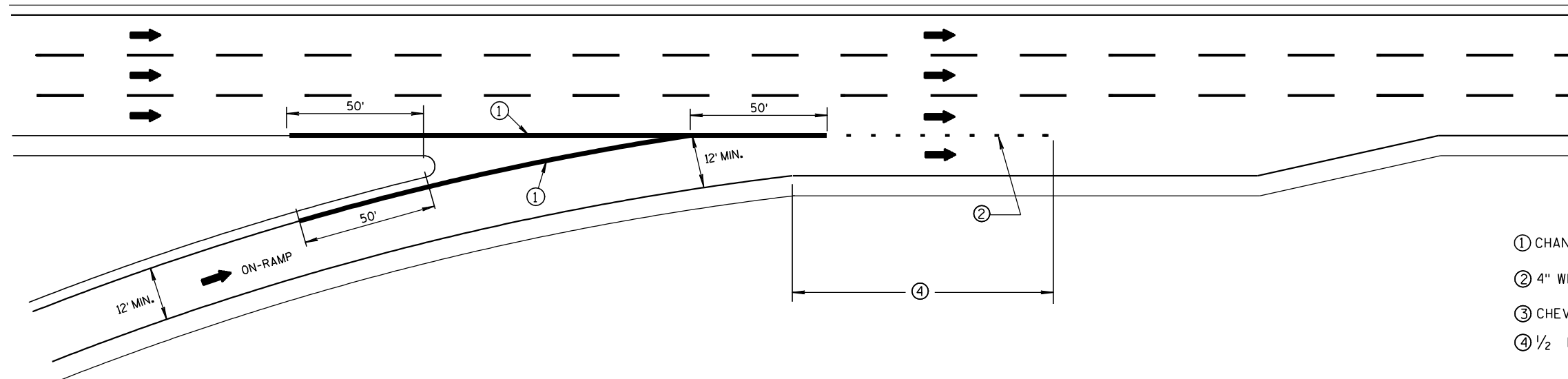
- 1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
- 2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
- 3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4. RETRACE EXISTING DIAGONAL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

* REFER TO DESIGN NOTES.



PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

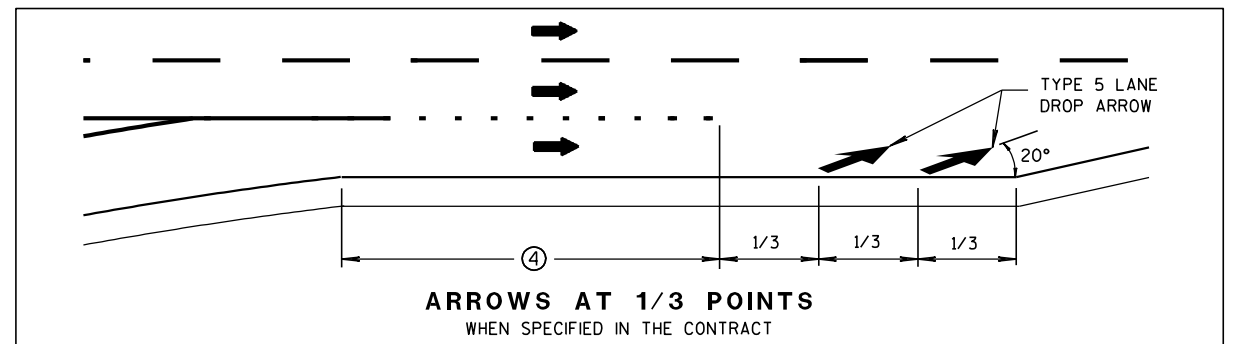
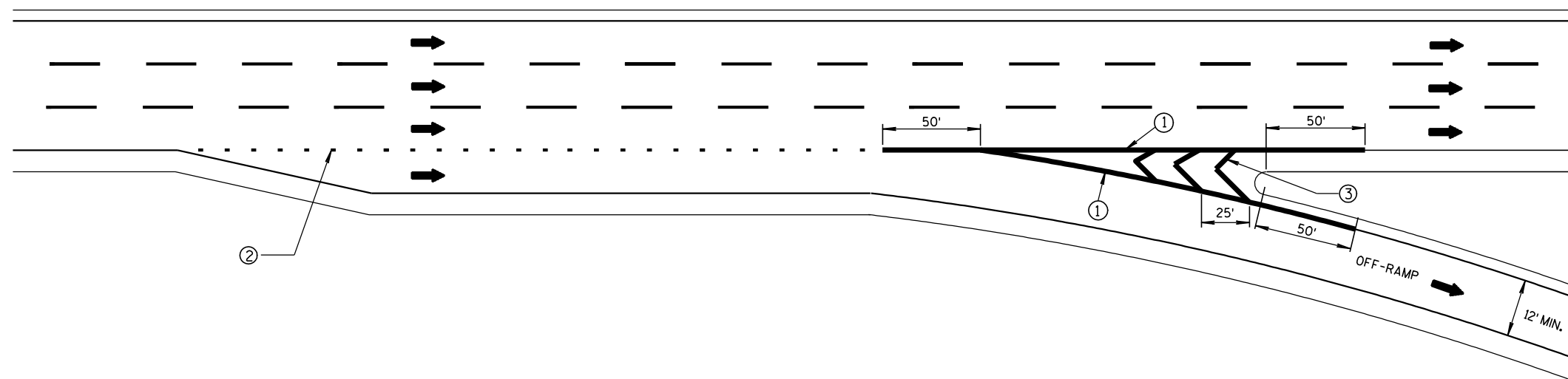


SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP

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

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

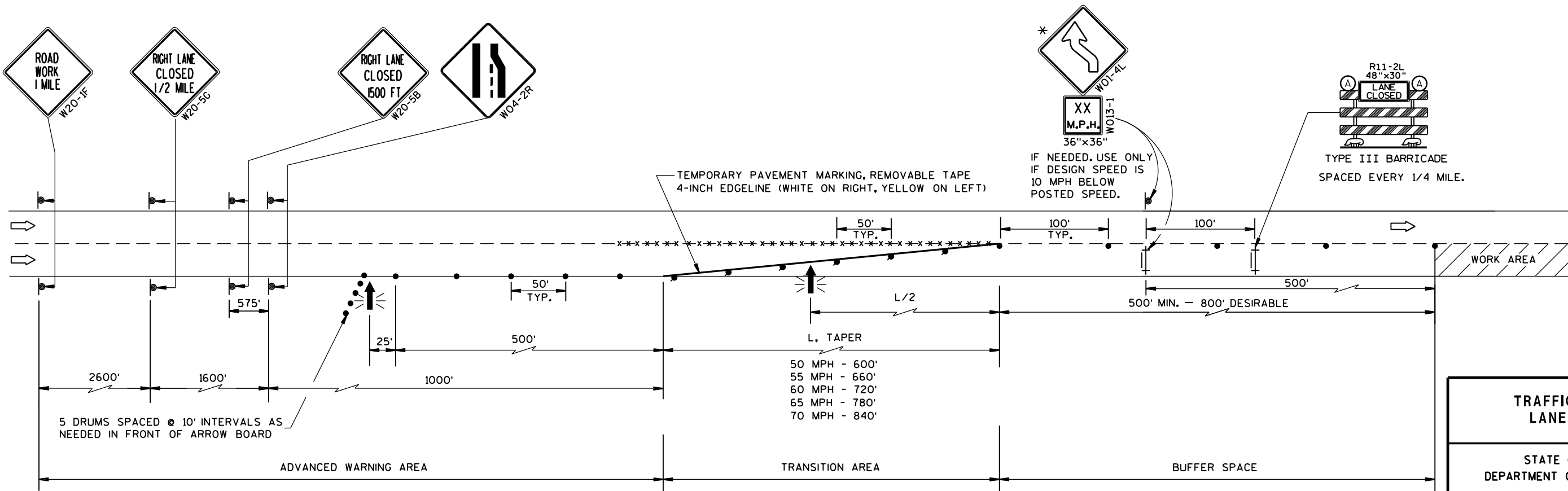
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

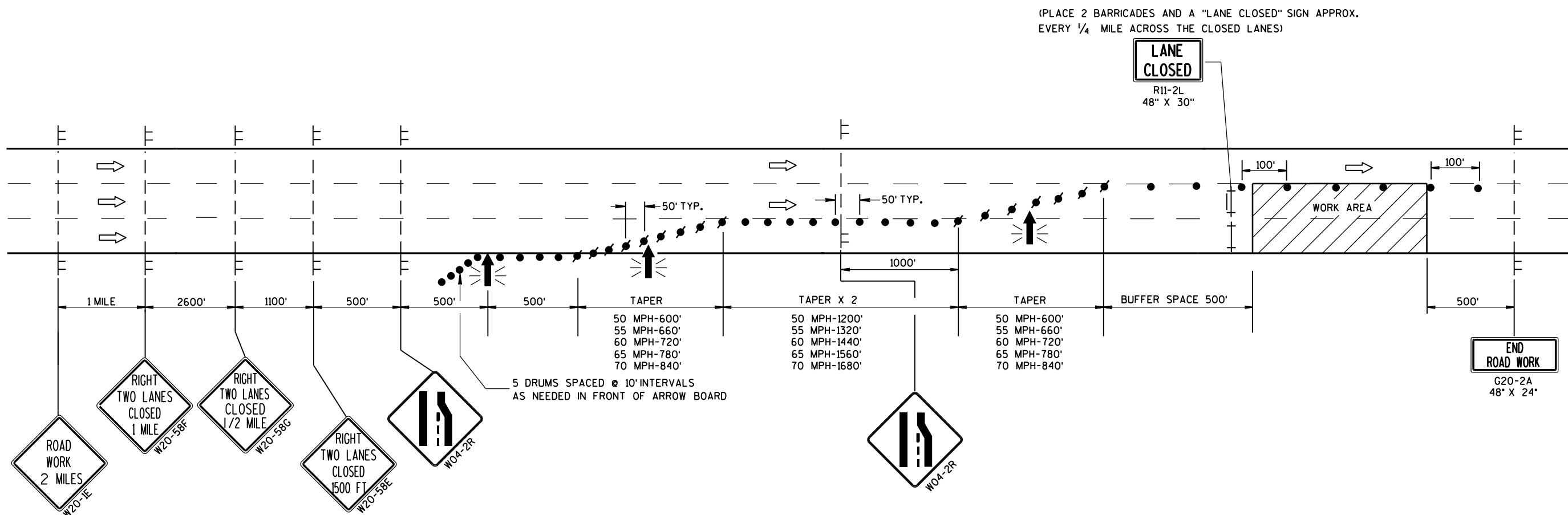
* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA



GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

W20-1E AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

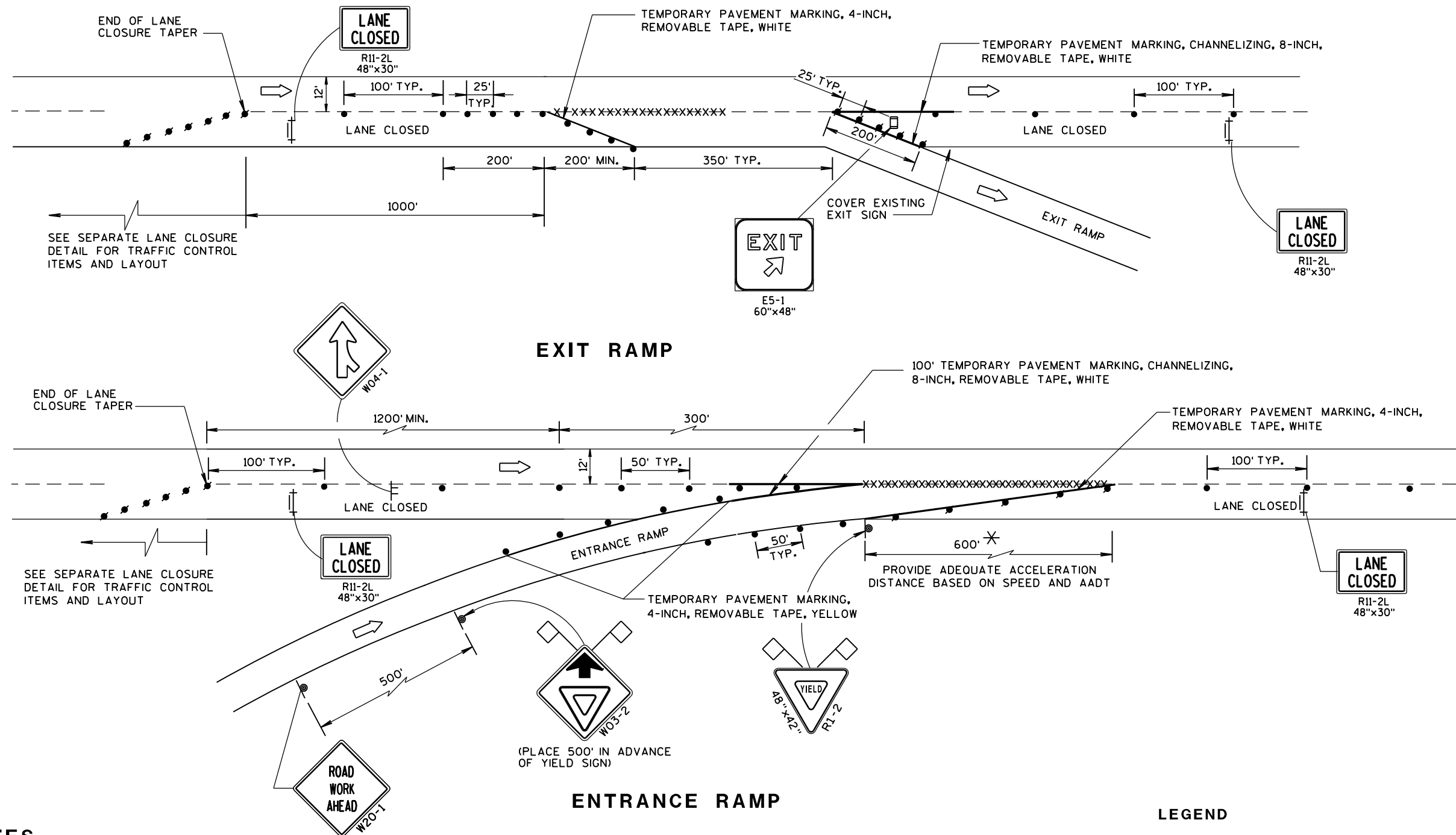
WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL. TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY. SHORT TERM (LESS THAN 24 HOURS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

- LEGEND
- ⊙ SIGN ON PERMANENT SUPPORT
 - ┃ SIGN ON TEMPORARY SUPPORT
 - TRAFFIC CONTROL DRUM
 - TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
 - XXXXX REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
 - ┃ TYPE III BARRICADE WITH ATTACHED SIGN
 - ▢ FLAGS, 16" x 16" MIN., (ORANGE)
 - ➡ DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
EXIT AND ENTRANCE RAMP
WITHIN LANE CLOSURE

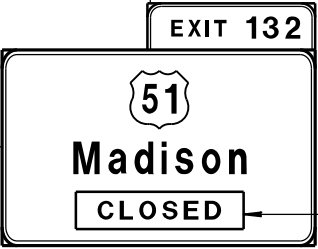
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER



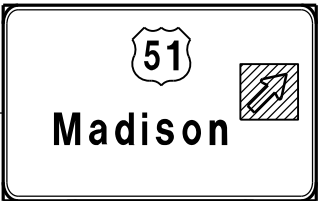
G20-60
108"x24"

OR



G20-60
108"x24"

PLACE SIGN G20-60 OVER MILEAGE
ON EXISTING E1-1A SIGN



COVER ARROW ON
EXISTING E4-1A
SIGN (COVERING
SIGNS TYPE I)

G20-61
120"x30"

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

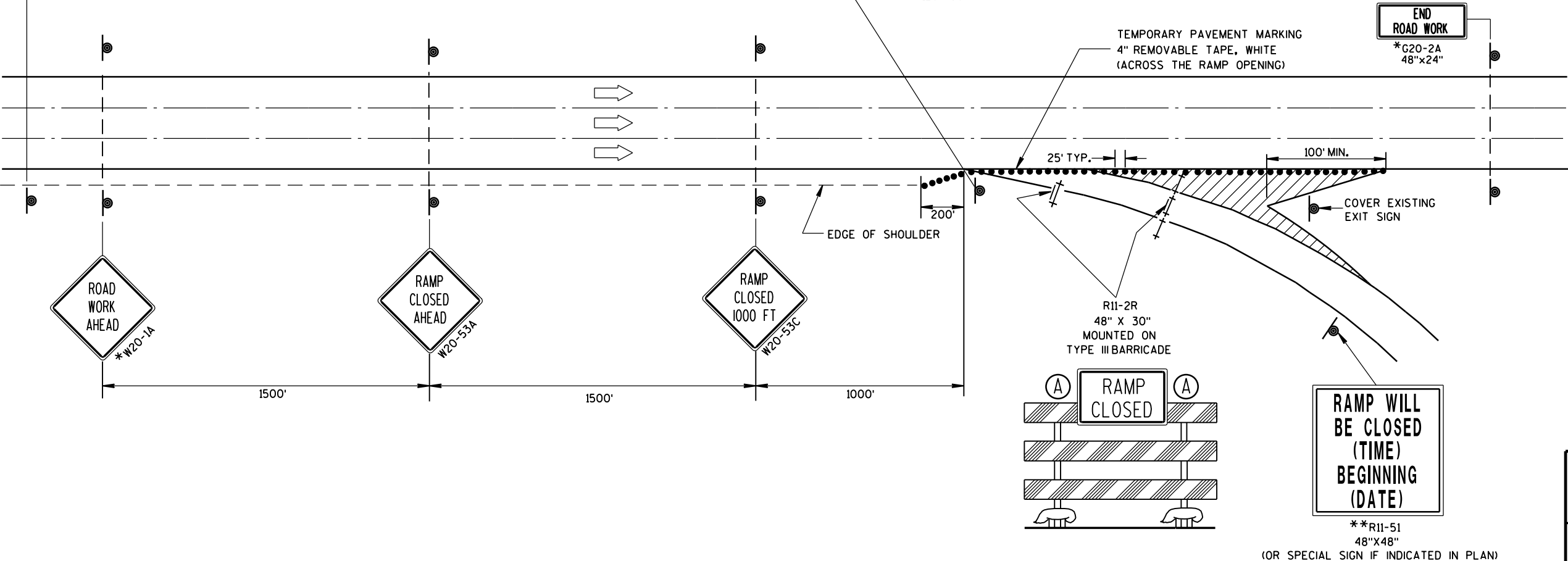
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

* W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP WILL BE CLOSED" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

6

6



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL,
EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

S.D.D. 15 D 16-3

S.D.D. 15 D 16-3



Wisconsin Department of Transportation

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