EAU

PROJECT ID: **1196-00-62**

WITH:

COUNTY: **WASHBURN**

MARCH 2023

ORDER OF SHEETS

TOTAL SHEETS = 80

33

N

DESIGN DESIGNATION

A.A.D.T.	(2023)	=	4,220
A.A.D.T.	(2043)	=	4,220
D.H.V.		=	18.2
D.D.		=	61/39
T.		=	19.4
DESIGN SPEED		=	65 MPH
ESALS		=	1,840,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'FB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

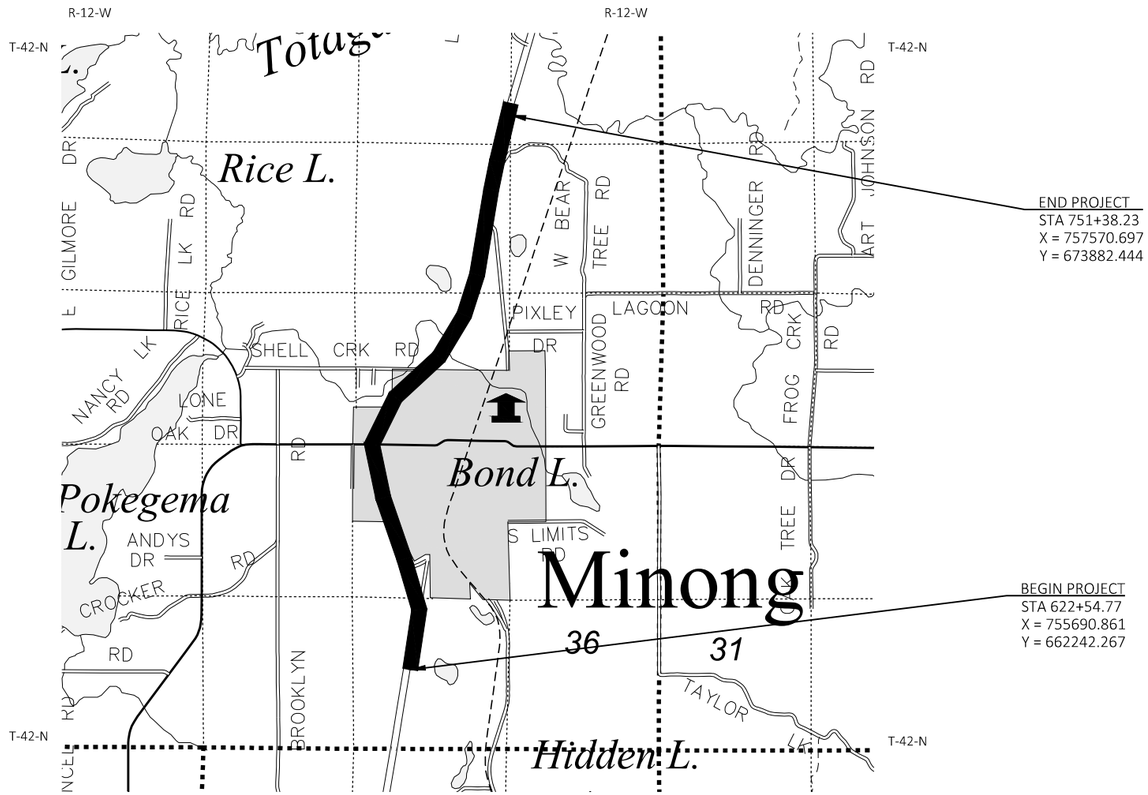
MINONG - SOLON SPRINGS

BUS 53 (MINONG) TO LAKESIDE RD (NB)

USH 53
WASHBURN

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1196-00-62	———	—

STATE PROJECT NUMBER
1196-00-62



LAYOUT

SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 2.44 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WASHBURN COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (1988). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WILLIAM HOLME
Designer	ANDREW UEHLING
Project Manager	ADAM HETRICK
Regional Examiner	TOU YANG
Regional Supervisor	DAVID KOEPP

APPROVED FOR THE DEPARTMENT

DATE: 7/20/2022 Adam M. Hetrick (Signature)

Digitally signed by Adam M. Hetrick
DN: C=US, E=adam.hetrick@dot.wi.gov, O=Wisconsin Department of Transportation, CN=Adam M. Hetrick
Date: 2022.07.20 17:20:34 -05'00'

E

FILE NAME : N:\PDS\C3D\11960032\SHEETSPLAN\010101-TI.DWG PLOT DATE : 6/23/2022 10:15 AM PLOT BY : THAO, KOU PLOT NAME :

GENERAL NOTES

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO UTILITIES THAT HAVE FACILITIES IN THE AREA.

NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

R/W APPROXIMATED ON PLAN SHEETS BASED ON AS-BUILTS.

ACCESS TO ALL RESIDENCES AND BUSINESSES SHALL BE MAINTAINED DURING CONSTRUCTION.

LOCATIONS OF CONCRETE PAVEMENT REPAIR, CONCRETE PAVEMENT REPLACEMENT, AND CENTERLINE JOINT REPAIR SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. APPROXIMATE LOCATIONS HAVE BEEN NOTED ON THE PLAN SHEETS ALONG WITH A CORRESPONDING LEGEND.

ORDER OF SECTION 2 SHEETS

CONTACTS

COMMUNICATION LINE

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ANDREW HEIGL
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P.O. BOX 190
IRON MOUNTAIN, MI 49801
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CENTURYLINK
BRIAN HUHN
425 ELLINGSON AVE
HAWKINS, WI 54530
PHONE: (715) 563-8294
EMAIL: brian.huhn@lumen.com

SPECTRUM
RYAN NELSON
1810 LAKESHORE DR E
ASHLAND, WI 54806
PHONE: (715) 931-0238
EMAIL: ryan.nelson@charter.com

ELECTRICITY

DAHLBERG LIGHT AND POWER COMPANY
JAMES DAHLBERG
9221 E MAIN ST
P.O. BOX 300
SOLON SPRING, WI 54873-0300
PHONE: (715) 378-2205

GAS / PETROLEUM

WE ENERGIES
STEVEN CHAVERS
104 W SOUTH ST
RICE LAKE, WI 54868
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EMAIL: steven.chavers@we-energies.com

WATER

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123 5TH AVE
MINONG, WI 54859
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EMAIL: whallock.publicworks@gmail.com

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EMAIL: Shawn.Haseleu@wisconsin.gov

DESIGN

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718 W CLAIREMONT AVE
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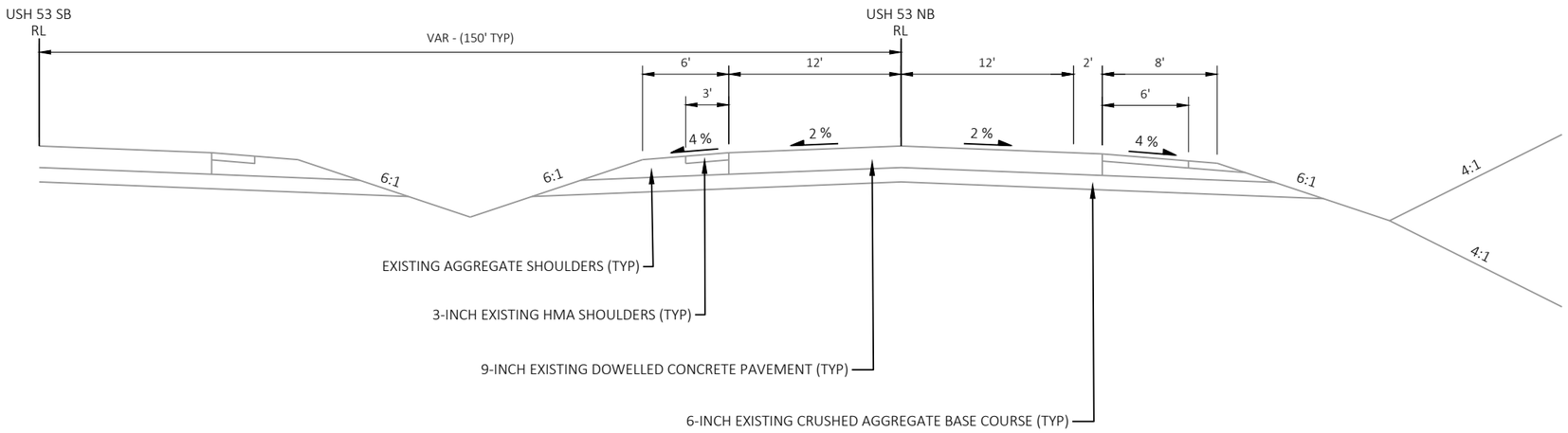
PHONE: (715) 833-5563
EMAIL: Andrew.Uehling@dot.wi.gov

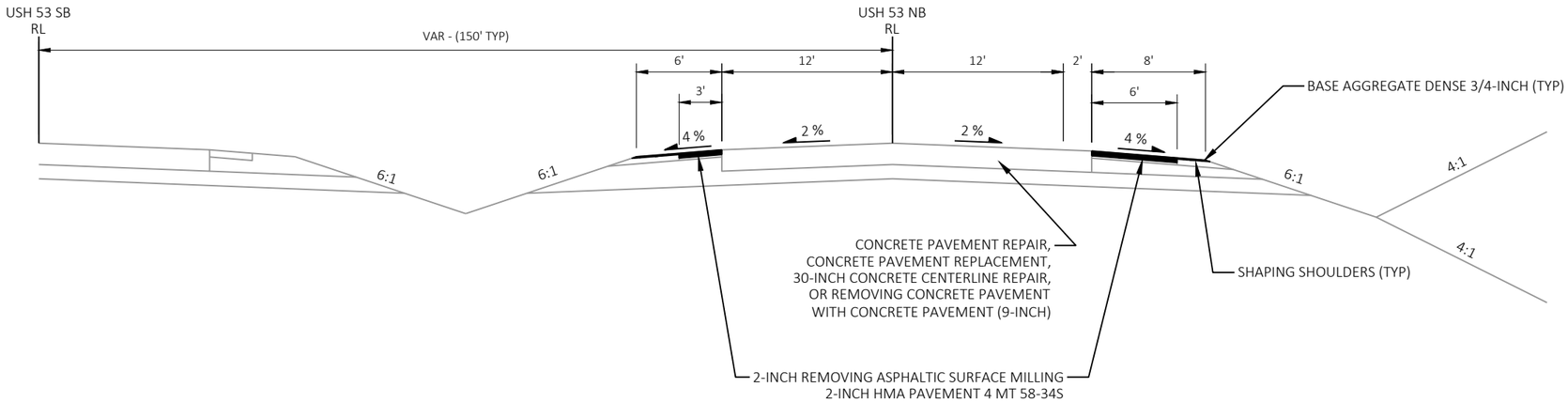
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

2



TYPICAL EXISTING SECTION

USH 53
STA 622+54 TO STA 751+39

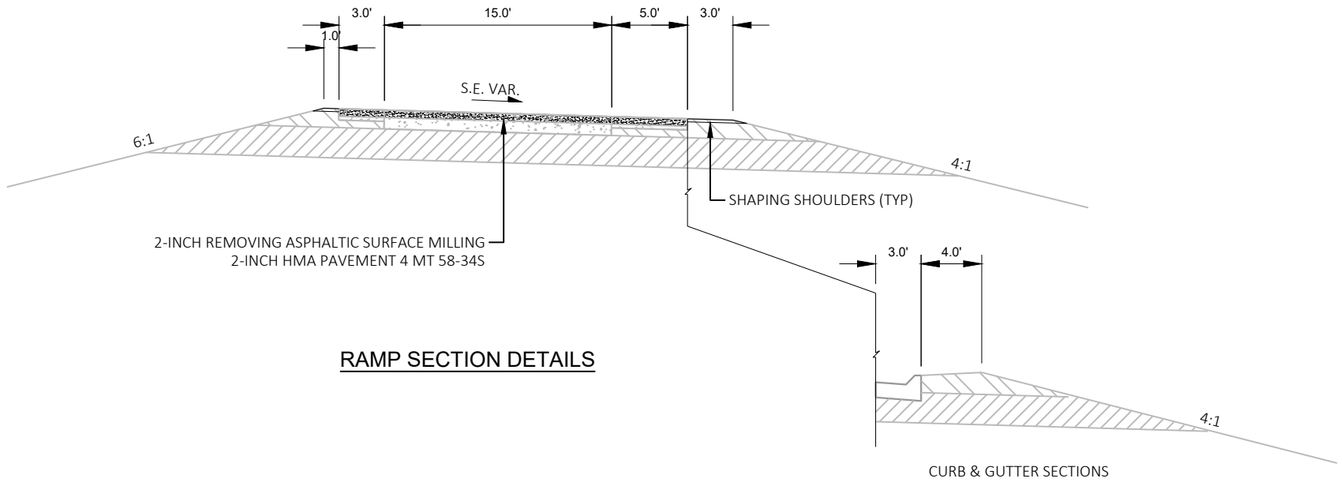


TYPICAL PROPOSED SECTION

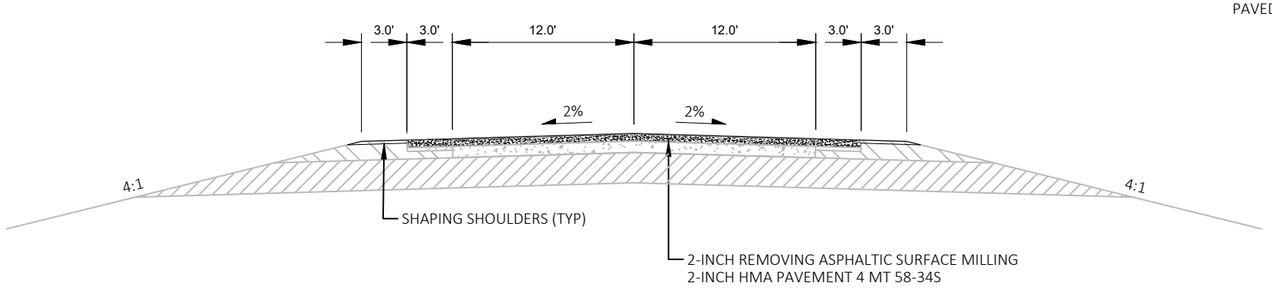
USH 53
STA 622+54 TO STA 751+39

NOTE: LOCATIONS OF CONCRETE PAVEMENT REPAIR, CONCRETE PAVEMENT REPLACEMENT, AND CONCRETE PAVEMENT CENTERLINE JOINT REPAIR SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

2



RAMP SECTION DETAILS



SIDEROAD SECTION DETAILS

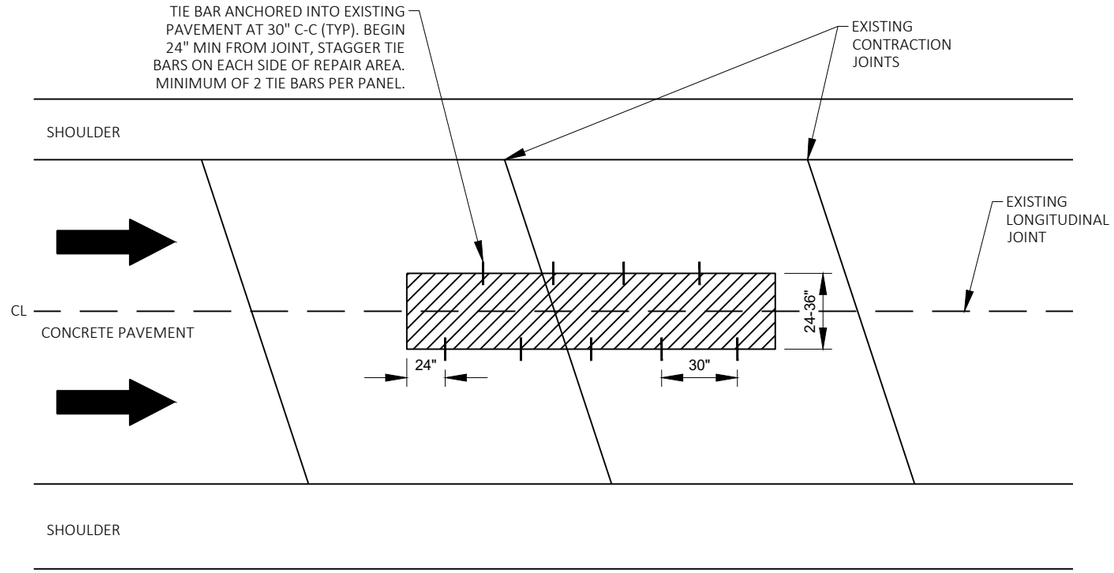
NOTES:

MILL AND OVERLAY EXISTING ASPHALT ROADWAY AND SHOULDERS AT SIDEROADS AND RAMPS TO THE LIMITS SHOWN IN THE PLANS.

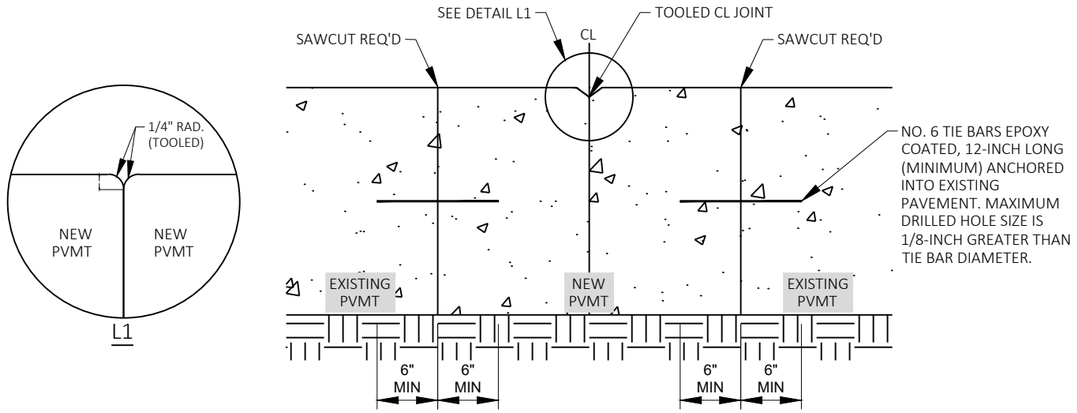
PAVED ROADWAY AND SHOULDER WIDTHS MAY VARY AT VARIOUS LOCATIONS.

PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	CONSTRUCTION DETAILS	SHEET 4	E

2



PLAN VIEW



SECTION VIEW

CONCRETE PAVEMENT CENTERLINE JOINT REPAIR

CONCRETE PAVEMENT CENTERLINE JOINT REPAIR LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

WORK TO BE PAID UNDER SPV ITEM 30-INCH CONCRETE CENTERLINE REPAIR

GENERAL NOTES

BARRELS, SIGNS, BARRICADES, AND ARROW BOARDS SHALL BE PLACED ACCORDING TO:

- SDD 15D12 "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION"
- SDD 15D15 "TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE"
- SDD 15D15 "TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE"
- SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- SDD 15D27 "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH"
- SDD 15D39 "TRAFFIC CONTROL, DROP-OFF SIGNING"
- SDD 15D40 "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER"

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE A.

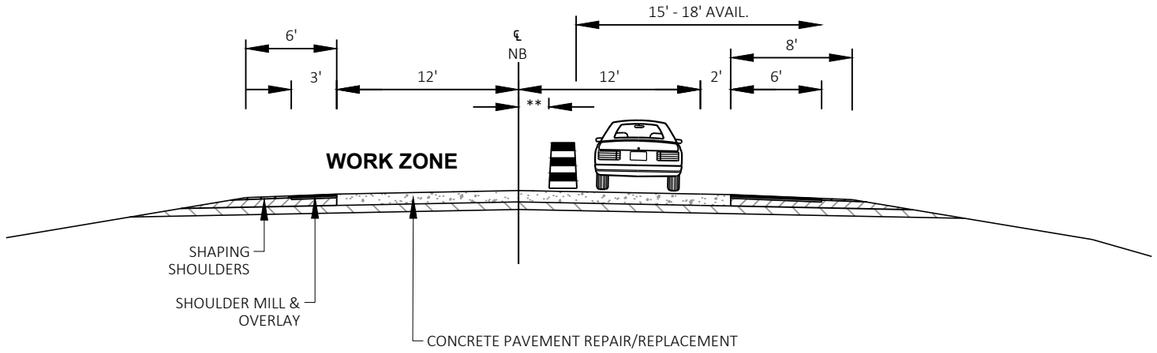
ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

DRUMS IN TAPERS SHALL BE EQUIPPED WITH TYPE C (STEADY BURN) TRAFFIC CONTROL WARNING LIGHTS.

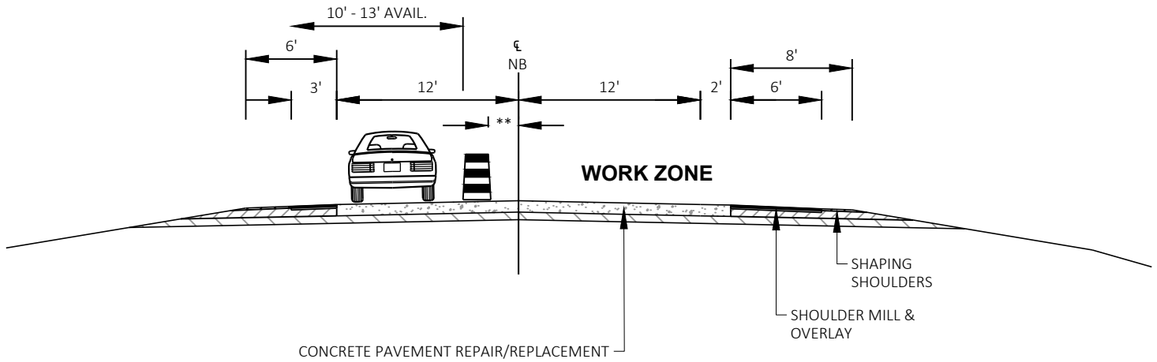
ANY SIGNS TEMPORARY OR EXISTING WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND AS APPROVED BY THE ENGINEER.

USH 53 NB RIGHT TURN LANES SHALL BE OPEN WHEN THE OUTSIDE LANE IS CLOSED. INTERSECTION STAGING SHALL BE DETERMINED BY CONTRACTOR MEANS AND METHODS. INTERSECTION STAGING SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT.



TRAFFIC CONTROL - STAGE 1 - INSIDE LANE CLOSED
STA: 622+54.77 - 751+38.23 NB

** NOTE
- O' TYP.
- UP TO 3' FOR CENTERLINE JOINT REPAIR



TRAFFIC CONTROL - STAGE 2 - OUTSIDE LANE CLOSED
STA: 622+54.77 - 751+38.23 NB

2

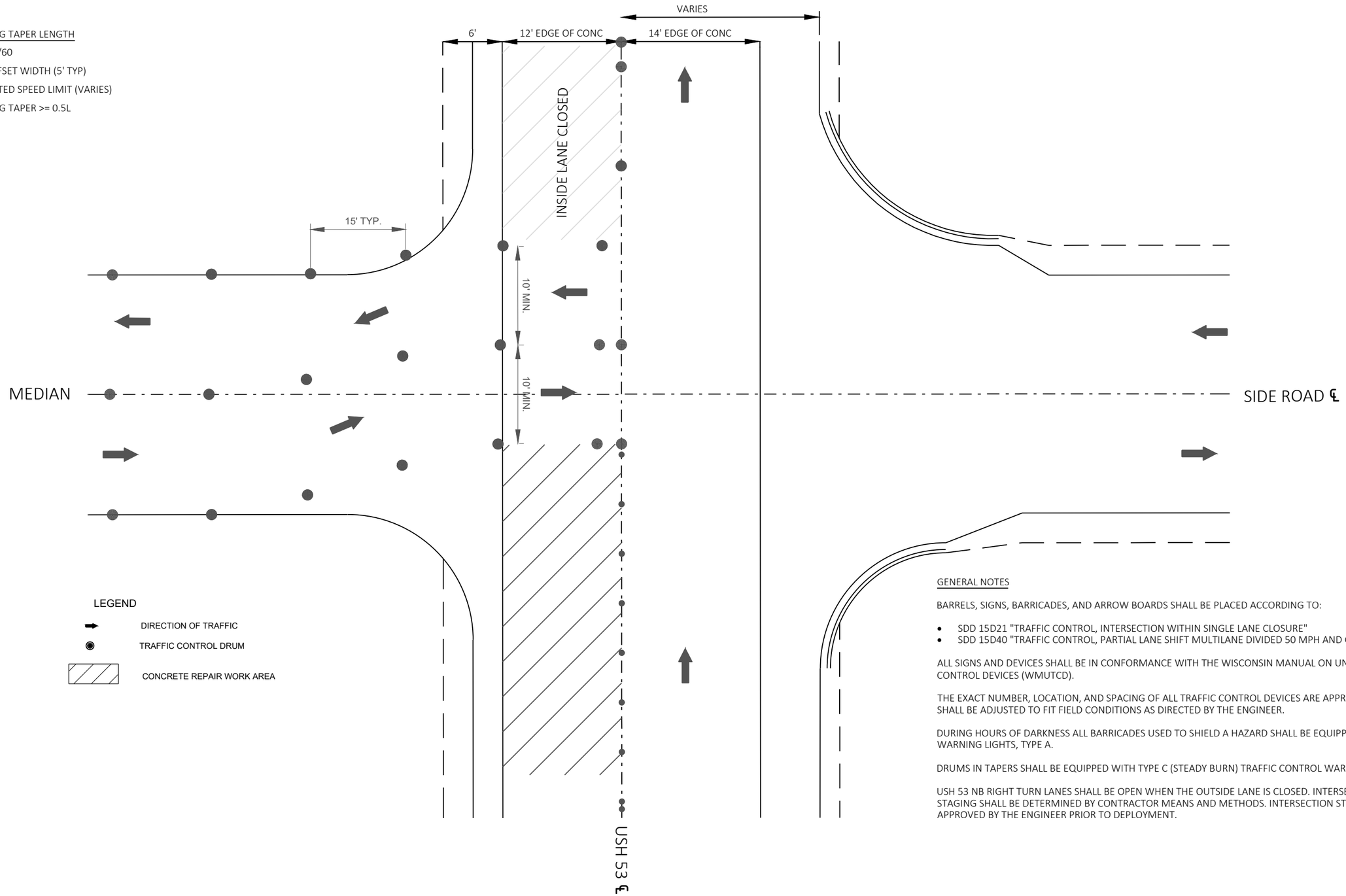
SHIFTING TAPER LENGTH

L = $WS^2/60$

W = OFFSET WIDTH (5' TYP)

S = POSTED SPEED LIMIT (VARIES)

SHIFTING TAPER >= 0.5L



INTERSECTION STAGING DETAIL
STAGE 1
NOT TO SCALE

GENERAL NOTES

BARRELS, SIGNS, BARRICADES, AND ARROW BOARDS SHALL BE PLACED ACCORDING TO:

- SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- SDD 15D40 "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER"

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE A.

DRUMS IN TAPERS SHALL BE EQUIPPED WITH TYPE C (STEADY BURN) TRAFFIC CONTROL WARNING LIGHTS.

USH 53 NB RIGHT TURN LANES SHALL BE OPEN WHEN THE OUTSIDE LANE IS CLOSED. INTERSECTION STAGING SHALL BE DETERMINED BY CONTRACTOR MEANS AND METHODS. INTERSECTION STAGING SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT.

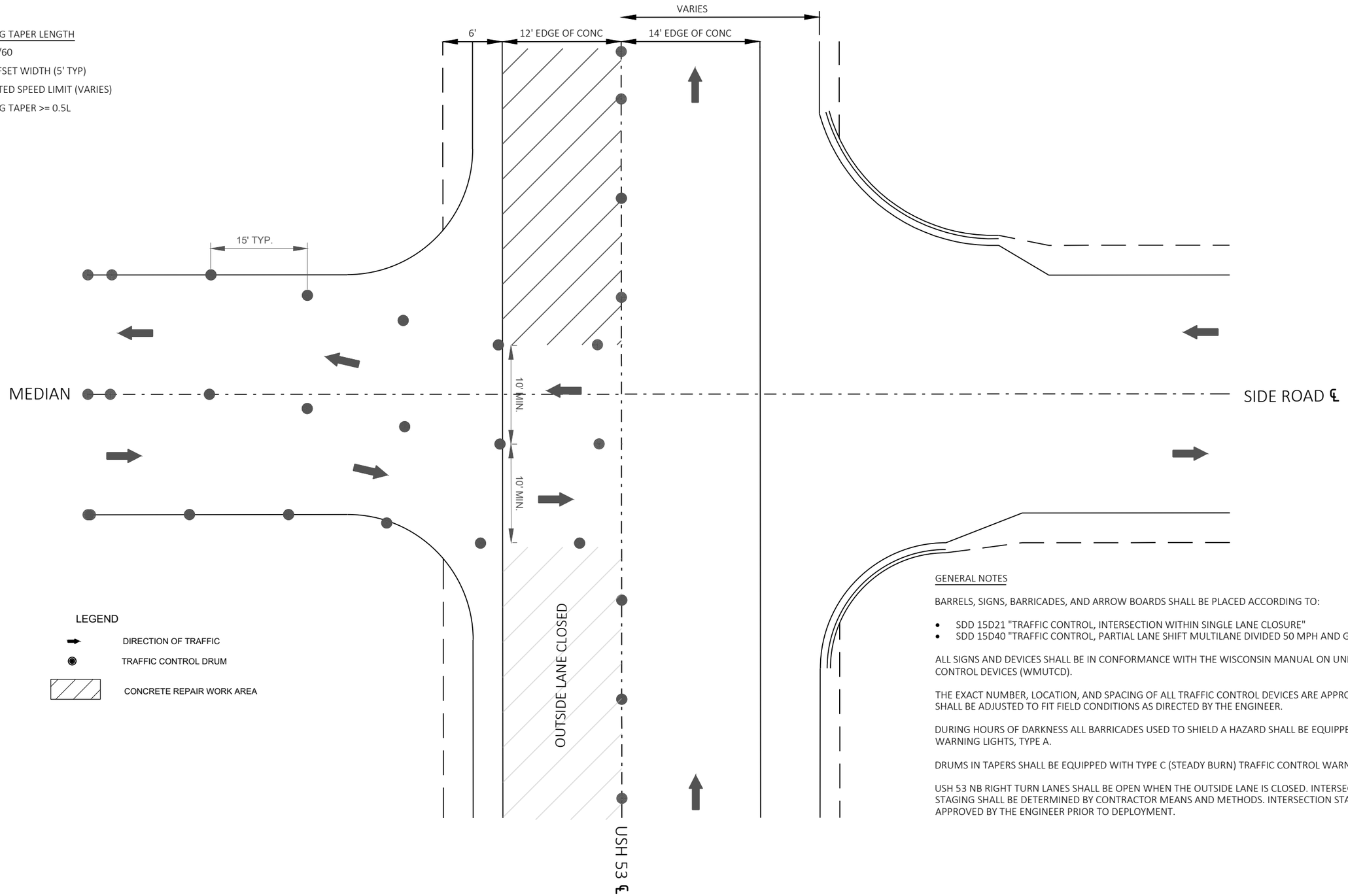
SHIFTING TAPER LENGTH

$L = WS^2/60$

W = OFFSET WIDTH (5' TYP)

S = POSTED SPEED LIMIT (VARIES)

SHIFTING TAPER >= 0.5L



GENERAL NOTES

BARRELS, SIGNS, BARRICADES, AND ARROW BOARDS SHALL BE PLACED ACCORDING TO:

- SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- SDD 15D40 "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER"

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE A.

DRUMS IN TAPERS SHALL BE EQUIPPED WITH TYPE C (STEADY BURN) TRAFFIC CONTROL WARNING LIGHTS.

USH 53 NB RIGHT TURN LANES SHALL BE OPEN WHEN THE OUTSIDE LANE IS CLOSED. INTERSECTION STAGING SHALL BE DETERMINED BY CONTRACTOR MEANS AND METHODS. INTERSECTION STAGING SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT.

INTERSECTION STAGING DETAIL
STAGE 2

NOT TO SCALE

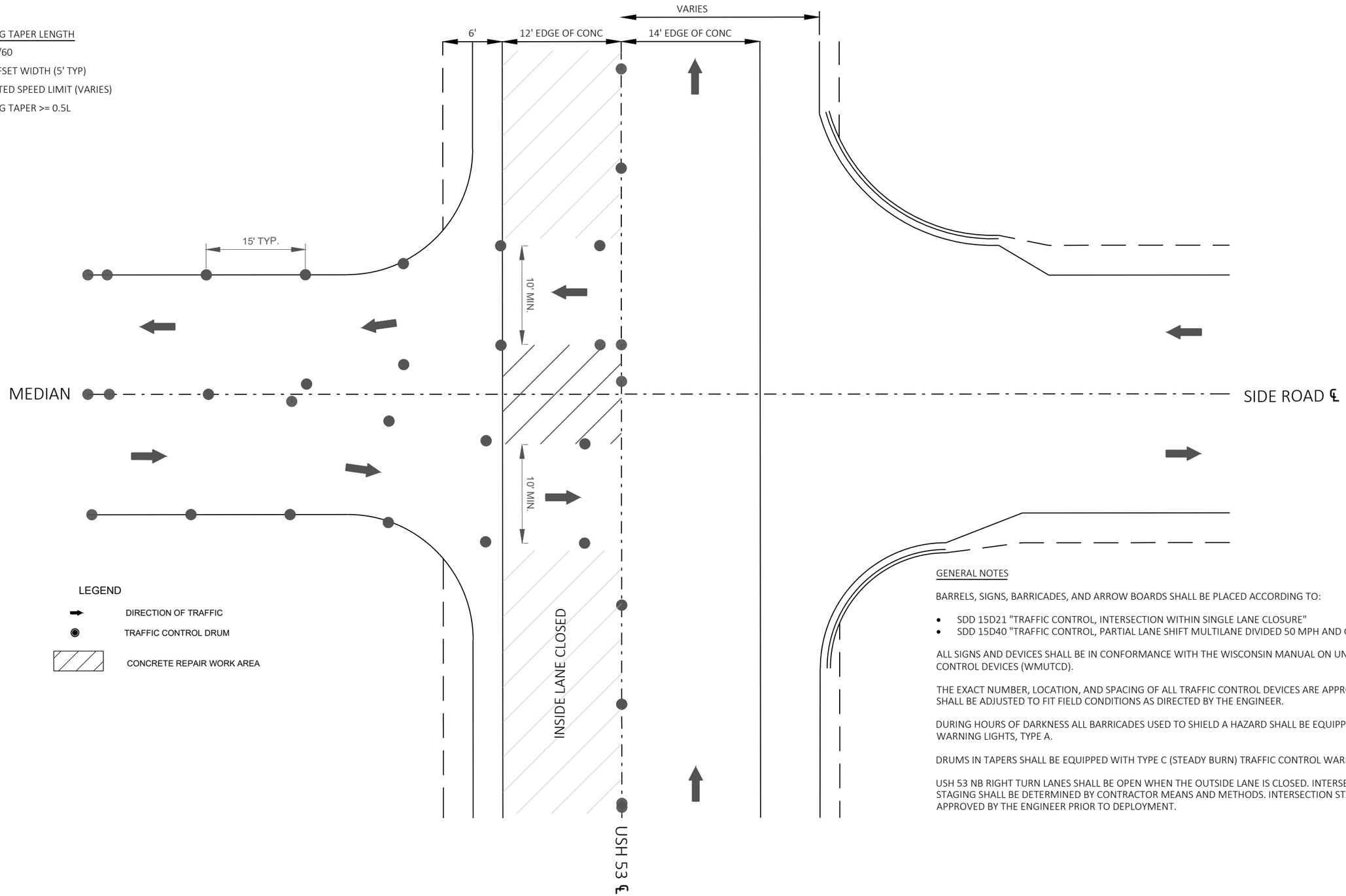
SHIFTING TAPER LENGTH

$L = WS^2/60$

W = OFFSET WIDTH (5' TYP)

S = POSTED SPEED LIMIT (VARIES)

SHIFTING TAPER >= 0.5L



GENERAL NOTES

BARRELS, SIGNS, BARRICADES, AND ARROW BOARDS SHALL BE PLACED ACCORDING TO:

- SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- SDD 15D40 "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER"

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE A.

DRUMS IN TAPERS SHALL BE EQUIPPED WITH TYPE C (STEADY BURN) TRAFFIC CONTROL WARNING LIGHTS.

USH 53 NB RIGHT TURN LANES SHALL BE OPEN WHEN THE OUTSIDE LANE IS CLOSED. INTERSECTION STAGING SHALL BE DETERMINED BY CONTRACTOR MEANS AND METHODS. INTERSECTION STAGING SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT.

INTERSECTION STAGING DETAIL
STAGE 3

NOT TO SCALE

2

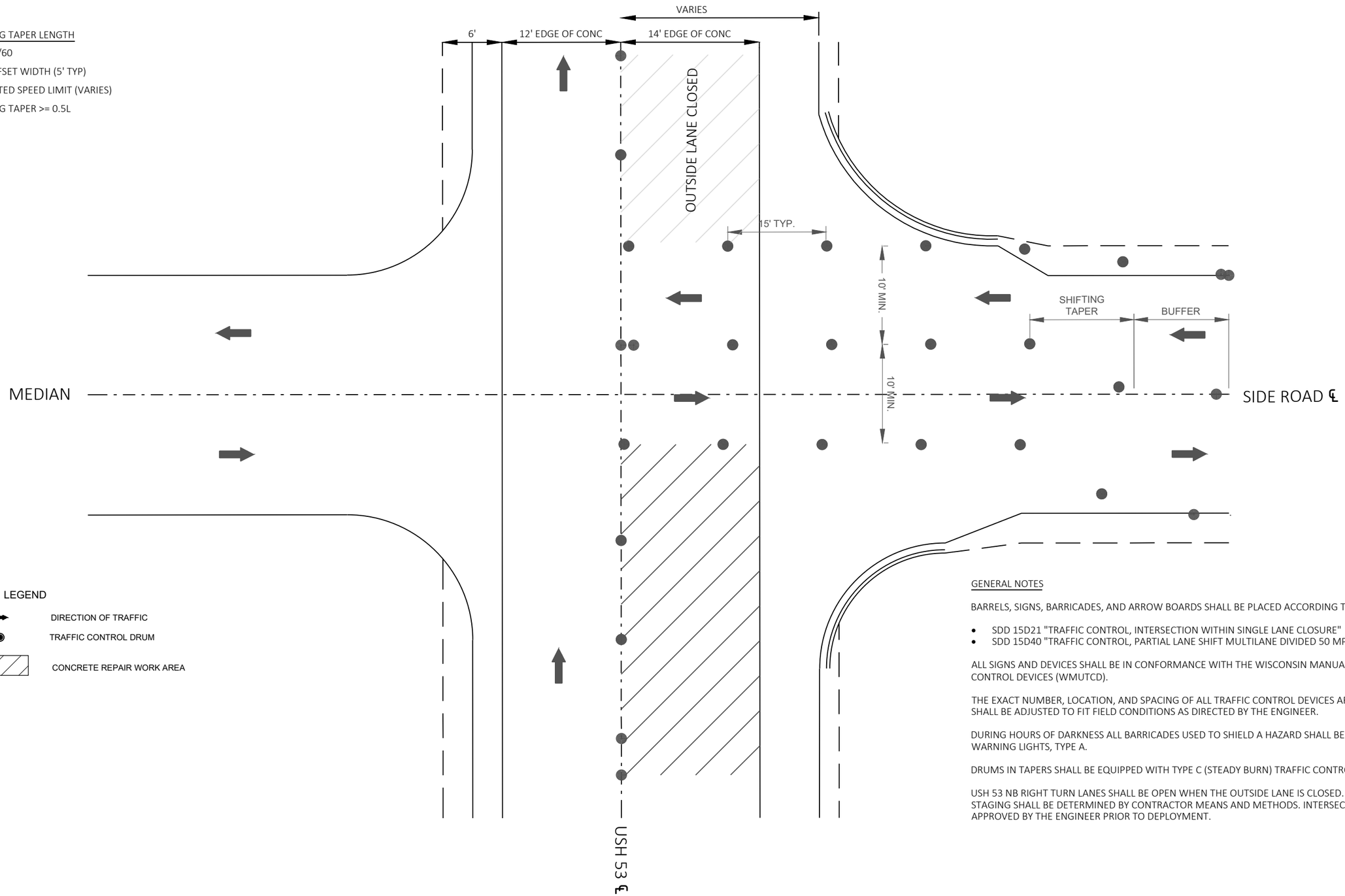
SHIFTING TAPER LENGTH

$L = WS^2/60$

W = OFFSET WIDTH (5' TYP)

S = POSTED SPEED LIMIT (VARIES)

SHIFTING TAPER >= 0.5L



INTERSECTION STAGING DETAIL
STAGE 4
NOT TO SCALE

GENERAL NOTES

BARRELS, SIGNS, BARRICADES, AND ARROW BOARDS SHALL BE PLACED ACCORDING TO:

- SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- SDD 15D40 "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER"

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE A.

DRUMS IN TAPERS SHALL BE EQUIPPED WITH TYPE C (STEADY BURN) TRAFFIC CONTROL WARNING LIGHTS.

USH 53 NB RIGHT TURN LANES SHALL BE OPEN WHEN THE OUTSIDE LANE IS CLOSED. INTERSECTION STAGING SHALL BE DETERMINED BY CONTRACTOR MEANS AND METHODS. INTERSECTION STAGING SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT.

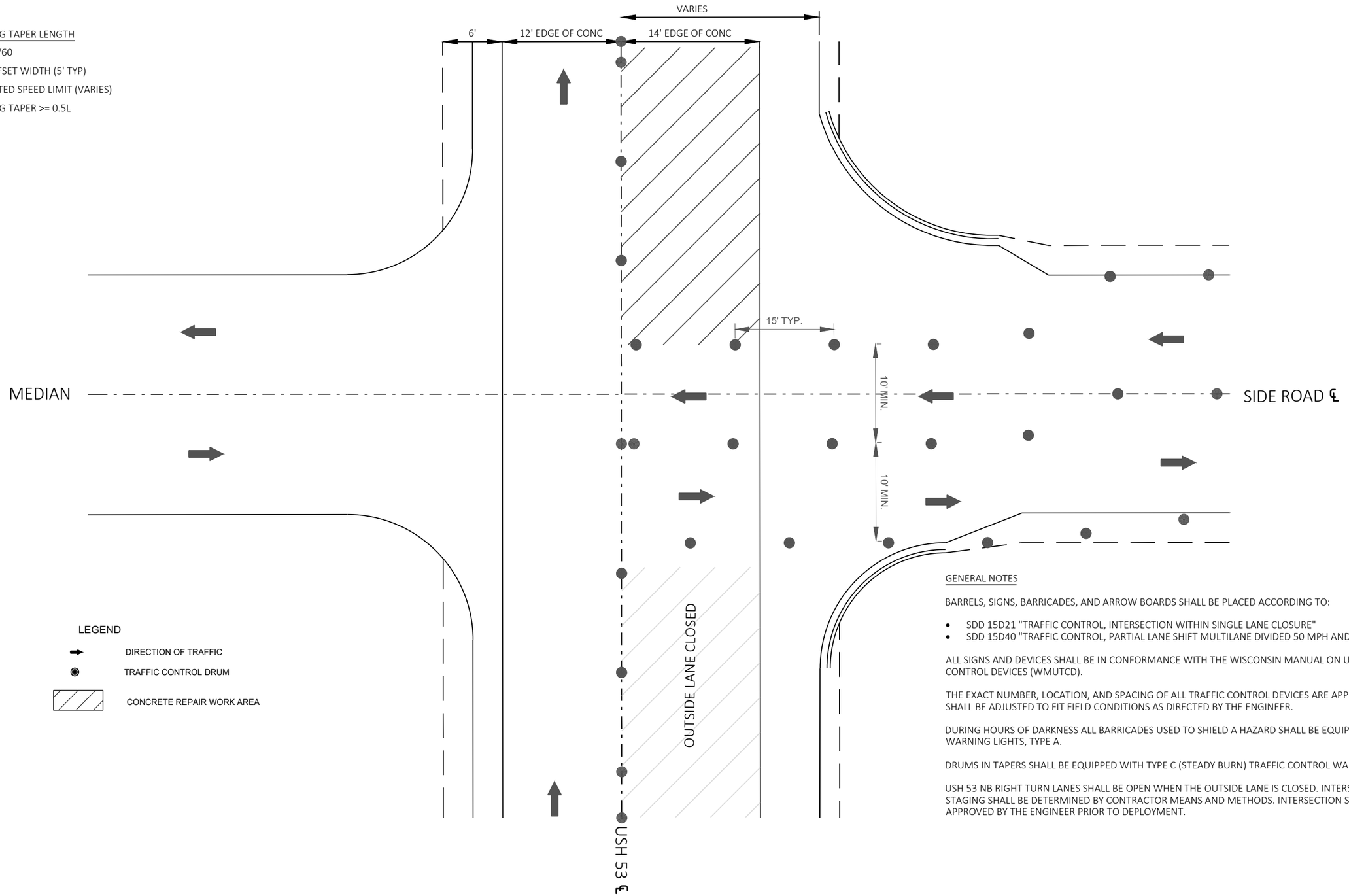
SHIFTING TAPER LENGTH

$L = WS^2/60$

W = OFFSET WIDTH (5' TYP)

S = POSTED SPEED LIMIT (VARIES)

SHIFTING TAPER >= 0.5L



INTERSECTION STAGING DETAIL
STAGE 5
NOT TO SCALE

GENERAL NOTES

BARRELS, SIGNS, BARRICADES, AND ARROW BOARDS SHALL BE PLACED ACCORDING TO:

- SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- SDD 15D40 "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER"

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE A.

DRUMS IN TAPERS SHALL BE EQUIPPED WITH TYPE C (STEADY BURN) TRAFFIC CONTROL WARNING LIGHTS.

USH 53 NB RIGHT TURN LANES SHALL BE OPEN WHEN THE OUTSIDE LANE IS CLOSED. INTERSECTION STAGING SHALL BE DETERMINED BY CONTRACTOR MEANS AND METHODS. INTERSECTION STAGING SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT.

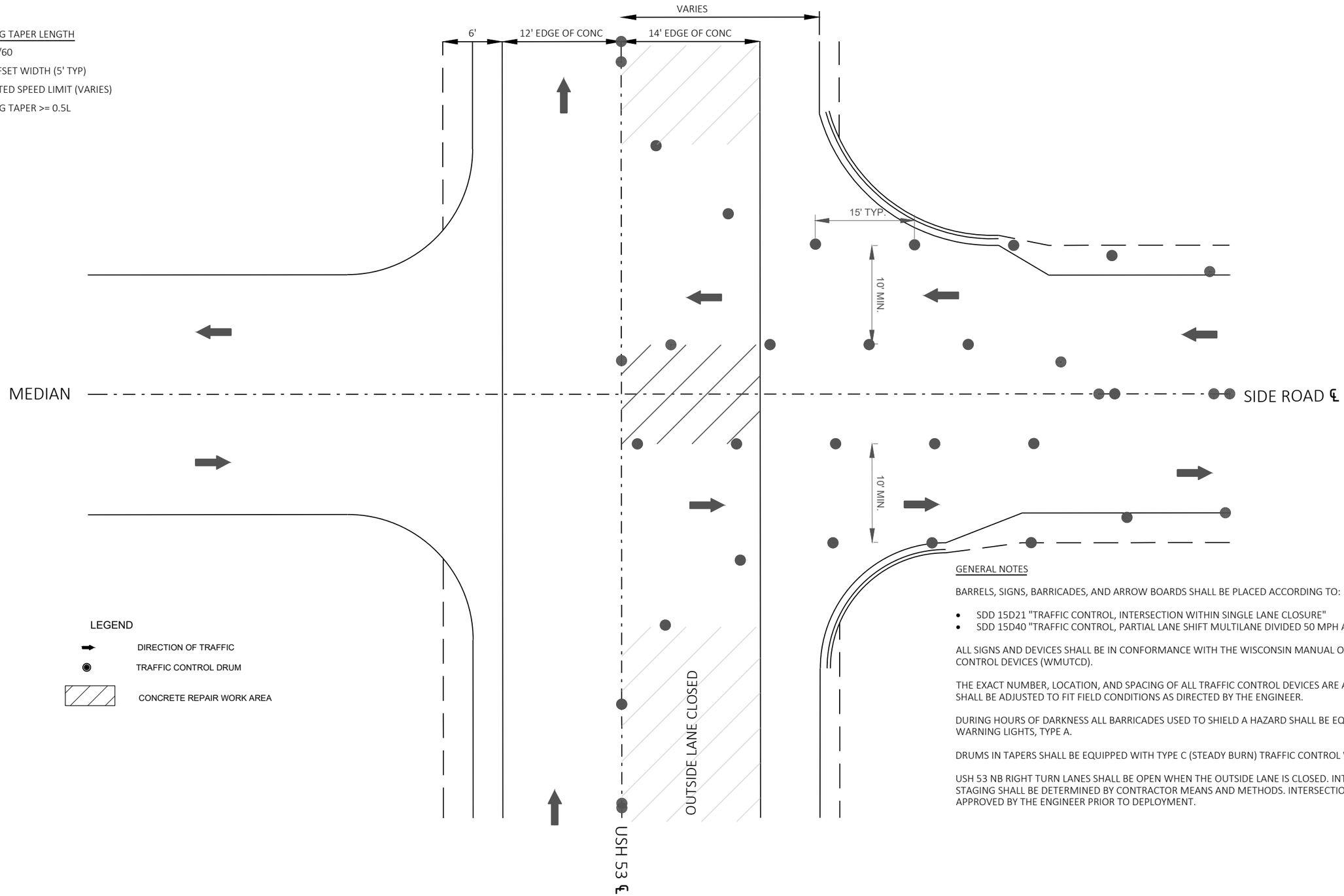
SHIFTING TAPER LENGTH

$L = WS^2/60$

W = OFFSET WIDTH (5' TYP)

S = POSTED SPEED LIMIT (VARIES)

SHIFTING TAPER >= 0.5L



INTERSECTION STAGING DETAIL
STAGE 6
NOT TO SCALE

GENERAL NOTES

BARRELS, SIGNS, BARRICADES, AND ARROW BOARDS SHALL BE PLACED ACCORDING TO:

- SDD 15D21 "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- SDD 15D40 "TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER"

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD).

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

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE A.

DRUMS IN TAPERS SHALL BE EQUIPPED WITH TYPE C (STEADY BURN) TRAFFIC CONTROL WARNING LIGHTS.

USH 53 NB RIGHT TURN LANES SHALL BE OPEN WHEN THE OUTSIDE LANE IS CLOSED. INTERSECTION STAGING SHALL BE DETERMINED BY CONTRACTOR MEANS AND METHODS. INTERSECTION STAGING SHALL BE APPROVED BY THE ENGINEER PRIOR TO DEPLOYMENT.

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- DIRECTION OF TRAFFIC

PCMS MESSAGING:

FRAME 1: "RAMP TO CLOSE"

FRAME 2: "XXXDAY XX-XX-XX"

TYPE III BARRICADE SIGN:

"ROAD CLOSED"

MB

EP: 142+75.26

SEE SDD 15D16 FOR EXIT RAMP CLOSURE

BUSINESS 53

SHELL CREEK RD

RD.

OF THE THREE MAJOR INTERSECTIONS (BUSINESS 53 SOUTH, STH 77, & BUSINESS 53 NORTH), ONLY ONE AREA CAN HAVE WORK BEING DONE RESULTING IN RESTRICTED ACCESS AT A TIME SUCH THAT THE OTHER TWO INTERSECTIONS ARE AVAILABLE FOR ACCESS INTO AND OUT OF MINONG

WORK ON THE BUS 53 RAMPS SHALL OCCUR DURING THE OUTSIDE LANE CLOSURE. THE RAMP CAN BE COMPLETELY CLOSED FOR NO LONGER THAN 3 DAYS TO ALLOW WORK OPERATIONS. TRAFFIC WILL USE SHELL CREEK RD WHILE THE RAMP IS CLOSED.

WHEN RAMP IS OPEN WITH MAINLINE LANE CLOSURES, UTILIZE SDD 15D15 "TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN RIGHT/LEFT LANE CLOSURE."

WITHIN THIS DETAIL, TYPE III BARRICADES HAVE TYPE A LIGHTS AND DELINEATING TRAFFIC CONTROL DRUMS HAVE TYPE C LIGHTS

PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	TRAFFIC CONTROL	SHEET 13	E

FILE NAME : C:\C3D\11960032\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - 025100-tc -01

PLOT DATE : 10/10/2022 2:44 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A WARNING LIGHT (FLASHING)
- (C) TYPE C WARNING LIGHT (STEADY BURN)
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- DIRECTION OF TRAFFIC

N

USH 53

BUS USH 53

620

618

616

614

612

SIGN

INL

MB

PCMS MESSAGING:
FRAME 1: "RAMP TO CLOSE"
FRAME 2: "XXXDAY XX-XX-XX"

TYPE III BARRICADE SIGN:
"ROAD CLOSED"

SEE SDD 15D16 FOR
EXIT RAMP CLOSURE

N

RIPRAP

INL

BUSINESS 53

MB

PCMS MESSAGING:
FRAME 1: "RAMP TO CLOSE"
FRAME 2: "XXXDAY XX-XX-XX"

TYPE III BARRICADE SIGN:
"ROAD CLOSED"

N

B ST.

BUSINESS 53

WALLS

MH

T

SEE SDD 15C02 FOR
MAINLINE CLOSURES

TYPE III BARRICADE SIGN:
"ROAD CLOSED"

W

SIGN

BUSINESS 53

WALLS

2

PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	TRAFFIC CONTROL	SHEET 14	E

FILE NAME : C:\C3D\11960032\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - 025100-tc -02

PLOT DATE : 10/10/2022 2:45 PM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

1196-00-62

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	4,524.000	4,524.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	600.000	600.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	30,875.000	30,875.000
0008	208.1100	Select Borrow	CY	68.000	68.000
0010	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1196-00-62	EACH	1.000	1.000
0012	213.0100	Finishing Roadway (project) 01. 1196-00-62	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	360.000	360.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	94.000	94.000
0018	305.0500	Shaping Shoulders	STA	318.000	318.000
0020	415.0090	Concrete Pavement 9-Inch	SY	4,524.000	4,524.000
0022	416.0610	Drilled Tie Bars	EACH	1,819.000	1,819.000
0024	416.0620	Drilled Dowel Bars	EACH	610.000	610.000
0026	455.0605	Tack Coat	GAL	3,899.000	3,899.000
0028	460.2000	Incentive Density HMA Pavement	DOL	2,160.000	2,160.000
0030	460.6244	HMA Pavement 4 MT 58-34 S	TON	3,363.000	3,363.000
0032	465.0110	Asphaltic Surface Patching	TON	200.000	200.000
0034	465.0400	Asphaltic Shoulder Rumble Strips	LF	21,442.000	21,442.000
0036	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	2.000	2.000
0038	520.8700	Cleaning Culvert Pipes	EACH	3.000	3.000
0040	606.0200	Riprap Medium	CY	5.000	5.000
0042	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1196-00-62	EACH	1.000	1.000
0044	619.1000	Mobilization	EACH	1.000	1.000
0046	624.0100	Water	MGAL	25.000	25.000
0048	628.1504	Silt Fence	LF	330.000	330.000
0050	628.1520	Silt Fence Maintenance	LF	50.000	50.000
0052	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0054	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0056	628.7504	Temporary Ditch Checks	LF	75.000	75.000
0058	633.5200	Markers Culvert End	EACH	24.000	24.000
0060	642.5001	Field Office Type B	EACH	1.000	1.000
0062	643.0300	Traffic Control Drums	DAY	25,060.000	25,060.000
0064	643.0420	Traffic Control Barricades Type III	DAY	1,285.000	1,285.000
0066	643.0705	Traffic Control Warning Lights Type A	DAY	1,390.000	1,390.000
0068	643.0715	Traffic Control Warning Lights Type C	DAY	1,445.000	1,445.000
0070	643.0800	Traffic Control Arrow Boards	DAY	100.000	100.000
0072	643.0900	Traffic Control Signs	DAY	4,915.000	4,915.000
0074	643.1050	Traffic Control Signs PCMS	DAY	30.000	30.000
0076	643.3155	Temporary Marking Line Removable Contrast Tape 4-Inch	LF	200.000	200.000
0078	643.3255	Temporary Marking Line Removable Contrast Tape 8-Inch	LF	400.000	400.000
0080	643.5000	Traffic Control	EACH	1.000	1.000
0082	645.0120	Geotextile Type HR	SY	173.000	173.000
0084	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	40,418.000	40,418.000
0086	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	1,230.000	1,230.000
0088	646.5020	Marking Arrow Epoxy	EACH	7.000	7.000
0090	646.5120	Marking Word Epoxy	EACH	7.000	7.000
0092	646.6120	Marking Stop Line Epoxy 18-Inch	LF	116.000	116.000
0094	646.9000	Marking Removal Line 4-Inch	LF	350.000	350.000
0096	650.8000	Construction Staking Resurfacing Reference	LF	13,500.000	13,500.000
0098	650.9911	Construction Staking Supplemental Control (project) 01. 1196-00-62	EACH	1.000	1.000

1196-00-62

Line	Item	Item Description	Unit	Total	Qty
0100	690.0150	Sawing Asphalt	LF	722.000	722.000
0102	690.0250	Sawing Concrete	LF	22,382.000	22,382.000
0104	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	1,357.000	1,357.000
0106	SPV.0180	Special 01. Concrete Pavement Repair Doweled	SY	325.000	325.000
0108	SPV.0180	Special 02. Concrete Pavement Replacement Doweled	SY	3,895.000	3,895.000
0110	SPV.0180	Special 03. 30-inch Concrete Centerline Repair	SY	65.000	65.000

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204.0100
REMOVING
CONCRETE
PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	SY
0010	674+82	-	684+33	RT	1,480
0010	685+38	-	694+89	RT	1,480
0010	715+48	-	718+65	RT	494
0010	719+17	-	722+87	RT	576
0010	739+24	-	742+41	RT	494
				TOTAL 0010	4,524

204.0120
REMOVING
ASPHALTIC SURFACE
MILLING

CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	622+55	-	642+48	NB LEFT ASPHALT SHOULDER	665	PROJECT BEGIN LIMIT
0010	642+48	-	644+06	MINONG SOUTH BUSINESS 53 MEDIAN	591	
0010	644+06	-	664+37	NB LEFT ASPHALT SHOULDER	677	
0010	664+37	-	665+39	MEDIAN	588	
0010	665+39	-	678+08	NB LEFT ASPHALT SHOULDER	423	NORTH LIMIT AT RECENT PAVING
0010	698+18	-	702+05	NB LEFT ASPHALT SHOULDER	129	SOUTH LIMIT AT RECENT PAVING
0010	702+05	-	703+85	WALLACE ST MEDIAN	680	
0010	703+85	-	718+33	NB LEFT ASPHALT SHOULDER	483	
0010	718+33	-	719+68	MINONG NORTH BUSINESS 53 MEDIAN	445	
0010	719+68	-	751+38	NB LEFT ASPHALT SHOULDER	1,057	PROJECT END LIMIT
0010	616+87	-	645+98	SOUTH BUSINESS 53 & RAMPS	11,725	
0010	622+55	-	640+77	NB RIGHT ASPHALT SHOULDER	1,215	PROJECT BEGIN LIMIT
0010	640+77	-	644+30	RIGHT TURN LANE & MINONG SOUTH BUSINESS 53	811	
0010	644+30	-	677+08	NB RIGHT ASPHALT SHOULDER	2,186	NORTH LIMIT AT RECENT PAVING
0010	683+78	-	689+58	RIGHT TURN LANE & SHOULDER THROUGH STH 77	733	SOUTH LIMIT AT RECENT PAVING
0010	689+58	-	702+24	NB RIGHT ASPHALT SHOULDER	844	
0010	702+24	-	703+79	NB RIGHT ASPHALT SHOULDER & WALLACE ST	376	
0010	703+79	-	714+54	NB RIGHT ASPHALT SHOULDER	717	
0010	714+54	-	720+43	RIGHT TURN LANE & MINONG NORTH BUSINESS 53	1,401	
0010	719+03	-	725+28	NORTH BUSINESS 53 & RAMPS	2,546	
0010	720+43		726+20	NB RIGHT ASPHALT SHOULDER	385	
0010	725+35	-	726+20	NB RAMP LEFT ASPHALT SHOULDER	29	
0010	725+35	-	729+73	NB RIGHT GORE AREA	433	
0010	725+35	-	751+38	NB RAMP/MAINLINE RIGHT ASPHALT SHOULDER	1,736	PROJECT END LIMIT
				TOTAL 0010	30,875	

204.0115
REMOVING ASPHALTIC
SURFACE BUTT JOINTS

CATEGORY	LOCATION	SY	REMARKS
0010	PROJECT	600	UNDISTRIBUTED
	TOTAL 0010	600	

208.1100
SELECT BORROW

CATEGORY	STATION	LOCATION	CY	REMARKS
0010	645+90	RT	68	REPAIR ONE-FOOT DROP OFF
		TOTAL 0010	68	

211.0101
PREPARE FOUNDATION
FOR ASPHALTIC PAVING

CATEGORY	LOCATION	EACH	REMARKS
0010	PROJECT	1	SHLDS, TURNLANES, ROADWAY, RAMPS
	TOTAL 0010	1	

213.0100.01
FINISHING ROADWAY
(PROJECT) (01. 1196-00-62)

CATEGORY	LOCATION	EACH	REMARKS
0010	PROJECT	1	PROJECT LIMITS
	TOTAL 0010	1	

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CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON
0010	622+55	-	642+78	NB LEFT SHOULDER	30
0010	644+06	-	664+44	NB LEFT SHOULDER	30
0010	665+29	-	678+08	NB LEFT SHOULDER	19
0010	698+18	-	702+20	NB LEFT SHOULDER	6
0010	703+63	-	718+46	NB LEFT SHOULDER	22
0010	719+65	-	751+38	NB LEFT SHOULDER	47
0010	616+87	-	645+98	SOUTH BUSINESS 53 & RAMPS	81
0010	622+55	-	641+12	NB RIGHT SHOULDER	19
0010	644+36	-	664+71	NB RIGHT SHOULDER	20
0010	665+15	-	677+08	NB RIGHT SHOULDER	12
0010	689+58	-	702+31	NB RIGHT SHOULDER	13
0010	703+46	-	714+88	NB RIGHT SHOULDER	12
0010	719+03	-	725+28	NORTH BUSINESS 53 & RAMPS	16
0010	721+43	-	725+35	NB RIGHT SHOULDER	4
0010	725+35	-	726+20	GORE SHOULDER	4
0010	726+20	-	747+00	NB RIGHT SHOULDER	21
0010	747+97	-	751+38	NB RIGHT SHOULDER	4
				TOTAL 0010	360

CATEGORY	STATION	TO	STATION	LOCATION	305.0500 SHAPING SHOULDERS STA
0010	622+55	-	642+78	NB LEFT SHOULDER	21
0010	644+06	-	664+44	NB LEFT SHOULDER	21
0010	665+29	-	678+08	NB LEFT SHOULDER	13
0010	698+18	-	702+20	NB LEFT SHOULDER	5
0010	703+63	-	718+46	NB LEFT SHOULDER	15
0010	719+65	-	751+38	NB LEFT SHOULDER	32
0010	616+87	-	645+98	SOUTH BUSINESS 53 & RAMPS	84
0010	622+55	-	641+12	NB RIGHT SHOULDER	19
0010	644+36	-	664+71	NB RIGHT SHOULDER	21
0010	665+15	-	677+08	NB RIGHT SHOULDER	12
0010	689+58	-	702+31	NB RIGHT SHOULDER	13
0010	703+46	-	714+88	NB RIGHT SHOULDER	12
0010	719+03	-	725+28	NORTH BUSINESS 53 & RAMPS	20
0010	721+43	-	725+35	NB RIGHT SHOULDER	4
0010	725+35	-	726+20	NB RIGHT SHOULDER	1
0010	726+20	-	747+00	NB RIGHT SHOULDER	21
0010	747+97	-	751+38	NB RIGHT SHOULDER	4
				TOTAL 0010	318

CATEGORY	STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	REMARKS
0010	675+35	-	675+88	LT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	704+39	-	704+92	LT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	711+78	-	712+31	LT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	712+84	-	713+37	LT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	715+48	-	717+06	LT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	719+17	-	721+29	LT	3	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	724+45	-	724+98	LT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	631+00	-	631+53	RT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	635+22	-	636+28	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	639+97	-	641+03	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	643+14	-	645+25	RT	4	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	670+60	-	671+65	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	674+82	-	684+33	RT	14	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	685+38	-	694+89	RT	14	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	700+17	-	700+69	RT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	704+39	-	707+03	RT	4	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	709+67	-	710+73	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	711+25	-	711+78	RT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	712+31	-	713+37	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	715+48	-	718+65	RT	5	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	719+17	-	722+87	RT	6	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	727+09	-	727+62	RT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	731+32	-	732+37	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	732+90	-	733+96	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	735+01	-	737+65	RT	4	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	739+24	-	742+41	RT	5	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	743+99	-	744+52	RT	1	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	745+05	-	746+10	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
0010	746+63	-	747+69	RT	2	QUANTITY IS BASED ON AN ESTIMATED 2-INCHES OF DEPTH PER AREA
				PROJECT	4	UNDISTRIBUTED FOR LANE REPAIR AREAS
				PROJECT	1	UNDISTRIBUTED FOR 30-INCH CL JOINT REPAIR AREAS
				TOTAL 0010	94	

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CATEGORY	STATION	TO	STATION	LOCATION	415.0090 CONCRETE PAVEMENT 9-SY
0010	674+82	-	684+33	RT	1,480
0010	685+38	-	694+89	RT	1,480
0010	715+48	-	718+65	RT	494
0010	719+17	-	722+87	RT	576
0010	739+24	-	742+41	RT	494
				TOTAL 0010	4,524

CATEGORY	STATION	TO	STATION	LOCATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	REMARKS
0010	675+35	-	675+88	LT	17	18	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	704+39	-	704+92	LT	17	18	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	711+78	-	712+31	LT	17	18	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	712+84	-	713+37	LT	17	18	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	715+48	-	717+06	LT	52	18	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	719+17	-	721+29	LT	70	18	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	724+45	-	724+98	LT	17	18	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	631+00	-	631+53	RT	17	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	635+22	-	636+28	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	639+97	-	641+03	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	643+14	-	645+25	RT	70	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	670+60	-	671+65	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	674+82	-	684+33	RT	317	22	CONCRETE PAVEMENT 9-INCH SECTION
0010	685+38	-	694+89	RT	317	22	CONCRETE PAVEMENT 9-INCH SECTION
0010	700+17	-	700+69	RT	17	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	704+39	-	707+03	RT	87	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	709+67	-	710+73	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	711+25	-	711+78	RT	17	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	712+31	-	713+37	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	715+48	-	718+65	RT	105	22	CONCRETE PAVEMENT 9-INCH SECTION
0010	719+17	-	722+87	RT	123	22	CONCRETE PAVEMENT 9-INCH SECTION
0010	727+09	-	727+62	RT	17	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	731+32	-	732+37	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	732+90	-	733+96	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	735+01	-	737+65	RT	88	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	739+24	-	742+41	RT	105	22	CONCRETE PAVEMENT 9-INCH SECTION
0010	743+99	-	744+52	RT	17	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	745+05	-	746+10	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
0010	746+63	-	747+69	RT	35	22	CONCRETE PAVEMENT REPLACEMENT SECTION
				TOTAL 0010	1,819	610	

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6244 HMA PAVEMENT 4 MT 58-34 S TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	REMARKS
									ALL LOCATIONS HAVE BEEN MULTIPLIED BY 2 FOR TACK COAT TO ESTIMATE WITH 2 LIFTS
0010	622+55	-	642+48	NB LEFT ASPHALT SHOULDER	87	75		1,993	PROJECT BEGIN LIMIT
0010	642+48	-	644+06	MINONG SOUTH BUSINESS 53 MEDIAN	77	67			
0010	644+06	-	664+37	NB LEFT ASPHALT SHOULDER	89	76		2,031	
0010	664+37	-	665+39	MEDIAN	38	33			
0010	665+39	-	678+08	NB LEFT ASPHALT SHOULDER	55	48		1,269	NORTH LIMIT AT RECENT PAVING
0010	698+18	-	702+05	NB LEFT ASPHALT SHOULDER	17	15		387	SOUTH LIMIT AT RECENT PAVING
0010	702+05	-	703+85	WALLACE ST MEDIAN	51	44			
0010	703+85	-	718+33	NB LEFT ASPHALT SHOULDER	63	55		1,448	
0010	718+33	-	719+68	MINONG NORTH BUSINESS 53 MEDIAN	34	30			
0010	719+68	-	751+38	NB LEFT ASPHALT SHOULDER	138	119		3,170	PROJECT END LIMIT
0010	616+87	-	645+98	SOUTH BUSINESS 53 & RAMPS	1,525	1,314			
0010	622+55	-	640+77	NB RIGHT ASPHALT SHOULDER	158	137		1,822	PROJECT BEGIN LIMIT
0010	640+77	-	644+30	RIGHT TURN LANE & MINONG SOUTH BUSINESS 53	106	91			
0010	644+30	-	677+08	NB RIGHT ASPHALT SHOULDER	285	245		3,278	NORTH LIMIT AT RECENT PAVING
0010	683+78	-	689+58	RIGHT TURN LANE & SHOULDER THROUGH STH 77	96	82			SOUTH LIMIT AT RECENT PAVING
0010	689+58	-	702+24	NB RIGHT ASPHALT SHOULDER	110	95		1,266	
0010	702+24	-	703+79	NB RIGHT ASPHALT SHOULDER & WALLACE ST	44	38			
0010	703+79	-	714+54	NB RIGHT ASPHALT SHOULDER	94	81		1,075	
0010	714+54	-	720+43	RIGHT TURN LANE & MINONG NORTH BUSINESS 53	163	140			
0010	719+03	-	725+28	NORTH BUSINESS 53 & RAMPS	331	286			
0010	720+43	-	726+20	NB RIGHT ASPHALT SHOULDER	51	44		577	
0010	725+35	-	726+20	NB RAMP LEFT ASPHALT SHOULDER	4	4		85	
0010	725+35	-	729+73	NB RIGHT GORE AREA	57	49		438	
0010	725+35	-	751+38	NB RAMP/MAINLINE RIGHT ASPHALT SHOULDER	226	195		2,603	PROJECT END LIMIT
							200		UNDISTRIBUTED
				TOTAL 0010	3,899	3,363	200	21,442	

CATEGORY	STATION	LOCATION	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.8700 CLEANING CULVERT PIPES EACH	REMARKS
0010	645+90	RT	1		REPAIR OF ONE-FOOT DROP AT ENDWALL (CONCRETE)
0010	702+07	RT	1		REPLACES 24-INCH CONCRETE AEW
0010	702+87			1	
0010	726+36			1	
0010	737+69			1	
		TOTAL 0010	2	3	

CATEGORY	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	REMARKS
0010	645+90	RT	5	REPAIR OF ONE-FOOT DROP AT ENDWALL (CONCRETE)
		TOTAL 0010	5	

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CATEGORY	LOCATION	618.0100.01 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT 1196-00-62) EACH
0010	PROJECT	1
	TOTAL 0010	1

CATEGORY	LOCATION	619.1000 MOBILIZATION EACH
0010	PROJECT	1
	TOTAL 0010	1

CATEGORY	LOCATION	624.0100 WATER MGAL	REMARKS
0010	PROJECT	25	UNDISTRIBUTED
	TOTAL 0010	25	

CATEGORY	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7504 TEMPORARY DITCH CHECKS LF
0010		PROJECT			2	2	
0010	702+25	LT					15
0010	703+75	LT					15
0010	726+15	LT					15
0010	726+36	LT	115	15			
0010	726+36	RT	80	10			
0010	737+50	LT					15
0010	737+69	LT	40	10			
0010	737+69	RT	95	15			
0010	737+90	LT					15
		TOTAL 0010	330	50	2	2	75

CATEGORY	STATION	LOCATION	633.5200 MARKERS CULVERT END EACH
0010	634+71	LT & RT	2
0010	643+41	LT & RT	2
0010	645+90	LT & RT	2
0010	661+89	LT & RT	2
0010	664+88	LT & RT	2
0010	677+78	LT & RT	2
0010	695+72	LT & RT	2
0010	702+07	LT & RT	2
0010	702+87	LT & RT	2
0010	718+23	LT & RT	2
0010	726+36	LT & RT	2
0010	737+69	LT & RT	2
		TOTAL 0010	24

CATEGORY	LOCATION	642.5001 FIELD OFFICE TYPE B EACH
0010	PROJECT	1
	TOTAL 0010	1

CATEGORY	LOCATION	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	PROJECT								1	
0010	PROJECT START	1,900	50	100	700	100	650			PER SDD TRAFFIC CONTROL, LANE CLOSURE SPEED REDUCTION
0010	PROJECT START	1,000	100	200	250		200			PER SDD TRAFFIC CONTROL, PARALLEL EXIT RAMP WITH LANE CLOSURE
0010	WALLACE ST, WOODYARD ENTRANCE	1,300	100				700			RIGHT LANE CLOSED; NO RTL BAY
0010	BUS 53 SOUTH, STH 77, BUS 53 NORTH	7,650	150				1,050			RIGHT LANE CLOSED; RTL BAY
0010	BUS 53 SOUTH, MEDIAN 1, WALLCE ST, BUS 53 NORTH	3,400	200				1,200			LEFT LANE CLOSED; NO LTL BAY
0010	BUS 53 SOUTH & NORTH RAMPS	810	135	90	495		315			RAMP CLOSURES
0010	STH 77	2,750	50				300			LEFT LANE CLOSED; LTL BAY
0010	MAINLINE LENGTH	6,250	500	1,000			500			APPROX 12,500 LF
0010	PROJECT							30		ESTIMATING 3 PCMS FOR 10 DAYS PRECONSTRUCTION ANNOUNCEMENT
	TOTAL 0010	25,060	1,285	1,390	1,445	100	4,915	30	1	

CATEGORY	STATION	LOCATION	645.0120 GEOTEXTILE TYPE HR SY	REMARKS
0010	645+90	RT	173	REPAIR ONE-FOOT DROP OFF
		TOTAL 0010	173	

STATION	TO	STATION	LOCATION	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH LF	646.3545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	REMARKS
616+87	-	645+98	SOUTH BUSINESS 53 & RAMPS	4,345				16	WHITE
616+87	-	645+98	SOUTH BUSINESS 53 & RAMPS	4,270					YELLOW
622+54	-	642+60	RT EDGELINE	2,006					WHITE
641+30	-	642+60	RIGHT TURN LANE CHANNELIZING		130				WHITE
641+13		642+51	RIGHT TURN LANE			1	1		RIGHT TURN ARROW; "ONLY"
		643+50	BUS 53 SOUTH; RT					20	WHITE
644+00	-	687+38	RT EDGELINE	4,338					WHITE
681+50	-	682+50	RIGHT TURN LANE			1	1		RIGHT TURN ARROW; "ONLY"
683+75	-	687+40	RIGHT TURN LANE CHANNELIZING		365				WHITE
685+50	-	686+50	RIGHT TURN LANE			1	1		RIGHT TURN ARROW; "ONLY"
688+87	-	702+30	RT EDGELINE	1,343					WHITE
703+30	-	718+61	RT EDGELINE	1,531					WHITE
715+10	-	718+60	RIGHT TURN LANE CHANNELIZING		350				WHITE
715+41		715+85	RIGHT TURN LANE			1	1		RIGHT TURN ARROW; "ONLY"
718+05		718+45	RIGHT TURN LANE			1	1		RIGHT TURN ARROW; "ONLY"
719+03	-	725+28	NORTH BUSINESS 53 & RAMPS	1,237					WHITE
719+03	-	725+28	NORTH BUSINESS 53 & RAMPS	1,078					YELLOW
		719+50	BUS 53 NORTH; RT					20	WHITE
719+92	-	733+31	RT EDGELINE INTO LEFT GORE	1,339					WHITE
725+35	-	733+31	BUS 53 NORTH RAMP LT EDGLINE INTO RIGHT GORE	796					WHITE
725+35	-	751+39	RT EDGLINE	2,604					WHITE
622+54	-	642+72	LT EDGELINE	2,018					YELLOW
		643+50	BUS 53 SOUTH MEDIAN (BOTH DIRECTIONS); LT					60	WHITE
644+06	-	686+63	LT EDGELINE	4,257					YELLOW
681+60	-	682+50	LEFT TURN LANE			1	1		LEFT TURN ARROW; "ONLY"
683+75	-	687+60	LEFT TURN LANE CHANNELIZING		385				WHITE
685+50	-	686+50	LEFT TURN LANE			1	1		LEFT TURN ARROW; "ONLY"
688+46	-	702+20	LT EDGELINE	1,374					YELLOW
703+62	-	718+46	LT EDGELINE	1,484					YELLOW
719+66	-	751+39	LT EDGELINE	3,173					YELLOW
622+54	-	751+39	RL; ON LEFT LANE PANEL	3,225					WHITE SKIPS
			TOTAL 0010	40,418	1,230	7	7	116	

CATEGORY	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	643.3155 TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 4-INCH LF	643.3255 TEMPORARY MARKING LINE REMOVABLE CONTRAST TAPE 8-INCH LF	REMARKS
0010	607+70	-	611+20	RT	350			SDD TRAFFIC CONTROL PARALLEL EXIT RAMP WITHIN LANE CLOSURE
0010	607+70	-	609+70	RT		200		WHITE TAPE; SDD TRAFFIC CONTROL PARALLELL EXIT RAMP WITHIN LANE CLOSURE
0010	612+85	-	614+85	RT			400	WHITE TAPE; SDD TRAFFIC CONTROL PARALLEL EXIT RAMP WITHIN LANE CLOSURE
				TOTAL 0010	350	200	400	

3

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	622+55			ASPHALT SHOULDER; LT	3	PROJECT START
0010	643+50			MEDIAN CROSSOVER; LT	60	
0010	664+90			MEDIAN CROSSOVER; LT	30	
0010	678+08			ASPHALT SHOULDER; LT	3	LOCATION OF PREVIOUS HSIP PROJECT START
0010	698+18			ASPHALT SHOULDER; LT	3	LOCATION OF PREVIOUS HSIP PROJECT END
0010	702+85			MEDIAN CROSSOVER; LT	40	
0010	719+25			MEDIAN CROSSOVER; LT	60	
0010	751+38			ASPHALT SHOULDER; LT	3	PROJECT END
0010	616+87			EXIT RAMP, RT	58	GORE, RAMPS
0010	622+55			ASPHALT SHOULDER; RT	6	PROJECT START
0010	645+98			BUS 53 (SOUTH); RT	40	
0010	677+08			ASPHALT SHOULDER; RT	6	LOCATION OF PREVIOUS HSIP PROJECT START
0010	689+58			ASPHALT SHOULDER; RT	6	LOCATION OF PREVIOUS HSIP PROJECT END
0010	702+85			WALLACE ST; RT	30	
0010	719+25			BUS 53 (NORTH); RT	62	AT GORE, INCLUDES RAMP
0010	751+38			ASPHALT SHOULDER; RT	6	PROJECT END
0010	675+35	-	675+88	LT	6	SHOULDERS
0010	704+39	-	704+92	LT	6	SHOULDERS
0010	711+78	-	712+31	LT	6	SHOULDERS
0010	712+84	-	713+37	LT	6	SHOULDERS
0010	715+48	-	717+06	LT	6	SHOULDERS
0010	719+17	-	721+29	LT	6	SHOULDERS
0010	724+45	-	724+98	LT	6	SHOULDERS
0010	631+00	-	631+53	RT	12	SHOULDERS
0010	635+22	-	636+28	RT	12	SHOULDERS
0010	639+97	-	641+03	RT	12	SHOULDERS
0010	643+14	-	645+25	RT	12	SHOULDERS
0010	670+60	-	671+65	RT	12	SHOULDERS
0010	674+82	-	684+33	RT	12	SHOULDERS
0010	685+38	-	694+89	RT	12	SHOULDERS
0010	700+17	-	700+69	RT	12	SHOULDERS
0010	704+39	-	707+03	RT	12	SHOULDERS
0010	709+67	-	710+73	RT	12	SHOULDERS
0010	711+25	-	711+78	RT	12	SHOULDERS
0010	712+31	-	713+37	RT	12	SHOULDERS
0010	715+48	-	718+65	RT	12	SHOULDERS
0010	719+17	-	722+87	RT	12	SHOULDERS
0010	727+09	-	727+62	RT	12	SHOULDERS
0010	731+32	-	732+37	RT	12	SHOULDERS
0010	732+90	-	733+96	RT	12	SHOULDERS
0010	735+01	-	737+65	RT	12	SHOULDERS
0010	739+24	-	742+41	RT	12	SHOULDERS
0010	743+99	-	744+52	RT	12	SHOULDERS
0010	745+05	-	746+10	RT	12	SHOULDERS
0010	746+63	-	747+69	RT	12	SHOULDERS
				TOTAL 0010	722	

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF
0010	616+50	-	751+50	USH 53 NB	13,500
				TOTAL 0010	13,500

CATEGORY	STATION	TO	STATION	LOCATION	690.0250 SAWING CONCRETE LF
0010	675+35	-	675+88	LEFT LANE	214
0010	704+39	-	704+92	LEFT LANE	214
0010	711+78	-	712+31	LEFT LANE	214
0010	712+84	-	713+37	LEFT LANE	214
0010	715+48	-	717+06	LEFT LANE	604
0010	719+17	-	721+29	LEFT LANE	808
0010	724+45	-	724+98	LEFT LANE	214
0010	631+00	-	631+53	RIGHT LANE	232
0010	635+22	-	636+28	RIGHT LANE	450
0010	639+97	-	641+03	RIGHT LANE	450
0010	643+14	-	645+25	RIGHT LANE	870
0010	670+60	-	671+65	RIGHT LANE	434
0010	674+82	-	684+33	RIGHT LANE	3820
0010	685+38	-	694+89	RIGHT LANE	3820
0010	700+17	-	700+69	RIGHT LANE	230
0010	704+39	-	707+03	RIGHT LANE	1074
0010	709+67	-	710+73	RIGHT LANE	450
0010	711+25	-	711+78	RIGHT LANE	232
0010	712+31	-	713+37	RIGHT LANE	450
0010	715+48	-	718+65	RIGHT LANE	1292
0010	719+17	-	722+87	RIGHT LANE	1497
0010	727+09	-	727+62	RIGHT LANE	232
0010	731+32	-	732+37	RIGHT LANE	434
0010	732+90	-	733+96	RIGHT LANE	450
0010	735+01	-	737+65	RIGHT LANE	1074
0010	739+24	-	742+41	RIGHT LANE	1292
0010	743+99	-	744+52	RIGHT LANE	232
0010	745+05	-	746+10	RIGHT LANE	434
0010	746+63	-	747+69	RIGHT LANE	451
				TOTAL 0010	22,382

3

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0180.01 SPECIAL (01. CONCRETE PAVEMENT REPAIR DOWELED) SY	SPV.0180.02 SPECIAL (02. CONCRETE PAVEMENT REPLACEMENT DOWELED) SY	SPV.0180.03 SPECIAL (03. 30-INCH CONCRETE CENTERLINE REPAIR) SY	REMARKS
				PROJECT	325		65	UNDISTRIBUTED
0010	675+35	-	675+88	LT		71		
0010	704+39	-	704+92	LT		71		
0010	711+78	-	712+31	LT		71		
0010	712+84	-	713+37	LT		71		
0010	715+48	-	717+06	LT		211		
0010	719+17	-	721+29	LT		283		
0010	724+45	-	724+98	LT		71		
0010	631+00	-	631+53	RT		83		
0010	635+22	-	636+28	RT		165		
0010	639+97	-	641+03	RT		165		
0010	643+14	-	645+25	RT		329		
0010	670+60	-	671+65	RT		164		
0010	700+17	-	700+69	RT		81		
0010	704+39	-	707+03	RT		411		
0010	709+67	-	710+73	RT		165		
0010	711+25	-	711+78	RT		83		
0010	712+31	-	713+37	RT		165		
0010	727+09	-	727+62	RT		83		
0010	731+32	-	732+37	RT		164		
0010	732+90	-	733+96	RT		165		
0010	735+01	-	737+65	RT		411		
0010	743+99	-	744+52	RT		83		
0010	745+05	-	746+10	RT		164		
0010	746+63	-	747+69	RT		165		
				TOTAL 0010	325	3,895	65	

PI STA = 631+63.72
Y = 663138.828
X = 755840.417
DELTA = 28°11'11"
D = 1°59'47"
T = 720.50'
L = 1411.82'
R = 2869.89'
PC STA = 624+43.22
PT STA = 638+55.04
S.E. = EXIST

CONCRETE PAVEMENT REPLACEMENT DOWELED

REMOVING CONCRETE PAVEMENT & CONCRETE PAVEMENT 9-INCH

N

USH 53 SB

PC: 624+43.22

BEGIN CONSTRUCTION
STA 622+54.77 NB

622 624 626 628 630 632 634 636

N9° 28' 14"E
5800.57'

USH 53 NB

BEGIN ASPHALT SHOULDER RESURFACING
STA 622+54.77 NB

SAWING ASPHALT
REMOVING ASPHALTIC SURFACE MILLING
PREPARE FOUNDATION FOR ASPHALTIC PAVING
HMA PAVEMENT 4 MT 58-34 S
TACK COAT
BASE AGGREGATE DENSE 3/4-INCH
SHAPING SHOULDERS
ASPHALTIC SHOULDER RUMBLE STRIPS

CENTURYLINK
FACILITIES
APPROX. LOCATION
[NOT FIELD LOCATED]

STA 634+72 LT/RT
2 - MARKERS CULVERT ENDS REQ'D

RIPRAP

5

5

ML

REMOVING
ASPHALTIC SURFACE
MILLING

NOTE:
LOCATIONS OF CONCRETE PAVEMENT LANE REPLACEMENT, CONCRETE PAVEMENT LANE REPAIR, & CONCRETE PAVEMENT JOINT REPAIR SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

USH 53 SB

USH 53 SB

PT: 638+55.04

636 638 640 642 644 646 648 650

N18° 42' 57"W
3496.10'

USH 53 NB

STA 645+90 LT/RT
1 - 24" X 121' RCCP WITH 2 - 24" AEW
EXISTING PIPE TO REMAIN
2 - MARKERS CULVERT END REQ'D

STA 645+90 RT
REMOVE EXISTING RIPRAP
SELECT BORROW
1 - APRON ENDWALLS FOR CULVERT PIPE 24-INCH
GEOTEXTILE TYPE HR AND RIPRAP MEDIUM

CONCRETE PAVEMENT REPLACEMENT DOWELED

REMOVING CONCRETE PAVEMENT & CONCRETE PAVEMENT 9-INCH

BUSINESS 53 (SOUTH)

N

(9)

PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	PLAN	SHEET 26	E

FILE NAME : C:\C3D\11960032\SHEETSPLAN\050101-PL.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 10/19/2022 10:04 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

USH 53 SB

RIPRAP

RIPRAP

REMOVING
ASPHALTIC SURFACE
MILLING

650 652 654 656 658 660 662 664

N18° 42' 57"W
3496.10'

USH 53 NB

SIGN

STA 661+89
2 - MARKERS CULVERT END REQ'D

CONCRETE PAVEMENT
REPLACEMENT DOWELED

REMOVING CONCRETE PAVEMENT
& CONCRETE PAVEMENT 9-INCH

N

5

5

SIGN

SIGN

(10)

NOTE:
LOCATIONS OF CONCRETE PAVEMENT LANE REPLACEMENT,
CONCRETE PAVEMENT LANE REPAIR, & CONCRETE PAVEMENT JOINT
REPAIR SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

USH 53 SB

PC: 673+51.14

STA 678+08, LT
END REMOVING ASPHLTIC SURFACE MILLING

666 668 670 672 674 676 678 680

N18° 42' 57"W
3496.10'

USH 53 NB

SIGN

EXISTING R/W

CONCRETE PAVEMENT
REPLACEMENT DOWELED

REMOVING CONCRETE PAVEMENT
& CONCRETE PAVEMENT 9-INCH

SIGN

STA 677+08, RT
END REMOVING ASPHLTIC SURFACE MILLING

N

SIGN

SIGN

T

TANKS

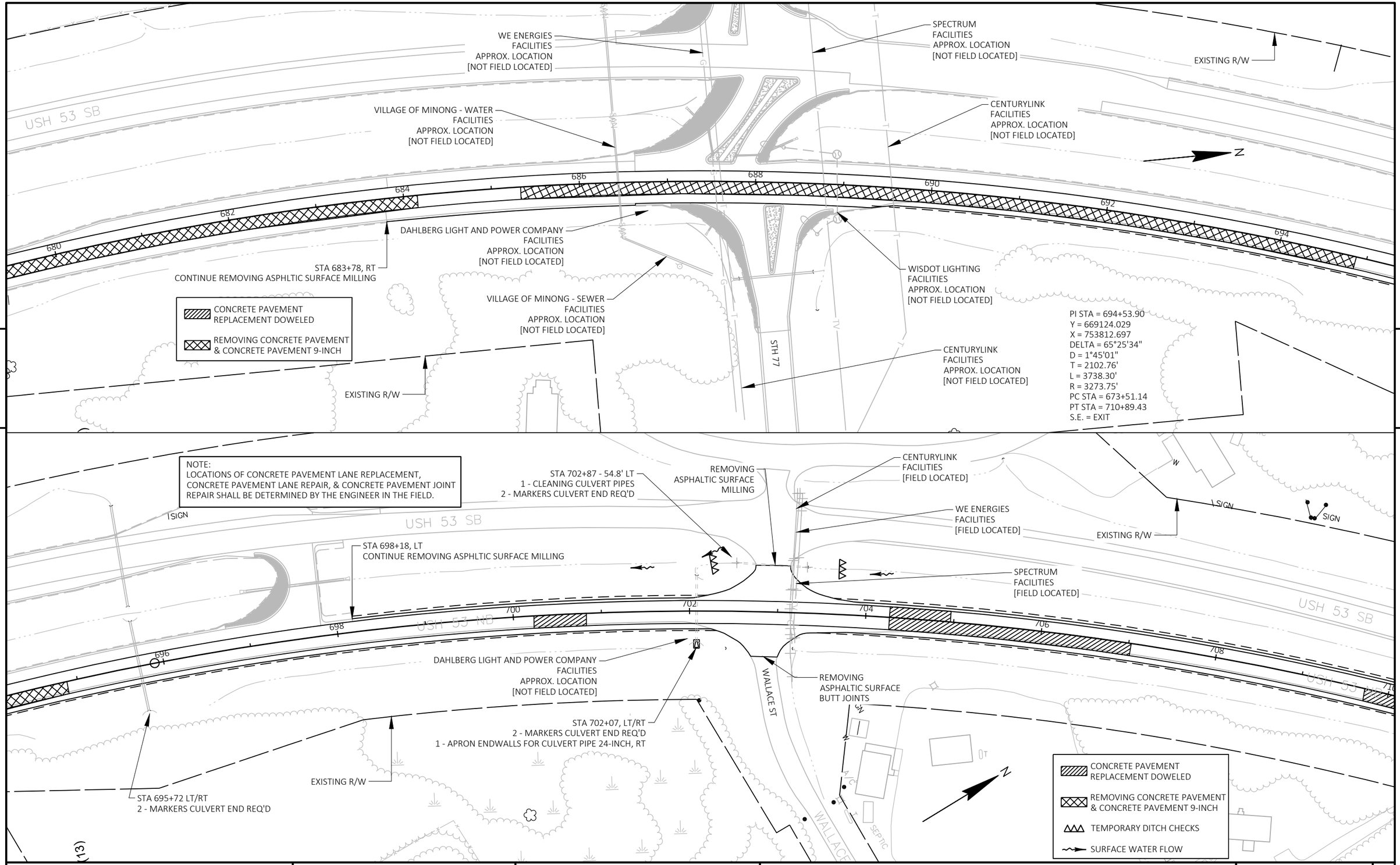
TANKS

PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	PLAN	SHEET 27	E

FILE NAME : C:\C3D\11960032\SHEETSPLAN\050101-PL.DWG
LAYOUT NAME - Sheet - (2)

PLOT DATE : 10/19/2022 10:04 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



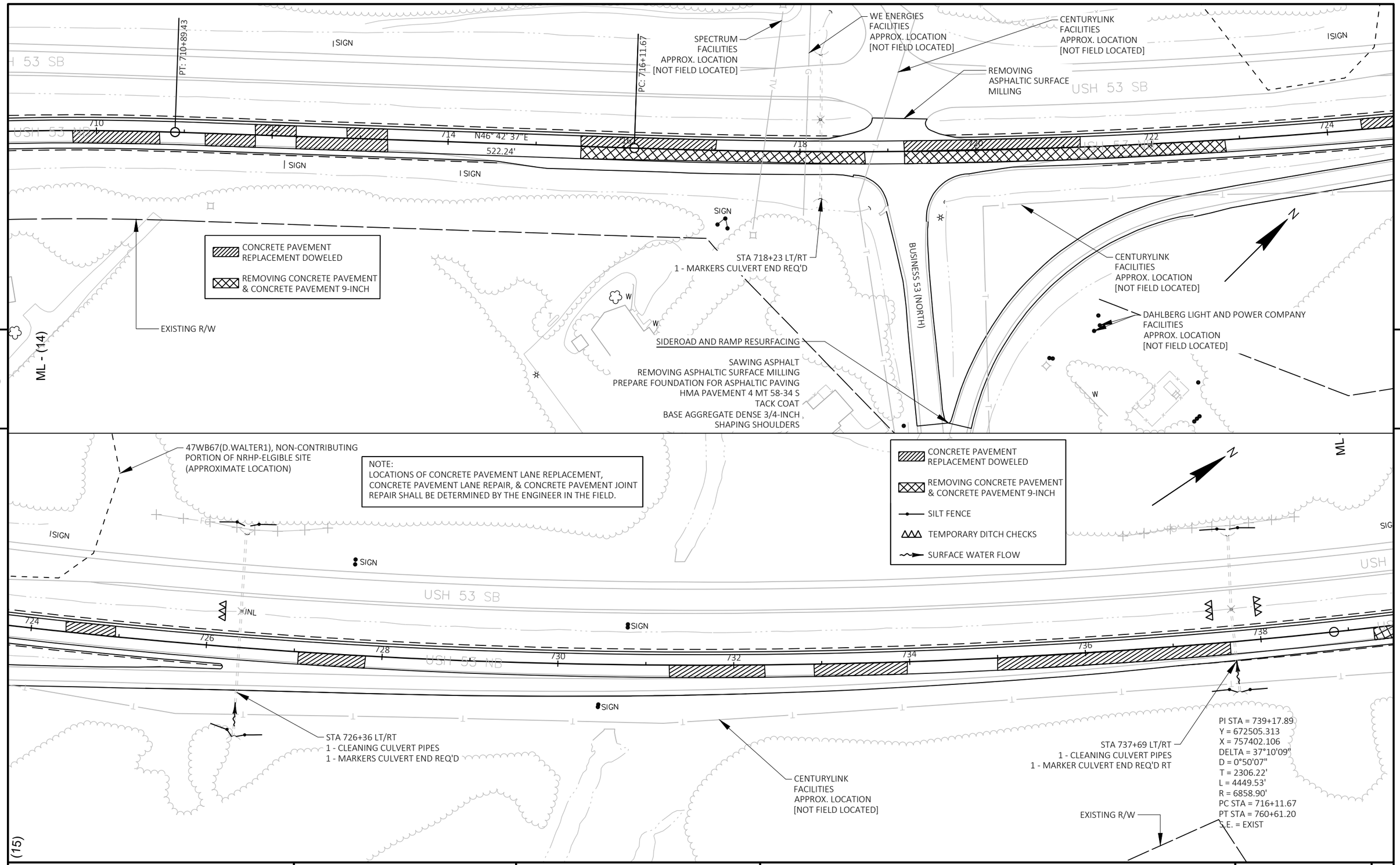
5

5

PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	PLAN	SHEET 28	E

FILE NAME : C:\C3D\11960032\SHEETSPLAN\050101-PL.DWG
LAYOUT NAME - Sheet - (3)

PLOT DATE : 10/19/2022 10:05 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

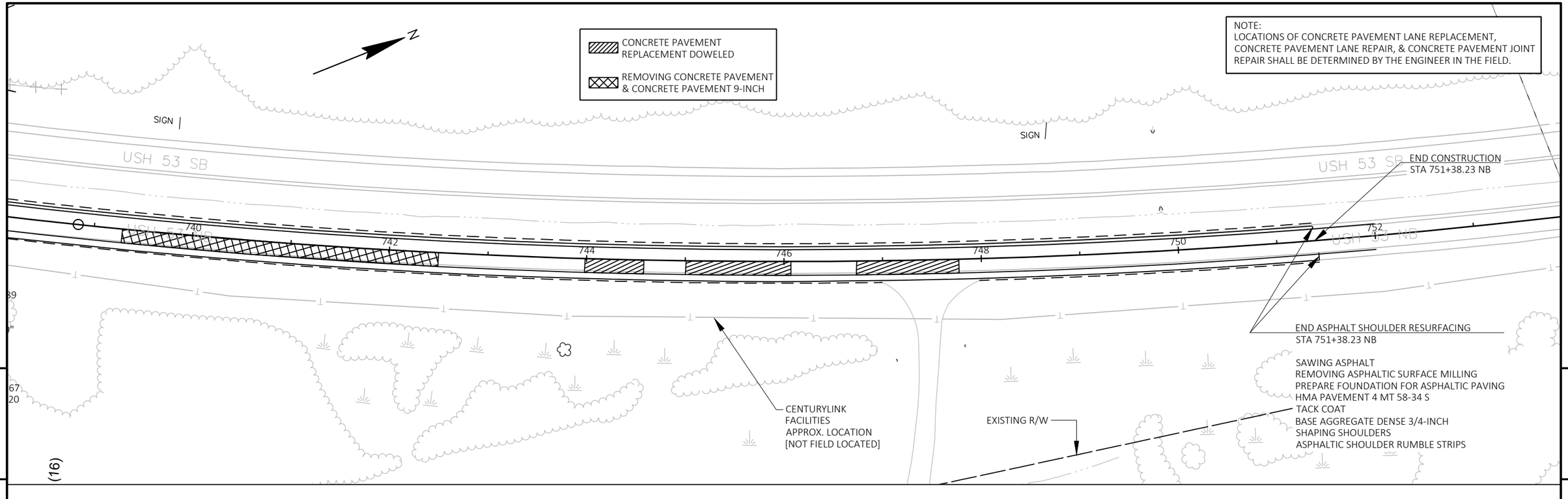


PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	PLAN	SHEET 29	E

FILE NAME : C:\C3D\11960032\SHEETSPLAN\050101-PL.DWG
LAYOUT NAME - Sheet - (4)

PLOT DATE : 10/19/2022 10:05 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	PLAN	SHEET 30	E

FILE NAME : C:\C3D\11960032\SHEETSPLAN\050101-PL.DWG
LAYOUT NAME - Sheet - (5)

PLOT DATE : 10/19/2022 10:06 AM PLOT BY : THAO, KOU PLOT NAME : PLOT SCALE : 1 IN:100 FT

PI STA = 631+63.72
Y = 663138.828
X = 755840.417
DELTA = 28°11'11"
D = 1°59'47"
T = 720.50'
L = 1411.82'
R = 2869.89'
PC STA = 624+43.22
PT STA = 638+55.04
S.E. = EXIST

PC: 624+43.22

PT: 638+55.04

SIDEROAD AND RAMP RESURFACING

SAWING ASPHALT
REMOVING ASPHALTIC SURFACE MILLING
PREPARE FOUNDATION FOR ASPHALTIC PAVING
HMA PAVEMENT 4 MT 58-34 S
TACK COAT
BASE AGGREGATE DENSE 3/4-INCH
SHAPING SHOULDERS

NOTE:
LOCATIONS OF CONCRETE PAVEMENT LANE REPLACEMENT, CONCRETE PAVEMENT LANE REPAIR, & CONCRETE PAVEMENT JOINT REPAIR SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

CONCRETE PAVEMENT REPLACEMENT DOWELED

REMOVING CONCRETE PAVEMENT & CONCRETE PAVEMENT 9-INCH

SIDEROAD AND RAMP RESURFACING

SAWING ASPHALT
REMOVING ASPHALTIC SURFACE MILLING
PREPARE FOUNDATION FOR ASPHALTIC PAVING
HMA PAVEMENT 4 MT 58-34 S
TACK COAT
BASE AGGREGATE DENSE 3/4-INCH
SHAPING SHOULDERS

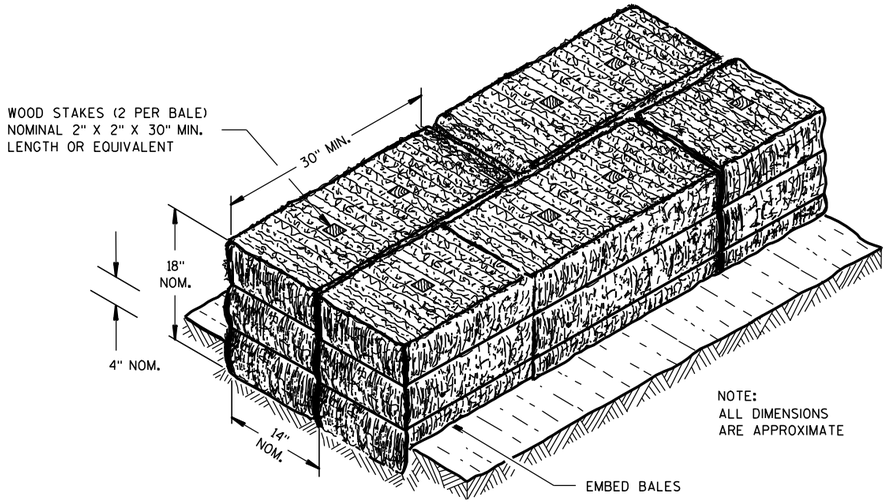
PROJECT NO: 1196-00-62	HWY: USH 53	COUNTY: WASHBURN	PLAN	SHEET 31	E

FILE NAME : C:\C3D\11960032\SHEETSPLAN\050101-PL.DWG
LAYOUT NAME - Sheet - (6)
PLOT DATE : 10/19/2022 10:06 AM
PLOT BY : THAO, KOU
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

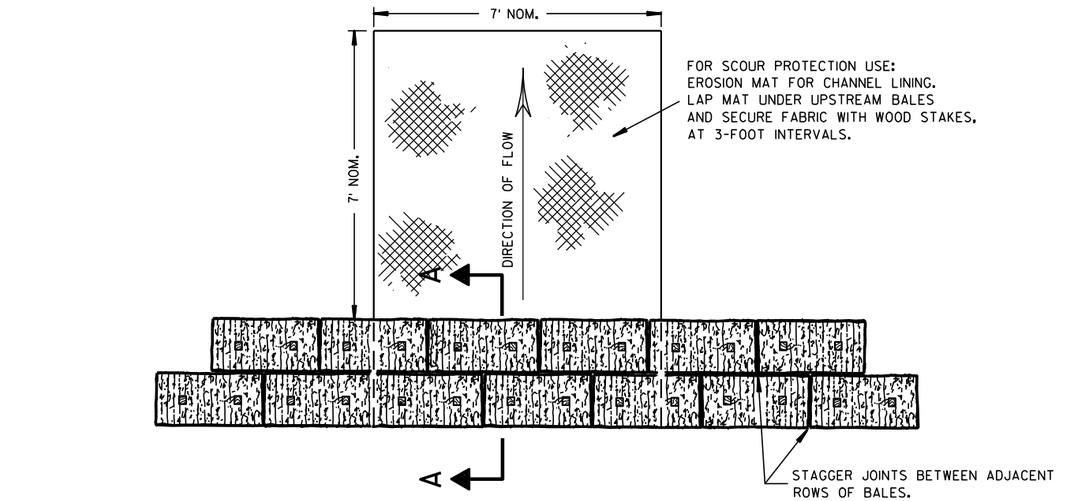
Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-17A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C16-02A	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C16-02B	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C18-07G	CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C08-22B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-22C	PAVEMENT MARKING (TURN LANES)
15C08-22D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C31-04A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-04C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15D12-10B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D15-06A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-06B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-06C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-06D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-06E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-05	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-04D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

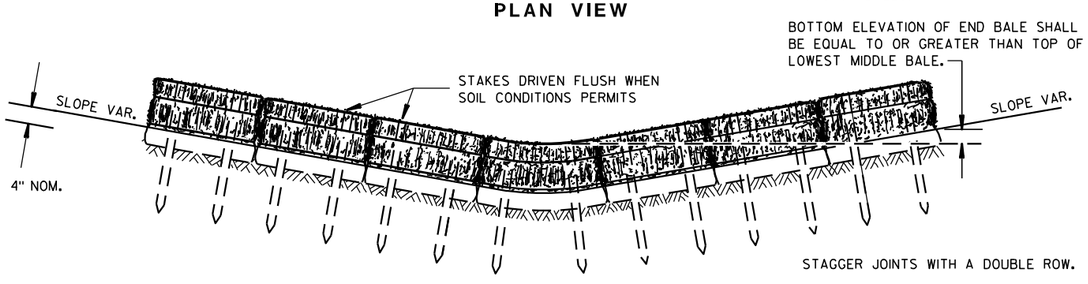
6



SECTION A-A



PLAN VIEW



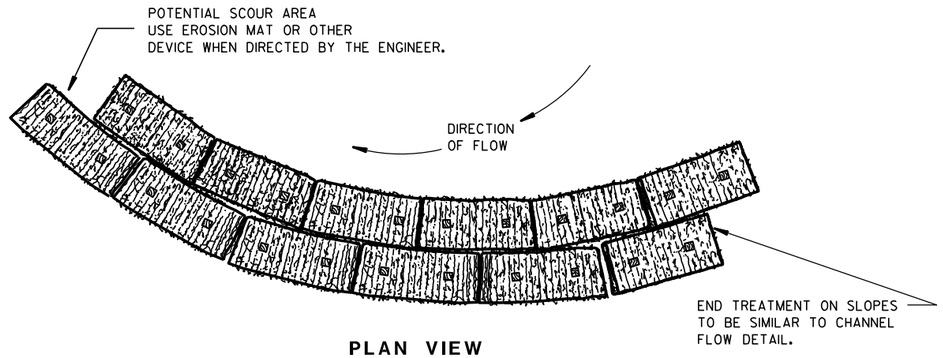
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

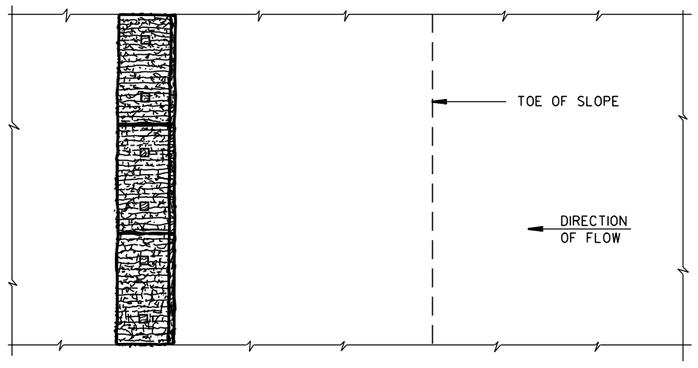
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

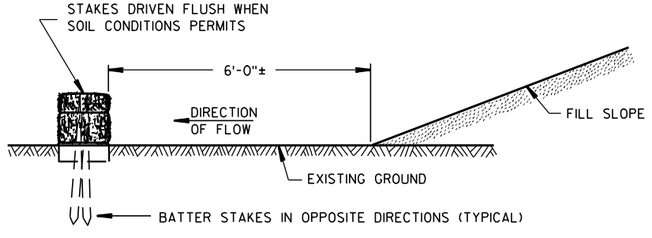


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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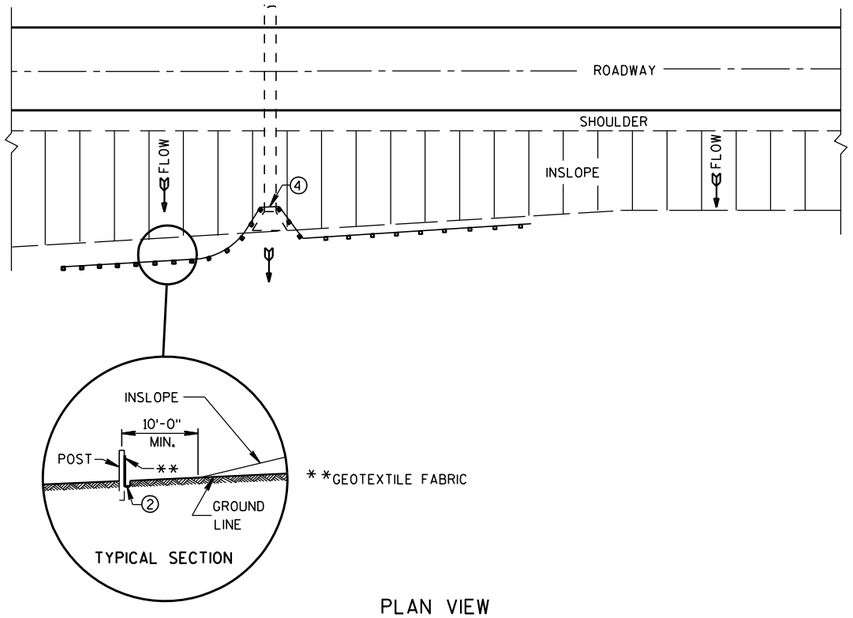
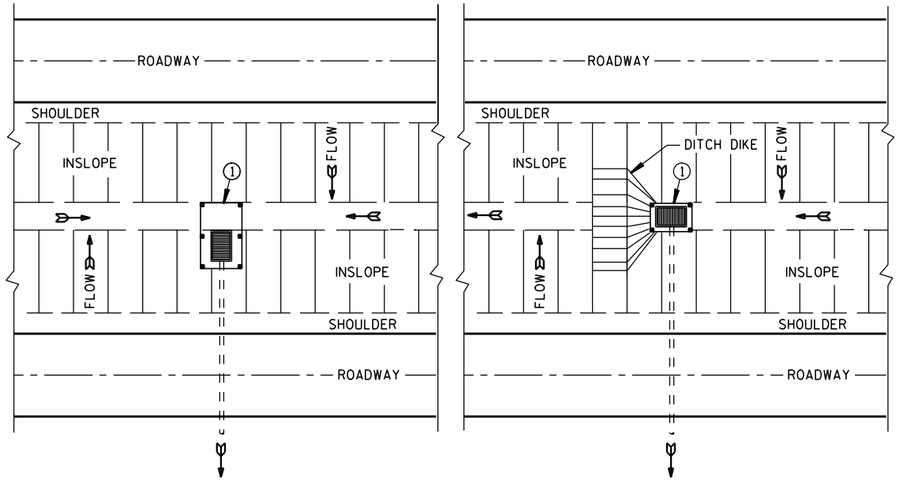
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

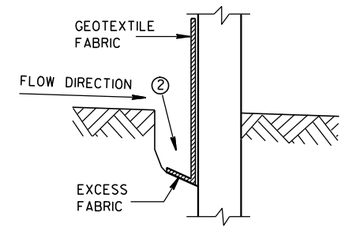
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

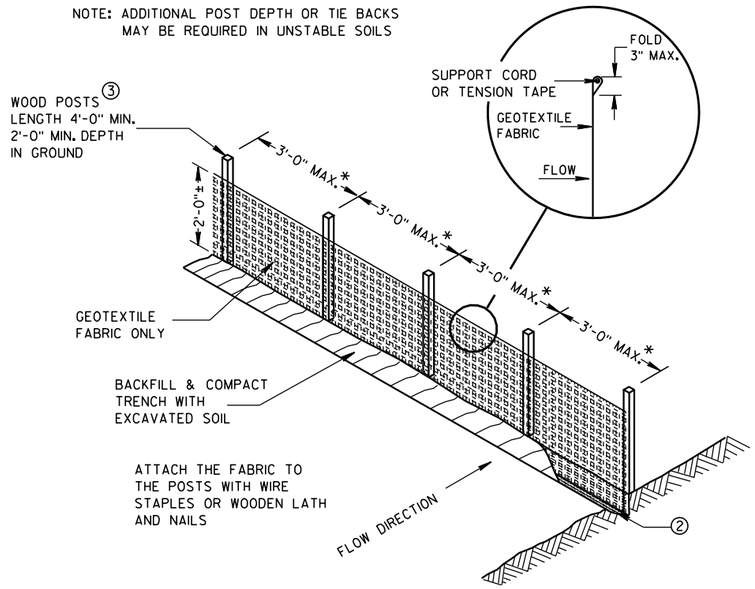
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

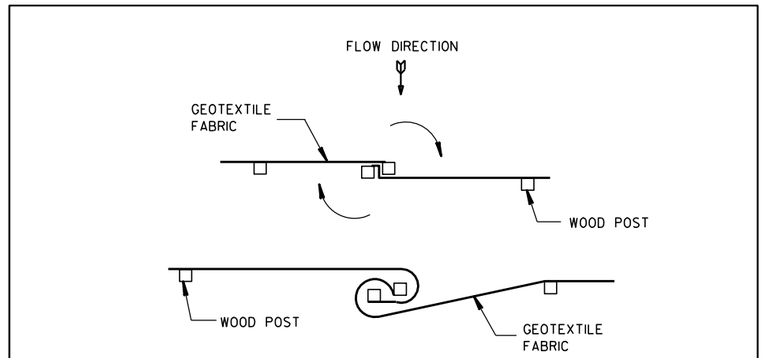
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



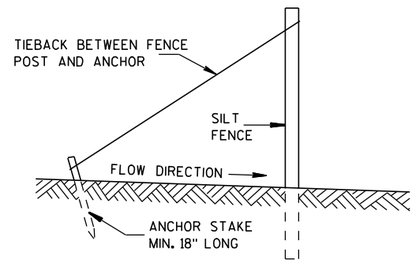
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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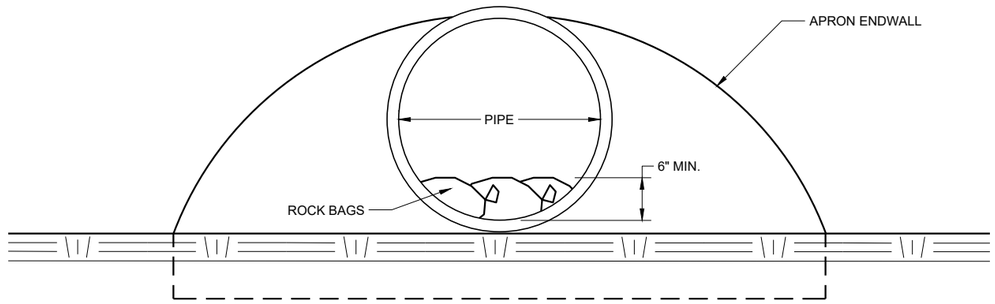
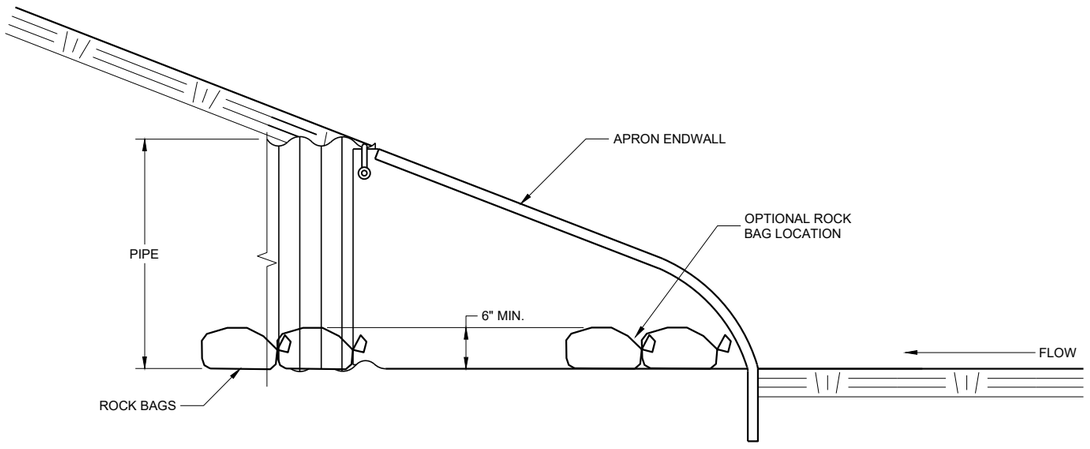
S.D.D. 8 E 9-6



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

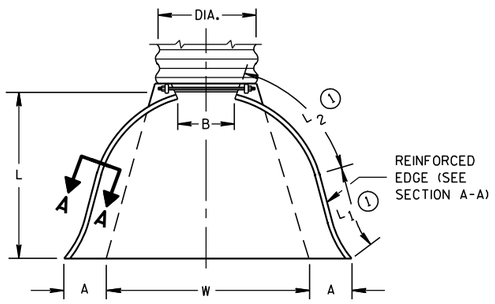
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

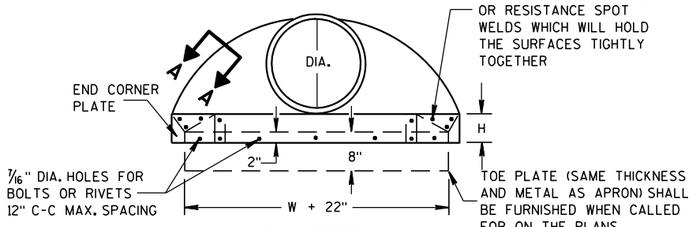
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

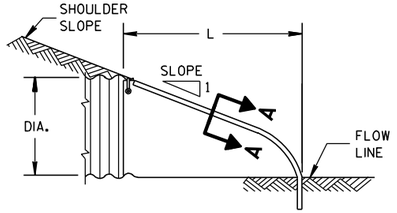
*MINIMUM
**MAXIMUM



PLAN VIEW

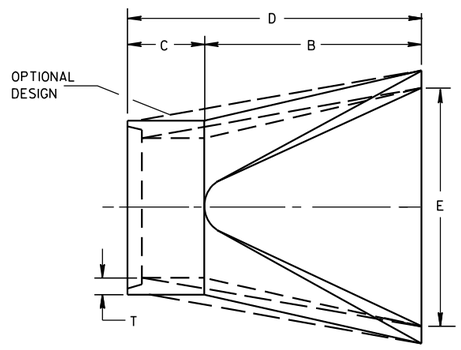


END VIEW

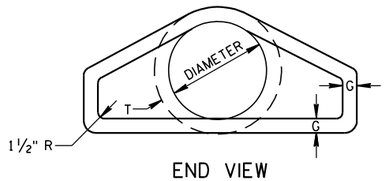


SIDE ELEVATION

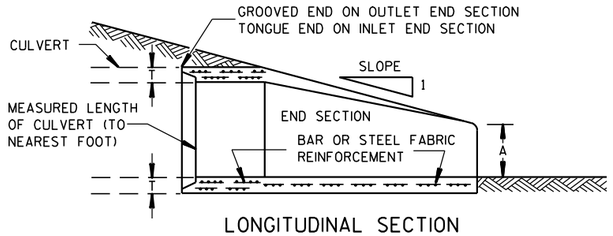
METAL ENDWALLS



PLAN

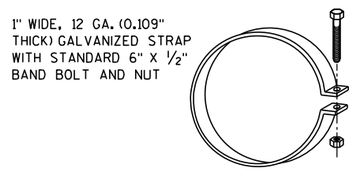


END VIEW



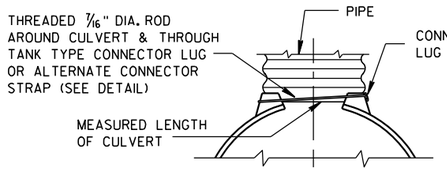
LONGITUDINAL SECTION

CONCRETE ENDWALLS

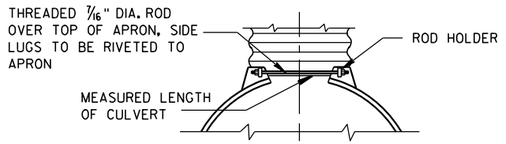


ALTERNATE FOR TYPE 1 CONNECTION

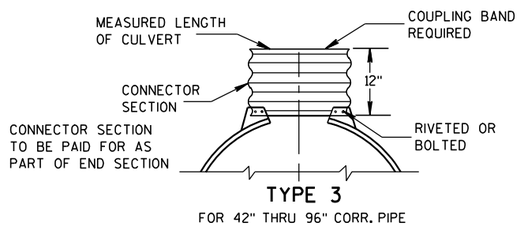
END SECTION CONNECTOR STRAP



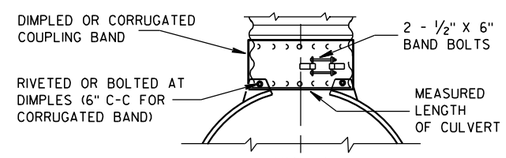
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

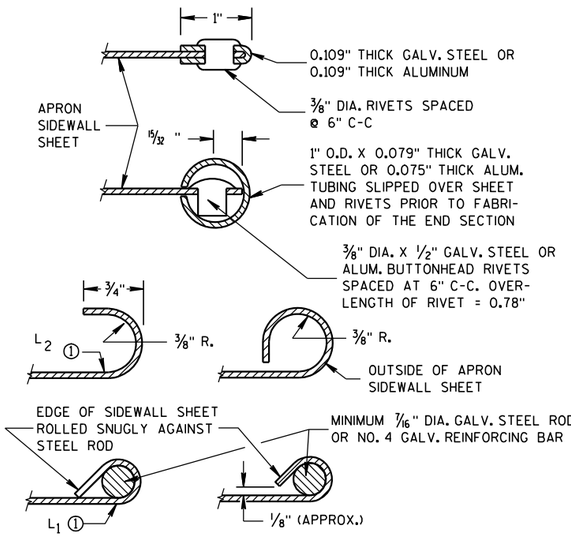
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

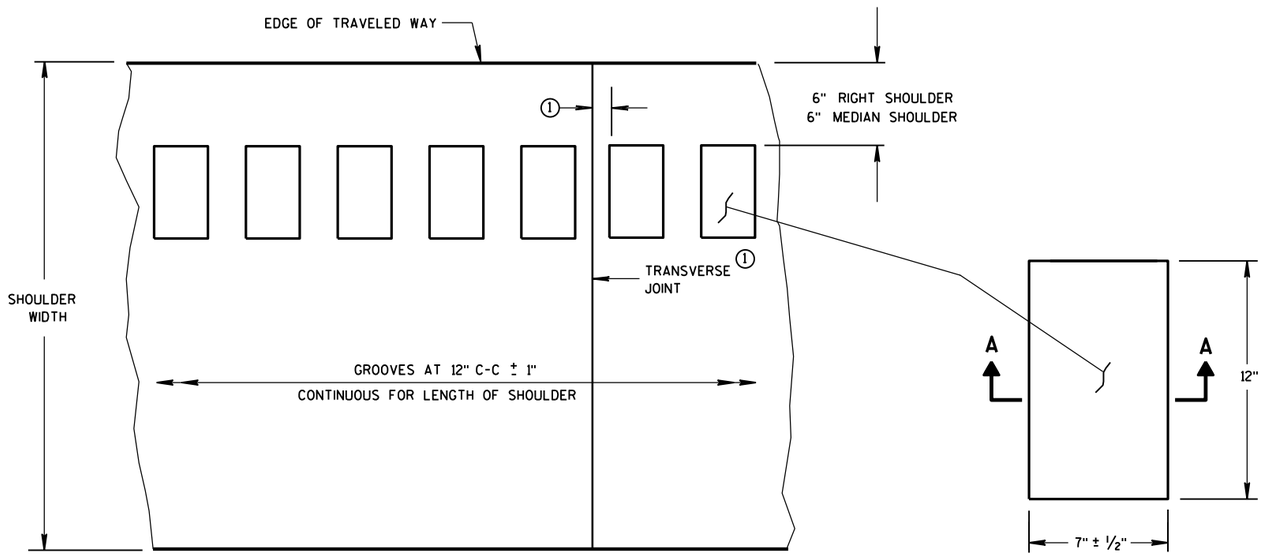
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENGINEER
FHWA

6
S.D.D. 8 F 1-11



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

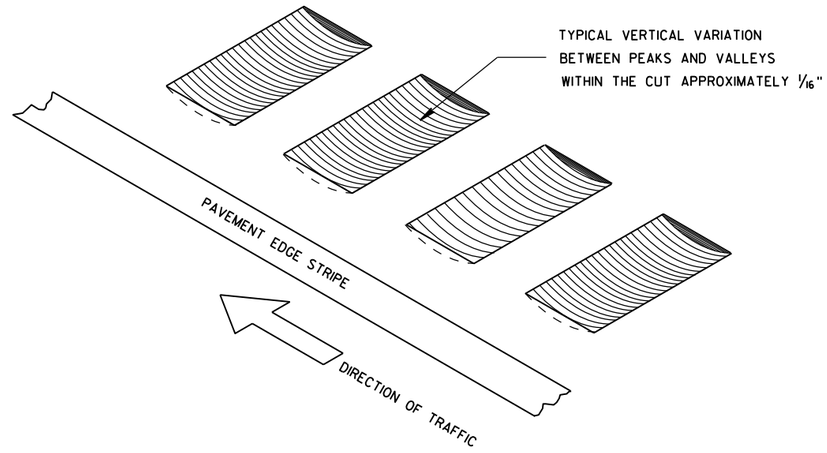
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

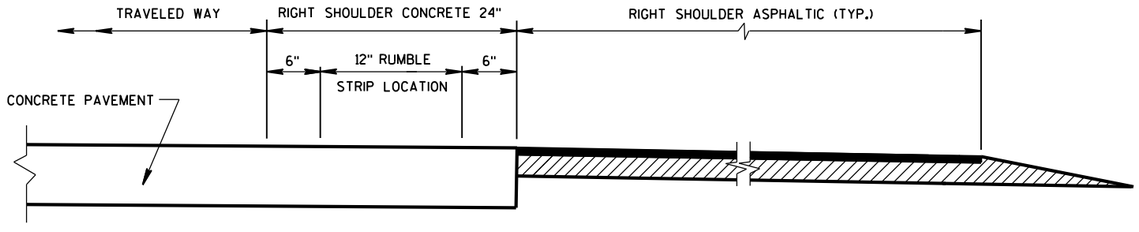
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

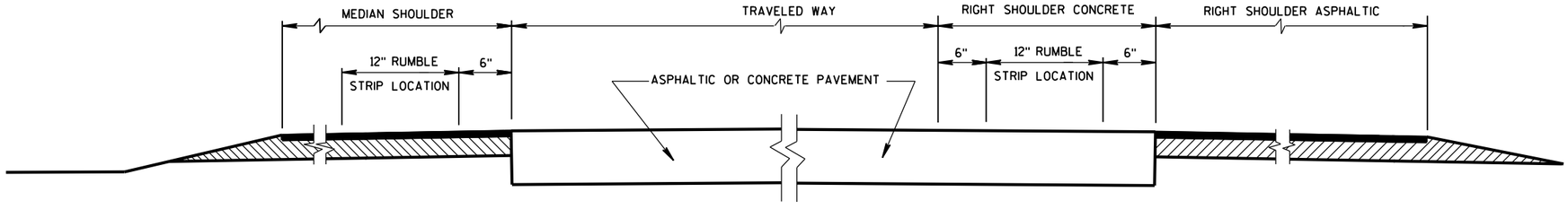
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



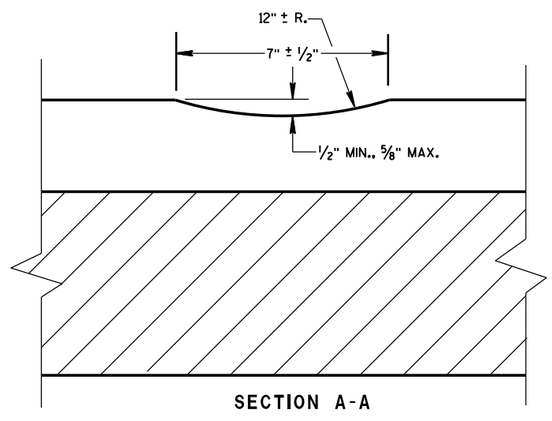
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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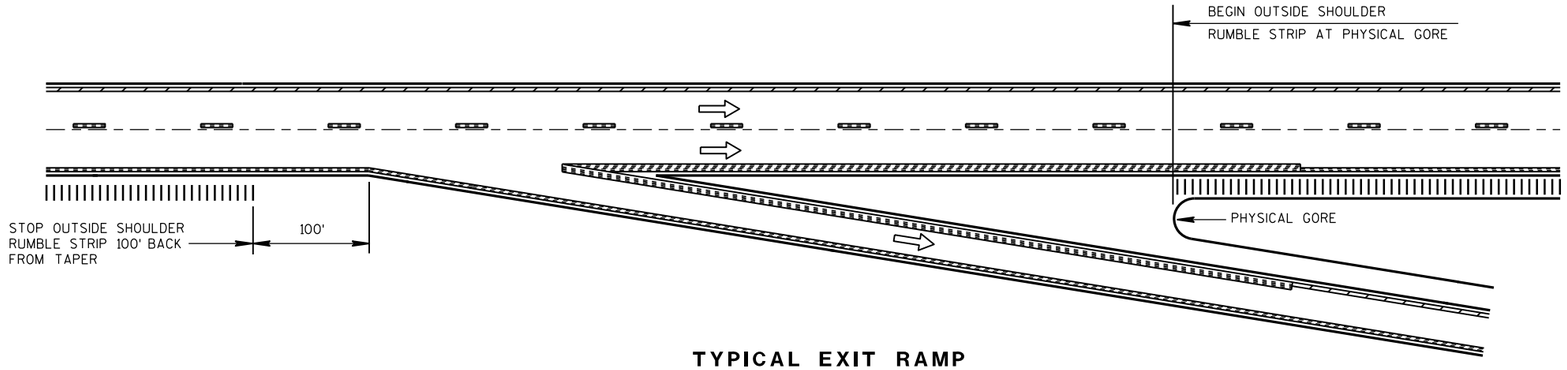
S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



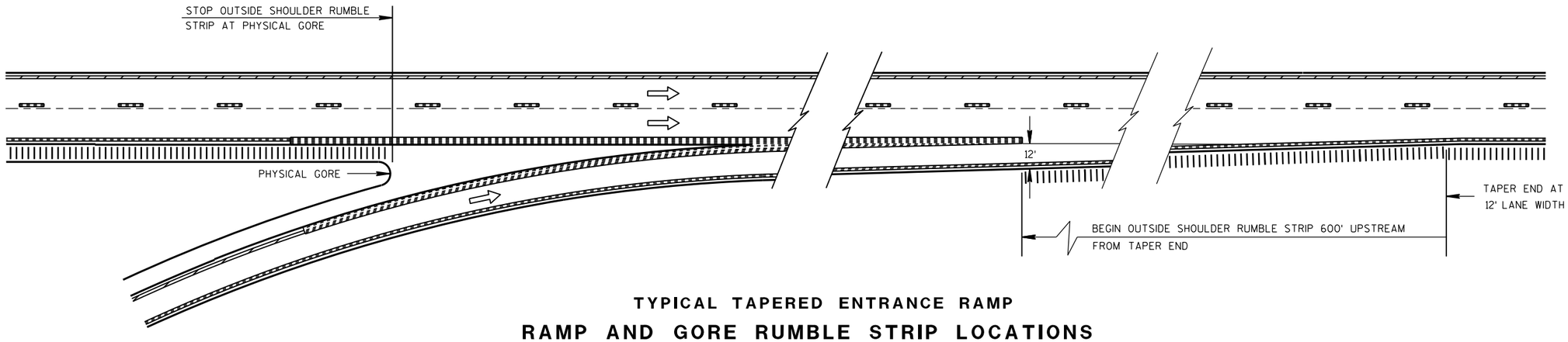
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

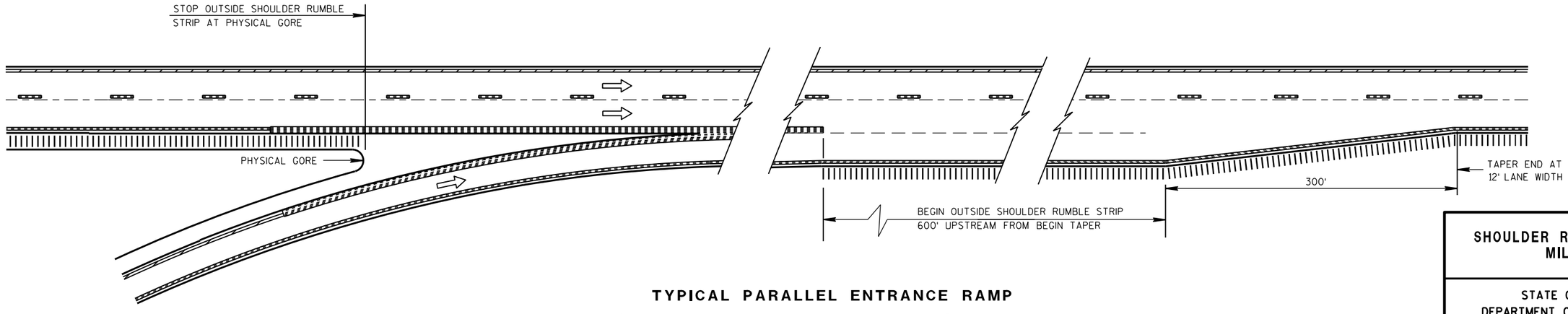
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

FHWA

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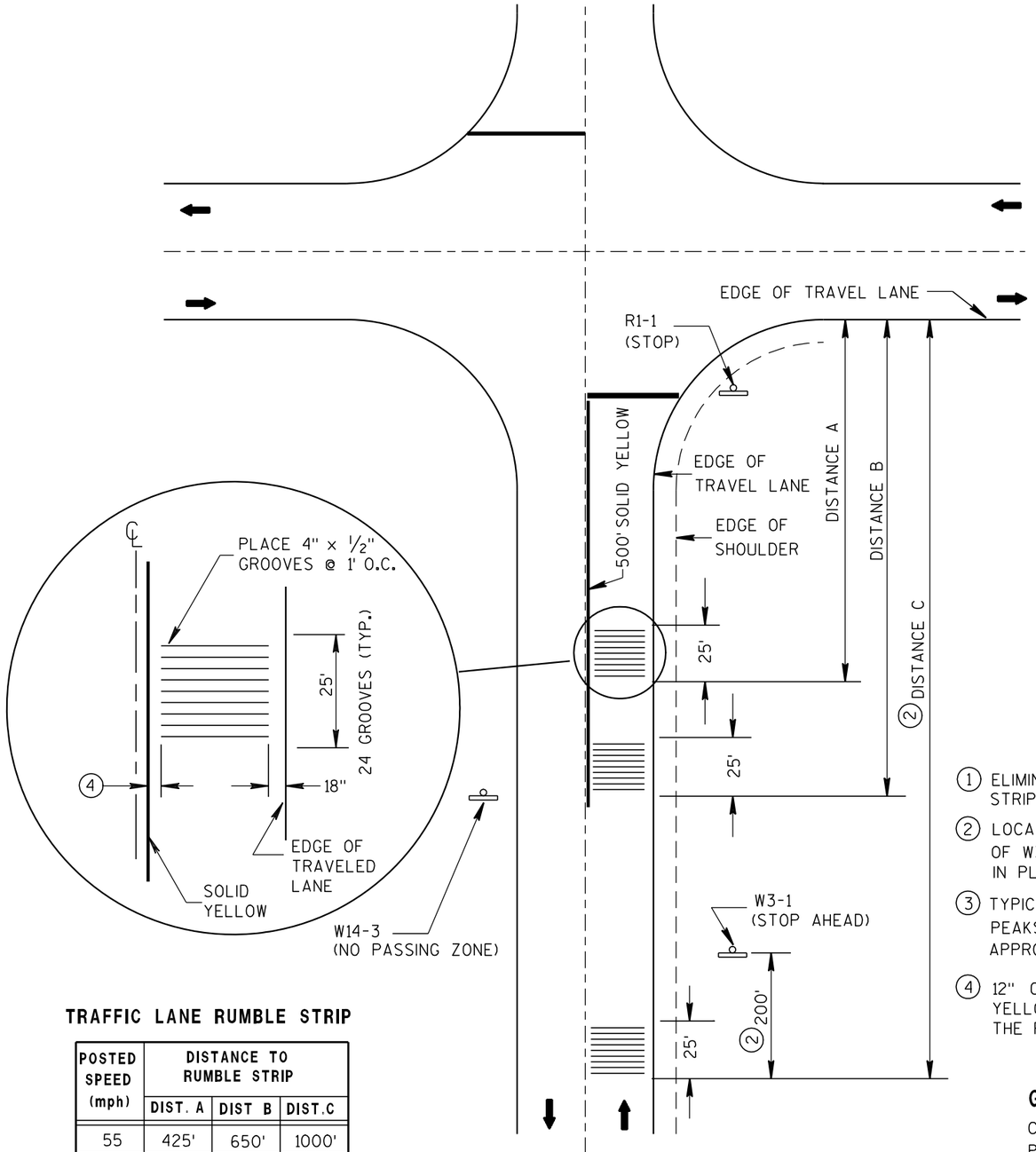
S.D.D. 13 A 5-5b



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

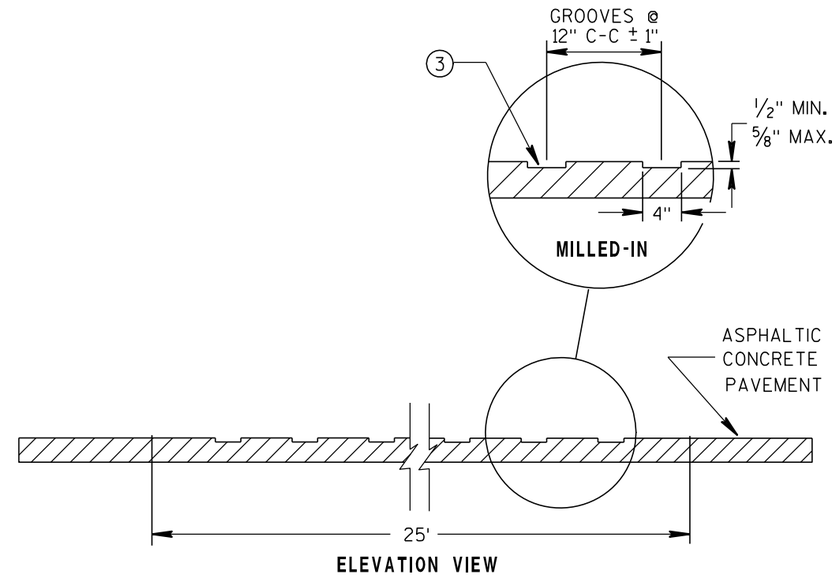
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

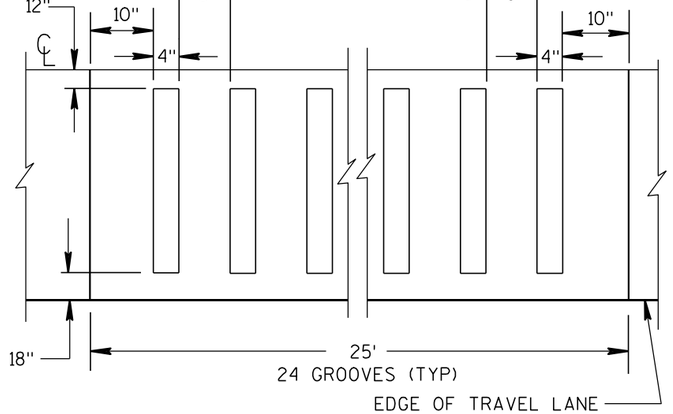
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"

(4) 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS | 39
ENGINEER

FHWA

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S.D.D. 13 A 8-1

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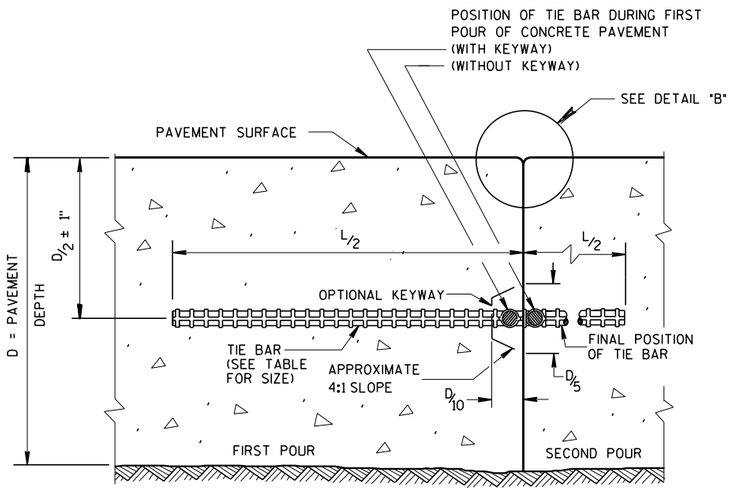
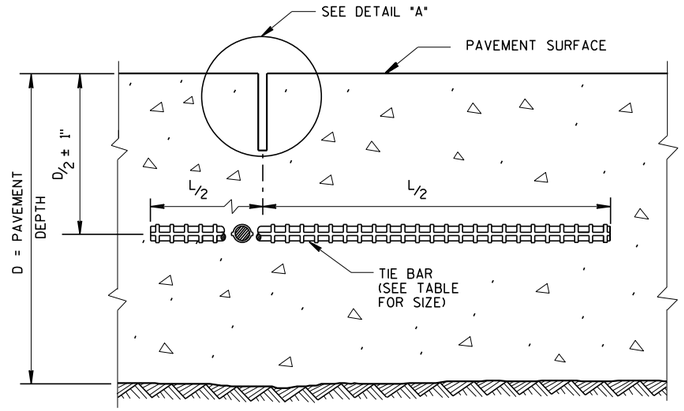
S.D.D. 13 A 8-1



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

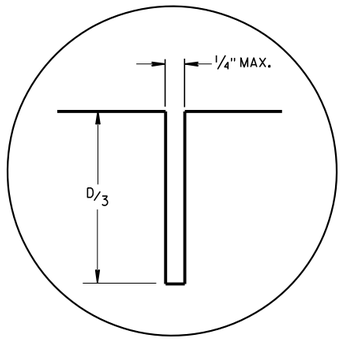
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

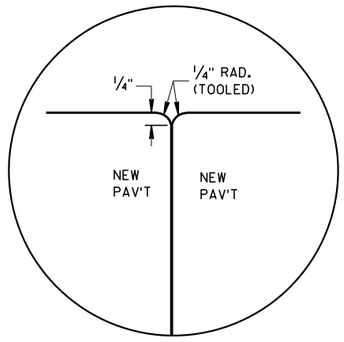
PLAN VIEW

SECTION A-A

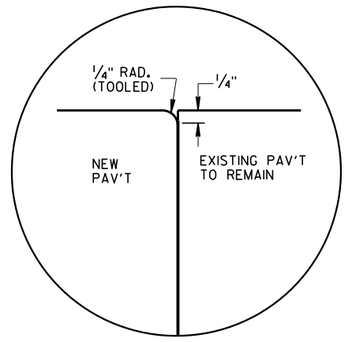
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



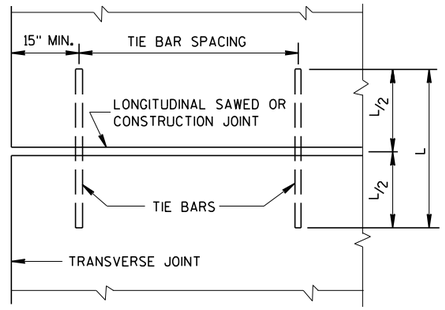
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Peter Kerr, P.E.
PAVEMENT SUPE

FHWA

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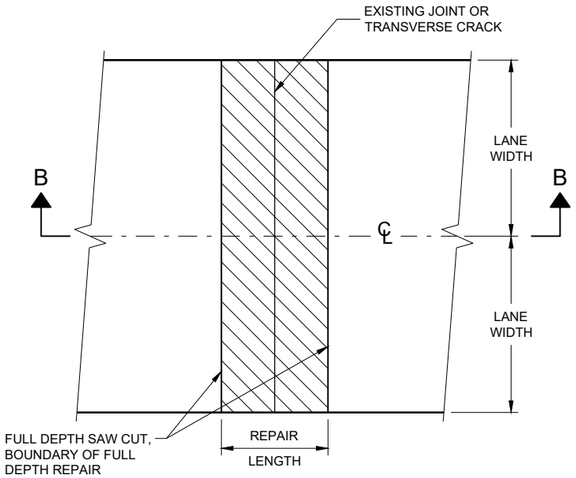
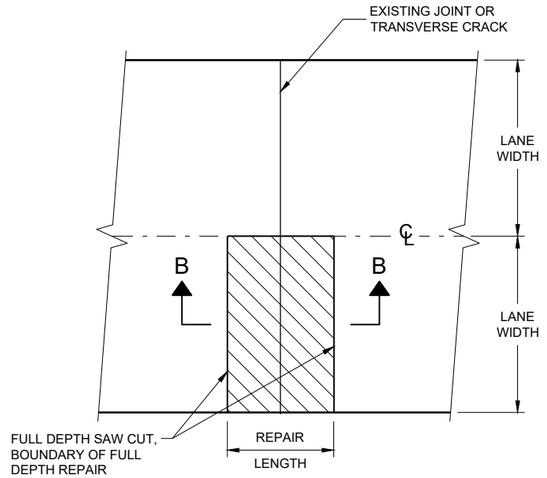
S.D.D. 13 C 1-19



PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

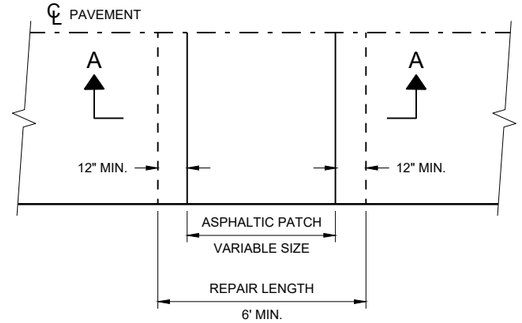
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

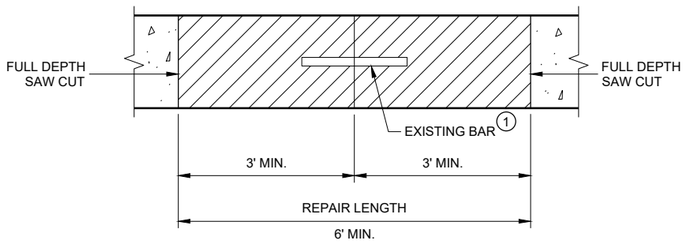
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.



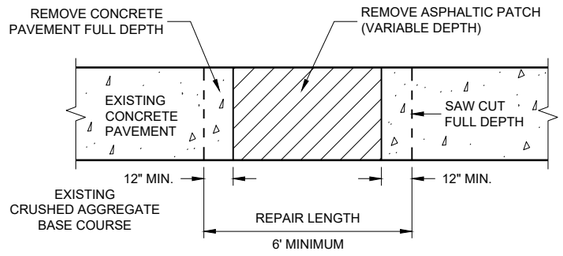
PLAN VIEW

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B

CONCRETE REMOVAL



SECTION A - A

HMA PATCH REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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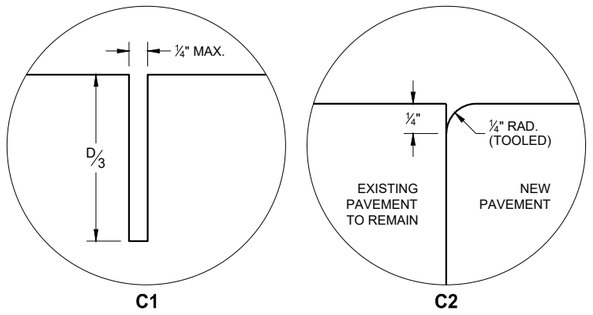
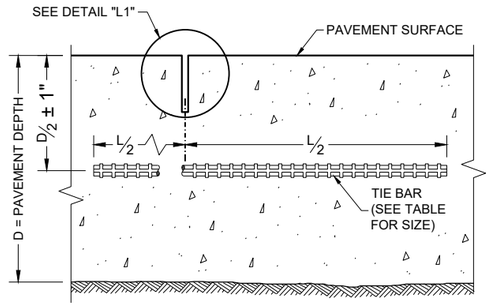
SDD13C09 - 16a

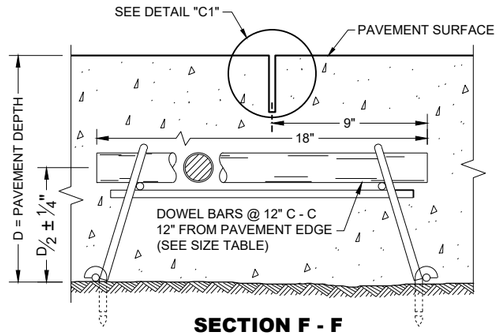


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

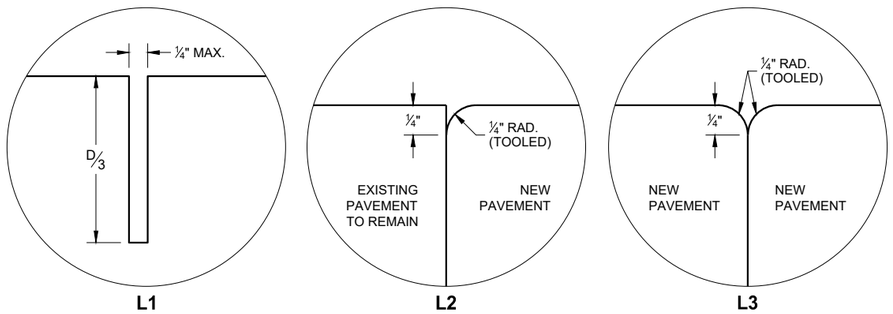
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

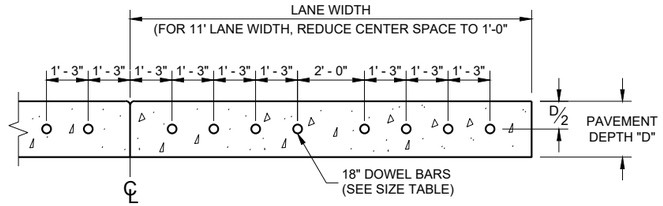
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

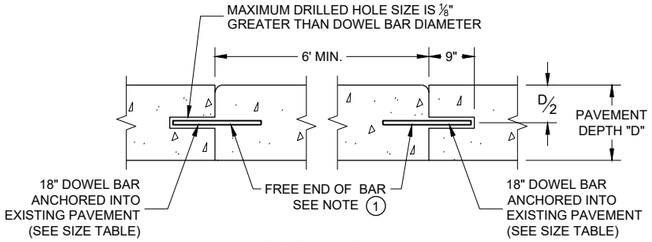


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

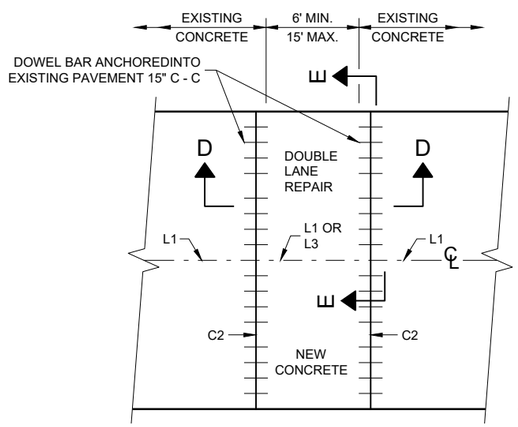
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

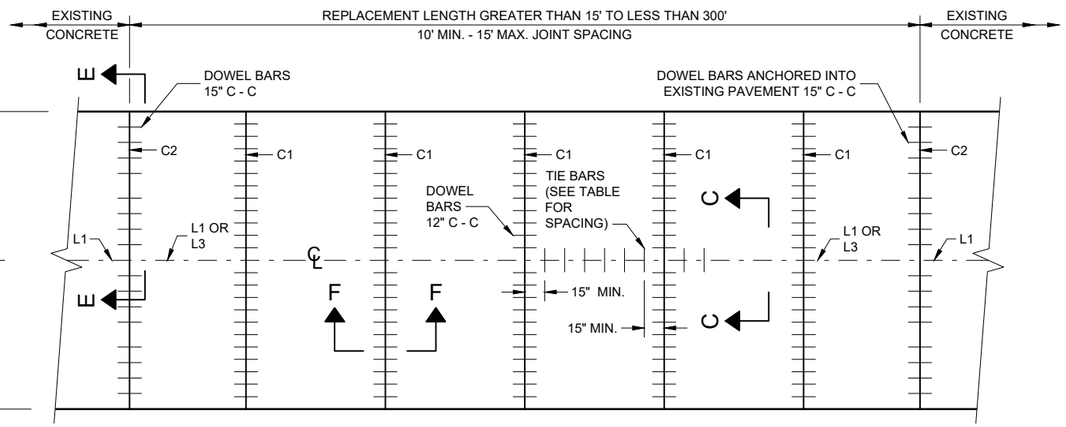
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	NONE	12'
7", 7 ½"	1"	1"	14'
8" & ABOVE	1 ¼"	1 ¼"	15'



PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

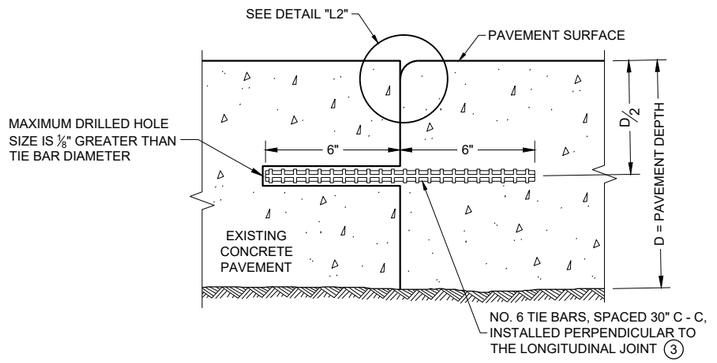
MULTILANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C09 - 17b

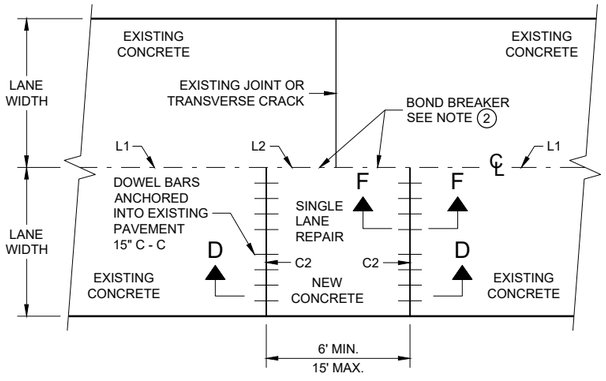


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

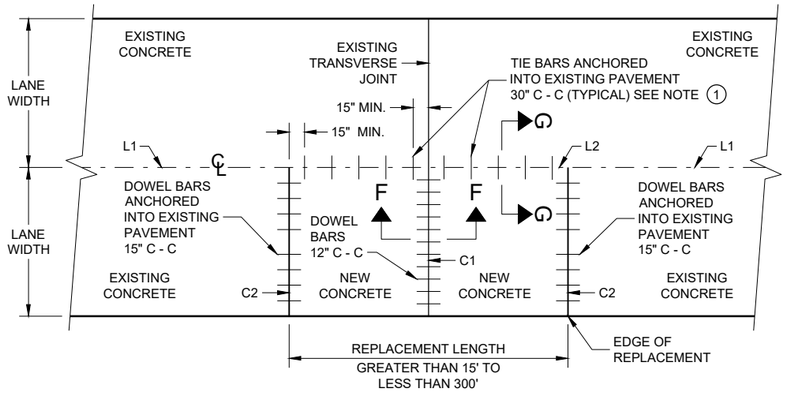
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR
FHWA

6

SDD 13C09 - 16c

GENERAL NOTES

PCCP = PORTLAND CEMENT CONCRETE PAVEMENT.

SHLDR = SHOULDER.

CONTINUE SAW CUT CONTRACTION JOINT ACROSS TURN LANE, EXIT TAPER AND PASSING LANE.

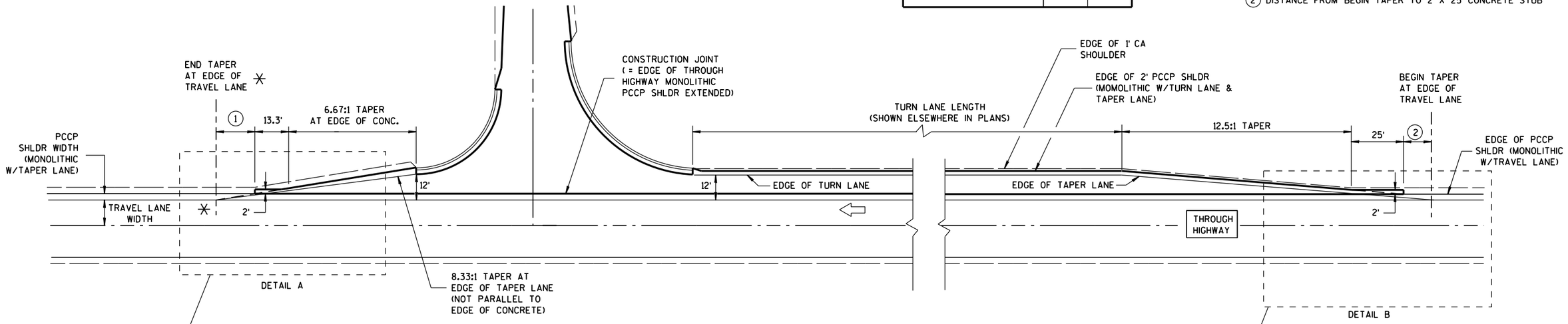
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

THROUGH HIGHWAY LANE WIDTH AND PCCP SHOULDER WIDTH ARE SHOWN ELSEWHERE IN PLANS

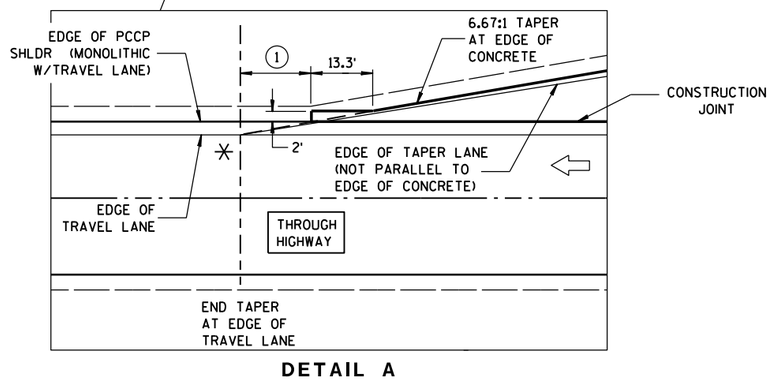
(1) DISTANCE FROM END TAPER TO 2' X 13.3' CONCRETE STUB

(2) DISTANCE FROM BEGIN TAPER TO 2' X 25' CONCRETE STUB

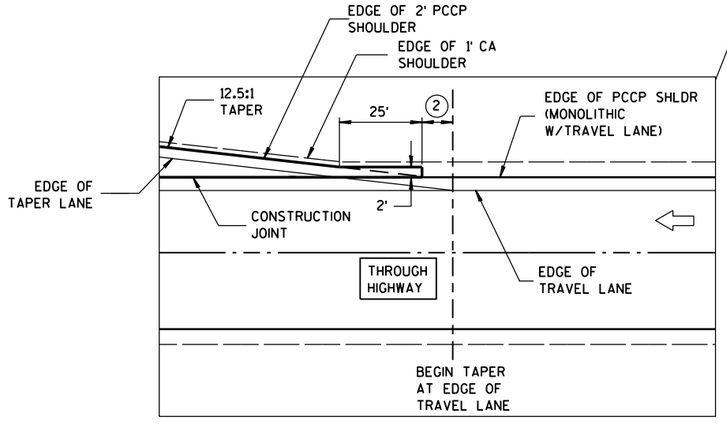
THROUGH HIGHWAY MONOLITHIC PCCP SHOULDER WIDTH (FEET)	DISTANCE (FEET) (1)	DISTANCE (FEET) (2)
2	13.3	0.0
3	20.0	12.5
TAPER RATE : 1	6.67	12.5



✳ NOTE: EDGE OF CONCRETE TAPER (EXTENDED) & EDGE OF TAPER LANE CONVERGE



DETAIL A



DETAIL B

RIGHT TURN LANE AND EXIT TAPER

DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 13 C 16-2a

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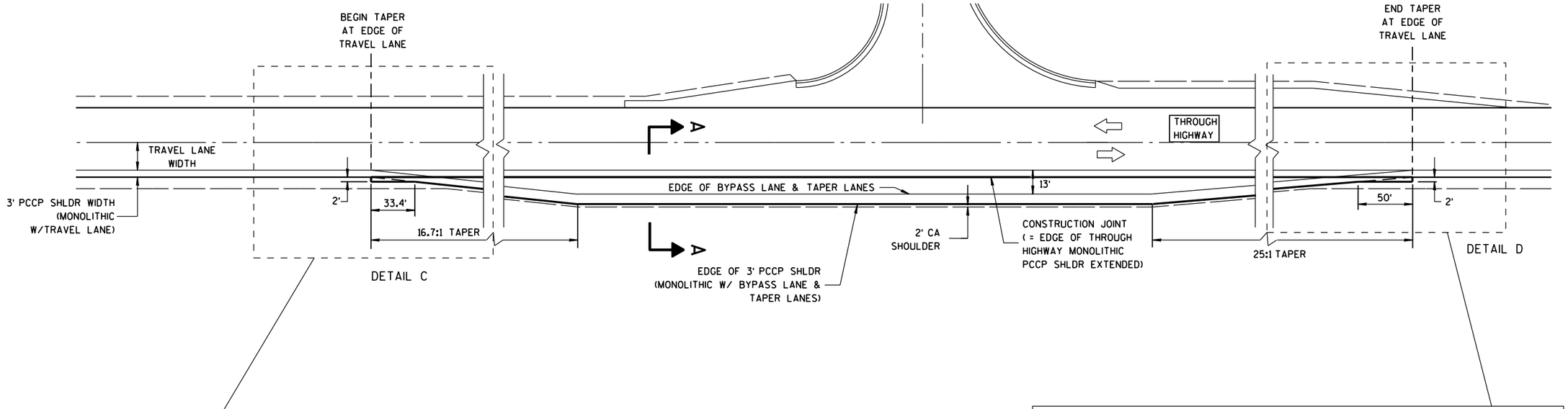
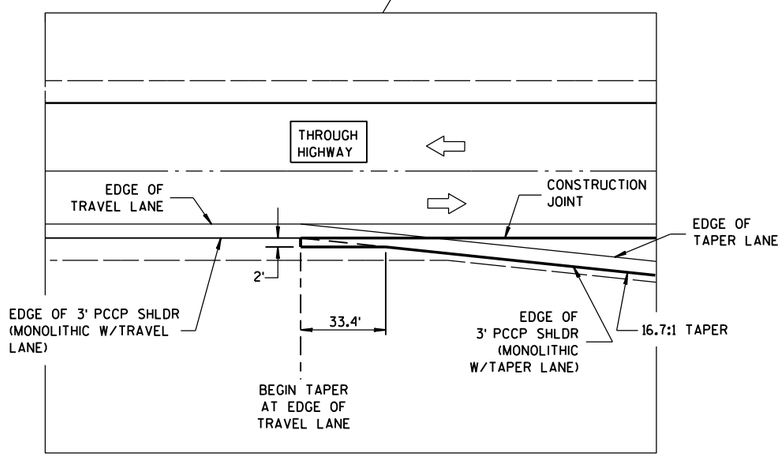
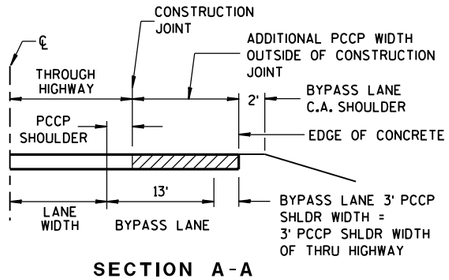
S.D.D. 13 C 16-2a



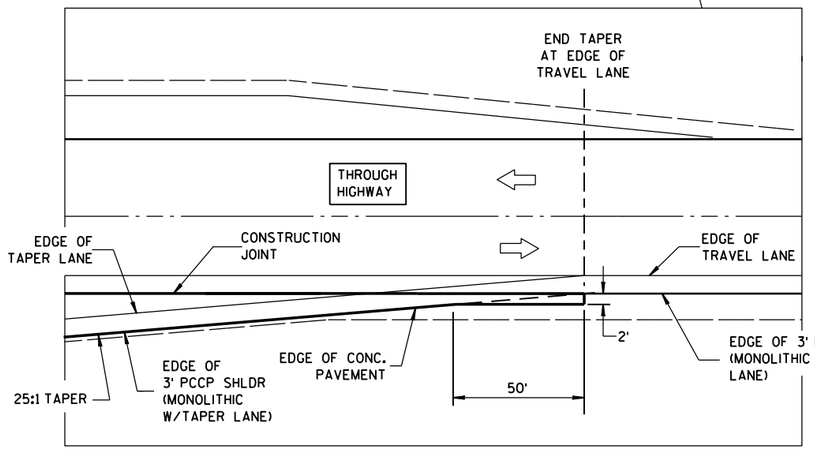


DETAIL C



SECTION A-A

(SHOWING BYPASS LANE AND SHOULDER)



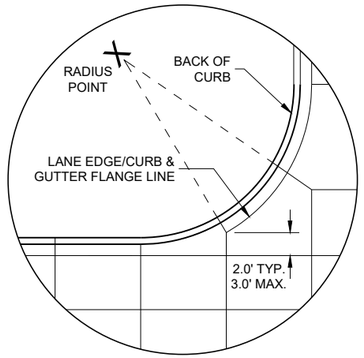
DETAIL D

TWO LANE UNDIVIDED HIGHWAY TEE INTERSECTION BYPASS LANE

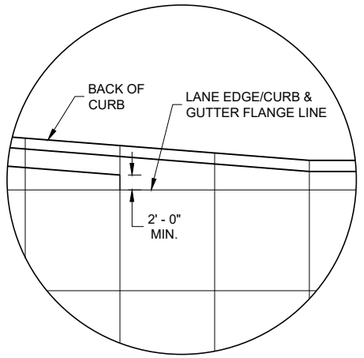
DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 12/18/12 — DATE /S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER FHWA

S.D.D. 13 C 16-2b

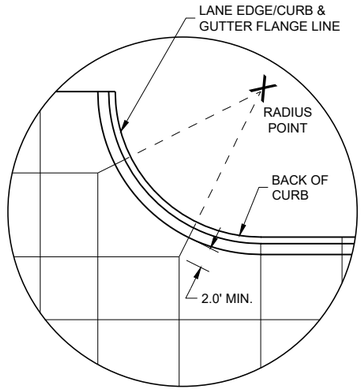
S.D.D. 13 C 16-2b



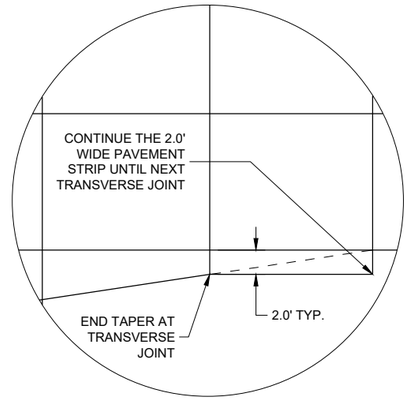
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

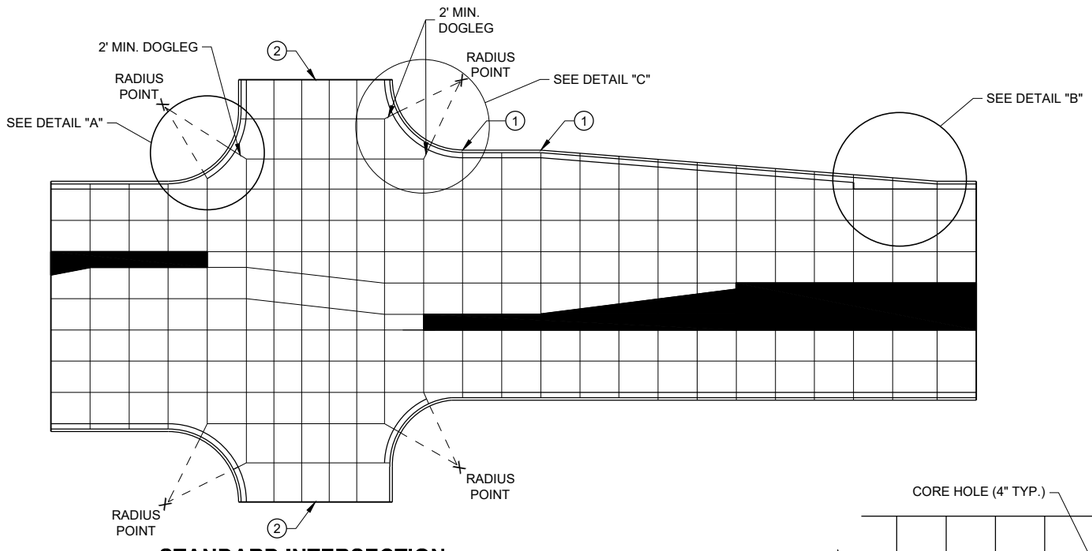
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

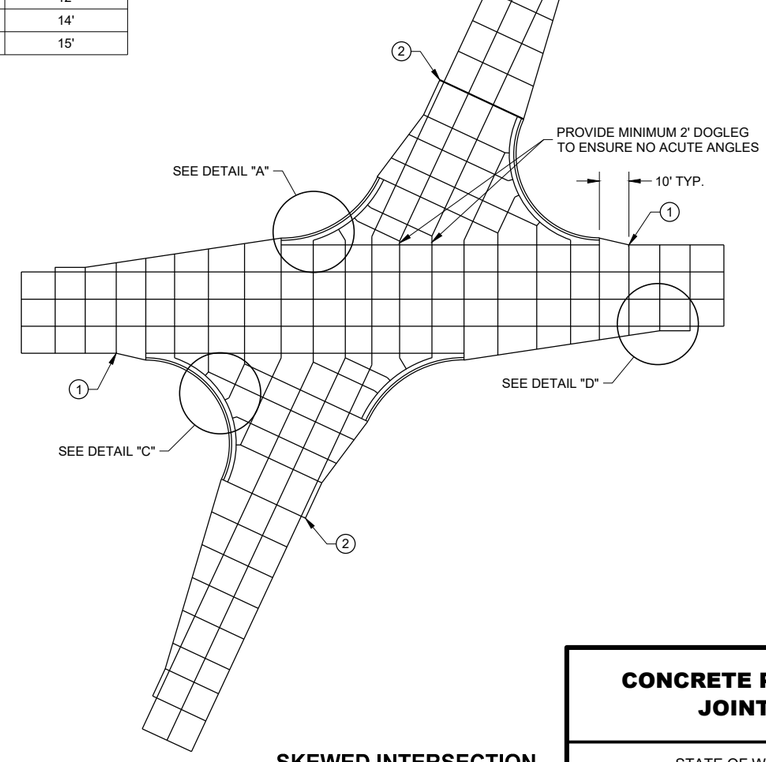
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



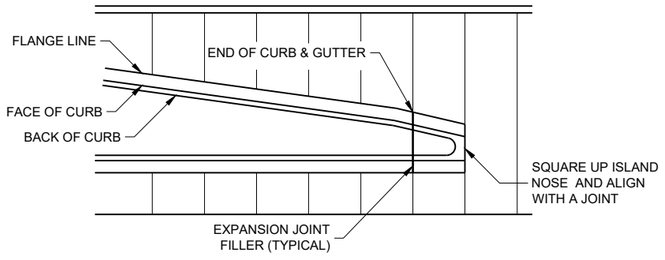
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

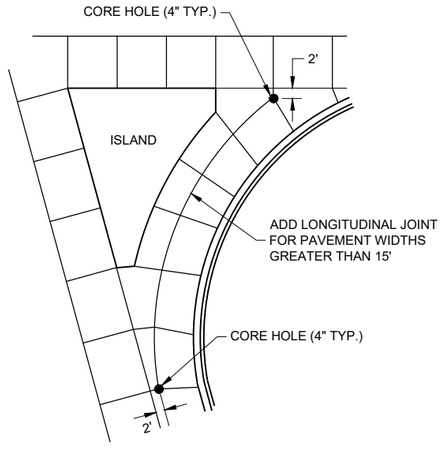
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07a

6

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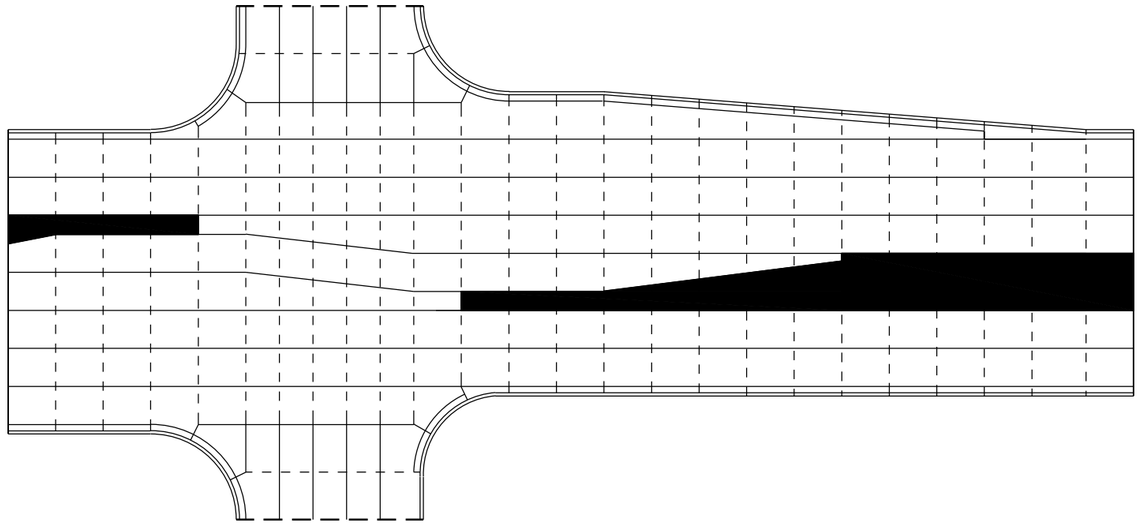
LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

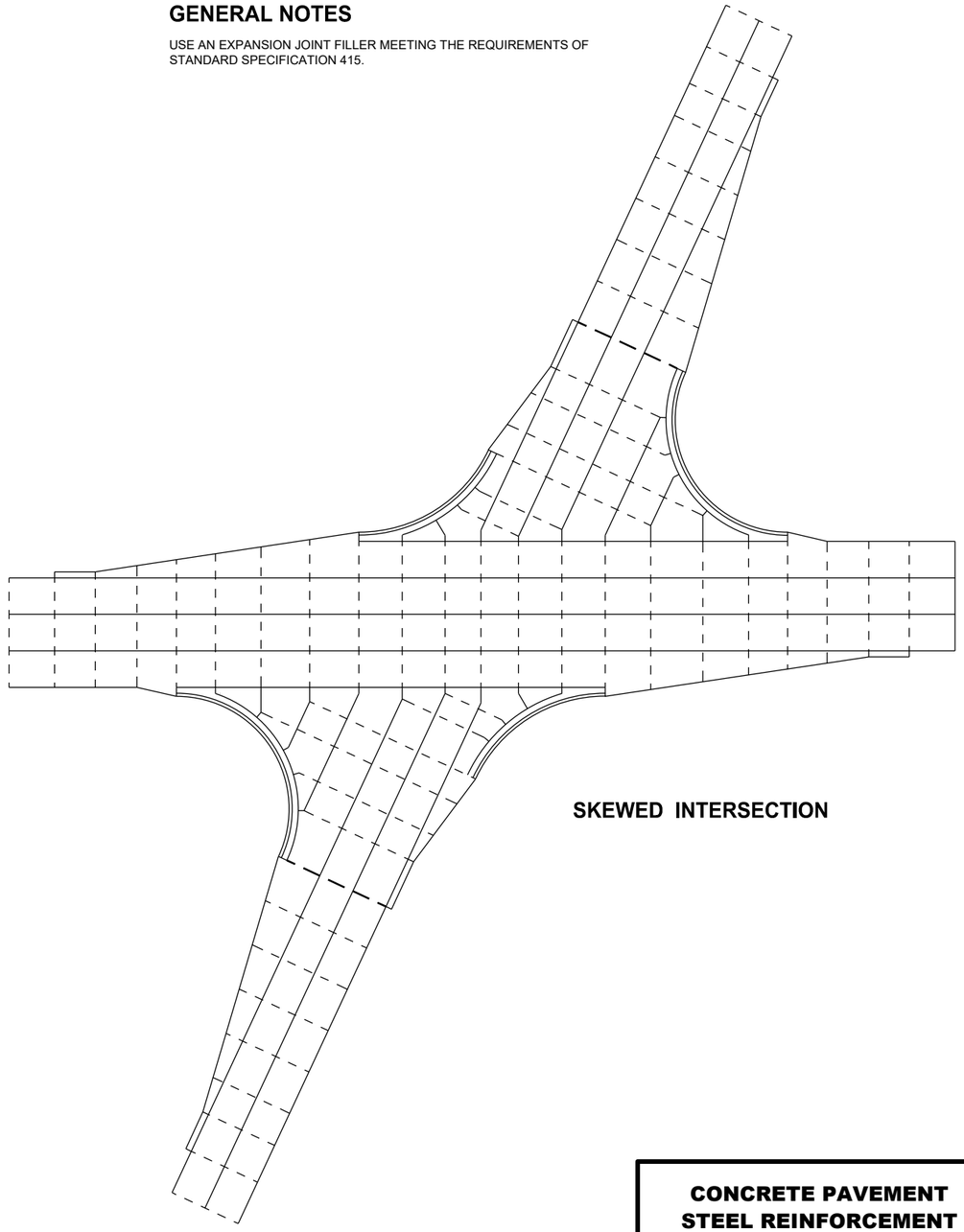
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

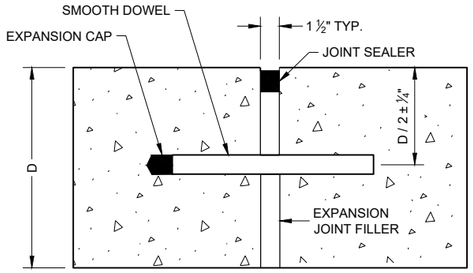
SDD 13C18 - 07b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

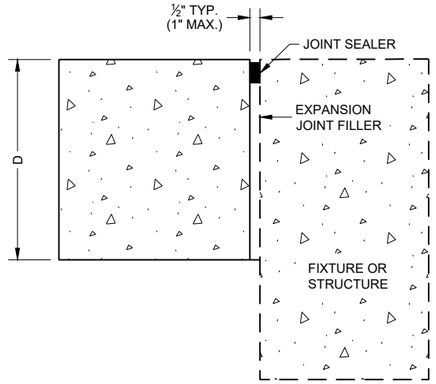
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

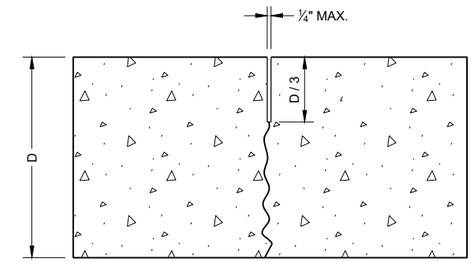
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

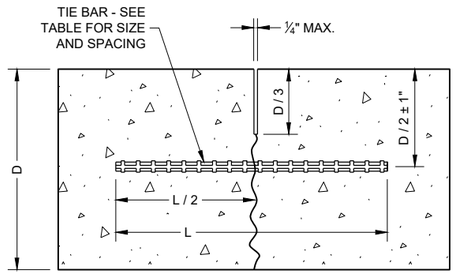
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

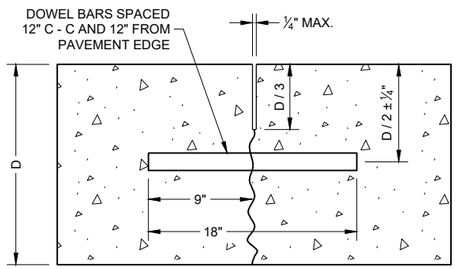
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

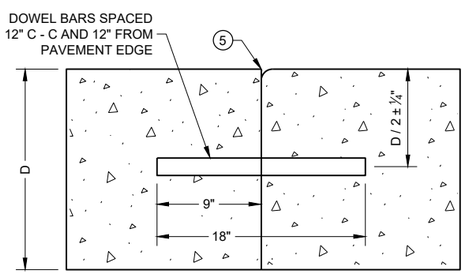


TIED LONGITUDINAL

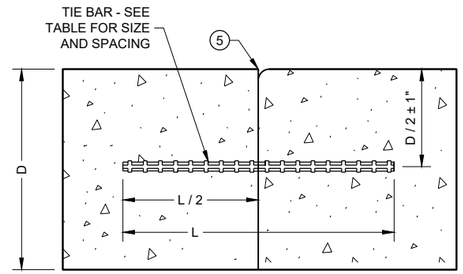


DOWELED TRANSVERSE

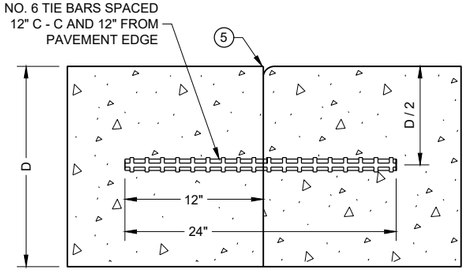
CONTRACTION JOINTS (2)



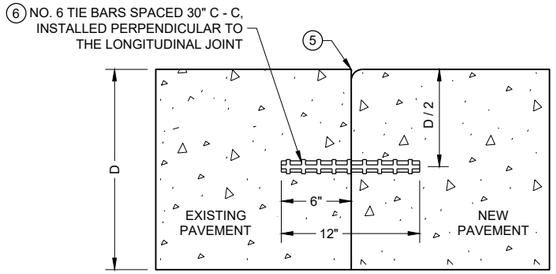
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07c

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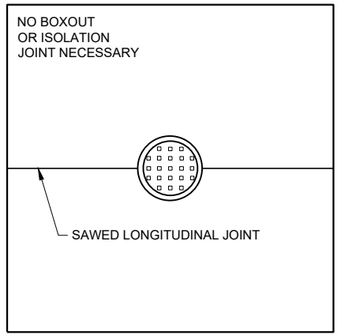
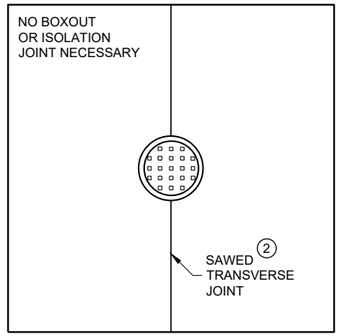
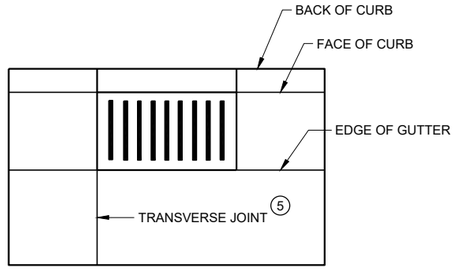


MANHOLE WITH LONGITUDINAL JOINT



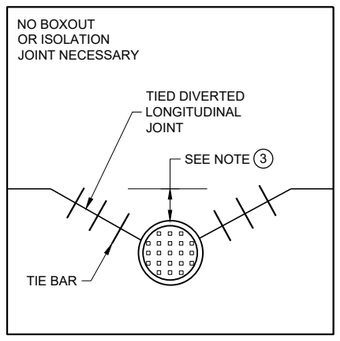
MANHOLE WITH TRANSVERSE JOINT



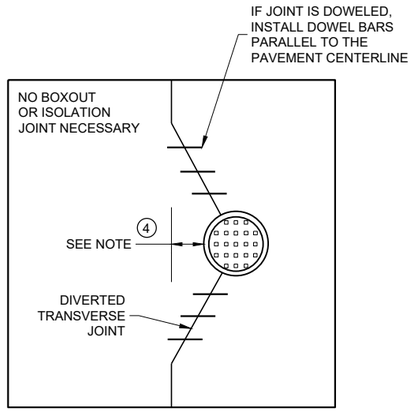
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

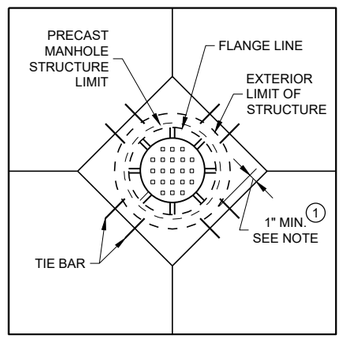
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

6

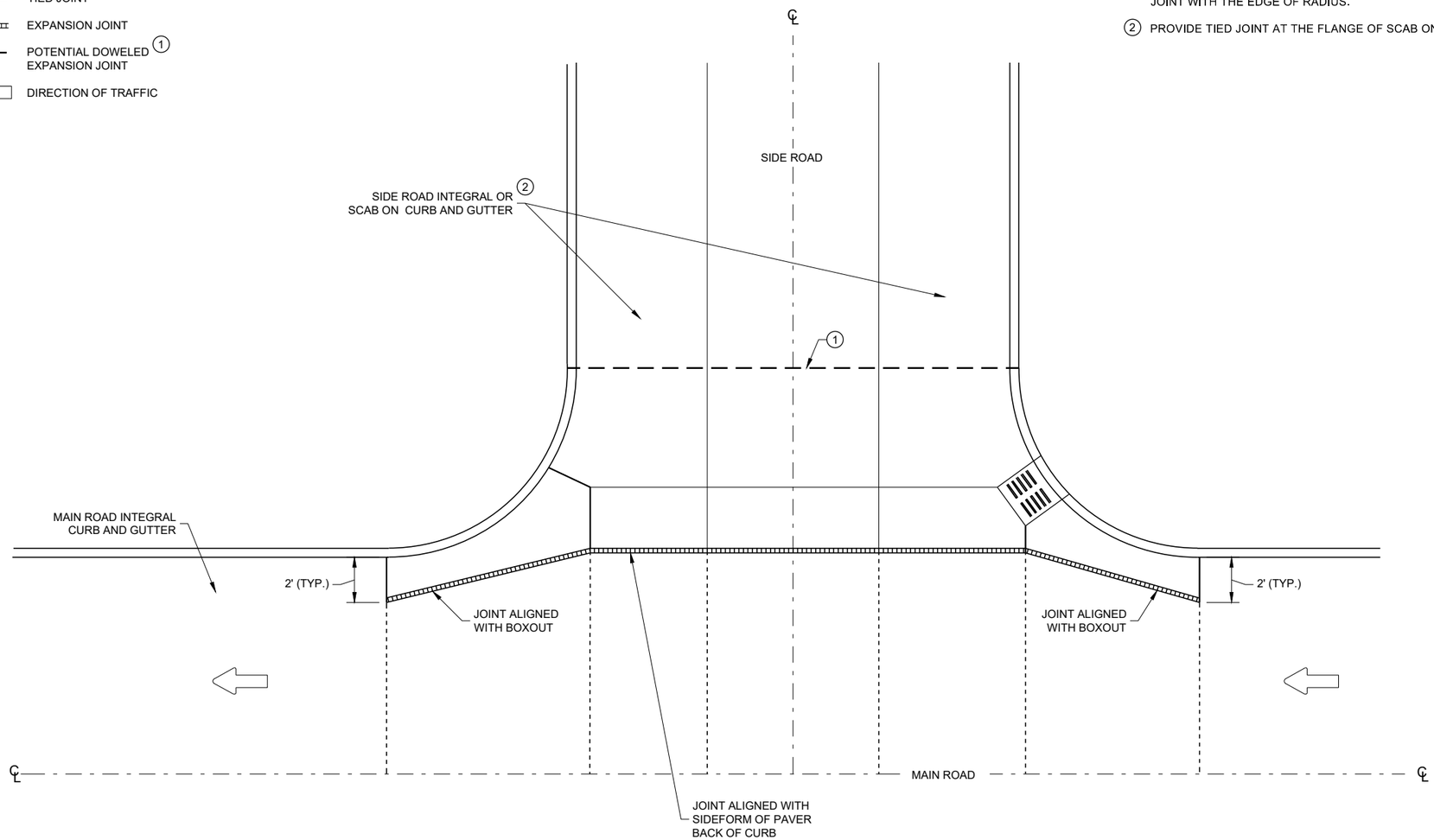
SDD13C18 - 07d

6

SDD13C18 - 07d

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

6

SDD 13C18 - 07f

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

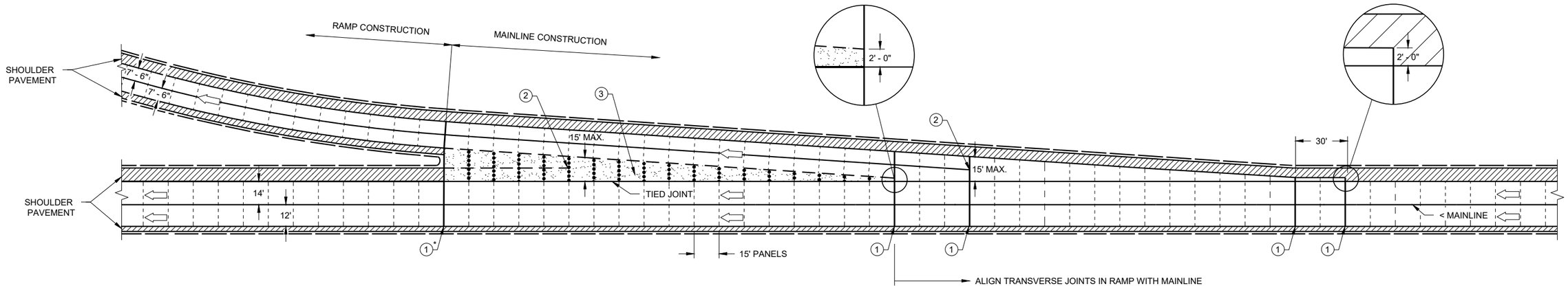
November 2018
DATE

/S/ Peter Kemp P.E.
ROADWAY STANDARDS DEVE ENGINEER

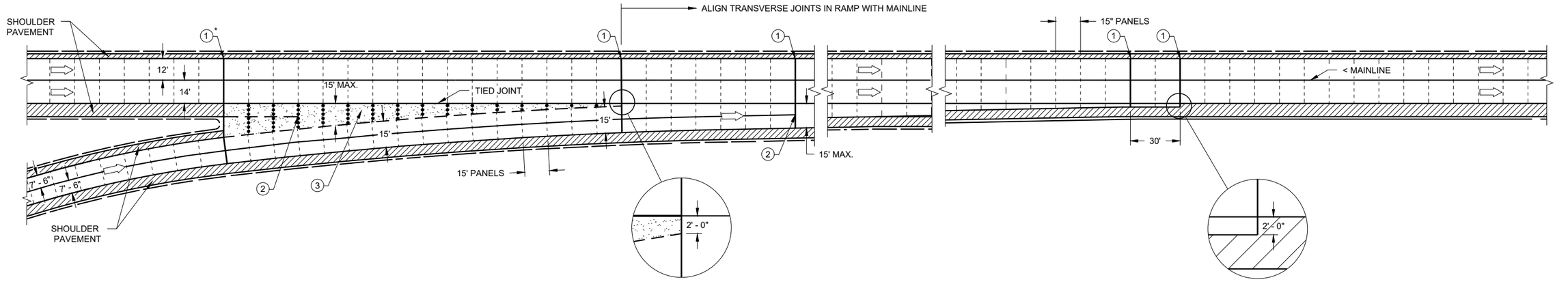
FHWA

6

SDD 13C18 - 07f



DECELERATION LANE



ACCELERATION LANE

GENERAL NOTES

PAVEMENT AND BASE THICKNESS, PANEL LENGTHS, JOINTS AND REINFORCEMENT FOR THE DECELERATION AND ACCELERATION LANES, INCLUDING TAPERS, SHALL BE THE SAME AS THE MAINLINE, EXCEPT WHERE OTHERWISE NOTED.

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED CONFORMING TO SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS.

LANE AND SHOULDER WIDTHS MAY VARY FROM SHOWN. SEE CONSTRUCTION PLANS FOR ACTUAL PROPOSED WIDTHS.

(1) CRITICAL TRANSVERSE JOINT LOCATIONS AT PAVEMENT WIDTH CHANGES.
((1)* IS NOT A CRITICAL TRANSVERSE JOINT WHEN ASPHALTIC GORE IS INSTALLED).

(2) STOP LONGITUDINAL JOINT WITH CORE HOLE (2" TYP.) WHEN IT MEETS THE FIRST TRANSVERSE JOINT LESS THAN 15' WIDE OR STOP LONGITUDINAL JOINT WHEN IT MEETS 2' AWAY FROM THE TIED JOINT OF THE MAINLINE.

(3) DISREGARD THE JOINT DETAILS IN AND AROUND THE GORE WHEN ASPHALTIC GORE IS INSTALLED.

LEGEND

- DOWELED JOINT
- UNDOWELED JOINT
- TIED JOINT
- UNTIED JOINT
- GORE
- DIRECTION OF TRAVEL

CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 — DATE
/S/ Peter Kemp P.E. — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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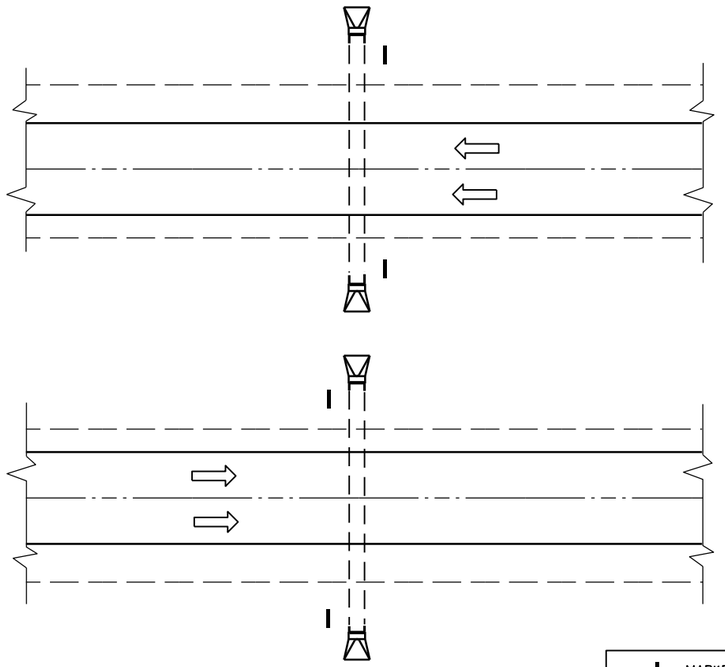
SDD 13C18 - 07g

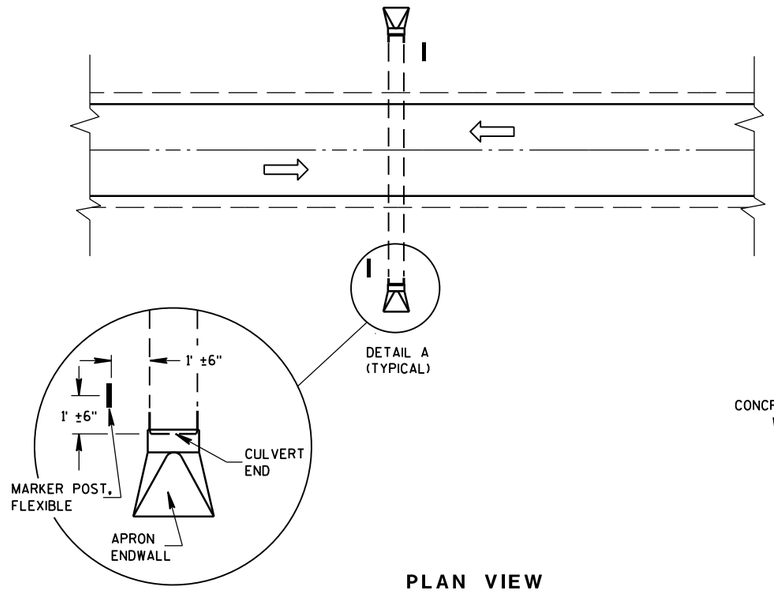
6

SDD 13C18 - 07g



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

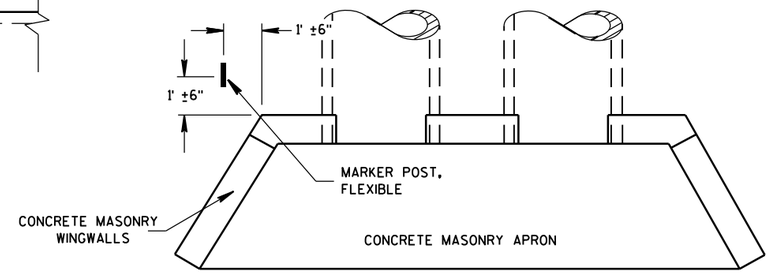
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

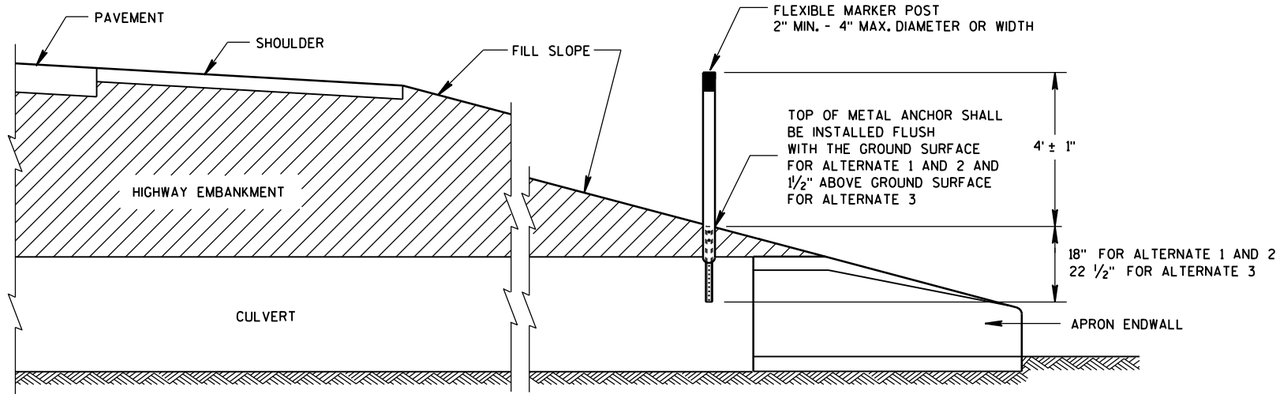
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

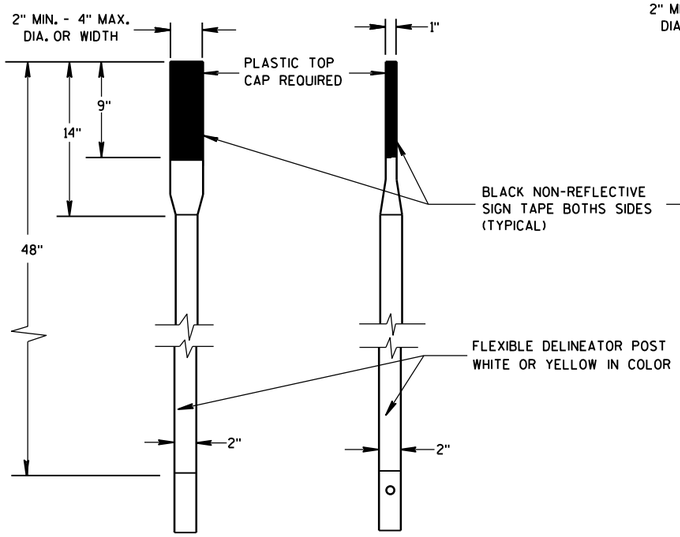
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

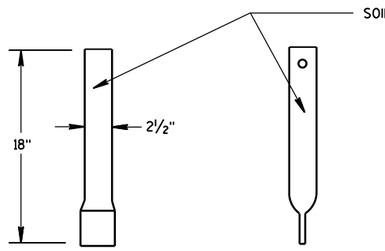
6

S.D.D. 15 A 3-2a

6

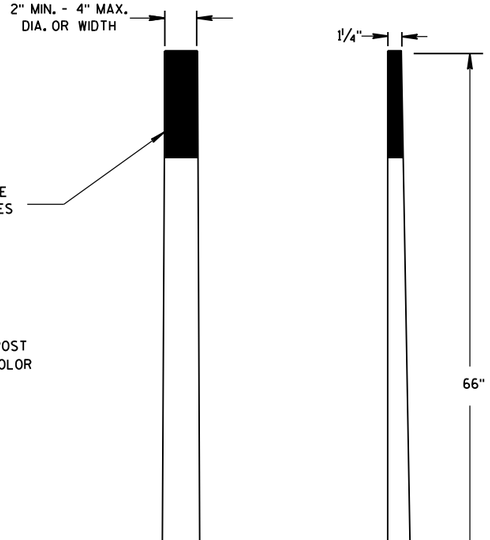
S.D.D. 15 A 3-2a





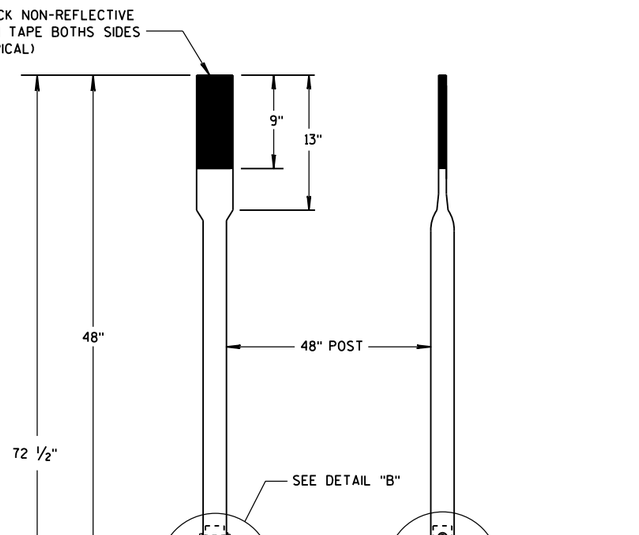
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

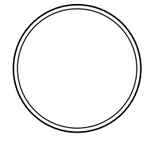
ALTERNATE 2



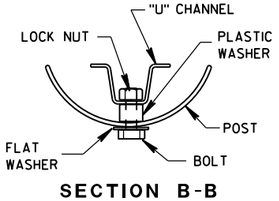
FRONT VIEW SIDE VIEW

ALTERNATE 3

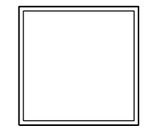
FLEXIBLE MARKER POSTS



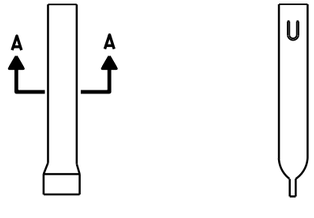
SECTION A-A



SECTION B-B

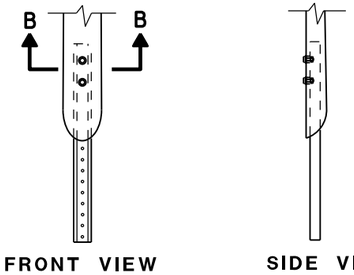


SECTION C-C



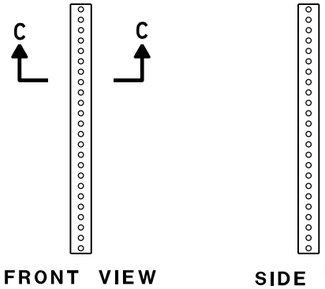
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

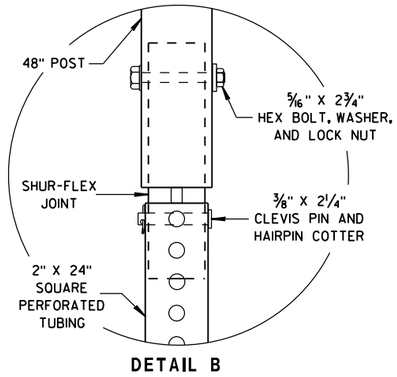
ALTERNATE 2



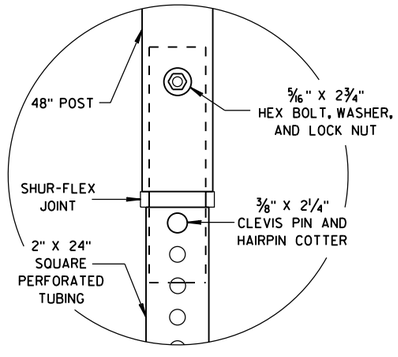
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

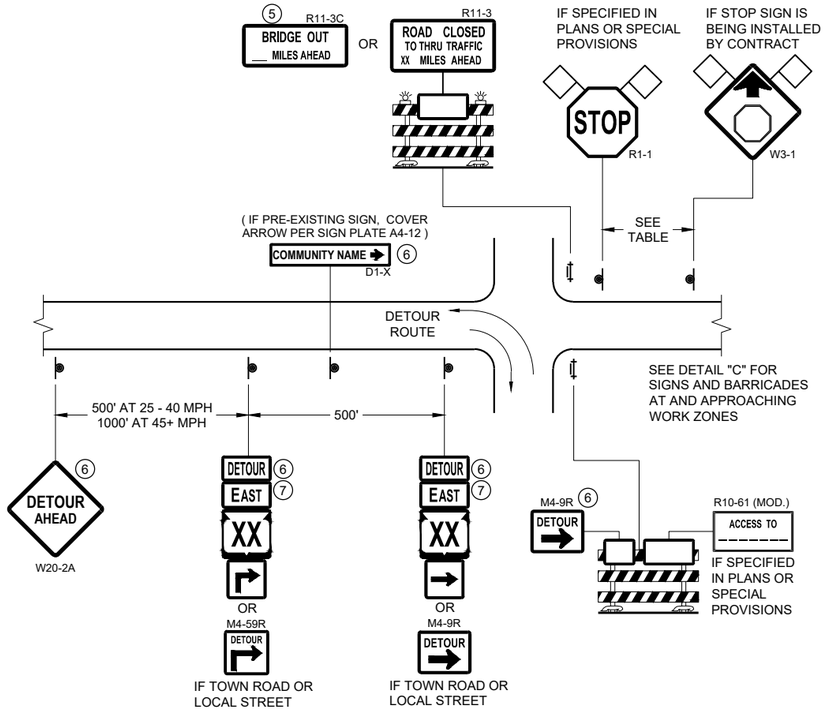
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

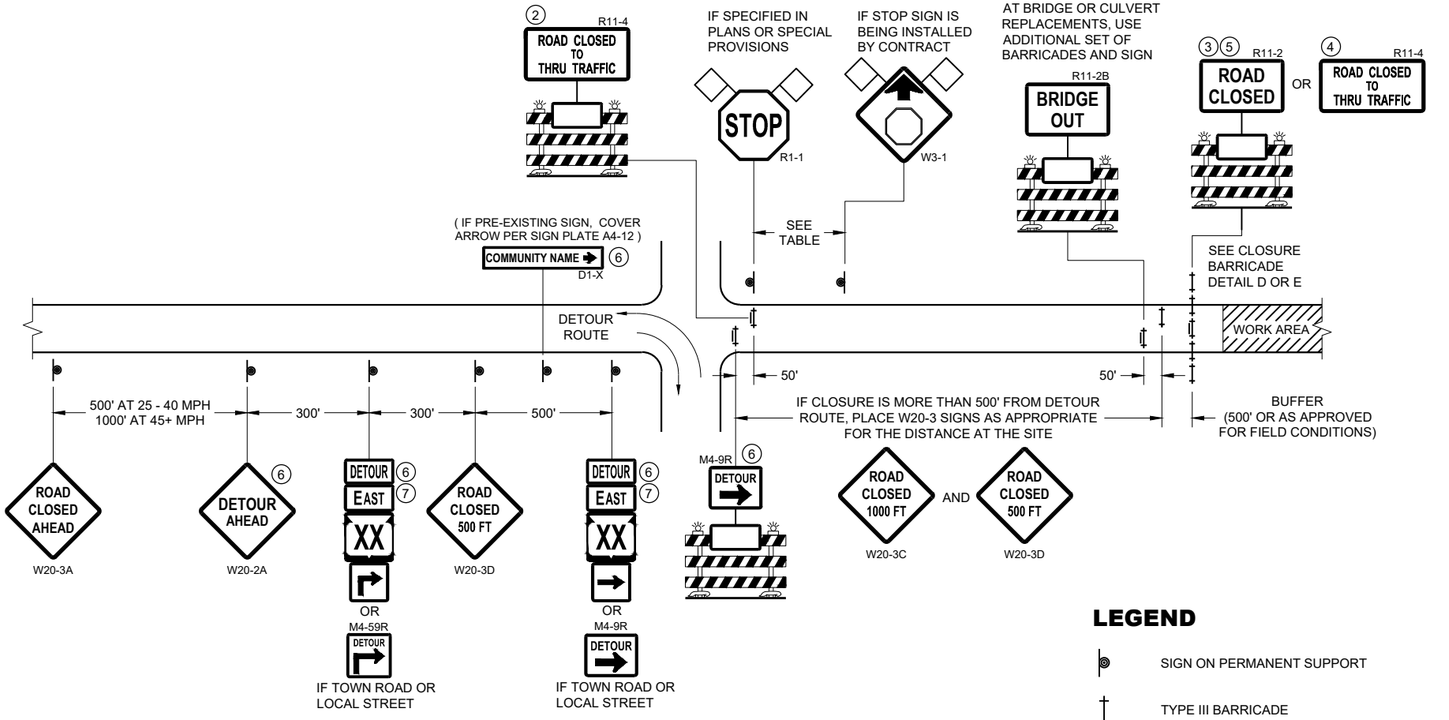
6

S.D.D. 15 A 3-2b



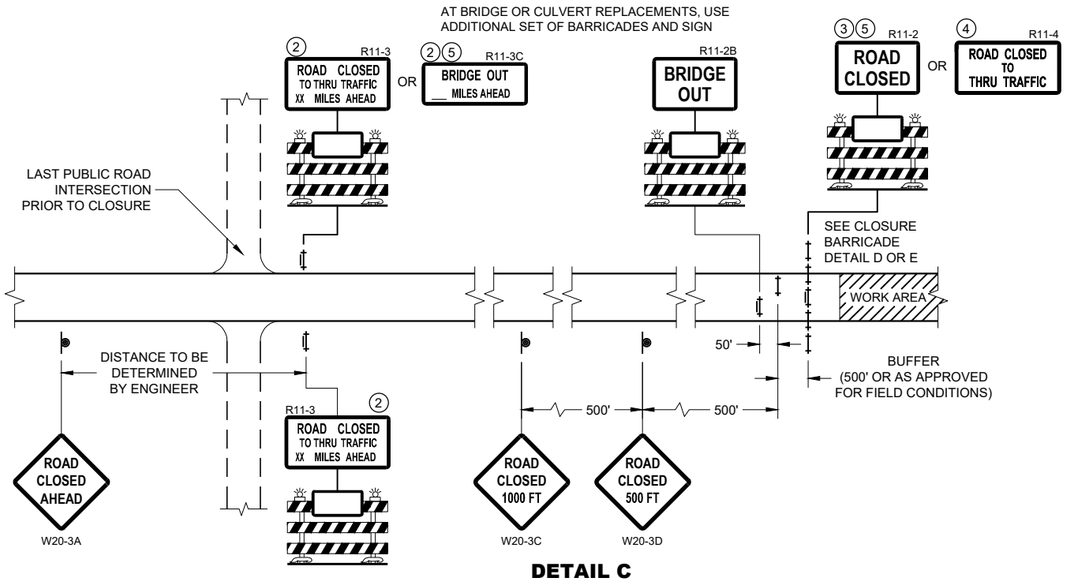
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

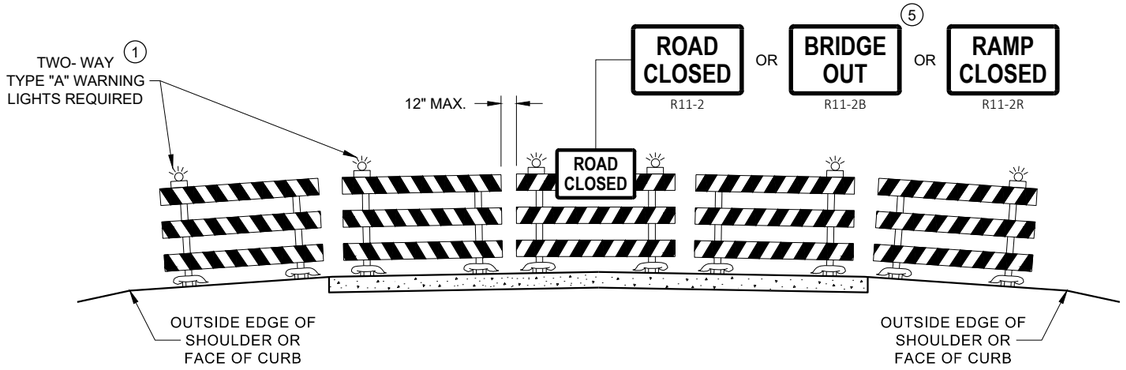
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

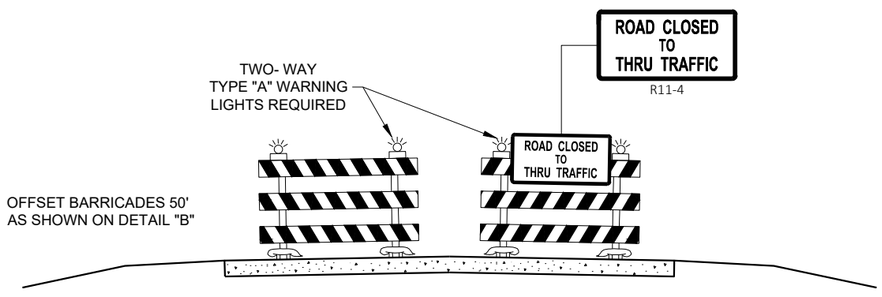
6

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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.

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

BARRICADES 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.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 08b

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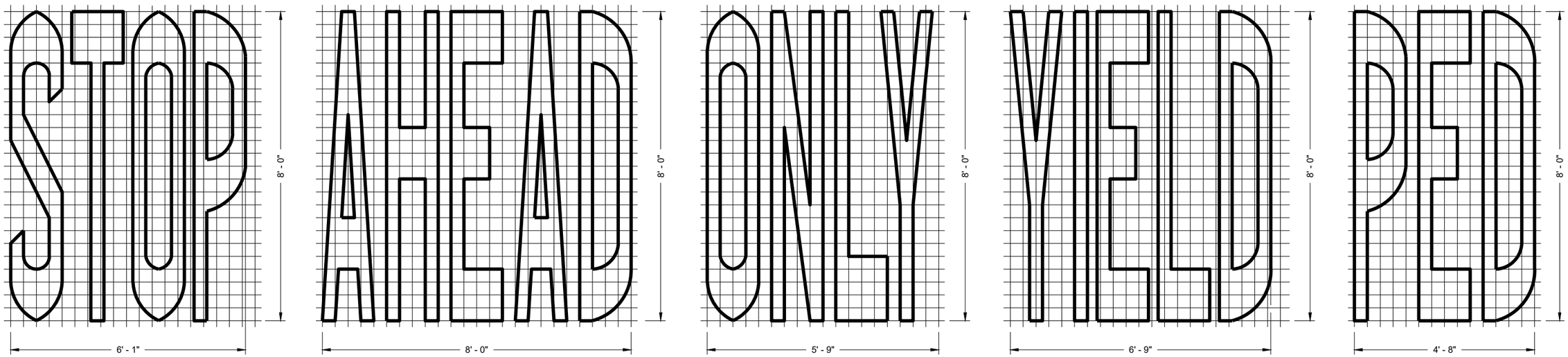
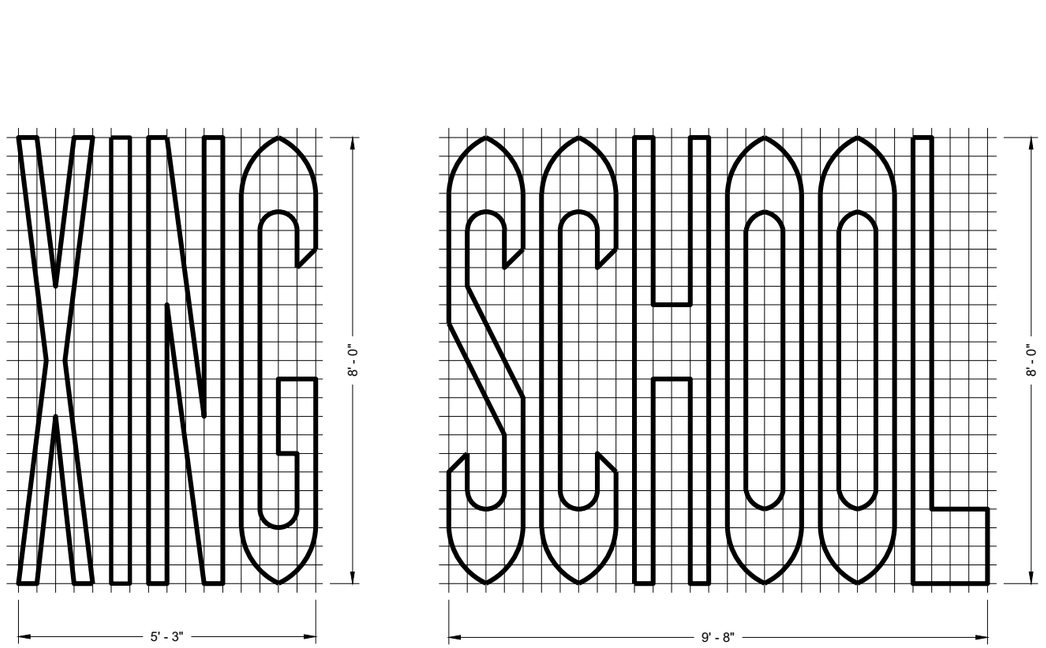
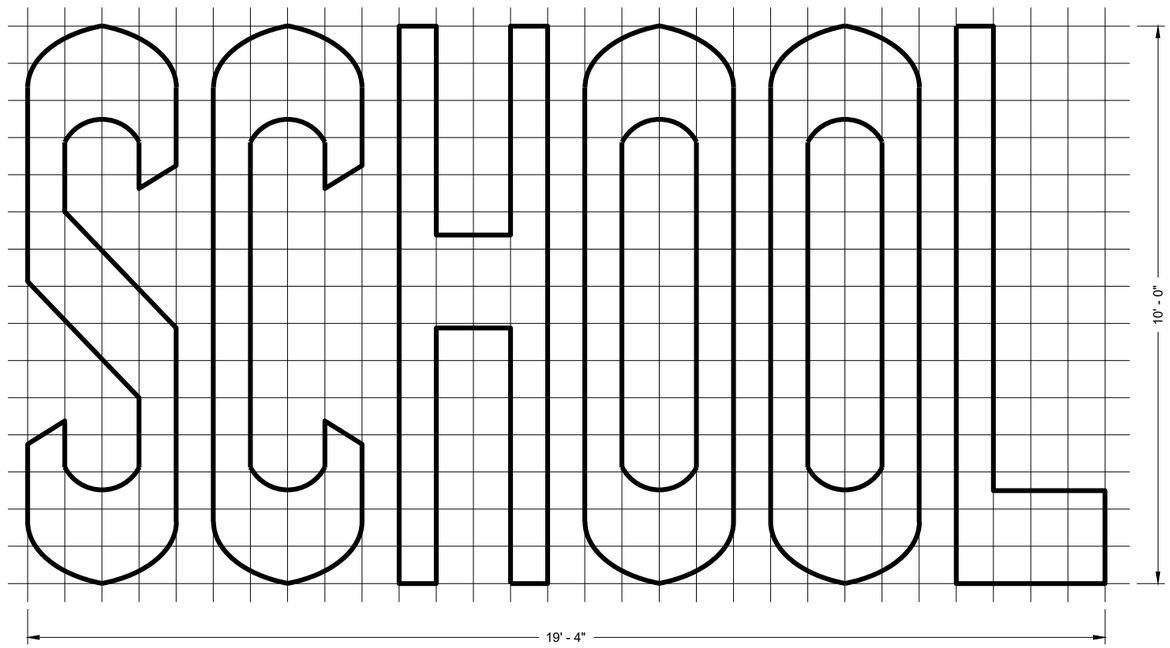
SDD 15C02 - 08b





SINGLE LANE



TWO - LANE

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.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

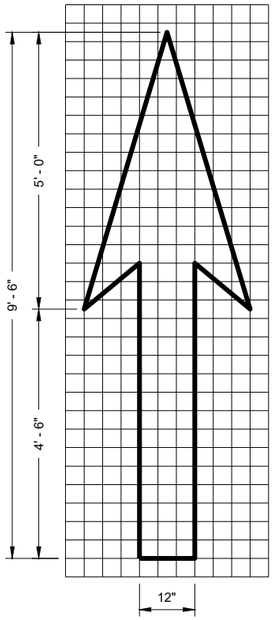
SDD 15C07 - 15b

6

SDD 15C07 - 15b

GENERAL NOTES

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



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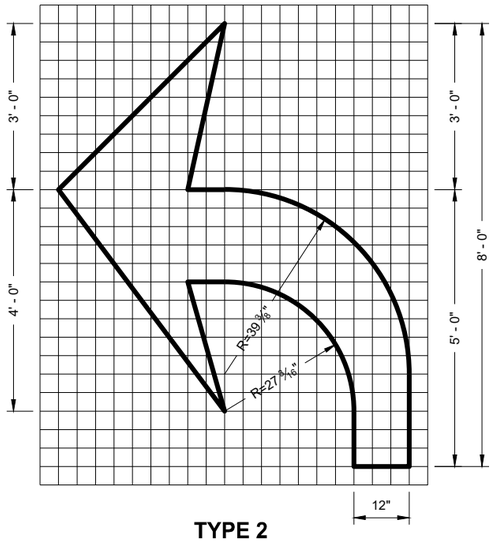

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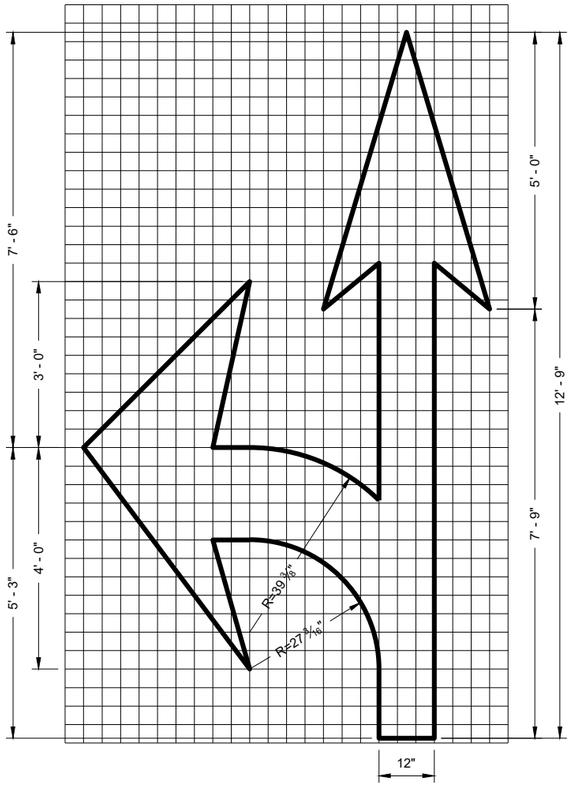
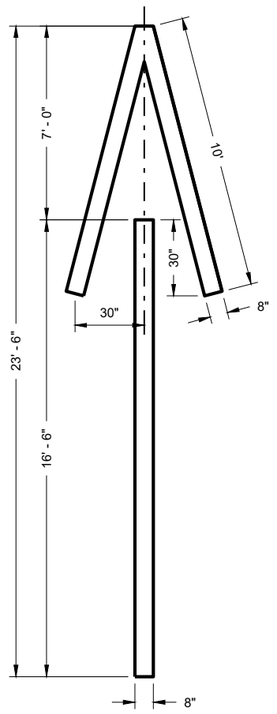
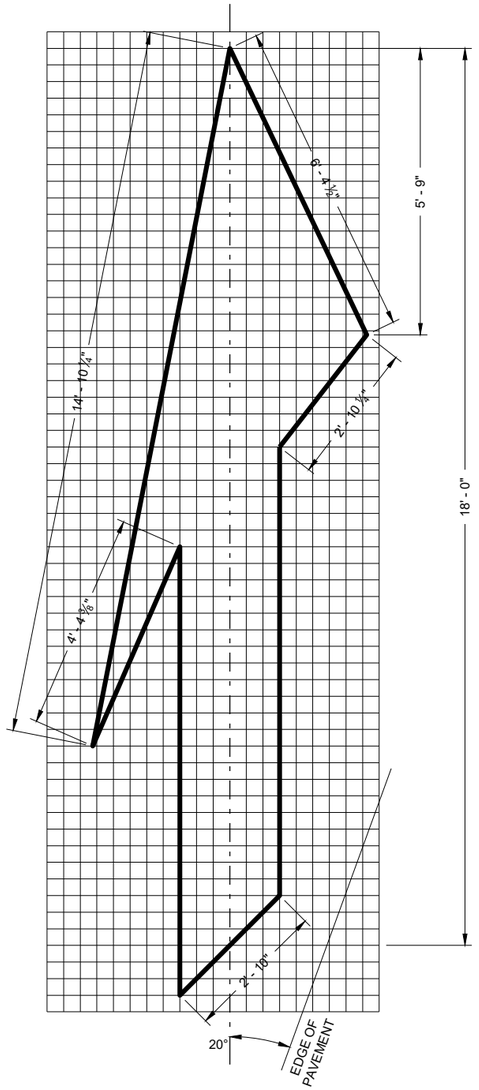


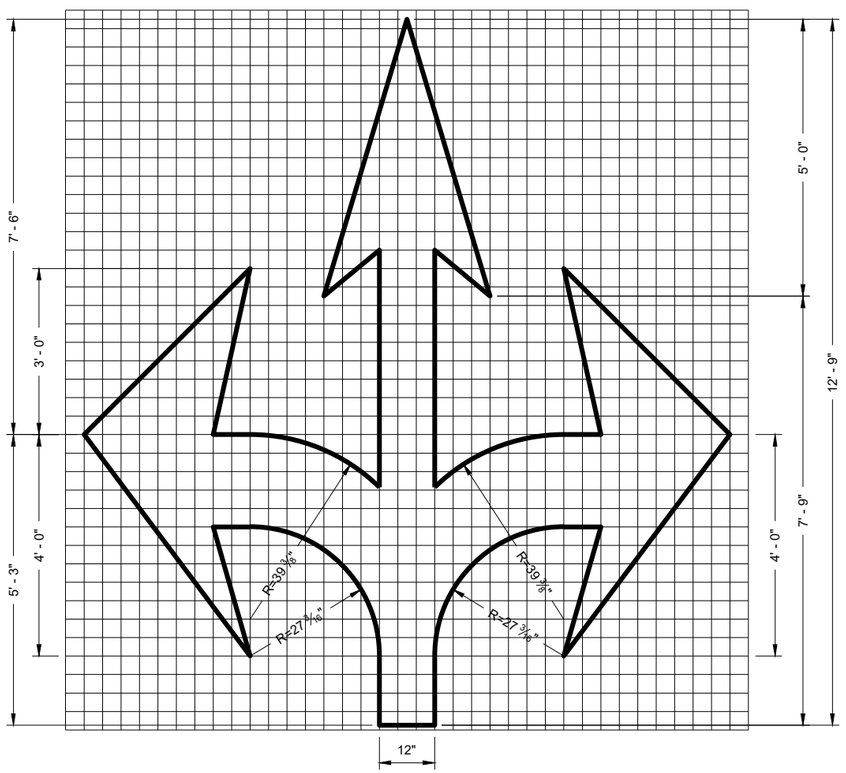
TYPE 3



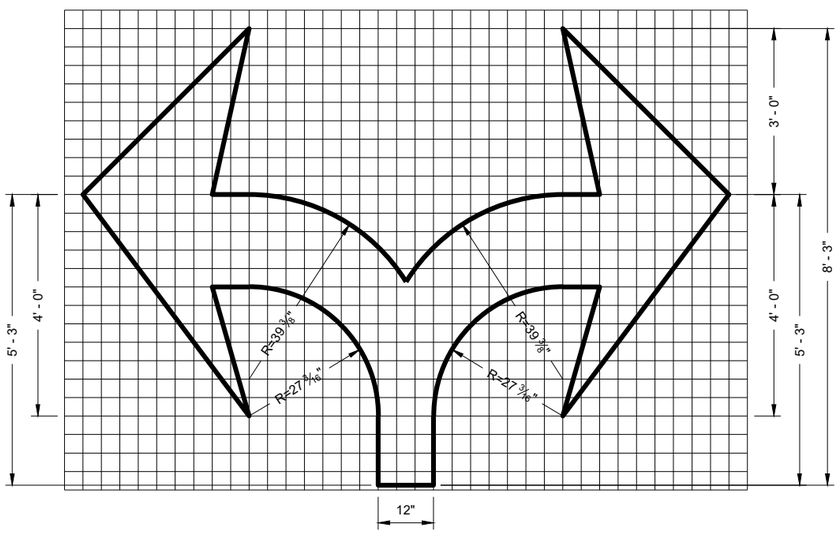
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07 - 15c

6

SDD 15C07 - 15c

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

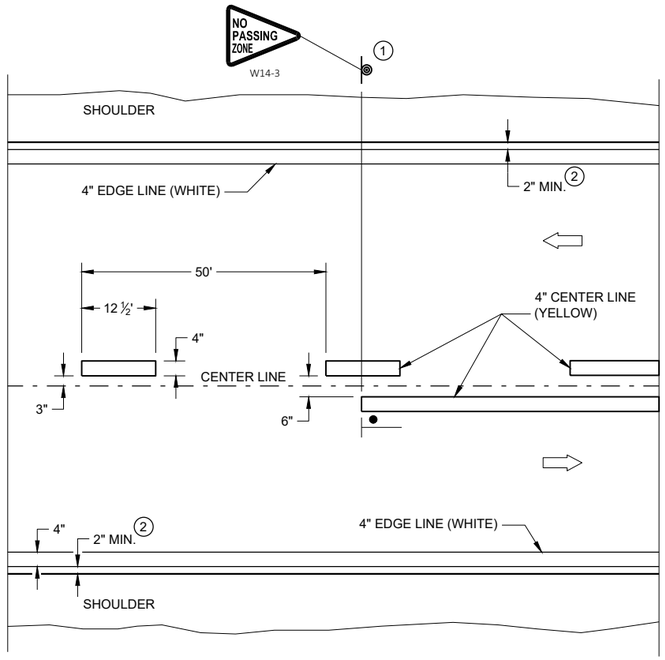
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

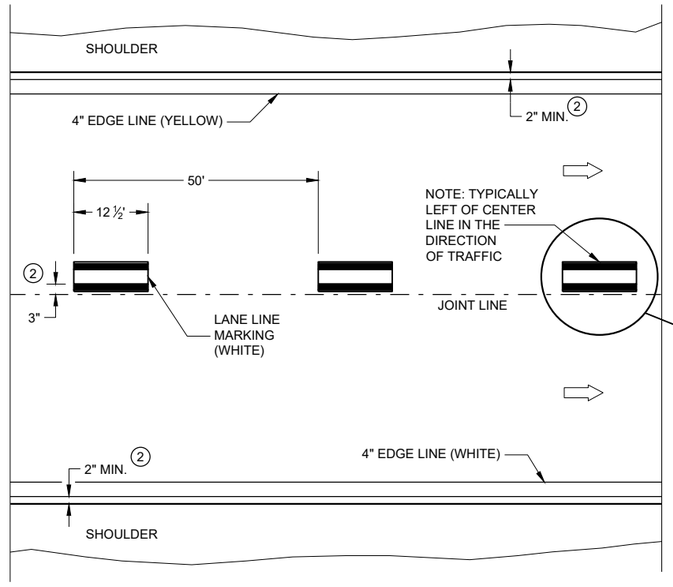
"T" MARKING

SIGN ON PERMANENT SUPPORT

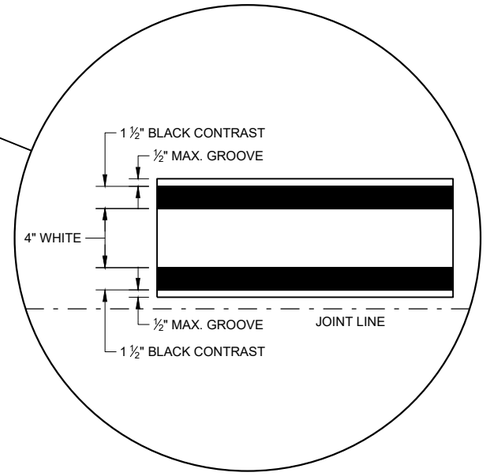
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Jeannie Silver
STATEWIDE SIGNING AND M
ENGINEER

FHWA

6

SDD 15C08 - 22a

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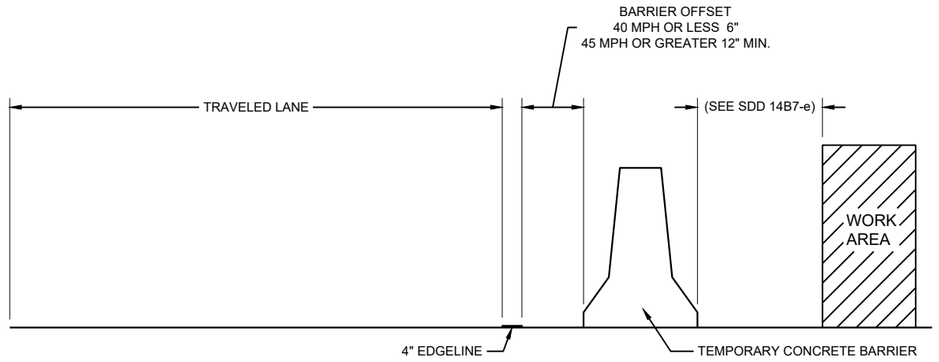
SDD 15C08 - 22a



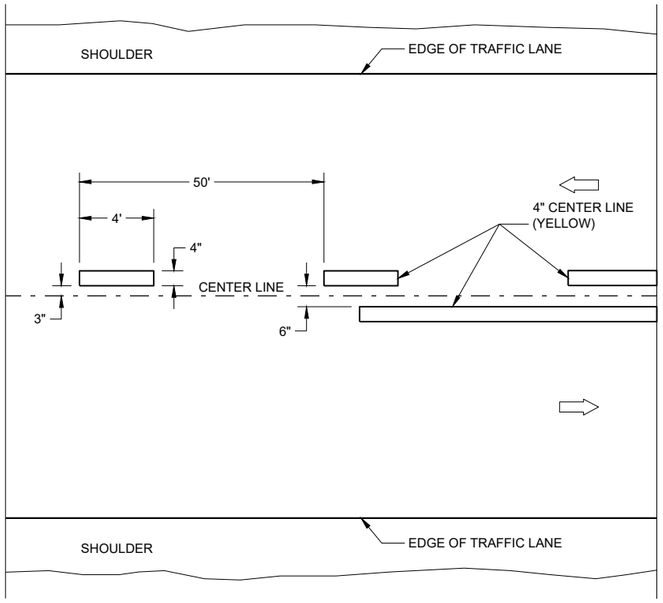
TEMPORARY BARRIER OFFSET FROM EDGELINE

GENERAL NOTES

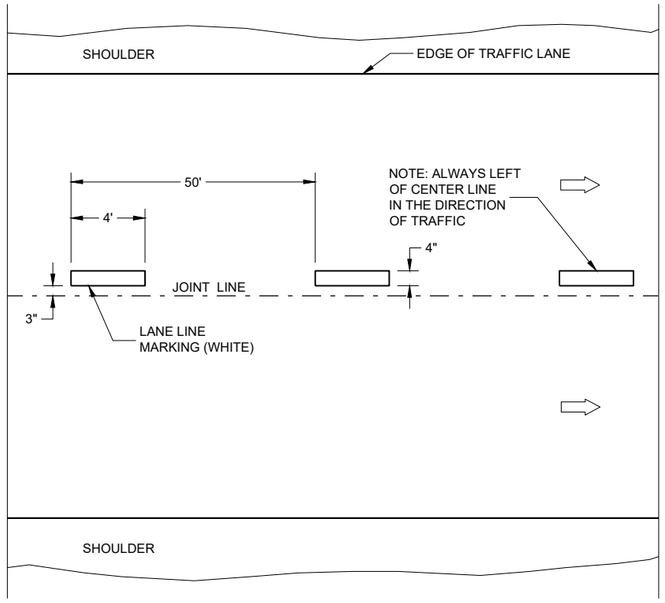
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

LEGEND

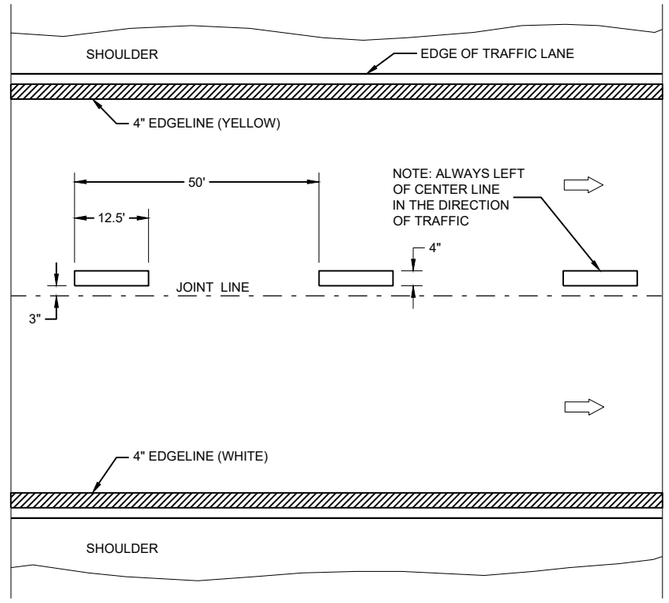
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

/S/ Jeannie Silver
STATEWIDE SIGNING AND M
ENGINEER

FHWA

6

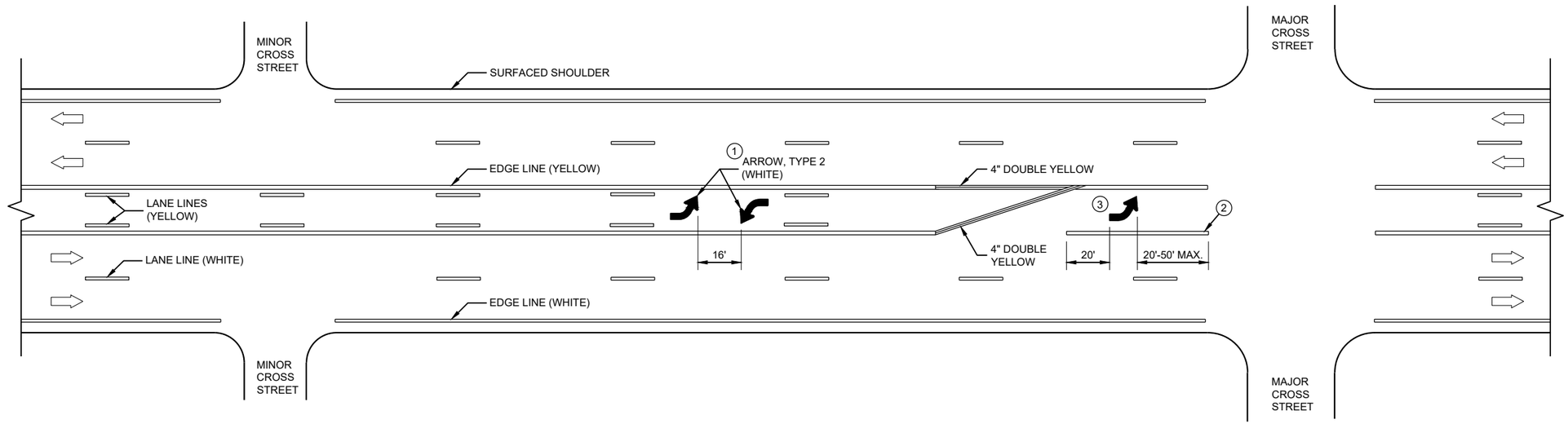
SDD 15C08 - 22b

SDD 15C08 - 22b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

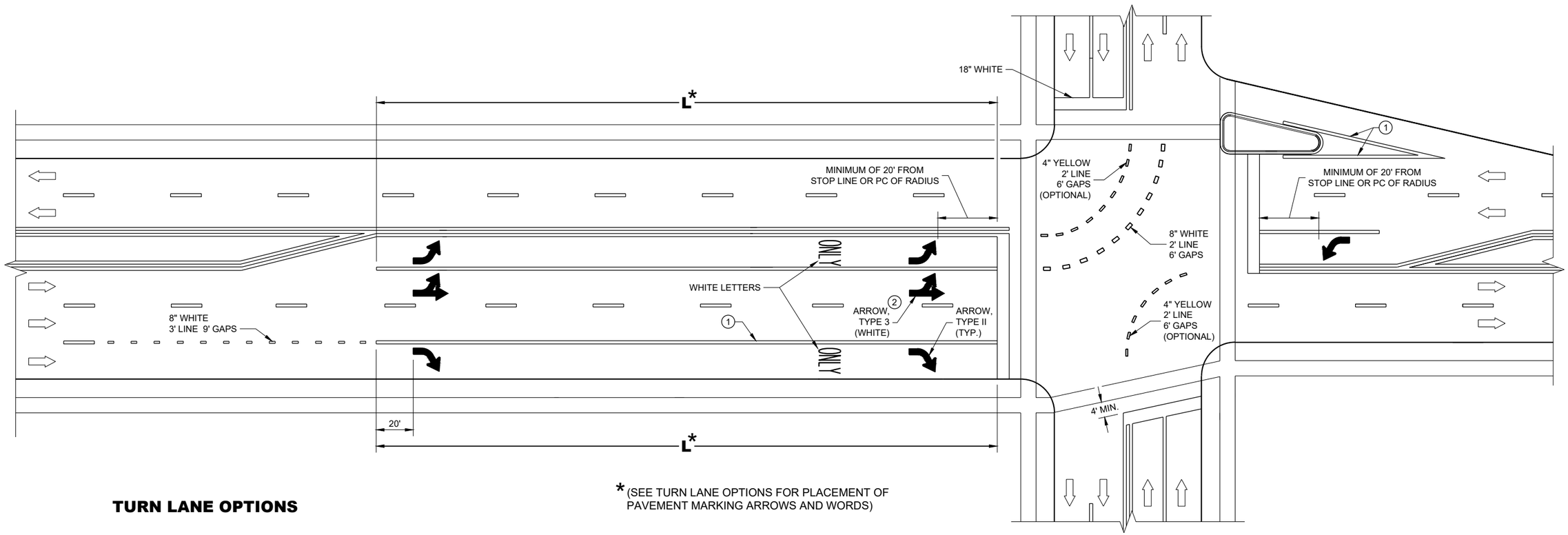
SDD 15C08 - 22c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

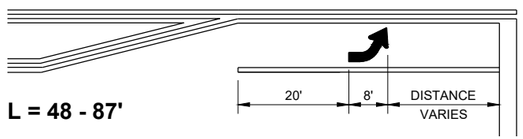
SDD 15C08 - 22c



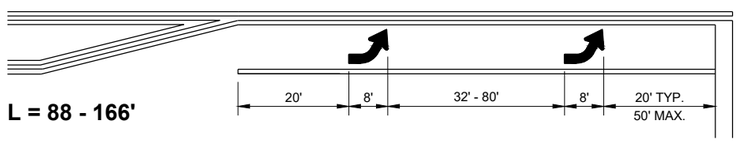
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

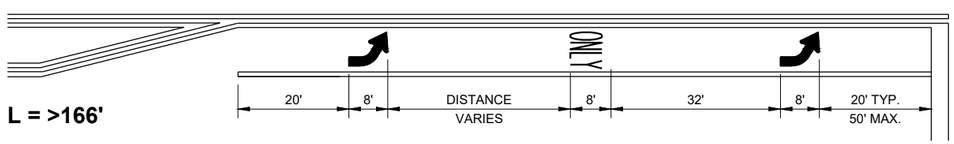
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

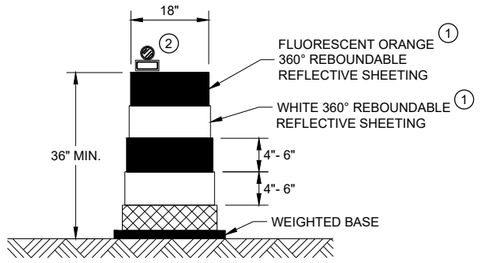
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 22d

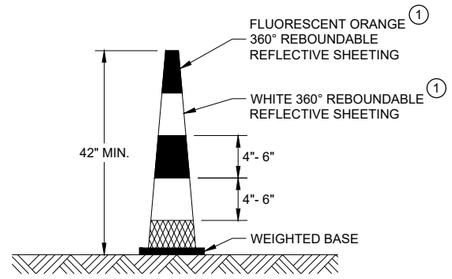
GENERAL NOTES

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



DRUM

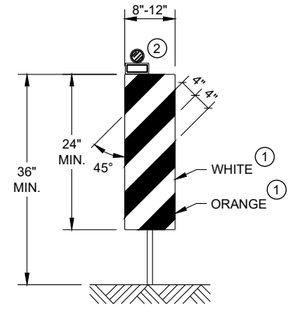
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

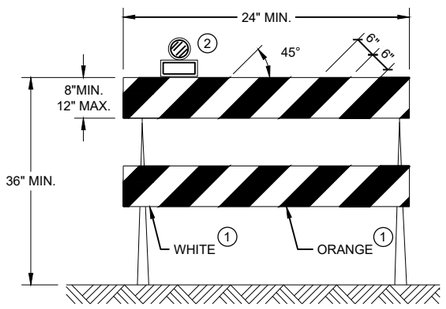
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



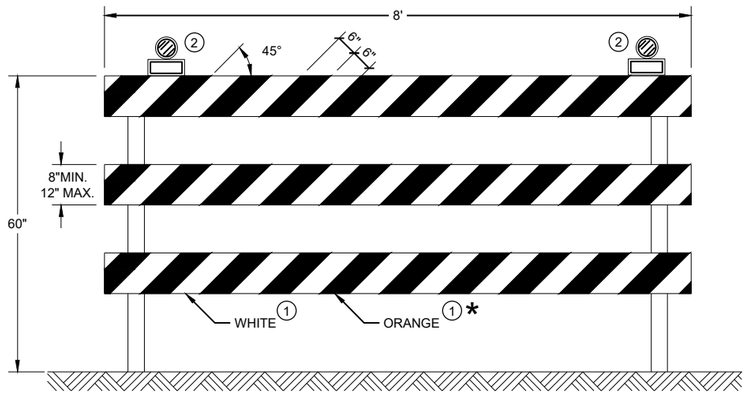
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

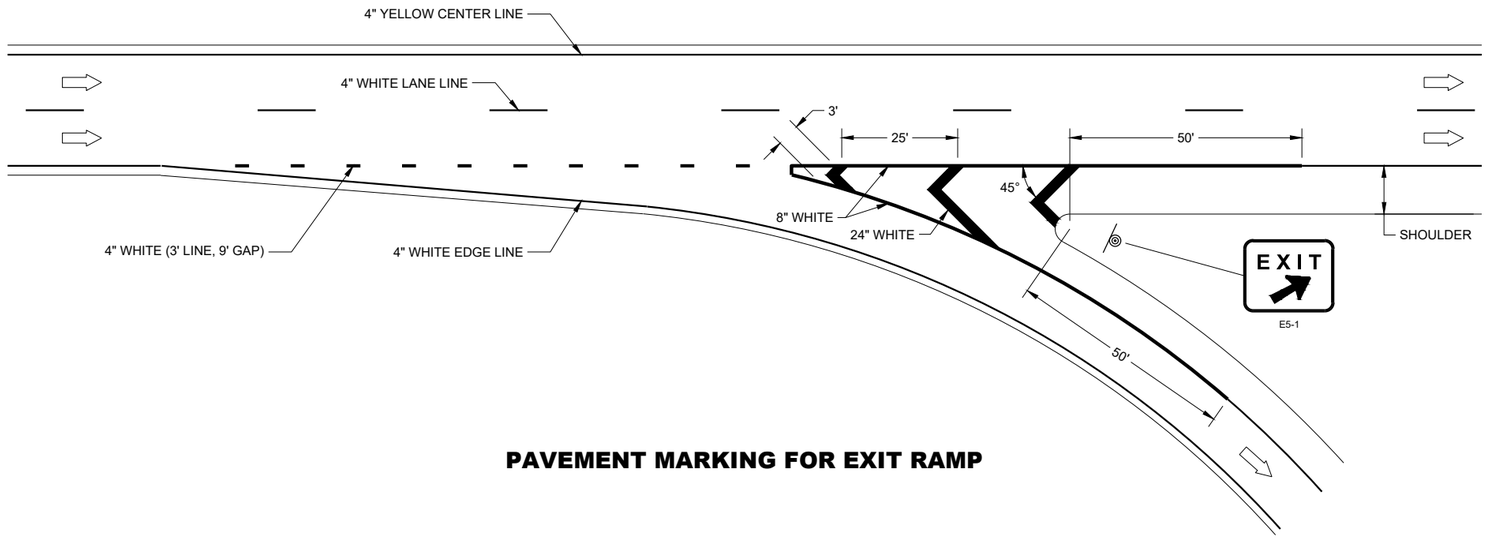
APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

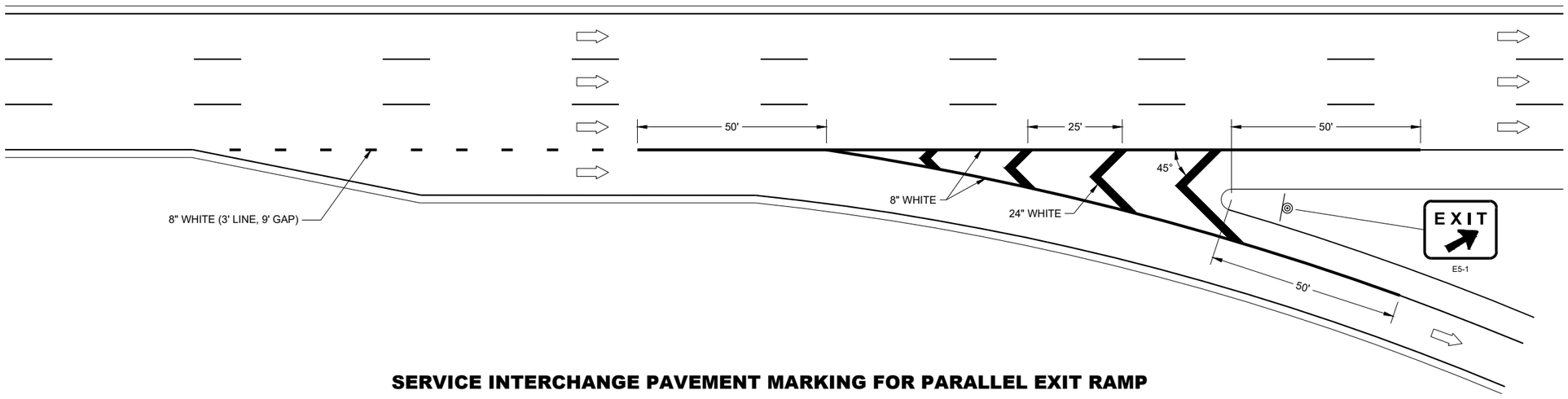
FHWA

6

SDD 15C11 - 10b
SDD 15C11 - 10b



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

6

SDD 15C31 - 04a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 15C31 - 04a

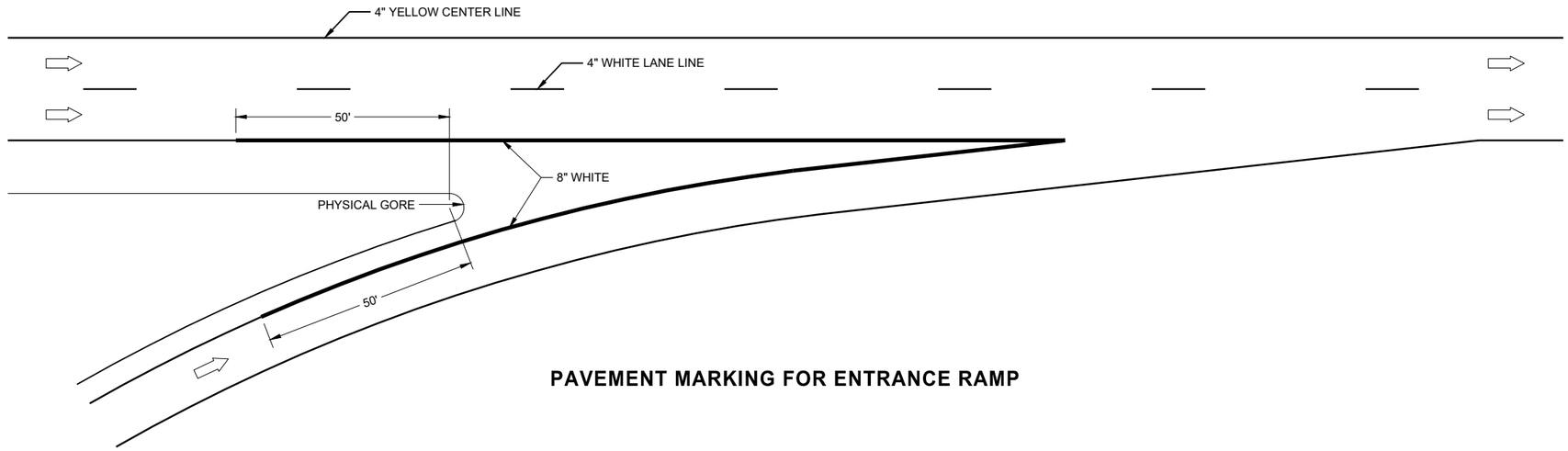
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

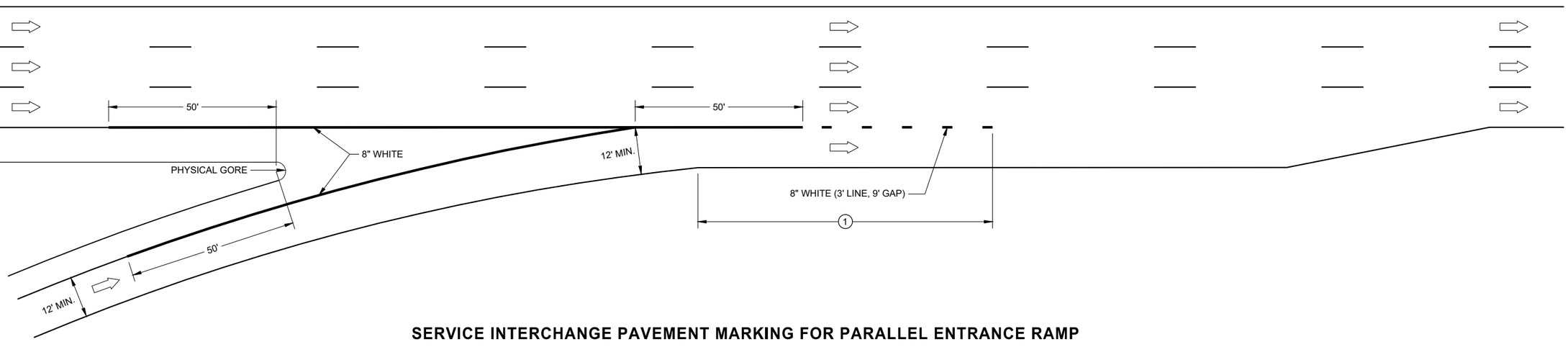
(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL



PAVEMENT MARKING FOR ENTRANCE RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

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SDD 14C31 - 04c

SDD 14C31 - 04c

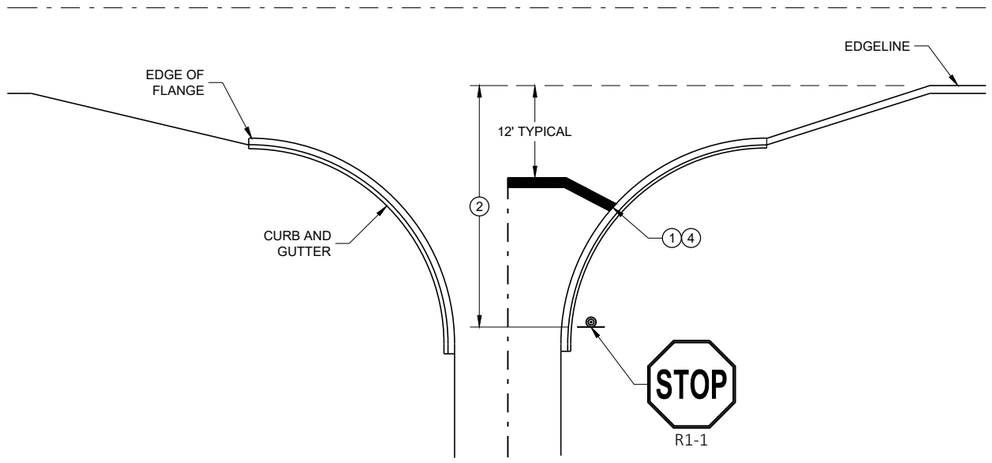
PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

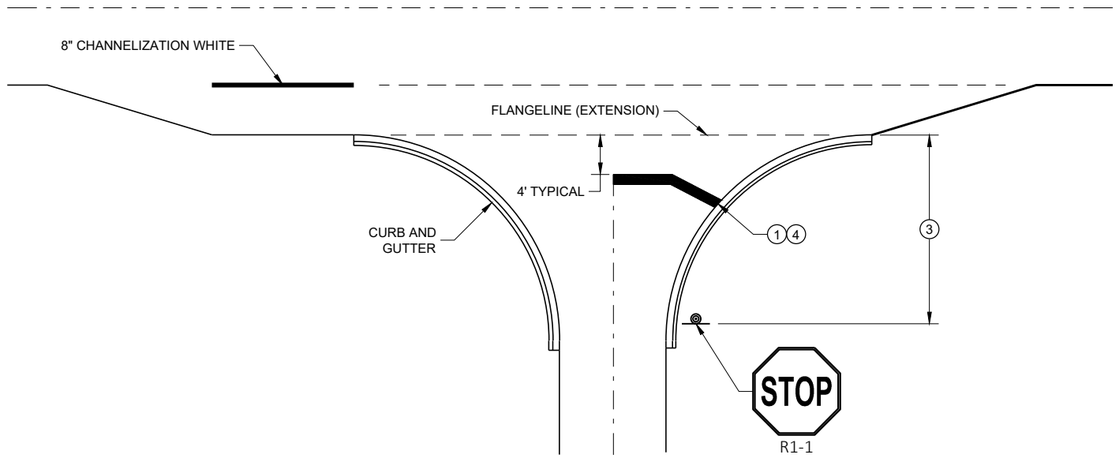
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

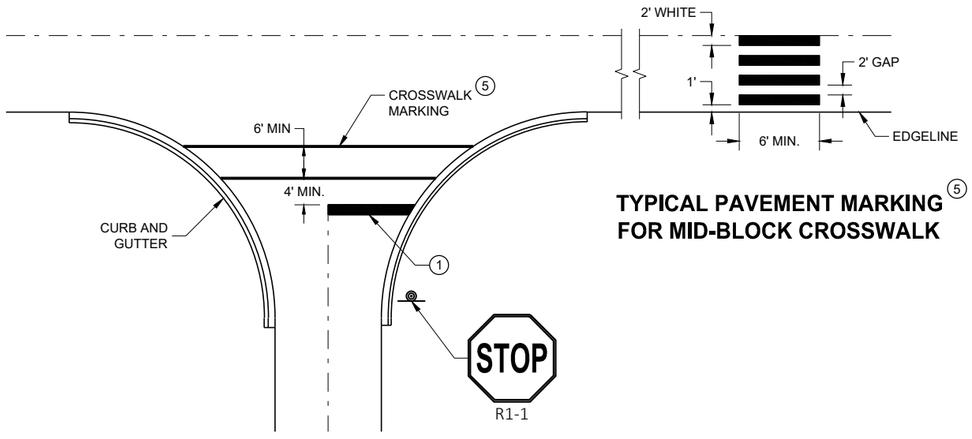
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

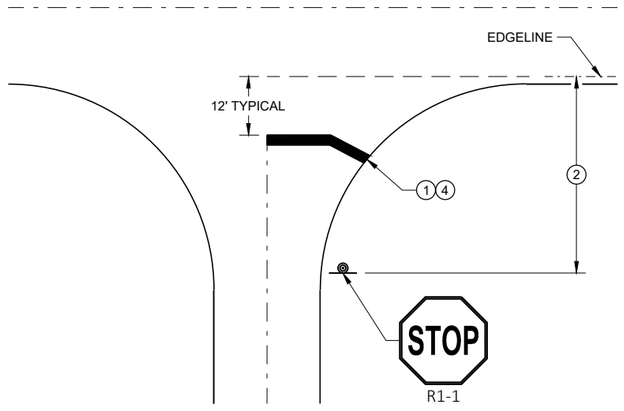


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C33 - 04

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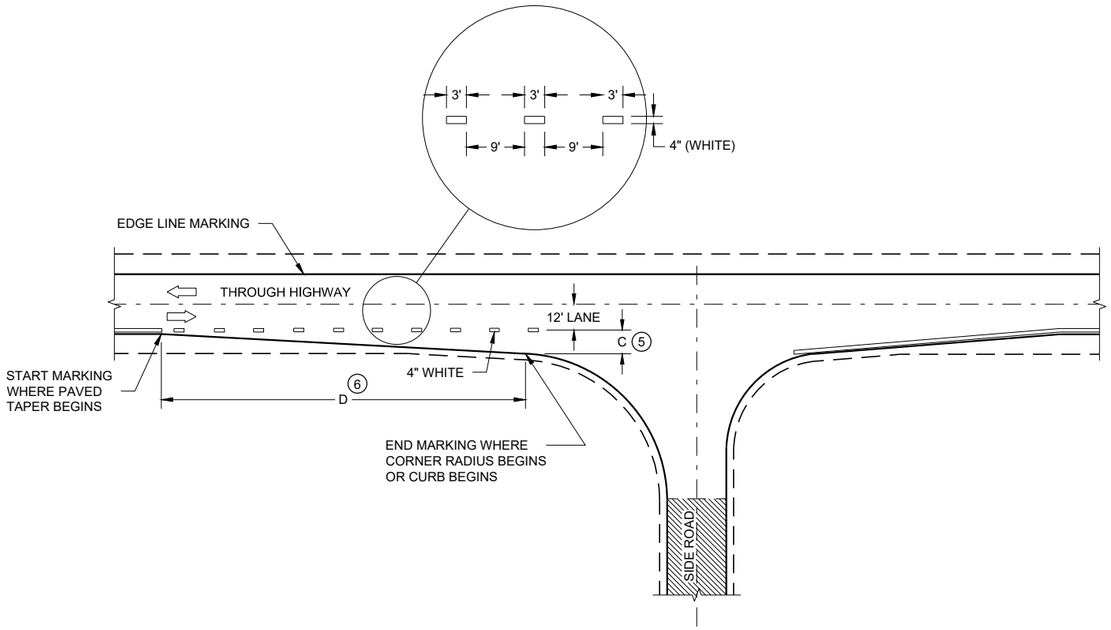
SDD 15C33 - 04



MINOR INTERSECTION

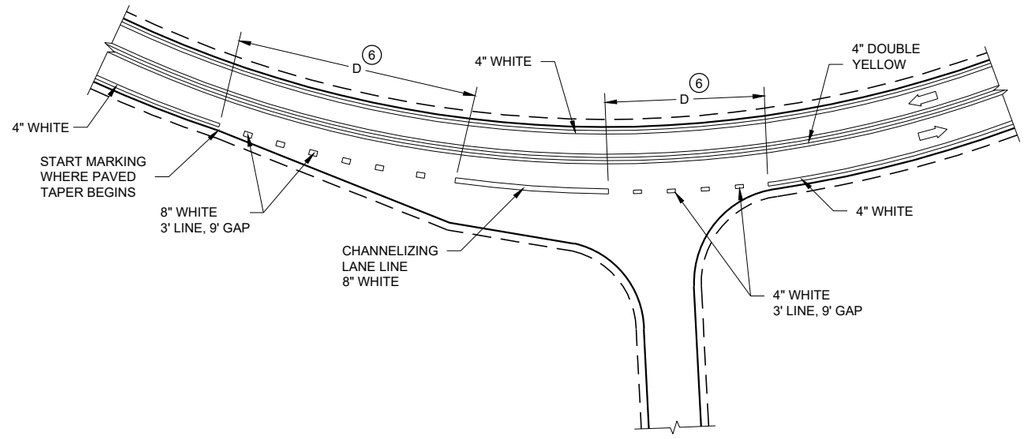
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

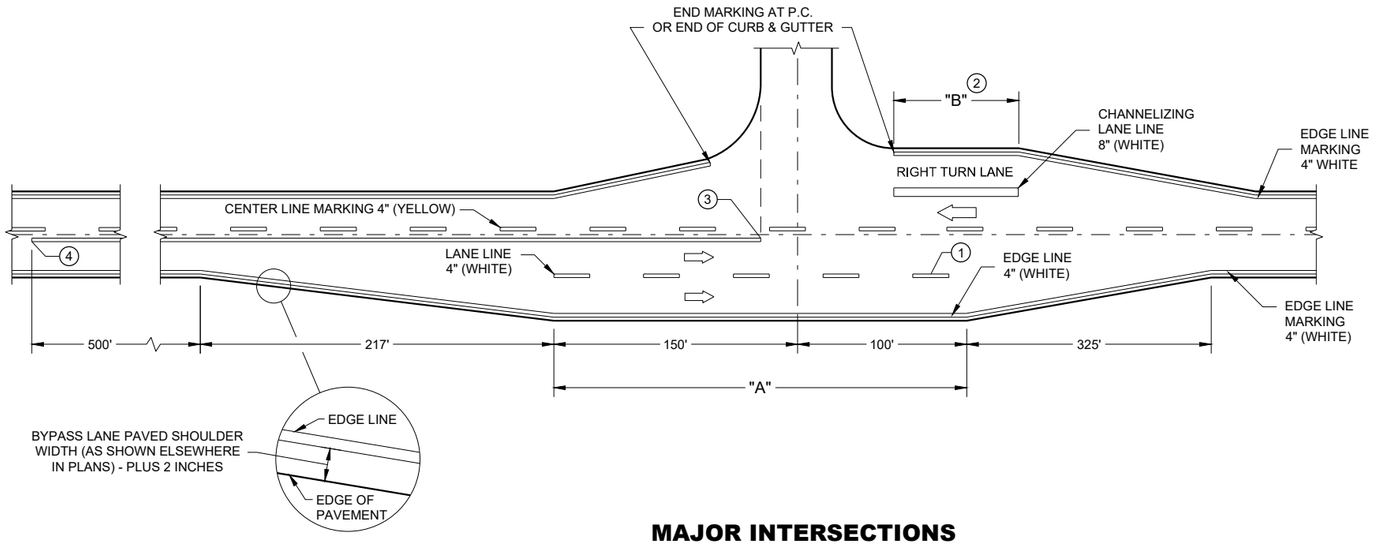
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 15C35 - 05a
SDD 15C35 - 05a

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 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

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 OR AS APPROVED BY THE ENGINEER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE 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 AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

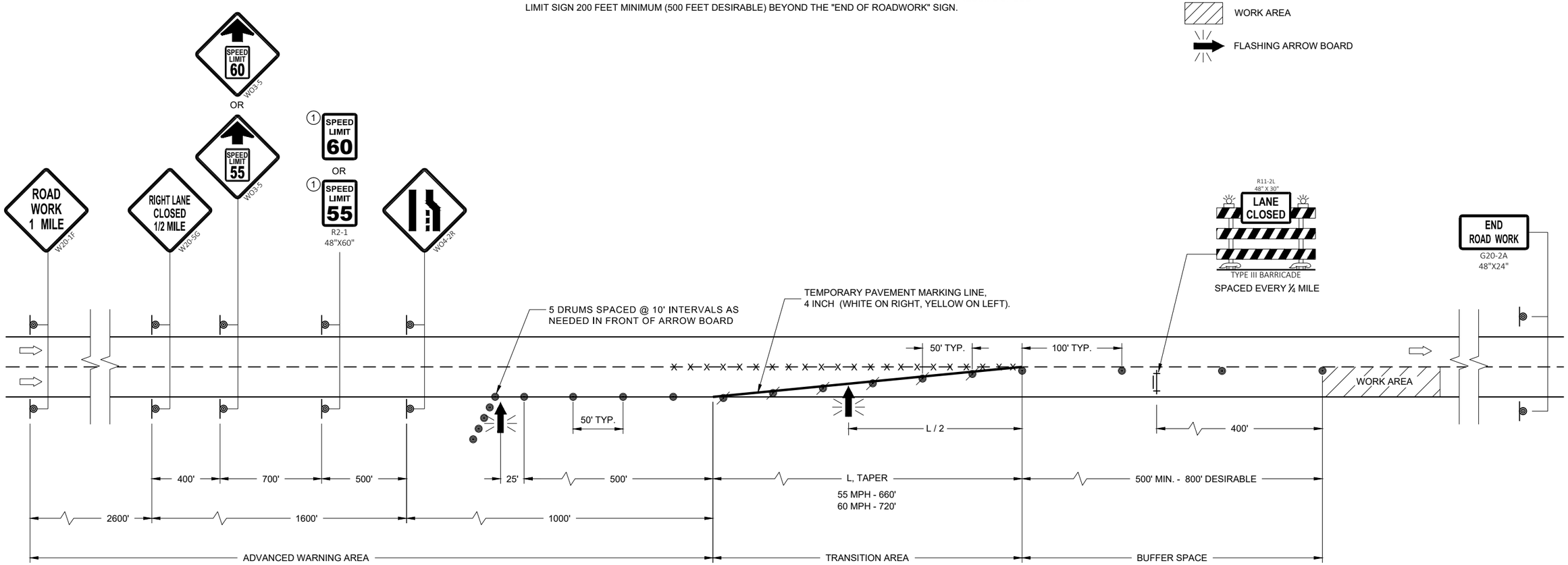
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE 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 ONE HALF 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.

(1) A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

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



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D12 - 10b

SDD 15D12 - 10b

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

DIRECTION OF TRAFFIC

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" X 48" 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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

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

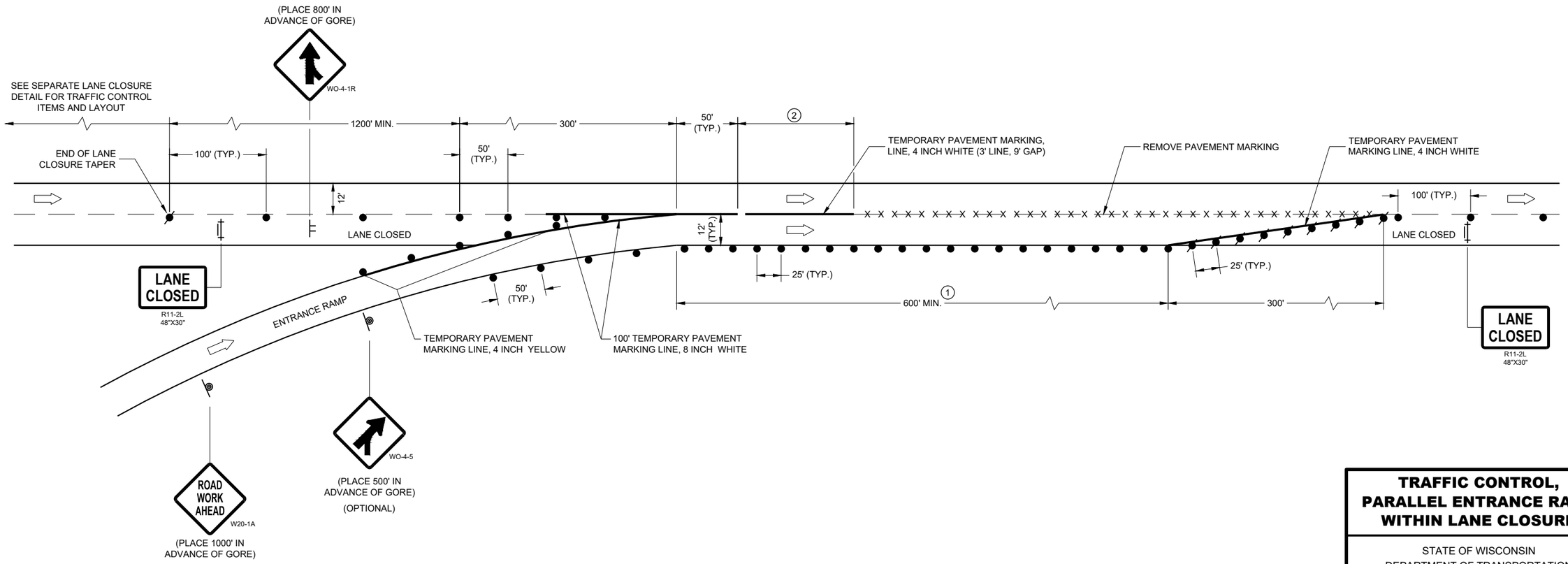
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 06a

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

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" X 48" 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.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE 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 /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

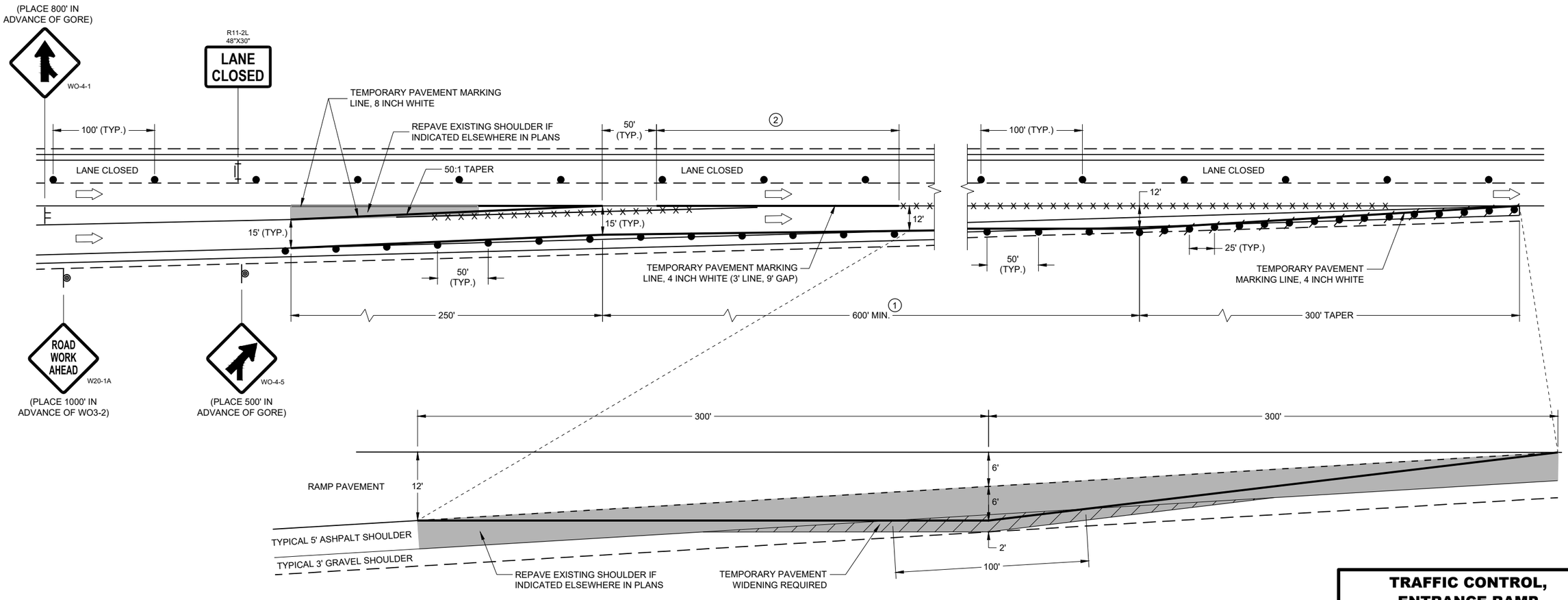
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D15 - 06b

SDD15D15 - 06b

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

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" X 48" 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 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

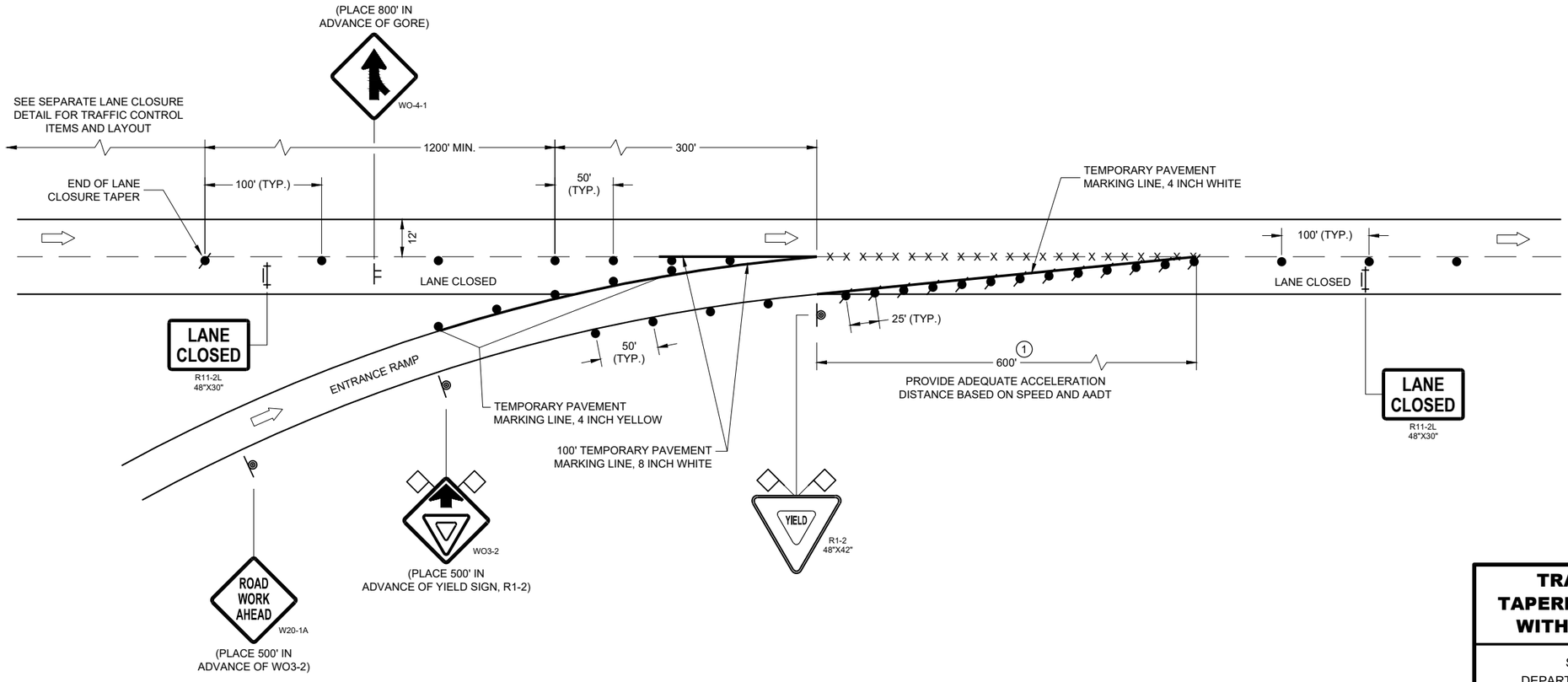
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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 LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 06c

6

SDD 15D15 - 06c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

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" X 48" 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.

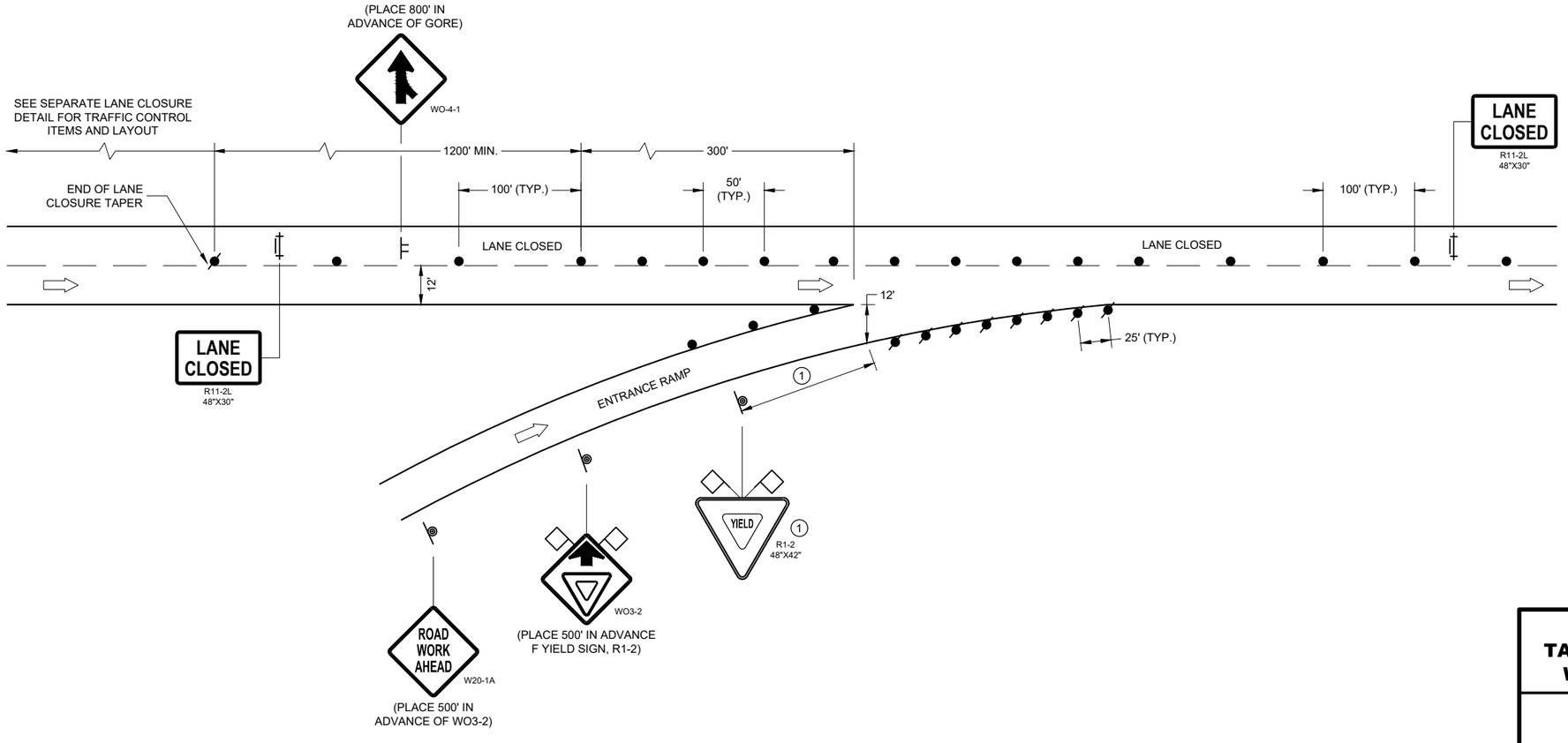
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

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.

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

(1) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D15 - 06d

SDD15D15 - 06d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

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.

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"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.

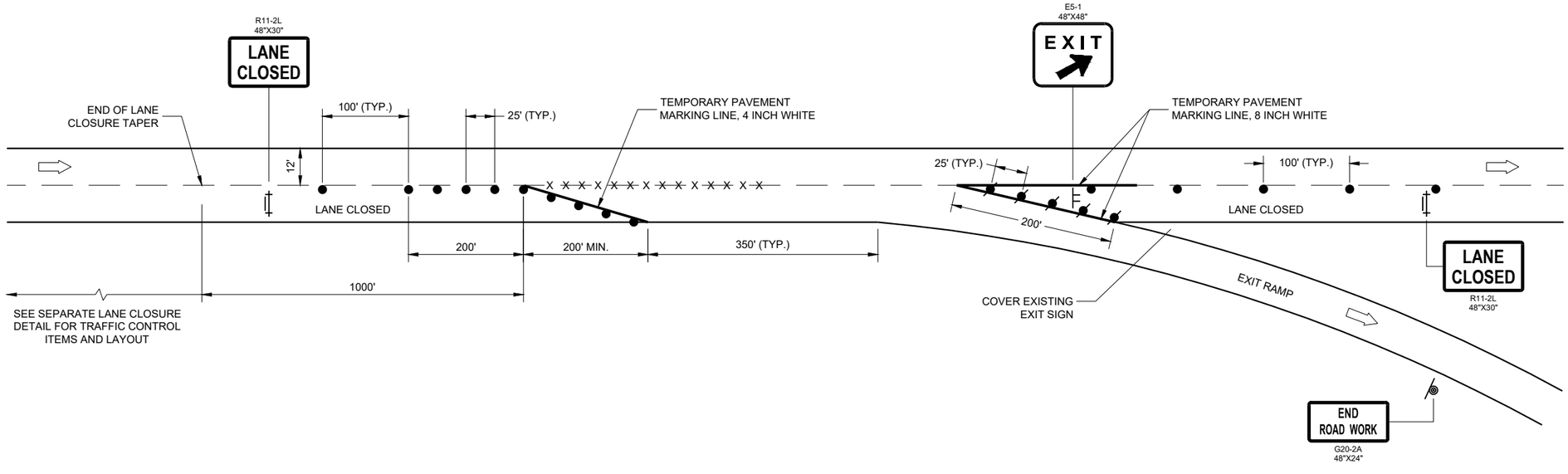
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT 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 LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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



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SDD 15D15 - 06e

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SDD15D15 - 06e

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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

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.

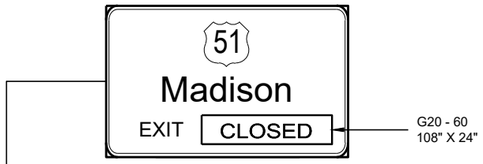
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF 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 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.

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

(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



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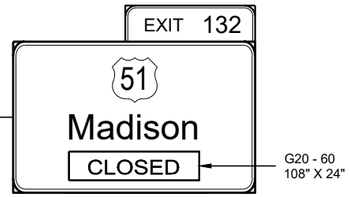
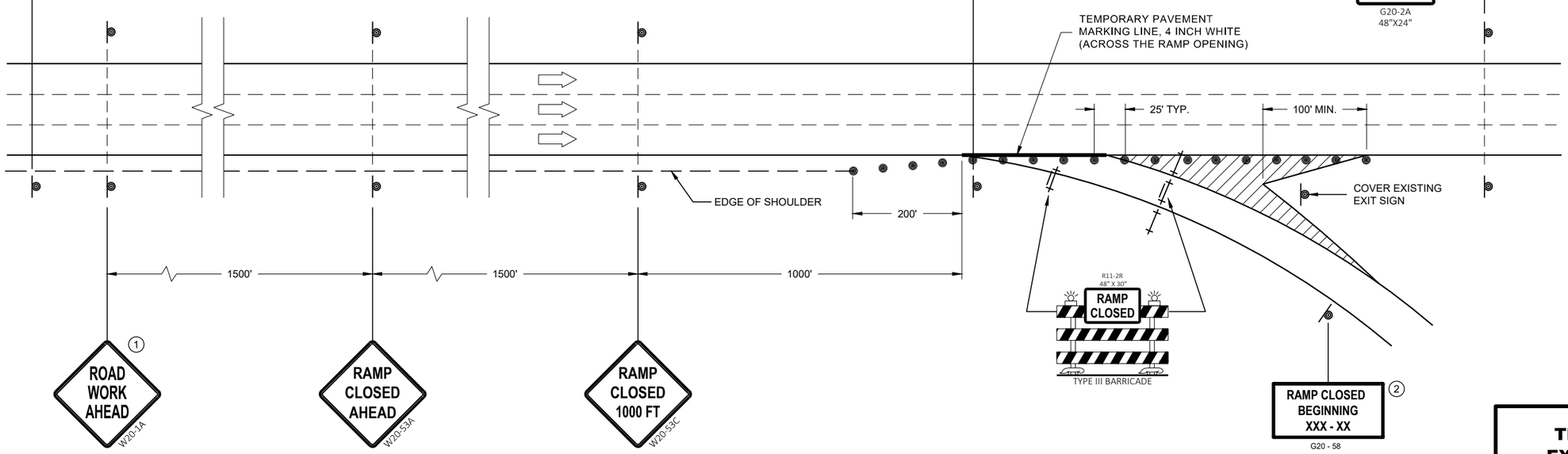


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN

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

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 15D16 - 05

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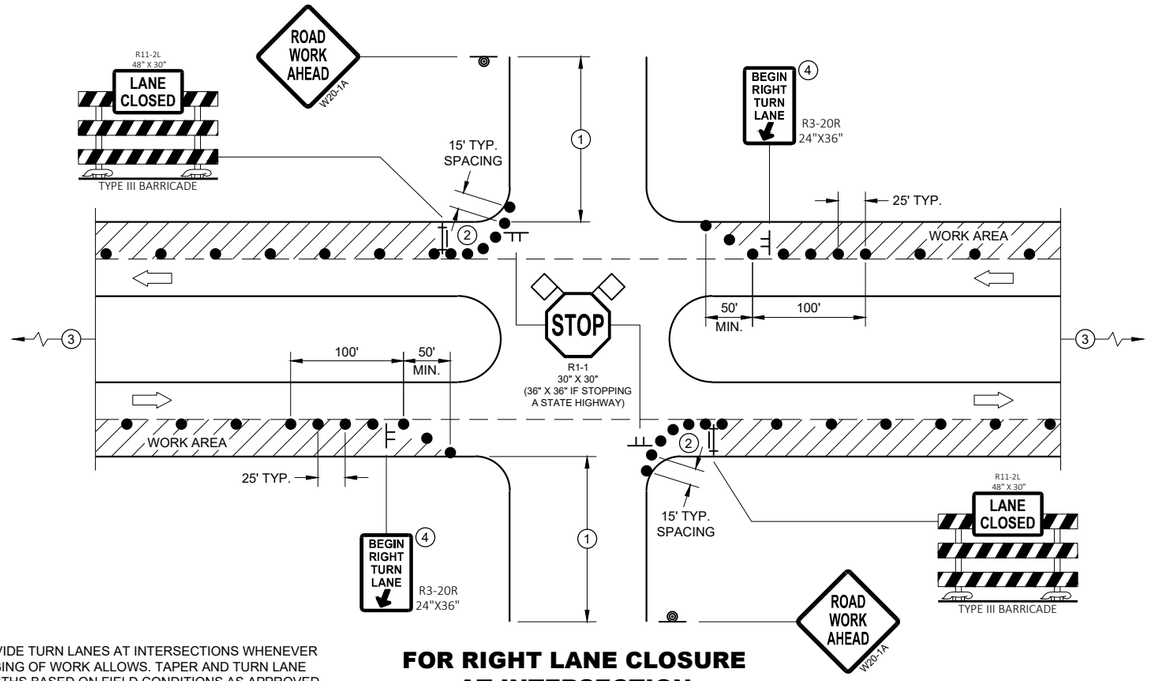
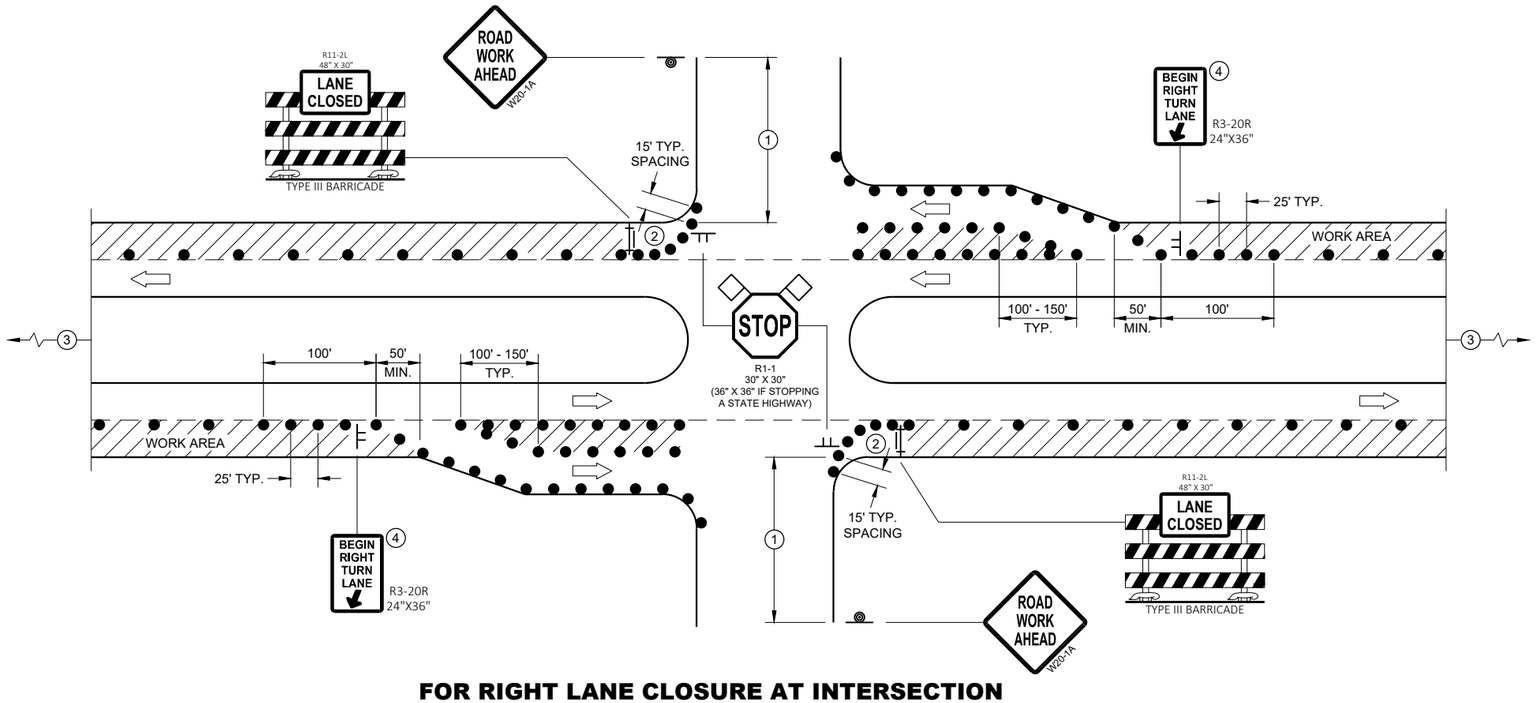
SDD 15D16 - 05



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE 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.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED 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.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D21 - 07a

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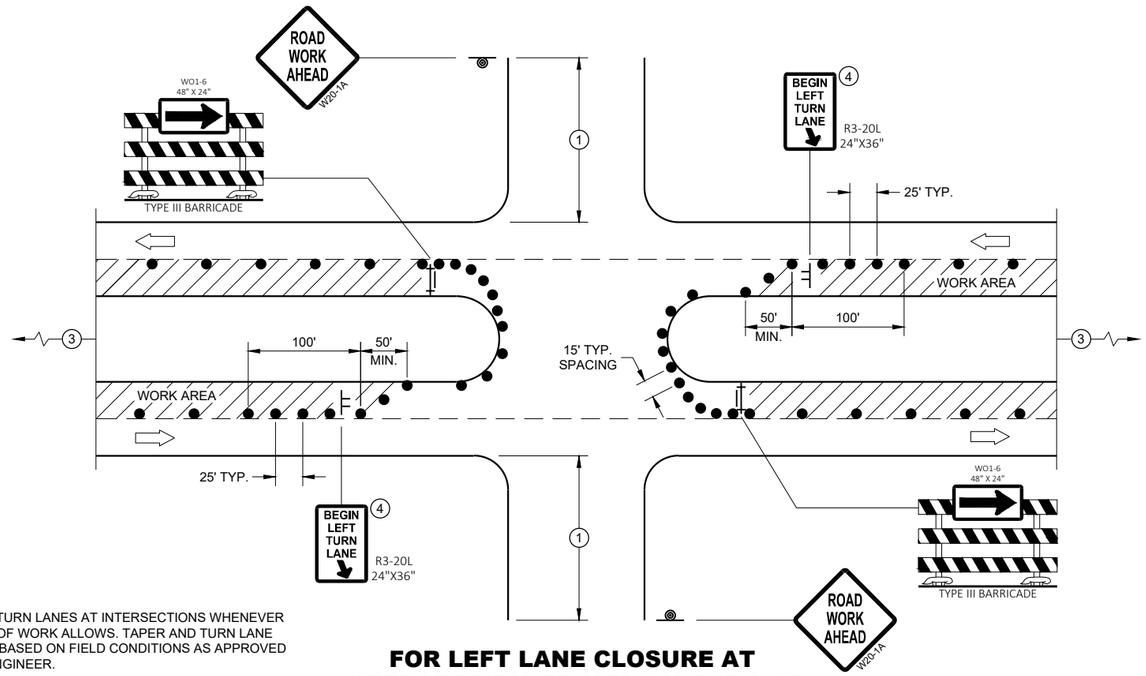
SDD 15D21 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE 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.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

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

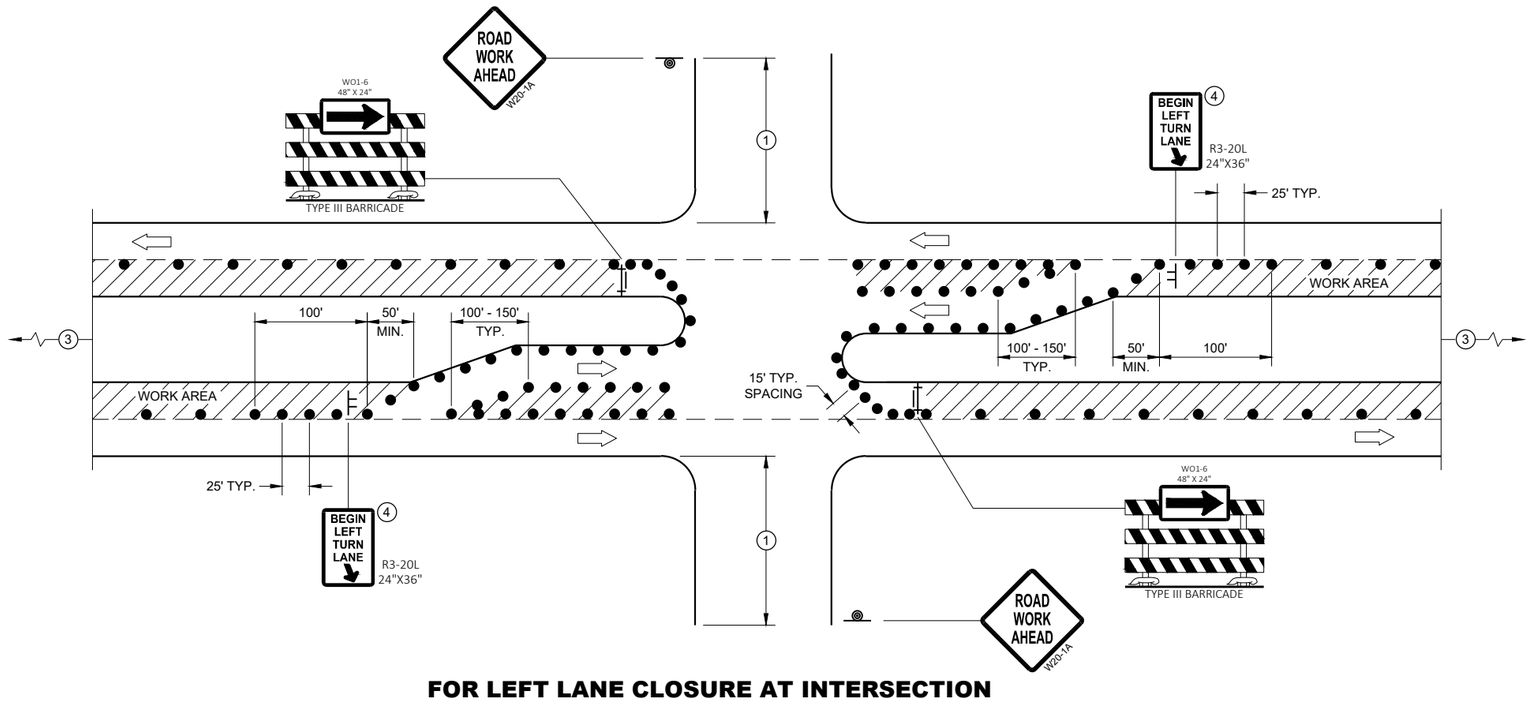
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

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SDD 15D21 - 07b

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

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

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

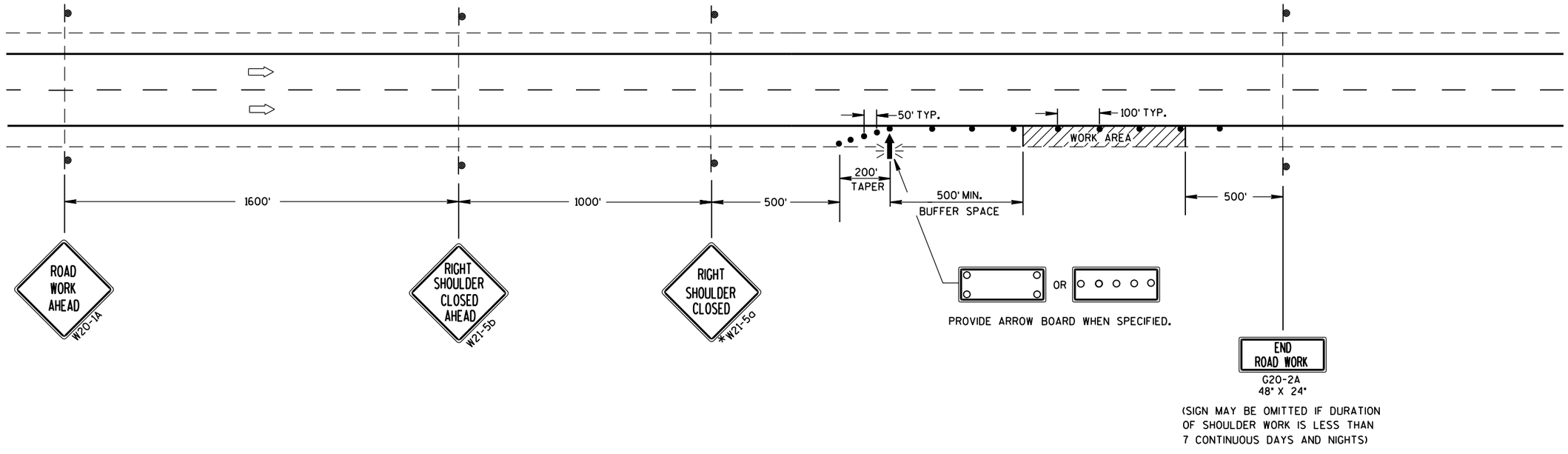
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE 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 APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

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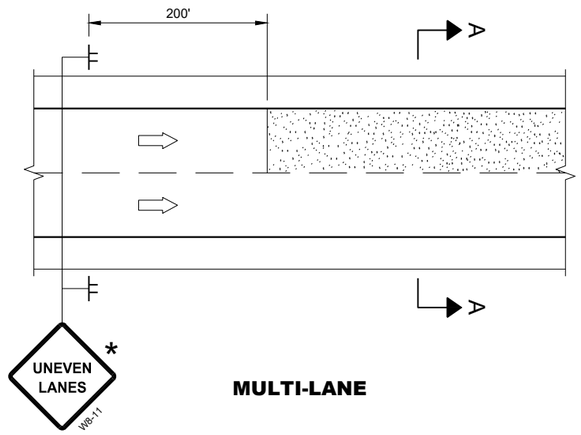
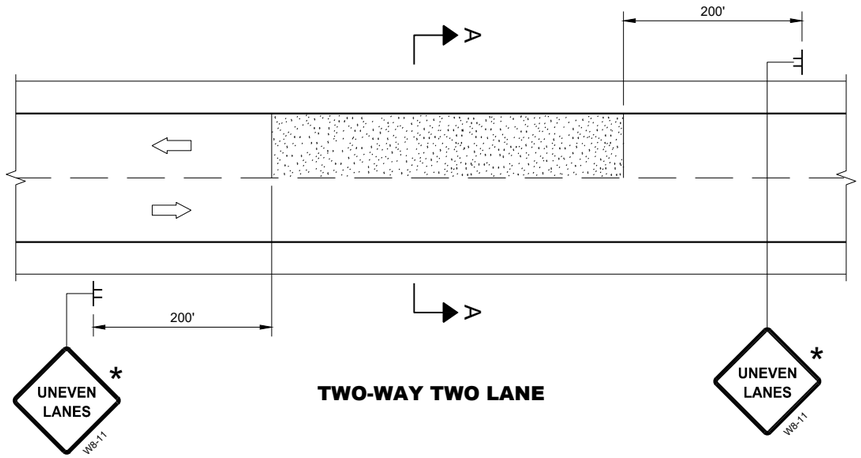
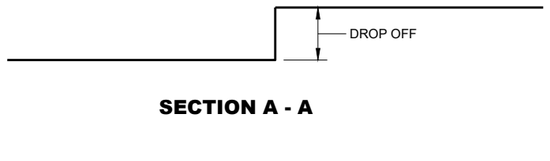
S.D.D. 15 D 27-3



MULTI-LANE

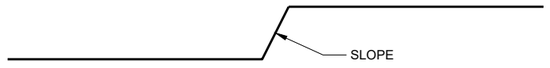


TWO-WAY TWO LANE

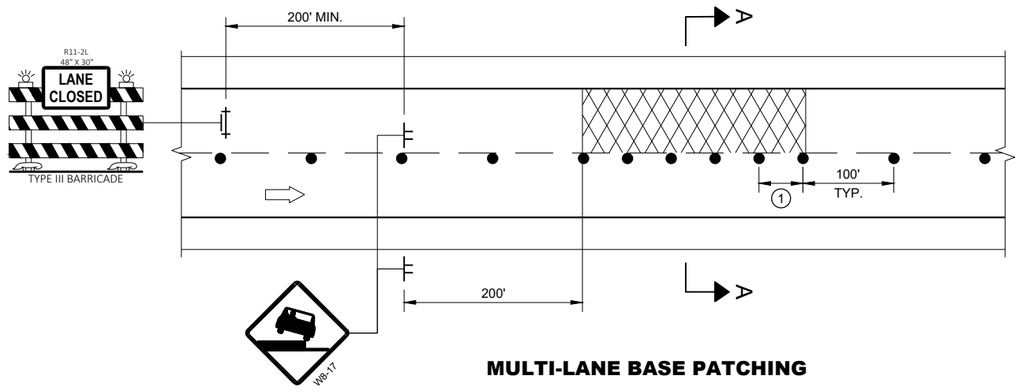


SECTION A - A

OR

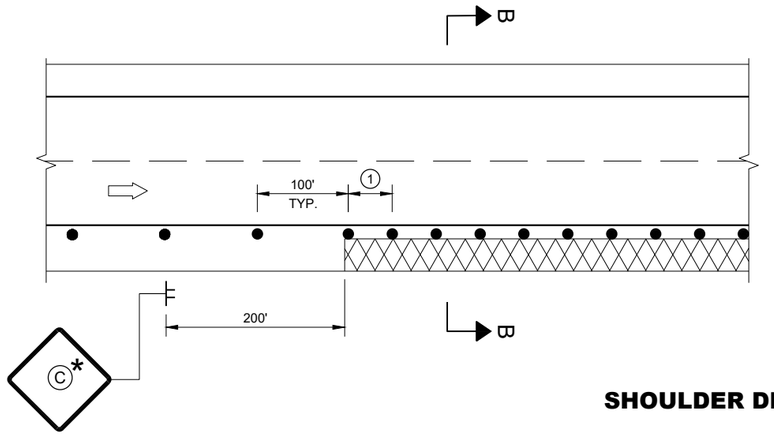


SECTION A - A

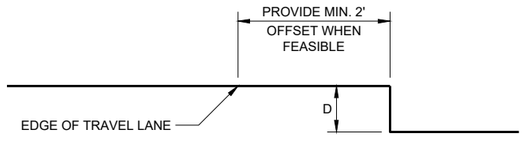


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

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

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE

FHWA

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SDD 15D39 - 02

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315

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 DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" 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 ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS 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.

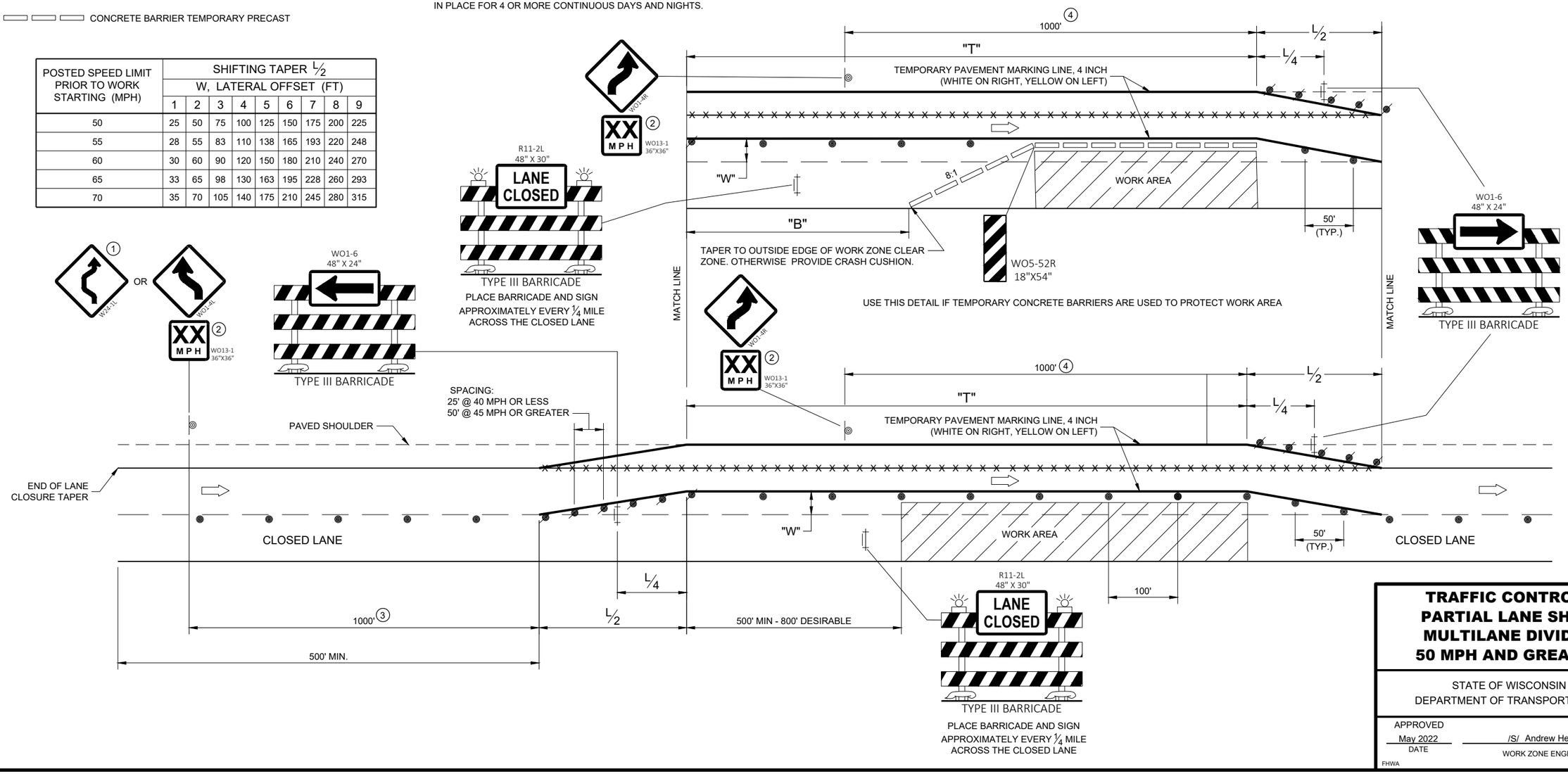
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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 SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT 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.

1. USE ONLY WHEN T<600', OMIT WO1-4R.
2. IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.
3. IF THE BEGINNING OF LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.
4. IF THE BEGINNING OF THE SECOND LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF THE FIRST LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE FIRST LANE CLOSURE TAPER.



TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15D40 - 04d

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov