EAU

SEPTEMBER 2024

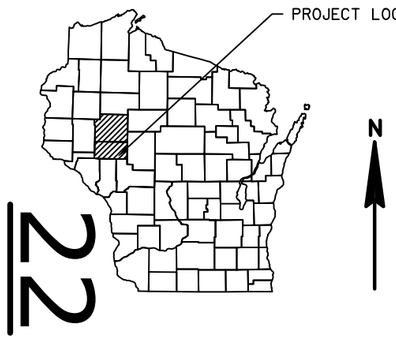
PROJECT ID: 1190-06-61

WITH: N/A

COUNTY: EAU CLAIRE, CHIPPEWA

ORDER OF SHEETS

TOTAL SHEETS = 242



DESIGN DESIGNATION			GOLF RD-USH 12	USH 12-40TH AVE
A.A.D.T.	2016	=	22,200	40,150
A.A.D.T.	2036	=	30,650	48,300
D.H.V.		=	3,130	4,930
D.D.		=	58/42	58/42
T.		=	18.4%	18.4%
DESIGN SPEED		=	70 MPH	70 MPH
ESALS		=	28,000,000	28,000,000

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
- 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

EAU CLAIRE - CHIPPEWA FALLS

GOLF ROAD TO 40TH AVENUE

USH 53

EAU CLAIRE AND CHIPPEWA COUNTIES

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1190-06-61	WISC 2024441	1

STATE PROJECT NUMBER
1190-06-61

END PROJECT 1190-06-61
698+09'NB'

EXCEPTION TO CENTERLINE LENGTH B-09-228 & B-08-229 (STA 675+32 'NB' - 677+20 'NB')

EXCEPTION TO CENTERLINE LENGTH B-09-246 & B-09-247 (STA 667+63 'NB' - 669+53 'NB')

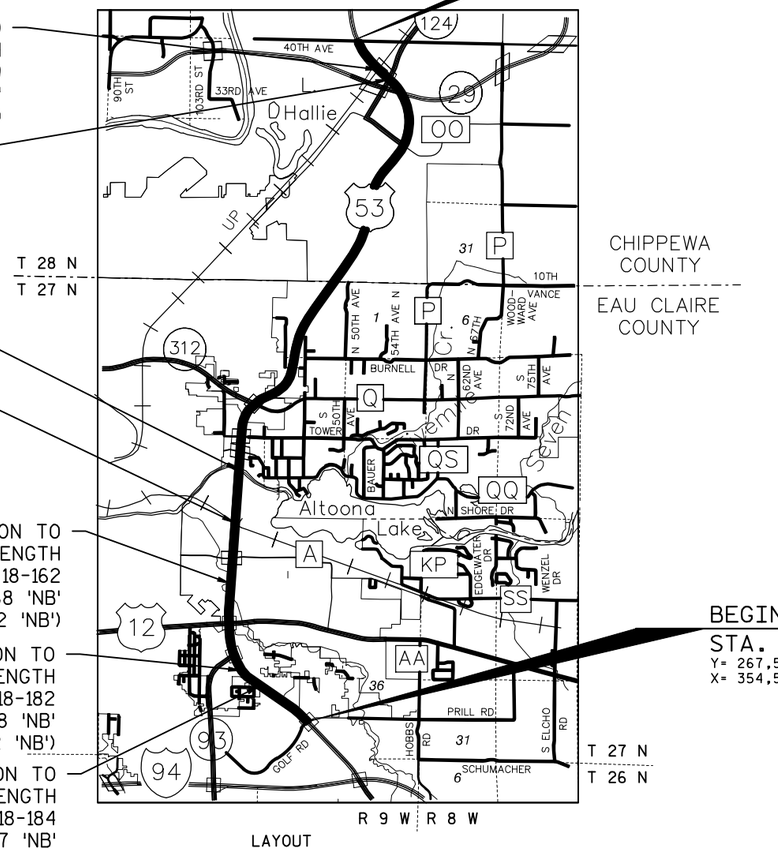
EXCEPTION TO CENTERLINE LENGTH B-18-167 & B-18-168 (STA 366+62 'NB' - 376+59 'NB')

EXCEPTION TO CENTERLINE LENGTH B-18-163 & B-18-164 (STA 332+27 'NB' - 336+36 'NB')

EXCEPTION TO CENTERLINE LENGTH B-18-161 & B-18-162 (STA 283+68 'NB' - 286+32 'NB')

EXCEPTION TO CENTERLINE LENGTH B-18-178 & B-18-182 (STA 237+48 'NB' - 239+02 'NB')

EXCEPTION TO CENTERLINE LENGTH B-18-183 & B-18-184 (STA 223+57 'NB' - 224+55 'NB')



BEGIN PROJECT 1190-06-61
STA. 200+94'NB'
Y= 267,541.38
X= 354,504.10

LAYOUT
SCALE 0 2 MILES

TOTAL NET LENGTH OF CENTERLINE = 8.975 MILES
EAU CLAIRE COUNTY = 5.630 MILES
CHIPPEWA COUNTY = 3.345 MILES

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), EAU CLAIRE COUNTY NAD 83(2011)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88 2012)

ORIGINAL PLANS PREPARED BY
KL Engineering [A] Better Experience

WISCONSIN
JOSHUA P. MELBY
43963-6
MENOMONIE, WIS
PROFESSIONAL ENGINEER

03/26/2024 (Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	KL ENGINEERING
Project Manager	MATTHEW VANNATTA
Regional Examiner	NW REGION
Regional Supervisor	MATTHEW VANNATTA

APPROVED FOR THE DEPARTMENT

DATE: Matthew Van Natta (Signature)
Location: Superior
Reason: I am approving this document
Date: 2024.04.22 15:34:43-05'00'

E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\010101-TI(TITLE SHEET).DWG
LAYOUT NAME - ****

PLOT DATE : 3/26/2024 4:03 PM PLOT BY : KL ENGINEERING PLOT NAME :

WISDOT/CADDS SHEET 10

CONTACTS

WISDOT CONTACT
MATTHEW VANNATTA
WISDOT NW REGION
W7102 GREEN VALLEY ROAD
SPOONER, WI 54801
(715) 392-7966
MATTHEW.VANNATTA@DOT.WI.GOV

DNR CONTACT
LEAH NICOL
DEPARTMENT OF NATURAL RESOURCES
1300 W. CLAIREMONT STREET
EAU CLAIRE, WI 54701
(715) 934-9014
LEAH.NICOL@WISCONSIN.GOV

DESIGN CONTACT
JOSHUA MELBY
KL ENGINEERING, INC.
393 RED CEDAR STREET SUITE 2
MENOMONIE, WI 54751
(715) 231-1600
JMELBY@KLENGINEERING.COM

RAILROAD CONTACT
JOHN VENICE
UNION PACIFIC RAILROAD
101 NORTH WACKER DRIVE - SUITE 1920
CHICAGO, IL 60606
(312) 777-2043
JNVENICE@UP.COM

WisDOT - COMMUNICATION LINE
JEFF MADSON
433 W. ST. PAUL AVE., STE. 300
MILWAUKEE, WI 53203
(414) 225-3723
JEFFREY.MADSON@DOT.WI.GOV

ORDER OF TYPICAL SECTION AND DETAIL SHEETS

2

UTILITY CONTACTS

ALTOONA MUNICIPAL WATER & SEWER UTILITY - SEWER
DAVID WALTER
1303 LYNN AVENUE, P.O. BOX 8
ALTOONA, WI 54720
O: (715) 839-6092 M: (715) 577-3459
DAVIDW@CI.ALTOONA.WI.US

ALTOONA MUNICIPAL WATER & SEWER UTILITY - WATER
DAVID WALTER
1303 LYNN AVENUE, P.O. BOX 8
ALTOONA, WI 54720
O: (715) 839-6092 M: (715) 577-3459
DAVIDW@CI.ALTOONA.WI.US

ASTREA - COMMUNICATION LINE
ANDREW HEIGL
105 KENT ST, P.O. BOX 190
IRON MOUNTAIN, MI 49801
(906) 221-7536
ASTREACONSTRUCTION@ASTREACONNECT.COM

AT&T WISCONSIN - COMMUNICATION LINE
RICK PODOLAK
304 S. DEWEY ST
EAU CLAIRE, WI 54703
O: (715) 839-5565 M: (715) 410-0656
RP4514@ATT.COM

CINC - COMMUNICATION LINE
DAREN BAUER
105 GARFIELD AVE
EAU CLAIRE, WI 54701
(715) 836-5286
BAUERDP@UWEC.EDU

CENTURYLINK COMMUNICATIONS - COMMUNICATION LINE
MEGAN SCOTT
300 W 66TH ST
RICHFIELD, MN 55423
O: (763) 326-2559 M: (413) 636-9621
MEGAN.SCOTT@LUMEN.COM; RELOCATIONS@LUMEN.COM

CITY OF EAU CLAIRE - SEWER
BEN SPANEL
1040 FOREST ST
EAU CLAIRE, WI 54703
(715) 839-5045
BEN.SPANEL@EAUCLAIREWI.GOV

CITY OF EAU CLAIRE - WATER
BEN SPANEL
1040 FOREST ST
EAU CLAIRE, WI 54703
(715) 839-5045
BEN.SPANEL@EAUCLAIREWI.GOV

EAU CLAIRE ENERGY COOPERATIVE - ELECTRICITY
ARIK ARNEVIK
8214 HWY 12, P.O. BOX 368
FALL CREEK, WI 54742
O: (715) 836-6485 M: (715) 579-0087
AARNEVIK@ECEC.COM

VILLAGE OF LAKE HALLIE - SEWER
SAMUEL BAUTCH
13136 30TH AVE
CHIPPEWA FALLS, WI 54729
O: (715) 726-2660
PWDEPT@LAKEHALLIE.US

VILLAGE OF LAKE HALLIE - WATER
SAMUEL BAUTCH
13136 30TH AVE
CHIPPEWA FALLS, WI 54729
O: (715) 726-2660
PWDEPT@LAKEHALLIE.US

LEVEL 3 COMMUNICATIONS - COMMUNICATION LINE
1025 ELDORADO BLVD
BROOMFIELD, CO 80021-8869
RELOCATIONS@LUMEN.COM

MAGELLAN PIPELINE - GAS
ADRIAN REENTS
1 WILLIAMS CENTER OTC 8
TULSA, OK 74172
(918) 574-7860
ADRIAN.REENTS@MAGELLANLP.COM

SPECTRUM - COMMUNICATION LINE
SHANE YODER
1201 MCCANN DR
ATLOONA, WI 54720
(715) 214-1175
SHANE.YODER@CHARTER.COM

SPRINT COMMUNICATIONS COMPANY - COMMUNICATION LINE
STEVEN HUGHES
1457 COUNTY ROAD 545 S
SKANDIA, MI 49885
(513) 462-7221
SHUGHES@COGENTCO.COM

VERIZON BUSINESS - COMMUNICATION LINE
RJ CICATELLO
15725 W RYERSON RD
NEW BERLIN, WI 53151
(262) 232-1323
RANDY.CICATELLO@VERIZON.COM

VIKING GAS TRANSMISSION COMPANY - GAS
STEVE KEILEN
2077 70TH AVE
OSCEOLA, WI 54020
(715) 294-2155 EXT. 8
STEVEN.KEILEN@ONEOK.COM

XCEL ENERGY - ELECTRICITY
DAVID MELSNESS
1414 W HAMILTON AVE, PO BOX 8
EAU CLAIRE, WI 54702
(715) 737-1495
DAVID.J.MELSNESS@XCELENERGY.COM

XCEL ENERGY - GAS/PETROLEUM
BRADY GARDOW
PO BOX 8
EAU CLAIRE, WI 54702
O: (715) 737-1450 M: (715) 577-0445
BRADY.P.GARDOW@XCELENERGY.COM

XCEL ENERGY - TRANSMISSON LINE
MITCHELL DIENGER
414 NICOLLET MALL - 5TH FLOOR
MINNEAPOLIS, MN 55401
O: (612) 321-3109 M: (608) 386-2233
MITCHELL.A.DIENGER@EXCELENERGY.COM

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

2

GENERAL NOTES

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

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS.

PLAN REMOVAL AREAS ARE APPROXIMATE, DETERMINE EXACT LIMITS IN THE FIELD.

DO NOT DRIVE EQUIPMENT OR STORE EQUIPMENT OR MATERIAL IN WETLANDS, WATERWAYS, OR ENVIRONMENTALLY SENSITIVE AREAS ADJACENT TO THE PROJECT.

THE EXACT LOCATIONS AND QUANTITIES OF CONCRETE PAVEMENT REPAIR AND REPLACEMENT SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER WILL DETERMINE THE EXACT LOCATION OF EROSION CONTROL ITEMS. MAINTAIN ALL EROSION CONTROL MEASURES UNTIL THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. THE CONTRACTOR WILL REMOVE EROSION CONTROL ITEMS AT THE DIRECTION OF THE ENGINEER.

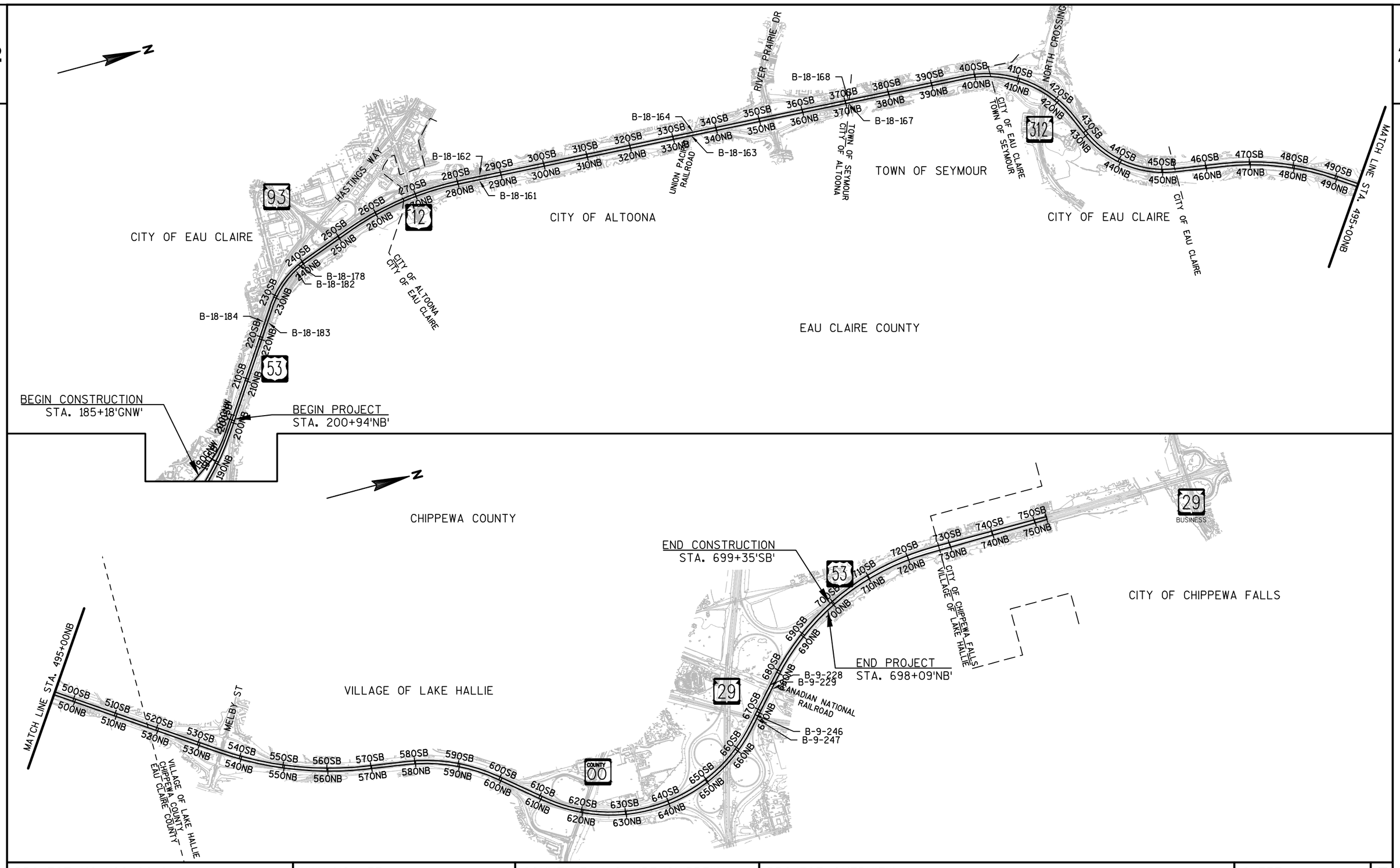
HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	0.08 0.22	0.16 0.30	0.22 0.38	0.12 0.26	0.20 0.34	0.27 0.44	0.15 0.30	0.24 0.37	0.33 0.50	0.19 0.34	0.28 0.41	0.38 0.56
MEDIAN STRIP-TURB	0.19 0.24	0.20 0.26	0.24 0.30	0.19 0.25	0.22 0.28	0.26 0.33	0.20 0.26	0.23 0.30	0.30 0.37	0.20 0.27	0.25 0.32	0.30 0.40
SIDE SLOPE-TRUF			0.25 0.32			0.27 0.34			0.28 0.36			0.30 0.38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

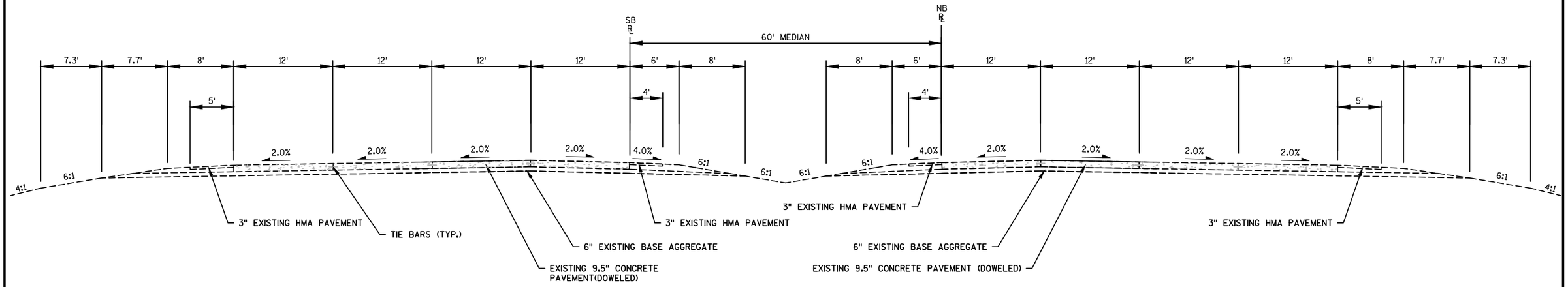
TOTAL PROJECT AREA = 526.2 ACRES

TOTAL AREA EXPECTED TO BE DISTRIBUTED BY CONSTRUCTION ACTIVITIES = 0.7 ACRES



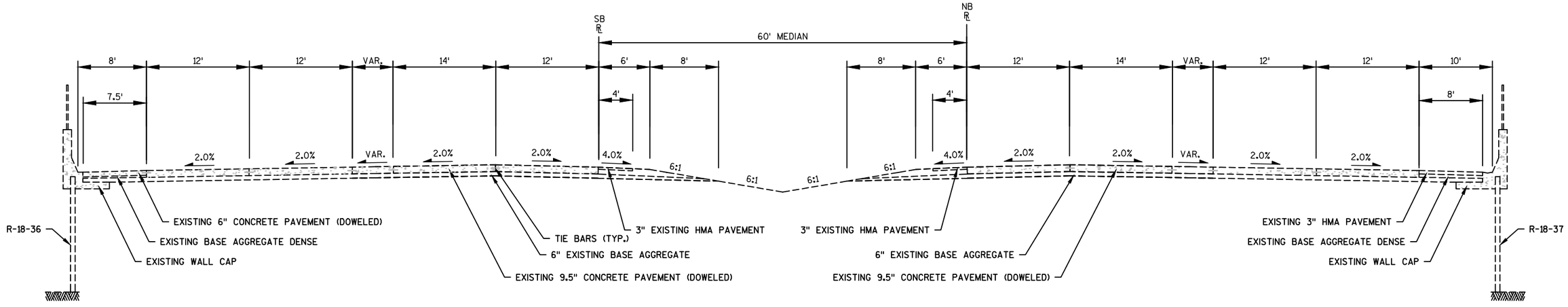
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	PROJECT OVERVIEW	SHEET 4	E

2



EXISTING TYPICAL SECTION, USH 53

STA. 200+94 'NB' - STA. 218+47 'NB'

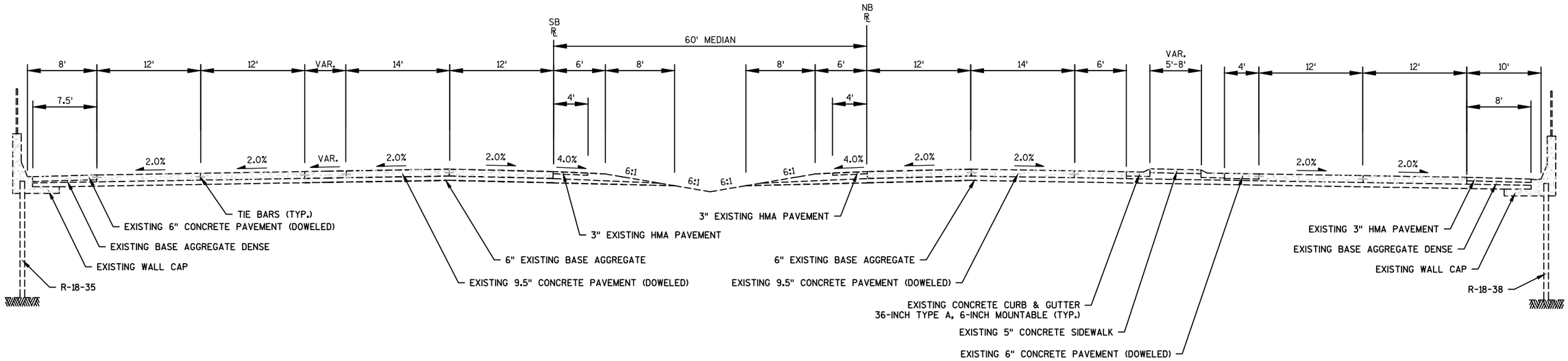


EXISTING TYPICAL SECTION, USH 53

STA. 218+47 'NB' - STA. 223+51 'NB'

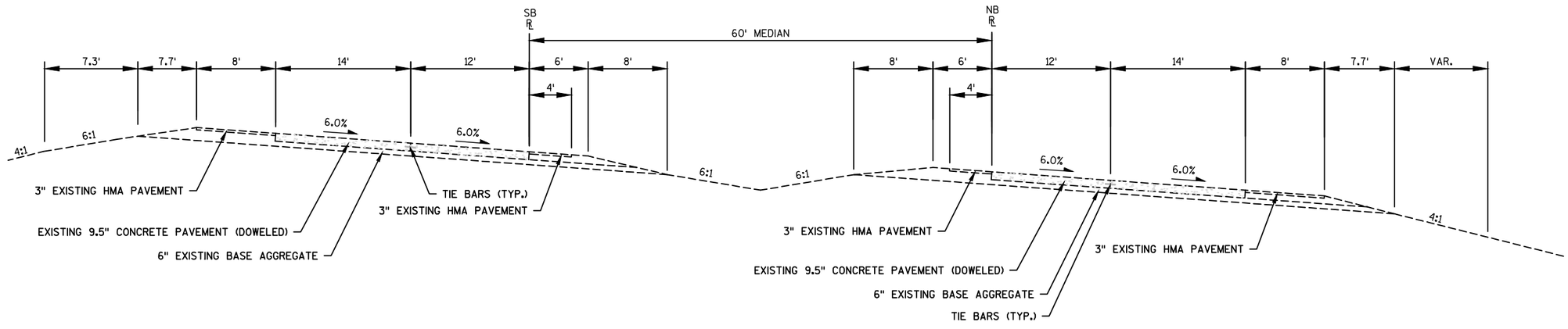
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	EXISTING TYPICAL SECTIONS	SHEET 5	E

2



EXISTING TYPICAL SECTION, USH 53

STA. 223+51 'NB' - STA. 223+57 'NB'
STA. 224+55 'NB' - STA. 225+24 'NB'



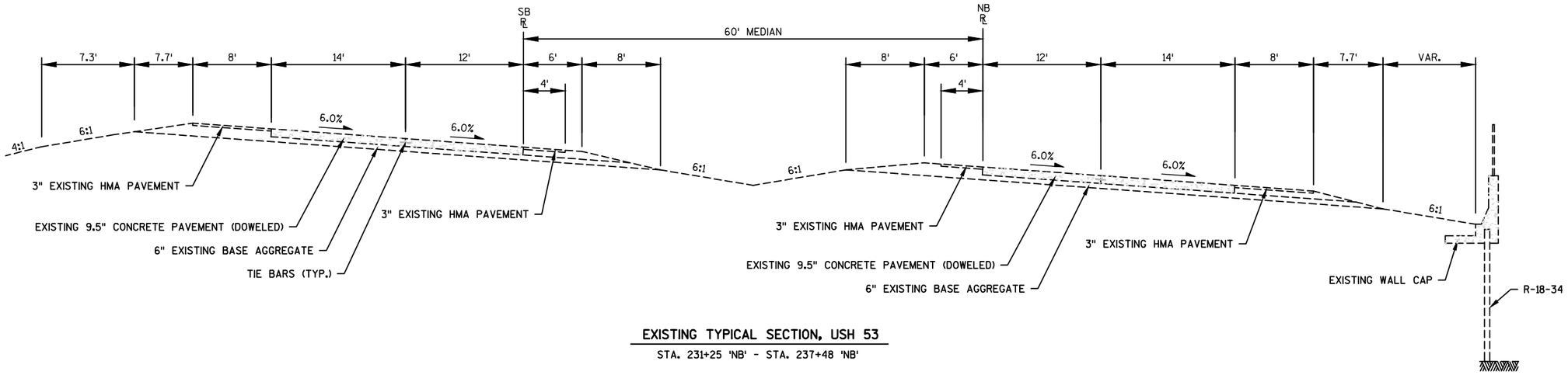
EXISTING TYPICAL SECTION, USH 53

STA. 225+24 'NB' - STA. 231+25 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	EXISTING TYPICAL SECTIONS	SHEET 6	E

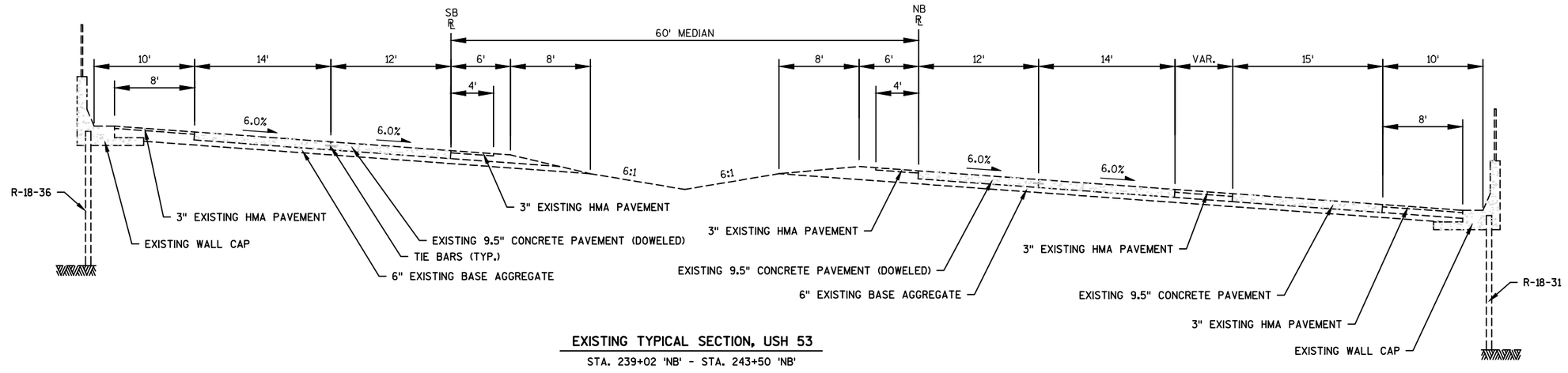
FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\020301-TS-EX.DWG
LAYOUT NAME - ****
PLOT DATE : 3/27/2024 2:07 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:12 FT
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION, USH 53

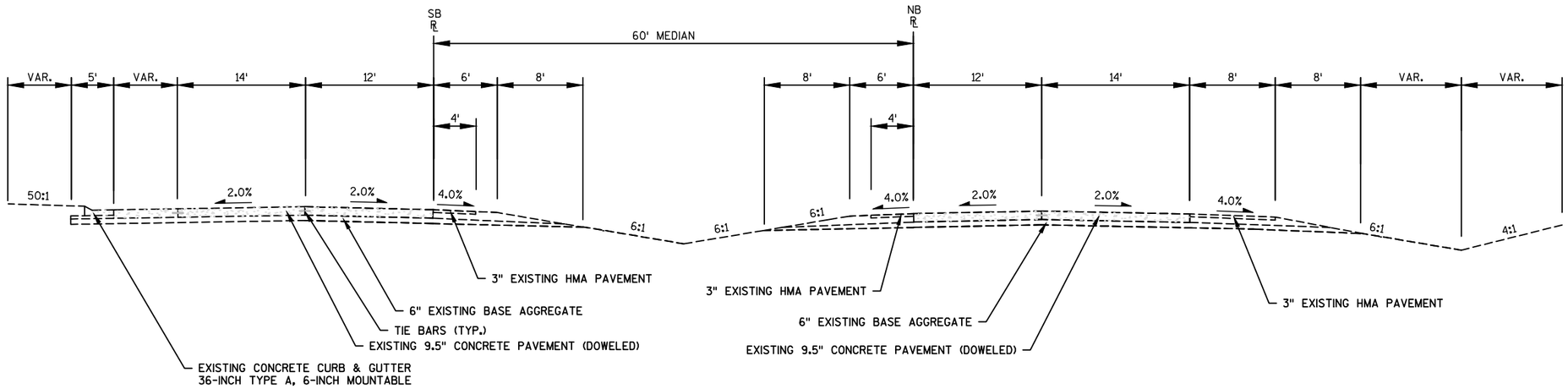
STA. 231+25 'NB' - STA. 237+48 'NB'



EXISTING TYPICAL SECTION, USH 53

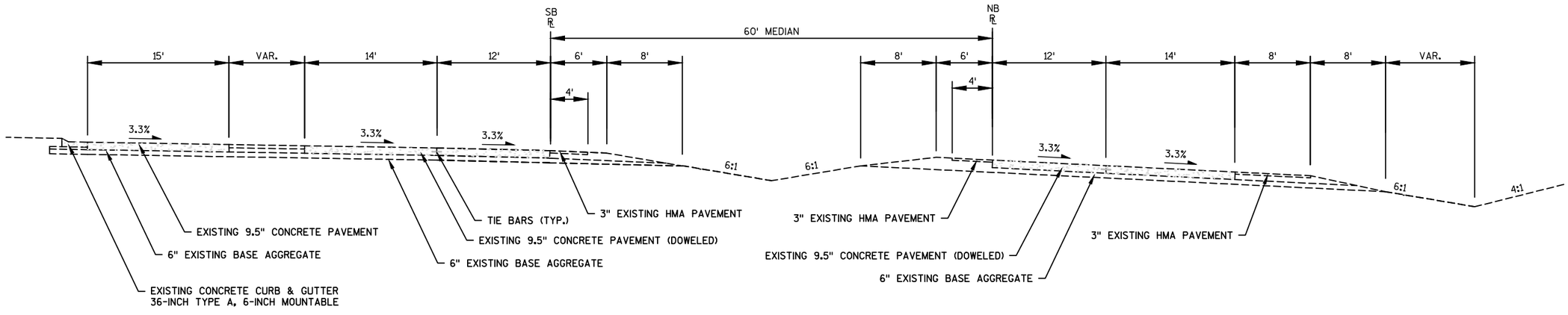
STA. 239+02 'NB' - STA. 243+50 'NB'

2



EXISTING TYPICAL SECTION, USH 53

STA. 243+50 'NB' - STA. 251+00 'NB'



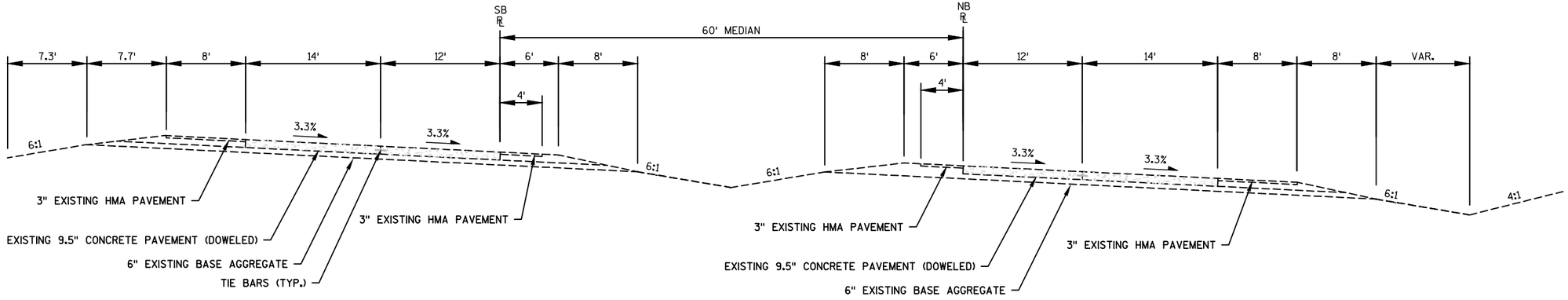
EXISTING TYPICAL SECTION, USH 53

STA. 251+00 'NB' - STA. 257+50 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	EXISTING TYPICAL SECTIONS	SHEET 8	E

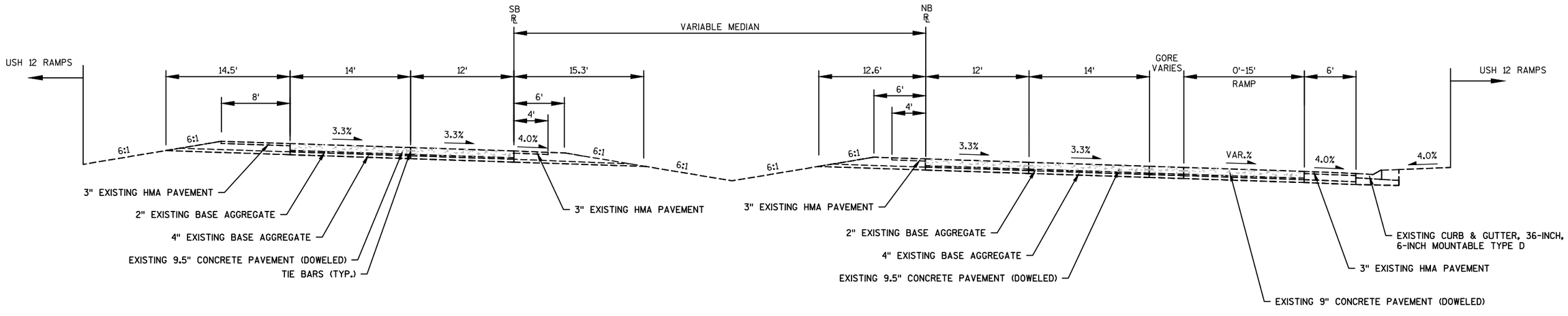
FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\020301-TS-EX.DWG
LAYOUT NAME - ****
PLOT DATE : 3/27/2024 2:07 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:12 FT
WISDOT/CADDS SHEET 42

2



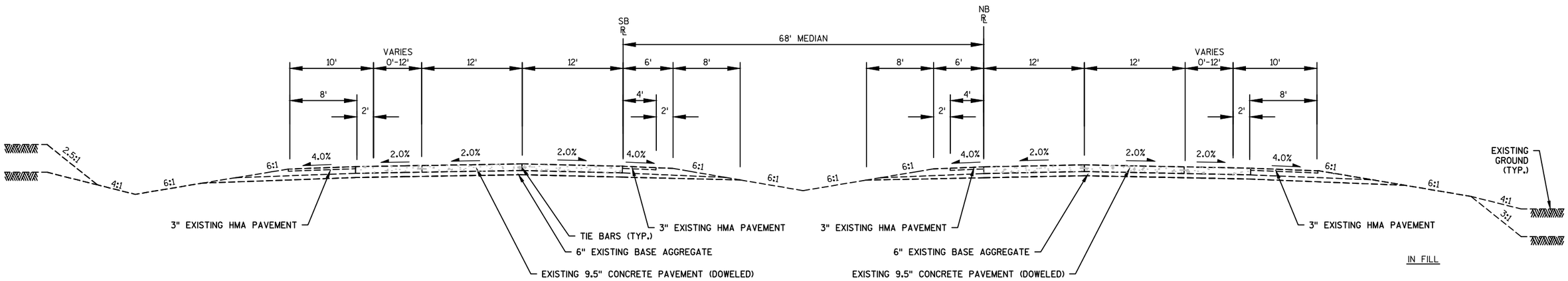
EXISTING TYPICAL SECTION, USH 53

STA. 257+50 'NB' - STA. 262+00 'NB'



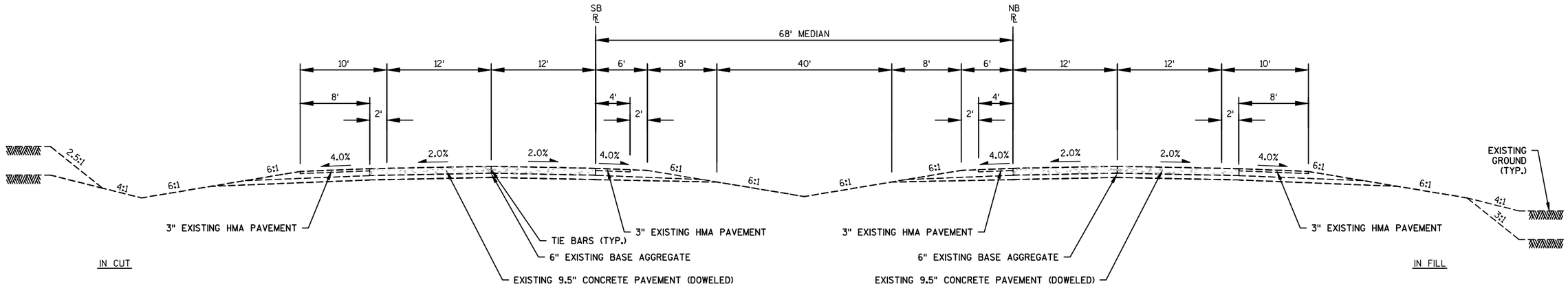
EXISTING TYPICAL SECTION, USH 53

STA. 262+00 'NB' - STA. 283+68 'NB'



EXISTING TYPICAL SECTION, USH 53

STA. 286+32 'NB' - STA. 332+27 'NB'

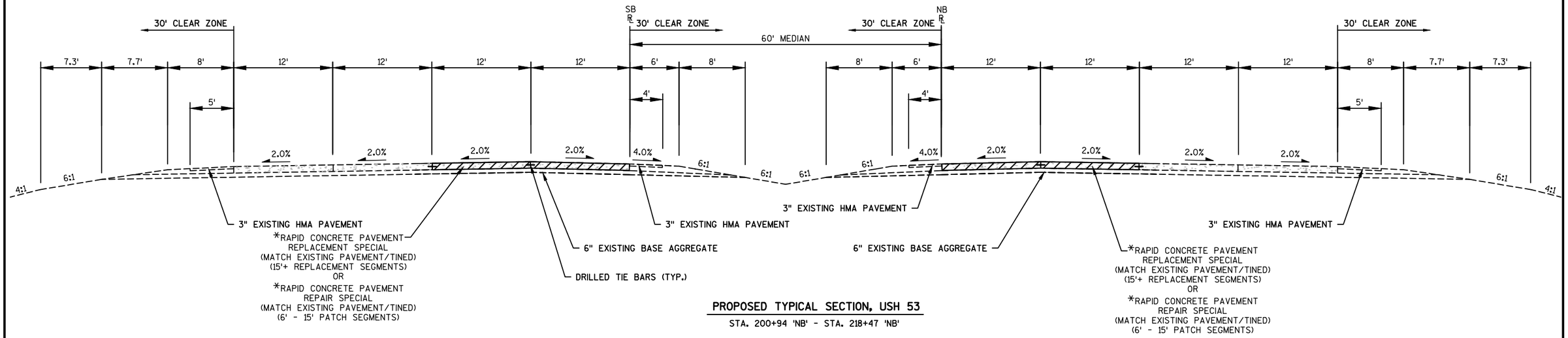


EXISTING TYPICAL SECTION, USH 53

STA. 336+36 'NB' - STA. 366+62 'NB'
STA. 376+59 'NB' - STA. 667+63 'NB'
STA. 669+53 'NB' - STA. 675+32 'NB'
STA. 677+20 'NB' - STA. 698+09 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	EXISTING TYPICAL SECTIONS	SHEET 10	E

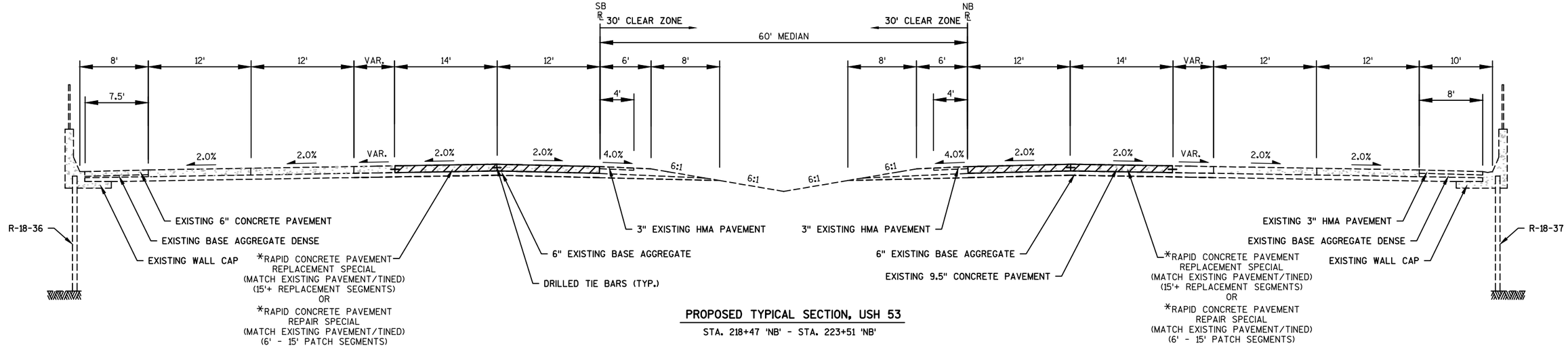
2



PROPOSED TYPICAL SECTION, USH 53

STA. 200+94 'NB' - STA. 218+47 'NB'

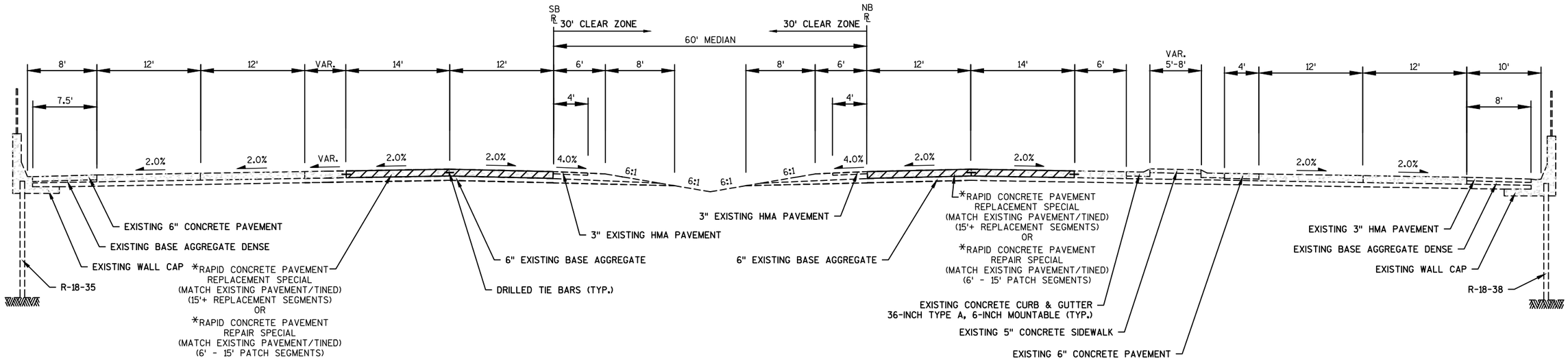
*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD



PROPOSED TYPICAL SECTION, USH 53

STA. 218+47 'NB' - STA. 223+51 'NB'

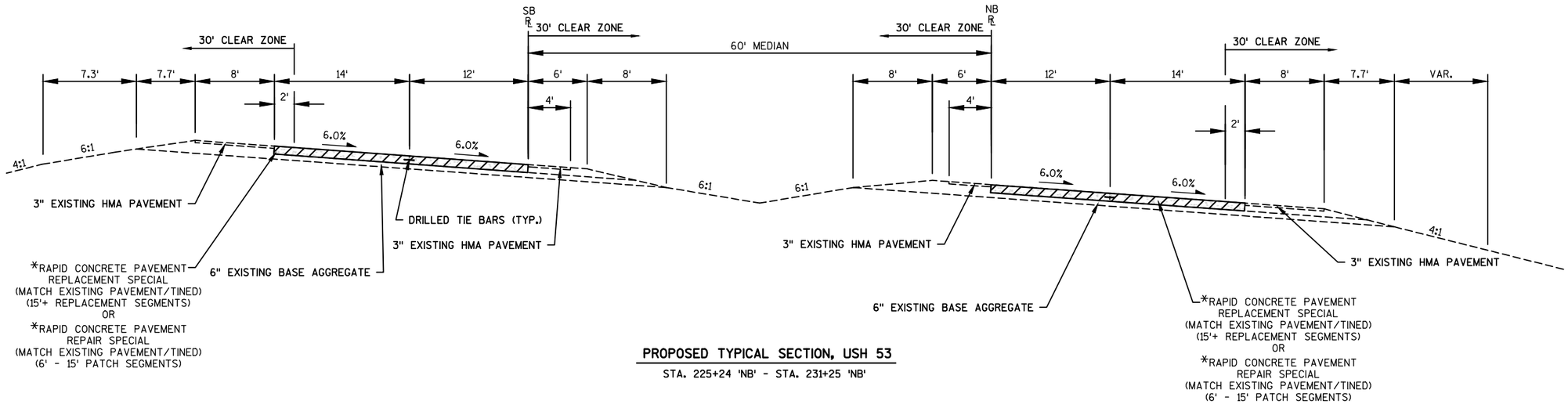
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	PROPOSED TYPICAL SECTIONS	SHEET 11	E



PROPOSED TYPICAL SECTION, USH 53

STA. 223+51 'NB' - STA. 223+57 'NB'
STA. 224+55 'NB' - STA. 225+24 'NB'

*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD

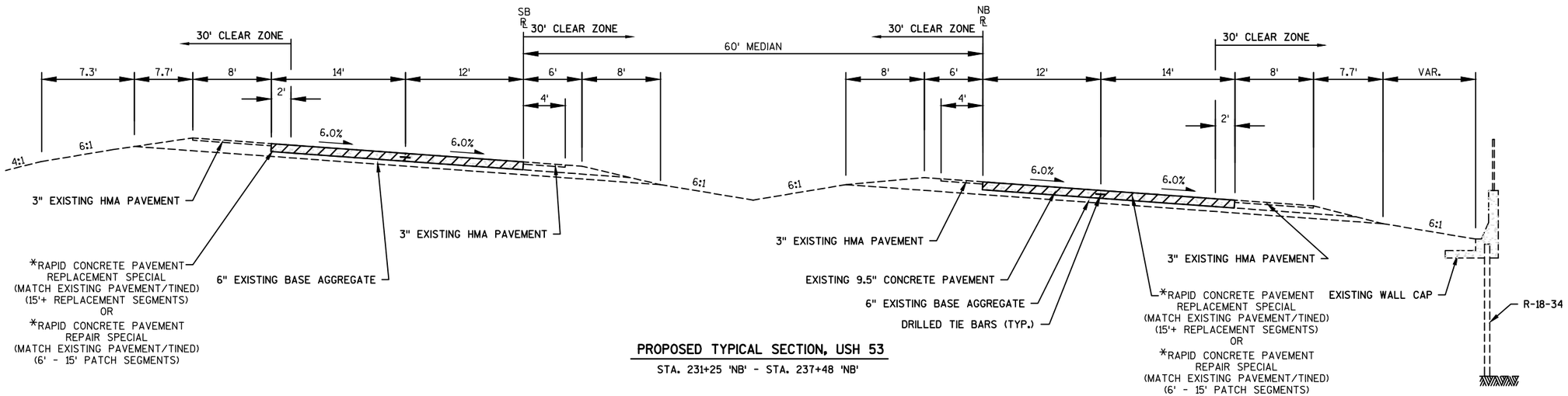


PROPOSED TYPICAL SECTION, USH 53

STA. 225+24 'NB' - STA. 231+25 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	PROPOSED TYPICAL SECTIONS	SHEET 12	E

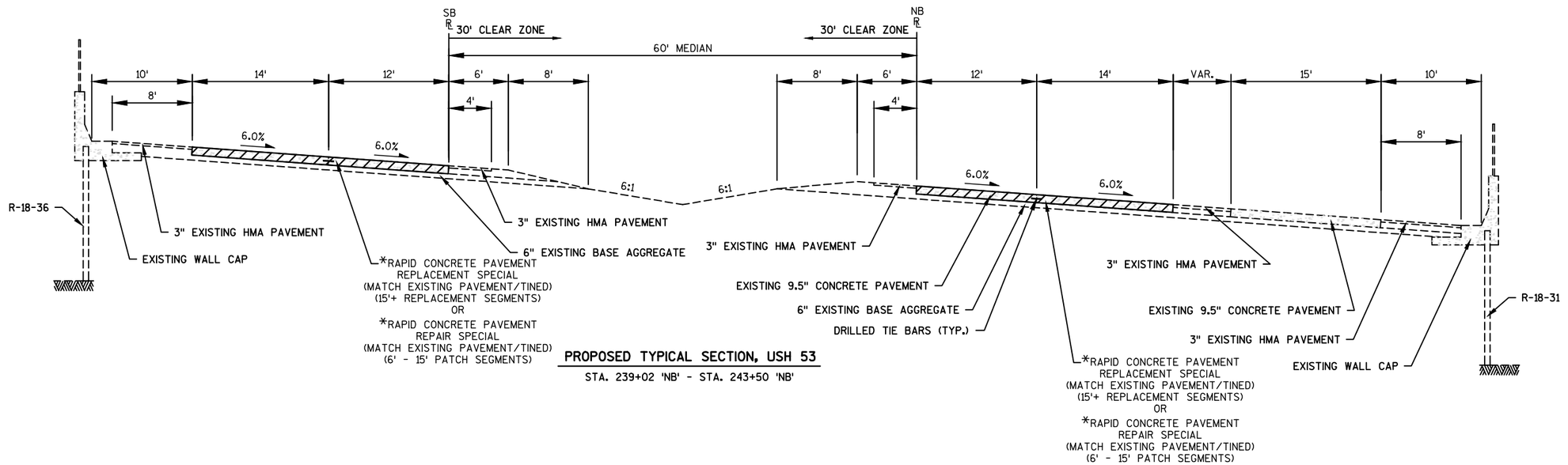
2



PROPOSED TYPICAL SECTION, USH 53

STA. 231+25 'NB' - STA. 237+48 'NB'

*LOCATIONS TO BE DETERMINED
BY THE ENGINEER IN THE FIELD

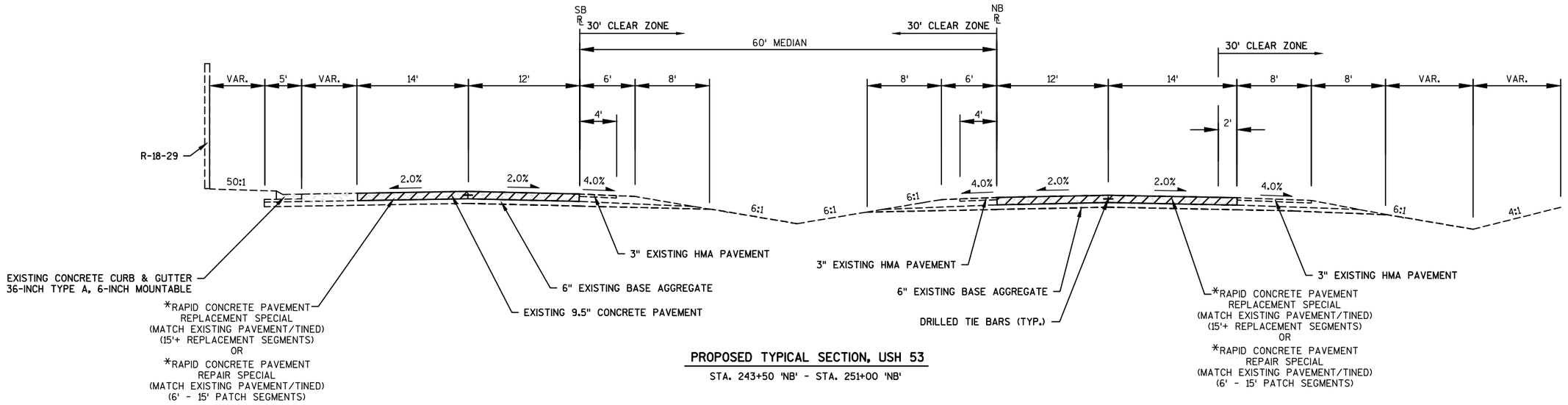


PROPOSED TYPICAL SECTION, USH 53

STA. 239+02 'NB' - STA. 243+50 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	PROPOSED TYPICAL SECTIONS	SHEET 13	E

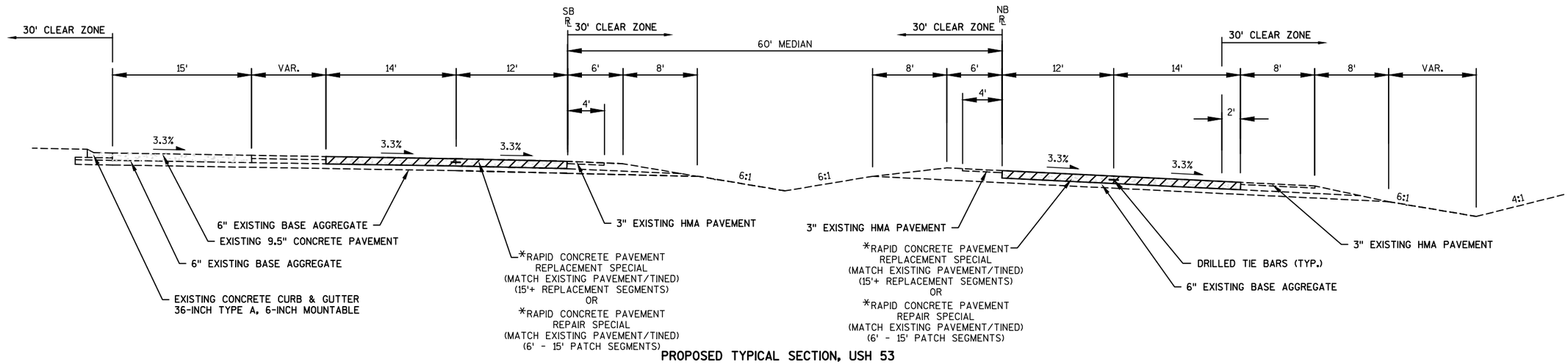
2



PROPOSED TYPICAL SECTION, USH 53

STA. 243+50 'NB' - STA. 251+00 'NB'

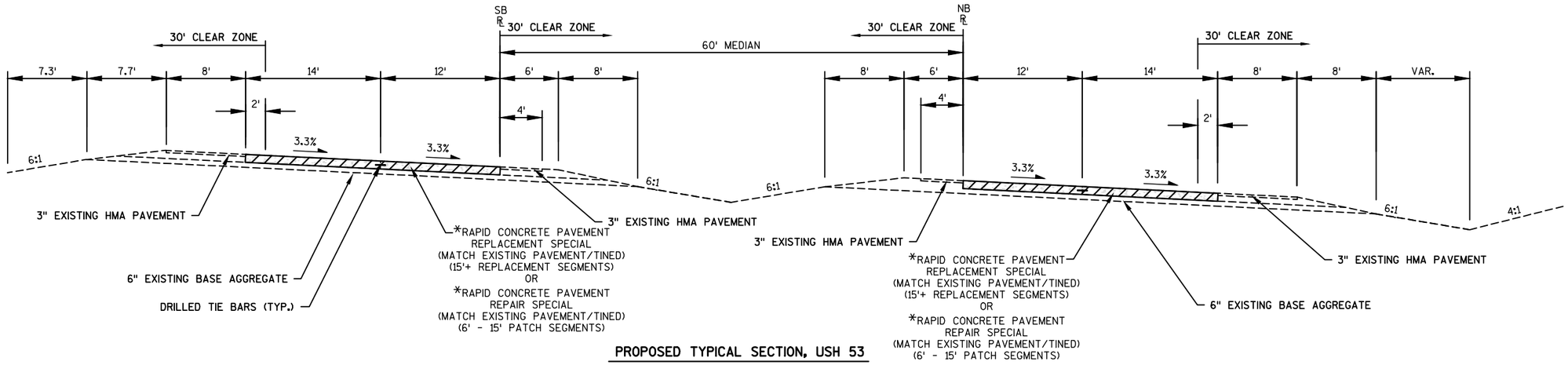
*LOCATIONS TO BE DETERMINED
BY THE ENGINEER IN THE FIELD



PROPOSED TYPICAL SECTION, USH 53

STA. 251+00 'NB' - STA. 257+50 'NB'

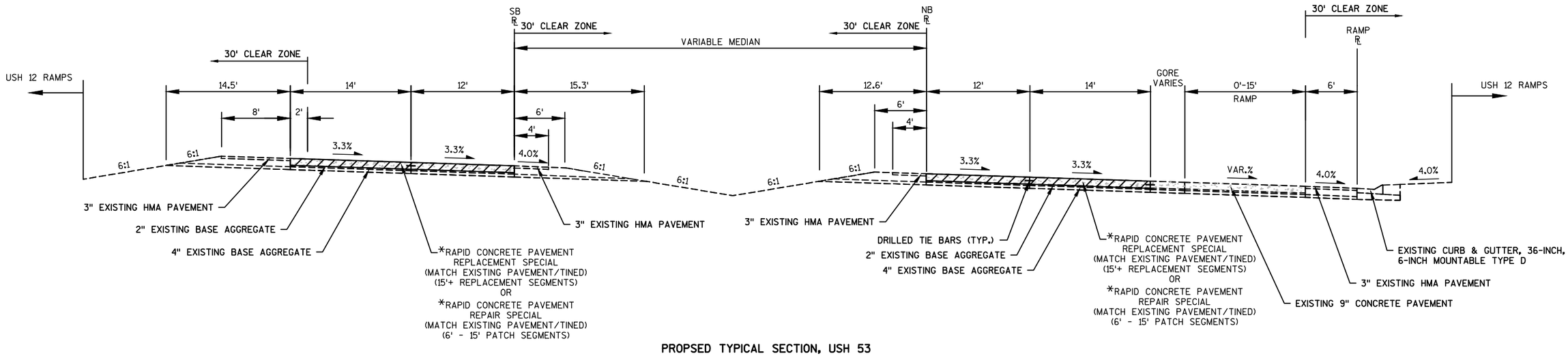
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	PROPOSED TYPICAL SECTIONS	SHEET 14	E



PROPOSED TYPICAL SECTION, USH 53

STA. 257+50 'NB' - STA. 262+00 'NB'

*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD

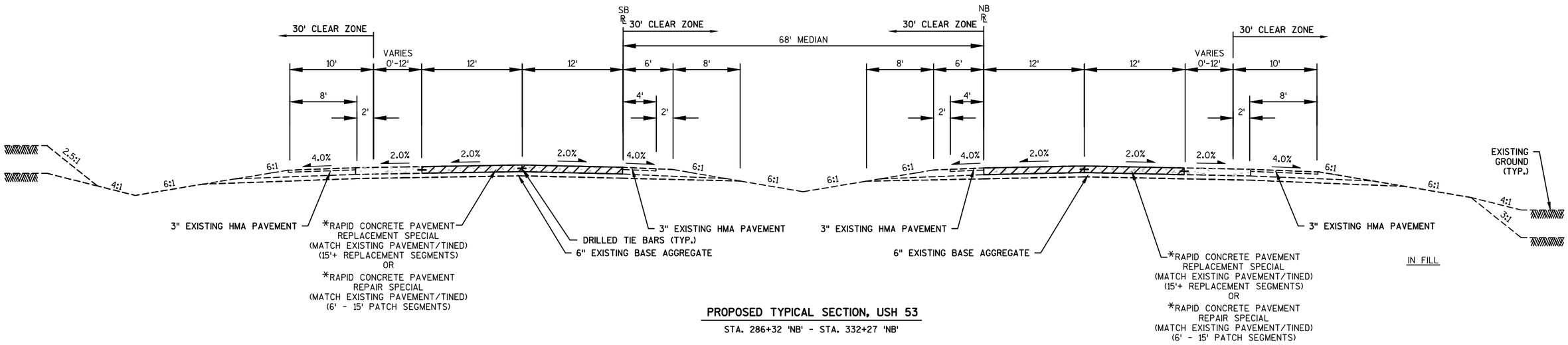


PROPSED TYPICAL SECTION, USH 53

STA. 262+00 'NB' - STA. 283+68 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	PROPOSED TYPICAL SECTIONS	SHEET 15	E

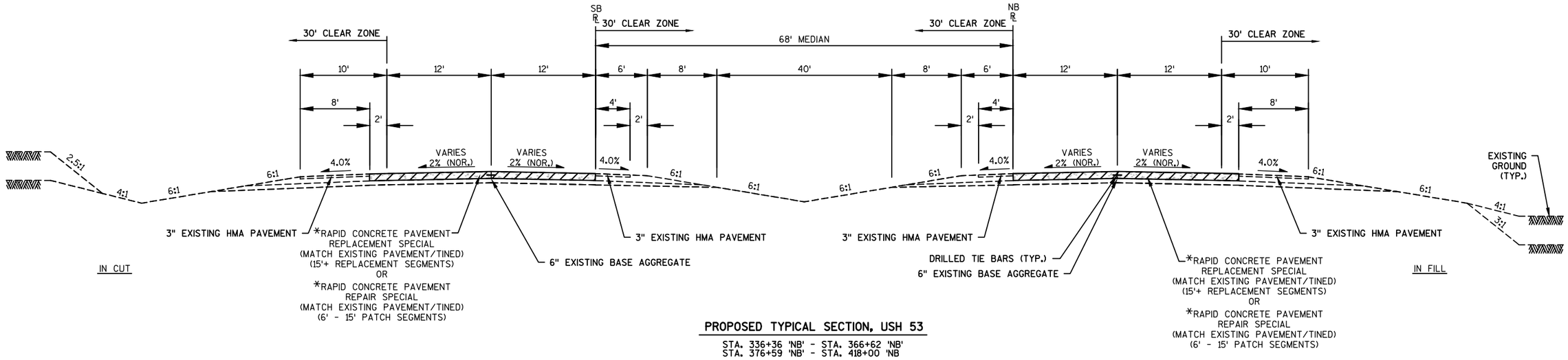
2



PROPOSED TYPICAL SECTION, USH 53

STA. 286+32 'NB' - STA. 332+27 'NB'

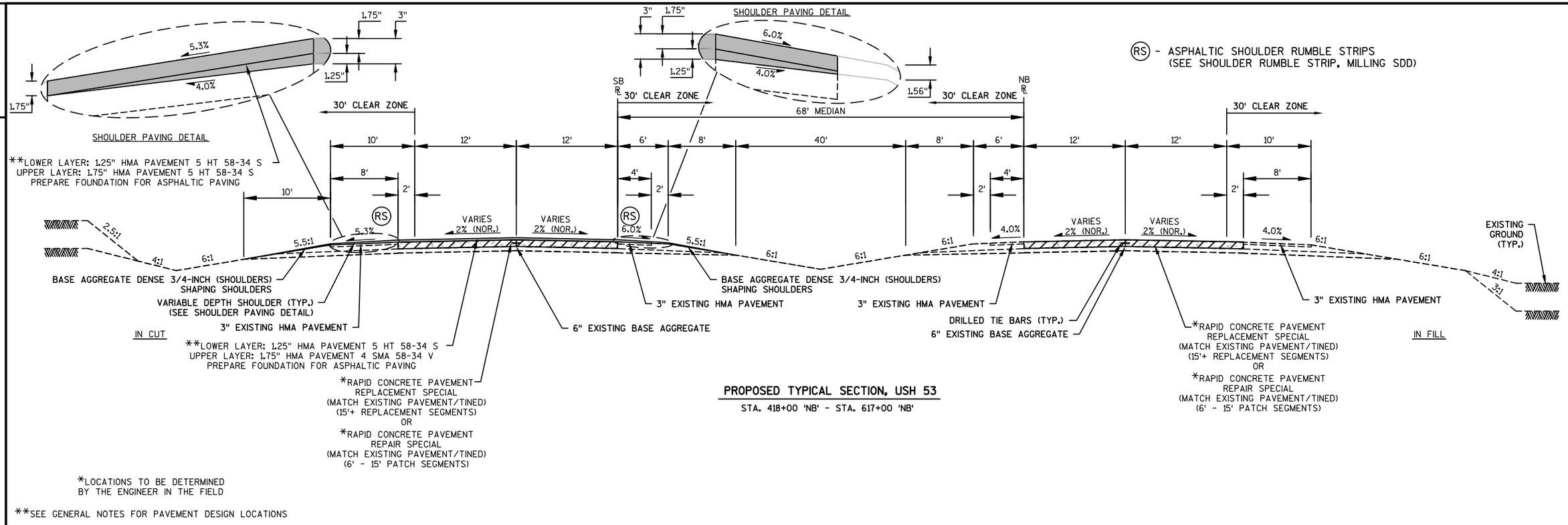
*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD



PROPOSED TYPICAL SECTION, USH 53

STA. 336+36 'NB' - STA. 366+62 'NB'
STA. 376+59 'NB' - STA. 418+00 'NB

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	PROPOSED TYPICAL SECTIONS	SHEET 16	E

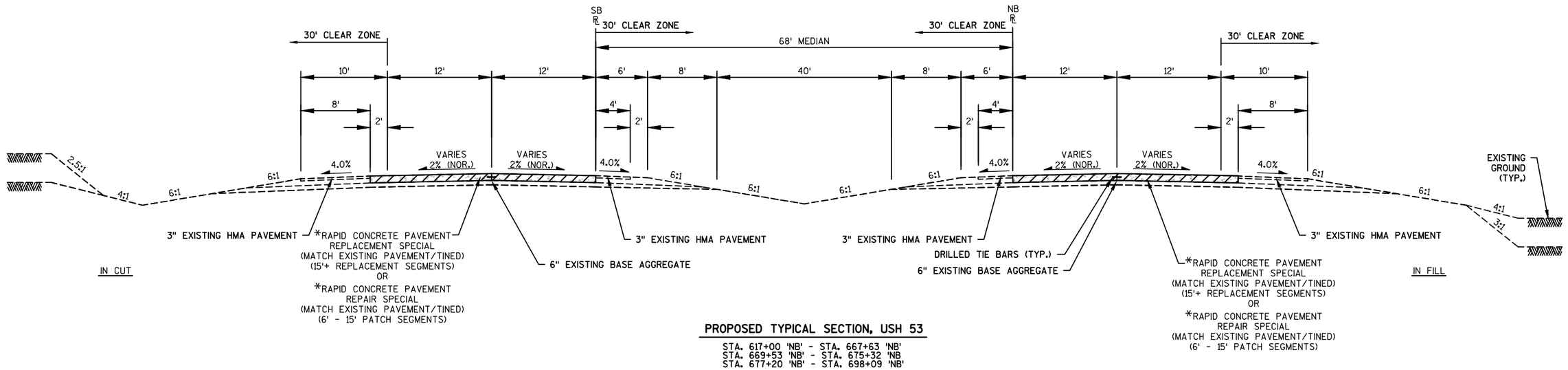


PROPOSED TYPICAL SECTION, USH 53

STA. 418+00 'NB' - STA. 617+00 'NB'

*LOCATIONS TO BE DETERMINED
BY THE ENGINEER IN THE FIELD

**SEE GENERAL NOTES FOR PAVEMENT DESIGN LOCATIONS



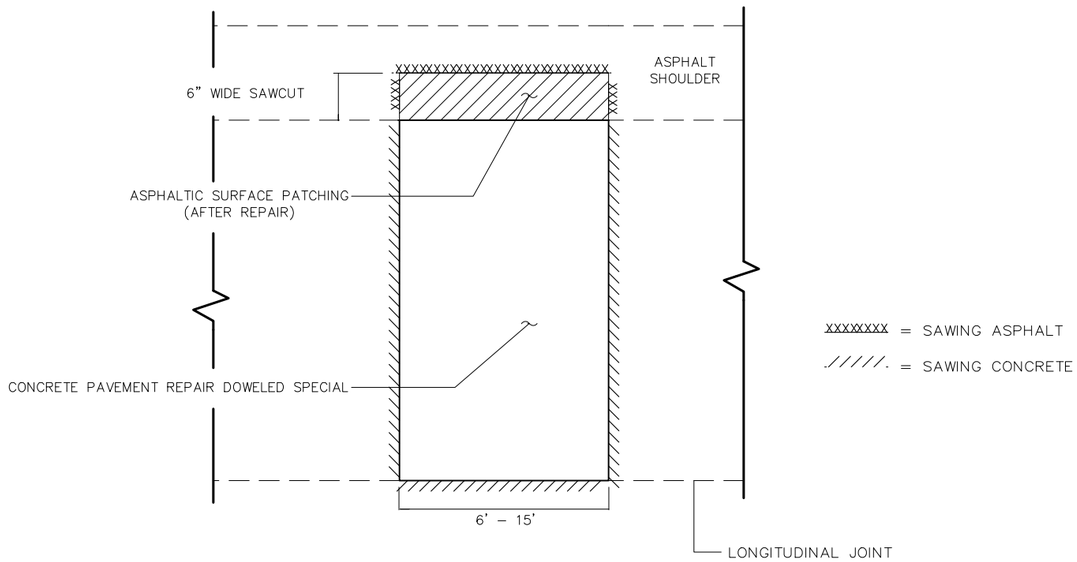
PROPOSED TYPICAL SECTION, USH 53

STA. 617+00 'NB' - STA. 667+63 'NB'
STA. 669+53 'NB' - STA. 675+32 'NB'
STA. 677+20 'NB' - STA. 698+09 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	PROPOSED TYPICAL SECTIONS	SHEET 17	E

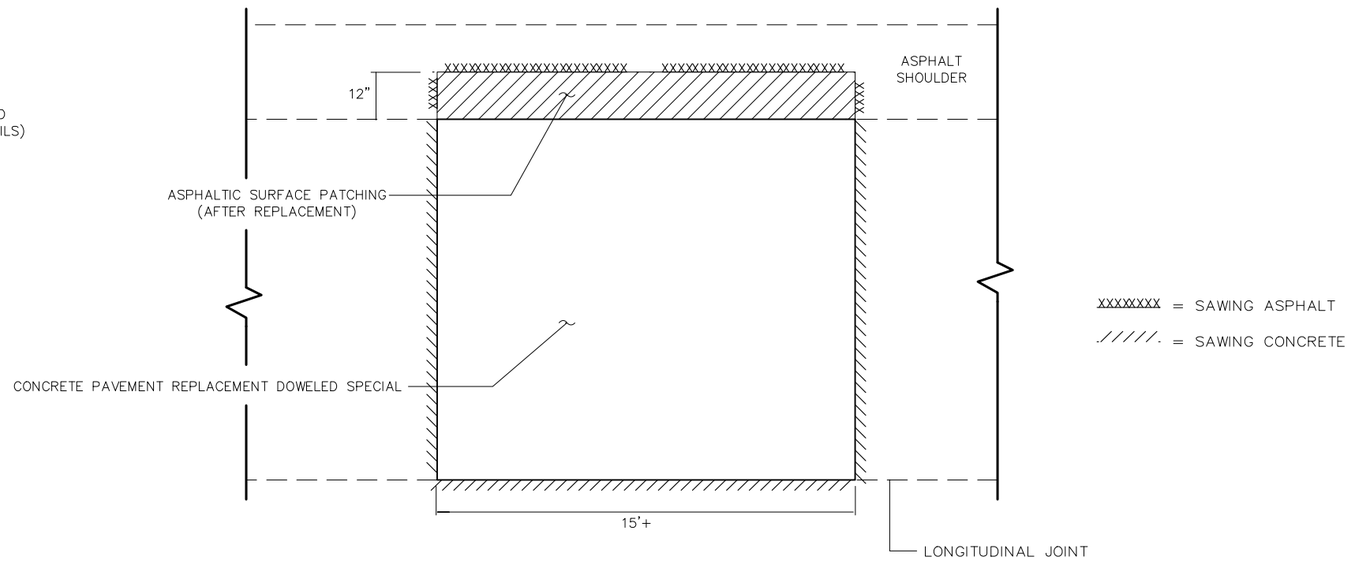
2

(SEE CONCRETE PAVEMENT REPAIR AND REPLACEMENT SDD FOR ADDITIONAL DETAILS)



RAPID CONCRETE PAVEMENT REPAIR SPECIAL SAWCUT DETAIL

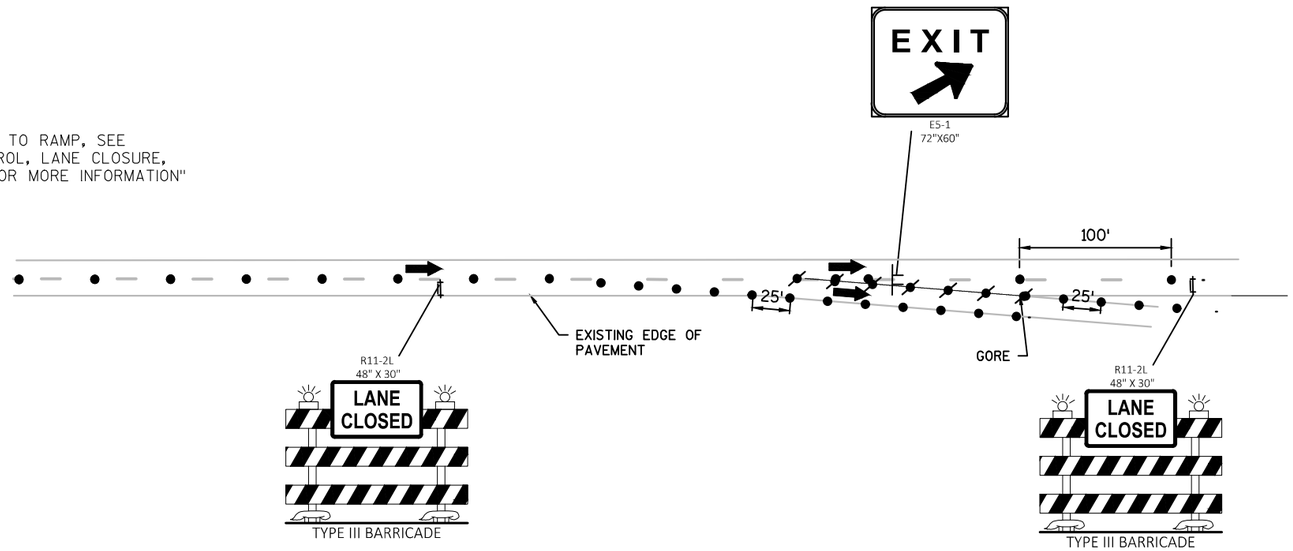
(SEE CONCRETE PAVEMENT REPAIR AND REPLACEMENT SDD FOR ADDITIONAL DETAILS)



RAPID CONCRETE PAVEMENT REPLACEMENT SPECIAL SAWCUT DETAIL

2

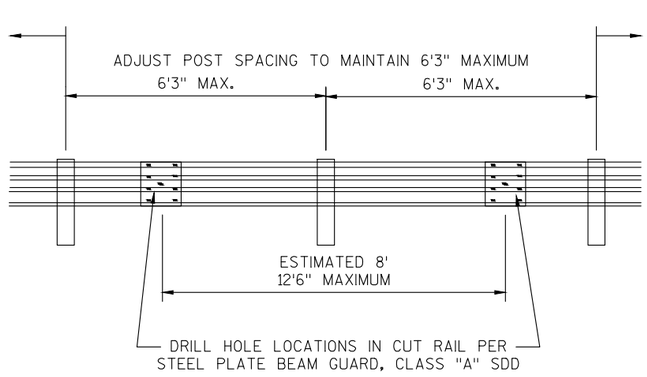
LANE CLOSED PRIOR TO RAMP, SEE
SDD "TRAFFIC CONTROL, LANE CLOSURE,
SPEED REDUCTION FOR MORE INFORMATION"



TRAFFIC CONTROL,
TAPERED STYLE EXIT RAMP IN LANE CLOSURE

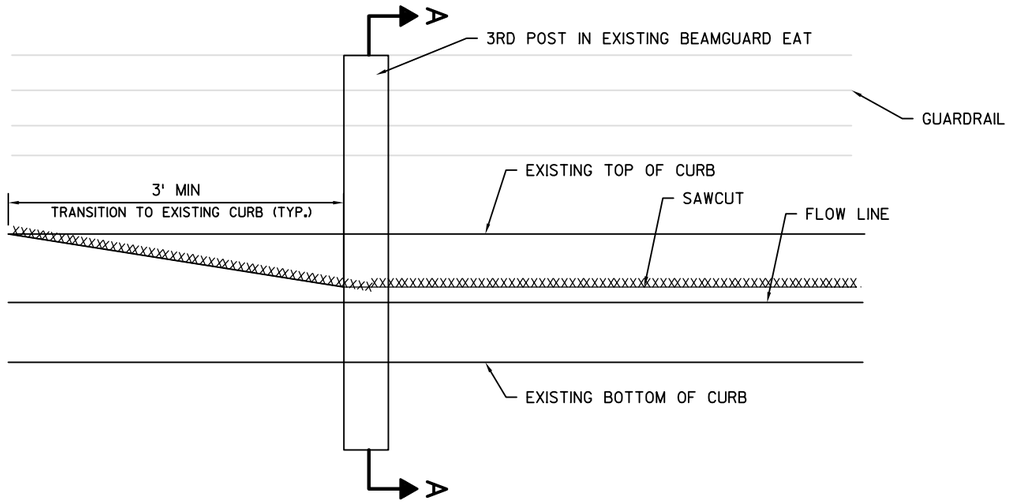
NOTE:
USE WHEN THERE IS NOT ENOUGH ROOM TO HAVE
A PARALLEL EXIT RAMP DUE TO PATCHING.

INSTALL GUARDRAIL PER SDD TO
MATCH EXISTING GUARDRAIL AFTER
REMOVING 50 LF OF EXISTING
BEAMGUARD TO POST 9 OF
EXISTING TERMINAL AT
APPROXIMATE 233+89'NB' RT

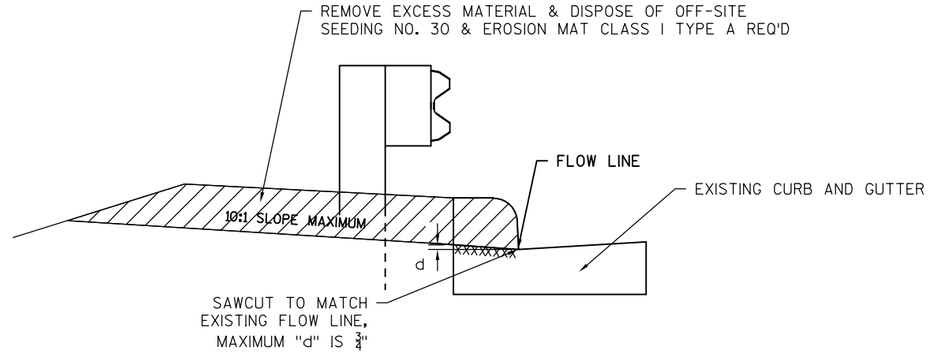


INSTALL GUARDRAIL PER SDD TO MATCH
EXISTING GUARDRAIL AFTER REMOVING
EXISTING TYPE 2 TERMINAL AT
APPROXIMATE 231+14'NB' RT

STEEL PLATE BEAM GUARD CLASS A INSTALLATION DETAIL - CUT & DRILL RAIL
FOR STA 231+14'NB' - 233+89'NB' RT



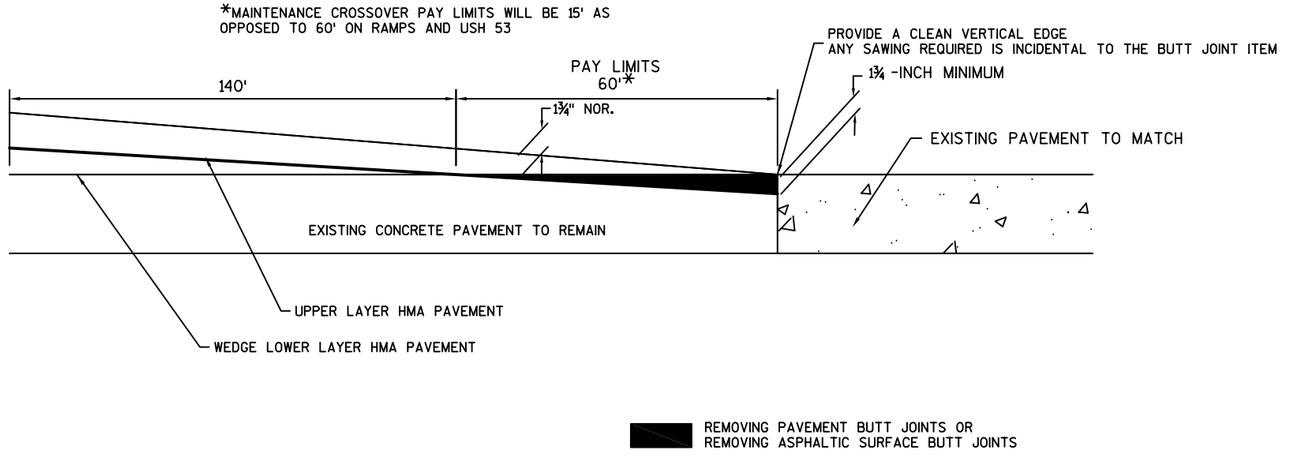
PROFILE VIEW



SECTION A-A

SAWING CURB HEAD

SAW AND REMOVE CONCRETE CURB HEAD, REMOVE EXCESS MATERIAL, SHAPE, AND RESTORE AREA BEHIND CURB. ALL ITEMS IN SHOWN IN DETAIL ARE INCIDENTAL TO BID ITEM "SAWING CURB HEAD"



BUTT JOINT DETAIL

STA 418+00'SB'
STA 617+00'SB'
STA 425+65'SB' USH 53 OFF-RAMP TO STH 312
STA 524+16'SB' USH 53 ON-RAMP FROM MELBY ST.
STA 550+00'SB' USH 53 OFF-RAMP TO MELBY ST.
STA 604+15'SB' USH 53 ON-RAMP FROM CTH OO
STA 464+70'SB' MAINTENANCE CROSSOVER*
STA 575+50'SB' MAINENANCE CROSSOVER*

2

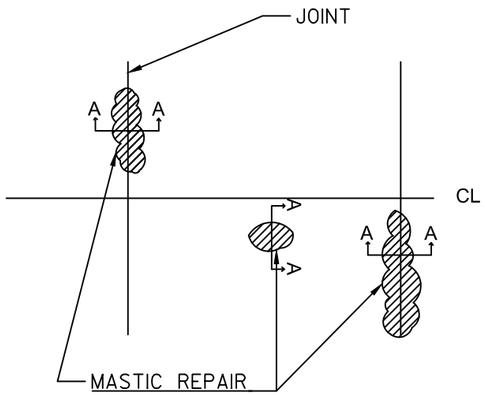
NOTES:
CLEAN JOINTS WITHOUT ROUTING.

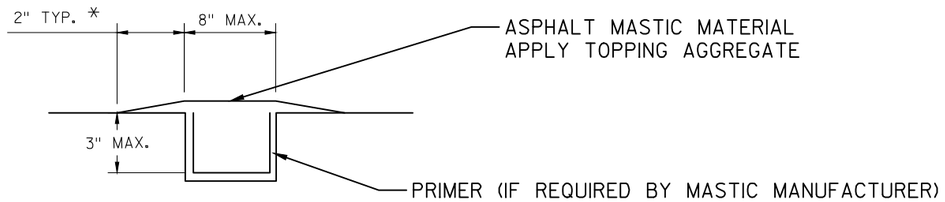
REMOVE ONLY LOOSE, DE-BONDED, AND FAILED GROUT AND OTHER DELETERIOUS MATERIAL.

EXISTING GROUT THAT IS WELL BONDED SHOULD REMAIN.

CONTRACTOR SHOULD REMOVE MATERIAL WITH A HIGH PRESSURE AIR NOZZLE TO THE MAXIMUM EXTENT POSSIBLE. JACK HAMMERING IS TO BE USED WITH THE APPROVAL OF THE ENGINEER.

REPAIR LIMITS WILL BE DETERMINED BY THE ENGINEER.





SECTION A-A

*OR AS RECOMMENDED BY THE MANUFACTURER

ASPHALT MASTIC JOINT SEALING DETAIL

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) EXISTING POST MOUNTED SPEED LIMIT SIGNS SHOULD BE COVERED OR REMOVED.

(2) PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE.

(3) AT EXISTING POST MOUNTED SPEED LIMIT SIGN AFTER THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP, IF THERE IS NOT AN EXISTING SIGN, PLACE 1,500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP

(4) IF WORK AREA STARTS LESS THAN 1,000 FEET FROM END OF LANE CLOSURE TAPER, OMIT DIGITAL SPEED LIMIT TRAILER AT THAT LOCATION.

(5) PLACE A DIGITAL SPEED LIMIT TRAILER A MINIMUM OF EVERY ONE MILE. MODIFY PLACEMENT AS DIRECTED BY ENGINEER WHEN DIGITAL SPEED LIMIT TRAILER IS LOCATED IN CLOSE PROXIMITY TO AN ACCELERATION LANE OF AN ENTRANCE RAMP.

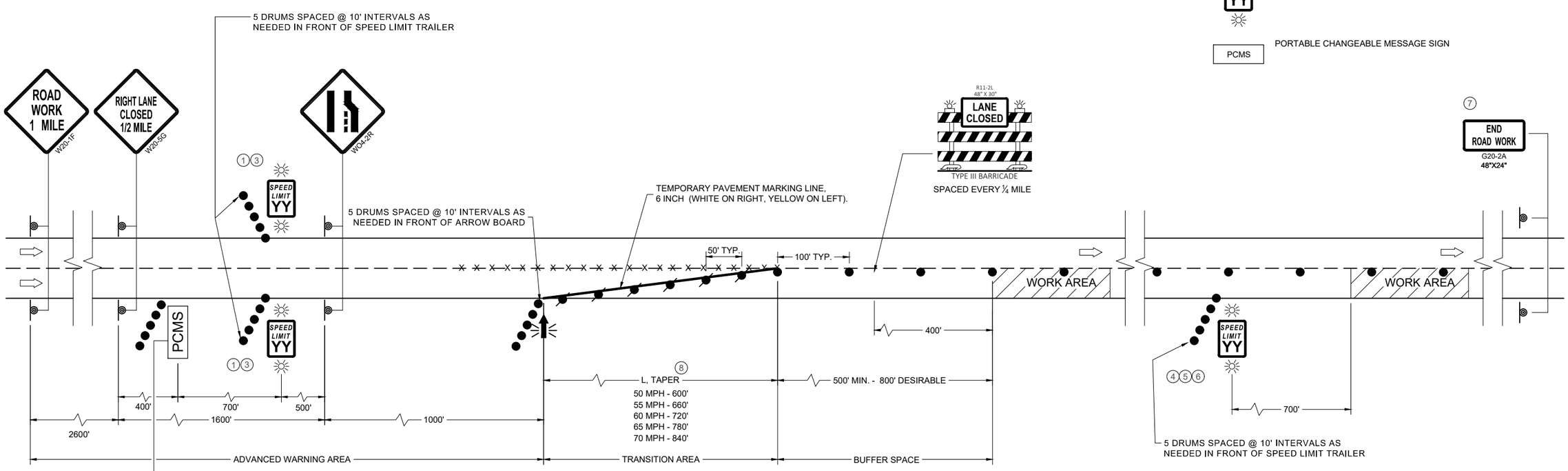
(6) OMIT DRUM DELINEATION FOR DIGITAL SPEED LIMIT TRAILER WITHIN A CLOSURE.

(7) INCLUDE NON-DIGITAL R2-1 RESUME SPEED LIMIT SIGNS 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END ROAD WORK" SIGN.

(8) IF THE SPEED LIMIT WILL CHANGE BASED ON THE PRESENCE OF WORKERS, USE THE TAPER LENGTH THAT MATCHES THE HIGHER OF THE TWO SPEEDS FOR A CONTINUOUS LANE CLOSURE.

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
- DIGITAL SPEED LIMIT TRAILER (SPEED LIMIT YY)
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

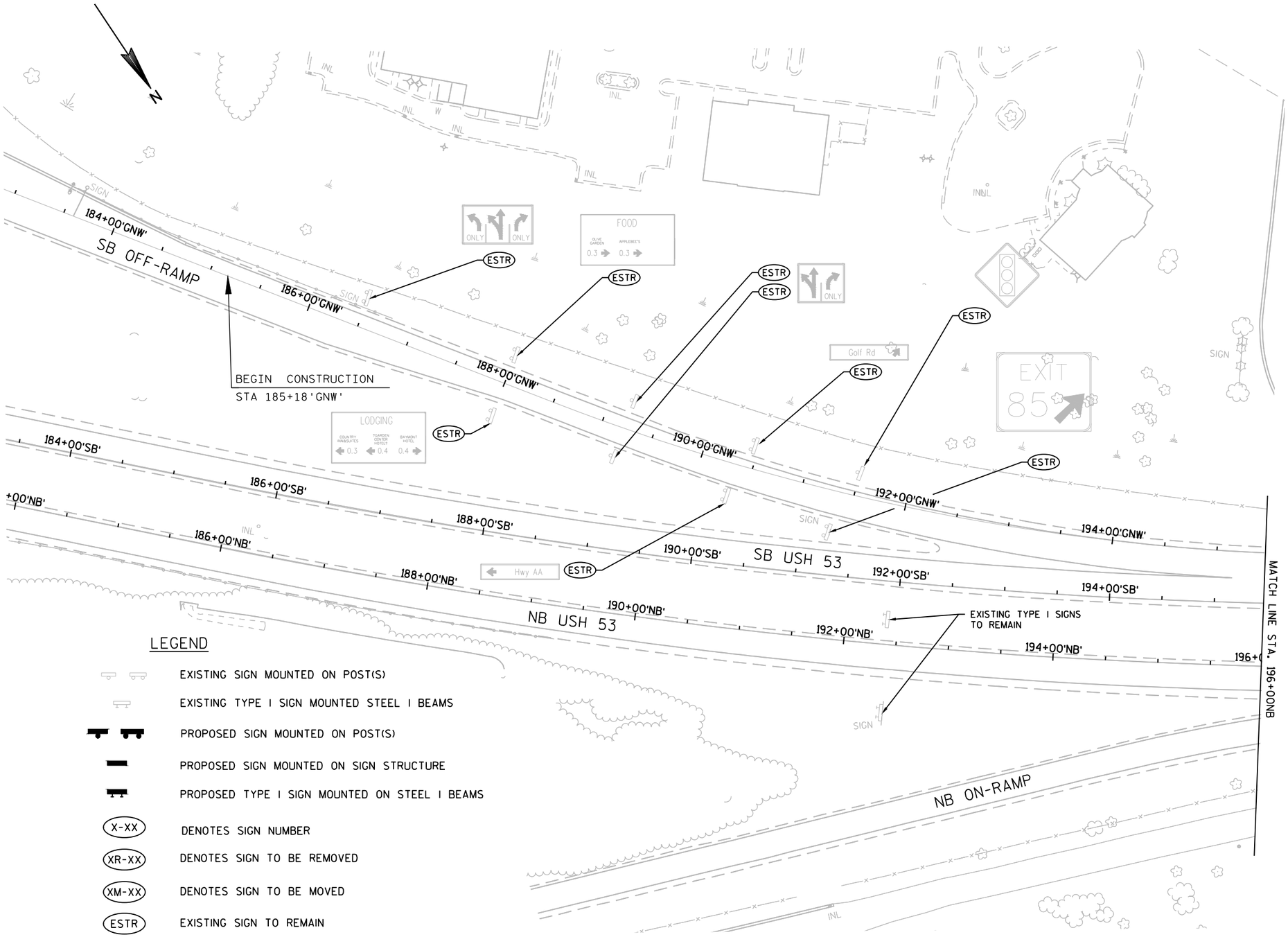


(2) PCMS MESSAGING

POSTED SPEED REDUCTION		NO SPEED REDUCTION
FRAME 1	FRAME 2	
REDUCED SPEED AHEAD	XX MPH	(FLASHING CAUTION MODE)

DIGITAL SPEED REDUCTION SYSTEM

2



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGN STRUCTURE
- PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS
- (X-XX) DENOTES SIGN NUMBER
- (XR-XX) DENOTES SIGN TO BE REMOVED
- (XM-XX) DENOTES SIGN TO BE MOVED
- (ESTR) EXISTING SIGN TO REMAIN

2

OAKWOOD HILLS PARKWAY

EXISTING TYPE I SIGN TO REMAIN

SB USH 53

196+00'SB' 198+00'SB' 200+00'SB' 202+00'SB' 204+00'SB' 206+00'SB' 208+00'SB' 210+00'SB'

198+00'NB' 200+00'NB' 202+00'NB' 204+00'NB' 206+00'NB' 208+00'NB' 210+00'NB'

MATCH LINE STA. 211+00NB

NB ON-RAMP

NB USH 53

S-18-55

S-18-56

BEGIN PROJECT 1190-06-61
STA. 200+94NB'

S. HASTINGS WAY

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGN STRUCTURE
- PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS
- X-XX — DENOTES SIGN NUMBER
- XR-XX — DENOTES SIGN TO BE REMOVED
- XM-XX — DENOTES SIGN TO BE MOVED
- ESTR — EXISTING SIGN TO REMAIN

SB USH 53

212+00'SB' 214+00'SB' 216+00'SB' 218+00'SB' 220+00'SB' 222+00'SB' 224+00'SB'

212+00'NB' 214+00'NB' 216+00'NB' 218+00'NB' 220+00'NB' 222+00'NB' 224+00'NB' 226+

MATCH LINE STA. 211+00NB

MATCH LINE STA. 226+00NB

S-18-118 S-18-58 S-18-59

2R-1 2R-2 2-1 2-2

AA Golf Rd 216+00'NB' 1/4 mile 1

12 Clairemont Ave 1/2
River Prairie Dr 2 1/2
312 North Crossing 3 3/4

SEE SPECIAL SIGN DETAILS SHEET 1 OF 2

SEE SPECIAL SIGN DETAILS SHEET 1 OF 2

NB USH 53

NB OFF-RAMP

B-18-184

SB ON-RAMP

B-18-183

CYPRESS RD.

S. HASTINGS WAY

OAKWOOD HILLS PARKWAY

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 24	E

FILE NAME : G:\WDOTC0\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - SHEET - (1)
PLOT DATE : 3/28/2024 10:00 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 44

2

HOSPITAL
EXIT 87

E. HAMILTON AVE.

S. HASTINGS WAY

SB USH 53

NB USH 53

S. HASTINGS WAY

SERVICE ROAD

STH 93

NB OFF-RAMP

MATCH LINE STA. 226+00NB

MATCH LINE STA. 240+50NB

MATCH LINE STA. 240+50NB

MATCH LINE STA. 255+00NB

226+00'SB'
228+00'SB'
230+00'SB'
232+00'SB'
234+00'SB'
236+00'SB'
238+00'SB'
240+00'SB'
242+00'SB'
244+00'SB'
246+00'SB'
248+00'SB'
250+00'SB'
252+00'SB'
254+00'SB'

228+00'NB'
230+00'NB'
232+00'NB'
234+00'NB'
236+00'NB'
238+00'NB'
240+00'NB'
242+00'NB'
244+00'NB'
246+00'NB'
248+00'NB'
250+00'NB'
252+00'NB'
254+00'NB'

3-1
E10-61
144"X54"

S-18-60
B-18-178
B-18-182

ESTR

EXIT 87
EXIT 85
Superior
Clairemont Ave
Golf Rd
3/4 MILE

LEGEND

	EXISTING SIGN MOUNTED ON POST(S)	X-XX	DENOTES SIGN NUMBER
	EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS	XR-XX	DENOTES SIGN TO BE REMOVED
	PROPOSED SIGN MOUNTED ON POST(S)	XM-XX	DENOTES SIGN TO BE MOVED
	PROPOSED SIGN MOUNTED ON SIGN STRUCTURE	ESTR	EXISTING SIGN TO REMAIN
	PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS		

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 25	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - SHEET - (2)
PLOT DATE : 3/28/2024 10:01 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 44

2

STH 93 ON-RAMP

SB ON-RAMP

SB USH 53

NB USH 53

NB ON-RAMP

E. CLAIREMONT AVE.

MATCH LINE STA. 255+00NB

MATCH LINE STA. 269+00NB

MATCH LINE STA. 283+00NB

256+00'SB' 258+00'SB' 260+00'SB' 262+00'SB' 264+00'SB' 266+00'SB' 268+00'SB'

256+00'NB' 258+00'NB' 260+00'NB' 262+00'NB' 264+00'NB' 266+00'NB' 268+00'NB'

270+00'SB' 272+00'SB' 274+00'SB' 276+00'SB' 278+00'SB' 280+00'SB' 282+00'SB'

270+00'NB' 272+00'NB' 274+00'NB' 276+00'NB' 278+00'NB' 280+00'NB' 282+00'NB'

S-18-65

S-18-68

3R-4

ESTR

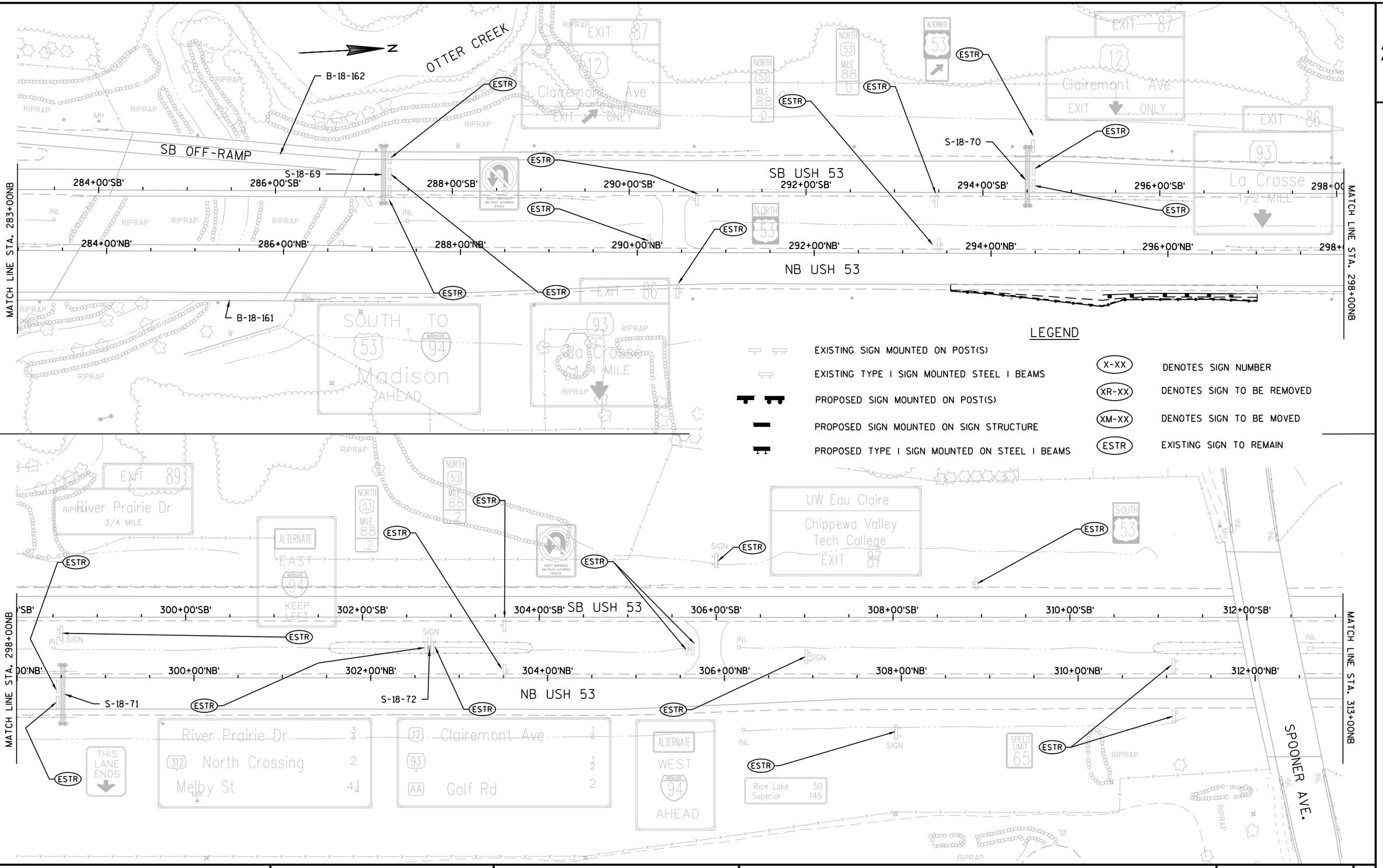
EXISTING CHANGEABLE MESSAGE BOARD TO REMAIN

LEGEND

EXISTING SIGN MOUNTED ON POST(S)	X-XX DENOTES SIGN NUMBER
EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS	XR-XX DENOTES SIGN TO BE REMOVED
PROPOSED SIGN MOUNTED ON POST(S)	XM-XX DENOTES SIGN TO BE MOVED
PROPOSED SIGN MOUNTED ON SIGN STRUCTURE	ESTR EXISTING SIGN TO REMAIN
PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS	

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 26 E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - SHEET - (3)
PLOT DATE : 3/28/2024 10:02 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 44

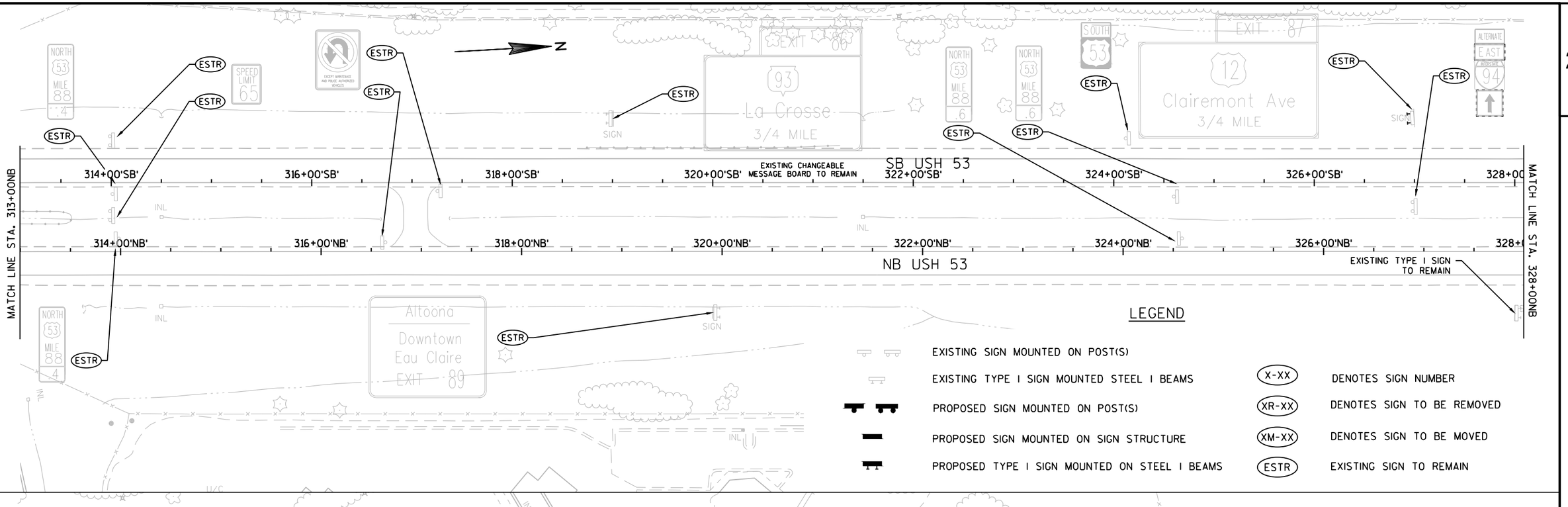


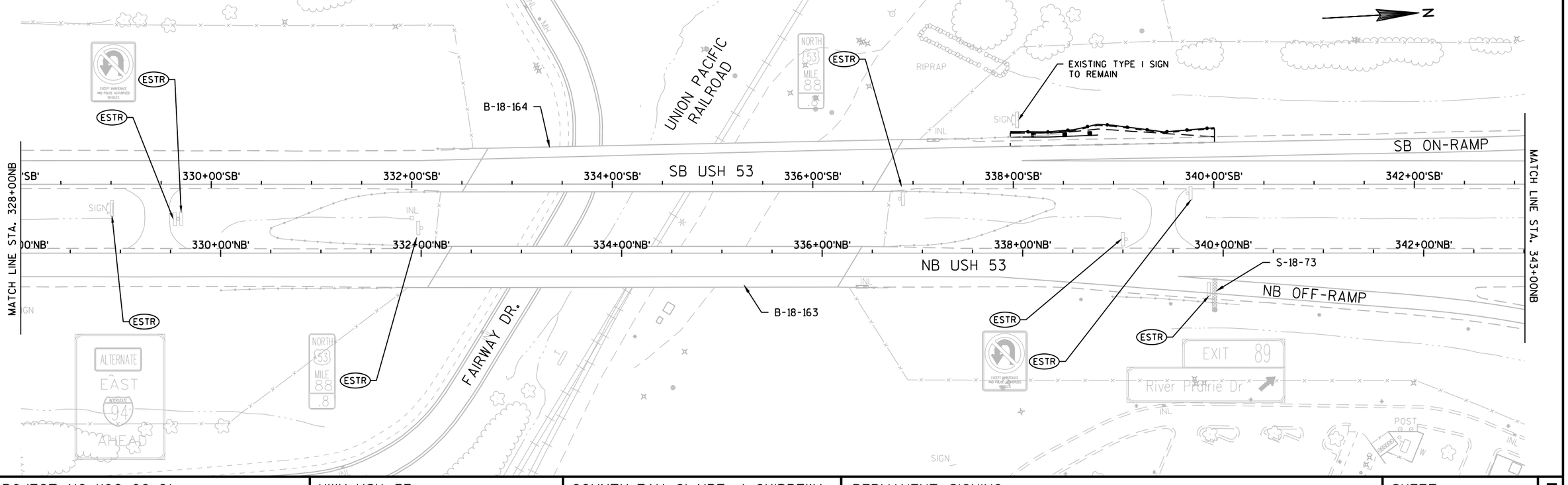
LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON SIGN STRUCTURE
- PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS

- (X-XX) DENOTES SIGN NUMBER
- (XR-XX) DENOTES SIGN TO BE REMOVED
- (XM-XX) DENOTES SIGN TO BE MOVED
- (ESTR) EXISTING SIGN TO REMAIN

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 27	E





PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 28	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - SHEET - (5)
PLOT DATE : 3/28/2024 10:04 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 44

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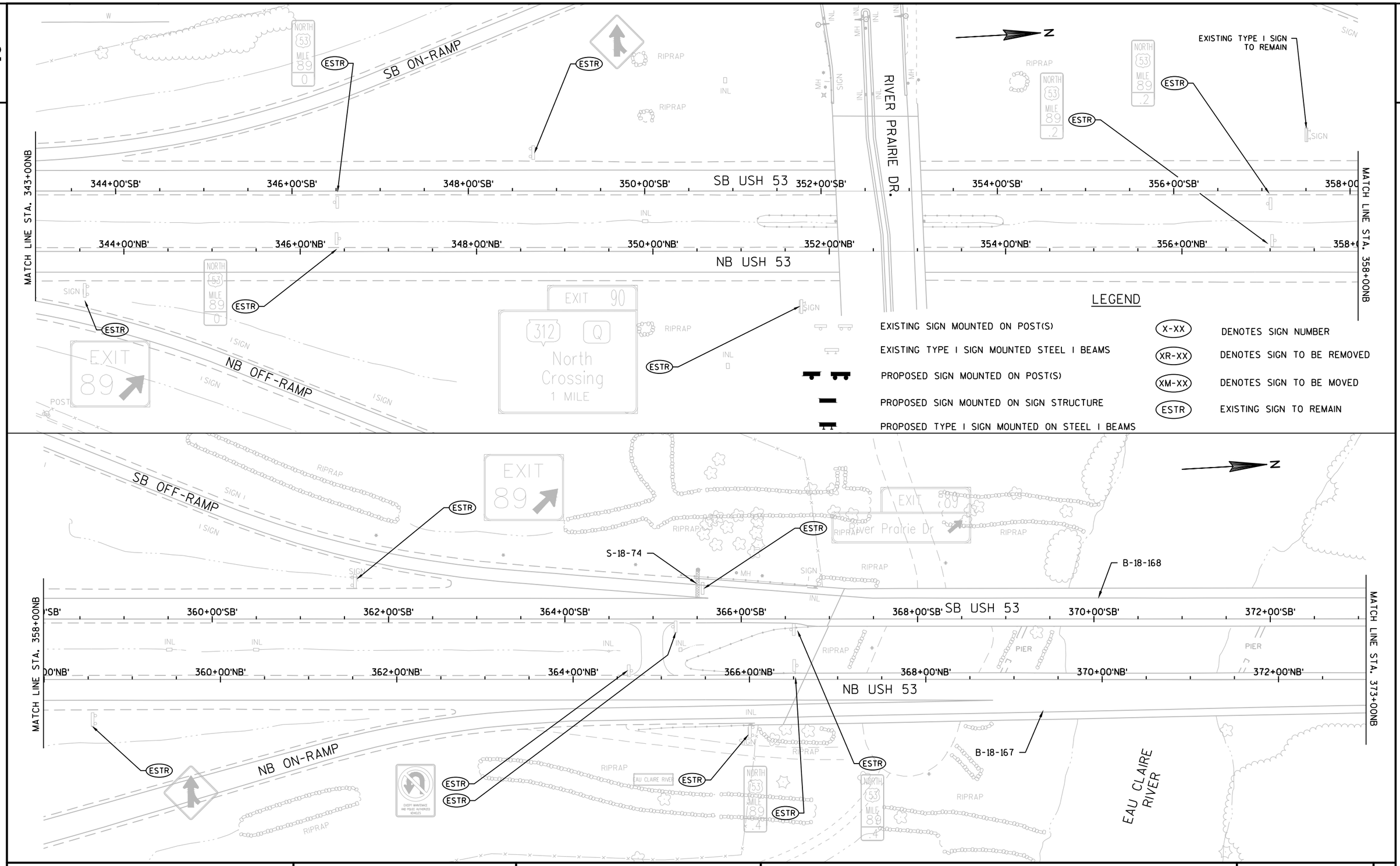
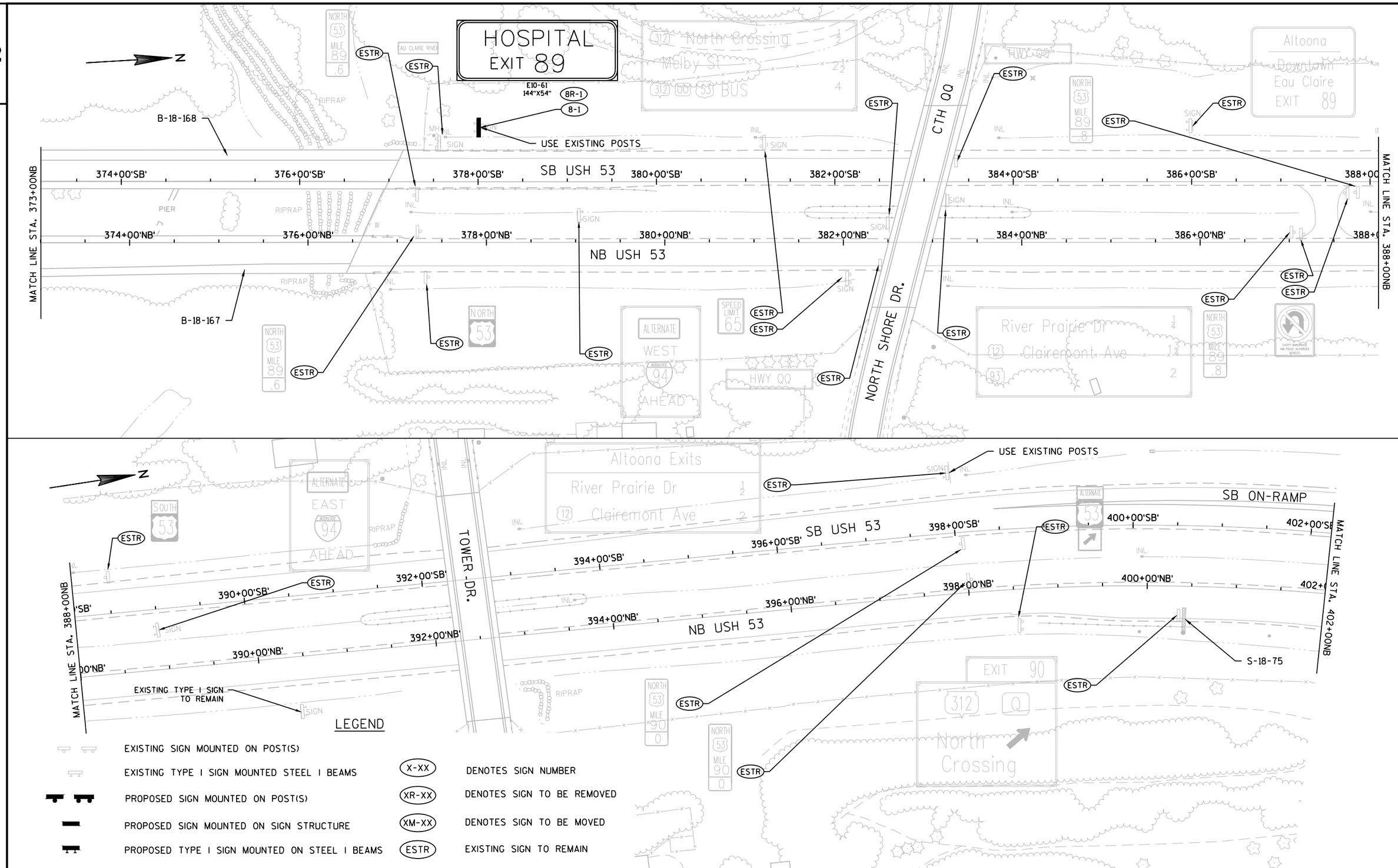


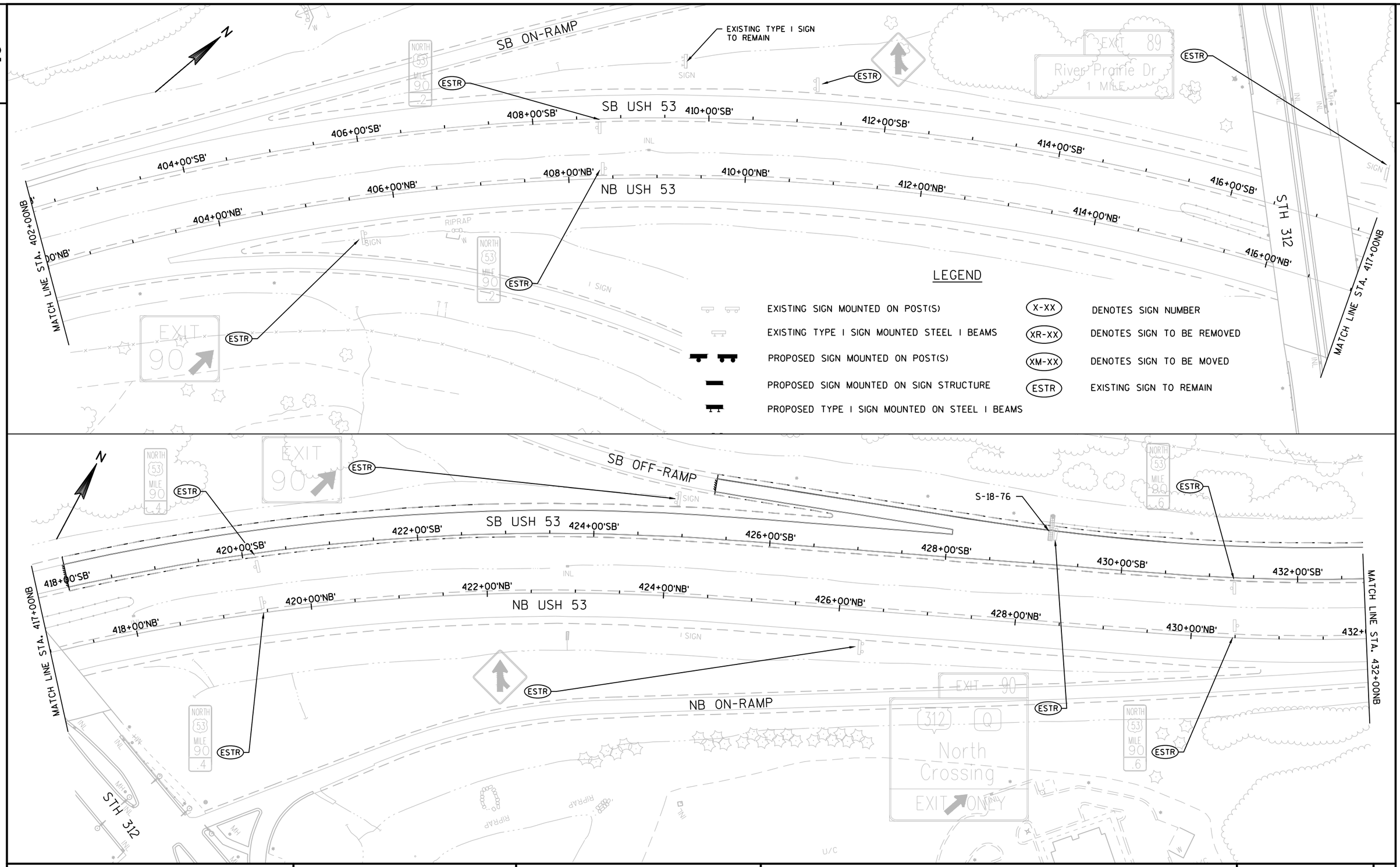
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 29 E

2

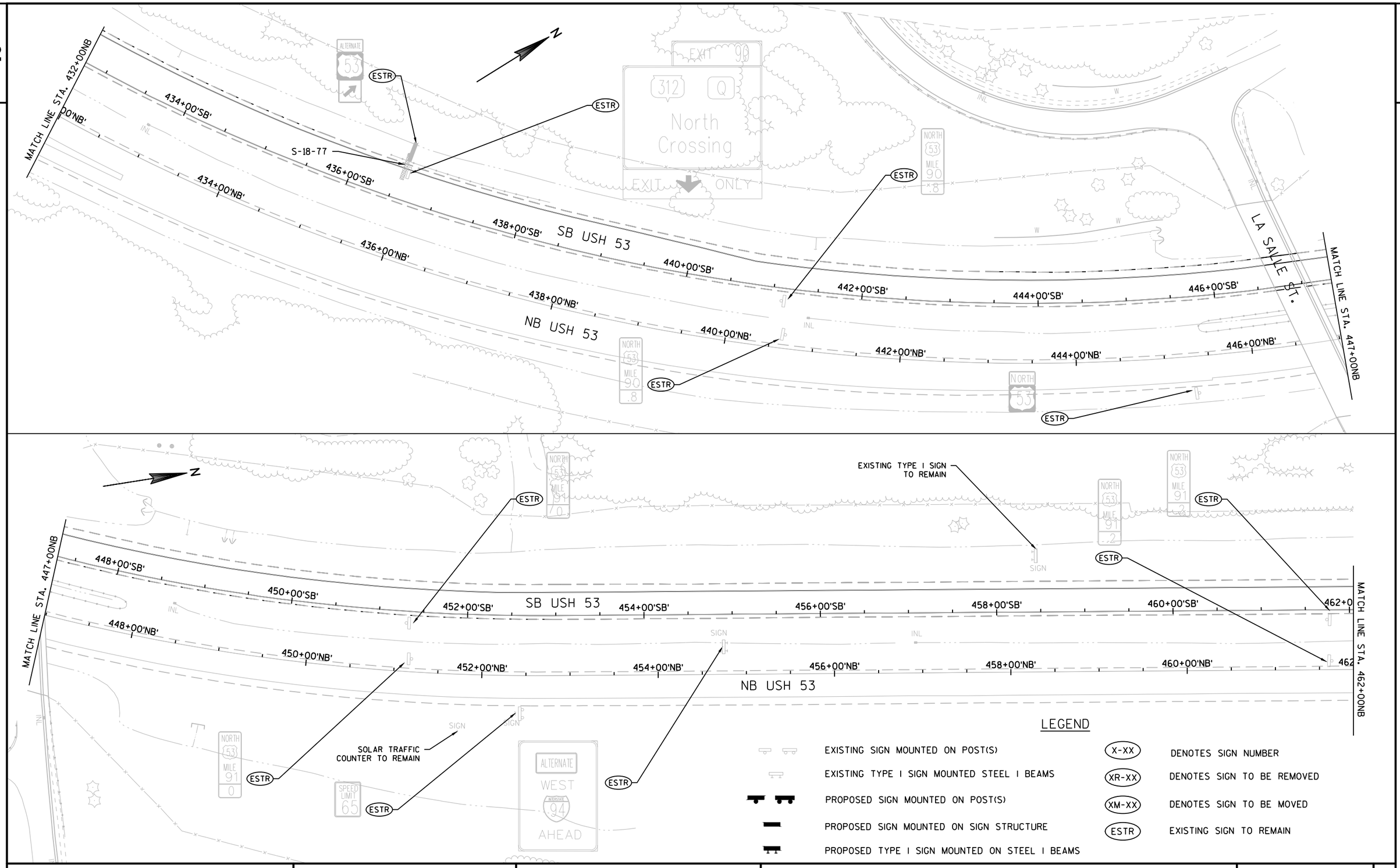


PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 30 E

2



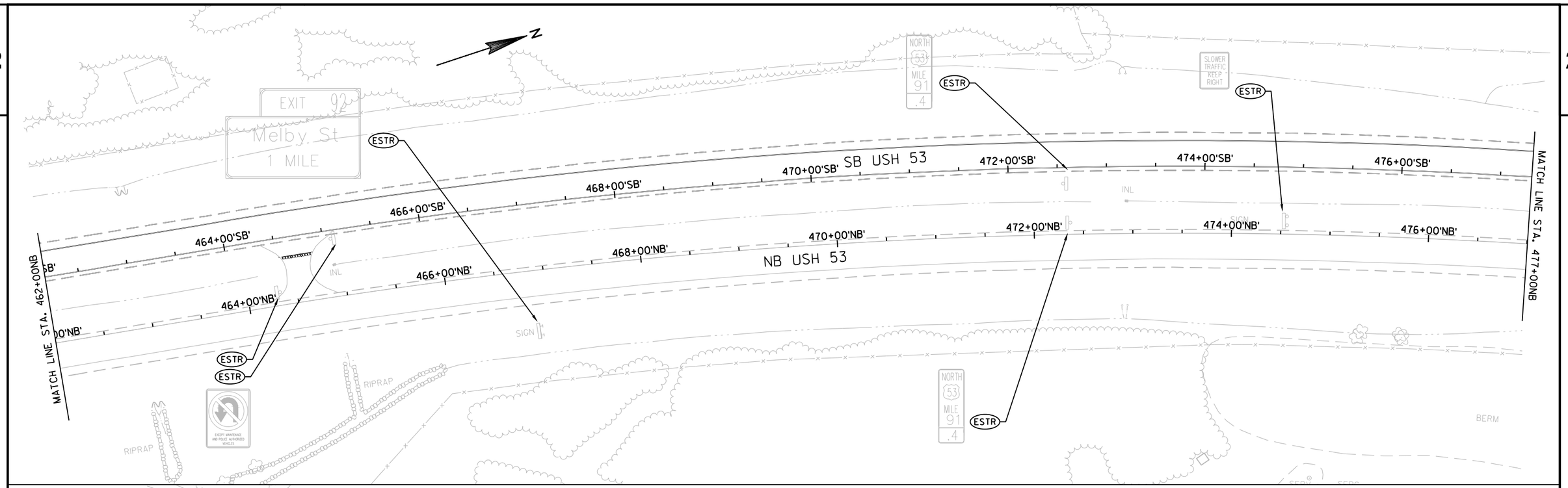
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 31 E

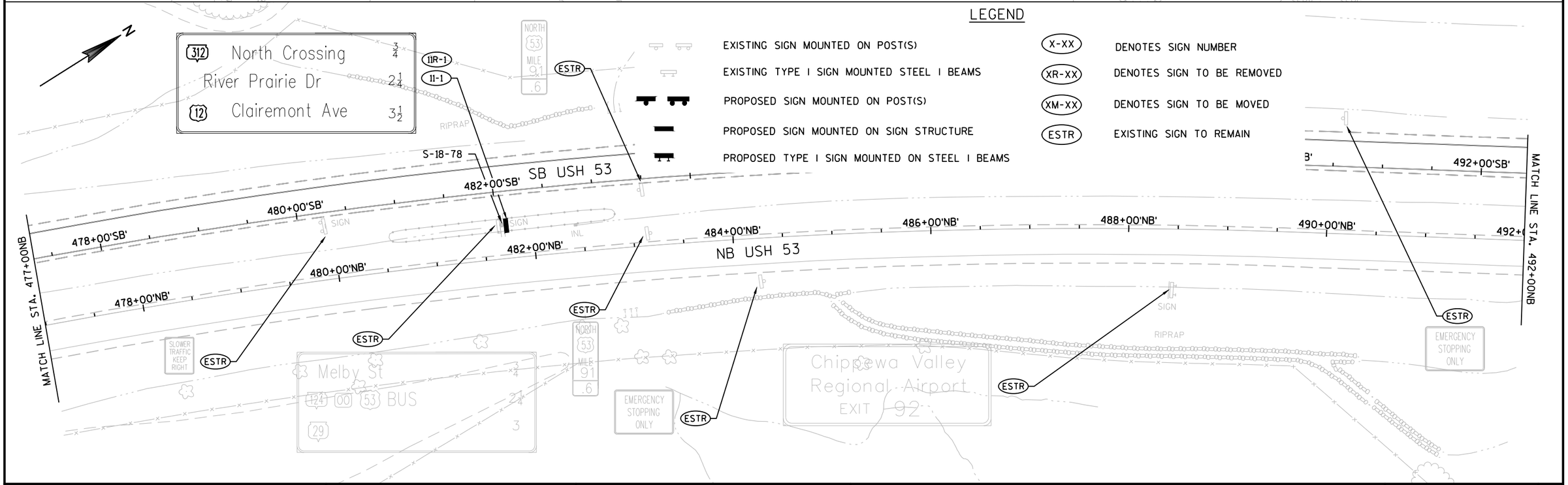


LEGEND

	EXISTING SIGN MOUNTED ON POST(S)
	EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS
	PROPOSED SIGN MOUNTED ON POST(S)
	PROPOSED SIGN MOUNTED ON SIGN STRUCTURE
	PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS
X-XX	DENOTES SIGN NUMBER
XR-XX	DENOTES SIGN TO BE REMOVED
XM-XX	DENOTES SIGN TO BE MOVED
ESTR	EXISTING SIGN TO REMAIN

2



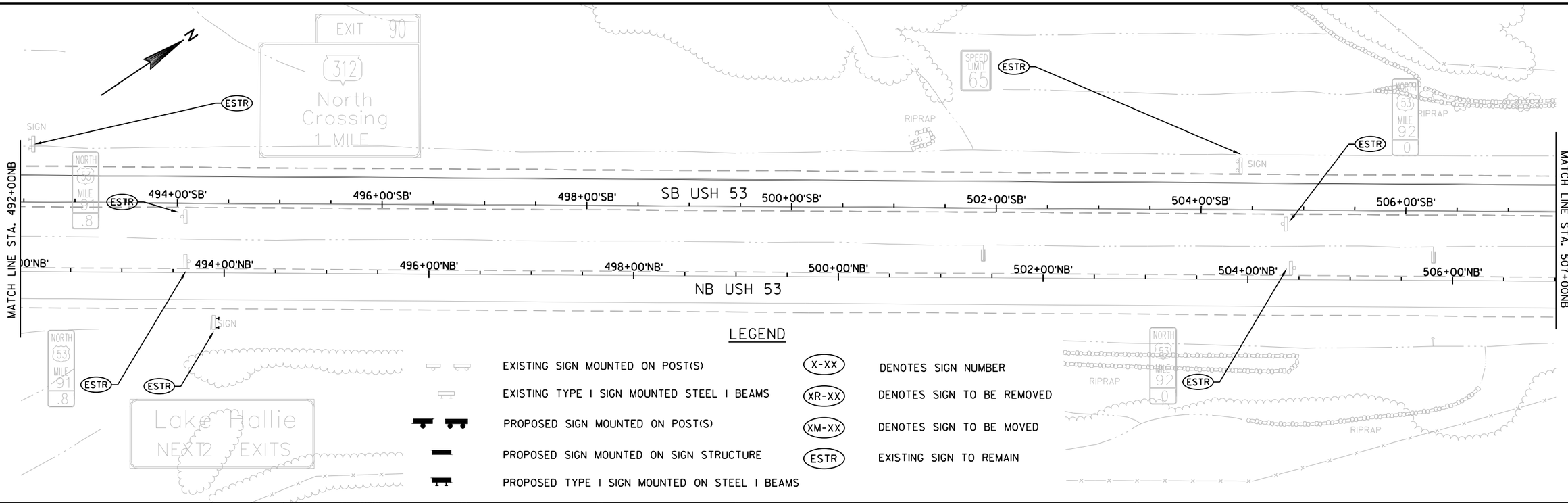


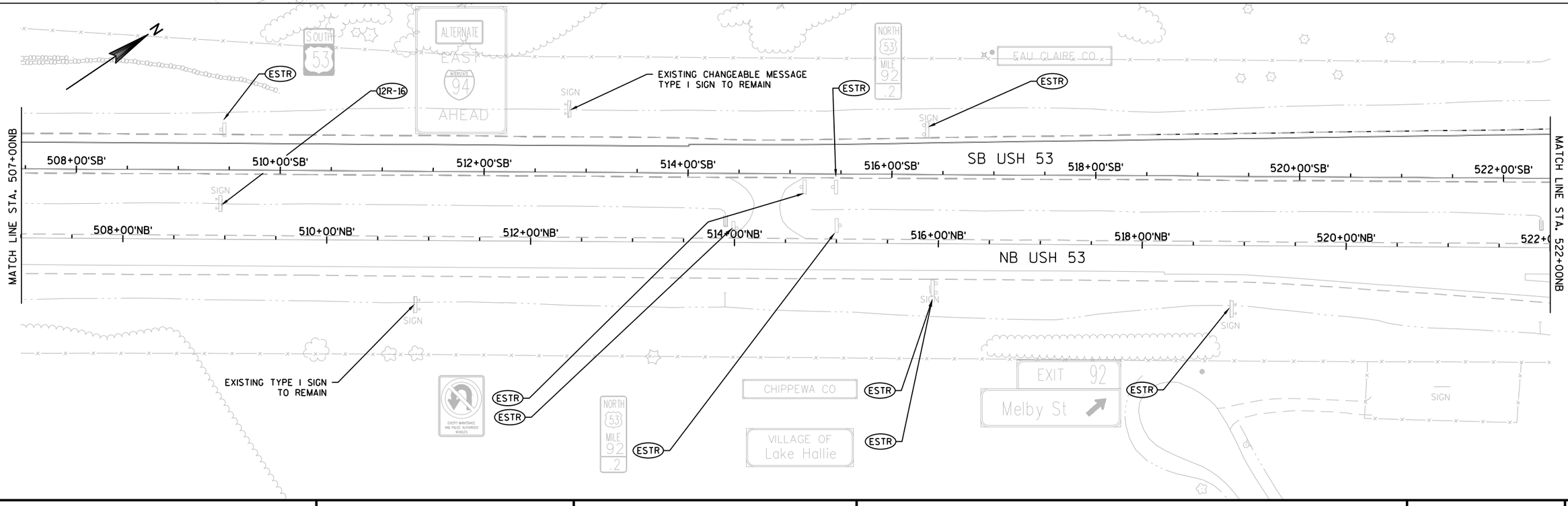
LEGEND

	EXISTING SIGN MOUNTED ON POST(S)	X-XX	DENOTES SIGN NUMBER
	EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS	XR-XX	DENOTES SIGN TO BE REMOVED
	PROPOSED SIGN MOUNTED ON POST(S)	XM-XX	DENOTES SIGN TO BE MOVED
	PROPOSED SIGN MOUNTED ON SIGN STRUCTURE	ESTR	EXISTING SIGN TO REMAIN
	PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS		

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 33	E

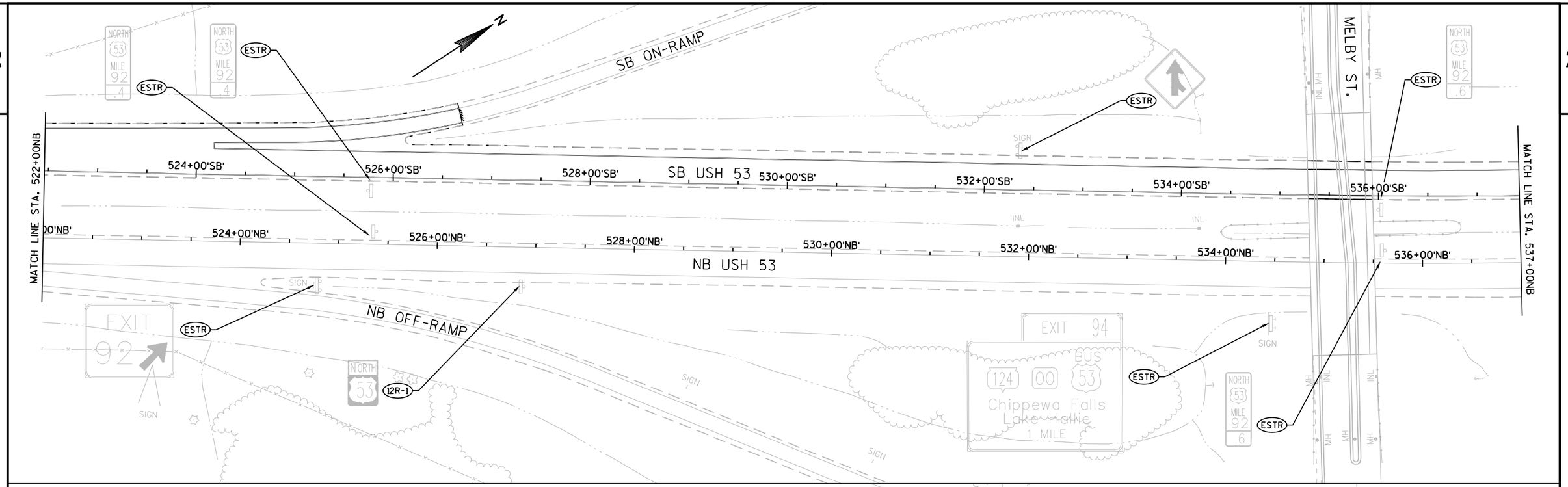
2





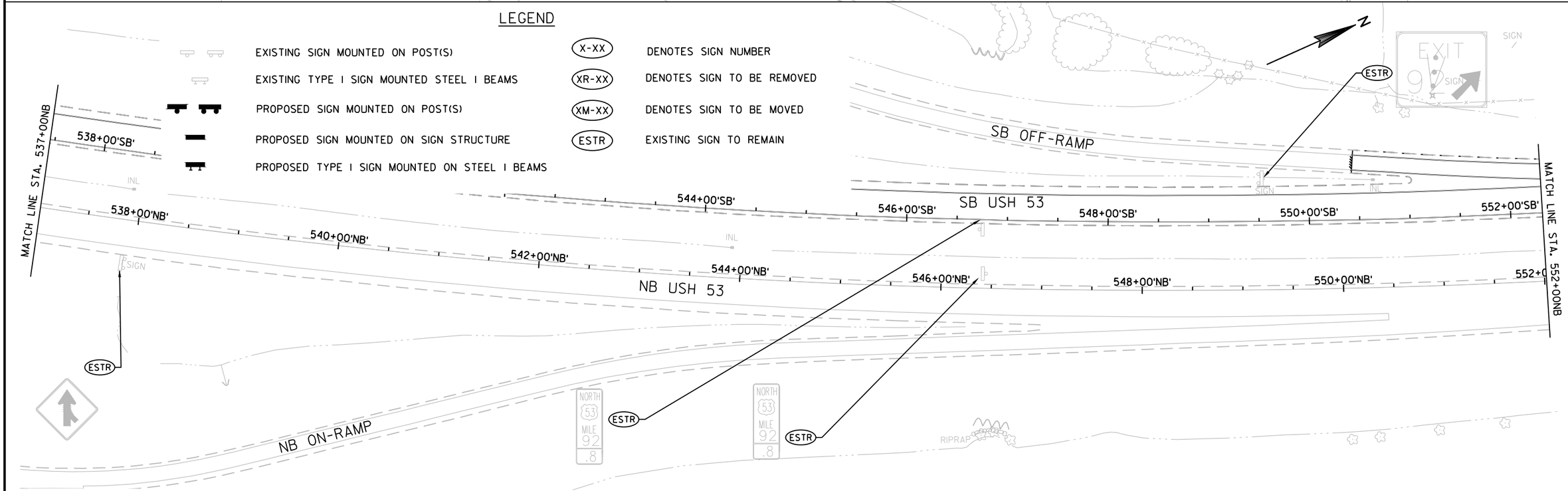
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 34	E

2



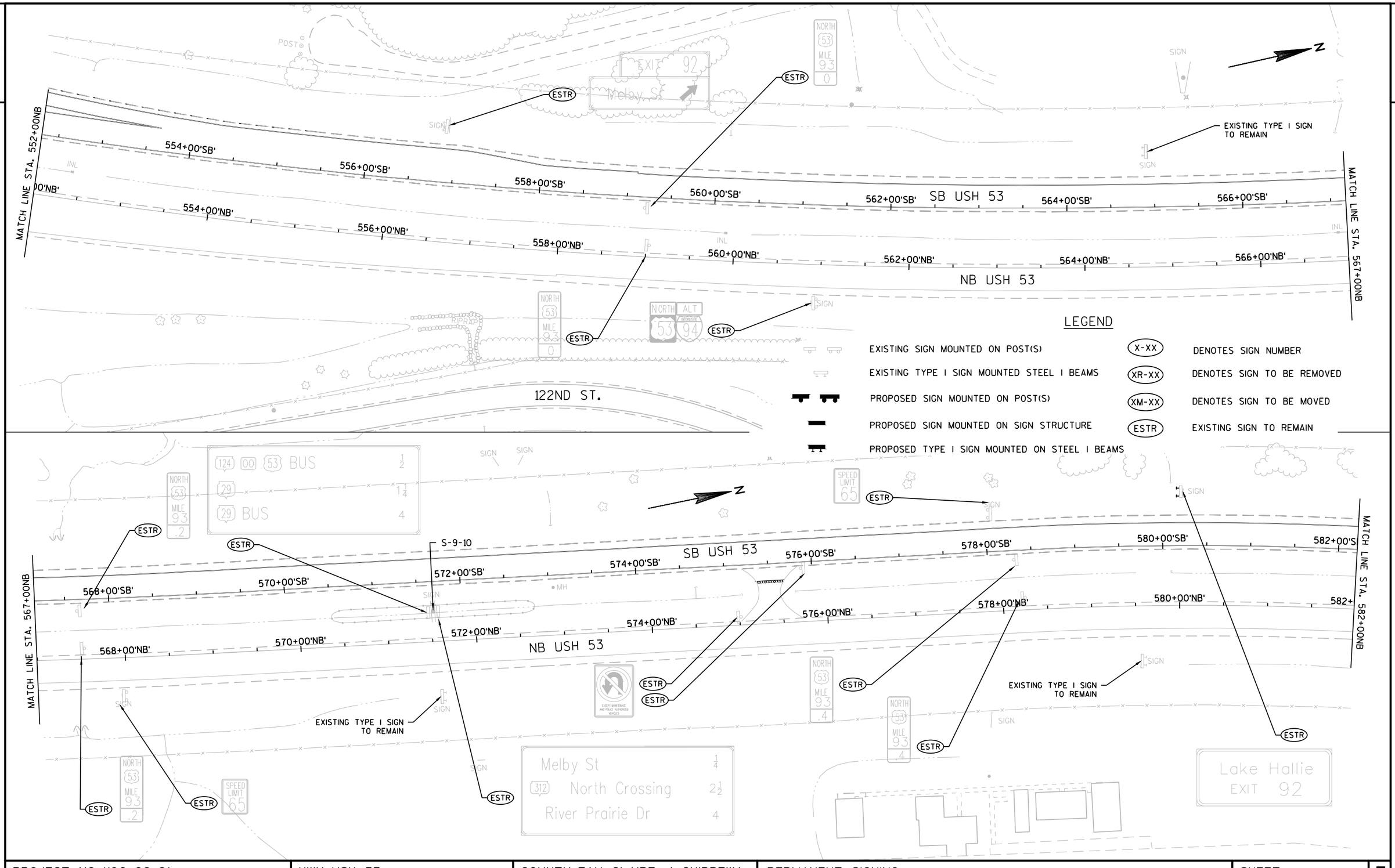
LEGEND

	EXISTING SIGN MOUNTED ON POST(S)	X-XX	DENOTES SIGN NUMBER
	EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS	XR-XX	DENOTES SIGN TO BE REMOVED
	PROPOSED SIGN MOUNTED ON POST(S)	XM-XX	DENOTES SIGN TO BE MOVED
	PROPOSED SIGN MOUNTED ON SIGN STRUCTURE	ESTR	EXISTING SIGN TO REMAIN
	PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS		



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 35 E

2

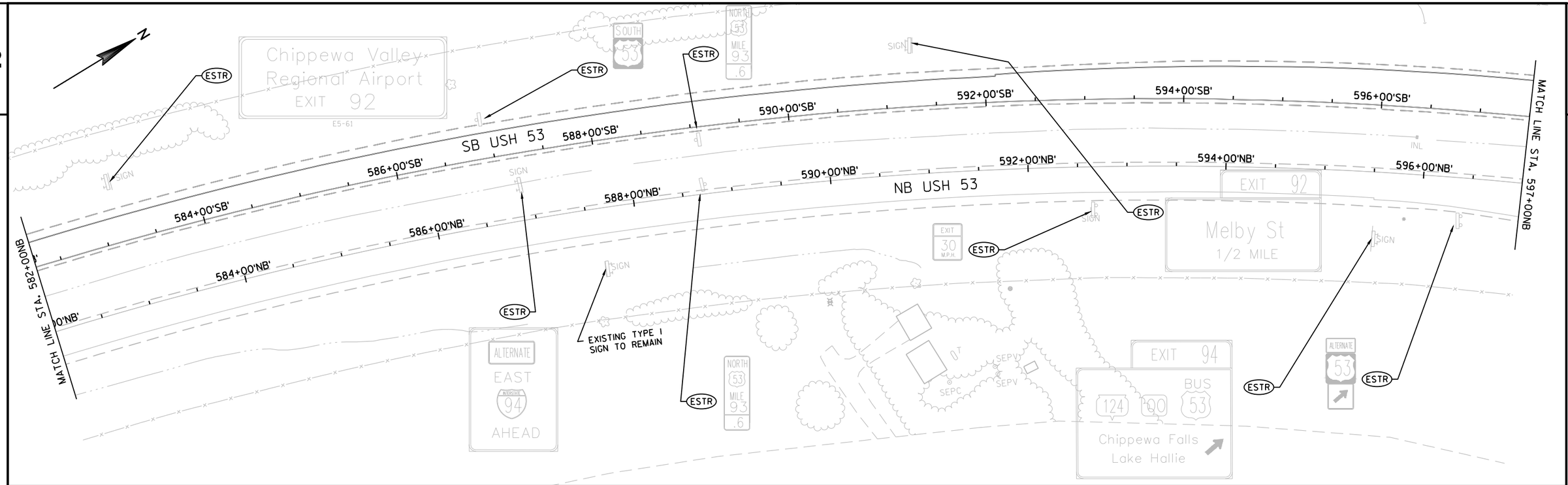


LEGEND

EXISTING SIGN MOUNTED ON POST(S)	X-XX	DENOTES SIGN NUMBER
EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS	XR-XX	DENOTES SIGN TO BE REMOVED
PROPOSED SIGN MOUNTED ON POST(S)	XM-XX	DENOTES SIGN TO BE MOVED
PROPOSED SIGN MOUNTED ON SIGN STRUCTURE	ESTR	EXISTING SIGN TO REMAIN
PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS		

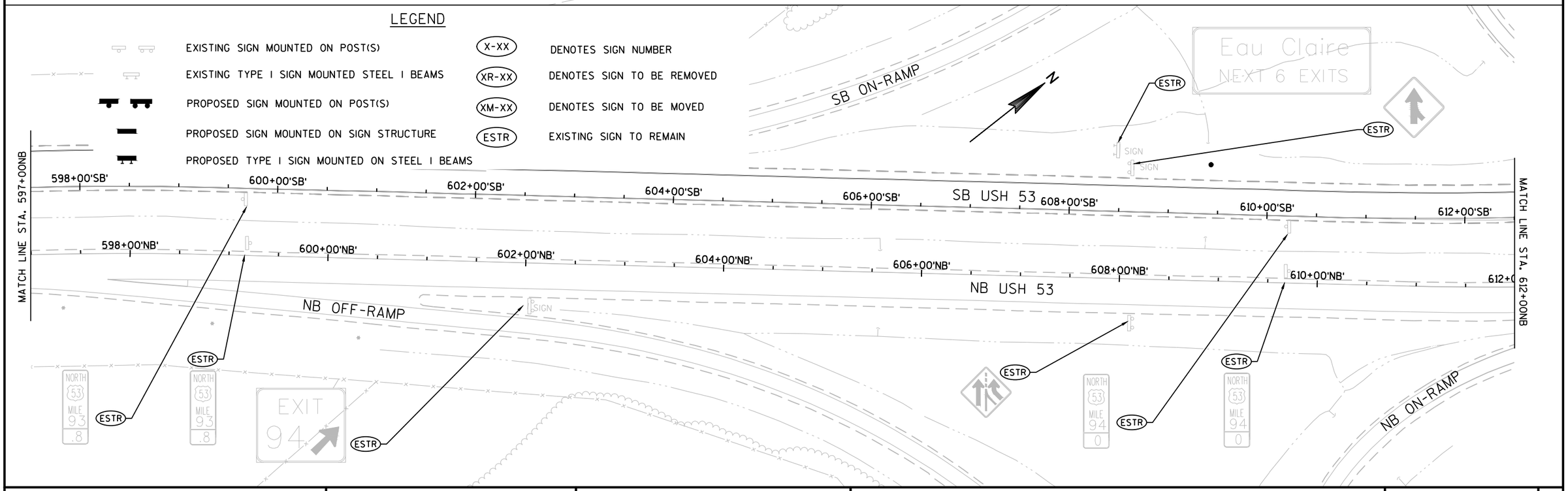
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 36	E

2

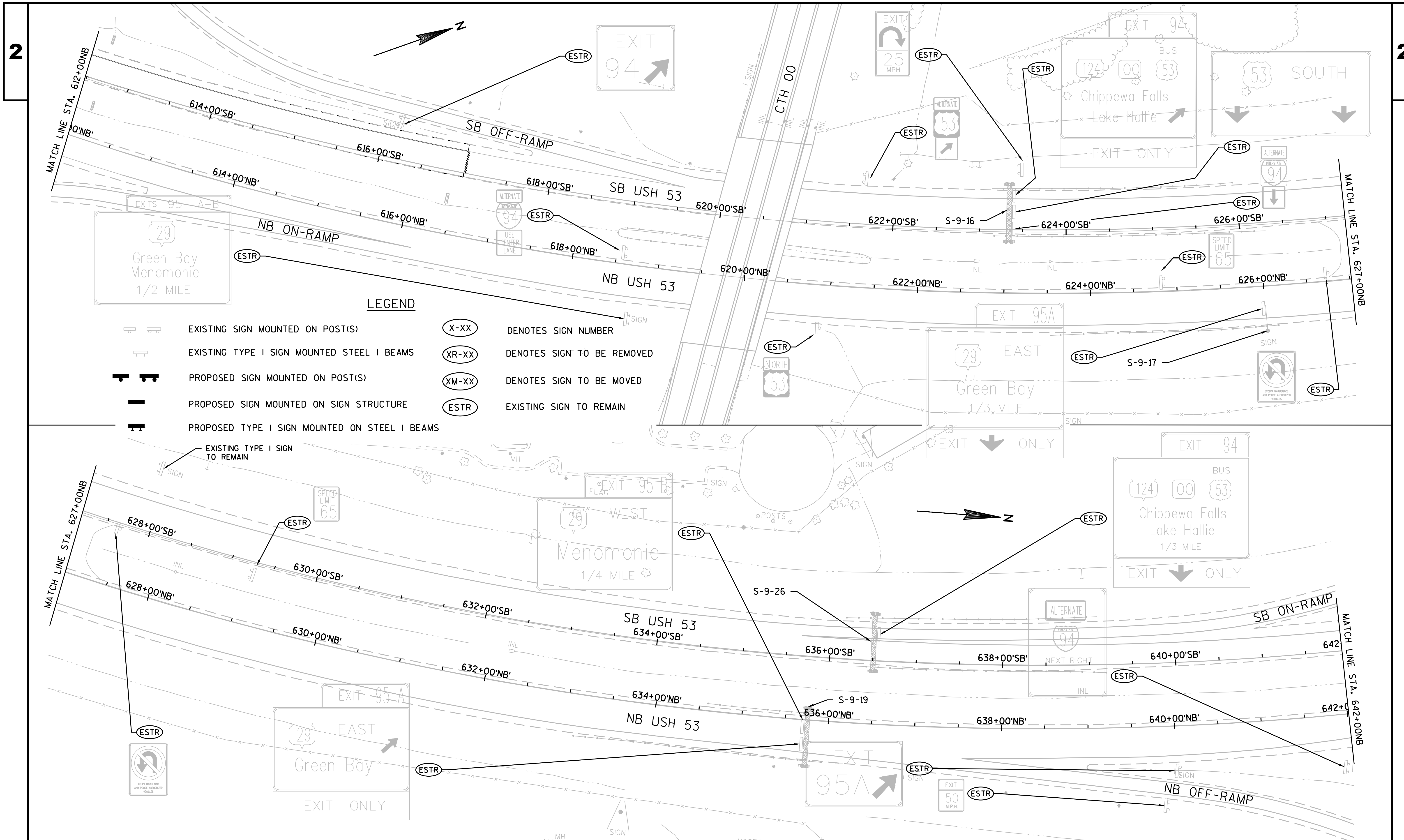


LEGEND

	EXISTING SIGN MOUNTED ON POST(S)	X-XX	DENOTES SIGN NUMBER
	EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS	XR-XX	DENOTES SIGN TO BE REMOVED
	PROPOSED SIGN MOUNTED ON POST(S)	XM-XX	DENOTES SIGN TO BE MOVED
	PROPOSED SIGN MOUNTED ON SIGN STRUCTURE	ESTR	EXISTING SIGN TO REMAIN
	PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS		



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 37	E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MATCH LINE STA. 612+00NB
614+00'SB'
616+00'SB'
618+00'SB'
620+00'SB'
622+00'SB'
624+00'SB'
626+00'SB'
614+00'NB'
616+00'NB'
618+00'NB'
620+00'NB'
622+00'NB'
624+00'NB'
626+00'NB'
SB OFF-RAMP
SB USH 53
NB ON-RAMP
NB USH 53
CTH OO
S-9-16
S-9-17
ESTR
MATCH LINE STA. 627+00NB
LEGEND
EXISTING SIGN MOUNTED ON POST(S)
EXISTING TYPE I SIGN MOUNTED STEEL I BEAMS
PROPOSED SIGN MOUNTED ON POST(S)
PROPOSED SIGN MOUNTED ON SIGN STRUCTURE
PROPOSED TYPE I SIGN MOUNTED ON STEEL I BEAMS
X-XX
DENOTES SIGN NUMBER
XR-XX
DENOTES SIGN TO BE REMOVED
XM-XX
DENOTES SIGN TO BE MOVED
ESTR
EXISTING SIGN TO REMAIN
EXISTING TYPE I SIGN TO REMAIN
628+00'SB'
630+00'SB'
632+00'SB'
634+00'SB'
636+00'SB'
638+00'SB'
640+00'SB'
628+00'NB'
630+00'NB'
632+00'NB'
634+00'NB'
636+00'NB'
638+00'NB'
640+00'NB'
SB USH 53
NB USH 53
SB ON-RAMP
NB OFF-RAMP
S-9-26
S-9-19
MATCH LINE STA. 642+00NB

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 38	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - SHEET - (15)
PLOT DATE : 3/28/2024 10:13 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : ###########
WISDOT/CADDS SHEET 44

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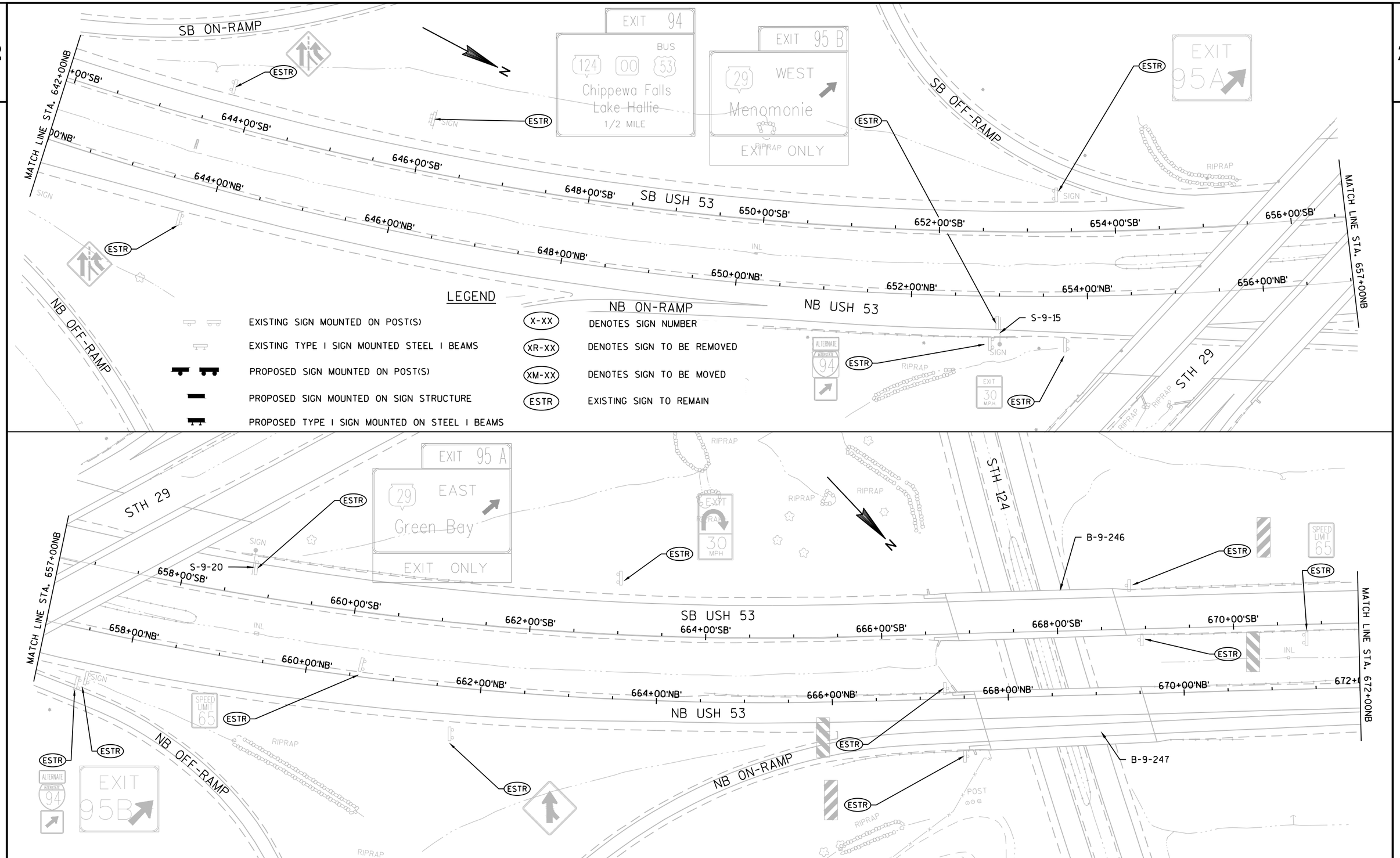
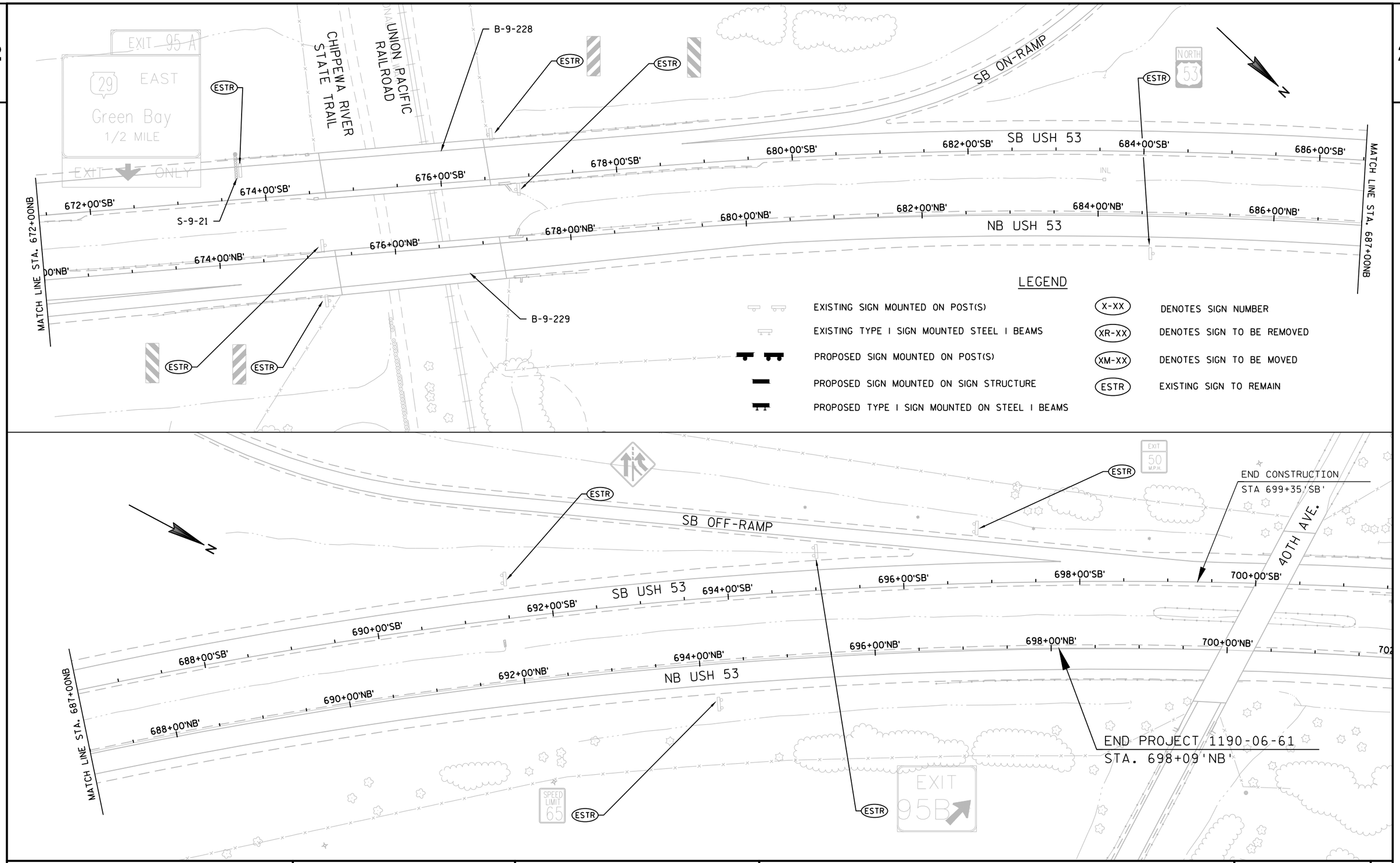


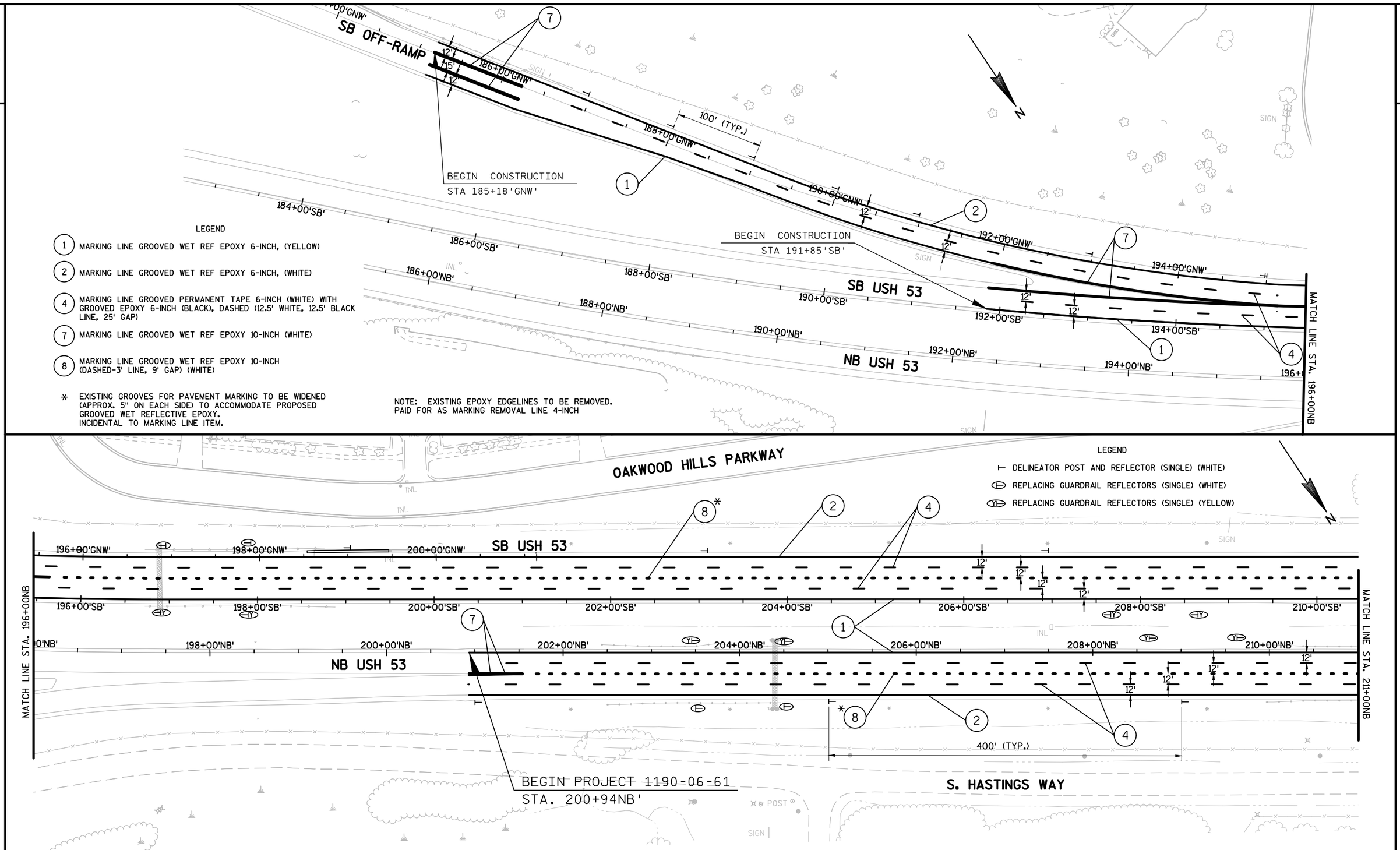
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 39 E

2



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PERMANENT SIGNING	SHEET 40	E

2



LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

* EXISTING GROOVES FOR PAVEMENT MARKING TO BE WIDENED (APPROX. 5" ON EACH SIDE) TO ACCOMMODATE PROPOSED GROOVED WET REFLECTIVE EPOXY. INCIDENTAL TO MARKING LINE ITEM.

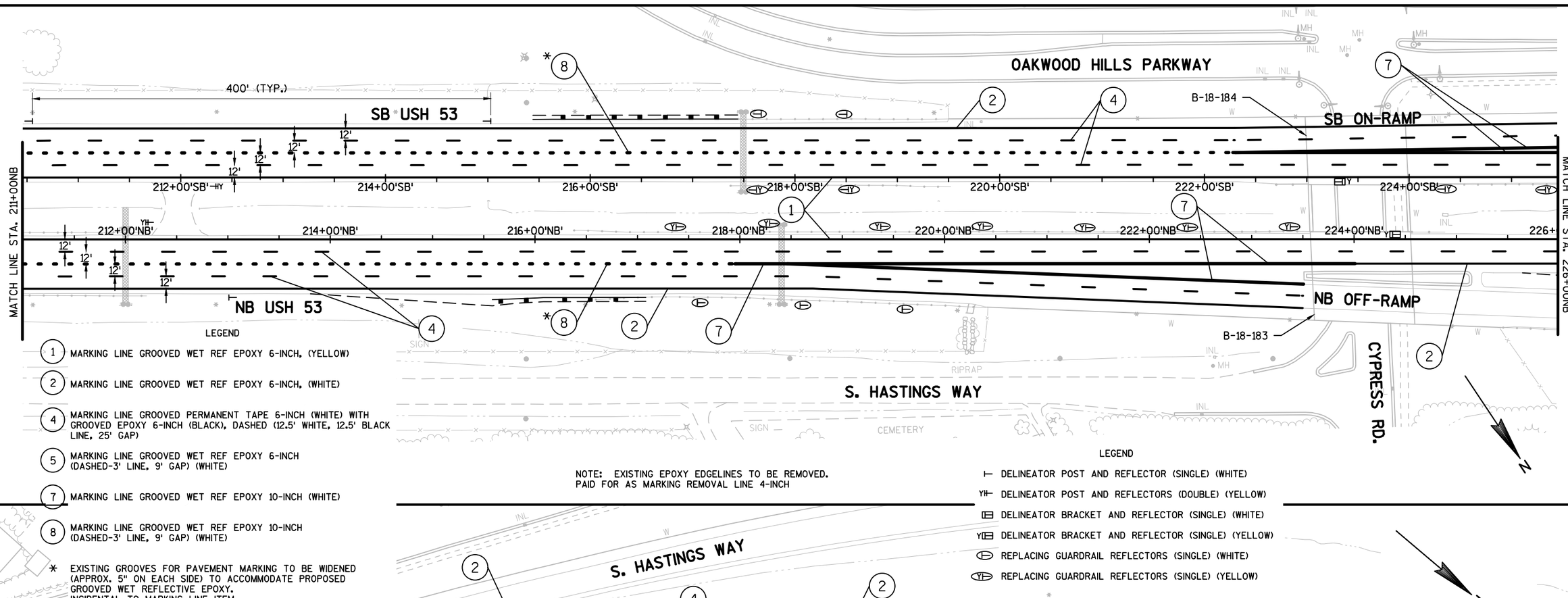
NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

LEGEND

- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 41	E

2



LEGEND

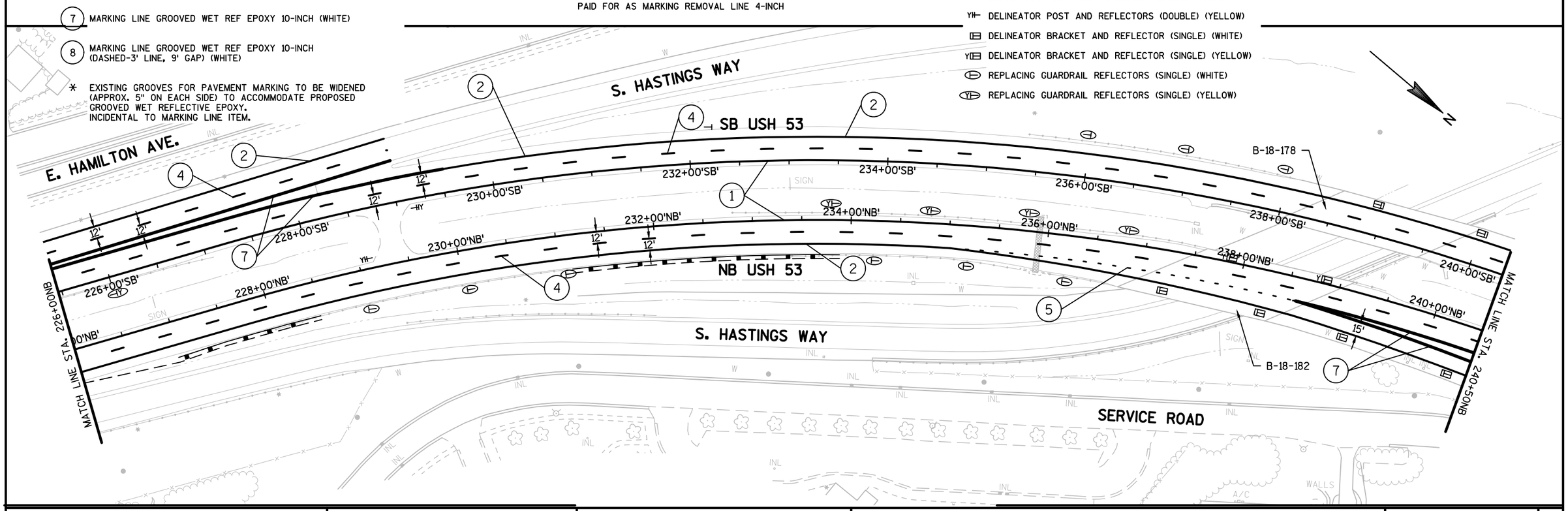
1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
5. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

* EXISTING GROOVES FOR PAVEMENT MARKING TO BE WIDENED (APPROX. 5" ON EACH SIDE) TO ACCOMMODATE PROPOSED GROOVED WET REFLECTIVE EPOXY. INCIDENTAL TO MARKING LINE ITEM.

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

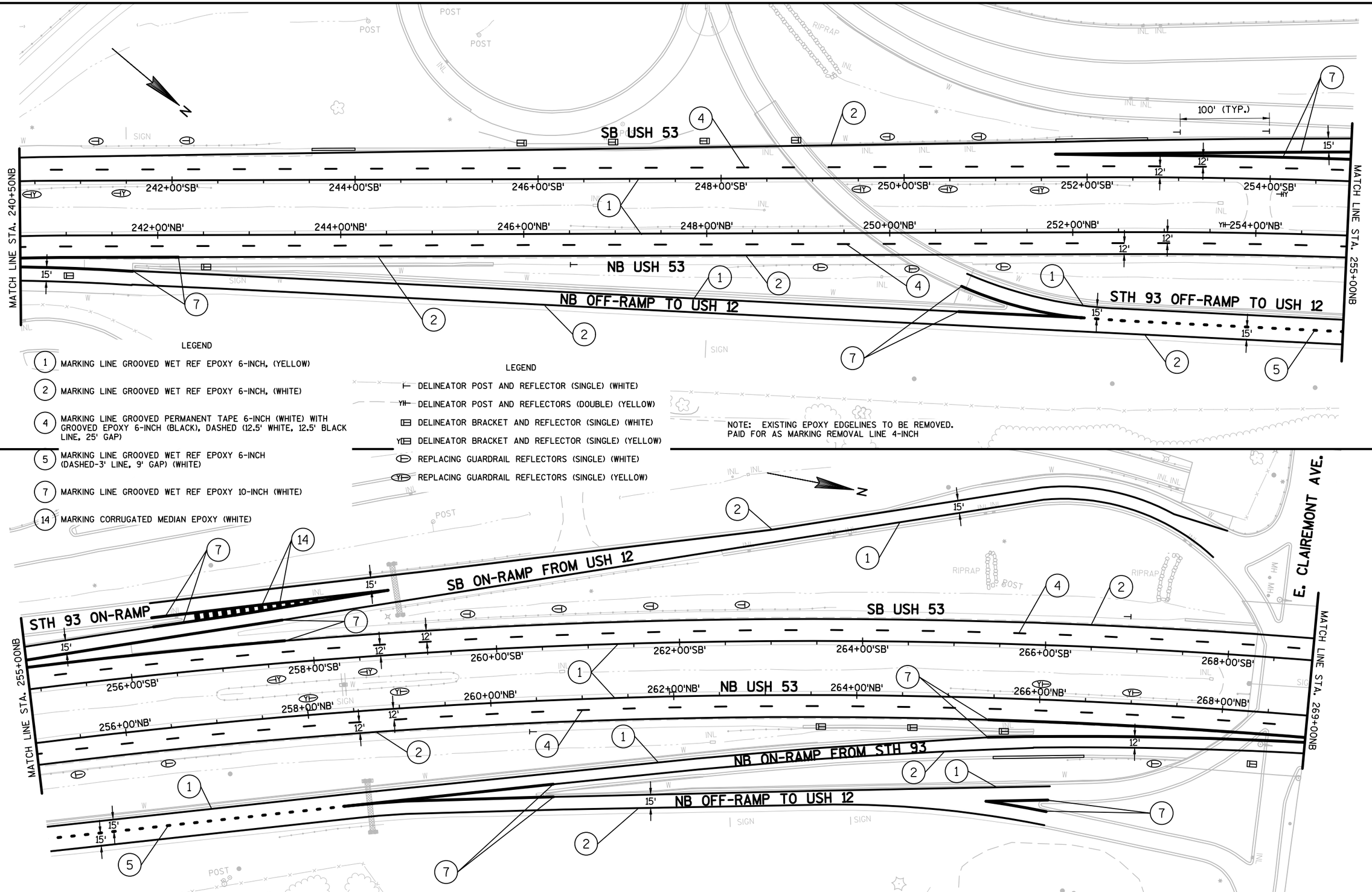
LEGEND

- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- YH DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)
- DELINEATOR BRACKET AND REFLECTOR (SINGLE) (WHITE)
- Y DELINEATOR BRACKET AND REFLECTOR (SINGLE) (YELLOW)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)
- Y REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 42	E

2



LEGEND

1 MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)

2 MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)

4 MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)

5 MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

7 MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)

14 MARKING CORRUGATED MEDIAN EPOXY (WHITE)

LEGEND

DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)

YH DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)

DELINEATOR BRACKET AND REFLECTOR (SINGLE) (WHITE)

YE DELINEATOR BRACKET AND REFLECTOR (SINGLE) (YELLOW)

REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)

YE REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED.
PAID FOR AS MARKING REMOVAL LINE 4-INCH

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 43	E

LEGEND

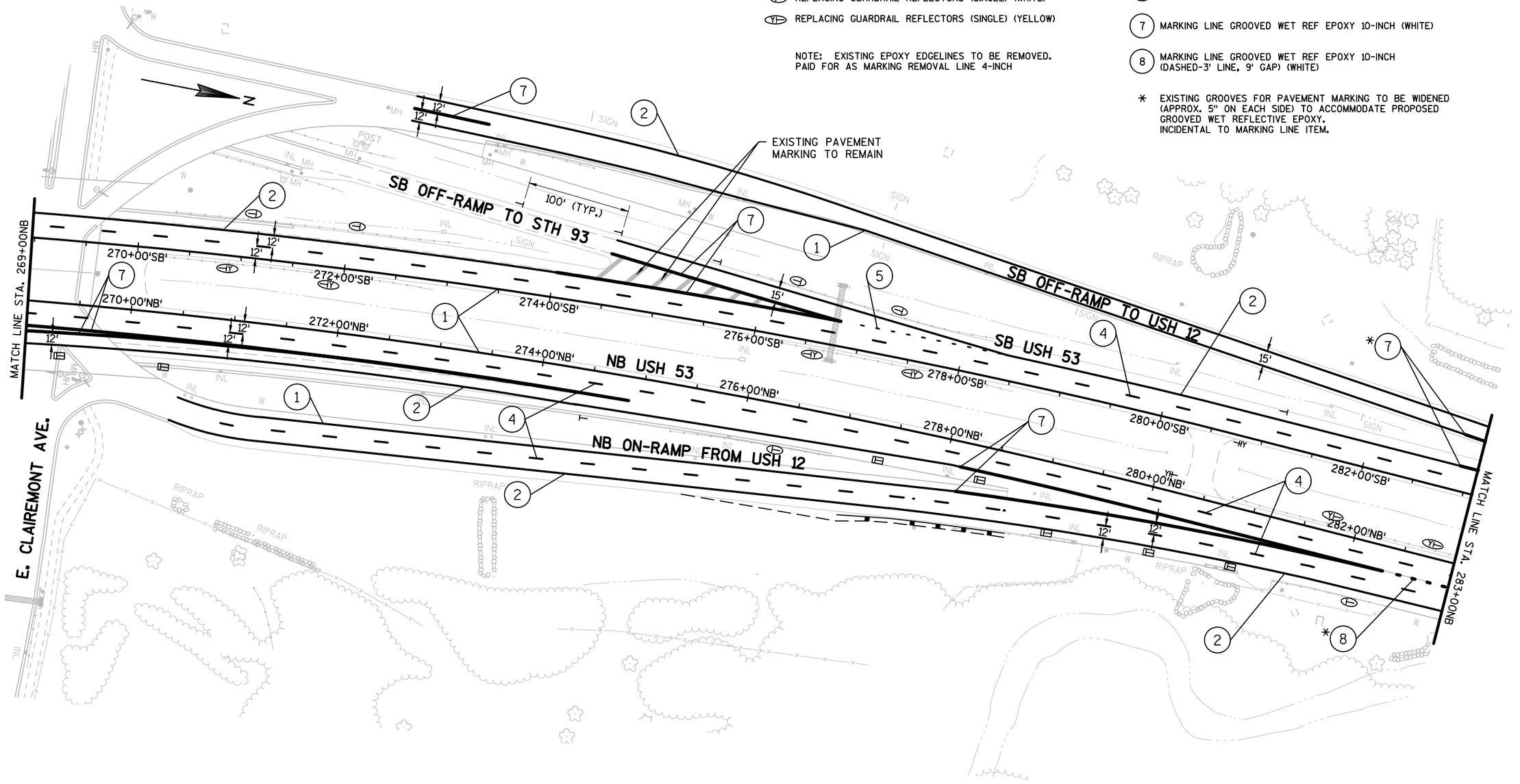
- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)
- DELINEATOR BRACKET AND REFLECTOR (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
5. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

* EXISTING GROOVES FOR PAVEMENT MARKING TO BE WIDENED (APPROX. 5" ON EACH SIDE) TO ACCOMMODATE PROPOSED GROOVED WET REFLECTIVE EPOXY. INCIDENTAL TO MARKING LINE ITEM.



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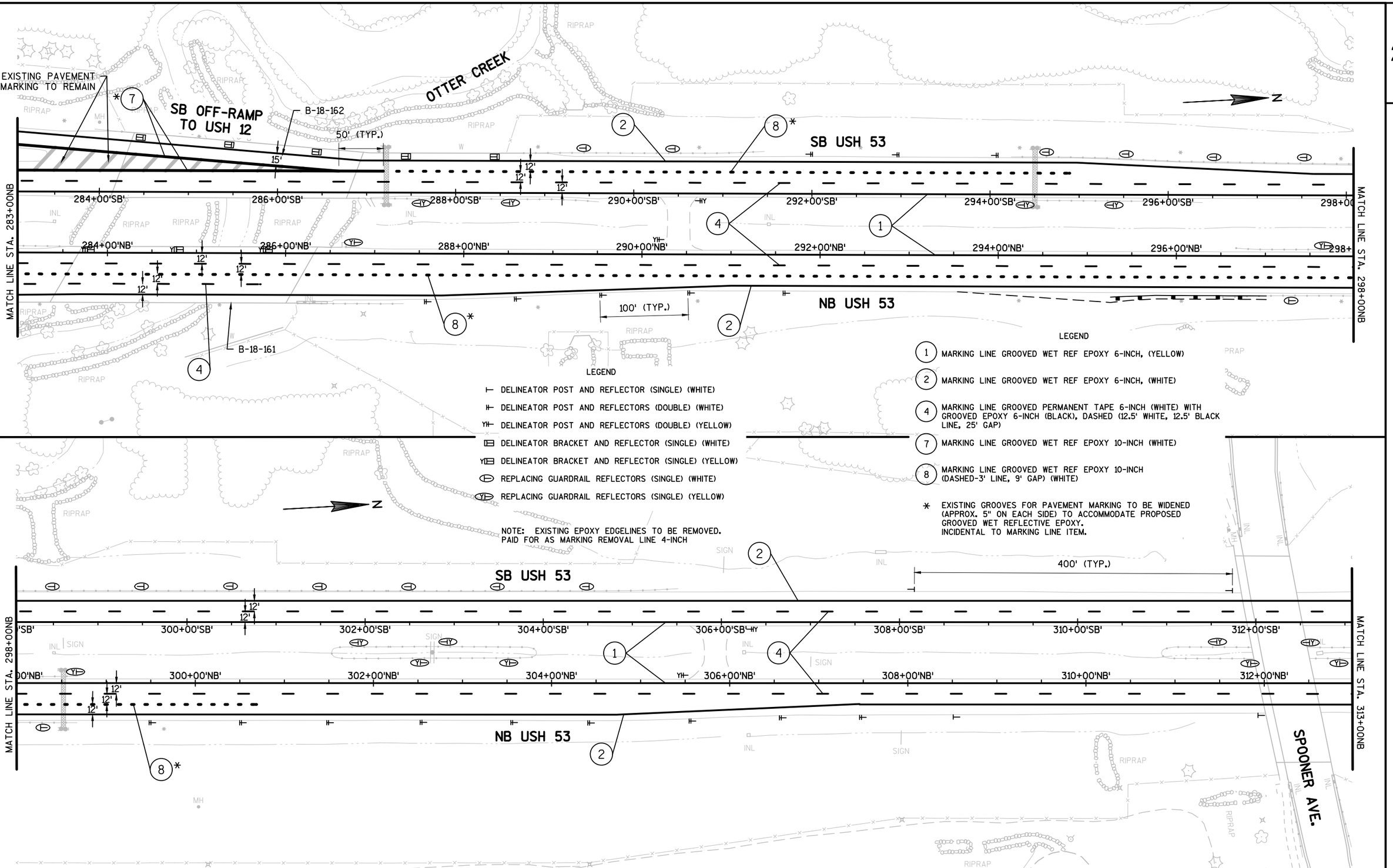


LEGEND

- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)
- DELINEATOR BRACKET AND REFLECTOR (SINGLE) (WHITE)
- DELINEATOR BRACKET AND REFLECTOR (SINGLE) (YELLOW)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

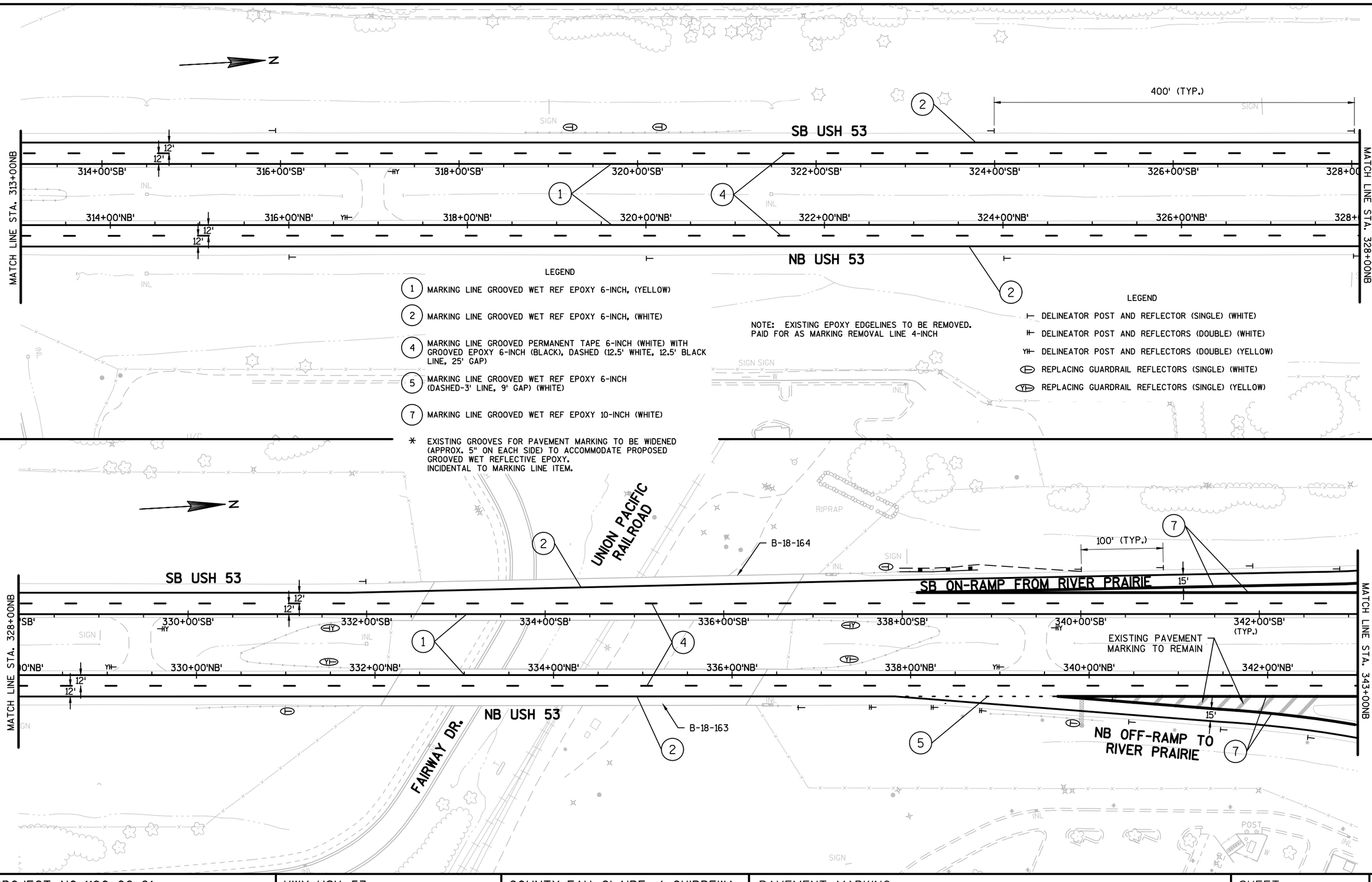
NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

* EXISTING GROOVES FOR PAVEMENT MARKING TO BE WIDENED (APPROX. 5" ON EACH SIDE) TO ACCOMMODATE PROPOSED GROOVED WET REFLECTIVE EPOXY. INCIDENTAL TO MARKING LINE ITEM.

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 45	E



LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
5. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)

* EXISTING GROOVES FOR PAVEMENT MARKING TO BE WIDENED (APPROX. 5" ON EACH SIDE) TO ACCOMMODATE PROPOSED GROOVED WET REFLECTIVE EPOXY. INCIDENTAL TO MARKING LINE ITEM.

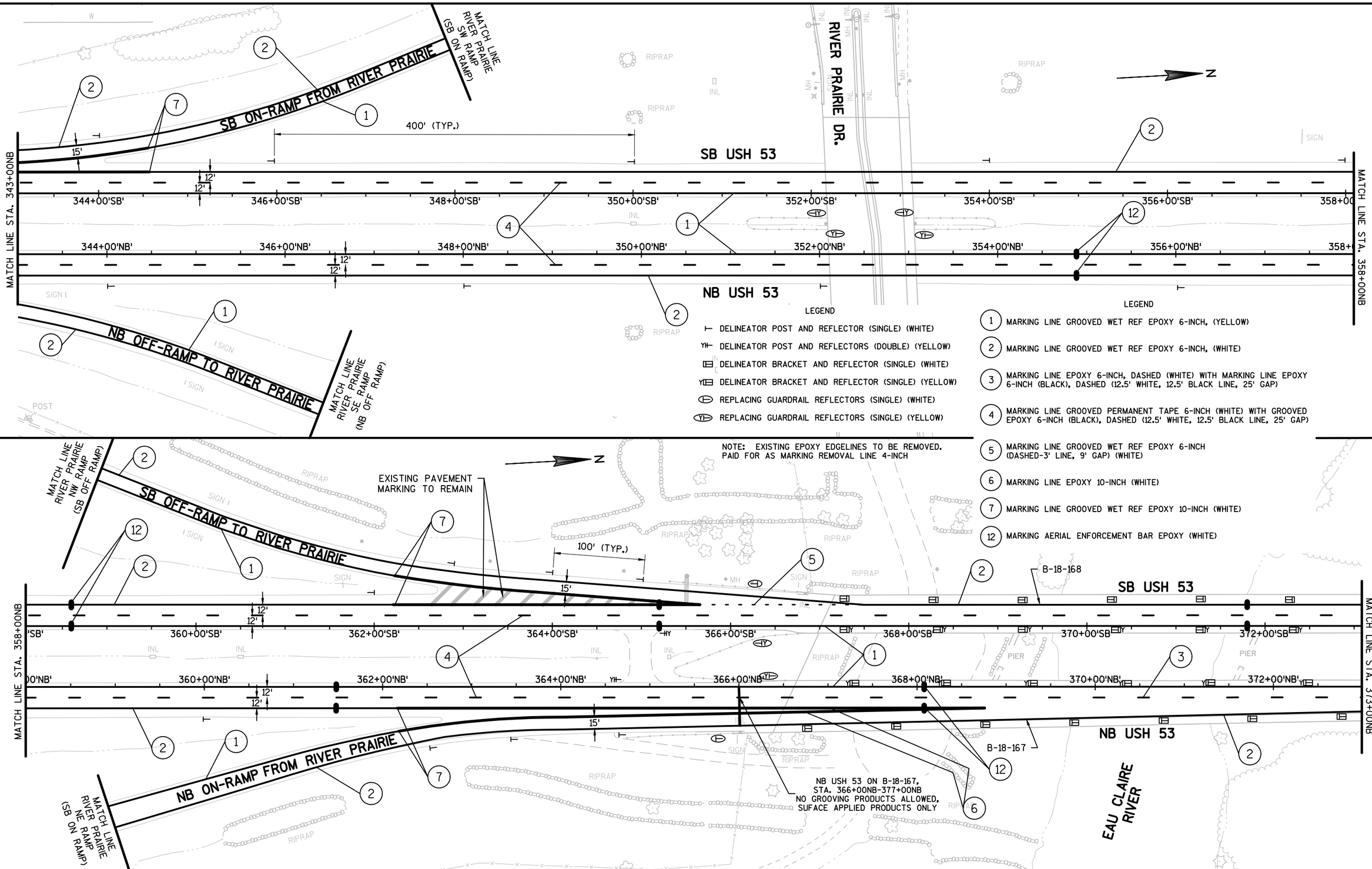
NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

LEGEND

- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

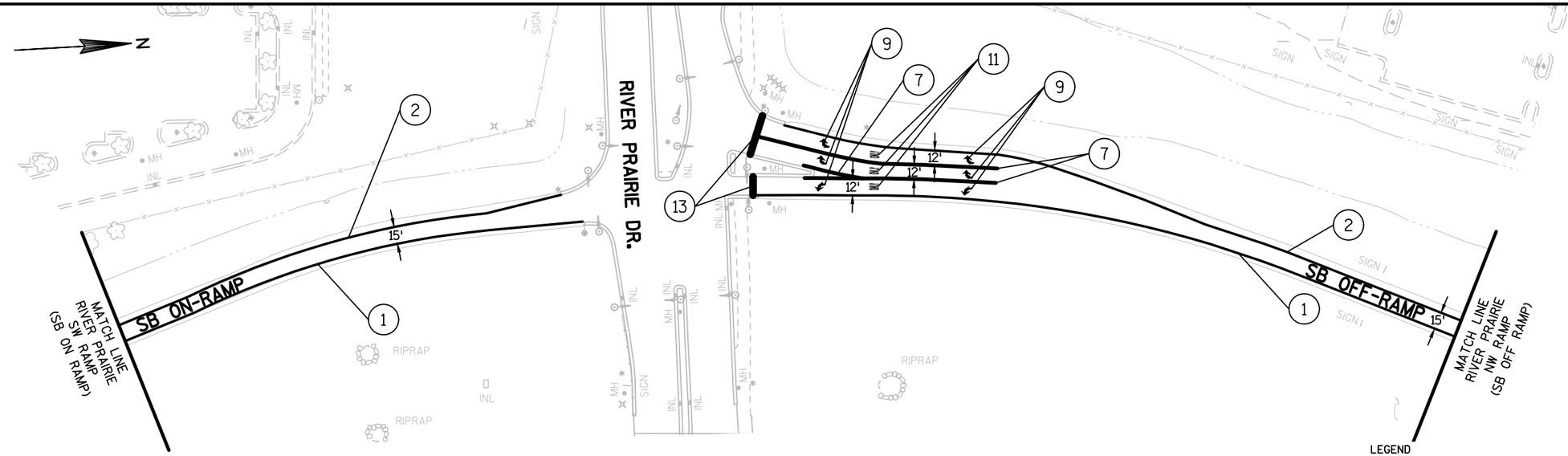
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 46 E

2



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 47	E

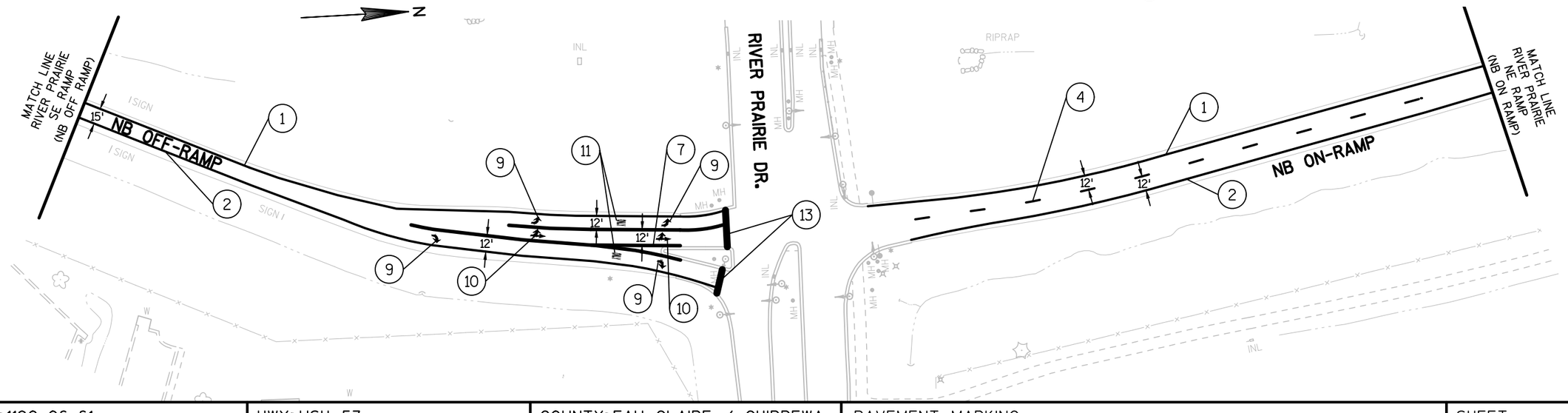
FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - SHEET - (6)
PLOT DATE : 4/10/2024 12:05 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 44



NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED.
PAID FOR AS MARKING REMOVAL LINE 4-INCH

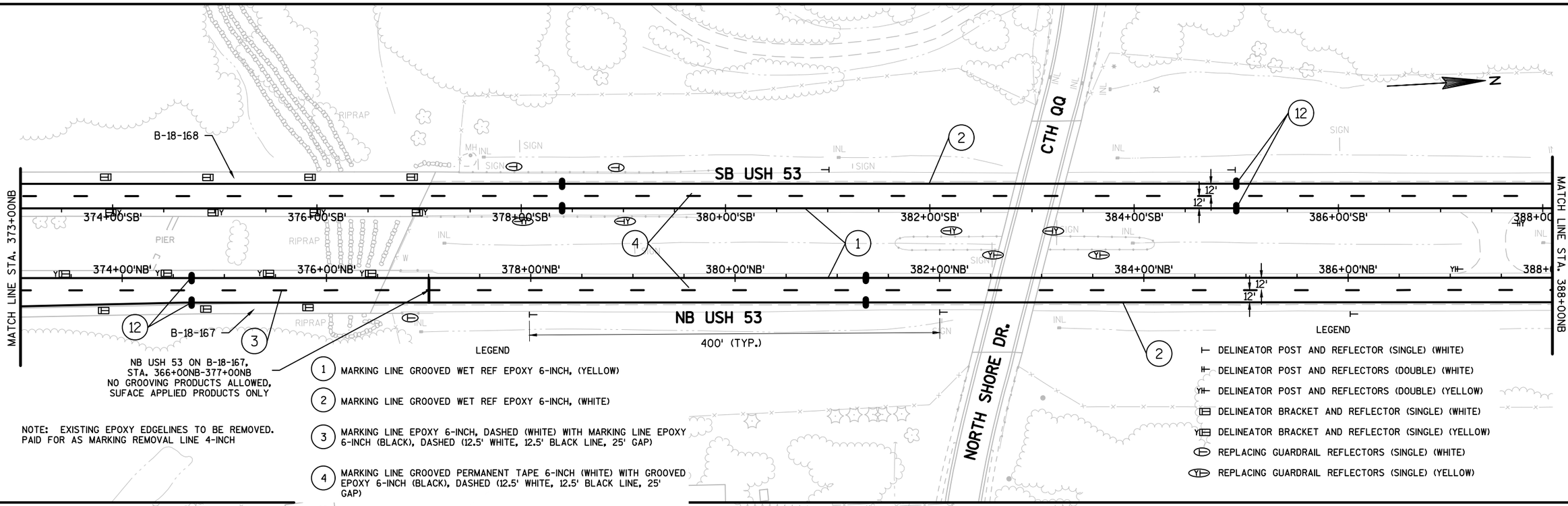
LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
9. MARKING ARROW EPOXY (TYPE 2) (WHITE)
10. MARKING ARROW EPOXY (TYPE 3) (WHITE)
11. MARKING WORD EPOXY (ONLY) (WHITE)
13. MARKING STOP LINE EPOXY 18-INCH (WHITE)



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 48	E

2



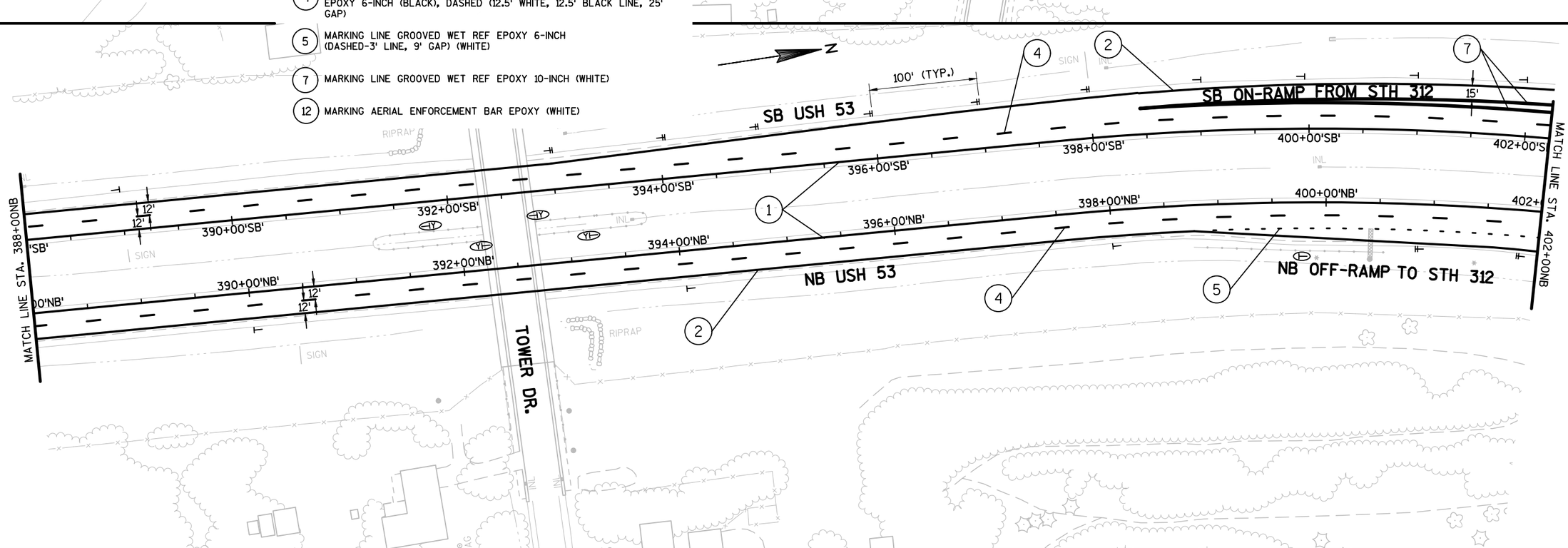
NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

LEGEND

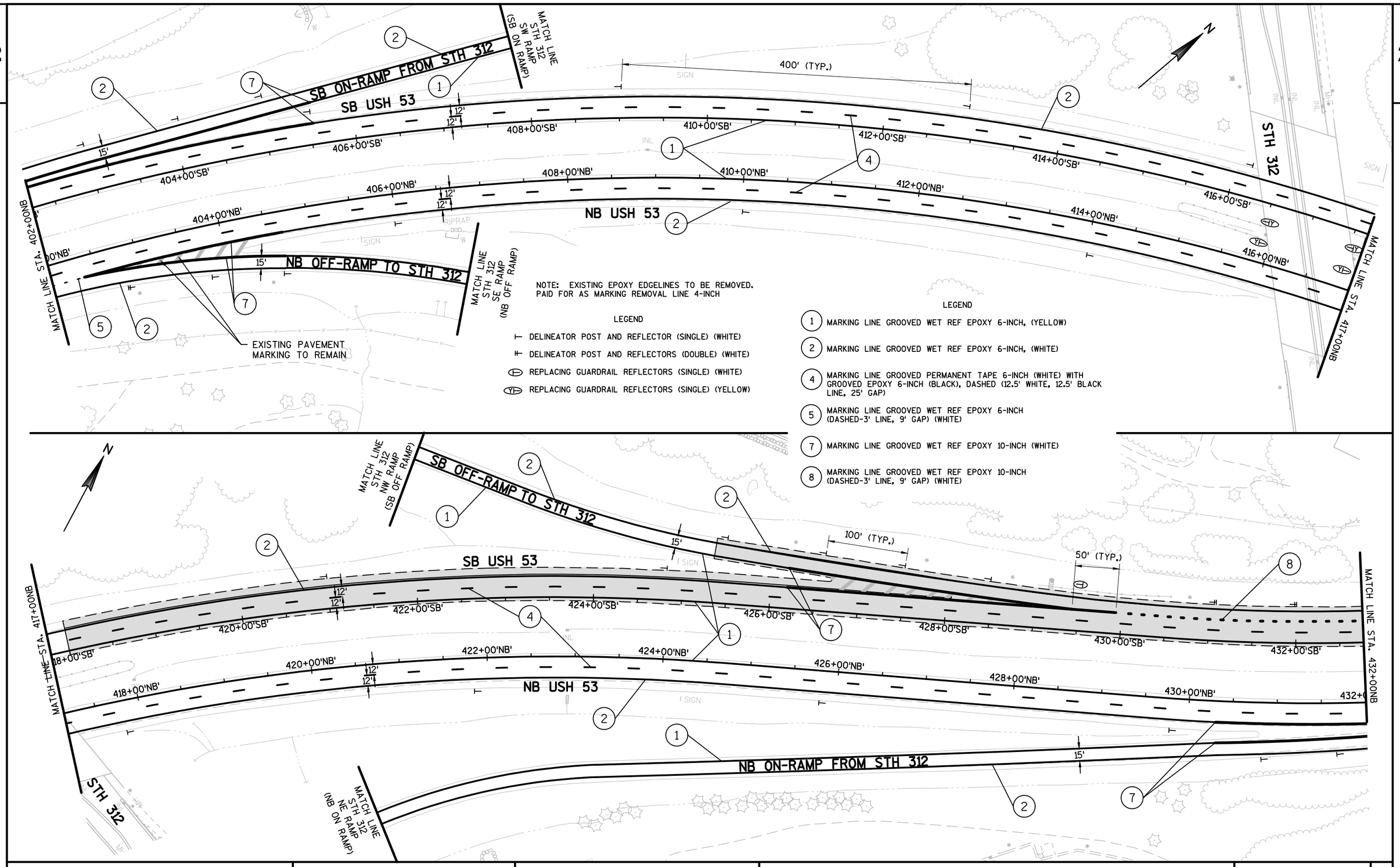
1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
3. MARKING LINE EPOXY 6-INCH, DASHED (WHITE) WITH MARKING LINE EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
5. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
12. MARKING AERIAL ENFORCEMENT BAR EPOXY (WHITE)

LEGEND

- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (WHITE)
- YH DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)
- DELINEATOR BRACKET AND REFLECTOR (SINGLE) (WHITE)
- YB DELINEATOR BRACKET AND REFLECTOR (SINGLE) (YELLOW)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)
- YR REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 49 E



NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

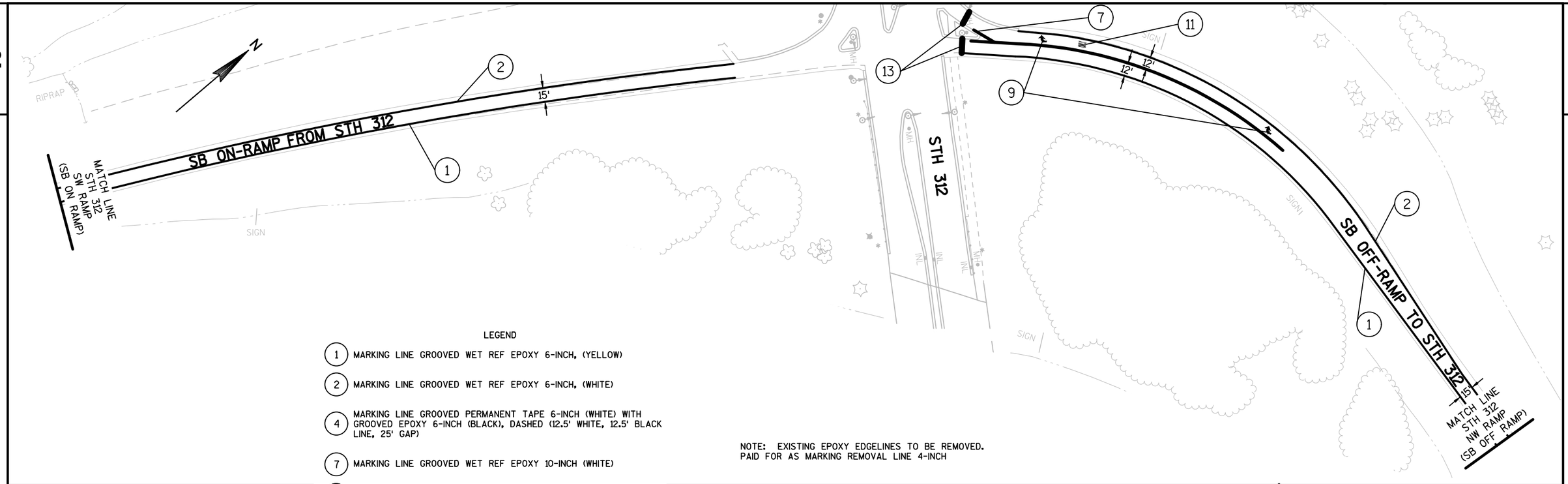
LEGEND

- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
5. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

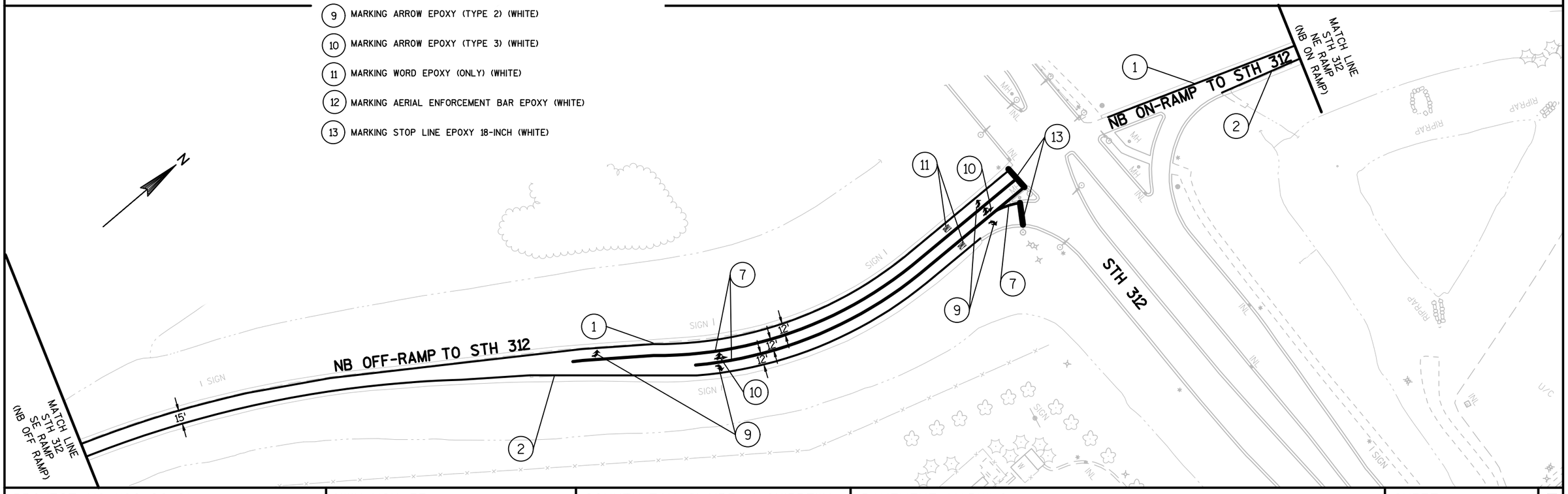
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 50	E



LEGEND

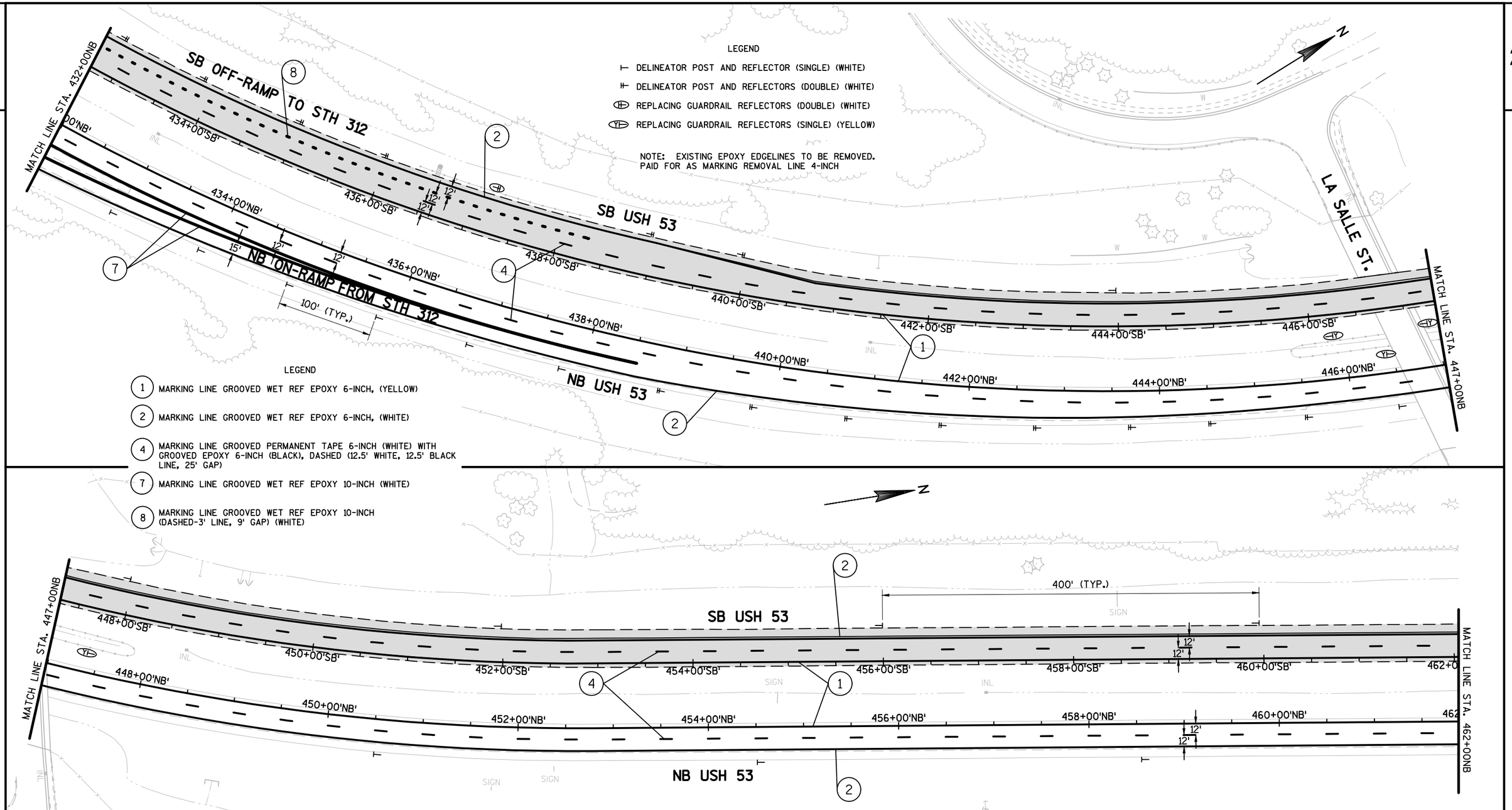
1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
9. MARKING ARROW EPOXY (TYPE 2) (WHITE)
10. MARKING ARROW EPOXY (TYPE 3) (WHITE)
11. MARKING WORD EPOXY (ONLY) (WHITE)
12. MARKING AERIAL ENFORCEMENT BAR EPOXY (WHITE)
13. MARKING STOP LINE EPOXY 18-INCH (WHITE)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH



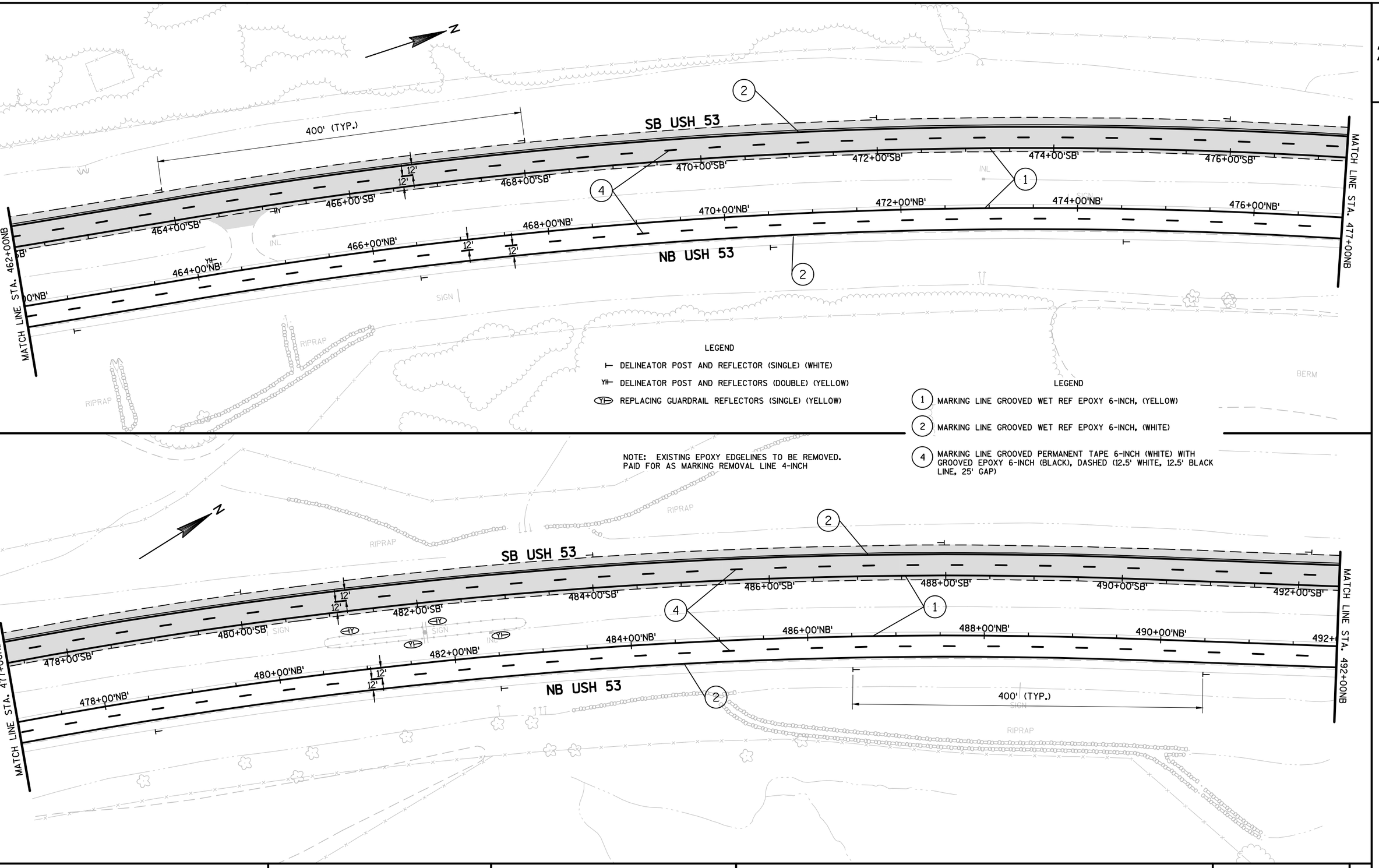
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 51	E

2



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 52	E

2



LEGEND

- ⊢ DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- YH⊢ DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)
- (YH) REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

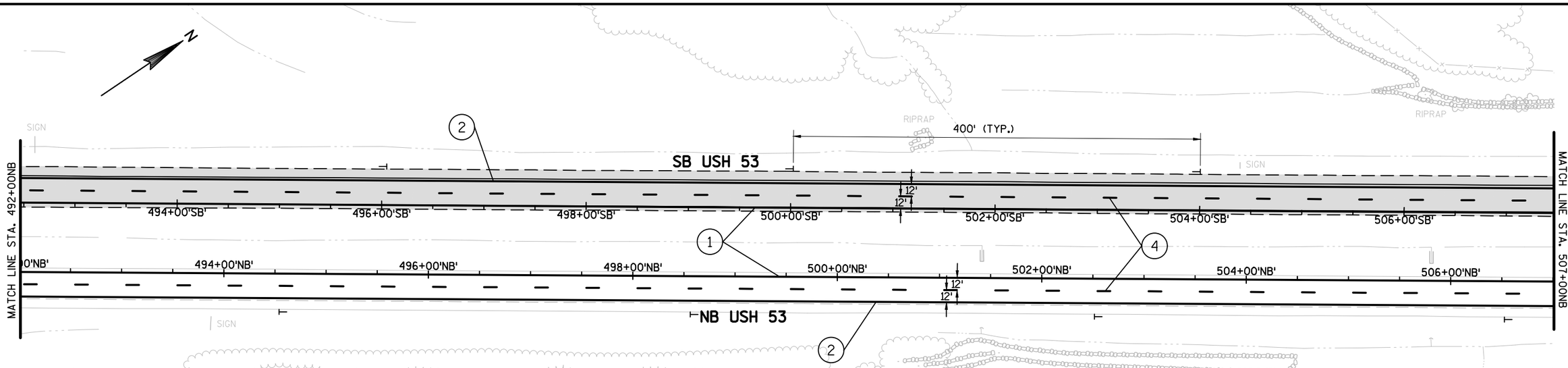
NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 53	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - SHEET - (10)
PLOT DATE : 4/10/2024 12:10 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 44



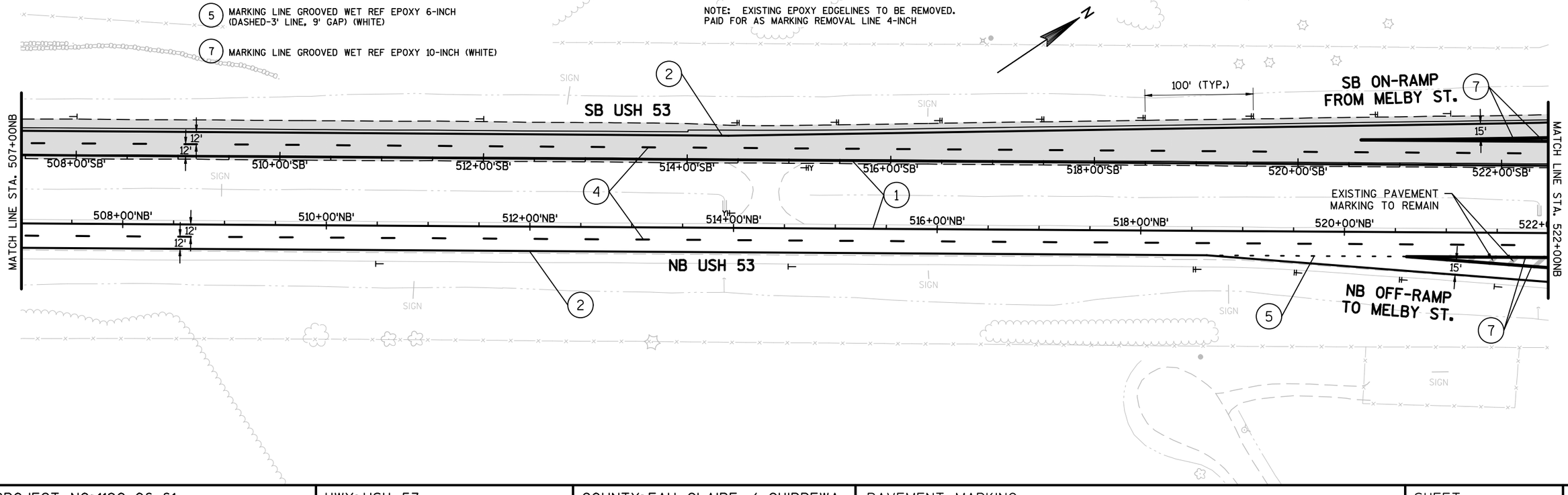
LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
5. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)

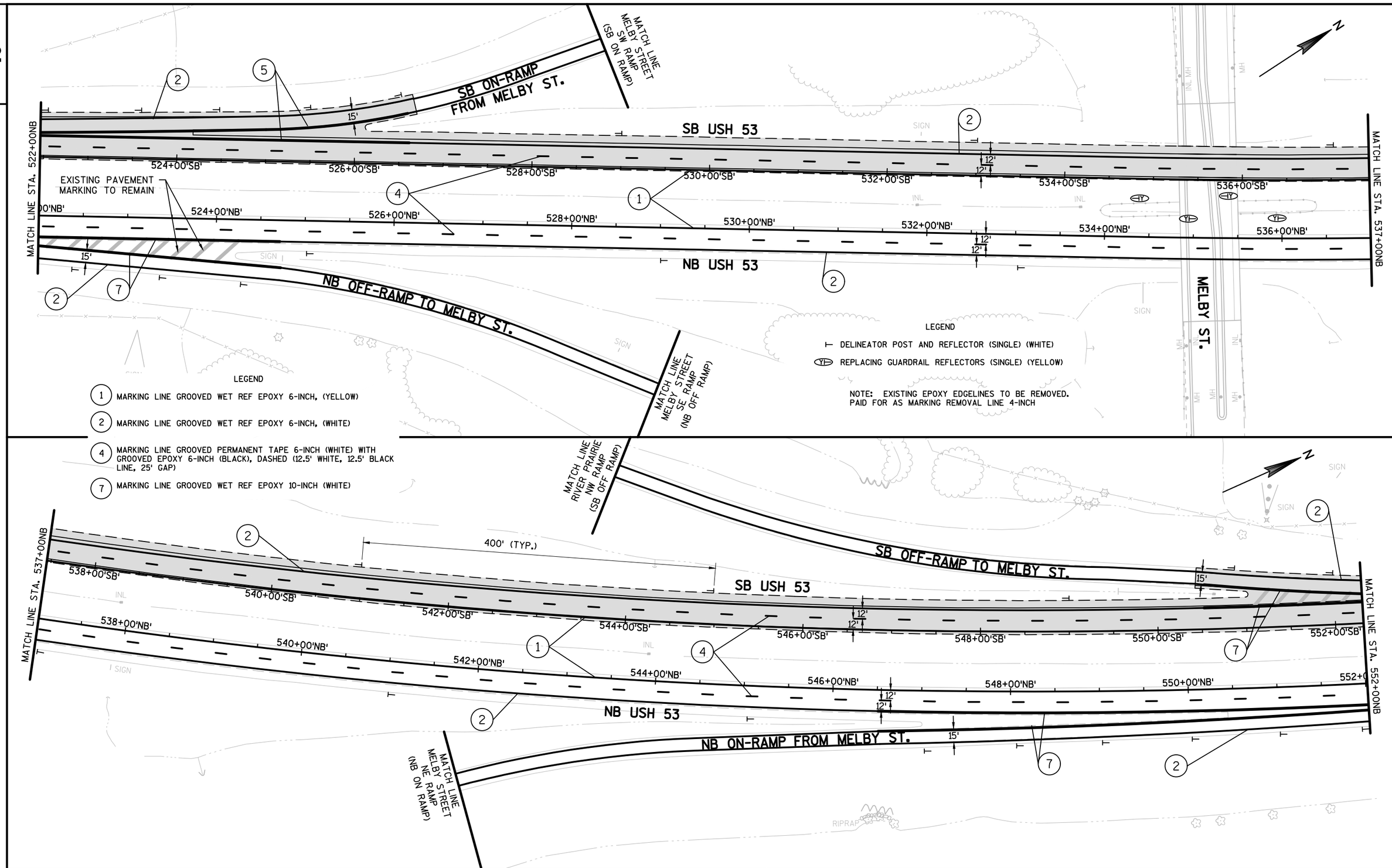
LEGEND

- ⊢ DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- ⊩ DELINEATOR POST AND REFLECTORS (DOUBLE) (WHITE)
- YH DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 54	E



LEGEND

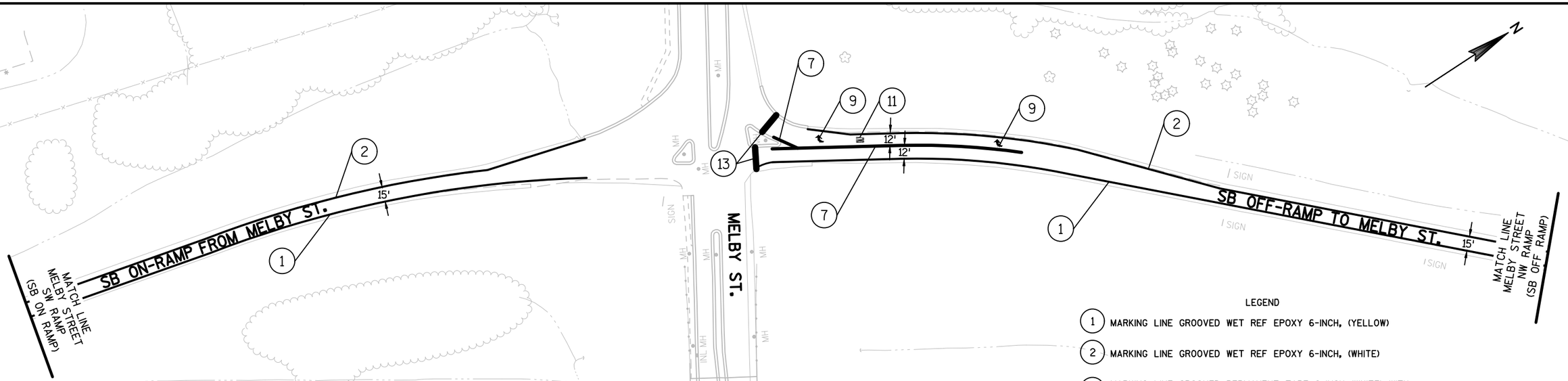
1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)

LEGEND

- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

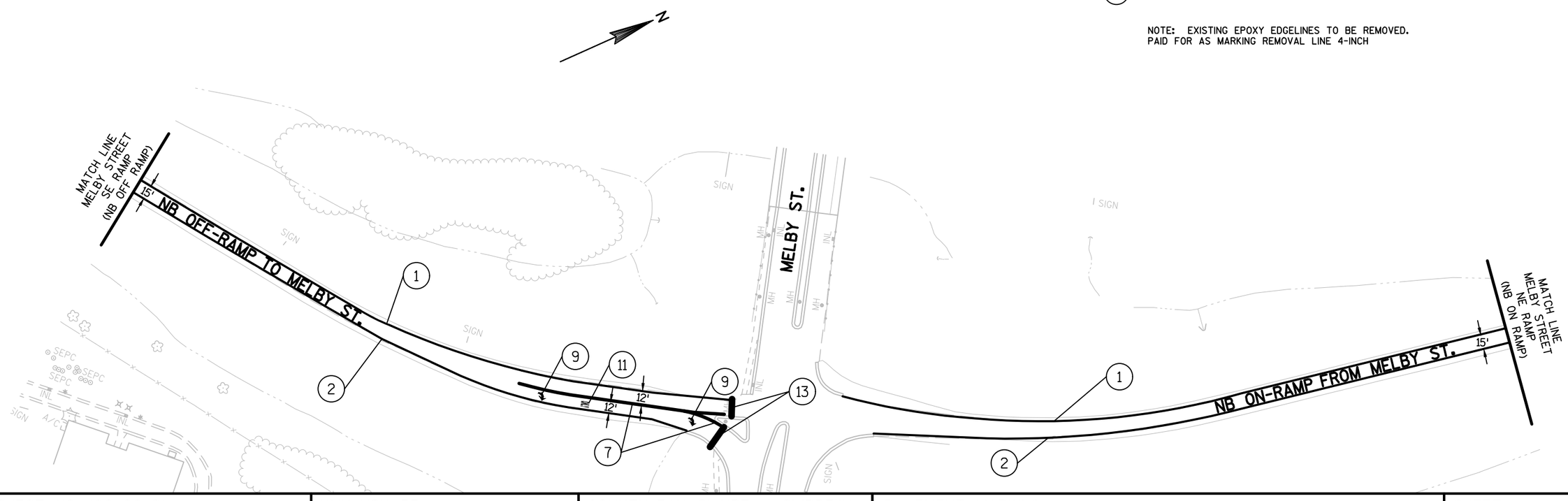
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 55	E



LEGEND

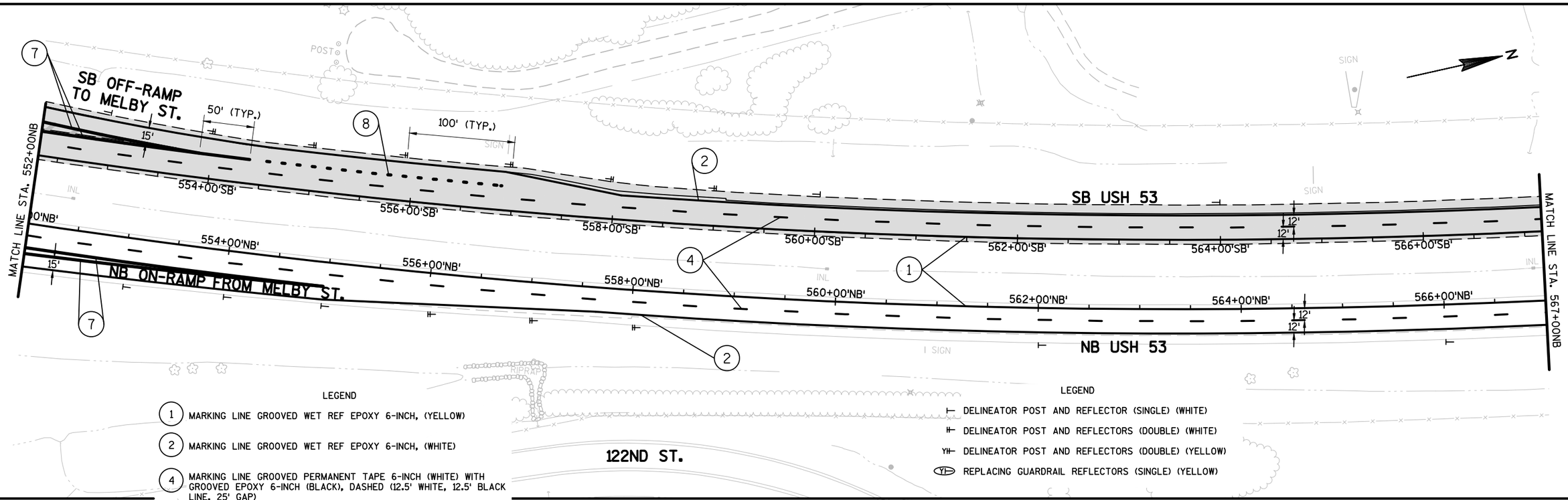
1	MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2	MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4	MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
9	MARKING ARROW EPOXY (TYPE 2) (WHITE)
11	MARKING WORD EPOXY (ONLY) (WHITE)
13	MARKING STOP LINE EPOXY 18-INCH (WHITE)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED.
PAID FOR AS MARKING REMOVAL LINE 4-INCH



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 56 E

2



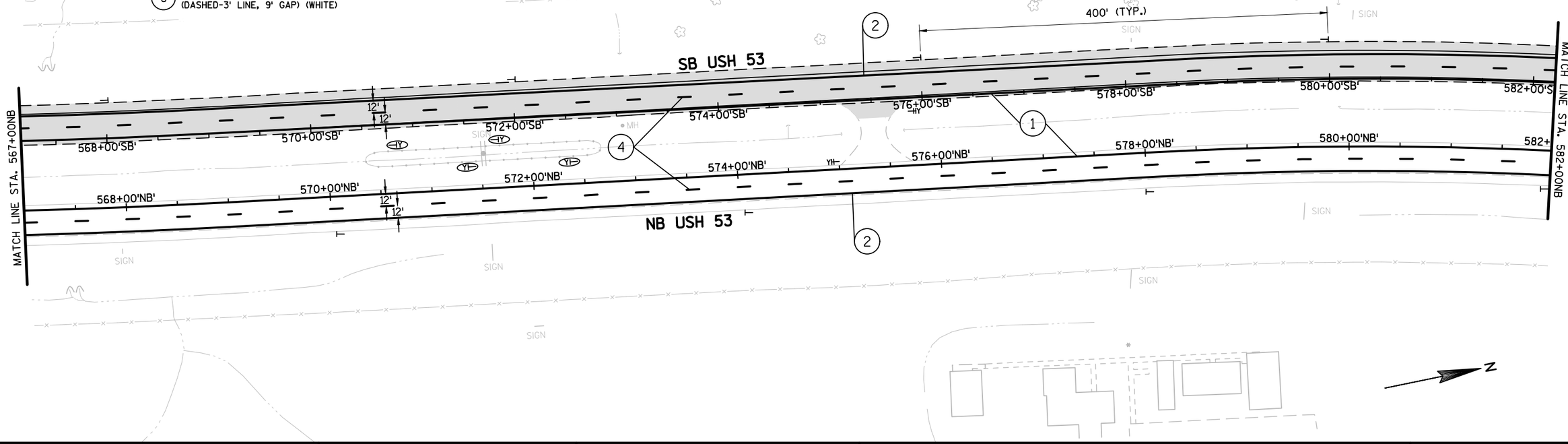
LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

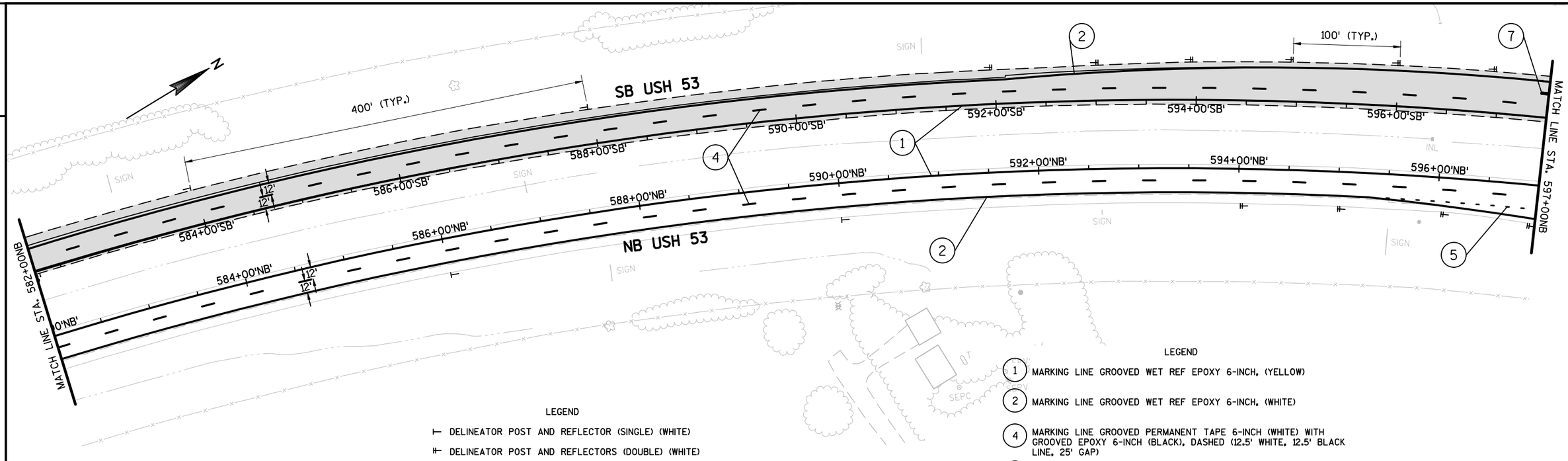
LEGEND

- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED.
PAID FOR AS MARKING REMOVAL LINE 4-INCH



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 57	E



LEGEND

⊢ DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)

⊩ DELINEATOR POST AND REFLECTORS (DOUBLE) (WHITE)

LEGEND

(1) MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)

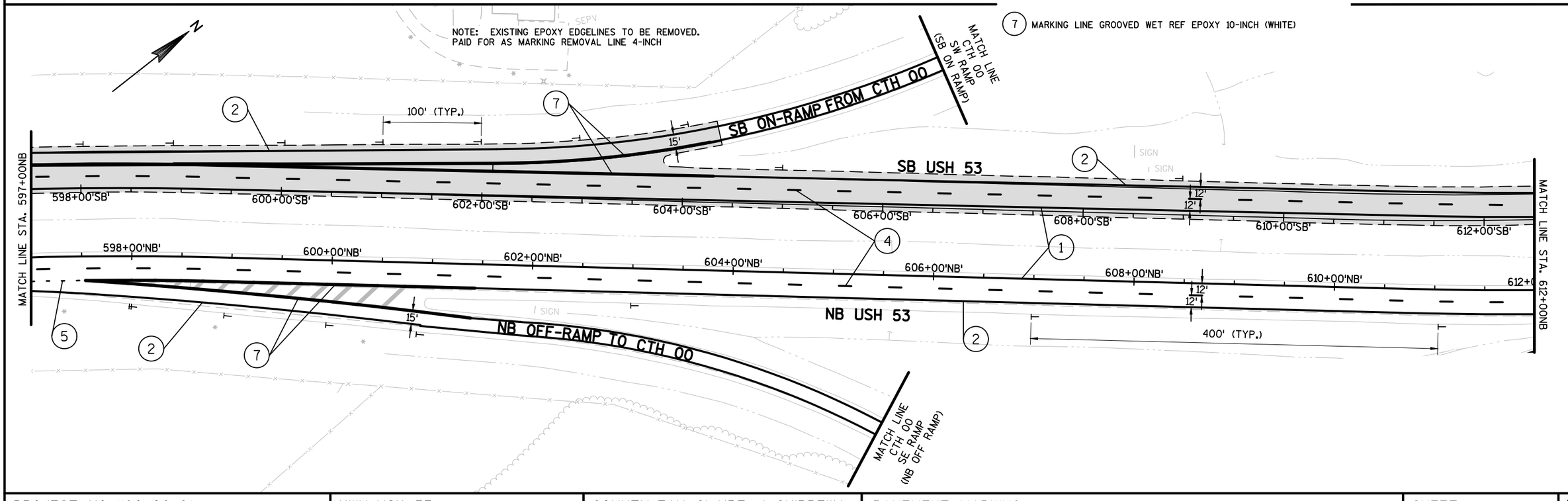
(2) MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)

(4) MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)

(5) MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

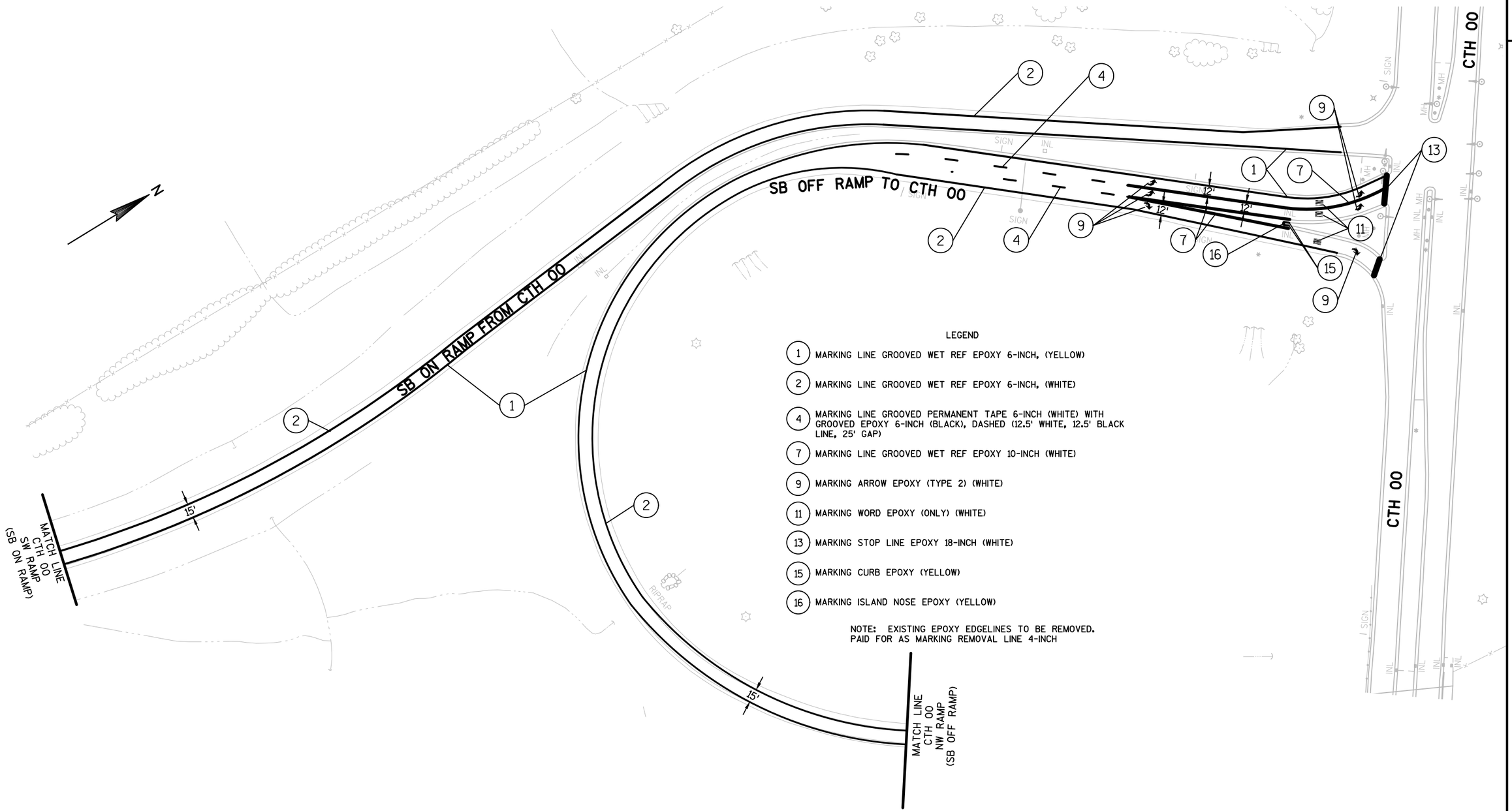
(7) MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 58	E

2



LEGEND

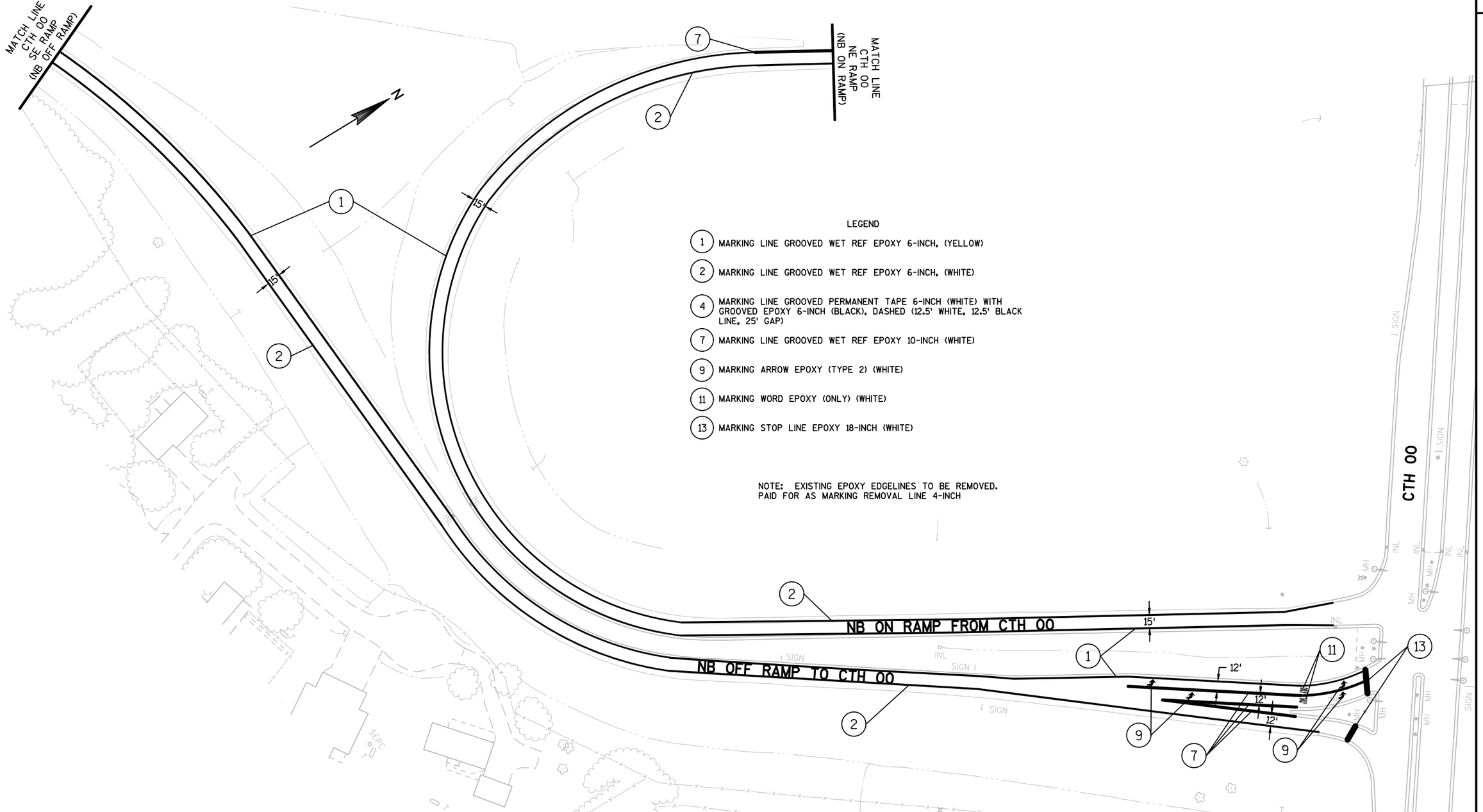
1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
9. MARKING ARROW EPOXY (TYPE 2) (WHITE)
11. MARKING WORD EPOXY (ONLY) (WHITE)
13. MARKING STOP LINE EPOXY 18-INCH (WHITE)
15. MARKING CURB EPOXY (YELLOW)
16. MARKING ISLAND NOSE EPOXY (YELLOW)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 59	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - SHEET - (14)
PLOT DATE : 4/10/2024 12:15 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 44

2



LEGEND

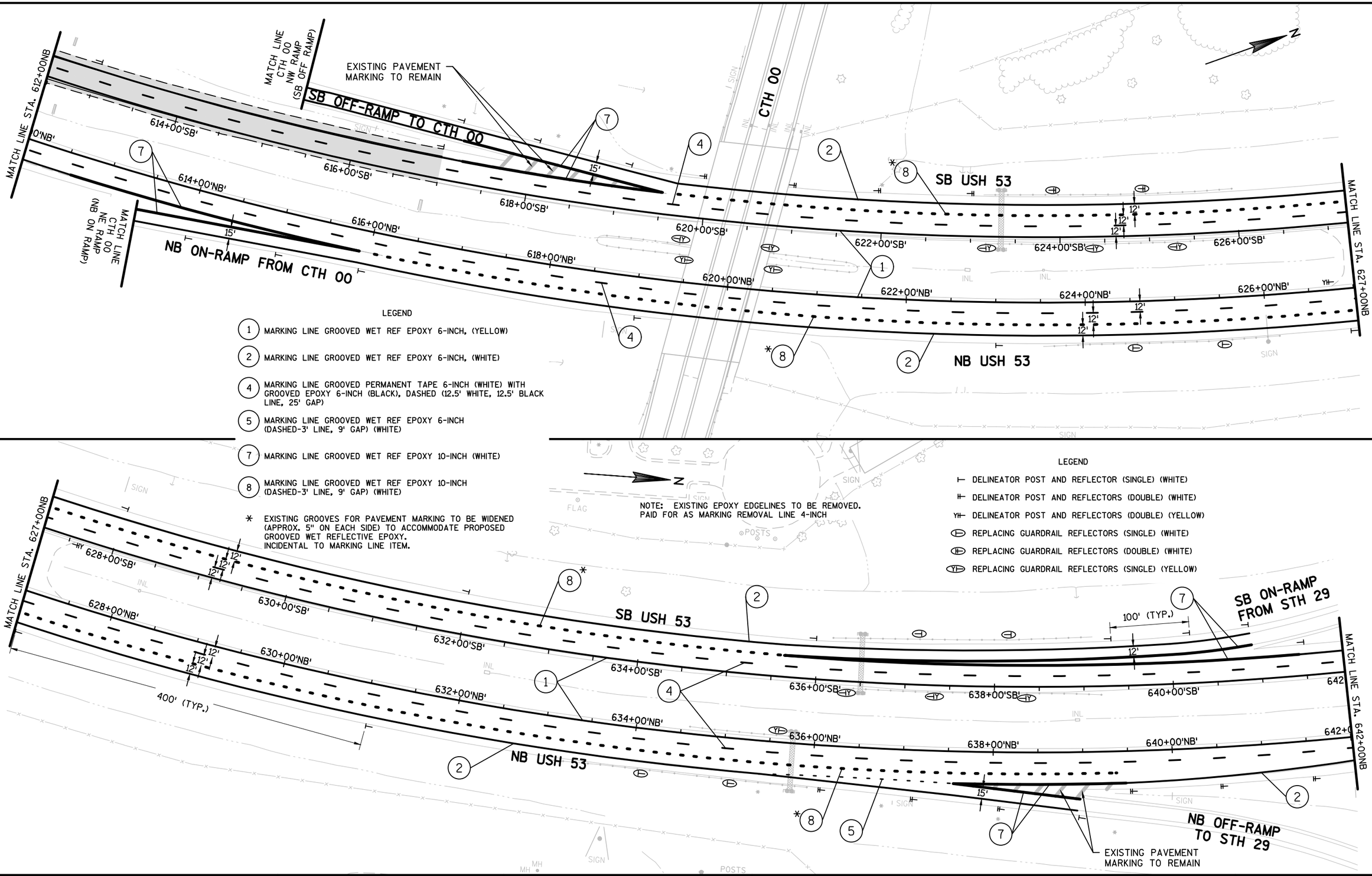
1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
9. MARKING ARROW EPOXY (TYPE 2) (WHITE)
11. MARKING WORD EPOXY (ONLY) (WHITE)
13. MARKING STOP LINE EPOXY 18-INCH (WHITE)

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED.
PAID FOR AS MARKING REMOVAL LINE 4-INCH

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 60	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - SHEET - (14)
PLOT DATE : 4/10/2024 12:16 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : **********

2



LEGEND

1. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (YELLOW)
2. MARKING LINE GROOVED WET REF EPOXY 6-INCH, (WHITE)
4. MARKING LINE GROOVED PERMANENT TAPE 6-INCH (WHITE) WITH GROOVED EPOXY 6-INCH (BLACK), DASHED (12.5' WHITE, 12.5' BLACK LINE, 25' GAP)
5. MARKING LINE GROOVED WET REF EPOXY 6-INCH (DASHED-3' LINE, 9' GAP) (WHITE)
7. MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
8. MARKING LINE GROOVED WET REF EPOXY 10-INCH (DASHED-3' LINE, 9' GAP) (WHITE)

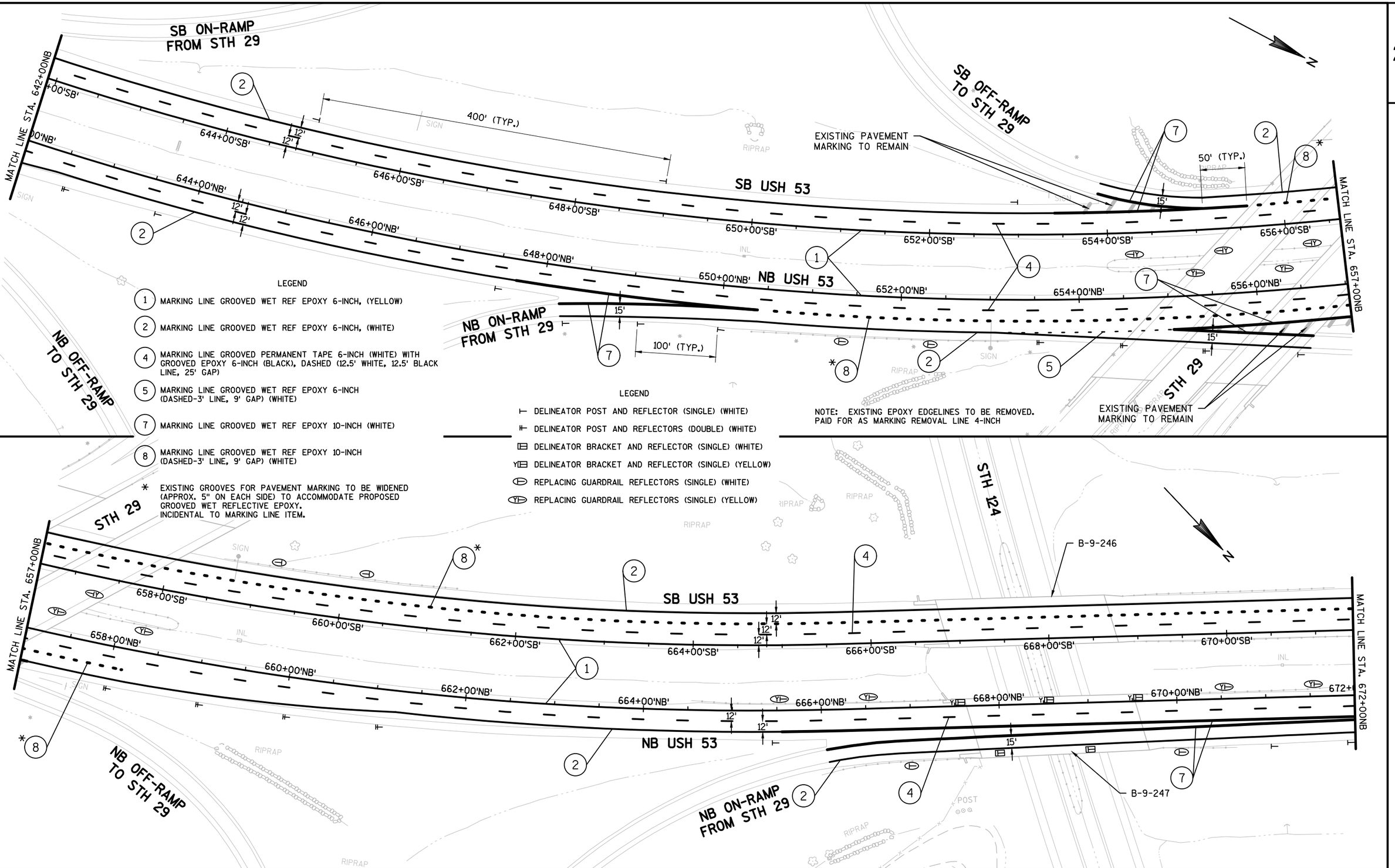
* EXISTING GROOVES FOR PAVEMENT MARKING TO BE WIDENED (APPROX. 5" ON EACH SIDE) TO ACCOMMODATE PROPOSED GROOVED WET REFLECTIVE EPOXY. INCIDENTAL TO MARKING LINE ITEM.

NOTE: EXISTING EPOXY EDGELINES TO BE REMOVED. PAID FOR AS MARKING REMOVAL LINE 4-INCH

LEGEND

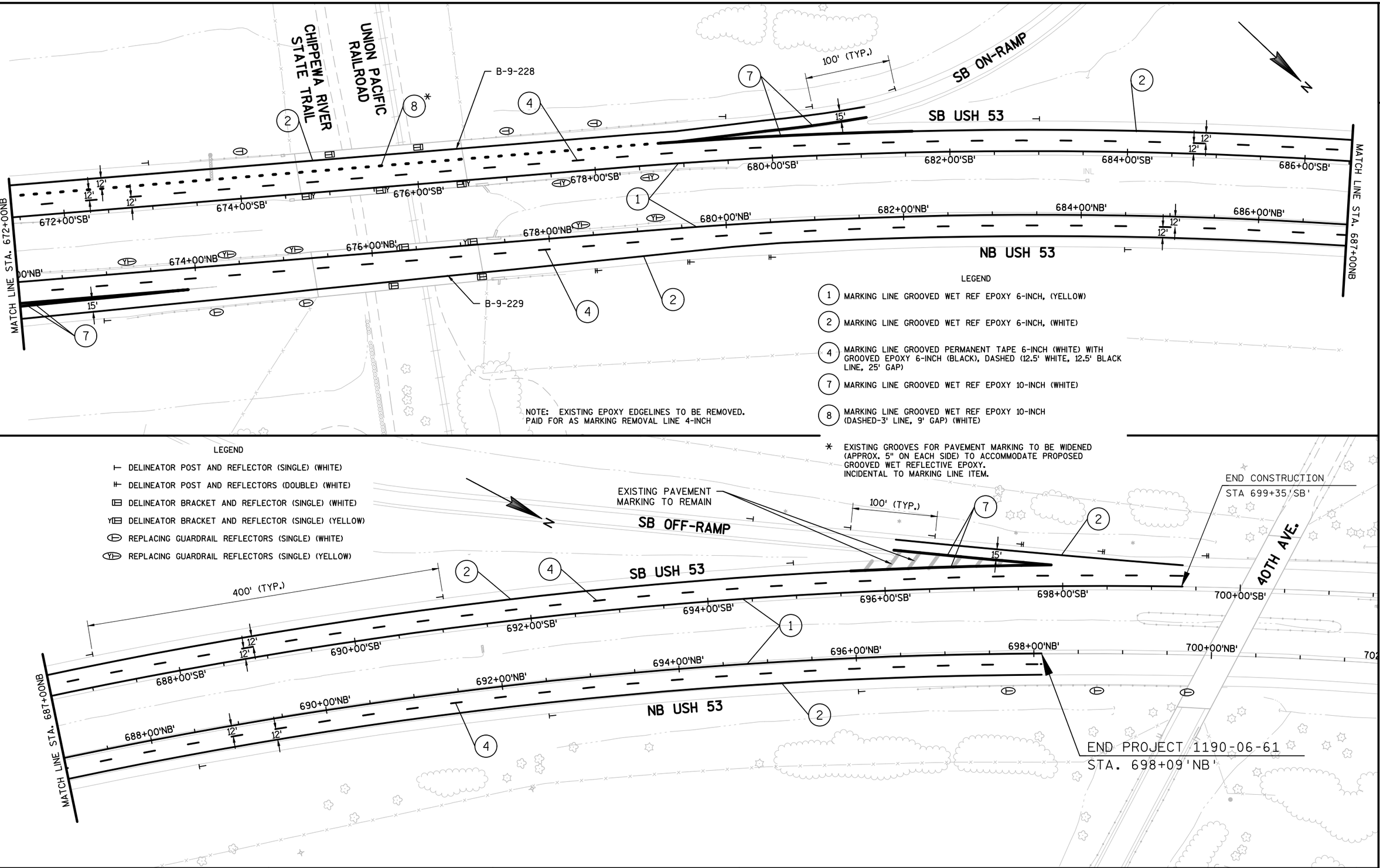
- DELINEATOR POST AND REFLECTOR (SINGLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (WHITE)
- DELINEATOR POST AND REFLECTORS (DOUBLE) (YELLOW)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (DOUBLE) (WHITE)
- REPLACING GUARDRAIL REFLECTORS (SINGLE) (YELLOW)

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 61	E

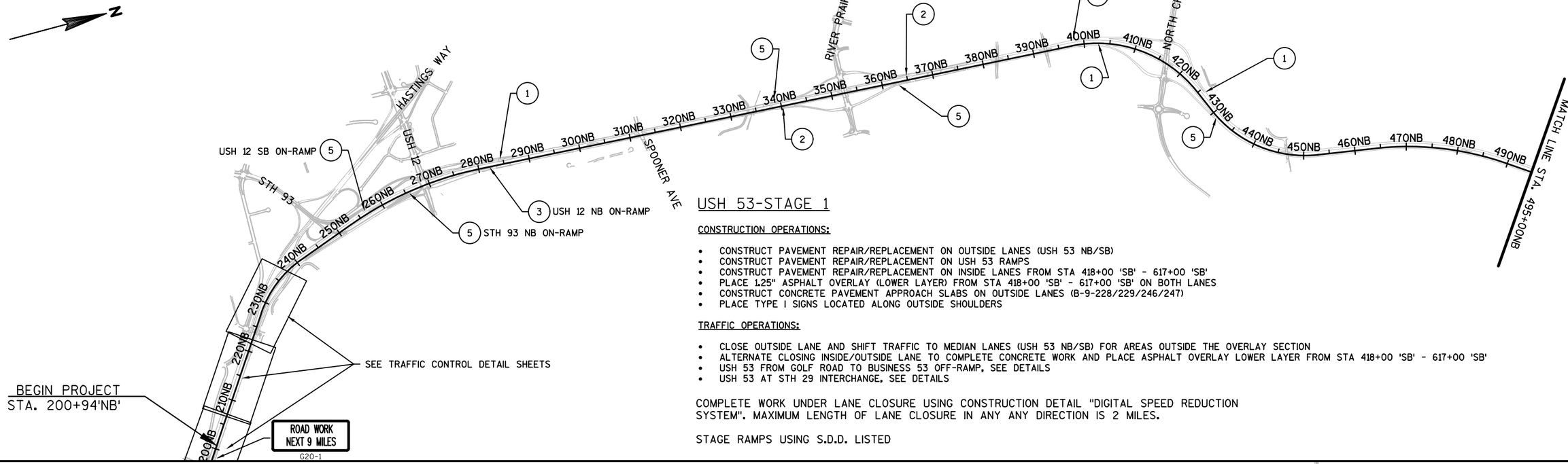


PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 62	E

2



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PAVEMENT MARKING	SHEET 63	E



USH 53-STAGE 1

CONSTRUCTION OPERATIONS:

- CONSTRUCT PAVEMENT REPAIR/REPLACEMENT ON OUTSIDE LANES (USH 53 NB/SB)
- CONSTRUCT PAVEMENT REPAIR/REPLACEMENT ON USH 53 RAMPS
- CONSTRUCT PAVEMENT REPAIR/REPLACEMENT ON INSIDE LANES FROM STA 418+00 'SB' - 617+00 'SB'
- PLACE 1.25" ASPHALT OVERLAY (LOWER LAYER) FROM STA 418+00 'SB' - 617+00 'SB' ON BOTH LANES
- CONSTRUCT CONCRETE PAVEMENT APPROACH SLABS ON OUTSIDE LANES (B-9-228/229/246/247)
- PLACE TYPE I SIGNS LOCATED ALONG OUTSIDE SHOULDERS

TRAFFIC OPERATIONS:

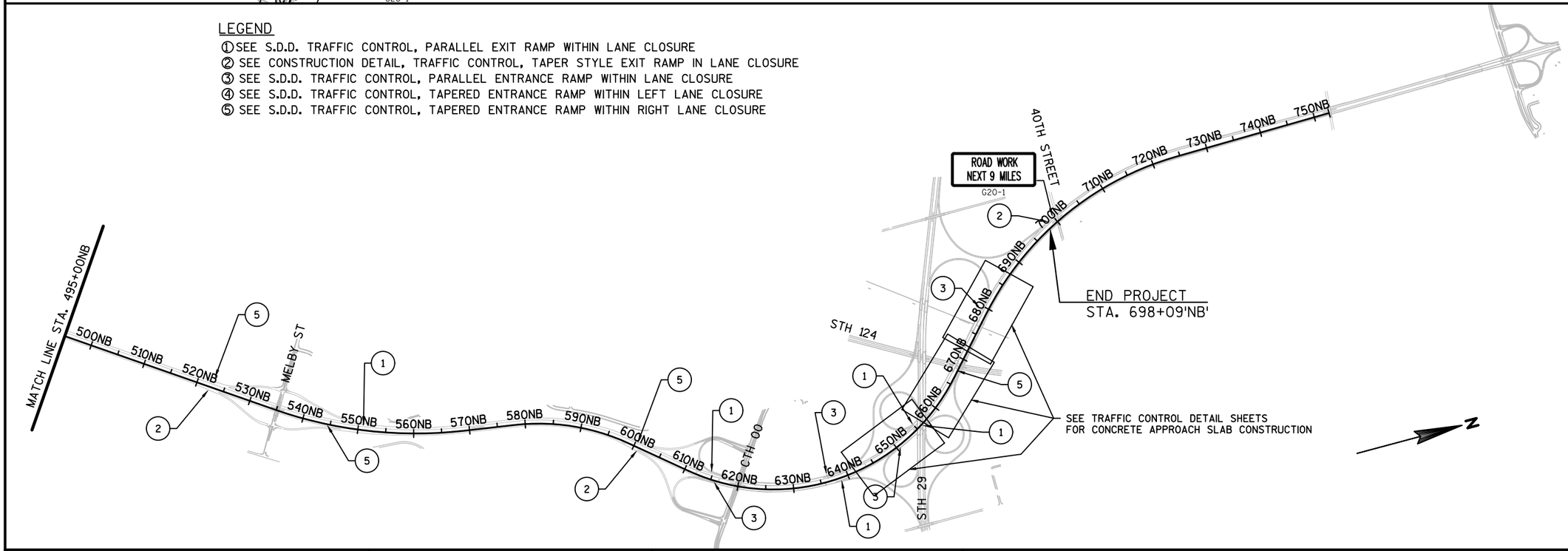
- CLOSE OUTSIDE LANE AND SHIFT TRAFFIC TO MEDIAN LANES (USH 53 NB/SB) FOR AREAS OUTSIDE THE OVERLAY SECTION
- ALTERNATE CLOSING INSIDE/OUTSIDE LANE TO COMPLETE CONCRETE WORK AND PLACE ASPHALT OVERLAY LOWER LAYER FROM STA 418+00 'SB' - 617+00 'SB'
- USH 53 FROM GOLF ROAD TO BUSINESS 53 OFF-RAMP, SEE DETAILS
- USH 53 AT STH 29 INTERCHANGE, SEE DETAILS

COMPLETE WORK UNDER LANE CLOSURE USING CONSTRUCTION DETAIL "DIGITAL SPEED REDUCTION SYSTEM". MAXIMUM LENGTH OF LANE CLOSURE IN ANY ANY DIRECTION IS 2 MILES.

STAGE RAMPS USING S.D.D. LISTED

LEGEND

① SEE S.D.D. TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
② SEE CONSTRUCTION DETAIL, TRAFFIC CONTROL, TAPER STYLE EXIT RAMP IN LANE CLOSURE
③ SEE S.D.D. TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
④ SEE S.D.D. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE
⑤ SEE S.D.D. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



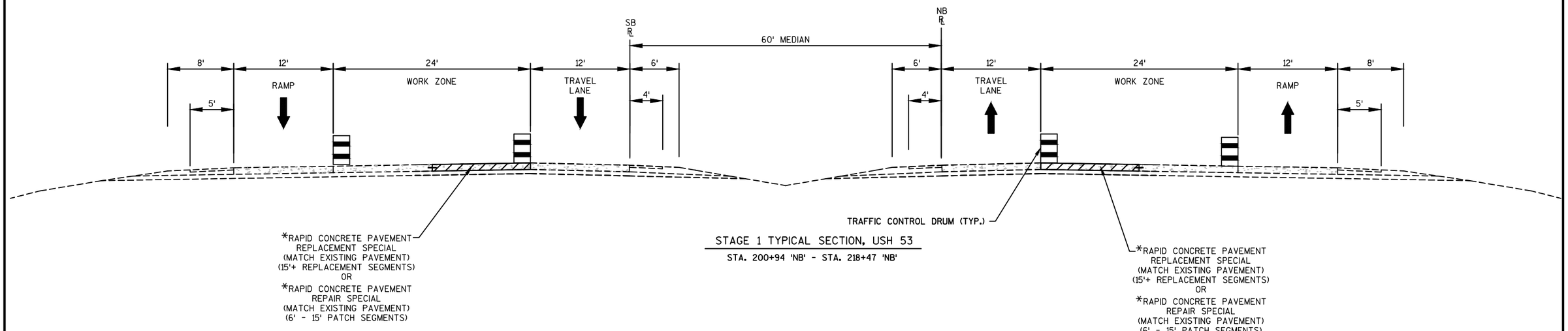
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - STAGE 1 OVERVIEW	SHEET 64 E

TRAFFIC CONTROL NOTES

1. COVER OR REMOVE CONFLICTING TRAFFIC SIGNS AS DIRECTED BY THE ENGINEER.
2. DURING NIGHTTIME OPERATIONS ALL DRUMS IN TAPERS WILL HAVE A TYPE C WARNING LIGHT.
3. EQUIP TYPE III BARRICADES WITH TYPE A WARNING LIGHTS PER STANDARD DETAIL DRAWINGS.
4. TRAFFIC CONTROL PLANS FOR USH 53 PROVIDE SUGGESTED STAGING WITH TRAFFIC CONTROL DEVICE LOCATIONS. STAGING MAY BE ALTERED WITH APPROVAL OF THE ENGINEER.
5. FOR LANE CLOSURES AND ADVANCE WARNING SEE SDD 'TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION'
6. REFER TO DETAIL SHEET FOR AREA BETWEEN GOLF ROAD - USH 12

SPEED REDUCTION

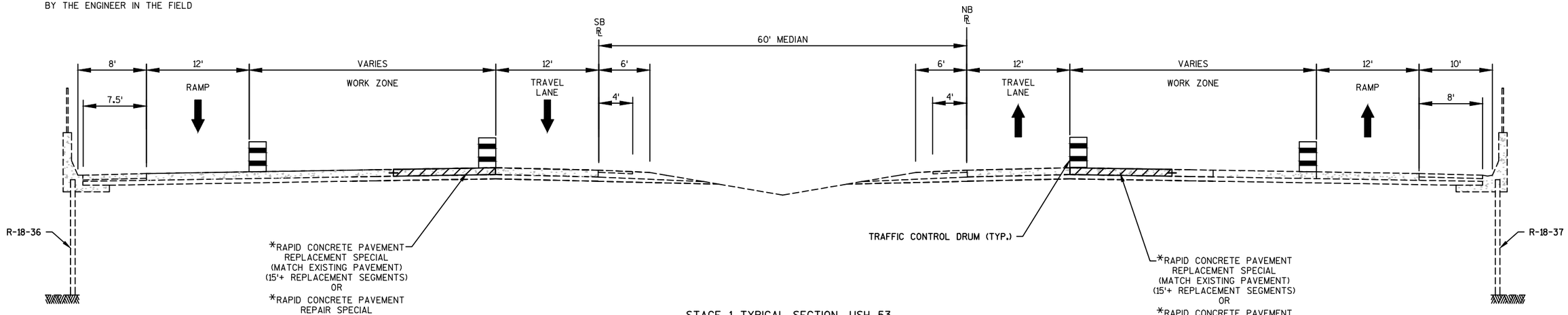
REDUCE THE SPEED LIMIT ON USH 53 TO 55 MPH WHEN WORK IS BEING PERFORMED ON USH 53. PLACE 55 MPH SPEED LIMIT SIGNS AND COVER EXISTING 65 MPH SIGNS.



STAGE 1 TYPICAL SECTION, USH 53

STA. 200+94 'NB' - STA. 218+47 'NB'

*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD

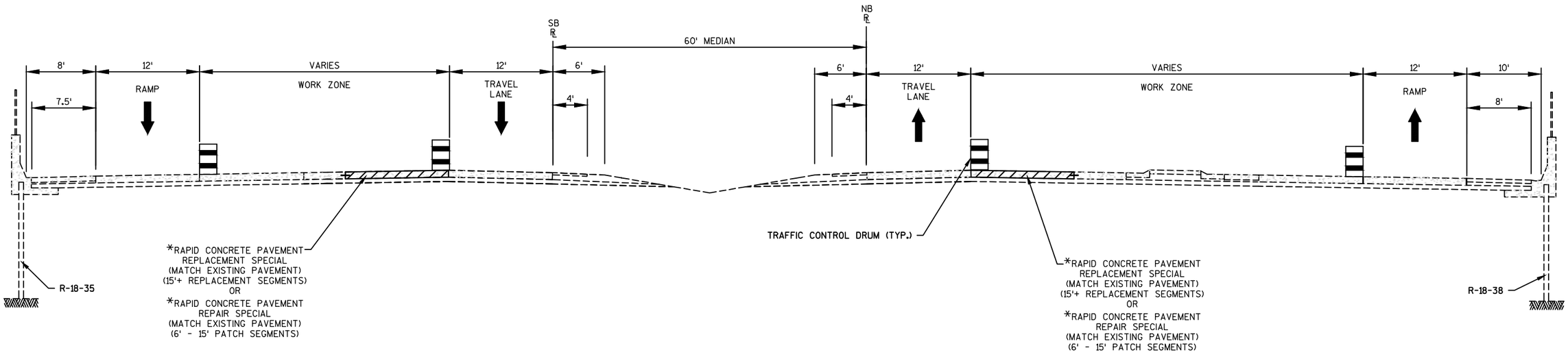


STAGE 1 TYPICAL SECTION, USH 53

STA. 218+47 'NB' - STA. 223+51 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 65	E

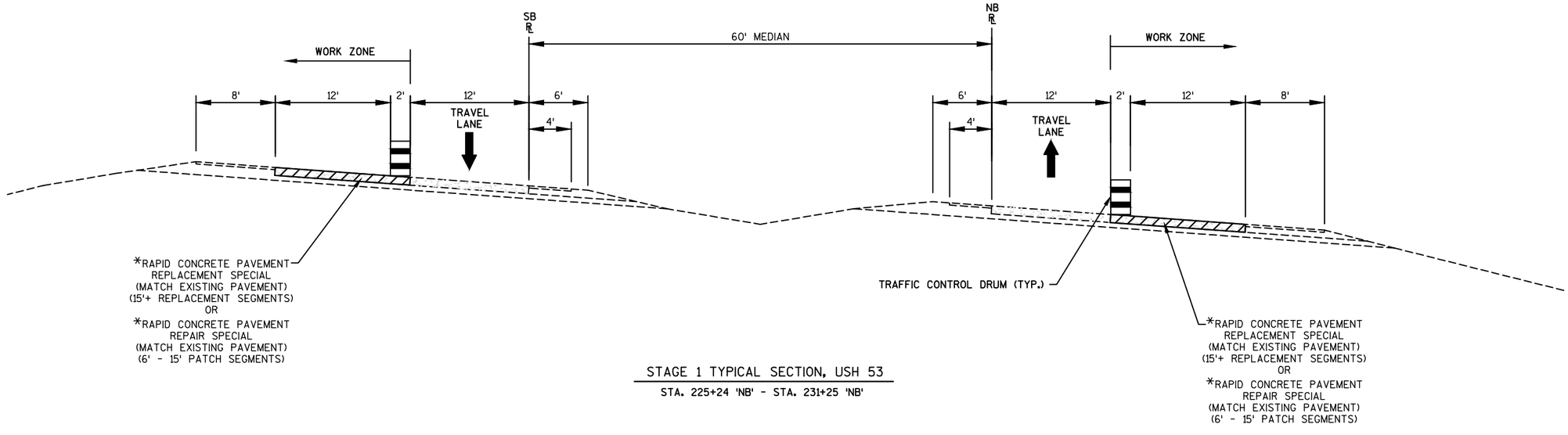
2



STAGE 1 TYPICAL SECTION, USH 53

STA. 223+51 'NB' - STA. 223+57 'NB'
STA. 224+55 'NB' - STA. 225+24 'NB'

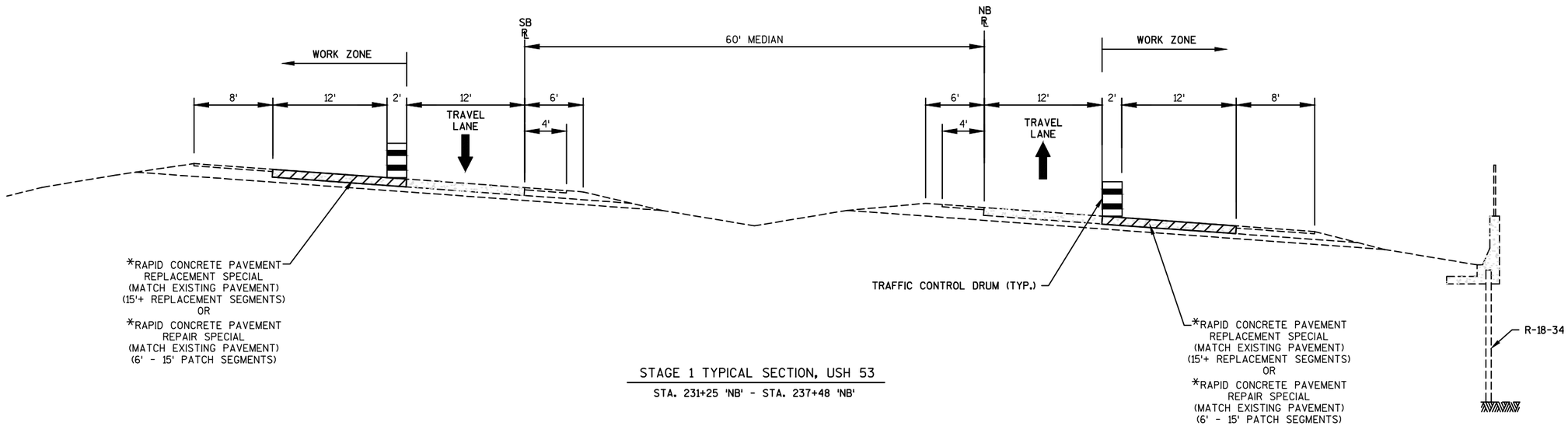
*LOCATIONS TO BE DETERMINED
BY THE ENGINEER IN THE FIELD



STAGE 1 TYPICAL SECTION, USH 53

STA. 225+24 'NB' - STA. 231+25 'NB'

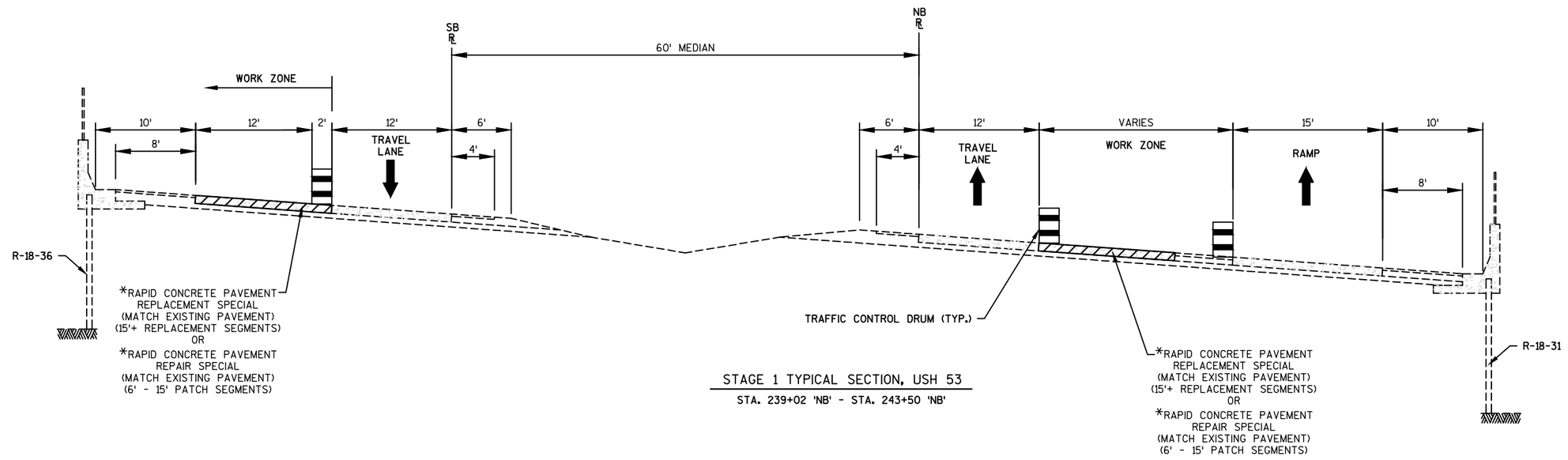
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 66	E



STAGE 1 TYPICAL SECTION, USH 53

STA. 231+25 'NB' - STA. 237+48 'NB'

*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD

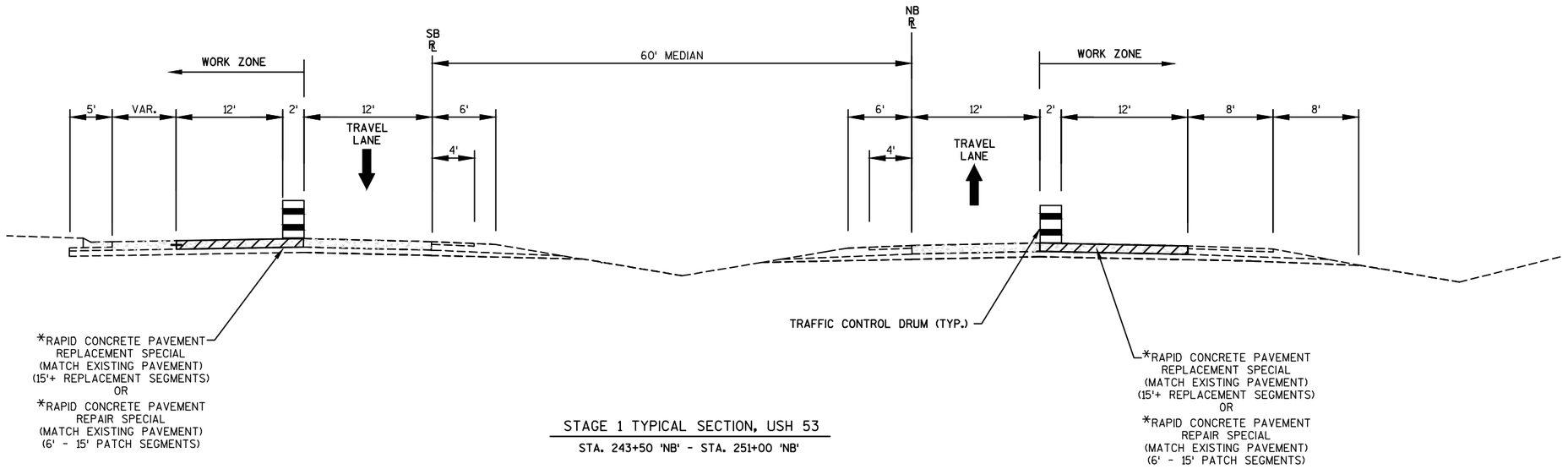


STAGE 1 TYPICAL SECTION, USH 53

STA. 239+02 'NB' - STA. 243+50 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 67	E

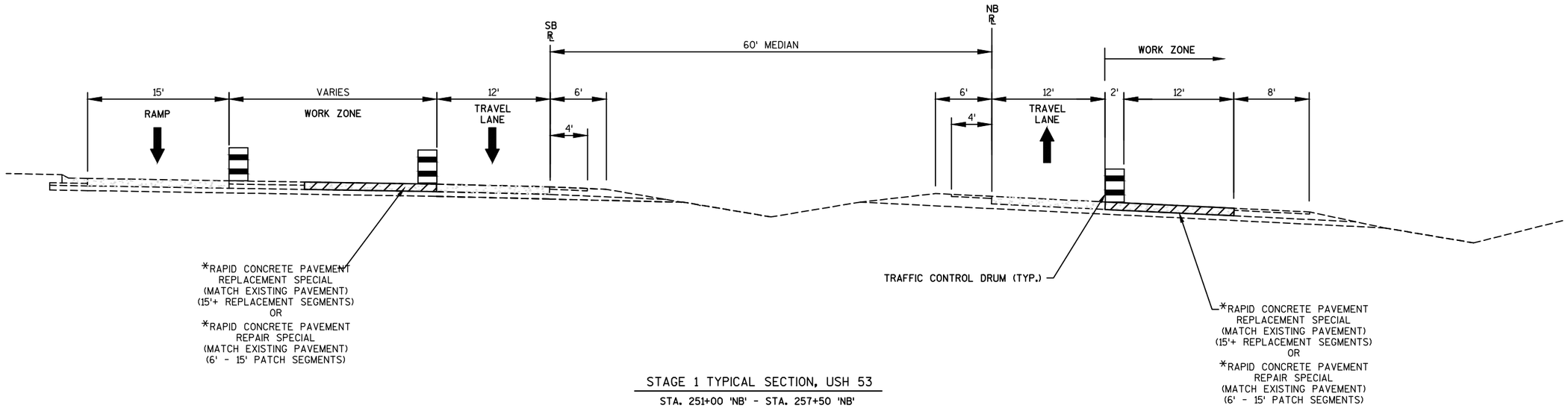
2



STAGE 1 TYPICAL SECTION, USH 53

STA. 243+50 'NB' - STA. 251+00 'NB'

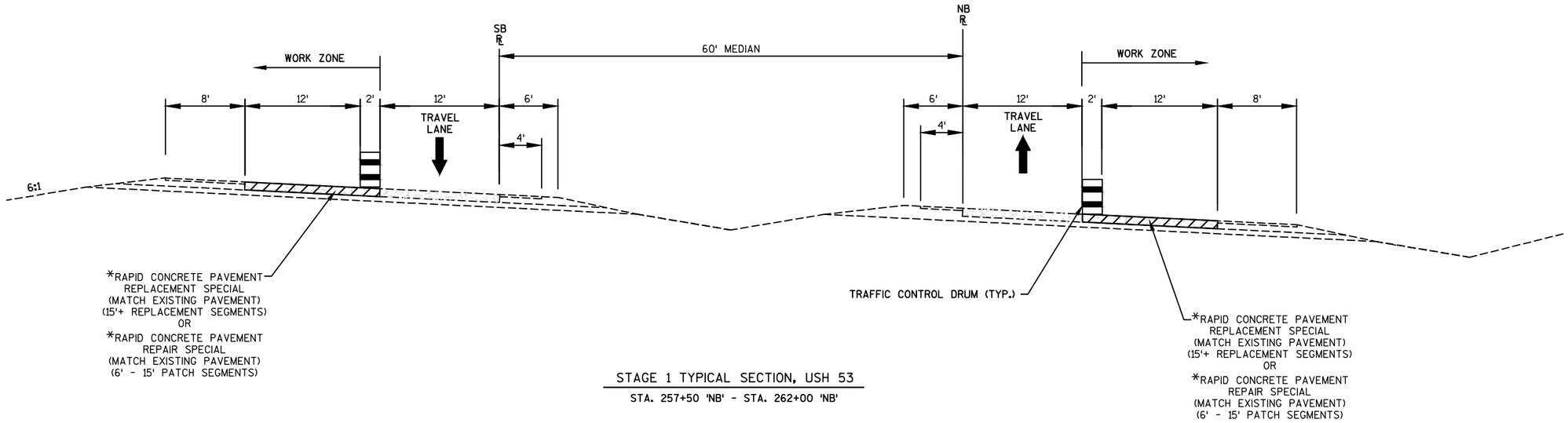
*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD



STAGE 1 TYPICAL SECTION, USH 53

STA. 251+00 'NB' - STA. 257+50 'NB'

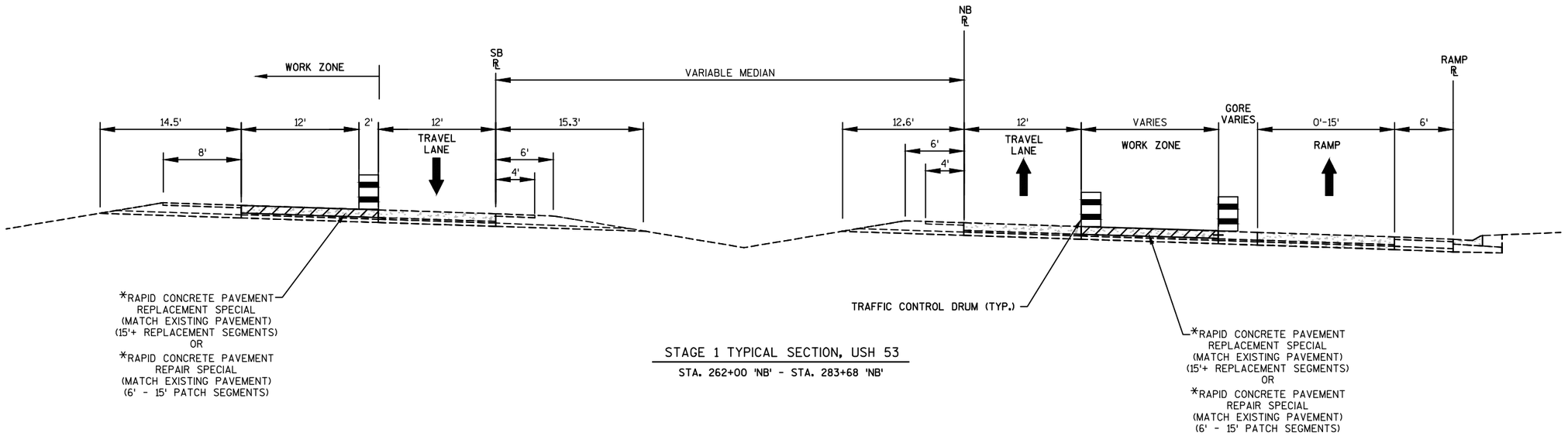
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 68	E



STAGE 1 TYPICAL SECTION, USH 53

STA. 257+50 'NB' - STA. 262+00 'NB'

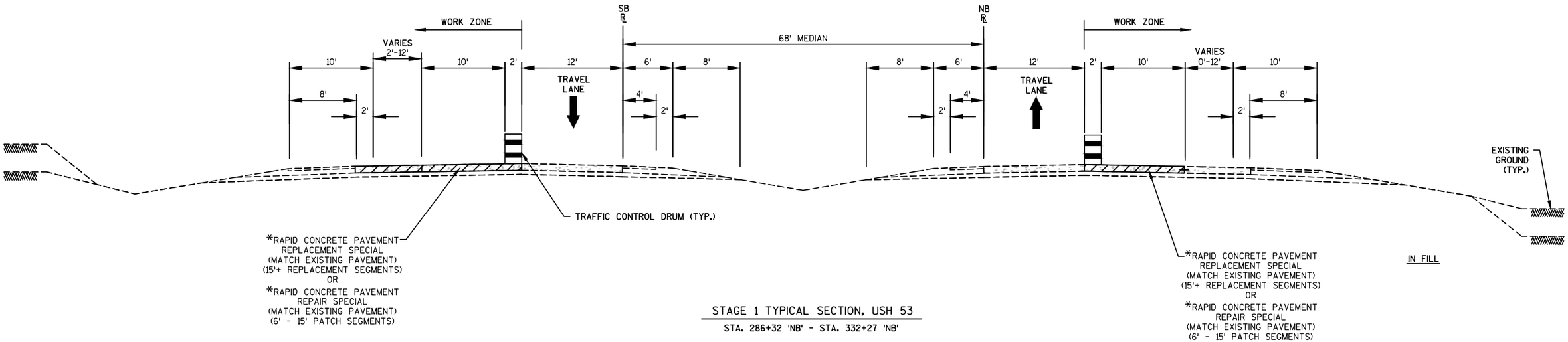
*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD



STAGE 1 TYPICAL SECTION, USH 53

STA. 262+00 'NB' - STA. 283+68 'NB'

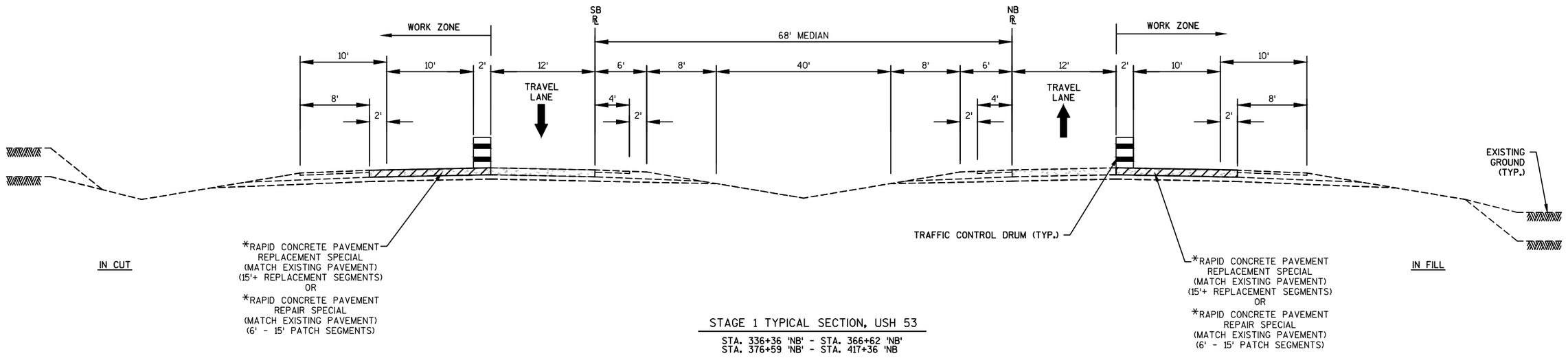
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 69	E



STAGE 1 TYPICAL SECTION, USH 53

STA. 286+32 'NB' - STA. 332+27 'NB'

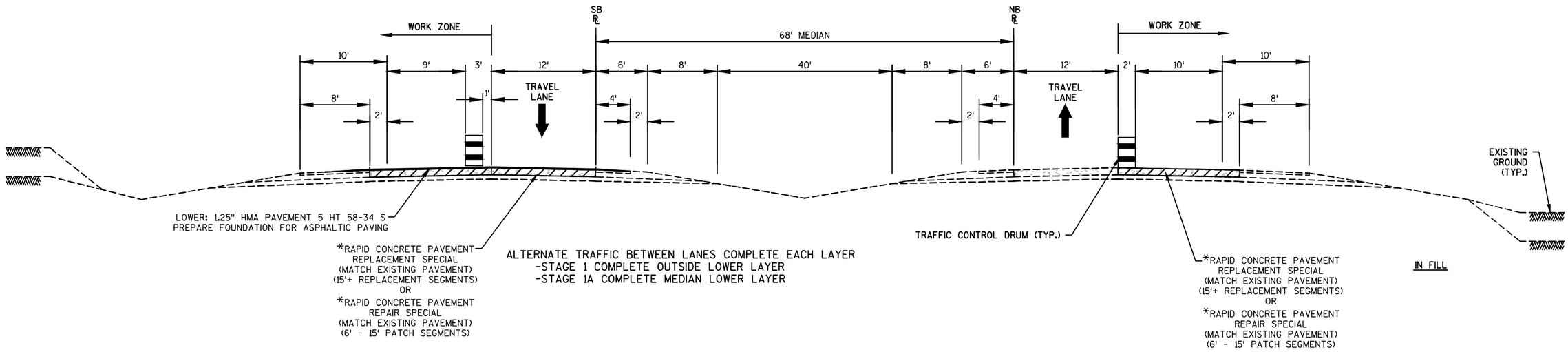
*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD



STAGE 1 TYPICAL SECTION, USH 53

STA. 336+36 'NB' - STA. 366+62 'NB'
STA. 376+59 'NB' - STA. 417+36 'NB

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 70	E

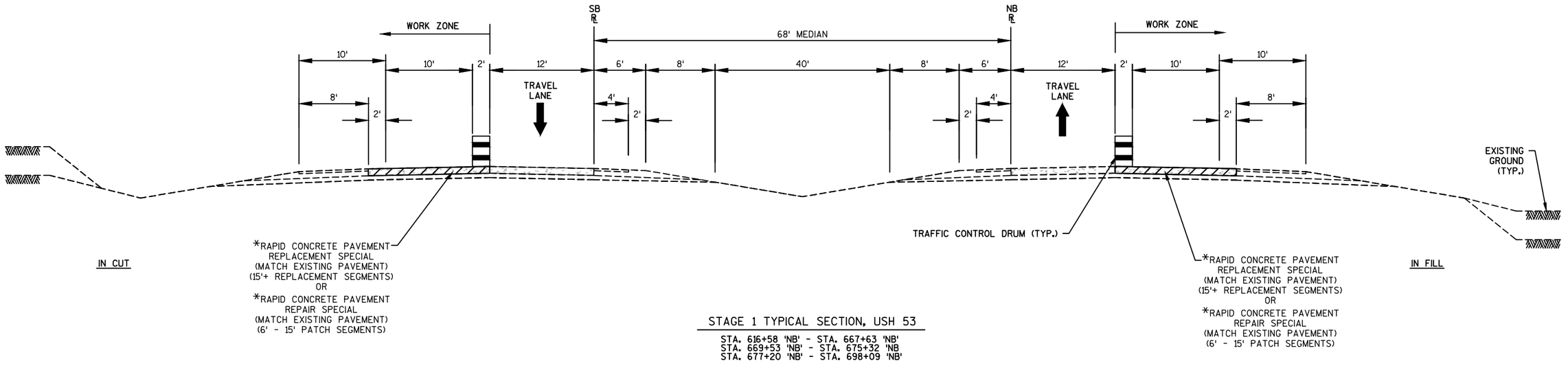


STAGE 1,1A TYPICAL SECTION, SB USH 53

STA. 418+00 'SB' - STA. 617+00 'SB'

STAGE 1 TYPICAL SECTION, USH 53

STA. 417+36 'NB' - STA. 616+58 'NB'



STAGE 1 TYPICAL SECTION, USH 53

STA. 616+58 'NB' - STA. 667+63 'NB'
STA. 669+53 'NB' - STA. 675+32 'NB'
STA. 677+20 'NB' - STA. 698+09 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 71	E

2

OAKWOOD HILLS PARKWAY

LANE CLOSED
R11-2-L
48"X30"

SB USH 53

MATCH LINE STA. 207+00NB

SEE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

NB USH 53

SEE SDD TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

WORK ZONE (TYP.)

195SB 200SB 205SB

195NB 200NB 205NB

50' TYP

100' TYP

25' TYP

W04-1R
48"X48"

W04-5
48"X48"

MB

MESSAGE BOARD
DIRECTING BUSINESS 53 TRAFFIC TO REMAIN IN RIGHT LANE

S. HASTINGS WAY

SEE SDD TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

M3-1 36"X18" M4-3 36"X18"
NORTH BUSINESS
M1-4 30"X30"
53 53
M05-2L M05-2R
30"X30" 30"X30"

M06-2 30"X30" M06-2 30"X30"

SOUTH TO 53 94 Madison

EXIT 85A

Golf Road

EXIT ONLY

SB-1

SB-2

NORTH 53 Superior AHEAD

EXIT 87
12
Clairemont Ave
1/2 MILE

NB-1

POST

SIGN

EXIT 86
BUS 53 TO 93
Hastings Way
1/4 MILE
EXIT ONLY

NB-2

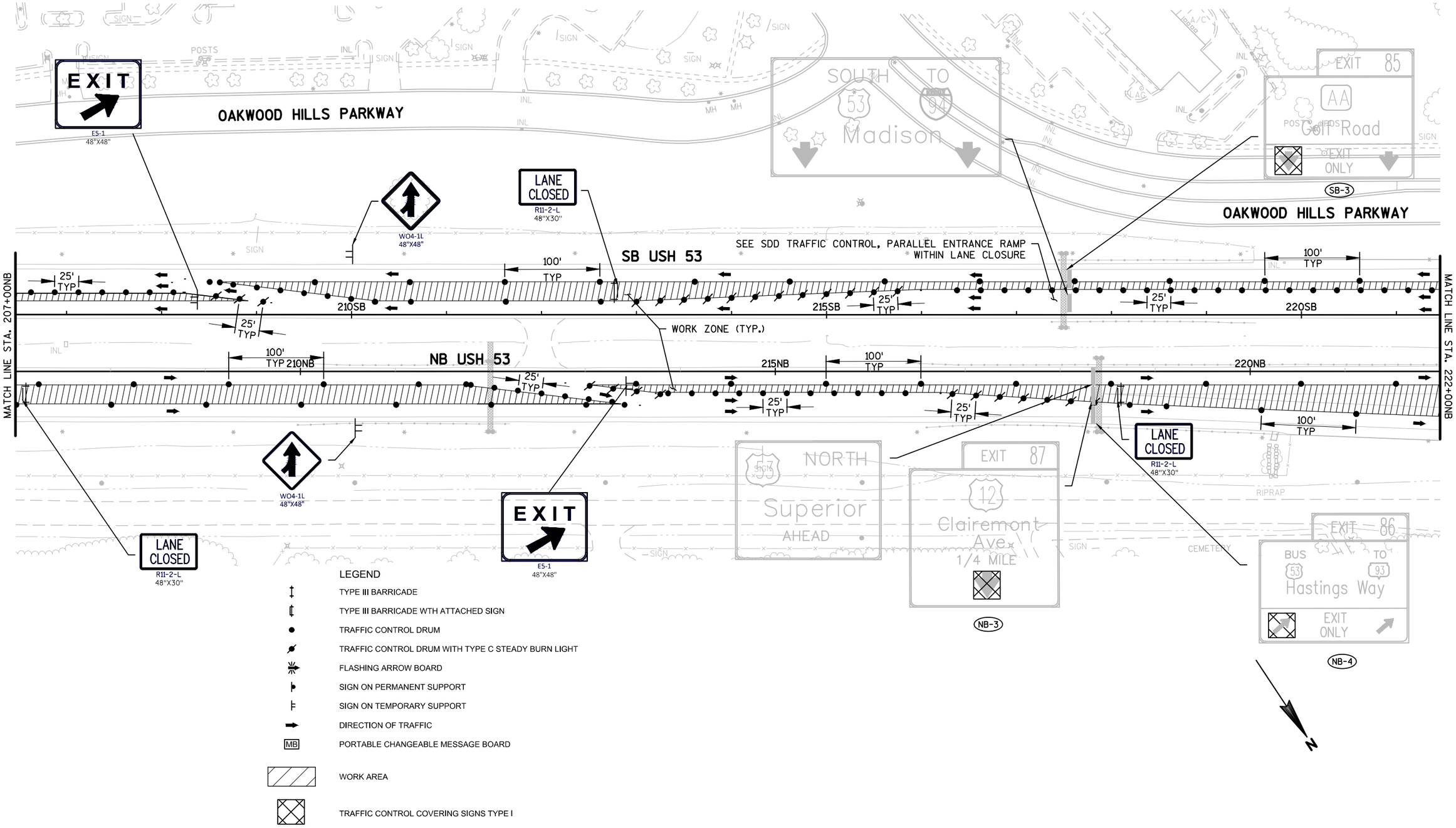
N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- TRAFFIC CONTROL COVERING SIGNS TYPE I

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - USH 53 (STAGE 1)	SHEET 72	E

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- TRAFFIC CONTROL COVERING SIGNS TYPE I

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - USH 53 (STAGE 1)	SHEET 73	E

2

SEE SDD TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

M3-3 36"X18"
SOUTH
M1-4 30"X30"
53
COUNTY AA
M1-5A 30"X30"
M06-2 30"X30" M06-2 30"X30"

LANE CLOSED
R11-2-L 48"X30"

M3-3 36"X18"
SOUTH
M1-4 30"X30"
53
COUNTY AA
M1-5A 30"X30"
M05-2L 30"X30" M05-2R 30"X30"

MESSAGE BOARD DIRECTING GOLF ROAD TRAFFIC TO REMAIN IN RIGHT LANE

SEE SDD TRAFFIC CONTROL, LANE CLOSURE

E HAMILTON AVE

OAKWOOD HILLS PARKWAY

BUSINESS 53 ON-RAMP

MB

50' TYP

SB USH 53

SEE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

230SB

100' TYP

225SB

25' TYP

WORK ZONE (TYP.)

230NB

50' TYP

NB USH 53

235SB

225NB

100' TYP

235NB

MATCH LINE STA. 222+00NB

100' TYP

BUSINESS 53 OFF-RAMP

25' TYP

S HASTINGS WAY

CYPRESS RD

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- TRAFFIC CONTROL COVERING SIGNS TYPE I

N

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - USH 53 (STAGE 1)	SHEET 74	E

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- TYPE I SIGN COVER

N

SEE SDD TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

645SB

645NB

SB USH 53

650SB

650NB

NB USH 53

655SB

655NB

EB USH 29

MATCH LINE STA. 657+00NB

WB USH 29

50' TYP

50' TYP

2600'

1600'

500'

WO4-2R 48"X48"

ROAD WORK 1 MILE W20-1F 48"X48"

RIGHT LANE CLOSED 1/2 MILE W20-5G 48"X48"

WO4-2R 48"X48"

M3-1 36"X18" NORTH

M1-4 30"X30" 53

RIGHT LANE CLOSED AHEAD W20-5A 48"X48"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

RIPRAP

SIGN

INL

MH

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - USH 53 (STAGE 1)	SHEET 75	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\025001-TC-S1 - BRIDGE APPROACH SLAB.DWG
LAYOUT NAME - 01

PLOT DATE : 4/16/2024 4:18 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

EB USH 29

WB USH 29

NB BUS 53

SB BUS 53

SB USH 53

660SB

665SB

670SB

MATCH LINE STA. 657+00NB

MATCH LINE STA. 672+00NB

660NB

665NB

670NB

NB USH 53

50' TYP

100' TYP

LANE CLOSED
R11-2-L
48"X30"

100' TYP

LANE CLOSED
R11-2-L
48"X30"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

RAMP CLOSED
SEE WB STH 29-NB USH 53 ON RAMP
DETOUR PLANS FOR ADDITIONAL DETAILS

RIPRAP

SIGN

INL

POST

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- TYPE I SIGN COVER

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - USH 53 (STAGE 1)	SHEET 76	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\025001-TC-S1 - BRIDGE APPROACH SLAB.DWG
LAYOUT NAME - 02

PLOT DATE : 4/16/2024 4:19 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

RAMP CLOSED
SEE WB STH 29-SB USH 53 ON RAMP
DETOUR PLANS FOR ADDITIONAL DETAILS

CANADIAN NATIONAL RAILWAY

LANE CLOSED
R11-2-L
48"X30"

100'
TYP

SEE SDD TRAFFIC CONTROL,
LANE CLOSURE, SPEED REDUCTION

675SB

680SB

685SB

SB USH 53

INL

MATCH LINE STA. 672+00NB

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

675NB

680NB

685NB

NB USH 53

100'
TYP

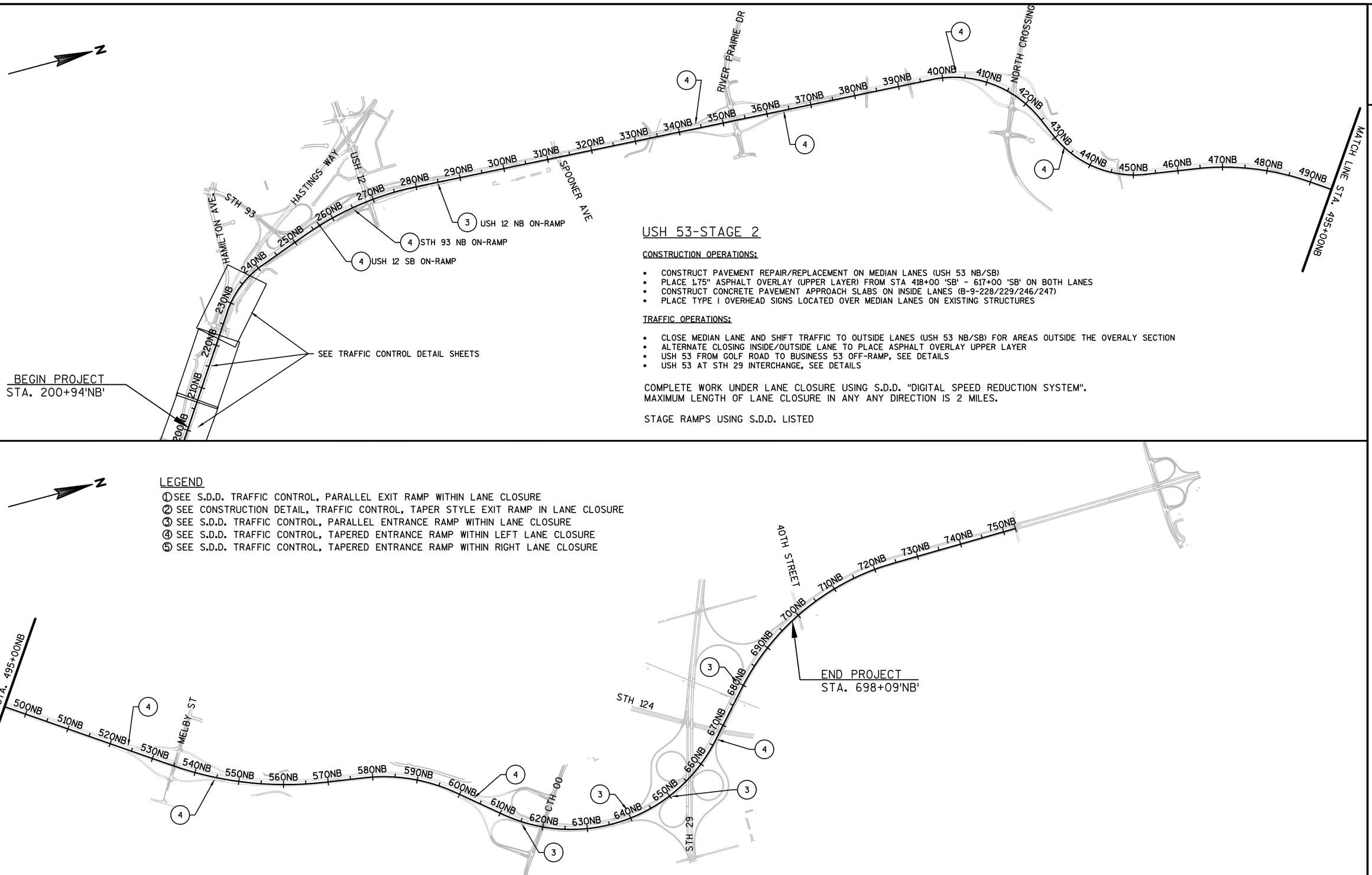
BIKE PATH
POST

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- TYPE I SIGN COVER

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - USH 53 (STAGE 1)	SHEET 77	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\025001-TC-S1 - BRIDGE APPROACH SLAB.DWG
LAYOUT NAME - 03
PLOT DATE : 4/16/2024 4:19 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42



USH 53-STAGE 2

CONSTRUCTION OPERATIONS:

- CONSTRUCT PAVEMENT REPAIR/REPLACEMENT ON MEDIAN LANES (USH 53 NB/SB)
- PLACE 1.75" ASPHALT OVERLAY (UPPER LAYER) FROM STA 418+00 'SB' - 617+00 'SB' ON BOTH LANES
- CONSTRUCT CONCRETE PAVEMENT APPROACH SLABS ON INSIDE LANES (B-9-228/229/246/247)
- PLACE TYPE I OVERHEAD SIGNS LOCATED OVER MEDIAN LANES ON EXISTING STRUCTURES

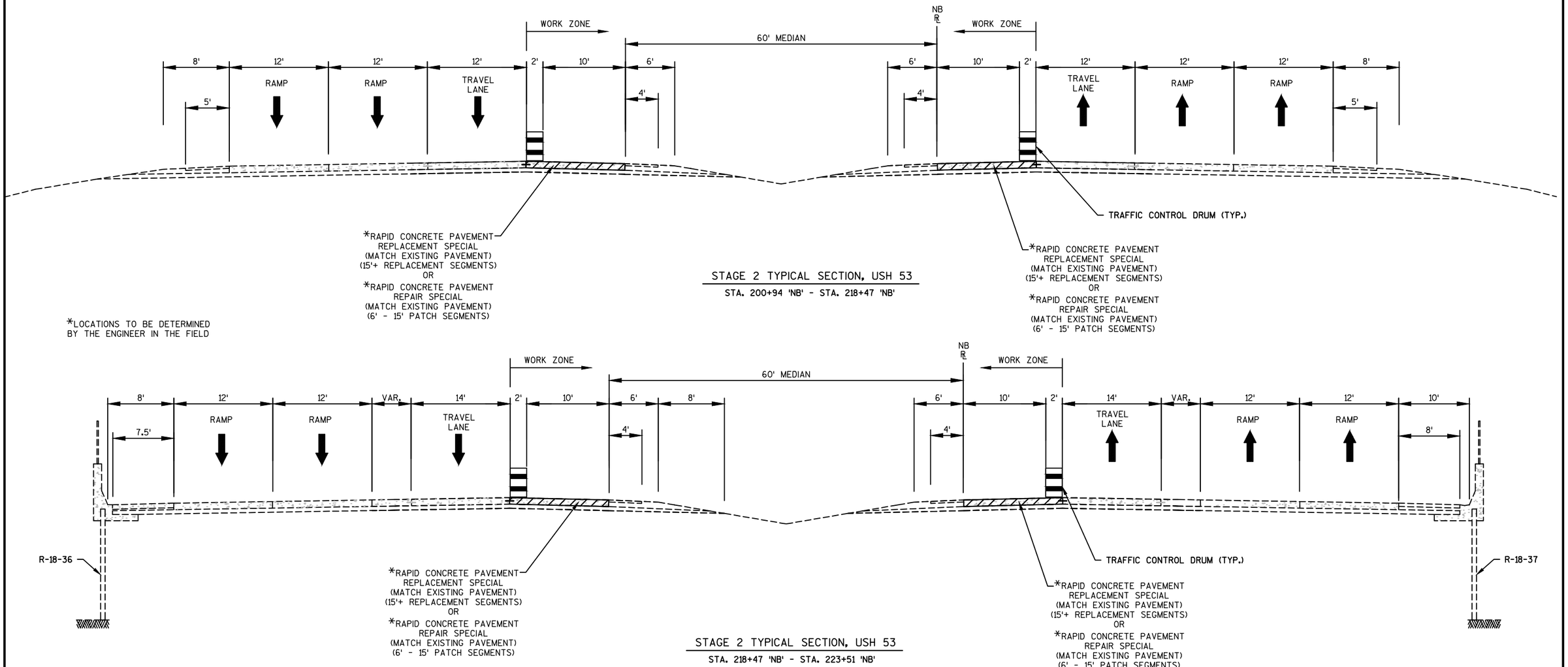
TRAFFIC OPERATIONS:

- CLOSE MEDIAN LANE AND SHIFT TRAFFIC TO OUTSIDE LANES (USH 53 NB/SB) FOR AREAS OUTSIDE THE OVERALY SECTION
- ALTERNATE CLOSING INSIDE/OUTSIDE LANE TO PLACE ASPHALT OVERLAY UPPER LAYER
- USH 53 FROM GOLF ROAD TO BUSINESS 53 OFF-RAMP, SEE DETAILS
- USH 53 AT STH 29 INTERCHANGE, SEE DETAILS

COMPLETE WORK UNDER LANE CLOSURE USING S.D.D. "DIGITAL SPEED REDUCTION SYSTEM".
MAXIMUM LENGTH OF LANE CLOSURE IN ANY ANY DIRECTION IS 2 MILES.

STAGE RAMPS USING S.D.D. LISTED

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - STAGE 2 OVERVIEW	SHEET 78 E



STAGE 2 TYPICAL SECTION, USH 53

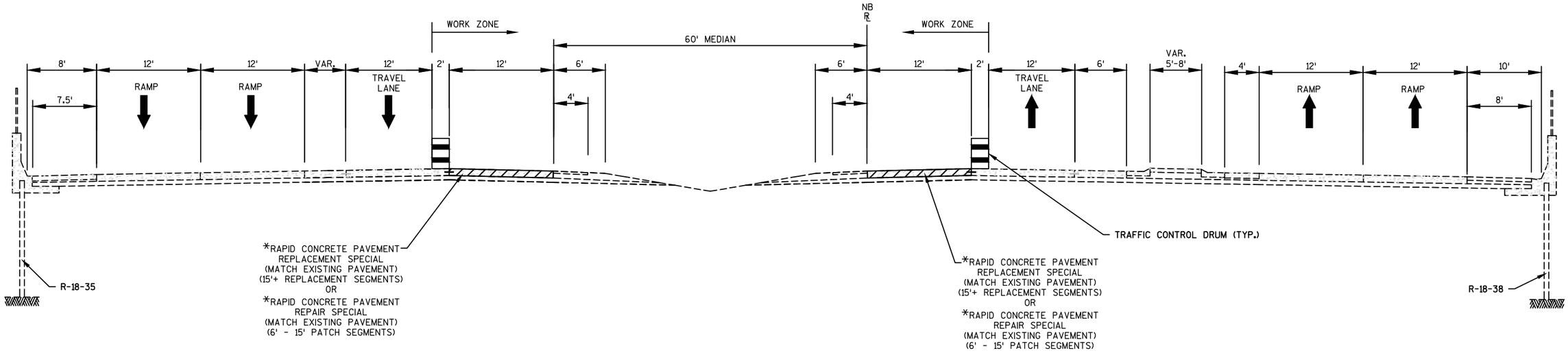
STA. 200+94 'NB' - STA. 218+47 'NB'

*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD

STAGE 2 TYPICAL SECTION, USH 53

STA. 218+47 'NB' - STA. 223+51 'NB'

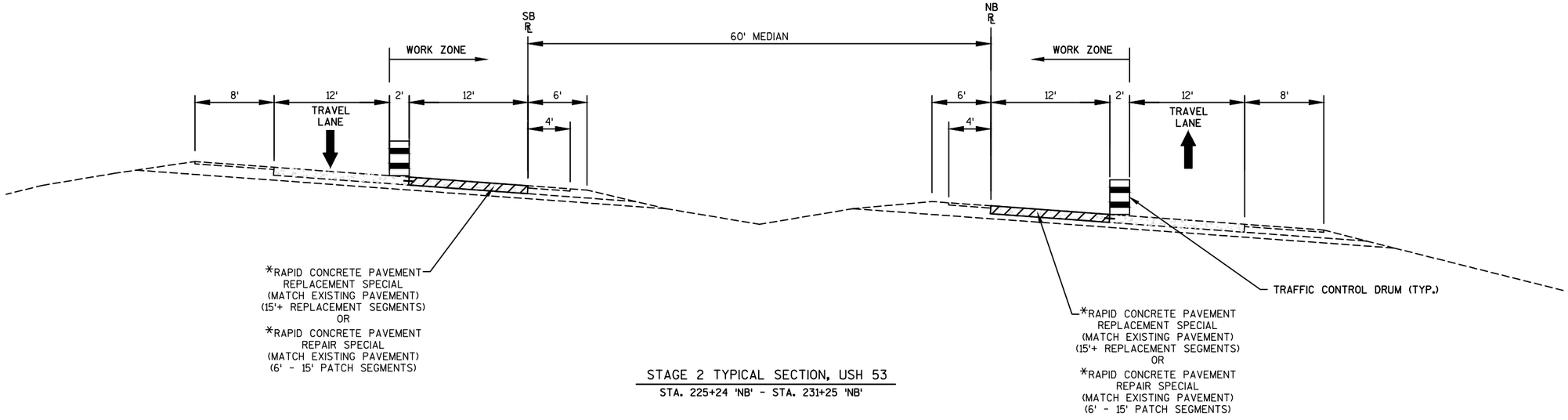
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 79	E



STAGE 2 TYPICAL SECTION, USH 53

STA. 223+51 'NB' - STA. 223+57 'NB'
STA. 224+55 'NB' - STA. 225+24 'NB'

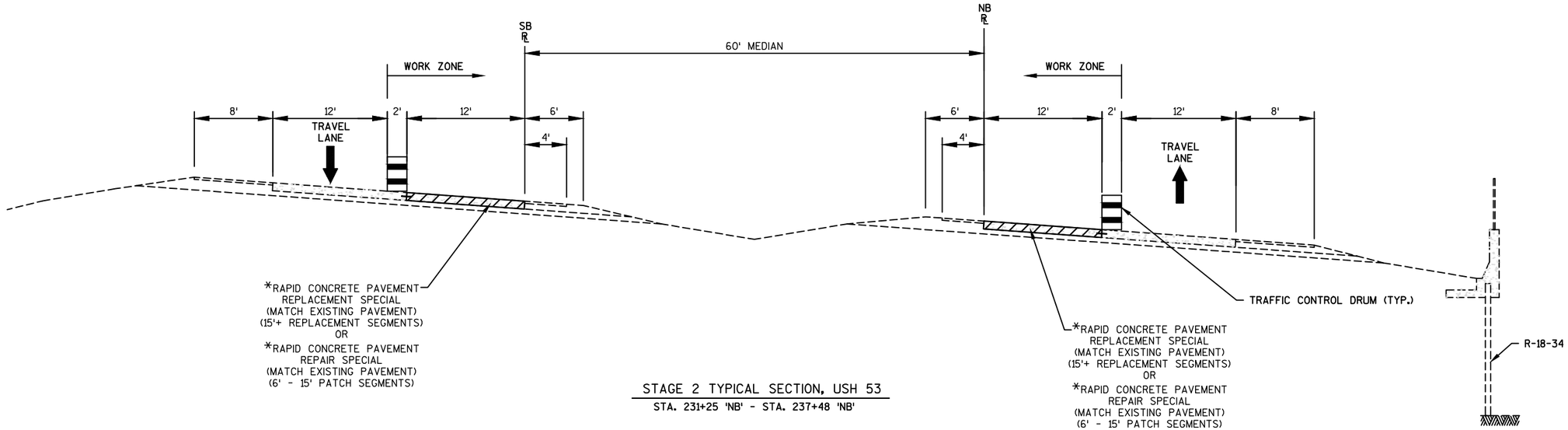
*LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD



STAGE 2 TYPICAL SECTION, USH 53

STA. 225+24 'NB' - STA. 231+25 'NB'

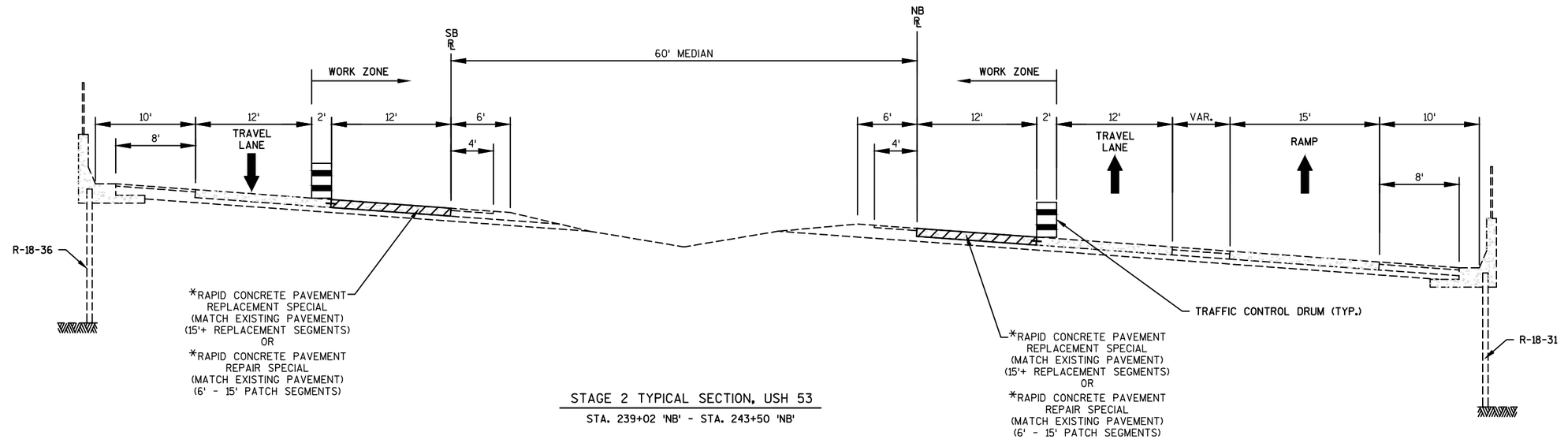
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 80	E



STAGE 2 TYPICAL SECTION, USH 53

STA. 231+25 'NB' - STA. 237+48 'NB'

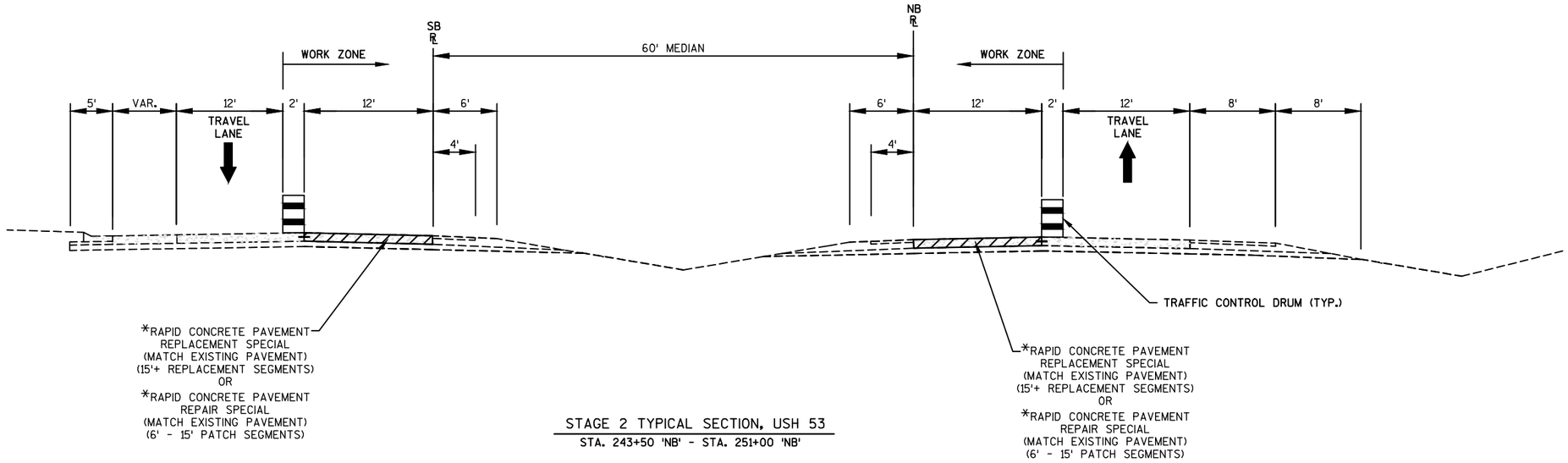
*LOCATIONS TO BE DETERMINED
BY THE ENGINEER IN THE FIELD



STAGE 2 TYPICAL SECTION, USH 53

STA. 239+02 'NB' - STA. 243+50 'NB'

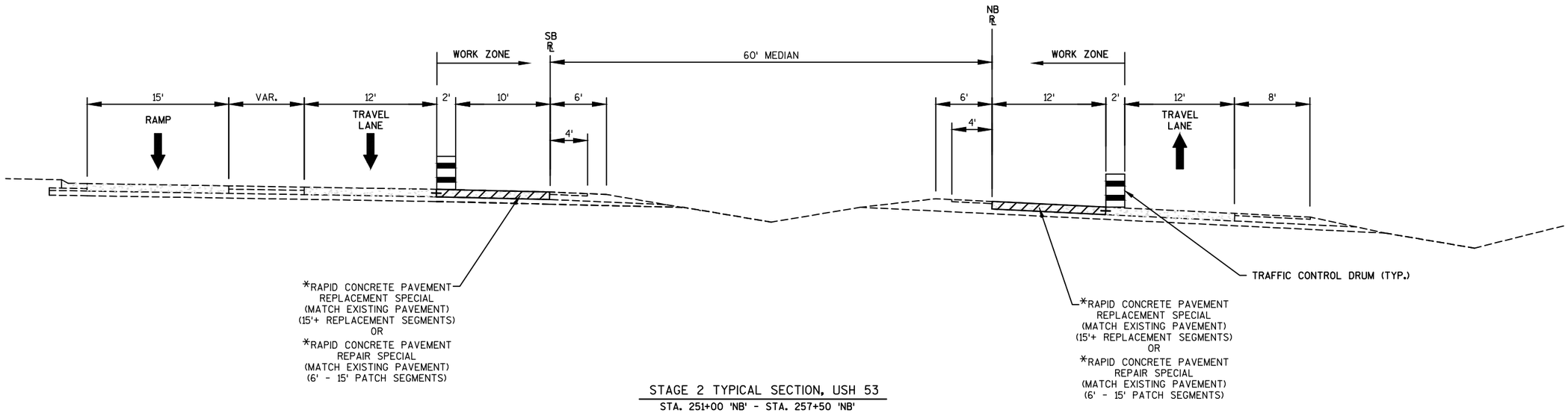
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 81	E



STAGE 2 TYPICAL SECTION, USH 53

STA. 243+50 'NB' - STA. 251+00 'NB'

*LOCATIONS TO BE DETERMINED
BY THE ENGINEER IN THE FIELD

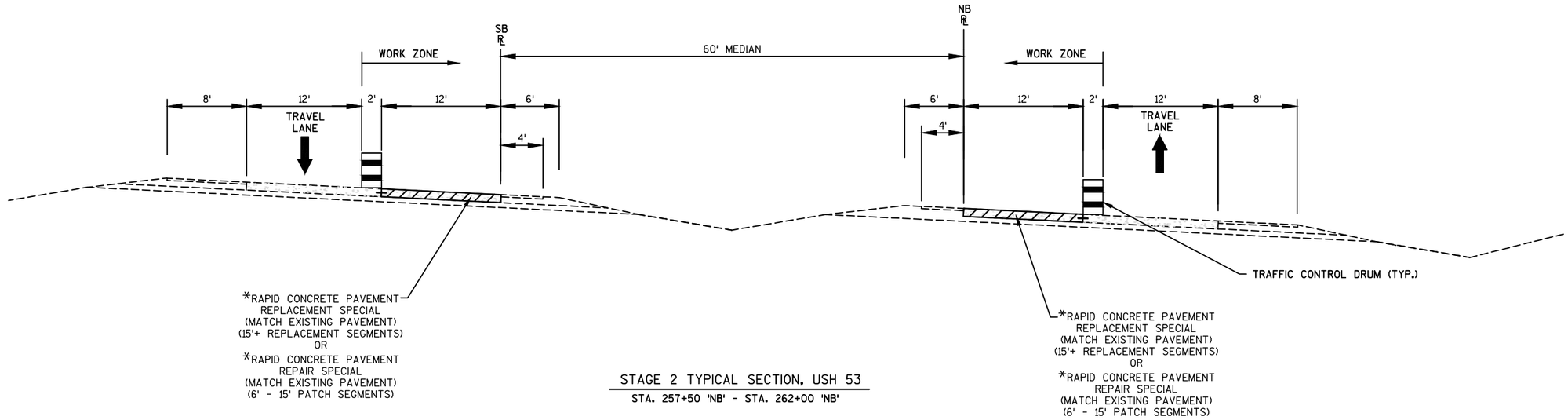


STAGE 2 TYPICAL SECTION, USH 53

STA. 251+00 'NB' - STA. 257+50 'NB'

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 82	E

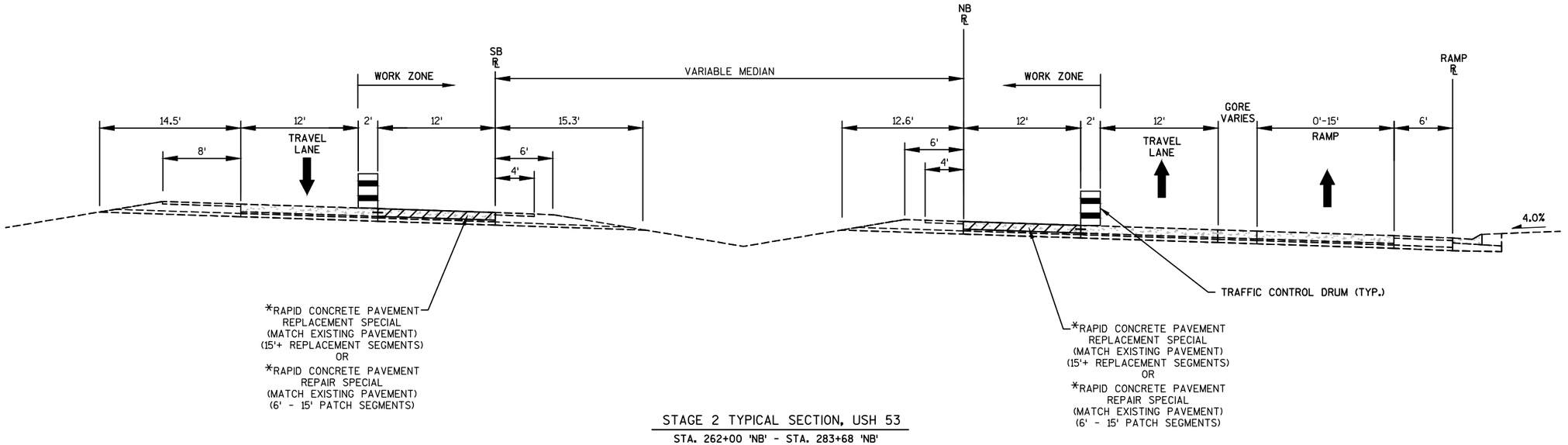
2



STAGE 2 TYPICAL SECTION, USH 53

STA. 257+50 'NB' - STA. 262+00 'NB'

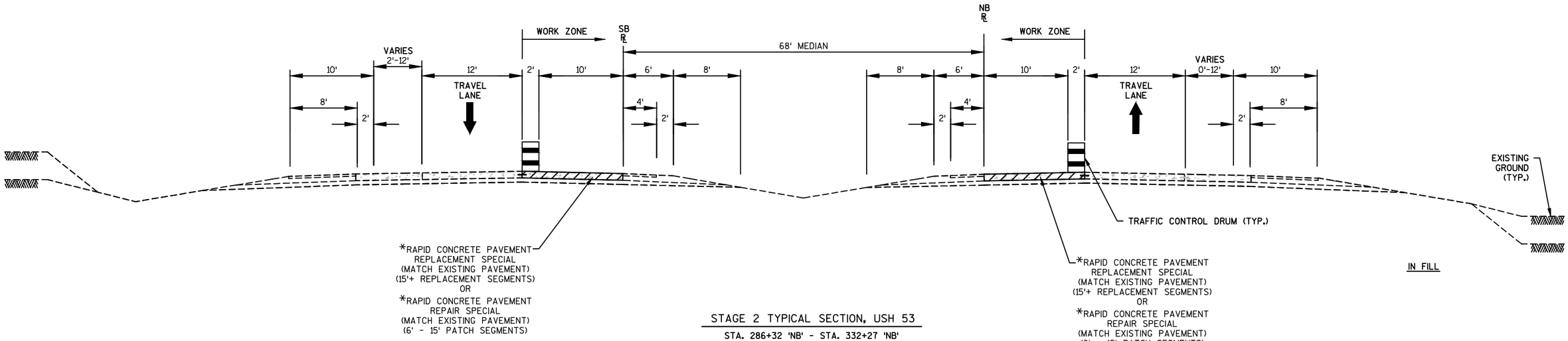
*LOCATIONS TO BE DETERMINED
BY THE ENGINEER IN THE FIELD



STAGE 2 TYPICAL SECTION, USH 53

STA. 262+00 'NB' - STA. 283+68 'NB'

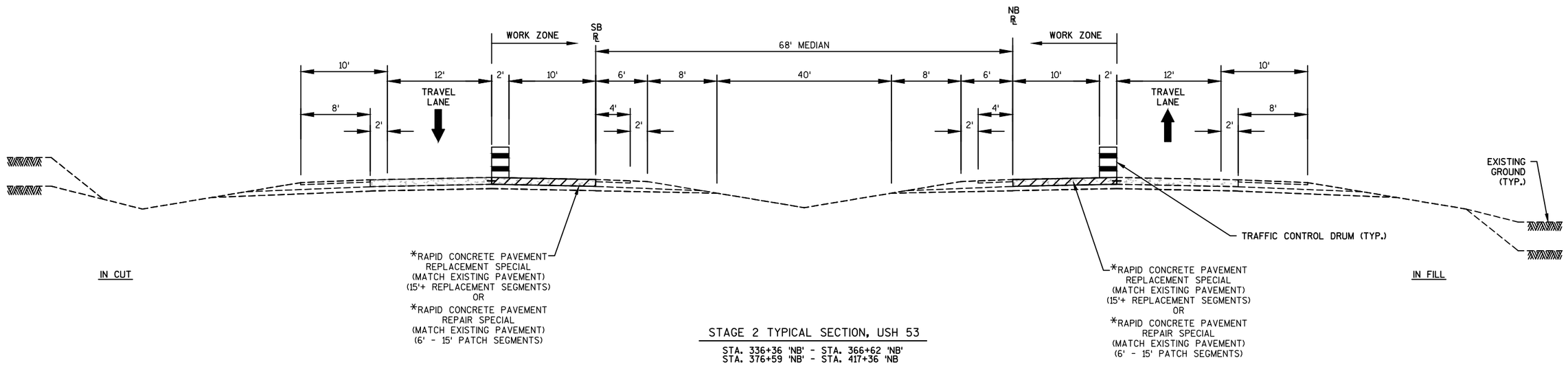
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 83	E



STAGE 2 TYPICAL SECTION, USH 53

STA. 286+32 'NB' - STA. 332+27 'NB'

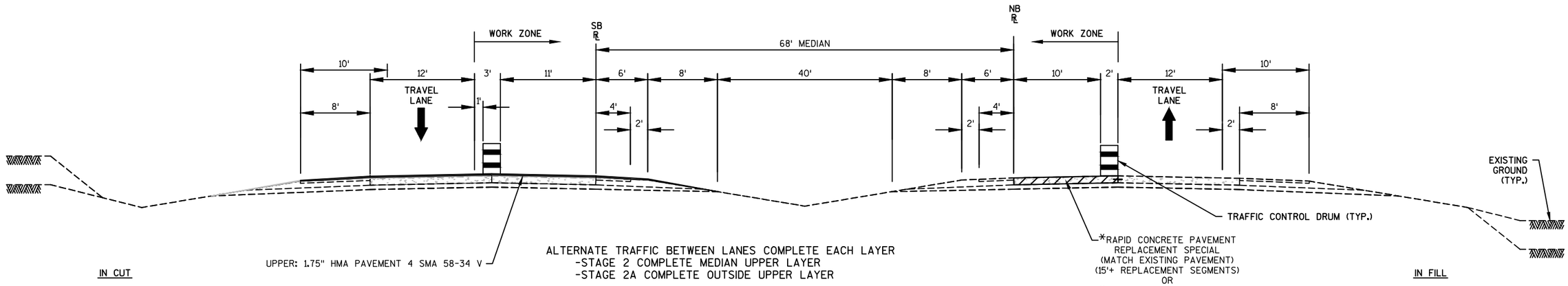
*LOCATIONS TO BE DETERMINED
BY THE ENGINEER IN THE FIELD



STAGE 2 TYPICAL SECTION, USH 53

STA. 336+36 'NB' - STA. 366+62 'NB'
STA. 376+59 'NB' - STA. 417+36 'NB

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 84	E

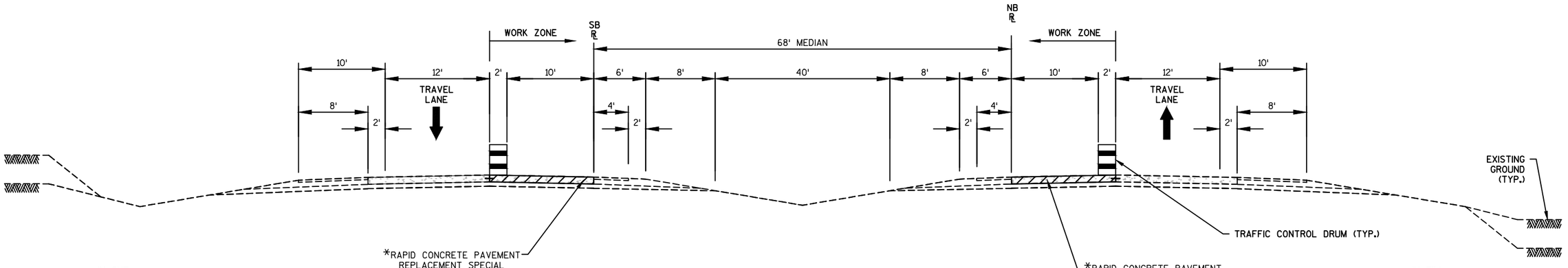


STAGE 2,2A TYPICAL SECTION, SB USH 53

STA. 418+00 'SB' - STA. 617+00 'SB'

STAGE 2 TYPICAL SECTION, USH 53

STA. 417+36 'NB' - STA. 616+58 'NB'

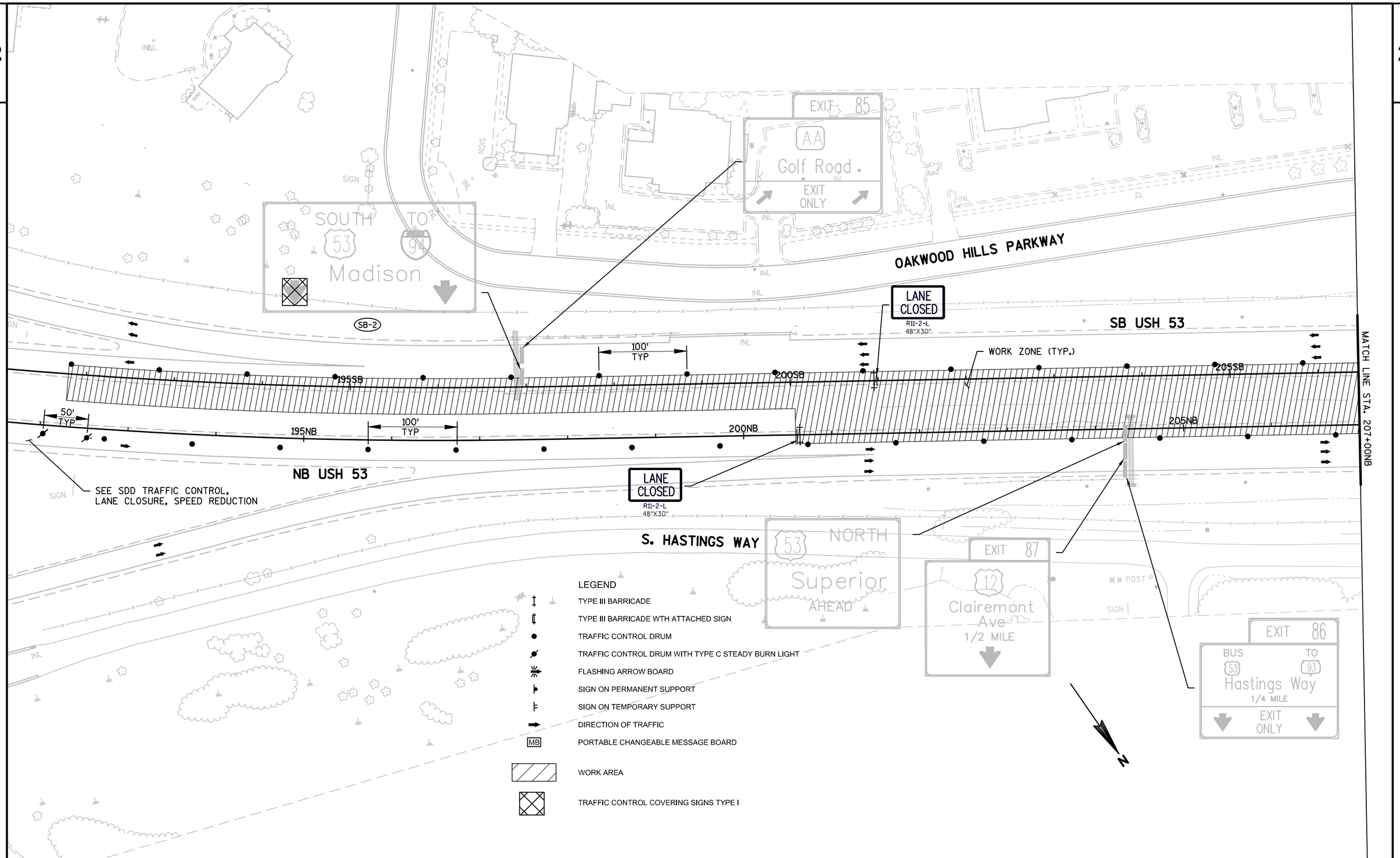


STAGE 2 TYPICAL SECTION, USH 53

STA. 616+58 'NB' - STA. 667+63 'NB'
STA. 669+53 'NB' - STA. 675+32 'NB
STA. 677+20 'NB' - STA. 698+09 'NB'

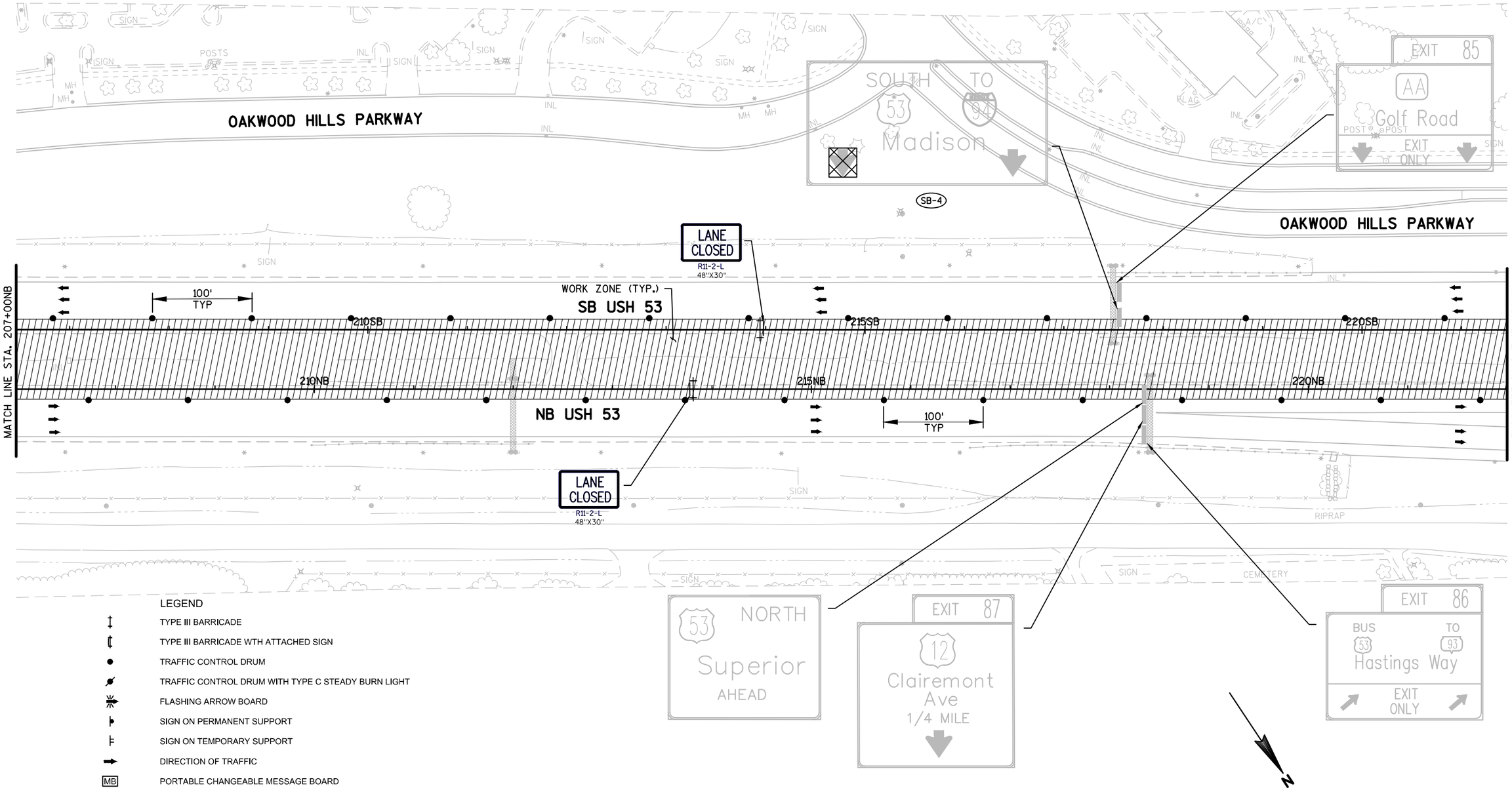
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CONSTRUCTION STAGING TYPICAL SECTIONS	SHEET 85	E

2



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL-USH 53 (STAGE 2)	SHEET 86	E

2

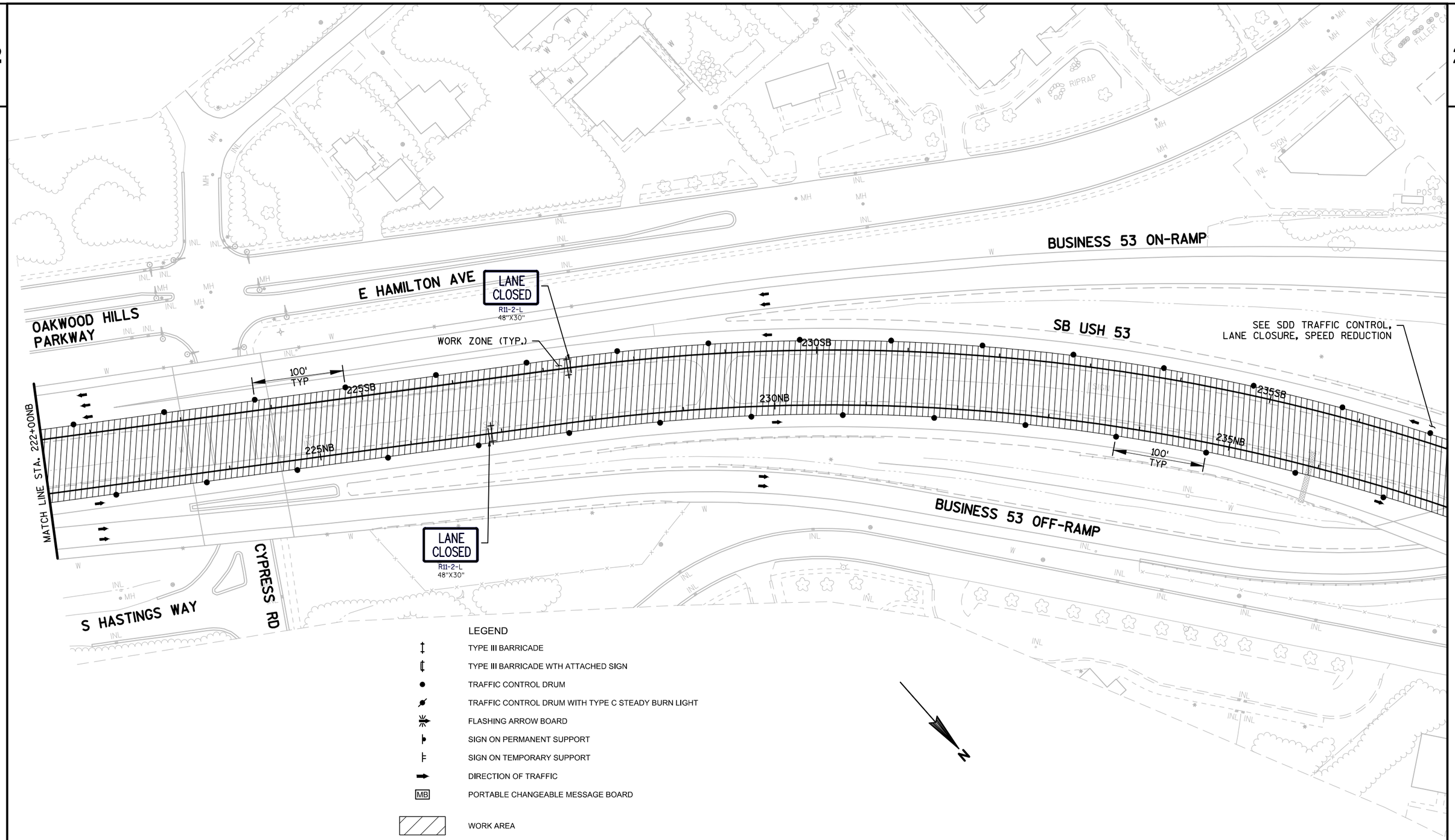


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- TRAFFIC CONTROL COVERING SIGNS TYPE I

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL-USH 53 (STAGE 2)	SHEET 87	E

2

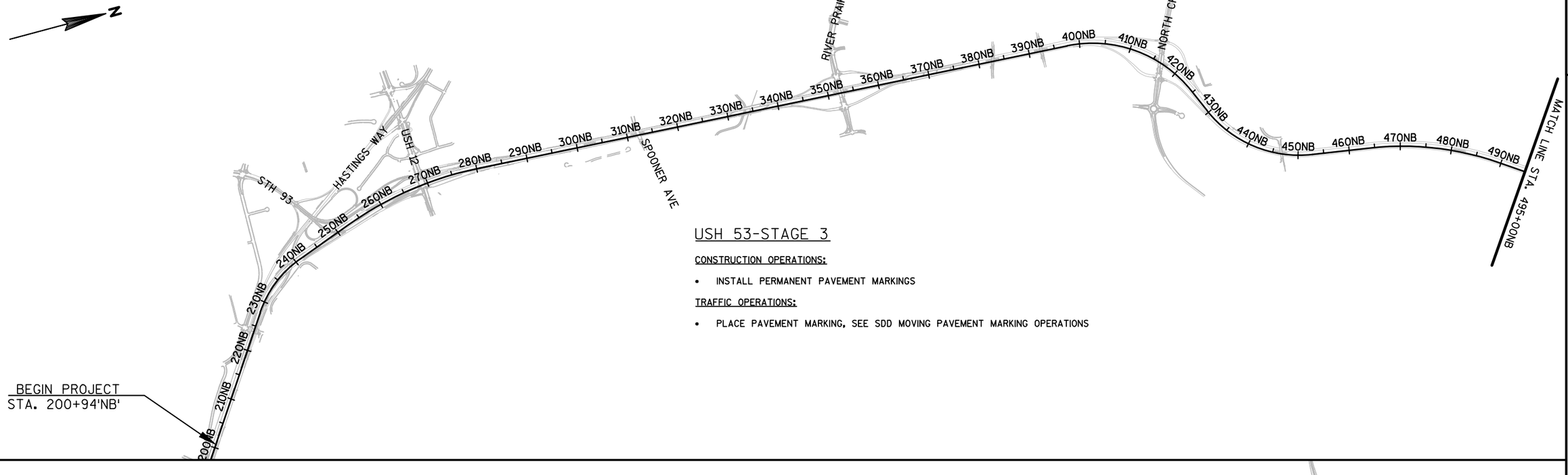


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- WORK AREA
- TRAFFIC CONTROL COVERING SIGNS TYPE I

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL-USH 53 (STAGE 2)	SHEET 88	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\025001-TC-S2.DWG
LAYOUT NAME - SHEET - (3)
PLOT DATE : 4/16/2024 11:07 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT



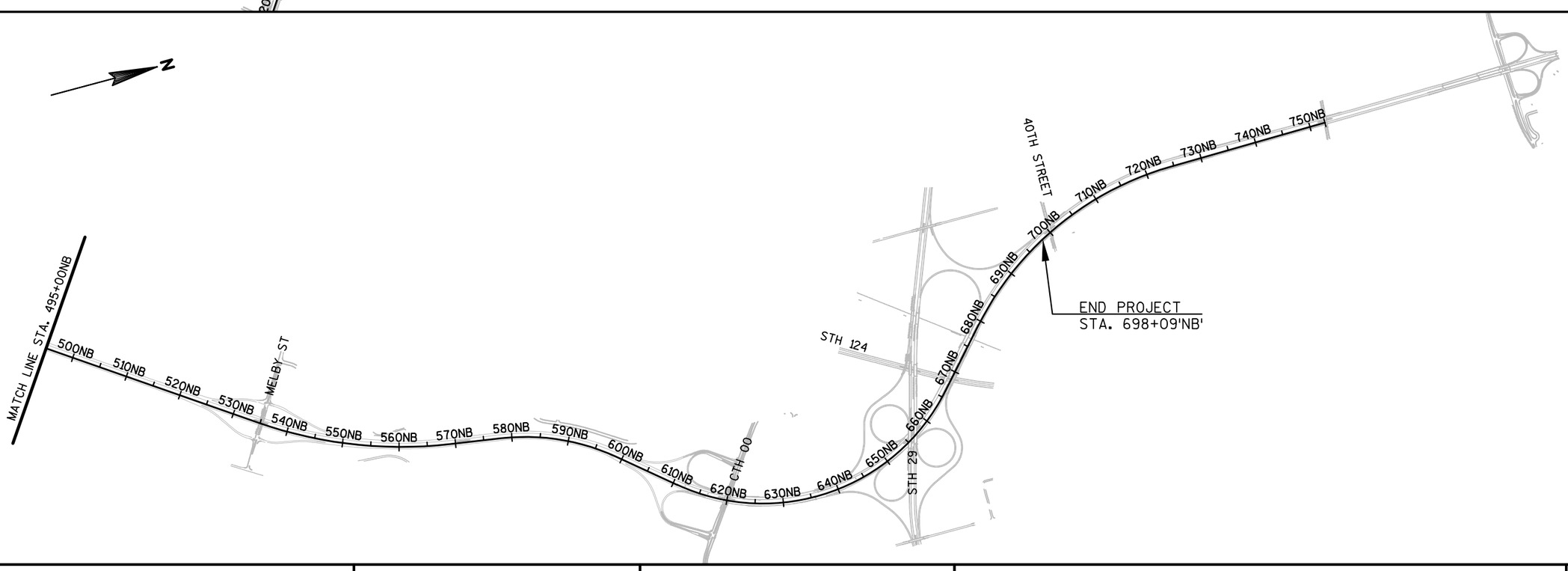
USH 53-STAGE 3

CONSTRUCTION OPERATIONS:

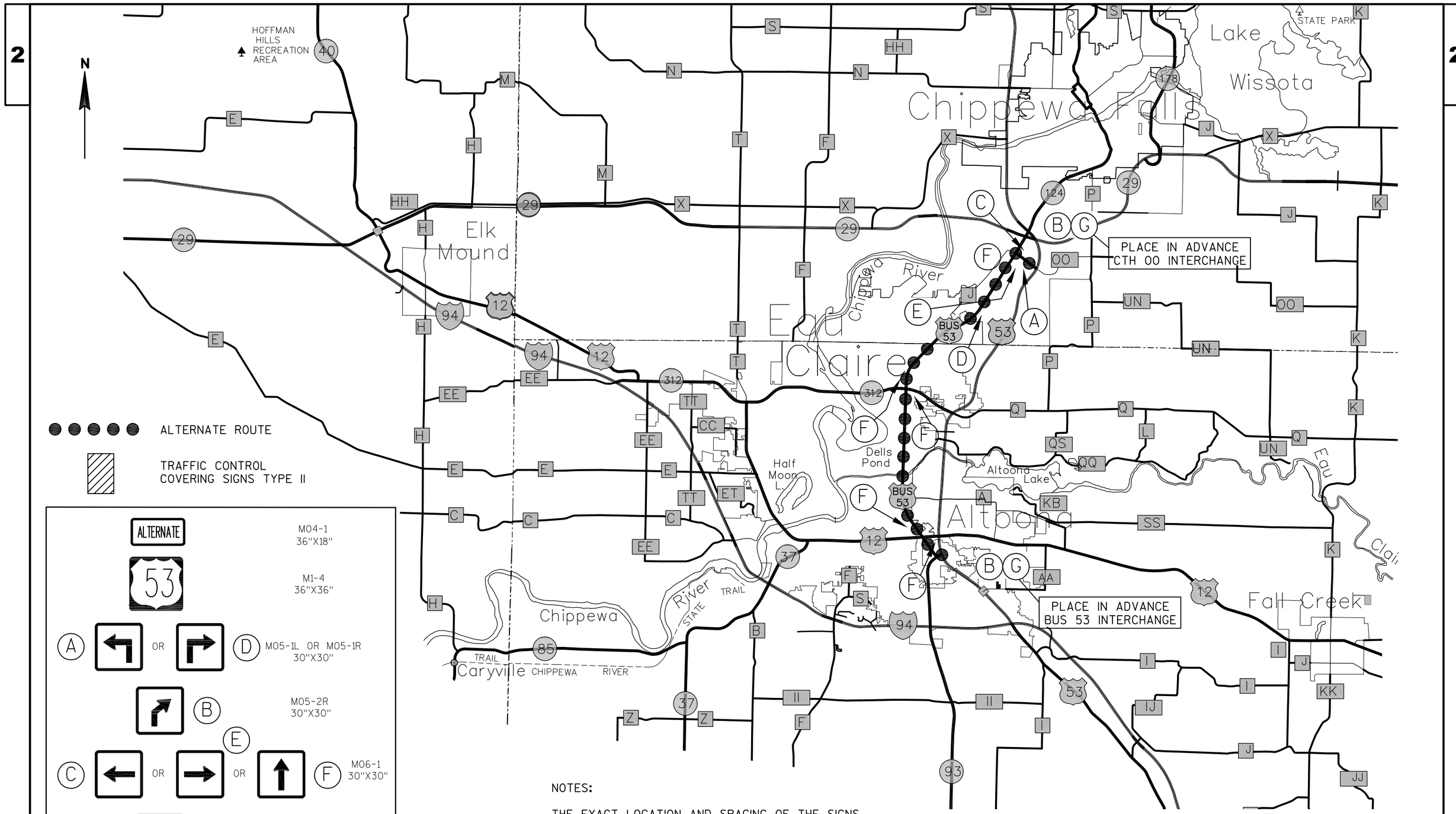
- INSTALL PERMANENT PAVEMENT MARKINGS

TRAFFIC OPERATIONS:

- PLACE PAVEMENT MARKING, SEE SDD MOVING PAVEMENT MARKING OPERATIONS



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL - STAGE 3 OVERVIEW	SHEET 89 E



NOTES:

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

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	TRAFFIC CONTROL USH 53 ALTERNATE ROUTE	SHEET 90 E

2

LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM/WITH TYPE C LIGHT
- SIGN ON PORTABLE SUPPORT
- MB TRAFFIC CONTROL SIGNS PCMS
- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)

NORTH SOUTH	M3-1/M3-3	36"X18"
TO	M04-5	36"X18"
END DETOUR	M4-8-A	30"X24"
	M05-2	30"X30"
	M06-1	30"X30"
	M06-2	30"X30"
93	M1-6	36"X36"
53	M1-4	36"X36"
RAMP CLOSED AHEAD	W20-53A	48"X48"

TRAFFIC CONTROL COVERING SIGNS

FRAME 1	FRAME 2
EXIT 86 RAMP TO CLOSE	XXXDAY XX XX XX

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE FOR 7 DAYS PRIOR TO, THE STH 93 DETOUR.

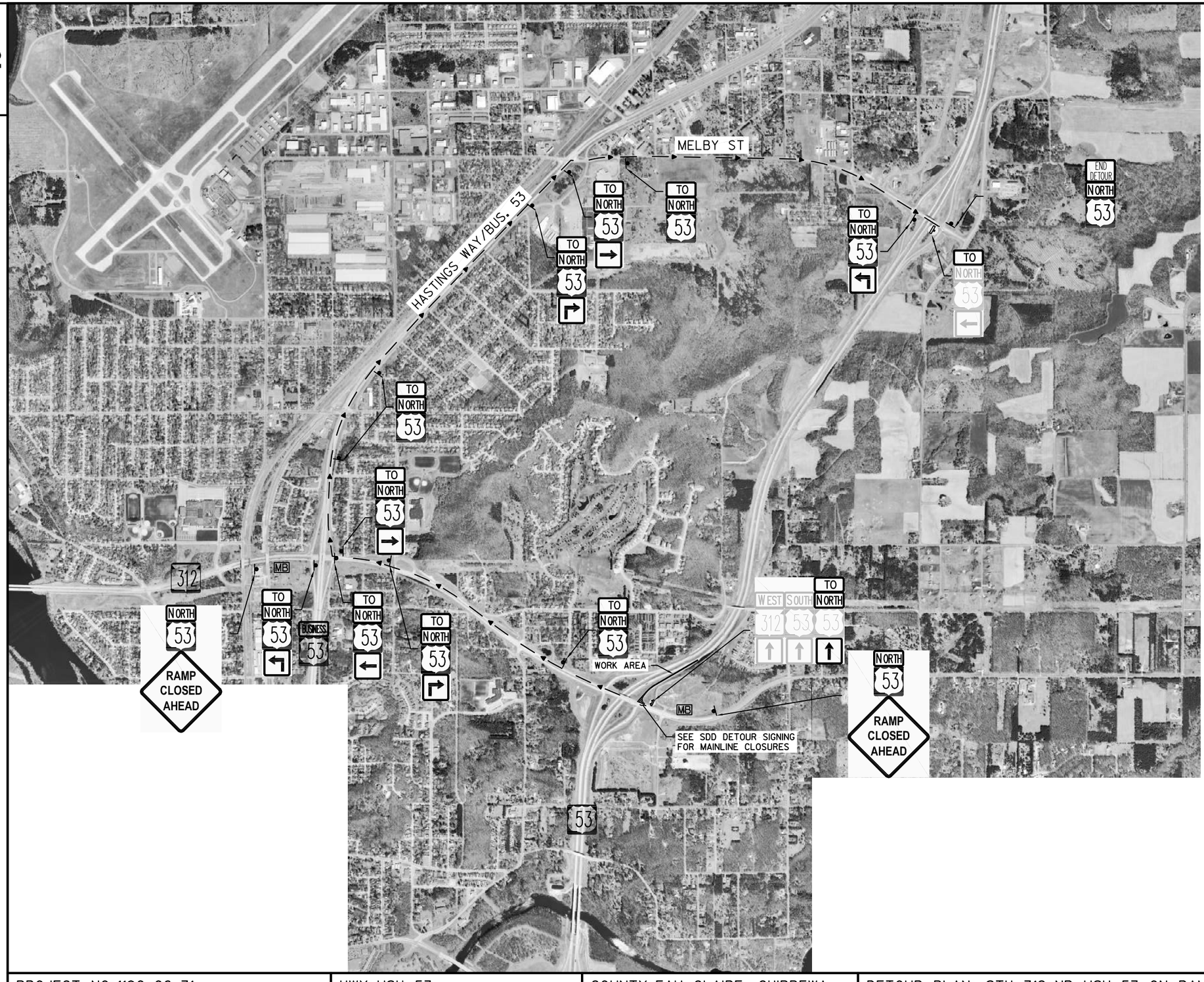
FRAME 1	FRAME 2
EXIT 86 RAMP CLOSED	USE ALT ROUTE

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE DURING, THE STH 93 DETOUR.

N

2

PROJECT NO: 1190-06-31	HWY: USH 53	COUNTY: EAU CLAIRE, CHIPPEWA	DETOUR PLAN: STH 93-SB USH 53 OFF RAMP	SHEET 91	E



N

LEGEND

	WORK ZONE
	TRAFFIC CONTROL DRUM/WITH TYPE C LIGHT
	SIGN ON PERMANENT SUPPORT
MB	TRAFFIC CONTROL SIGNS PCMS
	DETOUR ROUTE
	EXISTING SIGN MOUNTED ON POST(S)
NORTH SOUTH M3-1/M3-3	36"X18"
TO M04-5	36"X18"
END DETOUR M4-8-A	30"X24"
M05-1	30"X30"
M06-1	30"X30"
M06-2	30"X30"
53 M1-4	36"X36"
RAMP CLOSED AHEAD W20-53A	48"X48"

FRAME 1	FRAME 2
NB HWY 53 RAMP TO CLOSE	XXXDAY XX XX XX

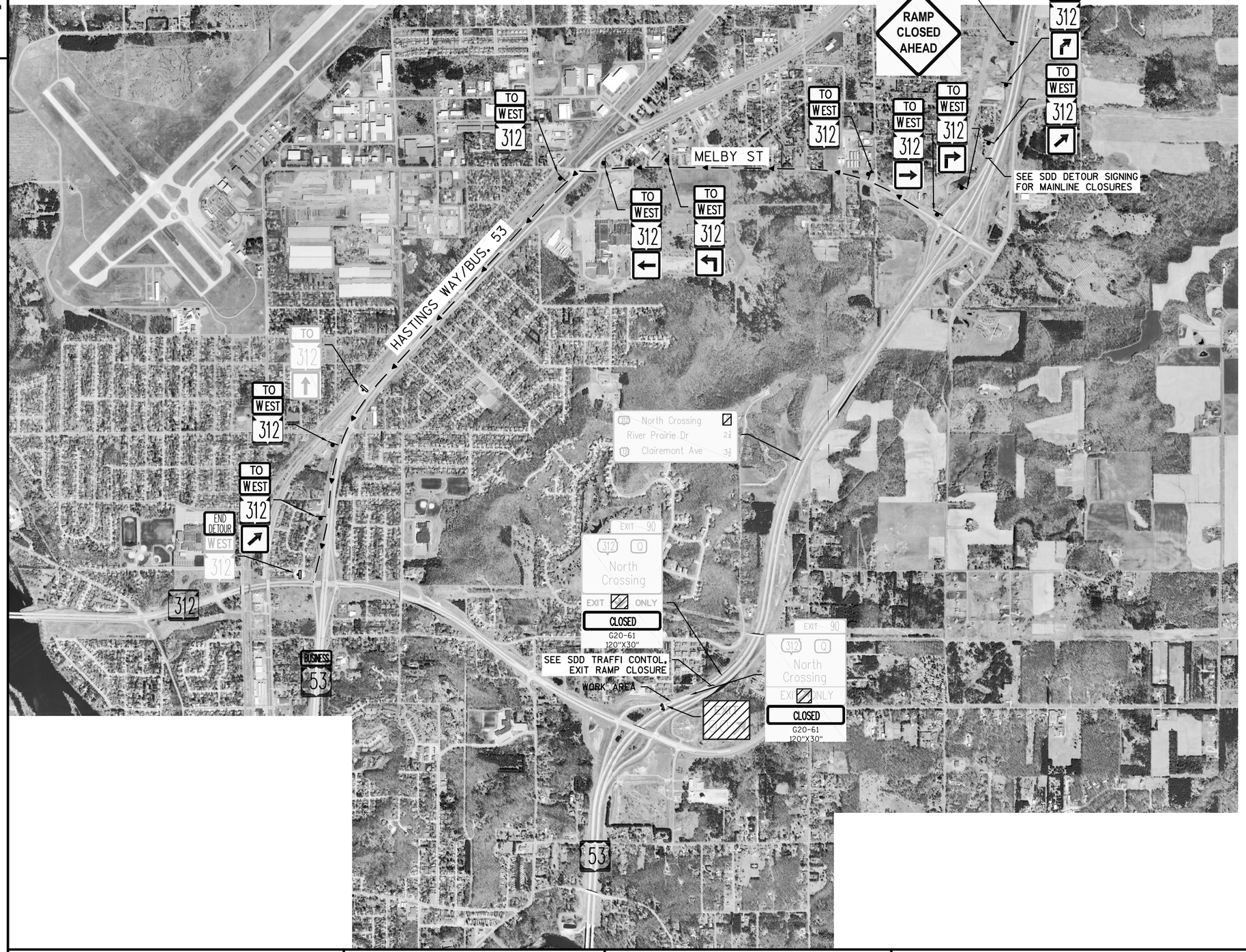
PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE FOR 7 DAYS PRIOR TO, THE USH 53 DETOUR.

FRAME 1	FRAME 2
NB HWY 53 RAMP CLOSED	USE ALT ROUTE

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE DURING, THE USH 53 DETOUR.

PROJECT NO: 1190-06-31	HWY: USH 53	COUNTY: EAU CLAIRE, CHIPPEWA	DETOUR PLAN: STH 312-NB USH 53 ON RAMP	SHEET 92	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\027003-DT.DWG
LAYOUT NAME - ****
PLOT DATE : 4/22/2024 3:37 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:2000 FT
WISDOT/CADDS SHEET 42



N

LEGEND

	WORK ZONE	
	TRAFFIC CONTROL DRUM/WITH TYPE C LIGHT	
	SIGN ON PERMANENT SUPPORT	
MB	TRAFFIC CONTROL SIGNS PCMS	
	DETOUR ROUTE	
	EXISTING SIGN MOUNTED ON POST(S)	
WEST / TO	M3-4/M4-5	36"X18"
TO	M04-5	36"X18"
END DETOUR	M4-8-A	30"X24"
	M05-1	30"X30"
	M05-2	30"X30"
	M06-1	30"X30"
	M06-2	30"X30"
312	M1-6	36"X36"
RAMP CLOSED AHEAD	W20-53A	48"X48"
	TRAFFIC CONTROL COVERING SIGNS	

FRAME 1	FRAME 2
EXIT 90 RAMP TO CLOSE	XXXDAY XX XX XX

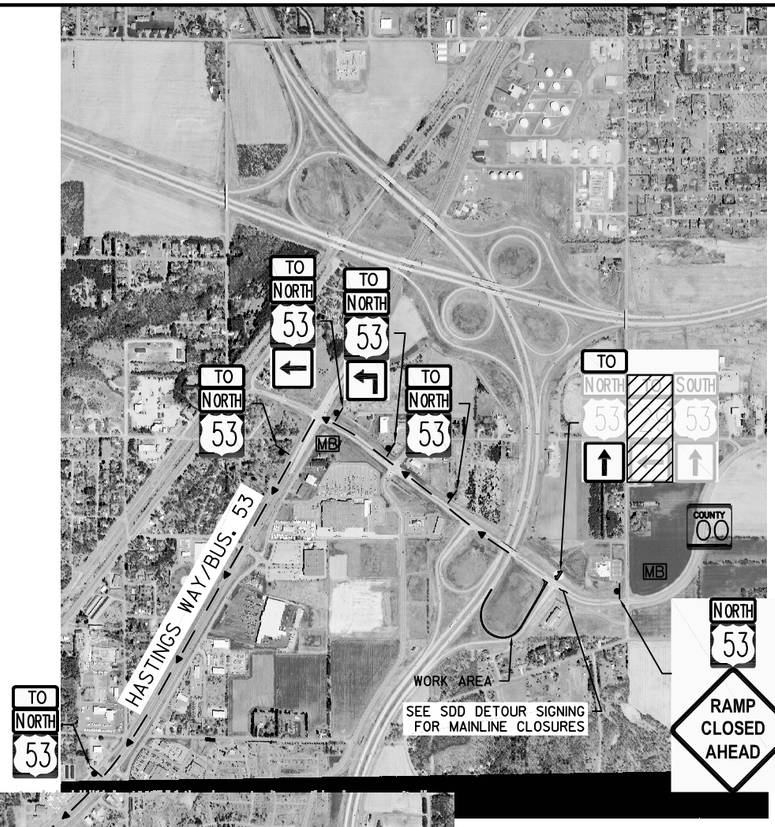
PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE FOR 7 DAYS PRIOR TO, THE STH 312 DETOUR.

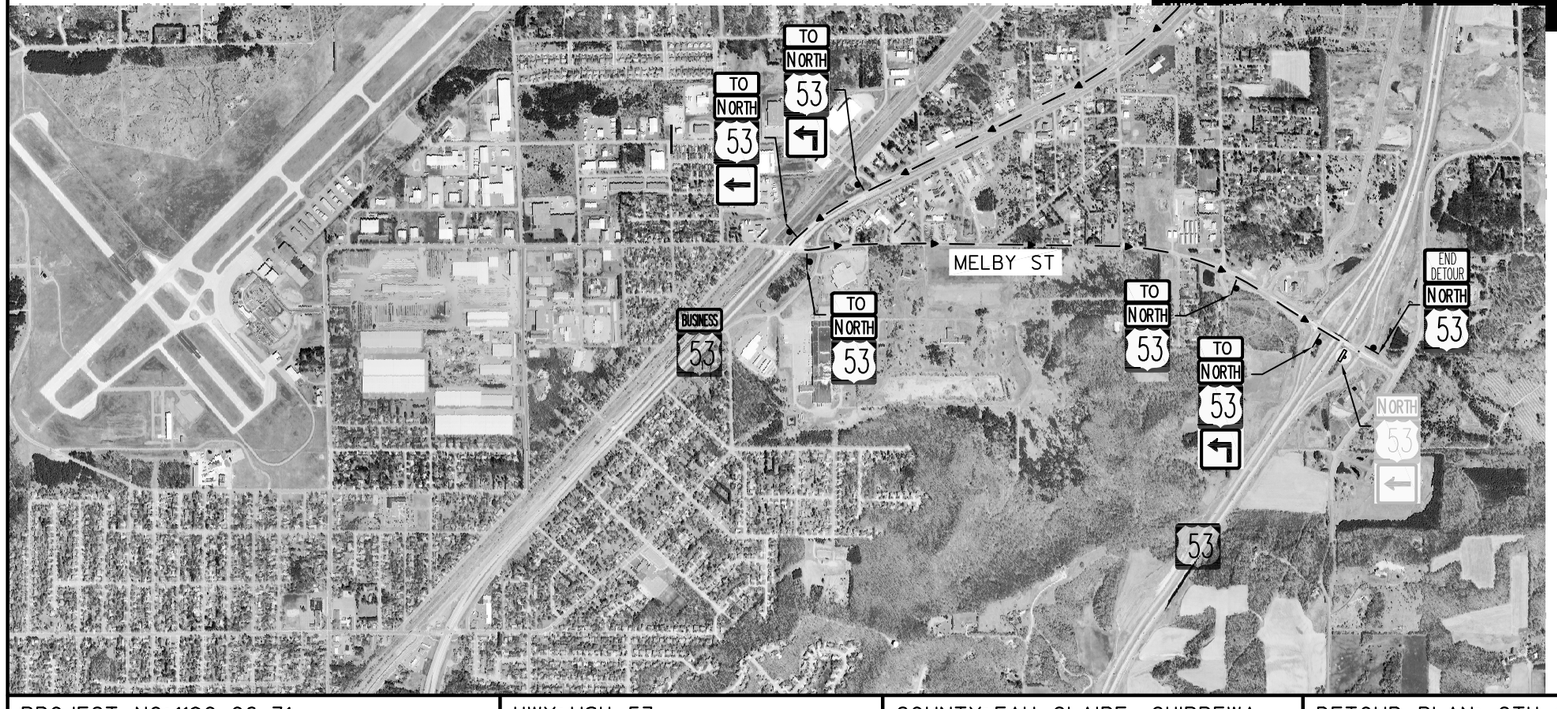
FRAME 1	FRAME 2
EXIT 90 RAMP CLOSED	USE EXIT 92

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE DURING, THE STH 312 DETOUR.

PROJECT NO: 1190-06-31	HWY: USH 53	COUNTY: EAU CLAIRE, CHIPPEWA	DETOUR PLAN: STH 312-SB USH 53 OFF RAMP	SHEET 93 E

2





LEGEND

	WORK ZONE	
	TRAFFIC CONTROL DRUM/WITH TYPE C LIGHT	
	SIGN ON PERMANENT SUPPORT	
MB	TRAFFIC CONTROL SIGNS PCMS	
	DETOUR ROUTE	
	EXISTING SIGN MOUNTED ON POST(S)	
NORTH SOUTH	M3-1/M3-3	36"X18"
TO	M04-8	36"X18"
END DETOUR	M4-8-A	30"X24"
	M05-1	30"X30"
	M06-1	30"X30"
	M06-2	30"X30"
53	M1-4	36"X36"
RAMP CLOSED AHEAD	W20-53A	48"X48"
	TRAFFIC CONTROL COVERING SINGS	

FRAME 1	FRAME 2
NB HWY 53 RAMP TO CLOSE	XXXDAY XX XX XX

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE FOR 7 DAYS PRIOR TO, THE USH 53 DETOUR.

FRAME 1	FRAME 2
NB HWY 53 RAMP CLOSED	USE ALT ROUTE

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE DURING, THE USH 53 DETOUR.

N

PROJECT NO: 1190-06-31	HWY: USH 53	COUNTY: EAU CLAIRE, CHIPPEWA	DETOUR PLAN: CTH OO-NB USH 53 ON RAMP	SHEET 94	E

2

N

LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM/WITH TYPE C LIGHT
- SIGN ON PERMANENT SUPPORT
- MB TRAFFIC CONTROL SIGNS PCMS
- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)

NORTH SOUTH	M3-1/M3-3	36"X18"
TO	M04-8	36"X18"
END DETOUR	M4-8-A	30"X24"
	M05-2	30"X30"
	M06-1	30"X30"
	M06-2	30"X30"
53	M1-4	36"X36"
RAMP CLOSED AHEAD	W20-53A	48"X48"

FRAME 1	FRAME 2
EXIT 75B RAMP TO CLOSE	XXXDAY XX XX XX

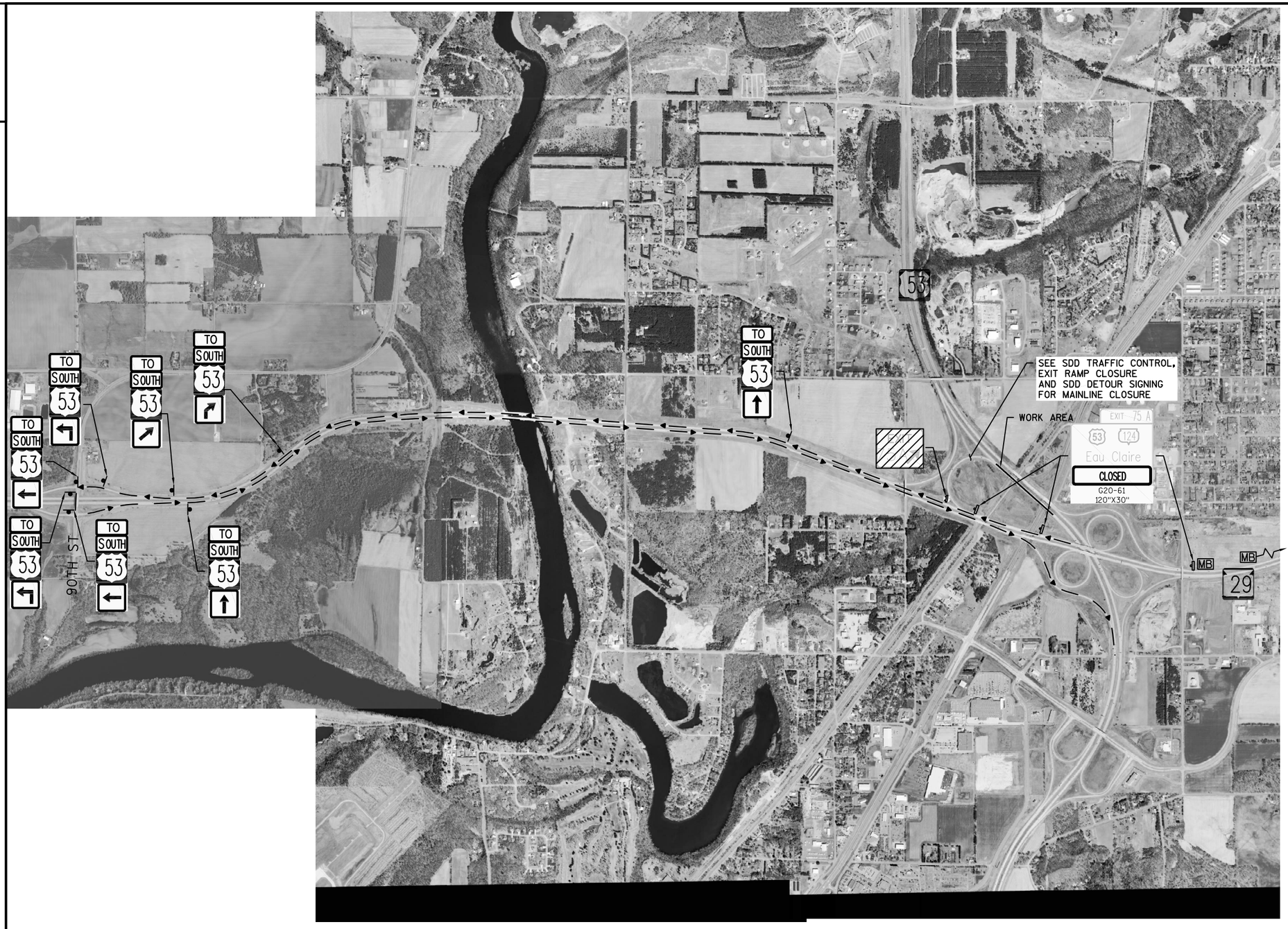
PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE FOR 7 DAYS PRIOR TO, THE STH 53 DETOUR.

FRAME 1	FRAME 2
EXIT 75B RAMP CLOSED	USE ALT ROUTE

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE DURING, THE STH 53 DETOUR.

PROJECT NO: 1190-06-31	HWY: USH 53	COUNTY: EAU CLAIRE, CHIPPEWA	DETOUR PLAN: WB STH 29-NB USH 53 ON RAMP	SHEET 95	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\027006-DT BRIDGE.DWG
LAYOUT NAME - ****
PLOT DATE : 4/22/2024 4:39 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42



LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUM/WITH TYPE C LIGHT
- SIGN ON PERMANENT SUPPORT
- MB — TRAFFIC CONTROL SIGNS PCMS
- DETOUR ROUTE
- EXISTING SIGN MOUNTED ON POST(S)

NORTH / SOUTH	M3-1/M3-3	36"X18"
TO	M04-8	36"X18"
END DETOUR	M4-8-A	30"X24"
	M05-1	30"X30"
	M06-1	30"X30"
	M06-2	30"X30"
53	M1-4	36"X36"
RAMP CLOSED AHEAD	W20-53A	48"X48"

- TRAFFIC CONTROL COVERING SINGS

FRAME 1	FRAME 2
SB HWY 53 RAMP TO CLOSE	XXXDAY XX XX XX

PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE FOR 7 DAYS PRIOR TO, THE USH 53 DETOUR.

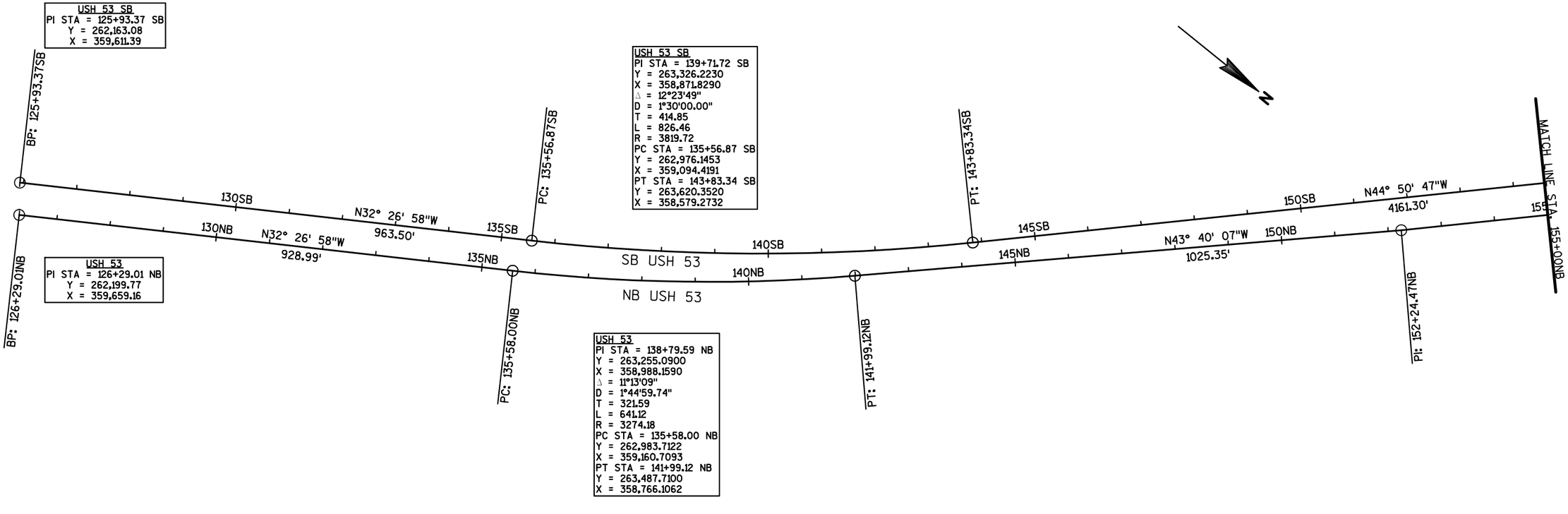
FRAME 1	FRAME 2
SB HWY 53 RAMP CLOSED	USE ALT ROUTE

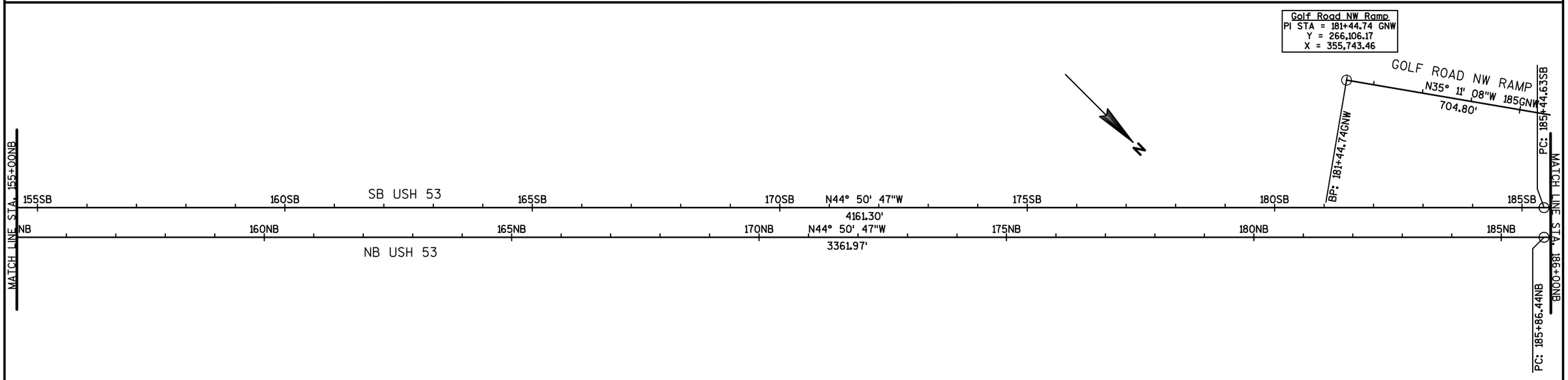
PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE IN PLACE DURING, THE USH 53 DETOUR.

N

PROJECT NO: 1190-06-31	HWY: USH 53	COUNTY: EAU CLAIRE, CHIPPEWA	DETOUR PLAN: WB STH 29-SB USH 53 ON RAMP	SHEET 96	E

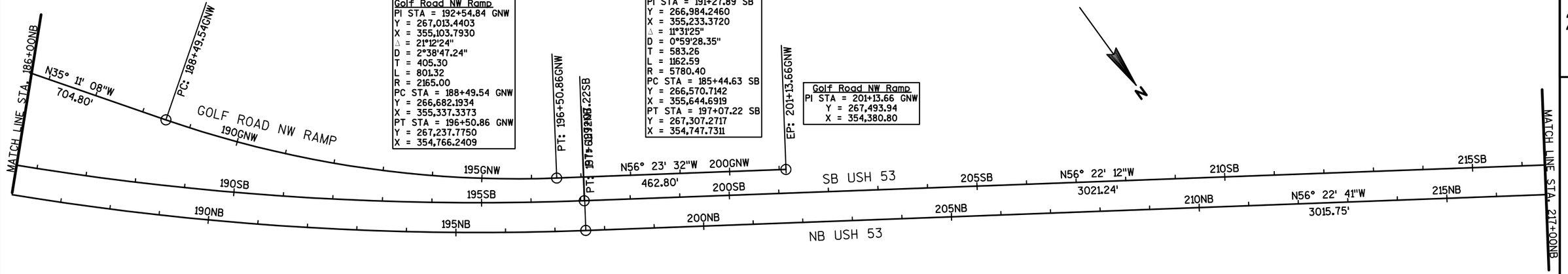
2





PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 97	E

2

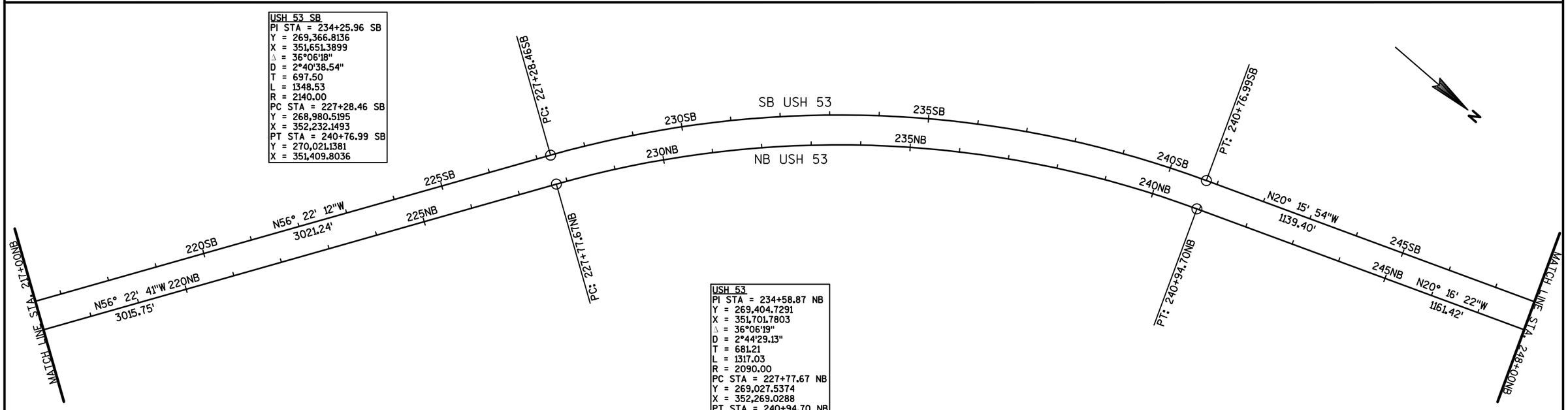


Golf Road NW Ramp
PI STA = 192+54.84 GNW
Y = 267,013.4403
X = 355,103.7930
Δ = 21°12'24"
D = 2°38'47.24"
T = 405.30
L = 801.32
R = 2165.00
PC STA = 188+49.54 GNW
Y = 266,682.1934
X = 355,337.3373
PT STA = 196+50.86 GNW
Y = 267,237.7750
X = 354,766.2409

USH 53 SB
PI STA = 191+27.89 SB
Y = 266,984.2460
X = 355,233.3720
Δ = 11°31'25"
D = 0°59'28.35"
T = 583.26
L = 1162.59
R = 5780.40
PC STA = 185+44.63 SB
Y = 266,570.7142
X = 355,644.6919
PT STA = 197+07.22 SB
Y = 267,307.2717
X = 354,747.7311

Golf Road NW Ramp
PI STA = 201+13.66 GNW
Y = 267,493.94
X = 354,380.80

USH 53
PI STA = 191+76.17 NB
Y = 267,031.1463
X = 355,271.3482
Δ = 11°31'54"
D = 0°58'51.69"
T = 589.73
L = 1175.48
R = 5840.40
PC STA = 185+86.44 NB
Y = 266,613.0264
X = 355,687.2317
PT STA = 197+61.92 NB
Y = 267,357.6865
X = 354,780.2731

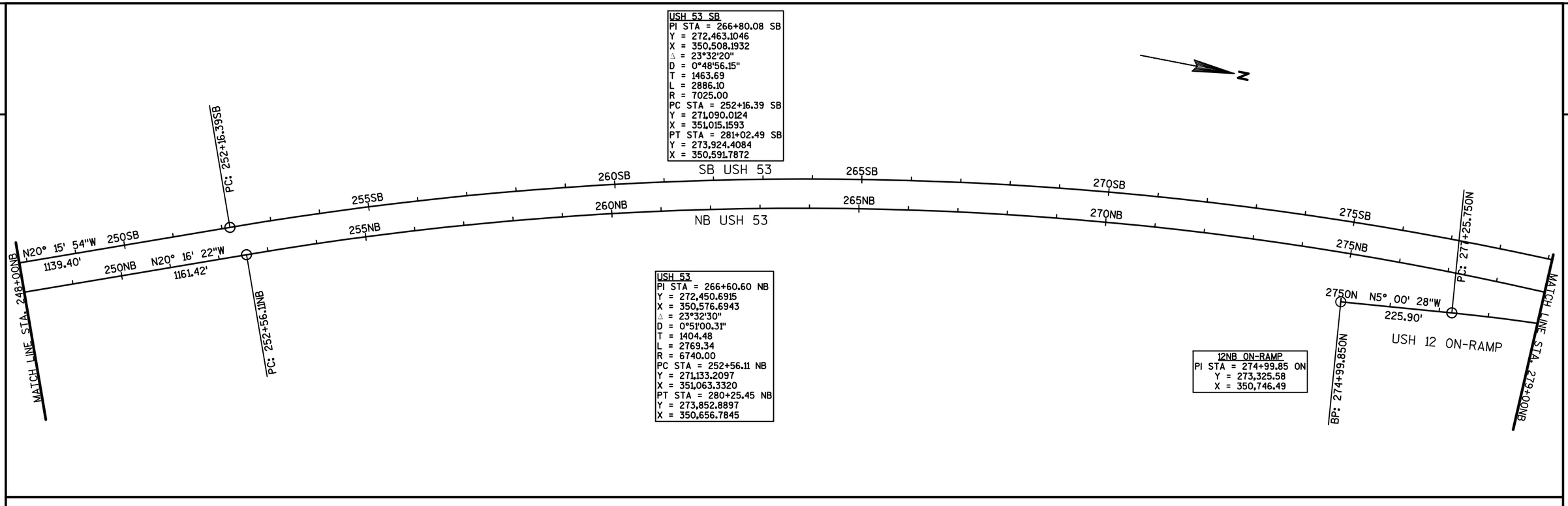


USH 53 SB
PI STA = 234+25.96 SB
Y = 269,366.8136
X = 351,651.3899
Δ = 36°06'18"
D = 2°40'38.54"
T = 697.50
L = 1348.53
R = 2140.00
PC STA = 227+28.46 SB
Y = 268,980.5195
X = 352,232.1493
PT STA = 240+76.99 SB
Y = 270,021.1381
X = 351,409.8036

USH 53
PI STA = 234+58.87 NB
Y = 269,404.7291
X = 351,701.7803
Δ = 36°06'19"
D = 2°44'29.13"
T = 681.21
L = 1317.03
R = 2090.00
PC STA = 227+77.67 NB
Y = 269,027.5374
X = 352,269.0288
PT STA = 240+94.70 NB
Y = 270,043.7392
X = 351,465.7494

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 98	E

2



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 99	E

2

N

MATCH LINE STA. 310+00NB

SB 315SB SB USH 53 320SB N3° 16' 27"E 325SB 330SB 335SB 340SB

11665.43'

NB 315NB 320NB 325NB N3° 16' 09"E 330NB 335NB 340NB

11731.38'

NB USH 53

MATCH LINE STA. 341+00NB

MATCH LINE STA. 341+00NB

345SB 350SB N3° 16' 27"E 355SB 360SB SB USH 53 365SB 370SB

11665.43'

345NB 350NB 355NB N3° 16' 09"E 360NB 365NB 370NB

11731.38'

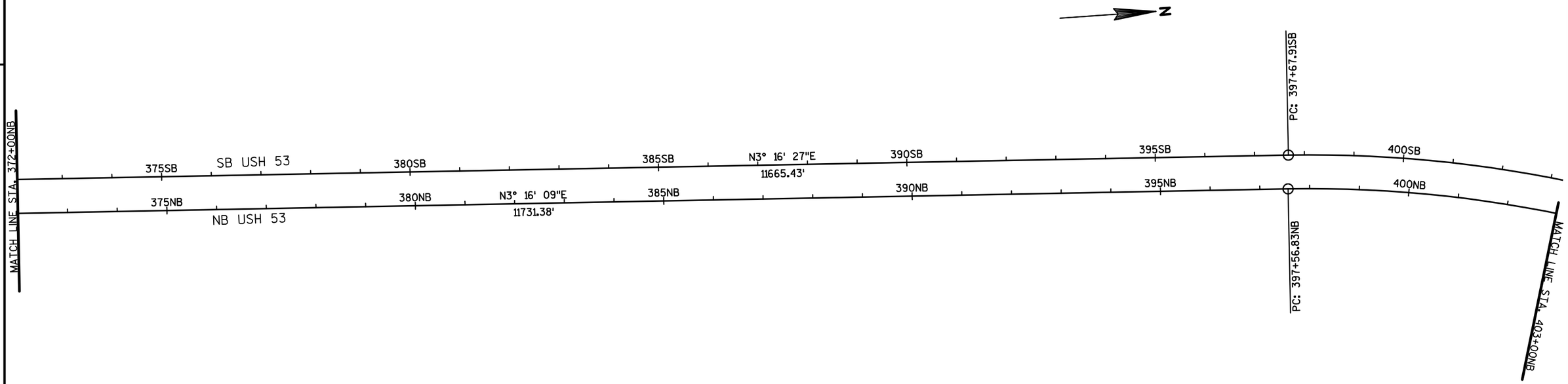
NB USH 53

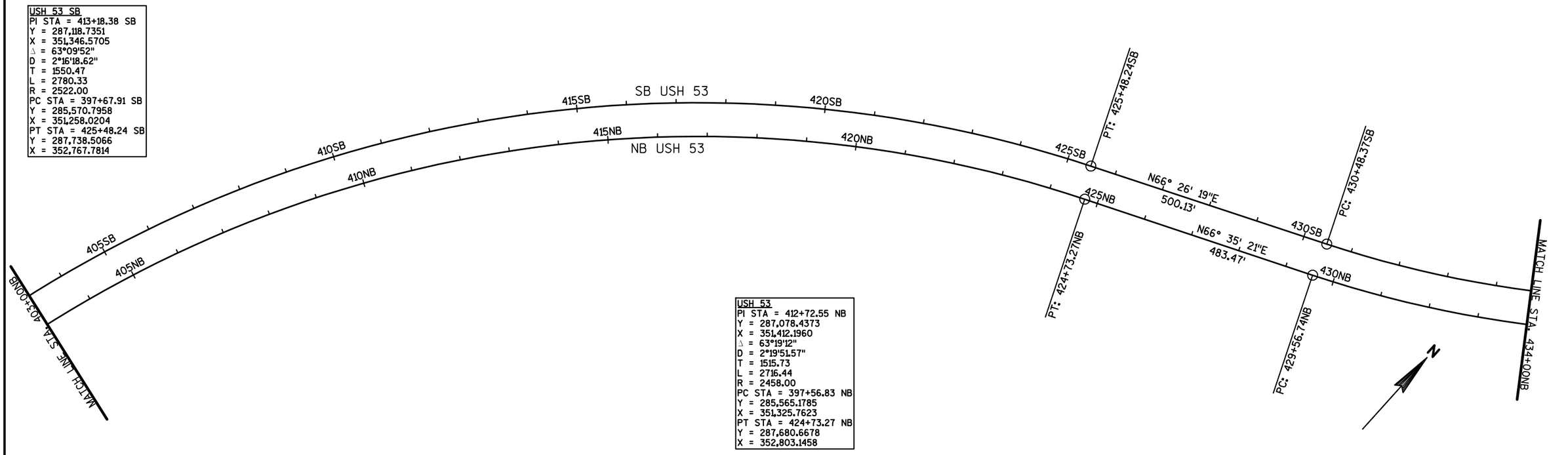
MATCH LINE STA. 372+00NB

N

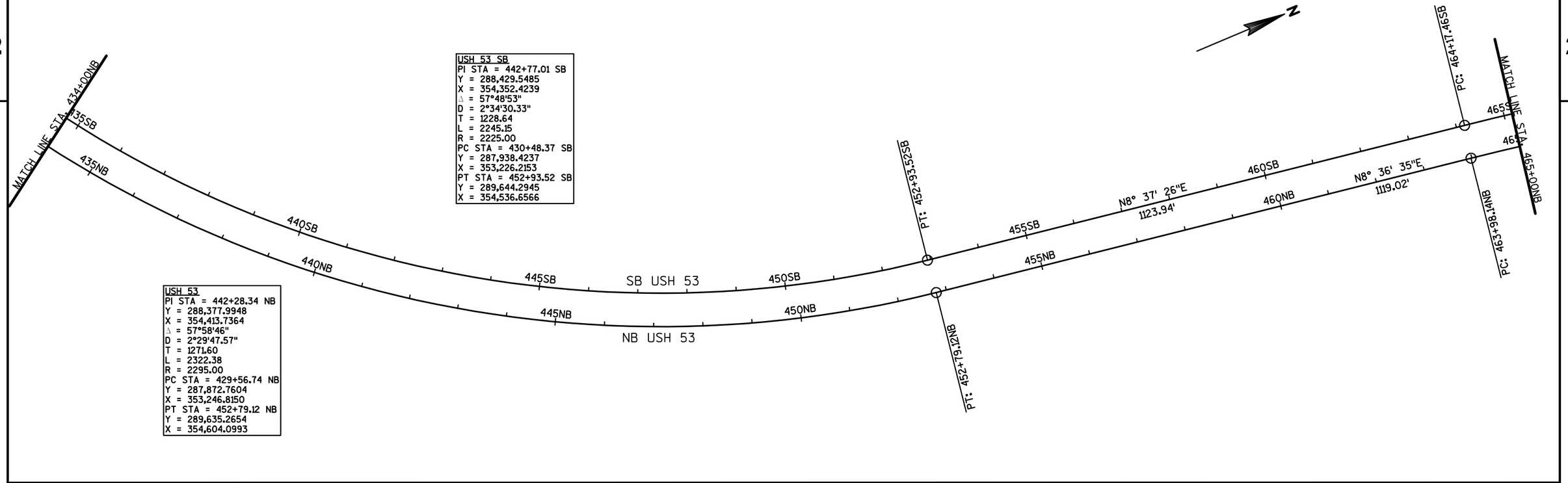
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 100	E

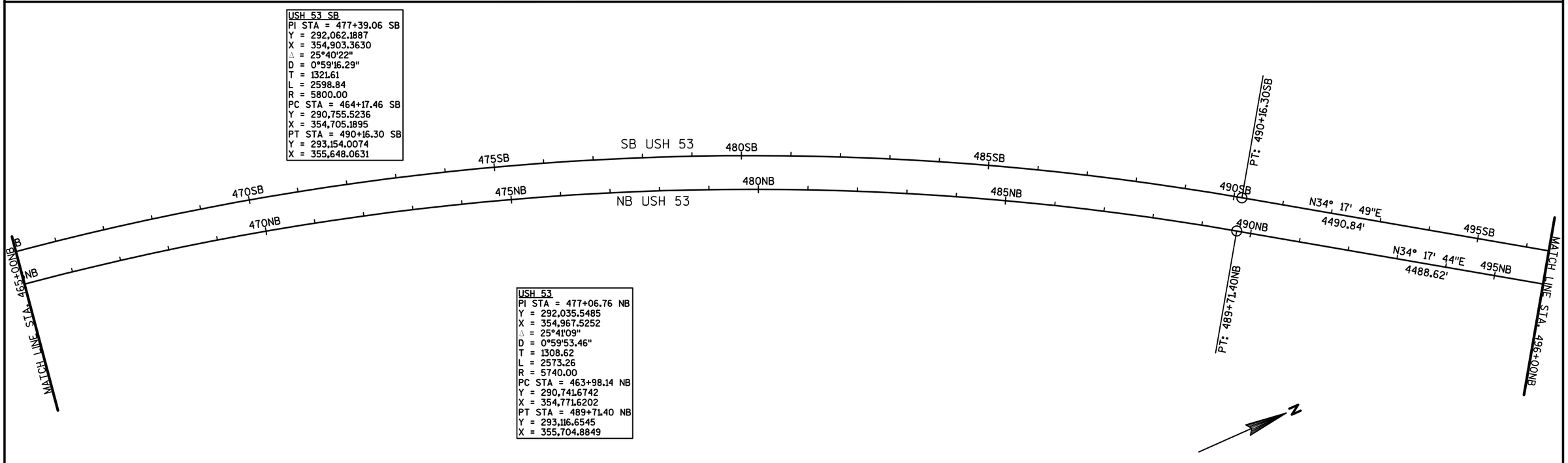
2





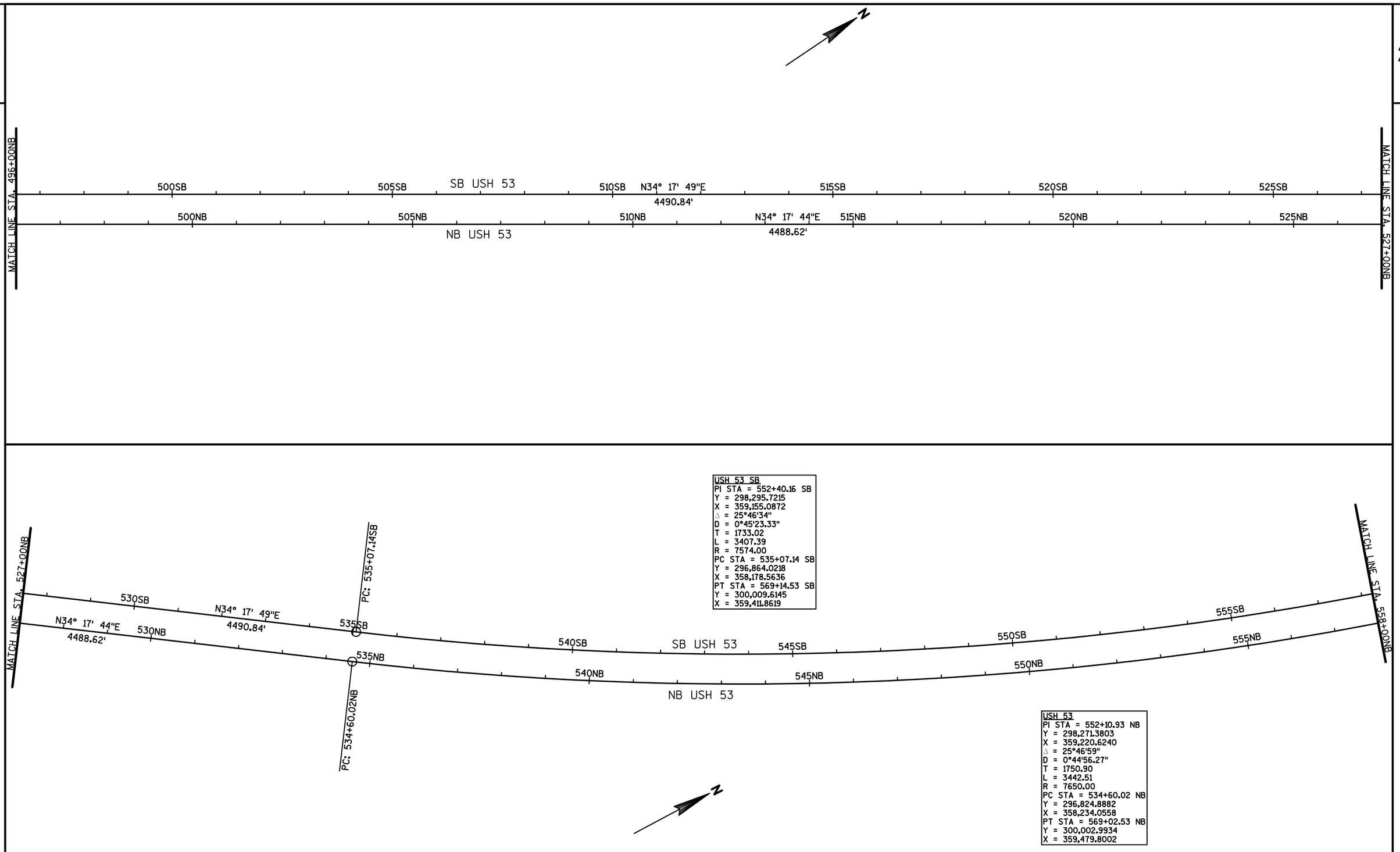
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 101	E





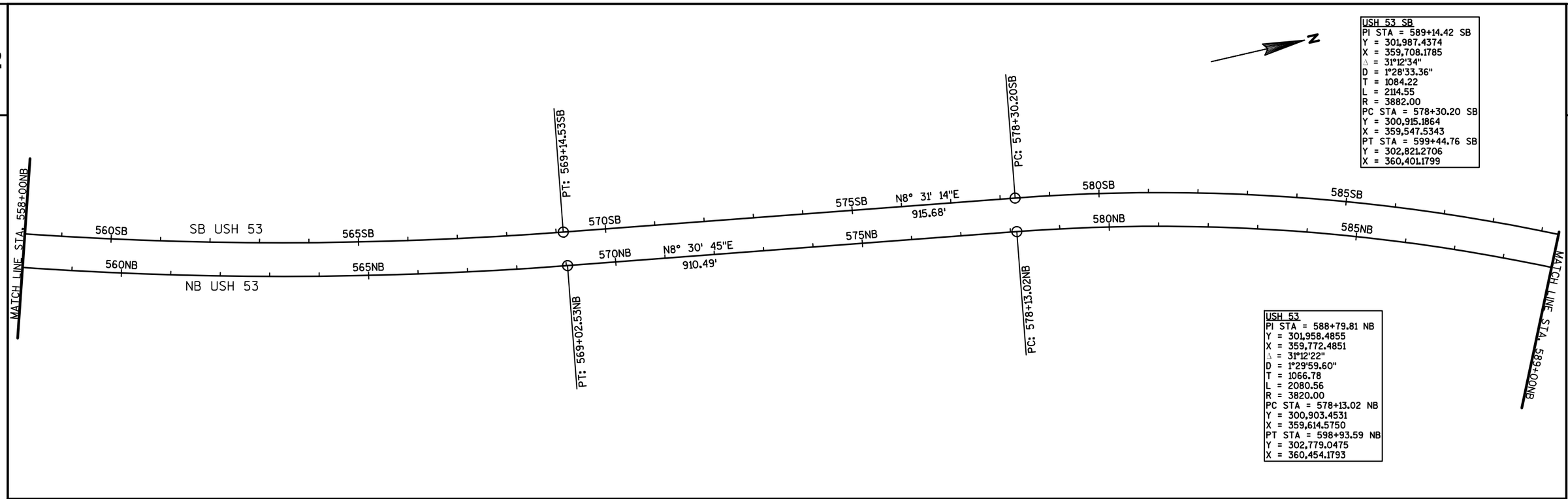
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 102	E

2

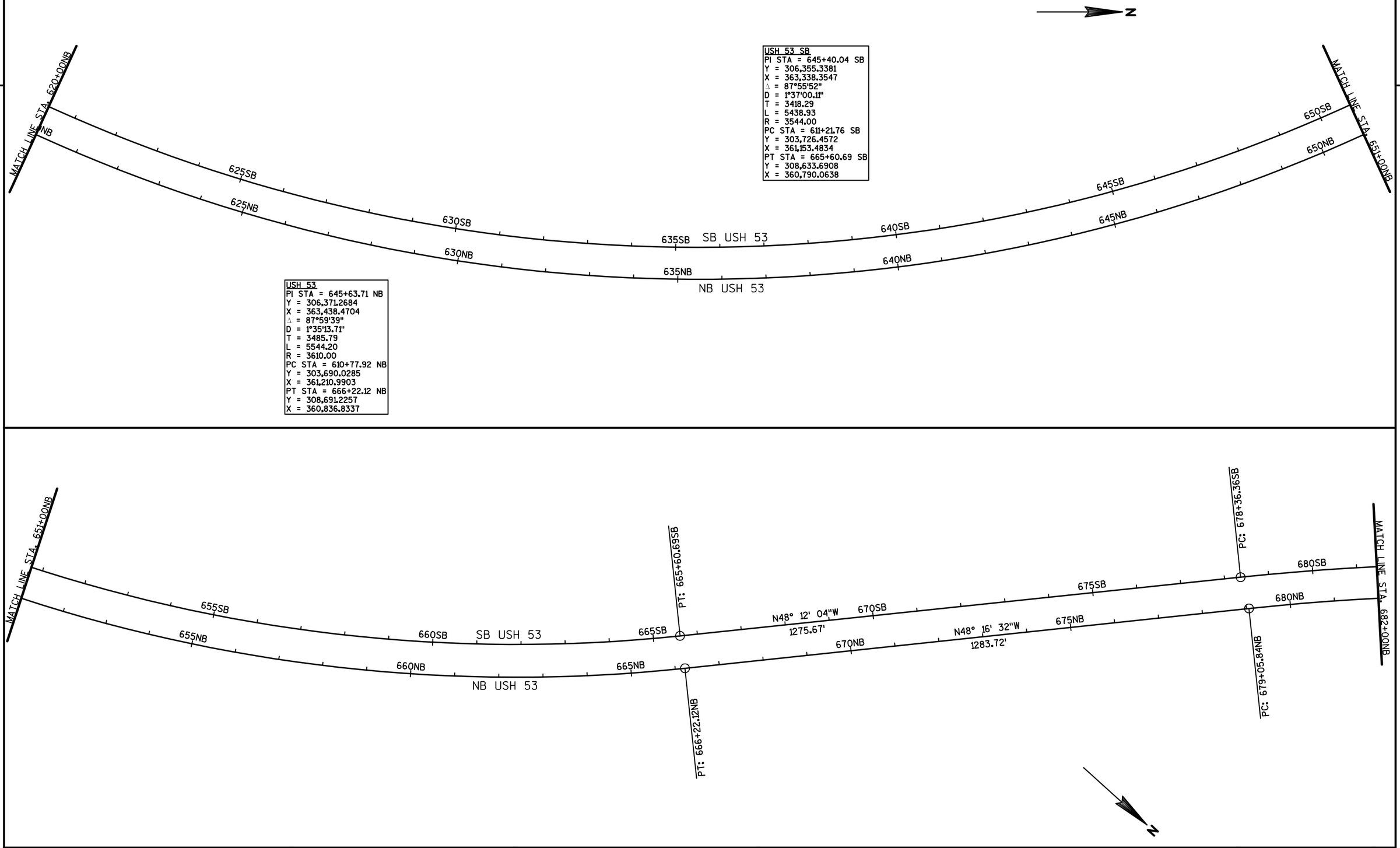


PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 103	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - SHEET - (124)
PLOT DATE : 4/1/2024 3:43 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44


USH 53 SB
PI STA = 589+14.42 SB
Y = 301,987.4374
X = 359,708.1785
Δ = 31°12'34"
D = 1°28'33.36"
T = 1084.22
L = 2114.55
R = 3882.00
PC STA = 578+30.20 SB
Y = 300,915.1864
X = 359,547.5343
PT STA = 599+44.76 SB
Y = 302,821.2706
X = 360,401.1799
N
MATCH LINE STA. 558+00NB
560SB
SB USH 53
565SB
PT: 569+14.53SB
570SB
575SB
N8° 31' 14"E
915.68'
PC: 578+30.20SB
580SB
585SB
MATCH LINE STA. 589+00SB
560NB
NB USH 53
565NB
570NB
N8° 30' 45"E
910.49'
575NB
580NB
585NB
MATCH LINE STA. 589+00NB
PT: 569+02.53NB
PC: 578+13.02NB
USH 53
PI STA = 588+79.81 NB
Y = 301,958.4855
X = 359,772.4851
Δ = 31°12'22"
D = 1°29'59.60"
T = 1066.78
L = 2080.56
R = 3820.00
PC STA = 578+13.02 NB
Y = 300,903.4531
X = 359,614.5750
PT STA = 598+93.59 NB
Y = 302,779.0475
X = 360,454.1793
590SB
SB USH 53
595SB
PT: 599+44.76SB
600SB
N39° 43' 48"E
1177.00'
605SB
610SB
PC: 611+21.76SB
615SB
620SB
MATCH LINE STA. 589+00NB
590NB
NB USH 53
595NB
600NB
605NB
N39° 43' 07"E
1184.33'
610NB
615NB
620NB
MATCH LINE STA. 620+00NB
PT: 598+93.59NB
PC: 610+77.92NB
N

2



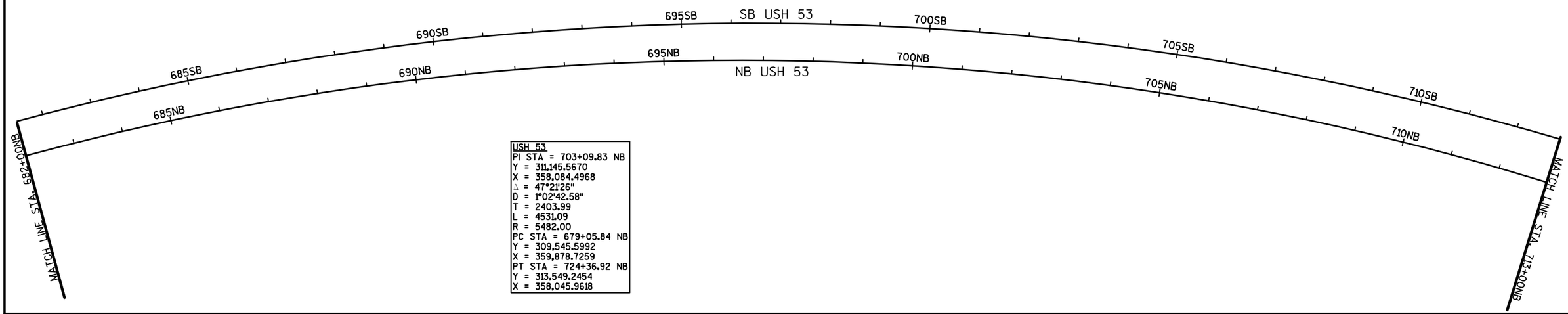
USH 53 SB
PI STA = 645+40.04 SB
Y = 306,355.3381
X = 363,338.3547
Δ = 87°55'52"
D = 1°37'00.11"
T = 3418.29
L = 5438.93
R = 3544.00
PC STA = 611+21.76 SB
Y = 303,726.4572
X = 361,153.4834
PT STA = 665+60.69 SB
Y = 308,633.6908
X = 360,790.0638

USH 53
PI STA = 645+63.71 NB
Y = 306,371.2684
X = 363,438.4704
Δ = 87°59'39"
D = 1°35'13.71"
T = 3485.79
L = 5544.20
R = 3610.00
PC STA = 610+77.92 NB
Y = 303,690.0285
X = 361,210.9903
PT STA = 666+22.12 NB
Y = 308,691.2257
X = 360,836.8337

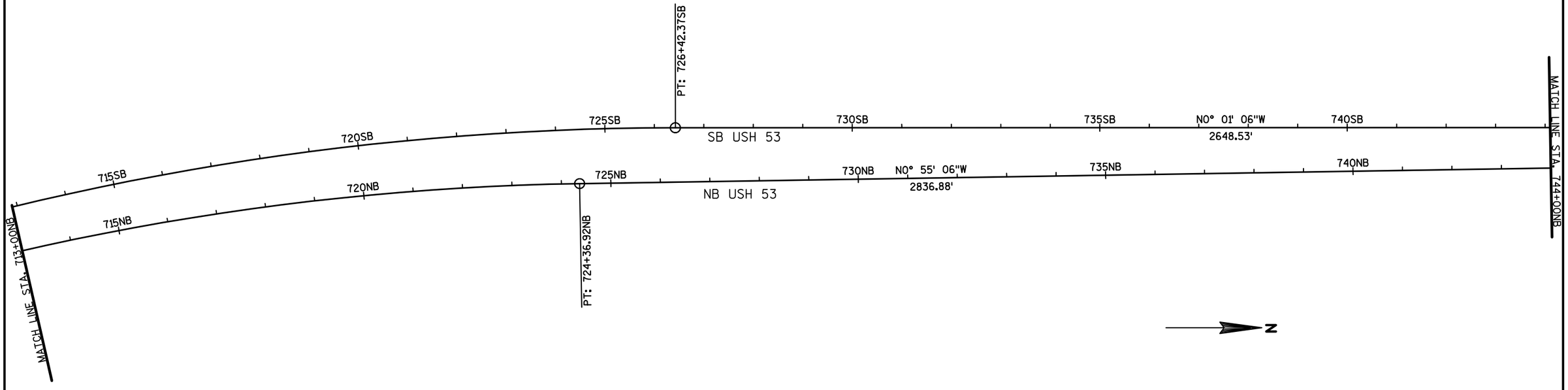
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 105 E

2

USH 53 SB
PI STA = 703+91.76 SB
Y = 311,187.1771
X = 357,934.0417
Δ = 48°10'58"
D = 1°00'09.18"
T = 2555.41
L = 4806.01
R = 5715.00
PC STA = 678+36.36 SB
Y = 309,483.9486
X = 359,839.0679
PT STA = 726+42.37 SB
Y = 313,742.5855
X = 357,933.2249

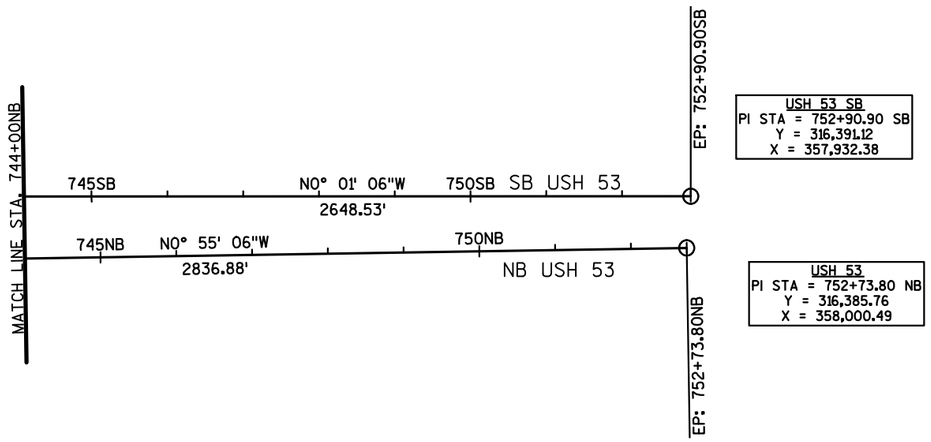


USH 53
PI STA = 703+09.83 NB
Y = 311,145.5670
X = 358,084.4968
Δ = 47°21'26"
D = 1°02'42.58"
T = 2403.99
L = 4531.09
R = 5482.00
PC STA = 679+05.84 NB
Y = 309,545.5992
X = 359,878.7259
PT STA = 724+36.92 NB
Y = 313,549.2454
X = 358,045.9618



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 106	E

2



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	ALIGNMENT DIAGRAM	SHEET 107	E

Estimate Of Quantities

1190-06-61

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	651.000	651.000
0004	204.0105	Removing Concrete Pavement Butt Joints	SY	740.000	740.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	560.000	560.000
0008	204.0165	Removing Guardrail	LF	314.000	314.000
0010	204.0180	Removing Delineators and Markers	EACH	495.000	495.000
0012	211.0101	Prepare Foundation for Asphaltic Paving (project) 001. 1190-06-61	EACH	1.000	1.000
0014	213.0100	Finishing Roadway (project) 001. 1190-06-61	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,650.000	1,650.000
0018	305.0500	Shaping Shoulders	STA	420.000	420.000
0020	415.0410	Concrete Pavement Approach Slab	SY	651.000	651.000
0022	416.0610	Drilled Tie Bars	EACH	3,100.000	3,100.000
0024	416.0620	Drilled Dowel Bars	EACH	8,950.000	8,950.000
0026	450.4000	HMA Cold Weather Paving	TON	1,800.000	1,800.000
0028	455.0605	Tack Coat	GAL	12,600.000	12,600.000
0030	460.0115.S	HMA Pavement Test Strip Volumetrics	EACH	1.000	1.000
0032	460.0120.S	HMA Pavement Test Strip Density	EACH	1.000	1.000
0034	460.2000	Incentive Density HMA Pavement	DOL	9,320.000	9,320.000
0036	460.7245	HMA Pavement 5 HT 58-34 S	TON	7,300.000	7,300.000
0038	460.8644	HMA Pavement 4 SMA 58-34 V	TON	7,250.000	7,250.000
0040	460.9000.S	Material Transfer Vehicle	EACH	1.000	1.000
0042	465.0110	Asphaltic Surface Patching	TON	490.000	490.000
0044	465.0520	Asphaltic Rumble Strips, Shoulder	LF	19,900.000	19,900.000
0046	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	1.600	1.600
0048	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	142.000	142.000
0050	531.2024	Drilling Shaft 24-Inch	LF	13.000	13.000
0052	614.0010	Barrier System Grading Shaping Finishing	EACH	7.000	7.000
0054	614.0115	Anchorages for Steel Plate Beam Guard Type 2	EACH	1.000	1.000
0056	614.0305	Steel Plate Beam Guard Class A	LF	945.500	945.500
0058	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	5.000	5.000
0060	614.0952	Replacing Guardrail Reflectors	EACH	220.000	220.000
0062	618.0100	Maintenance and Repair of Haul Roads (project) 001. 1190-06-61	EACH	1.000	1.000
0064	619.1000	Mobilization	EACH	1.000	1.000
0066	624.0100	Water	MGAL	25.000	25.000
0068	628.1504	Silt Fence	LF	1,955.000	1,955.000
0070	628.1520	Silt Fence Maintenance	LF	1,955.000	1,955.000
0072	633.0100	Delineator Posts Steel	EACH	385.000	385.000
0074	633.0500	Delineator Reflectors	EACH	600.000	600.000
0076	633.1000	Delineators Barrier Wall	EACH	90.000	90.000
0078	635.0200	Sign Supports Structural Steel HS	LB	390.000	390.000
0080	635.0300	Sign Supports Replacing Base Connection Bolts	EACH	1.000	1.000
0082	637.1220	Signs Type I Reflective SH	SF	550.500	550.500
0084	638.2601	Removing Signs Type I	EACH	4.000	4.000
0086	642.5001	Field Office Type B	EACH	1.000	1.000
0088	643.0300	Traffic Control Drums	DAY	18,800.000	18,800.000
0090	643.0420	Traffic Control Barricades Type III	DAY	1,400.000	1,400.000
0092	643.0705	Traffic Control Warning Lights Type A	DAY	2,350.000	2,350.000
0094	643.0715	Traffic Control Warning Lights Type C	DAY	4,850.000	4,850.000
0096	643.0800	Traffic Control Arrow Boards	DAY	290.000	290.000
0098	643.0900	Traffic Control Signs	DAY	3,650.000	3,650.000

Estimate Of Quantities

1190-06-61

Line	Item	Item Description	Unit	Total	Qty
0100	643.0910	Traffic Control Covering Signs Type I	EACH	35.000	35.000
0102	643.0920	Traffic Control Covering Signs Type II	EACH	500.000	500.000
0104	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	450.000	450.000
0106	643.1205.S	Basic Traffic Queue Warning System	DAY	232.000	232.000
0108	643.3105	Temporary Marking Line Paint 4-Inch	LF	4,975.000	4,975.000
0110	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	5,000.000	5,000.000
0112	643.4100	Traffic Control Interim Lane Closure	EACH	232.000	232.000
0114	643.5000	Traffic Control	EACH	1.000	1.000
0116	646.2020	Marking Line Epoxy 6-Inch	LF	550.000	550.000
0118	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	27,150.000	27,150.000
0120	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	252,600.000	252,600.000
0122	646.2050	Marking Line Grooved Permanent Tape 6-Inch	LF	27,150.000	27,150.000
0124	646.4020	Marking Line Epoxy 10-Inch	LF	560.000	560.000
0126	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	38,950.000	38,950.000
0128	646.4720	Marking Line Same Day Epoxy 6-Inch	LF	45,000.000	45,000.000
0130	646.4820	Marking Line Same Day Epoxy 10-Inch	LF	4,300.000	4,300.000
0132	646.5020	Marking Arrow Epoxy	EACH	34.000	34.000
0134	646.5120	Marking Word Epoxy	EACH	15.000	15.000
0136	646.5420	Marking Aerial Enforcement Bar Epoxy	EACH	20.000	20.000
0138	646.6120	Marking Stop Line Epoxy 18-Inch	LF	350.000	350.000
0140	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	125,950.000	125,950.000
0142	646.8020	Marking Corrugated Median Epoxy	SF	400.000	400.000
0144	646.8120	Marking Curb Epoxy	LF	10.000	10.000
0146	646.8220	Marking Island Nose Epoxy	EACH	1.000	1.000
0148	646.9000	Marking Removal Line 4-Inch	LF	251,900.000	251,900.000
0150	650.8000	Construction Staking Resurfacing Reference	LF	23,685.000	23,685.000
0152	690.0150	Sawing Asphalt	LF	11,700.000	11,700.000
0154	690.0250	Sawing Concrete	LF	47,550.000	47,550.000
0156	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0158	740.0440	Incentive IRI Ride	DOL	16,793.000	16,793.000
0160	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,440.000	1,440.000
0162	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,500.000	2,500.000
0164	SPV.0045	Special 001. Digital Speed Reduction System	DAY	222.000	222.000
0166	SPV.0060	Special 001. Removing Raised Pavement Markers and Filling Voids	EACH	1,300.000	1,300.000
0168	SPV.0090	Special 001. Sawing Curb Head	LF	340.000	340.000
0170	SPV.0090	Special 002. Asphaltic Mastic Joint Sealing	LF	3,120.000	3,120.000
0172	SPV.0180	Special 001. Rapid Concrete Pavement Replacement Special	SY	18,000.000	18,000.000
0174	SPV.0180	Special 002. Rapid Concrete Pavement Repair Special	SY	3,100.000	3,100.000

3

REMOVING PAVEMENT BUTT JOINTS

CATEGORY	STA - STA	LOCATION	204.0105 REMOVING PAVEMENT BUTT JOINTS (SY)	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)
0010				
	418+00 - 418+60	BEGIN OVERLAY MATCH	176	86
	425+35 - 425+95	STH 312 SB OFF-RAMP	99	58
	464+36 - 465+08	464+70 SB MAINTENANCE CROSSOVER	--	85
	526+10 - 526+70	MELBY SB ON-RAMP	98	54
	550+43 - 551+03	MELBY SB OFF-RAMP	99	55
	575+20 - 575+84	575+50 SB MAINTENANCE CROSSOVER	--	76
	603+79 - 604+39	CTH OO SB ON-RAMP	100	61
	616+40 - 617+00	END OVERLAY MATCH	169	85
		PROJECT 1190-06-61 TOTALS	**740**	**560**

HMA PAVEMENT OVERLAY QUANTITIES

CATEGORY	STA - STA	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0500 SHAPING SHOULDERS (STA)	450.4000 HMA COLD WEATHER PAVING (TON)	455.0605 TACK COAT (GAL)	460.7245 HMA PAVEMENT 5 HT 58-34 S (TON)	460.8644 HMA PAVEMENT 4 SMA 58-34 V (TON)	460.9000.S MATERIAL TRANSFER VEHICLE (EACH)	465.0520 ASPHALTIC RUMBLE STRIPS SHOULDER (LF)	624.0100 WATER (MGAL)	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH (LF)
0010												
	418+00 - 535+00	SB USH 53	906	231	1,026	7,041	4,139	4,110	--	9,171	14	2,925
	425+35 - 430+50	STH 312 SB OFF-RAMP	15	5	15	123	78	66	--	515	--	--
	513+56 - 526+70	MELBY SB ON-RAMP	11	4	9	88	60	43	--	1,314	--	--
	535+00 - 617+00	SB USH 53	621	158	713	4,859	2,790	2,860	--	7,075	9	2,050
	550+43 - 558+40	MELBY SB OFF-RAMP	13	4	12	111	76	54	--	700	--	--
	592+00 - 604+39	CTH OO SB ON-RAMP	21	7	19	179	125	85	--	1,125	--	--
		UNDISTRIBUTED	64	11	7	199	33	31	1	--	2	--
		PROJECT 1190-06-61 TOTALS	**1,650**	**420**	**1,800**	**12,600**	**7,300**	**7,250**	**1**	**19,900**	**25**	**4,975**

3

PREPARING AND STAKING

CATEGORY	STA - STA	LOCATION	211.0101 PREPARE FOUNDATION FOR ASPHALTIC PAVING (LS)	650.8000 CONSTRUCTION STAKING RESURFACE REFERENCE (LF)
0010				
	418+00 - 535+00	SB USH 53		11,700
	425+35 - 430+50	STH 312 OFF-RAMP		515
	514+00 - 526+70	MELBY ON-RAMP	1	1,270
	550+43 - 558+03	MELBY OFF-RAMP		760
	535+00 - 617+00	SB USH 53		8,200
	591+99 - 604+39	CTH OO ON-RAMP		1,240
		PROJECT 1190-06-61 TOTALS	**1**	**23,685**

TRAFFIC CONTROL COVERING SIGNS

CATEGORY	LOCATION	NUMBER OF CYCLES	NUMBER OF SIGNS	643.0910 TYPE I (EACH)	643.0920 TYPE II (EACH)	REMARKS
0010						
	USH 53, NB	23	11	--	253	SPEED LIMIT 65 MPH
	USH 53, SB	23	10	--	230	SPEED LIMIT 65 MPH
	SIGN NB-1	2	1	2	--	NB STAGE 1
	SIGN NB-2	2	1	2	--	NB STAGE 1
	SIGN NB-3	2	1	2	--	NB STAGE 1
	SIGN NB-4	2	1	2	--	NB STAGE 1
	SIGN SB-1	2	1	2	--	SB STAGE 1
	SIGN SB-2	2	1	2	--	SB STAGE 1
	SIGN SB-3	2	1	2	--	SB STAGE 1
	SIGN SB-2	2	1	2	--	SB STAGE 2
	SIGN SB-4	2	1	2	--	SB STAGE 2
	STH 93-SB USH 53 OFF RAMP	1	5	4	1	EXIT 86 SIGNS
	STH 312-SB USH 53 OFF RAMP	1	4	3	1	EXIT 90 SIGNS
	CTH OO-NB USH 53 ON RAMP	1	1	--	1	TO STH 29
	WB STH 29-NB USH 53 ON RAMP	1	2	1	1	EXIT 75B SIGNS
	WB STH 29-SB USH 53 ON RAMP	1	1	--	1	EXIT 75A SIGNS
	UNDISTRIBUTED			9	12	
	PROJECT 1190-06-61 TOTALS			**35**	**500**	

SAWING CURB HEAD

CATEGORY	STA - STA	LOCATION	O/S	SPV.0090.001 (LF)
0010				
	243+53 - 244+00	USH 53 SB	LT	47
	198+56 - 199+49	USH 53 SB	LT	93
	265+51 - 266+51	USH 53 NB	RT	100
	251+66 - 252+66	USH 53 SB	LT	100
	PROJECT 1190-06-61 TOTALS			**340**

RAPID CONCRETE PAVEMENT REPAIR & REPLACEMENT SPECIAL

CATEGORY	STA - STA	LOCATION	ESTIMATED # OF REPLACE AREAS EACH	LT LANE SY	RT LANE SY	SPV.0180.001 RAPID CONCRETE PAVEMENT REPLACEMENT SPECIAL (SY)	ESTIMATED # OF REPAIR AREAS EACH	LT LANE SY	RT LANE SY	SPV.0180.002 RAPID CONCRETE PAVEMENT REPAIR SPECIAL (SY)	416.0610 DRILLED TIE BARS (EACH)	416.0620 DRILLED DOWEL BARS (EACH)	465.0110 ASPHALTIC SURFACE PATCHING (TON)	690.0150* SAWING ASPHALT (LF)	690.0250* SAWING CONCRETE (LF)	SPV.0090.002 ASPHALTIC MASTIC JOINT SEALING (LF)
0010	192+00 - 220+00	USH 53 NB - GOLF TO PINE LOG	2	--	205	205	--	--	--	--	44	38	3	136	452	60
		GOLF ROAD ON-RAMP TO USH 53 NB	--	--	--	--	5	16	29	45	10	88	1	41	163	--
		BUS 53 NB OFF-RAMP FROM USH 53 NB	2	127	134	260	1	18	--	18	37	80	6	117	566	--
		STH 93 NB OFF-RAMP FROM USH 53 NB	2	133	47	180	1	--	18	18	45	54	3	142	447	--
	220+00 - 270+00	USH 53 NB - PINE LOG TO CLAIREMONT	10	347	1,485	1,831	11	32	138	170	323	490	48	1,007	4,072	60
		STH 93 NB ON-RAMP TO USH 53 NB	2	--	152	152	2	--	30	30	36	80	3	117	425	30
		USH 53 NB OFF-RAMP TO USH 12	3	--	245	245	1	--	20	20	53	80	4	167	593	--
		USH 53 NB ON-RAMP FROM USH 12	2	120	120	240	2	8	10	18	34	100	5	110	559	--
	270+00 - 355+00	USH 53 NB - CLAIREMONT TO RIVER PRAIRIE	9	476	594	1,070	23	85	226	311	197	760	29	653	3,126	--
		RIVER PRAIRIE ON-RAMP TO USH 53 NB	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		RIVER PRAIRIE OFF-RAMP FROM USH 53 NB	--	--	--	--	2	--	30	30	--	40	0	22	78	--
	355+00 - 415+00	USH 53 NB - RIVER PRAIRIE TO STH 312	6	135	500	635	20	97	157	254	174	500	26	575	2,107	--
		STH 312 OFF-RAMP FROM USH 53 NB	1	--	170	170	6	--	60	60	--	140	3	152	566	--
		STH 312 ON-RAMP TO USH 53 NB	3	--	285	285	--	--	--	--	--	60	4	177	628	15
	415+00 - 535+00	USH 53 NB - STH 312 TO MELBY	16	108	1,656	1,764	35	226	154	380	429	938	66	1,389	4,983	75
		MELBY OFF-RAMP FROM USH 53 NB	3	--	475	475	--	--	--	--	--	60	7	291	986	--
		MELBY ON-RAMP TO USH 53 NB	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	535+00 - 618+00	USH 53 NB - MELBY TO CTH OO	14	140	939	1,079	15	120	135	255	245	690	39	792	3,176	350
		CTH OO OFF-RAMP FROM USH 53 NB	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		CTH OO ON-RAMP TO USH 53 NB	9	--	470	470	12	--	120	120	--	420	9	396	1,588	105
	618+00 - 645+00	USH 53 NB - CTH OO TO STH 29	5	--	220	220	1	--	18	18	51	110	4	165	603	--
	645+00 - 679+00	USH 53 NB-STH 29 TO 40TH AVENUE	2	80	113	193	11	84	20	103	52	250	8	182	781	15
		NB TOTALS				9,474				1,850	1,732	4,978	268	6,630	25,898	710
	192+00 - 220+00	USH 53 SB - GOLF TO PINE LOG	1	--	50	50	2	--	33	33	18	55	1	59	201	--
		GOLF ROAD OFF-RAMP FROM USH 53 SB	--	--	--	--	1	--	10	10	2	19	0	9	35	--
		BUS 53 ON-RAMP TO USH 53 SB	2	102	103	205	6	8	47	55	36	175	5	123	639	--
	220+00 - 270+00	USH 53 SB - PINE LOG TO CLAIREMONT	11	154	870	1,025	5	--	65	65	192	338	29	608	2,413	45
		CLAIREMONT ON-RAMP TO USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		STH 93 SB OFF-RAMP FROM USH 53 SB	--	--	--	--	1	--	10	10	--	20	0	8	36	--
		CLAIREMONT OFF-RAMP FROM USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	270+00 - 355+00	USH 53 SB - CLAIREMONT TO RIVER PRAIRIE	13	335	1,018	1,353	27	65	250	315	277	824	41	909	3,833	110
		RIVER PRAIRIE ON-RAMP TO USH 53 SB	2	--	135	135	1	--	10	10	--	60	2	93	351	30
		RIVER PRAIRIE OFF-RAMP FROM USH 53 SB	1	--	50	50	--	--	--	--	--	20	1	32	124	--
	355+00 - 415+00	USH 53 SB - RIVER PRAIRIE TO STH 312	13	280	1,118	1,398	26	92	204	295	320	730	50	1,031	3,872	210
		STH 312 ON-RAMP TO USH 53 SB	1	--	50	50	--	--	--	--	--	20	1	32	124	--
		STH 312 OFF-RAMP FROM USH 53 SB	4	--	325	325	1	--	25	25	--	100	5	220	778	--
	415+00 - 535+00	USH 53 - STH 312 TO MELBY	7	260	509	769	3	14	45	59	113	278	17	352	1,745	2,000
		MELBY ON-RAMP	1	--	175	175	1	--	10	10	--	40	3	115	396	--
		MELBY OFF-RAMP	2	--	125	125	--	--	18	18	--	60	2	81	296	--
	535+00 - 618+00	USH 53 - MELBY TO CTH OO	19	508	832	1,340	3	25	29	54	192	615	30	620	3,239	--
		CTH OO ON-RAMP	1	--	75	75	--	--	--	--	--	20	1	47	171	15
		CTH OO OFF-RAMP	--	--	--	--	2	--	63	63	--	80	1	46	98	--
	618+00 - 645+00	USH 53 SB - CTH OO TO STH 29	1	34	41	75	4	25	48	73	20	140	3	69	367	--
	645+00 - 679+00	USH 53 SB -STH 29 TO 40TH AVENUE	5	440	935	1,375	8	65	90	155	198	378	30	616	2,933	--
		SB TOTALS				8,526				1,250	1,367	3,972	222	5,070	21,652	2,410
		PROJECT 1190-06-61 TOTALS				**18,000**				**3,100**	**3,100**	**8,950**	**490**	**11,700**	**47,550**	**3,120**

*ADDITIONAL QUANTITIES IN THE REMOVING PAVEMENT BUTT JOINTS TABLE

FINISHING ROADWAY

CATEGORY	LOCATION	213.0100 (EACH)
0010		
	PROJECT	1
PROJECT 1190-06-61 TOTALS		**1**

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	LOCATION	618.0100 (EACH)
0010		
	PROJECT	1
PROJECT 1190-06-61 TOTALS		**1**

CONCRETE PAVEMENT APPROACH SLAB

CATEGORY	STA	-	STA	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT (SY)	415.0410 (SY)
0010						
	667+48	-	669+80	B-9-247	226	226
	675+17	-	677+38	B-9-229	123	123
	666+61	-	668+91	B-9-246	164	164
	674+50	-	676+71	B-9-228	138	138
PROJECT 1190-06-61 TOTALS					**651**	**651**

REMOVING SIGNS TYPE I

CATEGORY	SIGN #	SIGN CODE	638.2601 (EACH)	NOTES	REMARKS
0010					
	2R-1	E8-1	1	USE EXISTING POSTS	SEQUENCE SIGN USH 12/RIVER PRAIRIE/STH 312
	2R-2	E8-1	1	USE EXISTING POSTS	SEQUENCE SIGN CTH AA/I-94
	8R-1	E10-61	1	USE EXISTING POSTS	HOSPITAL EXIT [000]
	11R-1	E8-1	1	USE EXISTING POSTS	SEQUENCE SIGN STH 312/RIVER PRAIRIE/USH12
PROJECT 1190-06-61 TOTALS			**4**		

PERMANENT SIGNING TYPE I

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE W IN	X	H IN	635.0300 SIGN SUPPORTS REPLACING BASE CONNECTION BOLTS (EACH)	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	STEEL POST SHAPE	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS (LB)	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS (CY)	511.1140 SIGN SUPPORTS HS ANCILLARY STRUCTURES TYPE NS (LB)	531.2024 DRILLING SHAFT 24-INCH (LF)	NOTES	REMARKS
0010														
	2-1	E8-1	288	X	90	--	180.00	--	--	--	--	--	REPLACE SIGN ON S-18-57	SEQUENCE SIGN USH 12/RIVER PRAIRIE/STH 312
	2-2	E8-1	180	X	66	--	82.50	--	--	--	--	--	REPLACE SIGN ON S-18-57	SEQUENCE SIGN CTH AA/I-94
	3-1	E10-61	144	X	54	--	54.00	W6X15	390	1.6	142	13	---	HOSPITAL EXIT 89
	8-1	E10-61	144	X	54	1	54.00	--	--	--	--	--	USE EXISTING POSTS	HOSPITAL EXIT 89
	11-1	E8-1	288	X	90	--	180.00	--	--	--	--	--	REPLACE SIGN ON S-18-78	SEQUENCE SIGN STH 312/RIVER PRAIRIE/USH12
PROJECT 1190-06-61 TOTALS						**1**	**550.50**		**390**	**1.6**	**142**	**13**		

NORTHBOUND TRAFFIC CONTROL SUMMARY (STAGE 1)

CATEGORY	LOCATION	APPROX. SERVICE DAYS	643.0300 DRUMS NUM. IN SERVICE	(DAY)	643.0420 BARRICADES TYPE III NUM. IN SERVICE	(DAY)	643.0705 WARNING LIGHTS TYPE A NUM. IN SERVICE	(DAY)	643.0715 WARNING LIGHTS TYPE C NUM. IN SERVICE	(DAY)	643.0800 ARROW BOARDS NUM. IN SERVICE	(DAY)	643.0900 SIGNS NUM. IN SERVICE	(DAY)	643.1051 SIGNS PCMS WITH CELLULAR COMM NUM. IN SERVICE	(DAY)
0010	USH 53 NB - GOLF TO PINE LOG	2	60	120	4	8	8	16	22	44	2	4	30	60	2	4
	GOLF ROAD ON-RAMP	2	56	112	4	8	2	4	36	72	--	--	16	32	1	2
	BUS 53 NB OFF-RAMP FROM USH 53 NB	2	46	92	2	4	2	4	12	24	--	--	5	10	--	--
	STH 93 NB OFF-RAMP FROM USH 53 NB	2	82	164	6	12	12	24	26	52	2	4	19	38	2	4
	USH 53 NB - PINE LOG TO CLAIREMONT	8	46	368	2	16	2	16	12	96	--	--	5	40	--	--
	STH 93 NB ON-RAMP TO USH 53 NB	2	25	50	2	4	2	4	10	20	--	--	3	6	--	--
	USH 53 NB OFF-RAMP TO USH 12	3	46	138	2	6	2	6	12	36	--	--	5	15	--	--
	USH 53 NB ON-RAMP FROM USH 12	2	31	62	1	2	2	4	16	32	2	4	14	28	2	4
	USH 53 NB - CLAIREMONT TO RIVER PRAIRIE	5	111	555	10	50	18	90	31	155	--	--	11	55	2	10
	RIVER PRAIRIE ON-RAMP TO USH 53 NB	2	46	92	2	4	2	4	12	24	--	--	5	10	--	--
	USH 53 NB - RIVER PRAIRIE TO STH 312	5	92	460	7	35	14	70	28	140	2	10	20	100	2	10
	STH 312 OFF-RAMP FROM USH 53 NB	3	25	75	2	6	2	6	10	30	--	--	3	9	--	--
	STH 312 ON-RAMP TO USH 53 NB	3	46	138	2	6	2	6	12	36	--	--	5	15	--	--
	USH 53 NB - STH 312 TO MELBY	10	152	1,520	11	110	22	220	36	360	2	20	24	240	2	20
	MELBY OFF-RAMP FROM USH 53 NB	4	25	100	2	8	2	8	10	40	--	--	3	12	--	--
	USH 53 NB - MELBY TO CTH OO	6	115	690	8	48	16	96	30	180	2	12	21	126	2	12
	CTH OO ON-RAMP TO USH 53 NB	4	46	184	2	8	2	8	12	48	--	--	5	20	--	--
	USH 53 NB - CTH OO TO STH 29	3	59	177	1	3	2	6	16	48	2	6	14	42	2	6
	USH 53 NB-STH 29 TO 40TH AVENUE	2	66	132	5	10	10	20	24	48	2	4	18	36	2	4
	STAGE 1 NB TOTALS			5,229		348		612		1,485		64		894		76

SOUTHBOUND TRAFFIC CONTROL SUMMARY (STAGE 1 & 1A)

CATEGORY	LOCATION	APPROX. SERVICE DAYS	643.0300 DRUMS NUM. IN SERVICE	(DAY)	643.0420 BARRICADES TYPE III NUM. IN SERVICE	(DAY)	643.0705 WARNING LIGHTS TYPE A NUM. IN SERVICE	(DAY)	643.0715 WARNING LIGHTS TYPE C NUM. IN SERVICE	(DAY)	643.0800 ARROW BOARDS NUM. IN SERVICE	(DAY)	643.0900 SIGNS NUM. IN SERVICE	(DAY)	643.1051 SIGNS PCMS WITH CELLULAR COMM NUM. IN SERVICE	(DAY)
0010	USH 53 SB - GOLF TO PINE LOG	2	60	120	4	8	8	16	22	44	2	4	27	54	2	4
	GOLF ROAD OFF-RAMP FROM USH 53 SB	2	25	50	2	4	2	4	10	20	--	--	3	6	--	--
	BUS 53 ON-RAMP TO USH 53 SB	2	68	136	4	8	2	4	24	48	--	--	15	30	--	--
	USH 53 SB - PINE LOG TO CLAIREMONT	6	82	492	6	36	12	72	26	156	2	12	19	114	2	12
	STH 93 SB OFF-RAMP FROM USH 53 SB	2	25	50	2	4	2	4	10	20	--	--	3	6	--	--
	CLAIREMONT OFF-RAMP FROM USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 SB - CLAIREMONT TO RIVER PRAIRIE	7	117	819	9	63	18	126	32	224	2	14	22	154	2	14
	RIVER PRAIRIE ON-RAMP TO USH 53 SB	2	46	92	2	4	2	4	12	24	--	--	5	10	--	--
	RIVER PRAIRIE OFF-RAMP FROM USH 53 SB	2	25	50	2	4	2	4	10	20	--	--	3	6	--	--
	USH 53 SB - RIVER PRAIRIE TO STH 312	8	92	736	7	56	14	112	28	224	2	16	20	160	--	--
	STH 312 ON-RAMP TO USH 53 SB	2	46	92	2	4	2	4	12	24	--	--	5	10	--	--
	STH 312 OFF-RAMP FROM USH 53 SB	3	25	75	2	6	2	6	10	30	--	--	3	9	--	--
	USH 53 - STH 312 TO MELBY	8	152	1,237	11	90	22	179	36	293	2	16	24	195	2	16
	MELBY ON-RAMP	2	46	92	2	4	2	4	12	24	--	--	5	10	--	--
	MELBY OFF-RAMP	2	25	50	2	4	2	4	10	20	--	--	3	6	--	--
	USH 53 - MELBY TO CTH OO	9	115	1,011	8	70	16	141	30	264	2	18	21	185	2	18
	CTH OO ON-RAMP	2	46	92	2	4	2	4	12	24	--	--	5	10	--	--
	CTH OO OFF-RAMP	2	25	50	2	4	2	4	10	20	--	--	3	6	--	--
	USH 53 SB - CTH OO TO STH 29	2	59	118	4	8	8	16	22	44	2	4	17	34	2	4
	USH 53 SB -STH 29 TO 40TH AVENUE	6	66	396	5	30	10	60	24	144	2	12	18	108	2	12
	STAGE 1 SB TOTALS			5,758		411		768		1,667		96		1,113		80

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NORTHBOUND TRAFFIC CONTROL SUMMARY (STAGE 2)

CATEGORY	LOCATION	APPROX. SERVICE DAYS	643.0300 DRUMS NUM. IN SERVICE	(DAY)	643.0420 BARRICADES TYPE III NUM. IN SERVICE	(DAY)	643.0705 WARNING LIGHTS TYPE A NUM. IN SERVICE	(DAY)	643.0715 WARNING LIGHTS TYPE C NUM. IN SERVICE	(DAY)	643.0800 ARROW BOARDS NUM. IN SERVICE	(DAY)	643.0900 SIGNS NUM. IN SERVICE	(DAY)	643.1051 SIGNS PCMS WITH CELLULAR COMM NUM. IN SERVICE	(DAY)
0010	USH 53 NB - GOLF TO PINE LOG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	GOLF ROAD ON-RAMP	2	22	44	2	4	--	--	12	24	--	--	10	20	3	6
	BUS 53 NB OFF-RAMP FROM USH 53 NB	2	46	92	2	4	2	4	12	24	--	--	5	10	3	6
	STH 93 NB OFF-RAMP FROM USH 53 NB	2	46	92	5	10	8	16	21	42	--	--	6	12	--	--
	USH 53 NB - PINE LOG TO CLAIREMONT	3	132	396	6	18	12	36	26	78	2	6	19	57	3	6
	STH 93 NB ON-RAMP TO USH 53 NB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 NB OFF-RAMP TO USH 12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 NB ON-RAMP FROM USH 12	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 NB - CLAIREMONT TO RIVER PRAIRIE	4	202	808	9	36	18	72	32	128	2	8	22	88	3	12
	RIVER PRAIRIE OFF-RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	RIVER PRAIRIE ON-RAMP	--	--	--	--	--	2	--	10	--	--	--	3	--	--	--
	USH 53 NB - RIVER PRAIRIE TO STH 312	3	152	456	7	21	14	42	28	84	2	6	20	60	3	6
	STH 312 OFF-RAMP FROM USH 53 NB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	STH 312 ON-RAMP TO USH 53 NB	--	--	--	--	--	2	--	10	--	--	--	3	--	--	--
	USH 53 NB - STH 312 TO MELBY	2	272	544	11	22	22	44	36	72	2	4	24	48	3	6
	MELBY OFF-RAMP FROM USH 53 NB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MELBY ON-RAMP TO USH 53 NB	--	--	--	--	--	2	--	10	--	--	--	3	--	--	--
	USH 53 NB - MELBY TO CTH OO	2	198	396	8	16	16	32	30	60	2	4	21	42	3	6
	CTH OO OFF-RAMP FROM USH 53 NB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	CTH OO ON-RAMP TO USH 53 NB	--	--	--	--	--	2	--	10	--	--	--	3	--	--	--
	USH 53 NB - CTH OO TO STH 29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 NB-STH 29 TO 40TH AVENUE	2	66	132	5	10	10	20	24	48	2	4	18	36	3	6
	STAGE 2 NB TOTALS			2,960		141		266		560		32		373		42

SOUTHBOUND TRAFFIC CONTROL SUMMARY (STAGE 2 & 2A)

CATEGORY	LOCATION	APPROX. SERVICE DAYS	643.0300 DRUMS NUM. IN SERVICE	(DAY)	643.0420 BARRICADES TYPE III NUM. IN SERVICE	(DAY)	643.0705 WARNING LIGHTS TYPE A NUM. IN SERVICE	(DAY)	643.0715 WARNING LIGHTS TYPE C NUM. IN SERVICE	(DAY)	643.0800 ARROW BOARDS NUM. IN SERVICE	(DAY)	643.0900 SIGNS NUM. IN SERVICE	(DAY)	643.1051 SIGNS PCMS WITH CELLULAR COMM NUM. IN SERVICE	(DAY)
0010	USH 53 SB - GOLF TO PINE LOG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	GOLF ROAD OFF-RAMP FROM USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	BUS 53 ON-RAMP TO USH 53 SB	2	46	92	2	4	2	4	12	24	--	--	5	10	--	--
	USH 53 SB - PINE LOG TO CLAIREMONT	2	48	96	3	6	6	12	20	40	2	4	16	32	2	4
	CLAIREMONT ON-RAMP TO USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	STH 93 SB OFF-RAMP FROM USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	CLAIREMONT OFF-RAMP FROM USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 SB - CLAIREMONT TO RIVER PRAIRIE	4	48	192	3	12	6	24	20	80	2	8	16	64	2	8
	RIVER PRAIRIE ON-RAMP TO USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	RIVER PRAIRIE OFF-RAMP FROM USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 SB - RIVER PRAIRIE TO STH 312	4	48	192	3	12	6	24	20	80	2	8	16	64	2	8
	STH 312 ON-RAMP TO USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	STH 312 OFF-RAMP FROM USH 53 SB	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 - STH 312 TO MELBY	7	152	1,081	11	78	22	156	36	256	2	14	24	171	2	14
	MELBY ON-RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	MELBY OFF-RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 - MELBY TO CTH OO	7	115	789	8	55	16	110	30	206	2	14	21	144	2	14
	CTH OO ON-RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	CTH OO OFF-RAMP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	USH 53 SB - CTH OO TO STH 29	2	59	118	4	8	8	16	22	44	2	4	17	34	2	4
	USH 53 SB -STH 29 TO 40TH AVENUE	6	56	336	4	24	8	48	22	132	2	12	17	102	2	12
	STAGE 2 SB TOTALS			2,896		199		394		862		64		621		64

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TRAFFIC CONTROL SUMMARY (RAMP CLOSURES)

CATEGORY	LOCATION	APPROX. SERVICE DAYS	643.0300 DRUMS NUM. IN SERVICE	643.0300 DRUMS (DAY)	643.0420 BARRICADES TYPE III NUM. IN SERVICE	643.0420 BARRICADES TYPE III (DAY)	643.0705 WARNING LIGHTS TYPE A NUM. IN SERVICE	643.0705 WARNING LIGHTS TYPE A (DAY)	643.0715 WARNING LIGHTS TYPE C NUM. IN SERVICE	643.0715 WARNING LIGHTS TYPE C (DAY)	643.0800 ARROW BOARDS NUM. IN SERVICE	643.0800 ARROW BOARDS (DAY)	643.0900 SIGNS NUM. IN SERVICE	643.0900 SIGNS (DAY)	643.1051 SIGNS PCMS WITH CELLULAR COMM NUM. IN SERVICE	643.1051 SIGNS PCMS WITH CELLULAR COMM (DAY)
0010	STH 93 SB OFF-RAMP FROM USH 53 SB	1	25	25	5	5	4	4	4	4	--	--	42	42	2	16
	RIVER PRAIRIE SB ON-RAMP	1	25	25	5	5	4	4	4	4	--	--	6	6	2	16
	STH 312 NB ON-RAMP	1	25	25	5	5	4	4	4	4	--	--	56	56	2	16
	STH 312 SB OFF-RAMP	2	25	50	5	10	4	8	4	8	--	--	49	98	2	18
	MELBY NB OFF-RAMP	1	25	25	5	5	4	4	4	4	--	--	6	6	2	16
	CTH OO NB ON-RAMP	1	25	25	5	5	4	4	4	4	--	--	49	49	2	16
	WB STH 29 NB ON-RAMP	6	25	150	5	30	4	24	4	24	--	--	37	222	2	26
	WB STH 29 SB ON-RAMP	11	25	275	5	55	4	44	4	44	--	--	41	451	2	36
	RAMP CLOSURE TOTALS			600		120		96		28		--		257		98
	UNDISTRIBUTED			1,357		181		214		249		34		392		90
	PROJECT 1190-06-61 TOTALS			**18,800**		**1,400**		**2,350**		**4,850**		**290**		**3,650**		**450**

DIGITAL SPEED REDUCTION SYSTEM

Category	Location	Stage	STAGE DURATION (DAY)	SPV.0045.001 DIGITAL SPEED REDUCTION SYSTEM NO.	SPV.0045.001 DIGITAL SPEED REDUCTION SYSTEM DAY	** TRAFFIC CONTROL SIGNS PCMS NO.	** TRAFFIC CONTROL SIGNS PCMS DAY	** DIGITAL SPEED LIMIT TRAILER NO.	** DIGITAL SPEED LIMIT TRAILER DAY
0010									
	USH 53 NB	1	78	1	78	1	78	9	702
	USH 53 SB	1	78	1	78	1	78	10	780
	STAGE 1 SUBTOTAL				156		156		1482
	USH 53 NB	2	33	1	33	1	33	9	297
	USH 53 SB	2	33	1	33	1	33	10	330
	STAGE 2 SUBTOTAL				66		66		627
PROJECT 1190-06-61 TOTA					**222**				

NOTE:
**NON-BID ITEM, ITEMS AND QUANTITIES LISTED FOR BID INFORMATION ONLY.
ITEMS INCIDENTAL TO DIGITAL SPEED REDUCTION SYSTEM.

BASIC TRAFFIC QUEUE WARNING SYSTEM

Category	Location	Stage	FLASHING BEACON SIGNS (FBS)	PORTABLE TRAFFIC SENSORS (PTS)	643.1205.S BASIC QUEUE WARNING SYSTEM (DAY)
0010					
	USH 53 NB	1	3	3	78
	USH 53 SB	1	3	3	78
			STAGE 1 SUBTOTAL		156
	USH 53 NB	2	3	3	33
	USH 53 SB	2	3	3	33
			STAGE 2 SUBTOTAL		66
	USH 53 NB	3	3	3	5
	USH 53 SB	3	3	3	5
			STAGE 3 SUBTOTAL		10
PROJECT 1190-06-61 TOTALS					**232**

TRAFFIC CONTROL INTERIM LANE CLOSURE

CATEGORY	LOCATION	643.4100 (EACH)	REMARKS
0010			
	USH 53, NB	116	ONE CLOSURE PER DAY
	USH 53, SB	116	ONE CLOSURE PER DAY
PROJECT 1190-06-61 TOTALS		**232**	

BARRIER SYSTEM GRADING SHAPING FINISHING (614.0010)

STA	-	STA	LOCATION	O/S	CUT (CY)	FILL (CY)	TOPSOIL (SY)	MULCHING (SY)	TYPE B (CWT)	SEEDING MIXTURE NO. 30 (CWT)
215+58'NB'	-	217+08'NB'	USH 53 NB	RT	1	16	75	75	0.05	1
226+99'NB'	-	228+50'NB'	USH 53 NB	RT	4	38	140	140	0.09	2
231+14'NB'	-	233+89'NB'	USH 53 NB	RT	1	91	350	350	0.22	6
277+08'ON'	-	278+70'ON'	USH 12 ON-RAMP	RT	9	6	50	50	0.03	1
295+26'NB'	-	297+01'NB'	USH 53 NB	RT	1	25	95	95	0.06	2
215+44'SB'	-	217+44'SB'	USH 53 SB	LT	2	18	75	75	0.05	1
337+97'SB'	-	338+85'SB'	USH 53 SB	LT	2	6	45	45	0.03	1
PROJECT 1190-06-61 TOTALS					**20**	**201**	**830**	**830**	**0.53**	**14**

*TABLE FOR INFORMATION ONLY, ITEMS PAID AS PART OF BARRIER SYSTEM GRADING SHAPING FINISHING ITEM

DELINEATORS

CATEGORY	STAGE	STATION TO STATION	204.0180 REMOVING DELINEATORS AND MARKERS (EA)	633.0100 DELINEATOR POSTS STEEL (EA)	633.0500 DELINEATOR REFLECTORS (WHITE) (EA)	633.0500 DELINEATOR REFLECTORS (YELLOW) (EA)	633.1000 DELINEATORS BARRIER WALL (EA)	614.0952 REPLACING GUARDRAIL REFLECTORS (WHITE) (EA)	614.0952 REPLACING GUARDRAIL REFLECTORS (YELLOW) (EA)	SPV.0060.001 REMOVING RAISED PAVEMENT MARKERS AND FILLING VOIDS (EA)
0010										
	STAGE 3									
		USH 53 NORTHBOUND								
		200+94 NB - 268+94 NB	25	7	14	8	12	17	22	130
		268+94 NB - 352+59 NB	47	37	55	15	10	6	12	106
		352+59 NB - 416+61 NB	37	20	31	14	21	3	6	55
		416+61 NB - 535+19 NB	55	52	59	4	---	---	6	153
		535+19 NB - 619+92 NB	46	39	46	2	---	---	4	116
		619+92 NB - 656+07 NB	17	20	29	2	---	6	3	52
		656+07 NB - 699+35 NB	10	16	27	5	9	8	12	56
		USH 53 SOUTHBOUND								
		191+93 SB - 195+15 SB	---	---	---	---	---	---	---	---
		195+15 SB - 268+93 SB	25	12	15	7	7	15	16	52
		268+93 SB - 352+65 SB	48	25	28	12	5	20	15	102
		352+65 SB - 416+90 SB	43	28	42	14	21	3	9	83
		416+90 SB - 535+61 SB	60	51	62	4	---	2	6	150
		535+61 SB - 620+39 SB	49	43	55	2	---	---	4	137
		620+39 SB - 656+53 SB	17	14	16	2	---	4	9	50
		656+53 SB - 698+09 SB	10	14	19	3	5	7	5	58
		GOLF ROAD NW RAMP								
		185+17 GNW - 195+14 GNW	6	7	8	---	---	---	---	---
	STAGE 3 TOTAL		495	385	506	94	90	91	129	1,300
	PROJECT 1190-06-61 TOTALS		**495**	**385**	**506**	**94**	**90**	**91**	**129**	**1,300**
					600			**220**		

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH

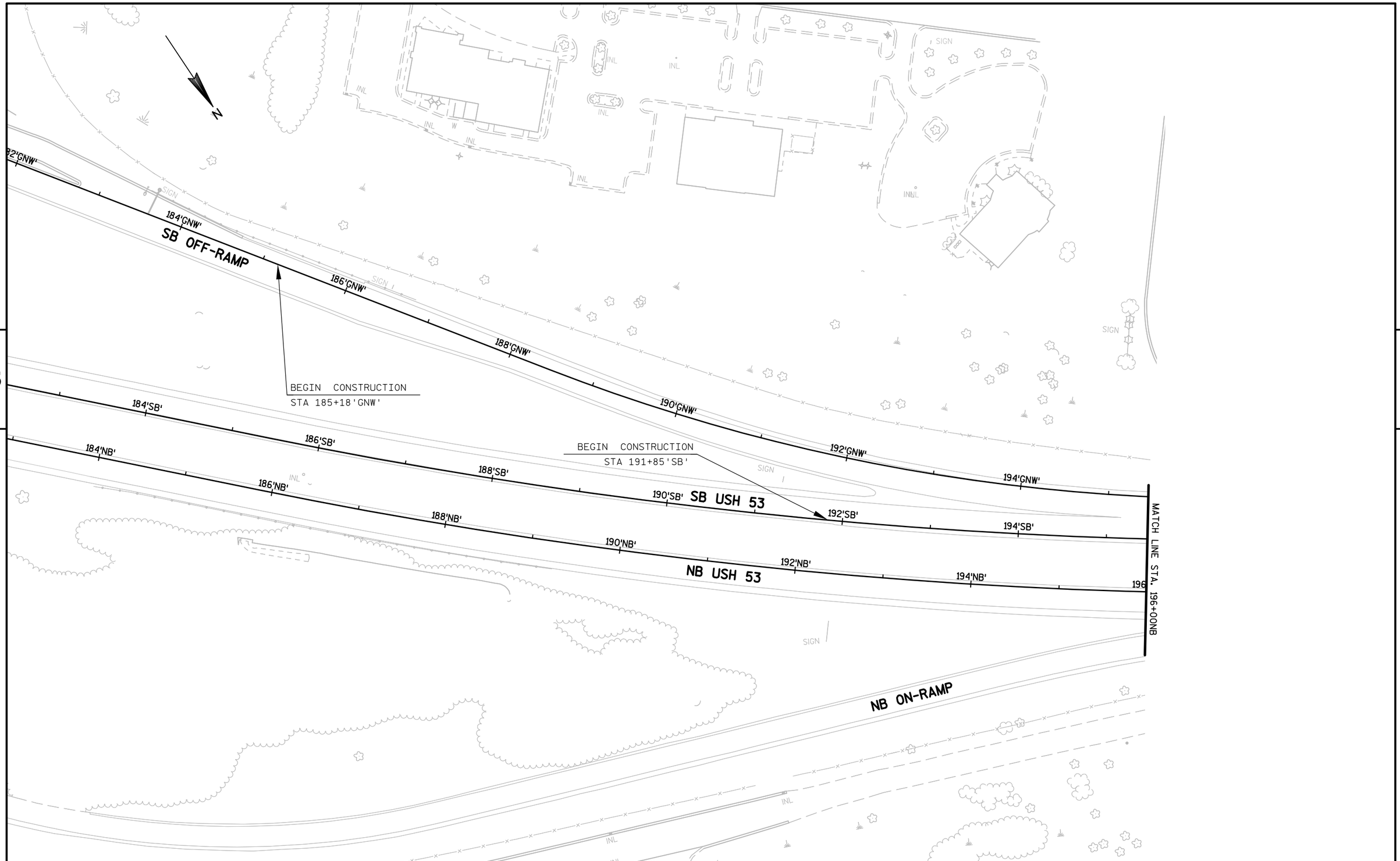
CATEGORY	LOCATION	643.3180 WHITE (LF)	REMARKS
0010			
	USH 53, NB	2,425	WB STH 29 NB USH 53 ON RAMP CLOSURE
	USH 53, SB	2,350	WB STH 29 SB USH 53 ON RAMP CLOSURE
	UNDISTRIBUTED	225	
PROJECT 1190-06-61 TOTALS		**5,000**	

GUARDRAIL ITEMS

CATEGORY	STA	-	STA	LOCATION	O/S	204.0165 REMOVING GUARDRAIL (LF)	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING (EACH)	614.0305 STEEL PLATE BEAM GUARD CLASS A (LF)	614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL (EACH)	614.0115 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 (EACH)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	DESCRIPTION
0010													
	215+58'NB'	-	217+08'NB'	USH 53 NB	RT	50	1	100	1	--	330	330	
	226+99'NB'	-	228+50'NB'	USH 53 NB	RT	50	1	100	1	--	285	285	
	231+14'NB'	-	233+89'NB'	USH 53 NB	RT	57	1	270.5	--	--	270	270	CUTTING REQ'D
	277+08'ON'	-	278+70'ON'	US 12 to 53 ON-RAMP	RT	50	1	112.5	1	--	315	315	
	295+26'NB'	-	297+01'NB'	USH 53 NB	RT	50	1	125	1	--	350	350	
	215+44'SB'	-	217+44'SB'	USH 53 SB	LT	7	1	200	--	1	200	200	
	337+97'SB'	-	338+85'SB'	USH 53 SB	LT	50	1	37.5	1	--	205	205	
	PROJECT 1190-06-61 TOTALS					**314**	**7**	**945.5**	**5**	**1**	**1,955**	**1,955**	

MARKING LINE

CATEGORY	STAGE	STATION TO STATION	646.2020 EPOXY 6-INCH BLACK 12.5' SEG, 25' GAP (LF)	646.2020 EPOXY 6-INCH WHITE 12.5' SEG, 25' GAP (LF)	646.2025 GROOVED EPOXY 6-INCH BLACK 12.5' SEG, 25' GAP (LF)	646.2040 GROOVED WET REF EPOXY 6-INCH YELLOW SOLID (LF)	646.2040 GROOVED WET REF EPOXY 6-INCH WHITE SOLID (LF)	646.2040 GROOVED WET REF EPOXY 6-INCH WHITE 3' SEG, 9' GAP (LF)	646.2050 GROOVED PERMANENT TAPE 6-INCH WHITE 12.5' SEG, 25' GAP (LF)	646.4020 EPOXY 10-INCH WHITE SOLID (LF)	646.4040 GROOVED WET REF EPOXY 10-INCH WHITE SOLID (LF)	646.4040 GROOVED WET REF EPOXY 10-INCH WHITE 3' SEG, 9' GAP (LF)	646.4720 SAME DAY EPOXY 6-INCH (LF)	646.4820 SAME DAY EPOXY 10-INCH (LF)	646.5020 MARKING ARROW EPOXY (TYPE 2) (EACH)	646.5020 MARKING ARROW EPOXY (TYPE 3) (EACH)	646.5120 MARKING WORD EPOXY (EACH)	646.5420 MARKING AERIAL ENFORCEMENT BAR EPOXY (EACH)	646.6120 MARKING STOP LINE EPOXY 18-INCH (LF)	646.6466 COLD WEATHER MARKING EPOXY 6-INCH (LF)	646.8020 MARKING CORRUGATED MEDIAN EPOXY (SF)	646.8120 MARKING CURB EPOXY (YELLOW) (LF)	646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) (EACH)	646.9000 MARKING REMOVAL LINE 4-INCH (LF)
0010																									
	STAGE 3																								
		USH 53 NORTHBOUND																							
		200+94 NB - 268+94 NB	---	---	2,270	6,811	6,633	90	2,270	---	2,600	411	---	---	---	---	---	---	---	6,722	---	---	---	13,444
		268+94 NB - 352+59 NB	---	---	2,270	8,375	8,256	50	2,270	---	2,553	460	---	---	---	---	---	---	---	8,315	---	---	---	16,631
		352+59 NB - 416+61 NB	275	275	1,325	6,411	6,562	90	1,325	560	1,176	---	---	---	---	---	---	10	---	6,487	---	---	---	12,973
		416+61 NB - 535+19 NB	---	---	2,965	11,868	11,784	50	2,965	---	2,386	---	---	---	---	---	---	---	---	11,826	---	---	---	23,652
		535+19 NB - 619+92 NB	---	---	2,120	8,483	8,335	60	2,120	---	2,989	102	---	---	---	---	---	---	---	8,409	---	---	---	16,818
		619+92 NB - 656+07 NB	---	---	910	3,627	3,605	105	910	---	1,040	633	---	---	---	---	---	---	---	3,616	---	---	---	7,232
		656+07 NB - 699+35 NB			1,050	4,203	4,051	---	1,050	---	1,774	52	---	---	---	---	---	---	---	4,127	---	---	---	8,254
		USH 53 SOUTHBOUND																							
		191+93 SB - 195+15 SB	---	---	85	324	---	---	85	---	322	---	---	---	---	---	---	---	---	162	---	---	---	324
		195+15 SB - 268+93 SB	---	---	2,700	7,385	7,209	---	2,700	---	2,638	666	---	---	---	---	---	---	---	7,297	---	---	---	14,594
		268+93 SB - 352+65 SB	---	---	2,095	8,373	8,227	45	2,095	---	2,507	193	---	---	---	---	---	---	---	8,300	---	---	---	16,600
		352+65 SB - 416+90 SB	---	---	1,610	6,426	6,349	50	1,610	---	2,025	---	---	---	---	---	---	10	---	6,387	---	---	---	12,775
		416+90 SB - 535+61 SB	---	---	2,970	11,880	12,054	---	2,970	---	1,899	208	26,654	2,127	---	---	---	---	---	11,967	---	---	---	23,933
		535+61 SB - 620+39 SB	---	---	2,120	8,479	8,442	---	2,120	---	2,511	84	18,345	2,174	---	---	---	---	---	8,460	---	---	---	16,921
		620+39 SB - 656+53 SB	---	---	900	3,614	3,477	---	900	---	1,434	402	---	---	---	---	---	---	---	3,546	---	---	---	7,091
		656+53 SB - 698+09 SB	---	---	1,075	4,283	4,181	---	1,075	---	921	555	---	---	---	---	---	---	---	4,232	---	---	---	8,464
		GOLF ROAD NW RAMP																							
		185+17 GNW - 195+14 GNW	---	---	225	676	996	---	225	---	321	---	---	---	---	---	---	---	---	836	---	---	---	1,672
		USH 12 RAMPS (STH 93)																							
		NB OFF RAMP	---	---	---	2,901	2,943	160	---	---	914	---	---	---	---	---	---	---	---	2,922	---	---	---	5,844
		SB ON RAMP	---	---	---	1,044	1,195	---	---	---	571	---	---	---	---	---	---	---	---	1,120	400	---	---	2,239
		SB OFF RAMP	---	---	---	1,061	1,113	---	---	---	124	---	---	---	---	---	---	---	---	1,087	---	---	---	2,174
		NB ON RAMP	---	---	210	756	811	---	210	---	50	---	---	---	---	---	---	---	---	784	---	---	---	1,567
		RIVER PRAIRIE RAMPS																							
		NB OFF RAMP (SE RAMP)	---	---	---	953	1,005	---	---	---	568	---	---	---	4	2	2	---	56	979	---	---	---	1,958
		SB ON RAMP (SW RAMP)	---	---	---	749	786	---	---	---	50	---	---	---	---	---	---	---	---	768	---	---	---	1,535
		SB OFF RAMP (NW RAMP)	---	---	---	949	983	---	---	---	459	---	---	---	6	---	3	---	50	966	---	---	---	1,932
		NB ON RAMP (NE RAMP)	---	---	130	903	920	---	130	---	50	---	---	---	---	---	---	---	---	912	---	---	---	1,823
		STH 312 RAMPS																							
		NB OFF RAMP (SE RAMP)	---	---	---	1,211	1,209	---	---	---	970	---	---	---	4	2	2	---	46	1,210	---	---	---	2,420
		SB ON RAMP (SW RAMP)	---	---	---	932	985	---	---	---	50	---	---	---	---	---	---	---	---	959	---	---	---	1,917
		SB OFF RAMP (NW RAMP)	---	---	---	1,068	1,032	---	---	---	367	---	---	---	2	---	1	---	30	1,050	---	---	---	2,100
		NB ON RAMP (NE RAMP)	---	---	---	1,162	1,091	---	---	---	50	---	---	---	---	---	---	---	---	1,127	---	---	---	2,253
		MELBY STREET RAMPS																							
		NB OFF RAMP (SE RAMP)	---	---	---	1,053	1,069	---	---	---	275	---	---	---	2	---	1	---	40	1,061	---	---	---	2,122
		SB ON RAMP (SW RAMP)	---	---	---	786	786	---	---	---	---	---	---	---	---	---	---	---	---	786	---	---	---	1,572
		SB OFF RAMP (NW RAMP)	---	---	---	1,460	1,401	---	---	---	270	---	---	---	2	---	1	---	42	1,431	---	---	---	2,861
		NB ON RAMP (NE RAMP)	---	---	---	1,117	1,138	---	---	---	50	---	---	---	---	---	---	---	---	1,128	---	---	---	2,255
		CTH OO RAMPS																							
		NB OFF RAMP (SE RAMP)	---	---	---	2,053	2,057	---	---	---	574	---	---	---	4	---	2	---	40	2,055	---	---	---	4,110
		SB ON RAMP (SW RAMP)	---	---	---	1,662	1,652	---	---	---	---	---	---	---	---	---	---	---	---	1,657	---	---	---	3,314
		SB OFF RAMP (NW RAMP)	---	---	120	1,679	1,634	---	120	---	648	---	---	---	6	---	3	---	46	1,657	---	10	1	3,313
		NB ON RAMP (NE RAMP)	---	---	---	1,603	1,611	---	---	---	50	---	---	---	---	---	---	---	---	1,607	---	---	---	3,214
	STAGE 3 TOTAL		275	275	27,150	126,320	125,580	700	27,150	560	35,186	3,764	45,000	4,300	30	4	15	20	350	125,950	400	10	1	251,900
PROJECT 1190-06-61 TOTALS			**275**	**275**	**27,150**	**126,320**	**125,580**	**700**	**27,150**	**560**	**35,186**	**3,764**	**45,000**	**4,300**	**30**	**4**	**15**	**20**	**350**	**125,950**	**400**	**10**	**1**	**251,900**
			550			**252,600**					**38,950**				**34**									



5 5

PROJECT NO:1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (1)

PLOT DATE : 7/26/2024 4:00 PM PLOT BY : KL ENGINEERING PLOT NAME : 01 PLOT SCALE : 1 IN:100FT

WISDOT/CADDS SHEET 44

OAKWOOD HILLS PARKWAY

STA 198+54GNW - 199+46GNW
92 LF SAWING CURB HEAD REQUIRED

196'GNW' 198'GNW' 200'GNW'

MATCH LINE STA. 196+00NB

196'SB' 198'SB' 200'SB' 202'SB' 204'SB' 206'SB' 208'SB' 210'SB'

SB USH 53

NB' 198'NB' 200'NB' 202'NB' 204'NB' 206'NB' 208'NB' 210'NB'

NB USH 53

MATCH LINE STA. 211+00NB

STA. 200+94 'NB'
BEGIN PROJECT 1190-06-61

S. HASTINGS WAY

5

5

STA 215+44SB - STA 217+44SB
7 LF REMOVING GUARDRAIL (ANCHOR TERMINAL)
200 LF STEEL PLATE BEAM GUARD CLASS A
1 ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
BARRIER SYSTEM GRADING SHAPING FINISHING REQUIRED

SLOPE INTERCEPT (TYP.)

OAKWOOD HILLS PARKWAY

B-18-184

SB ON-RAMP

SB USH 53

212'SB' 214'SB' 216'SB' 218'SB' 220'SB' 222'SB' 224'SB'

MATCH LINE STA. 211+00NB

212'NB' 214'NB' 216'NB' 218'NB' 220'NB' 222'NB' 224'NB'

NB USH 53

MATCH LINE STA. 226+00NB

NB OFF-RAMP

SILT FENCE (TYP.)

STA 215+58NB - 217+08 NB
50 LF REMOVING GUARDRAIL (TERMINAL)
1 STEEL PLATE BEAM GUARD EAT REQUIRED
100 LF STEEL PLATE BEAM GUARD CLASS A
BARRIER SYSTEM GRADING SHAPING FINISHING REQUIRED

B-18-183

CYPRESS RD.

S. HASTINGS WAY

CEMETERY

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 117	E

E. HAMILTON AVE.

S. HASTINGS WAY

SB USH 53

226'SB' 228'SB' 230'SB' 232'SB' 234'SB' 236'SB' 238'SB' 240'SB'

NB USH 53

226'NB' 228'NB' 230'NB' 232'NB' 234'NB' 236'NB' 238'NB' 240'NB'

MATCH LINE STA. 226+00NB

SLOPE INTERCEPT (TYP.)

STA 226+99NB - 228+50NB
50 LF REMOVING GUARDRAIL (TERMINAL)
1 STEEL PLATE BEAM GUARD EAT
100 LF STEEL PLATE BEAM GUARD CLASS A
BARRIER SYSTEM GRADING SHAPING FINISHING REQUIRED

SILT FENCE (TYP.)

STA 231+14NB - STA 233+89NB
57 LF REMOVE GUARDRAIL (ANCHOR TERMINALS)
270.5 LF STEEL PLATE BEAM GUARD CLASS A
BARRIER SYSTEM GRADING SHAPING FINISHING REQUIRED

B-18-178

B-18-182

S. HASTINGS WAY

SERVICE ROAD

MATCH LINE STA. 240+50NB

STH 93

STA 243+53SB - 244+00SB
92 LF SAWING CURB HEAD REQUIRED

STA 253+66SB - 252+66SB
100 LF SAWING CURB HEAD REQUIRED

STH 93 ON-RAMP

SB USH 53

242'SB' 244'SB' 246'SB' 248'SB' 250'SB' 252'SB' 254'SB'

NB USH 53

242'NB' 244'NB' 246'NB' 248'NB' 250'NB' 252'NB' 254'NB'

MATCH LINE STA. 240+50NB

MATCH LINE STA. 255+00NB

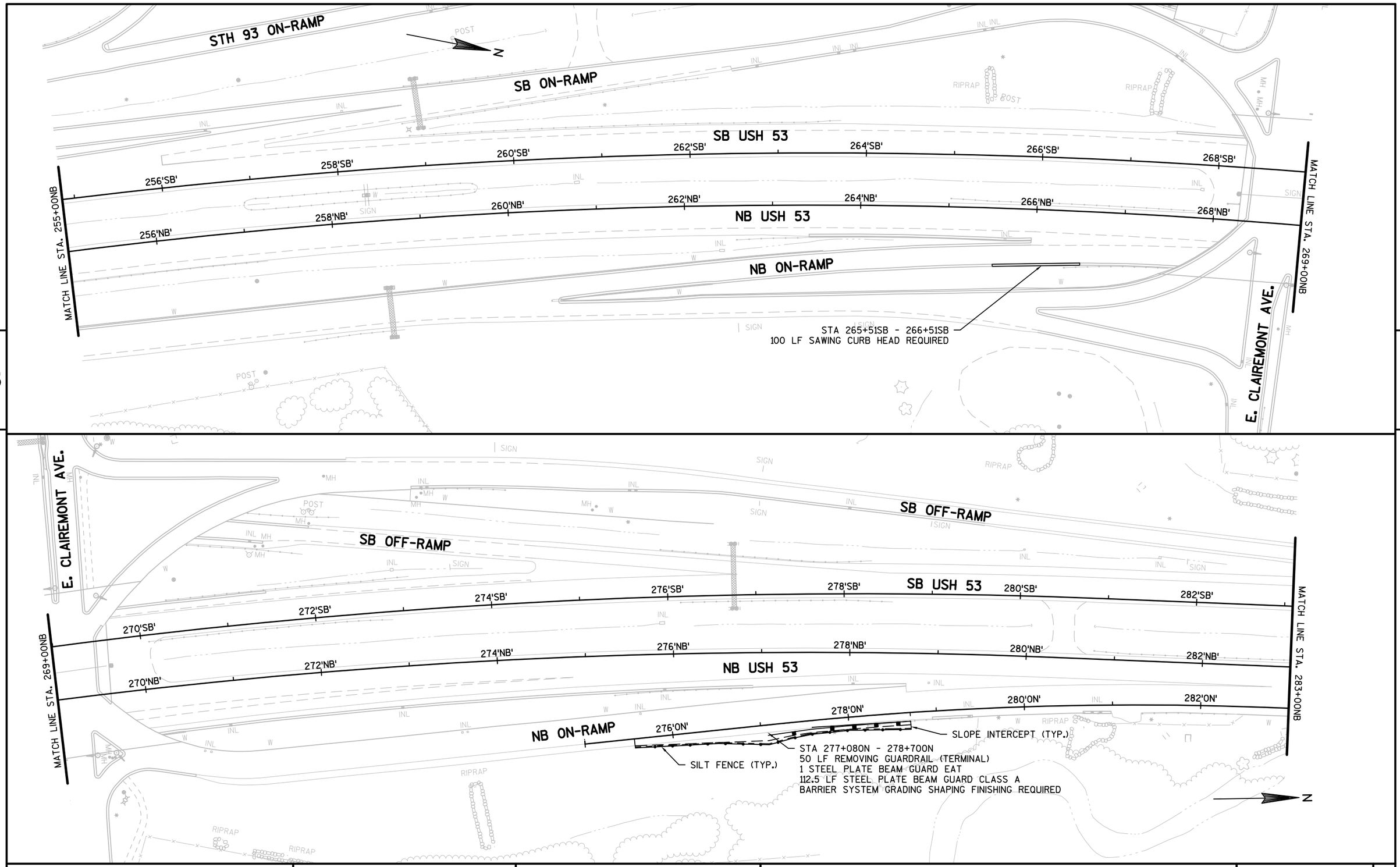
NB OFF-RAMP

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (2)

PLOT DATE : 7/26/2024 4:00 PM PLOT BY : KL ENGINEERING PLOT NAME : 03 PLOT SCALE : 1 IN:100FT

WISDOT/CADDS SHEET 44

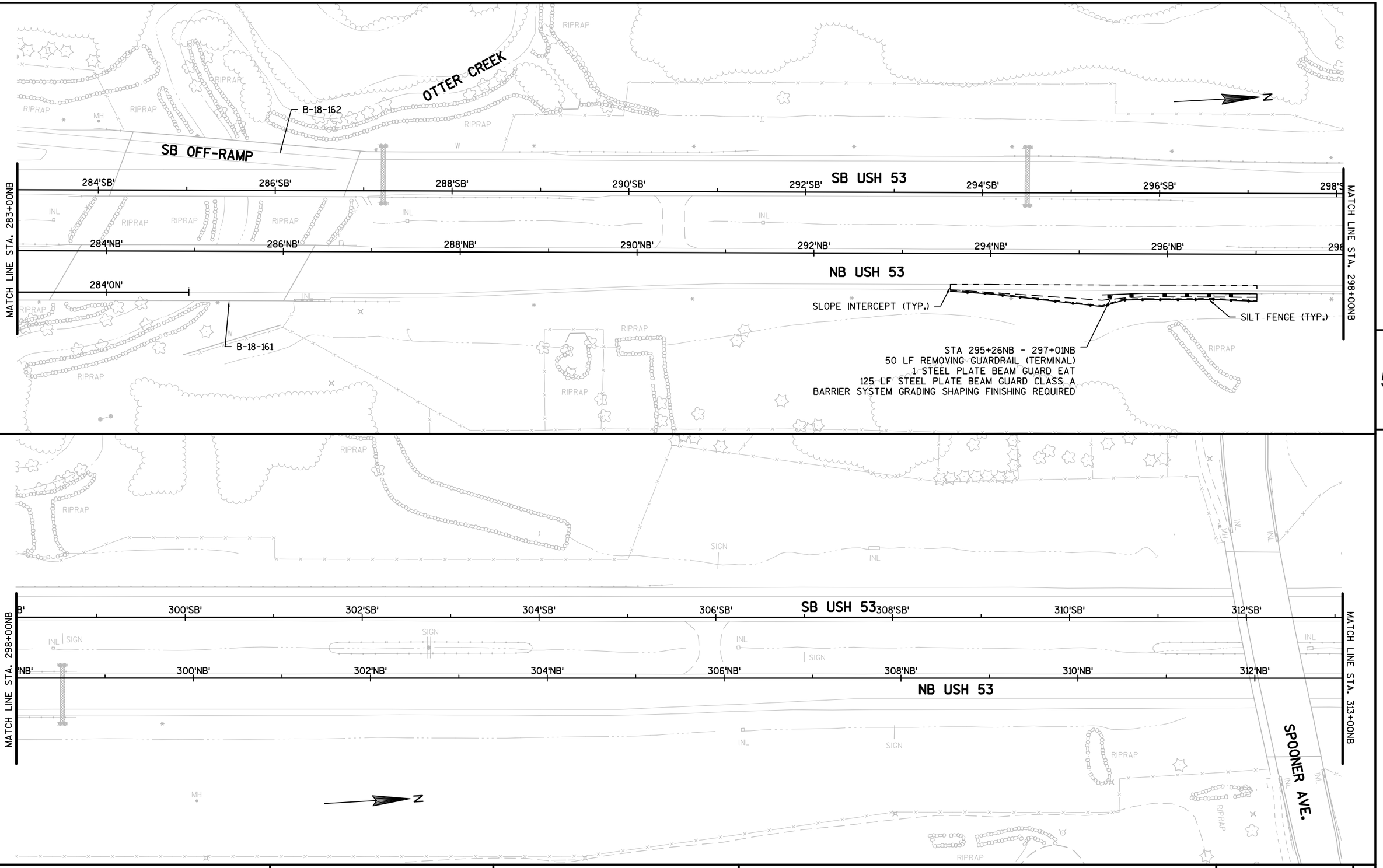


PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 119 E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (3)

PLOT DATE : 7/26/2024 4:00 PM PLOT BY : KL ENGINEERING PLOT NAME : 04 PLOT SCALE : 1 IN:100FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 120 E

5

N

SIGN

SIGN

MATCH LINE STA. 313+00NB

314'SB' 316'SB' 318'SB' 320'SB' SB USH 53 322'SB' 324'SB' 326'SB' 328'S

MATCH LINE STA. 328+00NB

INL

INL

314'NB' 316'NB' 318'NB' 320'NB' 322'NB' 324'NB' 326'NB' 328

NB USH 53

INL

SIGN

INL

SIGN SIGN

W

INL

INL

INL

INL MH

UNION PACIFIC RAILROAD

RIPRAP

STA 337+97SB - 338+85SB
50 LF REMOVING GUARDRAIL (TERMINAL)
1 STEEL PLATE BEAM GUARD EAT
37.5 LF STEEL PLATE BEAM GUARD CLASS A
BARRIER SYSTEM GRADING SHAPING FINISHING REQUIRED

B-18-164

SILT FENCE (TYP.)

SLOPE INTERCEPT (TYP.)

SB ON-RAMP

SB USH 53

MATCH LINE STA. 328+00NB

B' 330'SB' 332'SB' 334'SB' 336'SB' 338'SB' 340'SB' 342'SB'

MATCH LINE STA. 343+00NB

SIGN

INL

NB' 330'NB' 332'NB' 334'NB' 336'NB' 338'NB' 340'NB' 342'NB'

NB USH 53

INL

NB OFF-RAMP

B-18-163

FAIRWAY DR.

INL

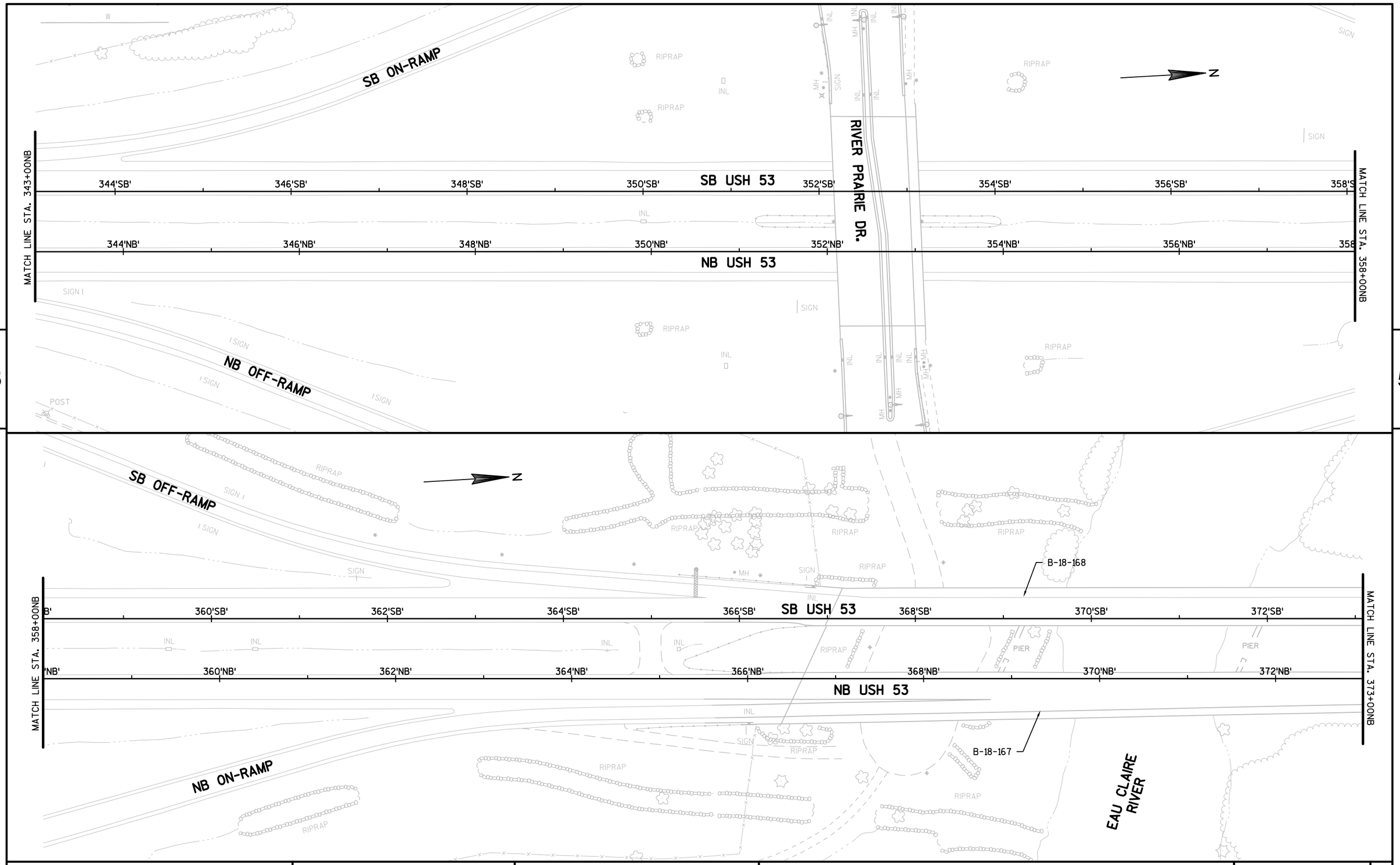
SIGN

INL

N

INL

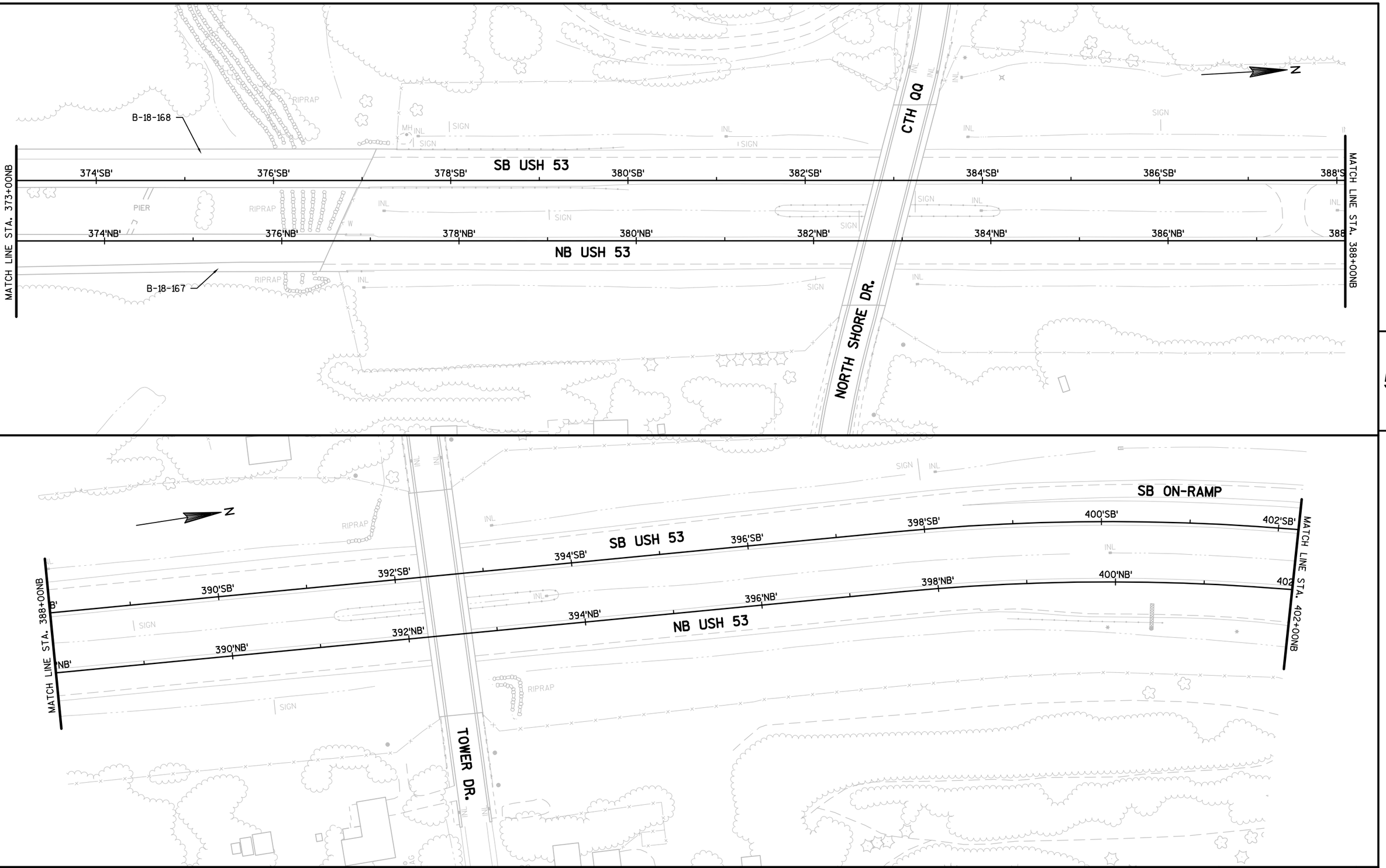
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 121	E



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 122 E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (6)

PLOT DATE : 7/26/2024 4:01 PM PLOT BY : KL ENGINEERING PLOT NAME : 07 PLOT SCALE : 1 IN:100FT



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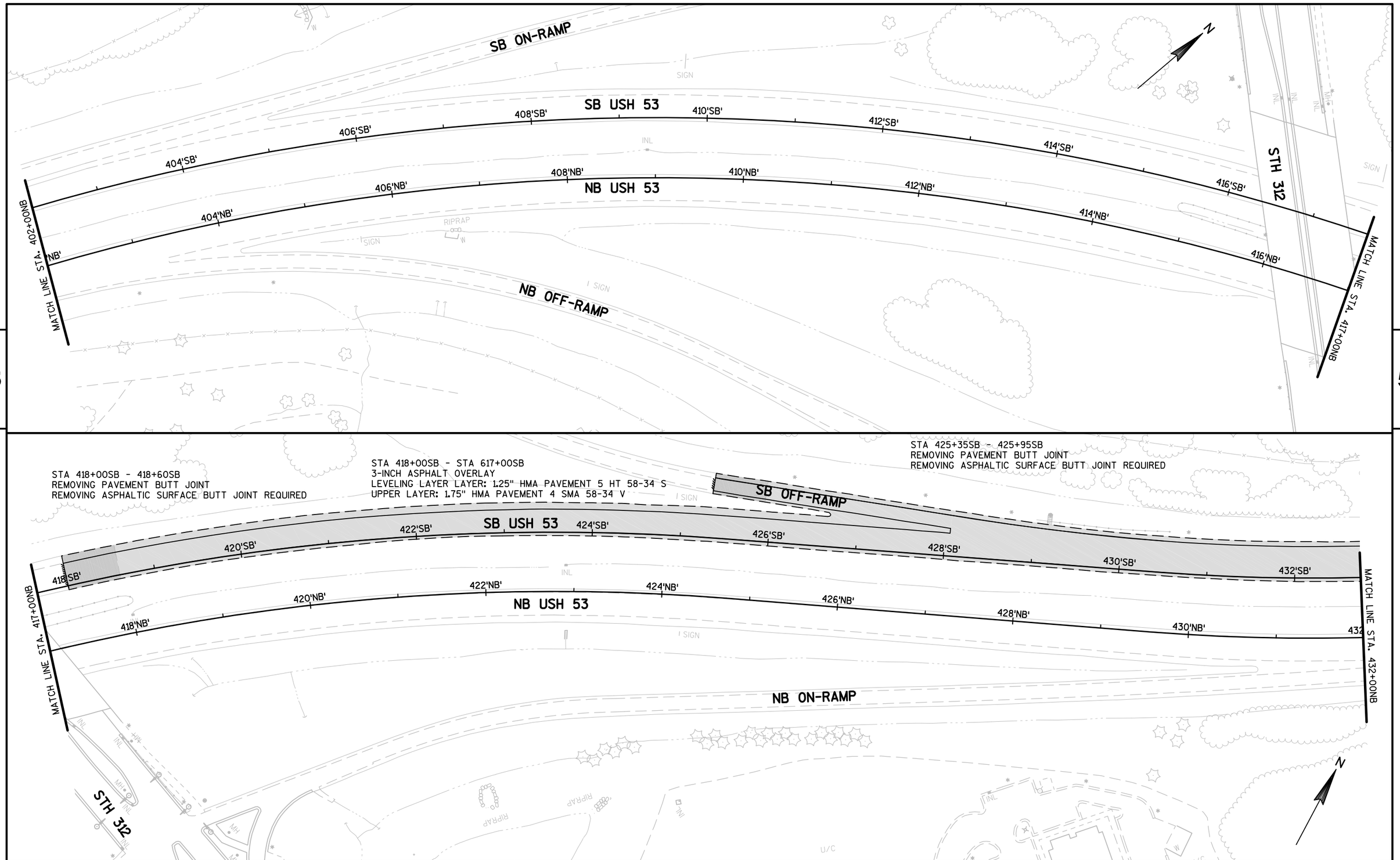
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 123 E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (7)

PLOT DATE : 7/26/2024 4:01 PM PLOT BY : KL ENGINEERING PLOT NAME : 08 PLOT SCALE : 1 IN:100FT

WISDOT/CADDS SHEET 44

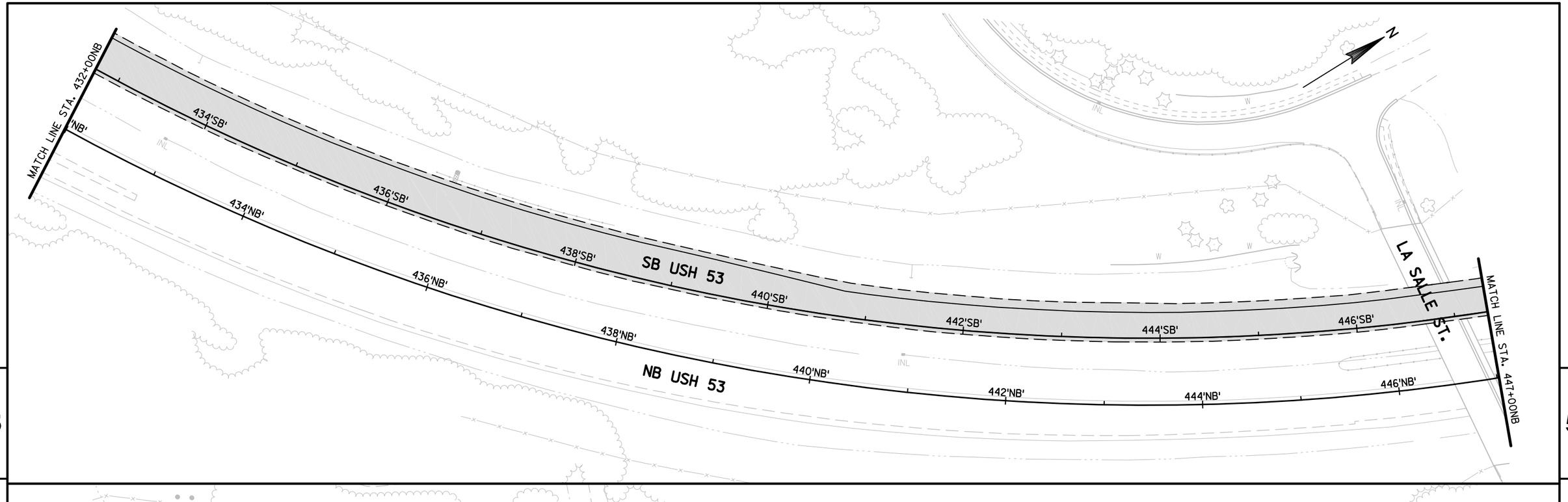


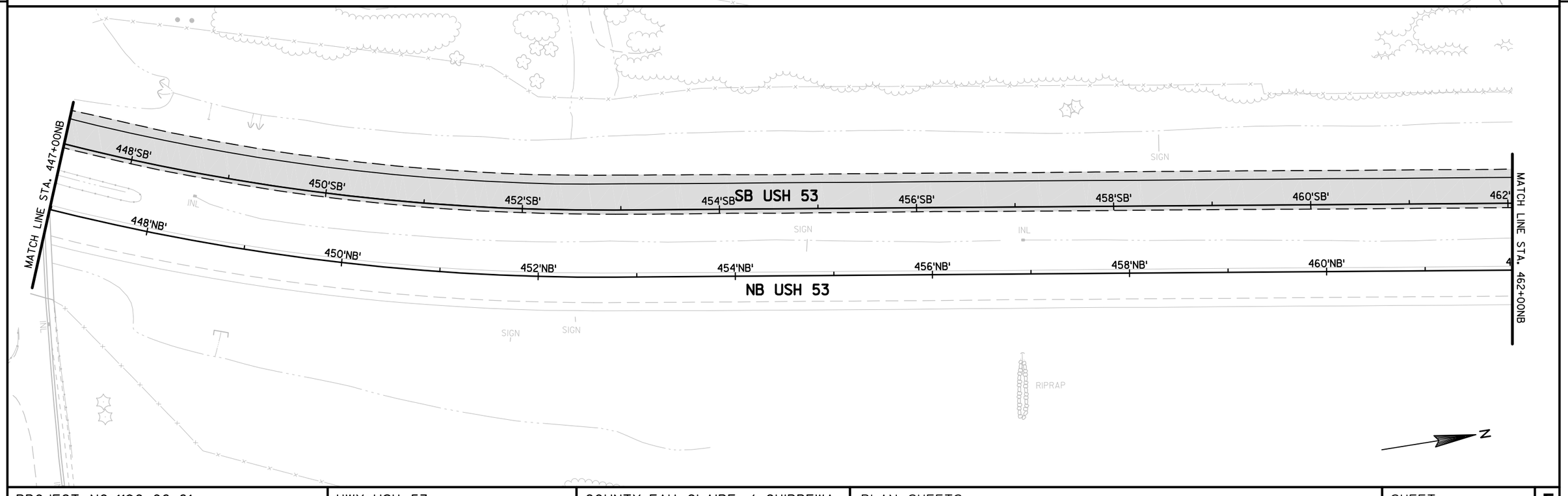
STA 418+00SB - 418+60SB
REMOVING PAVEMENT BUTT JOINT
REMOVING ASPHALTIC SURFACE BUTT JOINT REQUIRED

STA 418+00SB - STA 617+00SB
3-INCH ASPHALT OVERLAY
LEVELING LAYER LAYER: 1.25" HMA PAVEMENT 5 HT 58-34 S
UPPER LAYER: 1.75" HMA PAVEMENT 4 SMA 58-34 V

STA 425+35SB - 425+95SB
REMOVING PAVEMENT BUTT JOINT
REMOVING ASPHALTIC SURFACE BUTT JOINT REQUIRED

PROJECT NO:1190-06-61	HWY:USH 53	COUNTY:EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 124 E





PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 125 E

STA 464+36SB - 465+08SB
REMOVING ASPHALTIC SURFACE BUTT JOINT REQUIRED

N

SB USH 53

464'SB' 466'SB' 468'SB' 470'SB' 472'SB' 474'SB' 476'SB'

NB USH 53

464'NB' 466'NB' 468'NB' 470'NB' 472'NB' 474'NB' 476'NB'

MATCH LINE STA. 462+00NB

MATCH LINE STA. 477+00NB

INL SIGN RIPRAP BERM

5

5

N

SB USH 53

478'SB' 480'SB' 482'SB' 484'SB' 486'SB' 488'SB' 490'SB' 492'SB'

NB USH 53

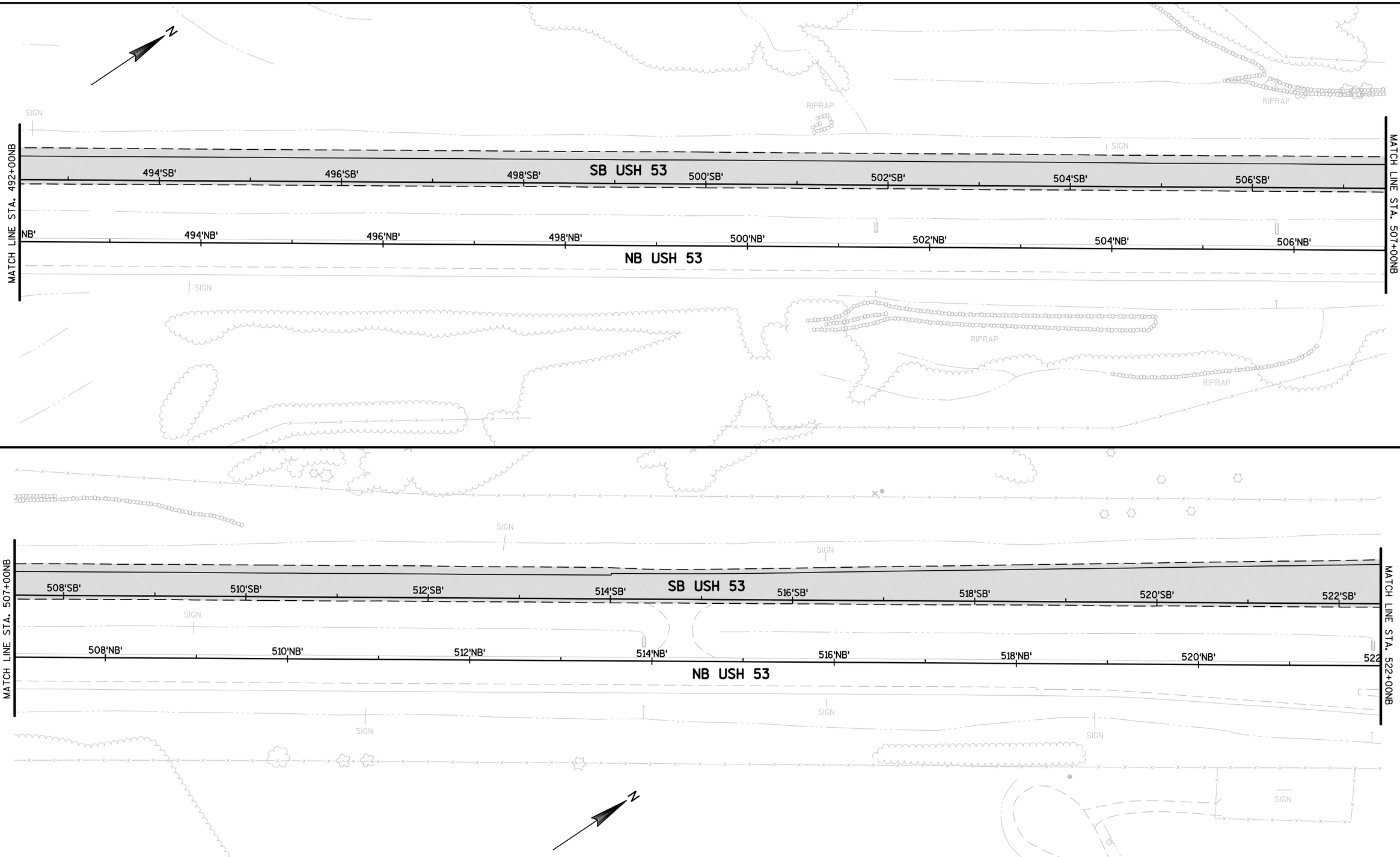
478'NB' 480'NB' 482'NB' 484'NB' 486'NB' 488'NB' 490'NB' 492

MATCH LINE STA. 477+00NB

MATCH LINE STA. 492+00NB

SIGN INL RIPRAP

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 126 E



5

5

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 127	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (11)

PLOT DATE : 7/26/2024 4:01 PM PLOT BY : KL ENGINEERING PLOT NAME : 12 PLOT SCALE : 1 IN:100FT

WISDOT/CADDS SHEET 44

STA 526+10SB - 526+70SB
REMOVING PAVEMENT BUTT JOINT
REMOVING ASPHALTIC SURFACE BUTT JOINT REQUIRED

SB ON-RAMP

MATCH LINE STA. 522+00NB

524'SB' 526'SB' 528'SB' 530'SB' 532'SB' 534'SB' 536'SB'

SB USH 53

524'NB' 526'NB' 528'NB' 530'NB' 532'NB' 534'NB' 536'NB'

NB USH 53

MATCH LINE STA. 537+00NB

NB OFF-RAMP

MELBY ST.

5

5

MATCH LINE STA. 537+00NB

538'SB' 540'SB' 542'SB' 544'SB' 546'SB' 548'SB' 550'SB' 552'SB'

SB USH 53

538'NB' 540'NB' 542'NB' 544'NB' 546'NB' 548'NB' 550'NB' 552

NB USH 53

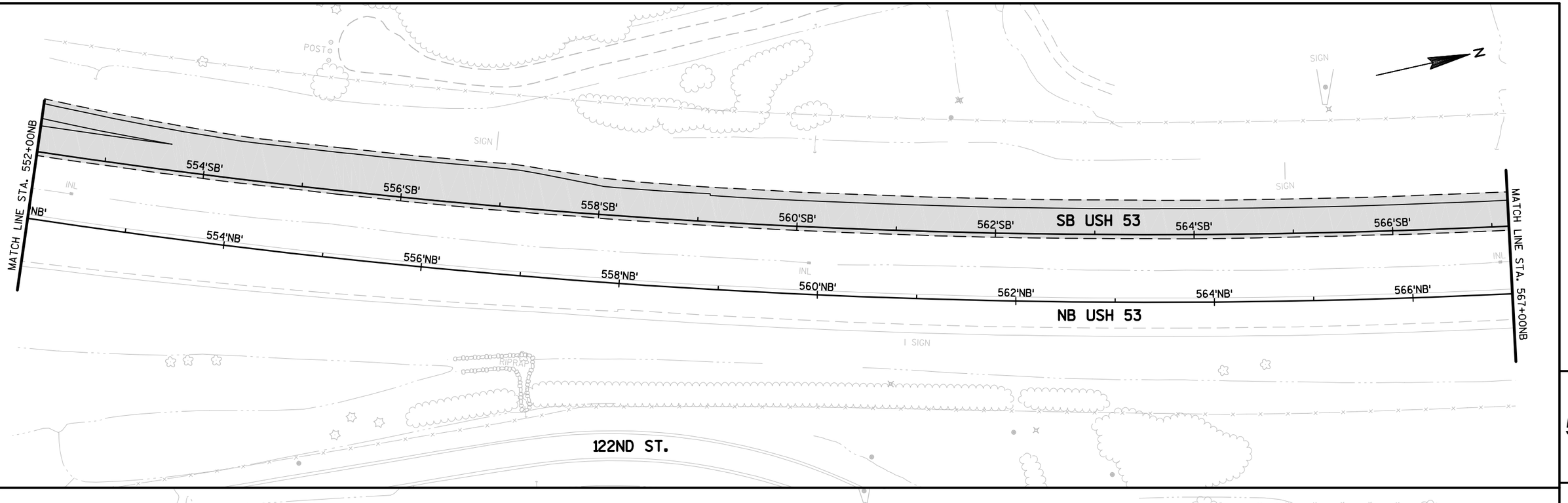
MATCH LINE STA. 552+00NB

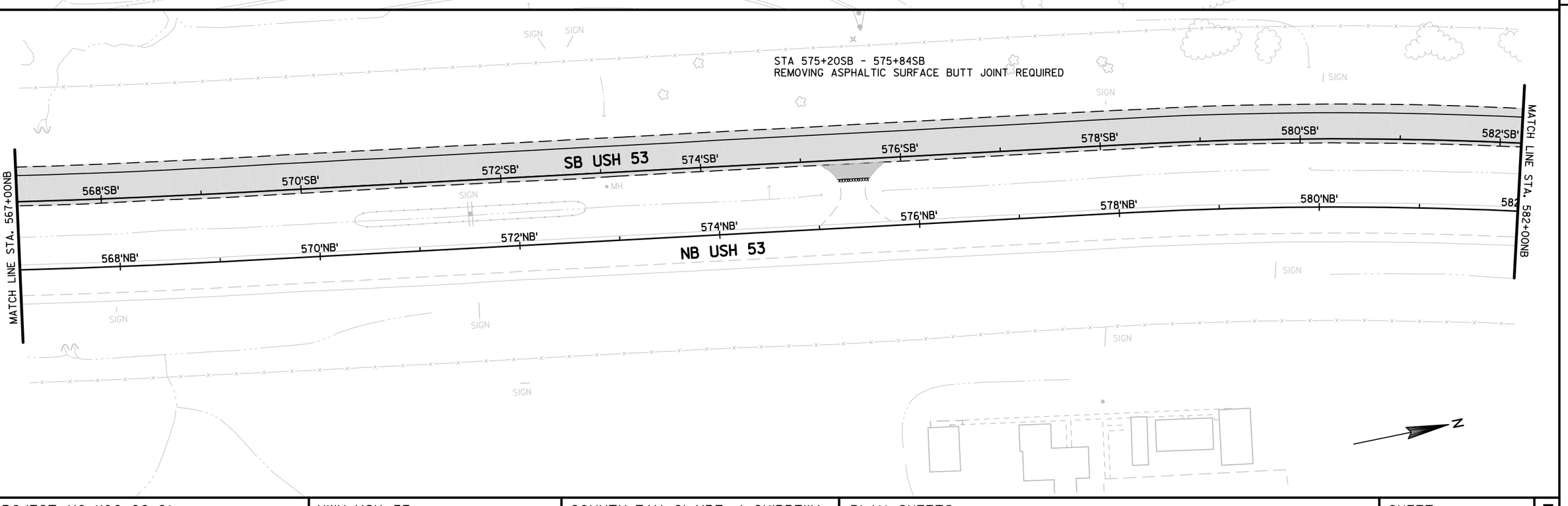
SB OFF-RAMP

STA 550+43SB - 551+03SB
REMOVING PAVEMENT BUTT JOINT
REMOVING ASPHALTIC SURFACE BUTT JOINT REQUIRED

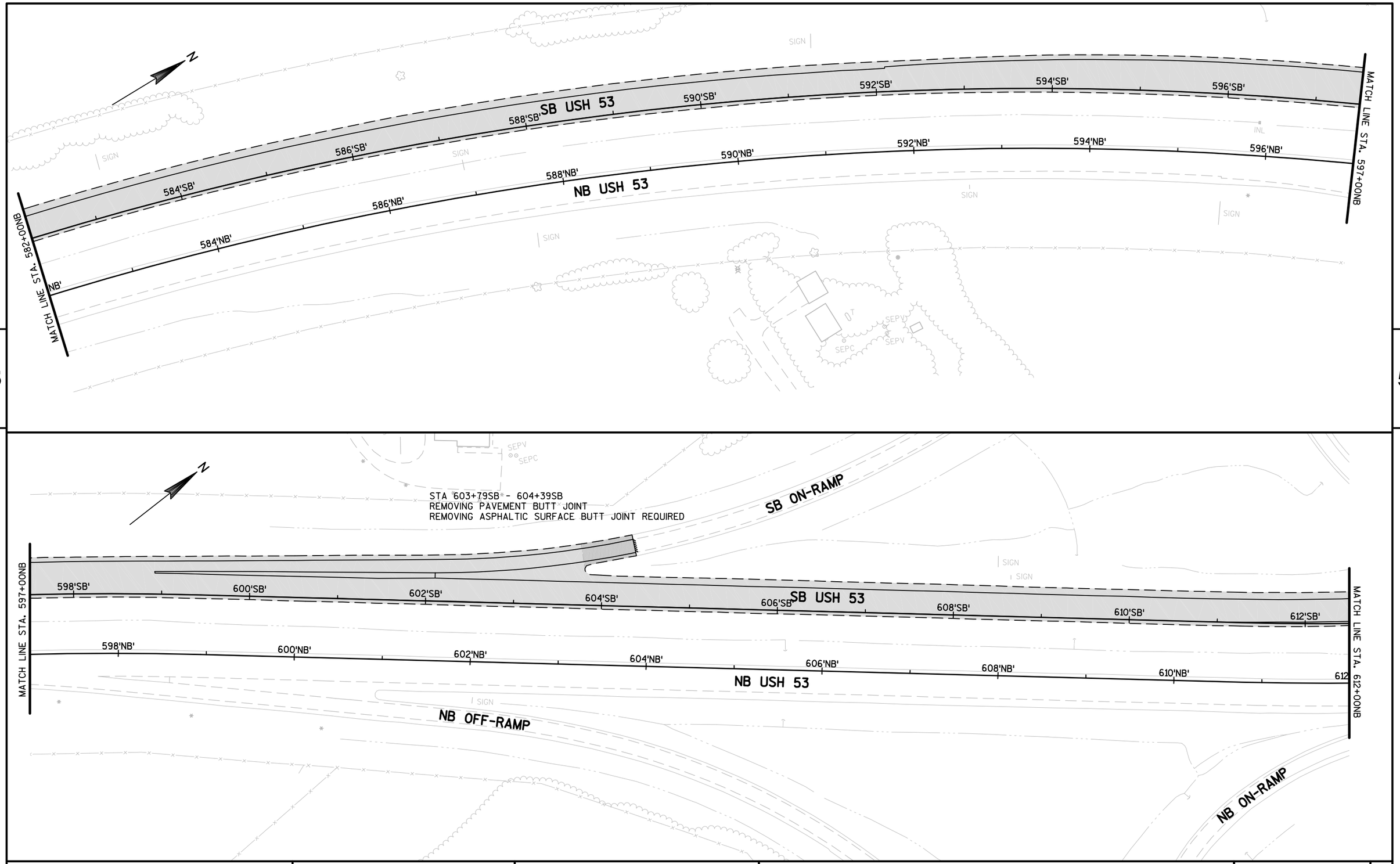
NB ON-RAMP

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 128	E





PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 129 E



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 130 E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (14)

PLOT DATE : 7/26/2024 4:02 PM PLOT BY : KL ENGINEERING PLOT NAME : 15 PLOT SCALE : 1 IN:100FT

WISDOT/CADDS SHEET 44

STA 616+40SB - 617+00SB
REMOVING PAVEMENT BUTT JOINT
REMOVING ASPHALTIC SURFACE BUTT JOINT REQUIRED

MATCH LINE STA. 612+00NB

SB OFF-RAMP

NB ON-RAMP

614'SB'
616'SB'
618'SB'
620'SB'
622'SB'
624'SB'
626'SB'

614'NB'
616'NB'
618'NB'
620'NB'
622'NB'
624'NB'
626'NB'

CTH 00

SB USH 53

NB USH 53

MATCH LINE STA. 627+00NB

5

5

MATCH LINE STA. 627+00NB

628'SB'
630'SB'
632'SB'
634'SB'
636'SB'
638'SB'
640'SB'

628'NB'
630'NB'
632'NB'
634'NB'
636'NB'
638'NB'
640'NB'

SB USH 53

NB USH 53

SB ON-RAMP

NB OFF-RAMP

MATCH LINE STA. 642+00NB

PROJECT NO:1190-06-61	HWY:USH 53	COUNTY:EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 131 E

SB ON-RAMP

MATCH LINE STA. 642+00NB

642'SB' 644'SB' 646'SB' 648'SB' 650'SB' 652'SB' 654'SB' 656'SB'

642'NB' 644'NB' 646'NB' 648'NB' 650'NB' 652'NB' 654'NB' 656'NB'

SB USH 53

NB USH 53

SB OFF-RAMP

NB OFF-RAMP

NB ON-RAMP

MATCH LINE STA. 657+00NB

STH 29

STH 124

SIGN

RIPRAP

INL

POST

5

5

MATCH LINE STA. 657+00NB

658'SB' 660'SB' 662'SB' 664'SB' 666'SB' 668'SB' 670'SB'

658'NB' 660'NB' 662'NB' 664'NB' 666'NB' 668'NB' 670'NB' 672

MATCH LINE STA. 672+00NB

STA 666+61SB - 666+86SB
81 SY REMOVE CONCRETE PAVEMENT APPROACH SLAB
(PAID FOR AS REMOVING CONCRETE PAVEMENT)
81 SY CONCRETE PAVEMENT APPROACH SLAB REQUIRED

B-9-246

STA 668+66SB - 668+91SB
83 SY REMOVE CONCRETE PAVEMENT APPROACH SLAB
(PAID FOR AS REMOVING CONCRETE PAVEMENT)
83 SY CONCRETE PAVEMENT APPROACH SLAB REQUIRED

STA 667+48NB - 667+76NB
119 SY REMOVE CONCRETE PAVEMENT APPROACH SLAB
(PAID FOR AS REMOVING CONCRETE PAVEMENT)
119 SY CONCRETE PAVEMENT APPROACH SLAB REQUIRED

B-9-247

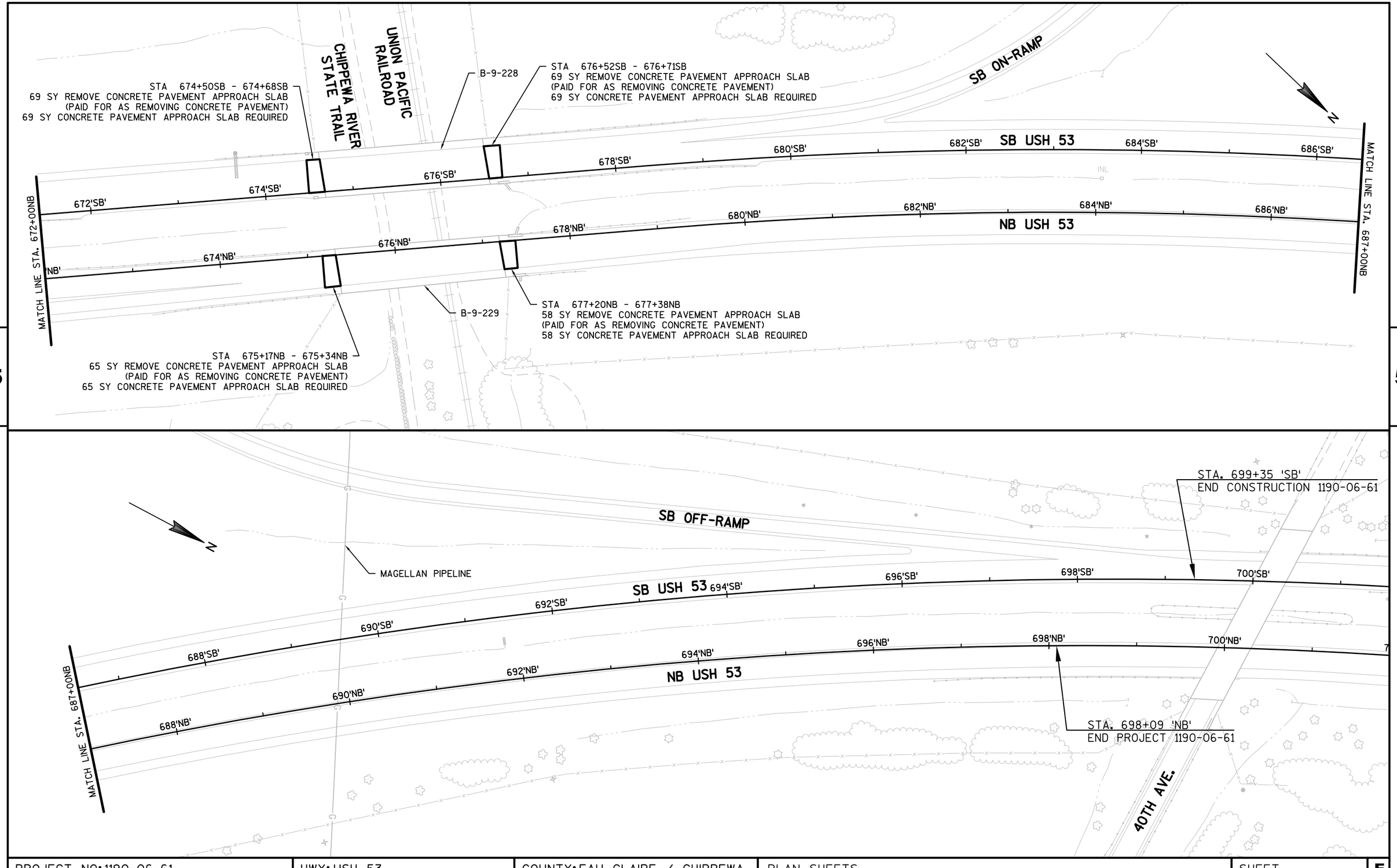
STA 669+53NB - 669+80NB
107 SY REMOVE CONCRETE PAVEMENT APPROACH SLAB
(PAID FOR AS REMOVING CONCRETE PAVEMENT)
107 SY CONCRETE PAVEMENT APPROACH SLAB REQUIRED

PROJECT NO:1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 132 E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (16)

PLOT DATE : 7/26/2024 4:02 PM PLOT BY : KL ENGINEERING PLOT NAME : 17 PLOT SCALE : 1 IN:100FT

WISDOT/CADDS SHEET 44



5

5

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE / CHIPPEWA	PLAN SHEETS	SHEET 133 E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - SHEET - (17)

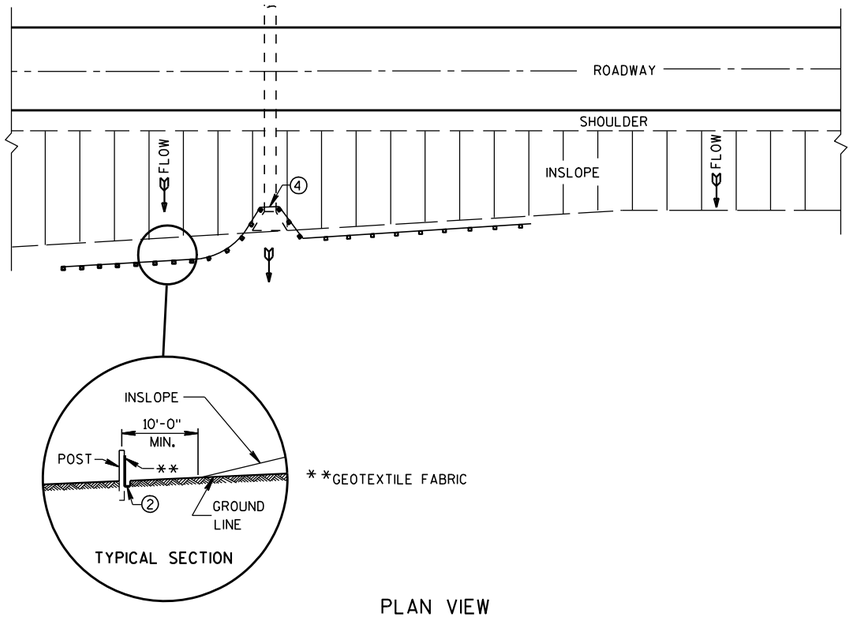
PLOT DATE : 7/26/2024 4:02 PM PLOT BY : KL ENGINEERING PLOT NAME : 18 PLOT SCALE : 1 IN:100FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

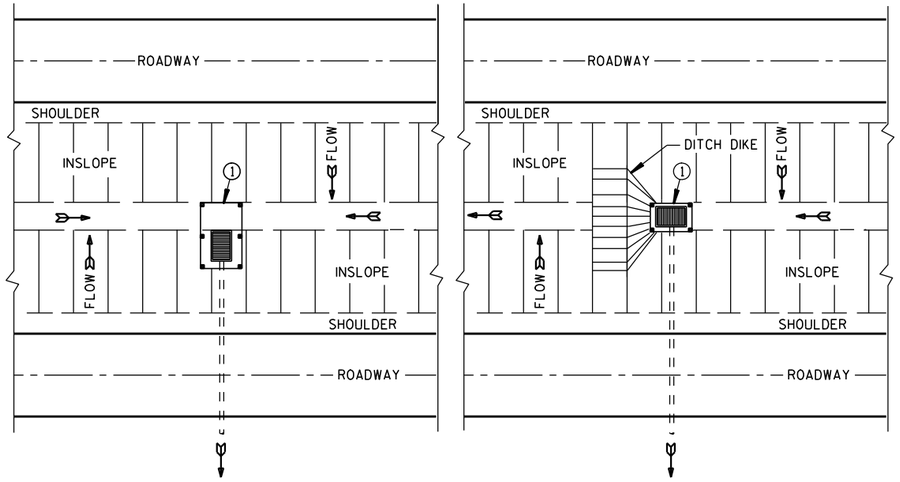
08E09-06	SILT FENCE
13A05-06A	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A05-06B	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C09-17A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B16-04A	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B16-04B	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09D	ON RAMP LANE CLOSURE
15C02-09E	OFF RAMP LANE CLOSURE
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C14-04	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-08B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-08C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-06A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-06B	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-06C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C31-06D	PAVEMENT MARKING LANE DROP AND LANE REDUCTION
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-12A	TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY RUMBLE STRIPS
15D12-12D	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D12-12F	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-07A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING

6



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.

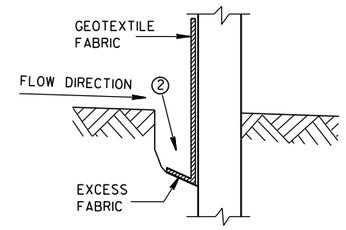
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

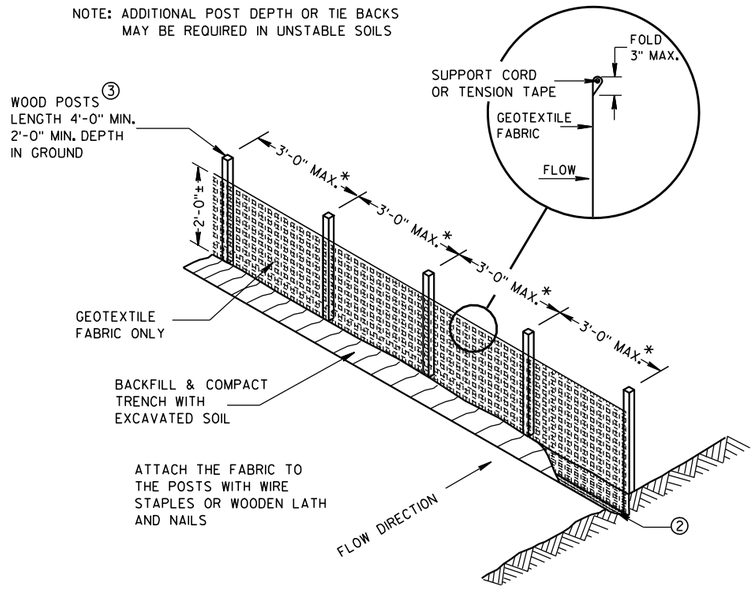
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

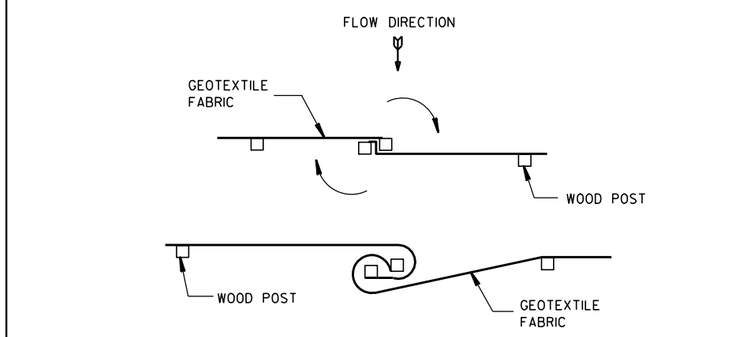
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



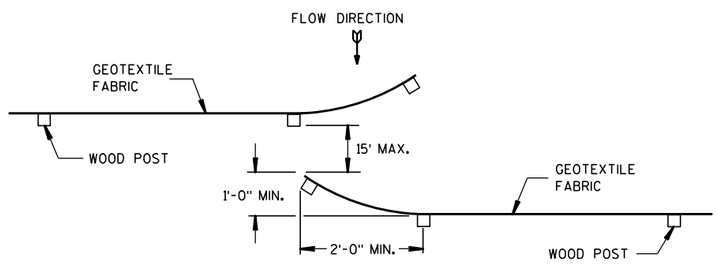
TRENCH DETAIL



SILT FENCE

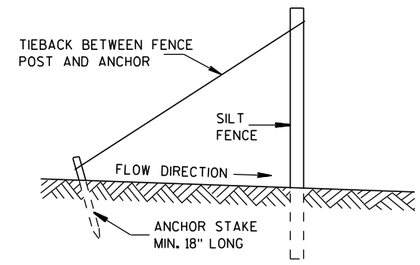


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

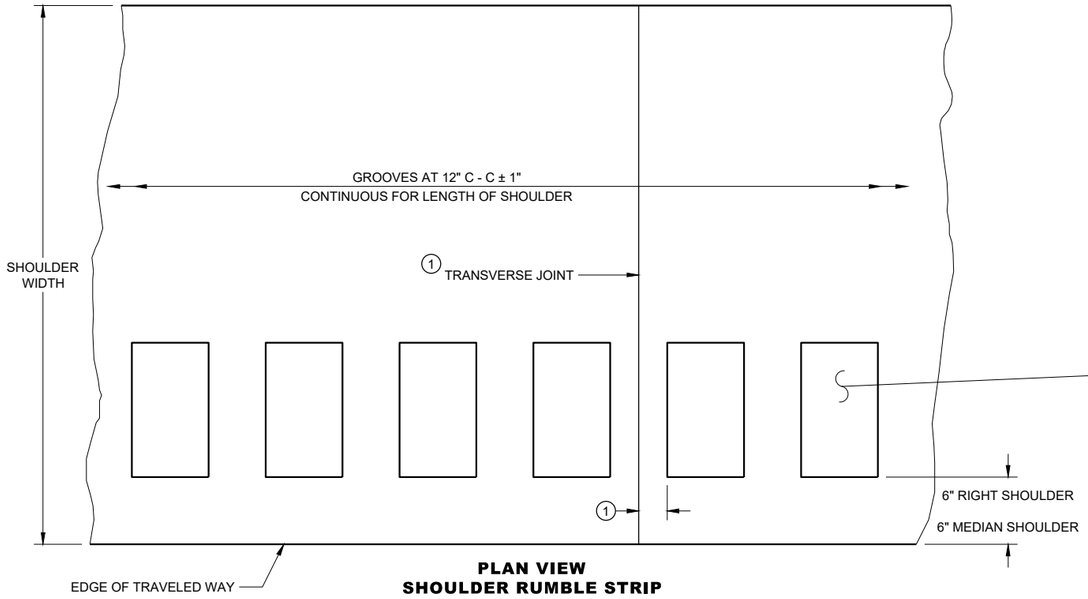
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

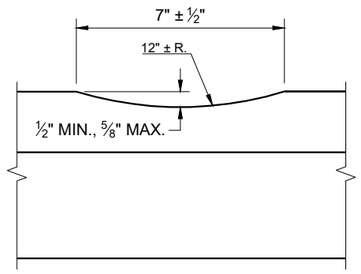
S.D.D. 8 E 9-6

6

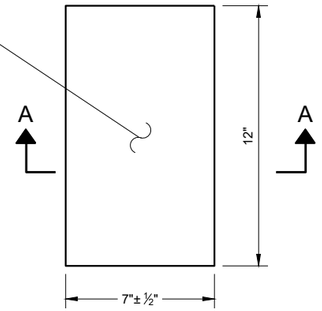
S.D.D. 8 E 9-6



PLAN VIEW
SHOULDER RUMBLE STRIP



SECTION A - A



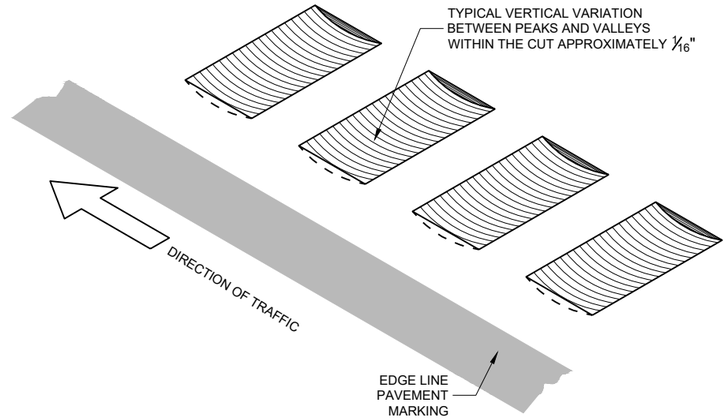
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

SDD 13A5, SHEET "b" SHOWS THE LOCATION OF THE RUMBLE STRIPS AT RAMP AND GORE LOCATIONS.

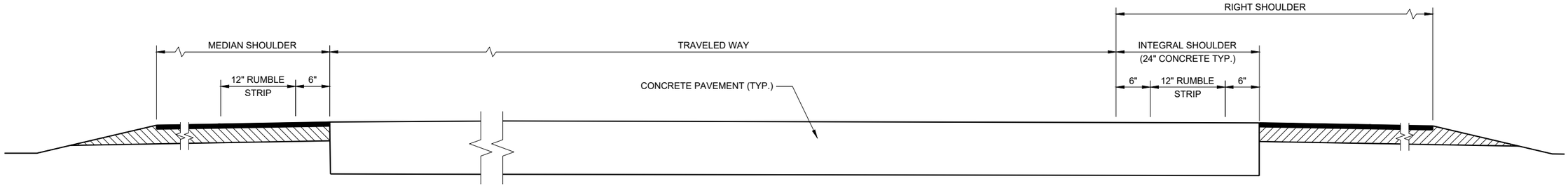
RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL AND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

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



ISOMETRIC

PLACEMENT DETAIL FOR RUMBLE STRIP



SECTION VIEW

TYPICAL SHOULDER RUMBLE STRIPS
(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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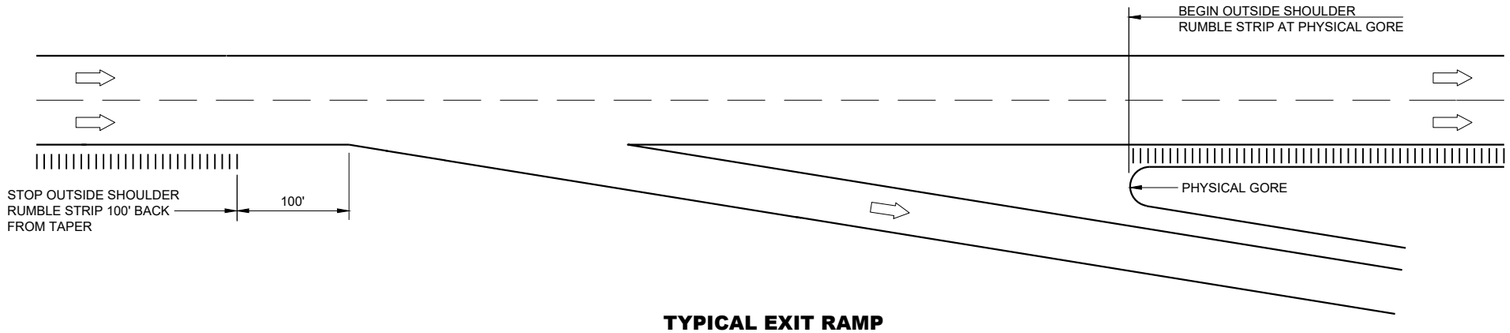
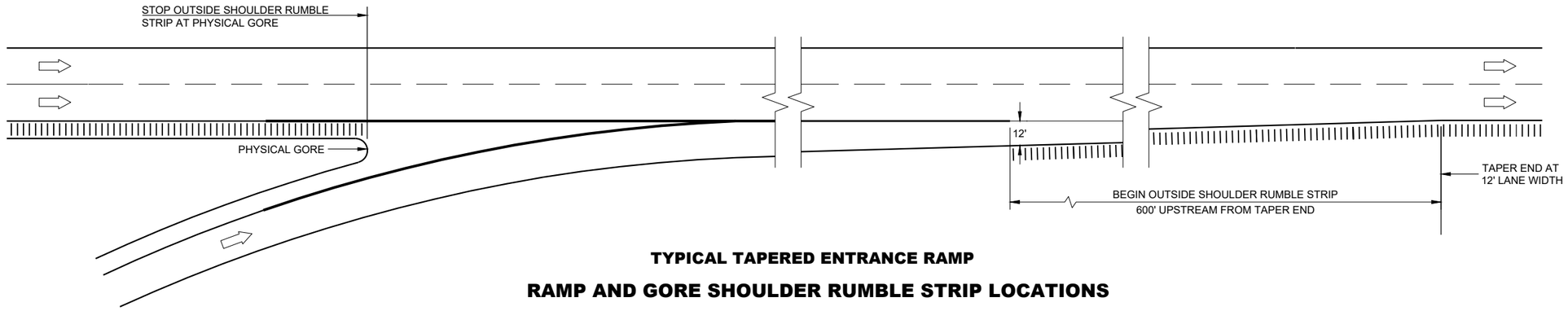
SDD 13A05-06a

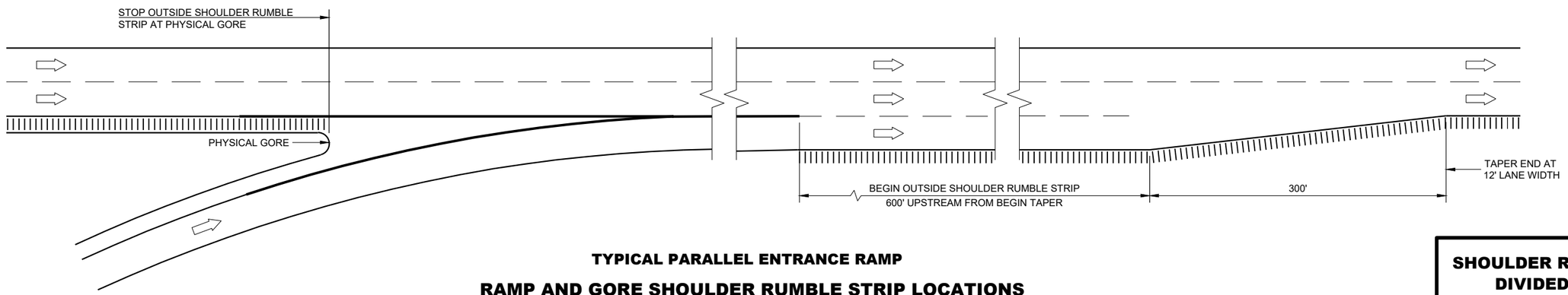


TYPICAL EXIT RAMP



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS

GENERAL NOTES

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

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIALAND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

LEGEND

⇨ DIRECTION OF TRAFFIC

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY DESIGN STANDARDS UNIT SUPERVISOR

FHWA

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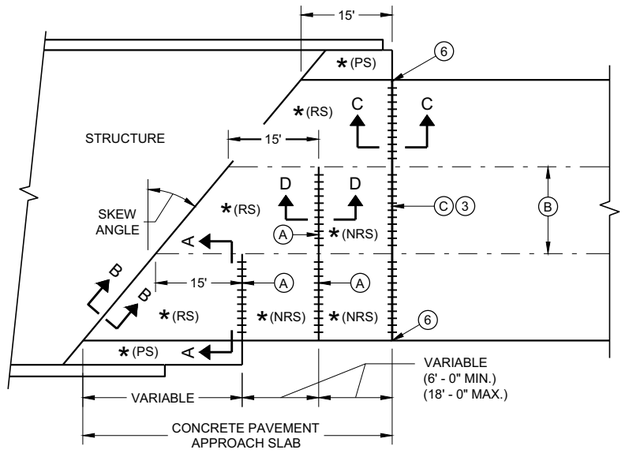
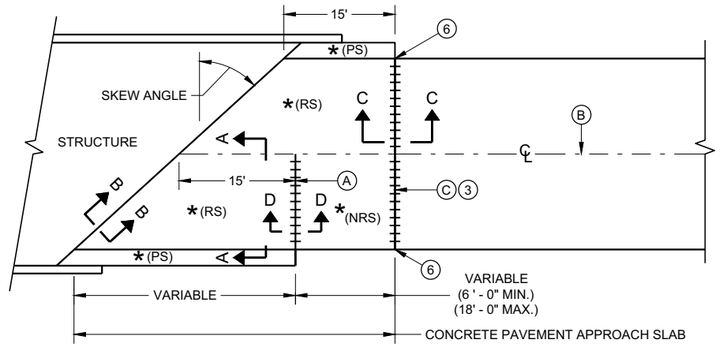
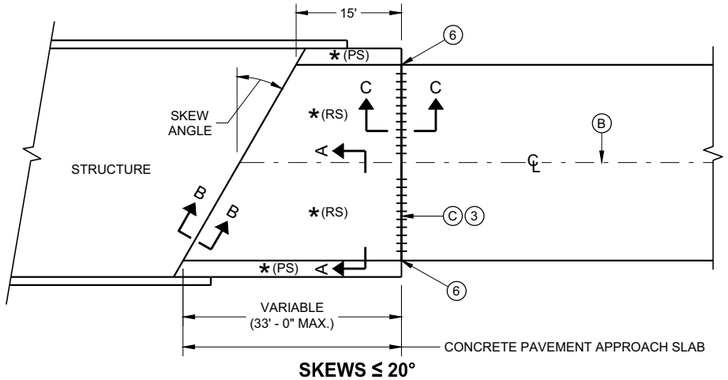
SDD 13A05-06b



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

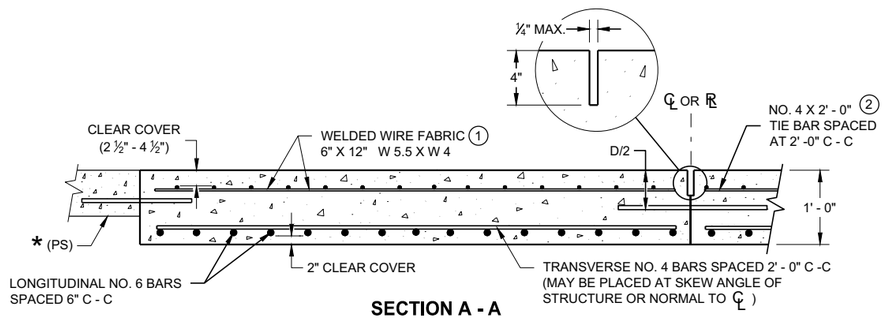
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

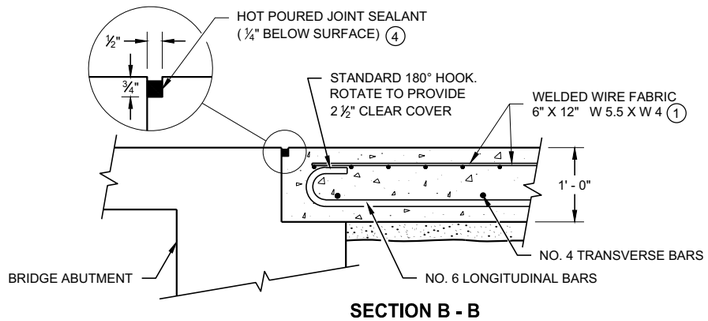
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

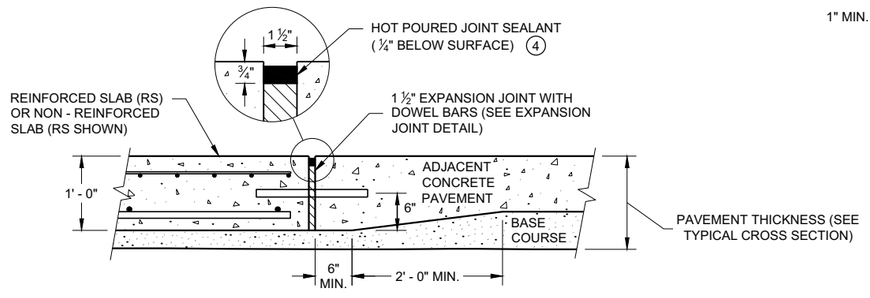
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

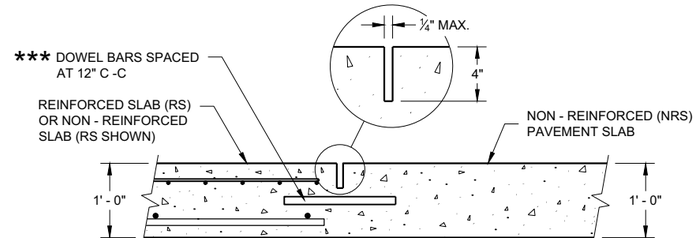
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

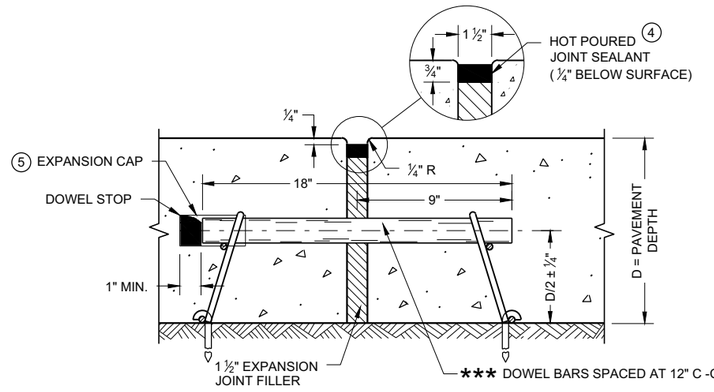
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

FHWA

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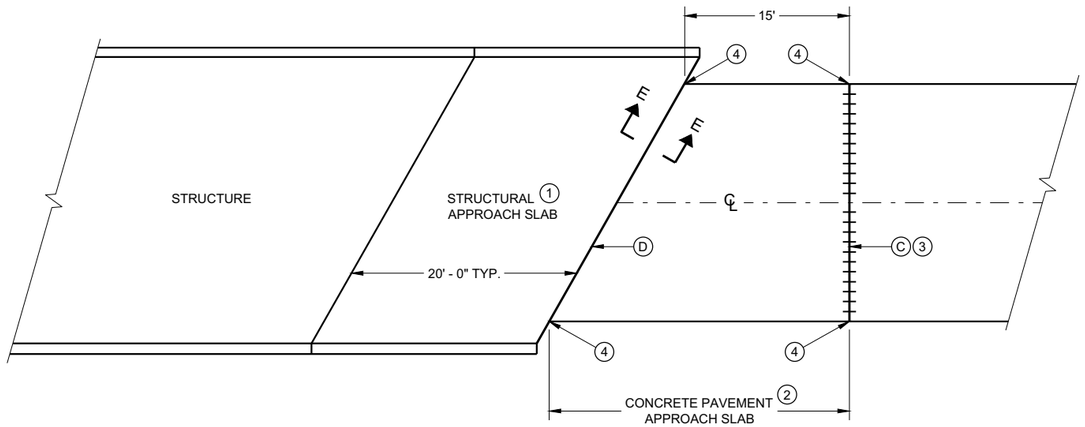
SDD 13B02 - 09a



BRIDGE APPROACHES

GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

(1) SEE BRIDGE PLAN.

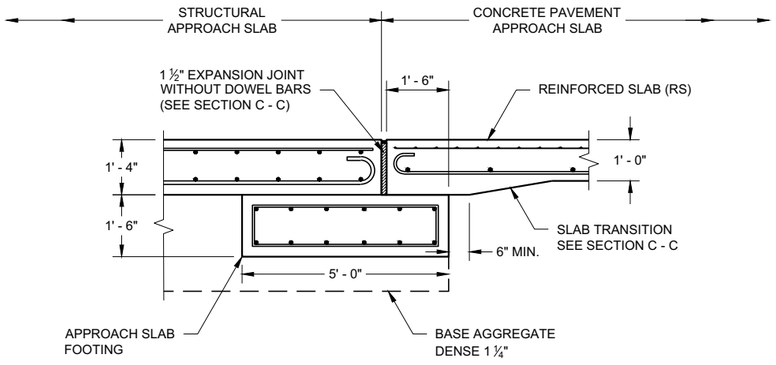
(2) CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞.

(D) 1 ½" EXPANSION JOINT (NO DOWELS)



SECTION E - E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

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SDD 13B02 - 09b

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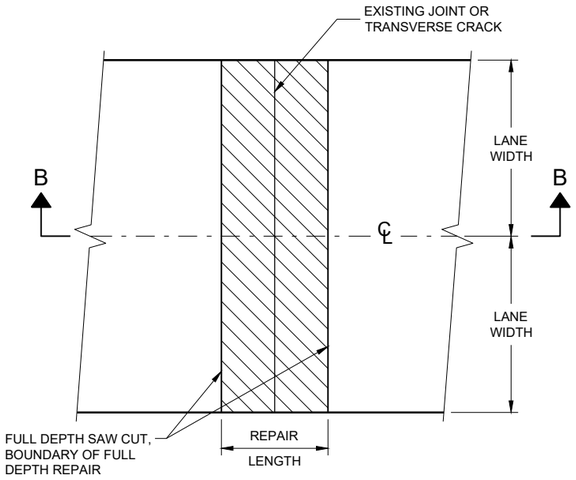
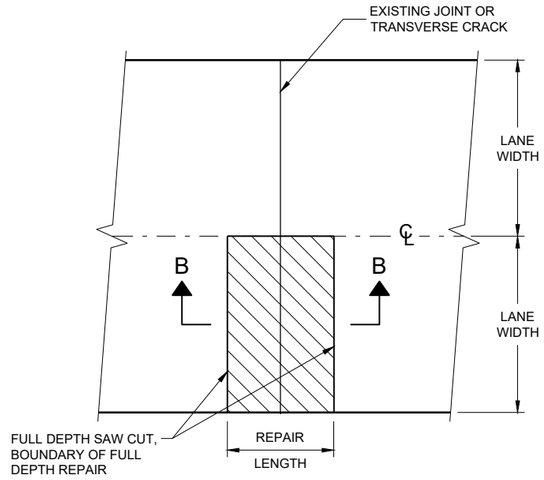
SDD 13B02 - 09b



PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

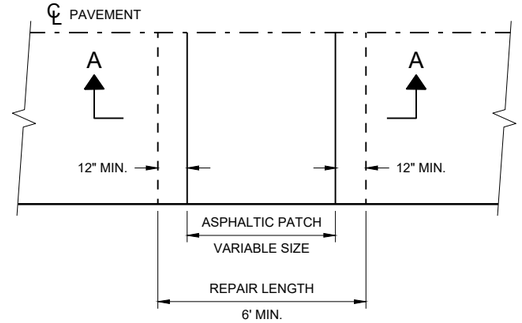
GENERAL NOTES

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.

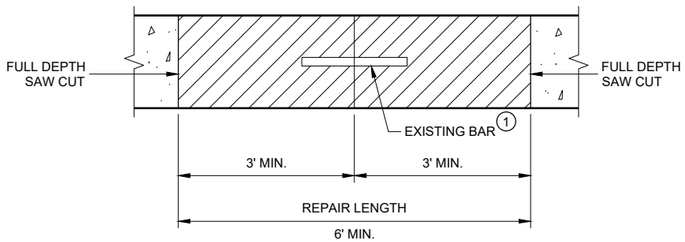
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.

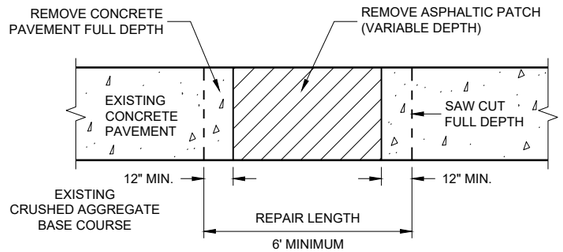


PLAN VIEW

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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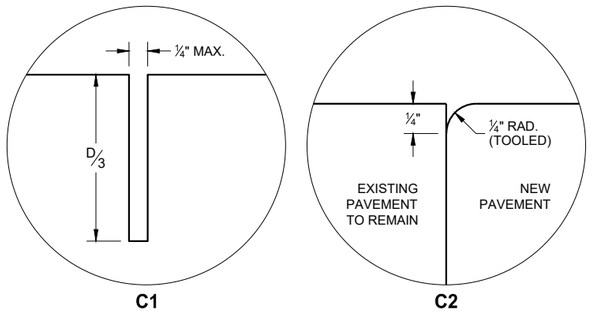
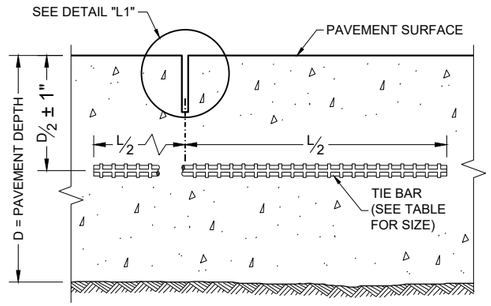
SDD13C09 - 17a

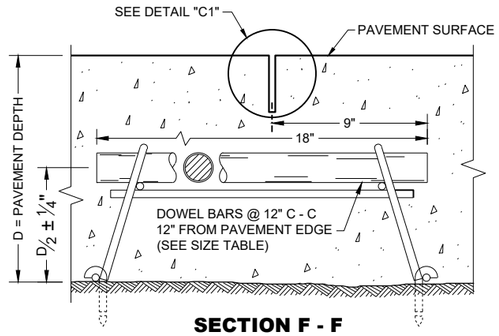


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

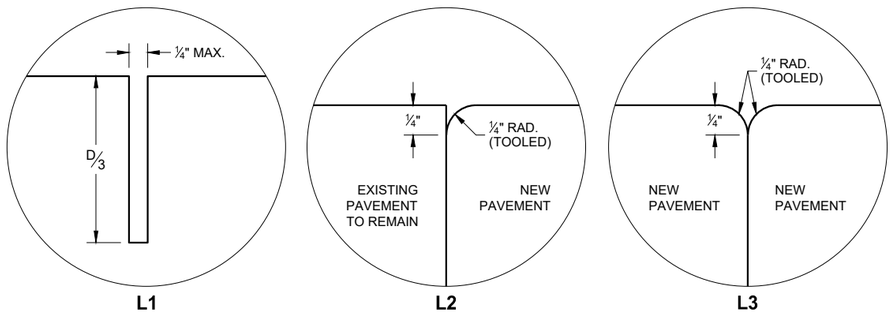
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

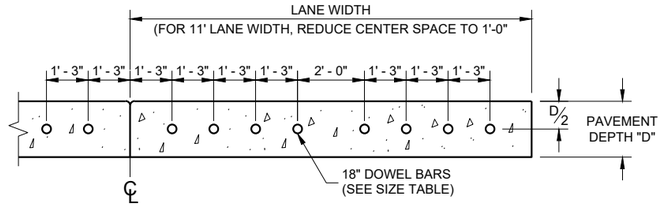
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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.

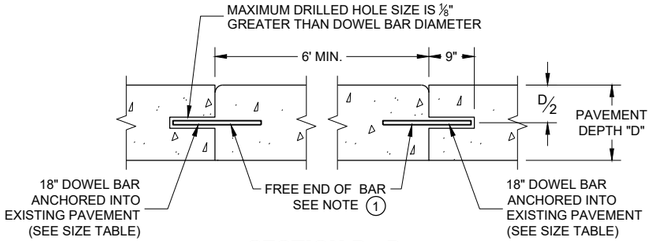


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

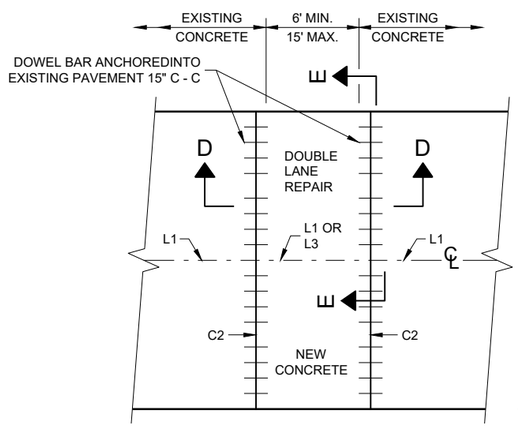
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* 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.

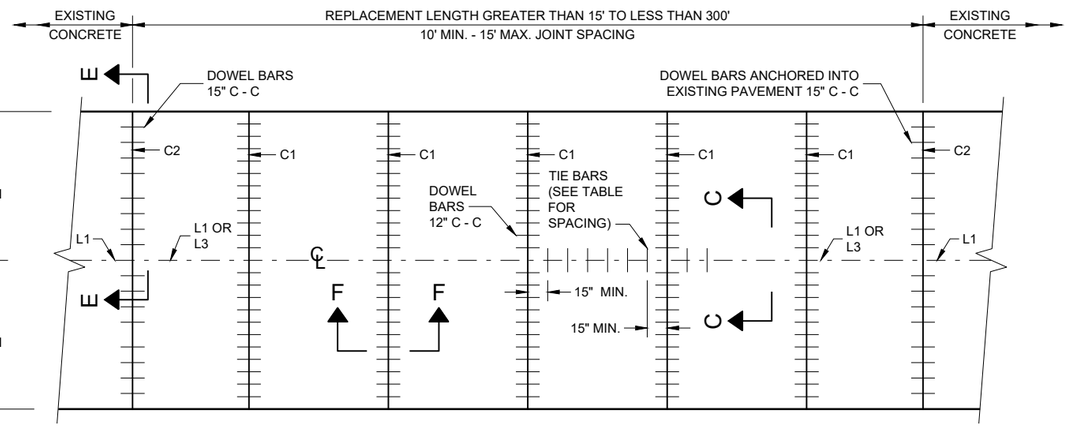
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



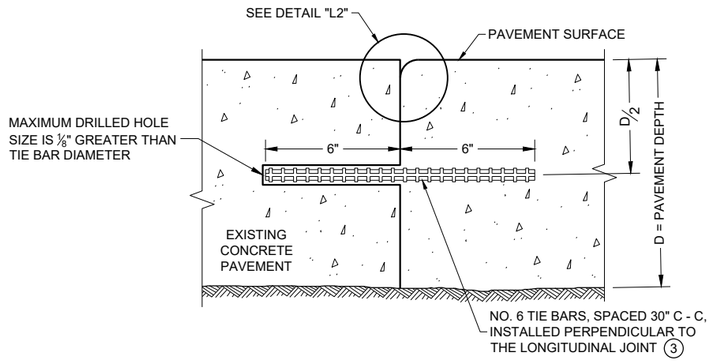
PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

6

SDD 13C09 - 17b

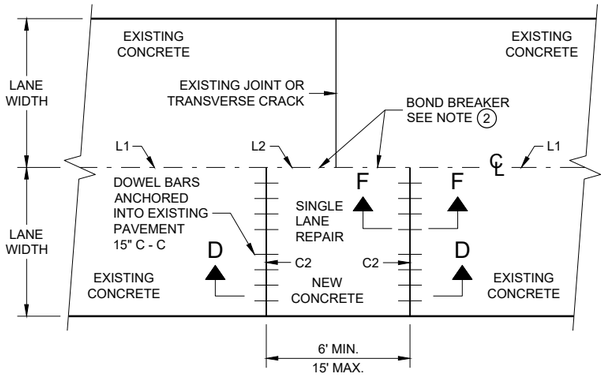


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

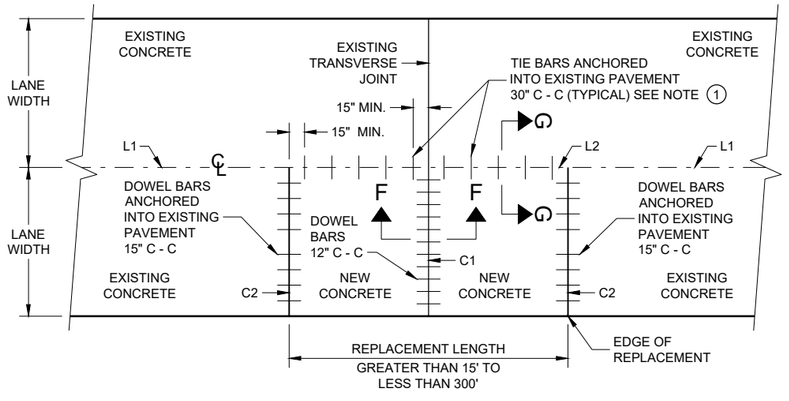
GENERAL NOTES

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

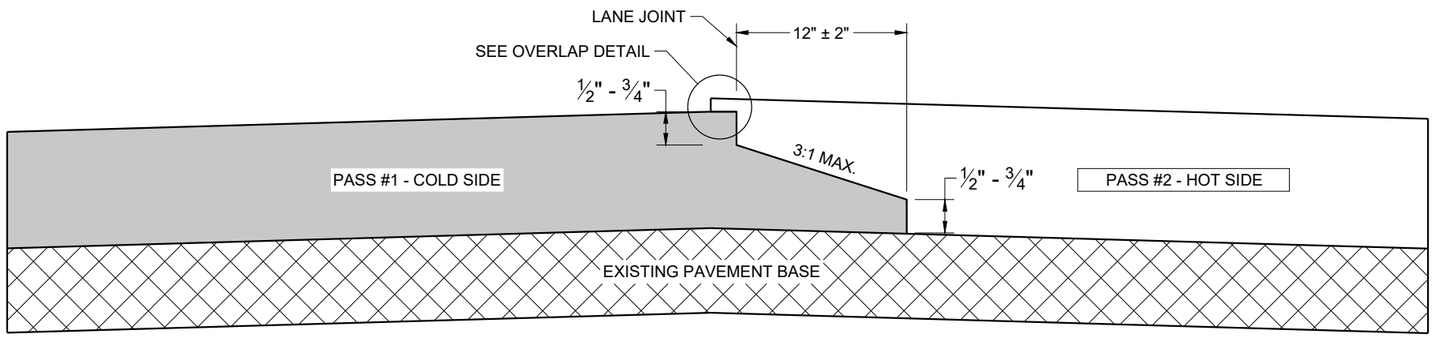
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

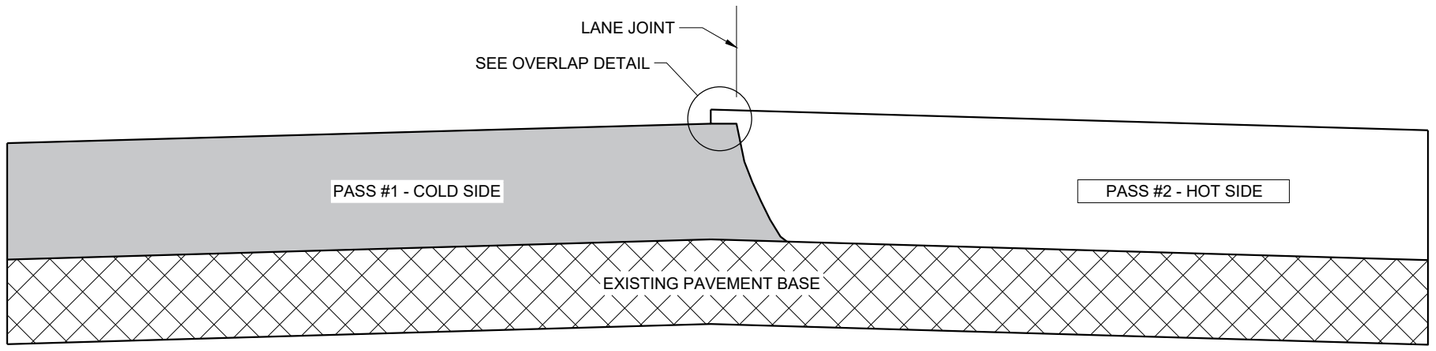
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

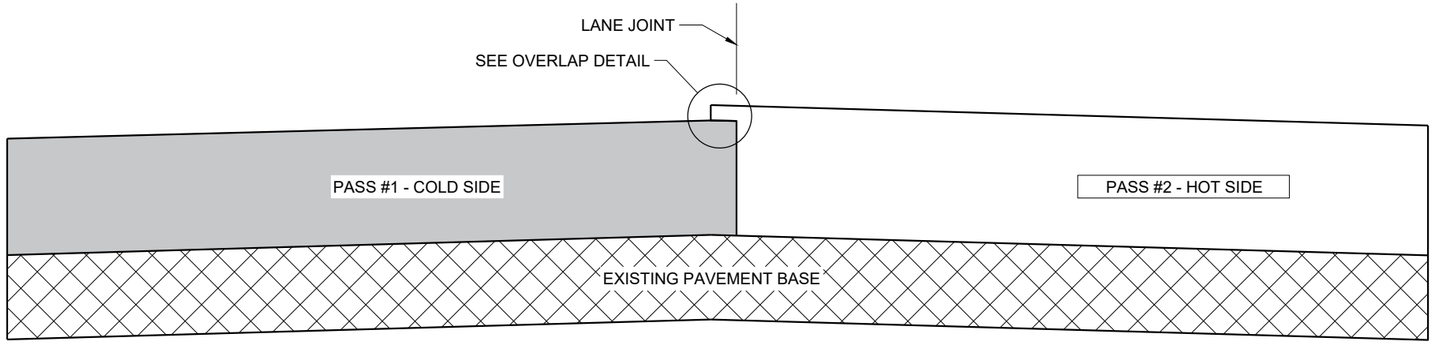
SDD 13C09 - 17c



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

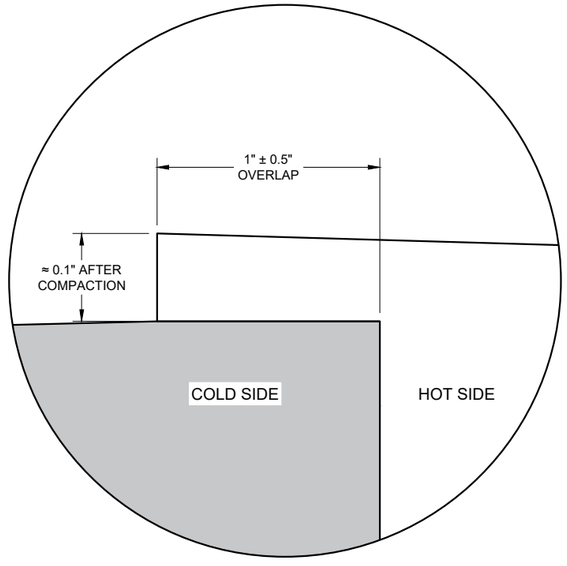
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGIN

FHWA

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SDD 13C19 - 03

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SDD 13C19 - 03

GENERAL NOTES

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

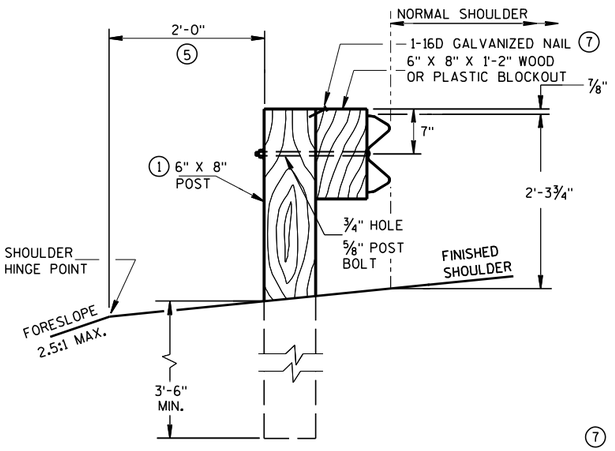
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

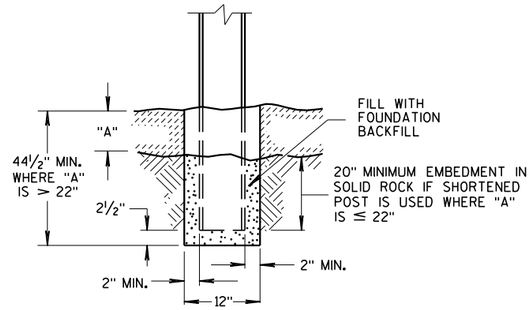
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

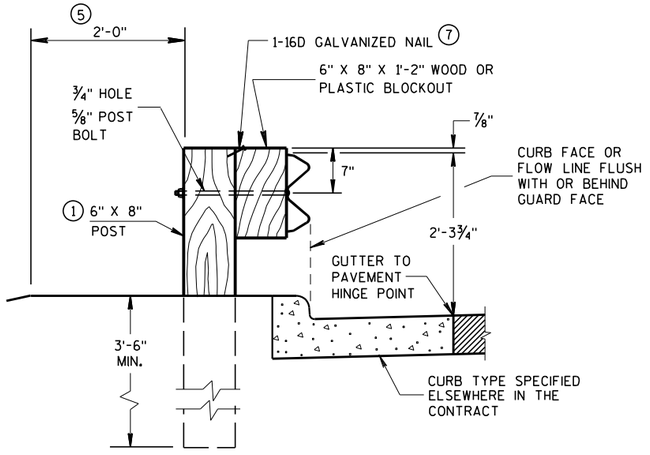
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



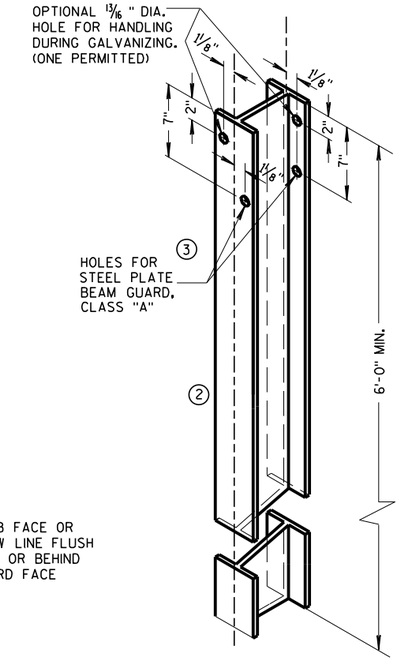
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)

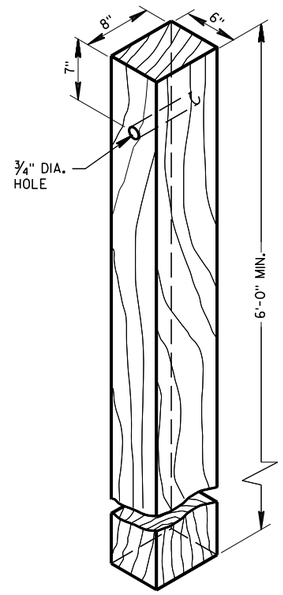


END VIEW
LOCATED ALONG A CURBED ROADWAY

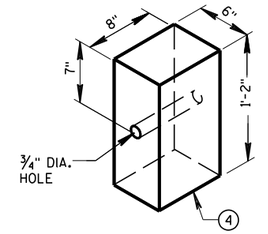


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

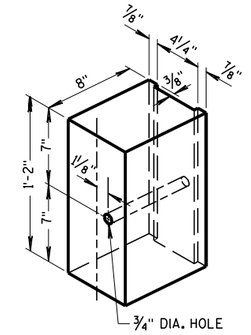
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



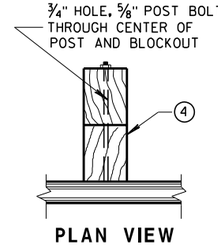
WOOD POST
(6"X8") NOMINAL



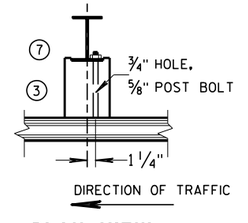
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



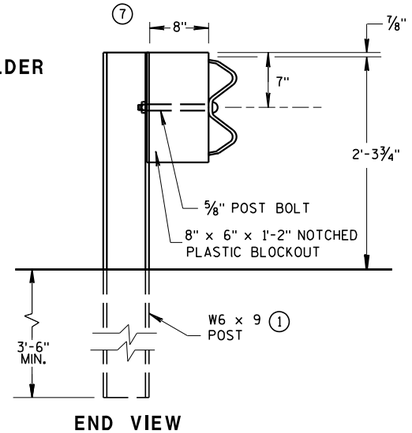
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



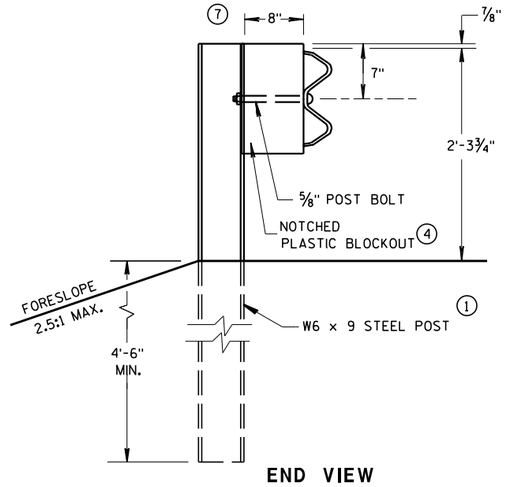
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



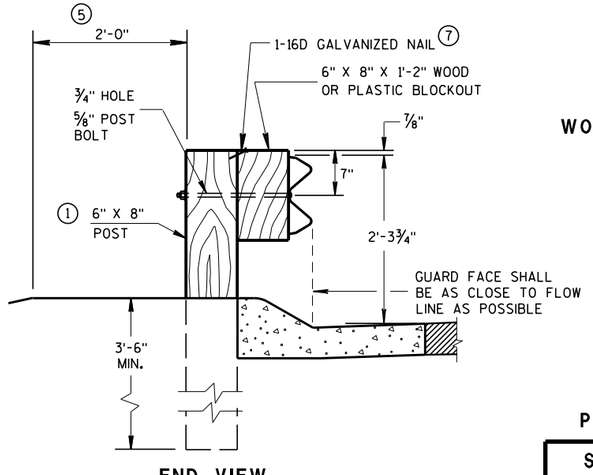
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



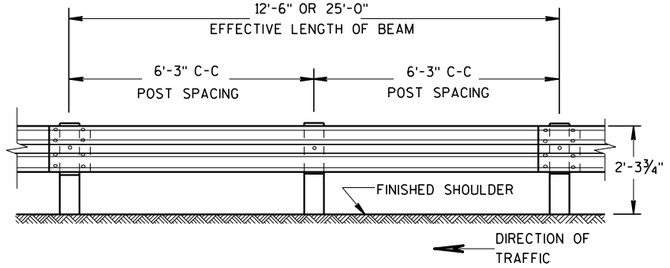
END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

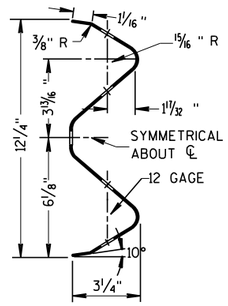
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

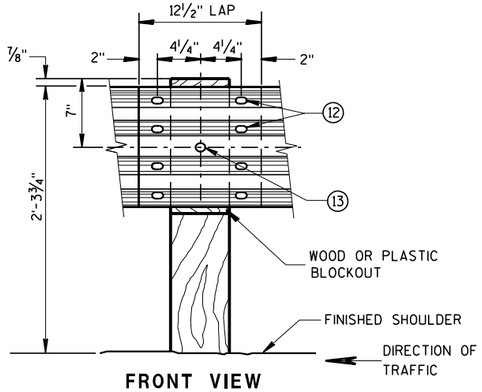


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

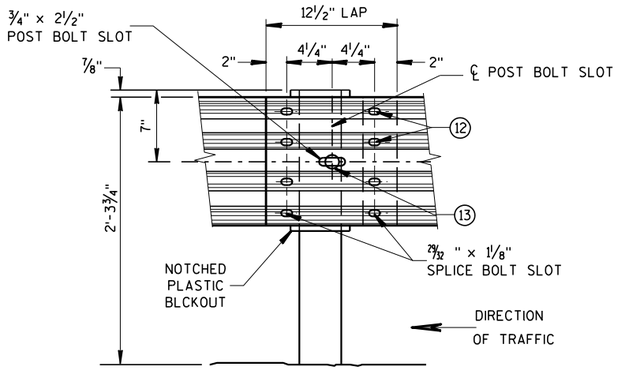
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.

(12) 8 -5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.

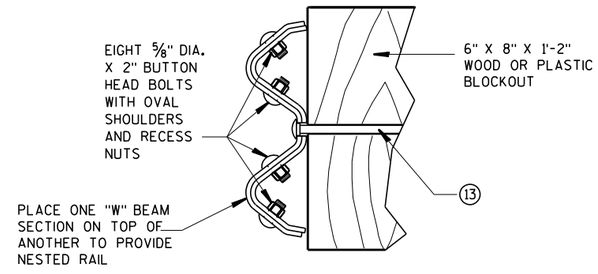
FRONT VIEW

POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

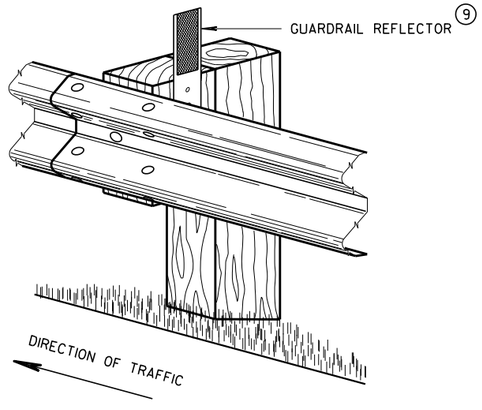


NESTED W BEAM (NW)

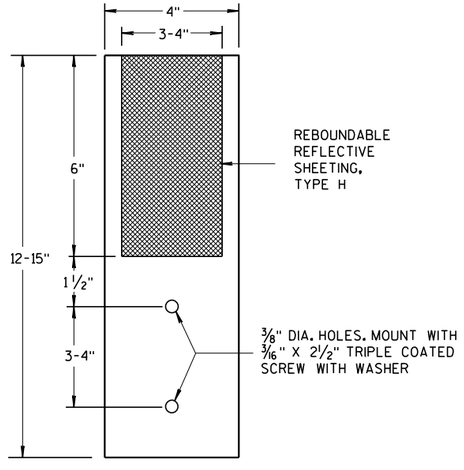
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

* USE DOUBLE SIDED WHITE GUADRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC (NO MEDIAN). USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.



4" X 12" GUARDRAIL REFLECTOR DETAIL AND TYPICAL INSTALLATION *



4"x 12" GUARDRAIL REFLECTOR

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCO 145
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 15-11b

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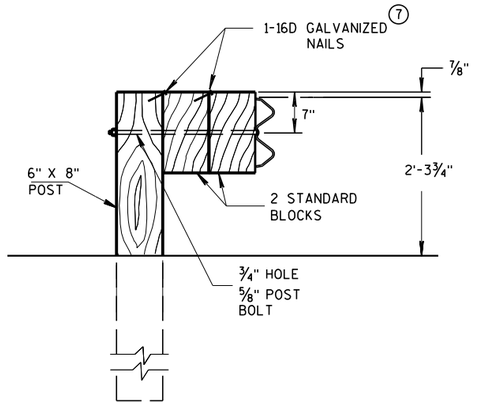
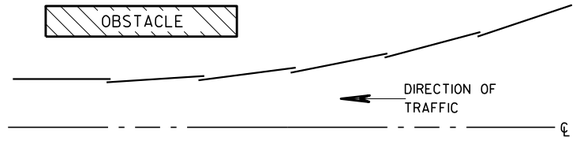
S.D.D. 14 B 15-11b

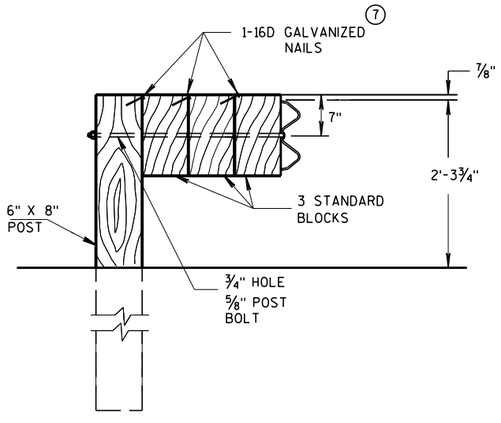


DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

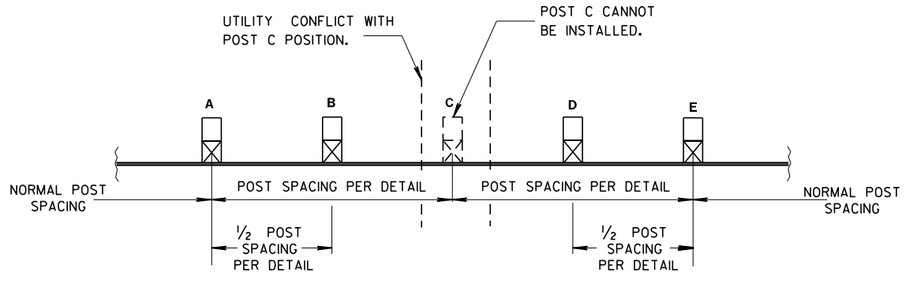


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

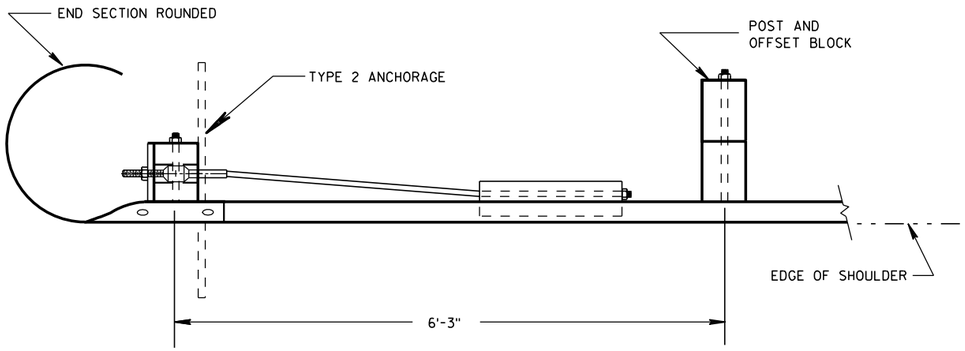
DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

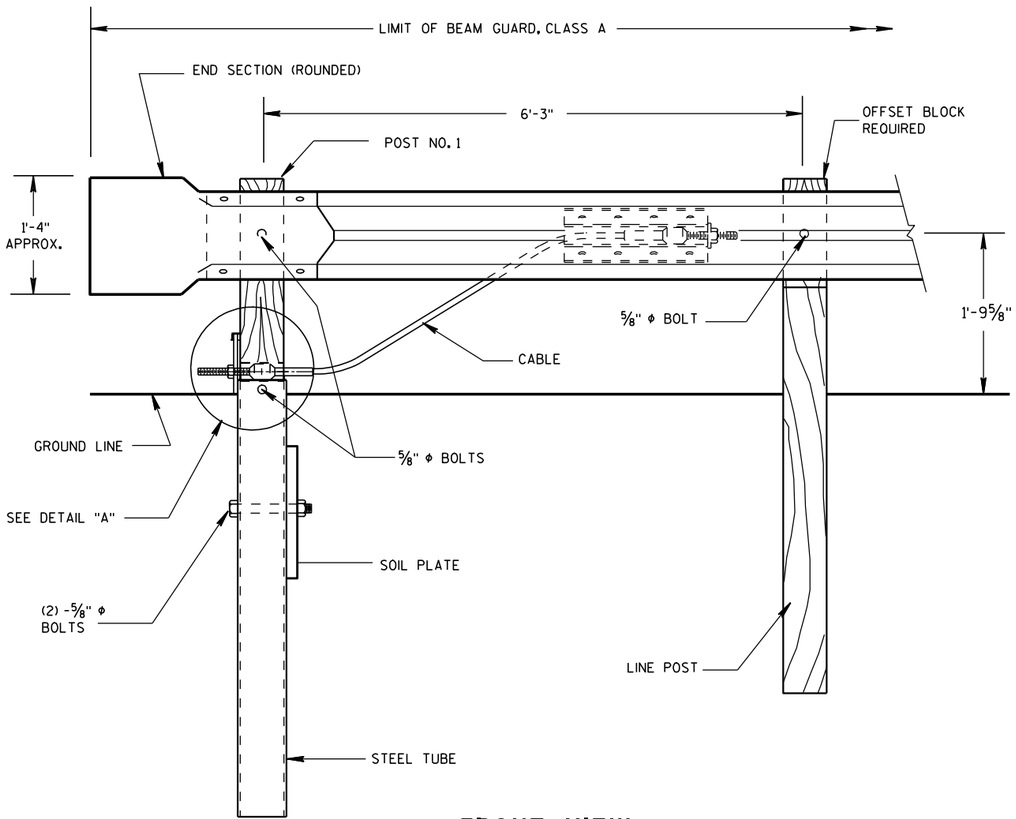
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

6
S.D.D. 14 B 15-11c



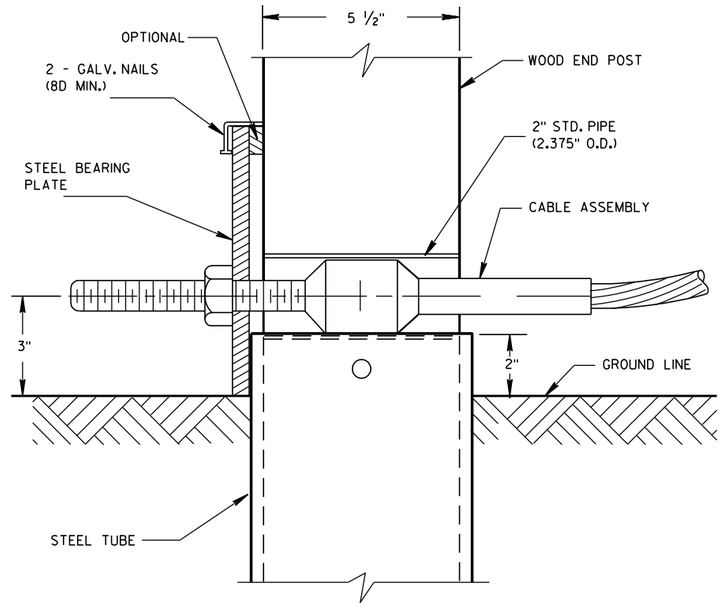
PLAN VIEW



FRONT VIEW

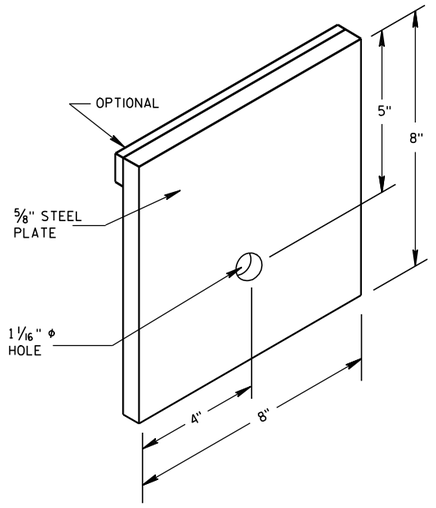
END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)



DETAIL "A"

POST NO. 1



STEEL BEARING PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO.....T

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S.D.D. 14 B 16-4a

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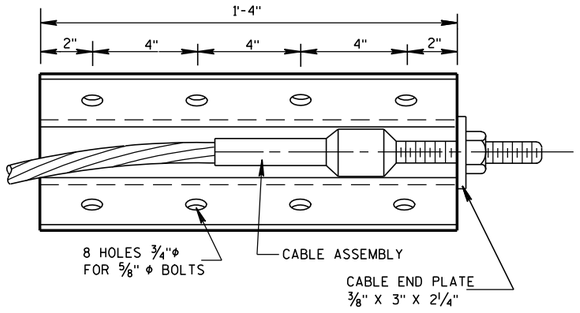
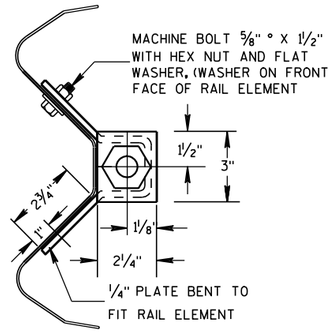
S.D.D. 14 B 16-4a

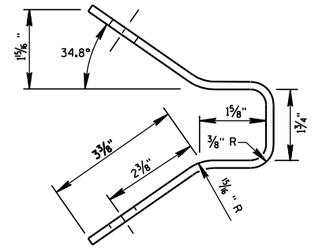


FRONT VIEW

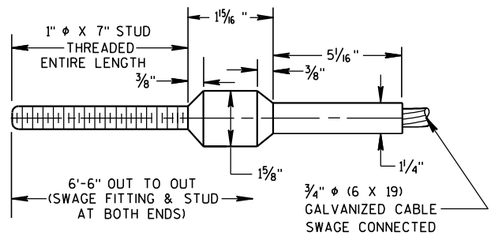


END VIEW

ANCHOR PLATE DETAIL



END VIEW OF BRACKET



CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP
A MINIMUM BREAKING STRENGTH OF 40,000 LB
(TIGHTEN UNTIL TAUT)

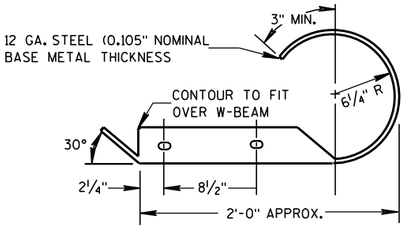
GENERAL NOTES

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

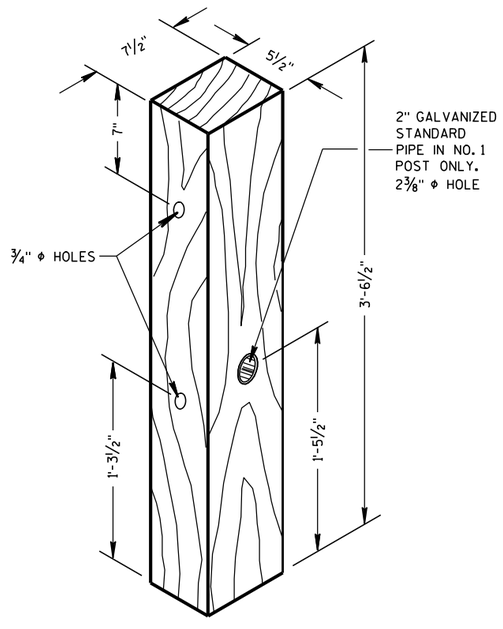
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

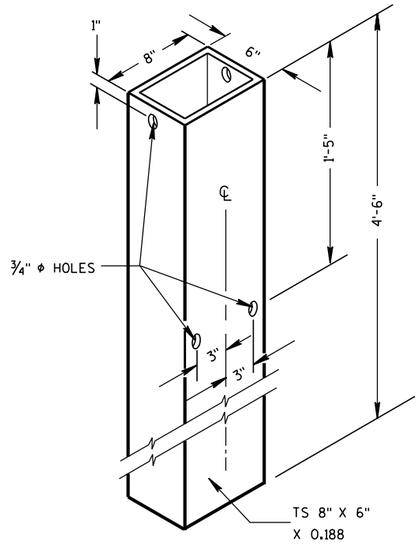
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.



PLAN VIEW

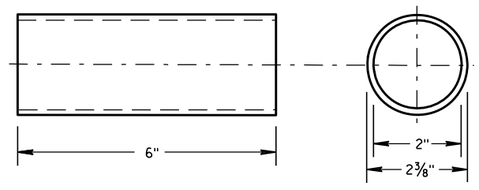


WOOD BREAKAWAY POST



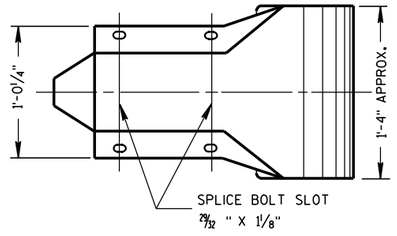
STEEL TUBE

STEEL TUBE SHALL CONFORM TO
REQUIREMENTS OF ASTM A500

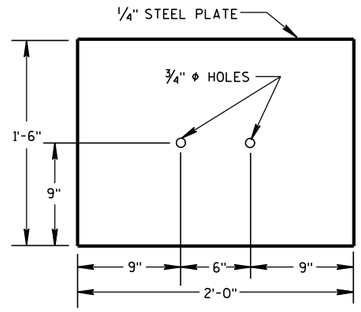


BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"



FRONT VIEW
W BEAM END SECTION ROUNDED



SOIL PLATE

ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/21/2007 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
148
FHWA

6

S.D.D. 14 B 16-4b

6

S.D.D. 14 B 16-4b

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

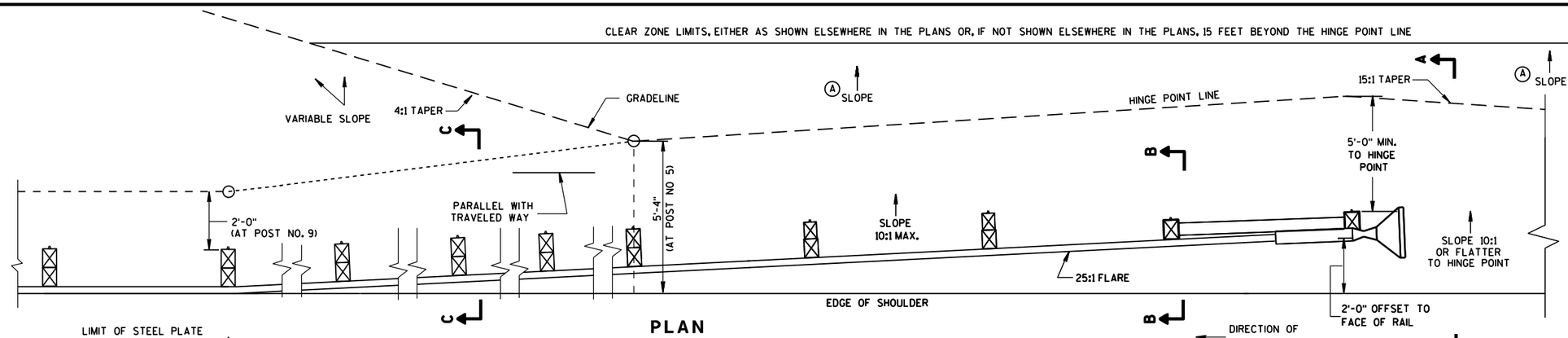
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

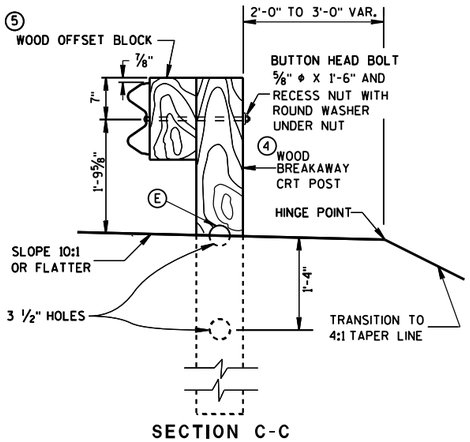
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

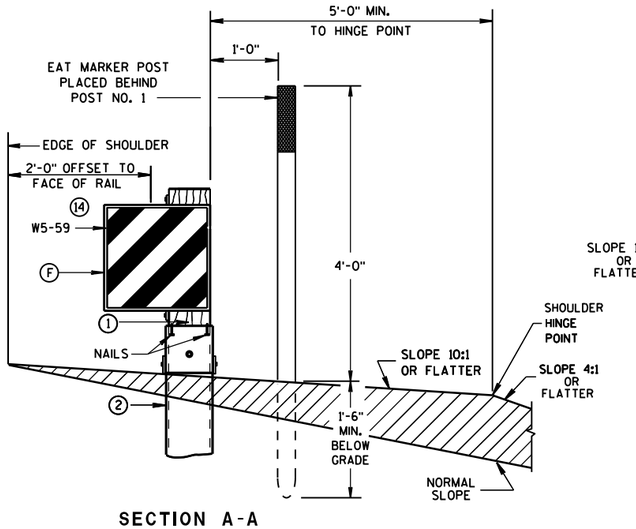
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

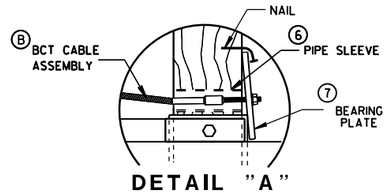
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

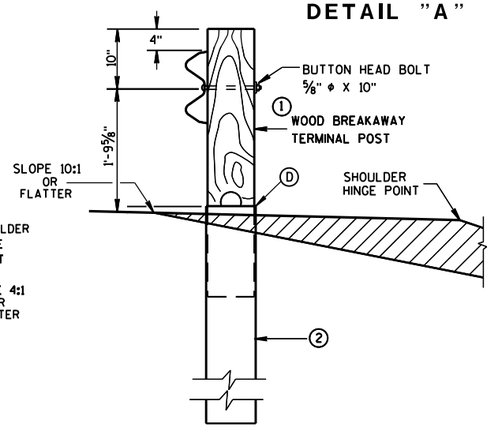
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

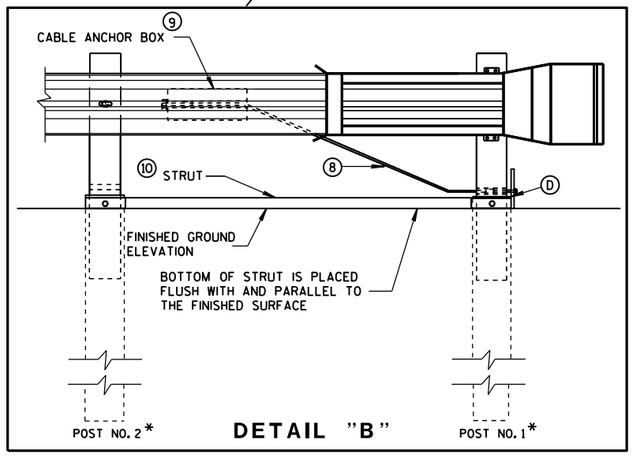










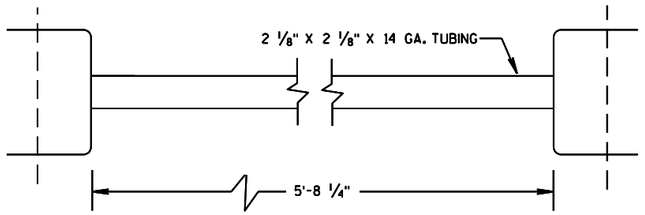


STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

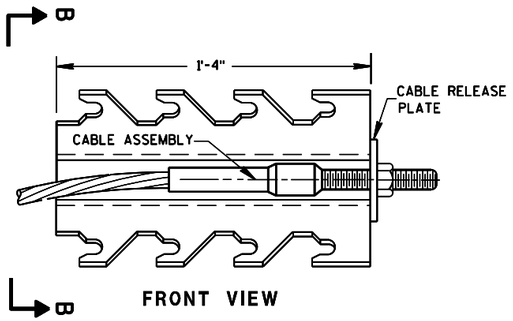
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

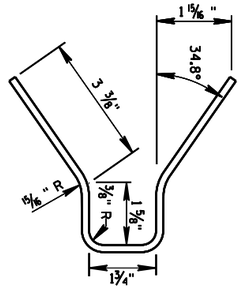
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL

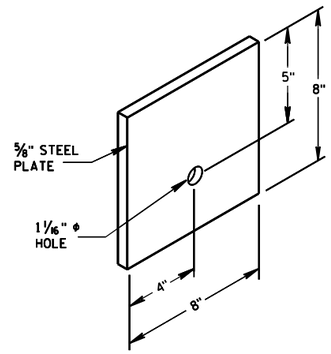


FRONT VIEW



SECTION B-B

⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

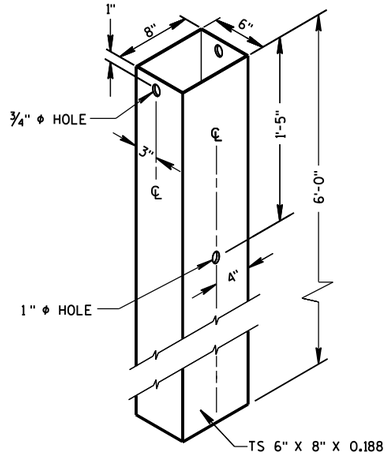
6

S.D.D. 14 B 24-9b

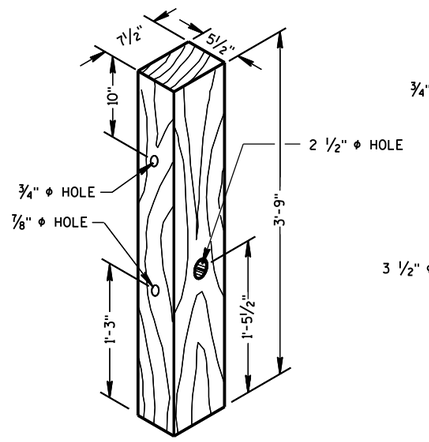
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

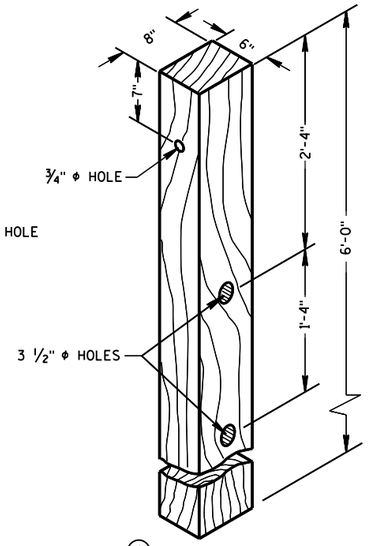
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

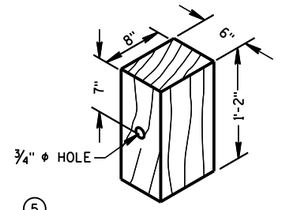


④ CRT POST
(POSTS NO'S 5-8

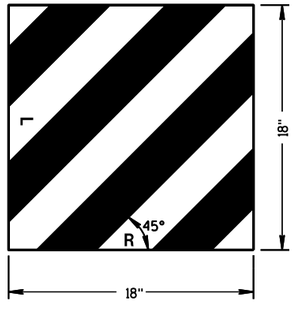
WOOD BREAKAWAY POSTS

GENERAL NOTES

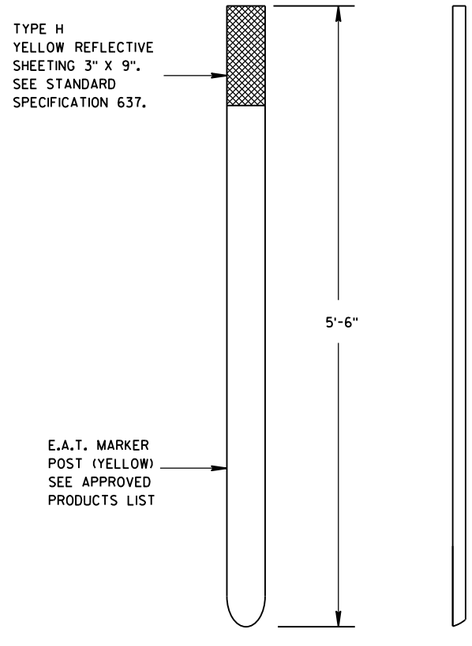
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERV...

ENT

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S.D.D. 14 B 24-9c

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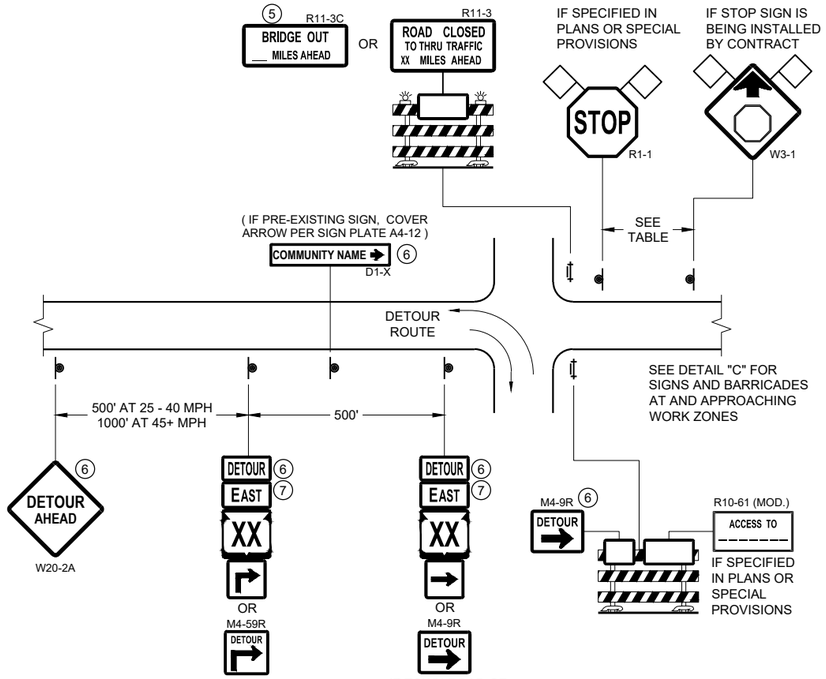
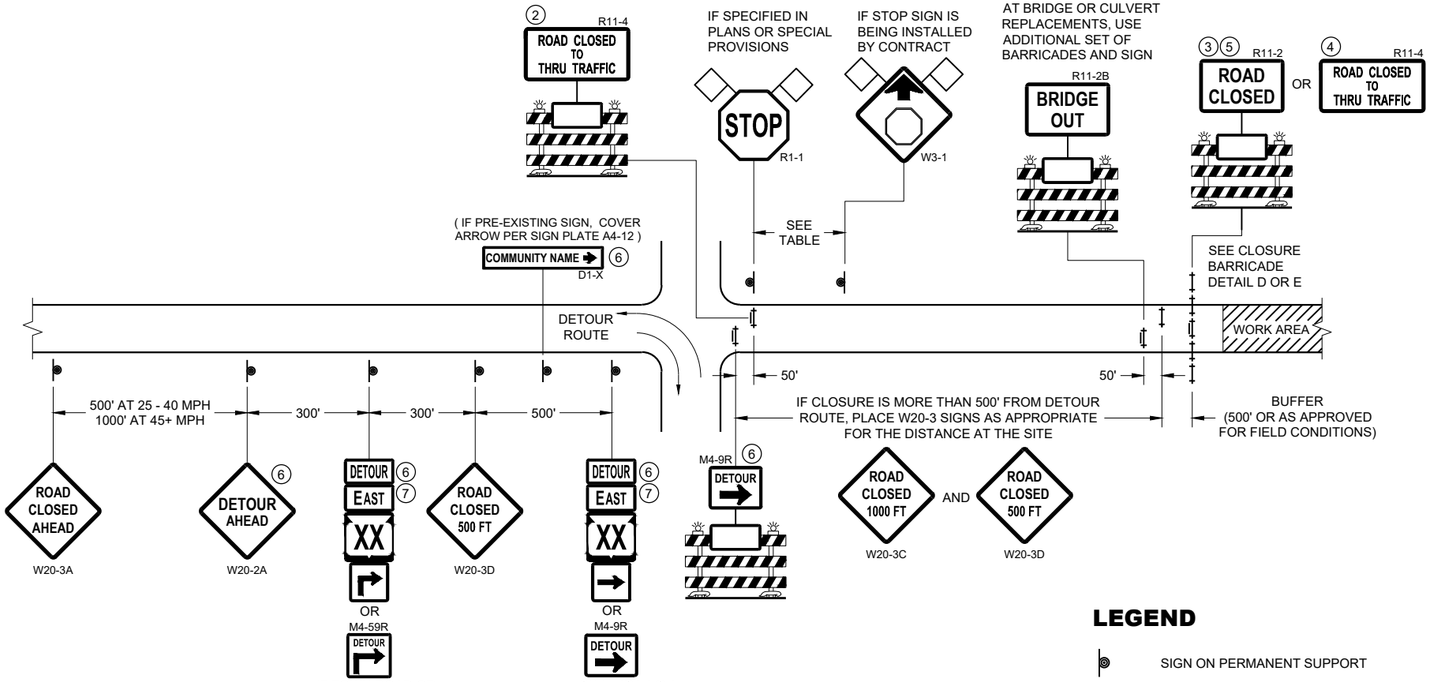
S.D.D. 14 B 24-9c



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

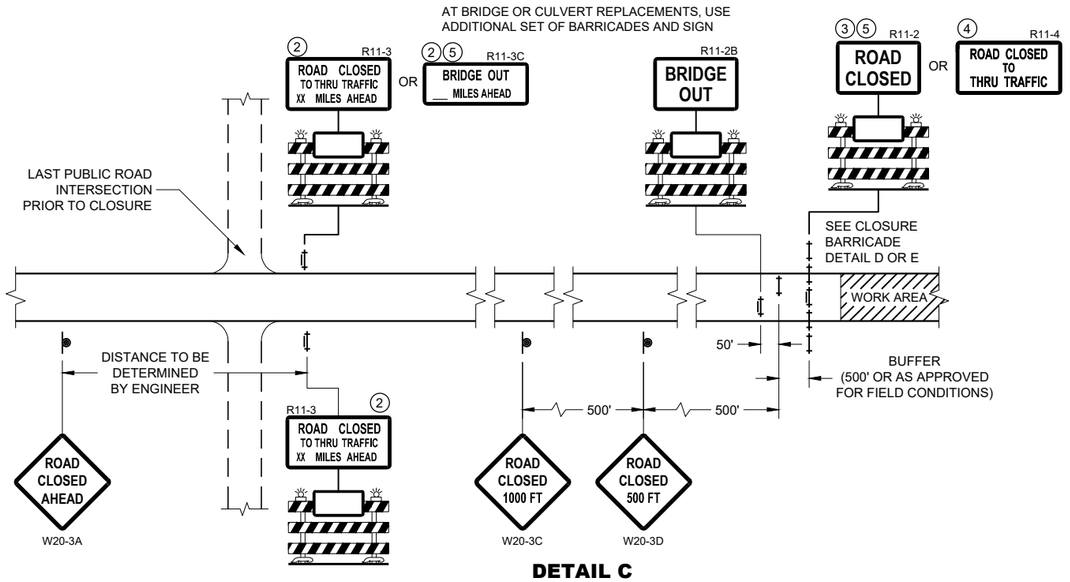


DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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

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



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

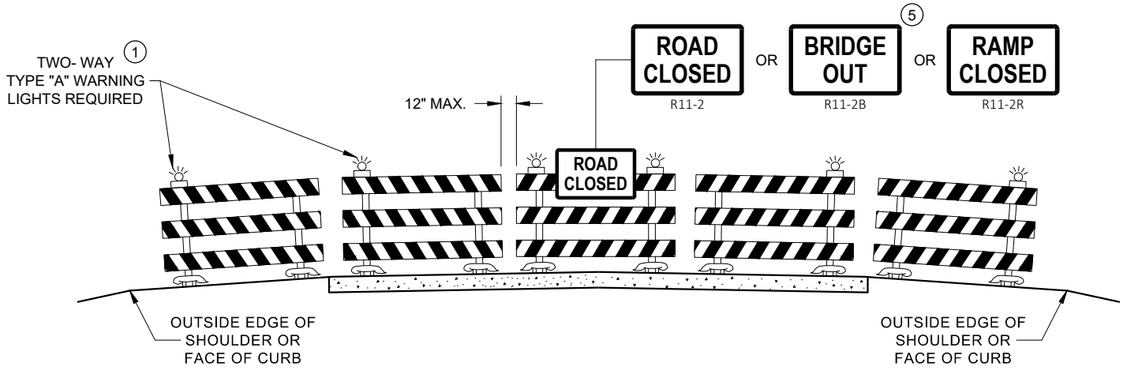
FHWA

6

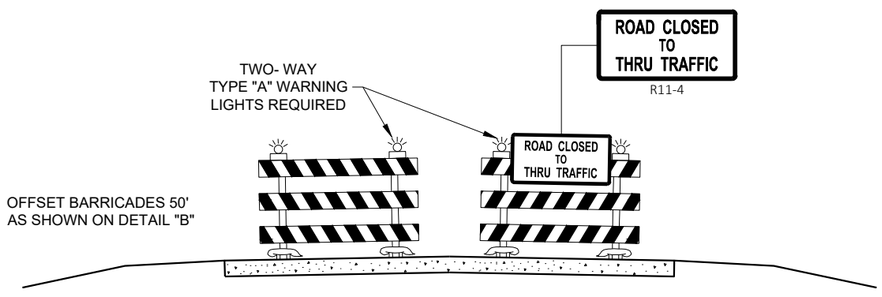
SDD 15C02 - 09a

6

SDD 15C02 - 09a



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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 09b

6

SDD 15C02 - 09b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

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. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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.

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

- 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)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-8a END DETOUR WEST XX *

DETOUR EAST XX WEST XX

DETOUR ROUTE

WORK AREA

DETOUR EAST XX

WEST XX OR M4-9L DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR NEXT X MILES * G20-51

DETOUR WEST XX * OR M4-59L DETOUR ** IF TOWN ROAD OR LOCAL STREET

MATCH POINT

* M4-59L DETOUR ** OR DETOUR EAST XX * IF TOWN ROAD OR LOCAL STREET

D1-X COMMUNITY NAME * (IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

500'

M4-9L DETOUR ** OR DETOUR EAST XX IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX

DETOUR WEST XX M4-9R DETOUR ** OR IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX * M4-59R DETOUR ** OR IF TOWN ROAD OR LOCAL STREET

500'

DETOUR ROUTE

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

DETOUR EAST XX *

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX

500'

DETOUR EAST XX

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST XX *

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

DETOUR EAST XX *

EAST XX M3-X 24" X 12" M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

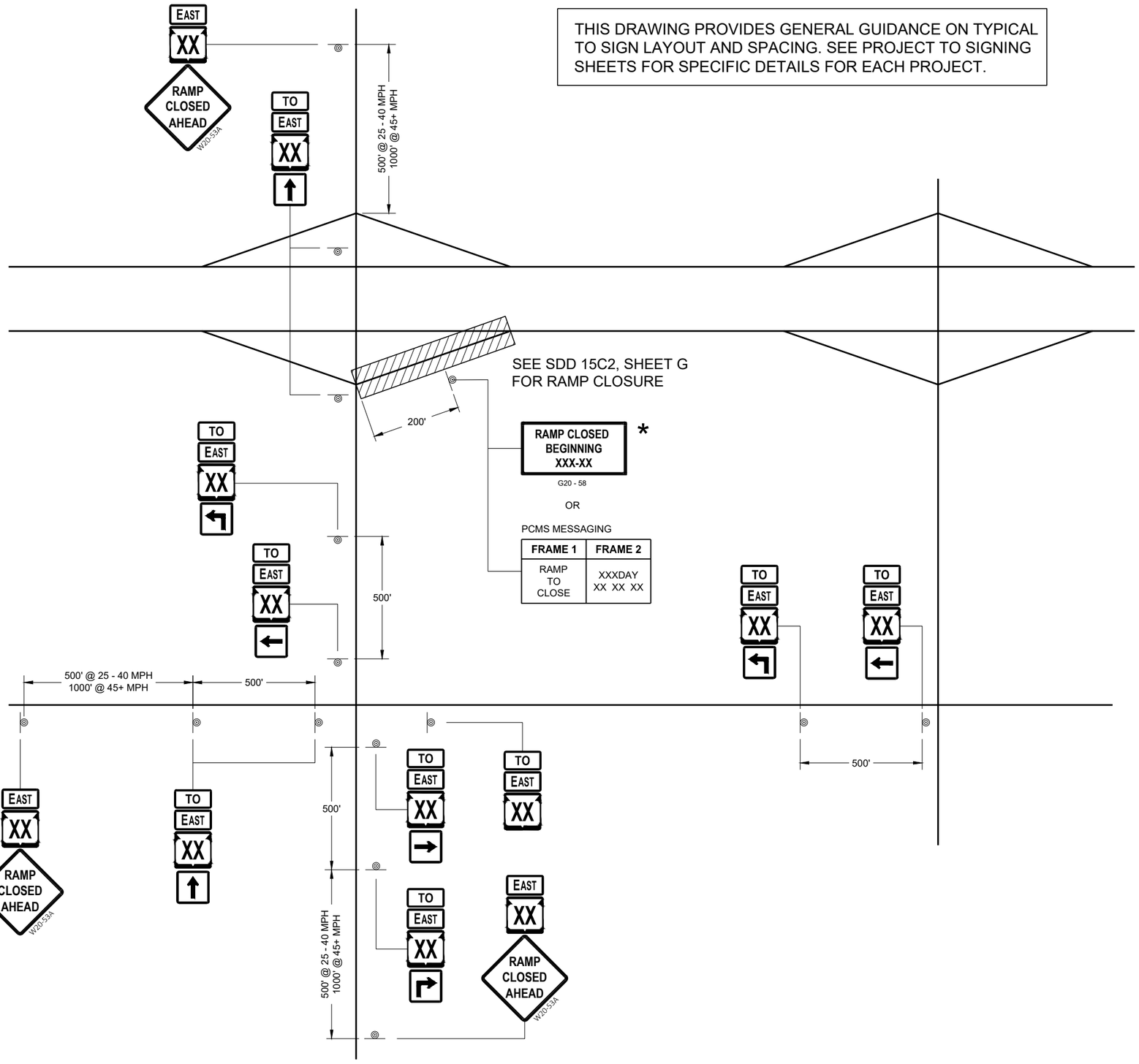
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C02 - 09c



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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.

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

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

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

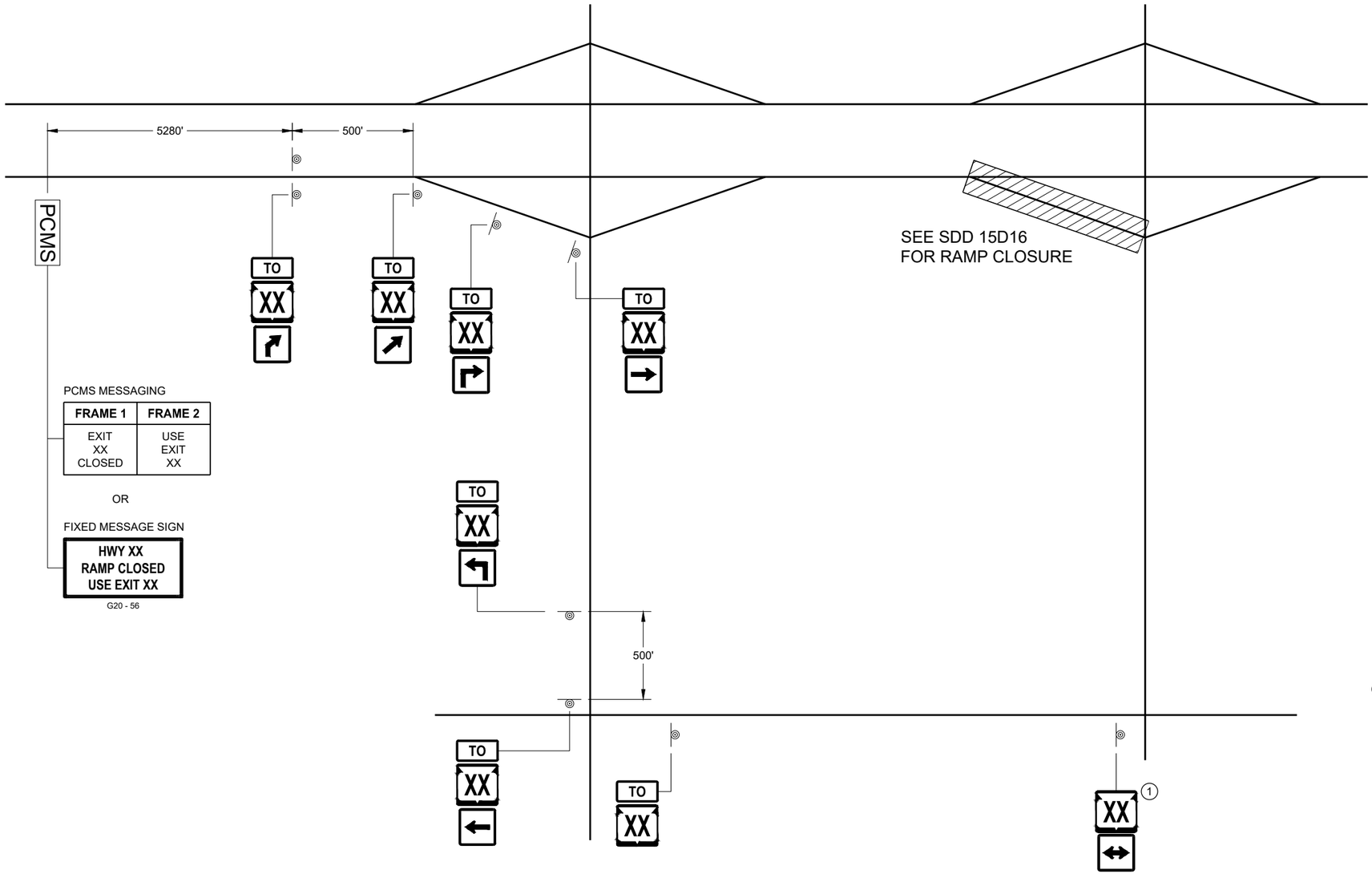
FHWA

6

SDD 15C02 - 09d

SDD 15C02 - 09d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 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, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

OFF RAMP
LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

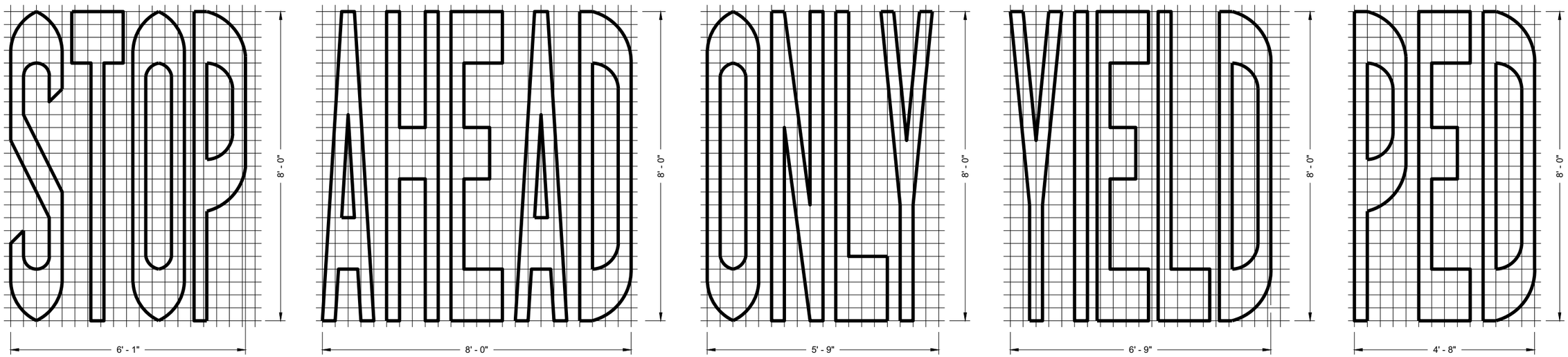
FHWA

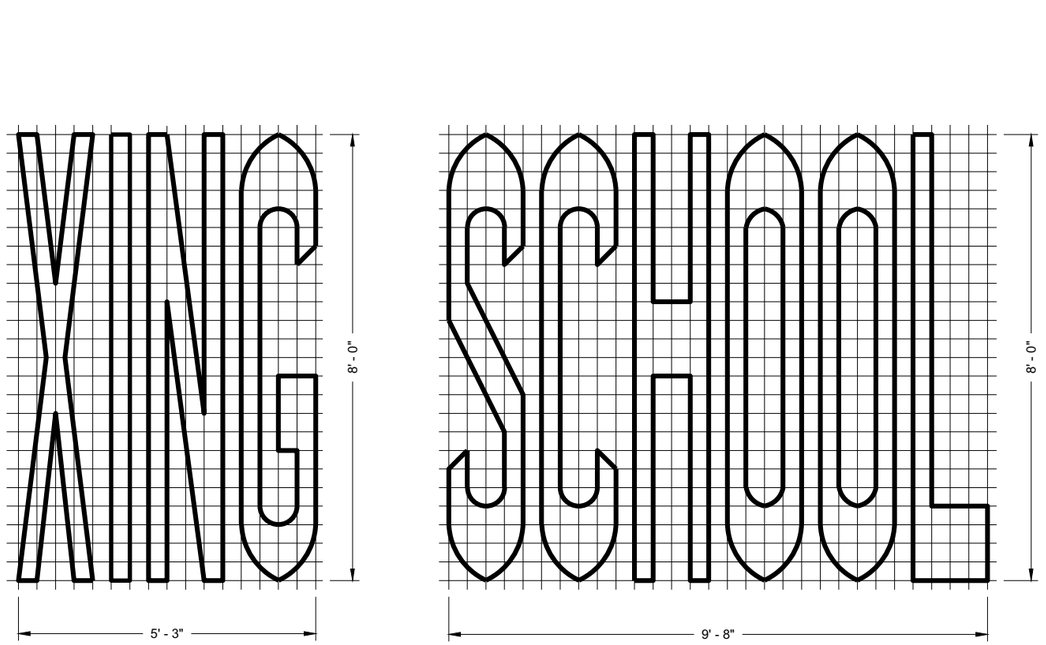
6

SDD 15C02 - 09e

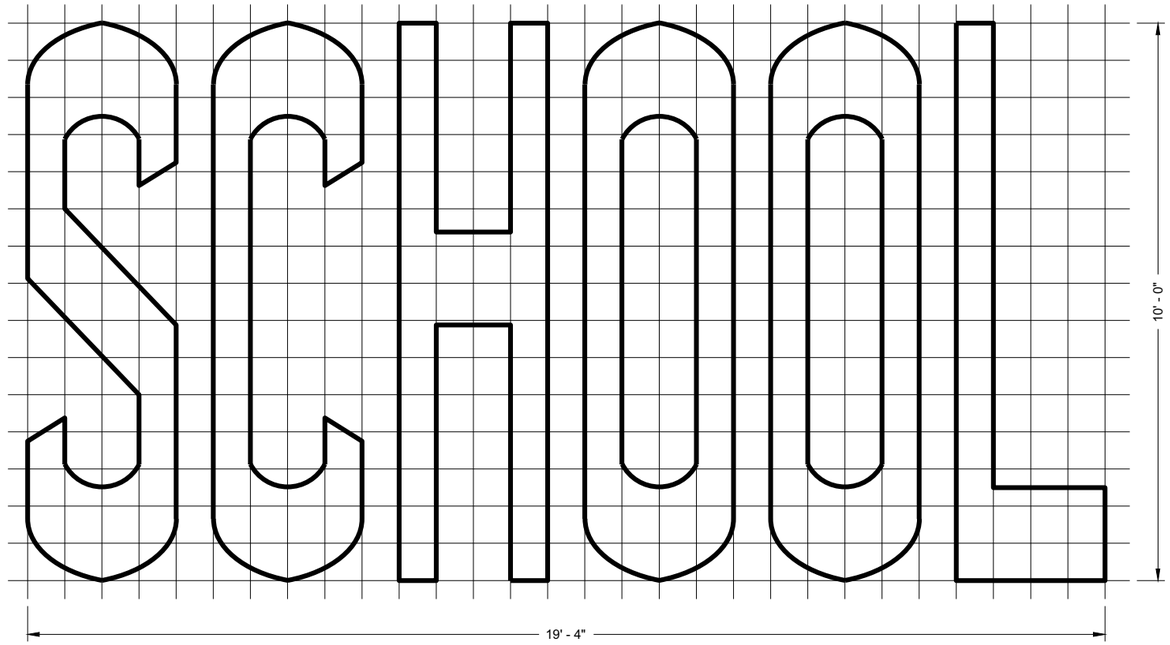
6

SDD 15C02 - 09e





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

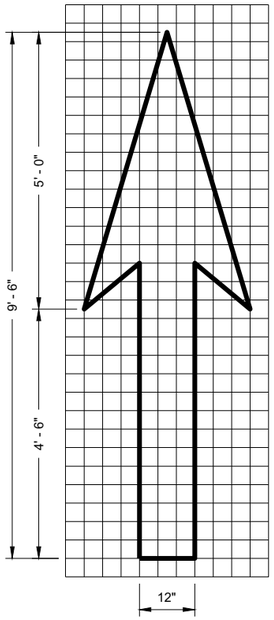
SDD 15C07 - 15b

6

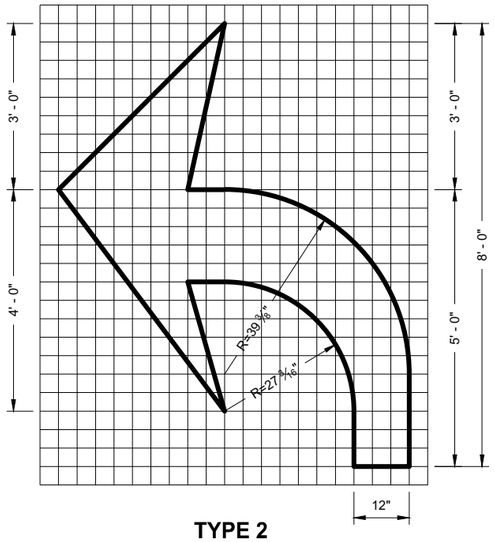
SDD 15C07 - 15b

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.



TYPE 1



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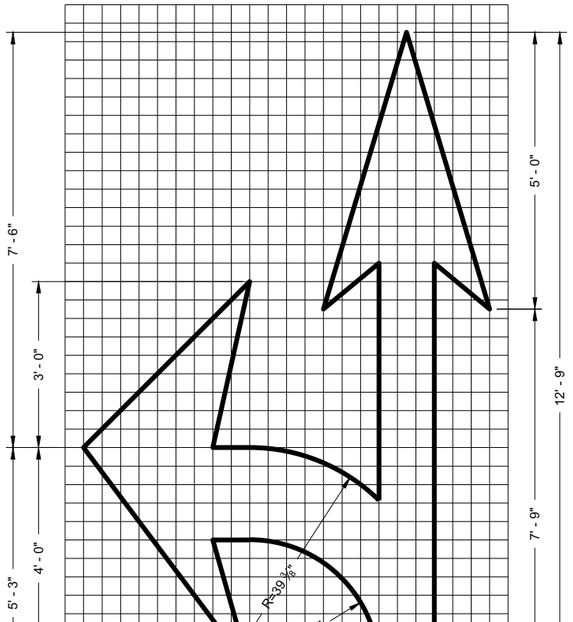
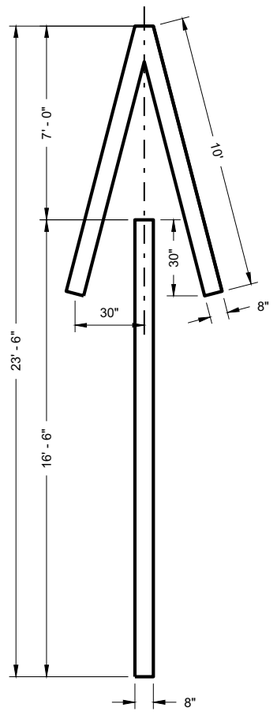
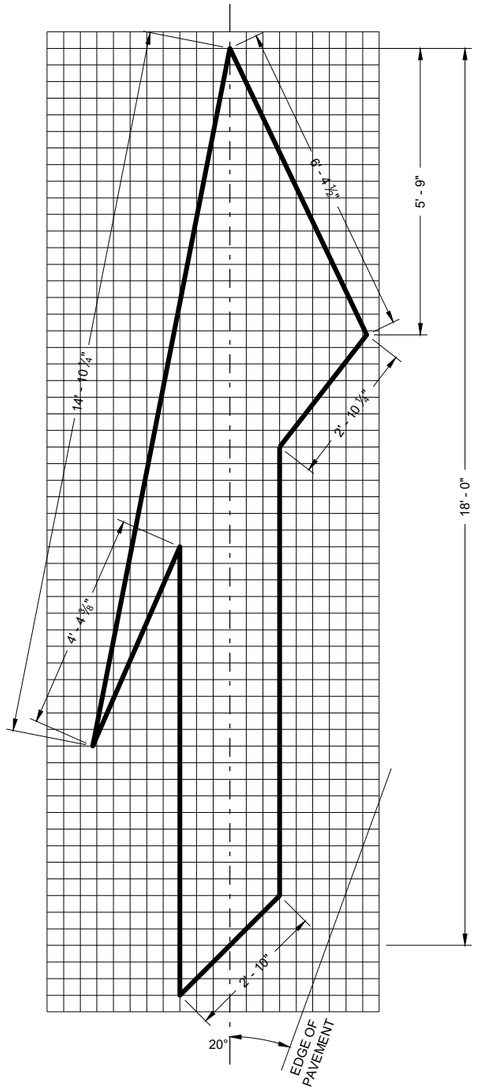


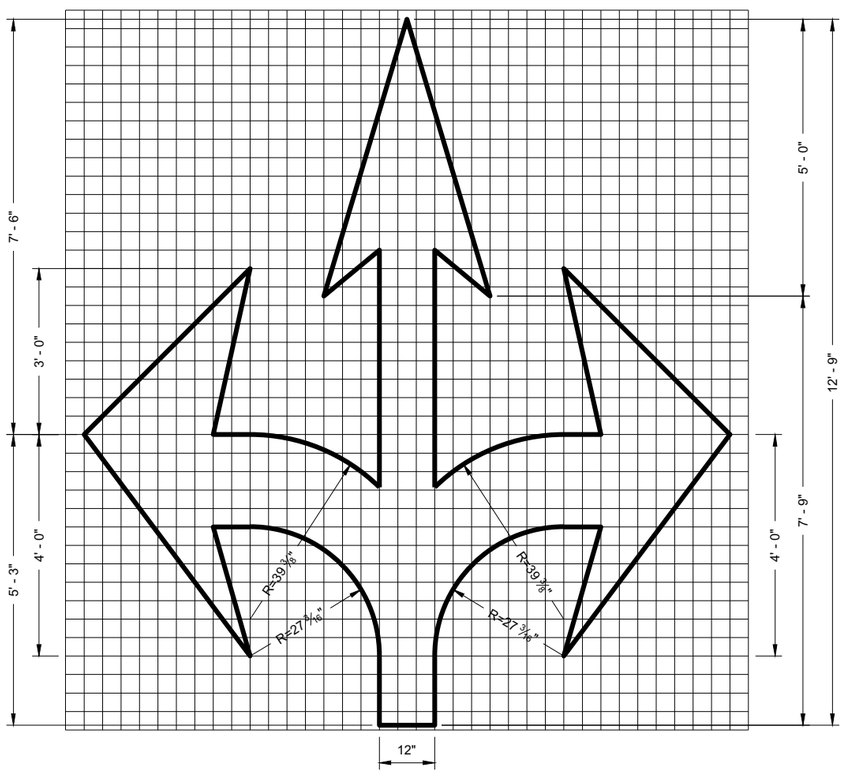
TYPE 3



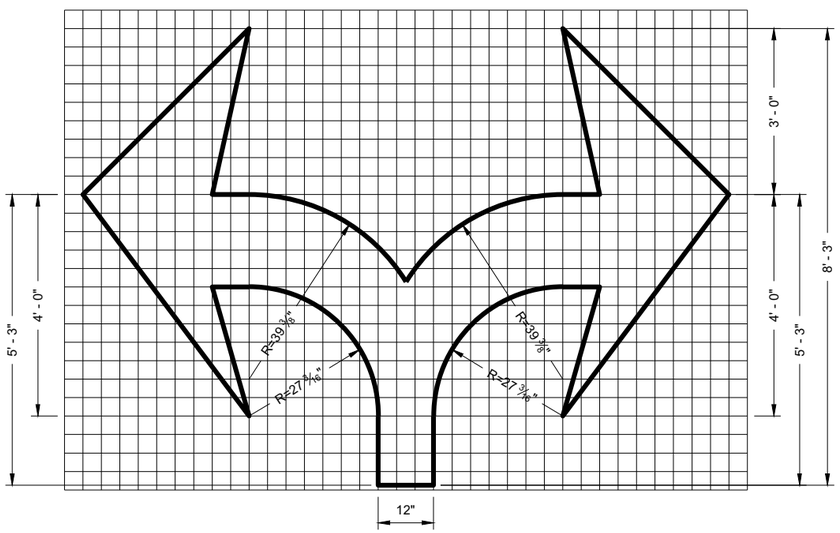
TYPE 4



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

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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.

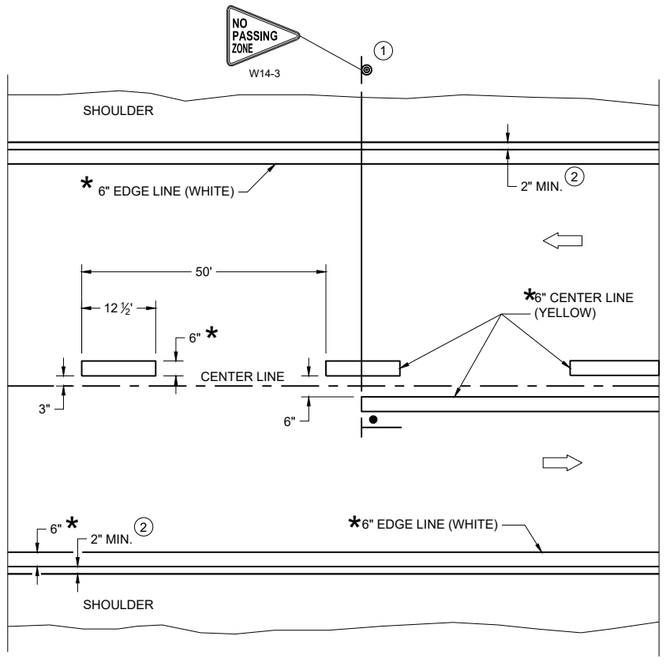
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

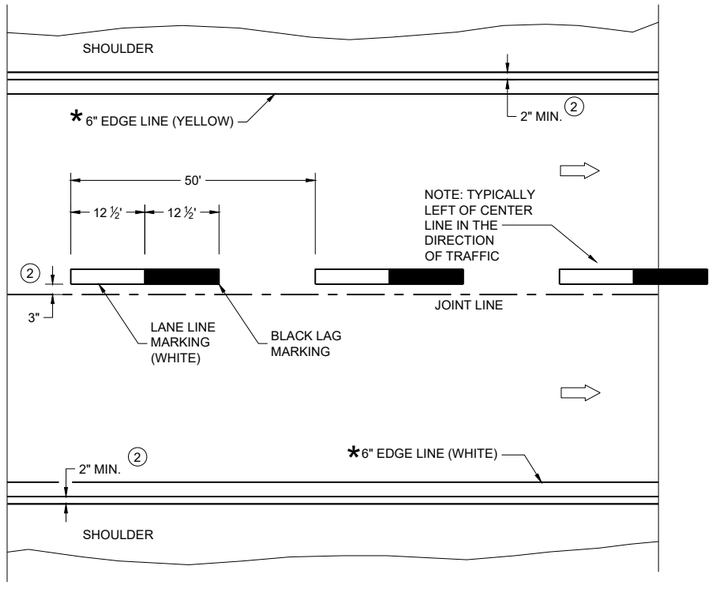
"T" MARKING

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 2023
DATE

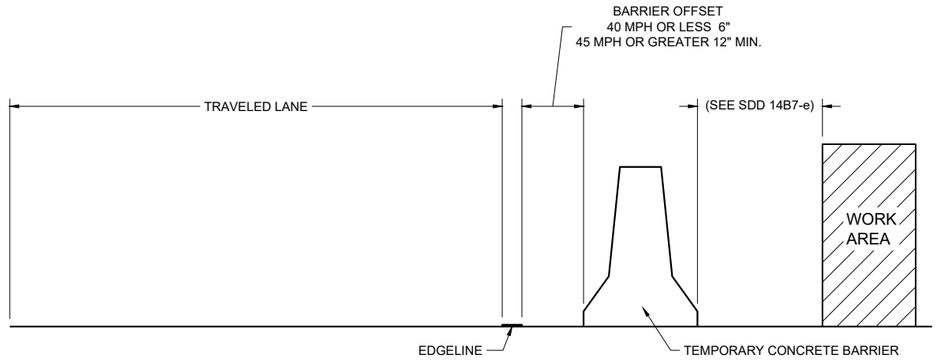
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-23a

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

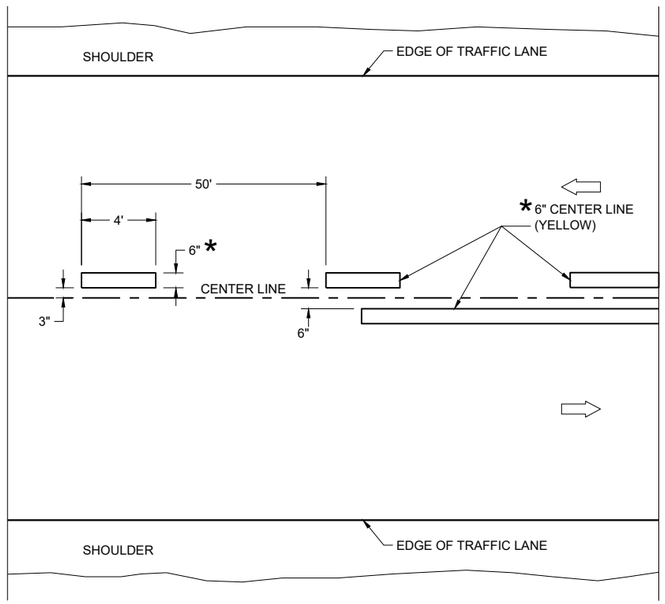
GENERAL NOTES

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

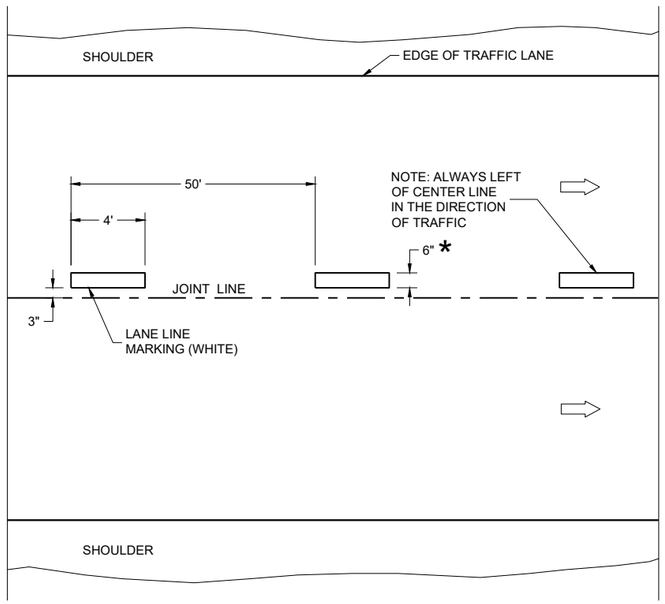
LEGEND

DIRECTION OF TRAFFIC

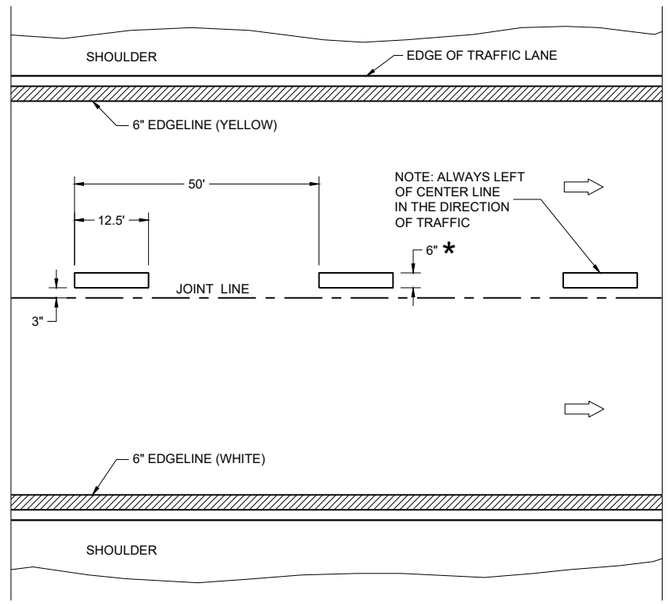
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA

6

SDD 15C08-23b

6

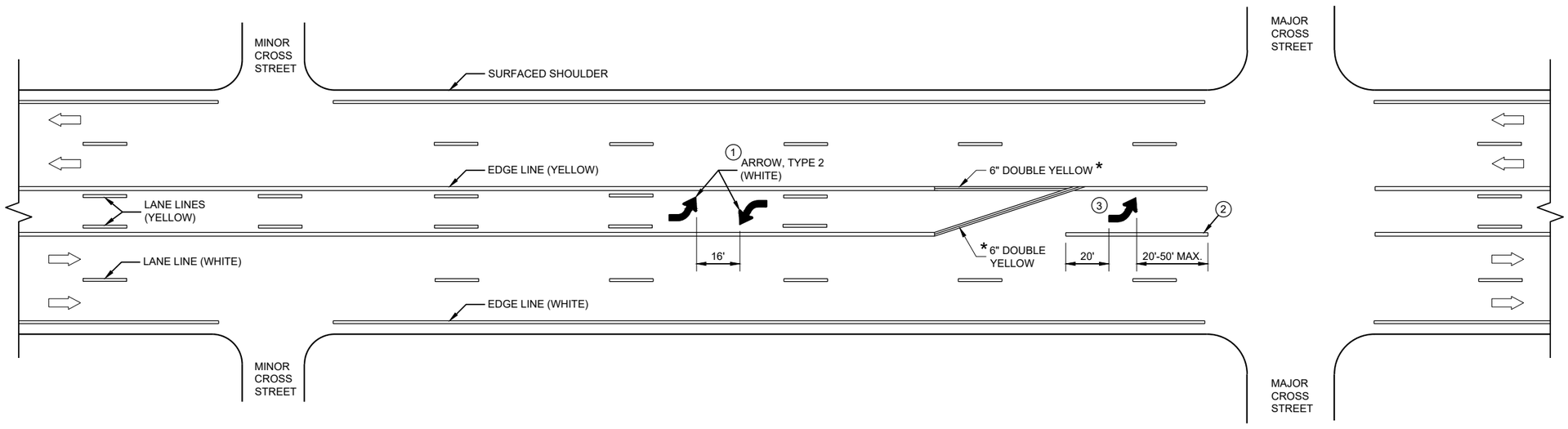
SDD 15C08-23b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

6

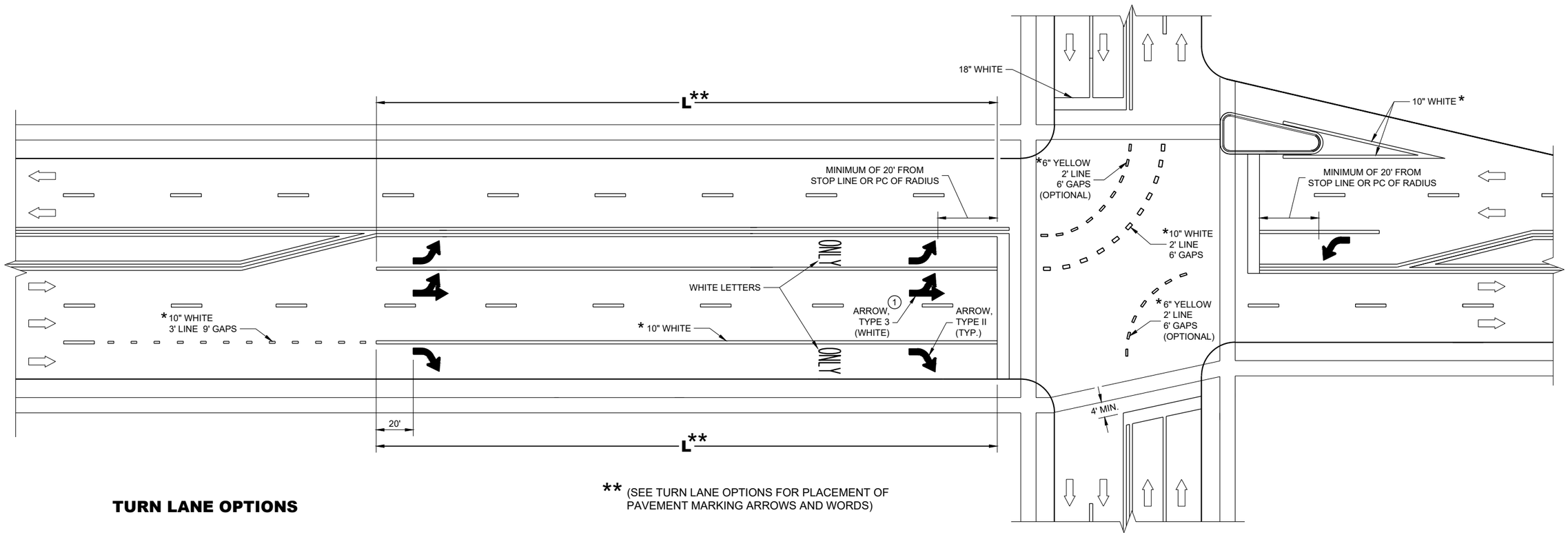
SDD 15C08-23c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 161

6

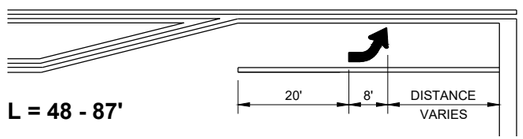
SDD 15C08-23c



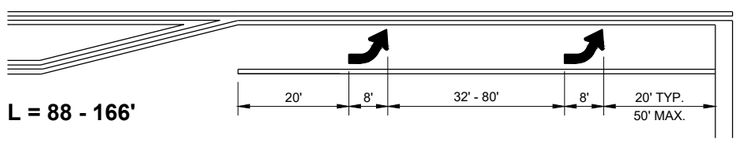
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

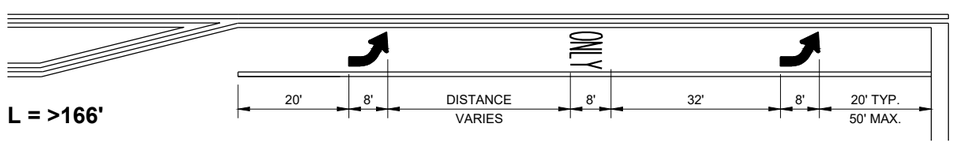
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 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

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

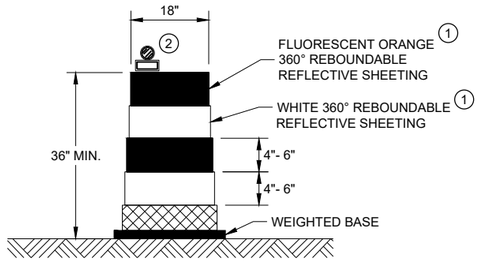
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-23d

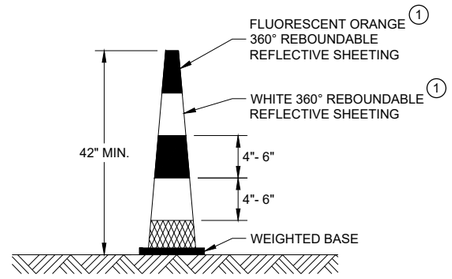
GENERAL NOTES

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

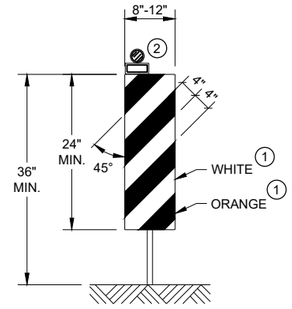
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

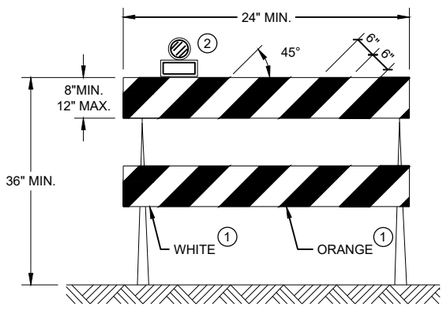
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



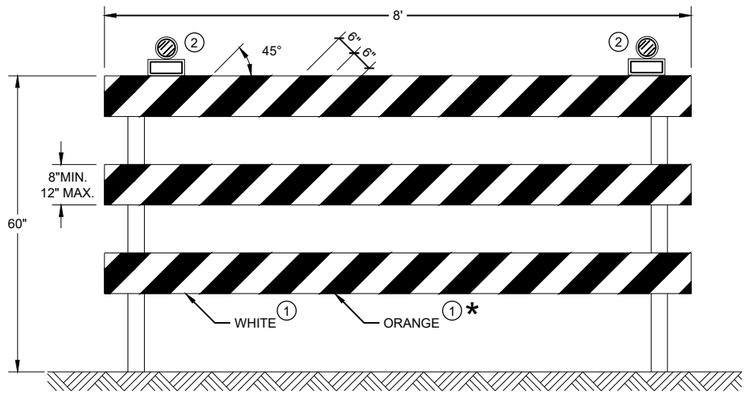
VERTICAL PANEL

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

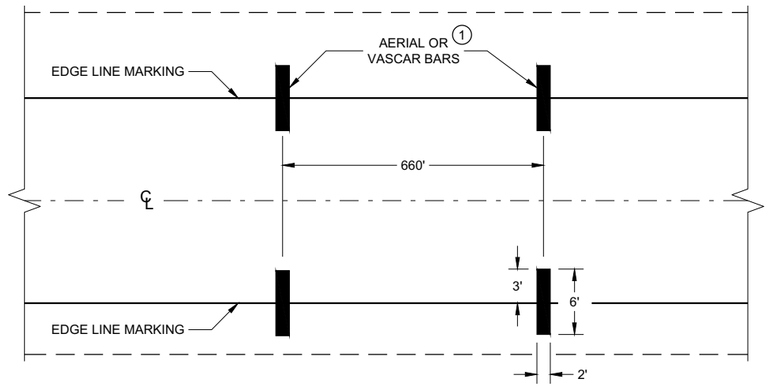
6

SDD 15C11 - 10b

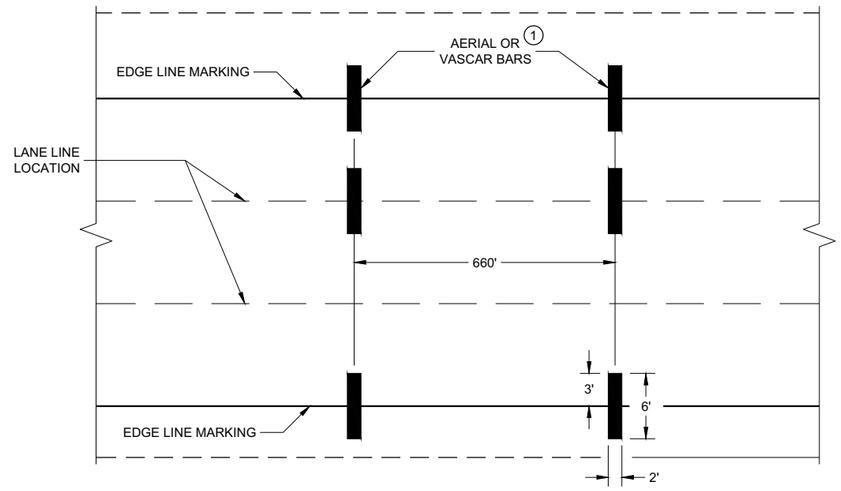
GENERAL NOTES

(1) PLACE TWO TO FIVE AERIAL OR VASCAR BARS AT 660 FOOT SPACING.

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



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

6

SDD 15C14 - 04

AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER

FHWA

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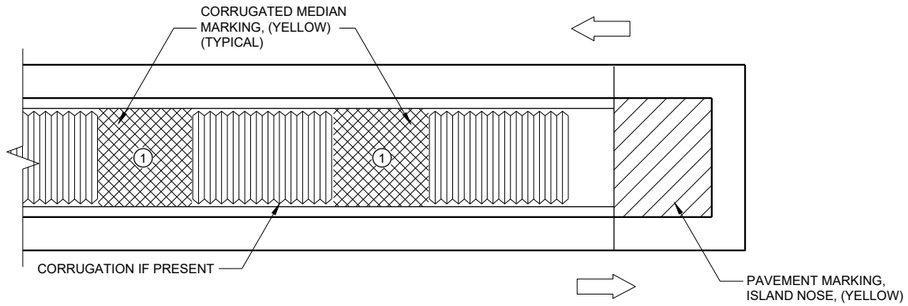
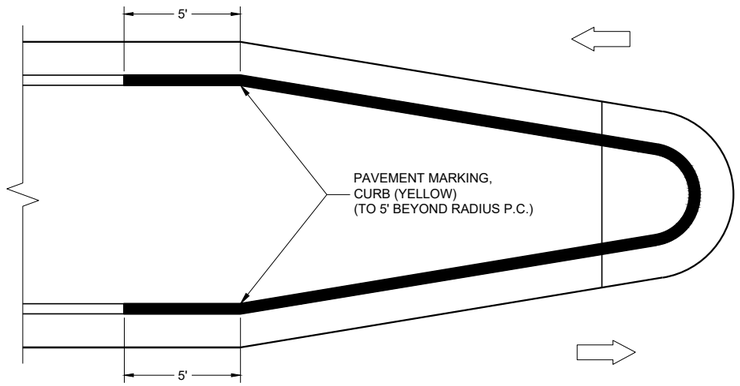
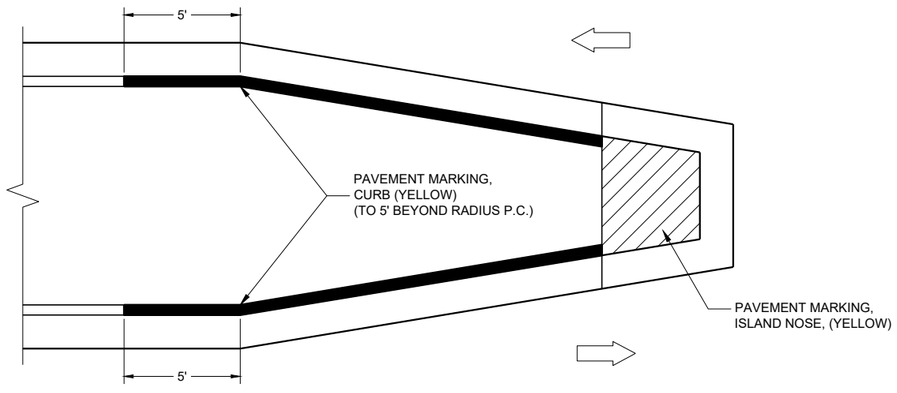
SDD 15C14 - 04



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 15C18-08b

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

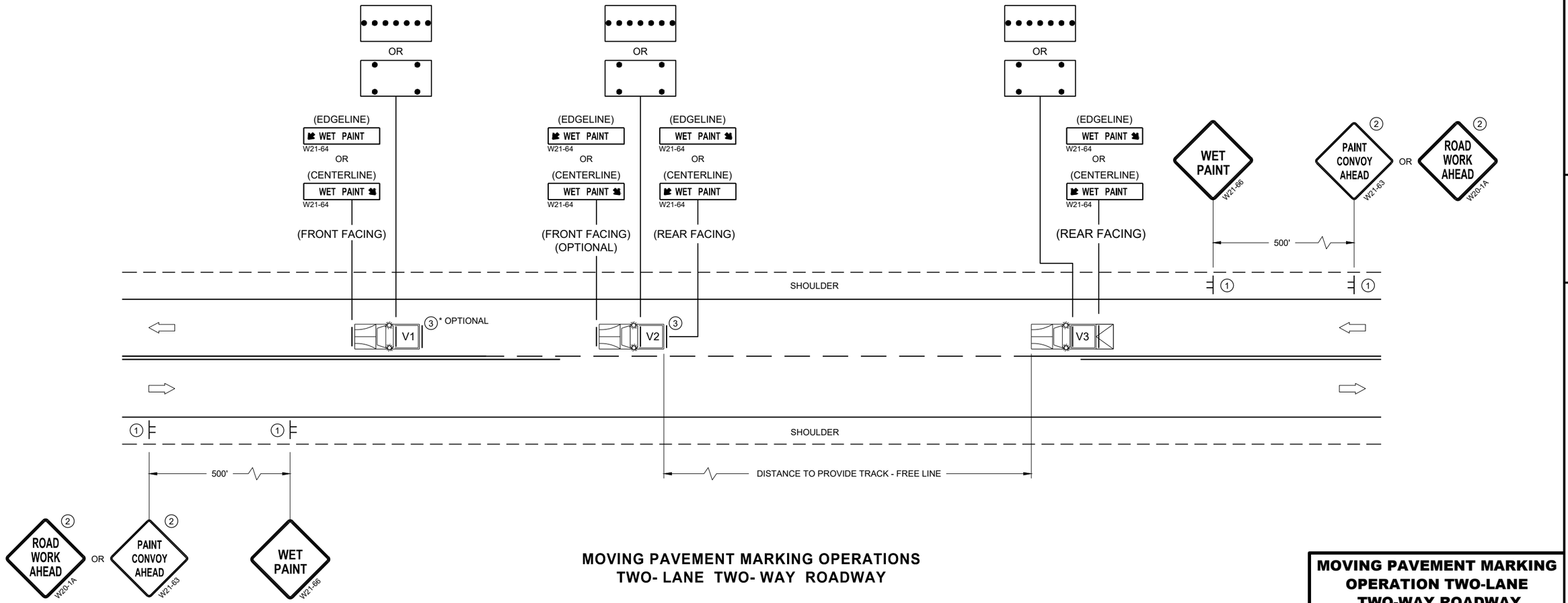
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

1. SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
2. IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
3. V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I
WORK ZONE EN

FHWA

6

SDD 15C19-08a

6

SDD 15C19-08a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

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

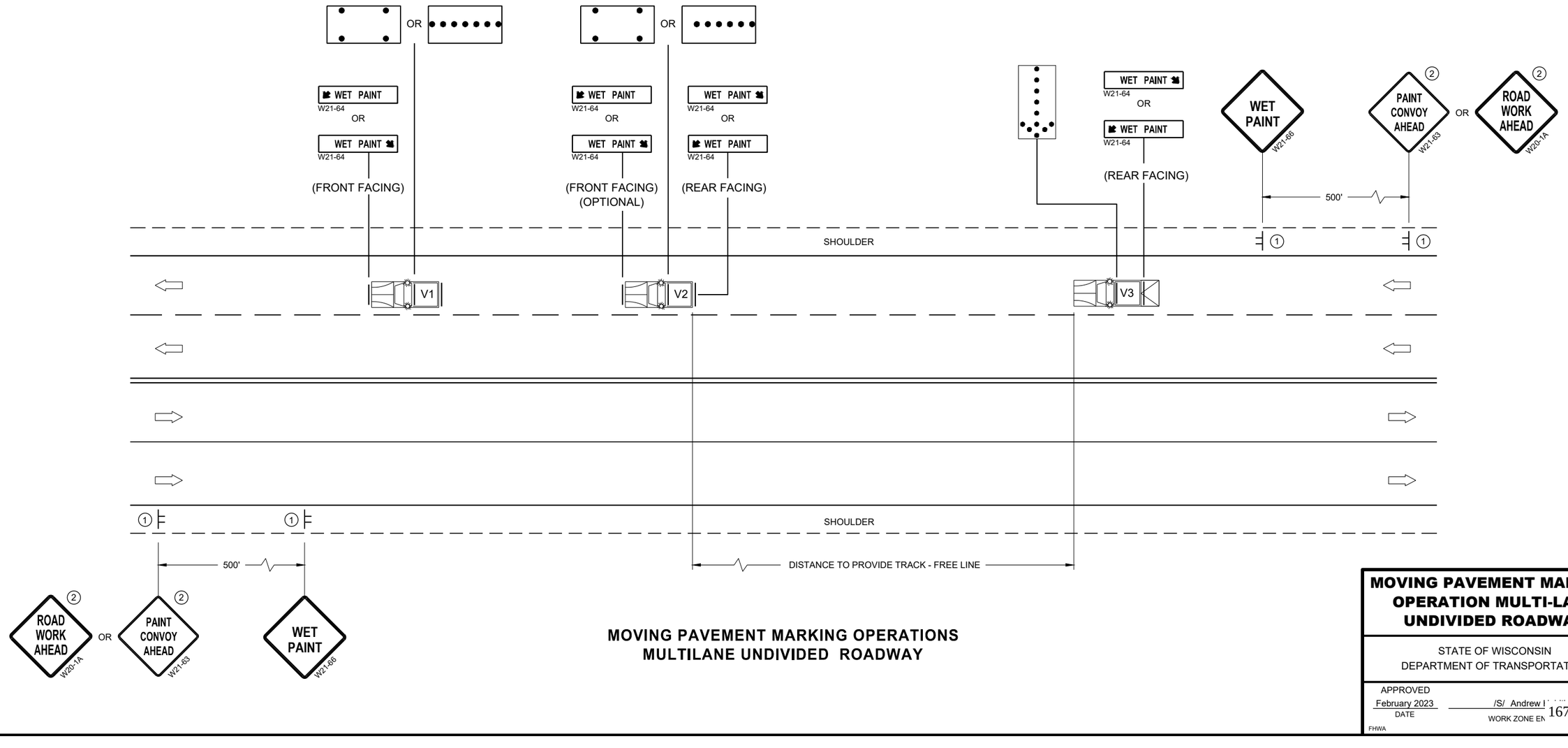
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS MULTILANE UNDIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN...

FHWA

6

SDD 15C19-08b

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SDD 15C19-08b

LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE

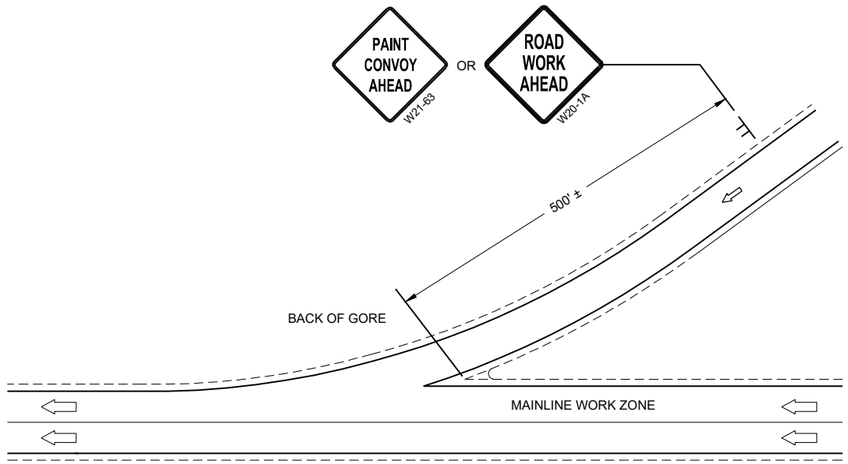
TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)

FLASHING ARROW PANEL (CAUTION)



GENERAL NOTES

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

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

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

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

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

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

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

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

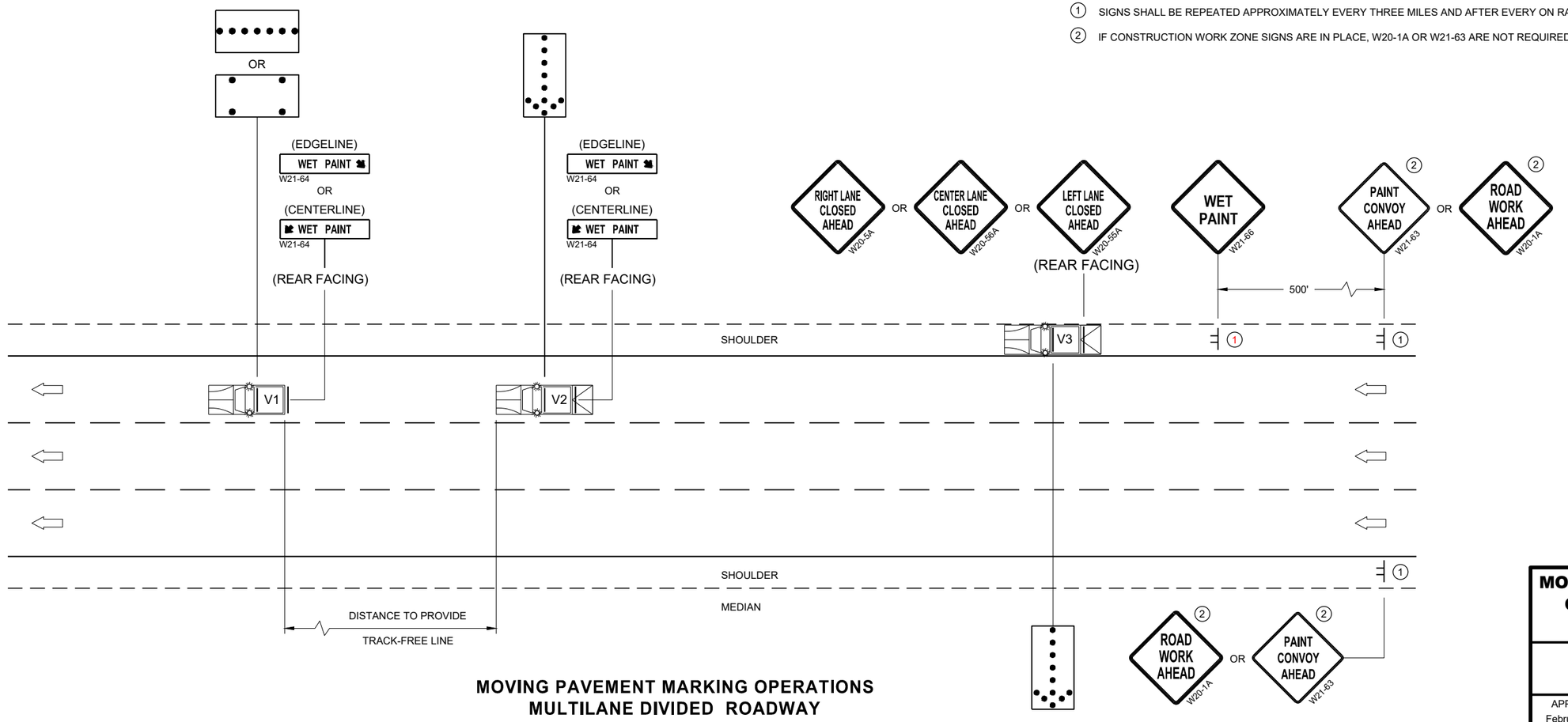
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE

/S/ Andrew [illegible]
WORK ZONE EN

FHWA

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SDD 15C19-08c

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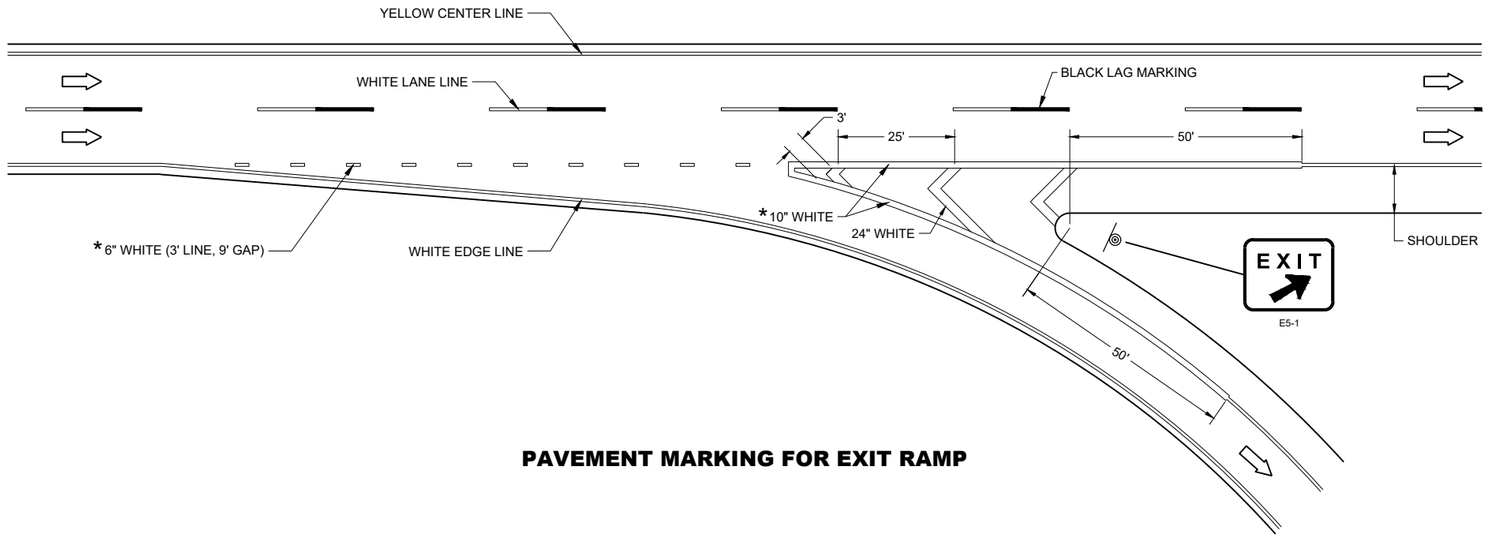
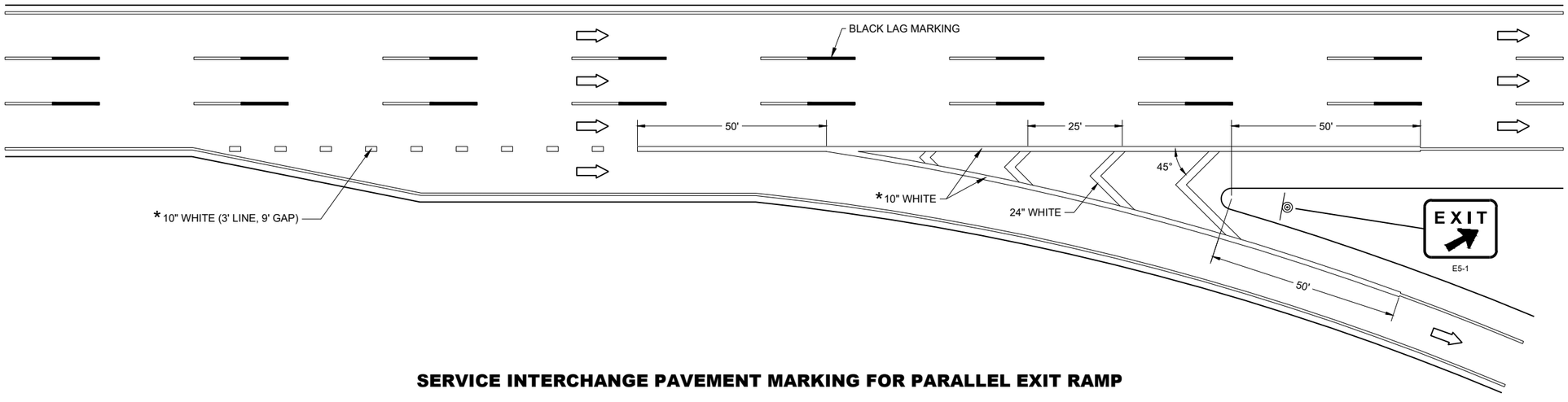
SDD 15C19-08c



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

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15C31-06a

GENERAL NOTES

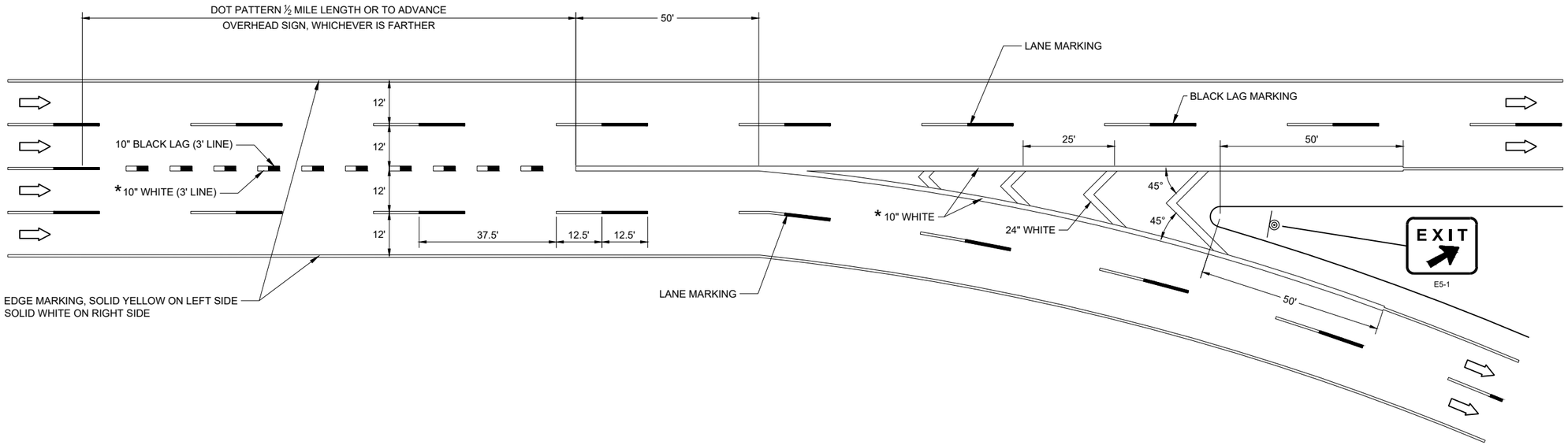
PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

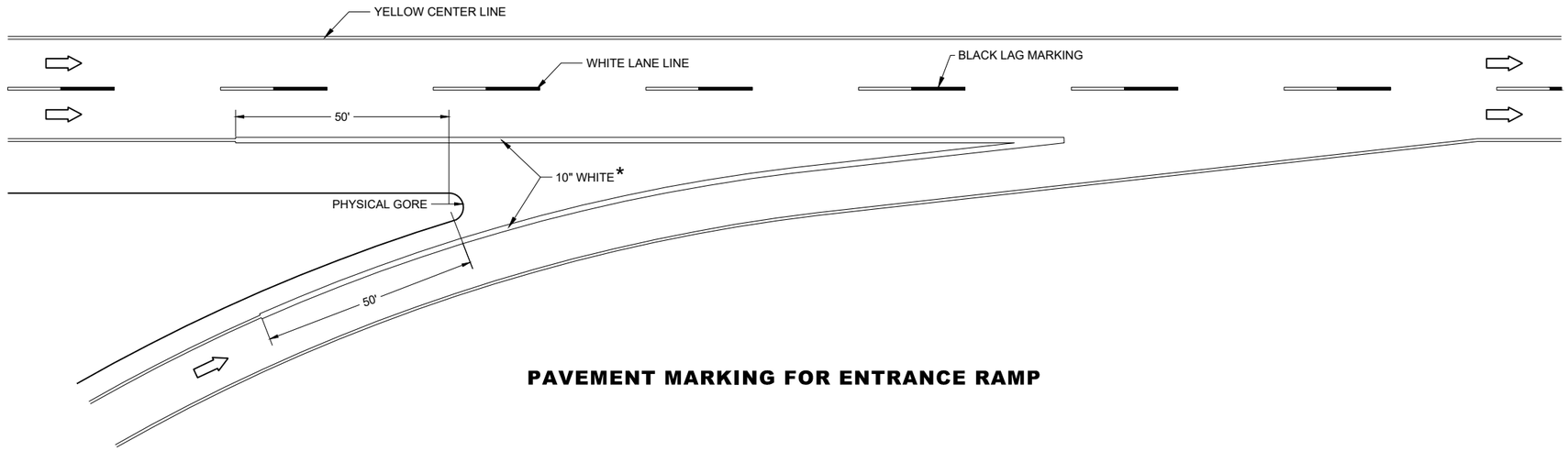
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



PAVEMENT MARKING, MAJOR SPLIT FREEWAY TO FREEWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15C31-06b



PAVEMENT MARKING FOR ENTRANCE RAMP

GENERAL NOTES

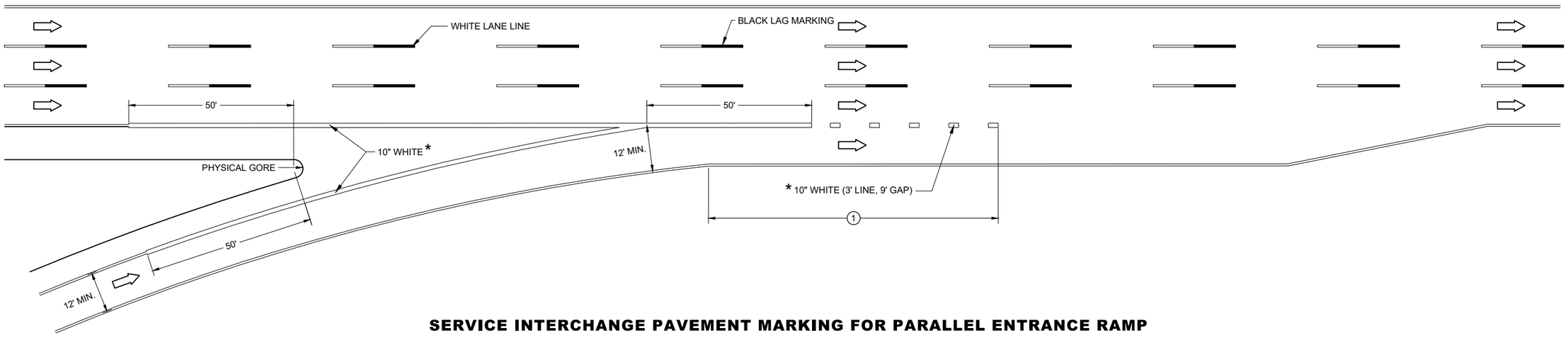
PLACE GROOVE 3 INCHES LEFT OF JOINT.

(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15C31-06c

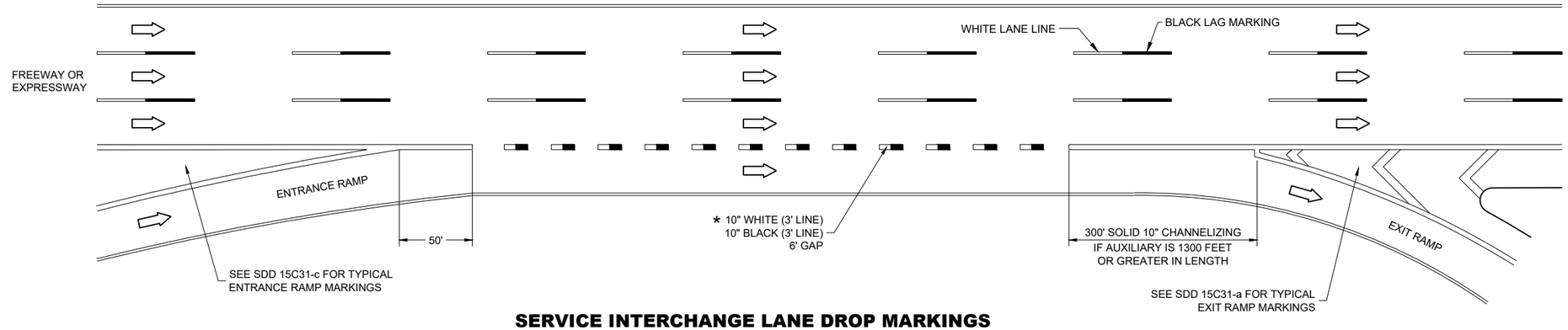
LEGEND

DIRECTION OF TRAVEL

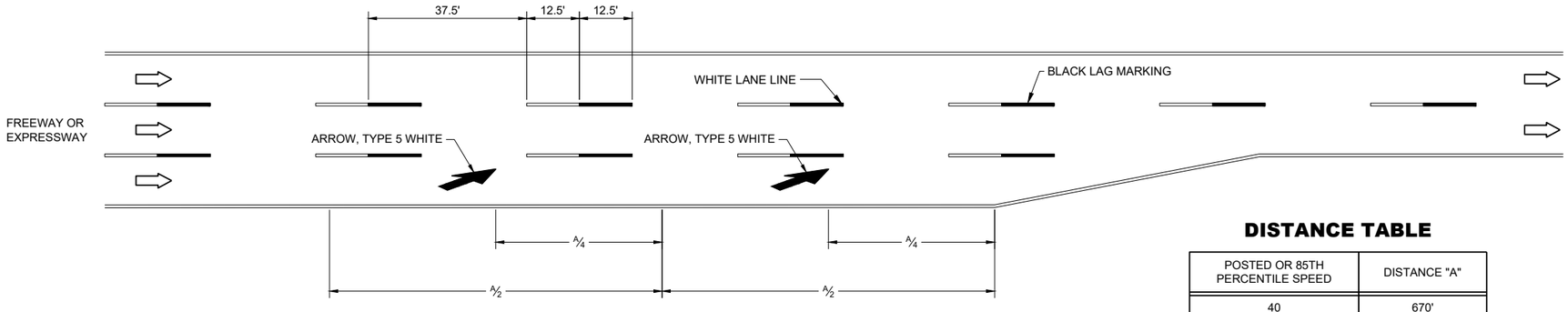
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.



SERVICE INTERCHANGE LANE DROP MARKINGS



LANE REDUCTION MARKINGS

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
40	670'
45	775'
50	885'
55	990'
60	1100'
65	1200'
70	1250'

PAVEMENT MARKING, LANE DROP AND LANE REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

September 2023
DATE

/S/ Matthew Rauch
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

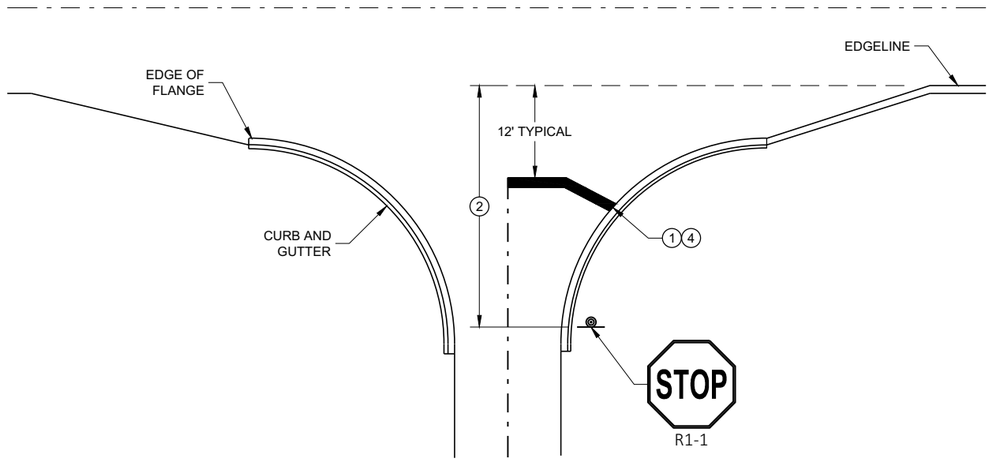
FHWA

6
SDD 15C31-06d

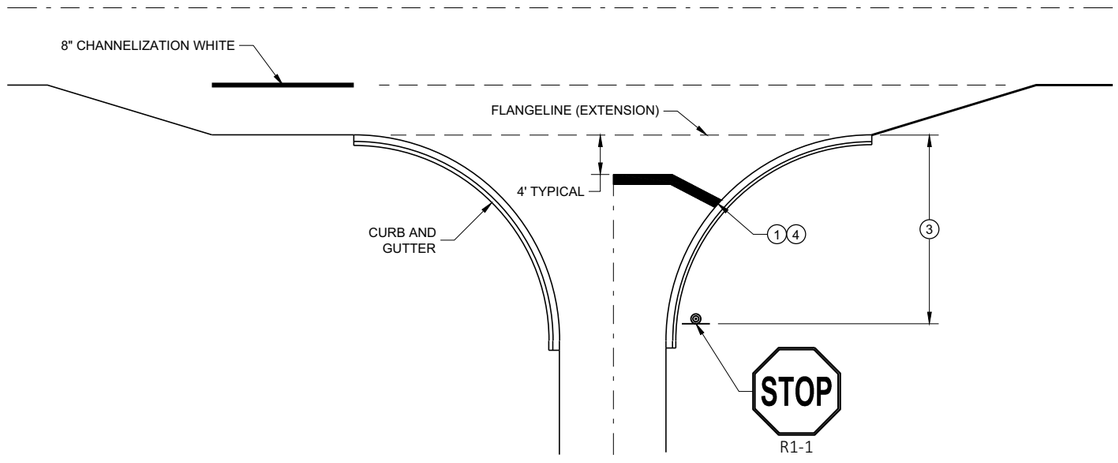
GENERAL NOTES

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

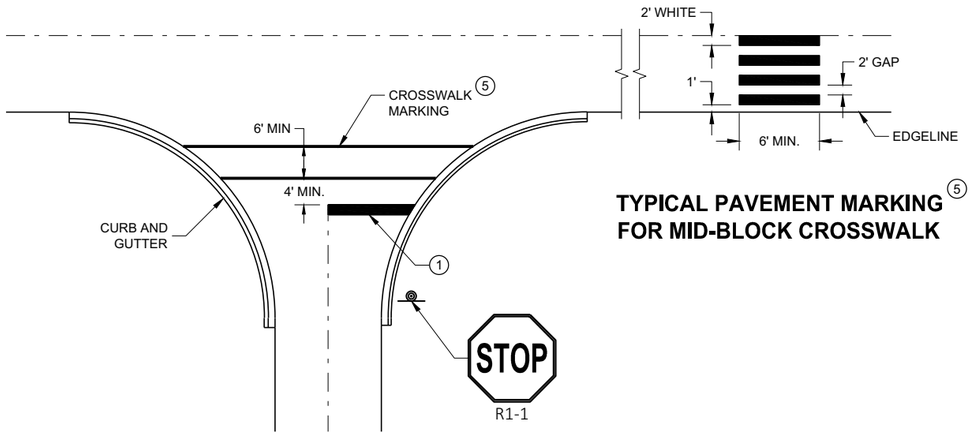
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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

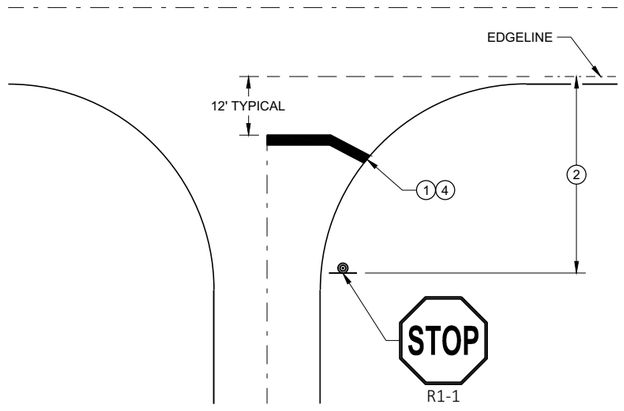


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



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

6

SDD 15C33 - 04

6

SDD 15C33 - 04

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" 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 OR AS APPROVED BY THE ENGINEER.

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.

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

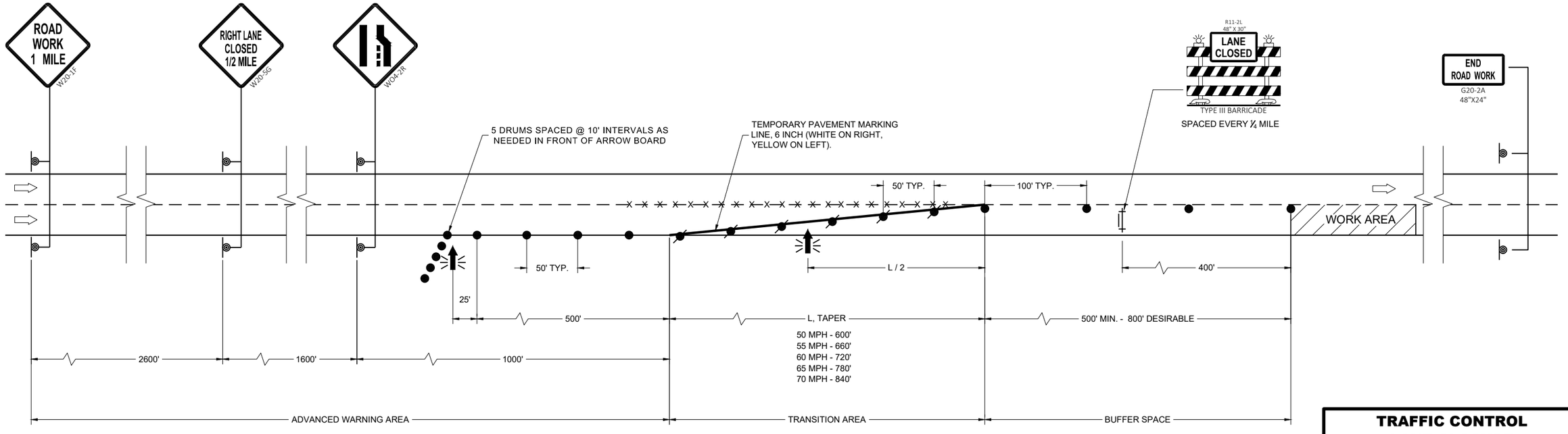
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

6

SDD 15D12-12a

6

SDD 15D12-12a

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
- S — PORTABLE TRAFFIC SENSOR (PTS)
- FBS — FLASHING BEACON SIGN

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, INCLUDING FBS 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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

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.

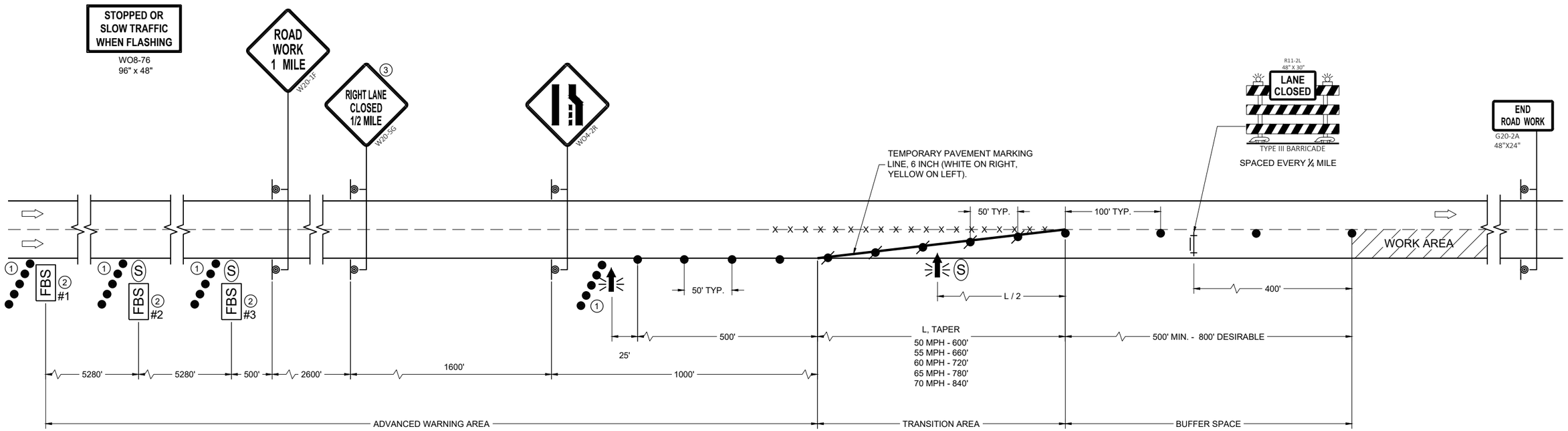
CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON THE FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

(1) 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.

(2) IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE FBS ON BOTH SIDES OF THE ROADWAY.

(3) IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. 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 (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2023 — DATE
/S/ Erin Schwark — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6 SDD 15D12-12d

6 SDD 15D12-12d

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- PORTABLE TRAFFIC SENSOR (PTS)
- TEMPORARY RUMBLE STRIPS (VARIABLE SPACING)

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. NO WARNING LIGHTS

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.

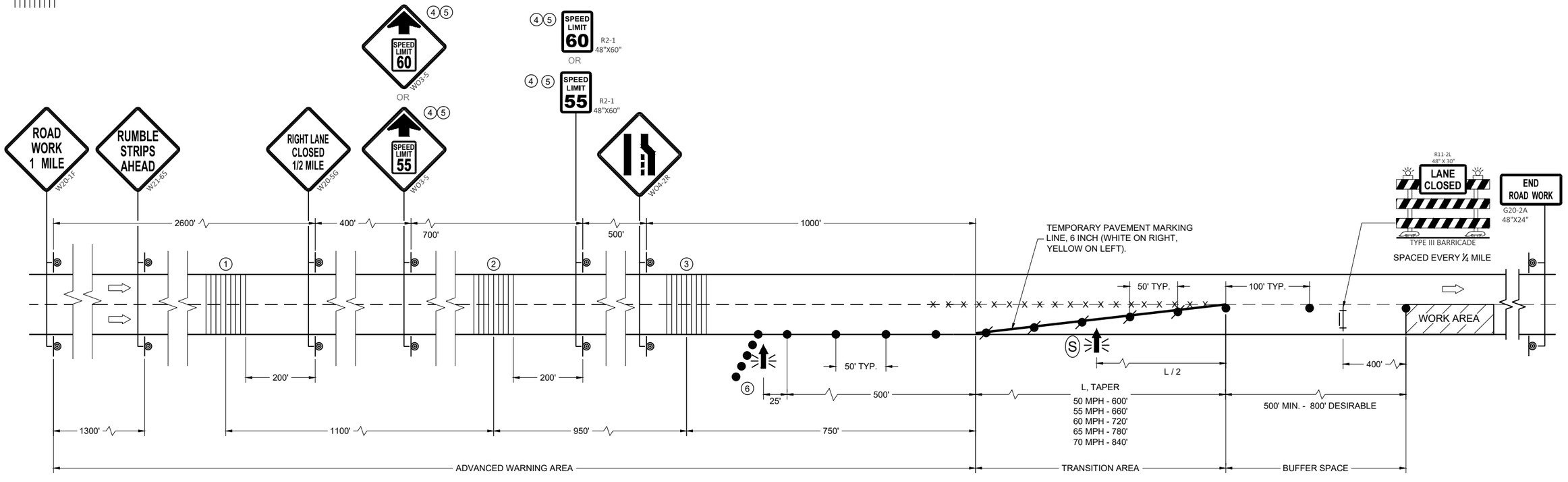
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

USE THIS DETAIL FOR PLACEMENT OF TEMPORARY RUMBLE STRIPS AND W21-65 SIGNS. SEE APPROPRIATE LANE CLOSURE SDD FOR DETAILS OF OTHER TRAFFIC CONTROL DEVICES AND SIGNS.

1. NINE RUMBLE STRIPS WITH 10 FOOT SPACING BETWEEN EACH INDIVIDUAL STRIP.
2. NINE RUMBLE STRIPS WITH 5 FOOT SPACING BETWEEN EACH INDIVIDUAL STRIP.
3. NINE RUMBLE STRIPS WITH 1.5 FOOT SPACING BETWEEN EACH INDIVIDUAL STRIP.
4. COVER OR REMOVE PER APPROVED TEMPORARY SPEED DECLARATION.
5. IF NO APPROVED SPEED DECLARATION, OMIT SIGNS.
6. 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.



TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY RUMBLE STRIPS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 15D12-12f

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.

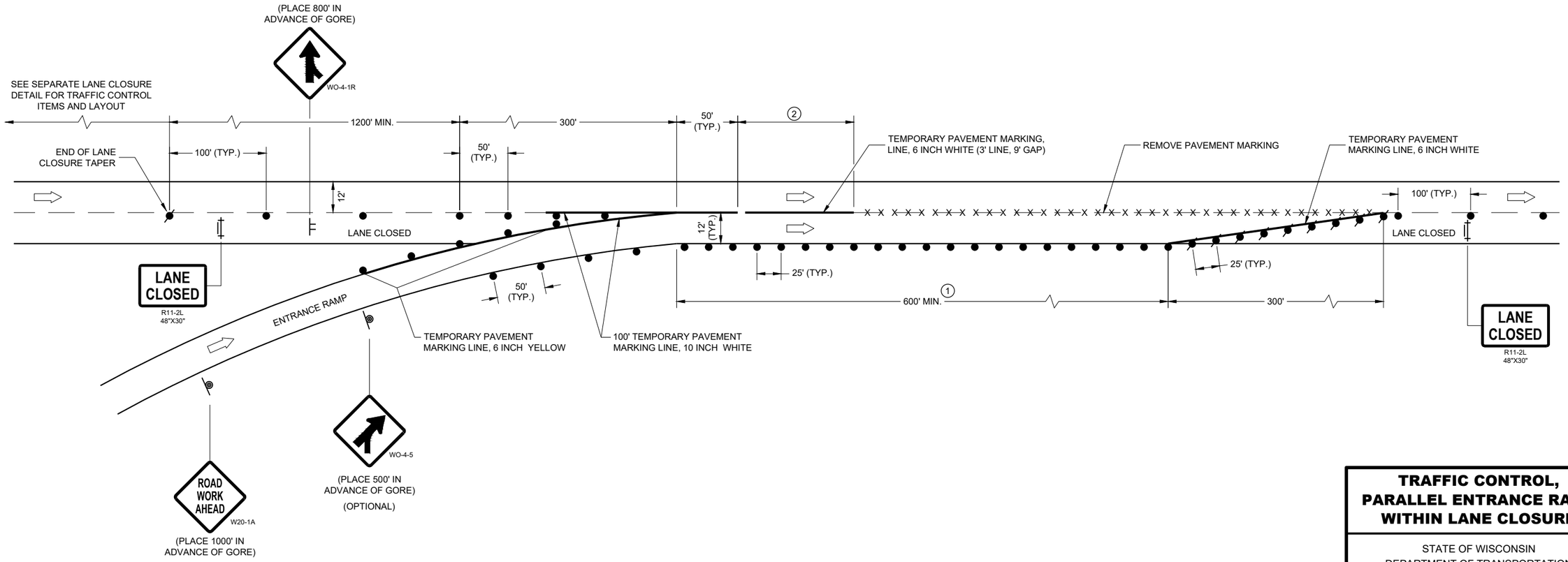
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D15-07a

6

SDD 15D15-07a

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.

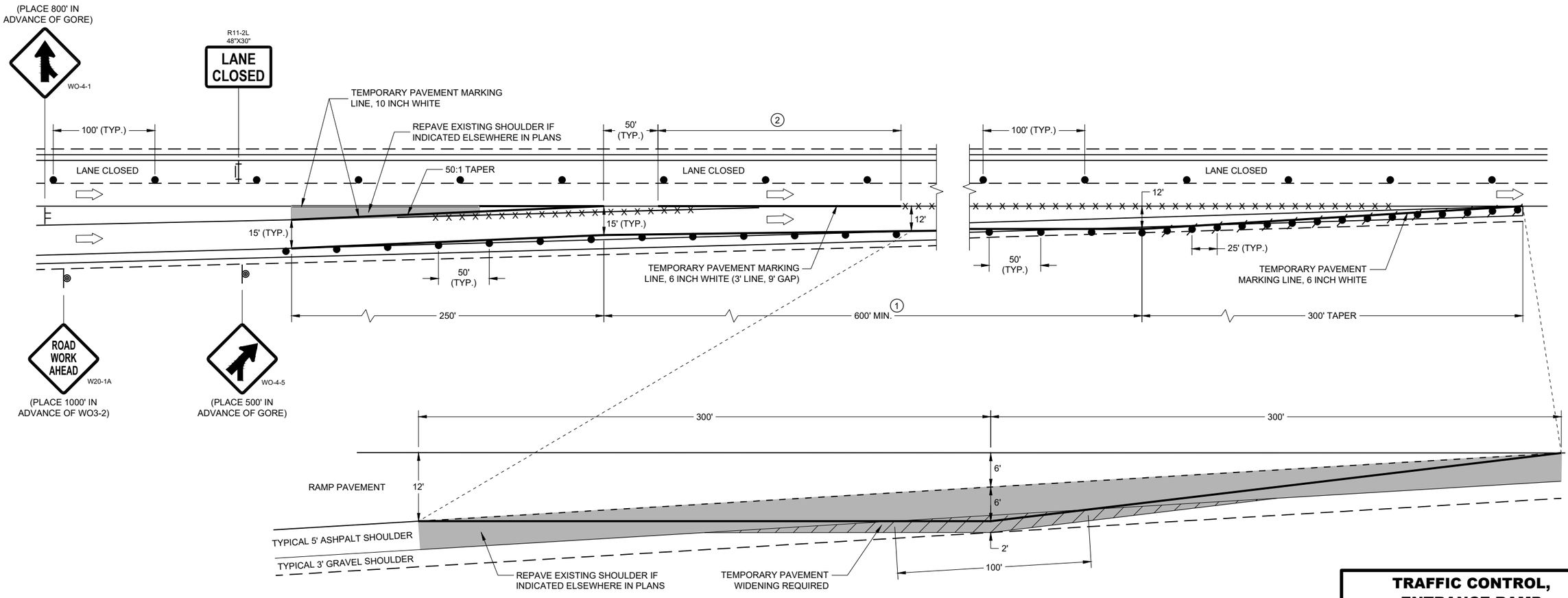
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D15-07b

6

SDD 15D15-07b

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.

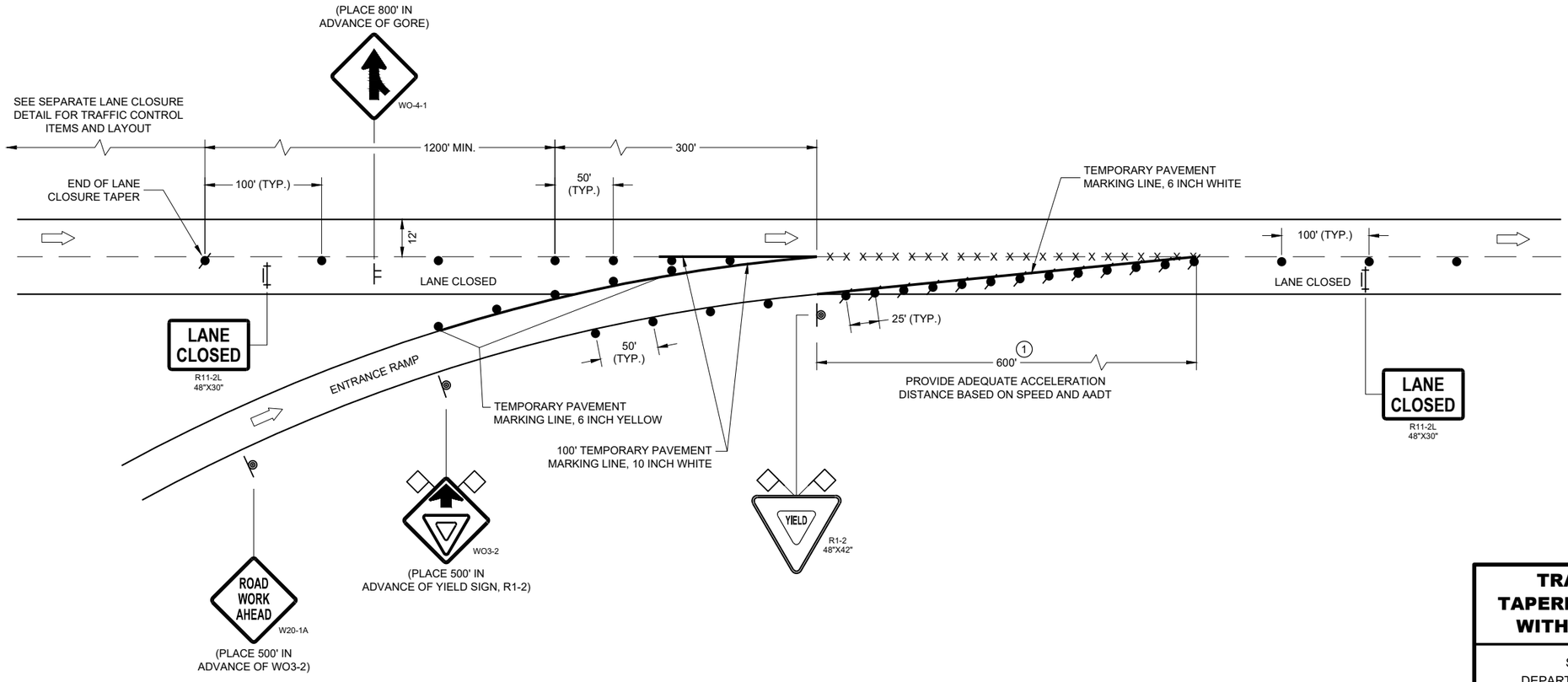
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15D15-07c

6

SDD 15D15-07c

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.

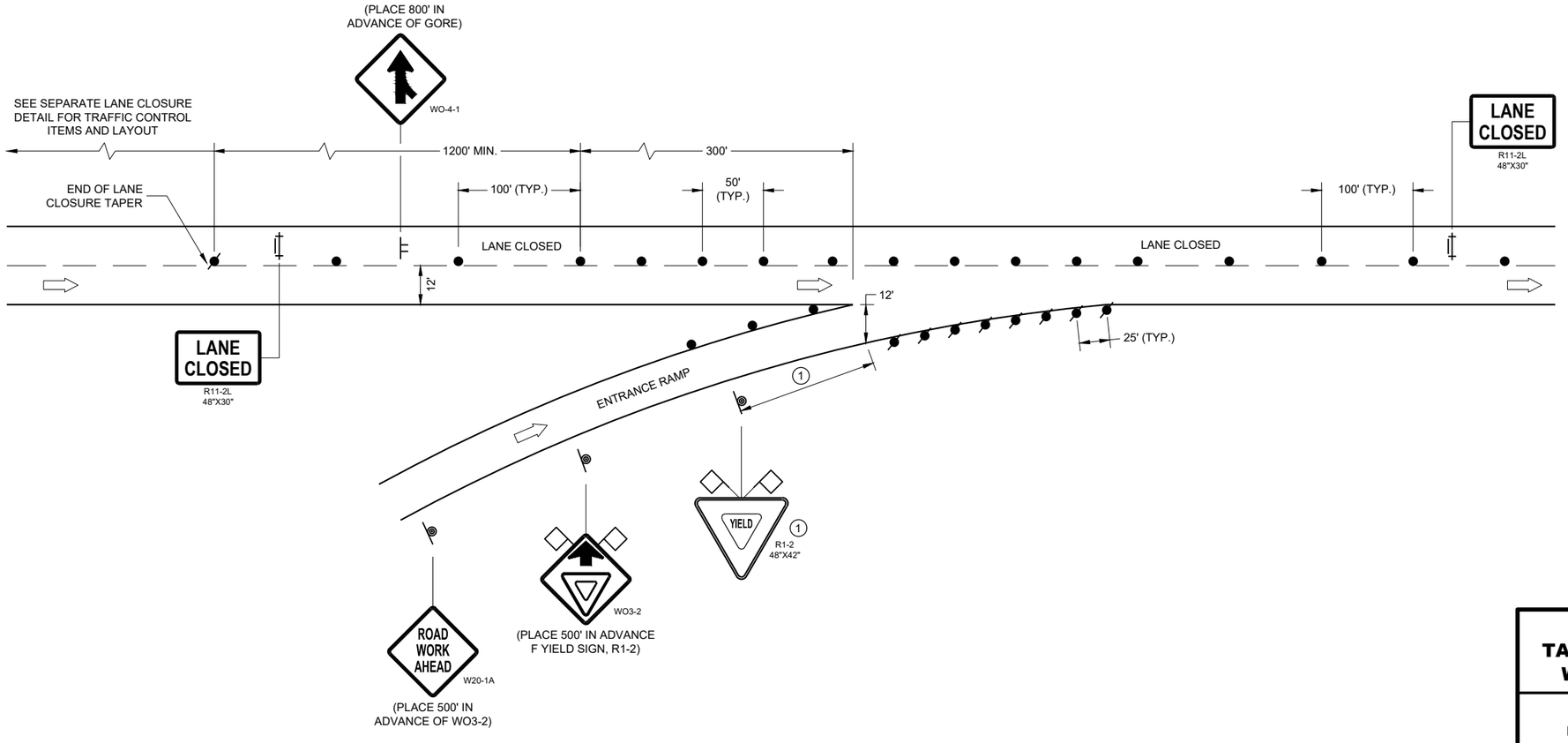
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15-07d

6

SDD 15D15-07d

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.

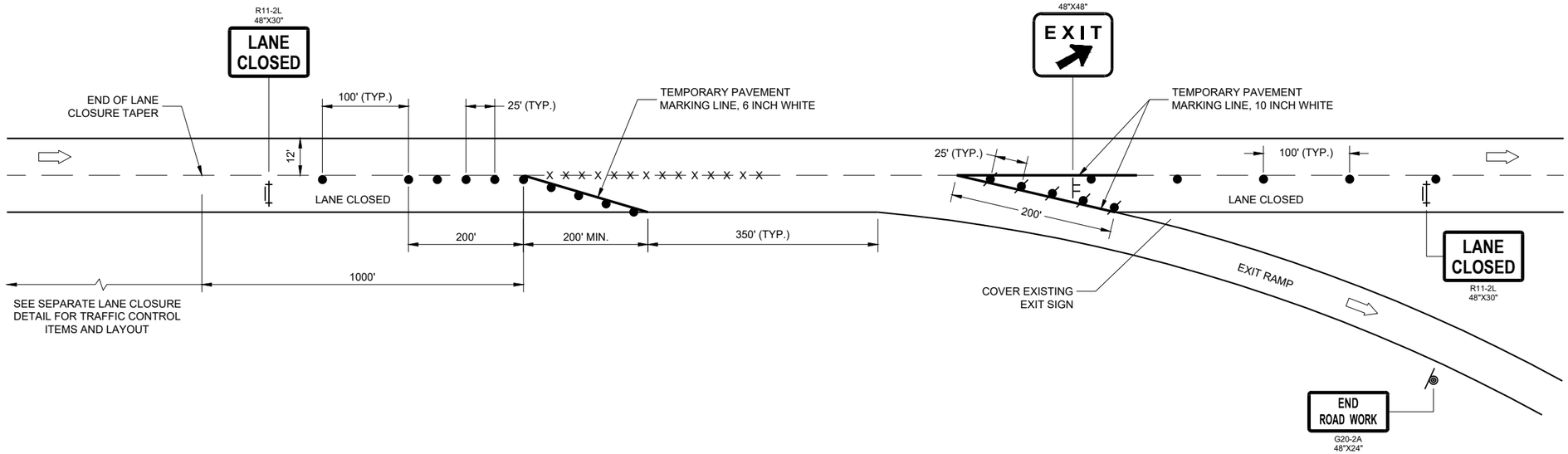
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS 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.



TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D15-07e

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.

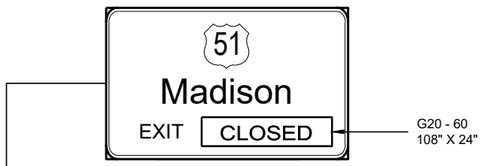
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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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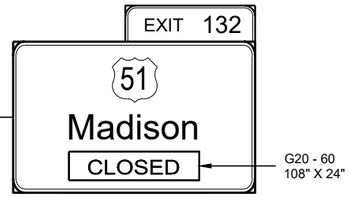
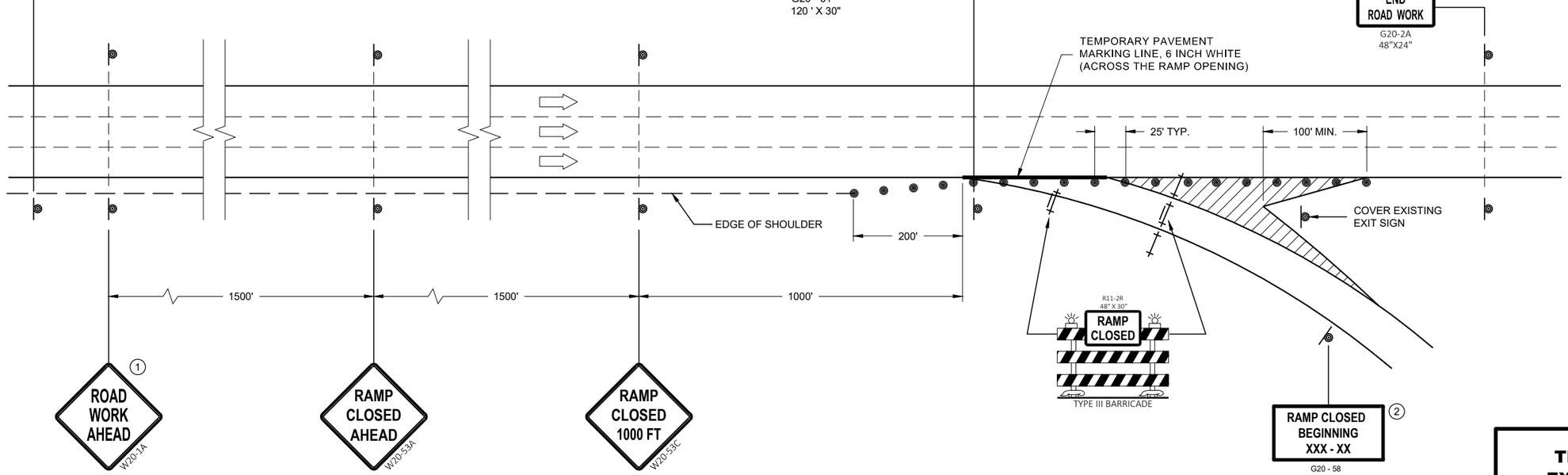


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN

G20 - 61
120 ' X 30"

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



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
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16-06

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)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

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

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

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

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

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

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

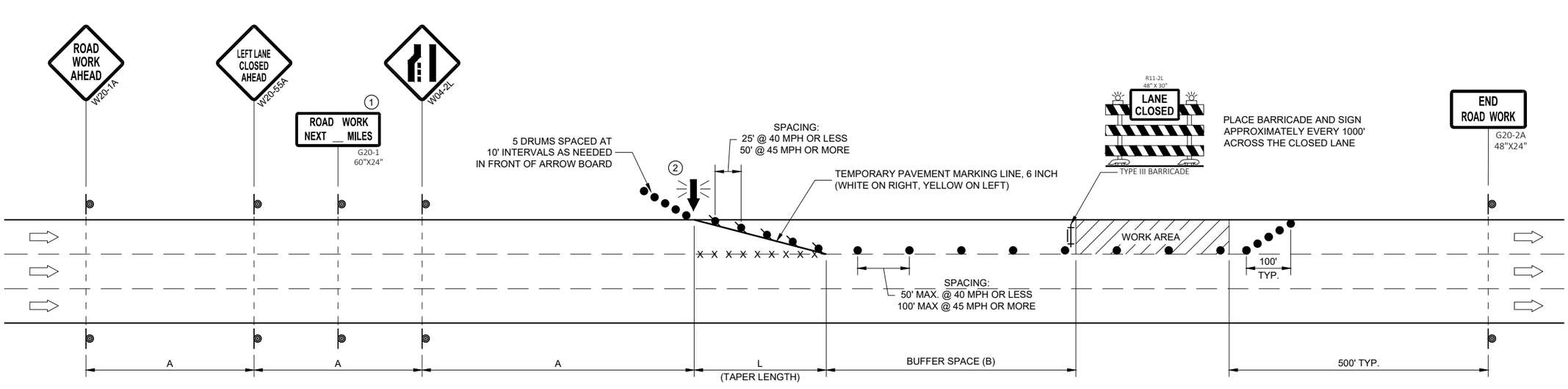
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D20-07a
SDD 15D20-07a

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.

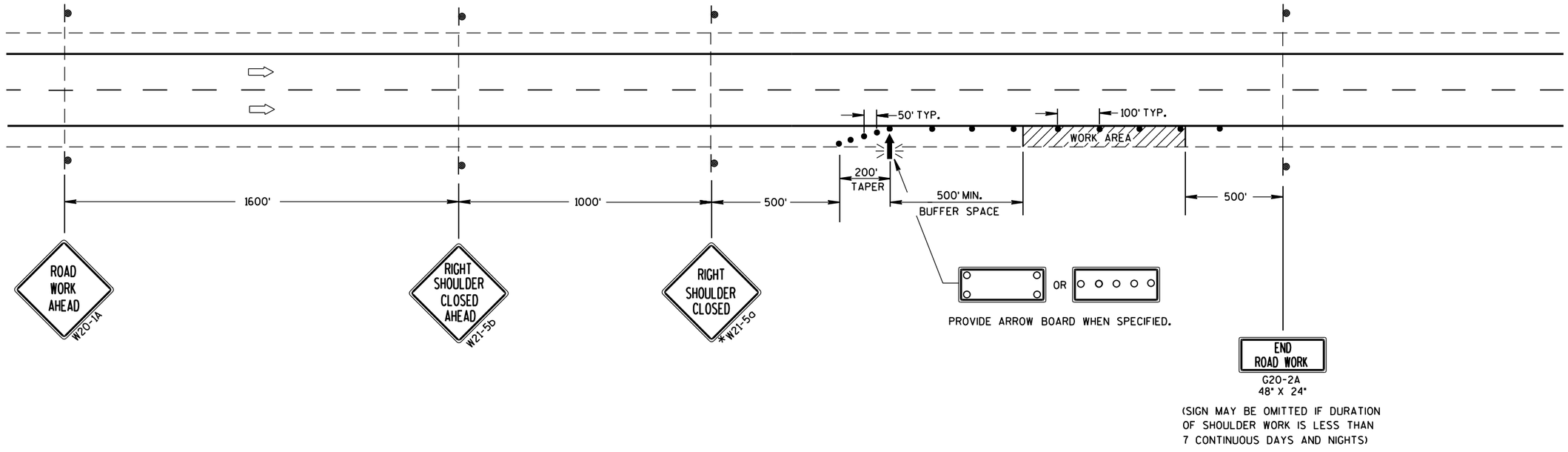
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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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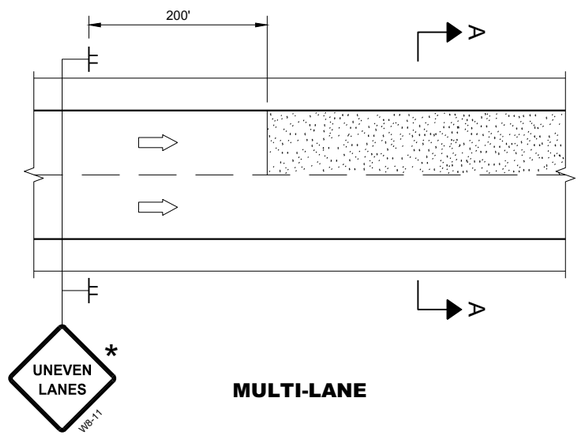
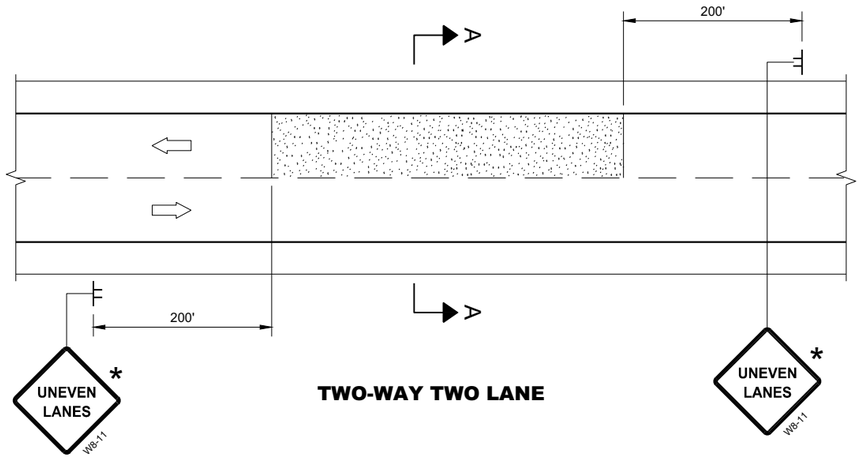
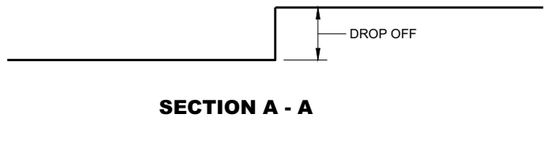
S.D.D. 15 D 27-3



MULTI-LANE

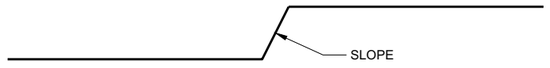


TWO-WAY TWO LANE

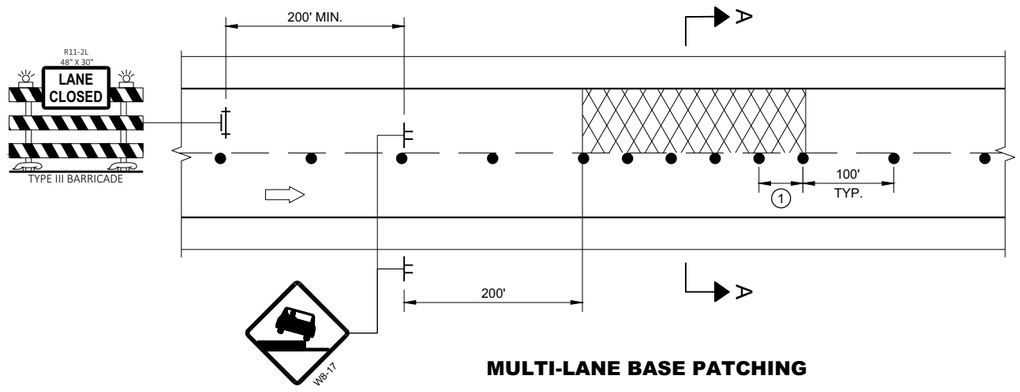


SECTION A - A

OR

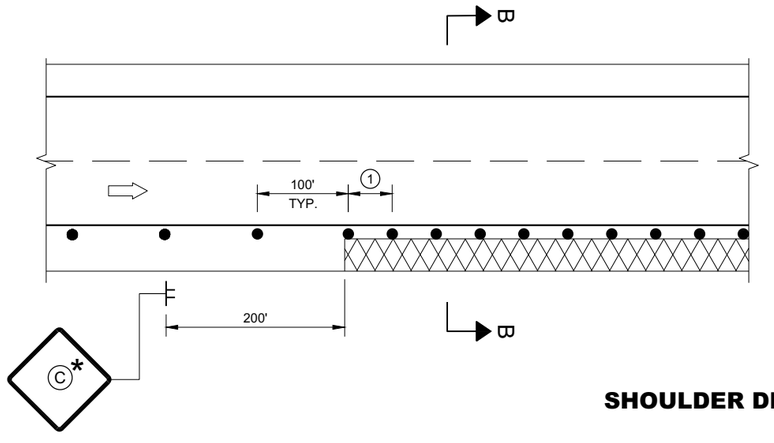


SECTION A - A

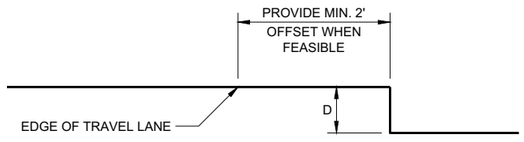


MULTI-LANE BASE PATCHING

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

6

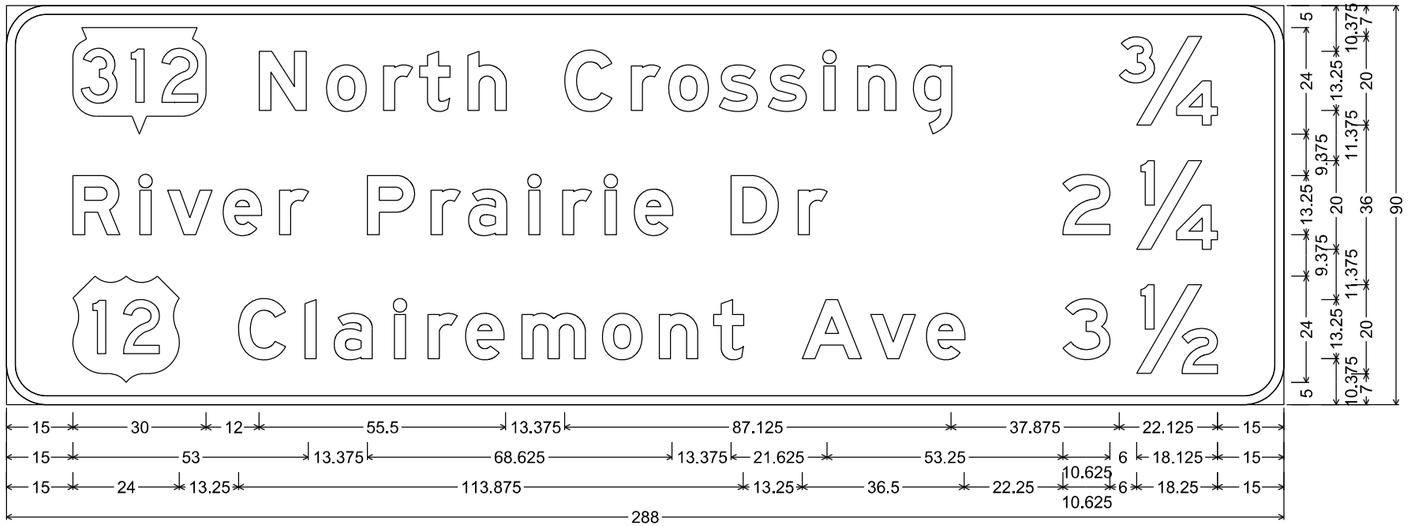
SDD 15D39 - 02

6

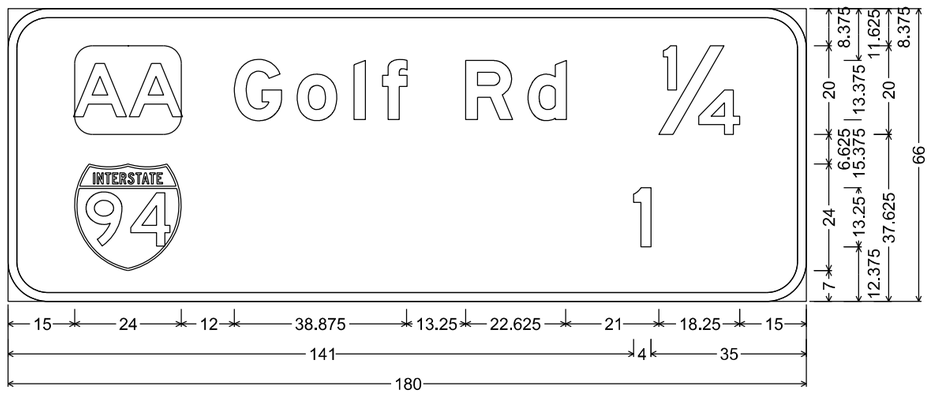
SDD 15D39 - 02

NOTES

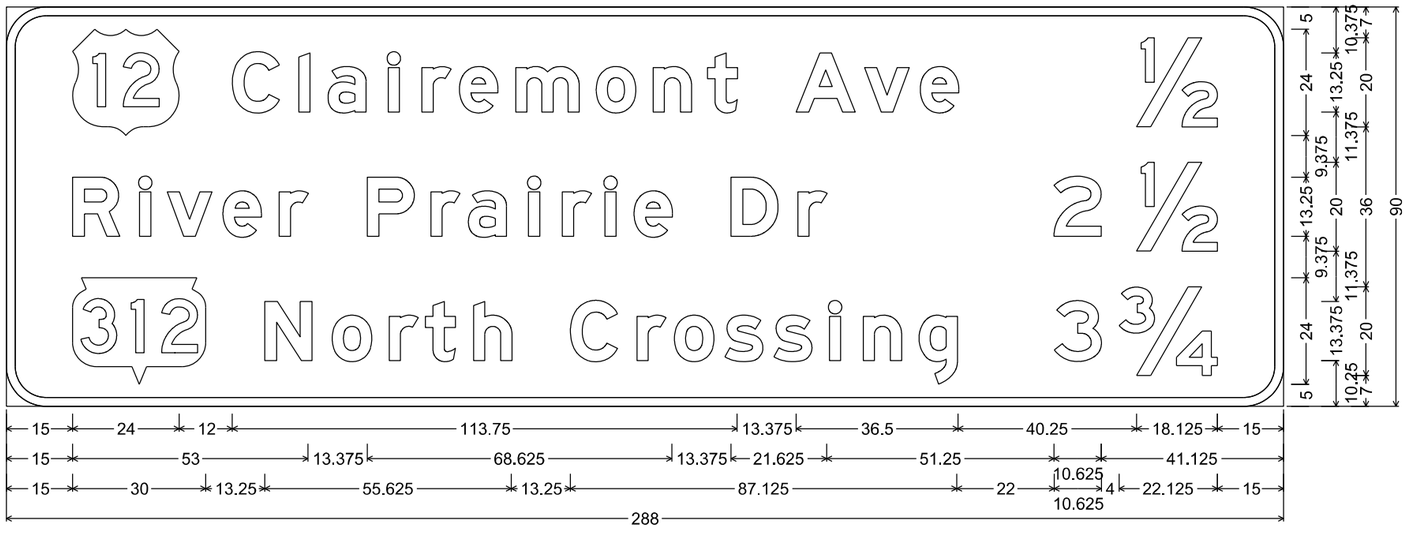
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



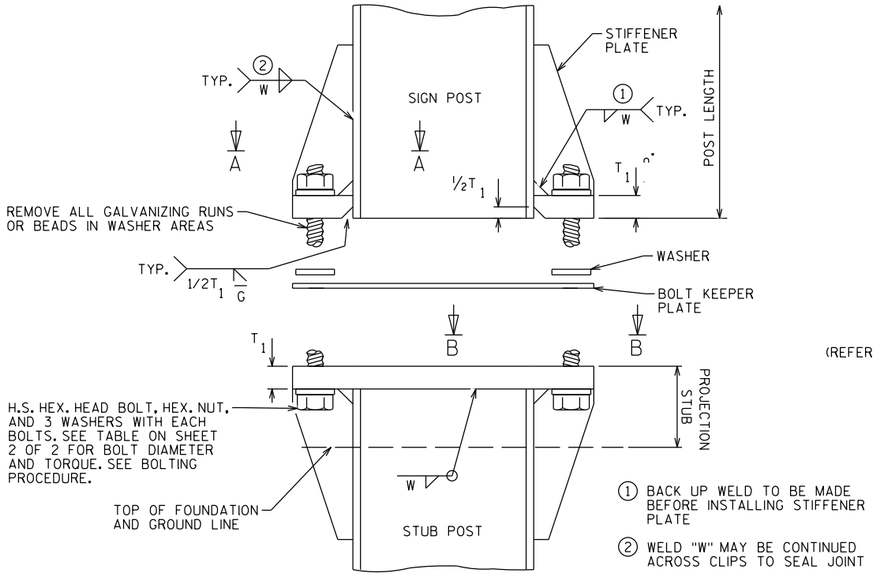
E8-1; 9.000" Radius, 2.000" Border



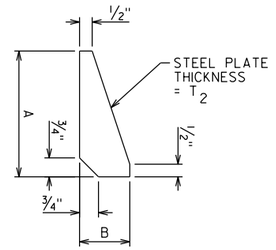
E8-1; 9.000" Radius, 2.000" Border



E8-1; 9.000" Radius, 2.000" Border

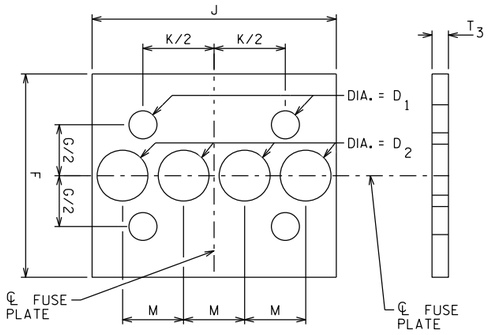


SIGN POST & STUB POST ELEVATION



STIFFENER PLATE DETAIL

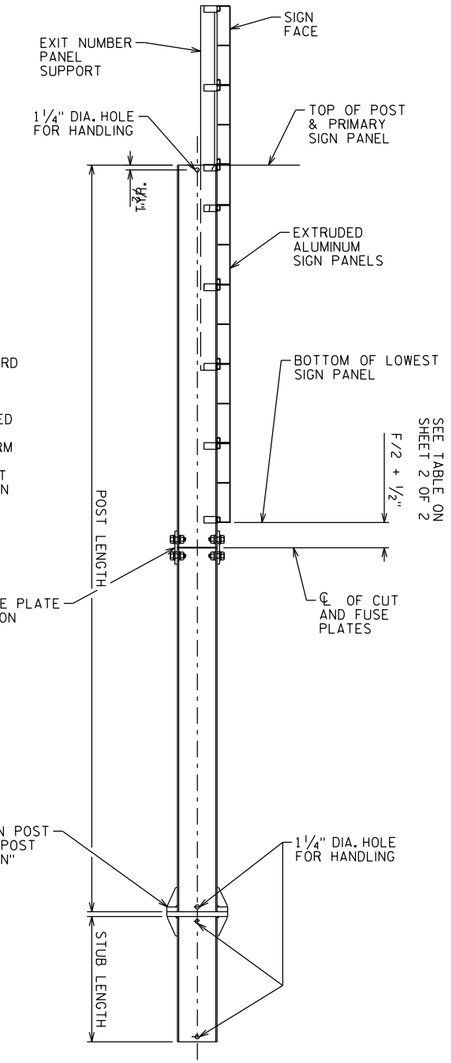
(REFER TO TABLE ON SHEET 2 OF 2 FOR DIMENSIONS)



PERFORATED FUSE PLATE DETAIL

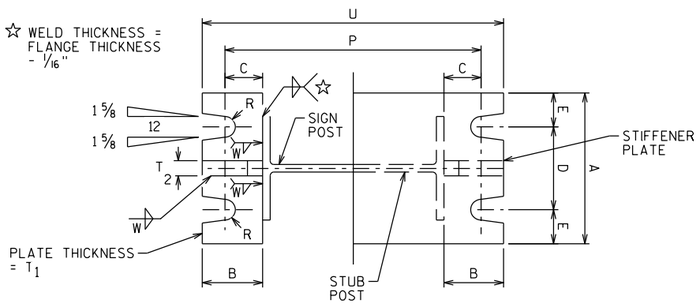
USE H.S. HEX HEAD BOLTS, HEX HEAD NUT AND FLAT WASHER UNDER NUT. INSTALL BOLTS PER THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 506.3.12.3.

ALL HOLES SHALL BE DRILLED, SUB-PUNCHED AND REAMED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. ASTM A572 GRADE 50 OR ASTM A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. MILL TEST REPORTS SHALL BE SUBMITTED FOR FUSE PLATES. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.



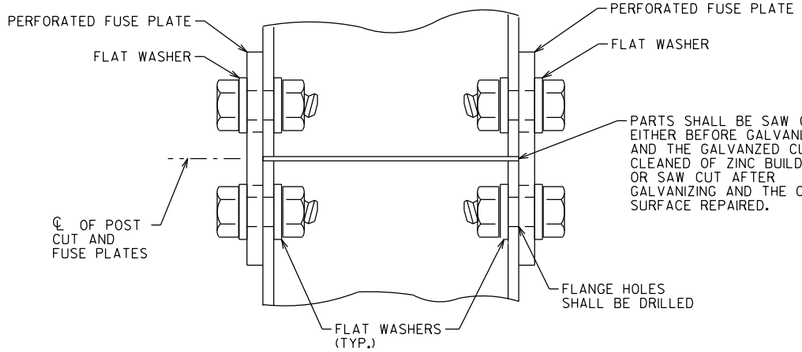
POST DETAIL

☆ WELD THICKNESS = FLANGE THICKNESS - 1/16"

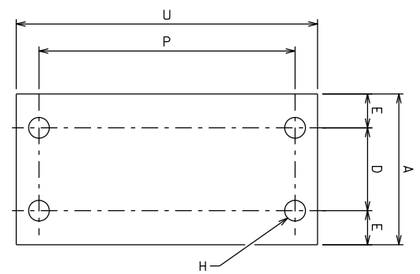


SECTION A-A

SECTION B-B



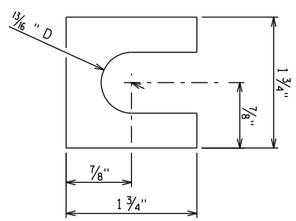
FUSE PLATE CONNECTION DETAIL



H = BOLT DIA. + 1/8"

BOLT KEEPER PLATE DETAIL

30 GA GALVANIZED SHEET STEEL



SHIM DETAIL

FURNISH TWO .012"± THICK AND TWO .032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36.

BOLTING PROCEDURE FOR BASE CONNECTION

1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE, AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
2. SHIM AS REQUIRED TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING, LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS.
5. LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PERSCRIBED TORQUE. (SEE TABLE FOR PERSCRIBED TORQUE). DO NOT OVER-TIGHTEN.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 1 OF 2

SHEET A3-1.20

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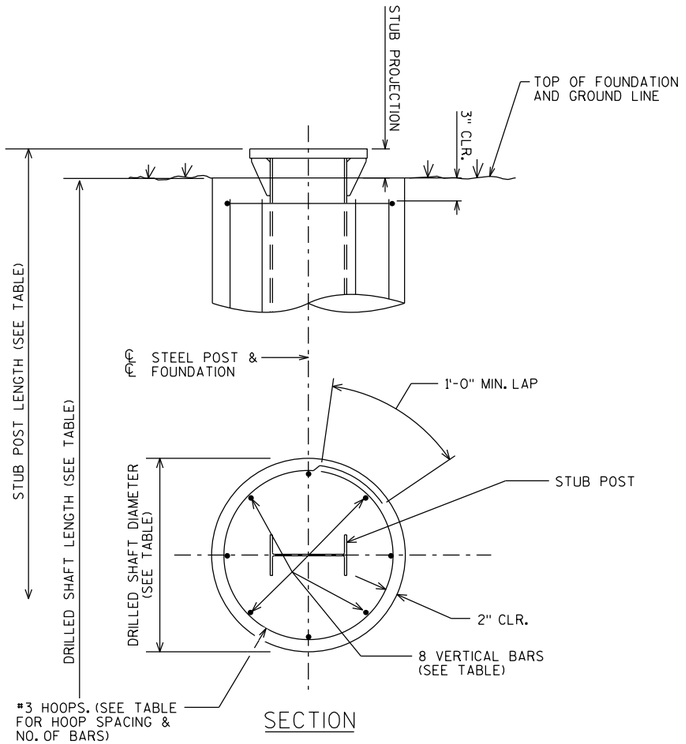

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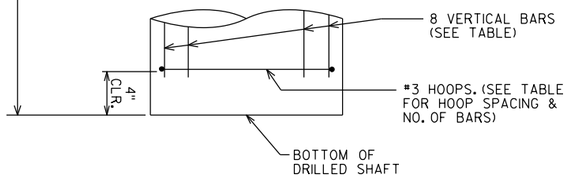
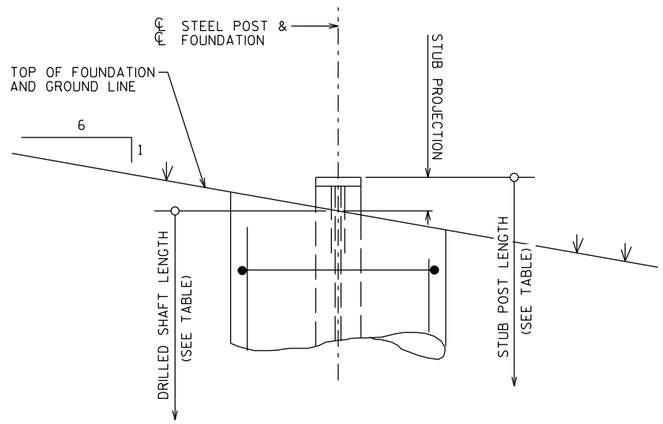


FOUNDATION DETAIL



SHAFT PLACEMENT

FOUNDATION DATA TABLE

POST SHAPE	STUB LENGTH	STUB PROJECTION	DRILLED SHAFT DIAMETER	DRILLED SHAFT LENGTH	VERTICAL BARS		HOOPS		CONCRETE VOLUME ◆	TOTAL REINF. WEIGHT ◆
					SIZE	LENGTH	MAX SPA.	NO.		
W6X15	2'-6"	3"	24"	6'-6"	#5	5'-11"	10"	9	0.8 CY	71 LB
W8X18	2'-6"	3"	24"	7'-6"	#6	6'-11"	12"	8	0.9 CY	102 LB
W8X21	3'-0"	2½"	24"	8'-0"	#6	7'-5"	12"	9	1.0 CY	110 LB
W10X22	3'-0"	2½"	24"	8'-6"	#7	7'-11"	12"	9	1.0 CY	151 LB
W12X26	3'-0"	2½"	24"	10'-0"	#7	9'-5"	12"	11	1.2 CY	180 LB

◆ QUANTITIES SHOWN ARE FOR ONE DRILLED SHAFT

BASE CONNECTION & FUSE PLATE DATA TABLE

POST SHAPE	WEIGHT PER FOOT	BASE CONNECTION DATA: BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R	BOLT KEEPER PLATE DATA: P	U	PERFORATED FUSE PLATE DATA: F	G	J	K	M	D1	D2	T3	BOLT DIA.	WGT. EA. LBS	BOLT LENGTH	V ◪
W6X15	15 LB	⅝" DIA. X 4" 36 TO 38 FT-LB	5"	2"	1¼"	2¾"	1⅛"	1¼"	½"	¼"	11/32"	8½"	10"	5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.4	2	73.0 LB
W8X18	18 LB											10⅝"	12⅛"	5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.0	2	83.0 LB
W8X21	21 LB	¾" DIA. X 4¾" 62 TO 63 FT-LB	6"	2¼"	1⅜"	3½"	1¼"	1½"	¾"	5/16"	13/32"	11"	12¾"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.1	2¼"	124.0 LB
W10X22	22 LB											12⅞"	14⅝"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	3.9	2¼"	134.0 LB
W12X26	26 LB											15"	16¾"	6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.5	2¼"	152.0 LB

◪ TOTAL STRUCTURAL CARBON STEEL WEIGHT FOR ONE POST = V + (POST LENGTH X POST WEIGHT PER FOOT)

"V" INCLUDES STUB POST, BASE PLATES, STIFFENER PLATES, PERFORATED FUSE PLATES, BOLTS, NUTS, AND WASHERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

MATERIALS SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506, UNLESS NOTED OTHERWISE.

FABRICATION SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506.

ALL POST, POST STUBS & ATTACHMENTS SHALL BE ASTM A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED.

FOUNDATION MATERIAL PROPERTIES

CONCRETE MASONRY	F'C = 3,500 P.S.I.
BAR STEEL REINFORCEMENT (UNCOATED), GRADE 60	FY = 60,000 P.S.I.

DESIGN DATA

DESIGN CONFORMS TO AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 1ST EDITION 2015 (WITH 2017 & 2018 INTERIM REVISIONS).

DEAD LOADS (DL):

- STEEL POST SELF WEIGHT
- SIGN PANEL WEIGHT = 3 PSF

WIND LOADS (WL):

WIND LOADS WERE APPLIED TO THE PROJECTED AREAS OF THE SIGN PANELS AND THE STEEL SIGN POSTS.

- BASIC WIND SPEED = 76 MPH
- MEAN RECURRANCE INTERVAL (MRI) = 10 YEARS
- HEIGHT & EXPOSURE FACTOR = 1.00
- DIRECTIONALITY FACTOR = 0.85
- GUST EFFECT FACTOR = 1.14

WIND LOAD CASES:

- WL CASE 1: 1.0 X NORMAL WIND
- WL CASE 2: 1.0 X TRANSVERSE WIND
- WL CASE 3: 0.75 X NORMAL WIND + 0.75 X TRANSVERSE WIND

LOAD COMBINATIONS:

LOAD COMBINATION	TYPE	DL FACTOR	WL FACTOR
STRENGTH I	GRAVITY	1.25	-
EXTREME I	WIND	1.10	1.0
		0.9	1.0
SERVICE I	DEFLECTION	1.0	1.0

FOUNDATION DESIGN DATA

THE FOUNDATION DESIGN ASSUMED COHESIONLESS SOILS (LOOSE SAND) ABOVE THE WATER TABLE WITH THE FOLLOWING PROPERTIES:

- SOIL UNIT WEIGHT = 115 PCF
- ANGLE OF INTERNAL FRICTION = 24 DEGREES
- SOIL MODULUS PARAMETER = 25 LB/IN3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 2 OF 2

SHEET A3-1.20

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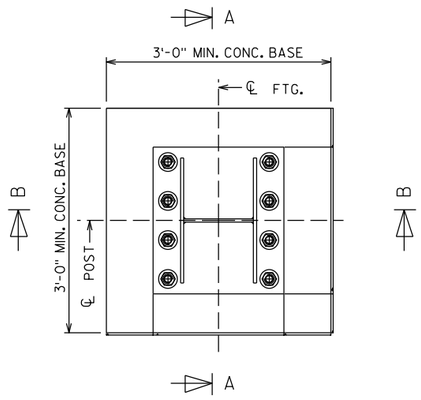
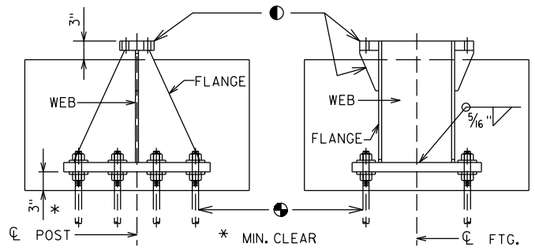
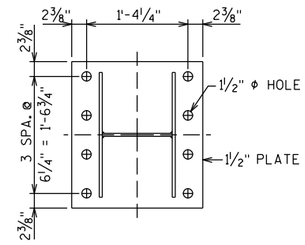
STUB AND ADHESIVE ANCHOR DETAILS



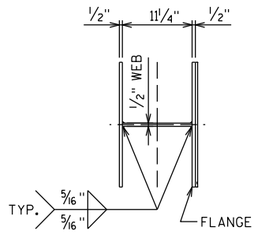
STUB SECTION



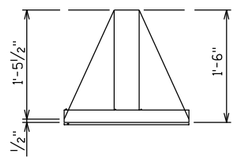
SECTION A-A SECTION B-B



BASE PLATE



STUB



FLANGE

◐ SEE BASE CONNECTION DETAILS ON "CONNECTIONS & FOUNDATION DETAILS" SHEETS.

◔ ADHESIVE ANCHORS 1¼-INCHES. ALLOWABLE PULL OUT CAPACITY = 15 KIPS. EMBED 1'-3" INTO ROCK.

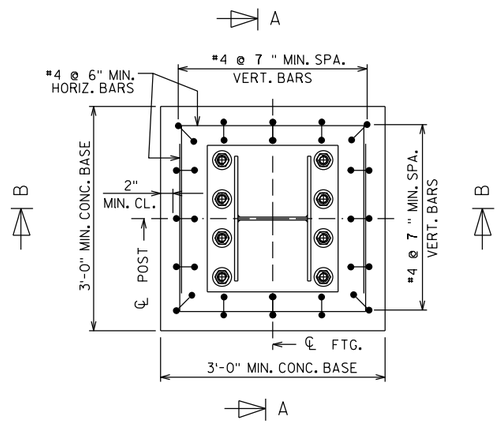
GENERAL NOTES:

QUANTITIES PER BASE:
REINFORCING STEEL = 62 LB
CONCRETE = 0.6 CY
STRUCTURAL STEEL = 335 LB

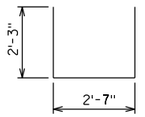
ALL MATERIALS, EXCEPT FOR ANCHOR ROD, NUTS, AND WASHERS, SHALL BE ASTM A709 GRADE 50. ALL MATERIALS TO BE GALVANIZED AFTER FABRICATION.

IF ROCK IS ENCOUNTERED PRIOR TO REACHING THE MINIMUM DRILLED SHAFT EMBEDMENT DEPTH DEFINED ON THE FOUNDATION DATA TABLE OF THE "CONNECTIONS & FOUNDATION DETAILS 2 OF 2" SHEET, THE CONTRACTOR SHALL INSTALL A TEST ADHESIVE ANCHOR AND DETERMINE THE PULL-OUT CAPACITY. IF THE FIELD TEST RESULTS IN A PULL-OUT CAPACITY GREATER THAN OR EQUAL TO 15 KIPS, THE CONTRACTOR MAY INSTALL THE ALTERNATE CONCRETE BASE AND BREAK-WAY STUB PER THE DETAILS ON THIS SHEET.

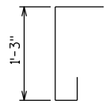
CONCRETE BASE DETAILS



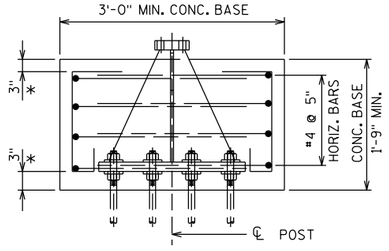
CONCRETE BASE PLAN



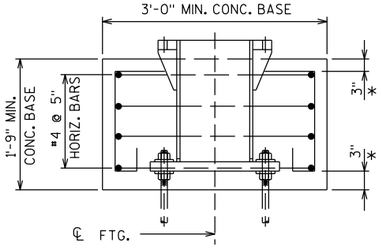
HORIZONTAL BAR
8 BARS @ 6'-11" LENGTH



VERTICAL BARS
16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A-A



SECTION B-B

* MIN. CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

ALTERNATE BREAK-AWAY BASE ON ROCK

SHEET A3-1M.2

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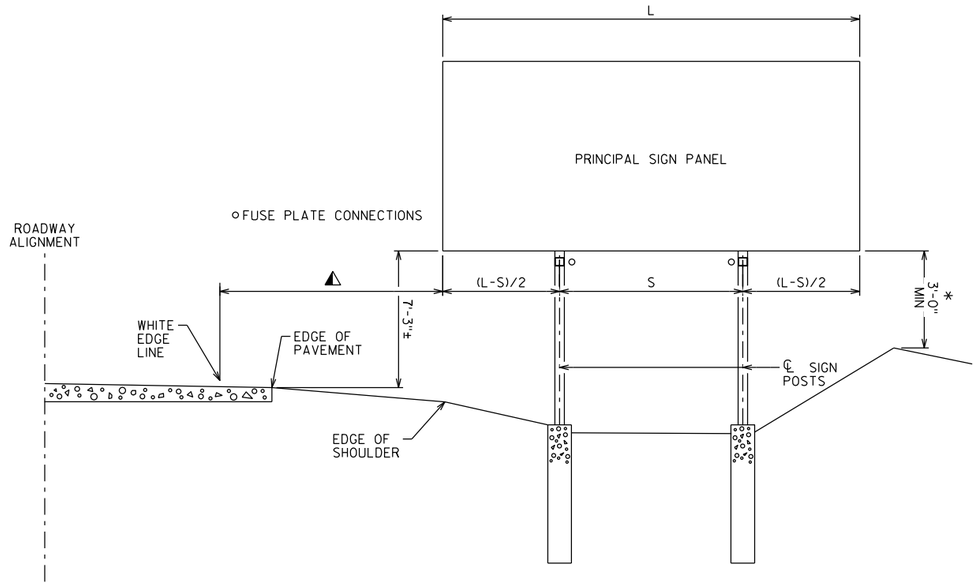
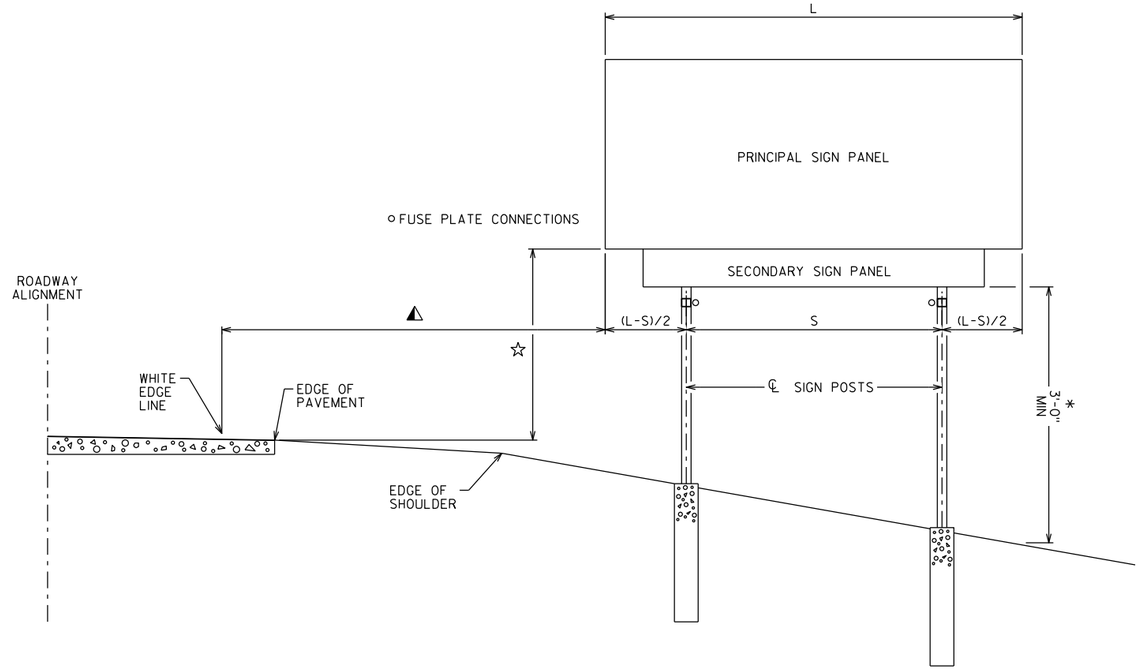


INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

◭ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

WHERE SIGNS ARE MOUNTED BEHIND CRASH WORTHY PROTECTION SUCH AS GUARDRAIL OR BARRIER WALL, THE LATERAL OFFSET MAY BE 4'-6" BEHIND THE GUARDRAIL OR BARRIER WALL.

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

○ FOR 2-POST SIGNS, IF THERE IS A SECONDARY SIGN THAT IS NOT AS WIDE AS THE POSTS, INSTALL FUSE PLATES BENEATH PRINCIPAL SIGN.

FOR SECONDARY SIGNS THAT ARE NOT AS WIDE AS THE EXTERIOR POSTS, SECURE SIGN WITH CHANNEL STEEL AS DESCRIBED IN A4-6.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY
	2/29/24		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

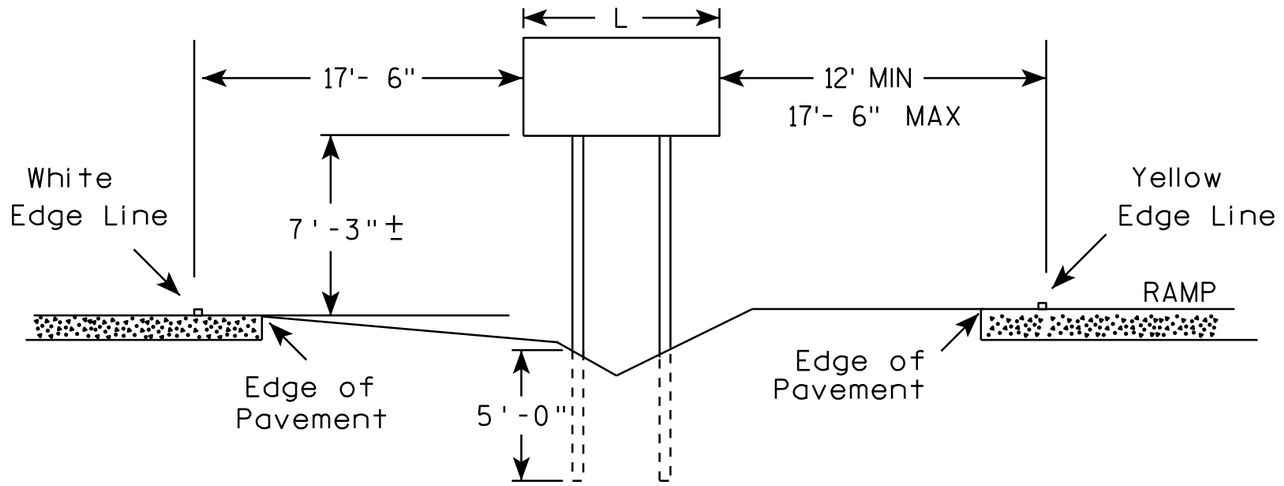
STRUCTURE BTO TYPE I SIGNS

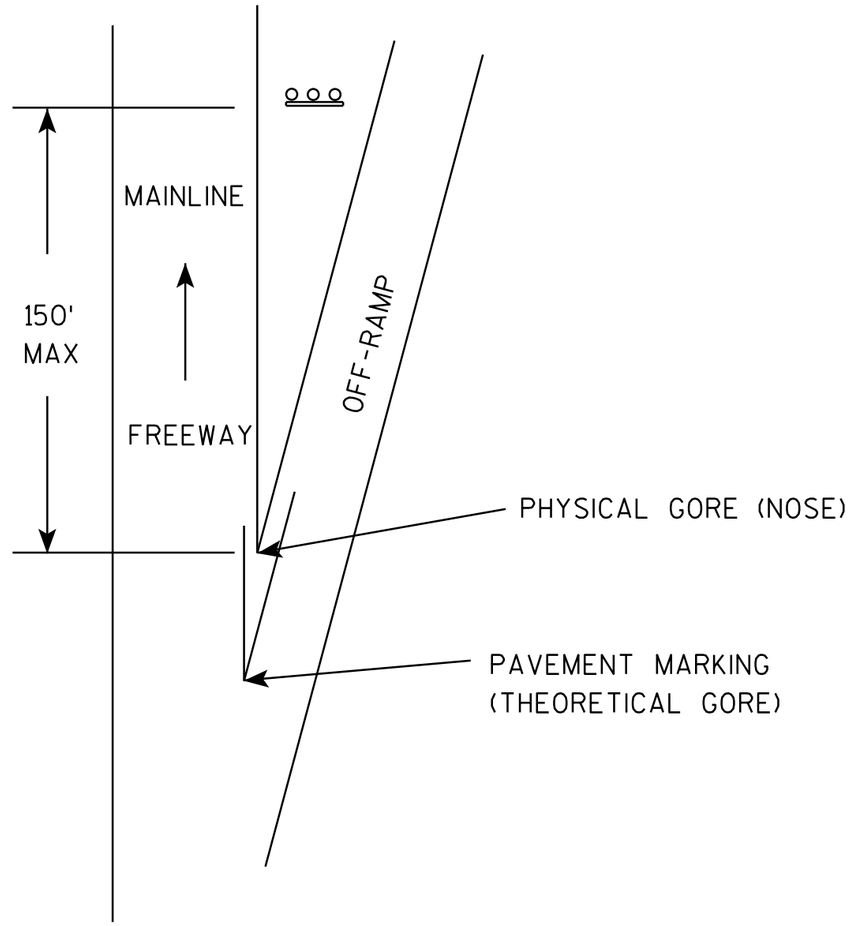
DRAWN BY	PLANS CK'D.

TYPICAL TYPE I SIGN INSTALLATION

SHEET A4-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 190	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

TYPICAL INSTALLATION OF TYPE II SIGNS ON WOOD POSTS IN GORE

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

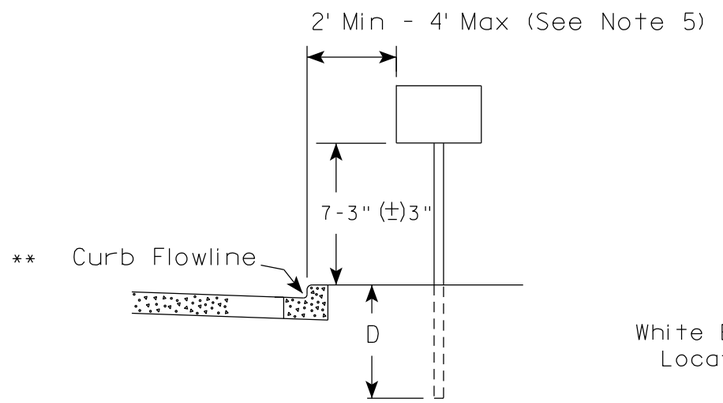
DATE 2/06/14 PLA... A4-2.3

PROJECT NO: | SHEET NO: E

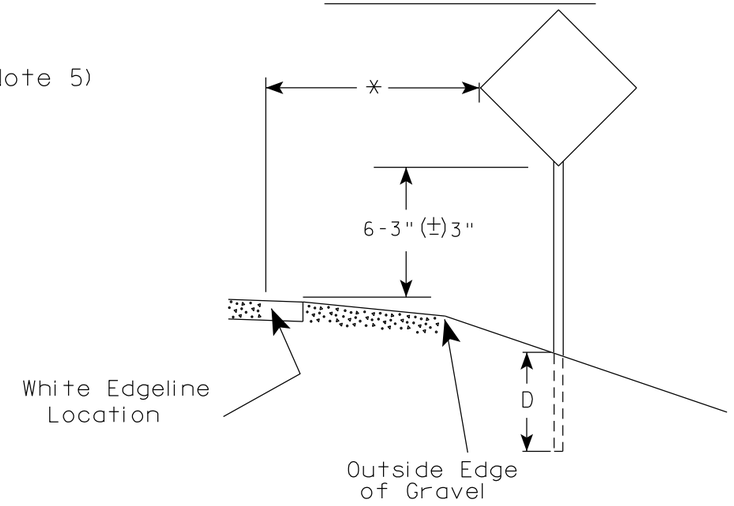
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A42.DGN PLOT DATE : 06-FEB-2014 12:36 PLOT BY : mscsja

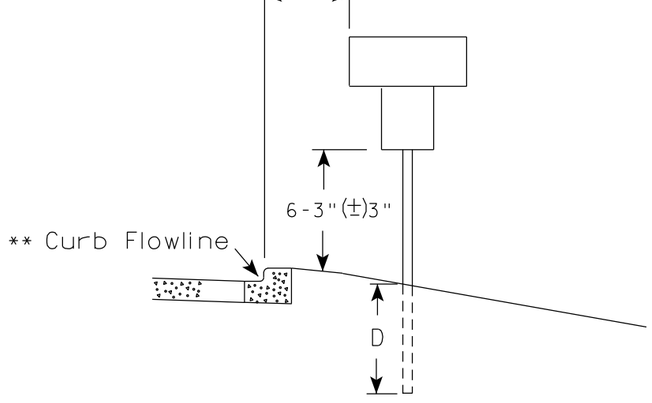
WISDOT/CADDS SHEET 42

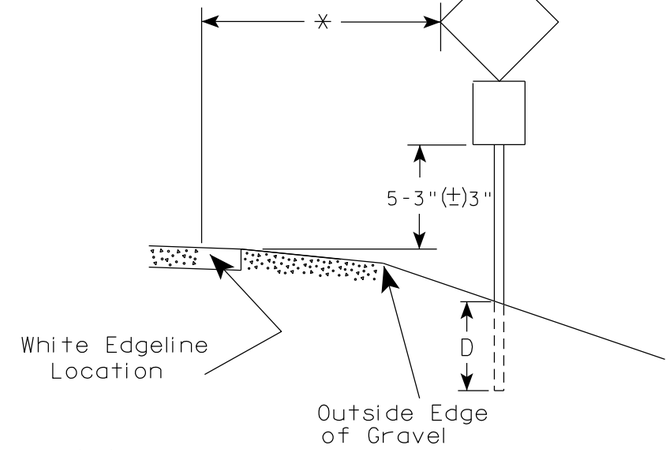
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

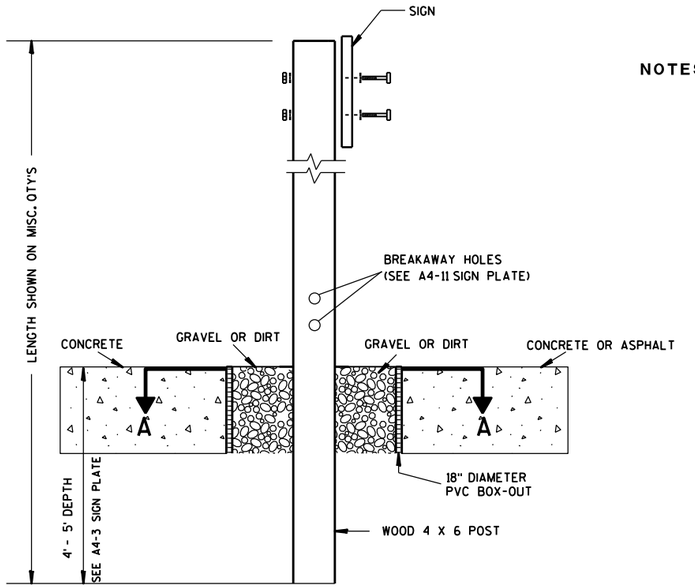
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

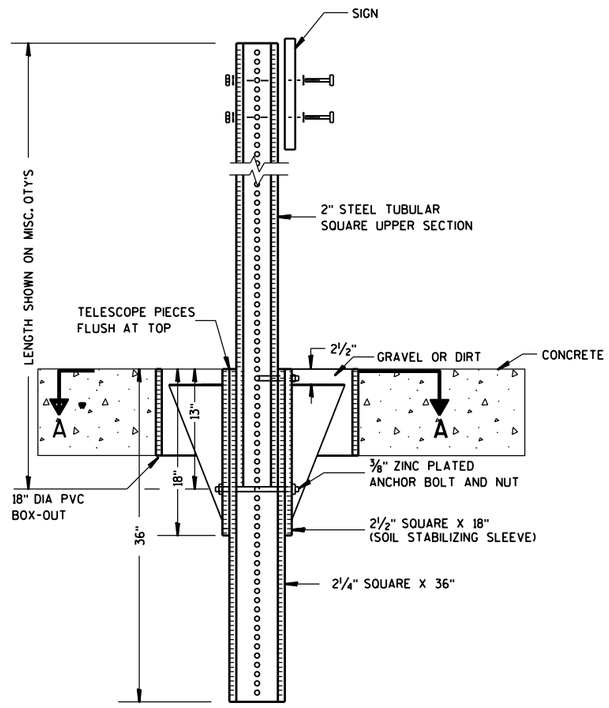
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 192	E



ELEVATION VIEW

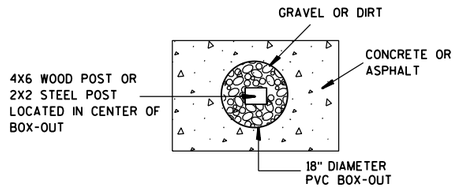
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

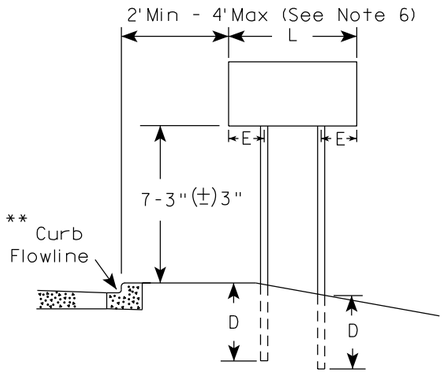
APPROVED Matthew R Rauch
for State Traffic Engineer

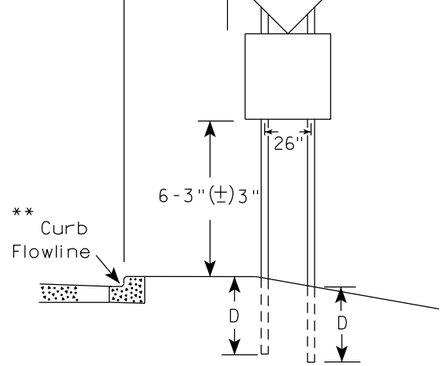
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

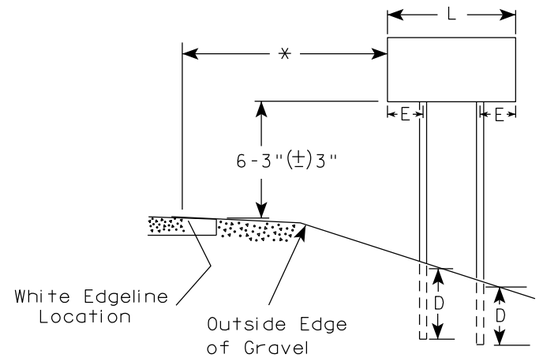
URBAN AREA

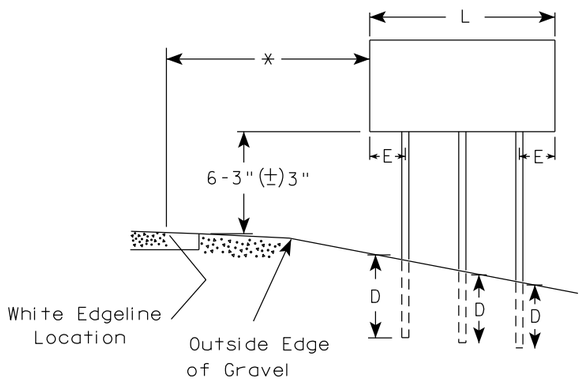


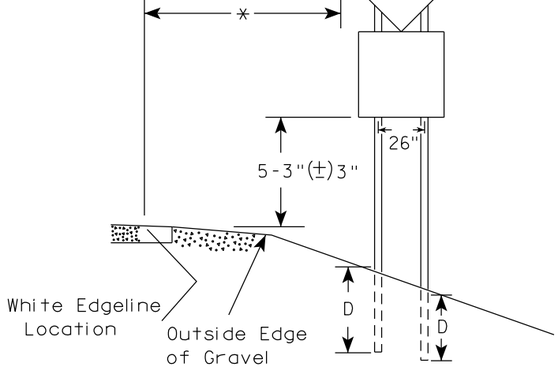


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

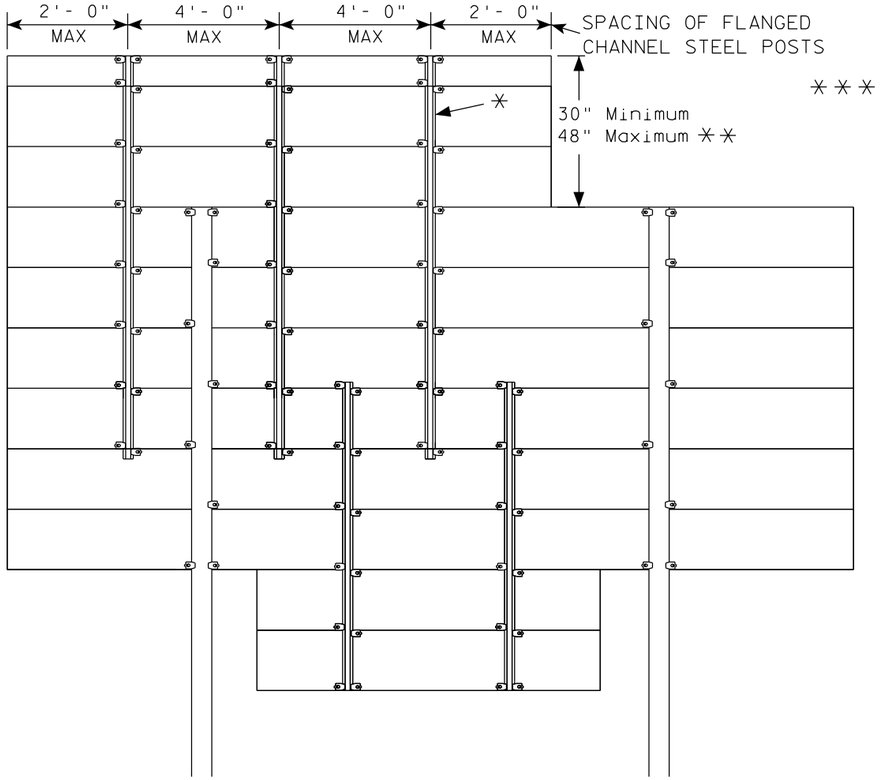
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 194	E

GROUND MOUNTED SIGN



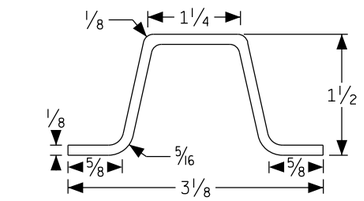
⁂=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

⁂⁂=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

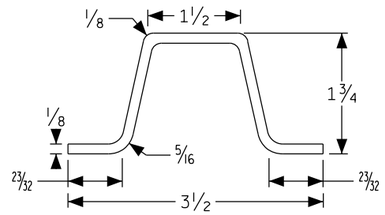
⁂⁂⁂ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

NOT TO SCALE

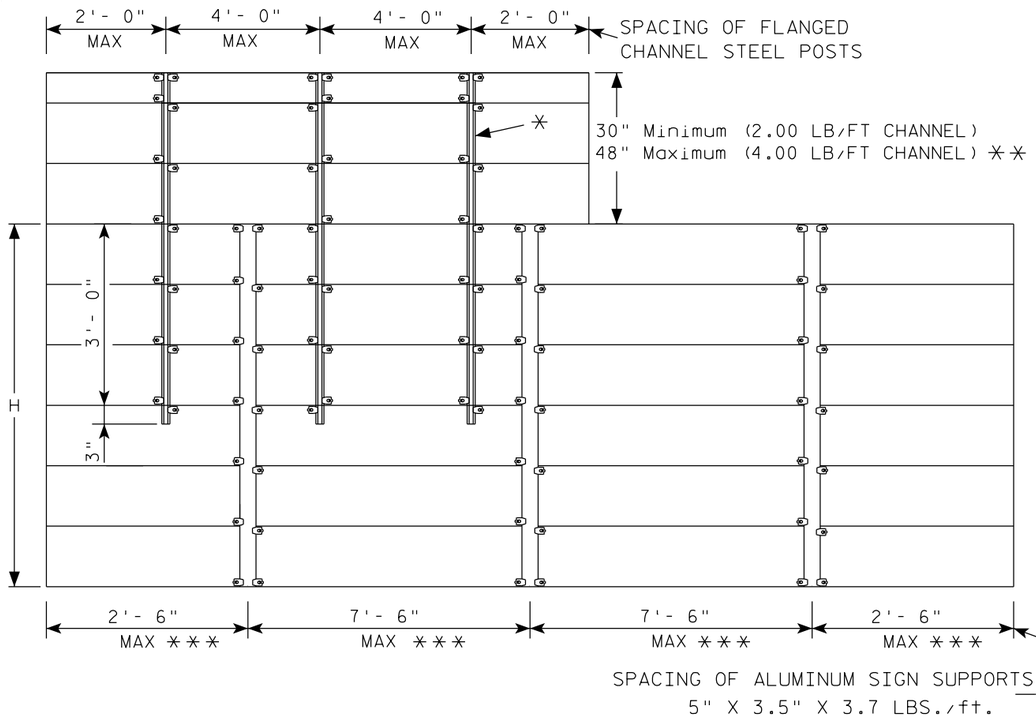


2.00 LB/FT CHANNEL



4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

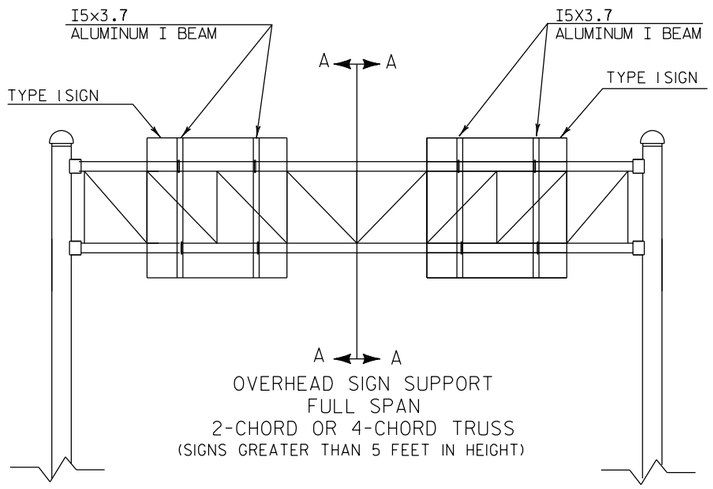
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

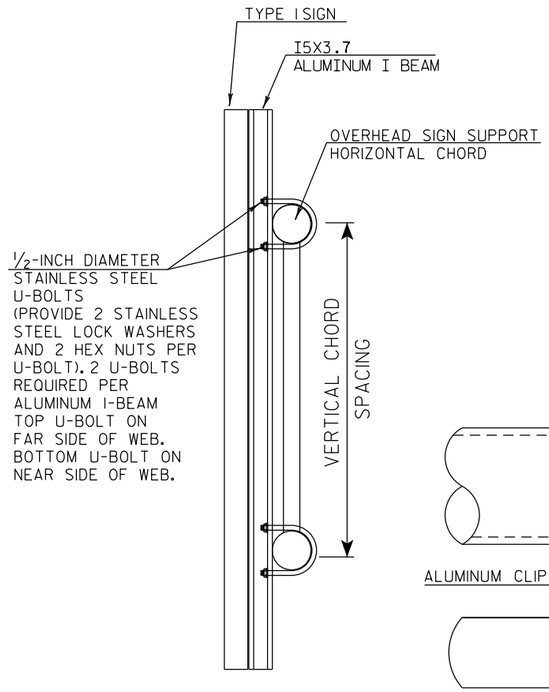
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

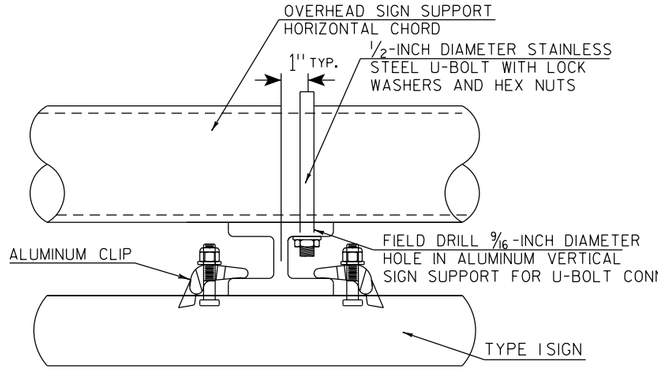
DATE 1/07/20 PLATE NO. A4-6.12



OVERHEAD SIGN SUPPORT
FULL SPAN
2-CHORD OR 4-CHORD TRUSS
(SIGNS GREATER THAN 5 FEET IN HEIGHT)



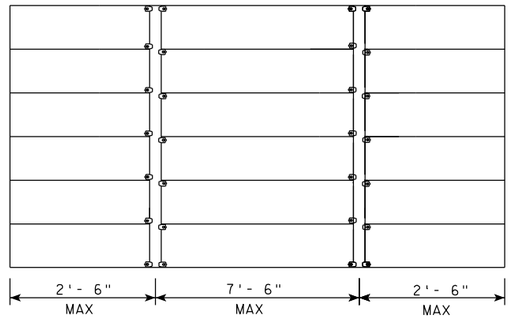
CUT SECTION A-A



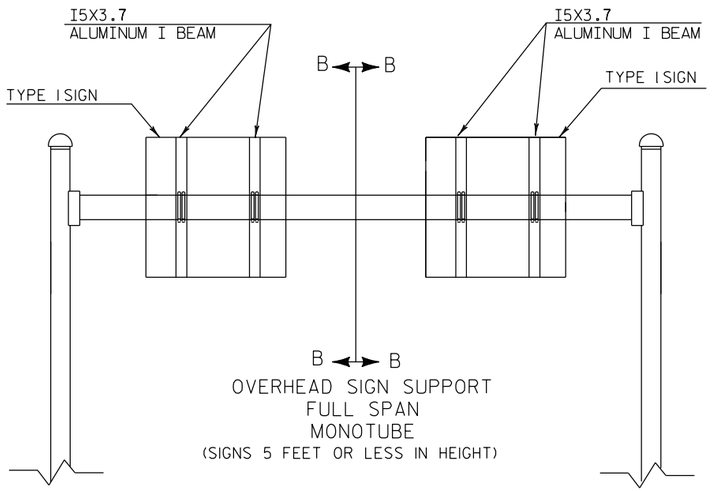
TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW

GENERAL NOTES

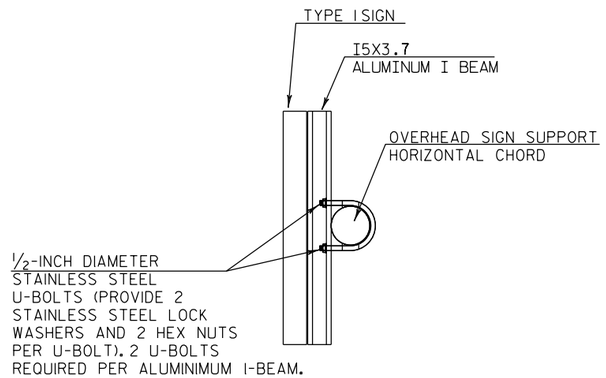
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



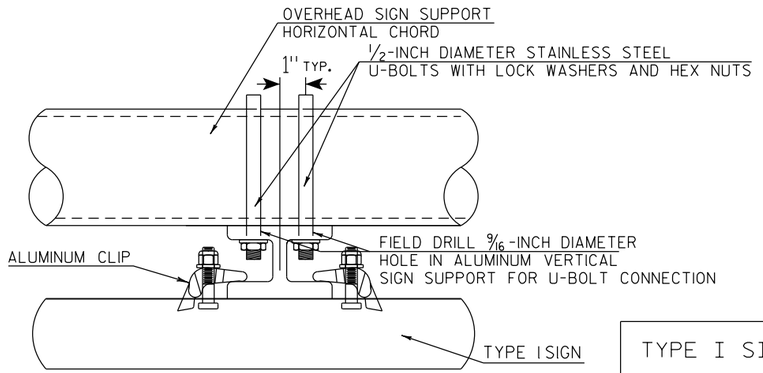
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
MONOTUBE
(SIGNS 5 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW

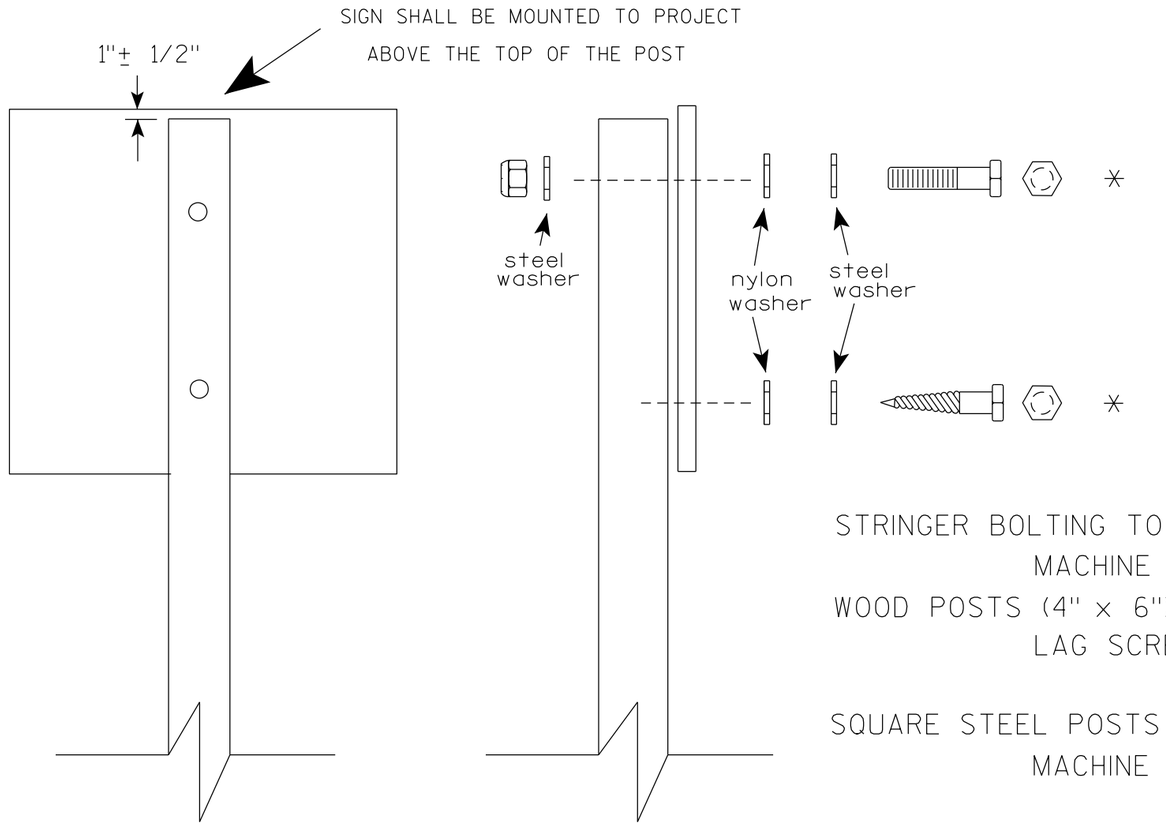
TYPE I SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-7A.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 196	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

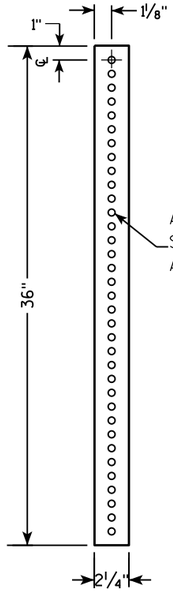
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

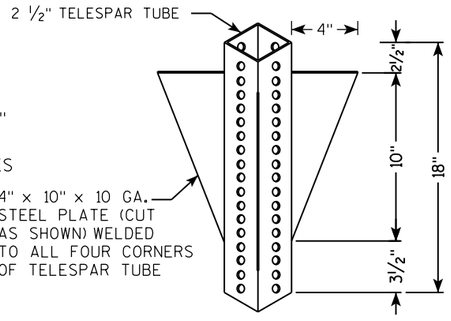
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

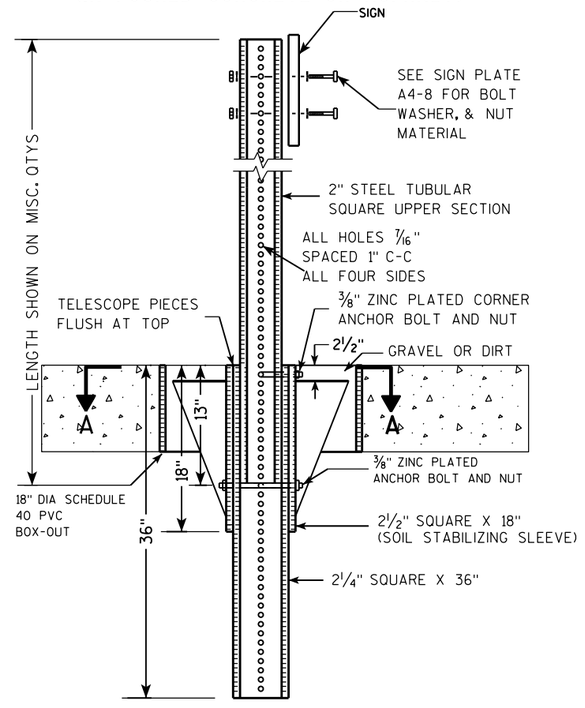
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



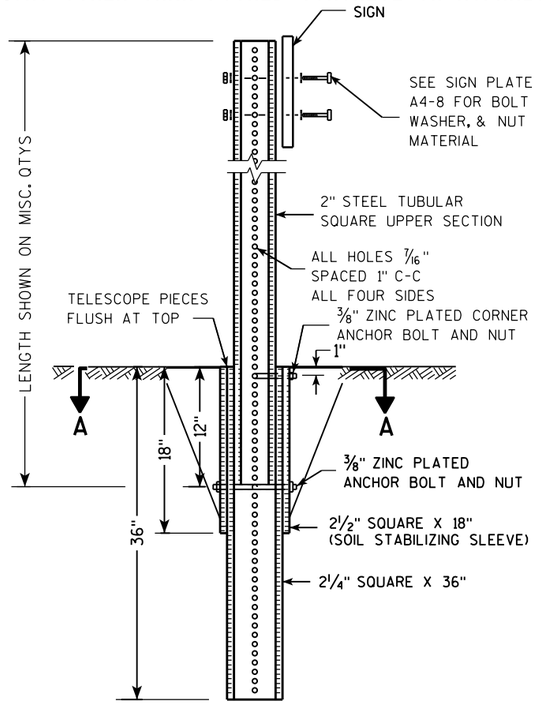
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

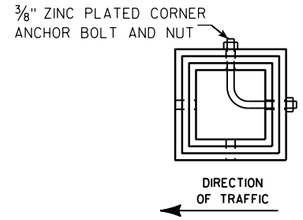


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

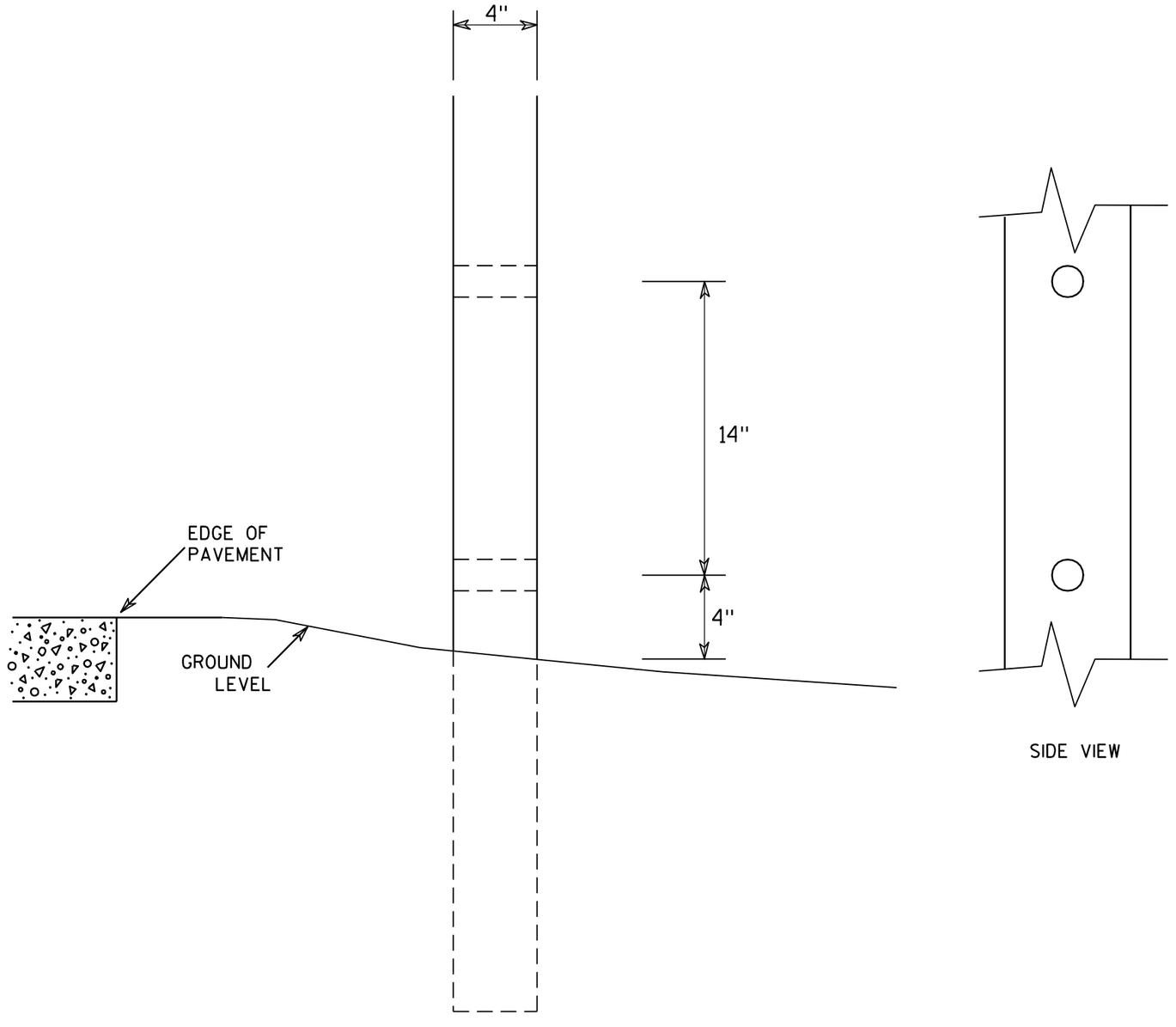
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

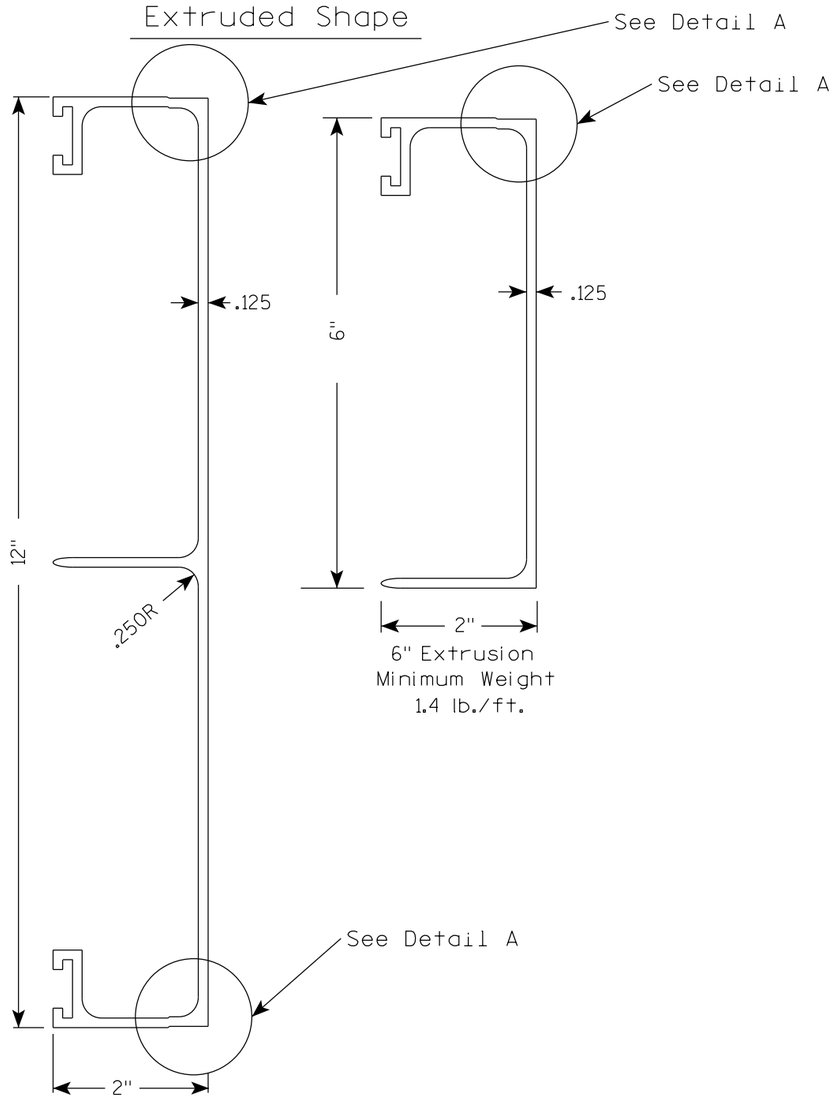
WISCONSIN DEPT OF TRANSPORTATION

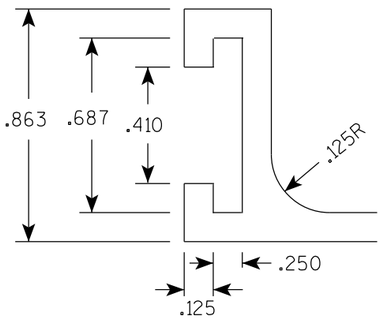
APPROVED Chester J Spang for State Traffic Engineer

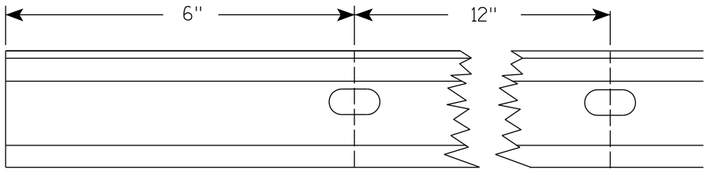
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 199	E

Extruded Shape







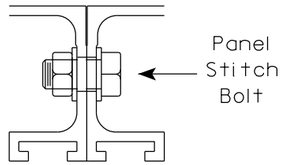
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

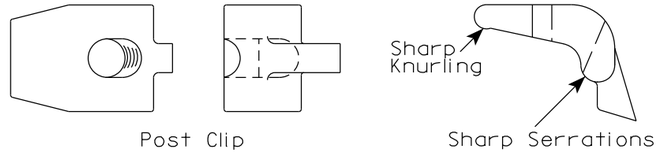
The hardware includes:

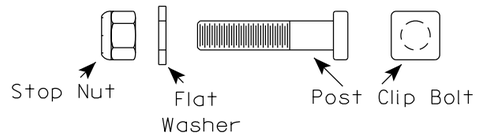
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

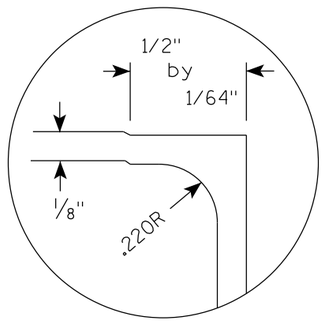
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

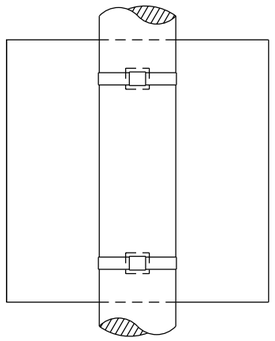
DATE 1/07/20 PLATE NO. A5-2.10

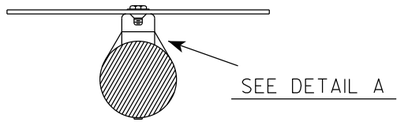
PROJECT NO:

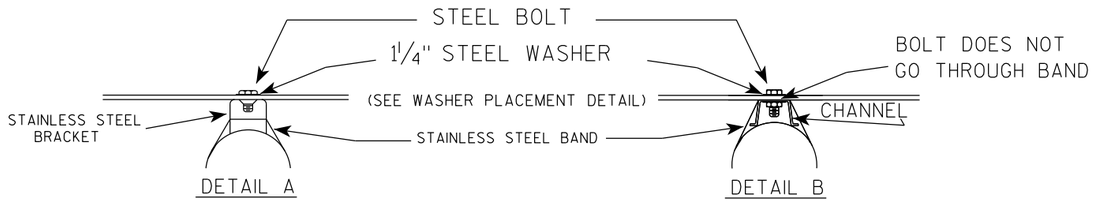
SHEET NO: 200 E

BANDING

SINGLE SIGN



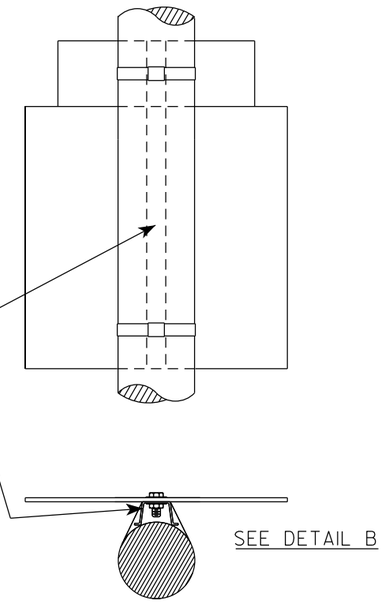




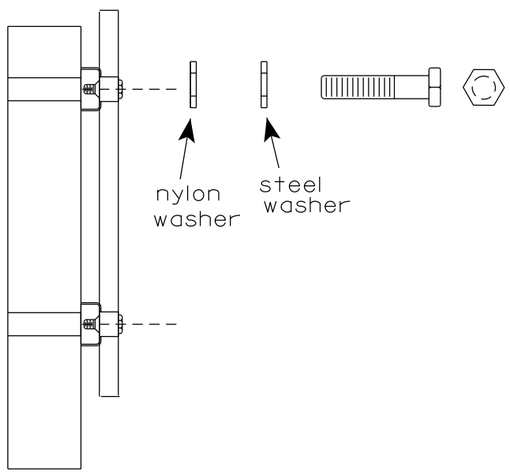
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

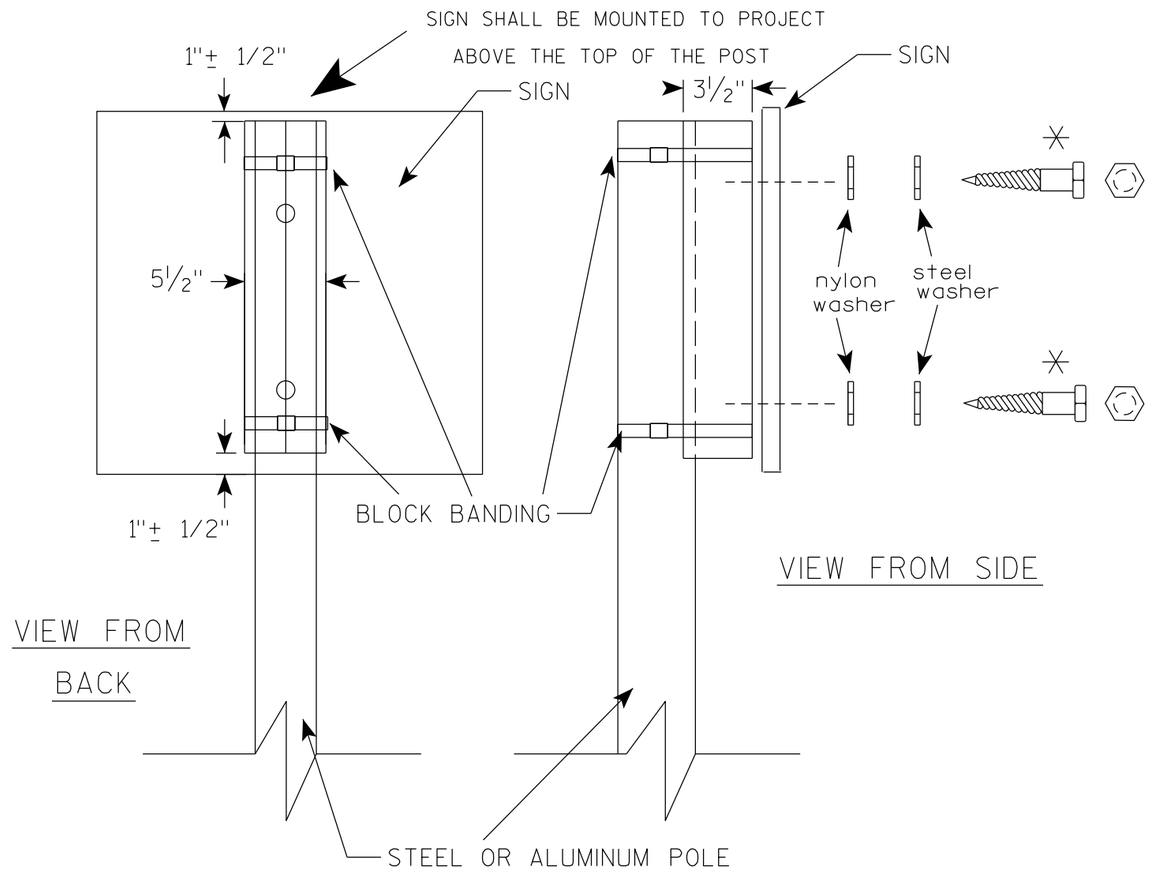
WISCONSIN DEPT OF TRANSPORTATION

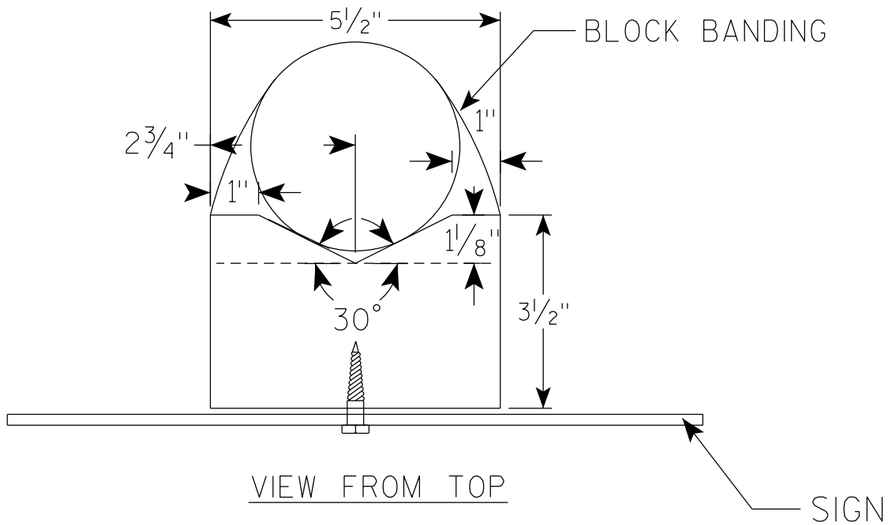
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 201	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

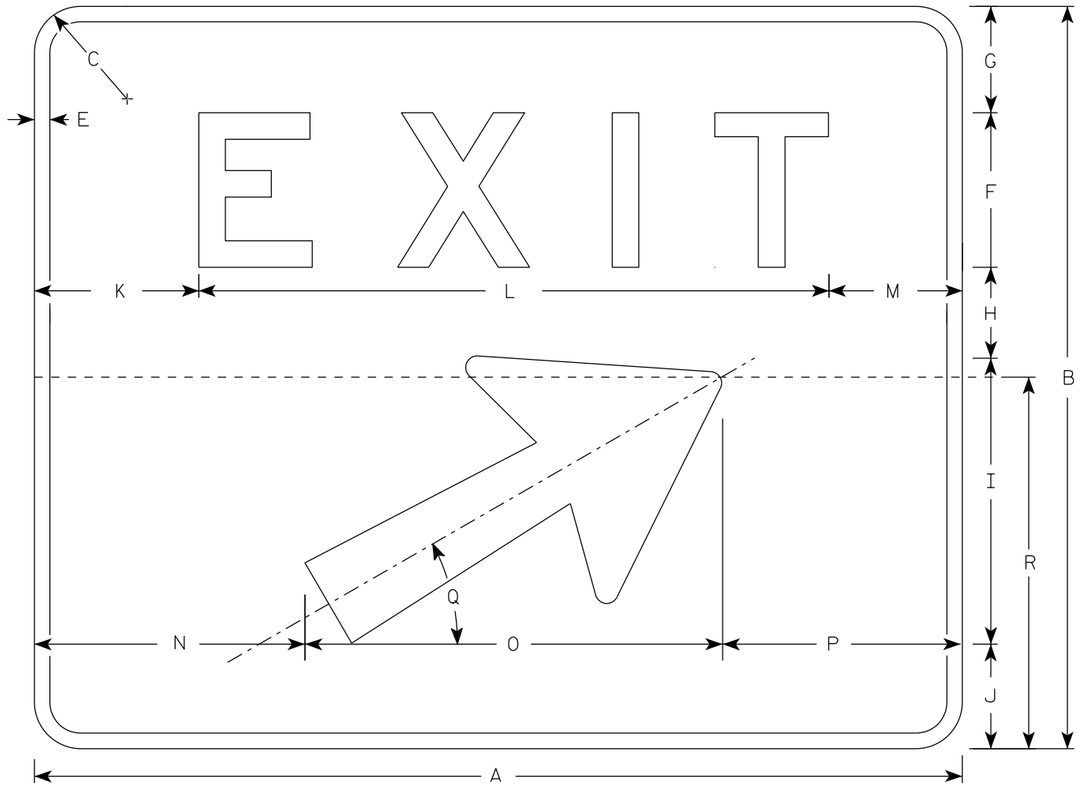
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 202 E



E5-1

NOTES

1. Sign is Type II - Type H reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Sign shall be split into two seperate pieces as shown on the detail by the dashed line (----------) for sizes 4 & 5.
5. Arrow is Type "A" from sign plate A1-1.
6. As per the Standard Spec's, this sign shall not have a vertical joint.
7. Size 3 E5-1 shall only be used in a Work Zone application with a Temporary Sign Support

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3	48	48	3		1	10	6 7/8	5 7/8	18 1/2	6 3/4	8 1/2	31 1/8	8 3/8	11 1/2	27	9 1/2	30°	30									16.0
4	60	48	3		1	10	6 7/8	5 7/8	18 1/2	6 3/4	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°	30									20.0
5	72	60	3		1	12	9 3/4	10	18 1/2	9 3/4	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°	30									30.0

STANDARD SIGN

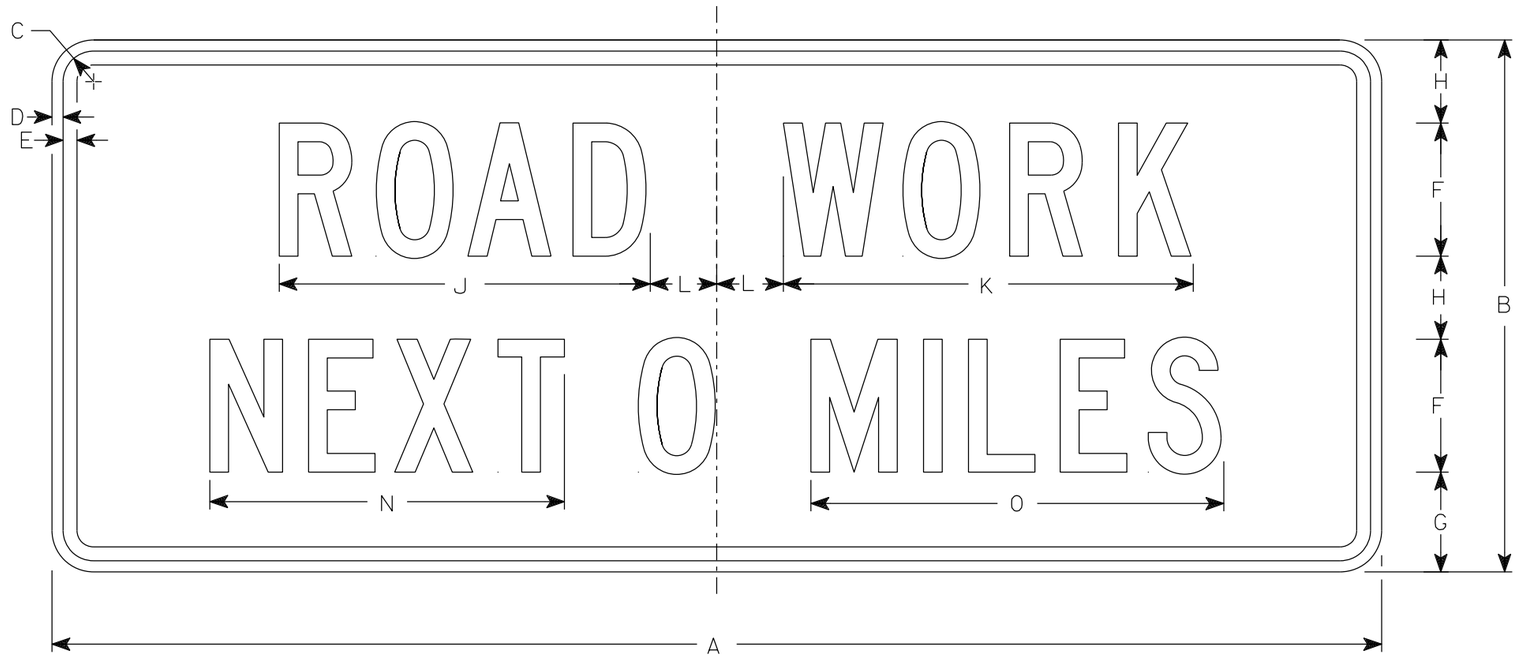
E5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. E5-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 203 | E



G20-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
2M	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
3	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
4	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
5	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0

STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 204	E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E

G20-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

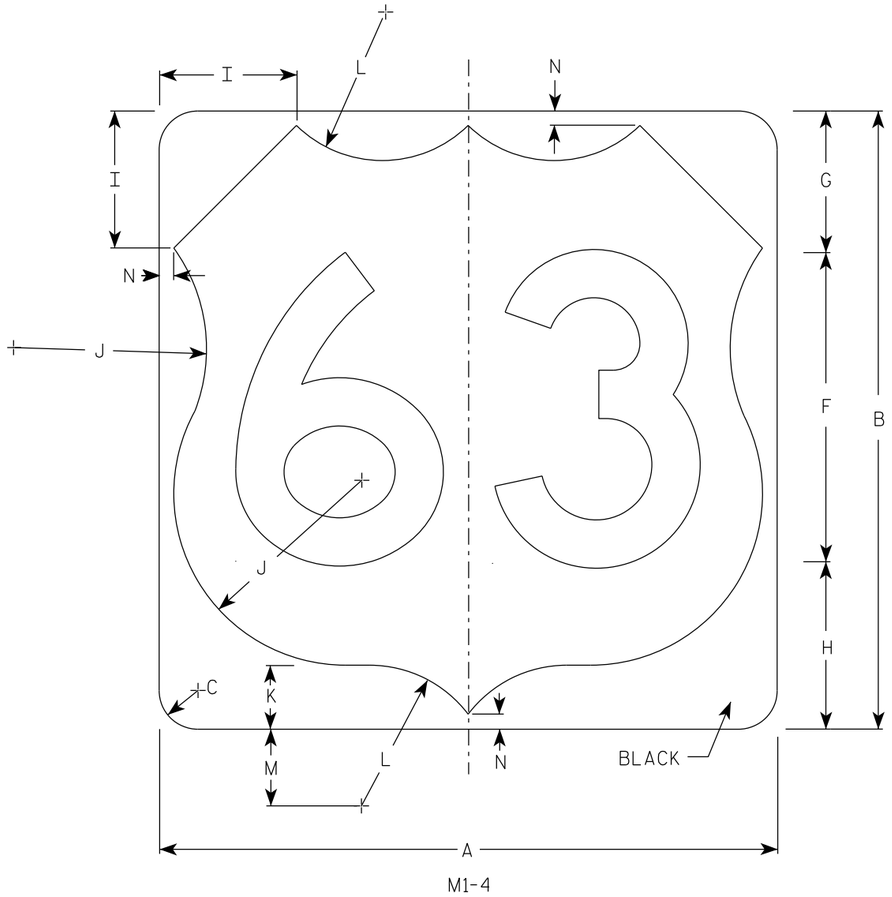
DATE 5/07/15 PLATE NO G20-61.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

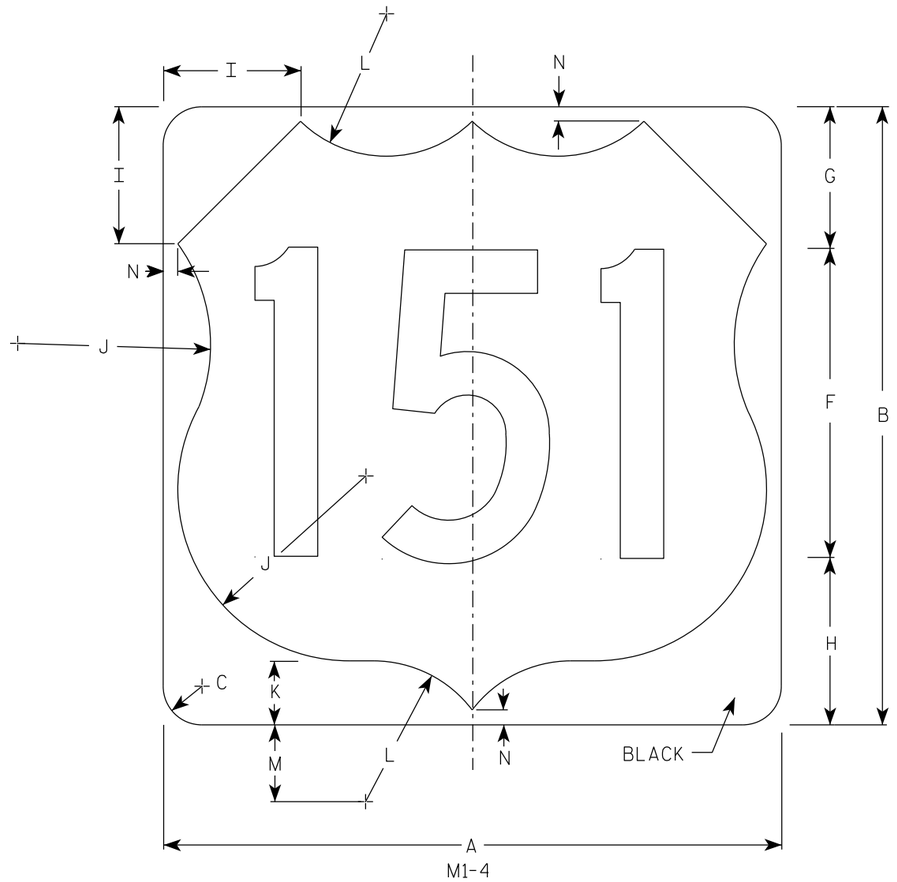
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



M1-4



M1-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0
2M	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0
3	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0
4	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0
5	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0

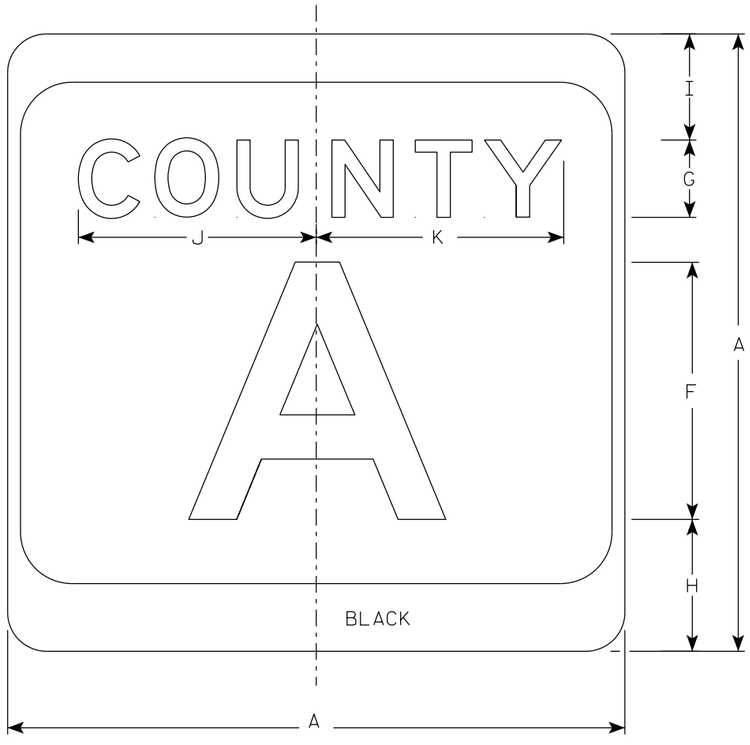
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

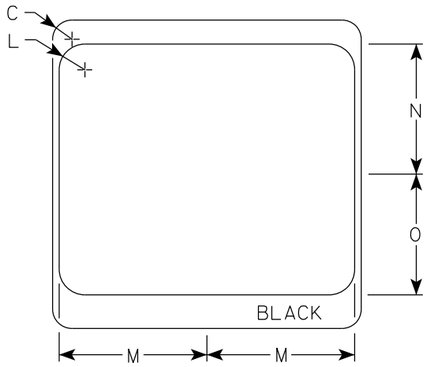
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 206 E

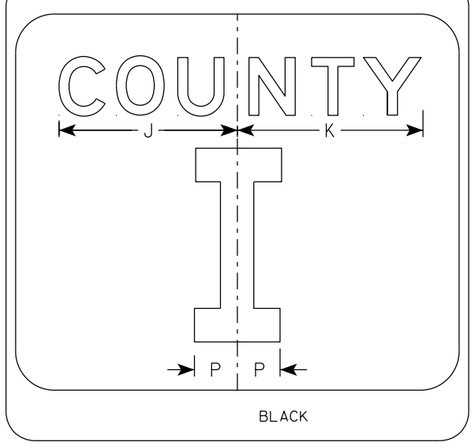


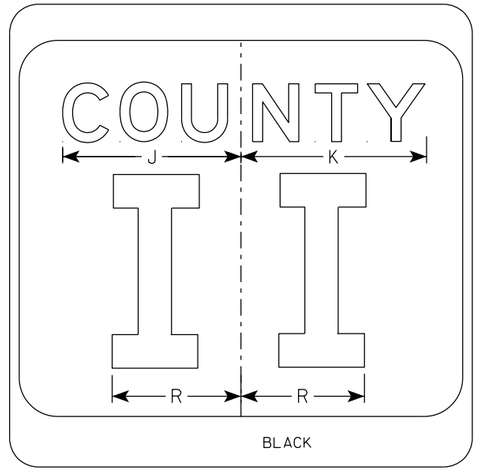
M1-5A



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - see Note 4
4. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
5. Substitute appropriate letters & optically center to achieve proper balance.





SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
2M	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

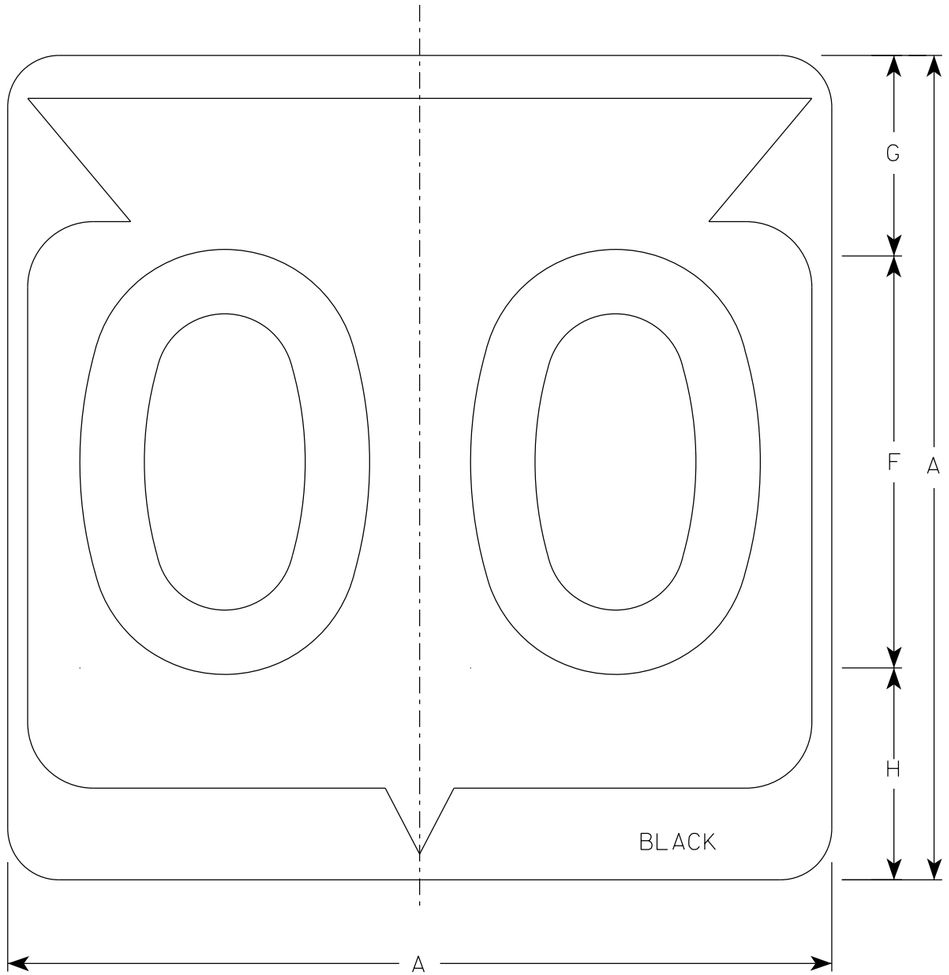
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

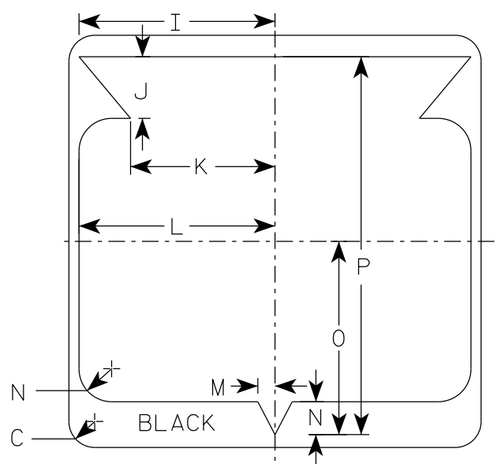
7



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

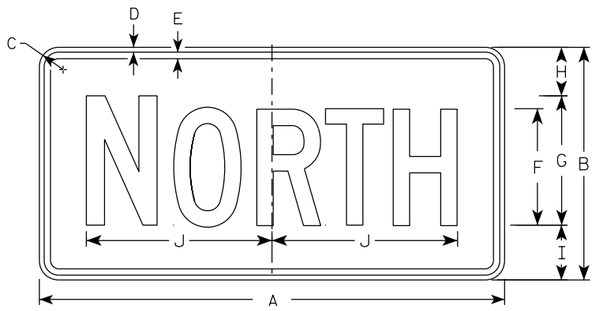
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

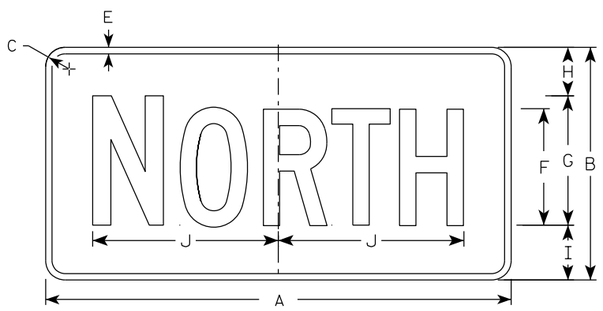
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

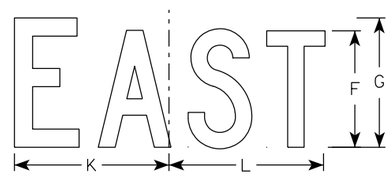
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 208	E



M3-1
MM3-1
MP3-1

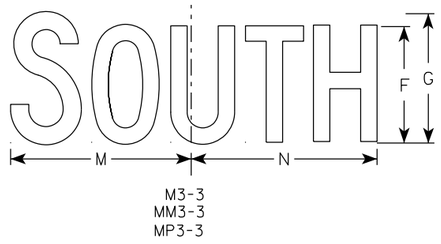


MB3-1
MK3-1
MN3-1

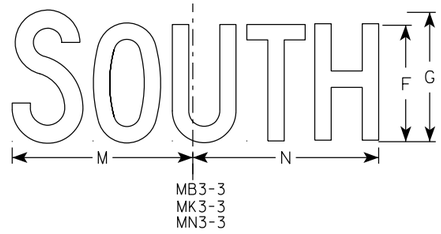


M3-2
MM3-2
MP3-2

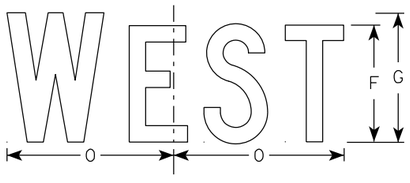
MB3-2
MK3-2
MN3-2



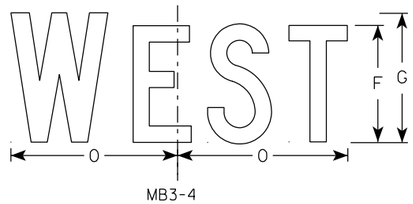
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

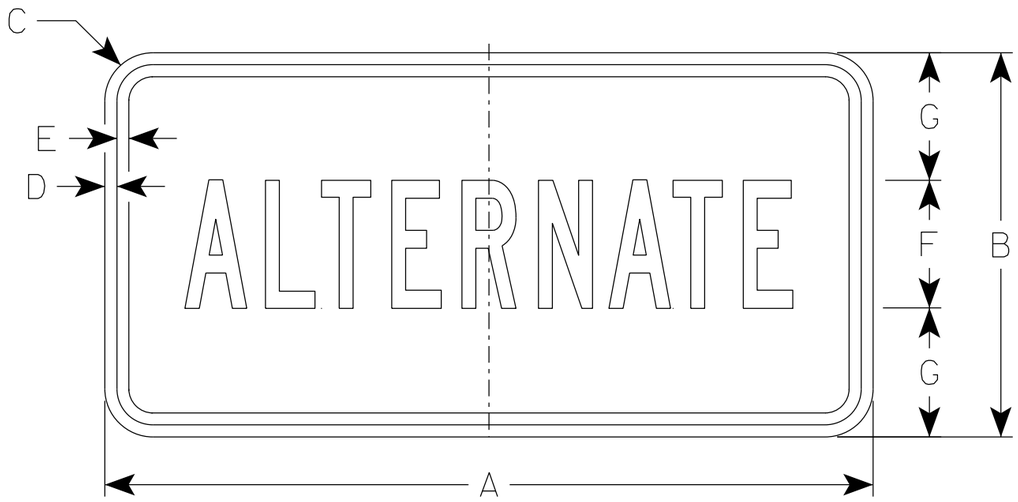
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 209 | E



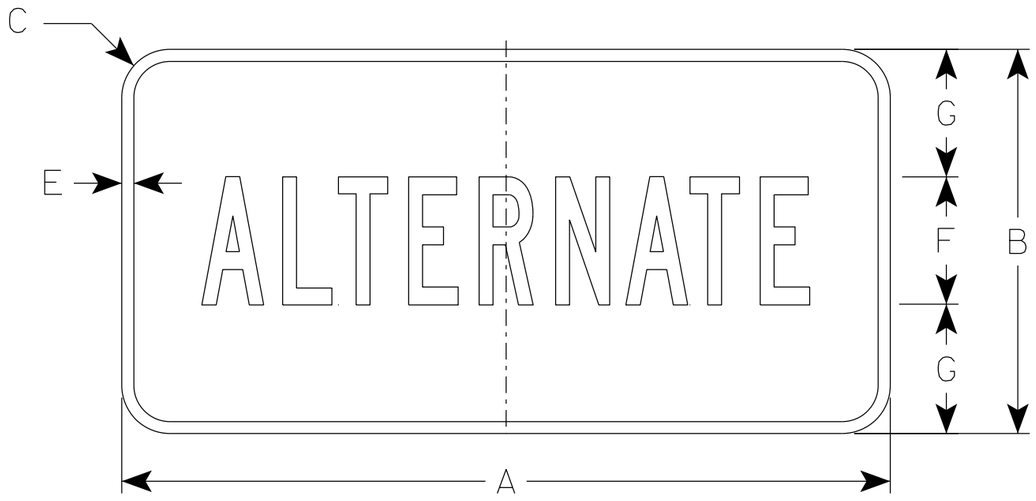
M4-1
MO4-1

NOTES

1. Sign is Type II - Type H Reflective except as Shown
2. Color:
   Background - See Note 5
   Message - See note 5
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-1 Background - White
   Message - Black

   MB4-1 Background - Blue
   Message - White

   MO4-1 Background - Orange - Type F Reflective
   Message - Black



MB4-1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	4	4	9 3/4	9 1/2																		2.00
2M	24	12	1 1/2	3/8	3/8	4	4	9 3/4	9 1/2																		2.00
3	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5

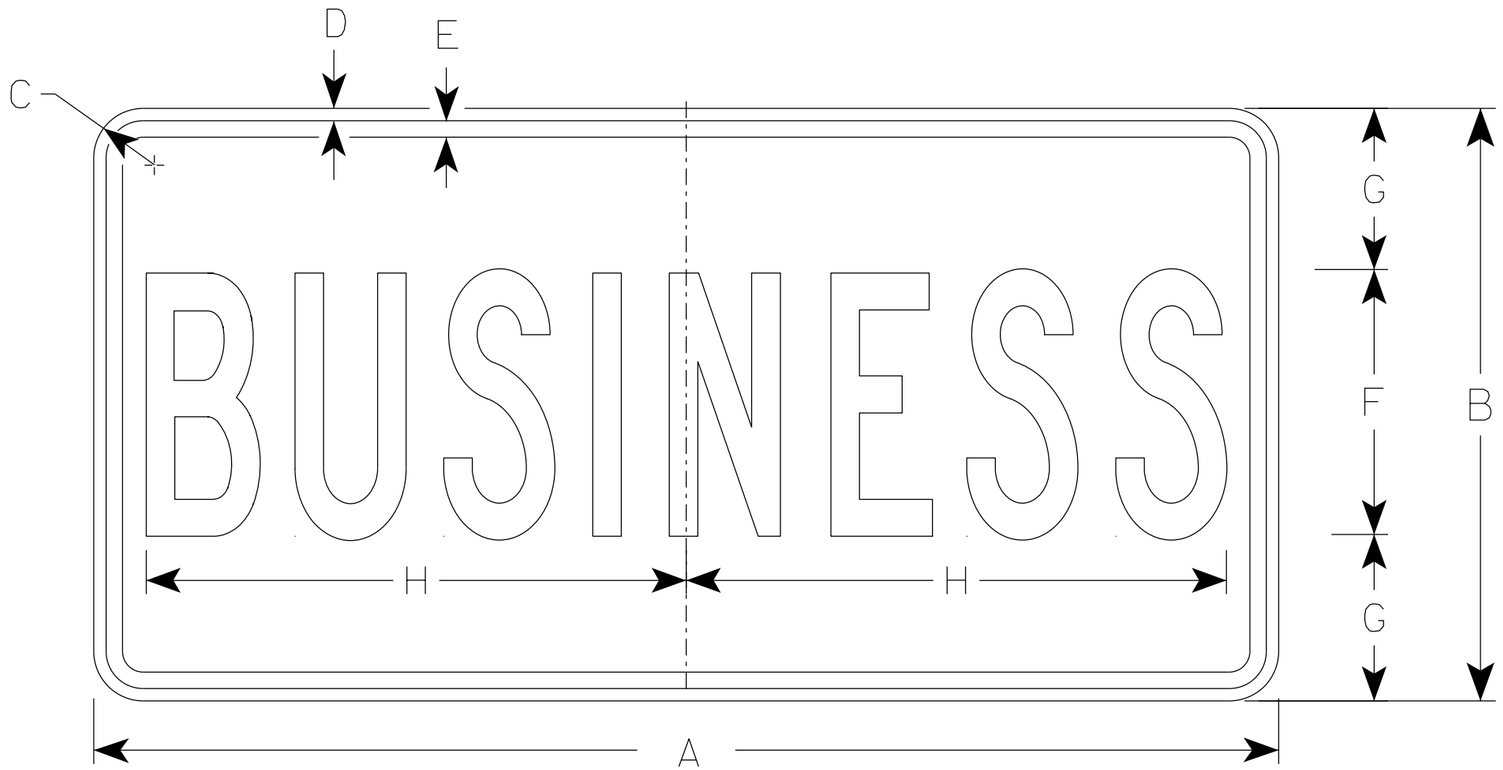
STANDARD SIGN
M4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 210 | E



M4-3

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	5	3 1/2	9 5/8																			2.0
2M	24	12	1 1/2	3/8	3/8	5	3 1/2	9 5/8																			2.0
3	36	18	1 1/2	3/8	1/2	8	5	16 3/8																			4.5
4	36	18	1 1/2	3/8	1/2	8	5	16 3/8																			4.5
5	36	18	1 1/2	3/8	1/2	8	5	16 3/8																			4.5

STANDARD SIGN

M4-3

WISCONSIN DEPT OF TRANSPORTATION

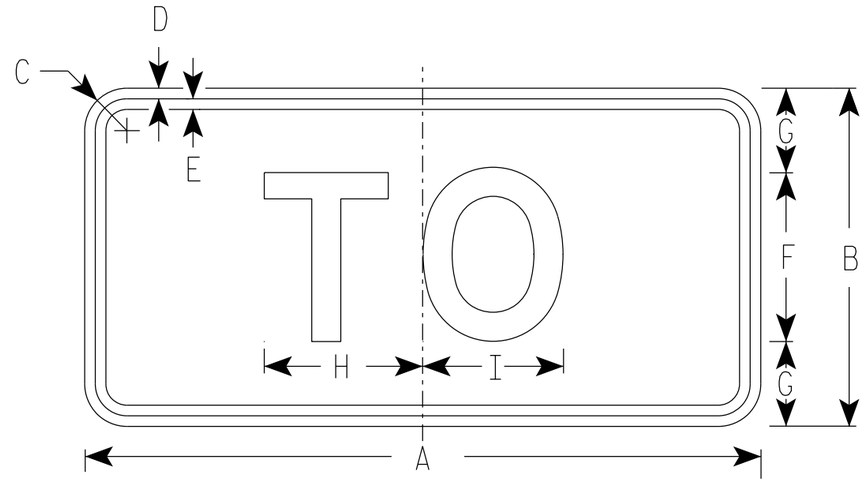
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-3.7

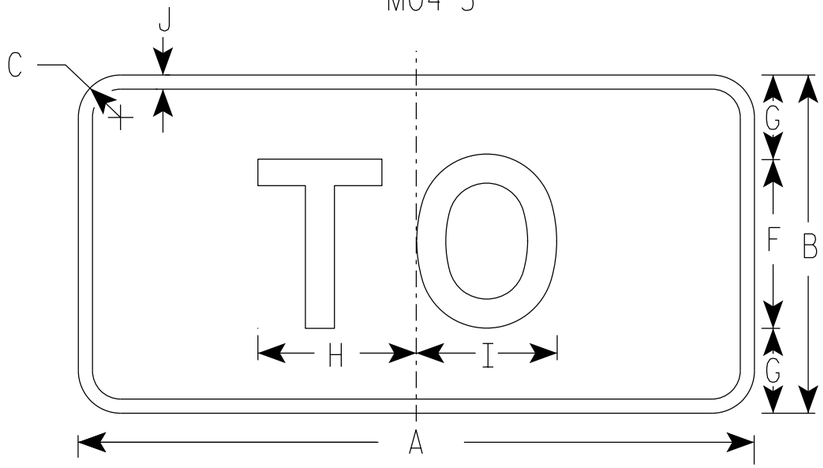
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M43.dgn PLOT DATE : 21-MARCH 2023 1:34 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7



M4-5
MM4-5
MP4-5
MO4-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black
   MB4-5 Background - Blue
   Message - White
   MK4-5 Background - Green
   Message - White
   MM4-5 Background - White
   Message - Green
   MN4-5 Background - Brown
   Message - White
   MP4-5 Background - White
   Message - Blue
   MO4-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	3	5 3/8	5 1/4	1/2																	2.00
2M	24	12	1 1/2	3/8	3/8	6	3	5 3/8	5 1/4	1/2																	2.00
3	36	18	1 1/2	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2																	4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2																	4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2																	4.5

STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

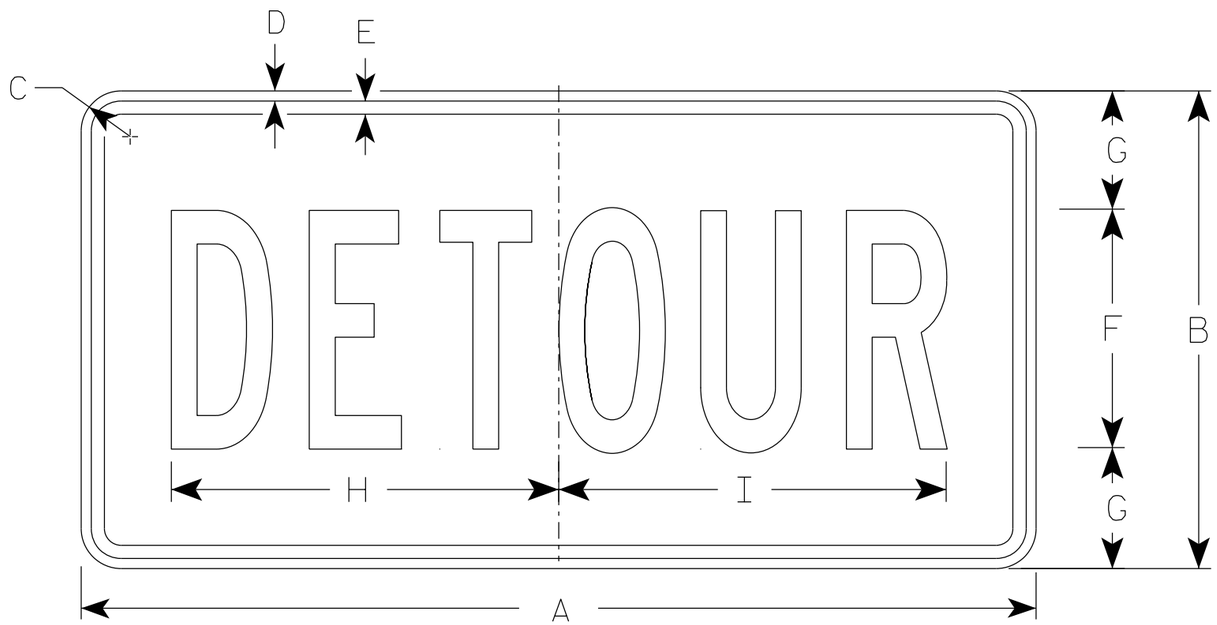
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 212 E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4-8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

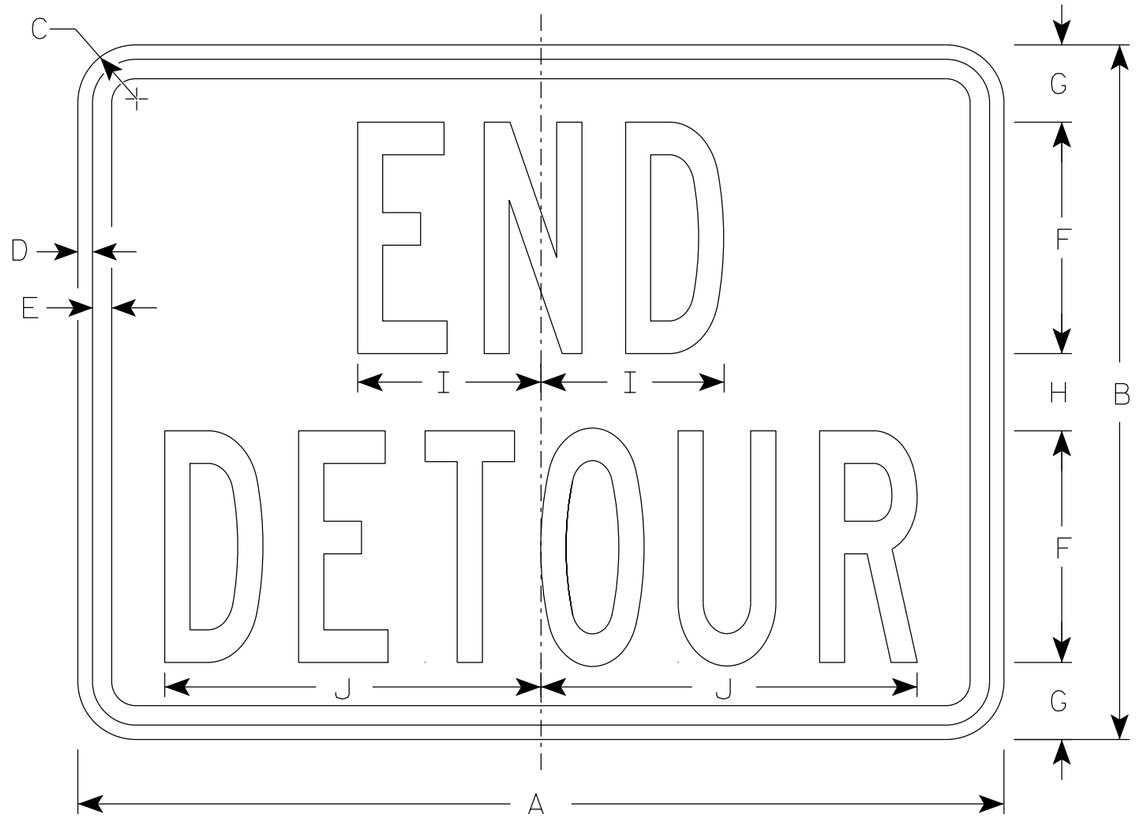
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 213	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

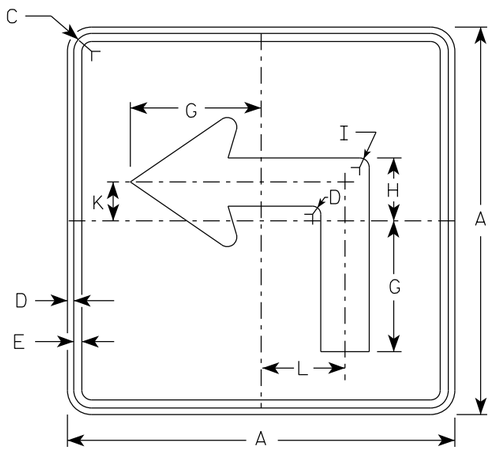
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

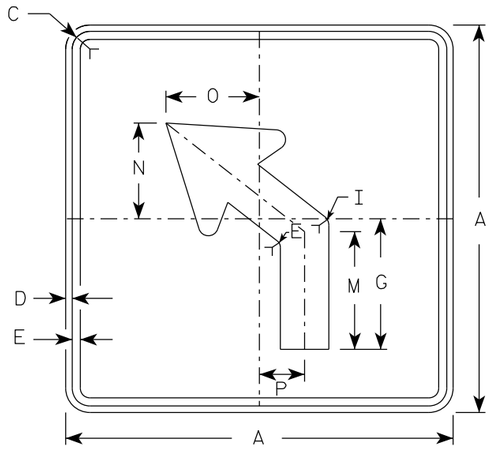
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

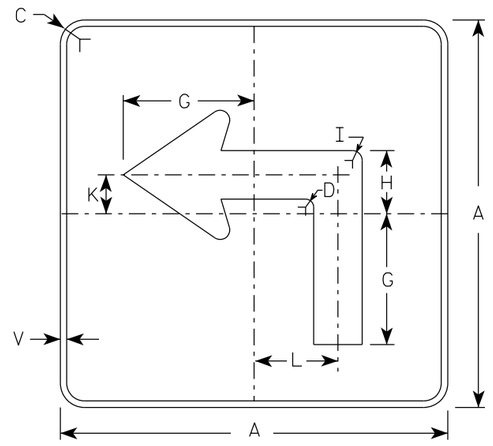
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 214 | E



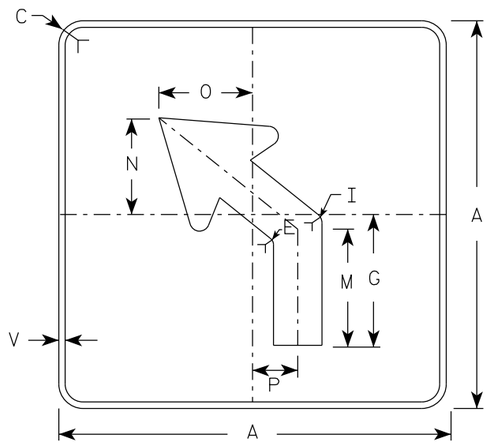
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

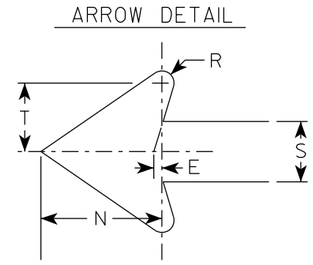


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

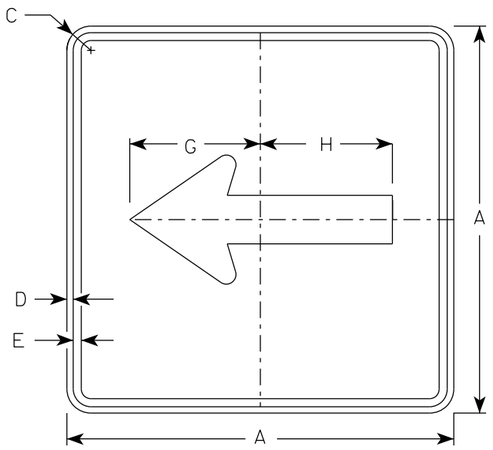
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

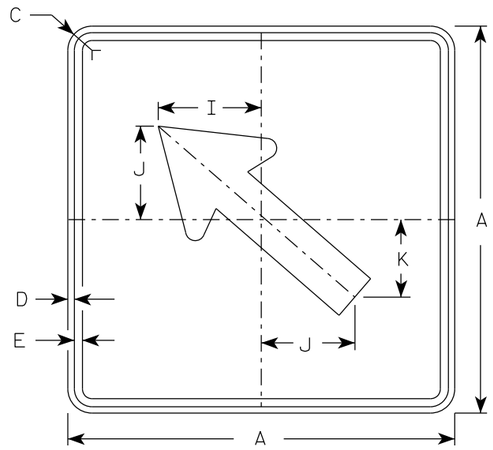
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

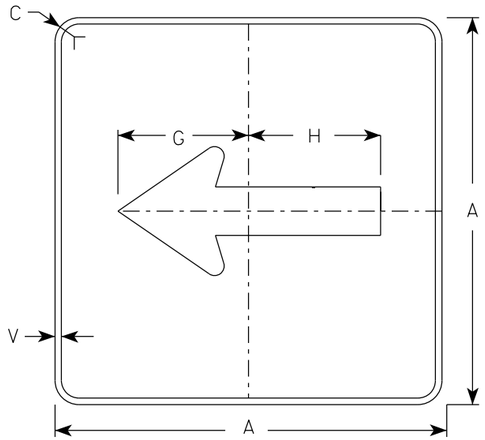
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 215 | E



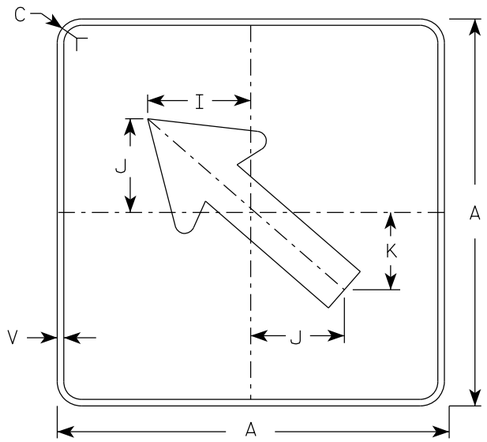
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

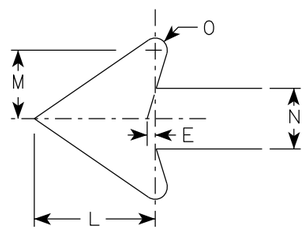


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

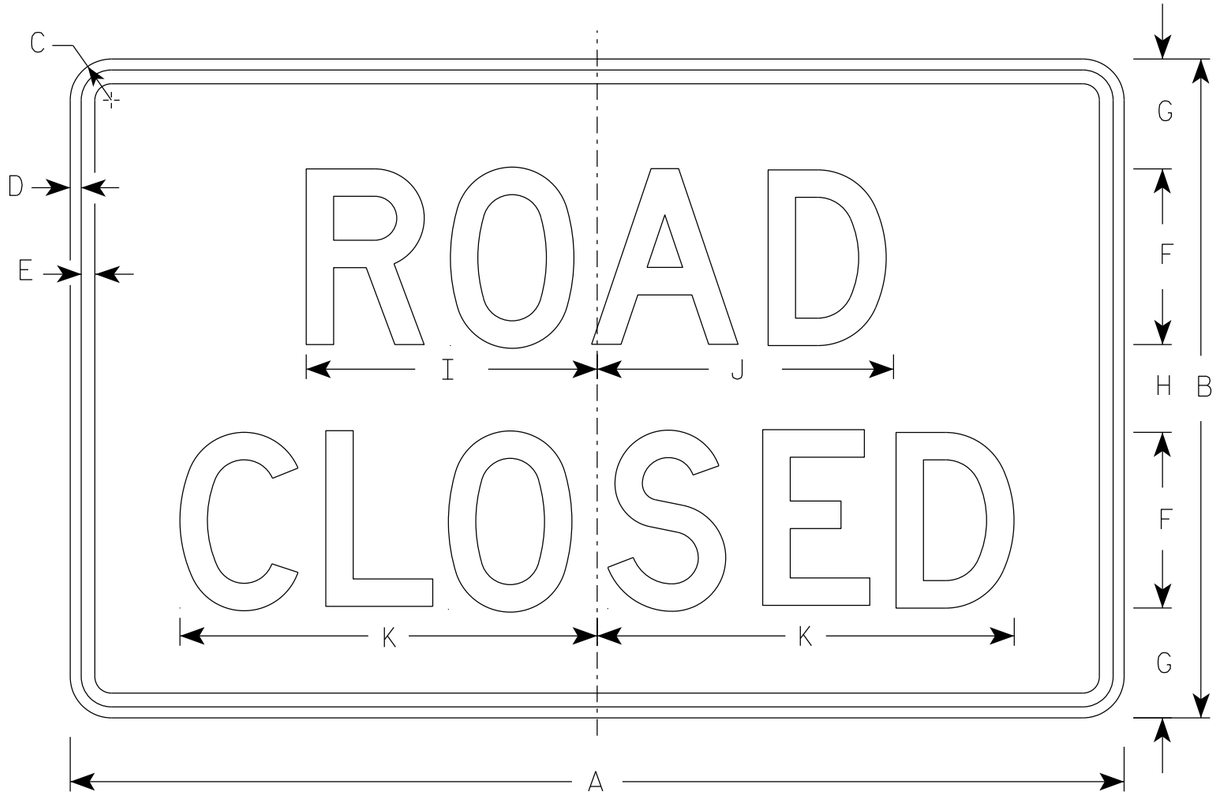
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 216 | E

7

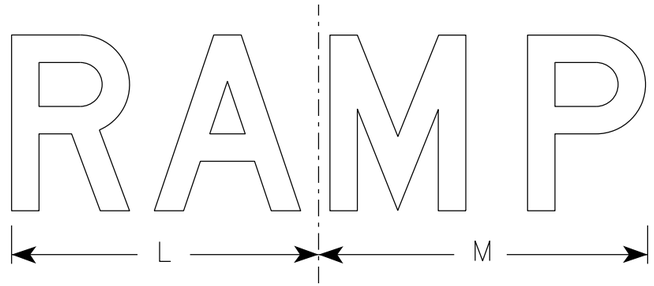
7



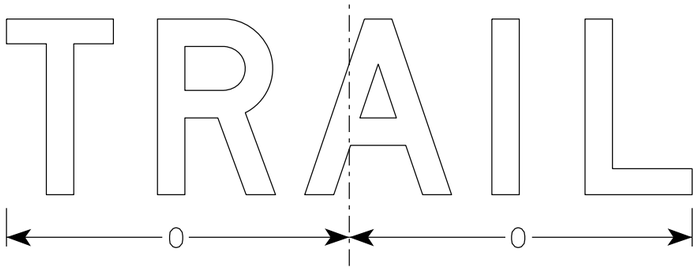
R11-2

NOTES

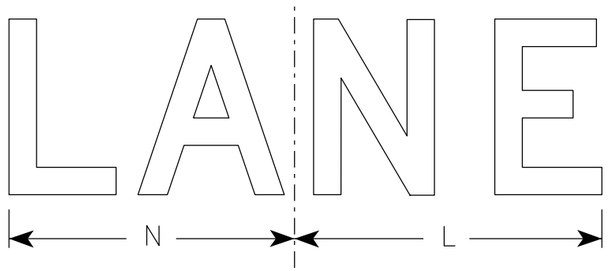
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

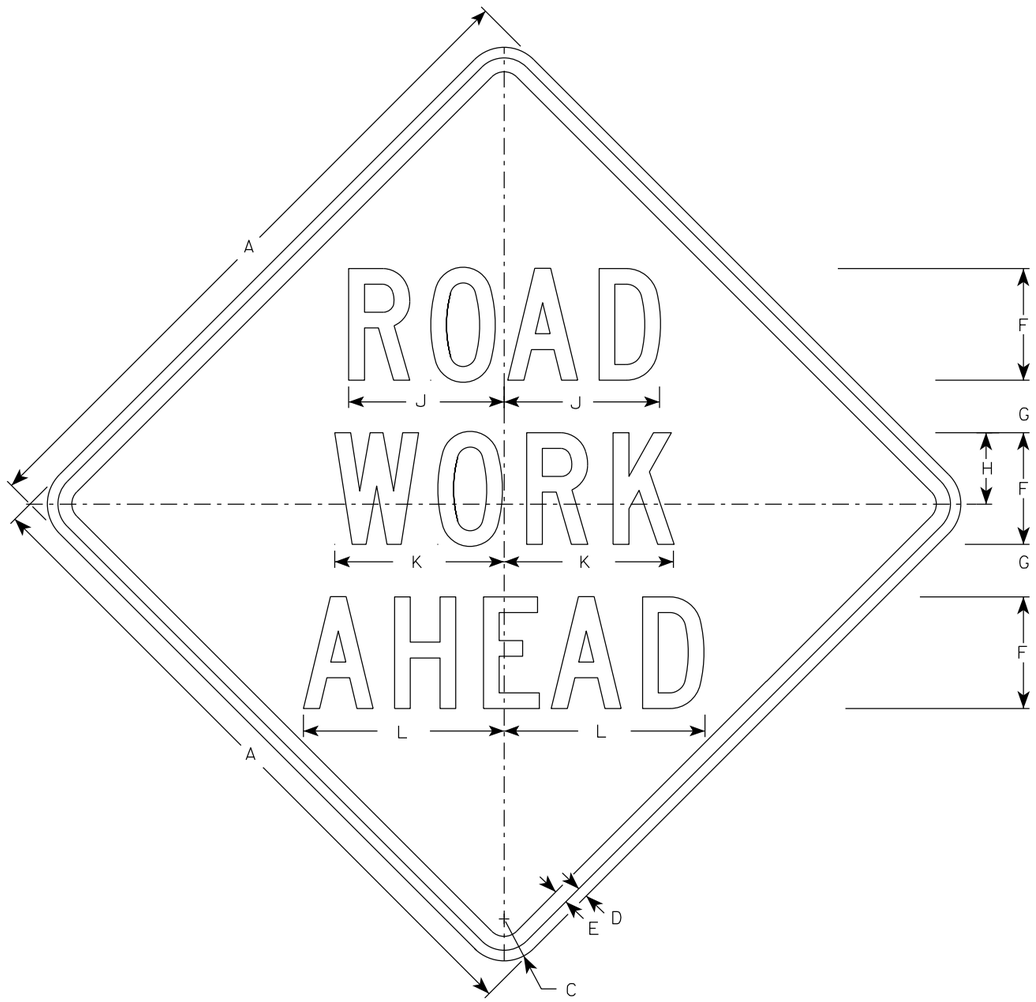
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

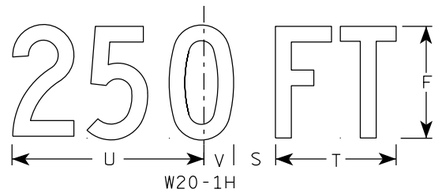
DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 217	E

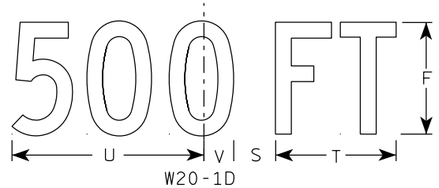
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 5-FEB 2024 2:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W20-1A

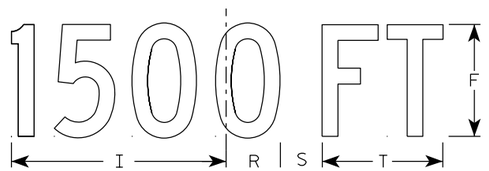


W20-1H

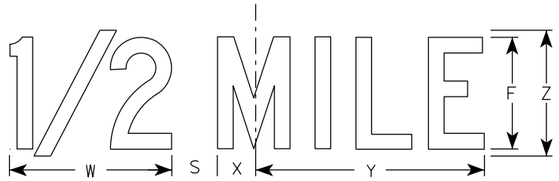


W20-1D

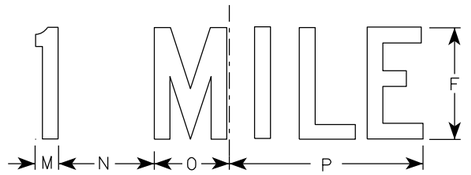
W20-1C



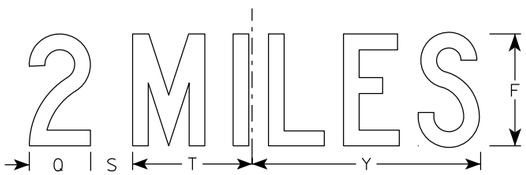
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

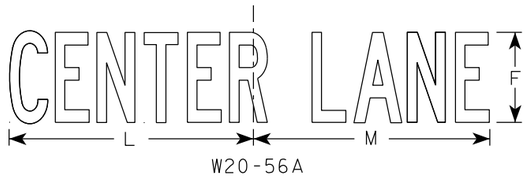
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

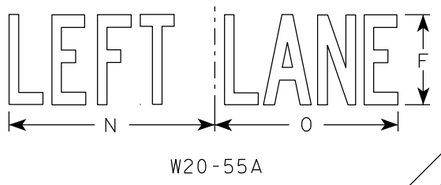
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

SHEET NO: 218 E

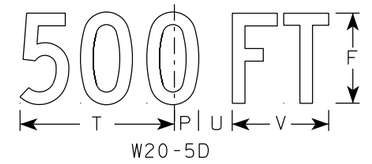


W20-56A

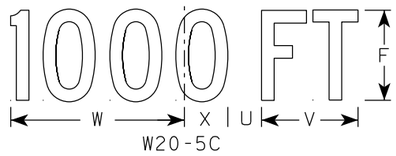


W20-55A

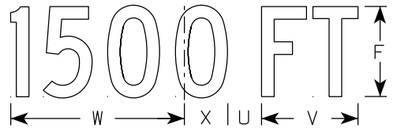
W20-5A



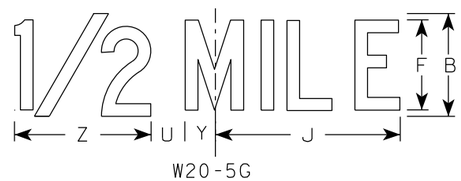
W20-5D



W20-5C



W20-5B



W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	2 1/4	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

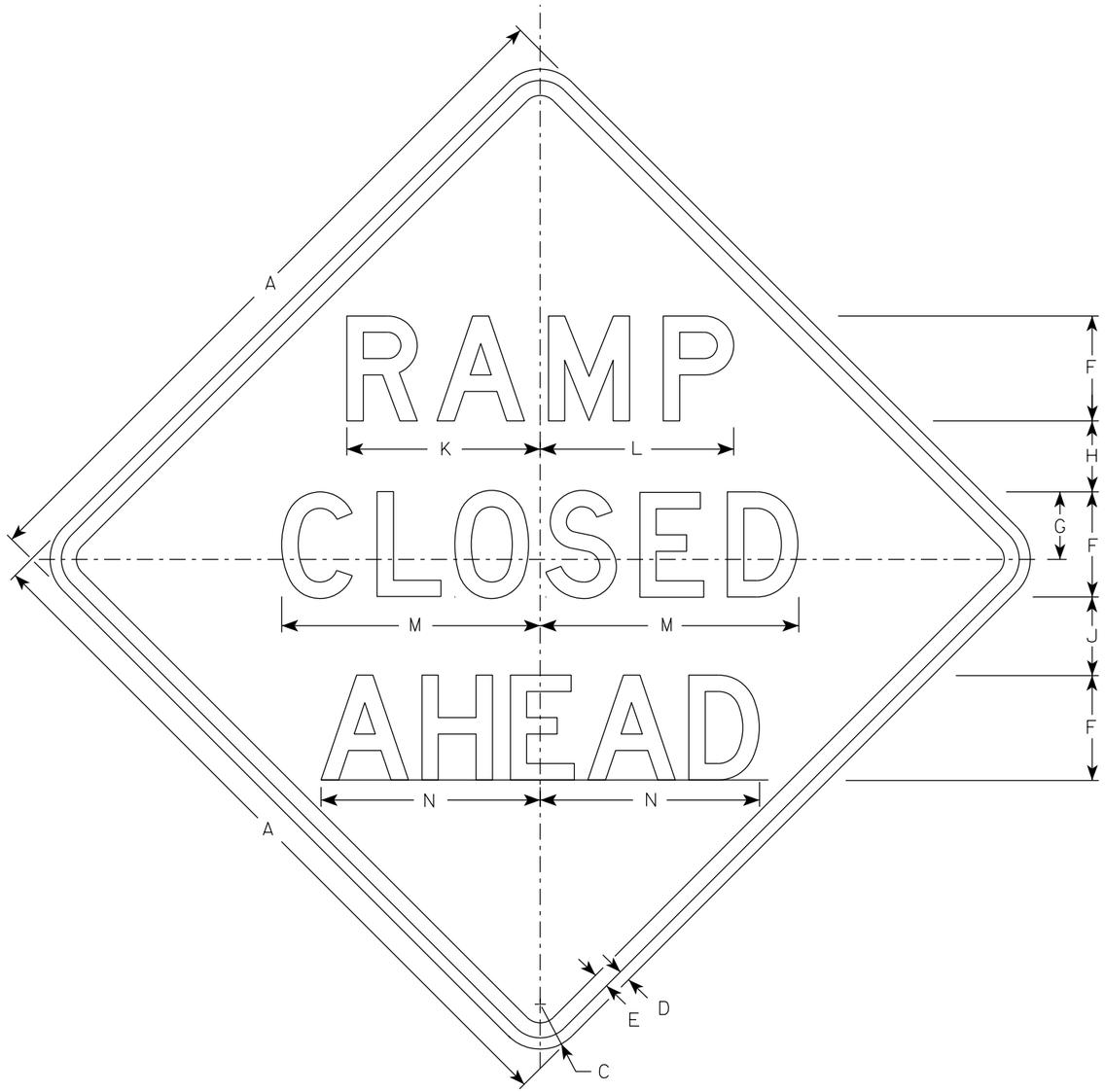
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

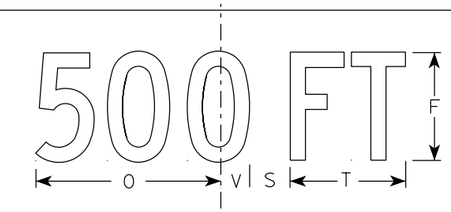
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

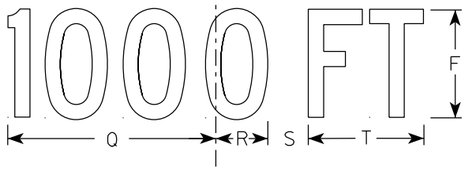
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 219	E



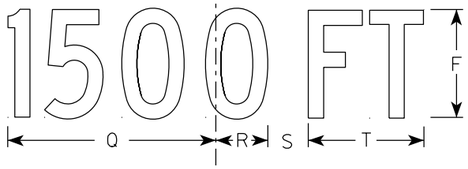
W20-53A



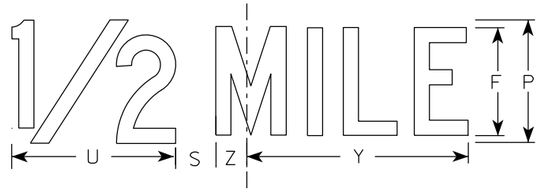
W20-53D



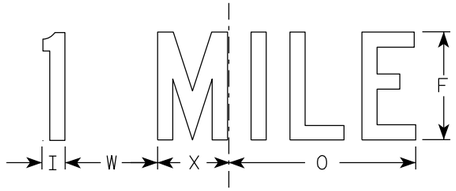
W20-53C



W20-53B



W20-53G



W20-53F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

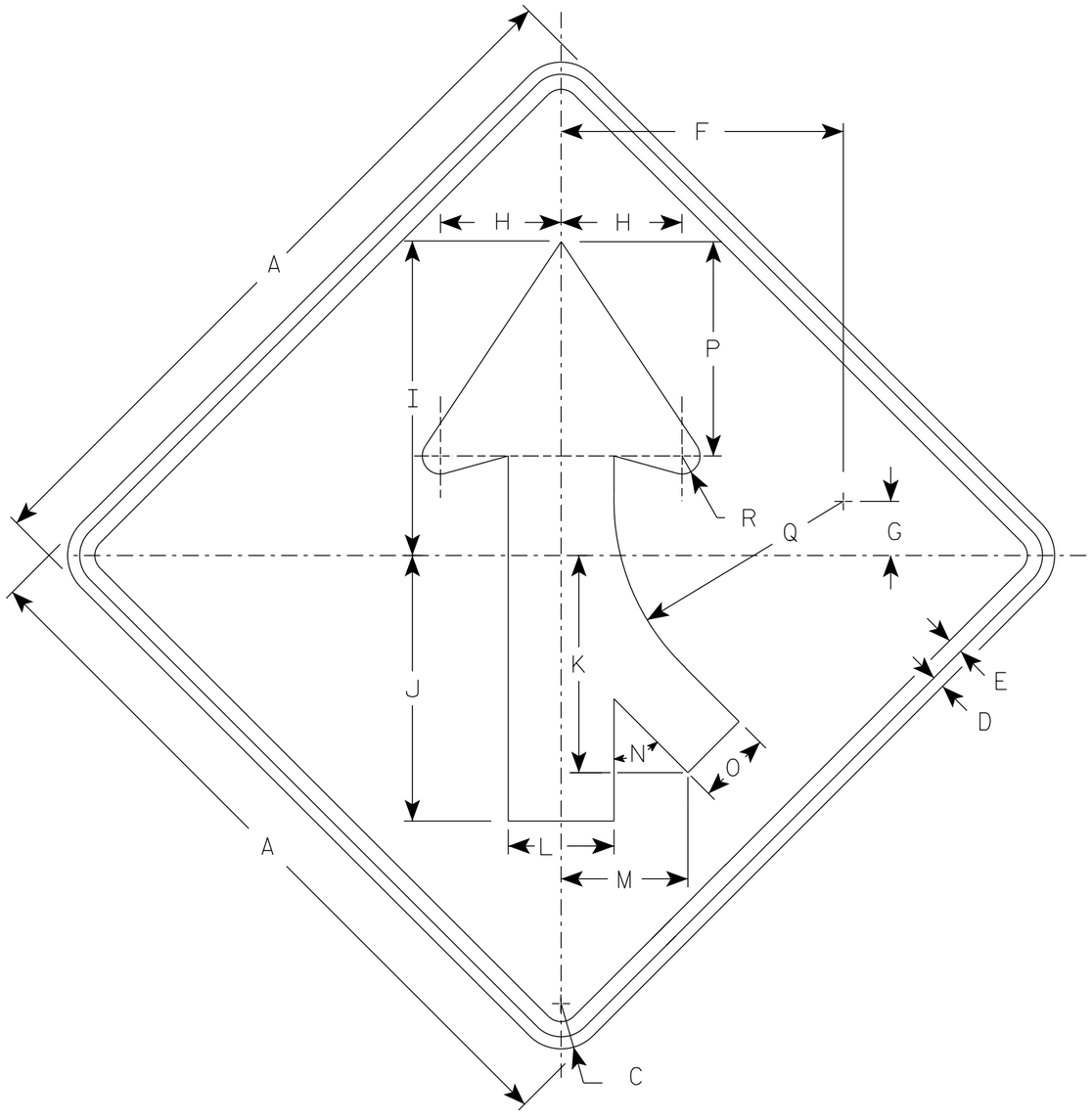
STANDARD SIGN
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-53.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W04-1R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-1L is the same as W04-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-1.3

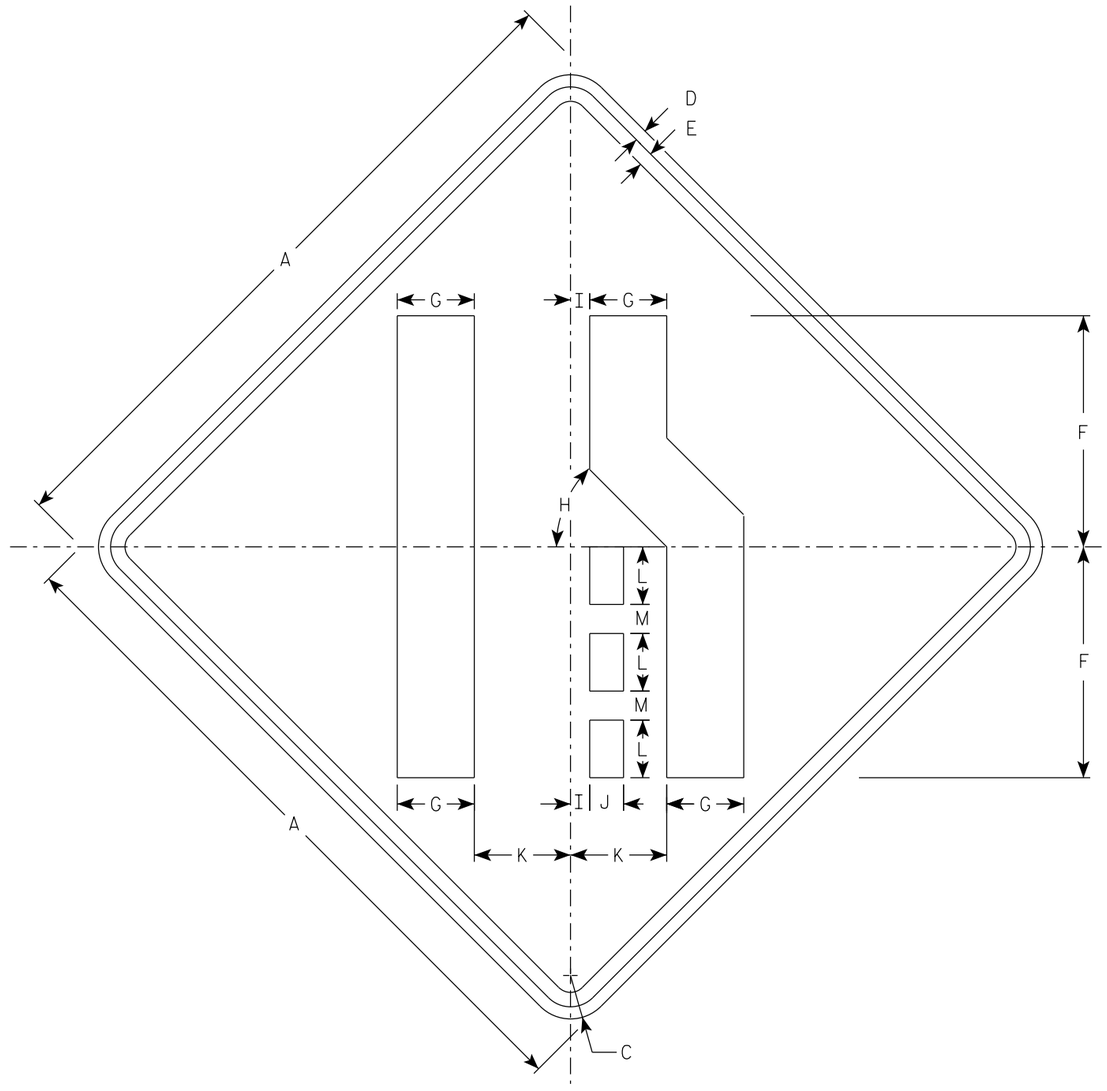
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 221 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W041.dgn PLOT DATE : 25-JAN 2024 8:20 PLOT BY : dotc4c PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

7

7



W04-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

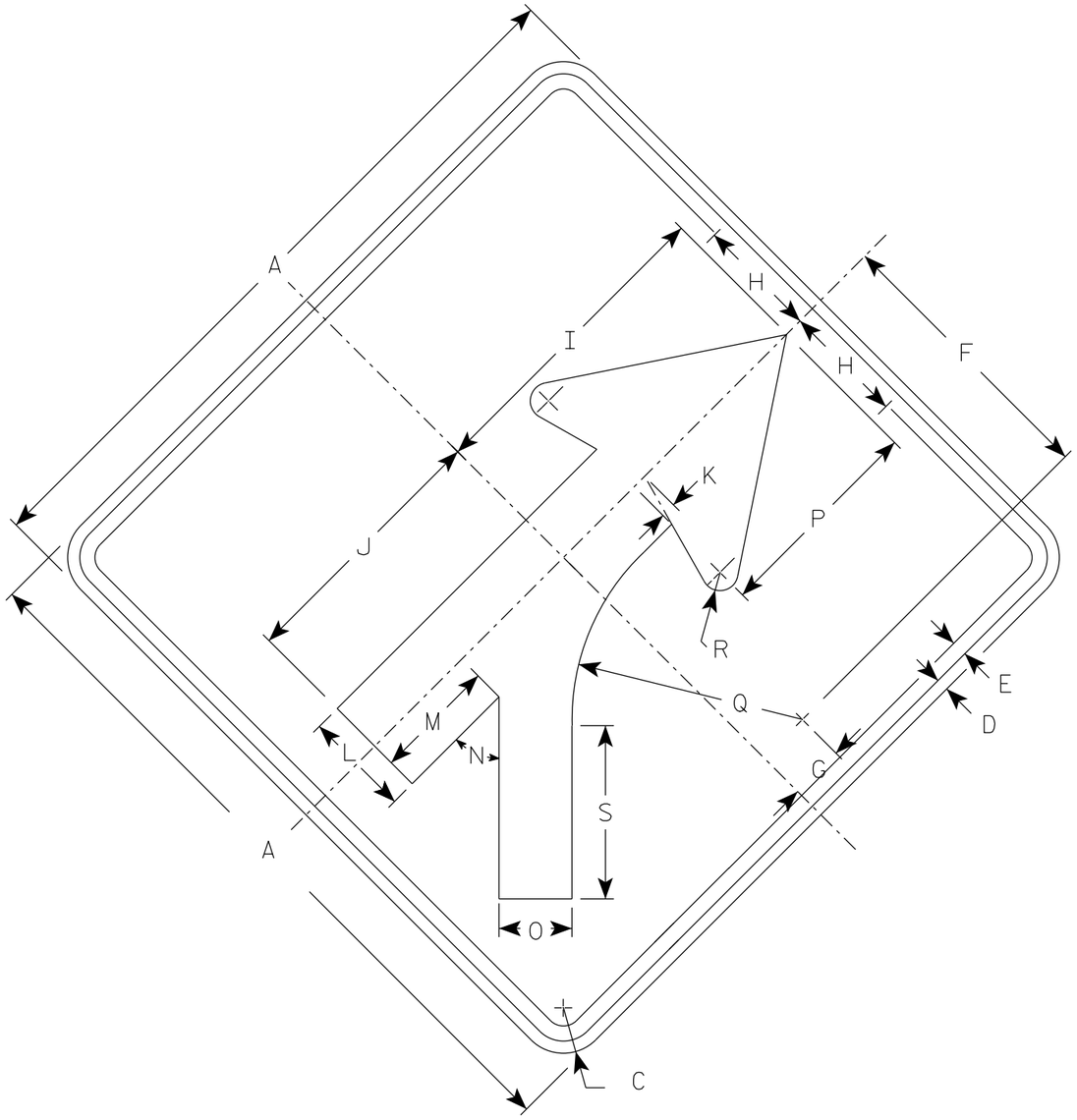
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 222 E



W04-5R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-5L is the same as W04-5R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	3/4	5 1/4	6 1/8	45°	3 5/8	10 5/8	11 3/8	7/8	8 1/2								9.0
2S	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	1	7	8 1/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0
2M	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	1	7	8 1/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0
3	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	1	7	8 1/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0
4	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	1	7	8 1/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0
5	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	1	7	8 1/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0

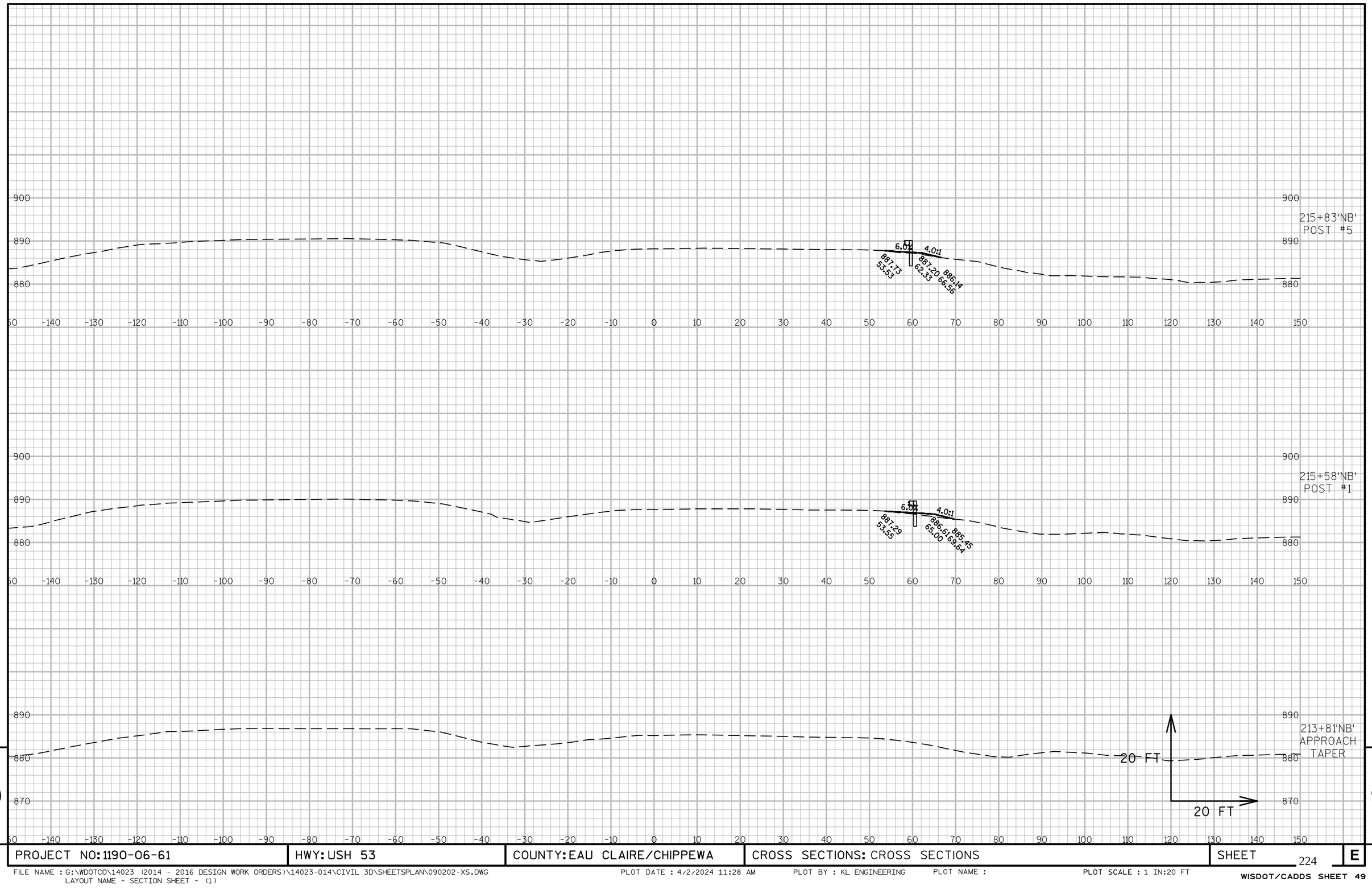
STANDARD SIGN
W04-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-5.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 223	E

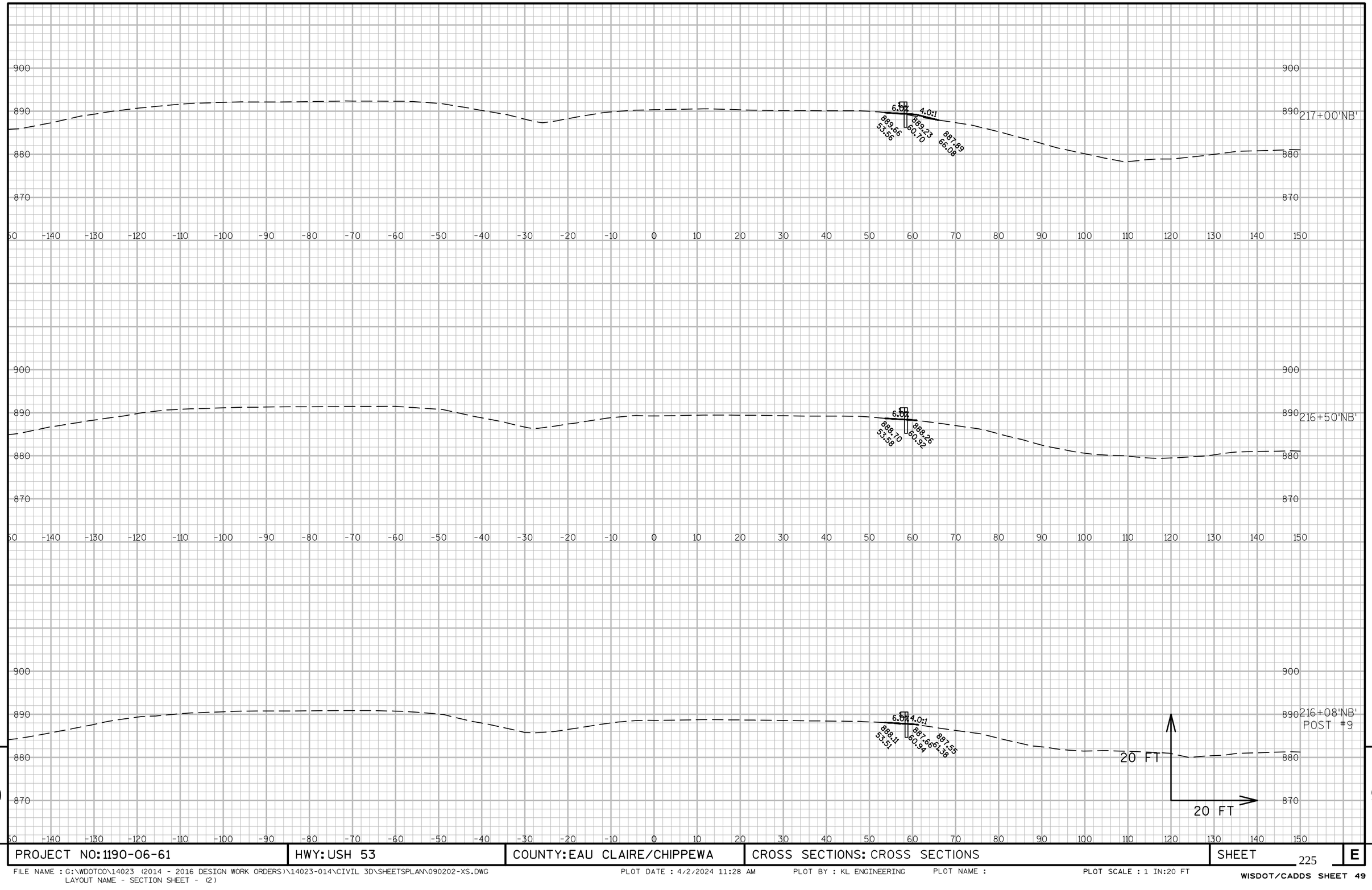


9

9

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 224	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (1)
PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

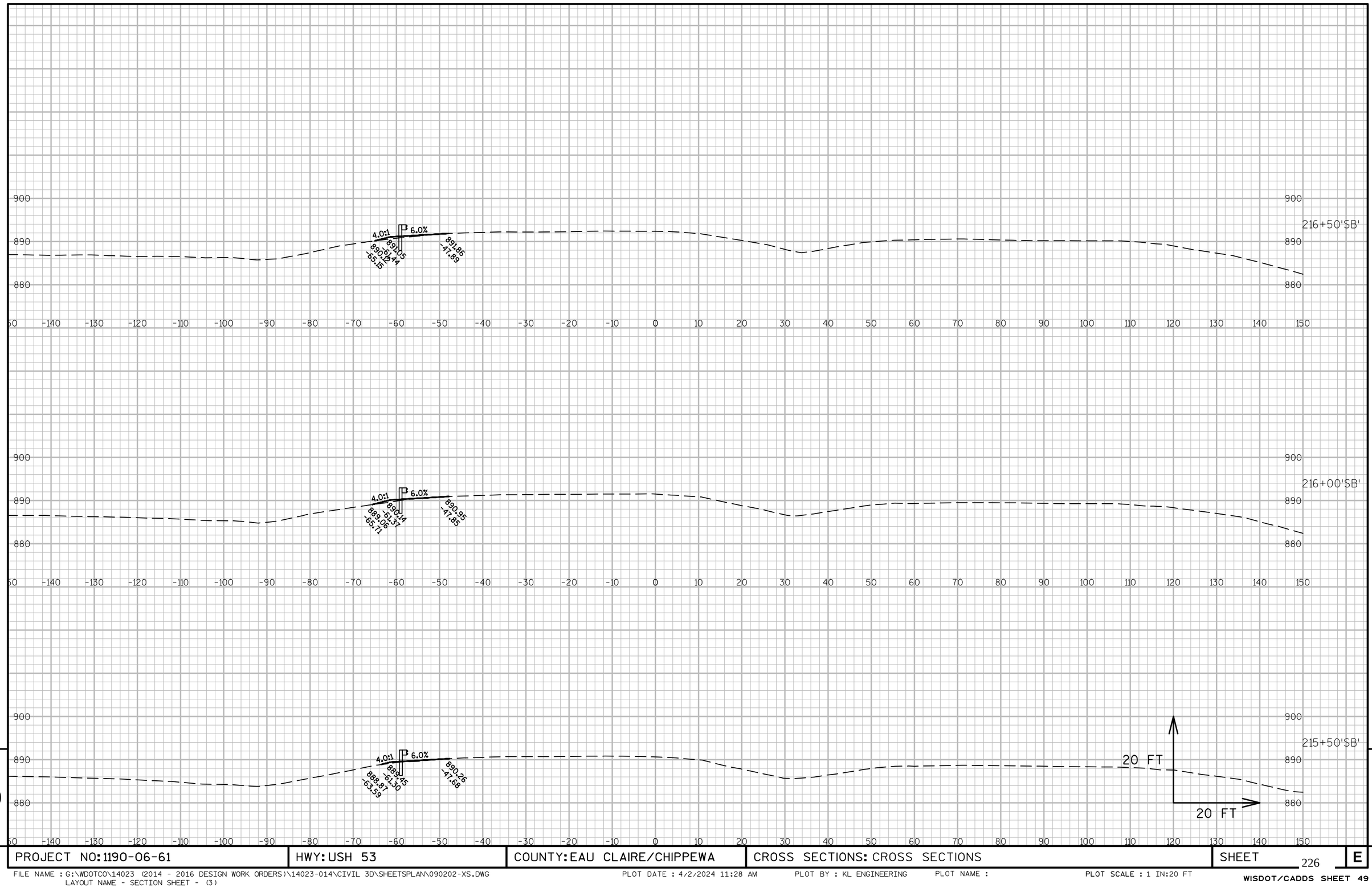
9

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 225	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (2)

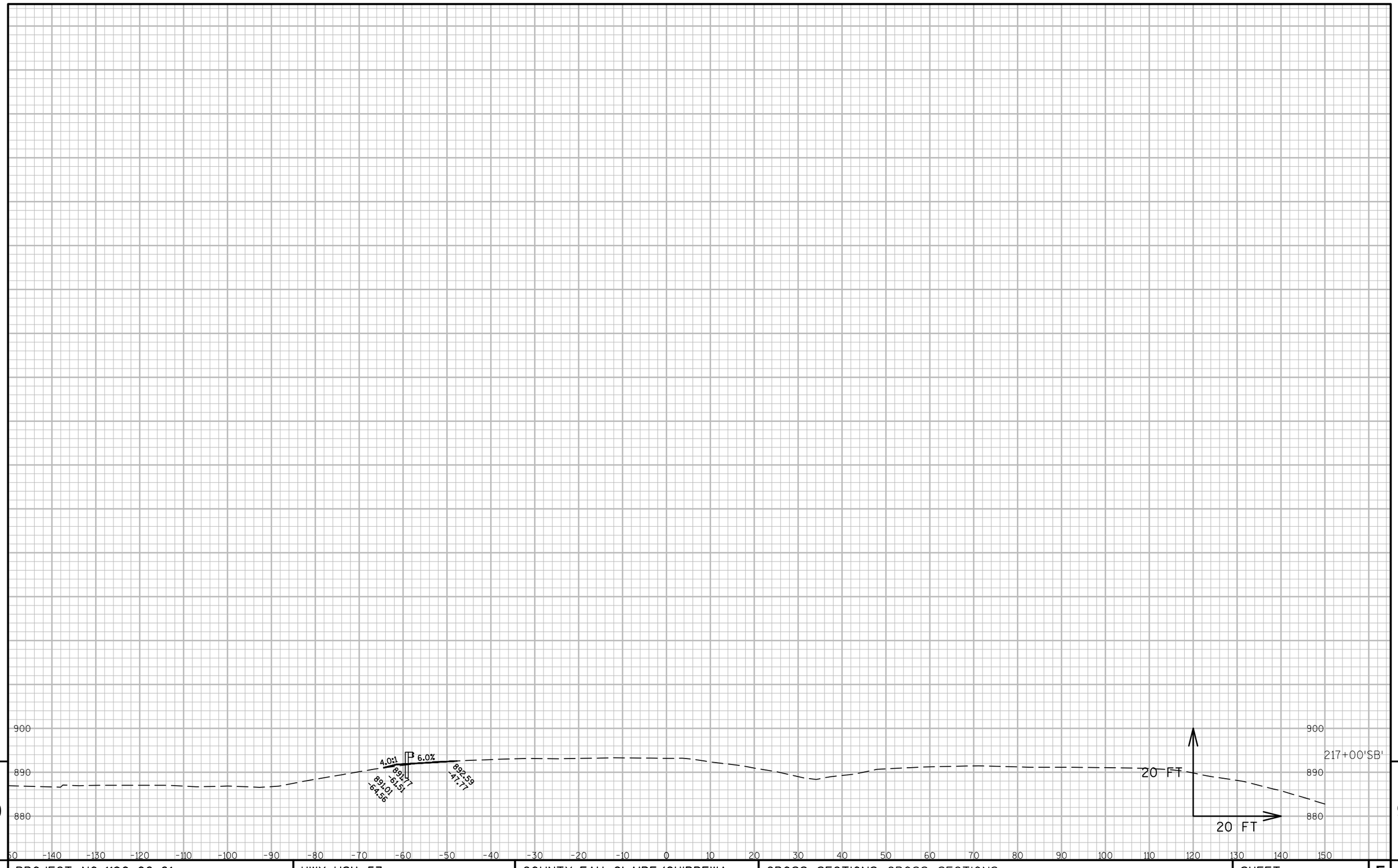
PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 226	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (3)
PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

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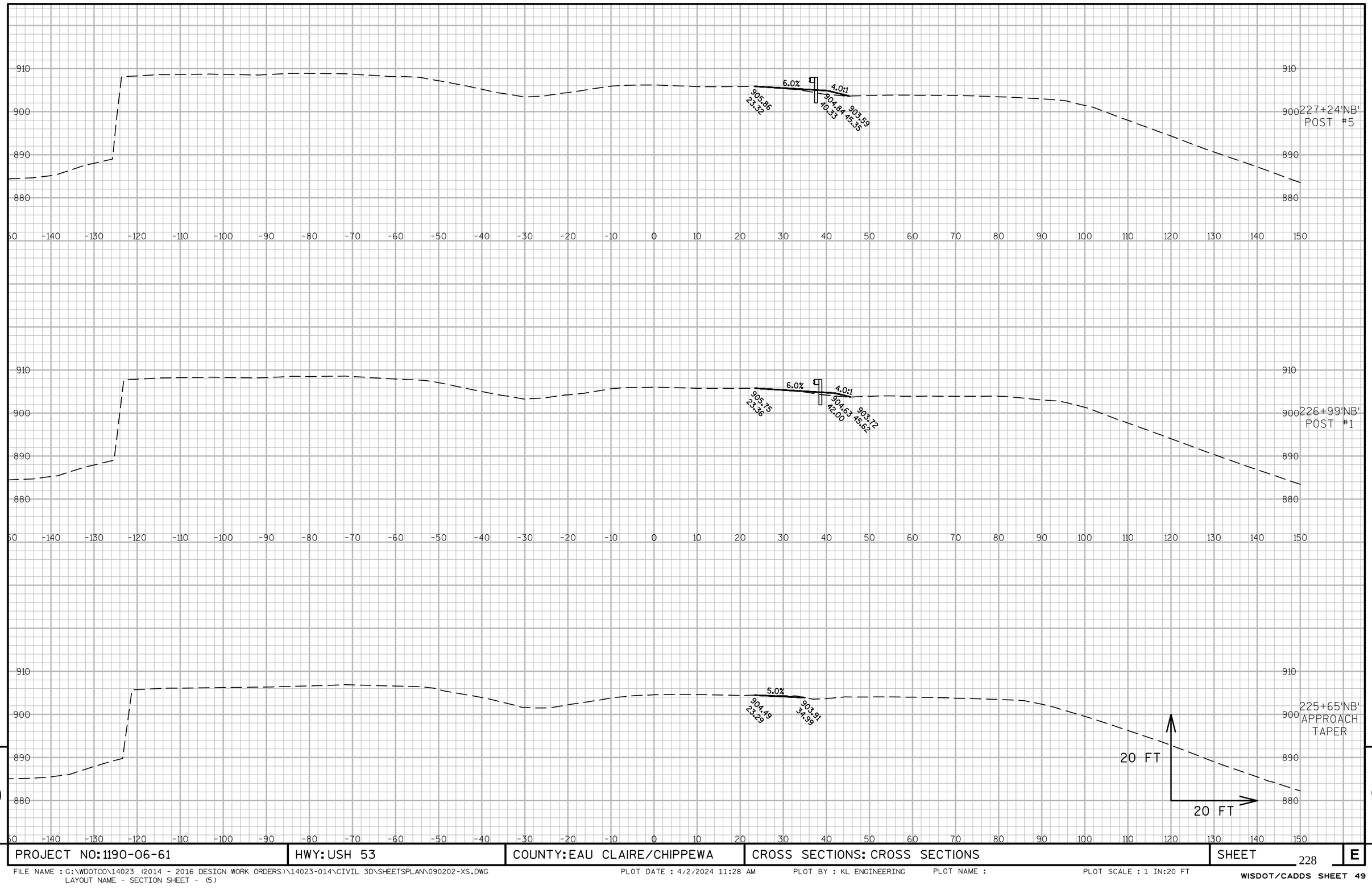
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 227	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (4)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

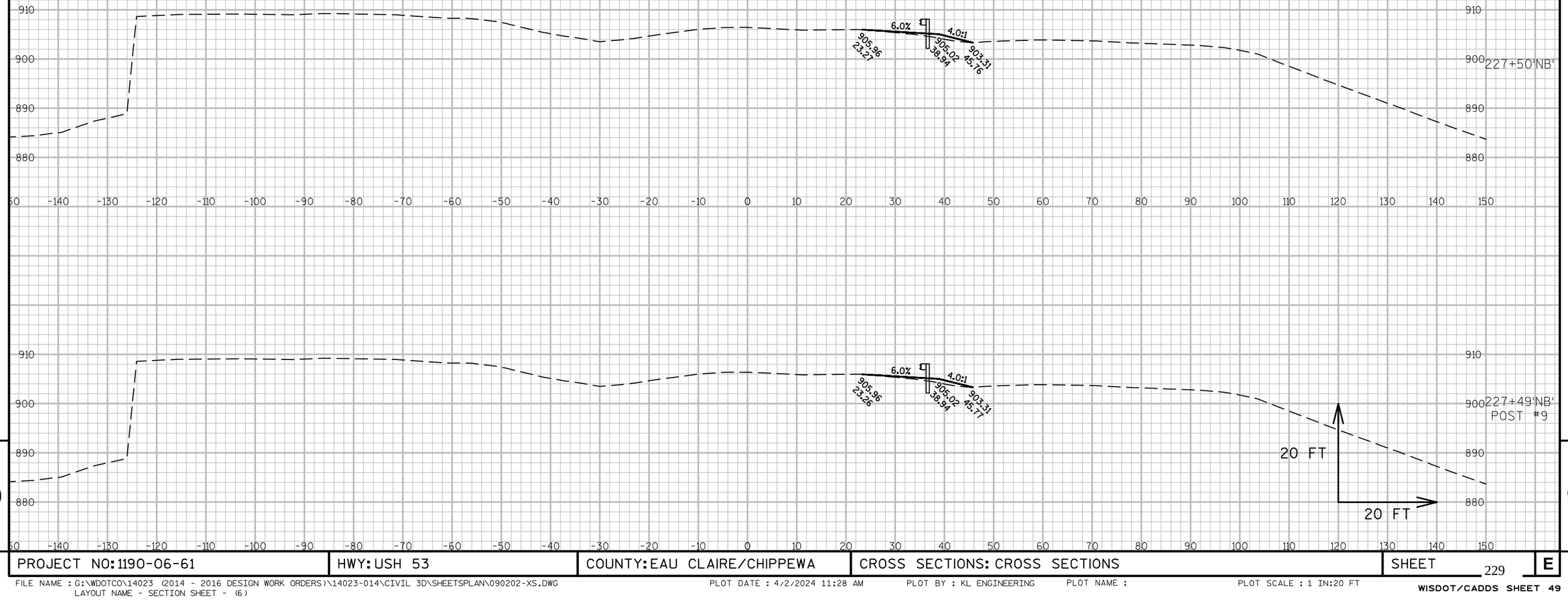


PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 228	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (5)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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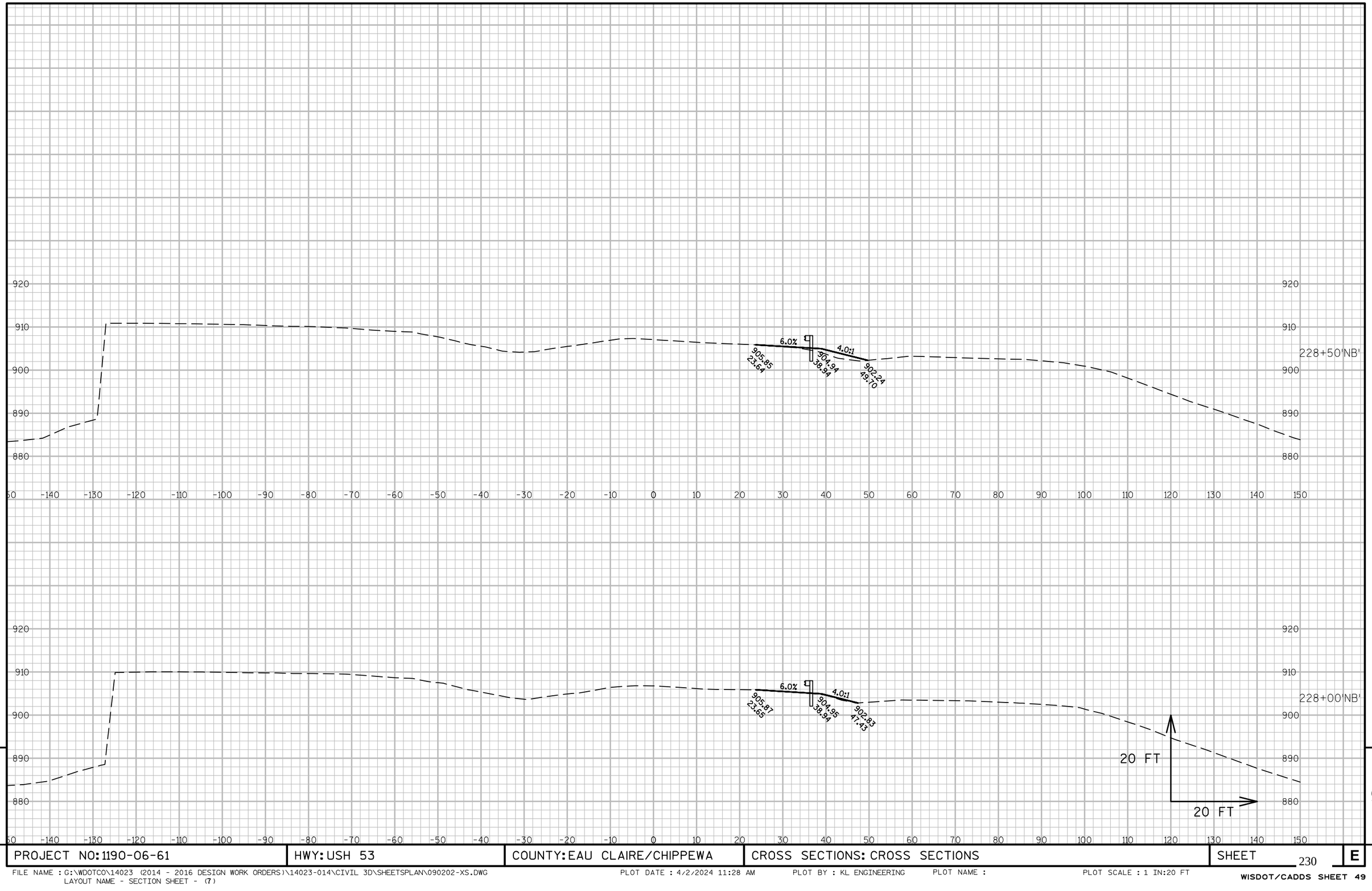
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 229	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (6)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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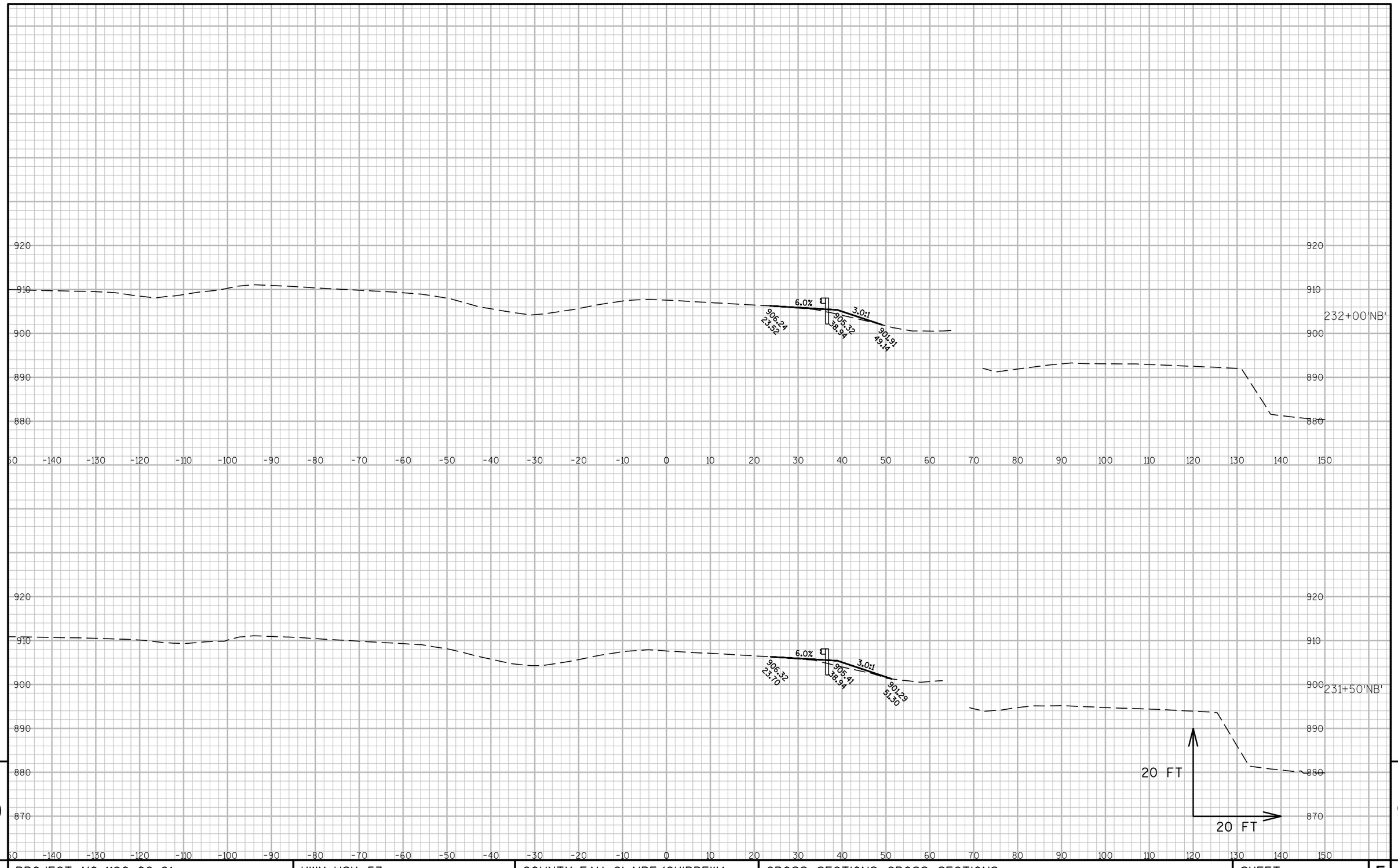
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 230	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (7)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT



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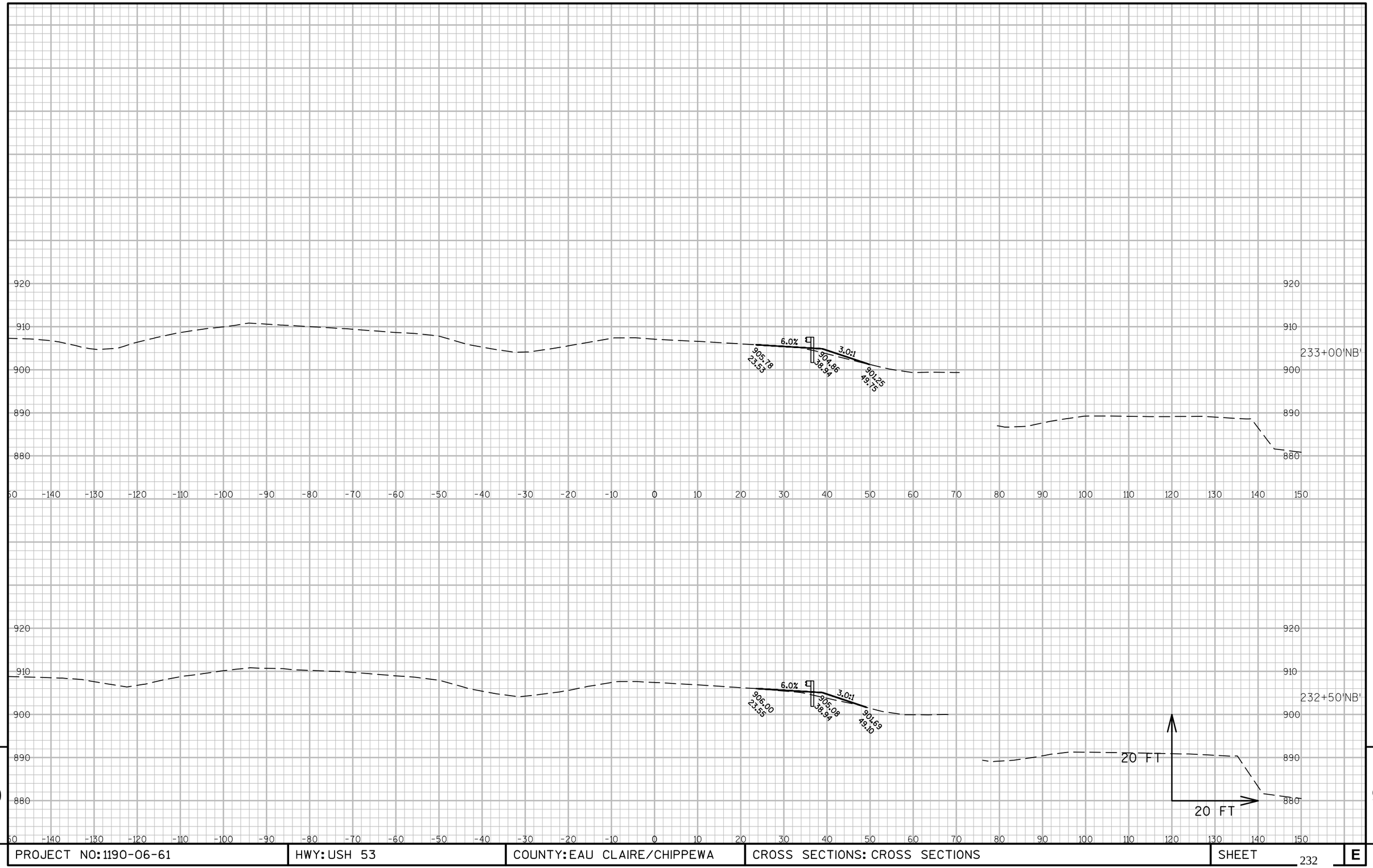
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 231	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (8)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT



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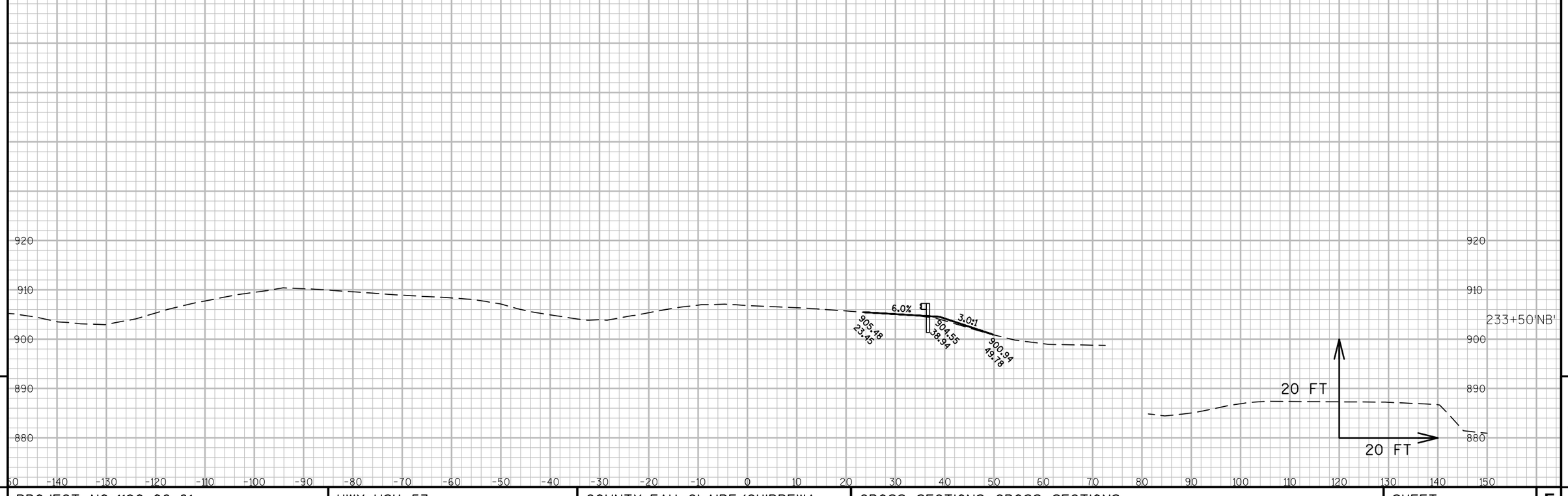
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 232	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (9)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

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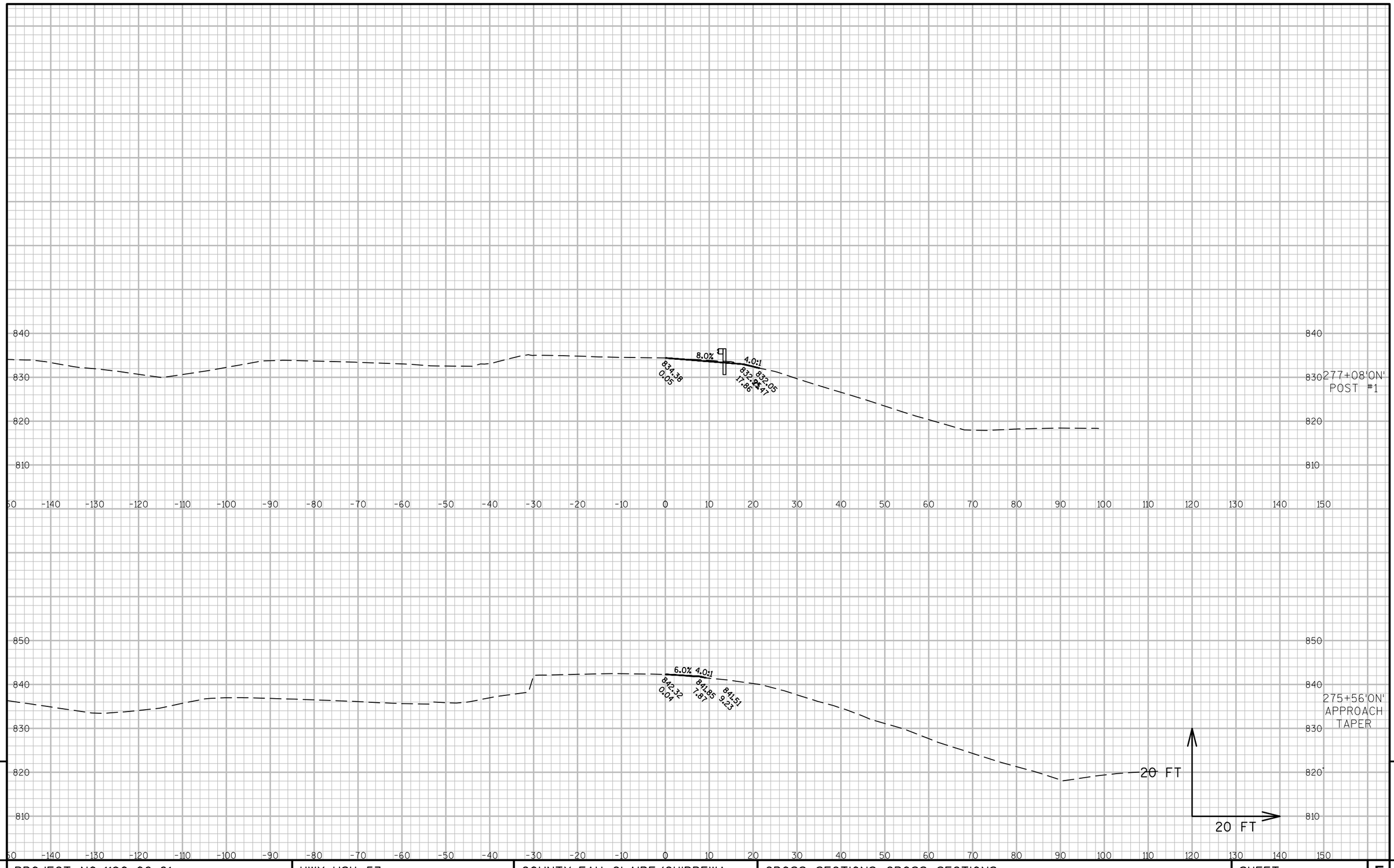
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 233	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (10)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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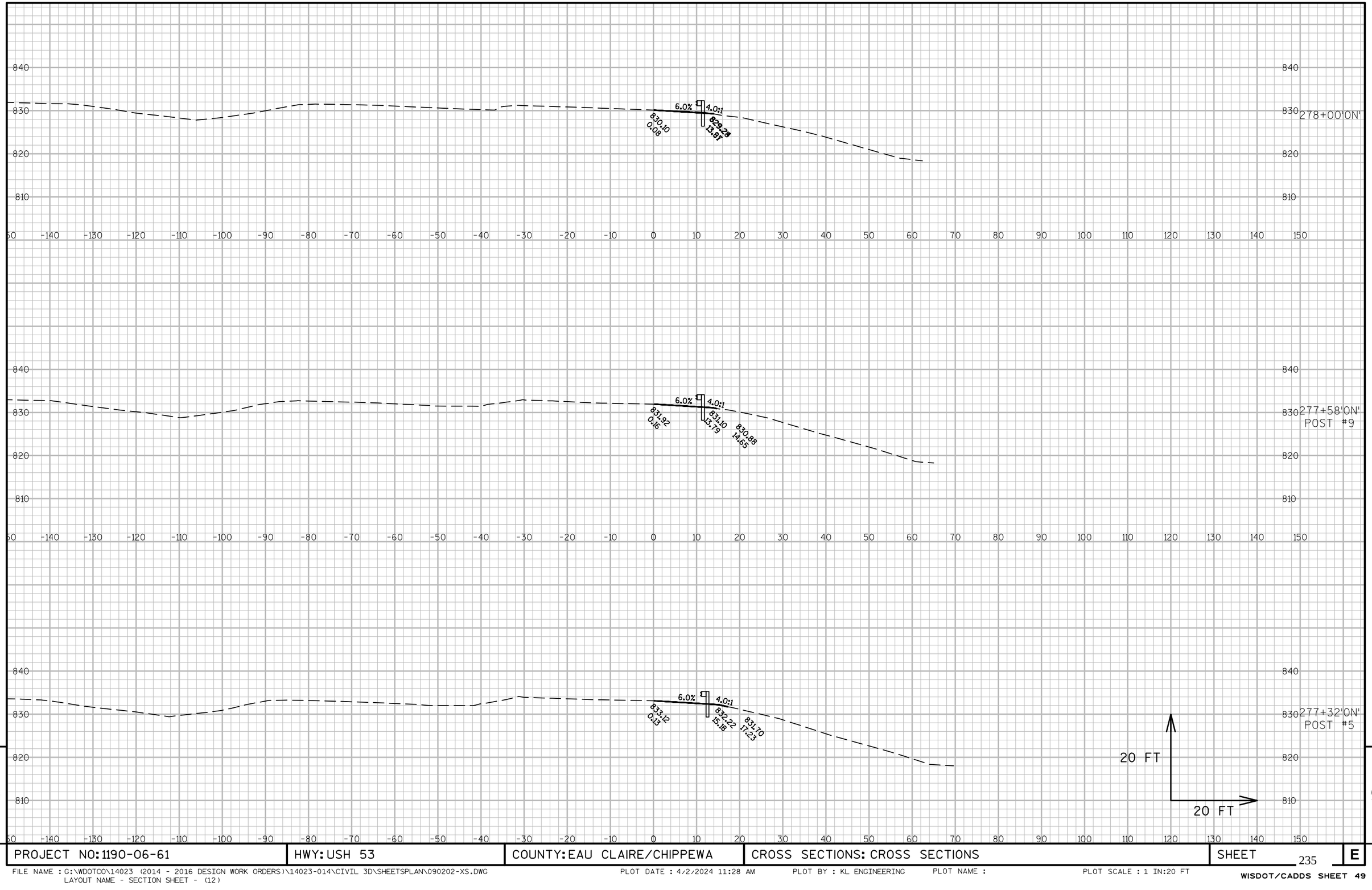
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 234	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (11)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

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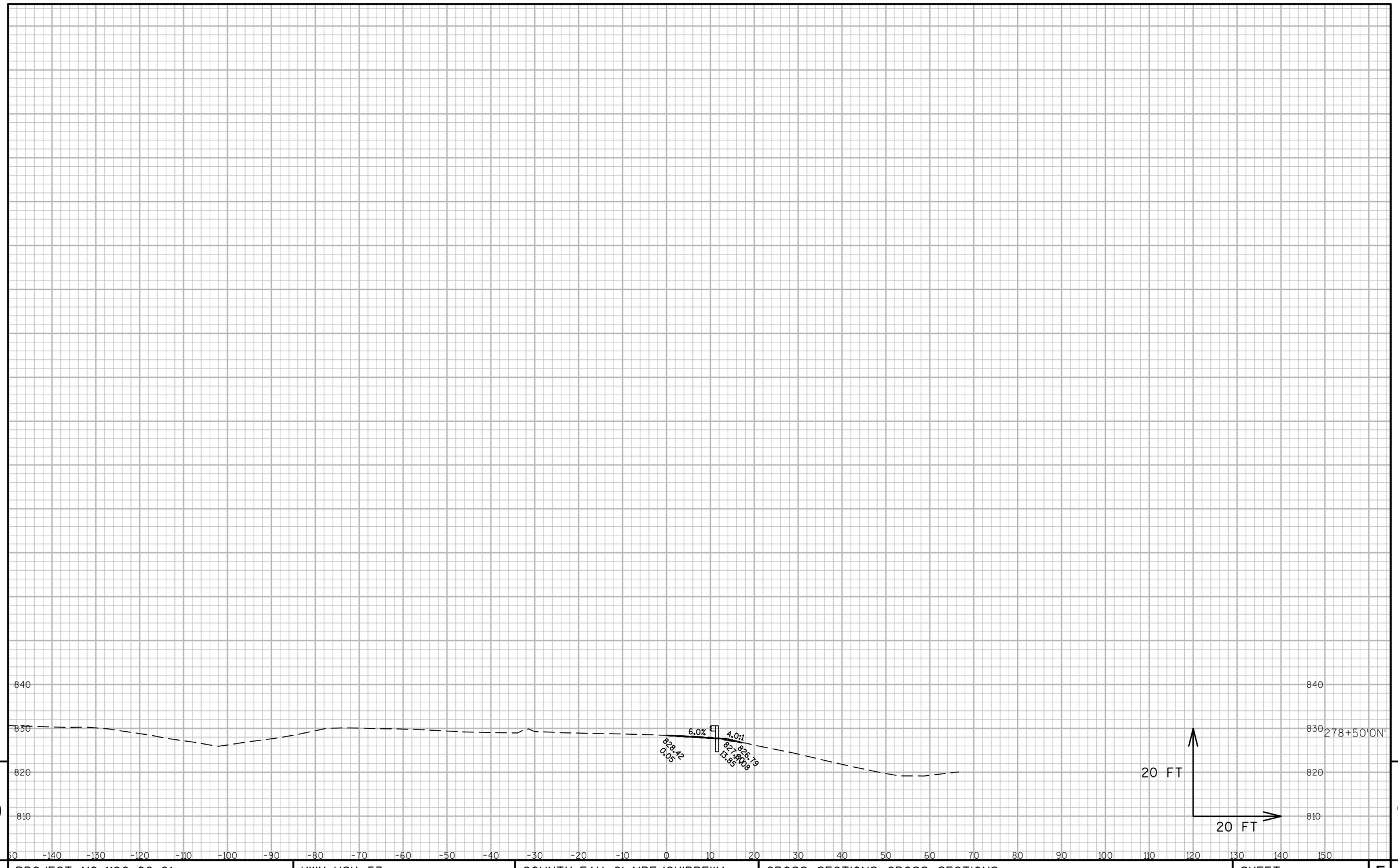
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 235	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (12)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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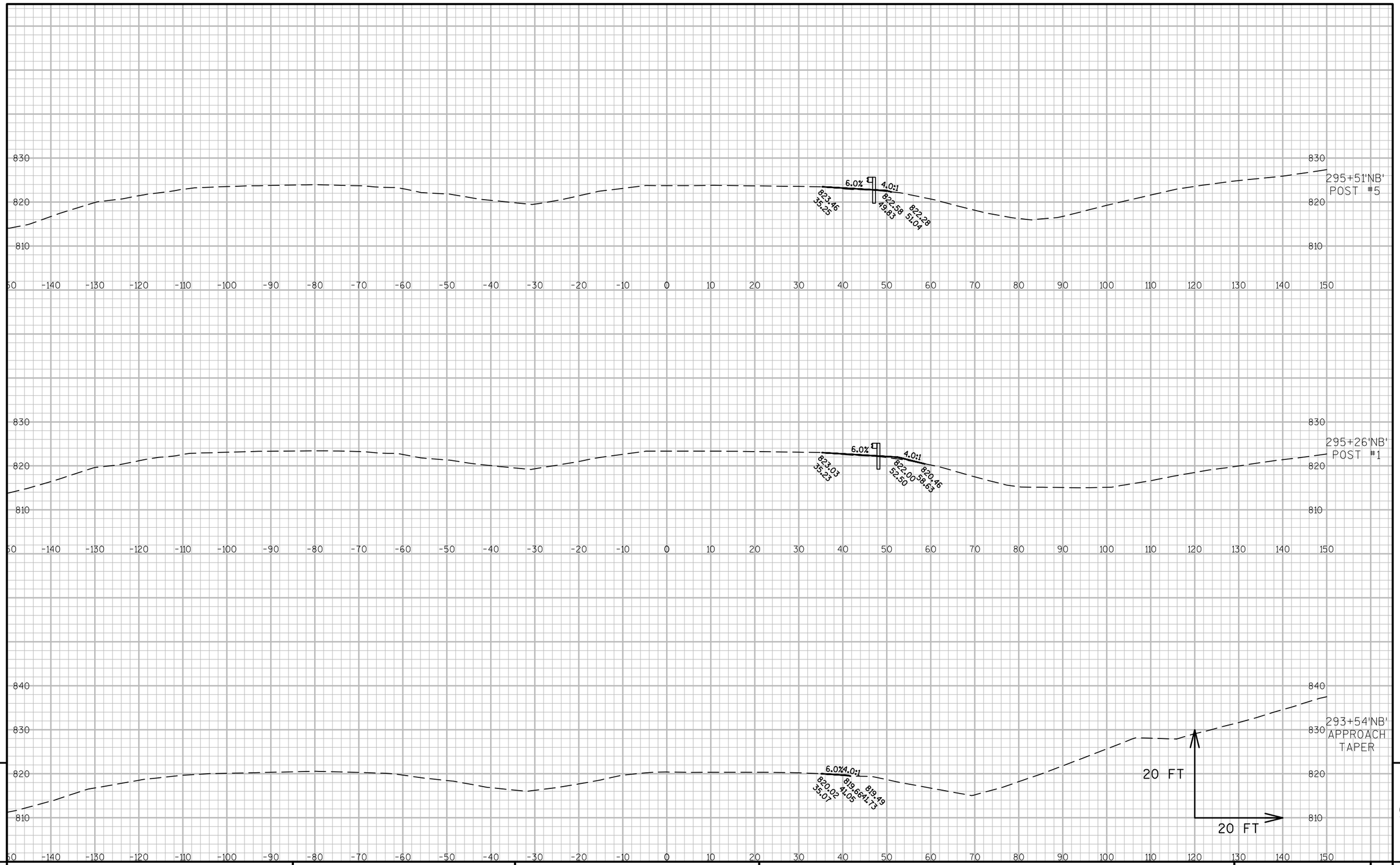
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 236	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (13)
PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

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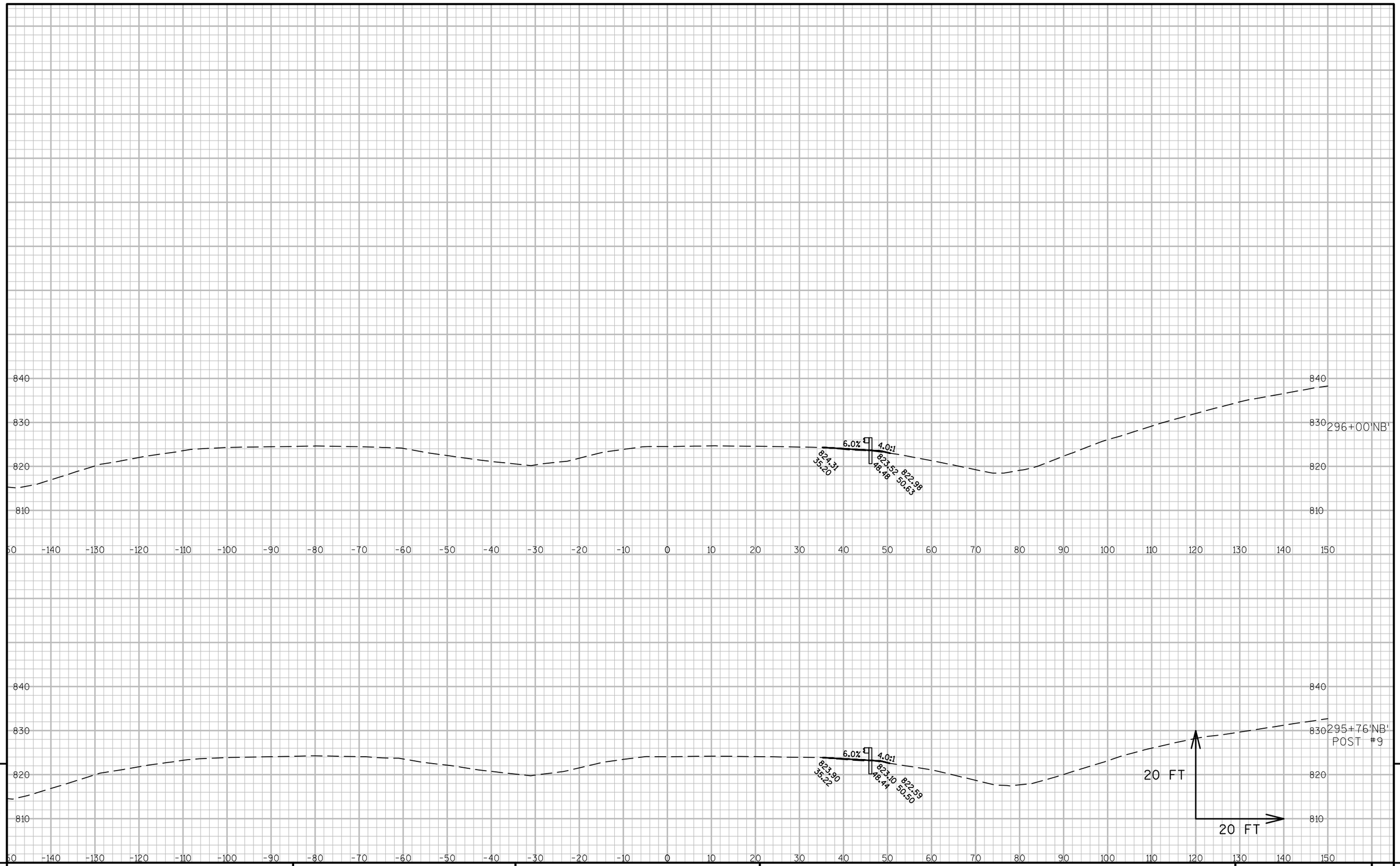
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 237	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (14)

PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

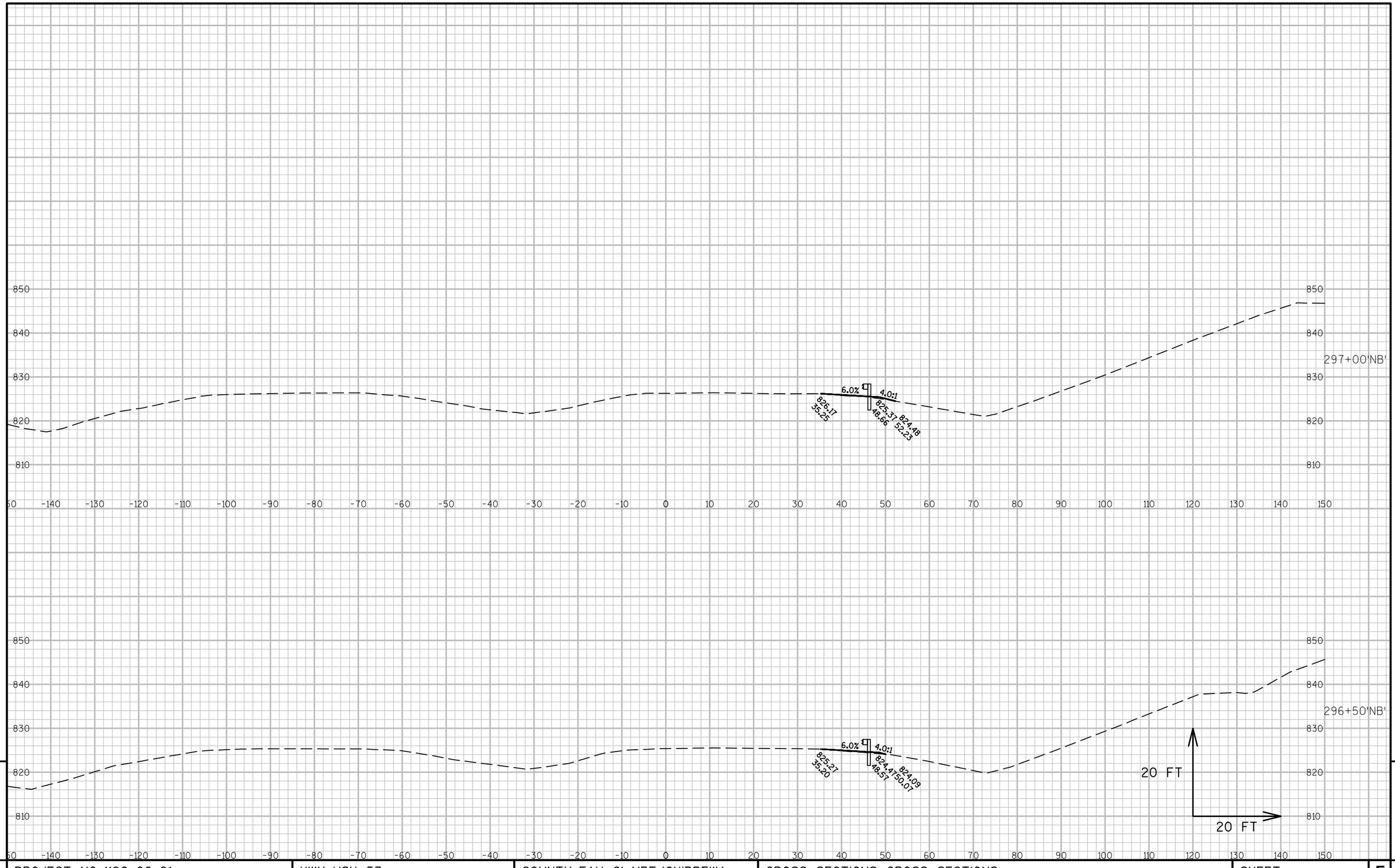


9

9

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 238 E

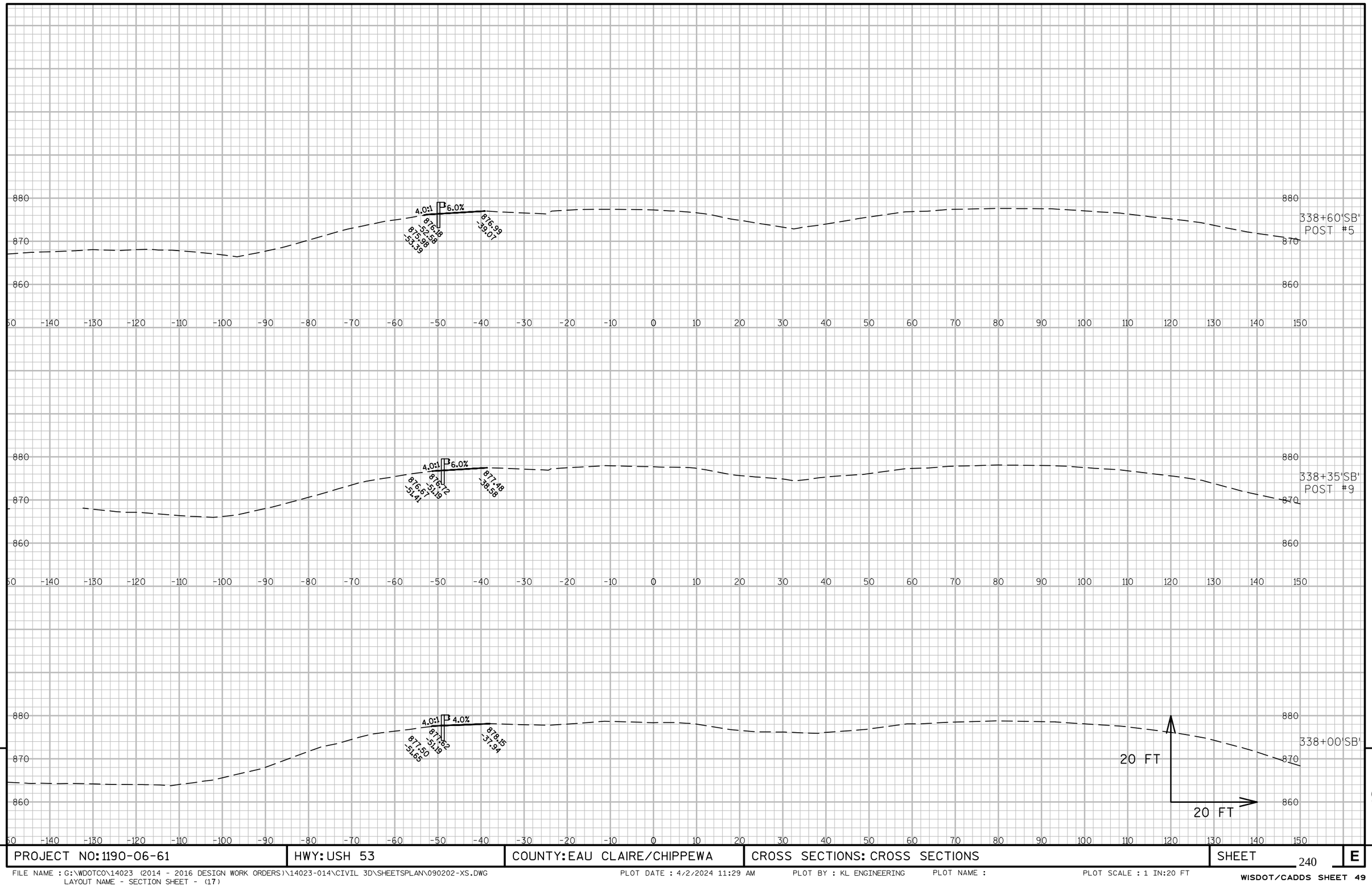
FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (15)
PLOT DATE : 4/2/2024 11:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 239	E



9

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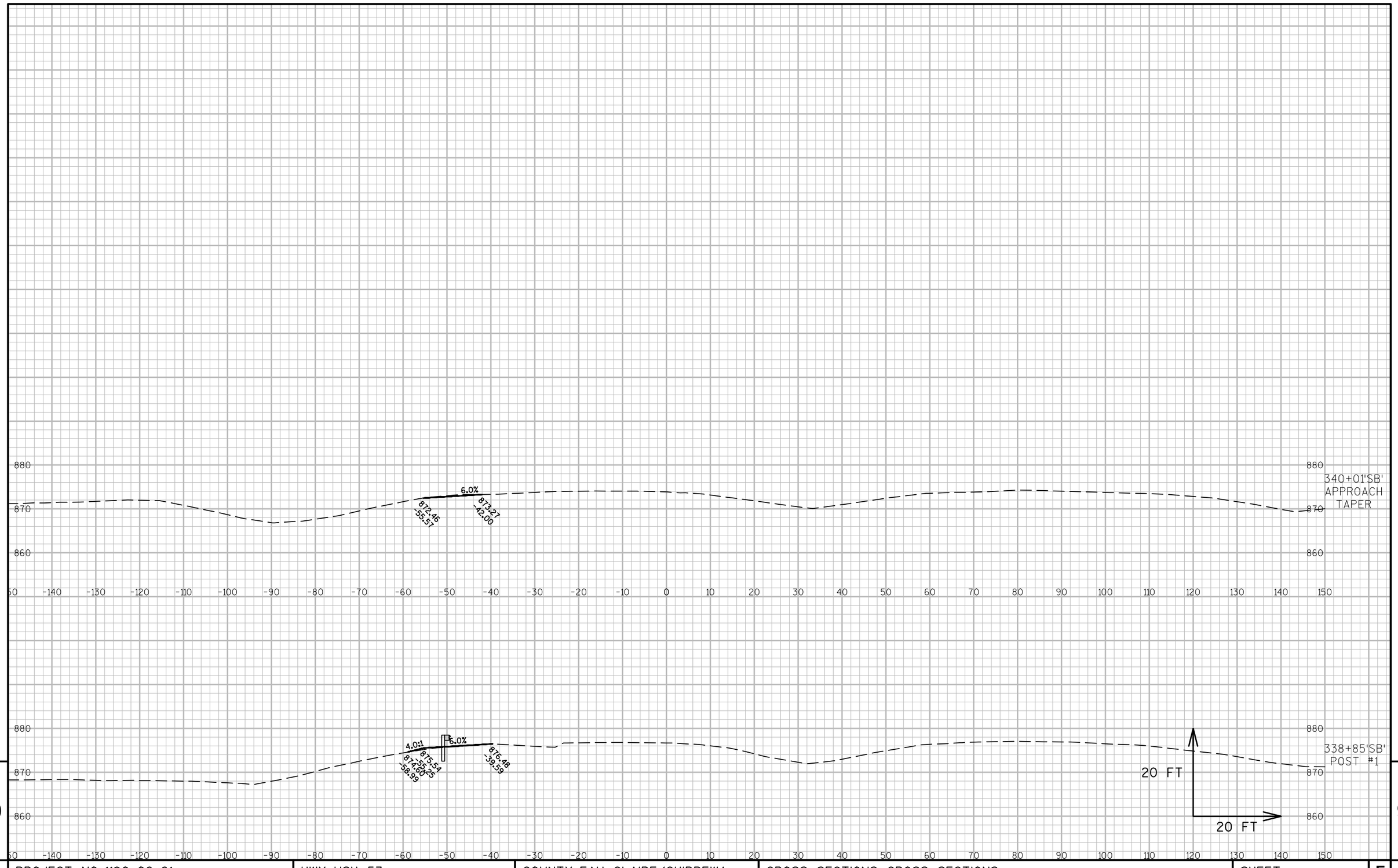
PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 240	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (17)

PLOT DATE : 4/2/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1190-06-61	HWY: USH 53	COUNTY: EAU CLAIRE/CHIPPEWA	CROSS SECTIONS: CROSS SECTIONS	SHEET 241	E

FILE NAME : G:\WDOTCO\14023 (2014 - 2016 DESIGN WORK ORDERS)\14023-014\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (18)

PLOT DATE : 4/2/2024 11:29 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov