

WKE

PROJECT ID:

WITH:

1100-17-79

COUNTY:

WASHINGTON

MAY 2021

ORDER OF SHEETS

Section No.

1

Title

Section No.

2

Typical Sections and Details

Section No.

3

Estimate of Quantities

Section No.

3

Miscellaneous Quantities

Section No.

4

Right of Way Plan

Section No.

5

Plan and Profile

Section No.

6

Standard Detail Drawings

Section No.

7

Sign Plates

Section No.

8

Structure Plans

Section No.

9

Computer Earthwork Data

Section No.

9

Cross Sections

TOTAL SHEETS =

68

33



N

DESIGN DESIGNATION

A.A.D.T.

2021

=

31,480

A.A.D.T.

2041

=

35,290

D.H.V.

=

3,557

D.D.

=

62/38

T.

=

18.6%

DESIGN SPEED

=

70 MPH

ESALS

=

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

MARSH AREA

WOODED OR SHRUB AREA

PROFILE

GRADE LINE

ORIGINAL GROUND

MARSH OR ROCK PROFILE
(To be noted as such)

SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)

UTILITIES

ELECTRIC

FIBER OPTIC

GAS

SANITARY SEWER

STORM SEWER

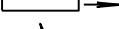
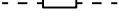
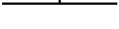
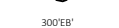
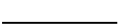
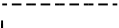
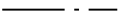
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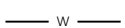
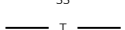
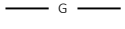
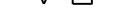
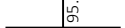
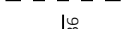
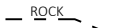
WATER

UTILITY PEDESTAL

POWER POLE

TELEPHONE POLE





STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MILWAUKEE - FOND DU LAC

STH 144 TO DODGE CO LINE

IH 41

WASHINGTON COUNTY

STATE PROJECT NUMBER

1100-17-79

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1100-17-79		

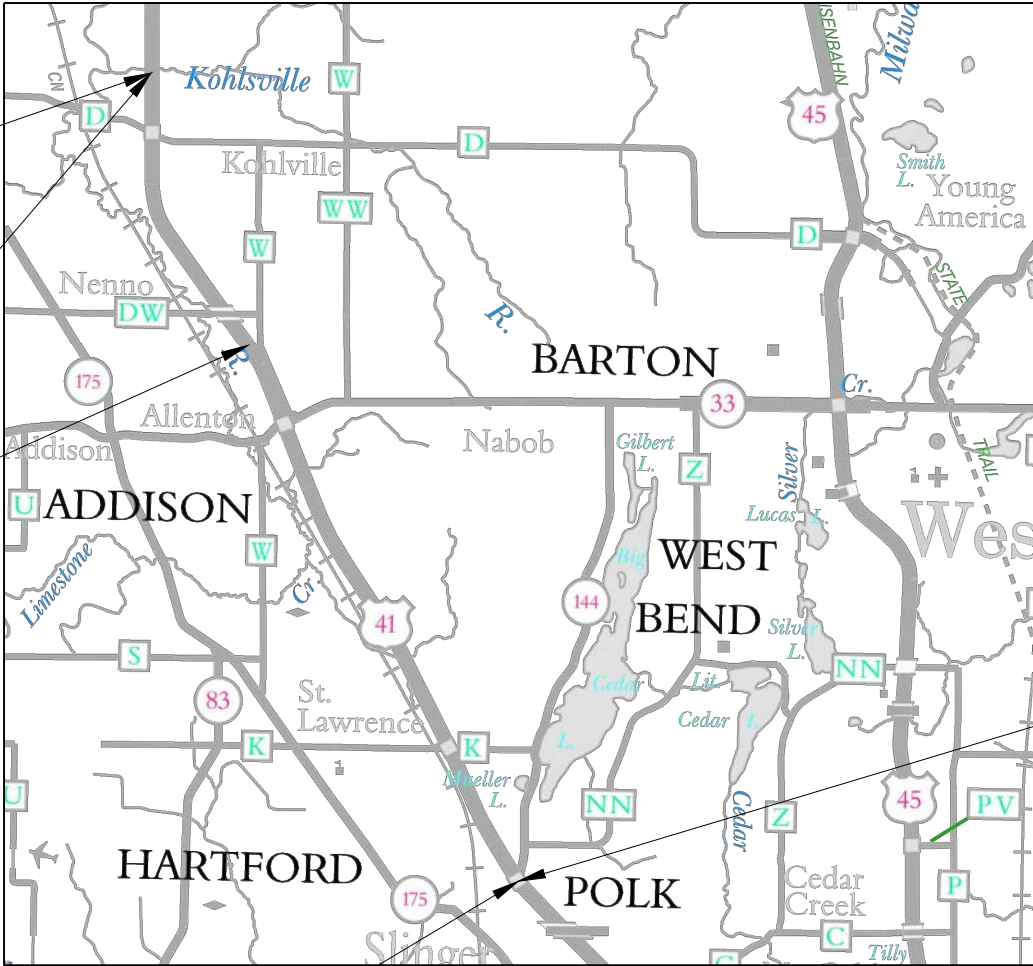
END PROJECT 1100-17-09
STA. 1633+25
X= 313595.36
Y= 206361.98

STRUCTURES B-66-189 & B-66-188

STRUCTURES B-66-194 & B-66-193

STRUCTURE B-66-110

BEGIN PROJECT 1100-17-09
STA. 1077+32
X= 335965.41
Y= 156574.23



LAYOUT

SCALE 0 1200 FT

TOTAL NET LENGTH OF CENTERLINE = 0.000

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WASHINGTON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD88 (2012) GEOID 12A-WI.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor

Designer

Project Manager

Regional Examiner

Regional Supervisor

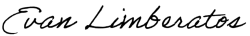
WISDOT

EVAN LIMBERATOS, P.E.

WAFA ELQAO, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 3/10/21


(Signature)

E

FILE NAME : N:\PDS\C3D\11001709\SHEETSPLAN\010101_TI.DWG

PLOT DATE : 4/15/2020 12:12 PM

PLOT BY : ATARI, RAZAN HAEI

PLOT NAME :

AT&T MOBILITY - COMMUNICATION LINE

MARC BROWN
301 E MILWAUKEE ST
JANESVILLE, WI 53545
Phone: (608) 755-5535
mb2682@att.com

ATC MANAGEMENT, INC - ELECTRICITY-TRANSMISSION

TRANS 220 MAILBOX
801 O'KEEFE RD
DE PERE, WI 54115-6113
PHONE: (920) 338-6582
dl-ATCDOTNotification@atcllc.com

WISDOT ATR PULL BOXES - ELECTRICITY

CHAD BIGLER
TRAVEL SURVEYS SHOP, 3633 PIERSTORFF ST
P.O. BOX 2583, MADISON, WI 53704-2583
PHONE: (608) 535-7413
chad.bigler@dot.wi.gov

ALLENTON SANITARY DISTRICT NO 1 - SEWER

TOM GURECKI
750 STH 33 W
ALLENTON, WI 53002-1293 P.O. BOX 293
PHONE: (262) 629-5761

ALLIANT ENERGY - ELECTRICITY

MARY MONTGOMERY
200 FIRST ST
CEDAR RAPIDS, IA 52401
PHONE: (319) 786-4768
MaryMontgomery@alliantenergy.com

ALLIANT ENERGY - GAS/PETROLEUM

MARY MONTGOMERY
200 FIRST ST
CEDAR RAPIDS, IA 52401
PHONE: (319) 786-4768
MaryMontgomery@alliantenergy.com

CHARTER COMMUNICATIONS - COMMUNICATION LINE

RON MUELLER
1515 W WASHINGTON AVE
WEST BEND, WI 53095
PHONE: (262) 429-8889
ron.mueller@charter.com

UTILITY CONTACTS

EVERSTREAM - COMMUNICATION LINE

EVERSTREAM UTILITY COORDINATION
324 E WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
PHONE: (414) 409-1709
WI-Relocations@everstream.net

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION LINE

RUSS RYAN
118 DIVISION ST
PLYMOUTH, WI 53073
PHONE: (920) 583-3275
Russell.w.ryan@ftr.com

HILLDALE SANITARY DISTRICT

CHRISTINA PFEIFER
3360 HIGHWAY K
HARTFORD, WI 53027
PHONE: (262) 673-7214
tpfeifer@townofhartford.com

KOCH PIPELINE COMPANY L.P. - GAS/PETROLEUM

ELIZABETH BARTLEY
13775 CLARK RD
ROSEMOUNT, MN 55068
PHONE: (612) 244-9950
elizabeth.bartley@FHR.com

LEVEL 3 COMMUNICATIONS LLC - COMMUNICATION LINE

NETWORK RELOCATIONS
1025 ELDORADO BLVD
BROOMFIELD, CO 80021
NationalRelo@centurylink.com

MIDWEST FIBER NETWORKS LLC - COMMUNICATION LINE

RICHARD TRGOVEC
6070 N FLINT RD
GLENDALE, WI 53209
PHONE: (414) 459-3554
rtrgovec@midwestfibernetworks.com

PAETEC COMMUNICATIONS, LLC - COMMUNICATION LINE

ERIC BECKER
314 N DANZ AVE
GREEN BAY, WI 54302-3526
PHONE: (940) 461-9825
Eric.Becker@windstream.com

VILLAGE OF SLINGER - ELECTRICITY

BRIAN RHODES
300 SLINGER ROAD
SLINGER, WI 53086-0227
PHONE: (262) 670-3700

VILLAGE OF SLINGER - SEWER

JAMES HAGGERTY
300 SLINGER ROAD P.O. BOX 227
SLINGER, WI 53086-0227
PHONE: (262) 644-5265
jhaggerty@vi.slinger.wi.gov

VILLAGE OF SLINGER - WATER

JAMES HAGGERTY
300 SLINGER ROAD P.O. BOX 227
SLINGER, WI 53086-0227
PHONE: (262) 644-5265
jhaggerty@vi.slinger.wi.gov

WISDOT STREET LIGHTING

ERIC PEREA
141 NW BARSTOW STREET
WAUKESHA, WI 53087-0798
PHONE: (414) 574-5422
eric.perea@dot.wi.gov

WISDOT SIGNALS

DERRIN WOLFORD
141 NW BARSTOW PO BOX 798
WAUKESHA, WI 53187-0798
PHONE: (262) 521-4409
derrin.wolford@dot.wi.gov

WISCONSIN INDEPENDENT NETWORK, LLC - COMMUNICATION LINE

DICK HAMMETTER
800 WISCONSIN AVE, SUITE 219
EAU CLAIRE, WI 54703
PHONE: (715) 838-4406
Hammetter@WINS.net

WASHINGTON COUNTY - ROAD FACILITY

SCOTT SCHMIDT
900 LANG ST
WEST BEND, WI 53090
PHONE: (262) 335-6881
scott.schmidt@co.washington.wi.us

WE ENERGIES - ELECTRICITY

WE ENERGIES - UTILITY COORDINATOR
500 S 116TH ST
WEST ALLIS, WI 53214
PHONE: (414) 221-2738
DISPATCH: 1 (800) 662-4797
We-Utility-relocations@we-energies.com

WE ENERGIES - GAS/PETROLEUM

WE ENERGIES - UTILITY COORDINATOR
500 S 116TH ST
WEST ALLIS, WI 53214
PHONE: (414) 221-2738
DISPATCH: 1 (800) 261-5325
We-Utility-relocations@we-energies.com



GENERAL NOTES

NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPERATELY.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

DO NOT REMOVE ANY TREES OR SHRUBS WITHOUT APPROVAL OF THE ENGINEER.

ALL PAVEMENT MARKING STATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED BY THE ENGINEER IN THE FIELD.

EROSION CONTROL FEATURES ARE SHOWN ON THE PLAN AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE FIELD ENGINEER.

ORDER OF SECTION 2 DETAIL SHEETS

- TITLE SHEET
- GENERAL NOTES
- PROJECT OVERVIEW
- CONSTRUCTION DETAILS
- PLAN DETAILS
- TRAFFIC CONTROL
- ALIGNMENT PLAN
- MISCELLANEOUS QUANTITIES

OTHER CONTACTS

WISDOT DESIGN

MR. EVAN LIMBERATOS P.E., PROJECT MANAGER
141 NW BARSTOW ST.
WAUKESHA, WI 53187-0798
PHONE: (262) 548-8797
EVAN.LIMBERATOS@DOT.WI.GOV

WISCONSIN DNR

MS. KRISTINA BETZOLD
2300 N DR. MARTIN LUTHER KING DRIVE
MILWAUKEE, WI 53212
PHONE: (414) 507-4946
KRISTINA.BETZOLD@WISCONSIN.GOV

MILWAUKEE COUNTY TRANSIT SYSTEM

MS. MELANIE FLYNN
1942 N. 17TH ST.
MILWAUKEE, WI 53205
PHONE: (414) 343-1764
MFLYNN@MCTS.ORG

WISCONSIN COACH LINES, INC.

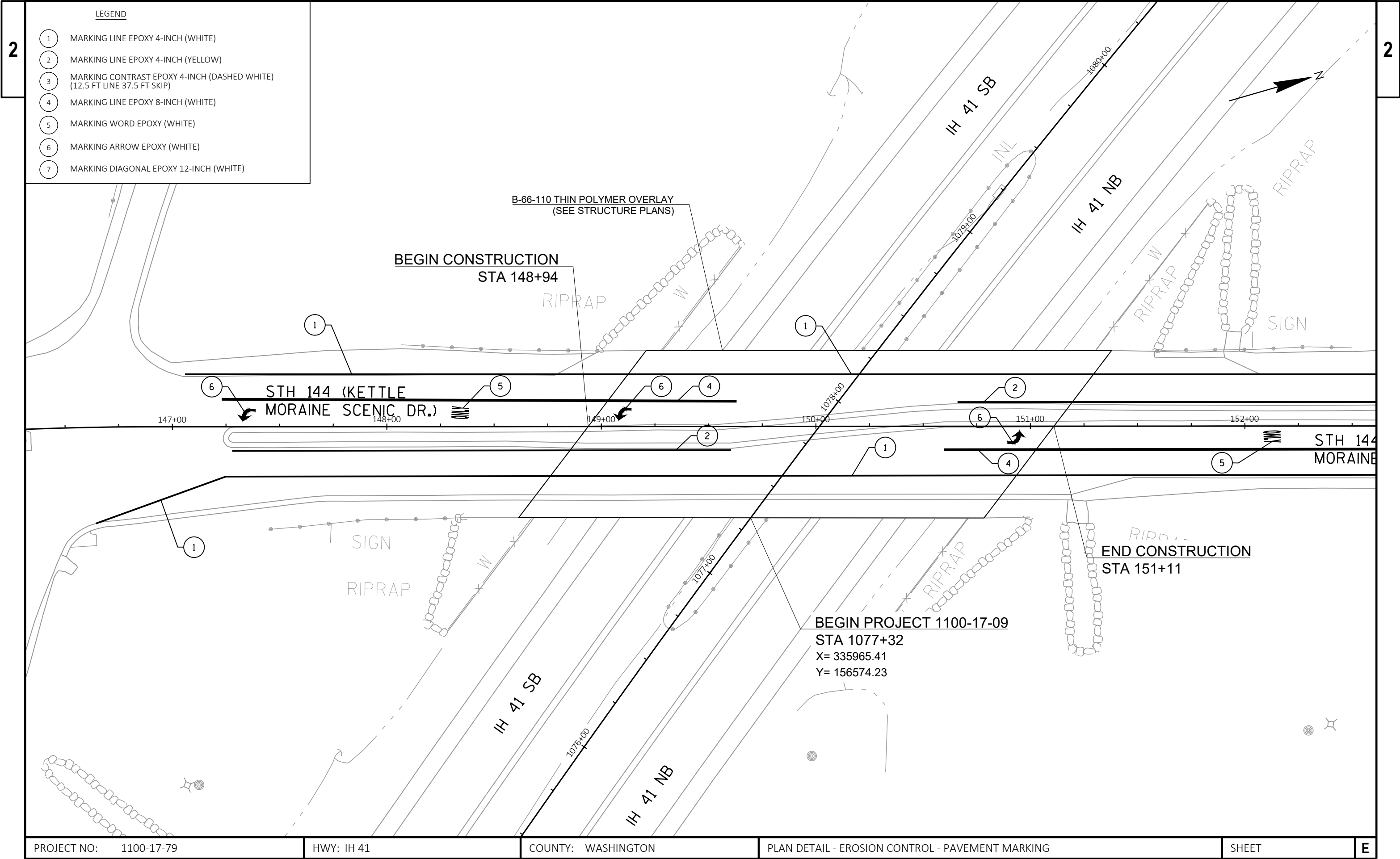
MR. TOM DIECKELMAN
1520 ARCADIAN AVENUE
WAUKESHA, WI 53186
PHONE: (262) 542-8861 EXT. 140
TOM.DIECKELMAN@COACHUSA.COM

STANDARD ABBREVIATIONS

ABUT	Abutment	LB	Pound
AC	Acre	R	Radius
AADT	Annual Average Daily Traffic	RL or R/L	Reference Line
AVG	Average	RT	Right
BR	Bridge	R/W	Right-of-Way
CL or C/L	Center Line	RD	Road
Δ	Central Angle or Delta	RDWY	Roadway
CONC	Concrete	SEC	Section
CO	County	SHLDR	Shoulder
CTH	County Trunk Highway	SW	Sidewalk
CY	Cubic Yard	S	South
D	Degree of Curve	SB	Southbound
DHV	Design Hour Volume	SPECS	Specifications
DD	Directional Distribution	SQ	Square
DOC	Document	SF or SQ FT	Square Feet
E	East	SY or SQ YD	Square Yard
X	East Grid Coordinate	STD	Standard
EB	Eastbound	SDD	Standard Detail Drawings
EL or ELEV	Elevation	STH	State Trunk Highways
ESALS	Equivalent Single Axle Loads	STA	Station
EXIST	Existing	STR	Structure or Structural
FAB	Flashing Arrow Board	SL or S/L	Survey Line
FT	Foot	T	Tangent
LT	Left	TEMP	Temporary
L	Length of Curve	T	Ton
LIN FT or LF	Linear Foot	T	Trucks (percent of)
LS	Lump Sum	TYP	Typical
MB	Message Board	USH	United States Highway
N	North	VAR	Variable
Y	North Grid Coordinate	V	Velocity or Design Speed
NB	Northbound	VOL	Volume
NO	Number	W	West
PT	Point	WB	Westbound
PC	Point of Curvature	YD	Yard
PI	Point of Intersection		
PT	Point of Tangency		

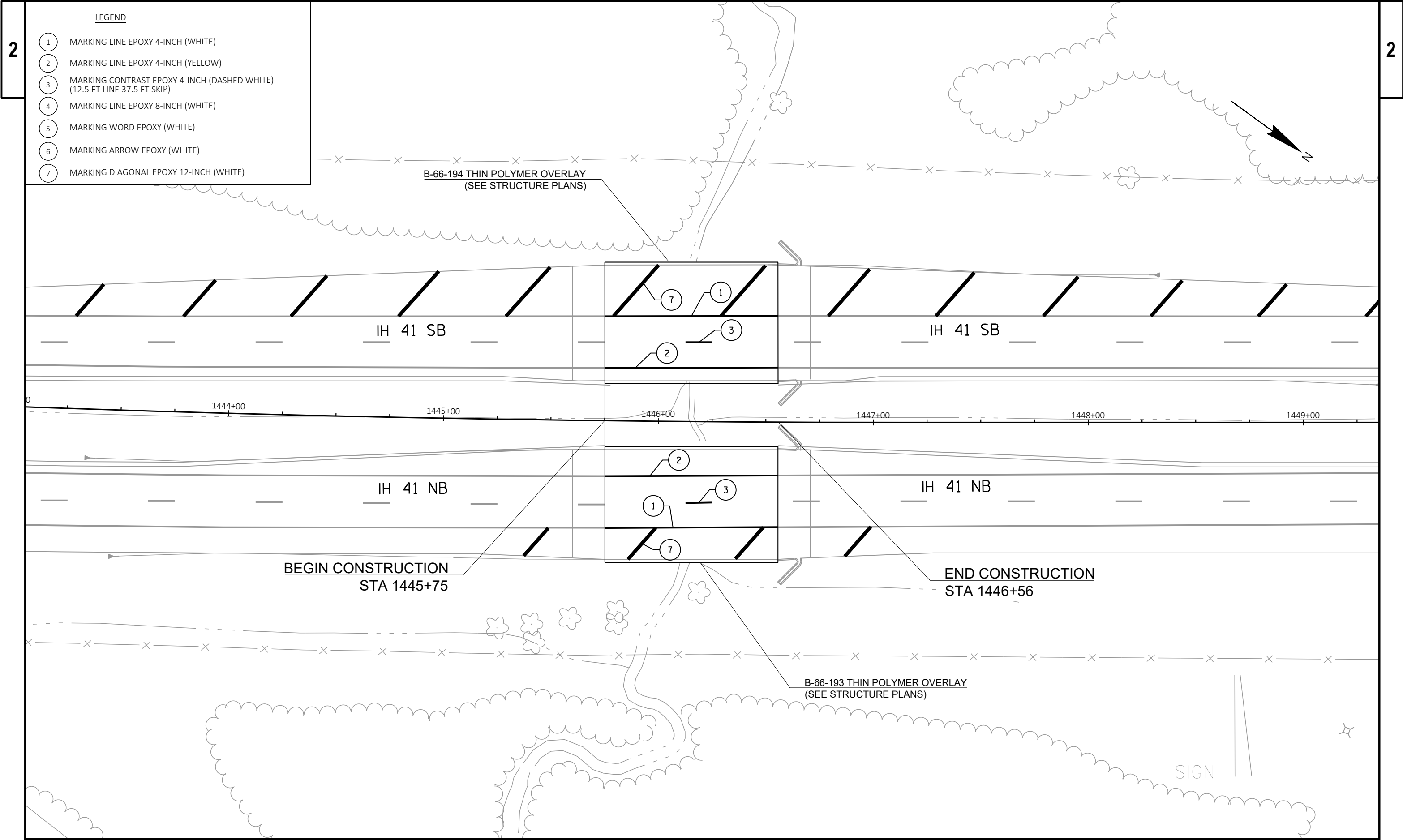


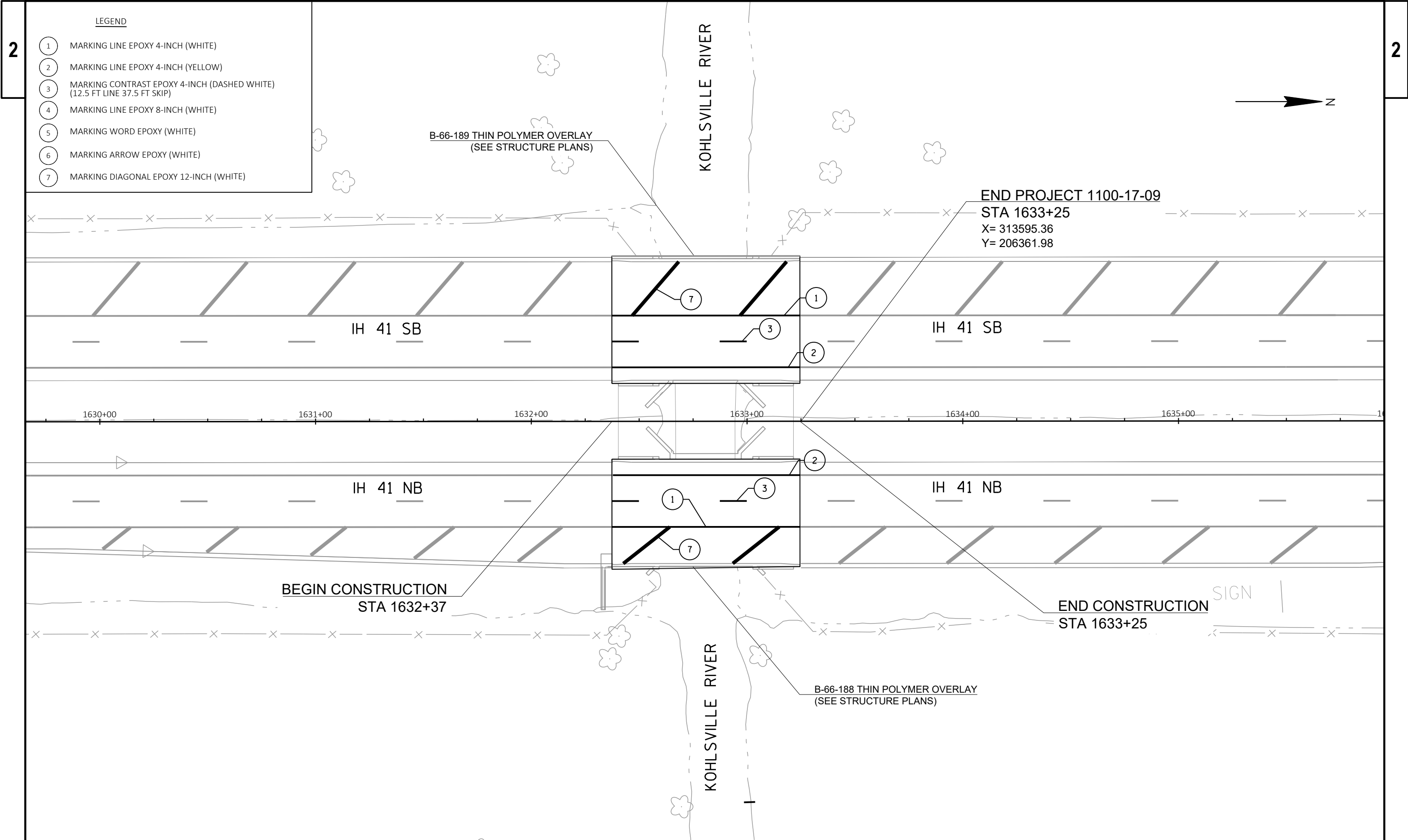
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	PROJECT OVERVIEW	SHEET	E
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LEGEND

- 1 MARKING LINE EPOXY 4-INCH (WHITE)
- 2 MARKING LINE EPOXY 4-INCH (YELLOW)
- 3 MARKING CONTRAST EPOXY 4-INCH (DASHED WHITE)
(12.5 FT LINE 37.5 FT SKIP)
- 4 MARKING LINE EPOXY 8-INCH (WHITE)
- 5 MARKING WORD EPOXY (WHITE)
- 6 MARKING ARROW EPOXY (WHITE)
- 7 MARKING DIAGONAL EPOXY 12-INCH (WHITE)





LEGEND

- 1 MARKING LINE EPOXY 4-INCH (WHITE)
- 2 MARKING LINE EPOXY 4-INCH (YELLOW)
- 3 MARKING CONTRAST EPOXY 4-INCH (DASHED WHITE)
(12.5 FT LINE 37.5 FT SKIP)
- 4 MARKING LINE EPOXY 8-INCH (WHITE)
- 5 MARKING WORD EPOXY (WHITE)
- 6 MARKING ARROW EPOXY (WHITE)
- 7 MARKING DIAGONAL EPOXY 12-INCH (WHITE)

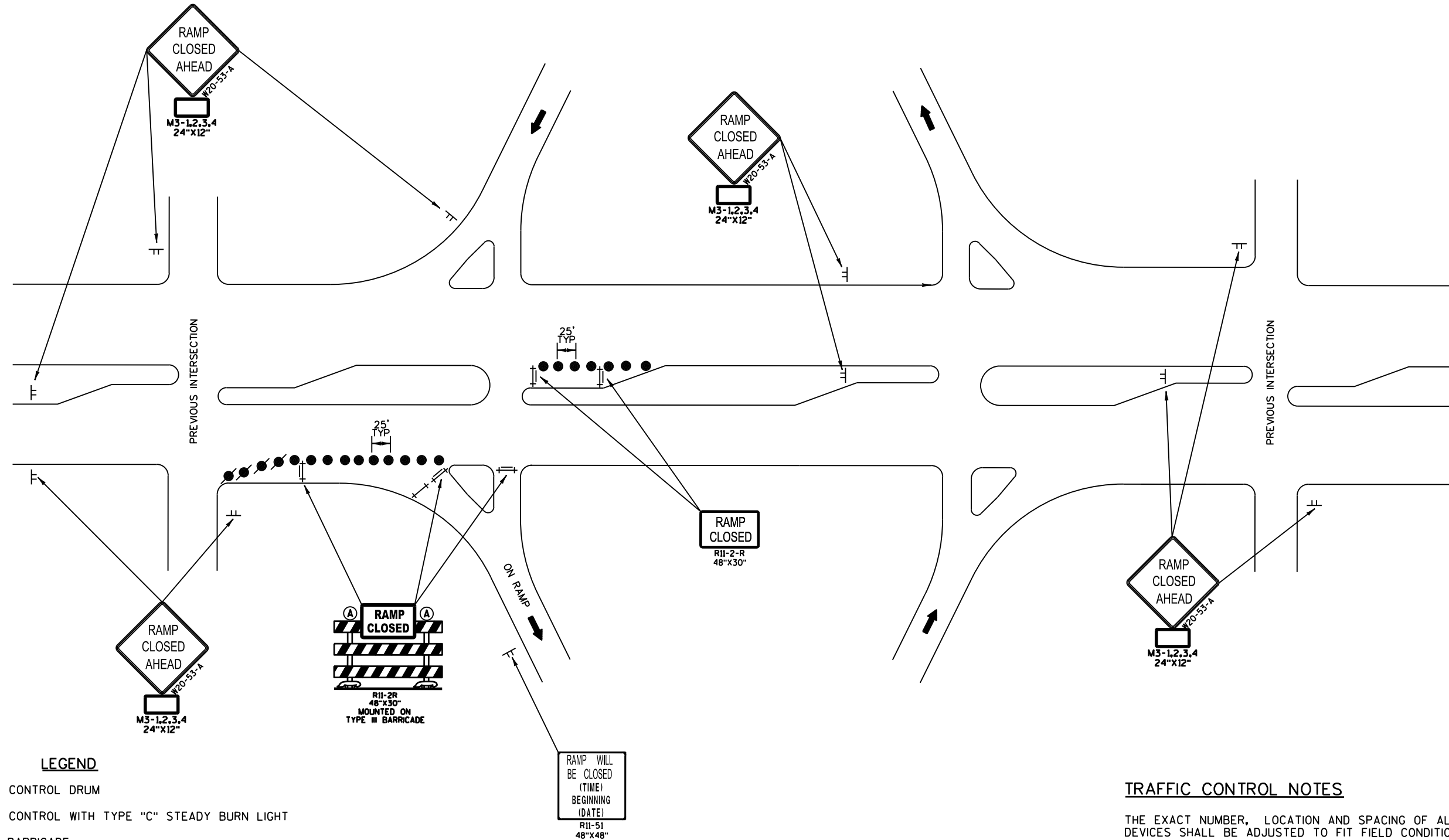
B-66-189 THIN POLYMER OVERLAY
(SEE STRUCTURE PLANS)

END PROJECT 1100-17-09
STA 1633+25
X= 313595.36
Y= 206361.98

BEGIN CONSTRUCTION
STA 1632+37

END CONSTRUCTION
STA 1633+25

B-66-188 THIN POLYMER OVERLAY
(SEE STRUCTURE PLANS)



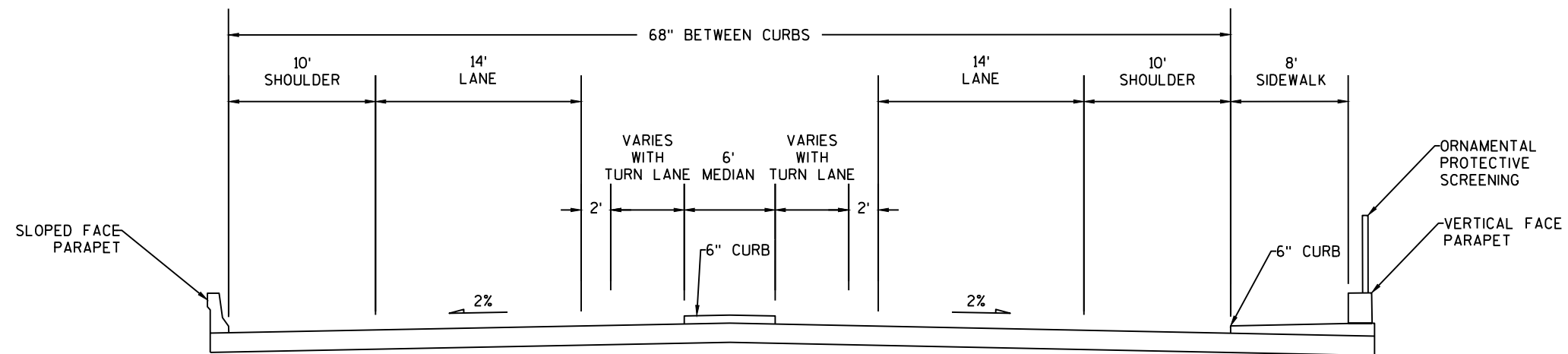
TRAFFIC CONTROL LEGEND

-  WORK ZONE
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW BOARD
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
-  TYPE III BARRICADE WITH TWO (2) TWO-WAY TYPE A WARNING LIGHTS (FLASHING)
-  TYPE III BARRICADE WITH ATTACHED SIGN AND TWO (2) TWO-WAY TYPE A WARNING LIGHTS (FLASHING)
-  SIGN ON TEMPORARY SUPPORT
- MB

 PORTABLE CHANGEABLE MESSAGE BOARD

TRAFFIC CONTROL GENERAL NOTES

- 1) THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 2) A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER. FLAGGING IS NOT PERMITTED ON FREEWAY LANES.
- 3) ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- 4) "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- 5) FOR NIGHTTIME OPERATION ALL DRUMS IN TAPERS SHALL HAVE A TYPE C STEADY BURN WARNING LIGHT.
- 6) ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.
- 7) TRAFFIC CONTROL DRUM SPACING SHALL BE 50' UNLESS OTHERWISE NOTED.



NOTE: FULL BRIDGE CLOSURE
REQUIRED FOR THIN POLYMER
OVERLAY APPLICATION

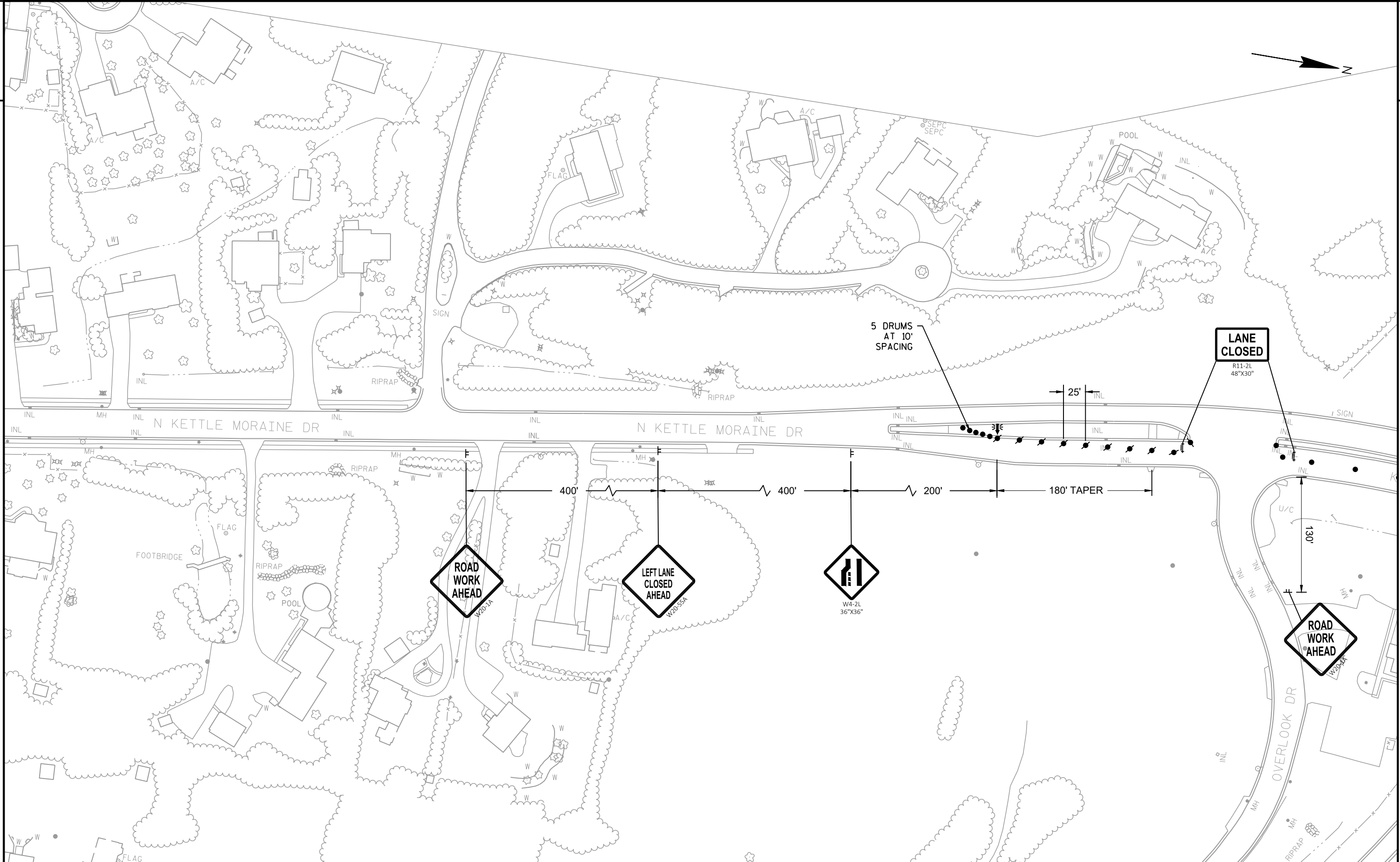
TYPICAL SECTION – FULL CLOSURE
STH 144
B-66-110



PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - B-66-110	SHEET	E
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2

2



PROJECT NO:	1100-17-79
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HWY: IH 41

COUNTY: WASHINGTON

TRAFFIC CONTROL - B-66-110

SHEET

E

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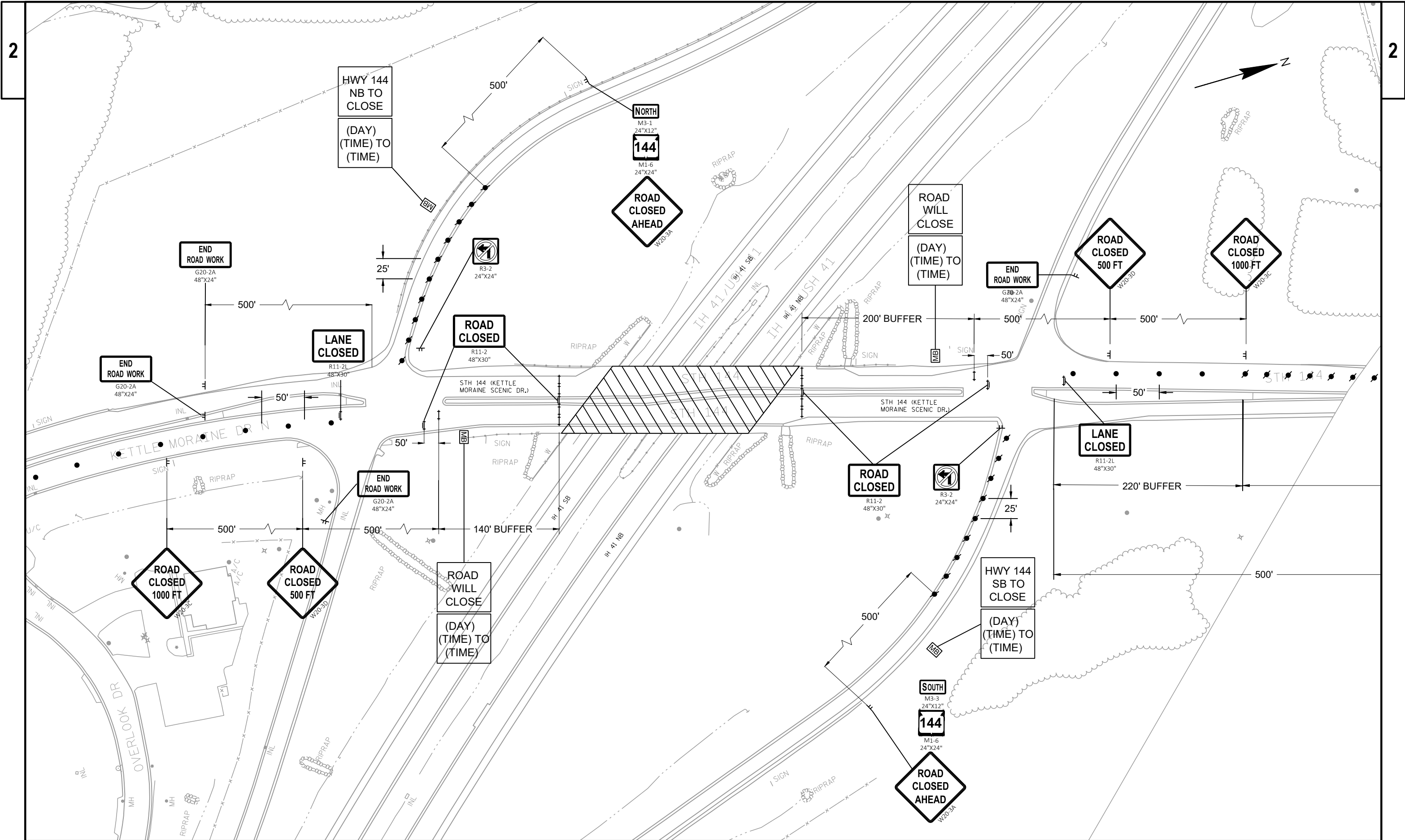
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PLOT BY : ATARI, RAZAN H A E L PLOT NAME :

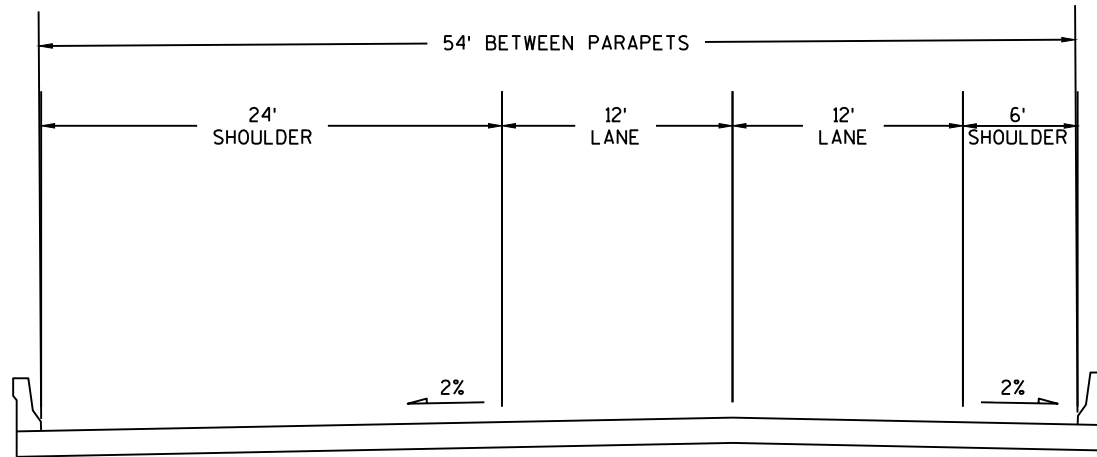
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PLOT SCALE : #####

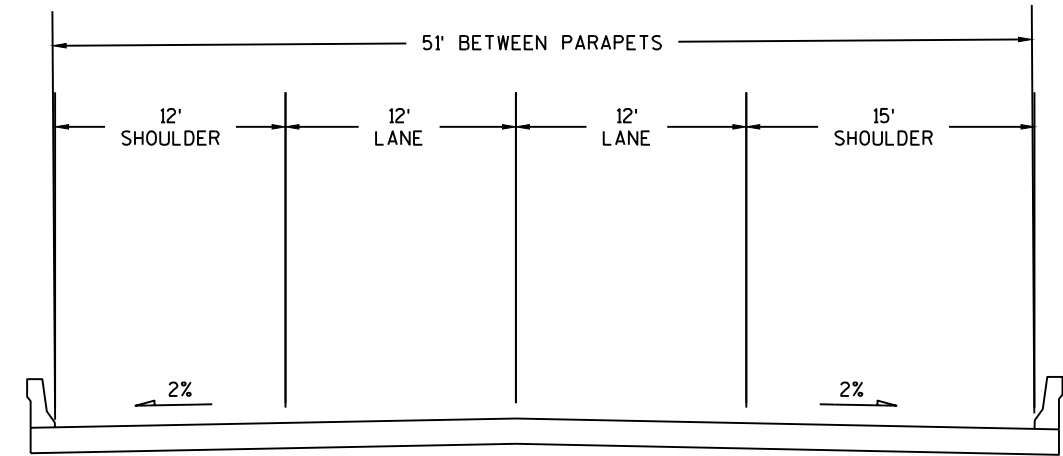
WISDOT/CADDS SHEET 42



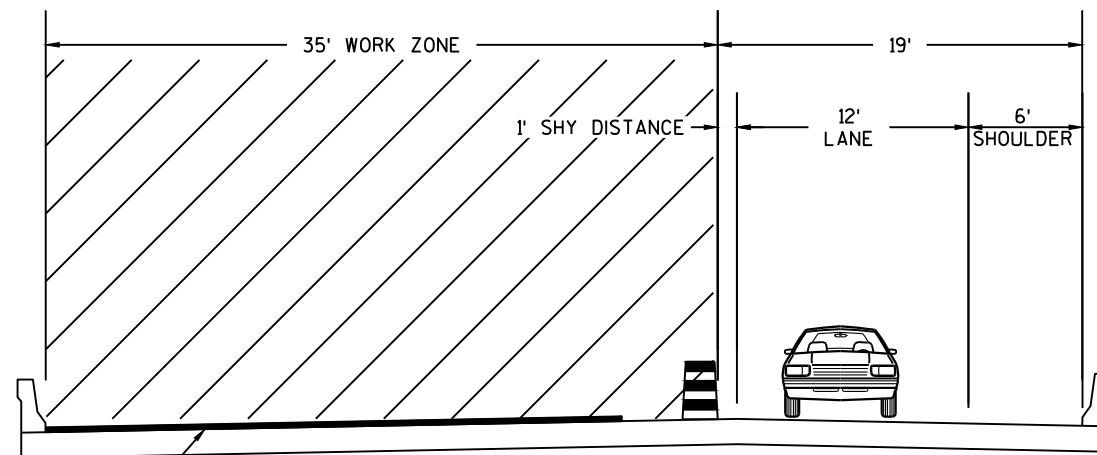




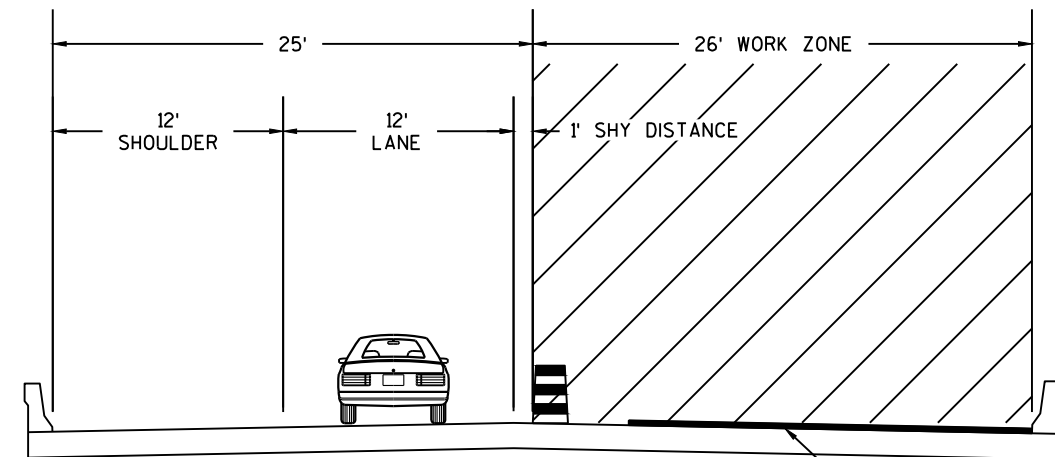
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IH 41 SB



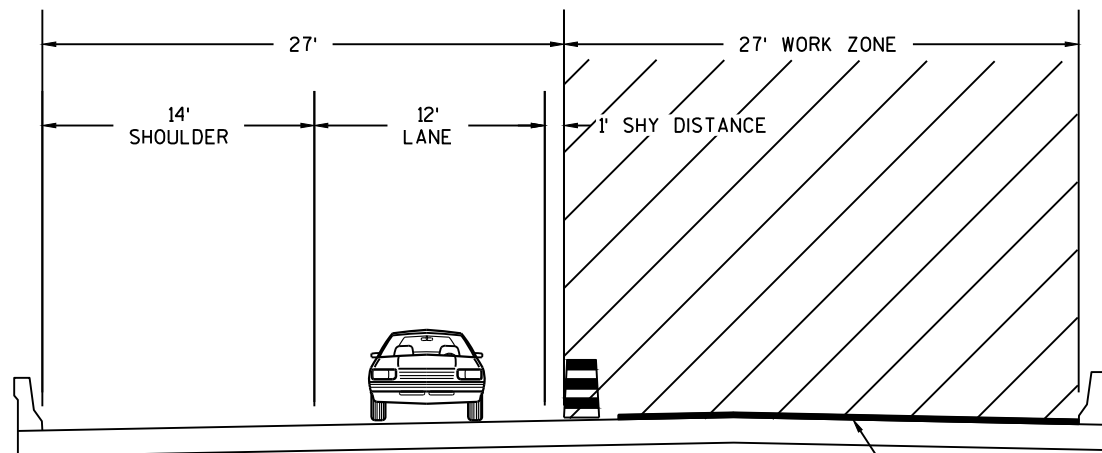
TYPICAL SECTION - EXISTING
IH 41 NB



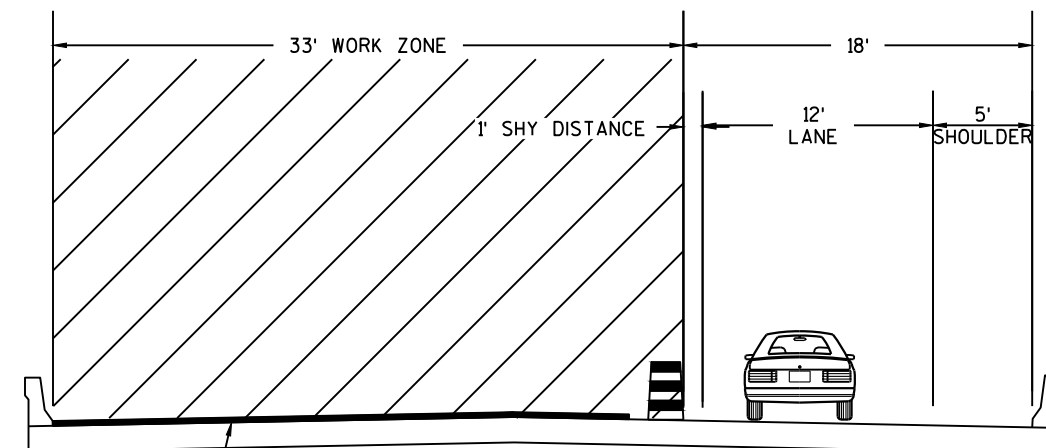
TYPICAL SECTION - STAGE 1
IH 41 SB



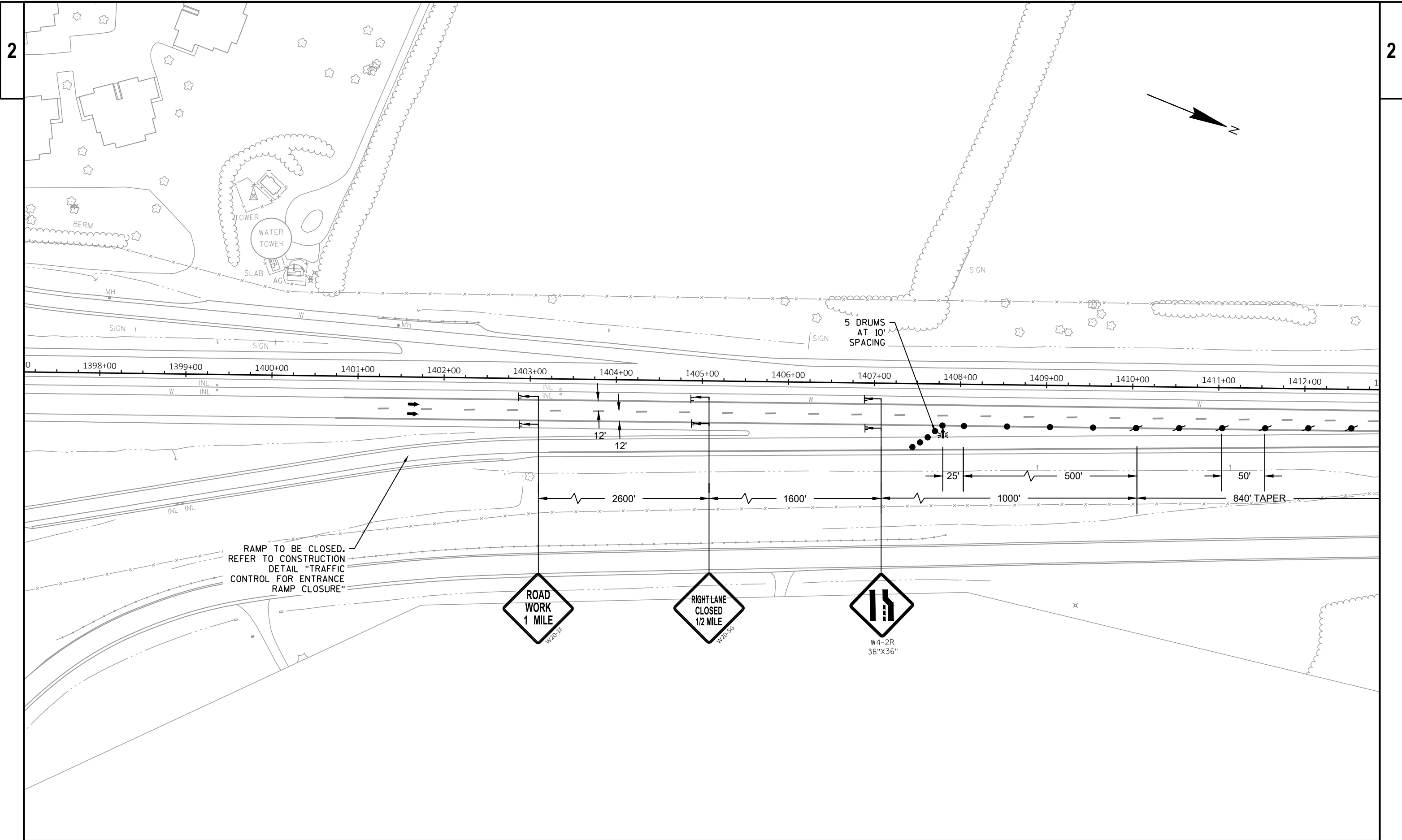
TYPICAL SECTION - STAGE 1
IH 41 NB



TYPICAL SECTION - STAGE 2
IH 41 SB



TYPICAL SECTION - STAGE 2
IH 41 NB



PROJECT NO: 1100-17-79

HWY: IH 41

COUNTY: WASHINGTON

TRAFFIC CONTROL - STAGE 1 - B-66-193 & B-66-194

SHEET

E

FILE NAME : N:\PDS\C3D\11001709\SHEETPLAN\026001_S1.DWG
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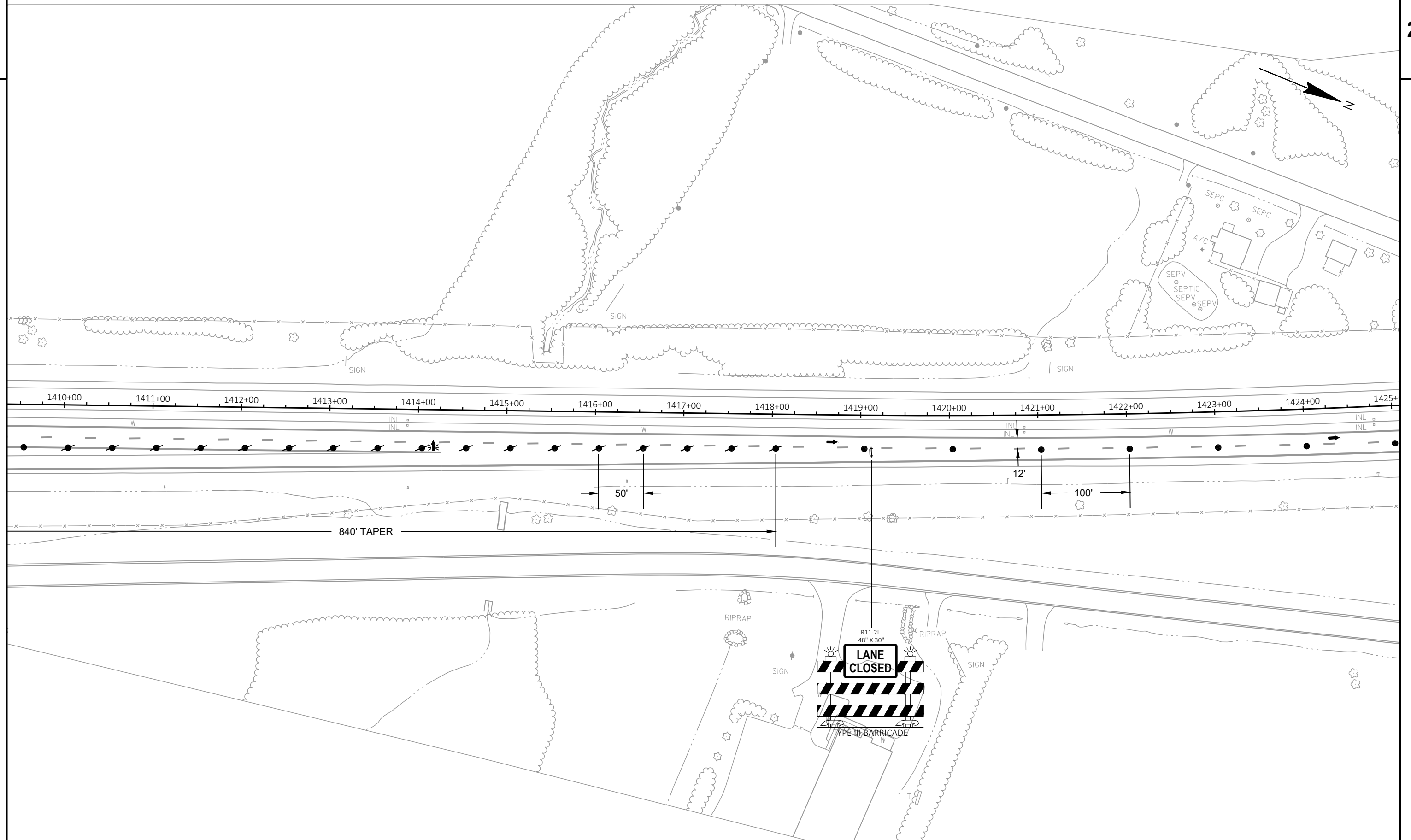
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PLOT BY : ATARI, RAZAN HAEI

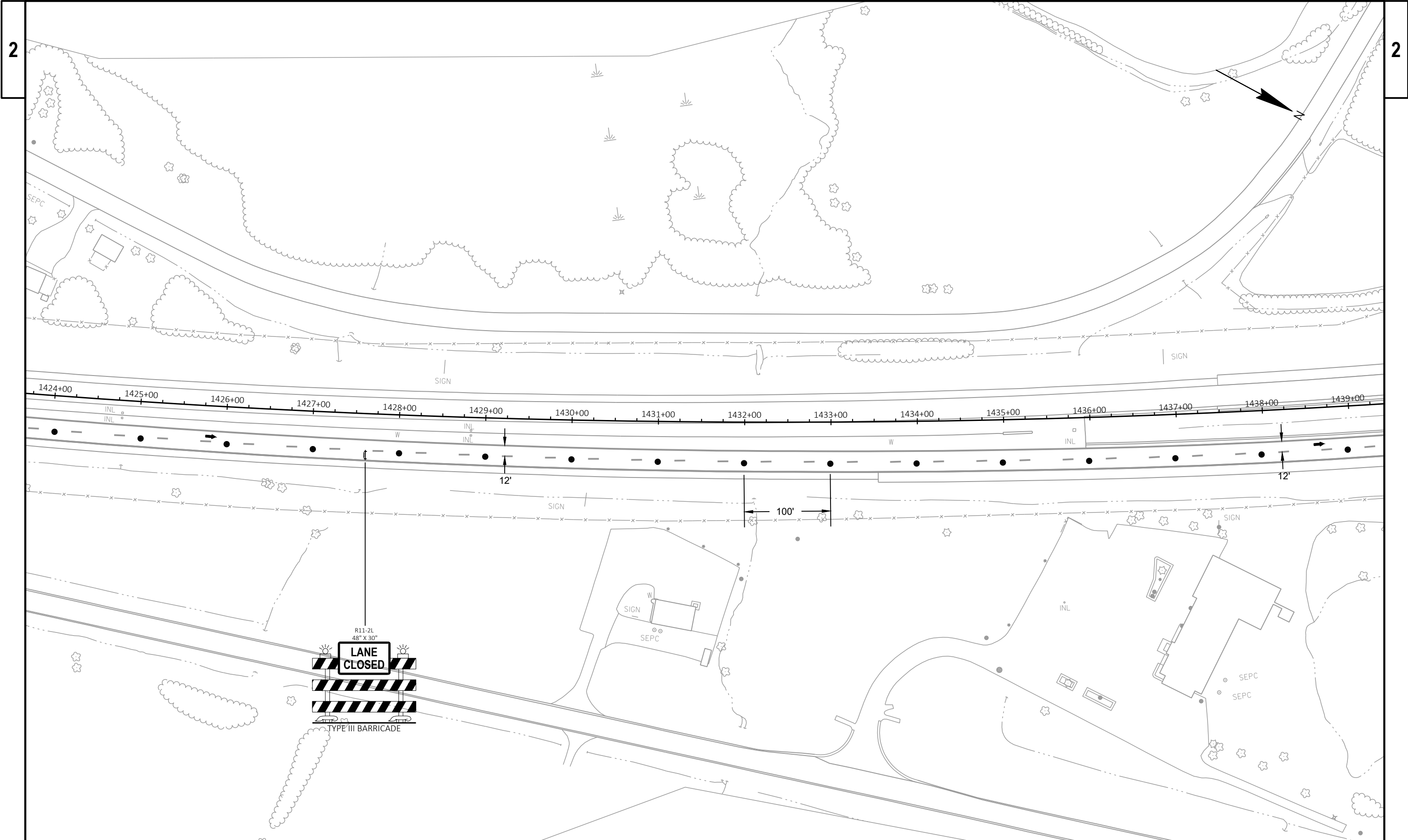
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PLOT SCALE : 1 IN:100 FT

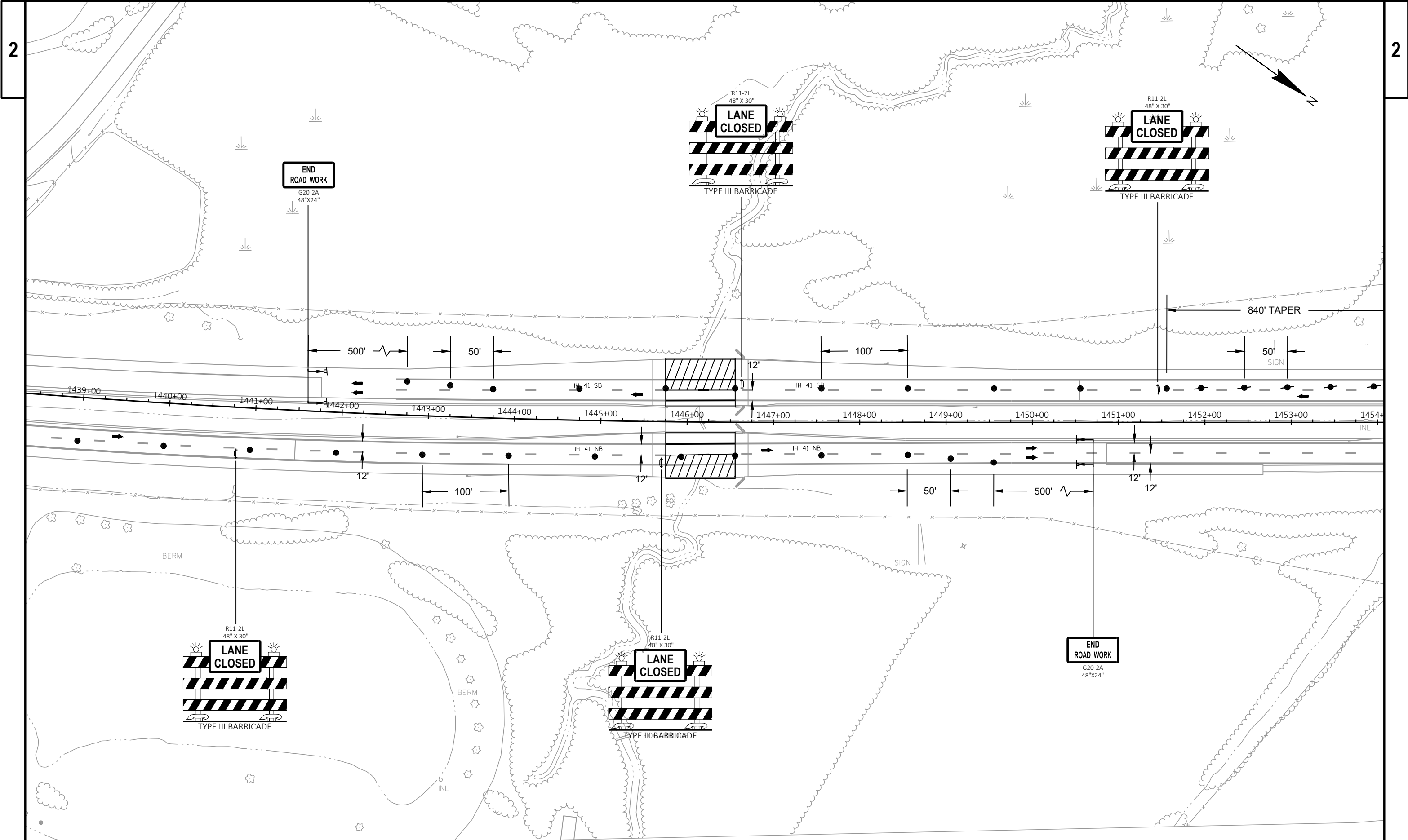
WISDOT/CADDs SHEET 42



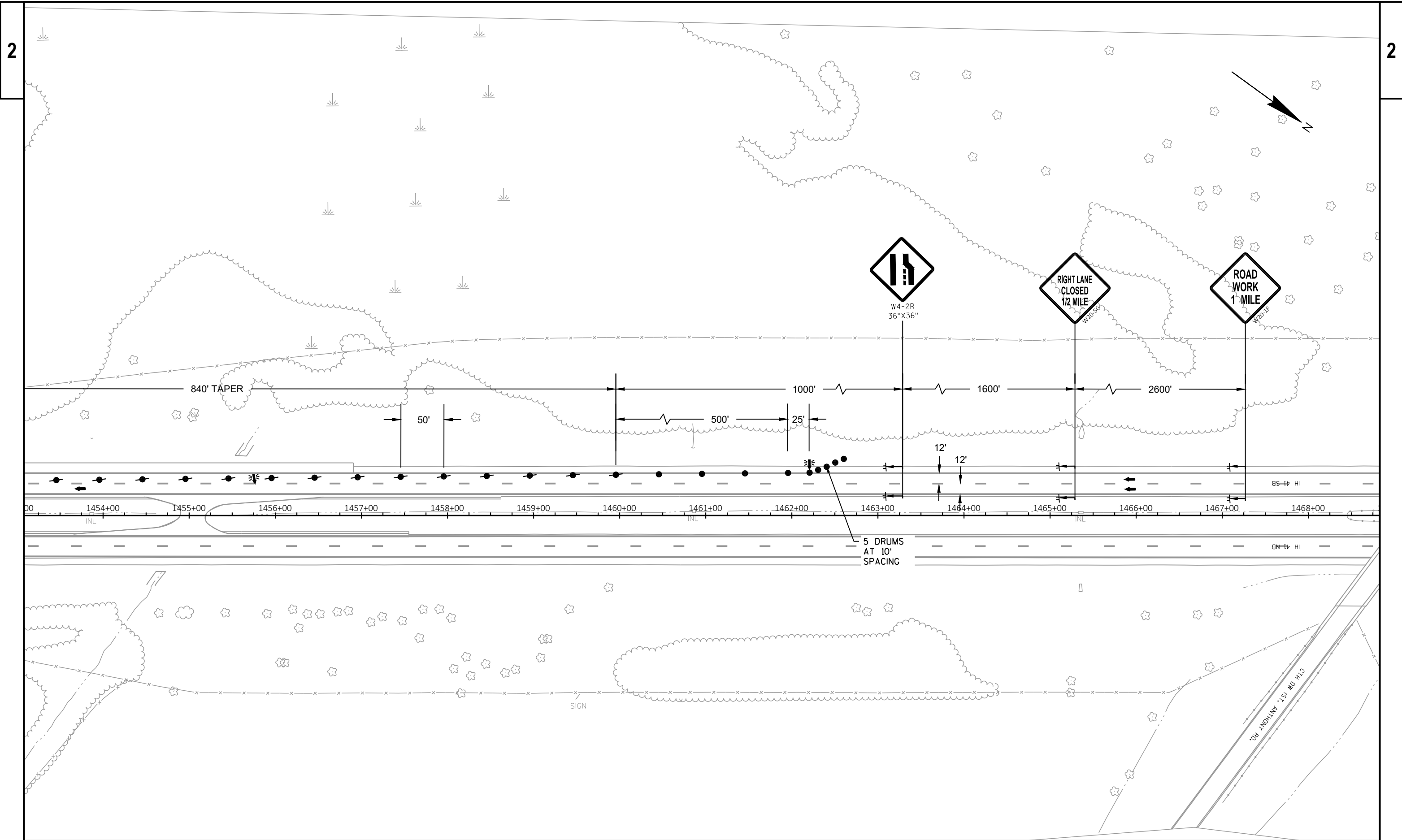
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 1 - B-66-193 & B-66-194	SHEET	E
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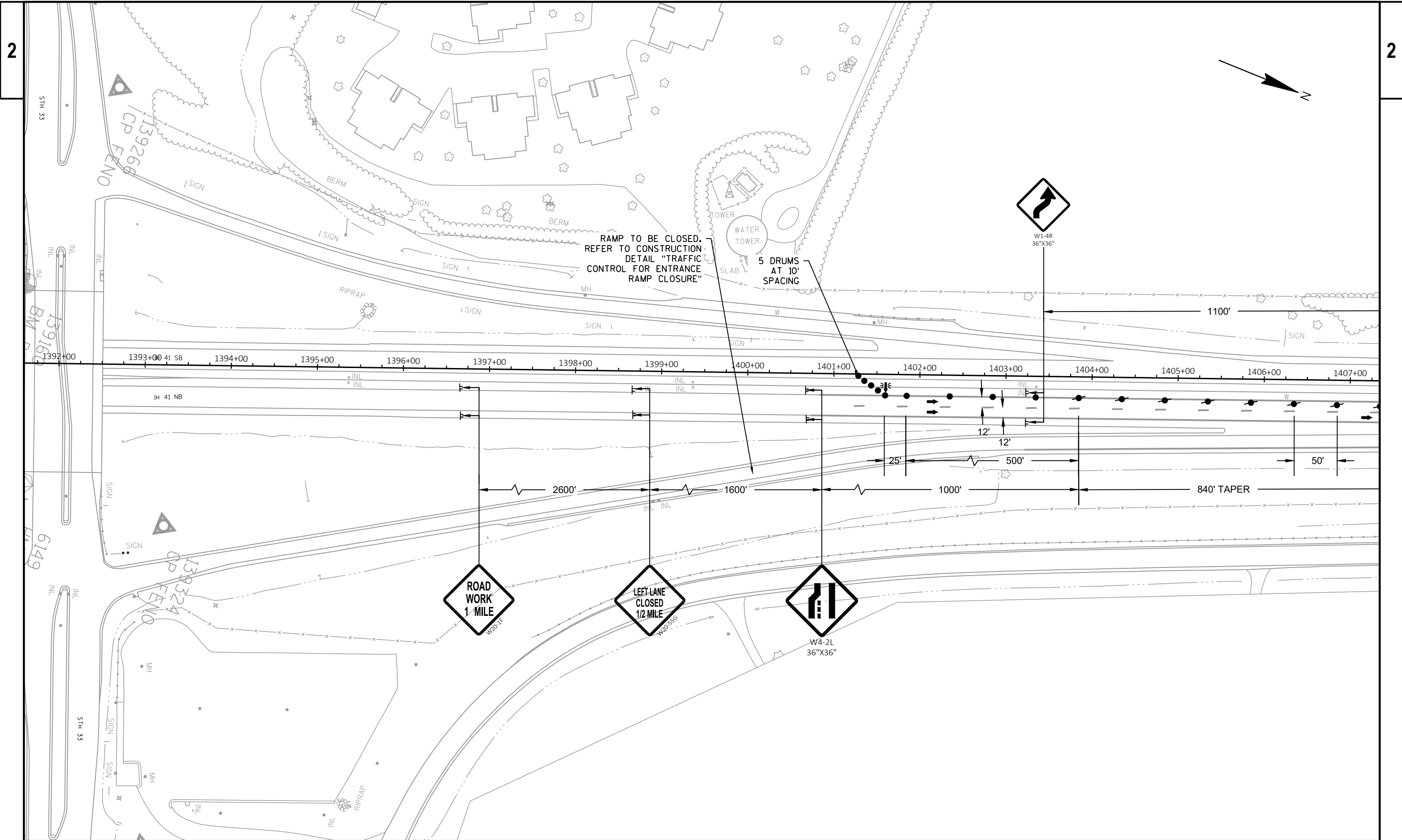
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 1 - B-66-193 & B-66-194	SHEET E
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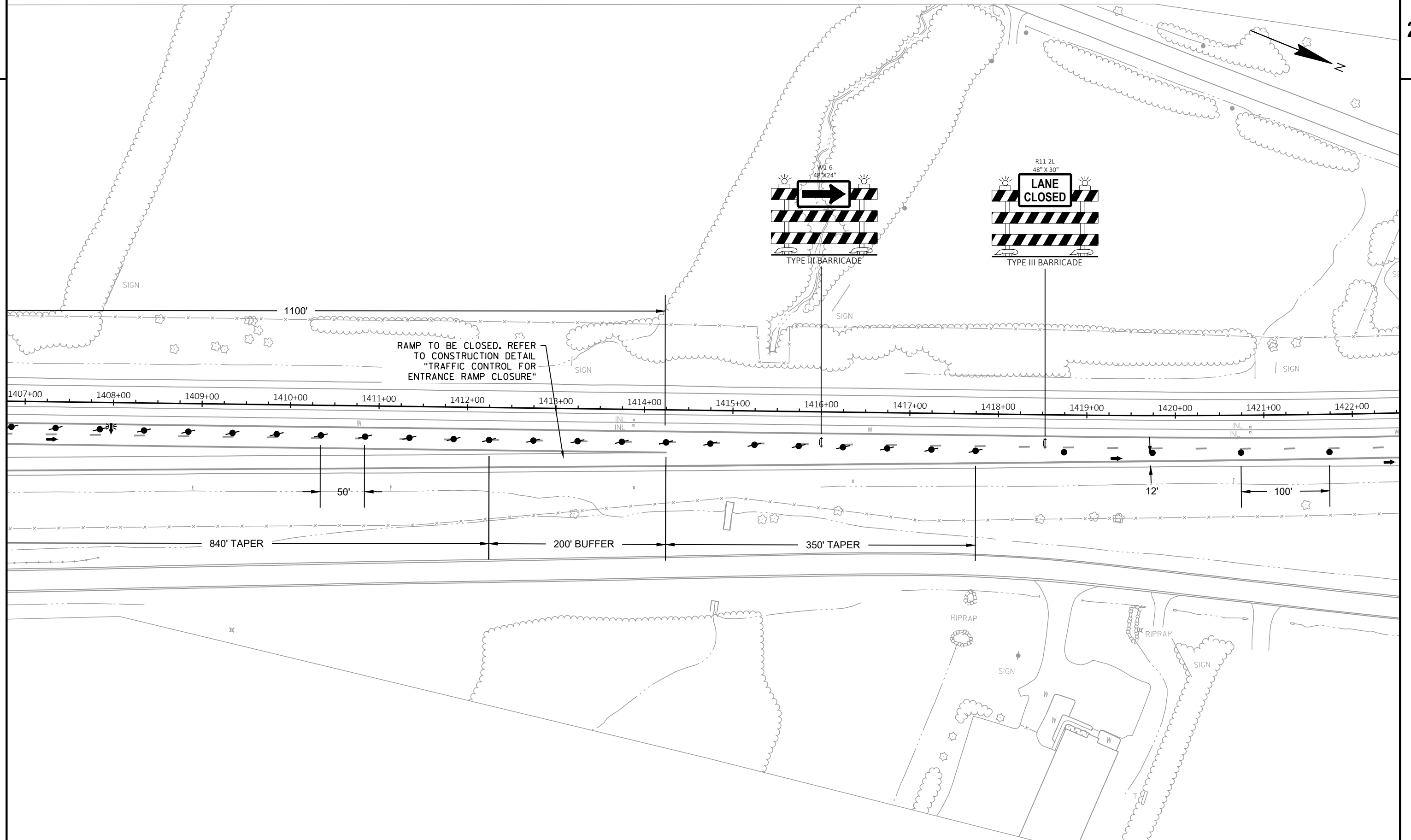


PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 1 - B-66-193 & B-66-194	SHEET	E
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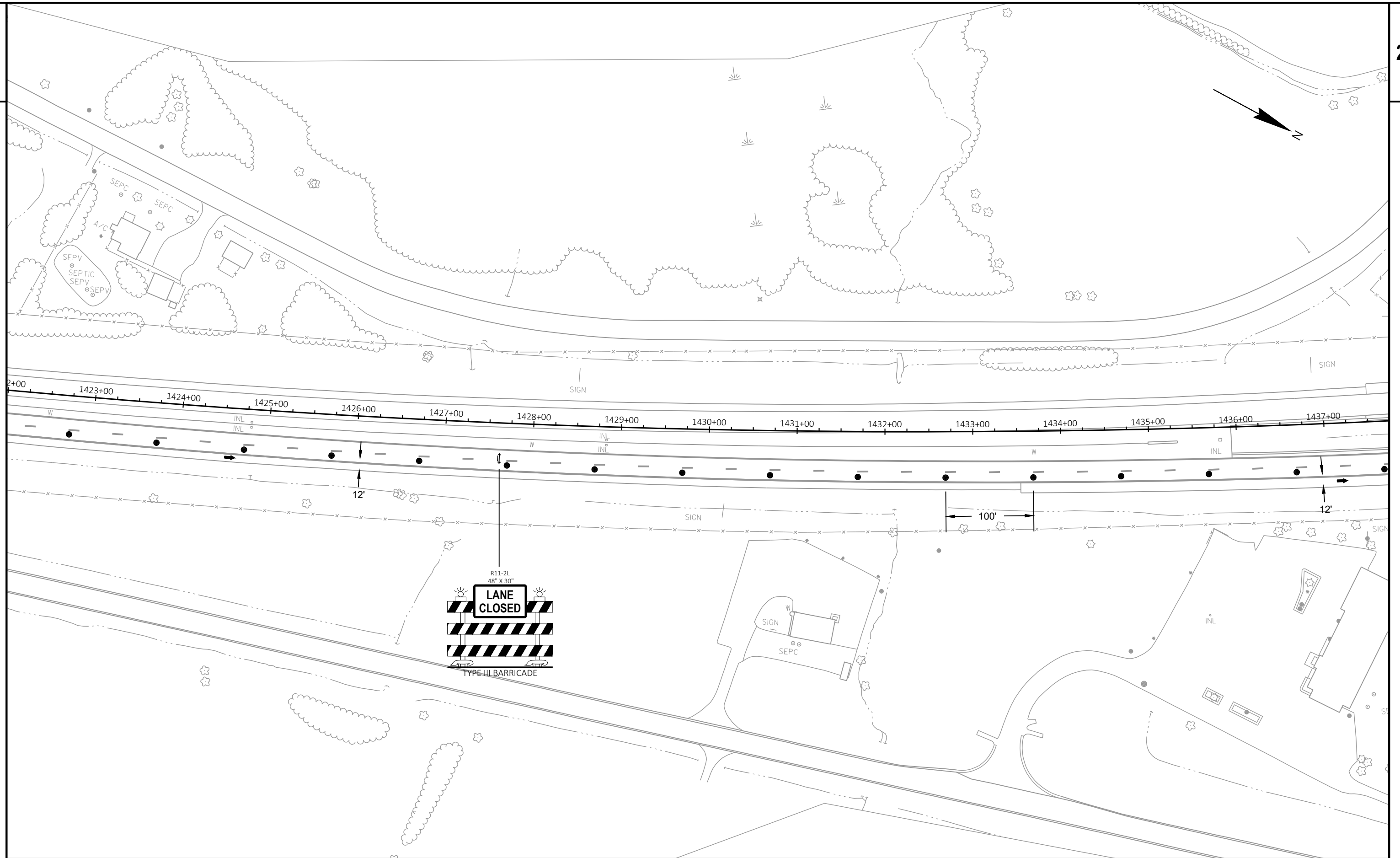


PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 1 - B-66-193 & B-66-194	SHEET E
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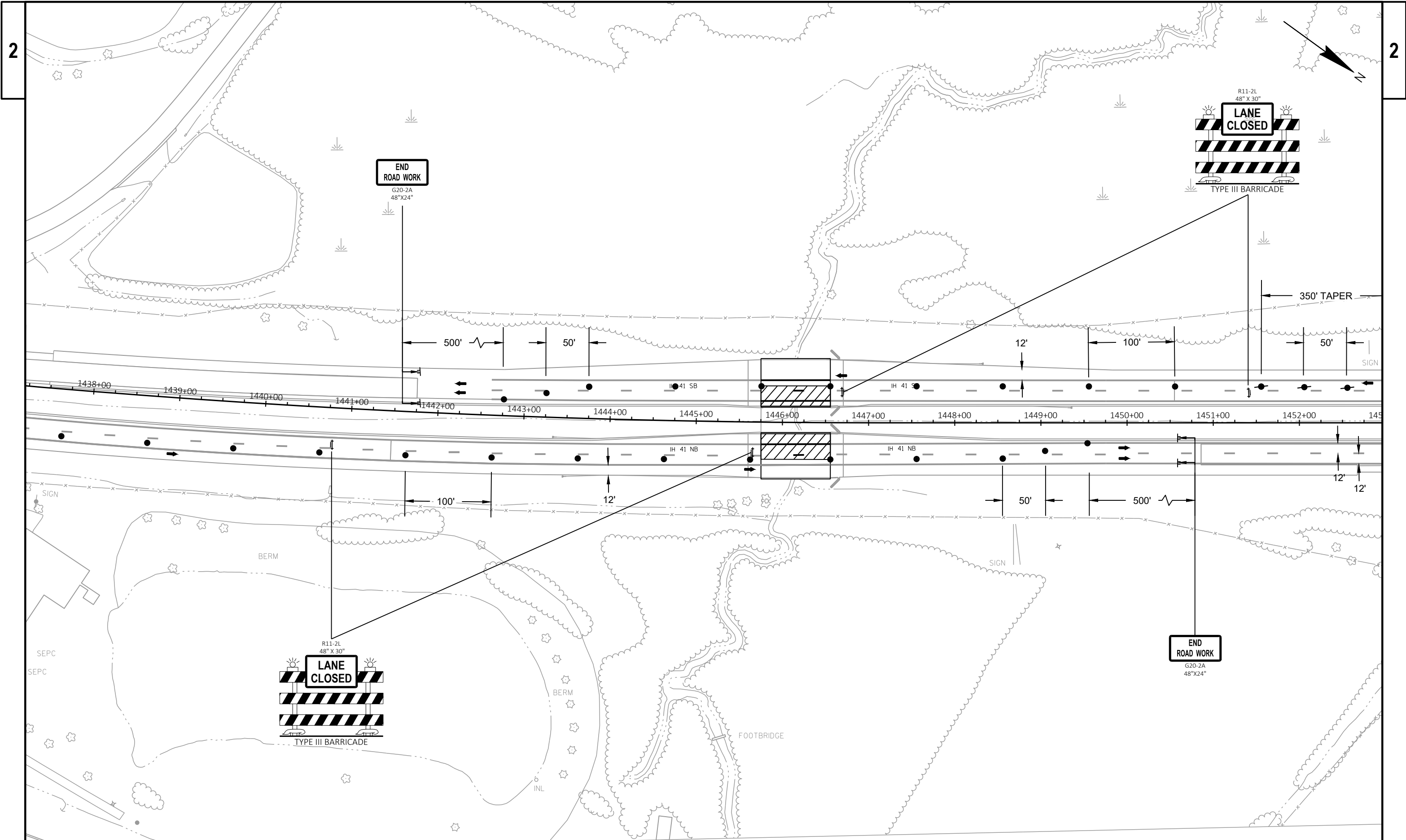




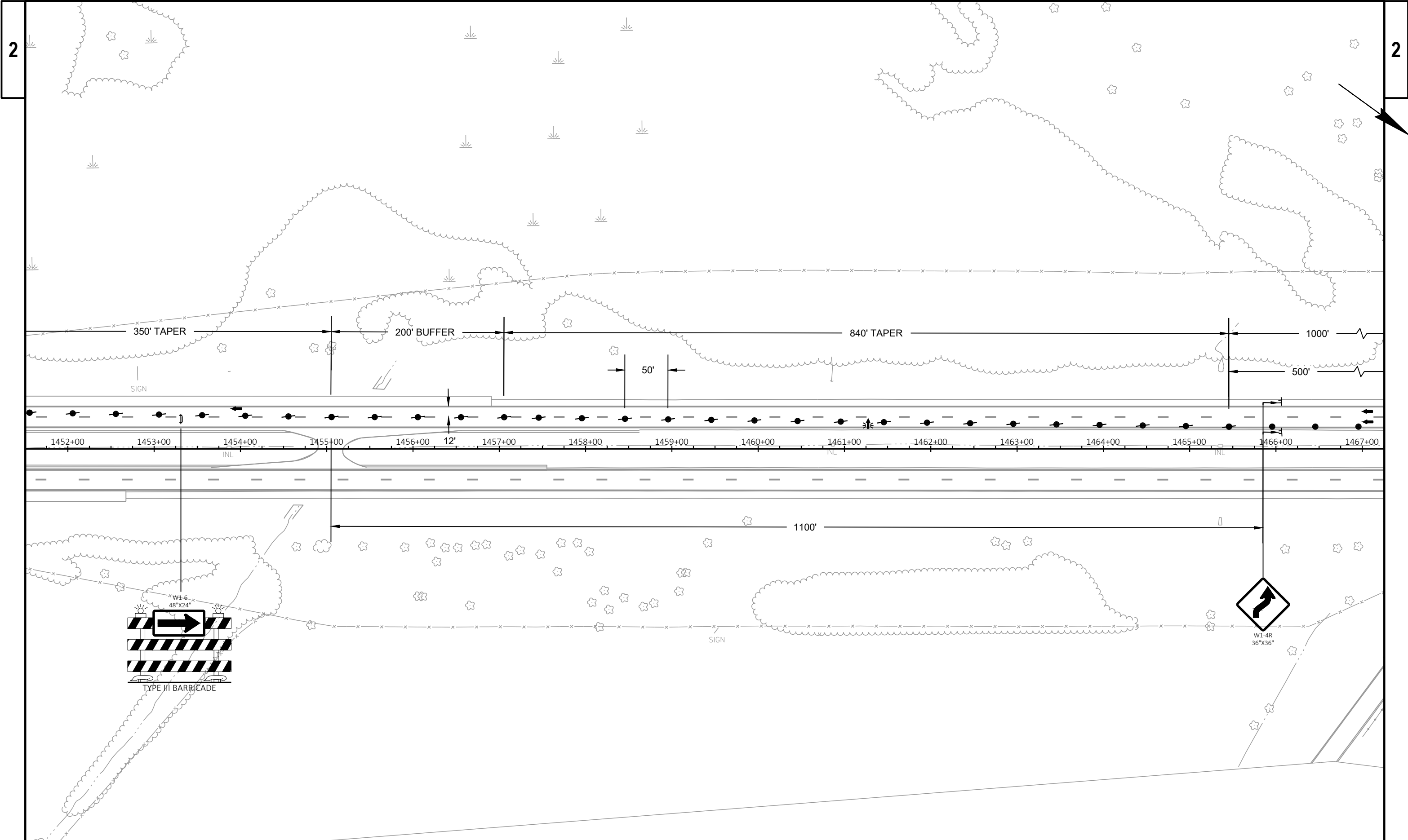
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 2 - B-66-193 & B-66-194	SHEET E
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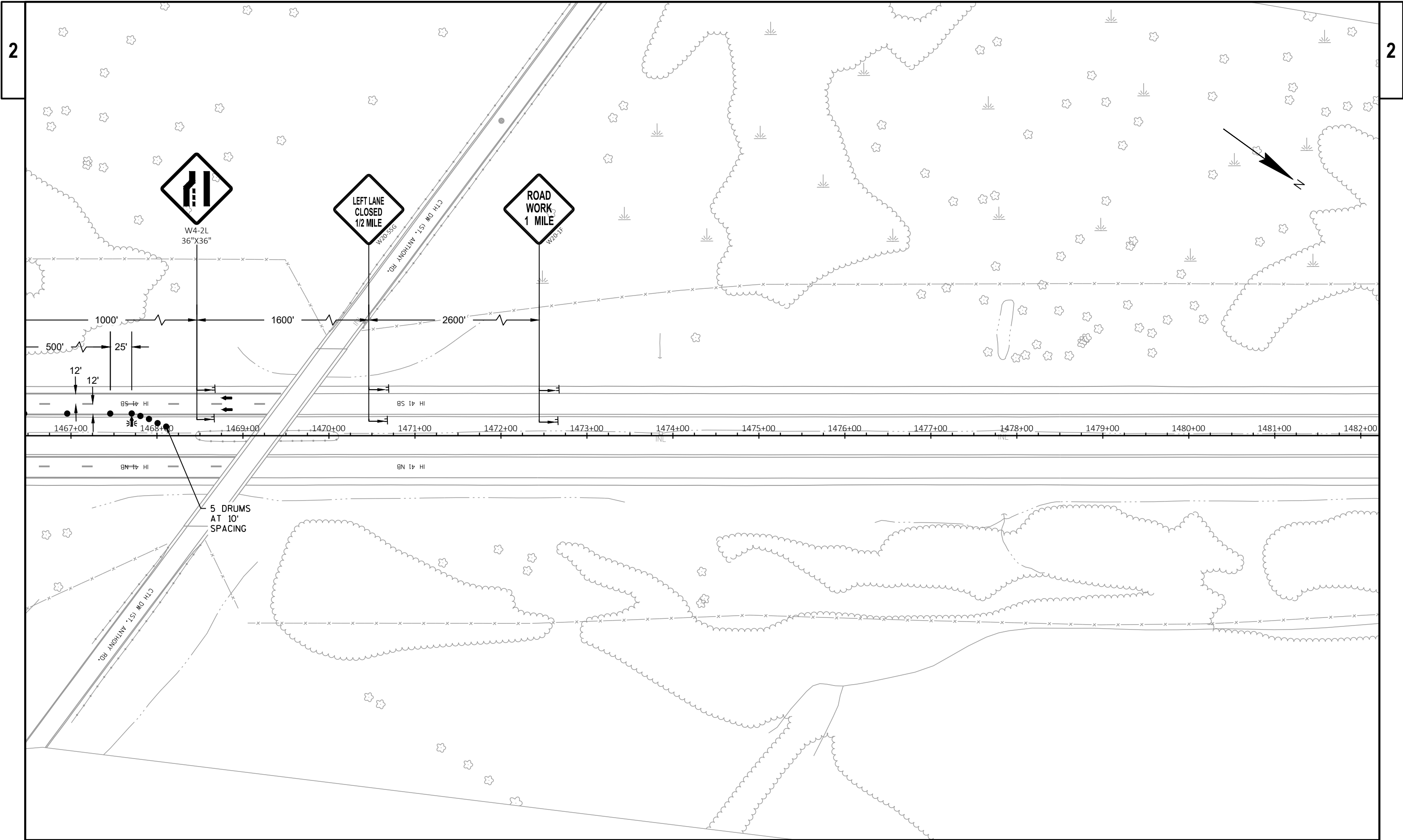
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 2 - B-66-193 & B-66-194	SHEET	E
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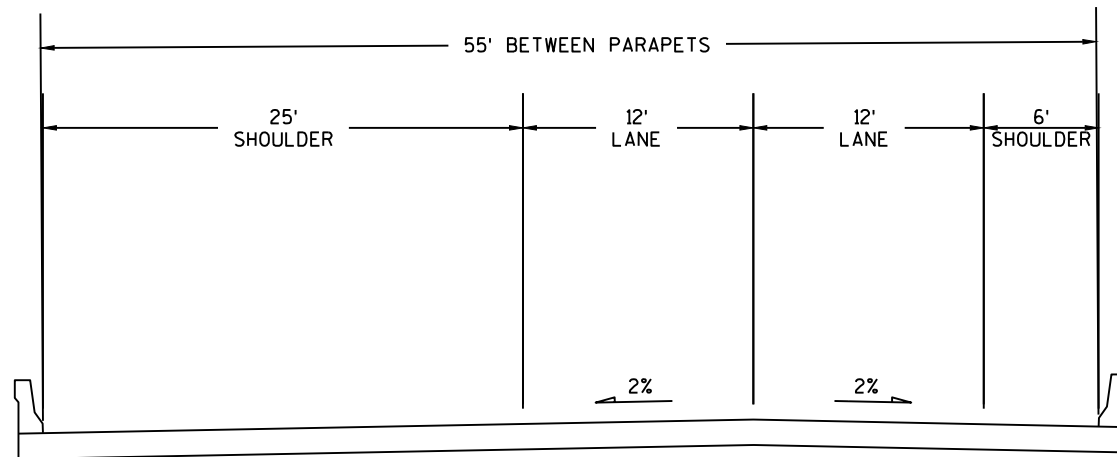
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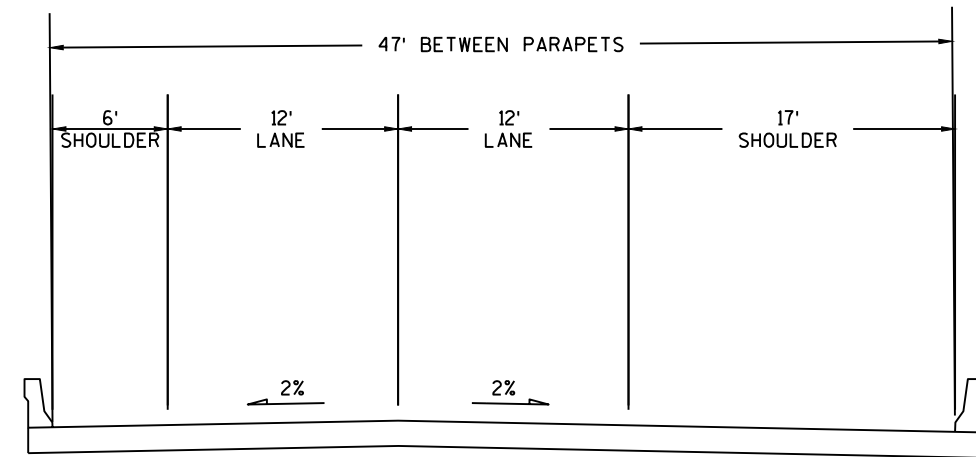
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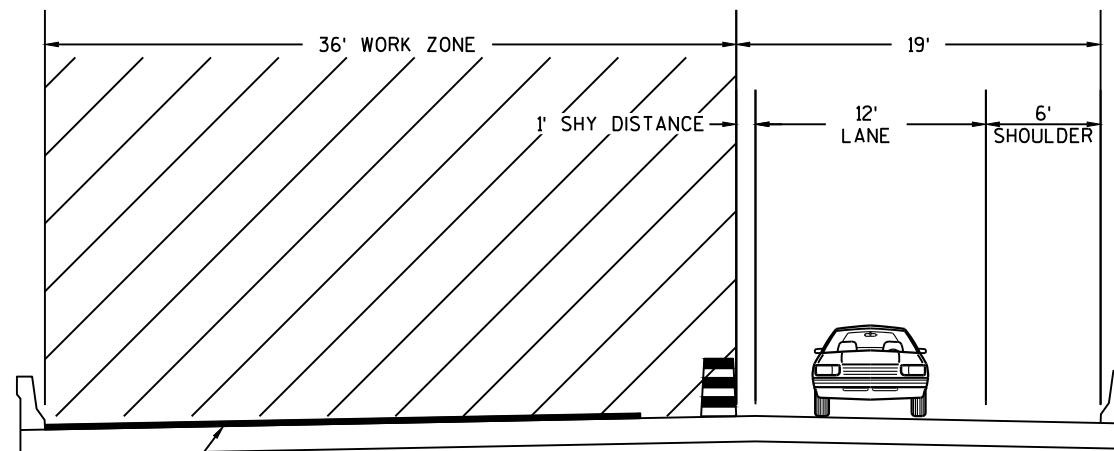
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 2 - B-66-193 & B-66-194	SHEET E
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TYPICAL SECTION – EXISTING
IH 41 SB

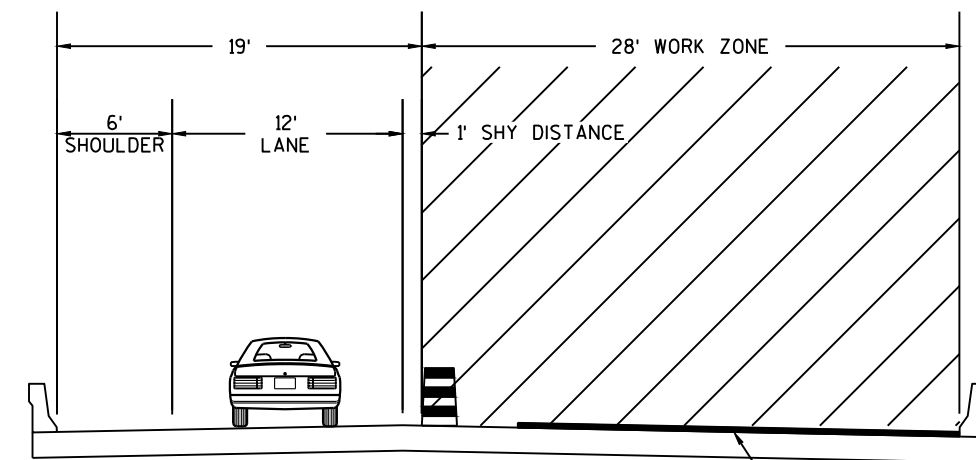


TYPICAL SECTION – EXISTING
IH 41 NB



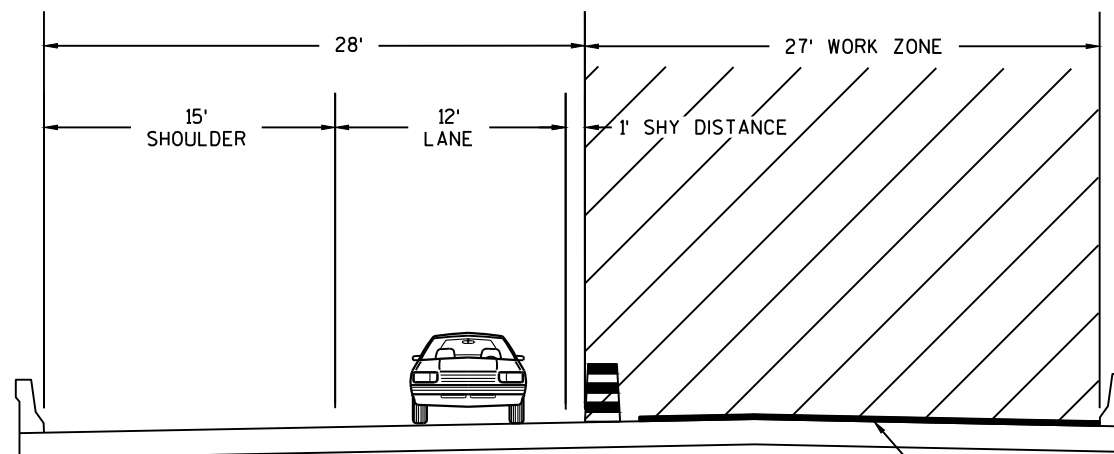
APPLY THIN POLYMER OVERLAY

TYPICAL SECTION – STAGE 1
IH 41 SB



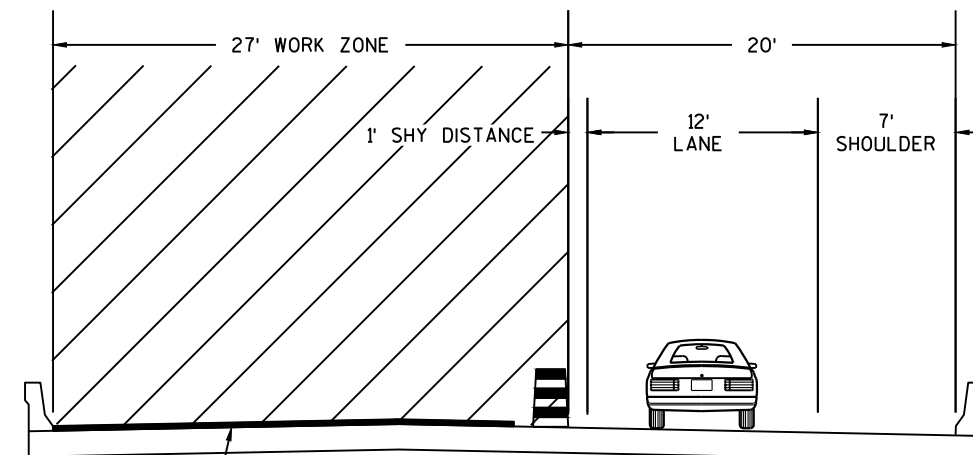
APPLY THIN POLYMER OVERLAY

TYPICAL SECTION – STAGE 1
IH 41 NB



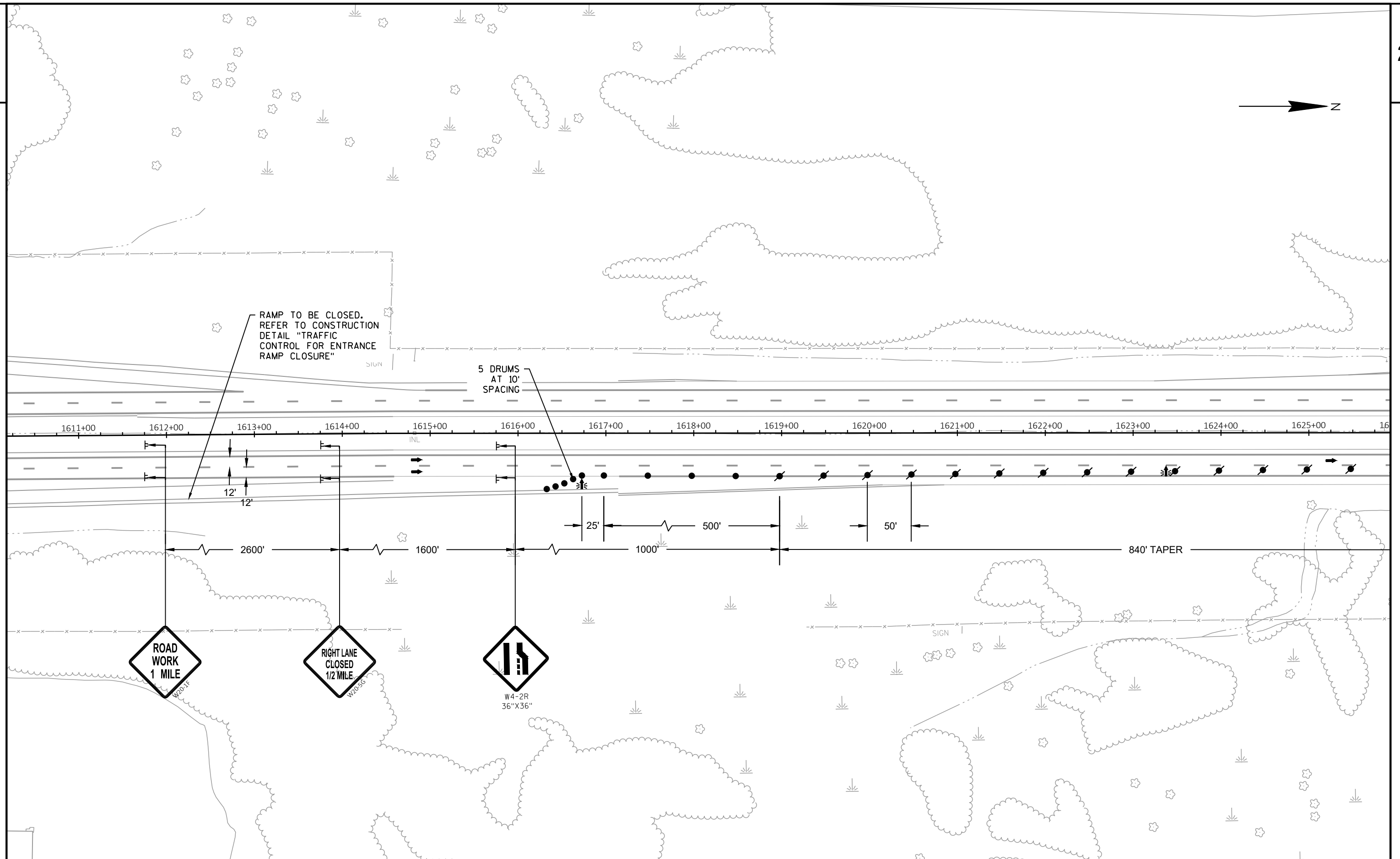
APPLY THIN POLYMER OVERLAY

TYPICAL SECTION – STAGE 2
IH 41 SB



APPLY THIN POLYMER OVERLAY

TYPICAL SECTION – STAGE 2
IH 41 NB



PROJECT NO: 1100-17-79

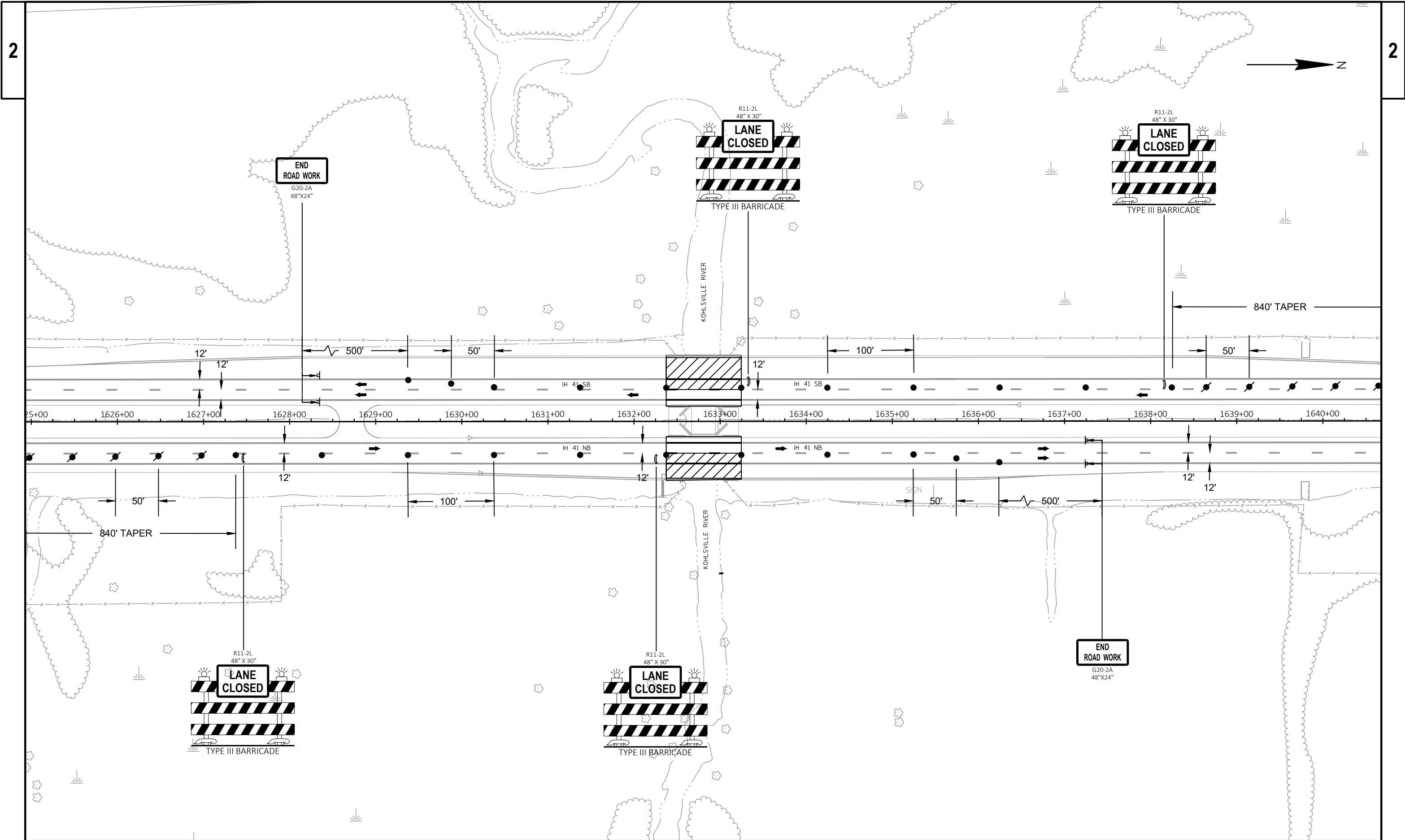
HWY: IH 41

COUNTY: WASHINGTON

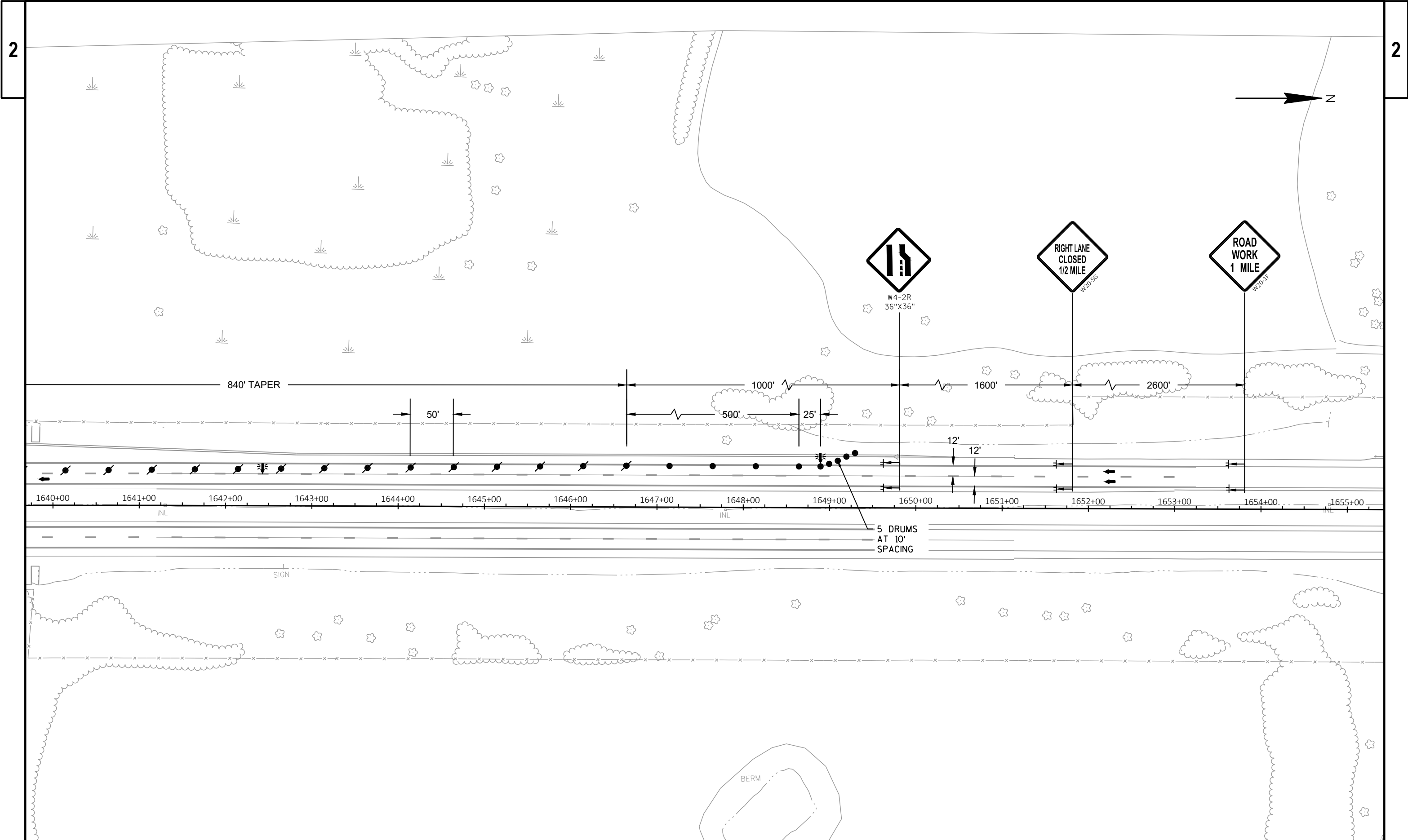
TRAFFIC CONTROL - STAGE 1 - B-66-188 & B-66-189

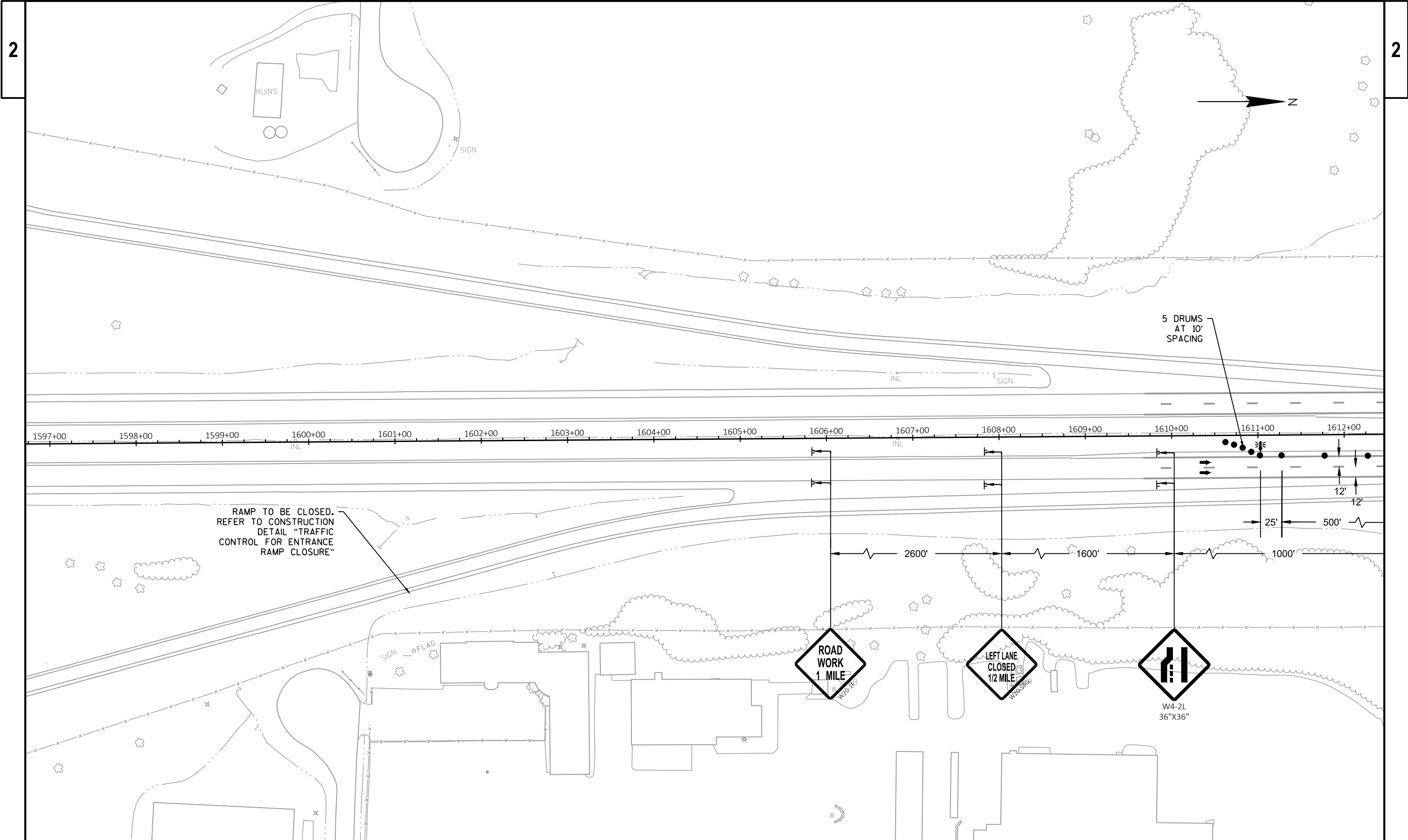
SHEET

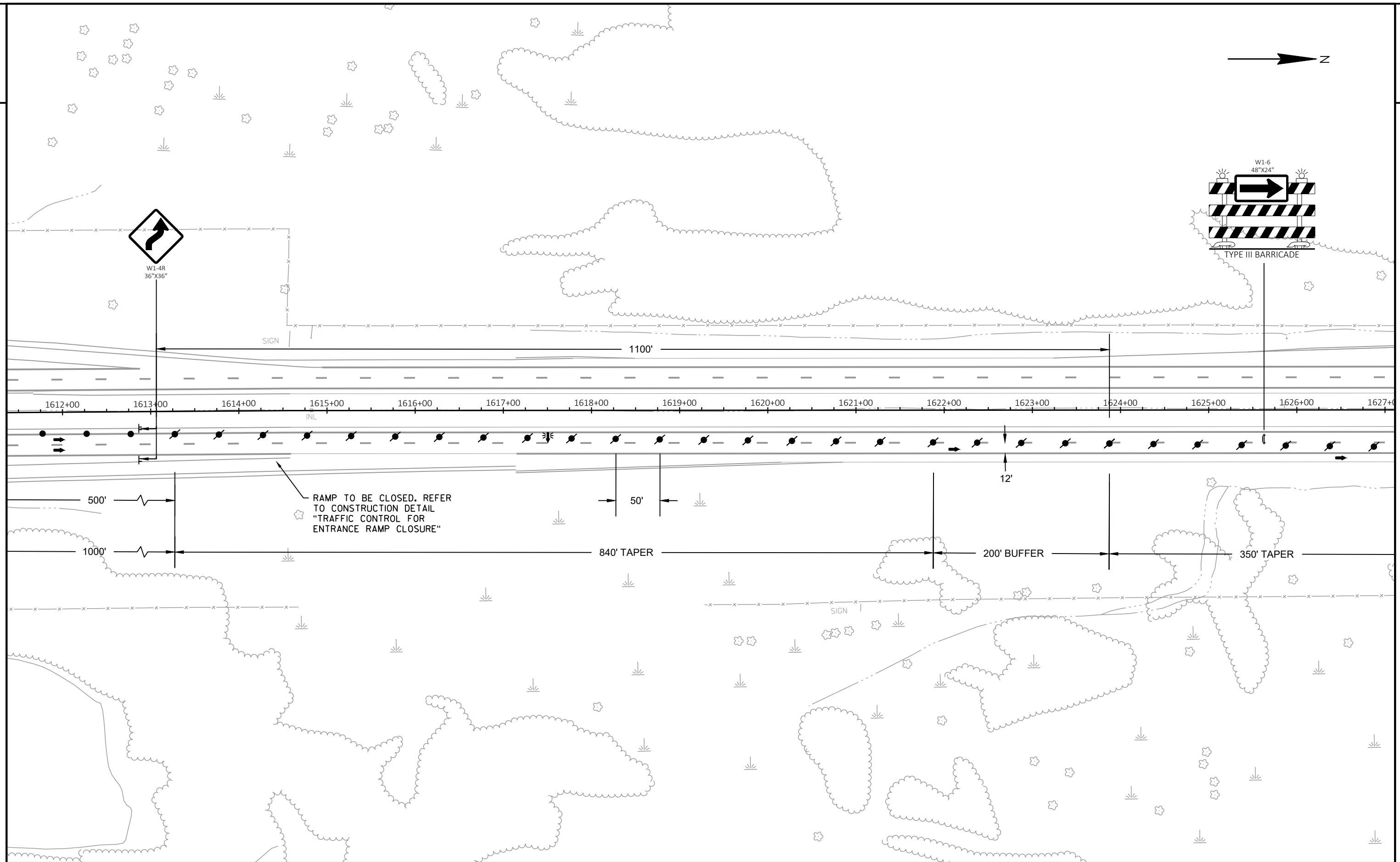
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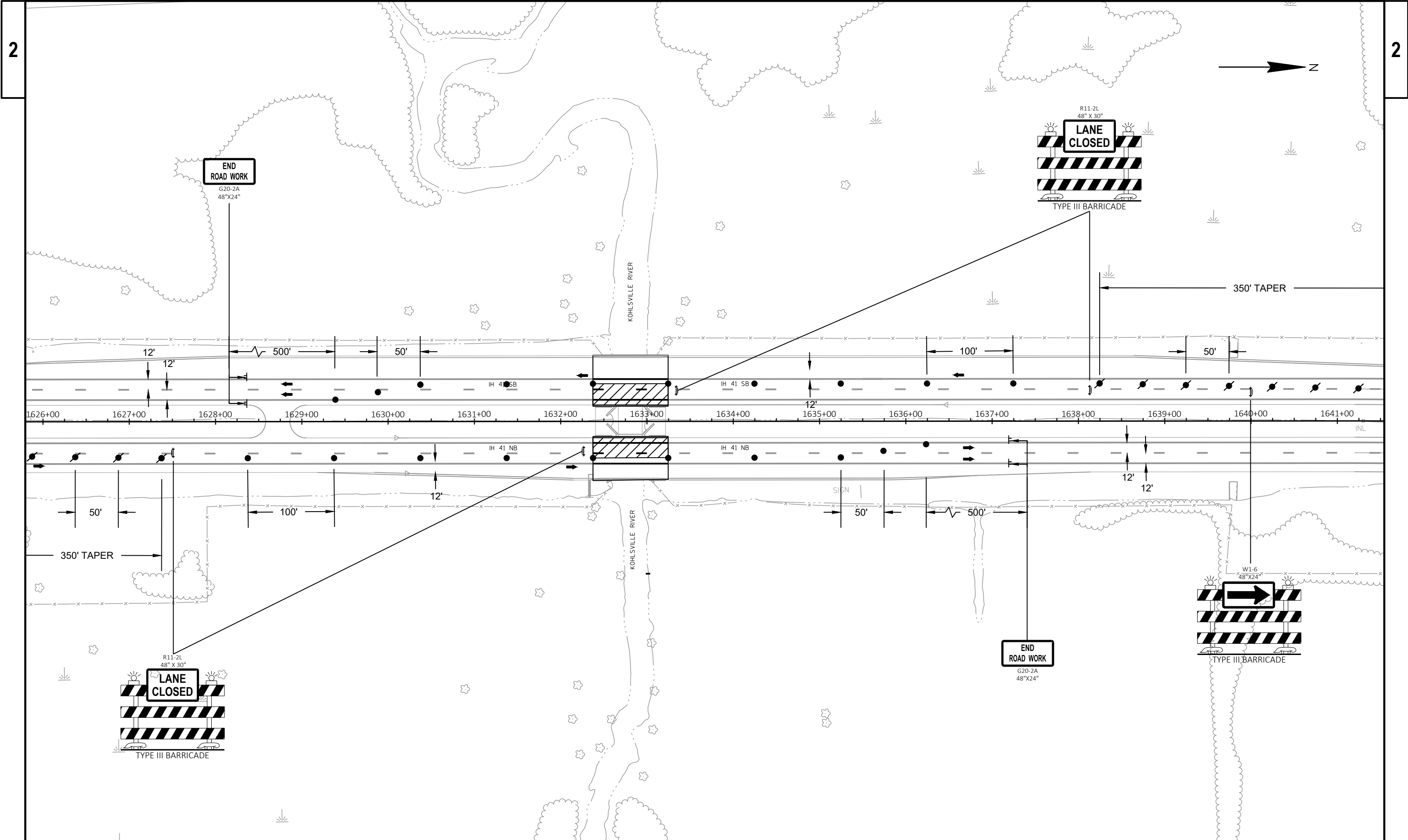
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 1 - B-66-188 & B-66-189	SHEET	E
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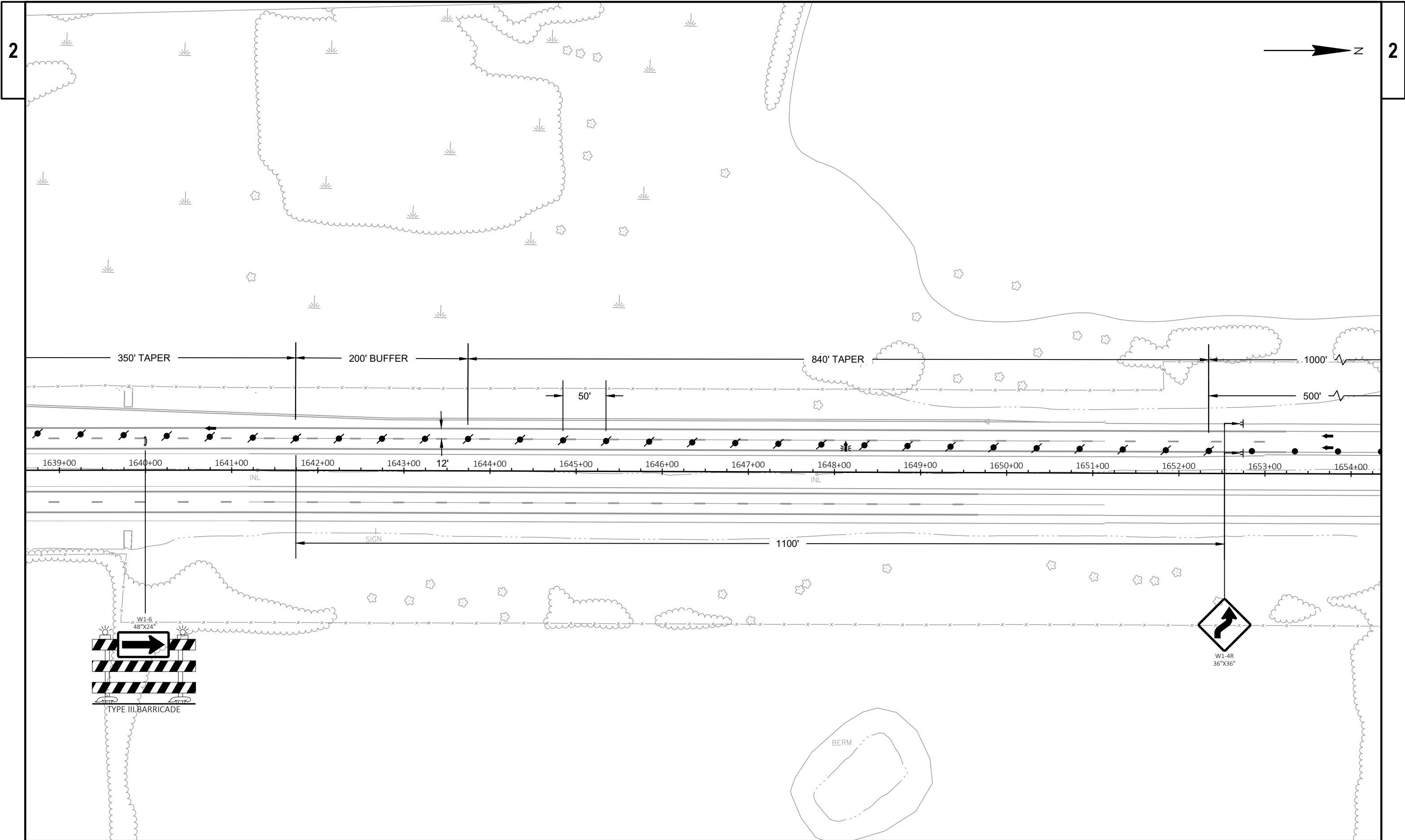




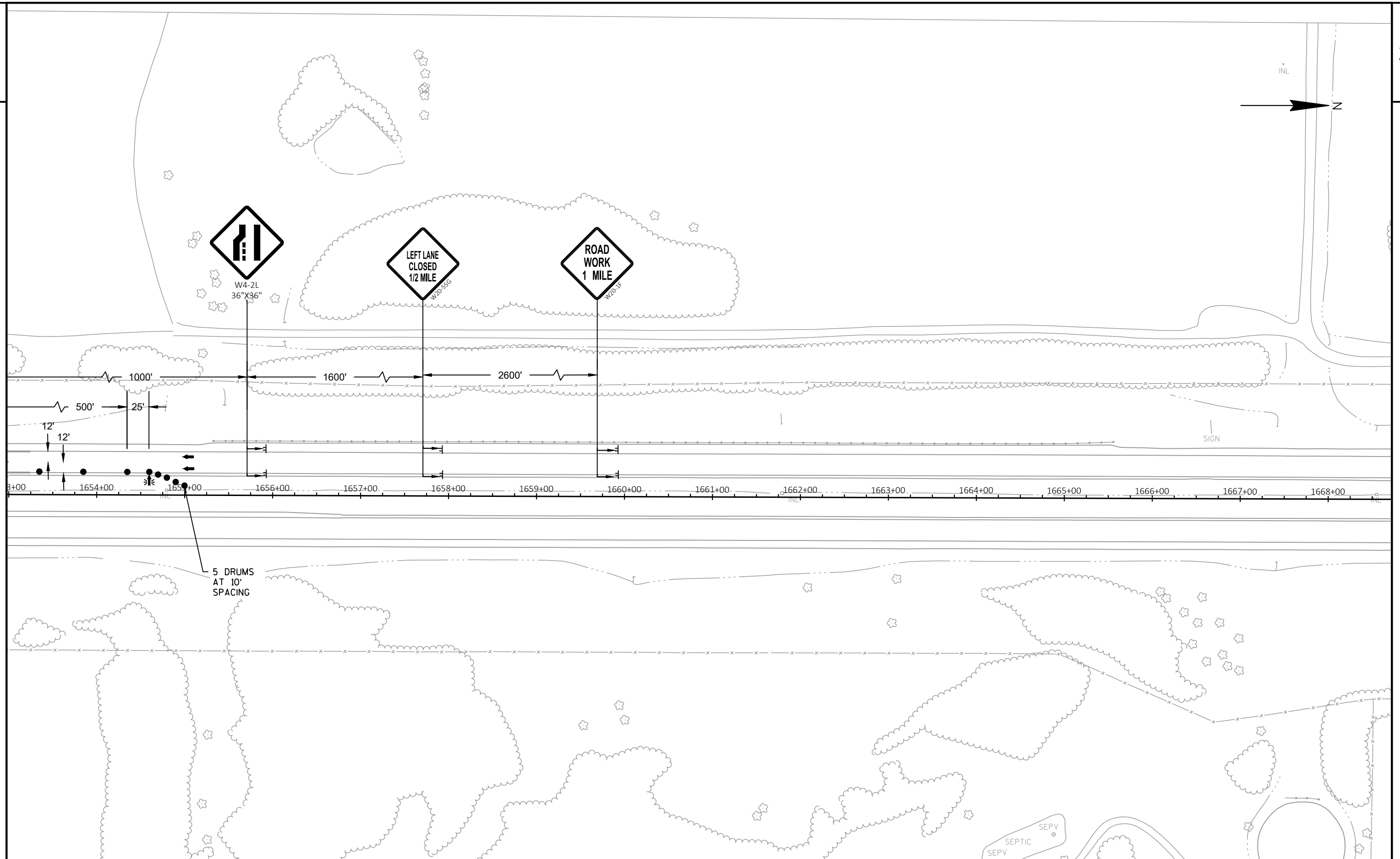
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 2 - B-66-188 & B-66-189	SHEET	E
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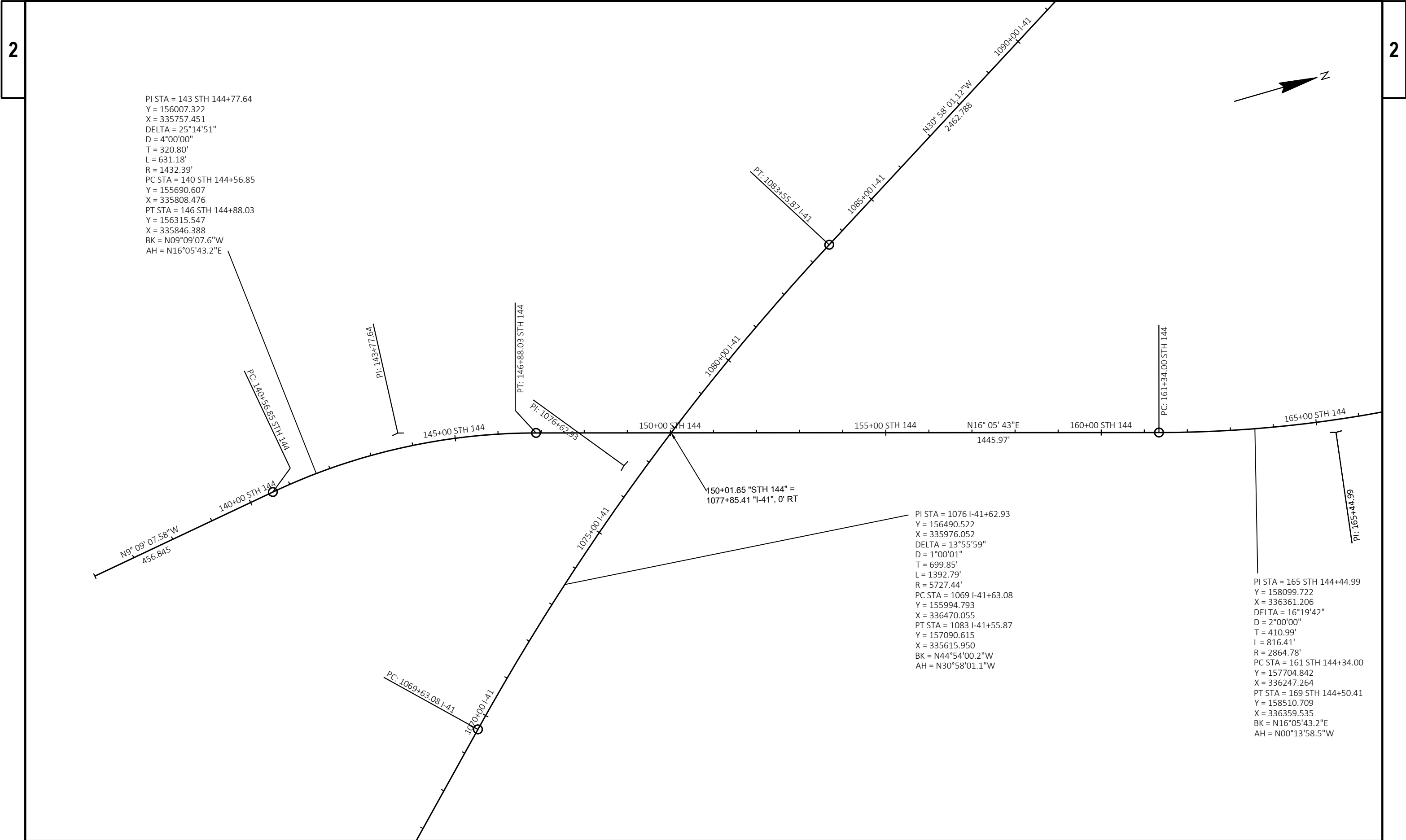
PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 2 - B-66-188 & B-66-189	SHEET	E
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PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 2 - B-66-188 & B-66-189	SHEET	E
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PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	TRAFFIC CONTROL - STAGE 2 - B-66-188 & B-66-189	SHEET	E
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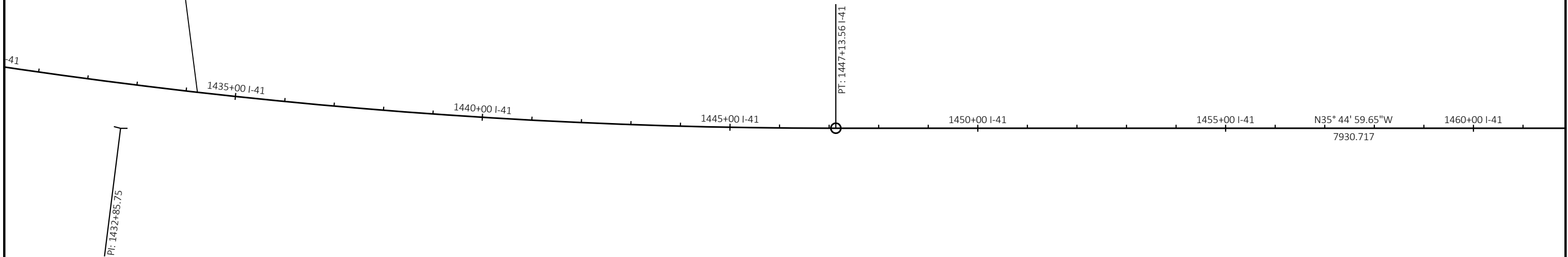
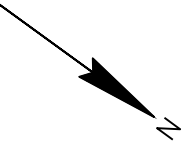


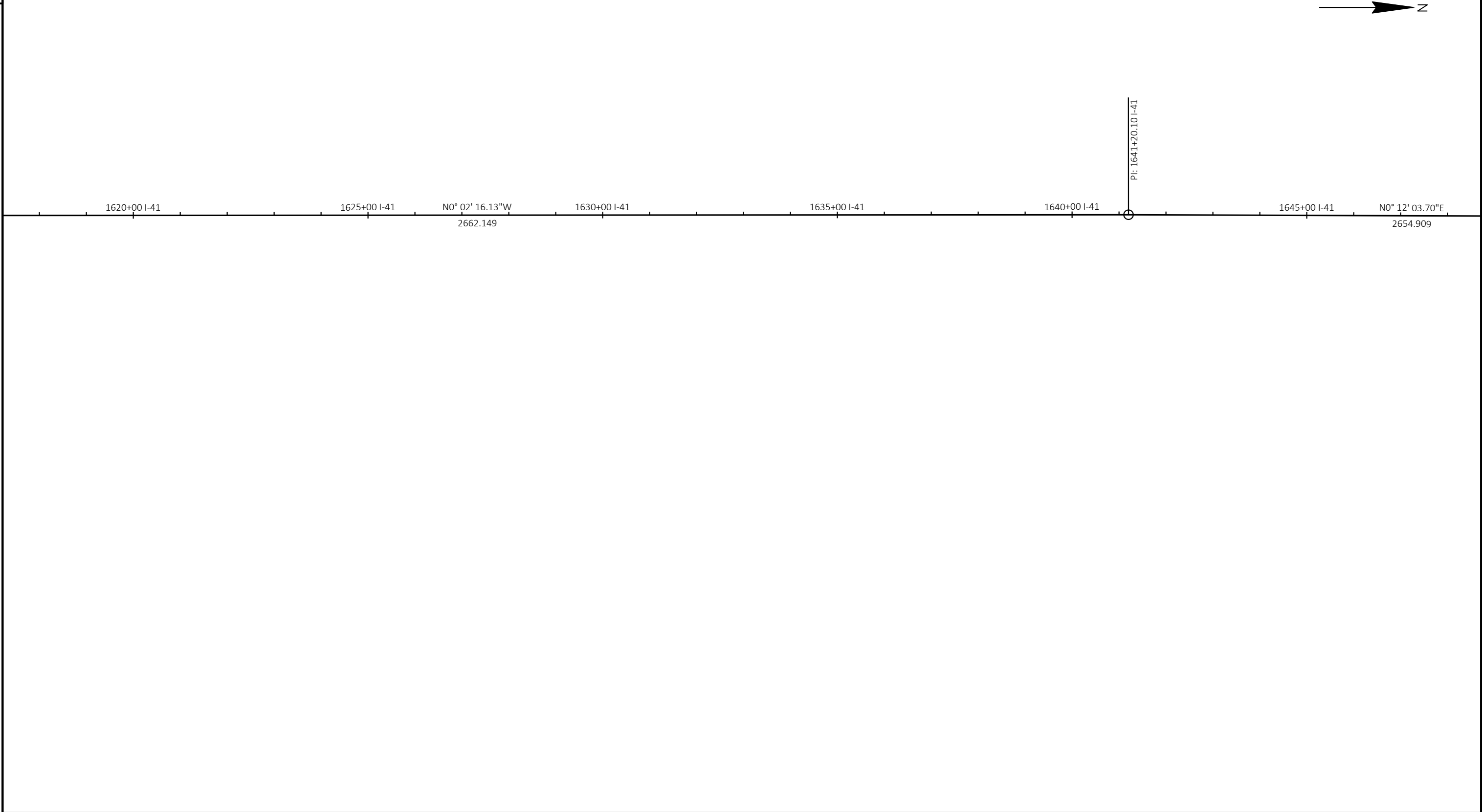
PI STA = 143 STH 144+77.64
Y = 156007.322
X = 335757.451
DELTA = 25°14'51"
D = 4°00'00"
T = 320.80'
L = 631.18'
R = 1432.39'
PC STA = 140 STH 144+56.85
Y = 155690.607
X = 335808.476
PT STA = 146 STH 144+88.03
Y = 156315.547
X = 335846.388
BK = N09°09'07.6"W
AH = N16°05'43.2"E

PI STA = 1076 I-41+62.93
Y = 156490.522
X = 335976.052
DELTA = 13°55'59"
D = 1°00'01"
T = 699.85'
L = 1392.79'
R = 5727.44'
PC STA = 1069 I-41+63.08
Y = 155994.793
X = 336470.055
PT STA = 1083 I-41+55.87
Y = 157090.615
X = 335615.950
BK = N44°54'00.2"W
AH = N30°58'01.1"W

PI STA = 165 STH 144+44.99
Y = 158099.722
X = 336361.206
DELTA = 16°19'42"
D = 2°00'00"
T = 410.99'
L = 816.41'
R = 2864.78'
PC STA = 161 STH 144+34.00
Y = 157704.842
X = 336247.264
PT STA = 169 STH 144+50.41
Y = 158510.709
X = 336359.535
BK = N16°05'43.2"E
AH = N00°13'58.5"W

PI STA = 1432 I-41+85.75
Y = 188301.437
X = 320158.295
DELTA = 14°21'11"
D = 0°30'00"
T = 1442.91'
L = 2870.72'
R = 11459.62'
PC STA = 1418 I-41+42.84
Y = 186957.976
X = 320684.707
PT STA = 1447 I-41+13.56
Y = 189472.470
X = 319315.275
BK = N21°23'48.8"W
AH = N35°44'59.6"W





PROJECT NO: 1100-17-79	HWY: IH 41	COUNTY: WASHINGTON	ALIGNMENT PLAN	SHEET	E
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Estimate Of Quantities

1100-17-79					
Line	Item	Item Description	Unit	Total	Qty
0002	213.0100	Finishing Roadway (project) 01. 1100-17-79	EACH	1.000	1.000
0004	509.0301	Preparation Decks Type 1	SY	55.000	55.000
0006	509.0302	Preparation Decks Type 2	SY	29.000	29.000
0008	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	235.000	235.000
0010	509.5100.S	Polymer Overlay	SY	2,562.000	2,562.000
0012	619.1000	Mobilization	EACH	1.000	1.000
0014	642.5401	Field Office Type D	EACH	1.000	1.000
0016	643.0300	Traffic Control Drums	DAY	1,909.000	1,909.000
0018	643.0420	Traffic Control Barricades Type III	DAY	275.000	275.000
0020	643.0705	Traffic Control Warning Lights Type A	DAY	550.000	550.000
0022	643.0715	Traffic Control Warning Lights Type C	DAY	871.000	871.000
0024	643.0800	Traffic Control Arrow Boards	DAY	57.000	57.000
0026	643.0900	Traffic Control Signs	DAY	847.000	847.000
0028	643.1000	Traffic Control Signs Fixed Message	SF	35.000	35.000
0030	643.1050	Traffic Control Signs PCMS	DAY	31.000	31.000
0032	643.4100.S	Traffic Control Interim Lane Closure	EACH	24.000	24.000
0034	643.5000	Traffic Control	EACH	1.000	1.000
0036	646.1020	Marking Line Epoxy 4-Inch	LF	2,552.000	2,552.000
0038	646.3020	Marking Line Epoxy 8-Inch	LF	508.000	508.000
0040	646.5020	Marking Arrow Epoxy	EACH	4.000	4.000
0042	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0044	646.7120	Marking Diagonal Epoxy 12-Inch	LF	526.000	526.000
0046	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	1,235.000	1,235.000
0048	649.0155	Temporary Marking Line Removable Contrast Tape 4-Inch	LF	76.000	76.000
0050	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	103.000	103.000
0052	SPV.0035	Special 4000. Rapid Set Deck Repair	CY	16.000	16.000
0054	SPV.0060	Special 01. Traffic Control Close-Open Freeway Entrance Ramp	EACH	12.000	12.000
0056	SPV.0075	Special 01. Pavement Cleanup Project 1100-17-79	HRS	12.000	12.000
0058	SPV.0090	Special 01. Marking Contrast Epoxy 4-Inch	LF	75.000	75.000
0060	SPV.0105	Special 01. Survey Project 1100-17-79	LS	1.000	1.000

PAVEMENT MARKING											
CATEGORY	STATION	TO	STATION	LOCATION	646.1020		646.3020	646.5020	646.5120	646.7120	SPV.0090.01
					MARKING LINE		MARKING LINE	MARKING	MARKING WORD	MARKING DIAGONAL	MARKING CONTRAST
					EPOXY 4-INCH		EPOXY 8-INCH	ARROW EPOXY	EPOXY	EPOXY 12-INCH	EPOXY 4-INCH)
					W	WHITE				WHITE	SKIP)
					LF	LF	LF	EACH	EACH	LF	LF
1000	146+64	-	153+84	B-66-110	495	1,388	508	4	2	--	--
	1445+75	-	1446+56	B-66-193	81	81	--	--	--	75	13
	1445+75	-	1446+56	B-66-194	81	81	--	--	--	330	13
	1632+37	-	1633+25	B-66-188	87	87	--	--	--	55	25
	1632+37	-	1633+25	B-66-189	87	87	--	--	--	66	25
SUBTOTAL					829	1,723	508	4	2	526	75
TOTAL 1000						2,552	508	4	2	526	75

TEMP PAVEMENT MARKING								
CATEGORY	STATION	TO	STATION	LOCATION	649.0150	649.0155	649.0250	
					TEMPORARY	TEMPORARY	TEMPORARY	
					MARKING LINE	MARKING LINE	MARKING LINE	
					REMOVABLE	REMOVABLE	REMOVABLE	
					TAPE 4-INCH	CONTRAST TAPE	TAPE 8-INCH	
					LF	LF	LF	
1000	148+94	-	151+11	B-66-110	563	--	103	
	1445+75	-	1446+56	B-66-193	162	13	--	
	1445+75	-	1446+56	B-66-194	162	13	--	
	1632+37	-	1633+25	B-66-188	174	25	--	
	1632+37	-	1633+25	B-66-189	174	25	--	
TOTAL 1000					1,235	76	103	

TRAFFIC CONTROL																			
				643.0300		643.0420		643.0705		643.0715		643.0800		643.0900		643.1000		643.1050	
				TRAFFIC CONTROL DRUMS		TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL WARNING LIGHTS TYPE C		TRAFFIC CONTROL ARROW BOARDS		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL SIGNS FIXED MESSAGE		TRAFFIC CONTROL SIGNS PCMS	
CATEGORY	STAGE	LOCATION	DAYS	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	SF	EACH	DAY	
1000	1	B-66-110	4	70	280	22	88	44	176	51	204	1	4	38	152	--	4	28	
		B-66-193	3	59	177	4	12	8	24	17	51	2	6	12	36	--	--	--	
		B-66-194	3	37	111	2	6	4	12	17	51	2	6	10	30	--	--	--	
		B-66-188	3	37	111	2	6	4	12	17	51	2	6	10	30	--	--	--	
		B-66-189	3	37	111	2	6	4	12	17	51	2	6	10	30	--	--	--	
		IH 41 ENTRANCE RAMP OFF STH 33	3	23	69	7	21	14	42	--	--	--	--	27	81	16	--	--	
		IH 41 ENTRANCE RAMP OFF CTH D	3	27	81	8	24	16	48	6	18	--	--	28	84	16	--	--	
		SUBTOTAL		940		163		326		426		28		443		32		28	
	2	B-66-193	3	71	213	5	15	10	30	29	87	2	6	15	45	--	--	--	
		B-66-194	3	48	144	3	9	6	18	29	87	2	6	13	39	--	--	--	
		B-66-188	3	48	144	3	9	6	18	29	87	2	6	13	39	--	--	--	
		B-66-189	3	48	144	3	9	6	18	29	87	2	6	13	39	--	--	--	
		IH 41 ENTRANCE RAMP OFF STH 33	3	23	69	7	21	14	42	--	--	--	--	27	81	--	--	--	
		IH 41 ENTRANCE RAMP OFF CTH D	3	27	81	8	24	16	48	6	18	--	--	28	84	--	--	--	
		SUBTOTAL		795		87		174		366		24		327		--		--	
UNDISTRIBUTED				174		25		50		79		5		77		3		3	
TOTAL 1000				1,909		275		550		871		57		847		35		31	

TRAFFIC CONTROL				
		643.4100.S	643.5000	SPV.0060.01
		TRAFFIC CONTROL INTERIM LANE CLOSURE EACH	TRAFFIC CONTROL EACH	TRAFFIC CONTROL CLOSE-OPEN FREEWAY ENTRANCE RAMP EACH
CATEGORY	PROJECT			
1000	1100-17-79	24	--	--
	STH 33 ENTRANCE RAMP	--	--	6
	CTH D ENTRANCE RAMP	--	--	6
	UNDISTRIBUTED	--	1	--
	TOTAL 1000	24	1	12

FINISHING ROADWAY

213.0100.01 FINISHING ROADWAY EACH		
CATEGORY	PROJECT	
1000	1100-17-79	1
	TOTAL 1000	1

MOBILIZATION

619.1000 MOBILIZATION EACH		
CATEGORY	PROJECT	
1000	1100-17-79	1
	TOTAL 1000	1

FIELD FACILITIES OFFICE SPACE

642.5401 FIELD OFFICE TYPE D EACH		
CATEGORY	PROJECT	
1000	1100-17-79	1
	TOTAL 1000	1

PAVEMENT CLEANUP

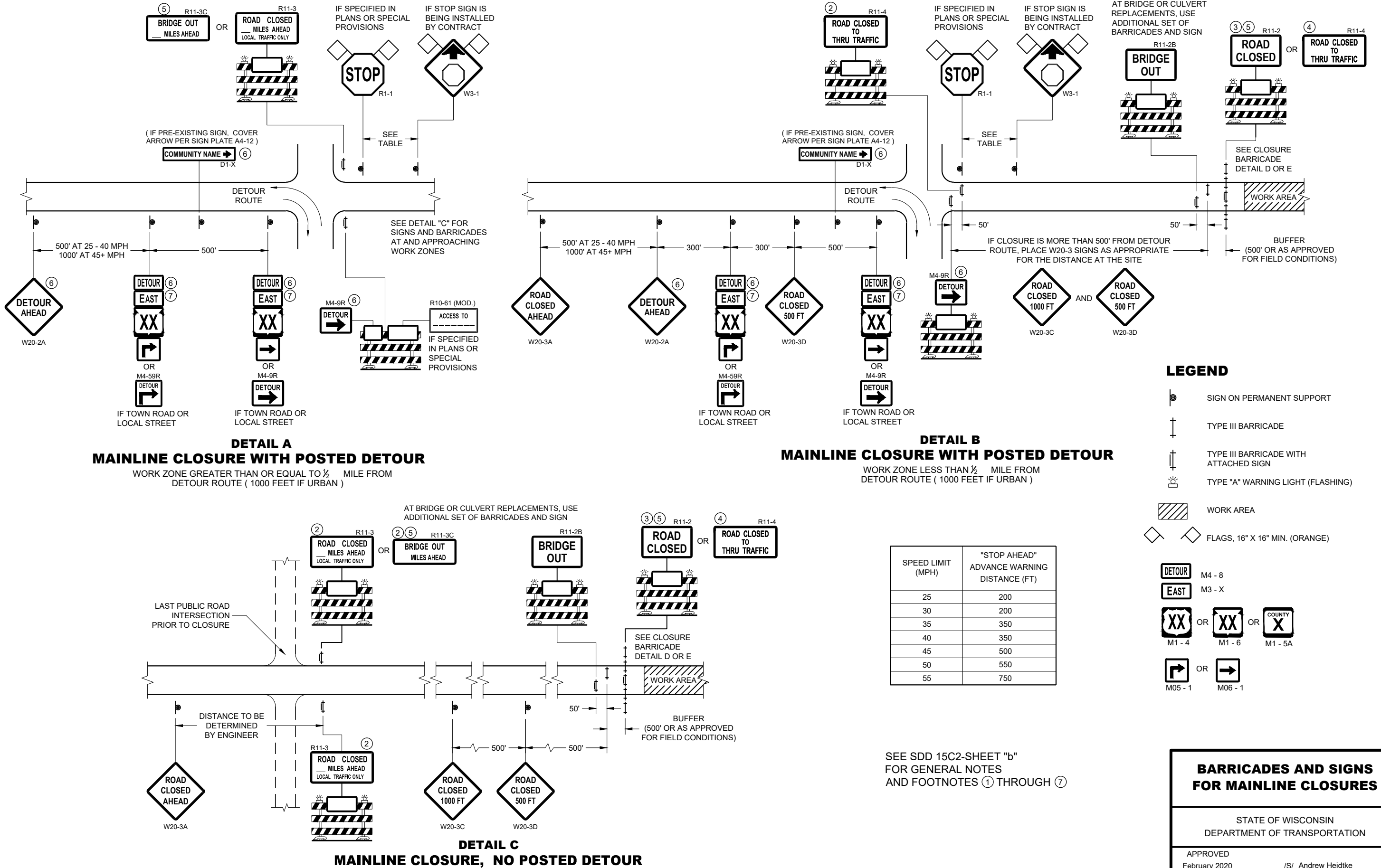
SPV.0075.01 SPECIAL (PAVEMENT CLEANUP PROJECT 1100-17-79) HRS		
CATEGORY	LOCATION	
1000	B-66-110	4
	B-66-193	2
	B-66-194	2
	B-66-188	2
	B-66-189	2
	TOTAL 1000	12

SURVEY PROJECT

SPV.0105.01 SURVEY PROJECT 1100-17-79 LS		
CATEGORY	PROJECT	
1000	110-17-79	1
	TOTAL 1000	1

Standard Detail Drawing List

15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-08B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D40-01	TRAFFIC CONTROL, LANE SHIFT, MULTILANE DIVIDED OR ONE WAY ROAD

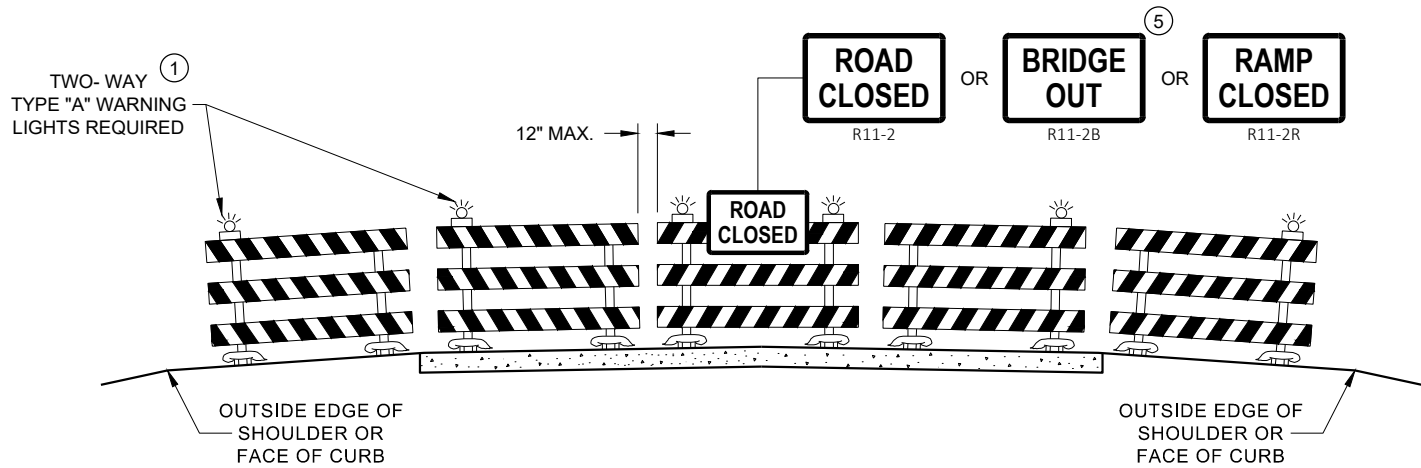


**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

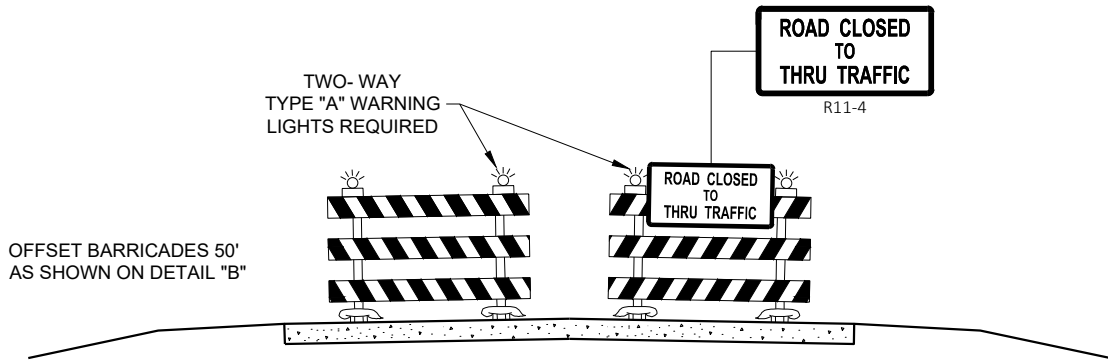
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

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

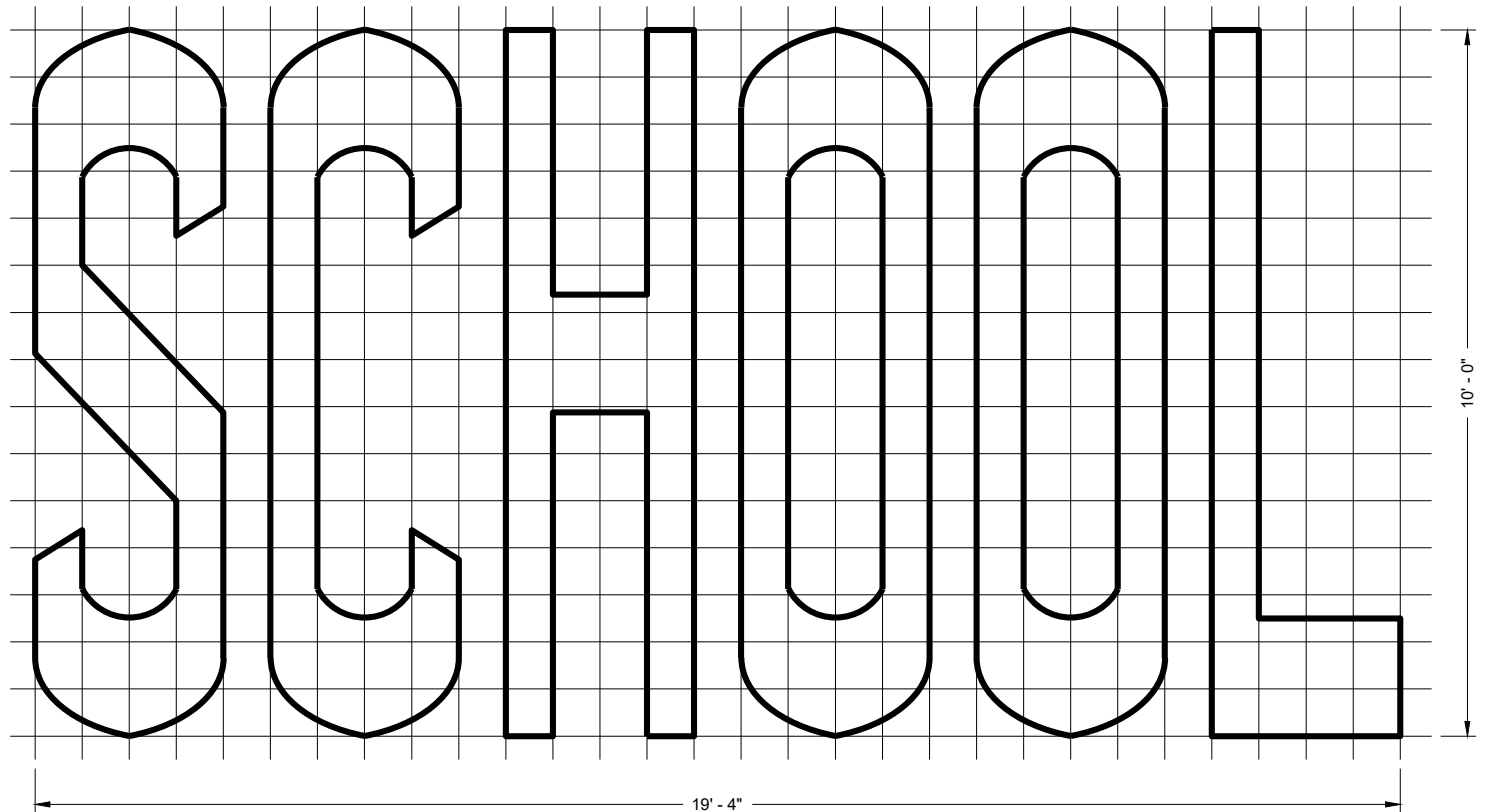
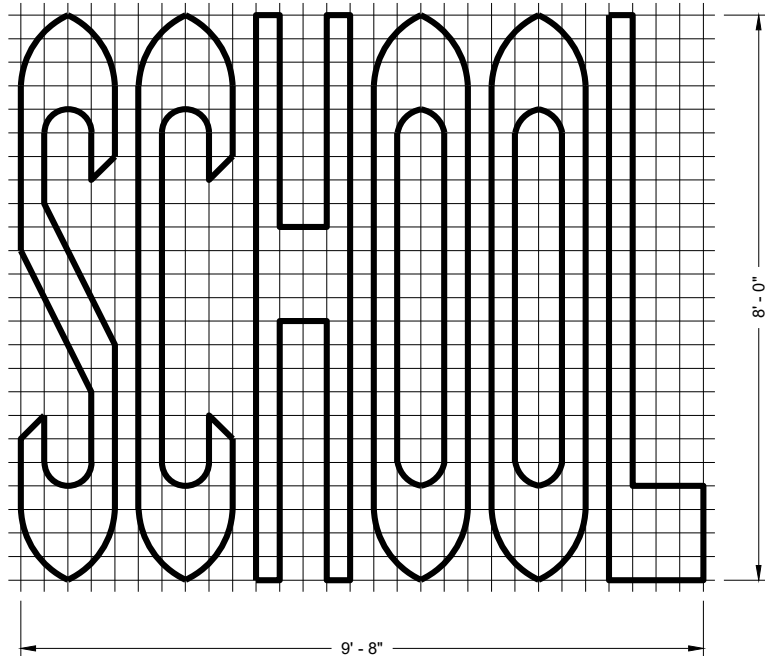
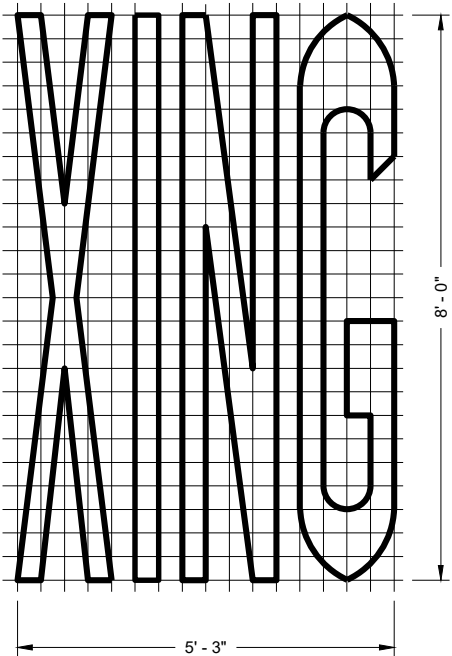
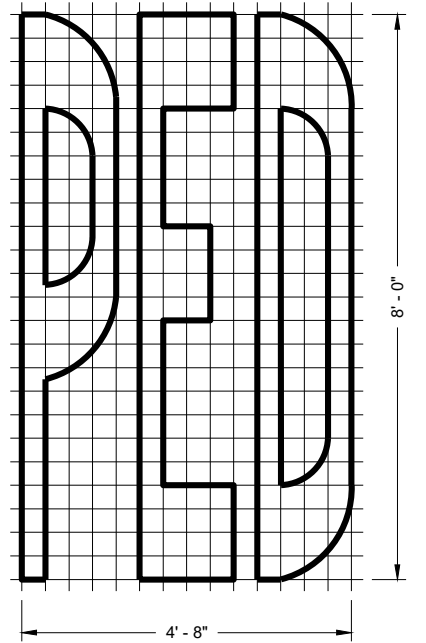
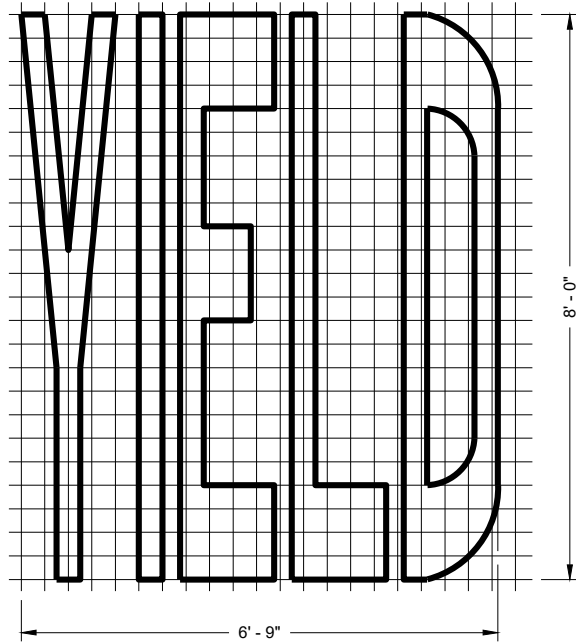
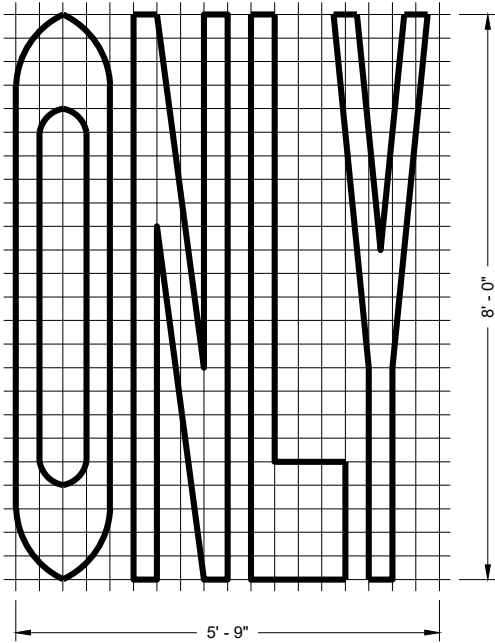
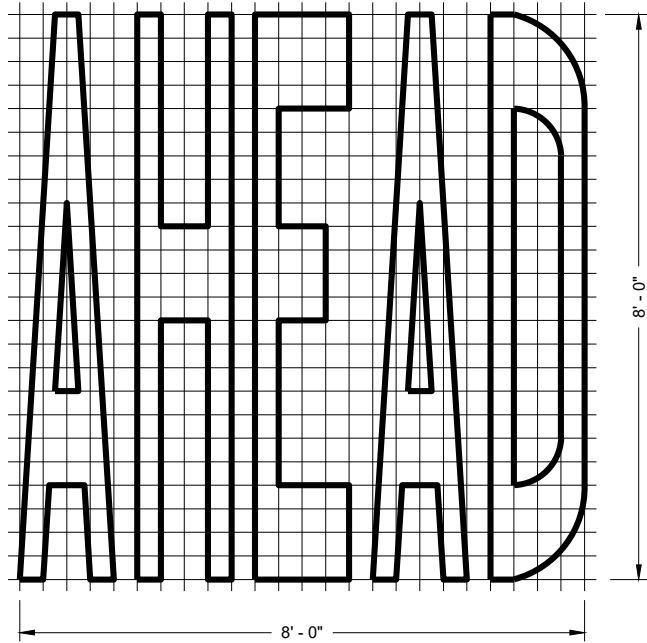
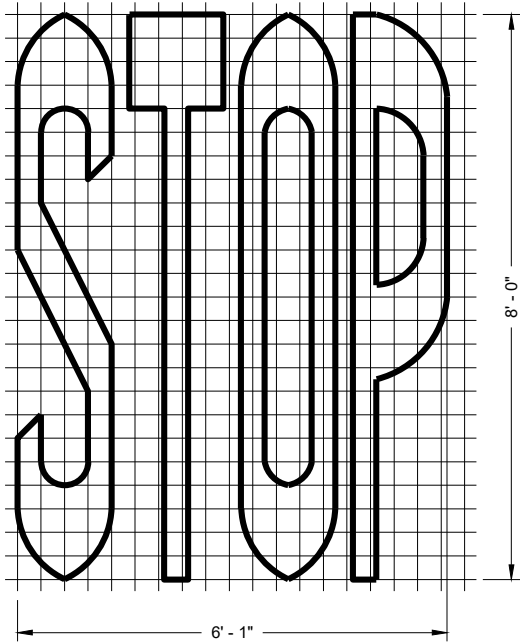
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



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.

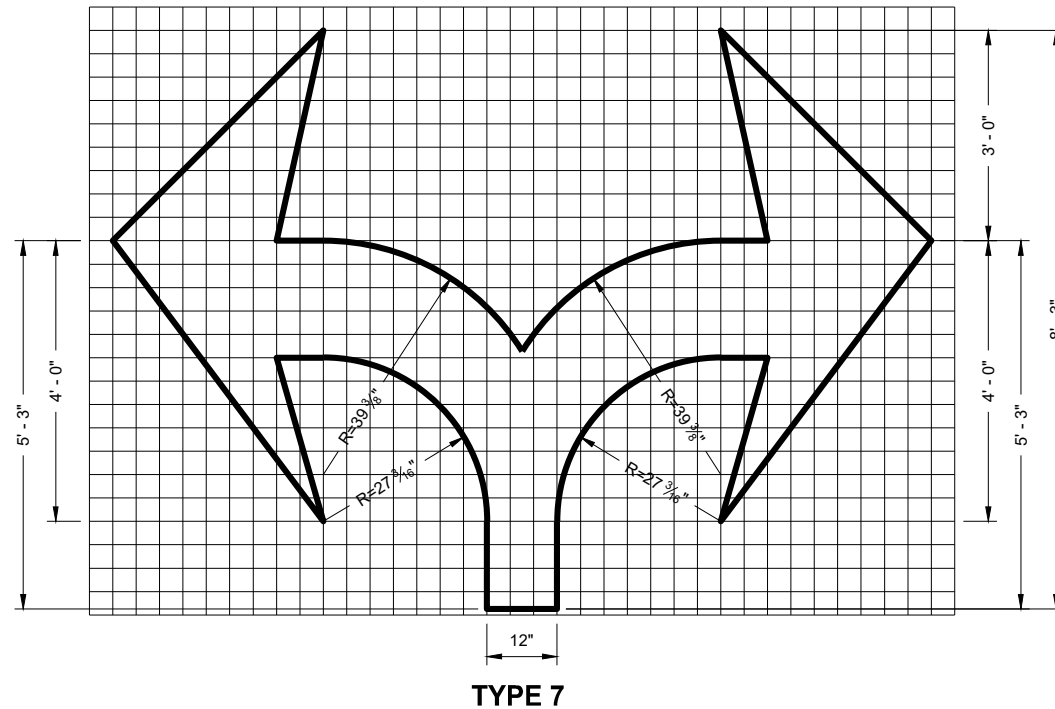
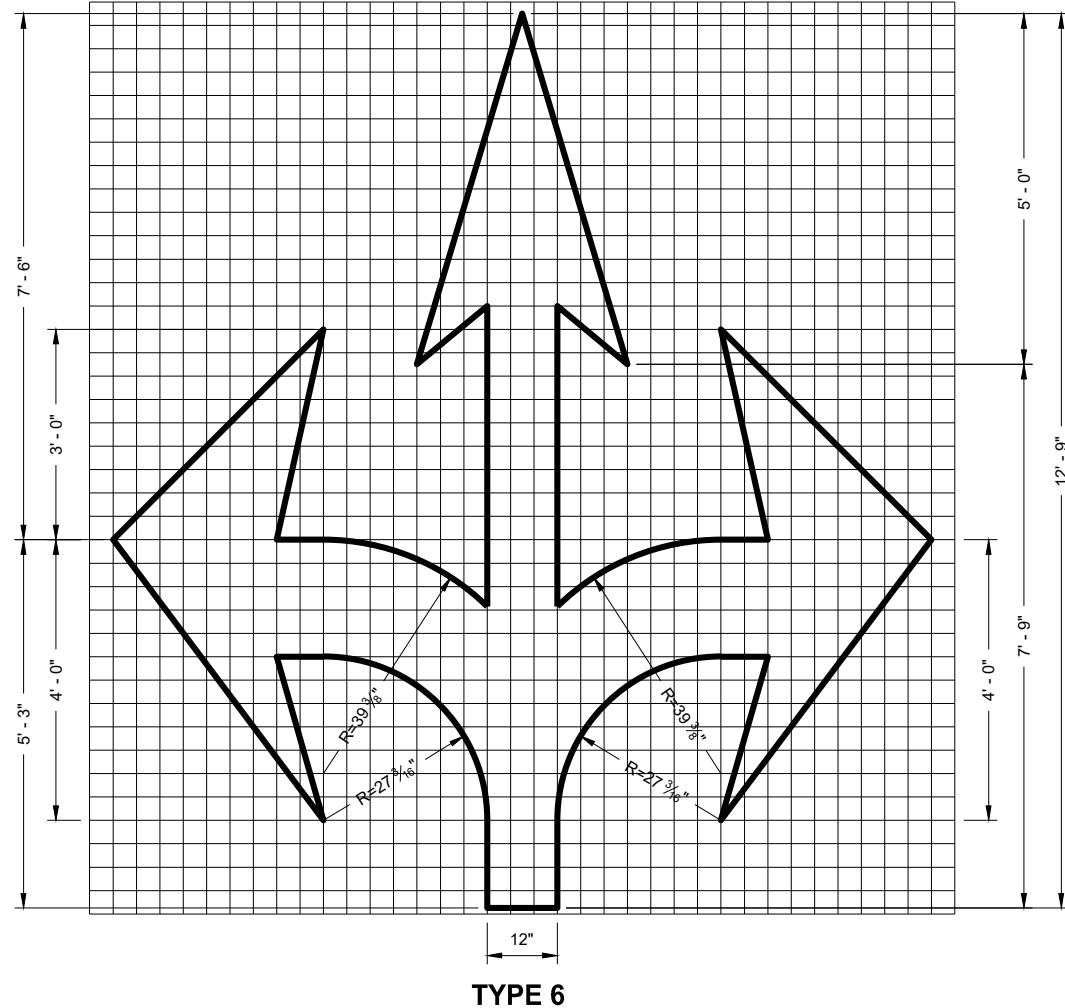
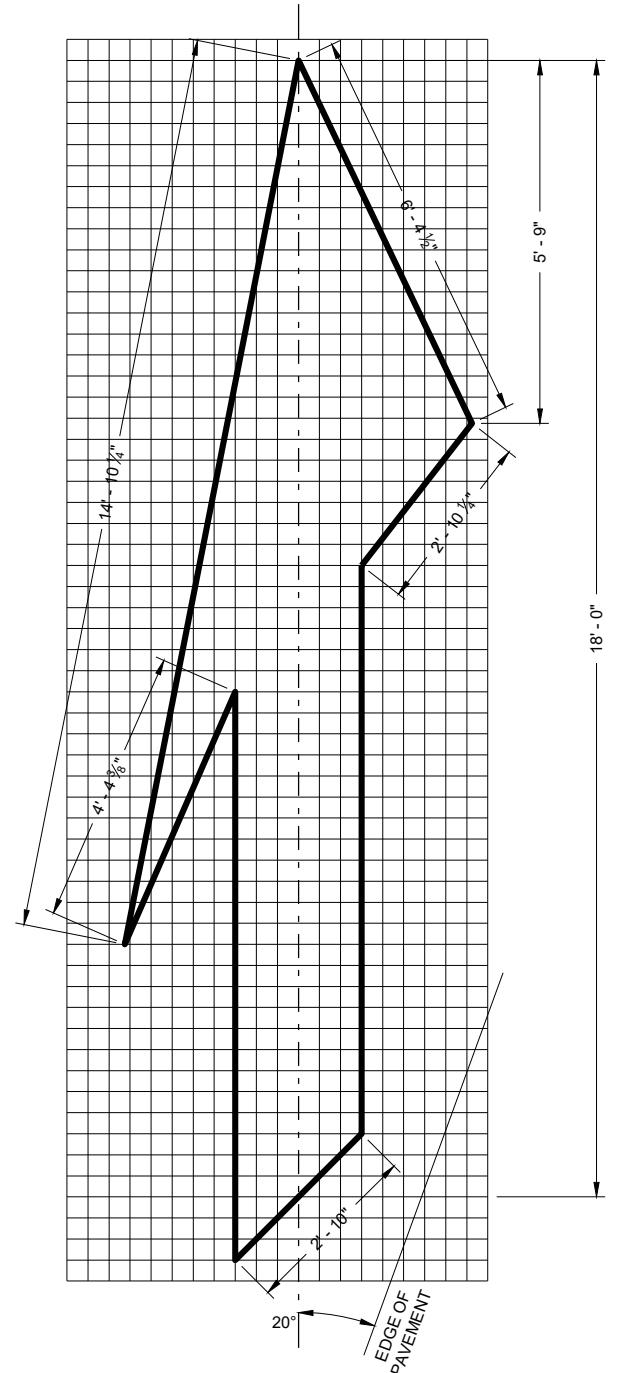
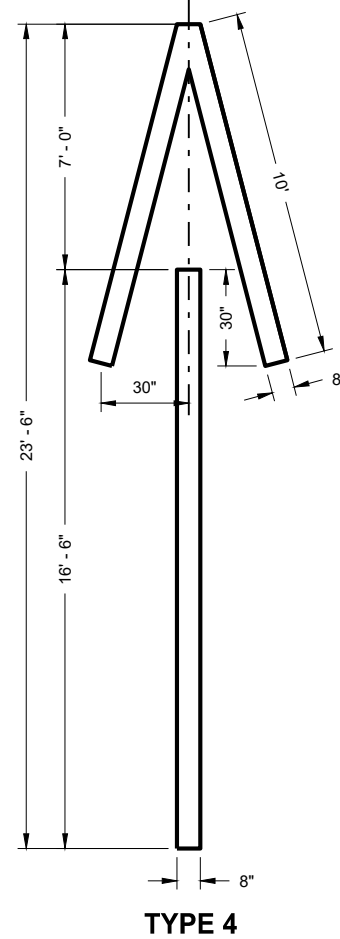
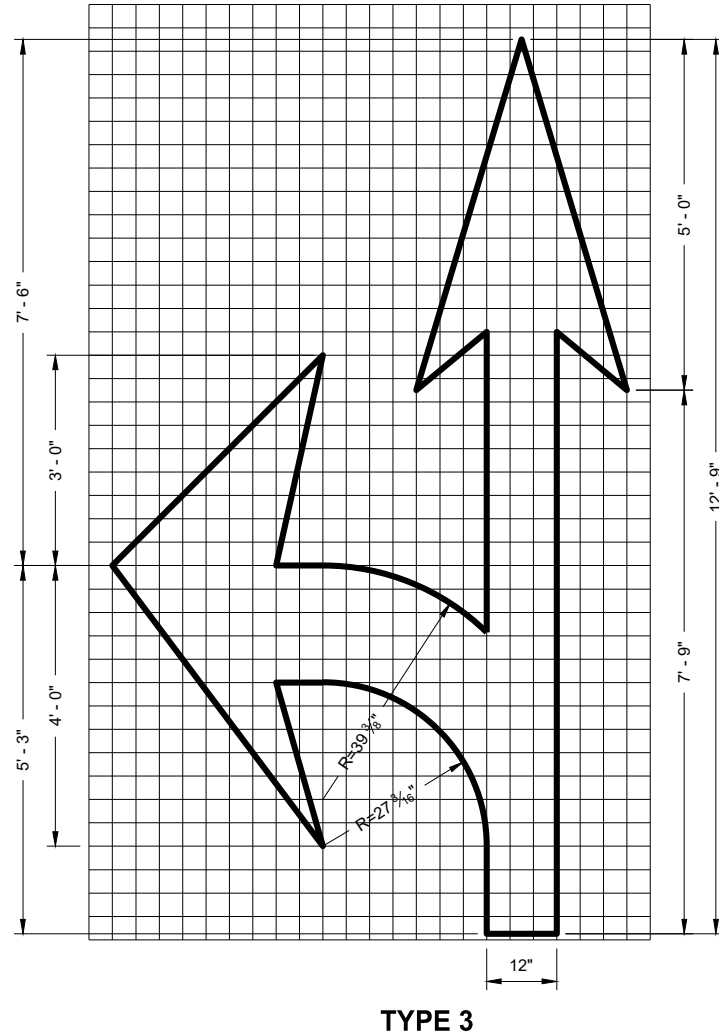
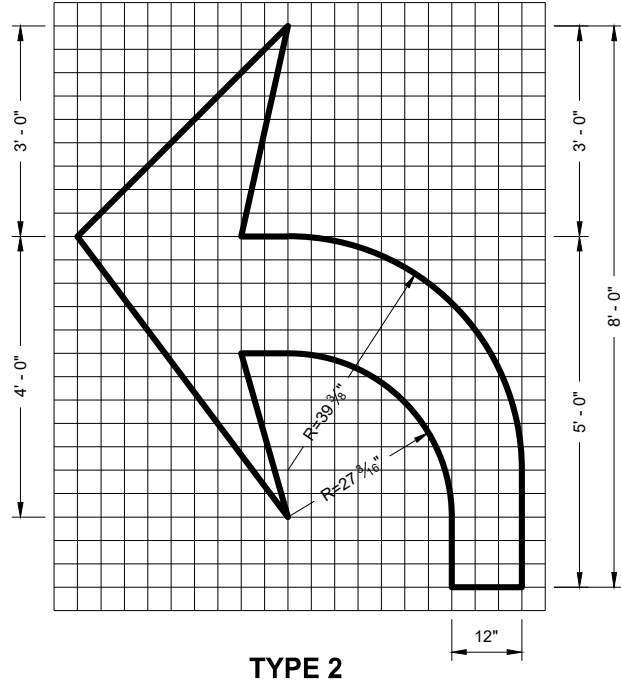
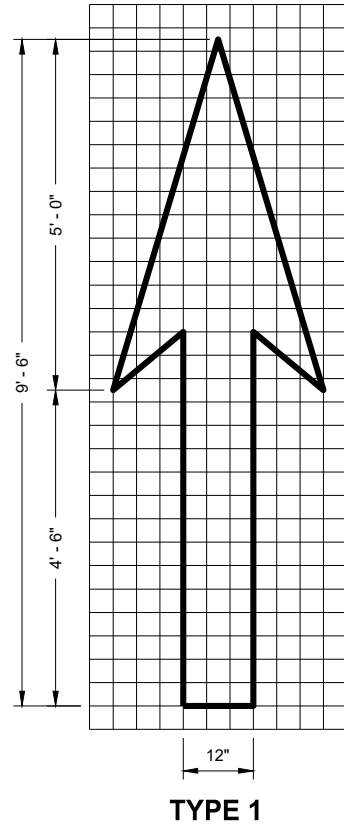
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

FHWA



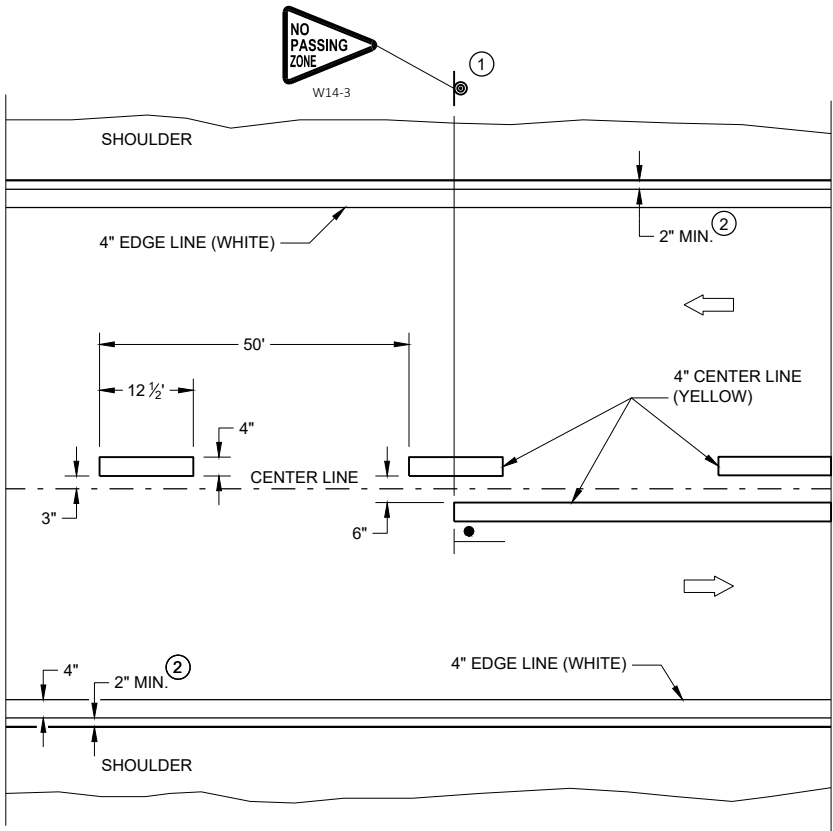
GENERAL NOTES

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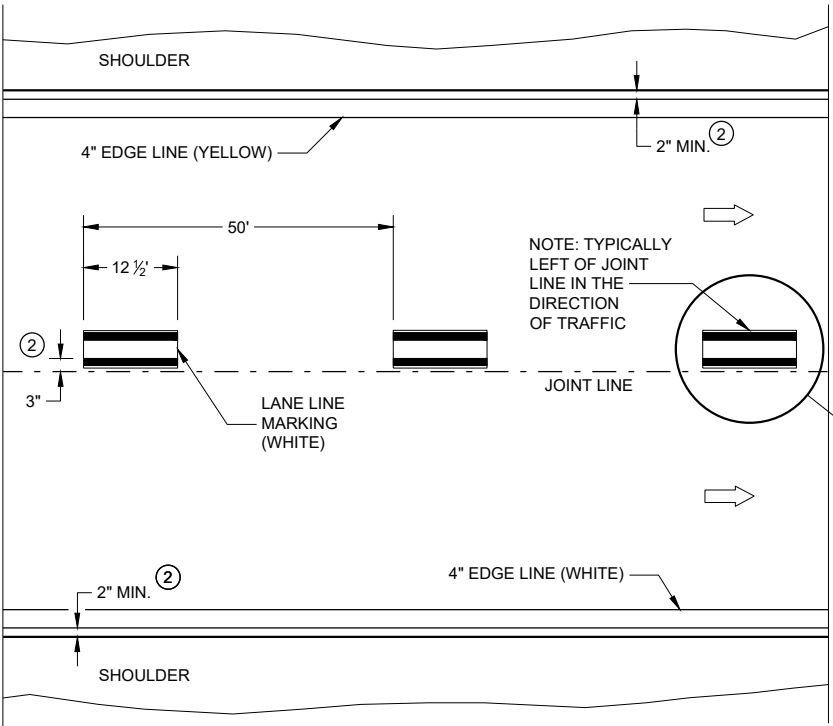
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

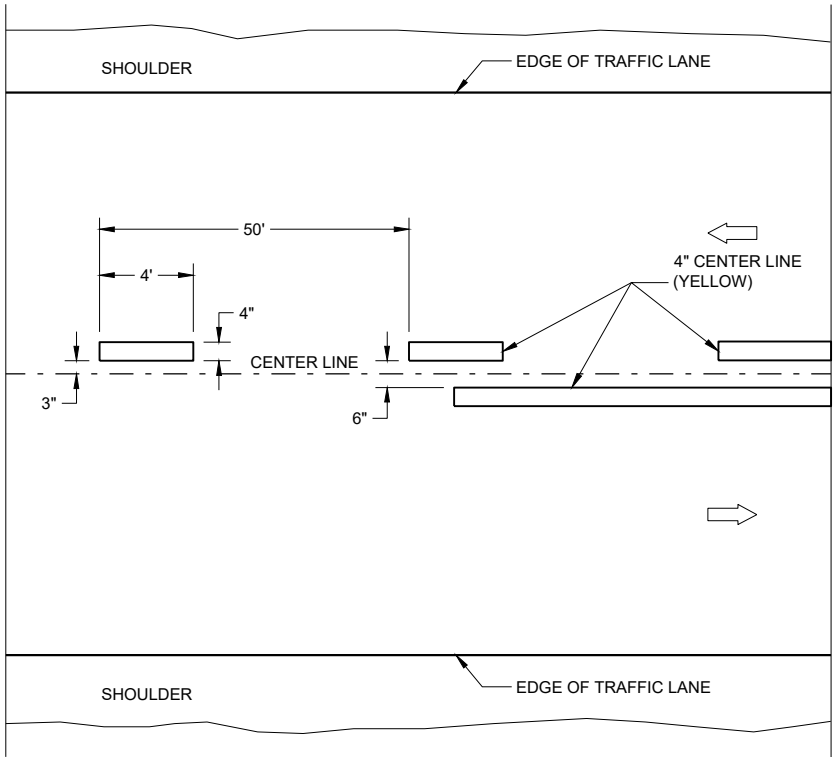


TWO WAY TRAFFIC

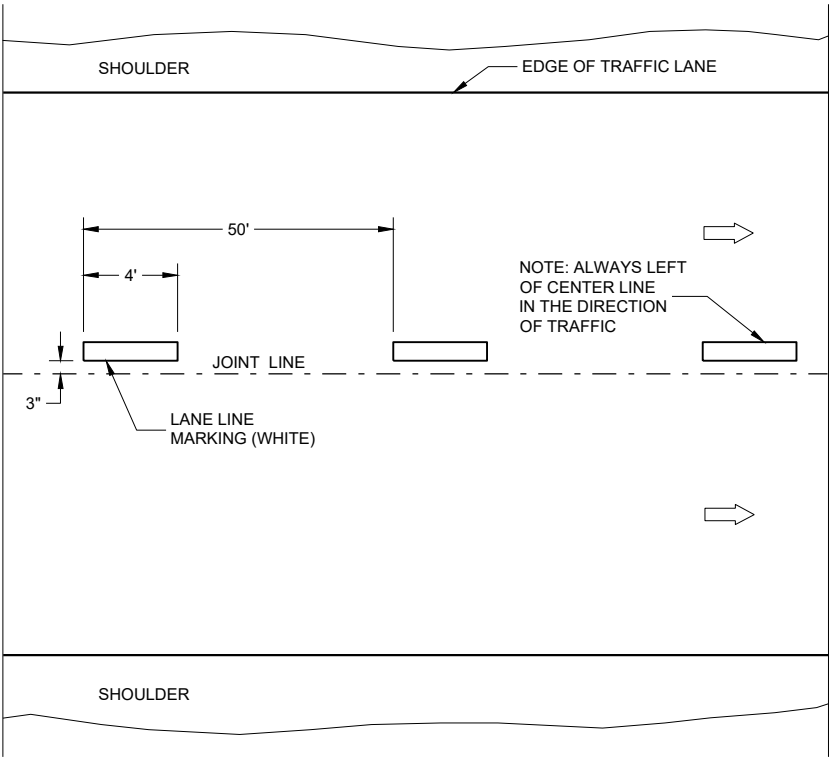


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

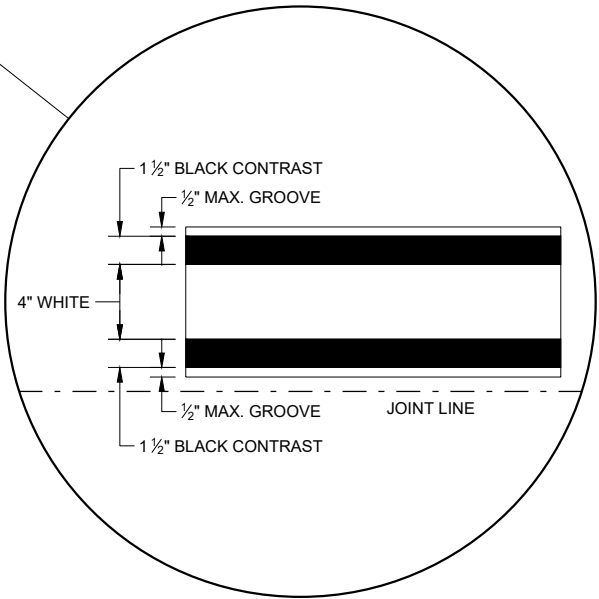
GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



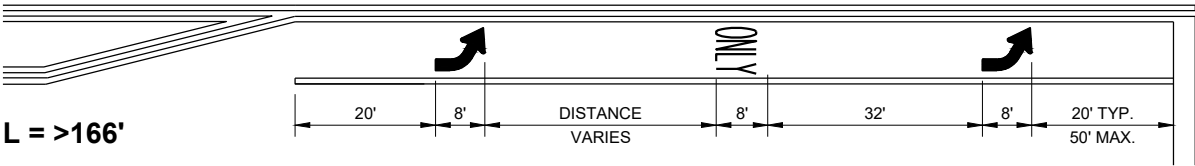
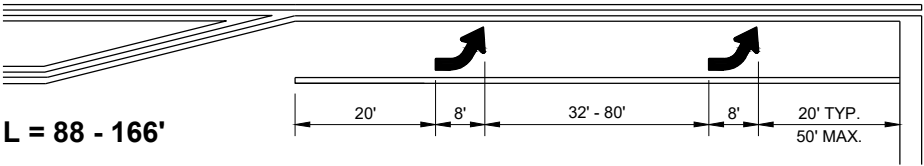
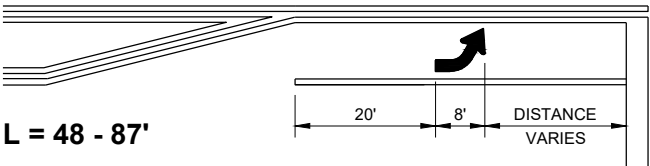
LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND MARKING
ENGINEER
FHWA

TURN LANE OPTIONS

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



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

GENERAL NOTES

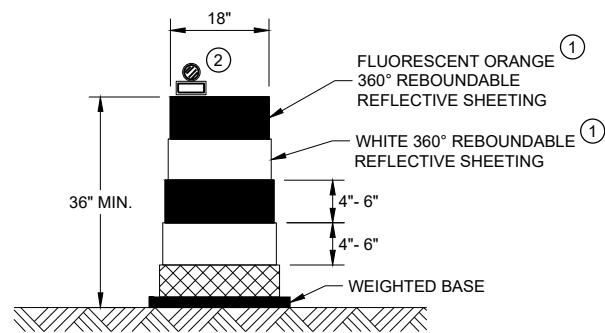
- ① 8" WHITE
- ② QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

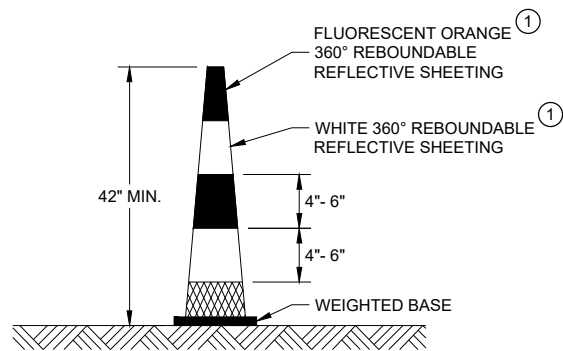
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

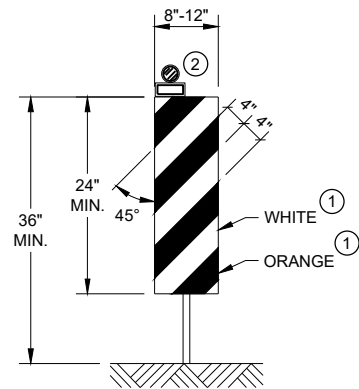


DRUM



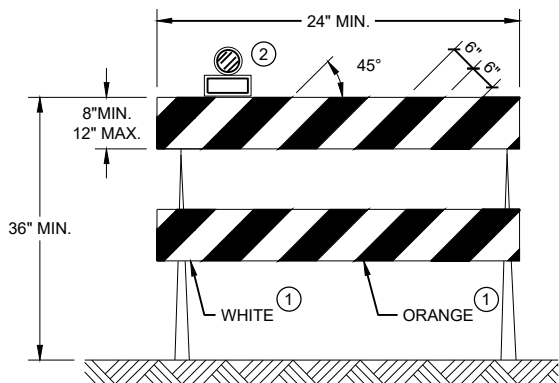
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



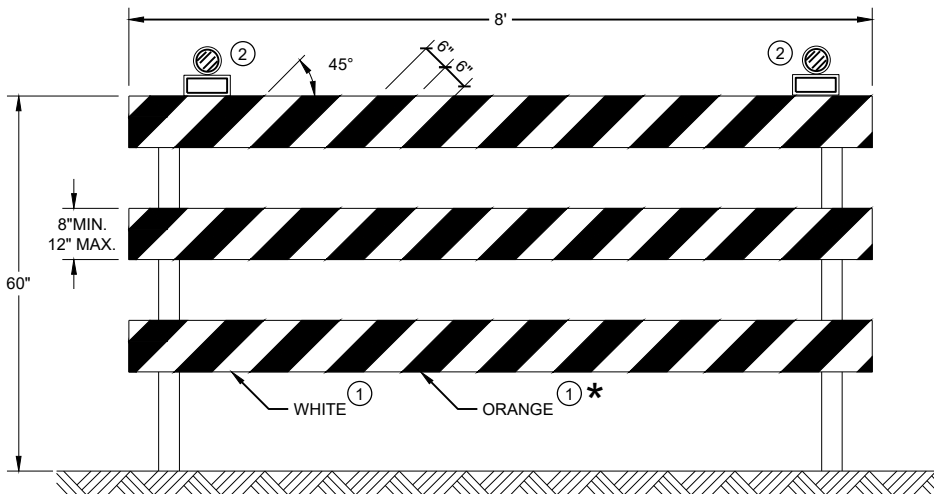
VERTICAL PANEL

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.

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.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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 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

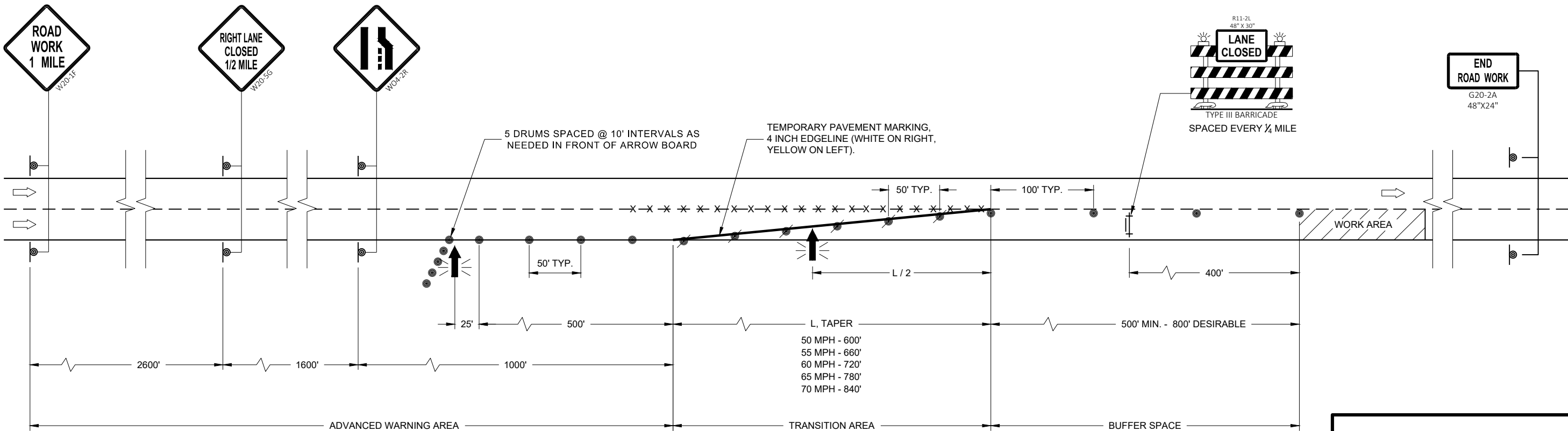
NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE 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

6



6

SDD 15D12 - 09a

SDD 15D12 - 09a

TRAFFIC CONTROL
LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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

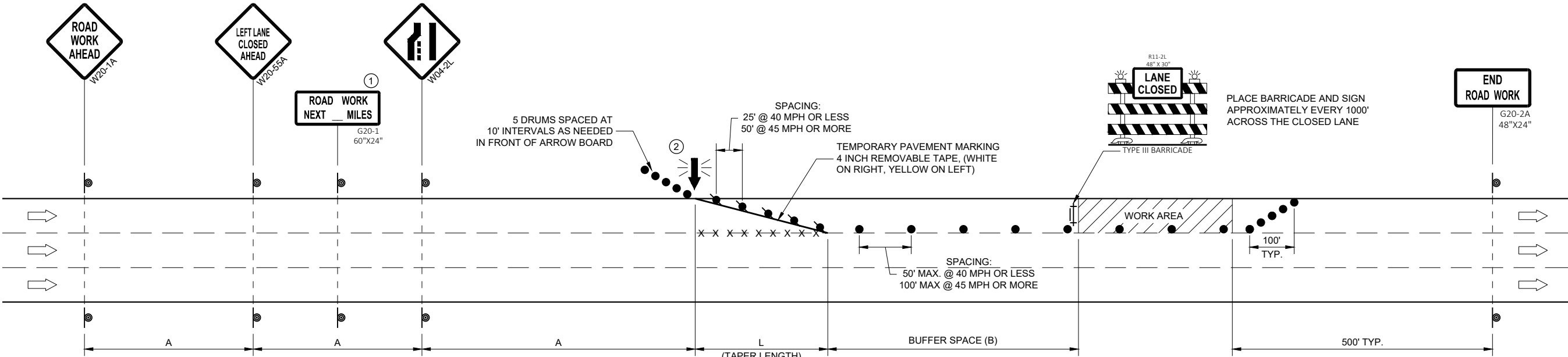
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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'

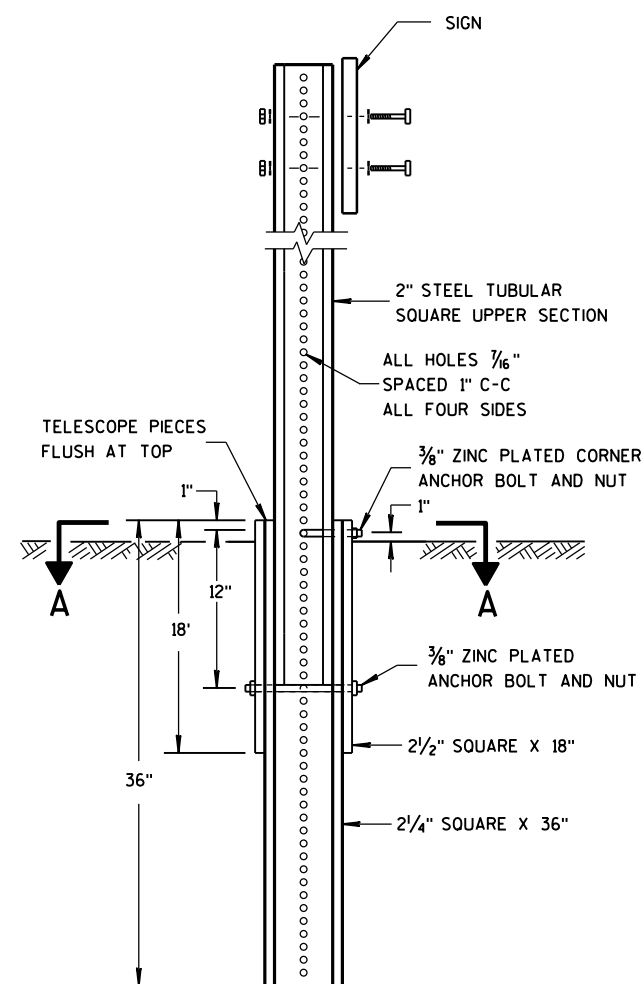
TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA



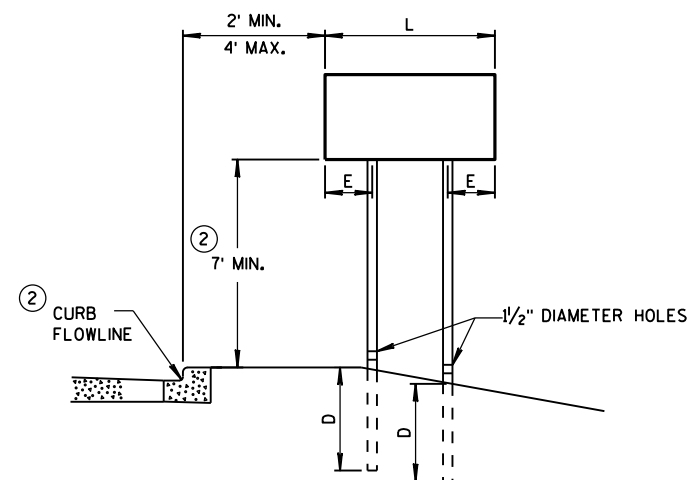
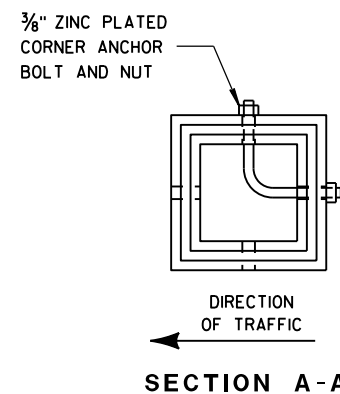
DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

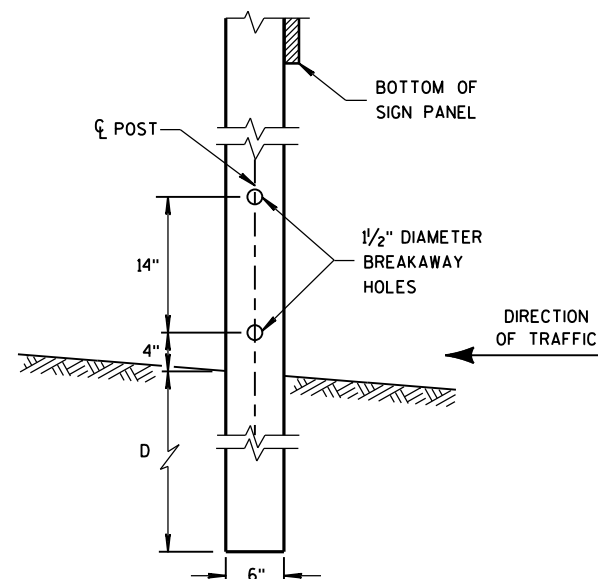


URBAN AREA

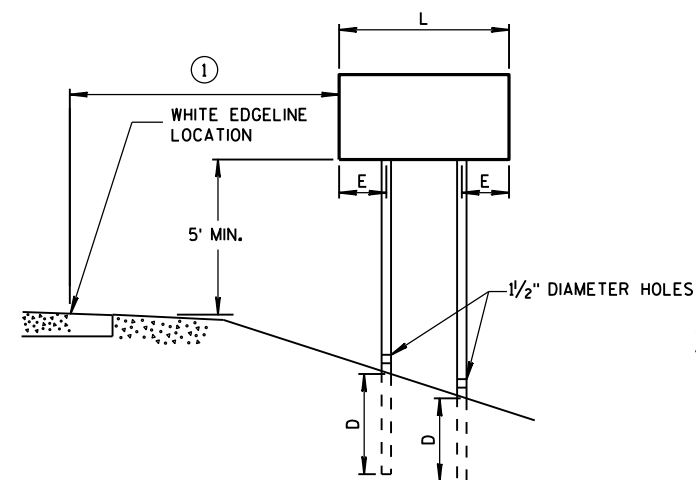
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

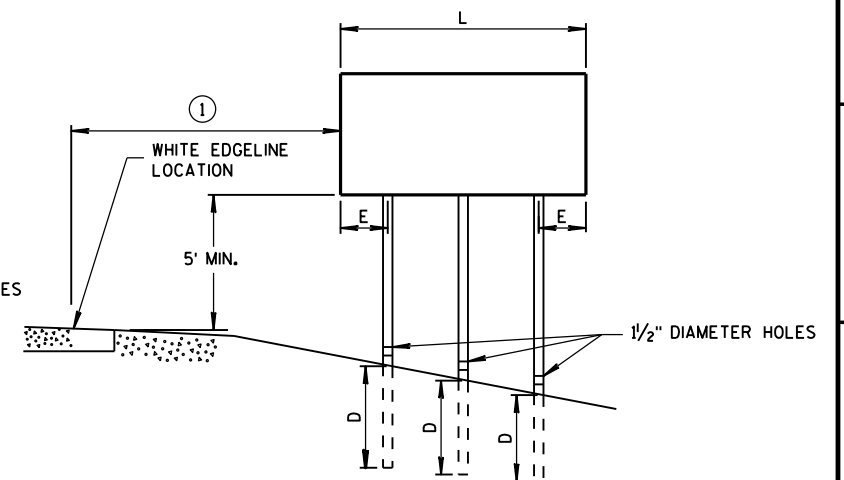
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4" x 6" WOOD POST MODIFICATION



RURAL AREA



GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- 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. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

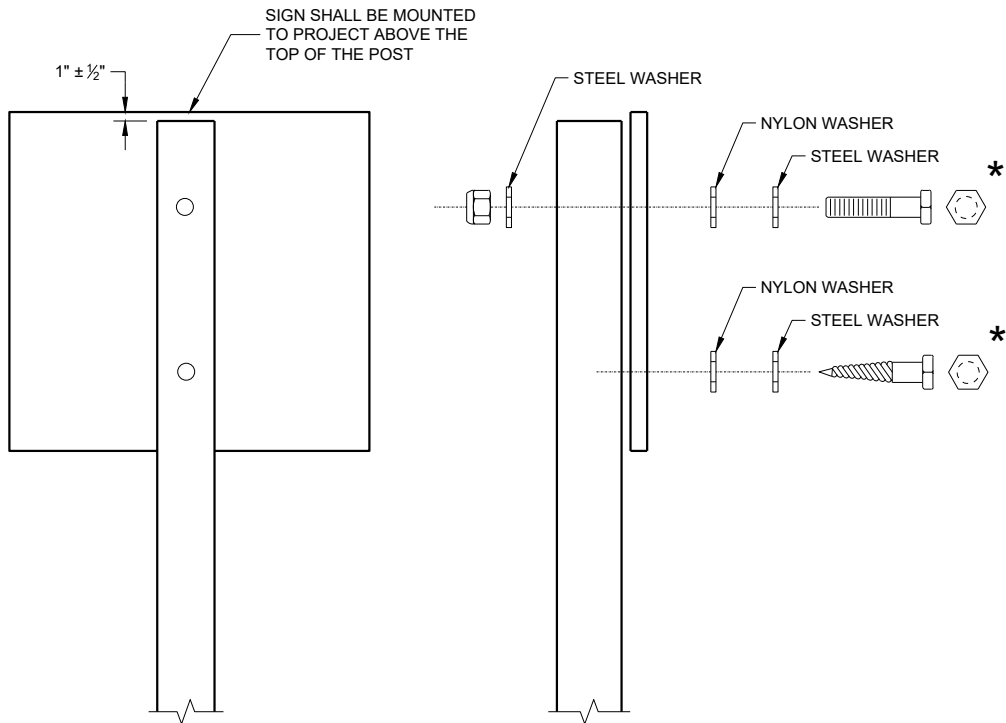
4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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.

WOOD POST (4" x 6")
LAG SCREWS - 3/8" x 3"
MACHINE BOLTS - 5/16" x 6 1/2" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - 3/8" x 3 1/4" LENGTH W/NUTS
RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM
BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH,
GRIP RANGE 0.042 - 0.375 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 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS
TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

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

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

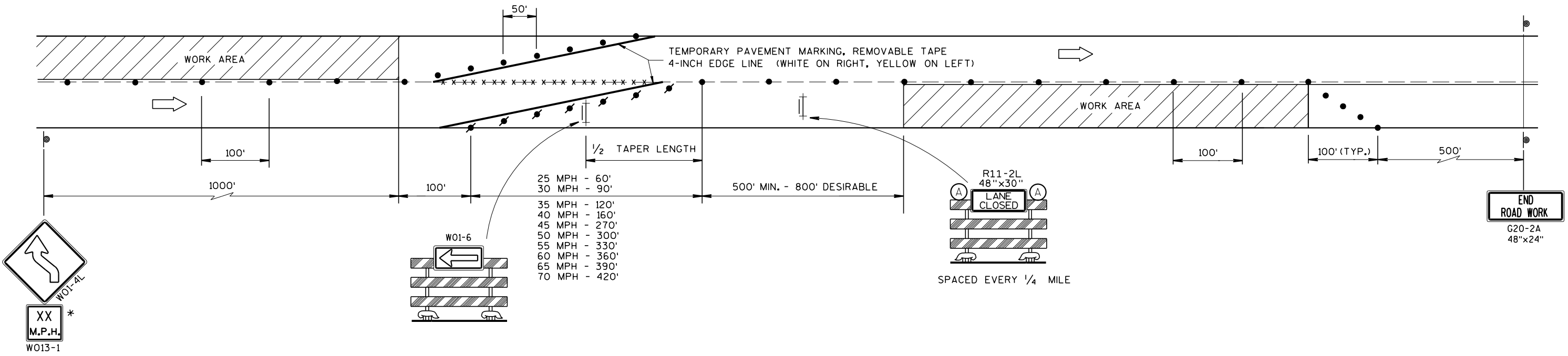
FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

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



* USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED

LANE SHIFT MULTI-LANE DIVIDED OR ONE WAY ROAD

TRAFFIC CONTROL, LANE SHIFT, MULTI-LANE DIVIDED OR ONE WAY ROAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2018 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

DESIGN DATA

LIVE LOAD
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.17
OPERATING RATING FACTOR: 1.66
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

TRAFFIC DATA

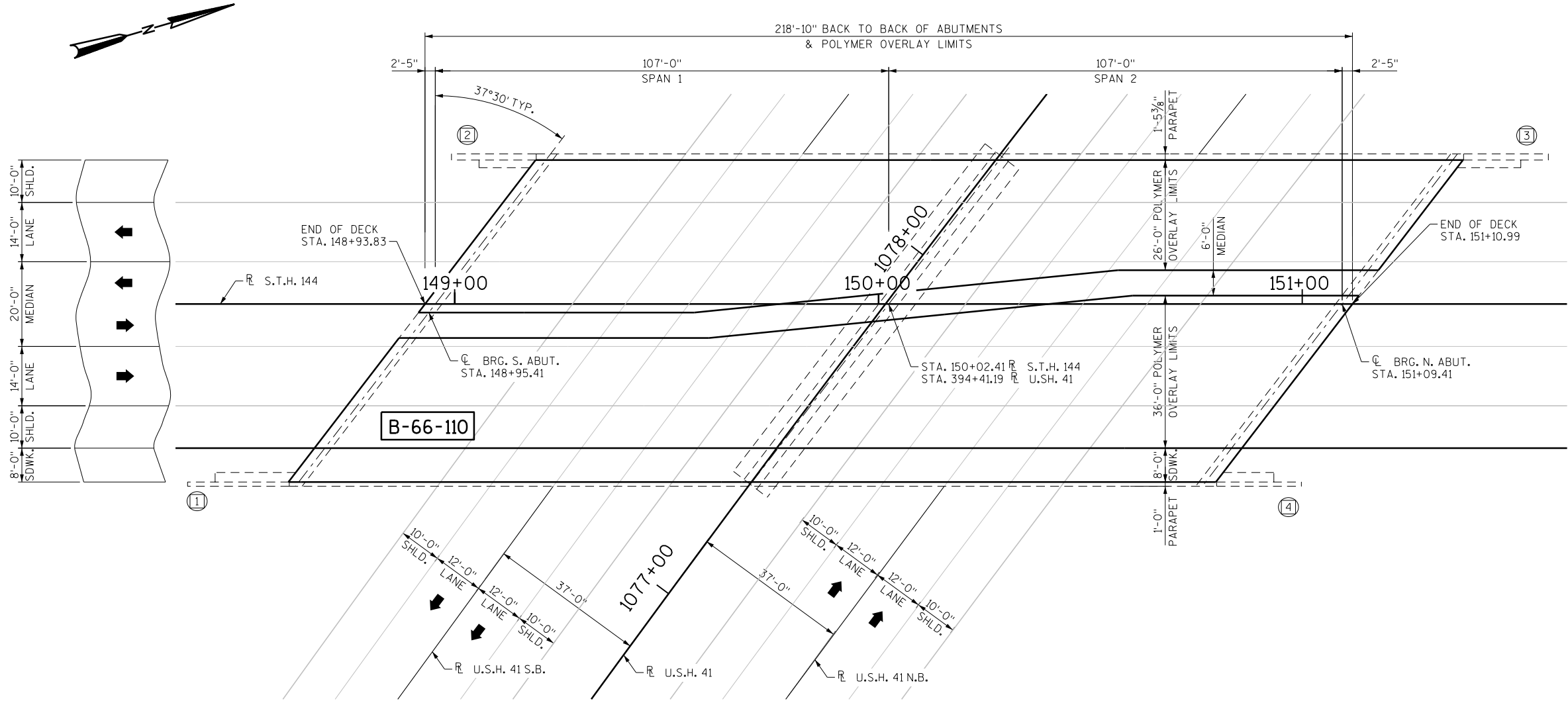
S.T.H. 441
A.D.T. = 5,170 (2021)
A.D.T. = 5,670 (2041)
R.D.S. = 40 M.P.H.
I.H. 41
A.D.T. = 31,480 (2021)
A.D.T. = 35,290 (2041)
R.D.S. = 70 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION

LEGEND

(X) INDICATES WINGWALL NUMBER



PLAN

POLYMER OVERLAY FOR 2-SPAN 54W" PRESTRESSED GIRDERS

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
- ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.
- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".
- SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.
- THE CONTRACTOR IS REponsible FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.
- PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".
- AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	31
509.0302	PREPARATION DECKS TYPE 2	SY	16
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	116
509.5100.S	POLYMER OVERLAY	SY	1508
SPV.0035.4000	RAPID SET DECK REPAIR	CY	4

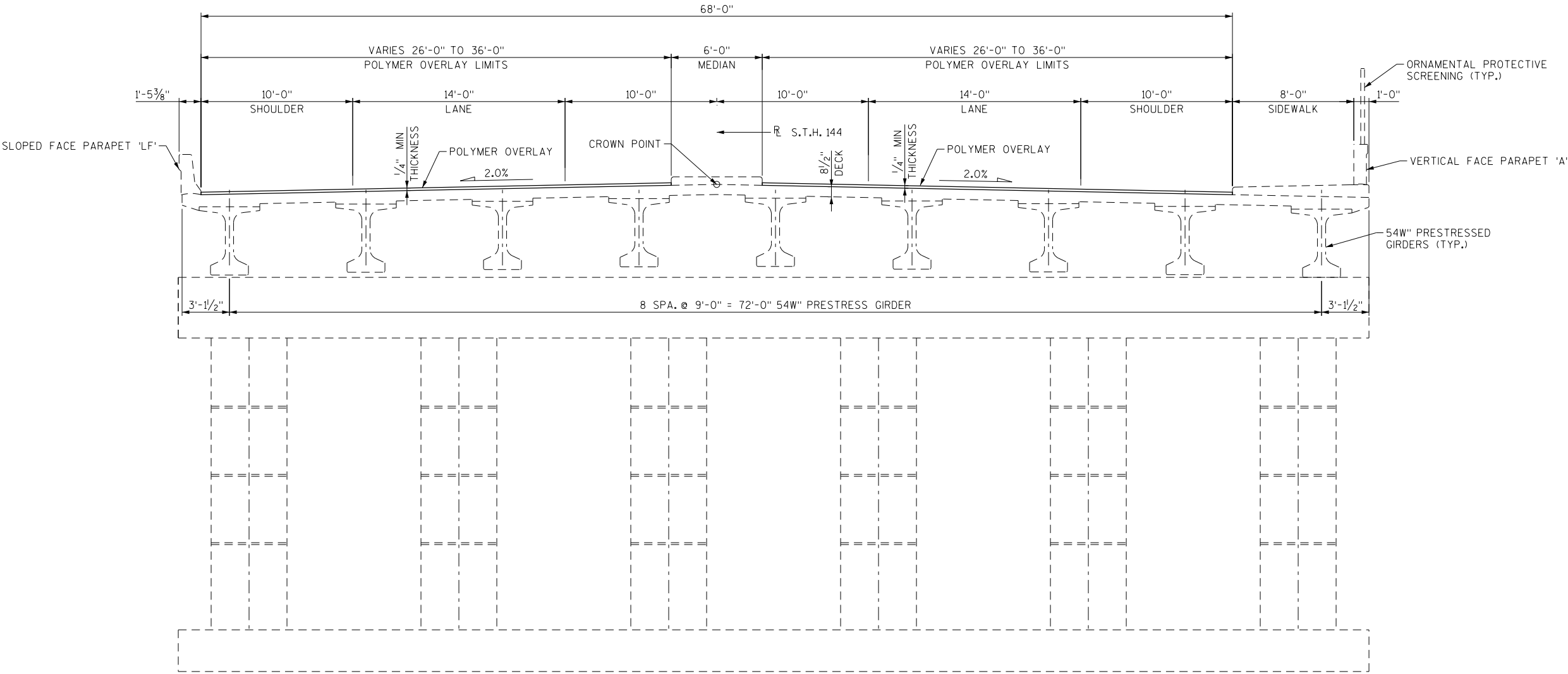
ALL ITEMS ARE CATEGORY 2000



STRUCTURES DESIGN CONTACTS

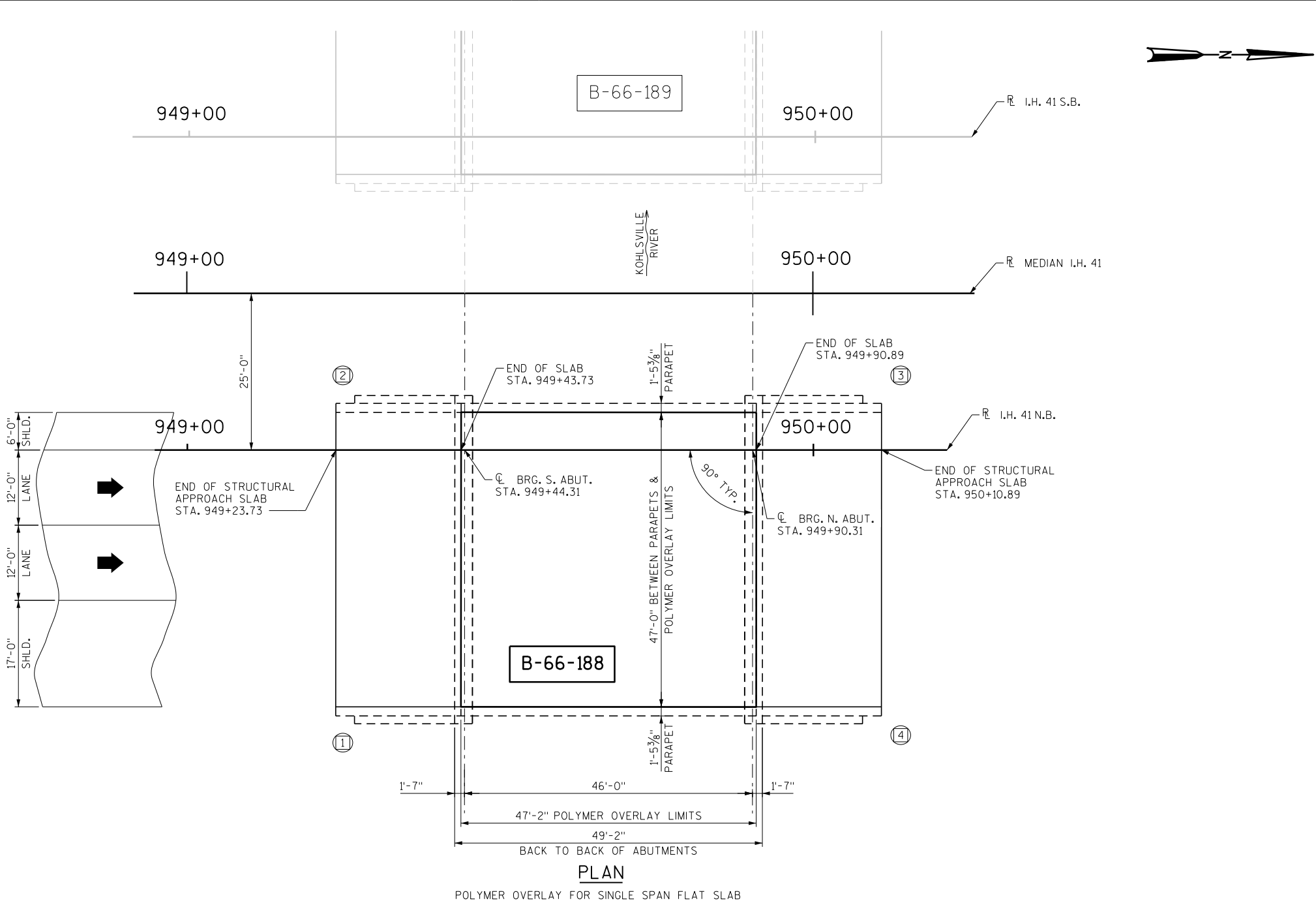
BRIDGE OFFICE:
AARON BONK, P.E. (608) 261-0261
CONSULTANT:
STEVEN SCHMITT, P.E. (262) 821-1171

NO.	DATE	REVISION	BY
KSingh Engineers Scientists Consultants			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>[Signature]</i> SDR		03/15/21 DATE	
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-66-110			
S.T.H. 144 OVER U.S.H. 41			
COUNTY	WASHINGTON	TOWN/CITY/VILLAGE	POLK
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	RT	DESIGN CK'D.	SWS
DRAWN BY	RT	PLANS CK'D.	SWS
GENERAL PLAN			SHEET 1 OF 2



TYPICAL SECTION THRU S.T.H. 144
54W" PRESTRESSED CONCRETE GIRDERS
(LOOKING NORTH)

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-66-110			
DRAWN BY		RT	PLANS CK'D. SWS
TYPICAL SECTION		SHEET 2 OF 2	



GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
- ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS AND ELEVATIONS ARE IN FEET.
- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".
- SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.
- THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.
- PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".
- AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

TOTAL ESTIMATED QUANTITIES

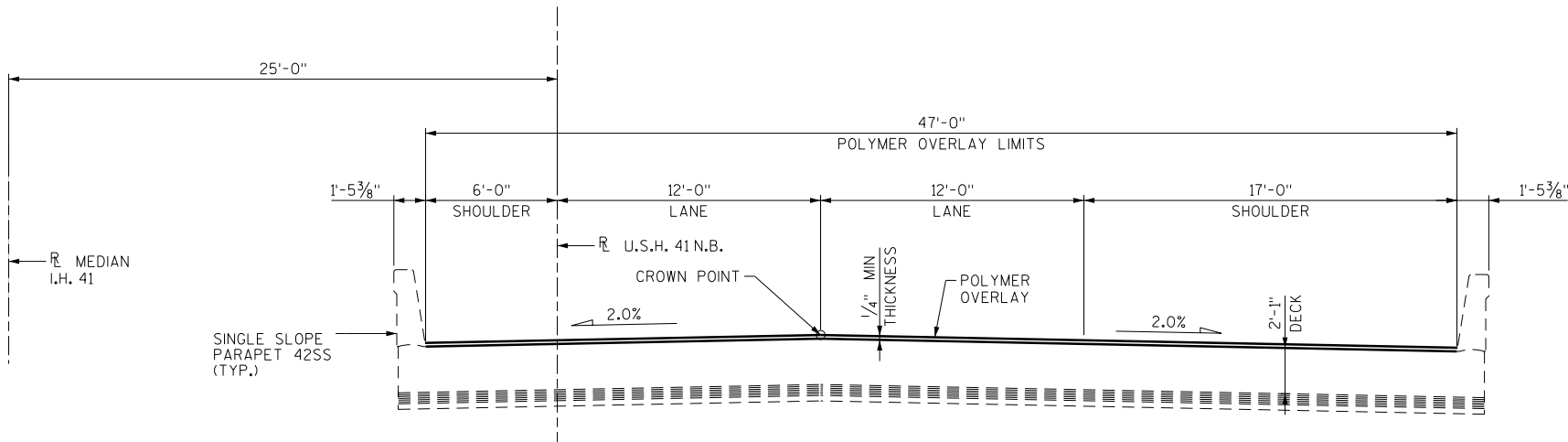
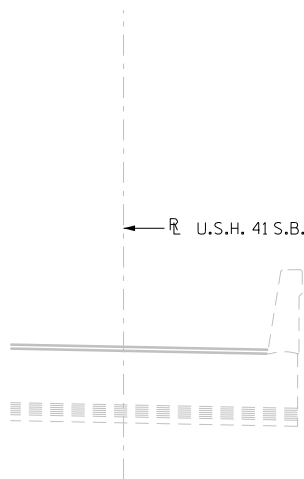
ITEM NO.	BID ITEMS	UNIT	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	6
509.0302	PREPARATION DECKS TYPE 2	SY	3
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	30
509.5100.S	POLYMER OVERLAY	SY	257
SPV.0035.4000	RAPID SET DECK REPAIR	CY	3

ALL ITEMS ARE CATEGORY 2010

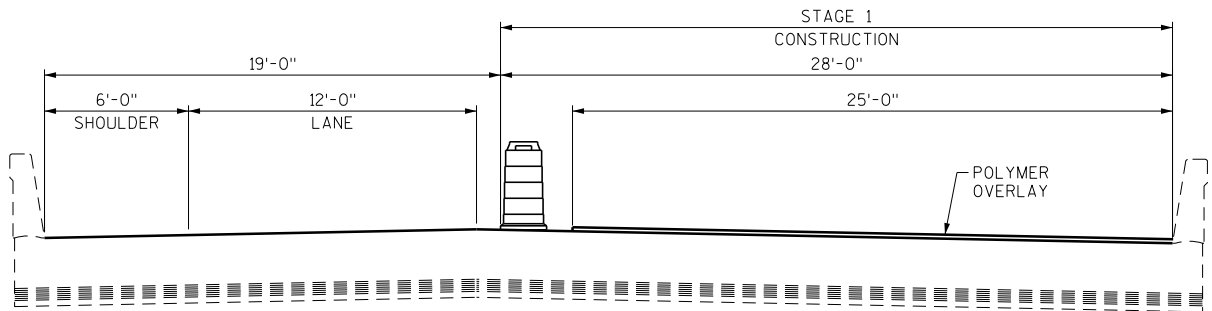


STRUCTURES DESIGN CONTACTS
BRIDGE OFFICE:
AARON BONK, P.E. (608) 261-0261
CONSULTANT:
STEVEN SCHMITT, P.E. (262) 821-1171

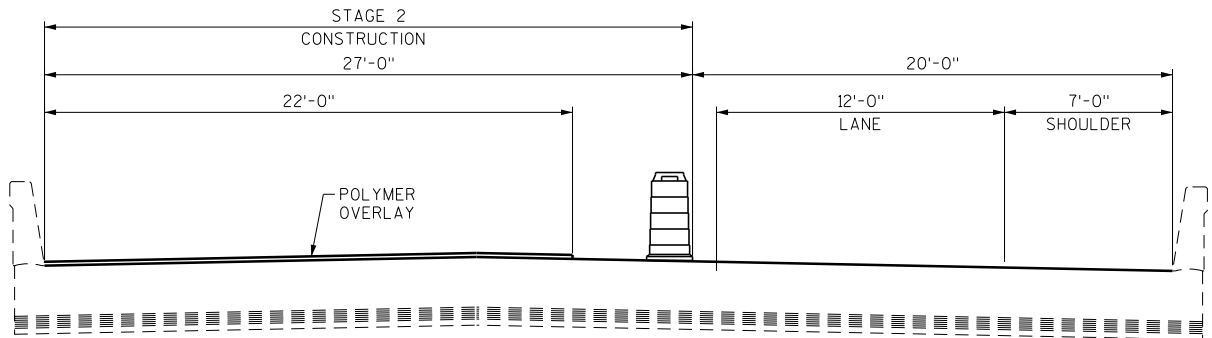
NO.	DATE	REVISION	BY
KSingh Engineers Scientists Consultants			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>[Signature]</i> SDR. 03/19/21		CHIEF STRUCTURES DESIGN ENGINEER DATE	
STRUCTURE B-66-188			
I.H. 41 N.B. OVER THE KOHLSVILLE RIVER			
COUNTY	WASHINGTON	TOWN/CITY/VILLAGE	WAYNE
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	RT	DESIGN CK'D. SWS	DRAWN BY RT PLANS CK'D. SWS
GENERAL PLAN			SHEET 1 OF 2



TYPICAL SECTION THRU U.S.H. 41
CONCRETE FLAT SLAB
(LOOKING NORTH)



TYPICAL SECTION - STAGE 1



TYPICAL SECTION - STAGE 2

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-66-188			
DRAWN BY		RT	PLANS CK'D. SWS
TYPICAL SECTION & STAGING			SHEET 2 OF 2

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.48
OPERATING RATING FACTOR: 1.92
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

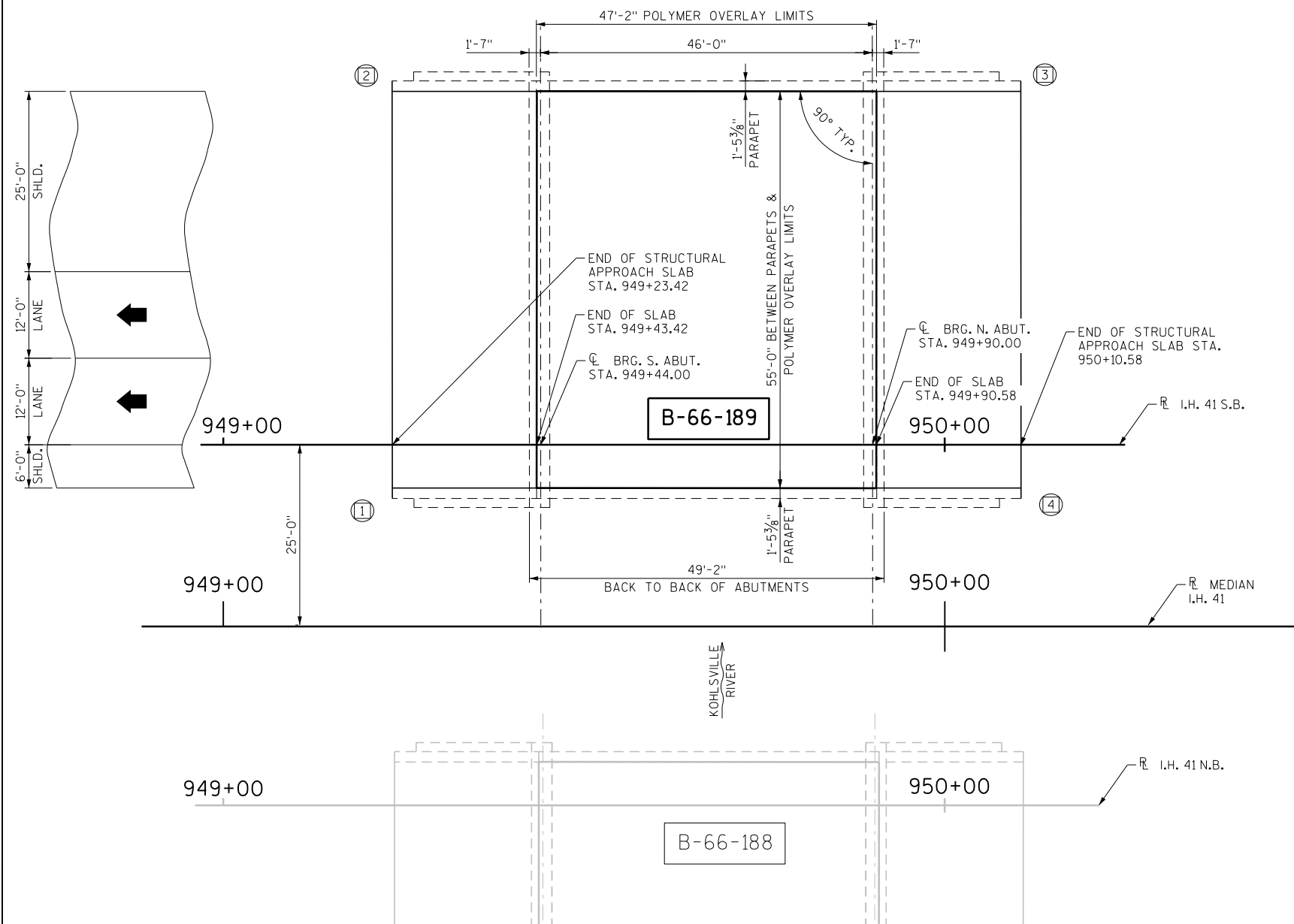
Q_∞ = 1200 C.F.S.
VEL. = 5.5 F.P.S.
HW. = EL. 939.4
WATERWAY AREA = 218 SQ. FT.
DRAINAGE AREA = 20 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 8

A.D.T. = 31,480 (2021)
A.D.T. = 35,290 (2041)
R.D.S. = 70 M.P.H.

Q₁ = 570 C.F.S.
HW₁ = EL. 938.0

1. GENERAL PLAN
2. TYPICAL SECTION & STAGING

 INDICATES WINGWALL NUMBER



PLAN

POLYMER OVERLAY FOR SINGLE SPAN FLAT SLAB

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC,
PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	7
509.0302	PREPARATION DECKS TYPE 2	SY	4
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	32
509.5100.S	POLYMER OVERLAY	SY	301
SPV.0035.4000	RAPID SET DECK REPAIR	CY	3

ALL ITEMS ARE CATEGORY 2020

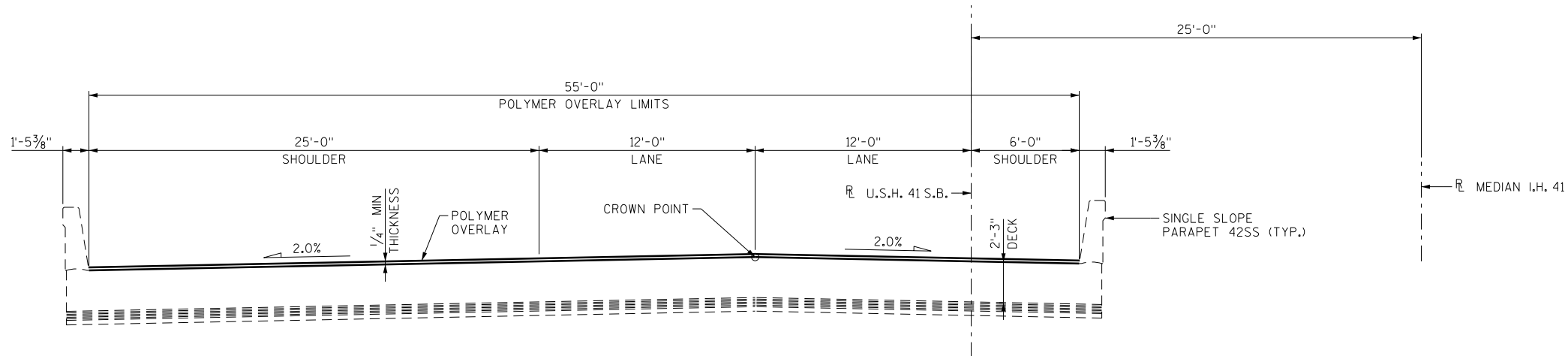


STRUCTURES DESIGN CONTACTS

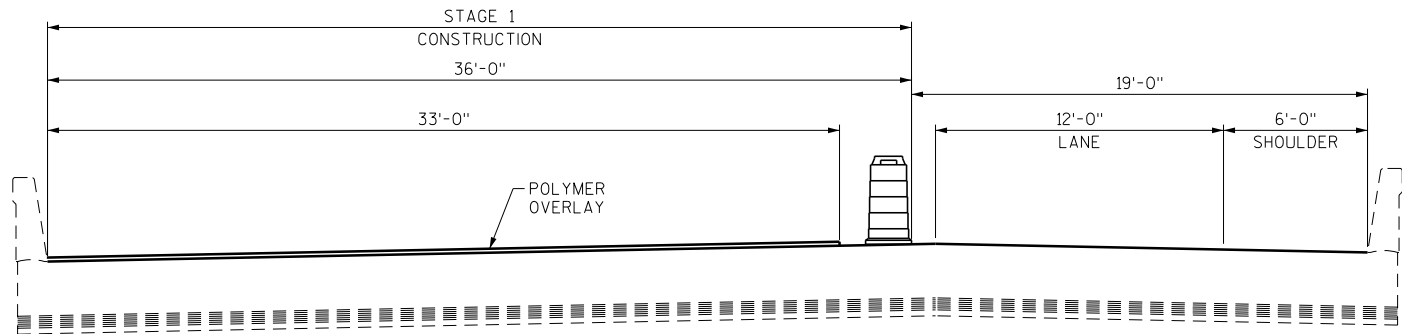
BRIDGE OFFICE:
AARON BONK, P.E. (608) 261-0261

CONSULTANT:
STEVEN SCHMITT, P.E. (262) 821-1171

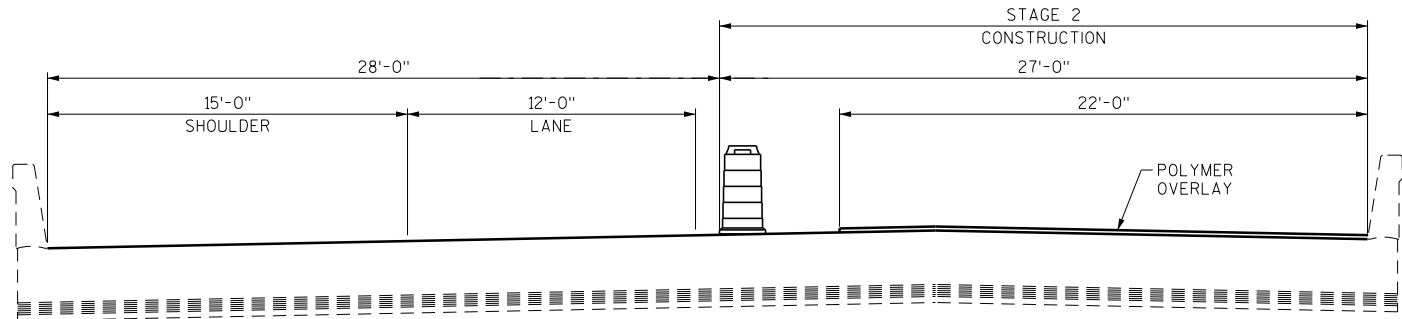
NO.	DATE	REVISION	BY
Engineers Scientists Consultants			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		SPR	03/19/21
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-66-189			
I.H. 41 S.B. OVER THE KOHLSDALE RIVER			
COUNTY	WASHINGTON	TOWN/CITY/VILLAGE	WASHNE
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	RT	DESIGN CK'D.	SWS
DRAWN BY	RT	PLANS CK'D.	SWS
GENERAL PLAN		SHEET 1 OF 2	



TYPICAL SECTION THRU U.S.H. 41
CONCRETE FLAT SLAB
(LOOKING NORTH)



TYPICAL SECTION - STAGE 1



TYPICAL SECTION - STAGE 2

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-66-189			
DRAWN BY		RT	PLANS CK'D. SWS
TYPICAL SECTION & STAGING			SHEET 2 OF 2

DESIGN DATA

LIVE LOAD
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.17
OPERATING RATING FACTOR: 1.52
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 230 KIPS

HYDRAULIC DATA

100 YEAR FREQUENCY
Q₁₀₀ = 420 C.F.S.
VEL. = 6.58 F.P.S.
HW. = EL. 956.48
WATERWAY AREA = 64 SQ. FT.
DRAINAGE AREA = 1.8 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 5

TRAFFIC DATA

I.H. 41
A.D.T. = 31,480 (2021)
A.D.T. = 35,290 (2041)
R.D.S. = 70 M.P.H.

2 YEAR FREQUENCY

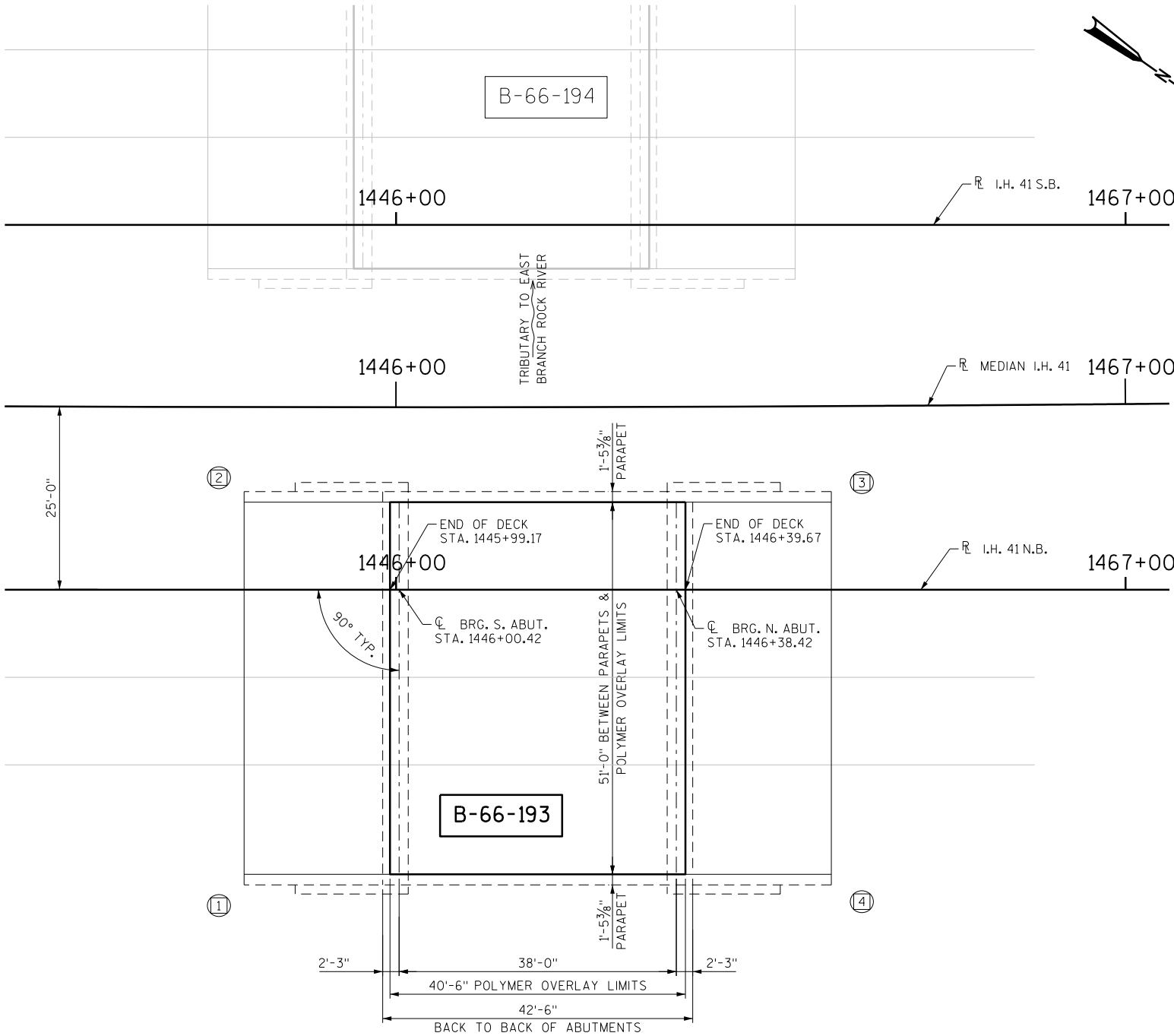
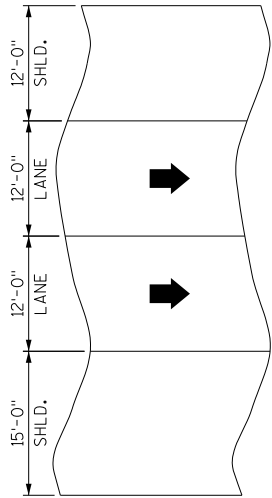
Q₂ = 150 C.F.S.
HW. = EL. 954.44
VEL. = 3.80 F.P.S.

LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION & STAGING

LEGEND

(X) INDICATES WINGWALL NUMBER



PLAN

POLYMER OVERLAY FOR SINGLE SPAN
28" PRESTRRESSED GIRDER BRIDGE

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
- ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.
- DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".
- SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC,
PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.
- THE CONTRACTOR IS REPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO
TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO
AVOID DAMAGE.
- PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON
THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AREAS
SHALL BE FILLED WITH "RAPID SET DECK REPAIR".
- AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	5
509.0302	PREPARATION DECKS TYPE 2	SY	3
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	27
509.5100.S	POLYMER OVERLAY	SY	241
SPV.0035.4000	RAPID SET DECK REPAIR	CY	3

ALL ITEMS ARE CATEGORY 2030

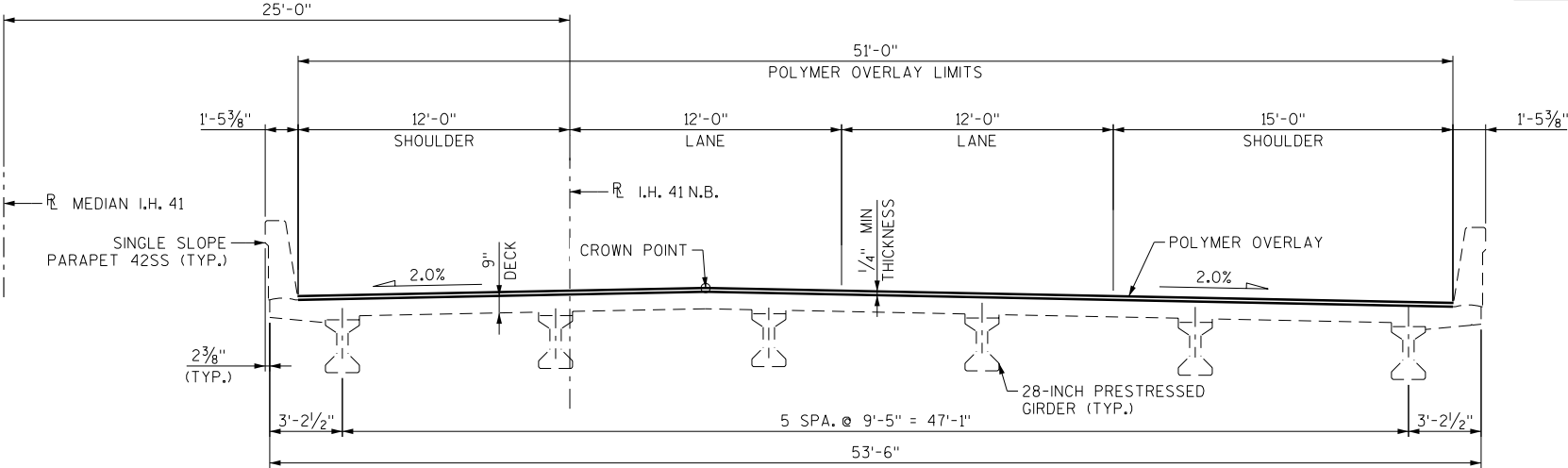
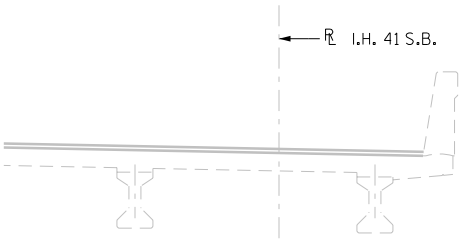


STRUCTURES DESIGN CONTACTS

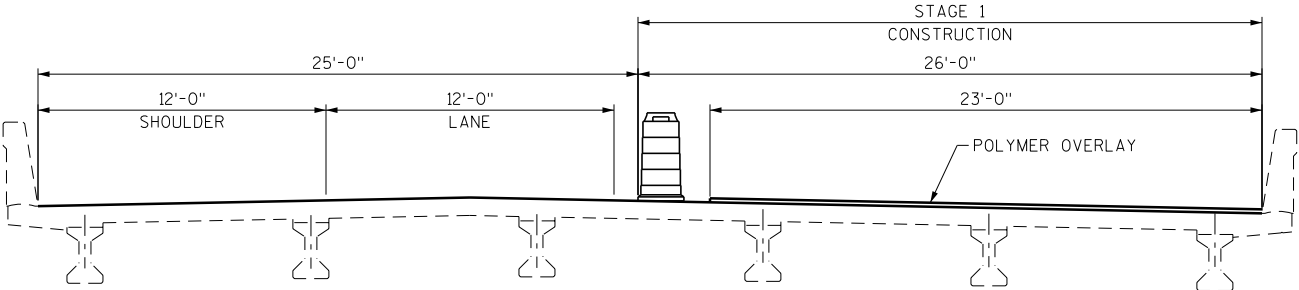
BRIDGE OFFICE:
AARON BONK, P.E. (608) 261-0261

CONSULTANT:
STEVEN SCHMITT, P.E. (262) 821-1171

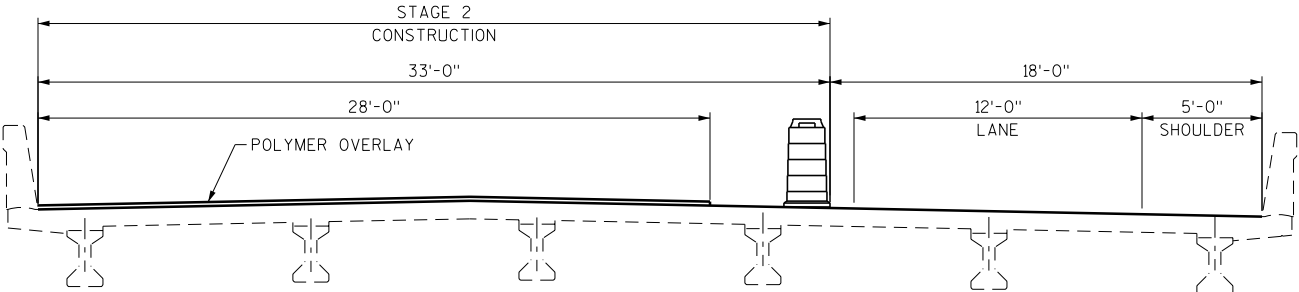
NO.	DATE	REVISION	BY
KSingh Engineers Scientists Consultants			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED	SDR. 03/19/21		DATE
STRUCTURE B-66-193			
I.H. 41 N.B. OVER TRIBUTARY TO EAST BRANCH ROCK RIVER			
COUNTY	WASHINGTON	TOWN/CITY/VILLAGE	ADDISON
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	RT	DESIGN CK'D. SWS	DRAWN BY RT PLANS CK'D. SWS
GENERAL PLAN			SHEET 1 OF 2



TYPICAL SECTION THRU I.H. 41 N.B.
28" PRESTRESSED CONCRETE GIRDERS
(LOOKING NORTH)

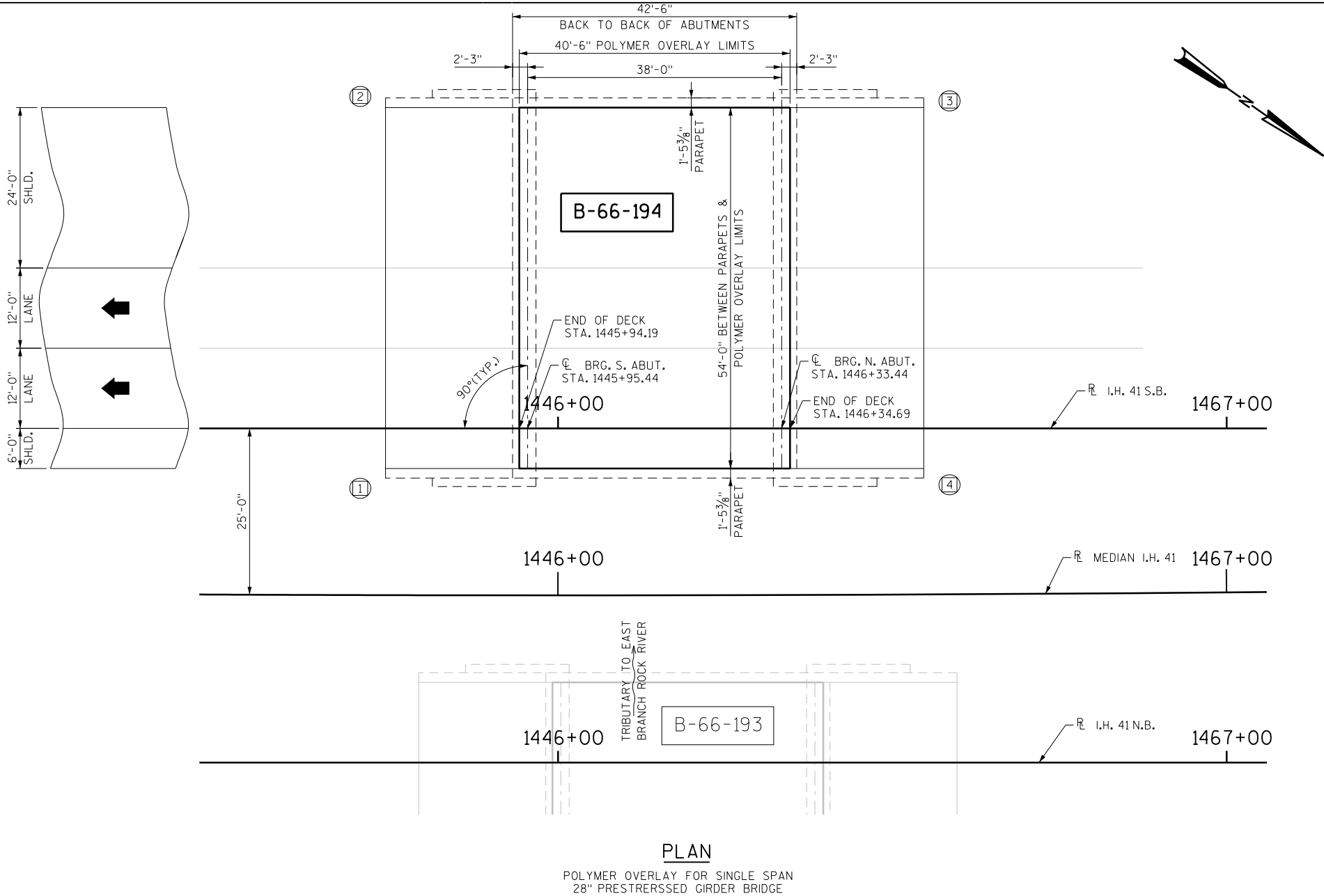


TYPICAL SECTION - STAGE 1



TYPICAL SECTION - STAGE 2

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-66-193			
DRAWN BY		RT	PLANS CK'D. SWS
TYPICAL SECTION & STAGING			SHEET 2 OF 2



GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
ALL STATIONS AND ELEVATIONS ARE IN FEET.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

SEE ROADWAY PLANS AND SPECIAL PROVISIONS FOR MAINTENANCE OF TRAFFIC, PERMISSIBLE LANE CLOSURES, AND CONSTRUCTION STAGING REQUIREMENTS.

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AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAWCUT.

TOTAL ESTIMATED QUANTITIES

ITEM NO.	BID ITEMS	UNIT	TOTAL
509.0301	PREPARATION DECKS TYPE 1	SY	6
509.0302	PREPARATION DECKS TYPE 2	SY	3
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	30
509.5100.S	POLYMER OVERLAY	SY	255
SPV.0035.4000	RAPID SET DECK REPAIR	CY	3

ALL ITEMS ARE CATEGORY 2040



STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK, P.E. (608) 261-0261

CONSULTANT:
STEVEN SCHMITT, P.E. (262) 821-1171

STATE PROJECT NUMBER

1100-17-79

DESIGN DATA

LIVE LOAD
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.13
OPERATING RATING FACTOR: 1.46
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 230 KIPS

HYDRAULIC DATA

100 YEAR FREQUENCY
Q₁₀₀ = 420 C.F.S.
VEL. = 7.22 F.P.S.
HW. = EL. 955.53
WATERWAY AREA = 58 SQ. FT.
DRAINAGE AREA = 1.8 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 5

2 YEAR FREQUENCY

Q₂ = 150 C.F.S.
HW₂ = EL. 954.37
VEL. = 5.56 F.P.S.

TRAFFIC DATA

I.H. 41
A.D.T. = 31,480 (2021)
A.D.T. = 35,290 (2041)
R.D.S. = 70 M.P.H.

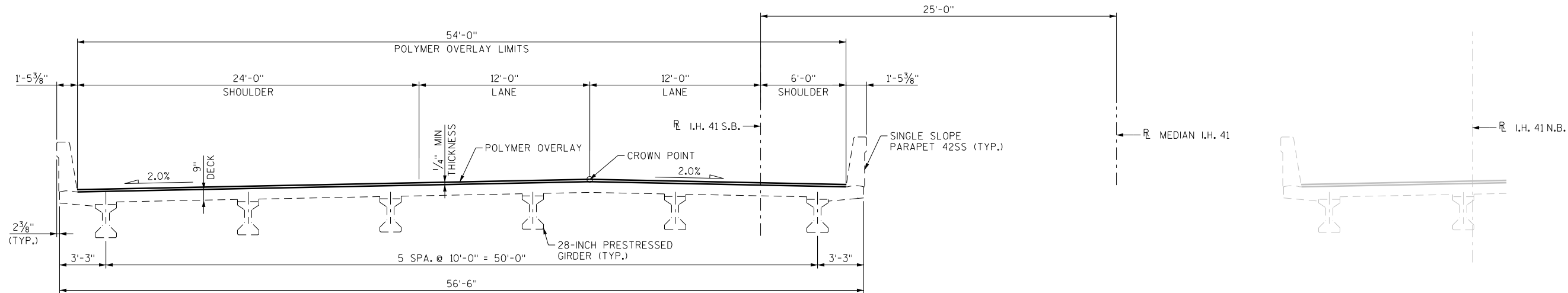
LIST OF DRAWINGS

- GENERAL PLAN
- TYPICAL SECTION & STAGING

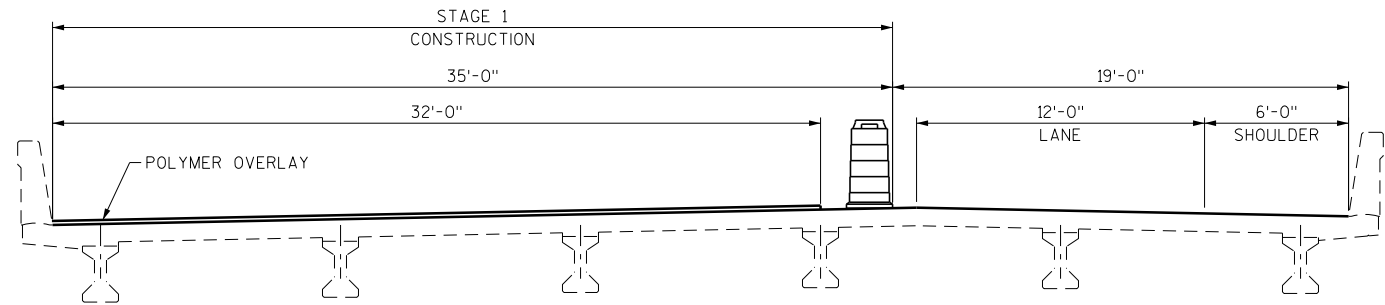
LEGEND

(X) INDICATES WINGWALL NUMBER

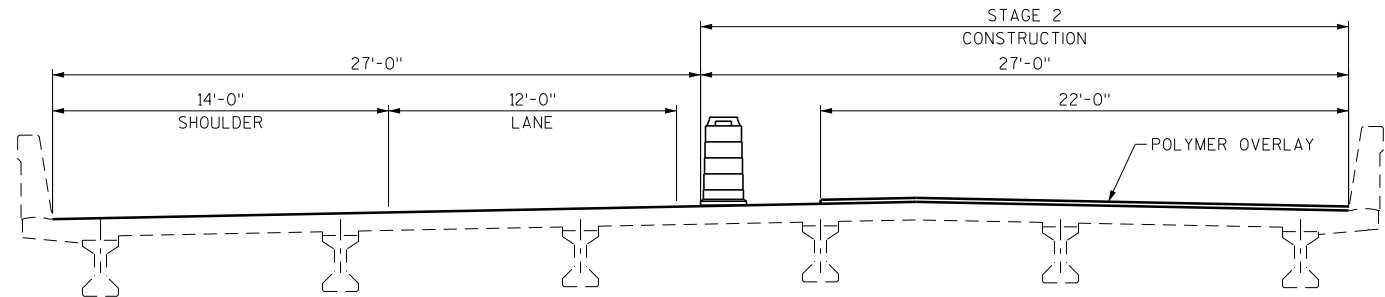
NO.	DATE	REVISION	BY
KSingh Engineers Scientists Consultants			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		SDR. 03/19/21	DATE
STRUCTURE B-66-194			
I.H. 41 S.B. OVER TRIBUTARY TO EAST BRANCH ROCK RIVER			
COUNTY	WASHINGTON	TOWN/CITY/VILLAGE	ADDISON
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	RT	DESIGN CK'D.	SWS
DRAWN BY	RT	PLANS CK'D.	SWS
GENERAL PLAN			SHEET 1 OF 2



TYPICAL SECTION THRU I.H. 41 S.B.
28" PRESTRESSED CONCRETE GIRDERS
(LOOKING NORTH)



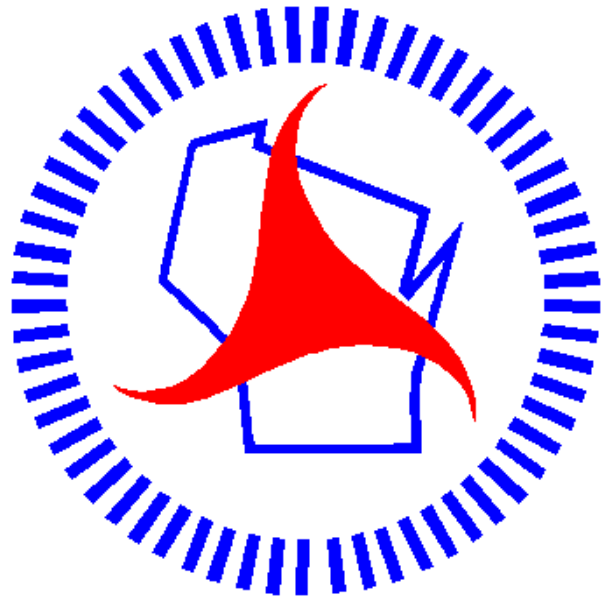
TYPICAL SECTION - STAGE 1



TYPICAL SECTION - STAGE 2

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-66-194			
DRAWN BY		RT	PLANS CK'D. SWS
TYPICAL SECTION & STAGING			SHEET 2 OF 2

Notes



Wisconsin Department of Transportation

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