GRE AUGUST 2026

PROJECT ID: **1130-74-71**

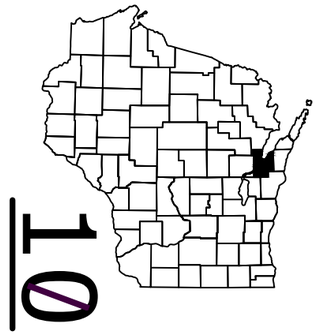
WITH: N/A

COUNTY: **BROWN**

ORDER OF SHEETS

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

TOTAL SHEETS = 564



N

DESIGN DESIGNATION		IH 41	STH 29 EB TO IH 41 SB
A.A.D.T.	2026 =	79,260	9570
A.A.D.T.	2046 =	90,500	9570
D.H.V.	=	N/A	
D.D.	=	56/44	
T.	=	12.2%	
DESIGN SPEED	=	70 MPH	
ESALS	=	N/A	

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- 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

GREEN BAY, IH 41

PARKVIEW RD - STH 29

IH 41

BROWN

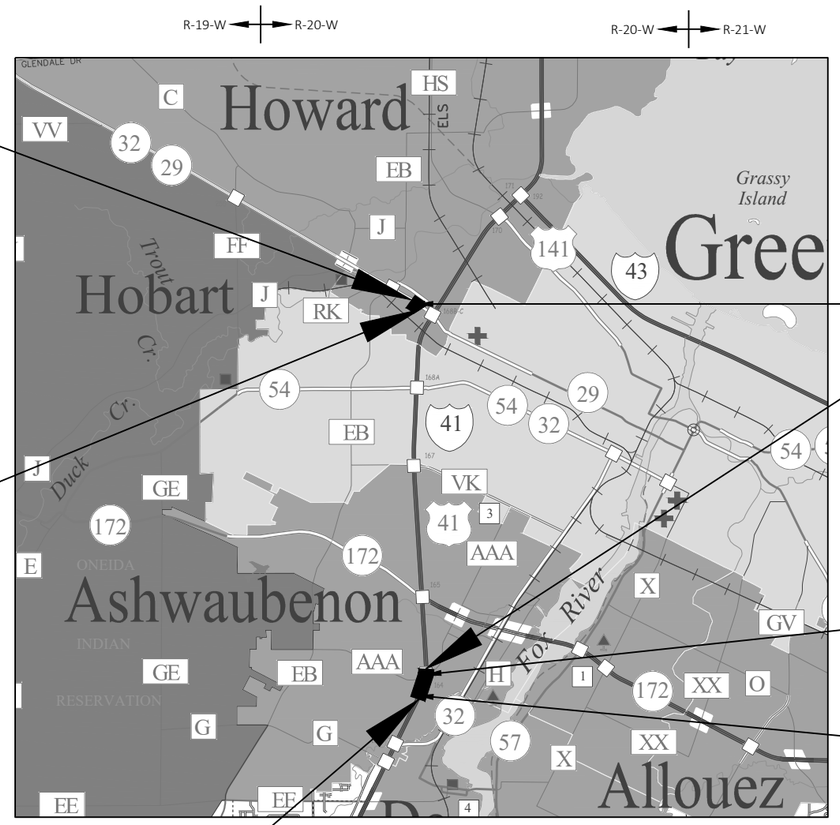
STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1130-74-71	WISC 2026439	1

STATE PROJECT NUMBER **1130-74-71**

BEGIN CONSTRUCTION
STA 809+94.95 FES
X = 82,123.714
Y = 576,624.959

END CONSTRUCTION
STA 816+00.00 FES

BEGIN PROJECT
STA 819+52.77
X = 83,030.650
Y = 551,306.628



B-5-663 (STH 29 EB TO IH 41 SB RAMP)
R-05-243
R-05-244

END PROJECT
STA 841+23.00

T-24-N
T-23-N

B-5-612 (IH 41 CD)
B-5-618 (IH 41 SB)
B-5-619 (IH 41 NB)

B-5-616 (IH 41 SB)
B-5-617 (IH 41 NB)
B-5-621 (IH 41 CD)

LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.41 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ORIGINAL PLANS PREPARED BY

KL Engineering
[A] Better Experience

WISCONSIN
BRAD R. HALVENSLEBEN
34638-006
BELLEVILLE, WI
PROFESSIONAL ENGINEER

DATE: APRIL 13, 2026 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AYRES ASSOCIATES/KL ENGINEERING
Designer	KL ENGINEERING
Project Manager	J. LANG
Regional Examiner	
Regional Supervisor	A. FULCER

APPROVED FOR THE DEPARTMENT

DATE: 5/1/2026 (Signature)

E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\010101-TI.DWG PLOT DATE : 4/13/2026 10:57 AM PLOT BY : KL ENGINEERING PLOT NAME :

STANDARD ABBREVIATIONS

BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
BLDG.	BUILDING
CTR	CENTER
C/L	CENTERLINE
C.E.	COMMERCIAL ENTRANCE
CONC.	CONCRETE
CSW	CONCRETE SIDEWALK
CMCP	CORRUGATED METAL CULVERT PIPE
CP	CULVERT PIPE
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
CPT	CONSTRUCTION PERMIT
EB	EASTBOUND
ELEC	ELECTRIC
IE	INVERT ELEVATION
EX.	EXISTING
FO	FIBER OPTIC
F.E.	FIELD ENTRANCE
GAS	GAS
HMA	HOT MIX ASPHALT
HSE.	HOUSE
LHF	LEFT HAND FORWARD
MH	MANHOLE
MAX.	MAXIMUM
MIN.	MINIMUM
NOR.	NORMAL
NTS	NOT TO SCALE
PLE	PERMANENT LIMITED EASEMENT
P.E.	PRIVATE ENTRANCE
P.L.	PROPERTY LINE
PROP.	PROPOSED
PRW	PROPOSED RIGHT-OF-WAY
RAD	RADIUS
R/L	REFERENCE LINE
RCCP	REINFORCED CONCRETE CULVERT PIPE
REQ'D.	REQUIRED
RHF	RIGHT HAND FORWARD
RW	RIGHT-OF-WAY LINE
SAN	SANITARY SEWER
SHLD	SHOULDER
SW	SIDEWALK
SF	SQUARE FEET
SY	SQUARE YARD
S.D.D.	STANDARD DETAIL DRAWING
STA	STATION
SS	STORM SEWER
TEL	TELEPHONE
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
WAT	WATER
WB	WESTBOUND

UTILITIES

Darlene Aschinger
Spectrum - Communication Line
3545 Plank Road
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(920) 328-3442
geremiah.young@btussel.com

Marnie Varner
Level 3 Communications LLC/CenturyLink Communications, LLC/Lumen National - Communication Line
mvarner@congruex.com

ORDER OF DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
EROSION CONTROL
PERMANENT SIGNING & MARKING
LIGHTING
TRAFFIC CONTROL
ALIGNMENT DIAGRAM & BENCHMARK/CONTROL POINT DATA

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

	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	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	0.70 - 0.95											
CONCRETE	0.80 - 0.95											
BRICK	0.70 - 0.80											
DRIVES, WALKS	0.75 - 0.85											
ROOFS	0.75 - 0.95											
GRAVEL ROADS, SHOULDERS	0.40 - 0.60											

TOTAL PROJECT AREA = 50.93 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 8.28 ACRES

NE REGION SURVEY COORDINATOR

CORMAC MCINNIS, PLS
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 492-5638
E-MAIL: cormac.mcinnis@dot.wi.gov

WISDOT CONTACT

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WISDOT - NE REGION
944 VANDERPERREN WAY
GREEN BAY, WI 54304
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E-MAIL: joshua.lang@dot.wi.gov

WDNR LIAISON

JIM DOPERALSKI
DNR NORTHEAST REGIONAL HQ
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
PHONE: (920) 412-0165
EMAIL: james.doperalski@wisconsin.gov

CONSULTANT CONTACT

BRAD HALVENSLEBEN
KL ENGINEERING, INC.
5400 KING JAMES WAY SUITE 200
MAIDSON, WI 53719
PHONE: (608) 310-3826
EMAIL: brad.halvensleben@klengineering.com

GENERAL NOTES

THE LOCATION OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE THEIR 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.

2

2

N

MID VALLEY DRIVE

IH 41 SB ON RAMP FROM CTH G/MAIN AVENUE

IH 41 SB OFF-RAMP TO CTH G/MAIN AVENUE

CTH G/MAIN AVENUE

IH 41 SB

765SB 770SB 775SB R/L SB 780SB 785SB 790SB

765NB 770NB 775NB 780NB 785NB 790NB

R/L NB

IH 41 NB

IH 41 NB OFF-RAMP TO CTH G/MAIN AVENUE

LAWRENCE DRIVE

IH 41 NB ON-RAMP FROM CTH G/MAIN AVENUE

IH 41 NB OFF-RAMP TO ASHLAND AVENUE

IH 41 SB ON-RAMP FROM ASHLAND AVENUE

ASHWAUBENON CREEK

LAWRENCE DRIVE

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po

PLOT DATE : 7/9/2025 3:46 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

MARKET STREET

ALLIED STREET

PARKVIEW ROAD

CNW RAILROAD

BEGIN PROJECT
STA 819NB+52.77
MATCH EXISTING
SAW CUT REQ'D

STRUCTURE B-5-616
IH 41 SB OVER PARKVIEW RD

RAMP OWB

R/L PRK

R/L OWW

R/L OWE

6900WW

6900WE

6950WW

6950WE

LIGHTING CONDUIT NEEDS TO HAVE WIRE PULLED BACK BEFORE WORK, CONDUIT REPAIR/REPLACED, AND WIRE PULLED BACK THROUGH CONDUIT

END PROJECT
STA 841NB+23.00
MATCH EXISTING
SAW CUT REQ'D

IH 41 SB

820OWB

820SB

820NB

820CD

825OWB

825SB

825NB

825CD

825OWC

830OWB

830SB

830NB

830CD

830OWC

835SB

835NB

835CD

840SB

840NB

840CD

845SB

845NB

845CD

R/L OWB

R/L SB

R/L CD

R-5-206

STRUCTURE B-5-617
IH 41 NB OVER PARKVIEW RD

STRUCTURE B-5-621
IH 41 CD OVER PARKVIEW RD

STRUCTURE B-5-618
IH 41 SB OVER ONEIDA ST

7000WW

7000WE

200PRK

105CNW RR

110CNW RR

R/L OWC

R/L NB

STRUCTURE B-5-619
IH 41 NB OVER ONEIDA ST

STRUCTURE B-5-612
IH 41 CD OVER ONEIDA ST

IH 41 CD

IH 41 NB

RAMP OWC

RAMADA WAY

RAMADA WAY

PARKVIEW ROAD

LIGHTING CONDUIT NEEDS TO HAVE WIRE PULLED BACK BEFORE WORK, CONDUIT REPAIRED/REPLACED, AND WIRE PULLED BACK THROUGH CONDUIT

R/L CNW RR

7050WW

7050WE

7100WE

HOLMGREN WAY

N

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020202-po

PLOT DATE : 7/9/2025 3:46 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

2

N

STH 29

806FES

808FES

R/L FES

BEGIN CONSTRUCTION
STA 809FES+94.95
MATCH EXISTING
SAW CUT REQ'D

810FES

LIGHTING CONDUIT NEEDS TO HAVE WIRE PULLED BACK BEFORE WORK, CONDUIT REPAIR/REPLACED, AND WIRE PULLED BACK THROUGH CONDUIT

812FES

R-5-244

BADGERLAND DRIVE

R/L DC

105DC

814FES

STRUCTURE B-5-663
STH 29 EB TO IH 41 SB

110DC

SHAWANO AVENUE

STRUCTURE B-5-661
IH 41 SB TO STH 29 WB
EXISTING STRUCTURE TO REMAIN
(FOR REFERENCE ONLY)

DUCK CREEK PARKWAY

R-5-243

816FES

END CONSTRUCTION
STA 816FES+00.00
MATCH EXISTING
SAW CUT REQ'D

818FES

820FES

822FES

824FES

826FES

828FES

830FES

BEAVER DAM CREEK

STH 29 EB TO IH 41 SB RAMP

IH 41 NB TO STH 29 WB RAMP

IH 41 SB TO STH 29 WB RAMP

STH 29 EB TO IH 41 NB RAMP

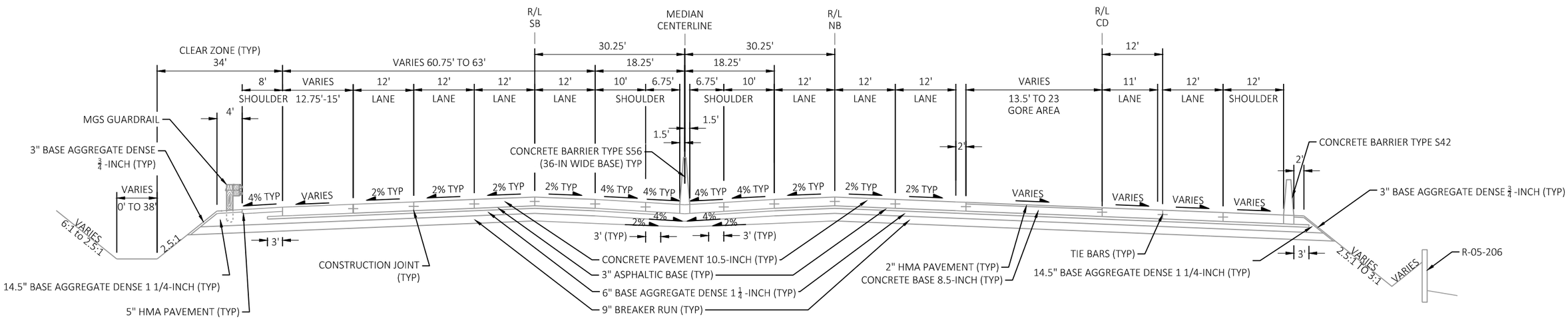
BEAVER DAM CREEK

SHAWANO AVENUE

IH 41 SB ON-RAMP FROM SHAWANO AVE

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PROJECT OVERVIEW	SHEET 5	E

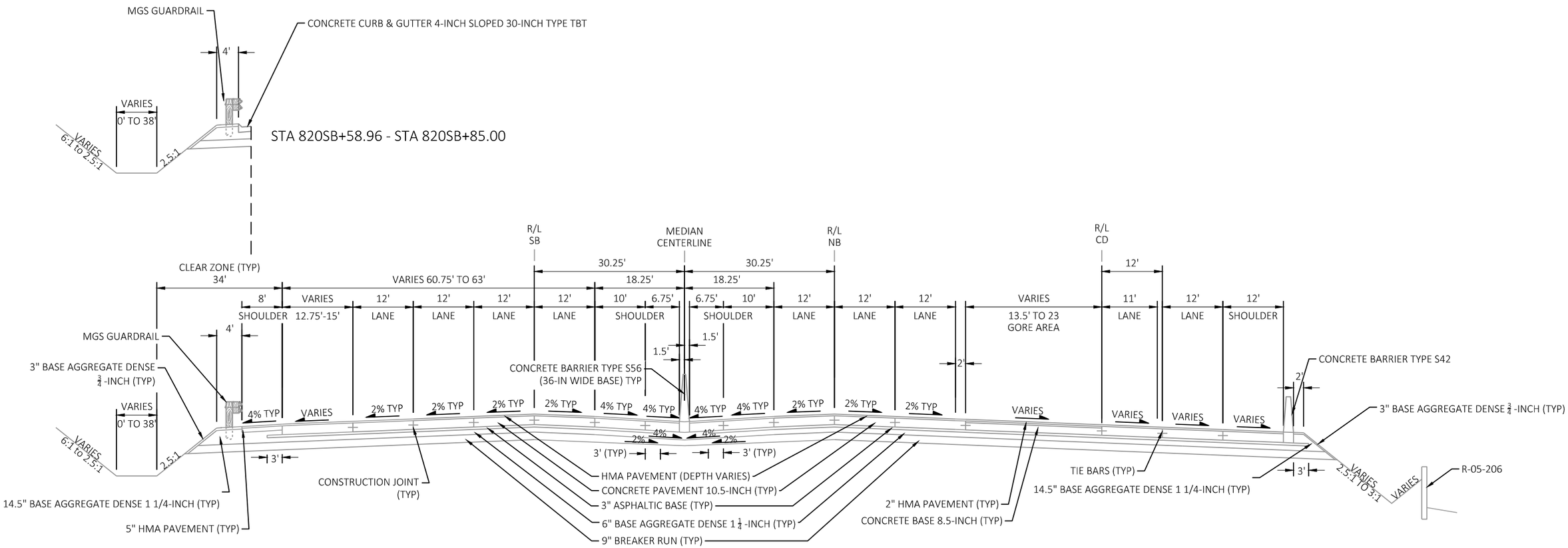
2



TYPICAL EXISTING SECTION IH 41
STA 819SB+27.11 - STA 819SB+86.17
STA 819NB+52.77 - STA 819NB+83.07
STA 819CD+09.07 - STA 819CD+84.54

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 6	E

2

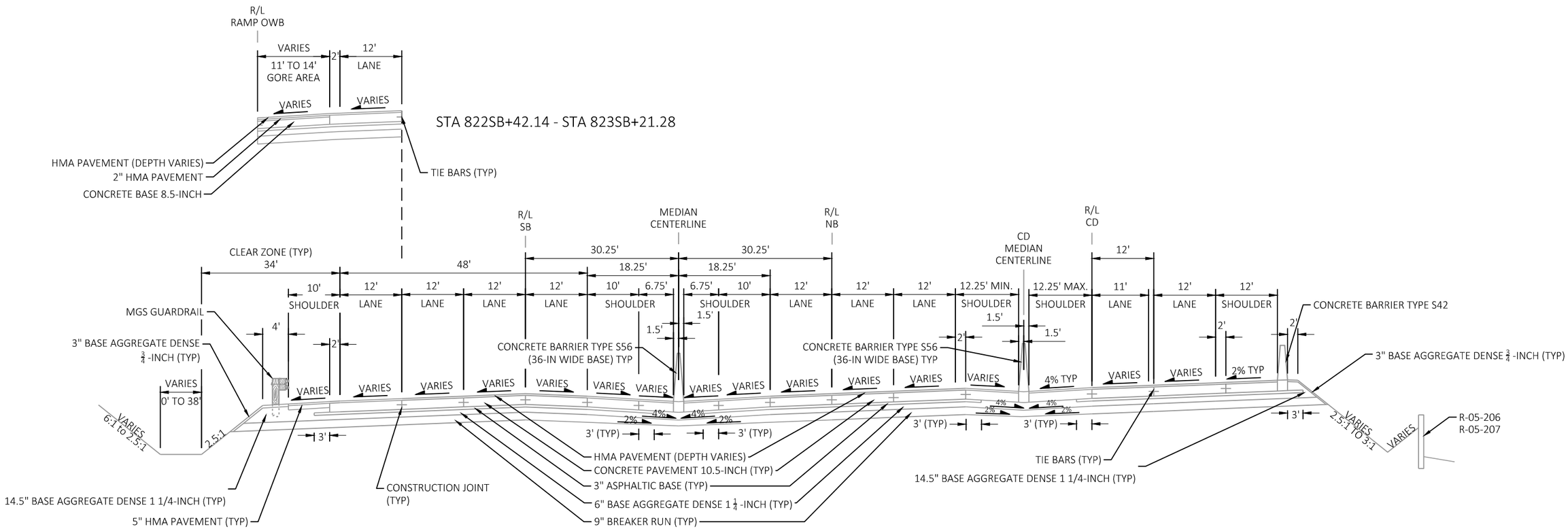


TYPICAL EXISTING SECTION IH 41
STA 819SB+86.17 - STA 820SB+85.28
STA 819NB+83.07 - STA 820NB+85.53
STA 819CD+84.54 - STA 820CD+86.50

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 7	E

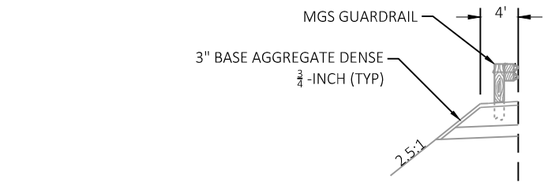
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 02
PLOT DATE : 7/9/2025 1:32 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : Custom

2

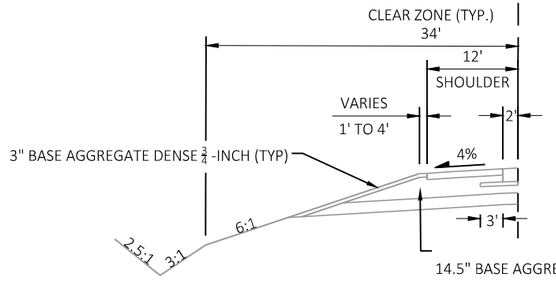


TYPICAL EXISTING SECTION IH 41
STA 822SB+42.14 - STA 823SB+21.28
STA 822NB+42.42 - STA 823NB+24.91
STA 822CD+43.41 - STA 823CD+00.38

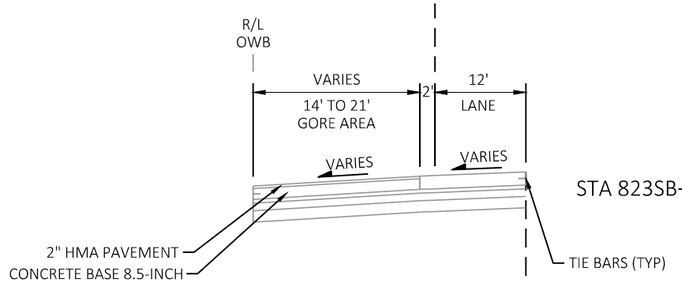
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 8	E



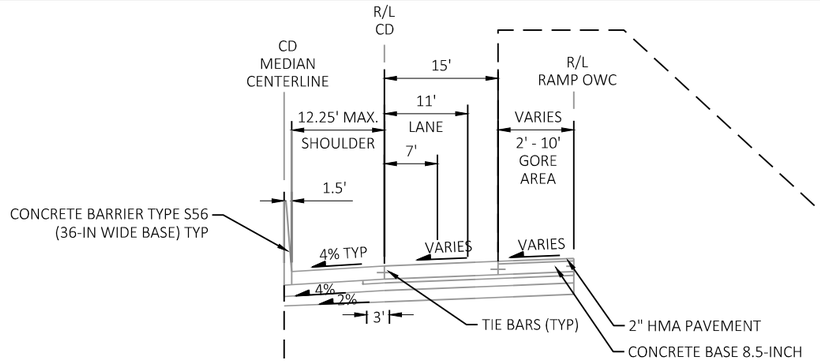
STA 825SB+30.00 - STA 829SB+36.79



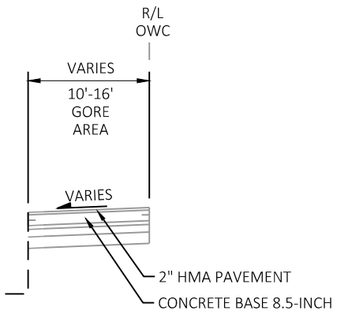
STA 824SB+09.06 - STA 825SB+30.00



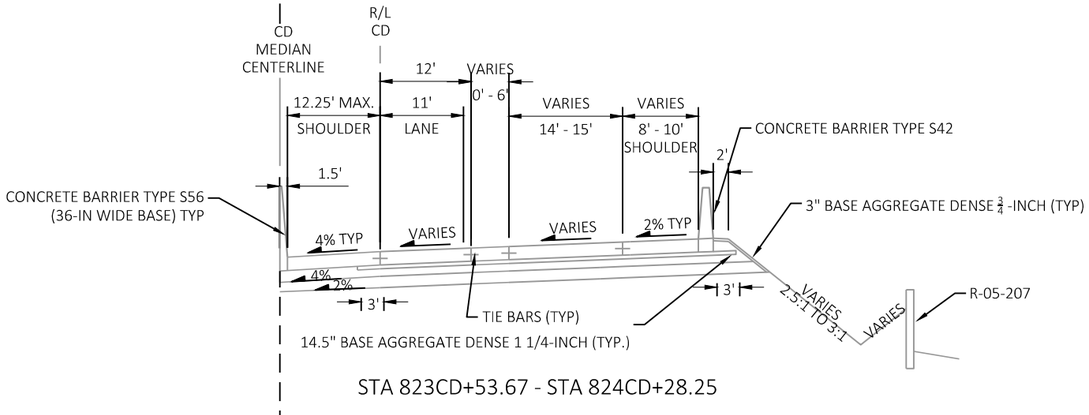
STA 823SB+21.28 - STA 824SB+09.06



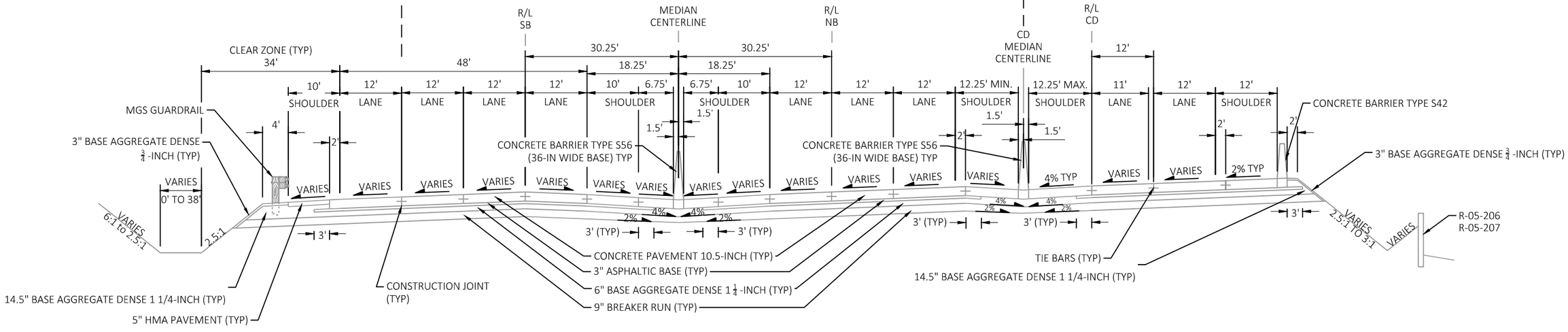
STA 824CD+28.25 - STA 825CD+02.25



STA 825CD+02.25 - STA 825CD+49.92

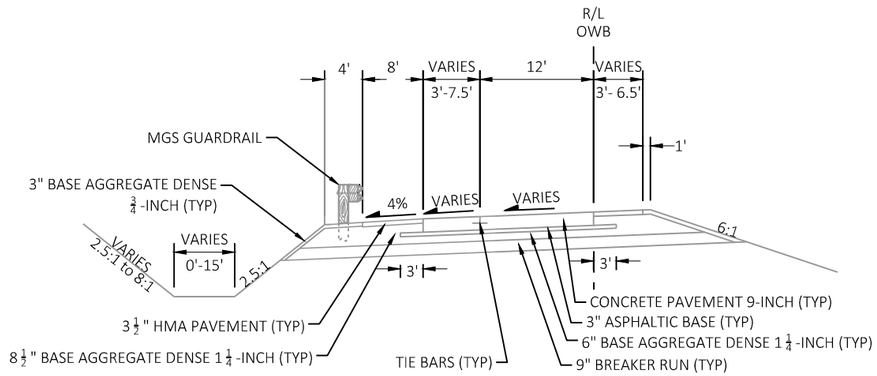


STA 823CD+53.67 - STA 824CD+28.25

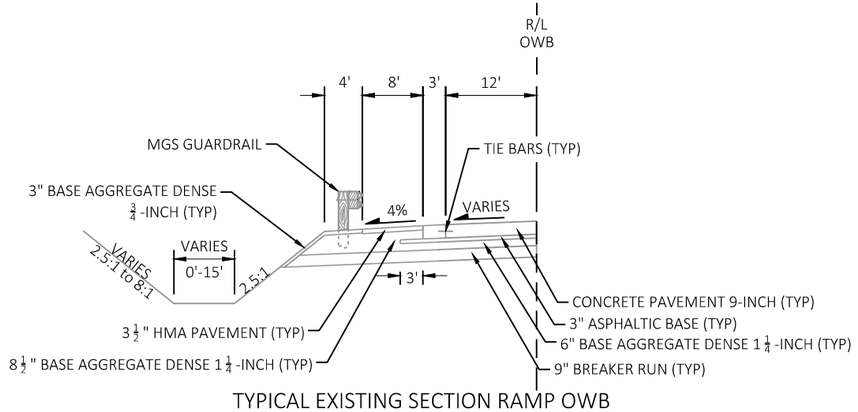


TYPICAL EXISTING SECTION IH 41
STA 823SB+21.28 - STA 829SB+36.79
STA 823NB+24.91 - STA 824NB+02.81
STA 823CD+00.38 - STA 825CD+02.25

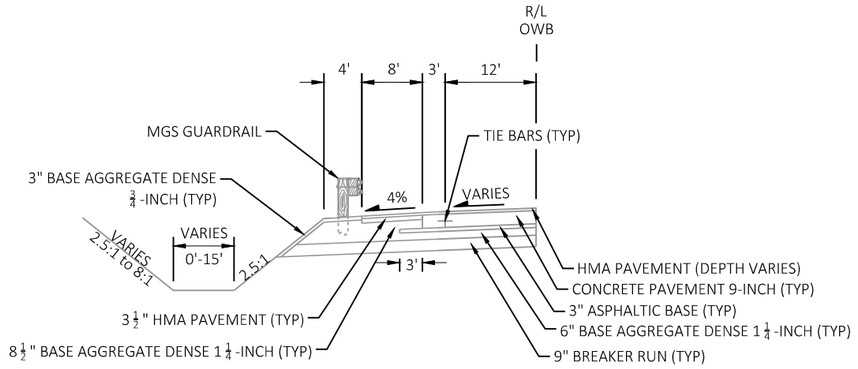
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 9	E



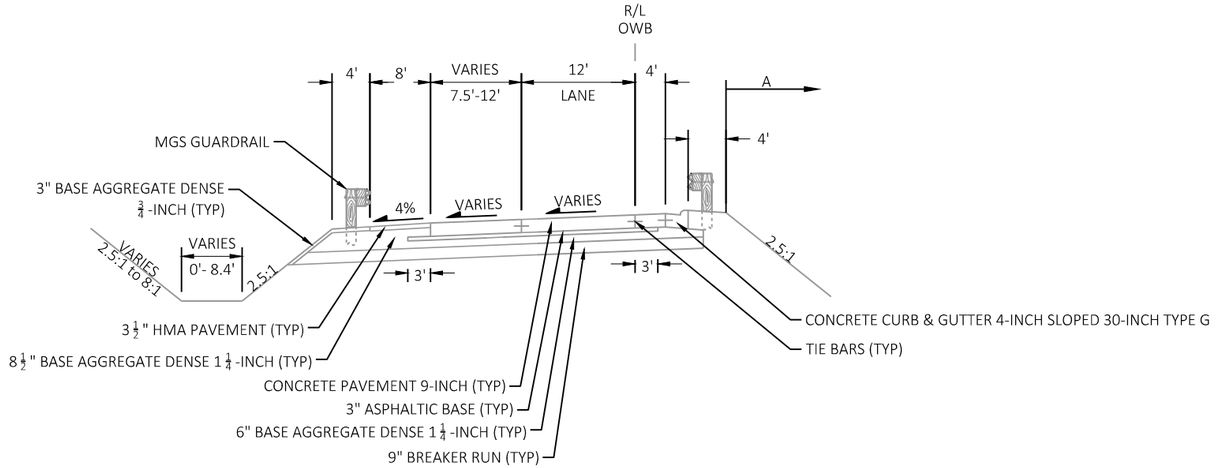
TYPICAL EXISTING SECTION RAMP OWB
STA 823OWB+98.56 - STA 825OWB+29.26



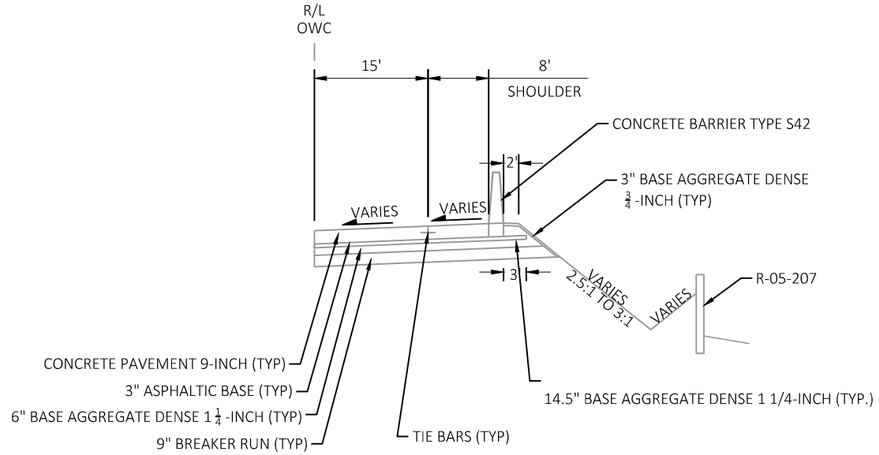
TYPICAL EXISTING SECTION RAMP OWB
STA 822OWB+42.23 - STA 823OWB+98.56



TYPICAL EXISTING SECTION RAMP OWB
STA 822OWB+42.23 - STA 823OWB+19.13

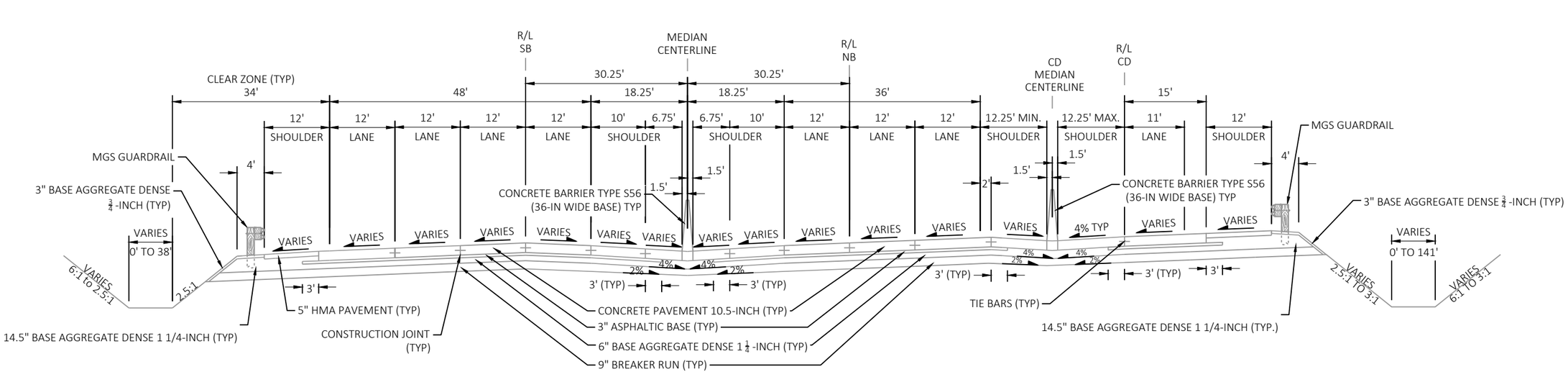


TYPICAL EXISTING SECTION RAMP OWB
STA 825OWB+29.26 - STA 828OWB+68.36



TYPICAL EXISTING SECTION RAMP OWC
STA 824OWC+28.68 - STA 825OWC+49.90

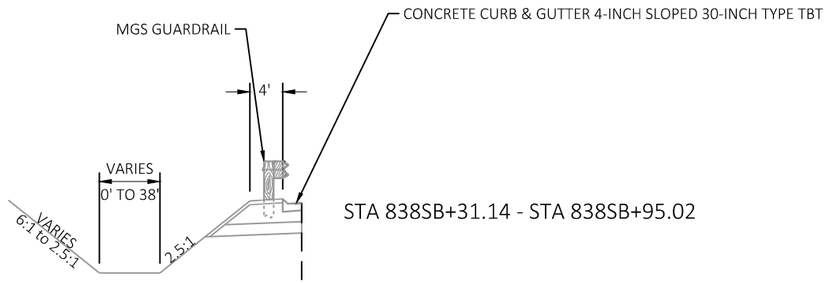
2



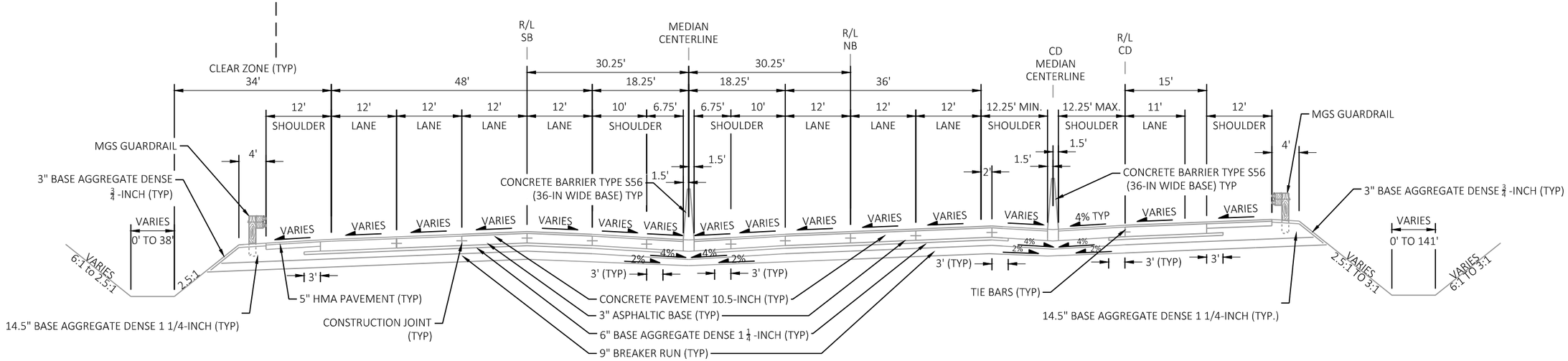
TYPICAL EXISTING SECTION IH 41
STA 829SB+36.79 - STA 834SB+98.89
STA 839SB+59.10 - STA 841SB+05.28
STA 832NB+19.23 - STA 835NB+60.70
STA 840NB+24.52 - STA 841NB+23.00
STA 831CD+30.13 - STA 835CD+86.54
STA 840CD+55.67 - STA 843CD+34.34

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 11	E

2

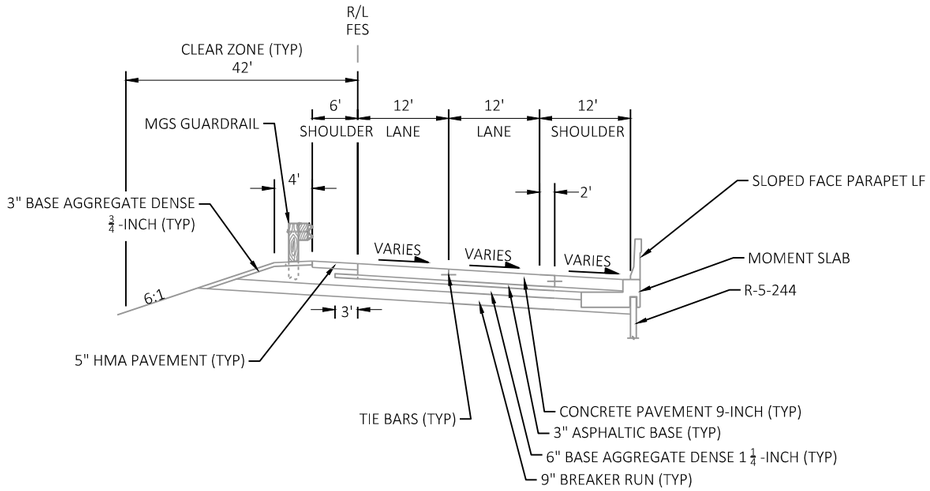


STA 838SB+31.14 - STA 838SB+95.02

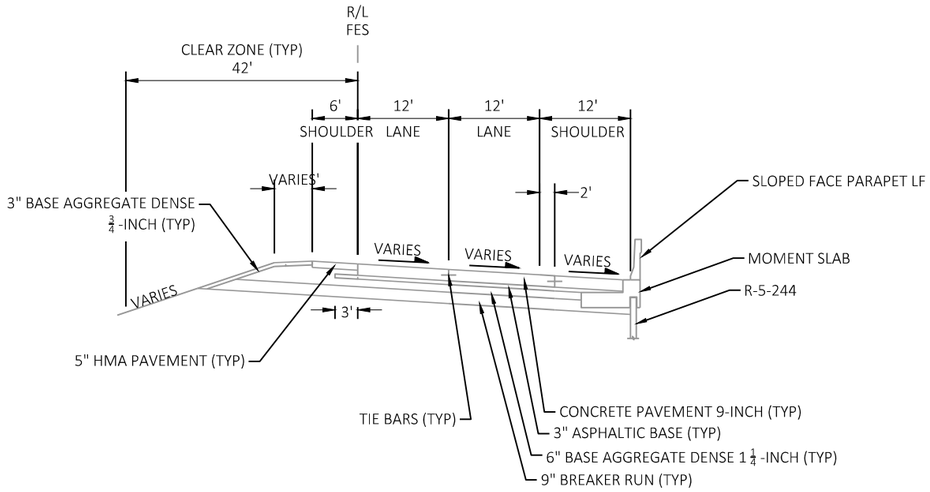


TYPICAL EXISTING SECTION IH 41

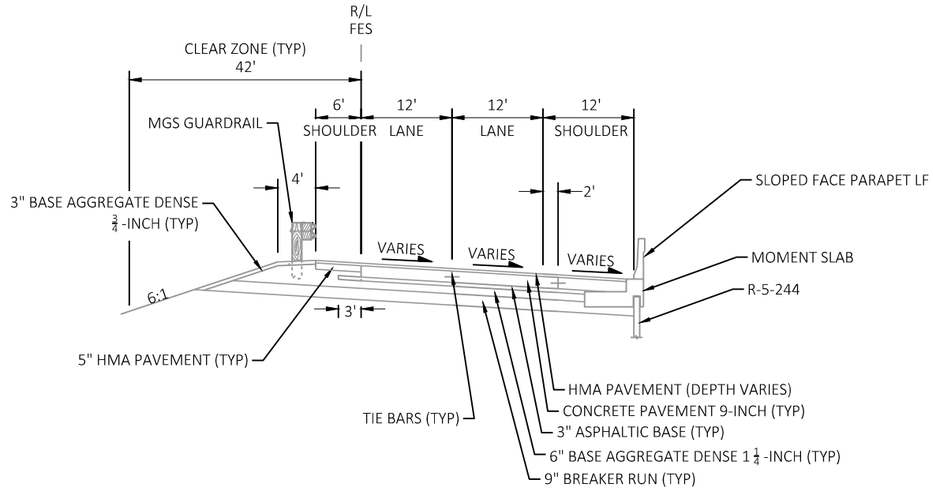
STA 834SB+98.89 - STA 836SB+22.72
STA 838SB+60.99 - STA 839SB+59.10
STA 835NB+60.70 - STA 836NB+84.37
STA 839NB+01.21 - STA 840NB+24.52
STA 835CD+86.54 - STA 837CD+37.37
STA 839CD+53.07 - STA 840CD+55.67



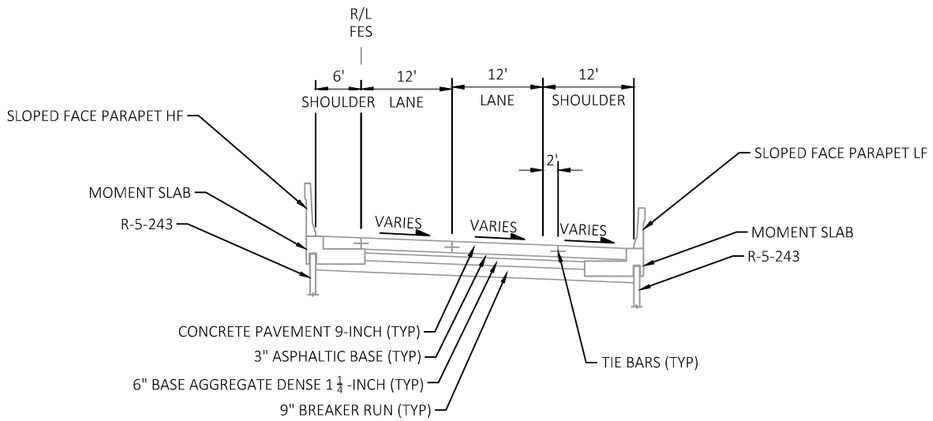
TYPICAL EXISTING SECTION
STH 29 EB TO IH 41 SB RAMP
STA 810FES+24.83 - STA 811FES+97.64



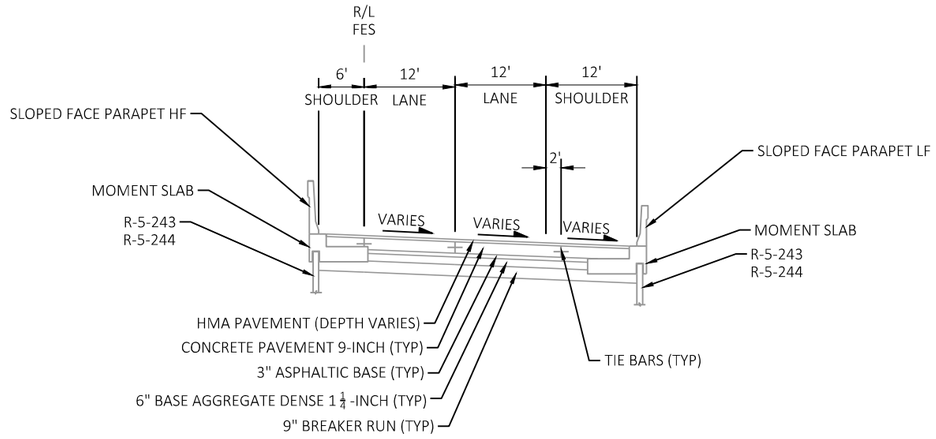
TYPICAL EXISTING SECTION
STH 29 EB TO IH 41 SB RAMP
STA 807FES+32.68 - STA 810FES+24.83



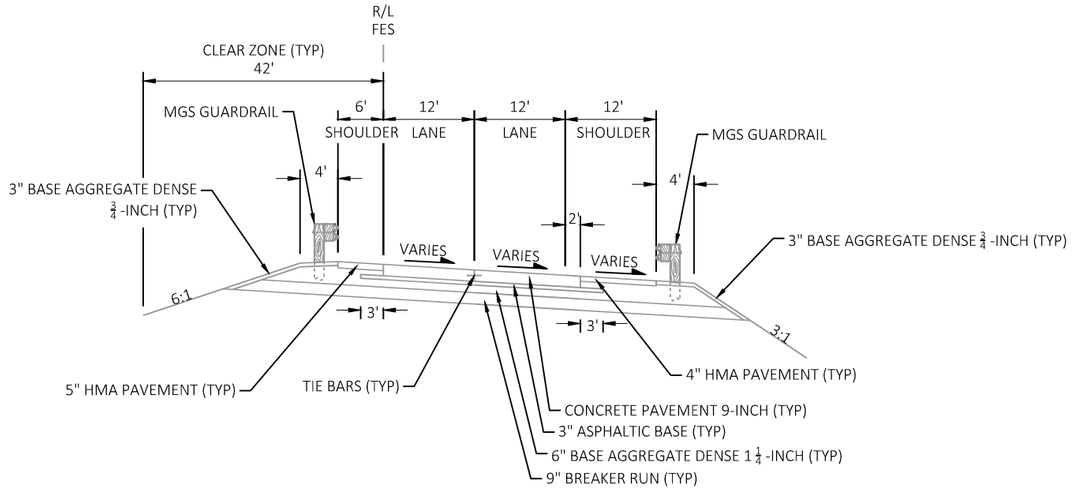
TYPICAL EXISTING SECTION
STH 29 EB TO IH 41 SB RAMP
STA 811FES+97.64 - STA 812FES+54.15



TYPICAL EXISTING SECTION
STH 29 EB TO IH 41 SB RAMP
STA 815FES+47.88 - STA 815FES+77.62

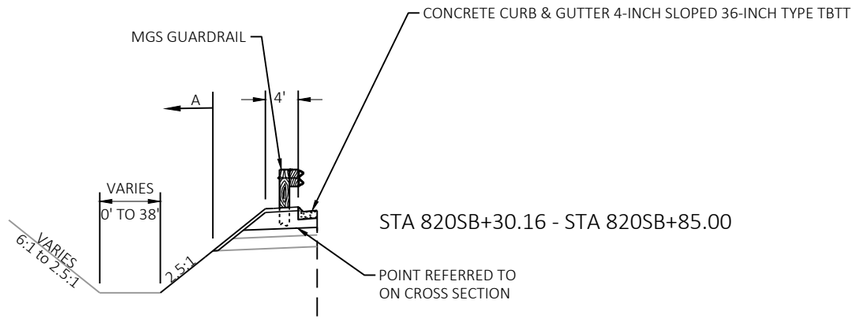


TYPICAL EXISTING SECTION
STH 29 EB TO IH 41 SB RAMP
STA 812FES+54.15 - STA 813FES+44.16
STA 814FES+88.15 - STA 815FES+47.88

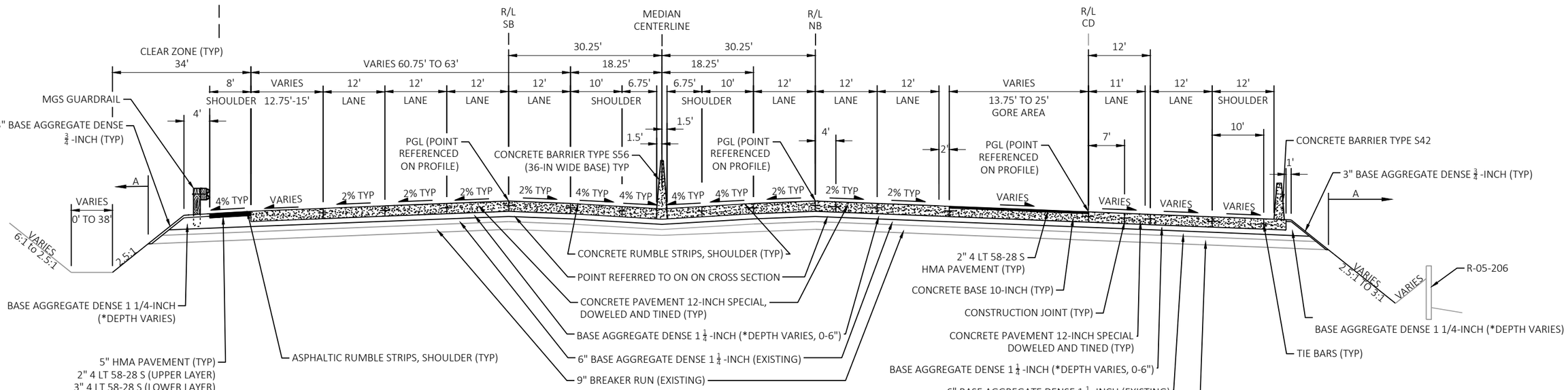


TYPICAL EXISTING SECTION
STH 29 EB TO IH 41 SB RAMP
STA 815FES+77.62 - STA 816FES+00.00

2



STA 820SB+30.16 - STA 820SB+85.00

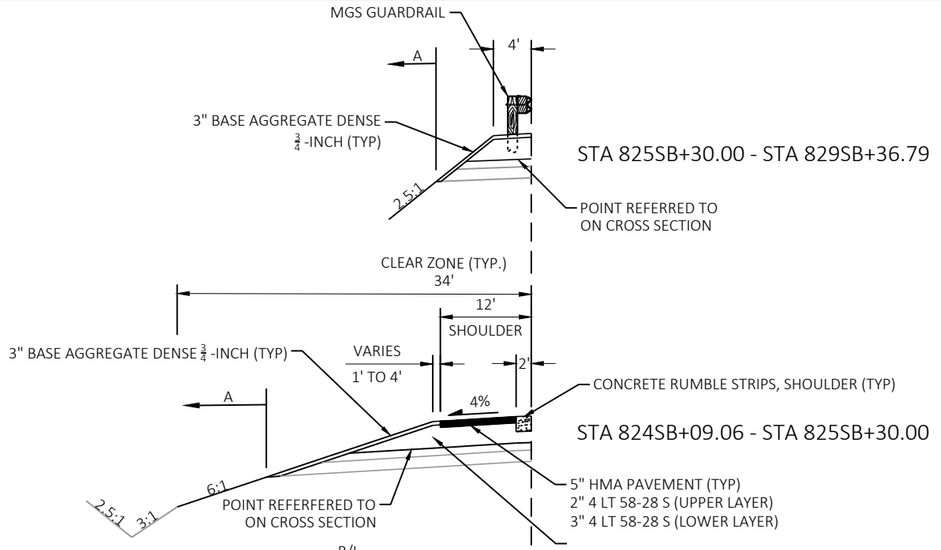


TYPICAL FINISHED SECTION IH 41
STA 819SB+27.11 - STA 820SB+85.28
STA 819NB+52.77 - STA 820NB+85.53
STA 819CD+09.07 - STA 820CD+86.50

*BASE AGGREGATE DENSE 1 ¼-INCH DEPTH WILL VARY DUE TO THE SETTLEMENT OF THE EXISTING PAVEMENT

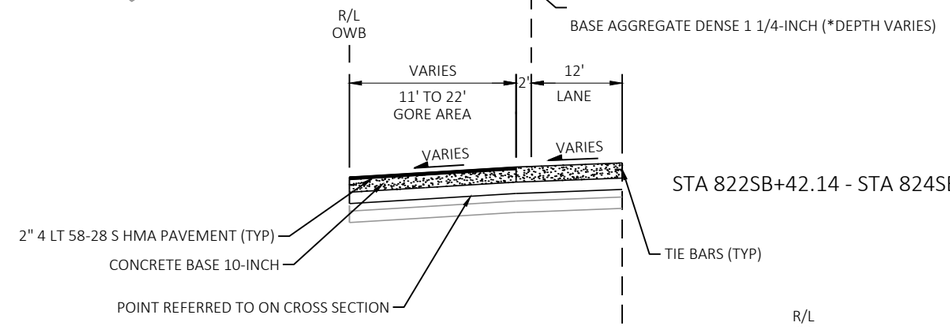
A SALVAGED TOPSOIL, EROSION MAT CLASS I TYPE B, FERTILIZER TYPE B, AND SEEDING MIX #30

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	FINISHED TYPICAL SECTIONS	SHEET 15	E

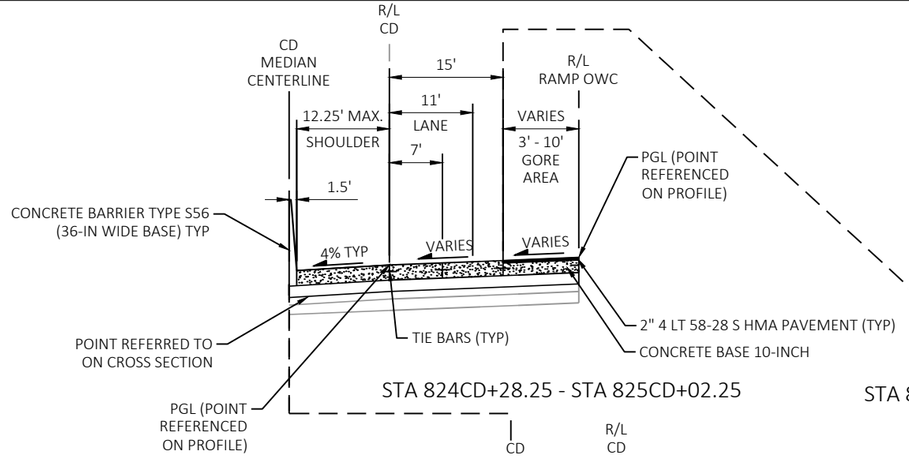


STA 825SB+30.00 - STA 829SB+36.79

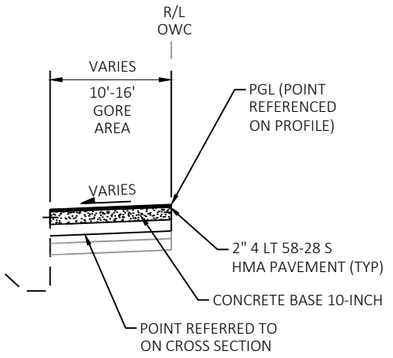
STA 824SB+09.06 - STA 825SB+30.00



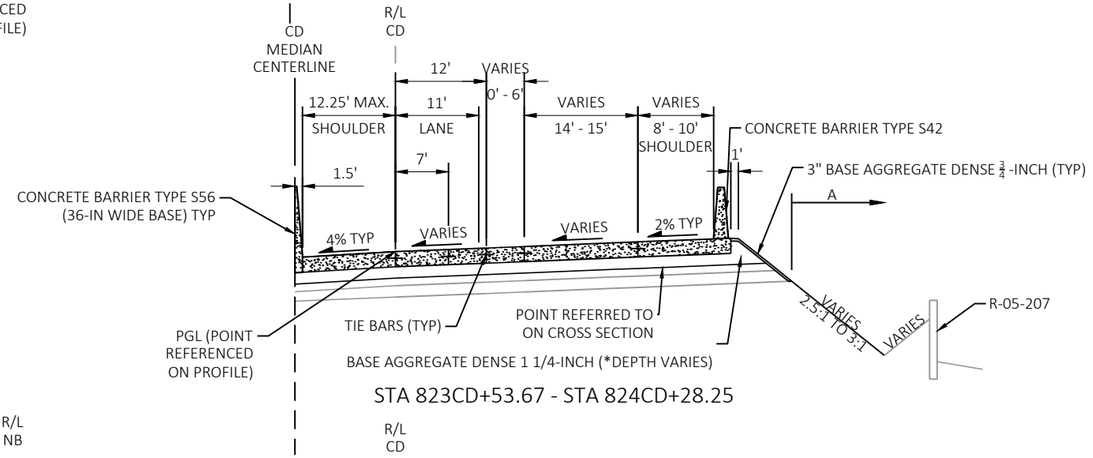
STA 822SB+42.14 - STA 824SB+09.06



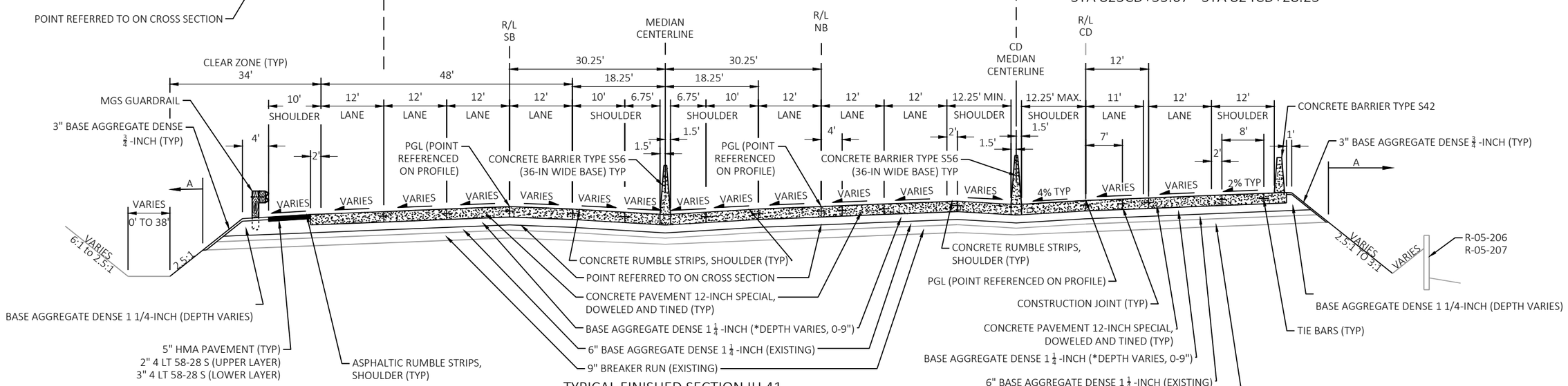
STA 824CD+28.25 - STA 825CD+02.25



STA 825CD+02.25 - STA 825CD+49.92



STA 823CD+53.67 - STA 824CD+28.25



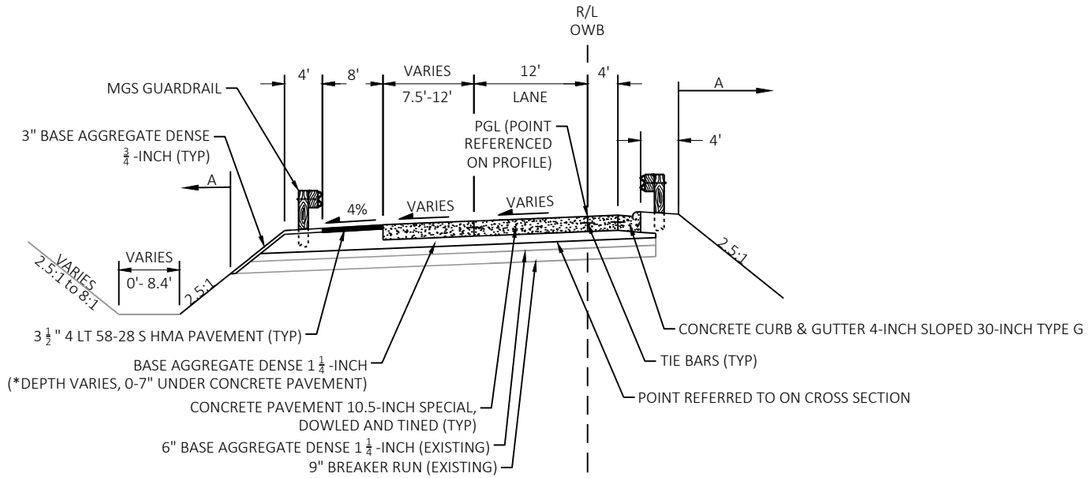
TYPICAL FINISHED SECTION IH 41
STA 822SB+42.14 - STA 829SB+36.79
STA 822NB+42.42 - STA 824NB+02.81
STA 822CD+43.41 - STA 825CD+02.25

*BASE AGGREGATE DENSE 1 ¼-INCH DEPTH WILL VARY DUE TO THE SETTLEMENT OF THE EXISTING PAVEMENT

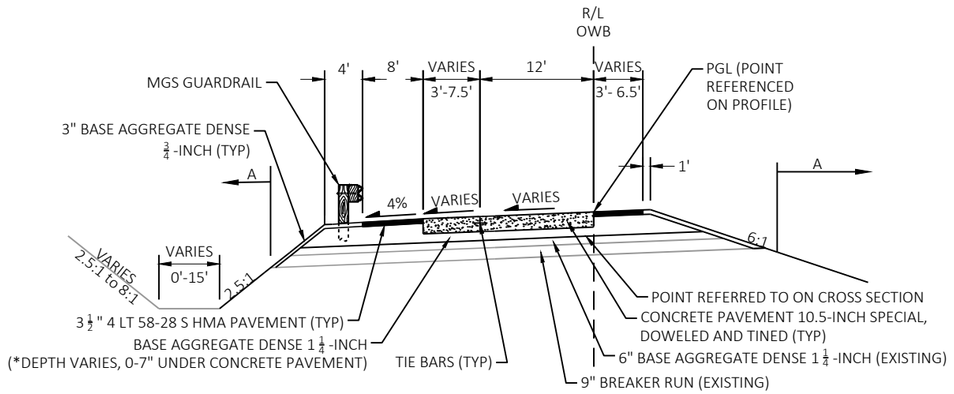
A SALVAGED TOPSOIL, EROSION MAT CLASS I TYPE B, FERTILIZER TYPE B, AND SEEDING MIX #30

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	FINISHED TYPICAL SECTIONS	SHEET 16	E

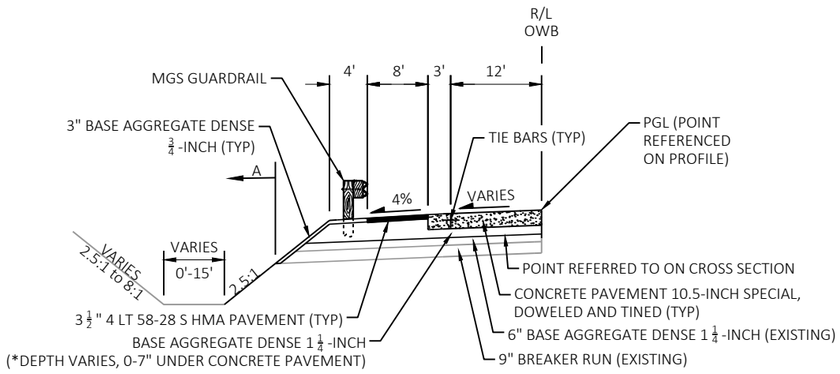
A SALVAGED TOPSOIL, EROSION MAT CLASS I TYPE B, FERTILIZER TYPE B, AND SEEDING MIX #30



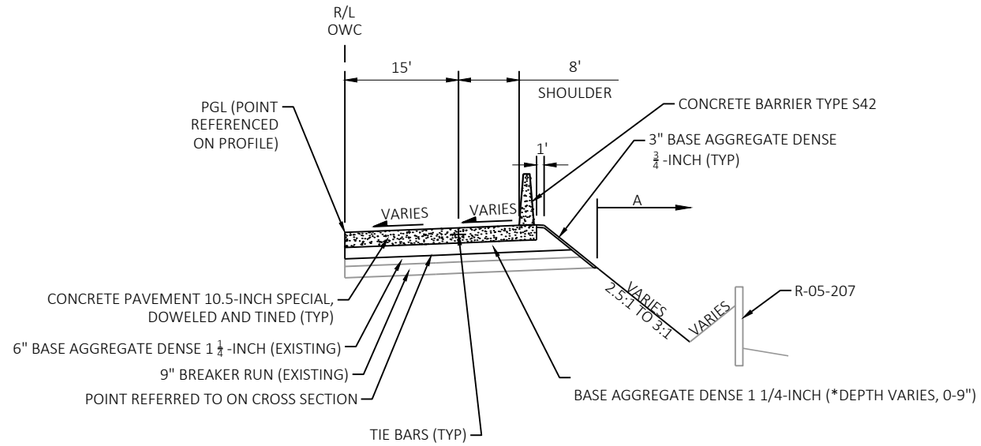
TYPICAL FINISHED SECTION RAMP OWB
STA 825OWB+29.26 - STA 828OWB+68.36



TYPICAL FINISHED SECTION RAMP OWB
STA 823OWB+98.56 - STA 825OWB+29.26



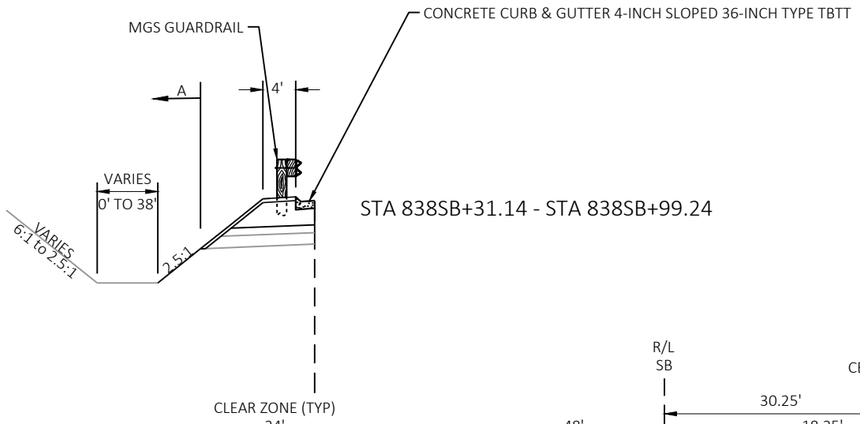
TYPICAL FINISHED SECTION RAMP OWB
STA 822OWB+42.23 - STA 823OWB+98.56



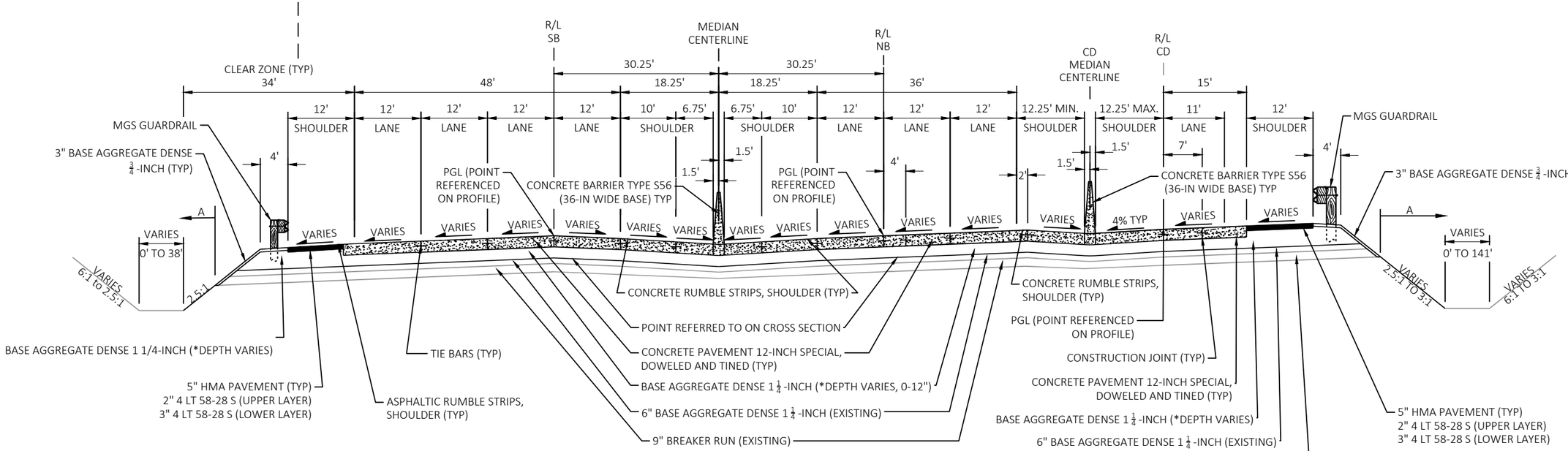
TYPICAL FINISHED SECTION RAMP OWC
STA 824OWC+28.68 - STA 825OWC+49.90

*BASE AGGREGATE DENSE 1 ¼-INCH DEPTH WILL VARY DUE TO THE SETTLEMENT OF THE EXISTING PAVEMENT

2



STA 838SB+31.14 - STA 838SB+99.24



TYPICAL FINISHED SECTION IH 41

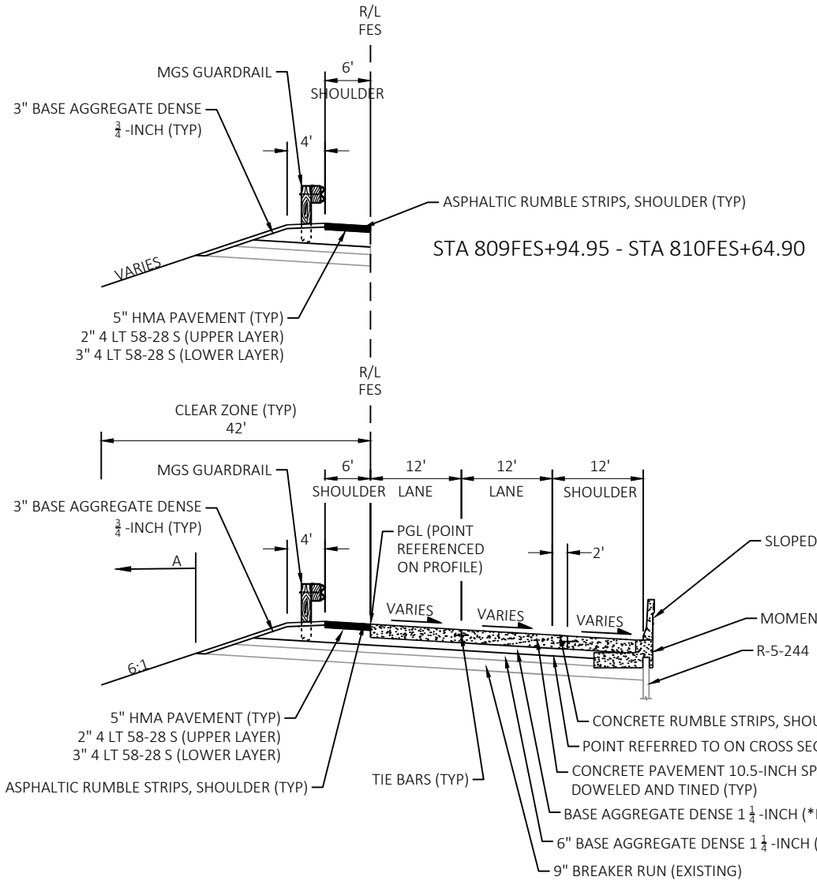
STA 829SB+36.79 - STA 836SB+22.72
STA 838SB+60.99 - STA 841SB+05.28
STA 832NB+19.23 - STA 836NB+84.37
STA 839NB+01.21 - STA 841NB+23.00
STA 831CD+30.13 - STA 837CD+37.37
STA 839CD+53.07 - STA 843CD+34.34

*BASE AGGREGATE DENSE 1 ¼-INCH DEPTH WILL VARY DUE TO THE SETTLEMENT OF THE EXISTING PAVEMENT

A SALVAGED TOPSOIL, EROSION MAT CLASS I TYPE B, FERTILIZER TYPE B, AND SEEDING MIX #30

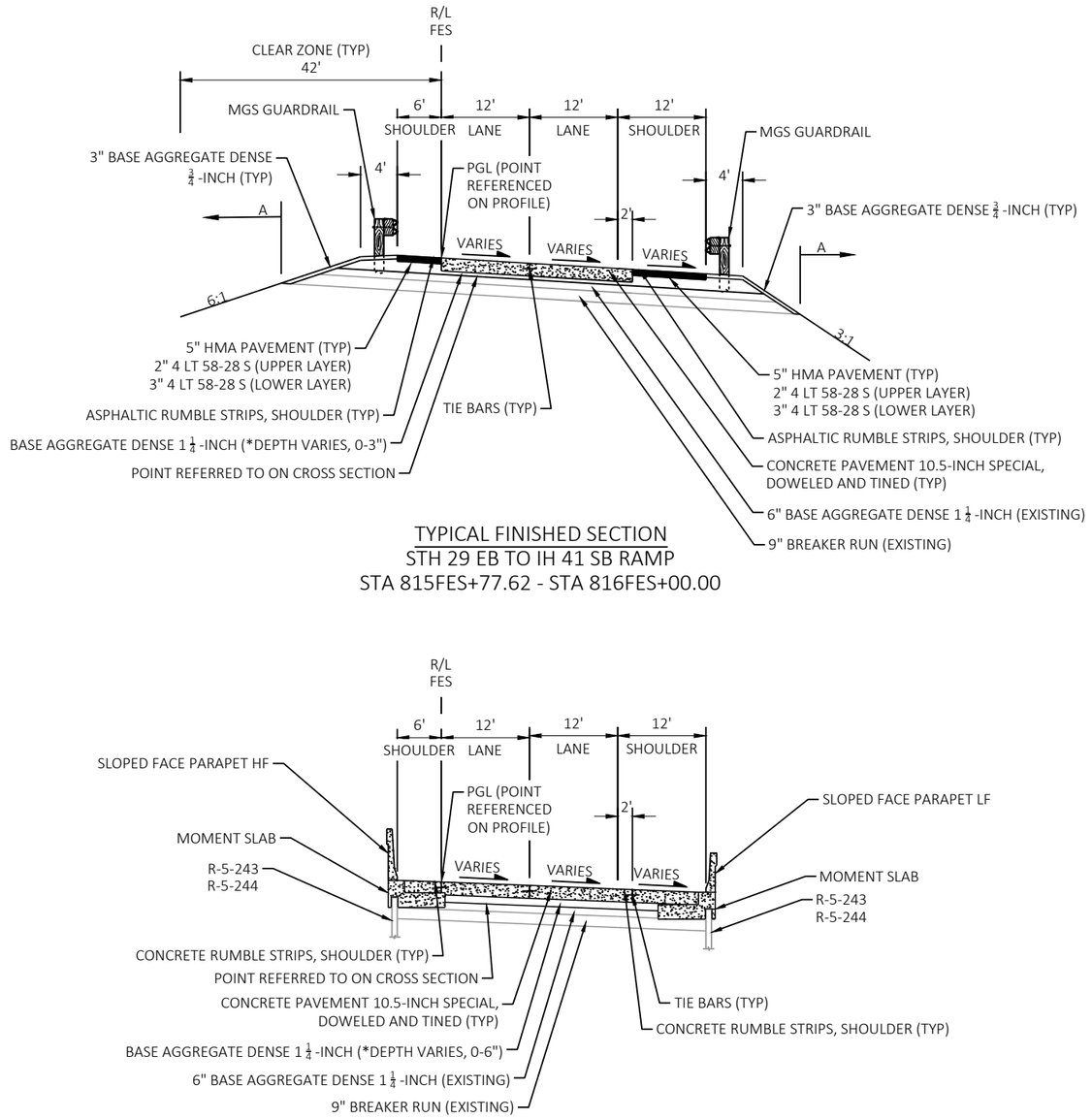
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	FINISHED TYPICAL SECTIONS	SHEET 18	E

2



STA 809FES+94.95 - STA 810FES+64.90

TYPICAL FINISHED SECTION
STH 29 EB TO IH 41 SB RAMP
STA 810FES+69.14 - 812FES+54.15



TYPICAL FINISHED SECTION
STH 29 EB TO IH 41 SB RAMP
STA 815FES+77.62 - STA 816FES+00.00

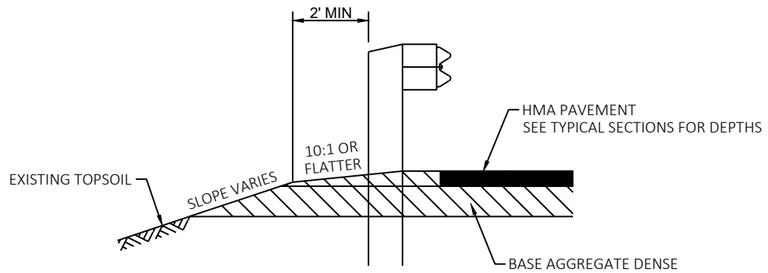
TYPICAL FINISHED SECTION
STH 29 EB TO IH 41 SB RAMP
STA 812FES+54.15 - STA 813FES+44.16
STA 814FES+88.15 - STA 815FES+77.62

*BASE AGGREGATE DENSE 1 ¼-INCH DEPTH WILL VARY
DUE TO THE SETTLEMENT OF THE EXISTING PAVEMENT

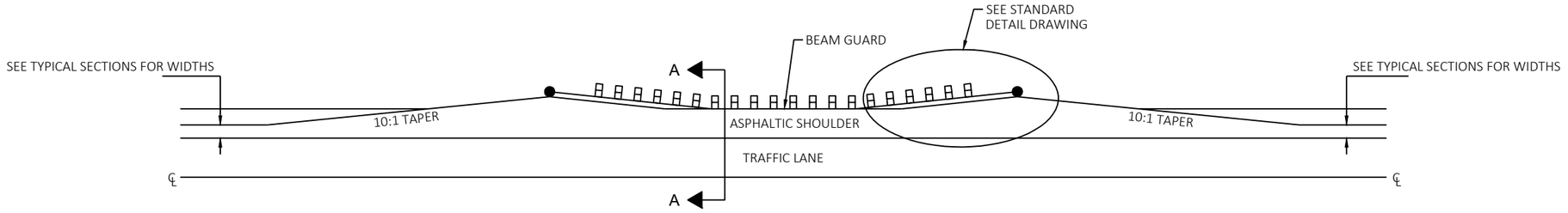
A SALVAGED TOPSOIL, EROSION MAT CLASS I TYPE B, FERTILIZER TYPE B, AND SEEDING MIX #30

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	FINISHED TYPICAL SECTIONS	SHEET 19	E

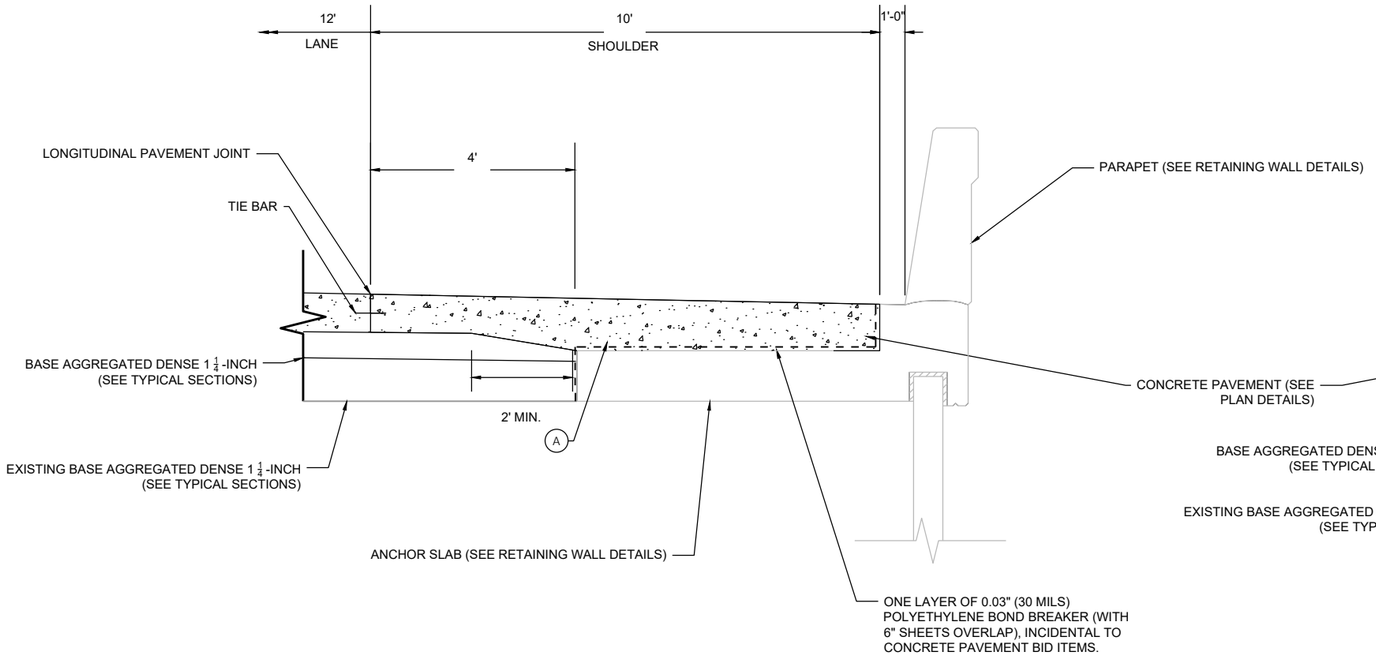
2



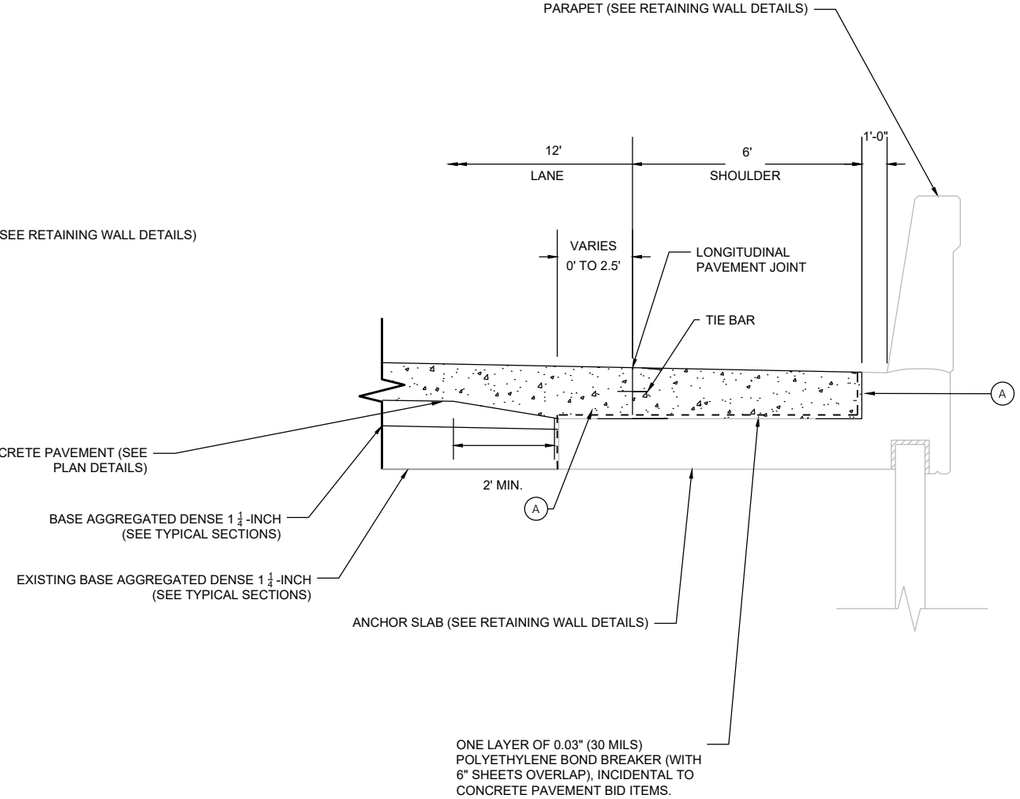
SECTION A-A



DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD



STA 810FES+69.14 - STA 813FES+44.16
STA 814FES+88.15 - STA 815FES+77.62

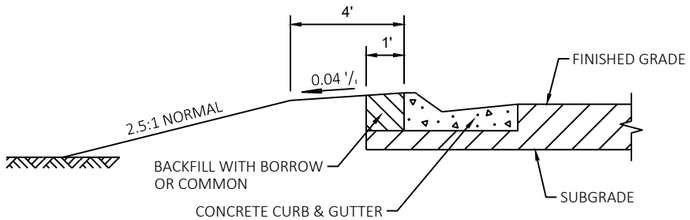


STA 812FES+54.15 - STA 813FES+44.16
STA 814FES+88.15 - STA 815FES+77.62

CONCRETE SHOULDER OVER MSE WALL ANCHOR SLAB

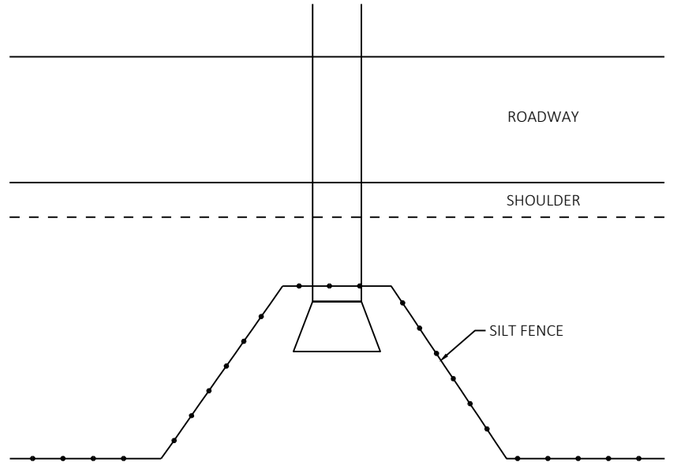
(A) ADDITIONAL THICKNESS OF CONCRETE IS INCIDENTAL TO CONCRETE PAVEMENT BID ITEMS

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 21	E



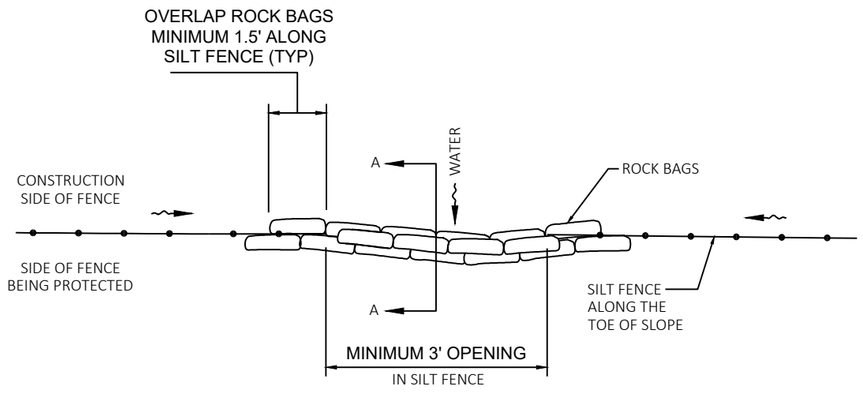
BERM DETAIL BEHIND CURB & GUTTER

STA 820SB+30.16 - STA 820SB+85.00
STA 838SB+31.14 - STA 838SB+99.24



NOTE
SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION

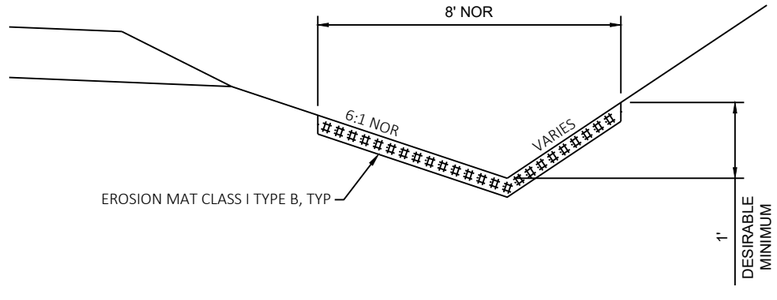
TYPICAL SILT FENCE DETAIL AT PIPE INLET



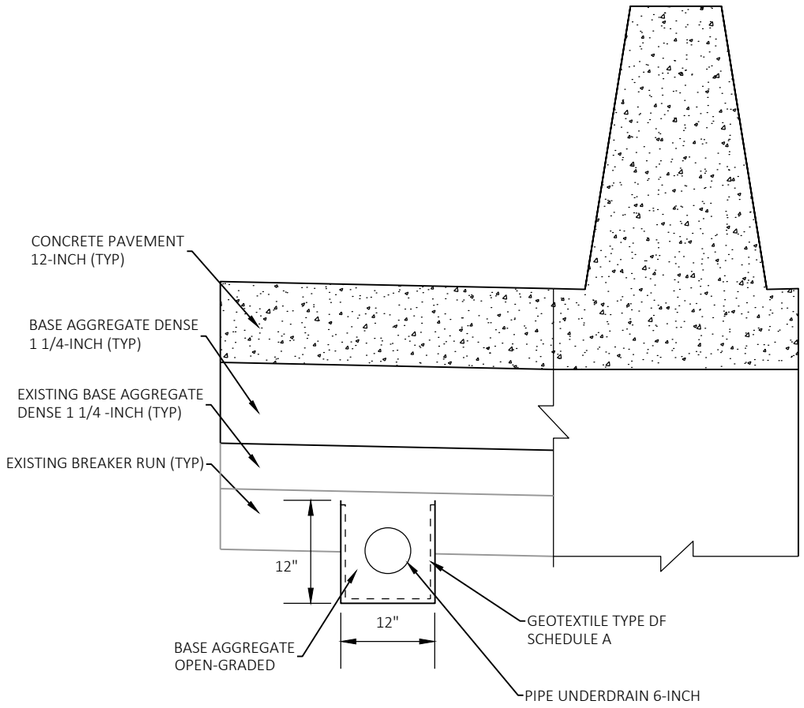
PLAN VIEW

SECTION A-A

SILT FENCE DRAINAGE OUTLET, ROCK BAGS



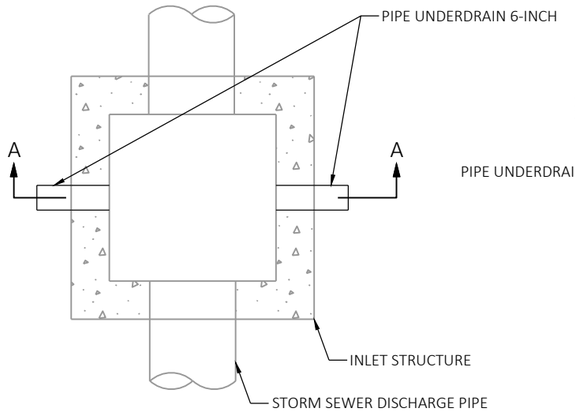
EROSION MAT DETAIL FOR DITCHES



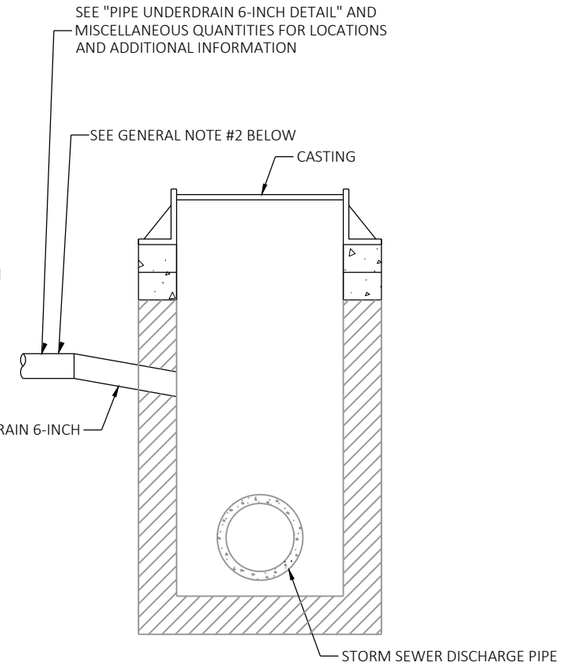
PIPE UNDERDRAIN 6-INCH DETAIL

NOTES:

1. PLACE UNDERDRAIN AT STORM SEWER STRUCTURE AT STA 840+50 LT



PLAN VIEW



SECTION A-A

PIPE UNDERDRAIN AT STORM SEWER STRUCTURES

NOTES:

1. CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN, 6-INCH.

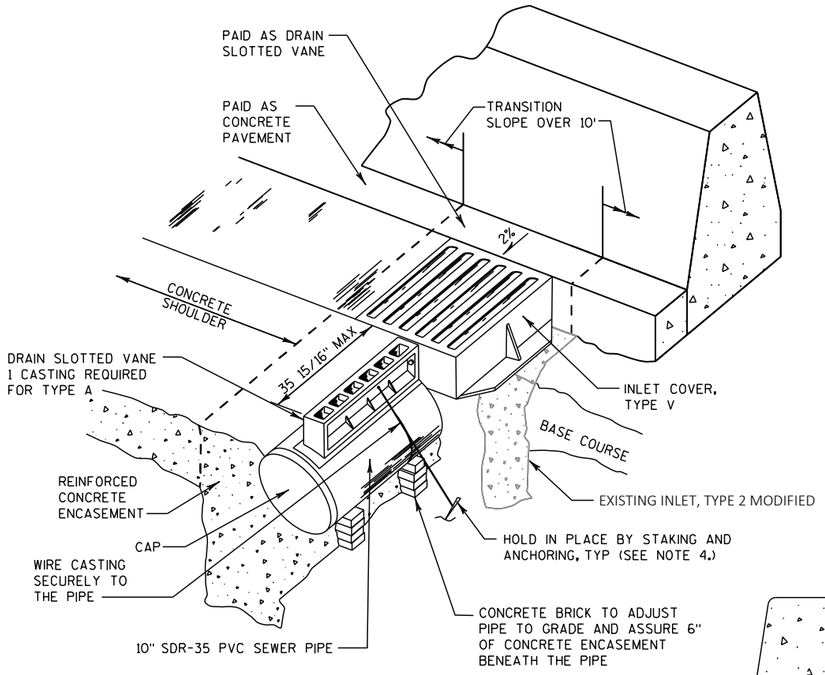
2. PROVIDE UNDERDRAIN OPENINGS TO ACCOMMODATE 6" UNDERDRAIN PIPE.

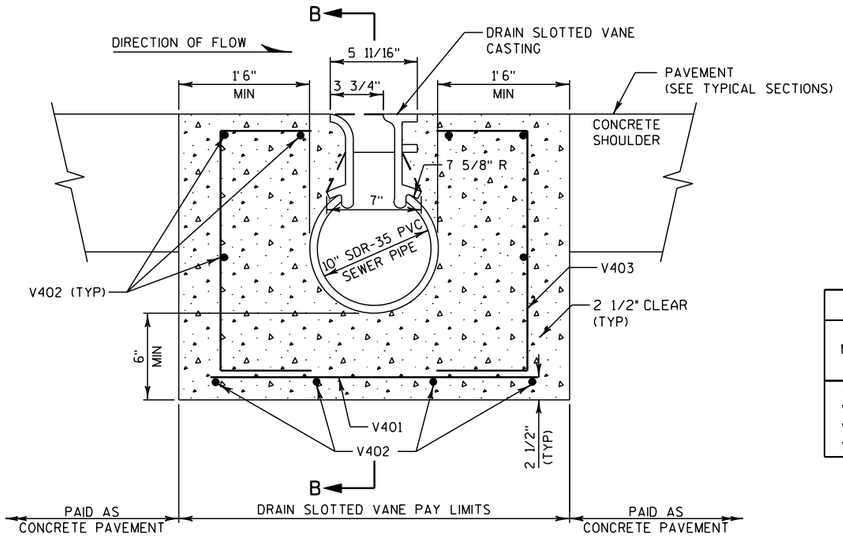
3. PIPE UNDERDRAIN WRAPPED 6-INCH EXTENDS 20 FEET UPGRADE OF STORM SEWER STRUCTURE.

4. PIPE UNDERDRAIN SHALL NOT BE ALLOWED IN THE ADJUSTMENT RING OF THE STRUCTURE OF INLETS OR SEWER ACCESS STRUCTURES

5. CORE HOLES SHALL PROVIDE FOR A MINIMUM OF 2" OF CONCRETE BETWEEN THE CUTOUT FOR A CONCRETE PIPE AND THE EDGE OF THE CORE HOLE.

6. CORE HOLES MAY HAVE 1" CLEARANCE FROM THE INSIDE WALLS OF A STRUCTURE.





SECTION A-A

NOTES

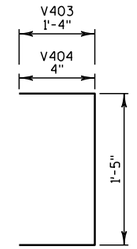
1. THE FIRST DIGIT OF BAR MARK SIGNIFIES THE BAR SIZE.
2. ALL DIMENSIONS ARE OUT TO OUT OF BAR.
3. ALL REINFORCEMENT BARS SHALL BE EPOXY-COATED.
4. APPROXIMATE WEIGHT OF DRAIN SLOTTED VANE CASTING = 87 POUNDS.
5. THE CASTING AND PVC PIPE SHALL BE SECURELY STAKED AND ANCHORED INTO PLACE DURING THE PLACEMENT OF THE CONCRETE ENCASEMENT.

BILL OF BARS *

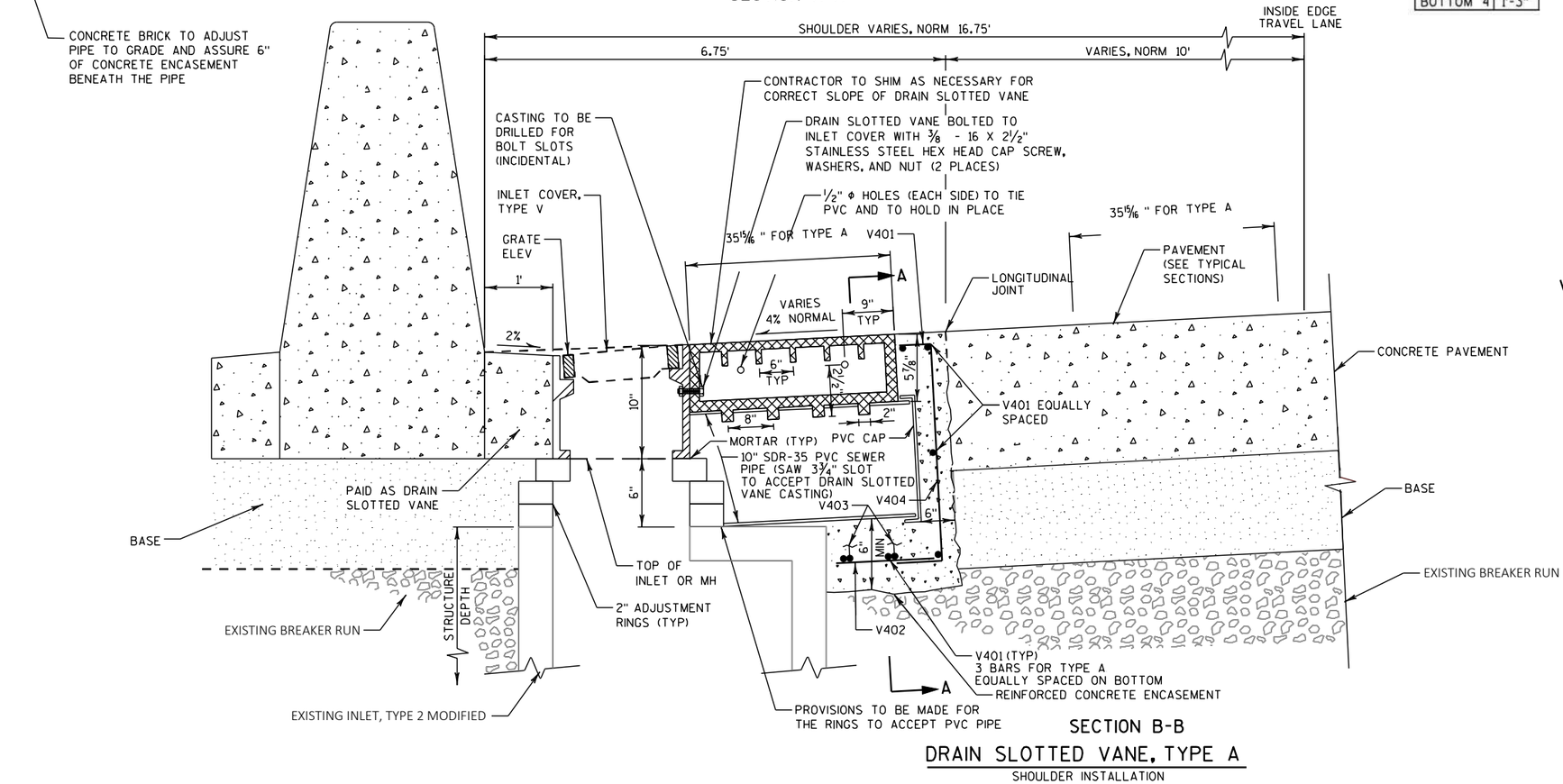
MARK	NO. REQUIRED TYPE A (3')		LENGTH TYPE A (3')		BENT	COAT	LOCATION
V401	6		3'-11"			X	HORIZ.. - END/BOTTOM
V402	10		**			X	HORIZ.. - SIDES/TOP/BOTTOM
V403	4		4'-1"		X	X	VERTICAL - SIDES
V404	3		2'-1"		X	X	VERTICAL - END

* INCIDENTAL TO THE ITEM OF DRAIN SLOTTED VANE

	A (3')
TOP 4	2'-6"
SIDE 2	2'-0"
BOTTOM 4	1'-3"



V403, V404



SECTION B-B

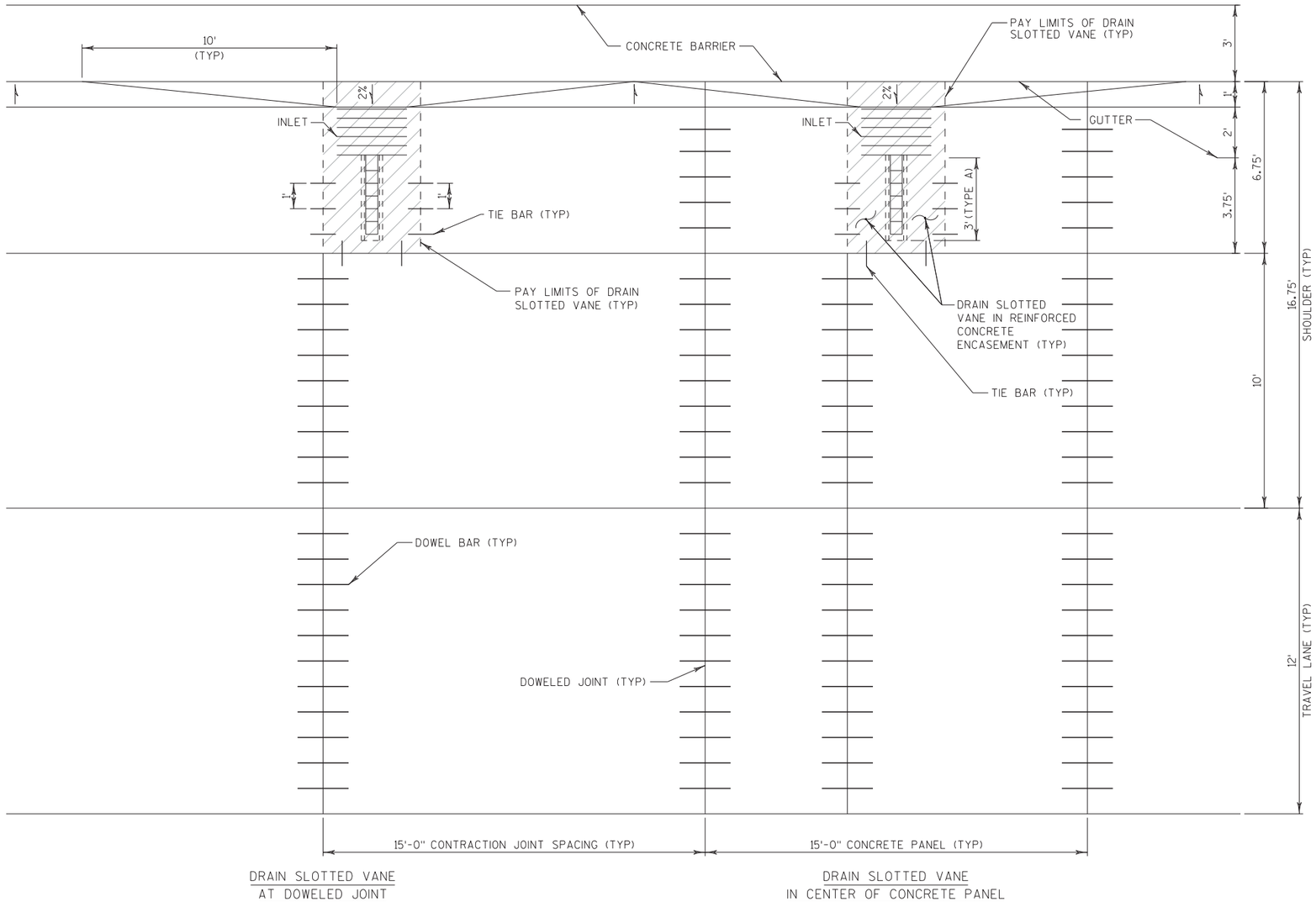
DRAIN SLOTTED VANE, TYPE A

SHOULDER INSTALLATION

DRAIN SLOTTED VANE, TYPE A LOCATIONS:

STA 825NB+99 LT	STA 831SB+87 RT
STA 829NB+50 LT	STA 838SB+81 LT
STA 832NB+00 LT/RT	STA 839SB+99 LT
STA 835NB+50 LT/RT	STA 823CD+00 LT
STA 820SB+74 LT	STA 832CD+12 LT
STA 825SB+96 RT	STA 835CD+66 LT
STA 829SB+41 RT	STA 840CD+50 LT

2

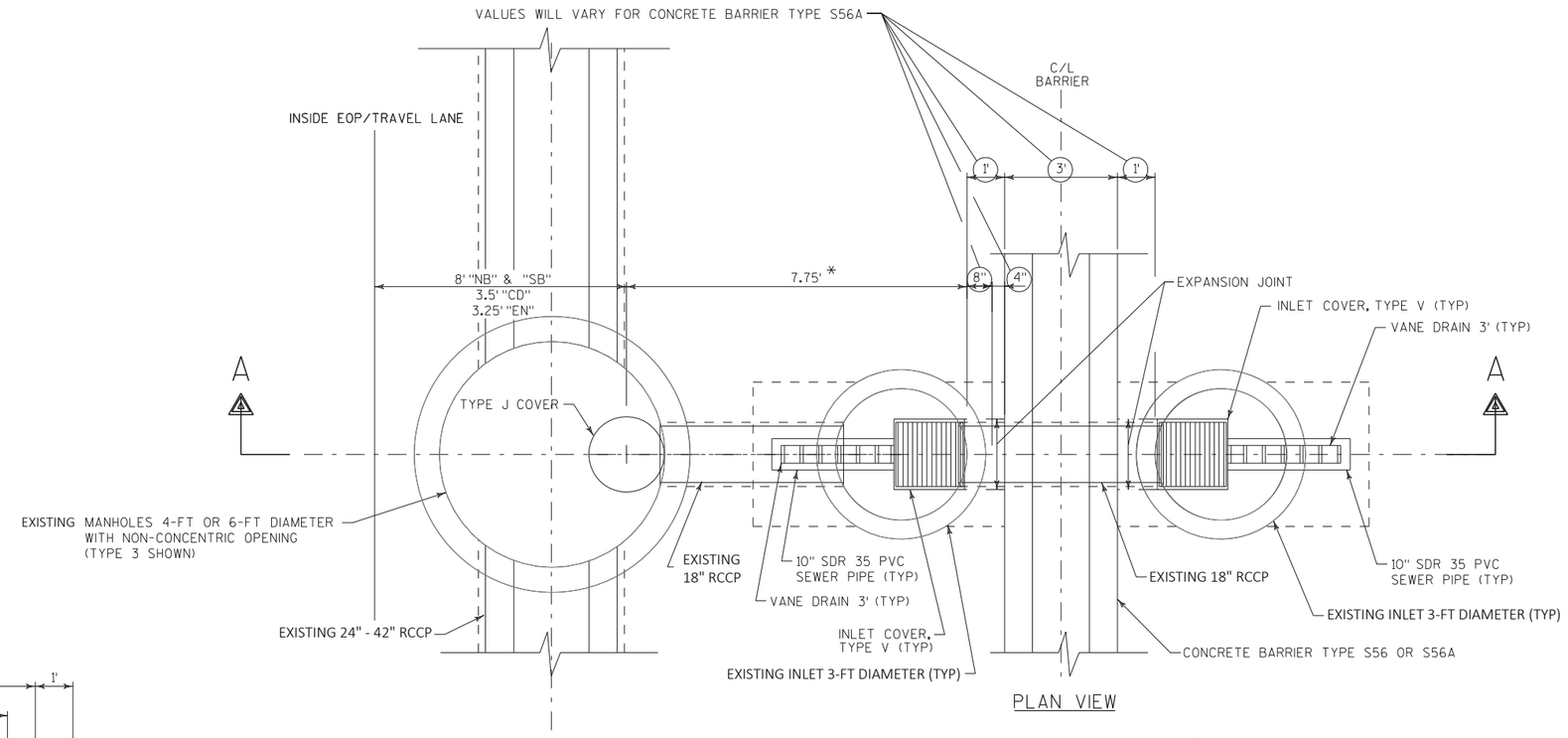


PAVEMENT JOINTING AT DRAIN SLOTTED VANE INSTALLATIONS

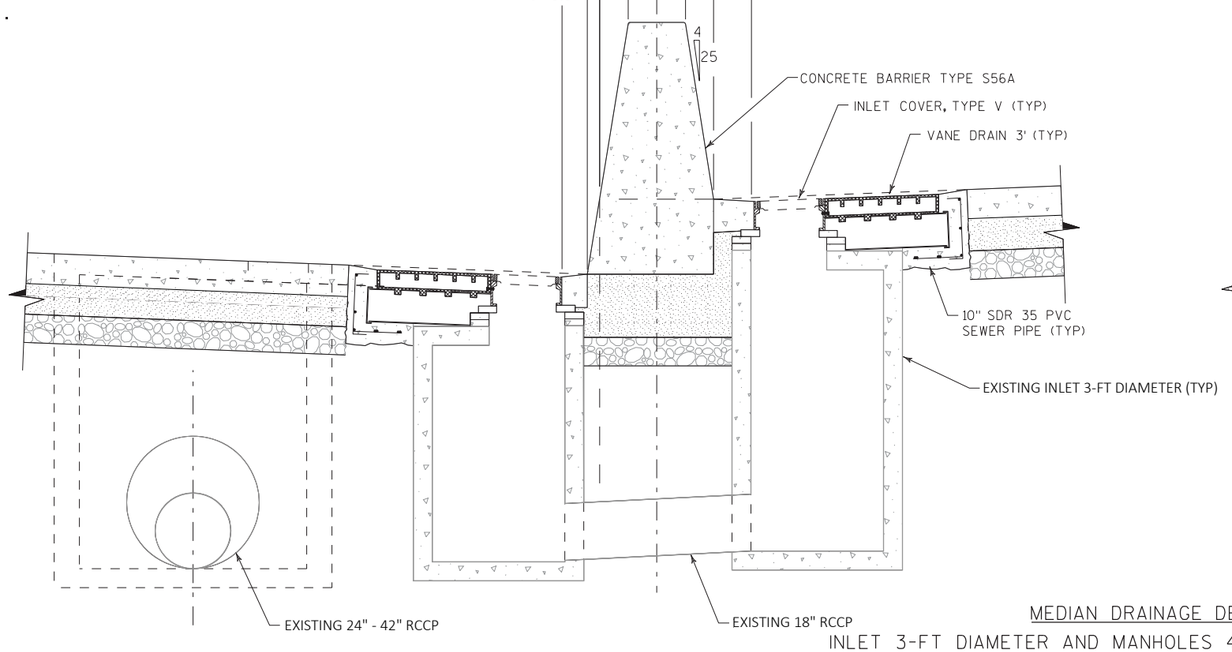
DRAIN SLOTTED VANE, TYPE A

SHOULDER INSTALLATION

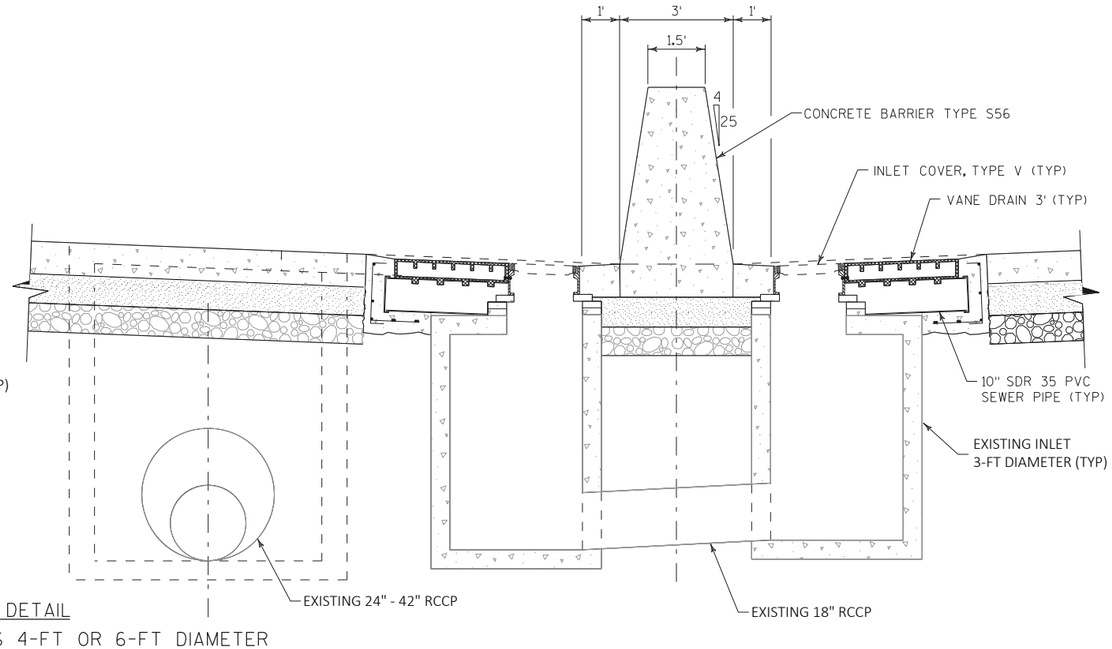
2



PLAN VIEW



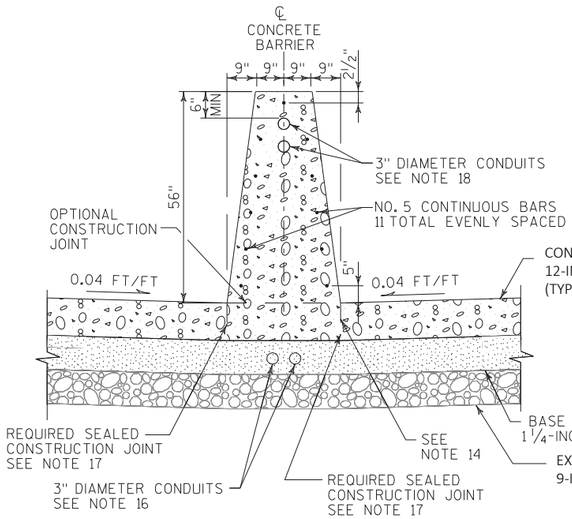
SECTION A-A
(CONCRETE BARRIER TYPE S56A)



SECTION A-A
(CONCRETE BARRIER TYPE S56)

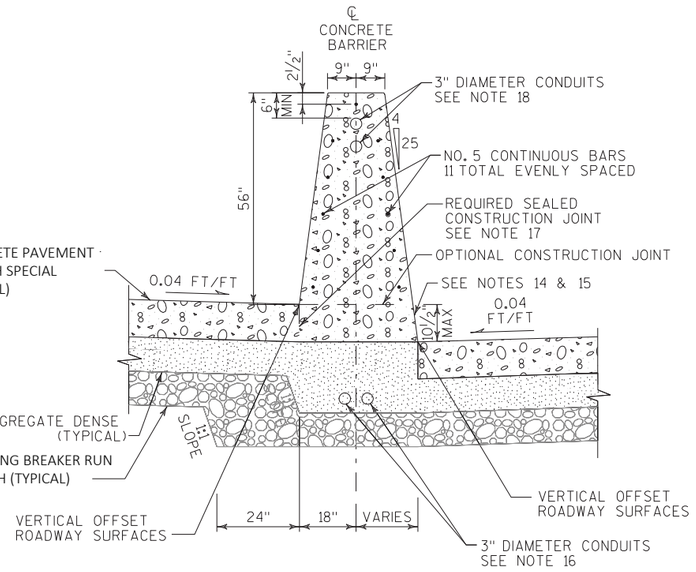
MEDIAN DRAINAGE DETAIL
INLET 3-FT DIAMETER AND MANHOLES 4-FT OR 6-FT DIAMETER
SLOTTED VANE DRAINS, TYPE A 3-FT
CONCRETE BARRIER TYPE S56 & S56A
(36-INCH WIDE BASE)
(SHOULDER INSTALLATION)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 26	E



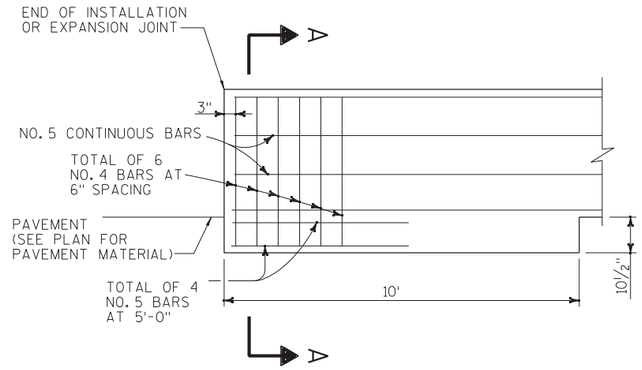
CONCRETE BARRIER TYPE S56 (36-INCH WIDE BASE)

(BETWEEN ADJACENT ROADWAYS)



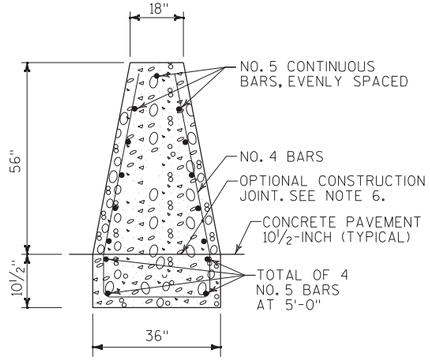
CONCRETE BARRIER TYPE S56 (36-INCH WIDE BASE)

(IN SPLIT PROFILE LOCATIONS)
(BETWEEN ADJACENT ROADWAYS)
(DRAWN AT MAXIMUM ELEVATION DIFFERENCE LOCATION)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT
(ELEVATION VIEW)

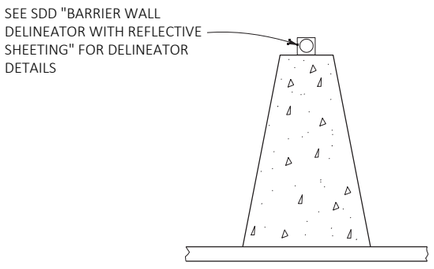


SECTION A-A

MONOLITHIC CONCRETE BARRIER END ANCHOR

NOTES

1) DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE CONCRETE BARRIER SINGLE SLOPE SDD.
2) EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.
3) WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 10½" CONCRETE BARRIER TYPE S56A REQUIRED, SEE DETAIL.
4) PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5) EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED.
6) FOR TYPE S56 (36-INCH WIDE BASE) MONOLITHIC BASE OR DOWELED BASE WITH 2-#8 X 8" @ 2'-0".
7) STAGGER LAPPING OF LONGITUDINAL STEEL, MINIMUM OVERLAP OF STEEL 2 FEET, BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8) 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9) WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSE STEEL INTO NEXT POURS REINFORCEMENT, LAPS TO BE FIRMLY TIED.
10) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11) 2" CLEAR COVER TYPICAL.
12) COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED, LAPS TO BE FIRMLY TIED.
13) ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHORS INCIDENTAL TO CONCRETE BARRIER TYPE S56.
14) CONCRETE PAVEMENT BELOW BARRIER IS INCIDENTAL TO CONCRETE BARRIER TYPE S56.
15) EDGE OF CONCRETE IN SPLIT PROFILE LOCATIONS SHALL BE SLOPED @ 4/25 SLOPE.
16) SEE PLANS FOR CONDUIT(S) LOCATION, PROVIDE CONDUIT(S) WHEN CALLED FOR IN THE PLAN. CENTER CONDUIT(S) HORIZONTALLY ON BARRIER CENTERLINE. ENSURE THAT CONDUIT(S) ARE ENCAPSULATED IN THE BASE AGGREGATE DENSE (BAD) LAYER SO THAT THERE IS BAD MATERIAL BOTH ABOVE AND BELOW THE CONDUIT(S).
17) SEE SPECIFICATIONS FOR SAW CUT CONSTRUCTION JOINT OPTION. SAW CUTTING AND SEALING IS INCIDENTAL TO BARRIER ITEM.
18) SEE LIGHTING PLANS FOR LOCATIONS OF CONDUIT(S) EMBEDDED IN BARRIER. THIS IS FOR SPECIAL SITUATIONS ONLY. TYPICAL CONDUIT(S) LOCATION IS IN THE BASE AGGREGATE DENSE LAYER AS SHOWN. GAP BETWEEN CONDUIT(S) EMBEDDED IN BARRIER IS AT CONTRACTOR PREFERENCE.



DELINEATION

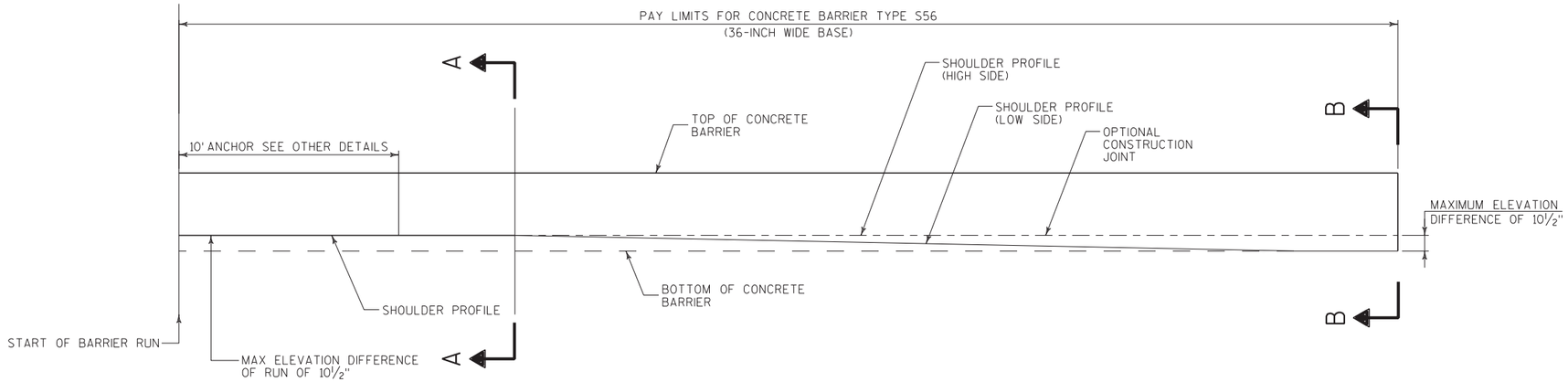
DELINEATOR SPACING ON HORIZONTAL CURVES

RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

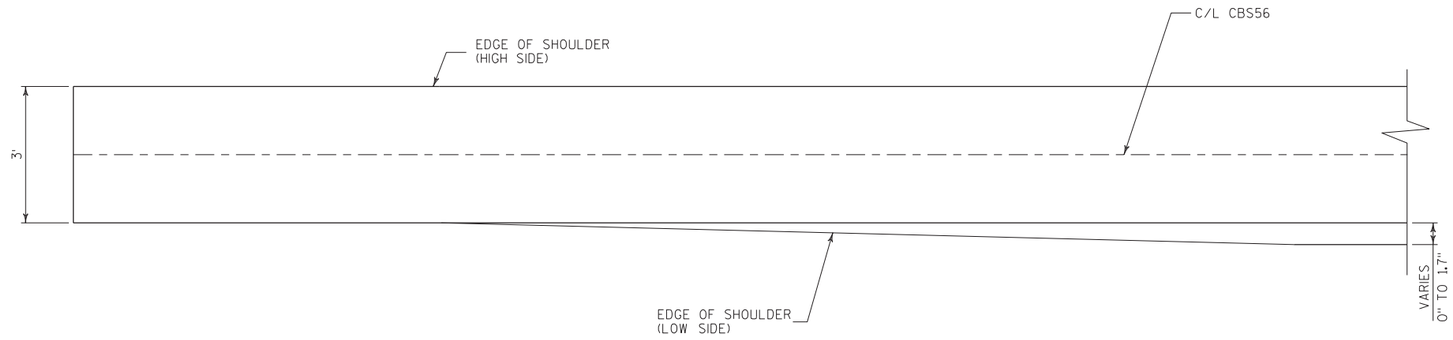
DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

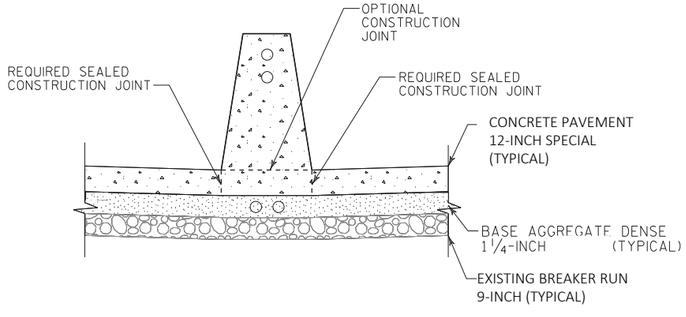
IF BARRIER RUN IS LONGER THAN 1000' USE 200' DELINEATOR SPACING.



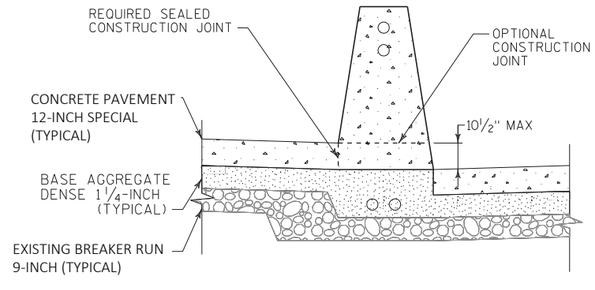
ELEVATION VIEW
CONCRETE BARRIER TYPE S56
(36-INCH WIDE BASE)
(IN SPLIT PROFILE LOCATIONS)



PLAN VIEW
CONCRETE BARRIER TYPE S56
(36-INCH WIDE BASE)
(IN SPLIT PROFILE LOCATIONS)



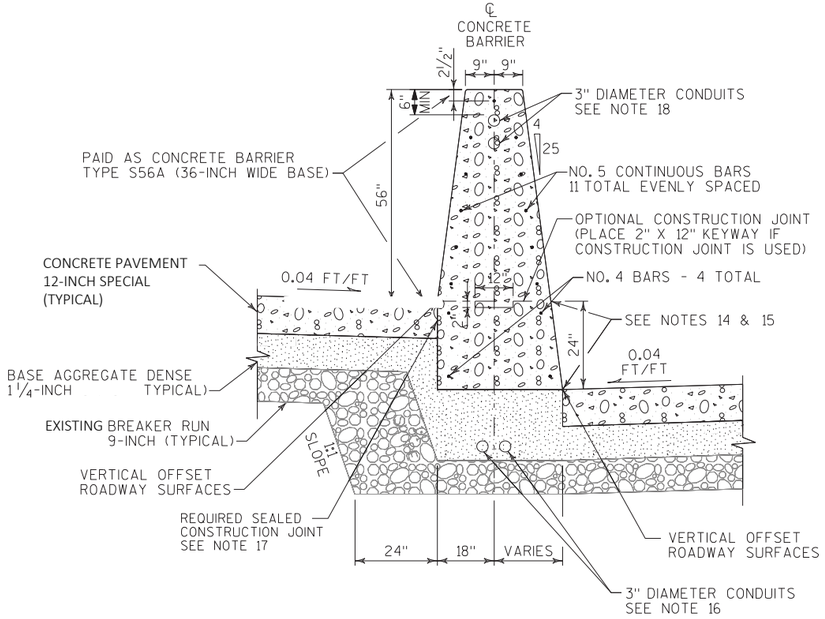
SECTION A-A



SECTION B-B

DETAIL (2 OF 2)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 28	E



CONCRETE BARRIER TYPE S56A (36-INCH WIDE BASE)

(SPLIT PROFILE - RETAINING WALL)
(BETWEEN ADJACENT ROADWAYS)
(DRAWN AT MAXIMUM ELEVATION DIFFERENCE LOCATION)

NOTES

1) DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE CONCRETE BARRIER SINGLE SLOPE SDD.

2) EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.

3) PLACE WHERE VERTICAL ROADWAY OFFSET IS BETWEEN 10½" AND 24".

4) PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

5) EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED.

6) FOR TYPE S56A (36-INCH WIDE BASE) MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 X 8" @ 2'-0".

7) STAGGER LAPPING OF LONGITUDINAL STEEL, MINIMUM OVERLAP OF STEEL 2 FEET, BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

8) 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

9) WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PAST OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSE STEEL INTO NEXT POURS REINFORCEMENT, LAPS TO BE FIRMLY TIED.

10) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

11) 2" CLEAR COVER TYPICAL.

12) COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED, LAPS TO BE FIRMLY TIED.

13) ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHORS INCIDENTAL TO CONCRETE BARRIER TYPE S56A.

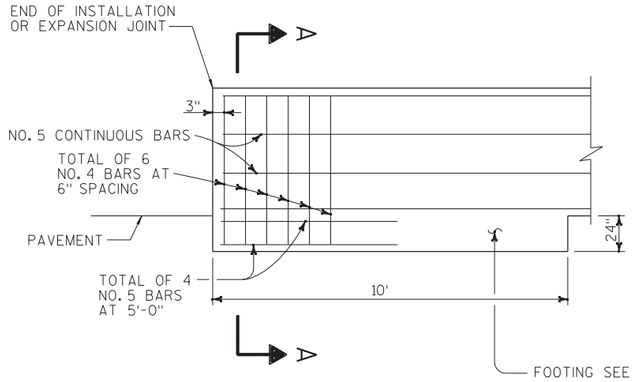
14) CONCRETE FOOTING AT BASE OF BARRIER IS INCIDENTAL TO CONCRETE BARRIER TYPE S56A.

15) EDGE OF CONCRETE SHALL BE SLOPED @ 4/25 SLOPE.

16) SEE PLANS FOR CONDUIT(S) LOCATION. PROVIDE CONDUIT(S) WHEN CALLED FOR IN THE PLAN. CENTER CONDUIT(S) HORIZONTALLY ON BARRIER CENTERLINE. ENSURE THAT CONDUIT(S) ARE ENCAPSULATED IN THE BASE AGGREGATE DENSE (BAD) LAYER SO THAT THERE IS BAD MATERIAL BOTH ABOVE AND BELOW THE CONDUIT(S)

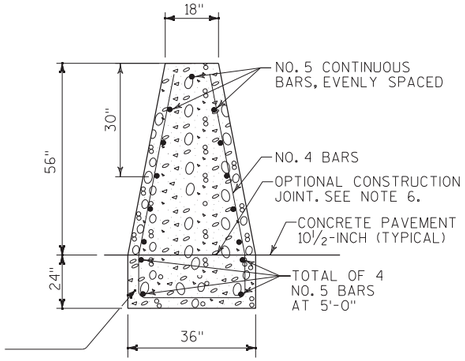
17) SEE SPECIFICATIONS FOR SAW CUT CONSTRUCTION JOINT OPTION. SAW CUTTING AND SEALING IS INCIDENTAL TO BARRIER ITEM.

18) SEE LIGHTING PLAN FOR LOCATIONS OF CONDUIT(S) EMBEDDED IN BARRIER. THIS IS FOR SPECIAL SITUATIONS ONLY. TYPICAL CONDUIT(S) LOCATION IS IN THE BASE AGGREGATE DENSE LAYER AS SHOWN. GAP BETWEEN CONDUIT(S) EMBEDDED IN BARRIER IS AT CONTRACTOR PREFERENCE.



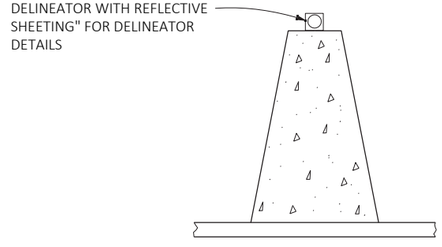
END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT
(ELEVATION VIEW)



SECTION A-A

MONOLITHIC CONCRETE BARRIER END ANCHOR



DELINEATION

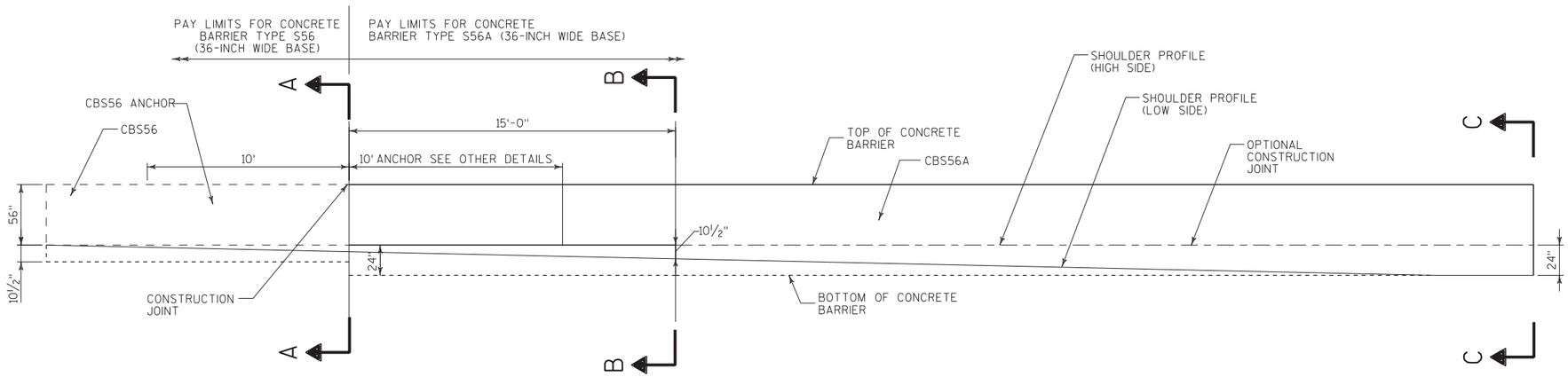
DELINEATOR SPACING ON HORIZONTAL CURVES

RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

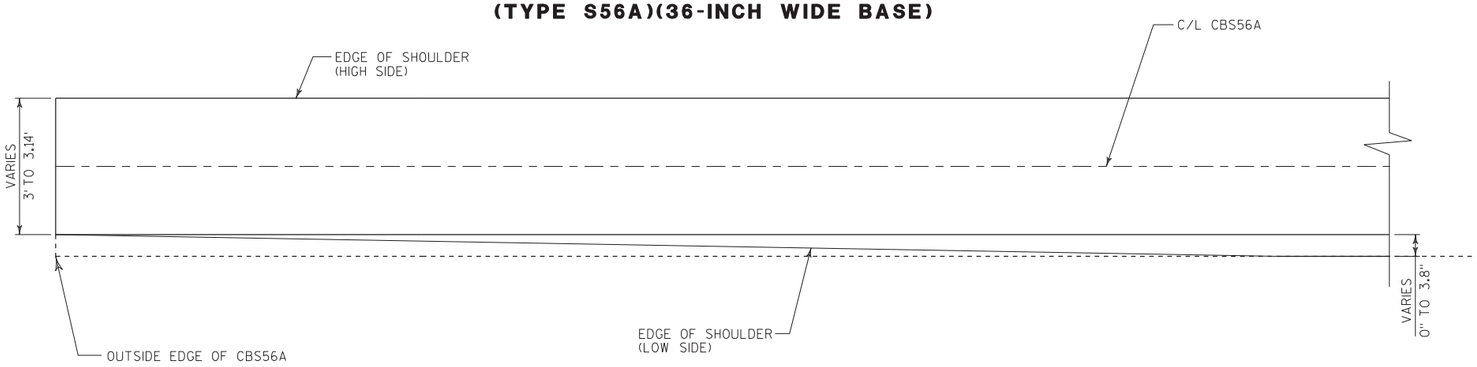
DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

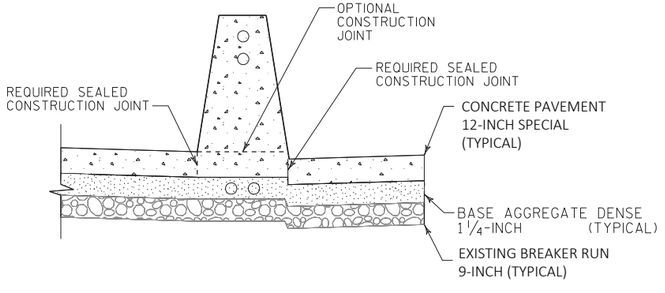
IF BARRIER RUN IS LONGER THAN 1000' USE 200' DELINEATOR SPACING.



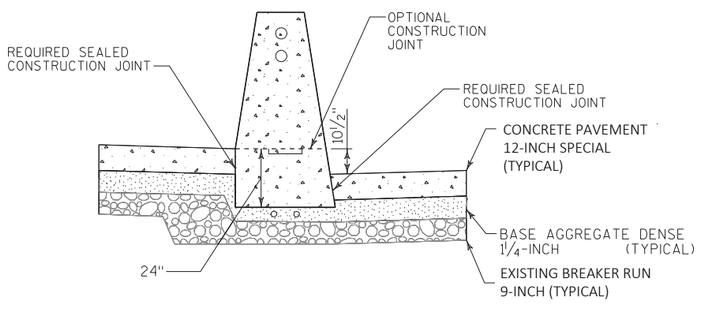
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S56A)(36-INCH WIDE BASE)



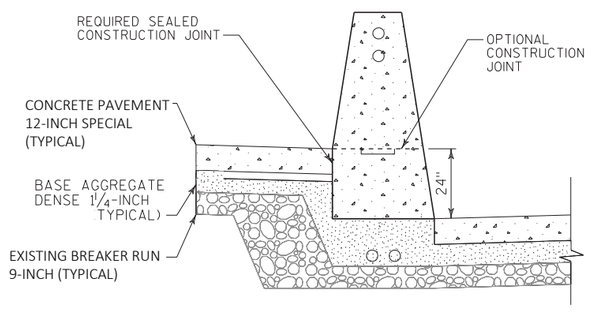
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S56A)(36-INCH WIDE BASE)



SECTION A-A



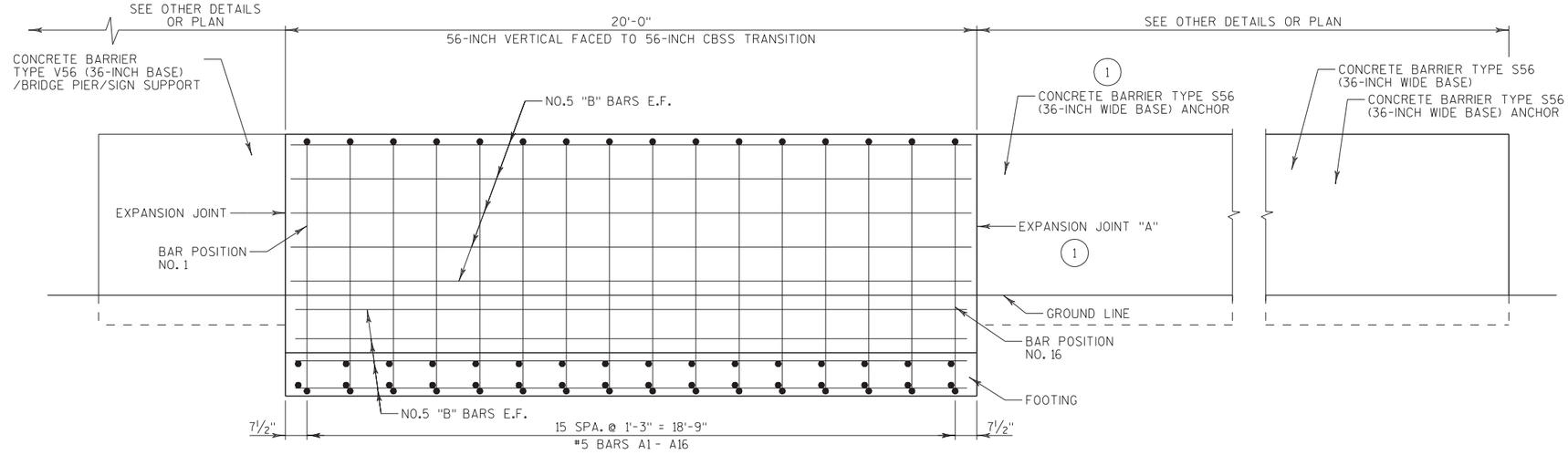
SECTION B-B



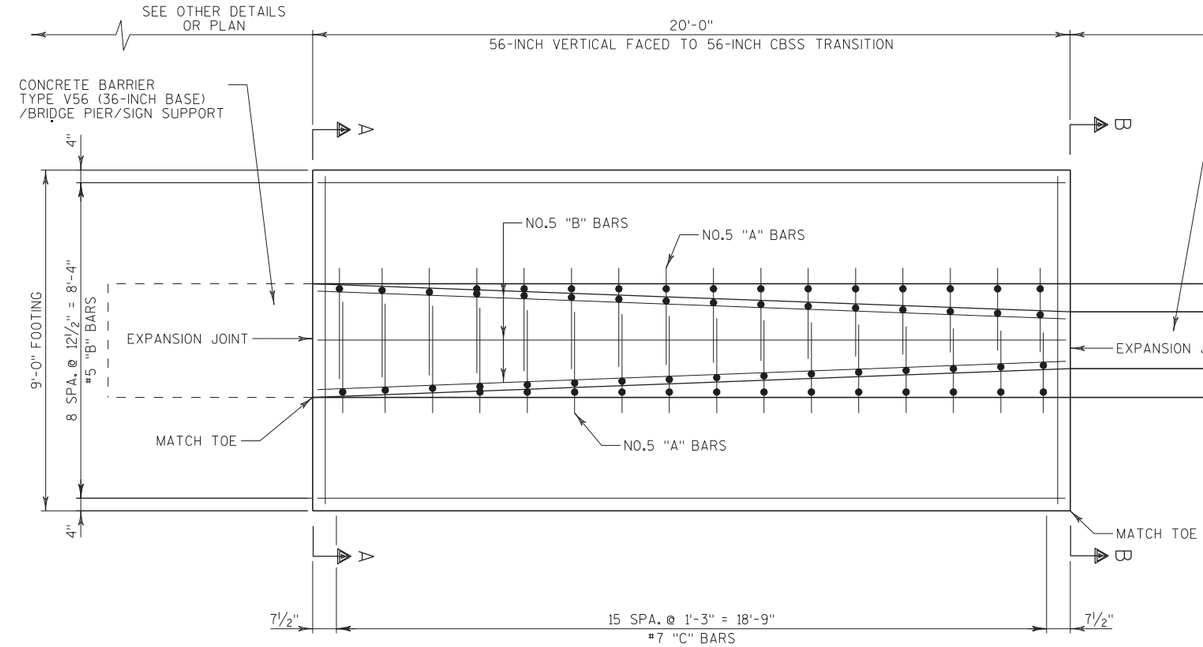
SECTION C-C

DETAIL (2 OF 2)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 30	E



ELEVATION VIEW



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'-6" LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

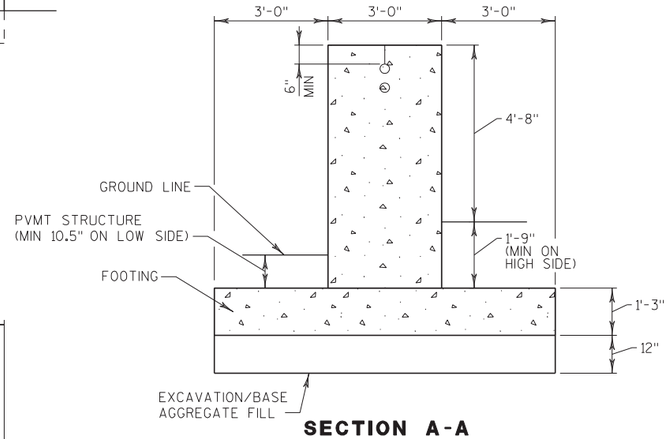
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

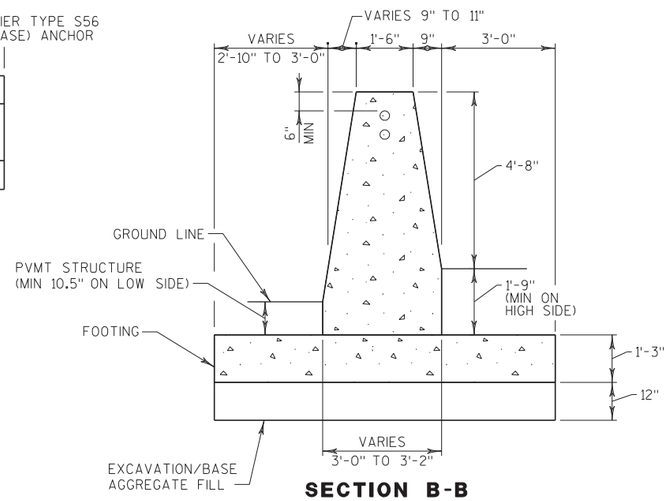
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BAR LOCATION.

3" CLEAR COVER AT BOTTOM OF FOOTING, 2" CLEAR COVER ALL OTHER FACES.

(1) EXPANSION JOINT "A" MAYBE REPLACED WITH A COLD-JOINT PROVIDED THAT 3-FEET OF LAP JOINT OF LONGITUDINAL STEEL IS PROVIDED. IF COLD-JOINT IS USED ANCHOR NOT REQUIRED.



SECTION A-A



SECTION B-B

CONCRETE BARRIER TRANSITION TYPE V56 TO S56 (36-INCH WIDE BASE)

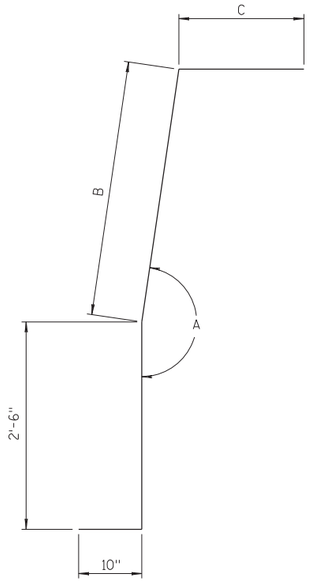
56-INCH VERTICAL SHAPE CONCRETE BARRIER TO 56-INCH SINGLE SLOPE CONCRETE BARRIER (36-INCH WIDE BASE) TRANSITION

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 31	E

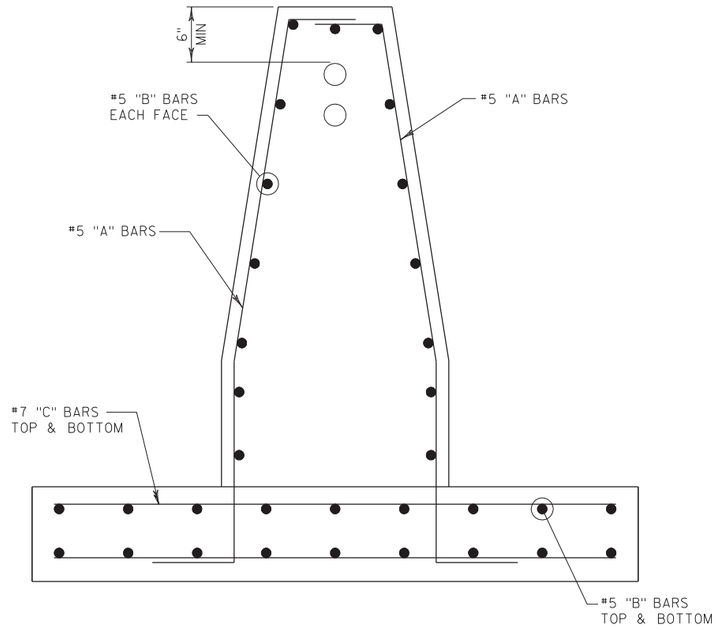
BAR SUMMARY TABLE

BAR MK.	SIZE	LEN.	NO. REQ'D
"A"	#5	*	32
"B"	#5	19'-8"	33
"C"	#7	8"-8"	32

* SEE BENDING DETAIL



"A" BAR BENDING DETAIL



BAR DETAIL
BAR POSTIONS NO. 1 - NO. 16

"A" BAR CHART
BAR POSITIONS NO. 1 - NO. 16

BAR	A	B	C
A1	179°-45'	4'-6	2'-0"
A2	179°-10'	4'-6	2'-0"
A3	178°-35'	4'-6	2'-0"
A4	178°-00'	4'-6	2'-0"
A5	177°-25'	4'-6	2'-0"
A6	177°-50'	4'-6	2'-0"
A7	176°-15'	4'-6	2'-0"
A8	175°-40'	4'-6"	1'-6"

BAR	A	B	C
A9	175°-05'	4'-6	1'-6"
A10	174°-35'	4'-6	1'-6"
A11	174°-00'	4'-6	1'-6"
A12	173°-25'	4'-6	1'-6"
A13	172°-50'	4'-6½"	1'-0"
A14	172°-15'	4'-6½"	1'-0"
A15	171°-45'	4'-6½"	1'-0"
A16	171°-10'	4'-6½"	1'-0"

CONCRETE BARRIER TRANSITION
TYPE V56 TO S56 (36-INCH WIDE BASE)

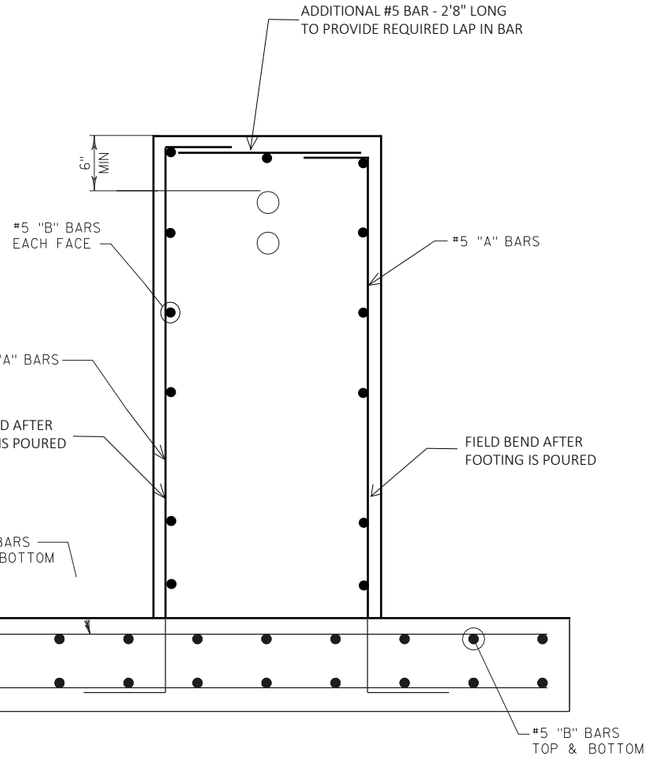
56-INCH VERTICAL SHAPE
CONCRETE BARRIER TO 56-INCH
SINGLE SLOPE CONCRETE
BARRIER (36-INCH WIDE BASE) TRANSITION

2

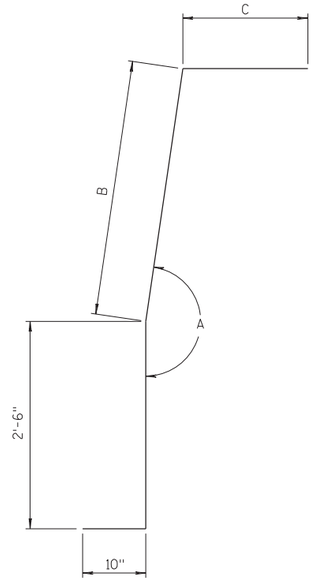
BAR SUMMARY TABLE

BAR MK.	SIZE	LEN.	NO. REQ'D
"A"	#5	*	32
"B"	#5	19'-8"	33
"C"	#7	8"-8"	32

* SEE BENDING DETAIL



BAR DETAIL
BAR POSTIONS NO. 1 - NO. 16



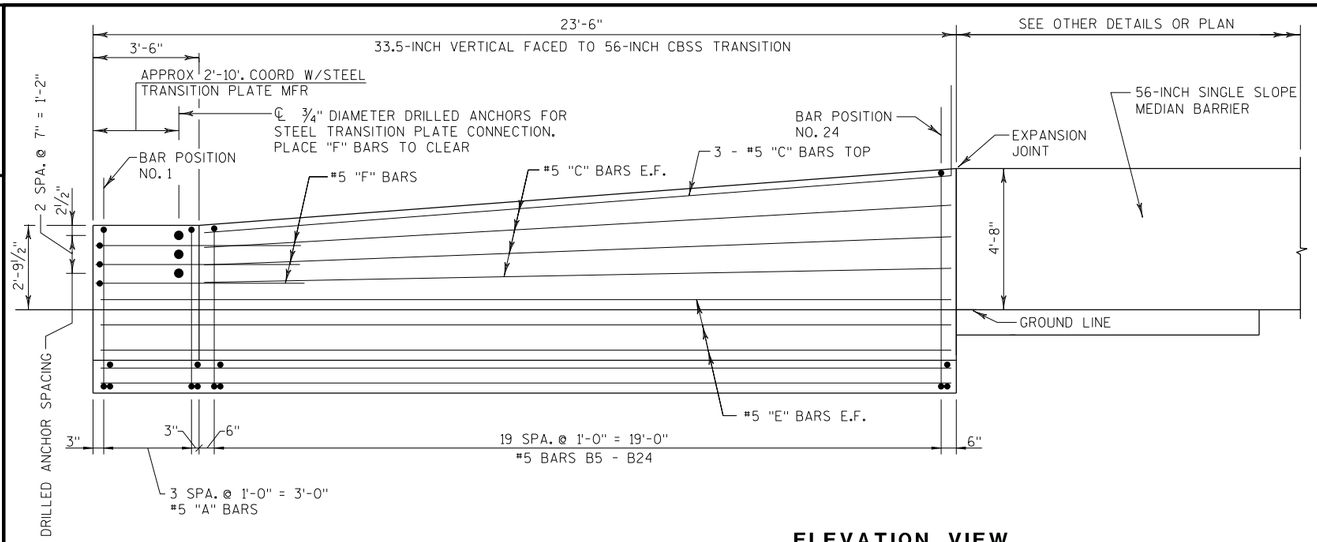
"A" BAR
BENDING DETAIL

"A" BAR CHART
BAR POSITIONS NO. 1 - NO. 16

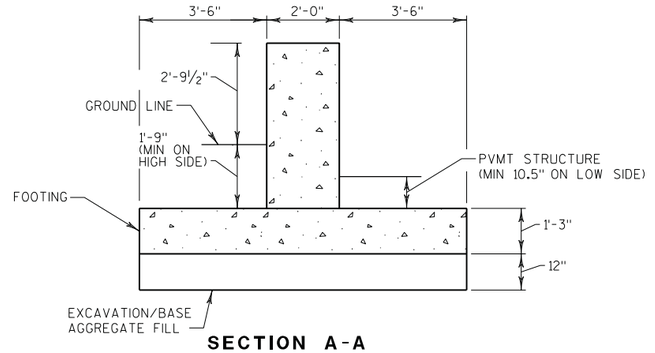
BAR	A	B	C
A1	179°-45'	4'-6	2'-0"
A2	179°-10'	4'-6	2'-0"
A3	178°-35'	4'-6	2'-0"
A4	178°-00'	4'-6	2'-0"
A5	177°-25'	4'-6	2'-0"
A6	177°-50'	4'-6	2'-0"
A7	176°-15'	4'-6	2'-0"
A8	175°-40'	4'-6"	1'-6"

BAR	A	B	C
A9	175°-05'	4'-6	1'-6"
A10	174°-35'	4'-6	1'-6"
A11	174°-00'	4'-6	1'-6"
A12	173°-25'	4'-6	1'-6"
A13	172°-50'	4'-6½"	1'-0"
A14	172°-15'	4'-6½"	1'-0"
A15	171°-45'	4'-6½"	1'-0"
A16	171°-10'	4'-6½"	1'-0"

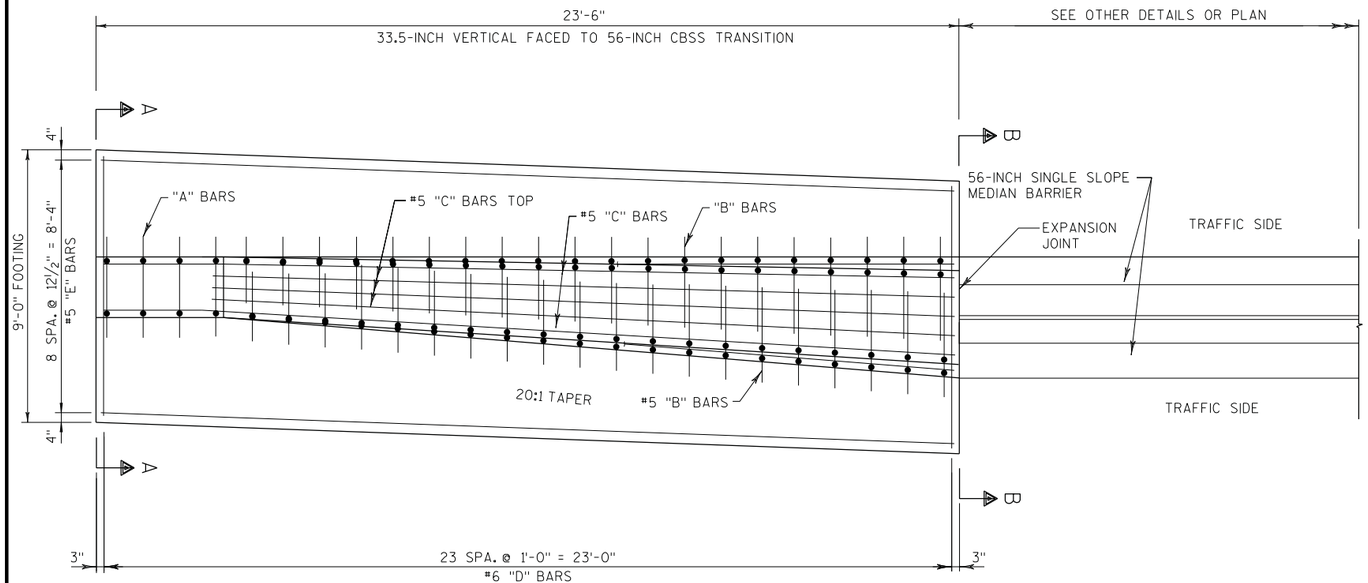
Concrete Barrier Type V56
(36-Inch Wide Base) - 20' Gap



ELEVATION VIEW



SECTION A-A



PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'-6" LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

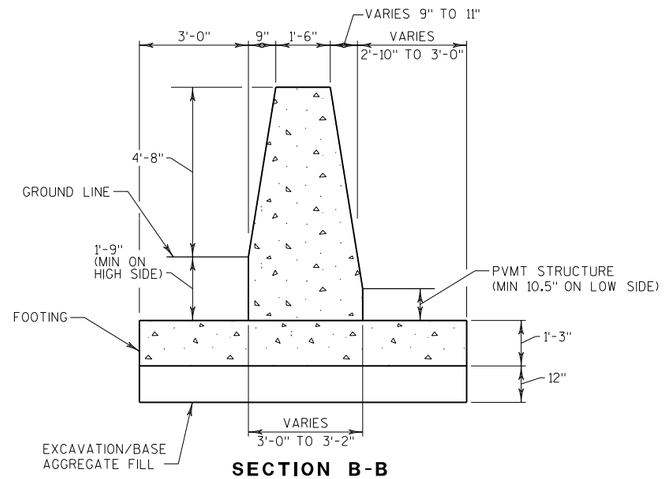
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BAR LOCATION.

3" CLEAR COVER AT BOTTOM OF FOOTING, 2" CLEAR COVER ALL OTHER FACES.

TAPER RATES ARE GIVEN IN RELATION TO THE ROADWAY REFERENCE LINE.



SECTION B-B

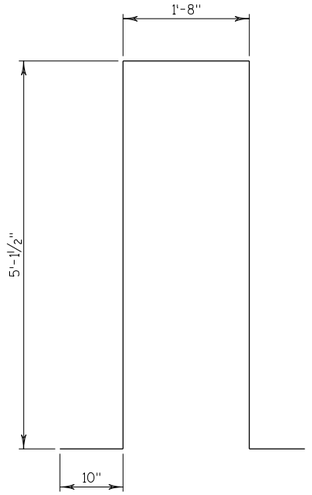
CONCRETE BARRIER TRANSITION TYPE I V33.5 TO S56 BLOCK

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 34	E

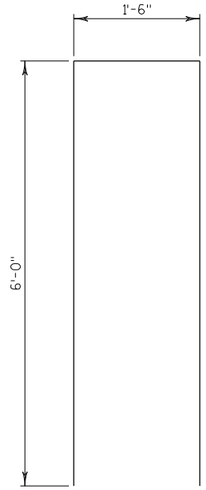
BAR SUMMARY TABLE

BAR MK.	SIZE	LEN.	NO. REQ'D
"A"	#5	*	4
"B"	#5	*	40
"C"	#5	19'-8"	11
"D"	#6	8"-8"	48
"E"	#5	23'-2"	24
"F"	#5	*	3

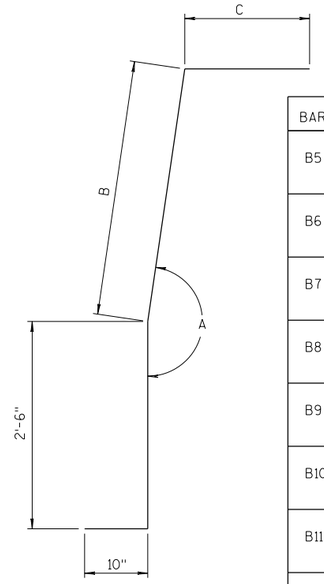
* SEE BENDING DETAIL



"A" BAR
BENDING DETAIL



"F" BAR
BENDING DETAIL



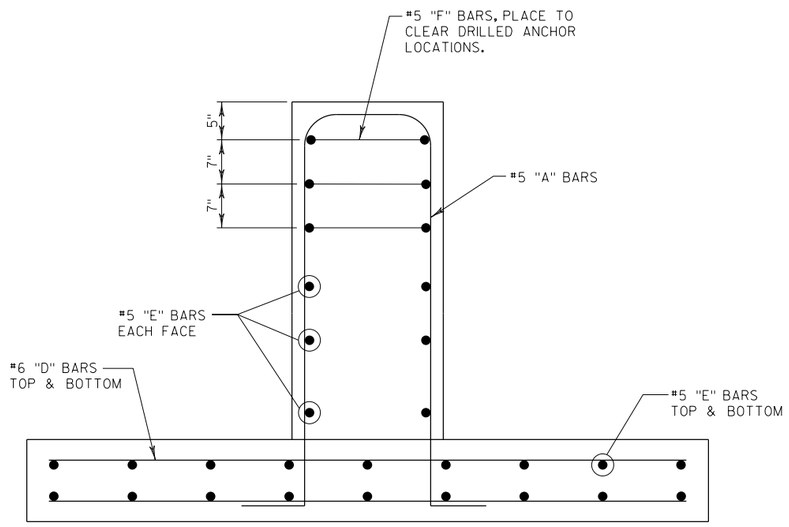
"B" BAR
BENDING DETAIL

"B" BAR CHART
BAR POSITIONS NO. 5 - NO. 24

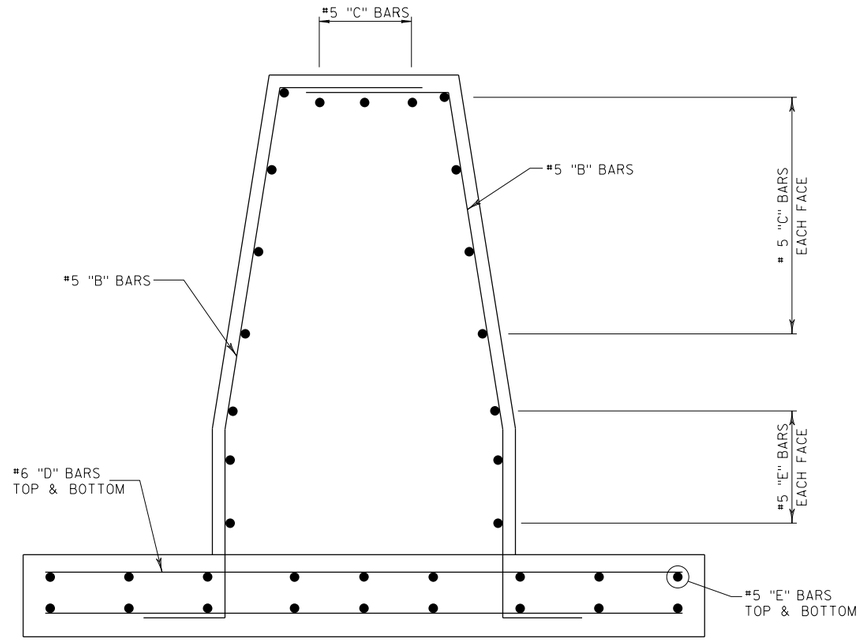
BAR	A	B	C
B5	179°-40'	2'-8"	1'-8"
B6	179°-05'	2'-8"	1'-8"
B7	178°-30'	2'-9"	1'-8"
B8	177°-55'	2'-10½"	1'-8"
B9	177°-15'	2'-11½"	1'-6"
B10	176°-40'	3'-1"	1'-6"
B11	176°-05'	3'-2"	1'-6"
B12	175°-30'	3'-3½"	1'-6"

BAR	A	B	C
B13	174°-50'	3'-4½"	1'-6"
B14	174°-15'	3'-6"	1'-6"
B15	173°-40'	3'-7"	1'-4"
B16	173°-00'	3'-8½"	1'-4"
B17	172°-25'	3'-9½"	1'-4"
B18	171°-50'	3'-11"	1'-4"
B19	171°-15'	4'-0"	1'-4"
B20	170°-40'	4'-1½"	1'-0"

BAR	A	B	C
B21	170°-00'	4'-2½"	1'-0"
B22	169°-25'	4'-4"	1'-0"
B23	168°-50'	4'-5"	1'-0"
B24	168°-10'	4'-6½"	1'-0"



BAR DETAIL
BAR POSTIONS NO. 1 - NO. 4



BAR DETAIL
BAR POSTIONS NO. 5 - NO. 24

CONCRETE BARRIER TRANSITION TYPES I, II, III, IV V33.5 TO S56 BLOCK

2

GENERAL NOTES

1) BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

2) CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

3) MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

4) CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4-INCHES, PRIOR TO INSTALLING END BELL.

5) ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE PLUGGED IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN PLUGGED.

6) BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

7) A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR ALL BASES.

8) THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE IN THE JUNCTION BOXES. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE CONTINUOUS AND NEATLY COILED AND THE COIL TIED TOGETHER.

9) ANCHOR BOLTS SHALL BE THREADED 12-INCHES IN LENGTH ON THE END OF THE BOLT. ANCHOR BOLTS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 654.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A307, ASTM 4-449, OR ASTM A-687 (GRADE 105). ALTERNATE "L"-BEND (MIN. 4") IS ACCEPTABLE.

10) WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR BOLTS.

11) VERIFY COMPATIBILTY OF ANCHOR BOLT SIZE AND PATTERN PRIOR TO FORMING THE CONCRETE BASE.

12) ANCHOR BOLTS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL PER SECTION 5.17.6.3 AASHTO 2001 4TH EDITION STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.

13) GALVANIZED STEEL MESH WITH ¾" STAINLESS STEEL BANDING USED FOR RODENT SCREEN REQUIRED FOR ALL POLES. MESH AND BANDING SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM.

14) WELDING OF THE ANCHOR BOLTS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

15) BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

16) MIRROR THE CONDITIONS DEPICTED ON THESE DETAILS WHEN CONDUIT ENTRANCES ARE OPPOSITE FROM THE CASES SHOWN.

17) THE DIMENSIONS OF THE CONCRETE BASES WILL VARY FROM WHAT IS SHOWN ON THIS DETAIL DEPENDING ON THE VERTICAL AND HORIZONTAL SEPARATION BETWEEN THE NORTHBOUND AND SOUTHBOUND TRAVEL LANES. THIS DETAIL PROVIDES TYPICAL DIMENSIONS FOR THE MAJORITY OF BASES. QUANTITIES OF BAR STEEL REINFORCEMENT AND CONCRETE AS SHOWN ARE APPROXIMATE. DIMENSIONS OF BAR STEEL REINFORCEMENT WILL VARY IN TRANSITION SECTIONS. MAKE FIELD ADJUSTMENTS AS REQUIRED.

18) ADDITIONAL QUANTITIES AND STAKING REQUIRED IN TRANSITION SECTIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASE MEDIAN BARRIER BID ITEM.

19) THE CONCRETE SURFACE SHALL MATCH THE PROPOSED MEDIAN BARRIER WALL FINISH.

20) ALL STEEL CONDUIT SHALL BE GROUNDED. FURNISH AND INSTALL GROUNDING BUSHING WITH LAY-IN TYPE GROUND LUG AND COPPER GROUNDING JUMPER.

21) ADJUST THE JUNCTION BOX LOCATION AS REQUIRED TO FIT FIELD CONDITIONS AND TO AVOID CONFLICTS WITH REINFORCEMENT STEEL. MAINTAIN A MINIMUM OF 2-INCHES OF CONCRETE BETWEEN REINFORCEMENT STEEL ALONG ALL SIDES OF THE JUNCTION BOXES.

ESTIMATED QUANTITIES PER BASE (APPROX.)

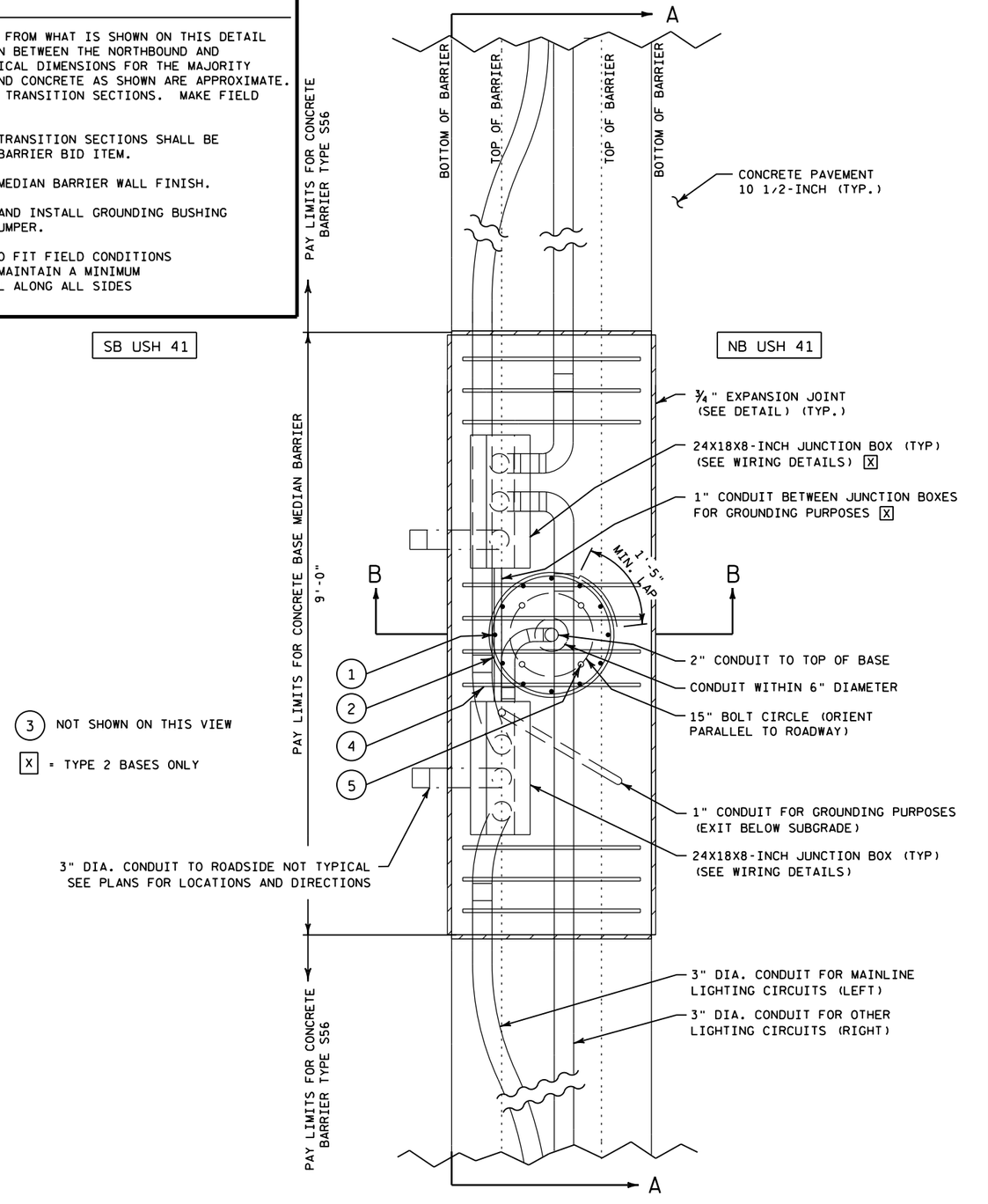
ITEM	UNIT	TYPE 1 QUANTITY	TYPE 2 QUANTITY
CONCRETE MASONRY	C.Y.	5.5*	5.5*
BAR STEEL REINFORCEMENT	LB.	525*	525*
ANCHOR BOLTS	EACH	4	4
24"X18"X8" JUNCTION BOX	EACH	1	2
3" CONDUIT ***	LF	7**	14**
2" CONDUIT	LF	3	3
1" CONDUIT	LF	8	10

ALL QUANTITIES INCIDENTAL TO "CONCRETE BASE MEDIAN BARRIER (TYPE)"
BID ITEM SPV.0060.351 (TYPE 1)
BID ITEM SPV.0060.352 (TYPE 2)

* AMOUNT VARIES IN GRADE SEPARATED AREAS
** AMOUNT VARIES DEPENDING ON NUMBER OF CONDUITS ENTERING BASE (SEE PLANS)
*** SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS OF RIGID METALLIC CONDUIT

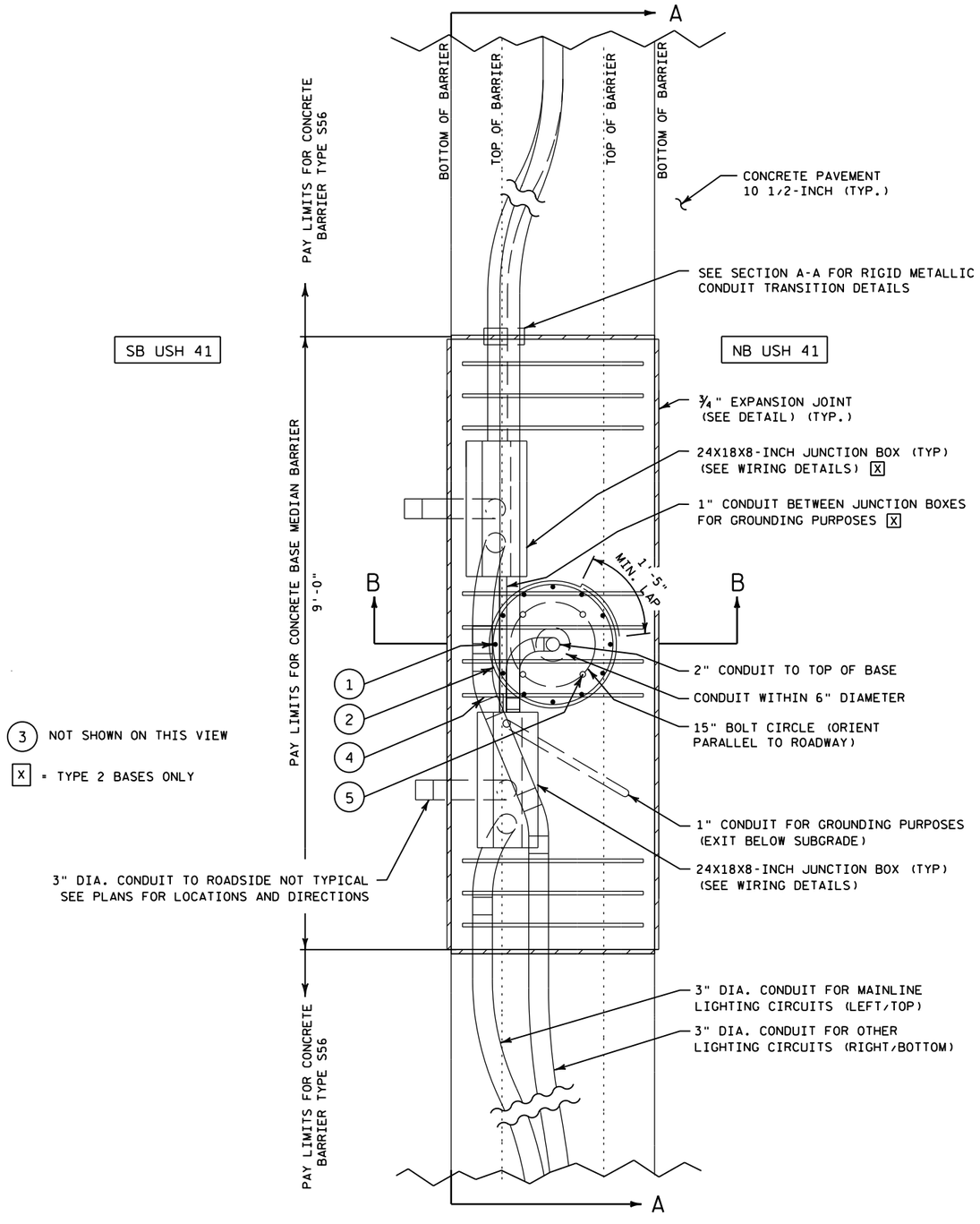
CONCRETE BASE MEDIAN BARRIER TYPE 1 & 2

(SHEETS 2-14) NO SCALE



PLAN VIEW

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

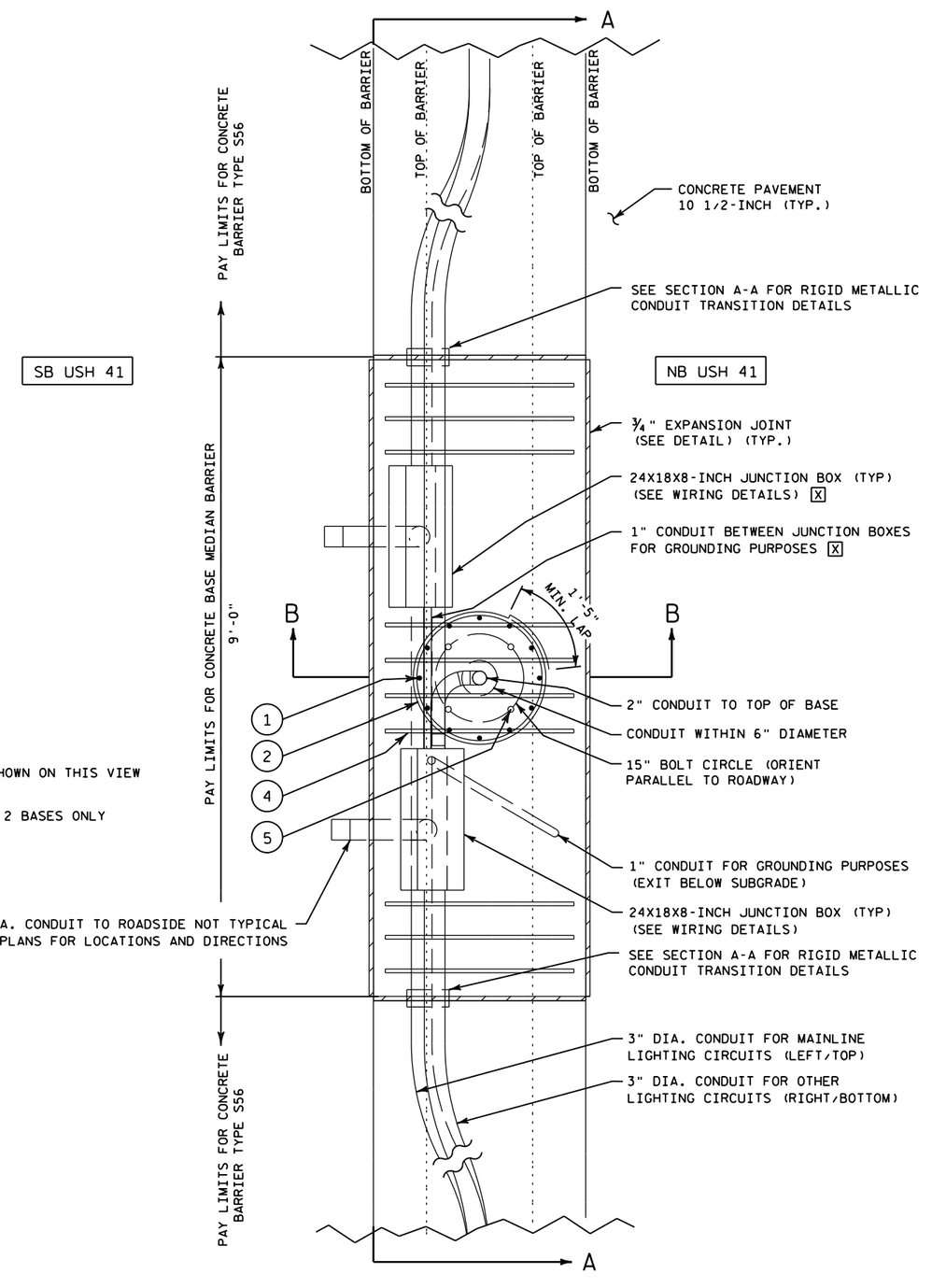


3 NOT SHOWN ON THIS VIEW

X = TYPE 2 BASES ONLY

PLAN VIEW

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE



3 NOT SHOWN ON THIS VIEW

X = TYPE 2 BASES ONLY

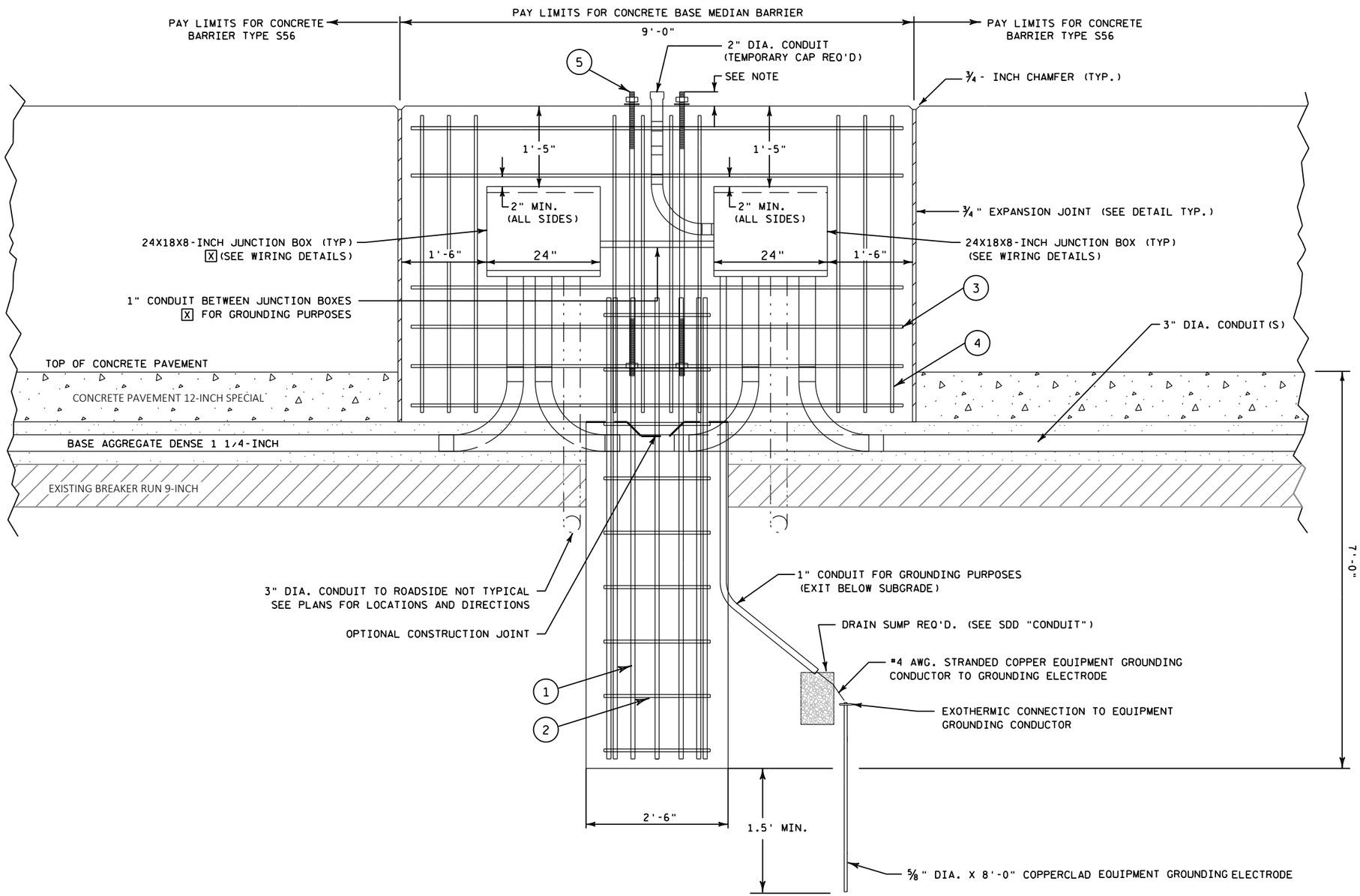
PLAN VIEW

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

2

NOTE: SET ANCHOR BOLT PROJECTION FOR
NON-BREAKAWAY INSTALLATION PER SDD "CONCRETE BASES 1, 2, 5, & 6"

[X] = TYPE 2 BASES ONLY



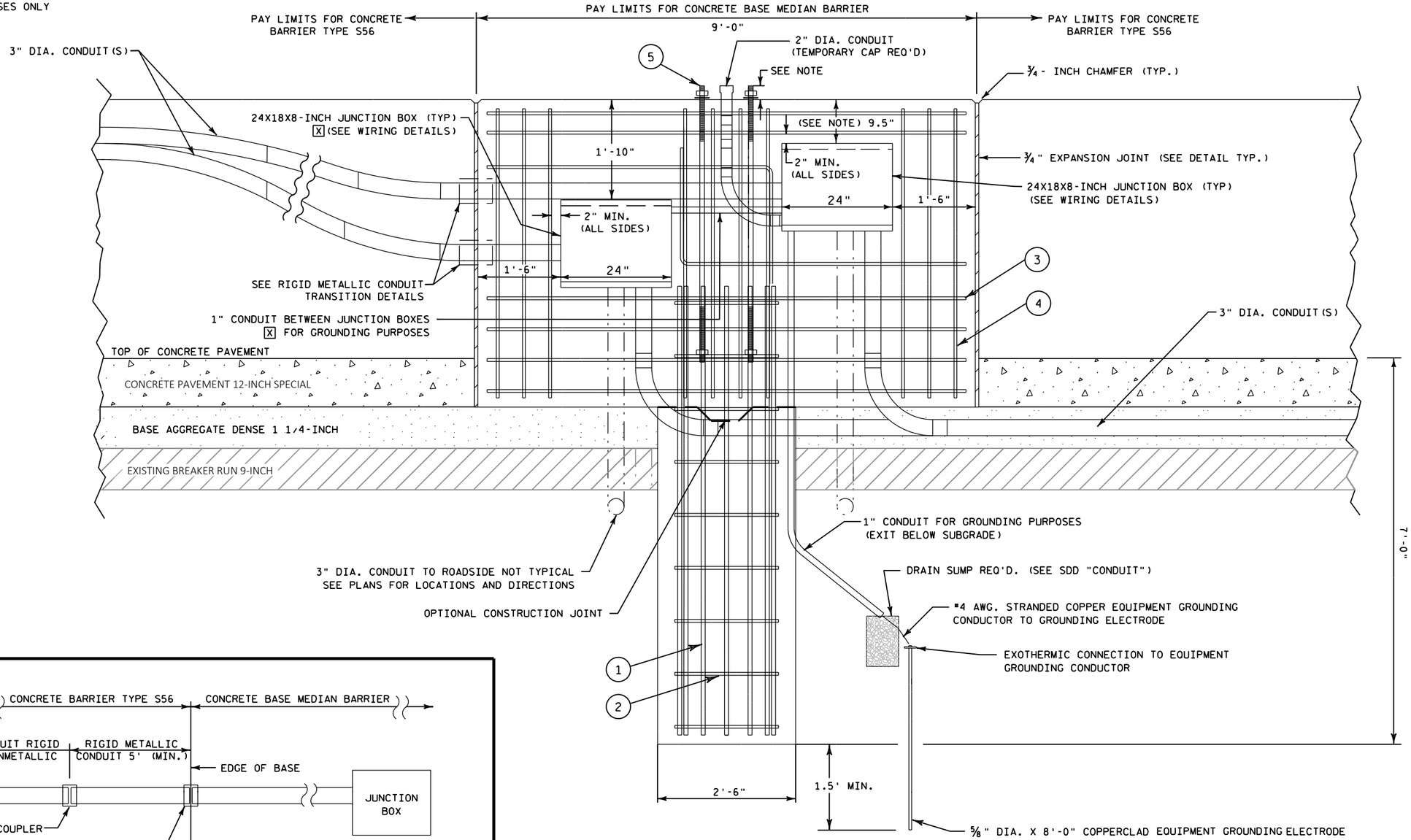
SECTION A-A
SIDE VIEW (FACING EAST/SOUTH)

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

NOTE: SET ANCHOR BOLT PROJECTION FOR
NON-BREAKAWAY INSTALLATION PER SDD "CONCRETE BASES 1, 2, 5, & 6"

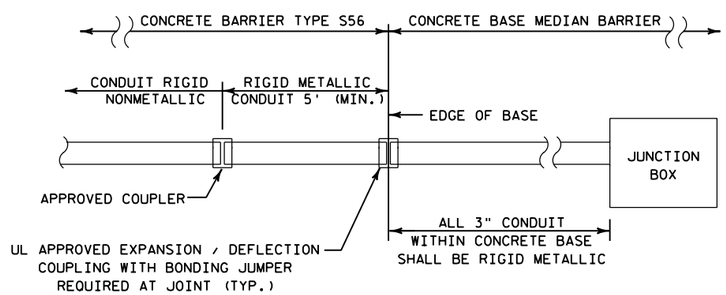
NOTE: SET HEIGHT OF JUNCTION BOX AT 1' - 5"
FROM TOP OF BARRIER FOR TYPE 1 BASES

[X] = TYPE 2 BASES ONLY



SECTION A-A
SIDE VIEW (FACING EAST/SOUTH)

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE



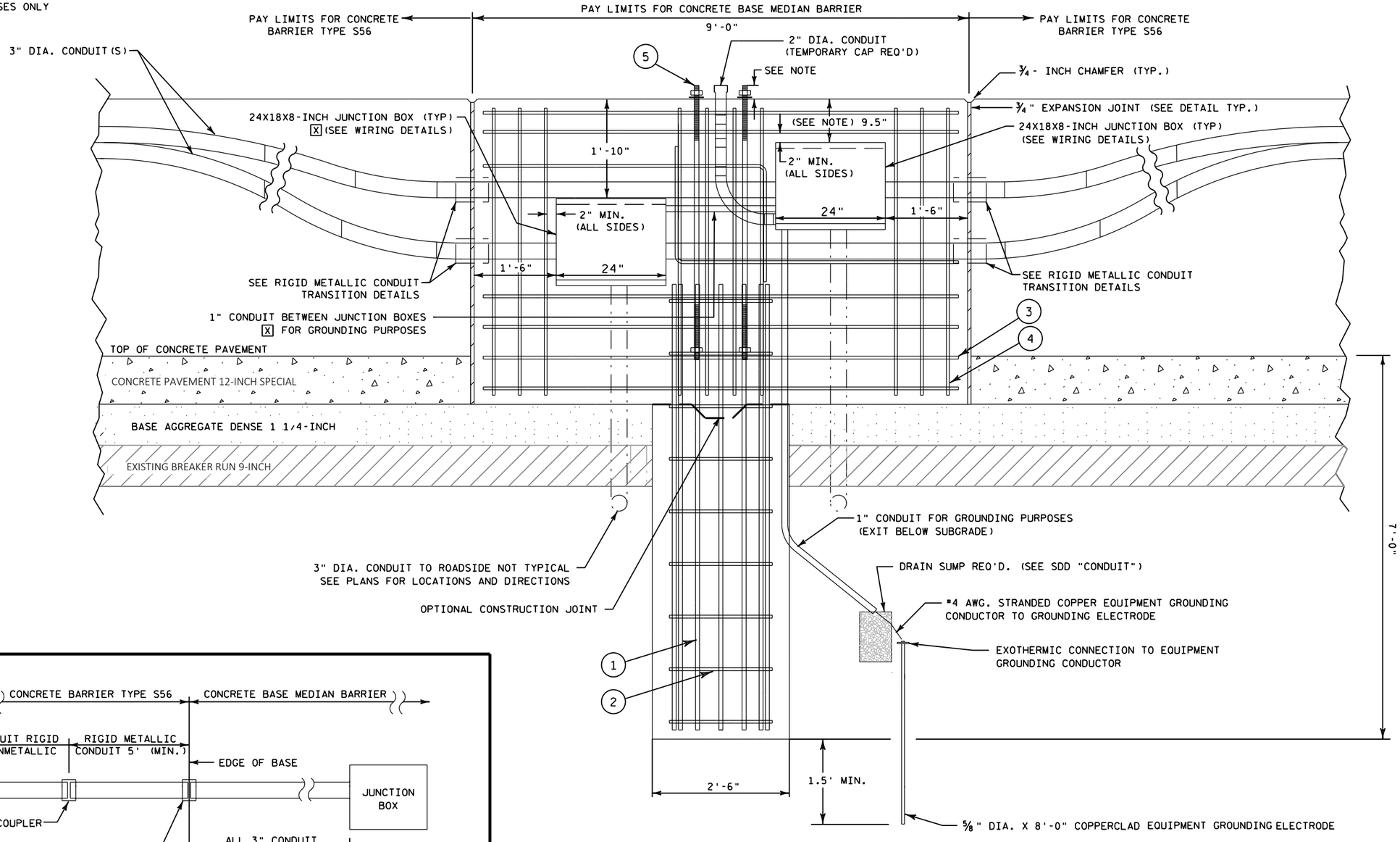
RIGID METALLIC CONDUIT TRANSITION DETAIL

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS - LIGHTING	SHEET 39	E

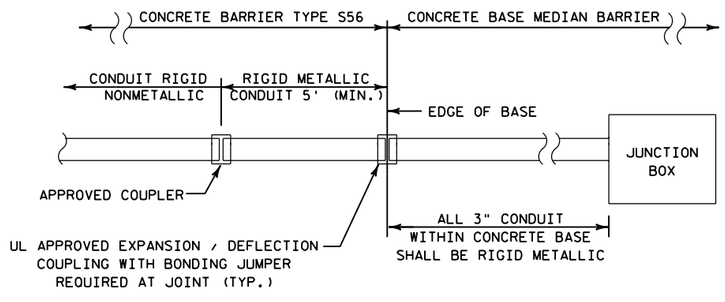
NOTE: SET ANCHOR BOLT PROJECTION FOR
NON-BREAKAWAY INSTALLATION PER SDD "CONCRETE BASES 1, 2, 5, & 6"

NOTE: SET HEIGHT OF JUNCTION BOX AT 1' - 5"
FROM TOP OF BARRIER FOR TYPE 1 BASES

[X] = TYPE 2 BASES ONLY



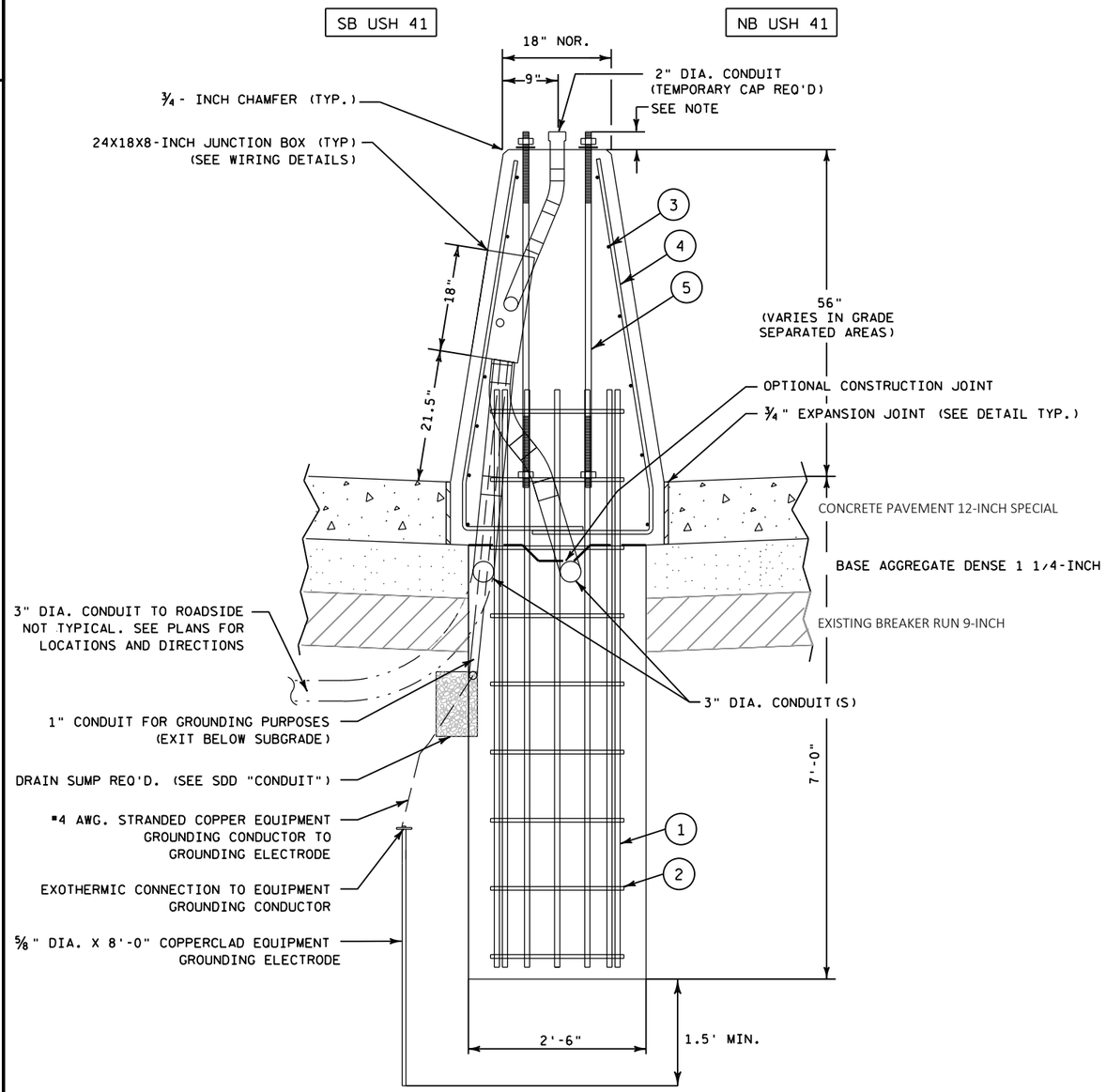
SECTION A-A
SIDE VIEW (FACING EAST/SOUTH)
CASE 3 - CONDUIT IN BARRIER BOTH SIDES



RIGID METALLIC CONDUIT TRANSITION DETAIL

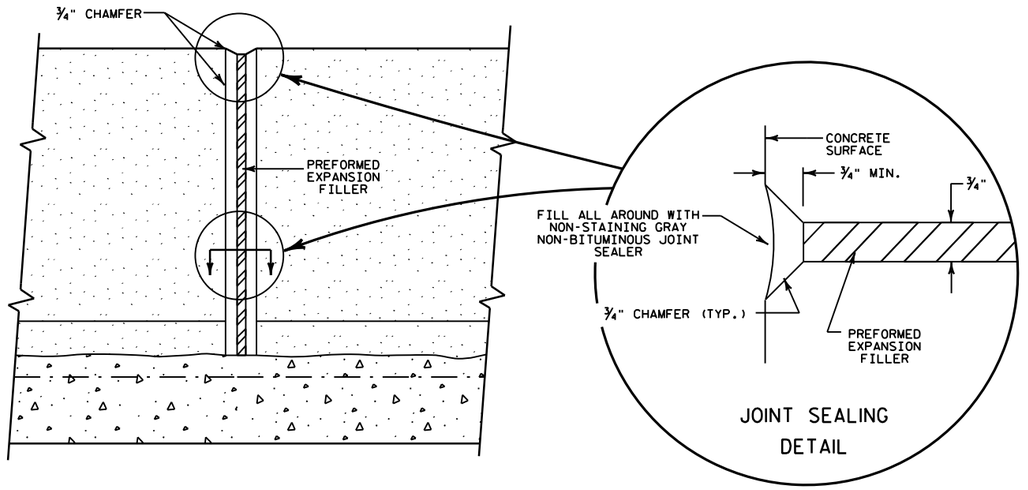
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS - LIGHTING	SHEET 40	E

NOTE: SET ANCHOR BOLT PROJECTION FOR
NON-BREAKAWAY INSTALLATION PER SDD "CONCRETE BASES 1, 2, 5, & 6"

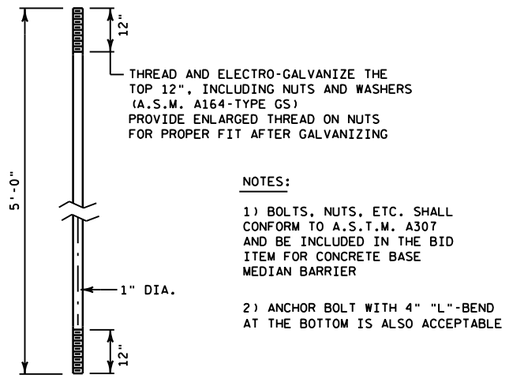


SECTION B-B

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES



EXPANSION JOINT DETAIL

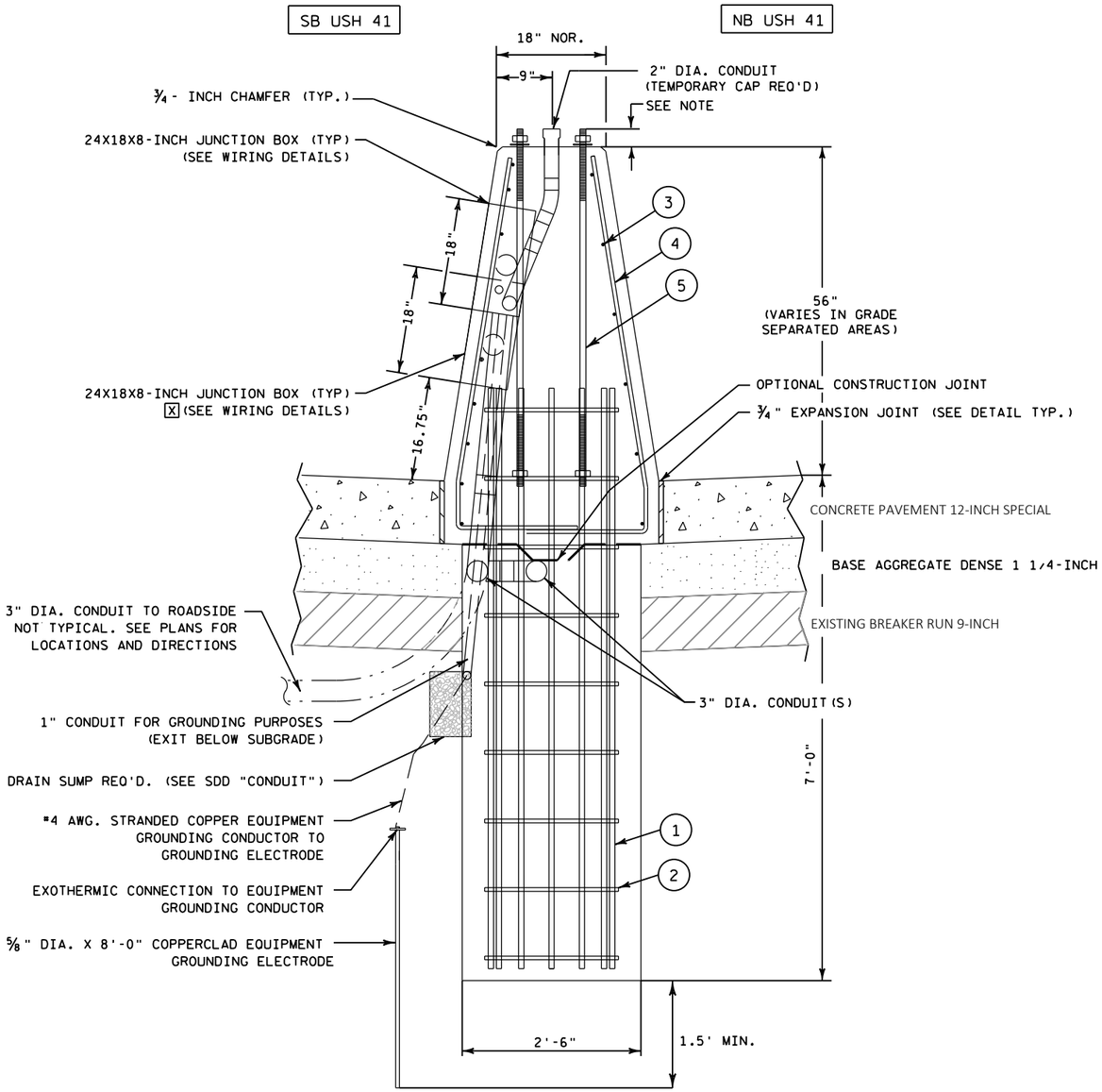


ANCHOR BOLT DETAIL (5)

2

NOTE: SET ANCHOR BOLT PROJECTION FOR
NON-BREAKAWAY INSTALLATION PER SDD "CONCRETE BASES 1, 2, 5, & 6"

[X] = TYPE 2 BASES ONLY

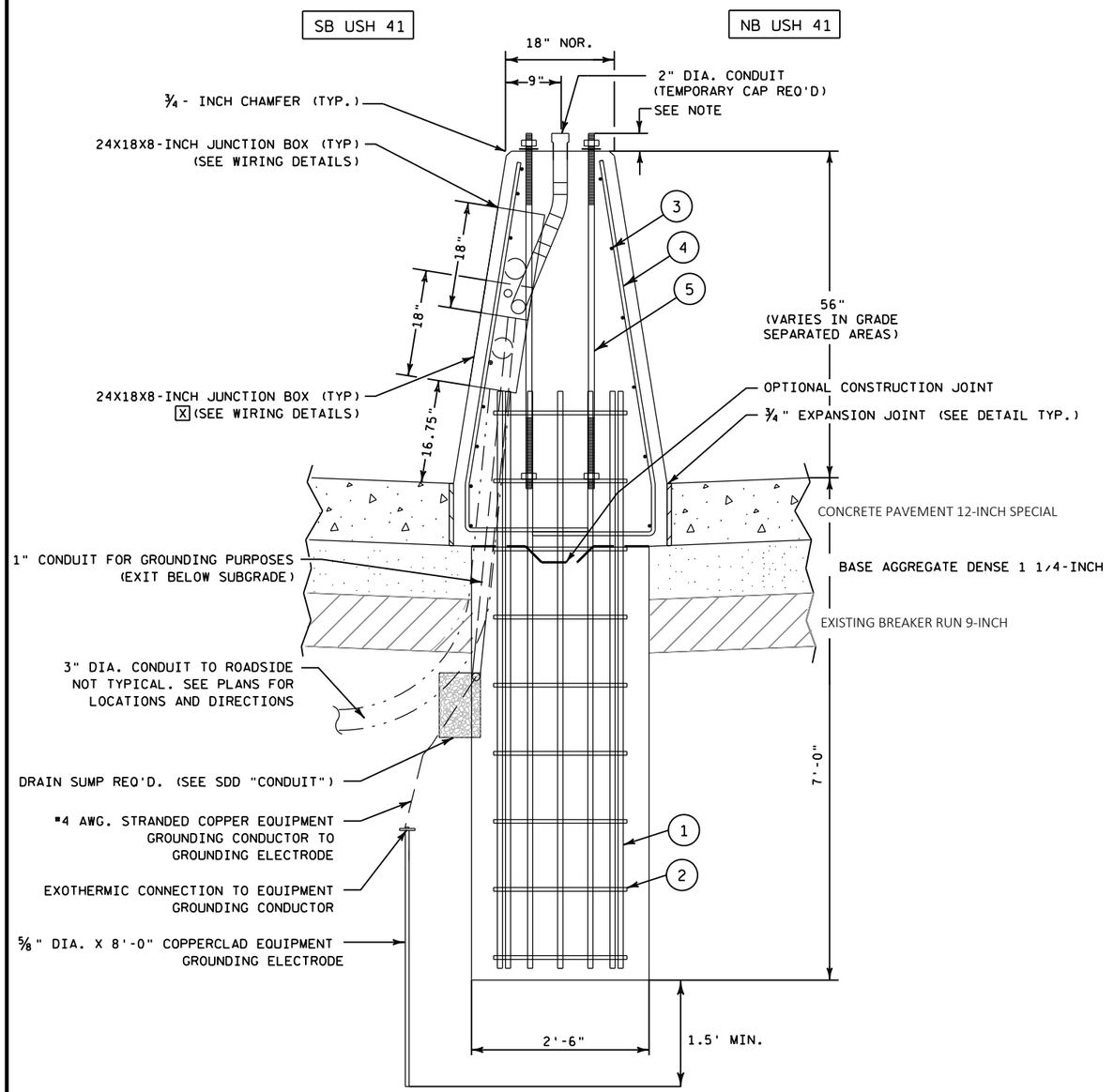


SECTION B-B

CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE

NOTE: SET ANCHOR BOLT PROJECTION FOR
NON-BREAKAWAY INSTALLATION PER SDD "CONCRETE BASES 1, 2, 5, & 6"

[X] = TYPE 2 BASES ONLY



SECTION B-B

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

BILL OF BARS

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
1	12	8.12'		FOOTING VERTICAL
2	9	5.89'	X	FOOTING HOOPS
3	14*	8.67'	X	WALL - HORIZONTAL**
4	20	6.95'*	X	WALL - STIRRUPS

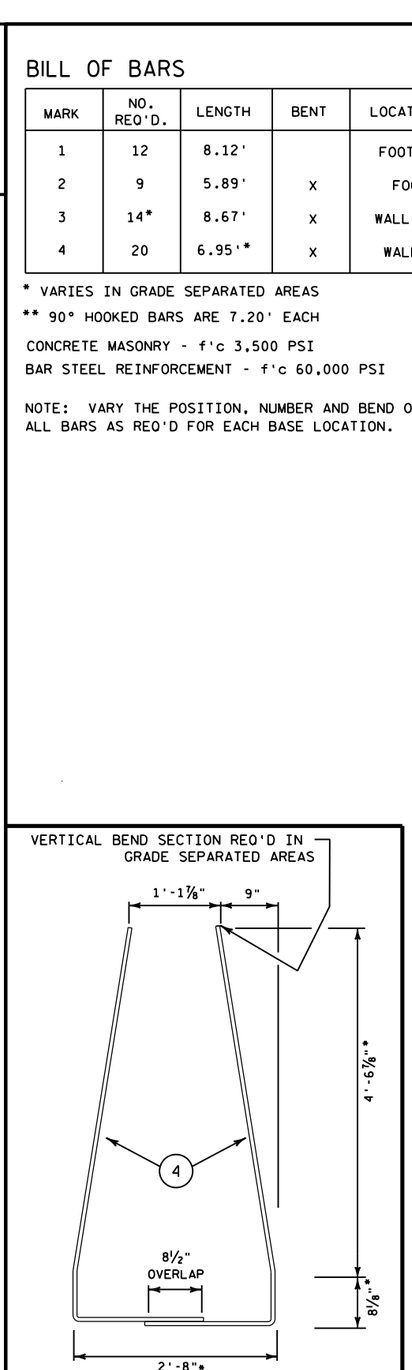
* VARIES IN GRADE SEPARATED AREAS

** 90° HOOKED BARS ARE 7.20' EACH

CONCRETE MASONRY - f'c 3,500 PSI

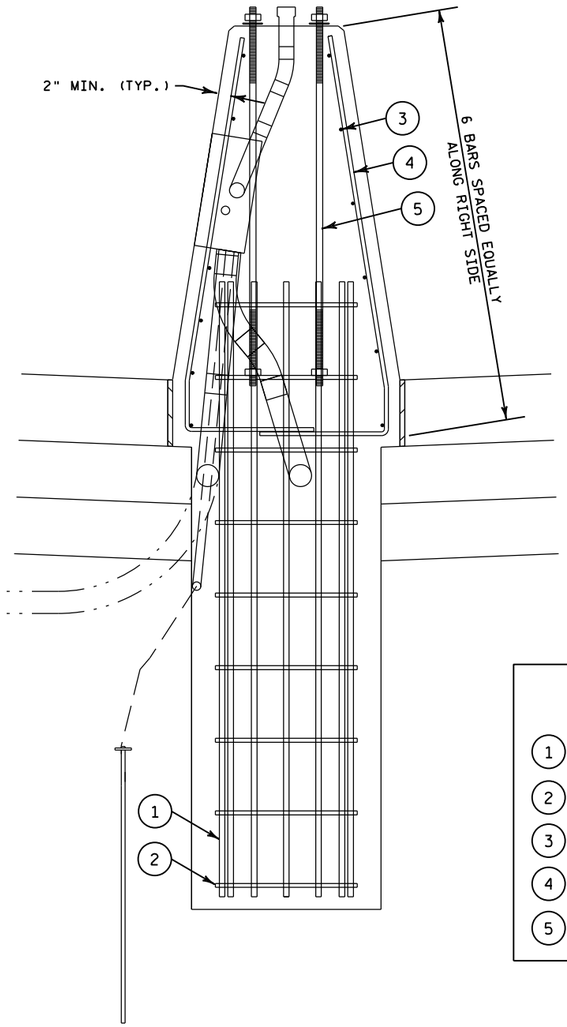
BAR STEEL REINFORCEMENT - f'c 60,000 PSI

NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.



* DIMENSIONS VARY IN GRADE SEPARATED AREAS

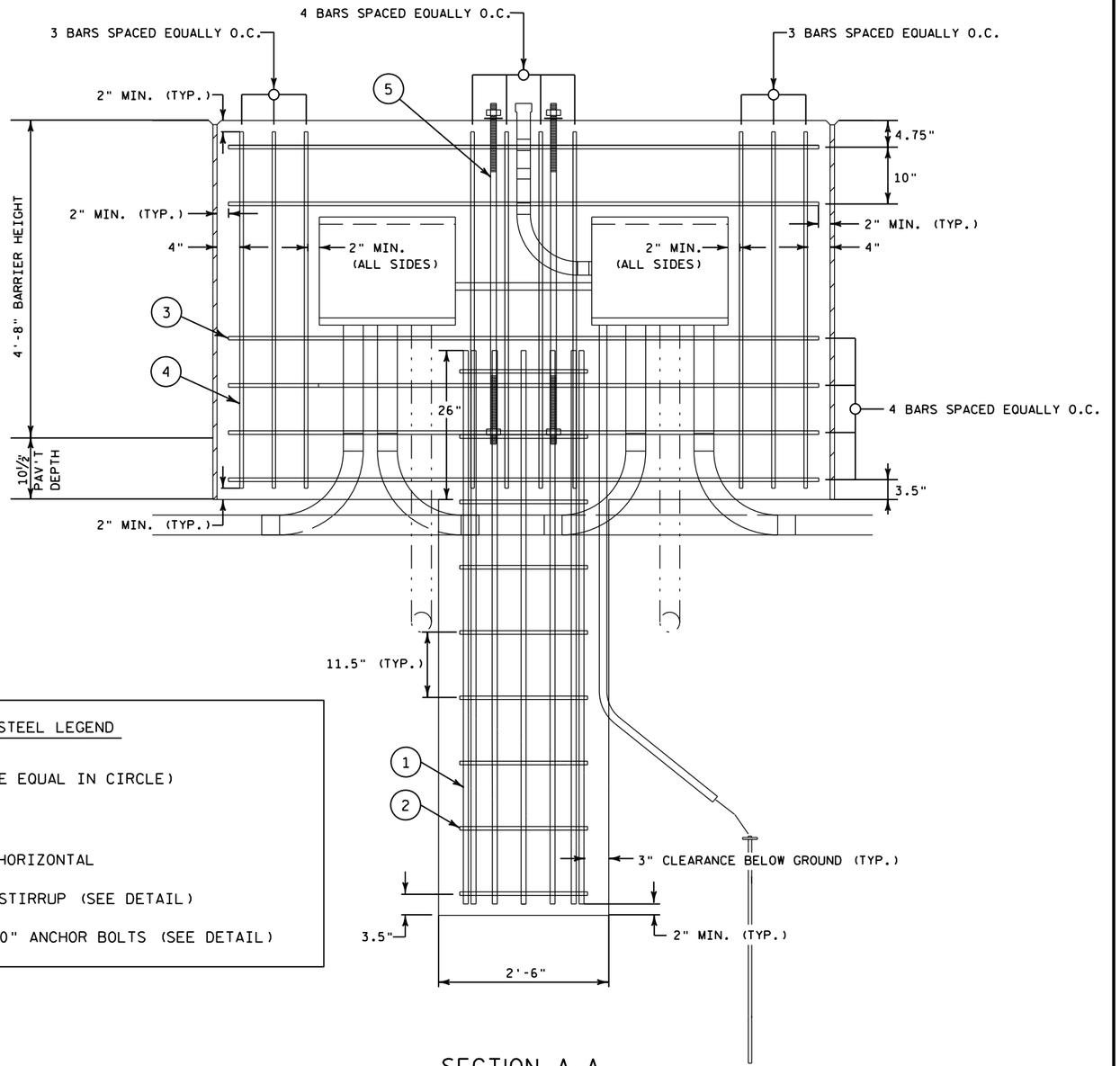
WALL STIRRUP DETAIL



SECTION B-B

BAR STEEL LEGEND

1. #7 BARS (SPACE EQUAL IN CIRCLE)
2. #5 HOOPS
3. #5 BARS WALL HORIZONTAL
4. #5 BARS WALL STIRRUP (SEE DETAIL)
5. 1" DIA. 5' - 0" ANCHOR BOLTS (SEE DETAIL)



SECTION A-A

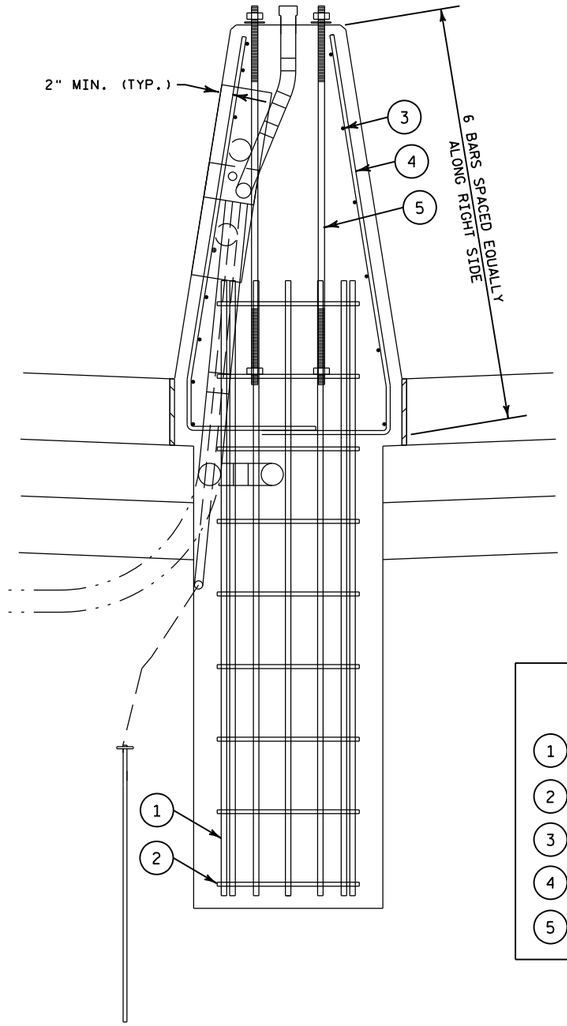
REBAR DETAILS

CASE 1 - CONDUIT IN BASE COURSE BOTH SIDES

NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.

NOTE: VARY THE POSITION OF BARS FOR TYPE 1 BASES

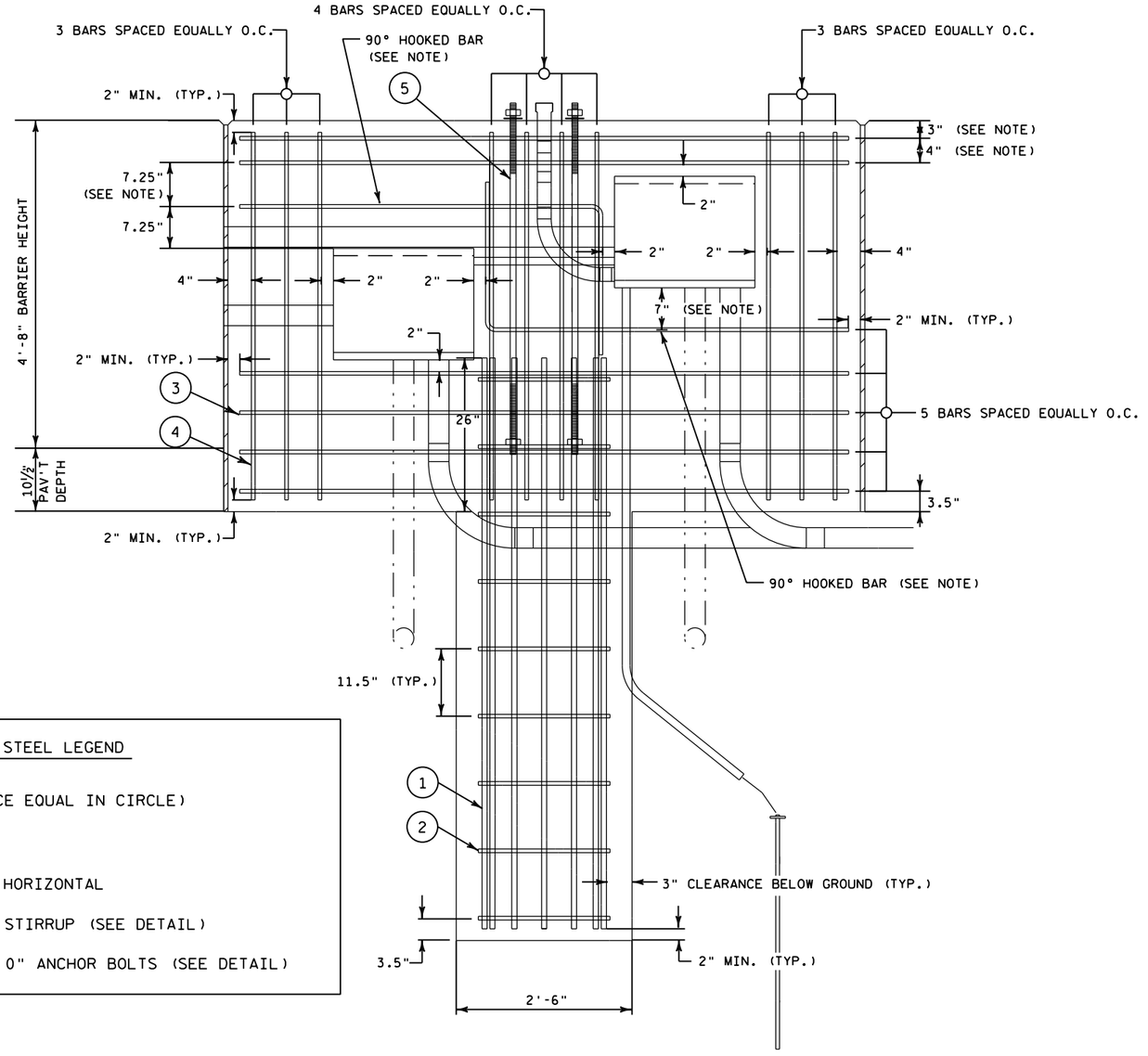
NOTE: ONE 90° BENT BAR SHALL BE STRAIGHT; OMIT OTHER FOR TYPE 1 BASES



SECTION B-B

BAR STEEL LEGEND

1. #7 BARS (SPACE EQUAL IN CIRCLE)
2. #5 HOOPS
3. #5 BARS WALL HORIZONTAL
4. #5 BARS WALL STIRRUP (SEE DETAIL)
5. 1" DIA. 5' - 0" ANCHOR BOLTS (SEE DETAIL)



SECTION A-A

REBAR DETAILS

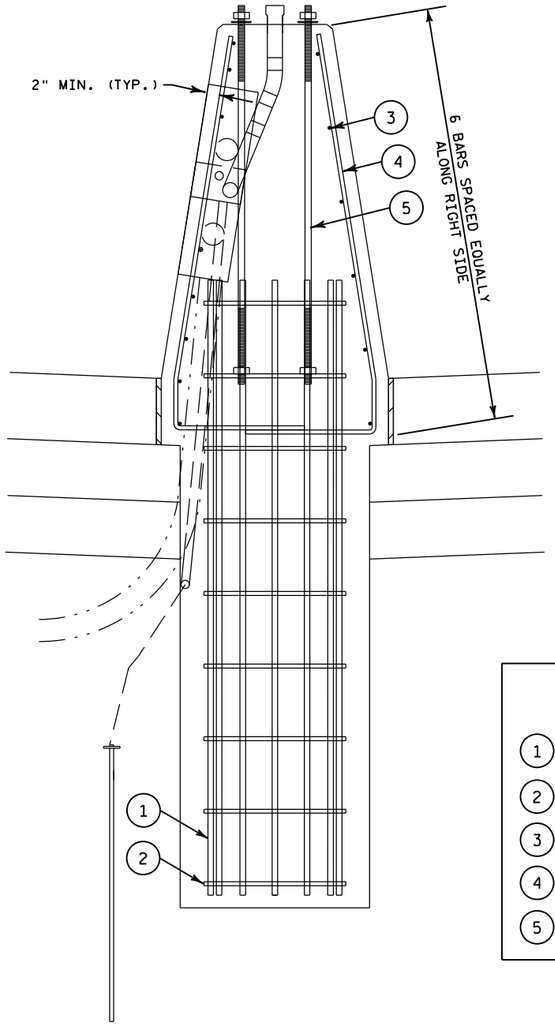
CASE 2 - CONDUIT IN BASE COURSE ONE SIDE
CONDUIT IN BARRIER ONE SIDE

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAILS - LIGHTING	SHEET 44	E

NOTE: VARY THE POSITION, NUMBER AND BEND OF ALL BARS AS REQ'D FOR EACH BASE LOCATION.

NOTE: VARY THE POSITION OF BARS FOR TYPE 1 BASES

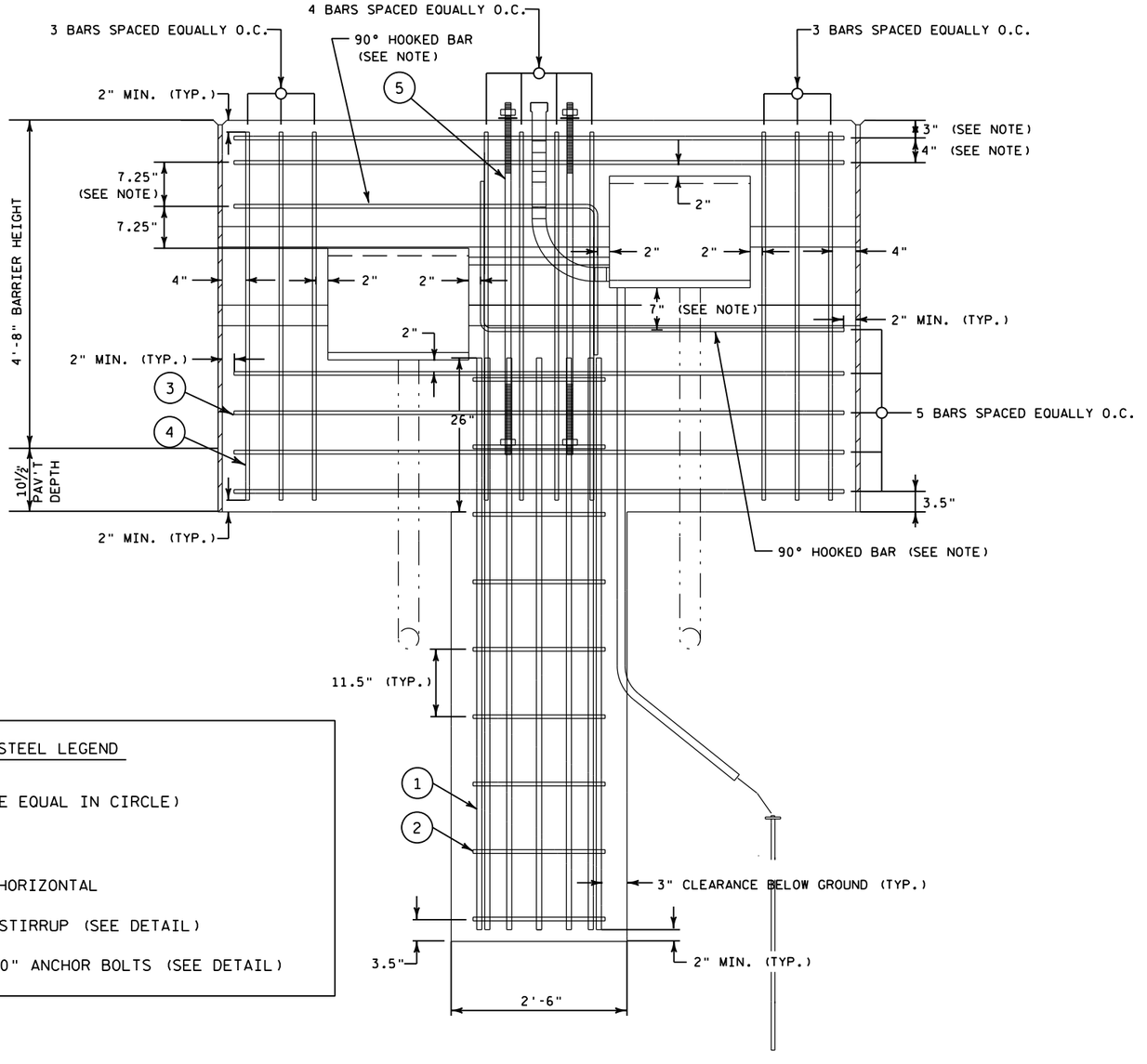
NOTE: ONE 90° BENT BAR SHALL BE STRAIGHT; OMIT OTHER FOR TYPE 1 BASES



SECTION B-B

BAR STEEL LEGEND

1. #7 BARS (SPACE EQUAL IN CIRCLE)
2. #5 HOOPS
3. #5 BARS WALL HORIZONTAL
4. #5 BARS WALL STIRRUP (SEE DETAIL)
5. 1" DIA. 5' - 0" ANCHOR BOLTS (SEE DETAIL)



SECTION A-A

REBAR DETAILS

CASE 3 - CONDUIT IN BARRIER BOTH SIDES

2

2

PLAN DETAIL LEGEND

AG01 BASE AGGREGATE DENSE 3/4-INCH

AP02 HMA PAVEMENT 2-INCH

AP3.5 HMA PAVEMENT 3 1/2-INCH

AP05 HMA PAVEMENT 5-INCH

BG26 CRASH CUSHIONS PERMANENT LOW MAINTENANCE

BG32 MGS GUARDRAIL 3

BG41 MGS GUARDRAIL TERMINAL TYPE 2

CB42 CONCRETE BARRIER TYPE S42

CB56 CONCRETE BARRIER TYPE S56 (36-INCH WIDE BASE)

CB106 CONCRETE BARRIER TRANSITION TYPE NJ32SF TO S42 (INCLUDES TRANSITION NJ32SF TO S36 AND TRANSITION S36 TO S42)

CB130 CONCRETE BARRIER TRANSITION TYPE V56 TO S56

CG29 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE G

CG40 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT

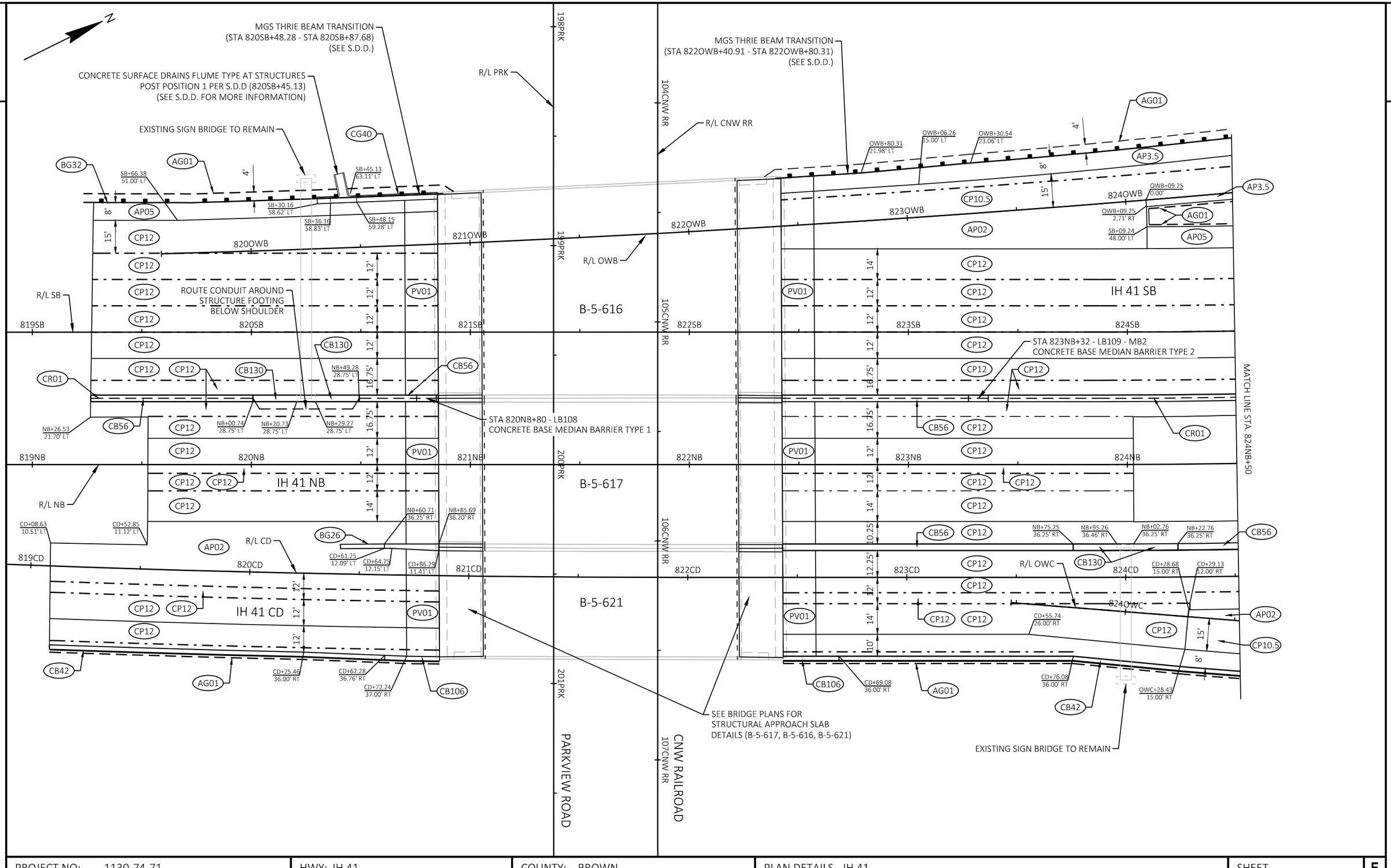
CP10.5 CONCRETE PAVEMENT 10 1/2-INCH SPECIAL

CP12 CONCRETE PAVEMENT 12-INCH SPECIAL

PV01 CONCRETE PAVEMENT APPROACH SLAB SPECIAL

CR01 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

SEE S.D.D. CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES AND S.D.D. RURAL DOWELED CONCRETE PAVEMENT FOR INFORMATION REGARDING DRILLED TIE BARS AND DRILLED DOWEL BARS



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN DETAILS - IH 41	SHEET 47	E

2

N

R=3150.62

OWB+06.26
3165.62' LT

BG32

4'

8'

12'

12'

END CONSTRUCTION
STA 828OWB+68.37
MATCH EXISTING
SAW CUT REQ'D

829OWB

R/L OWB

828OWB

OWB+46.41
24.00' LT

IH 41 SB ON-RAMP FROM ONEIDA ST

827OWB

AP3.5

CP10.5

CP10.5

826OWB

BG32

4'

AP3.5

825OWB

OWB+29.26
4.00' RT

OWB+67.16
3.00' RT

CG29

BG41

10'

14'

12'

12'

12'

1675'

AG01

OWB+99.29
5.74' RT

OWB+29.25
10.50' RT

AP05

SB+00
49.00' LT

SB+30
52.00' LT

SB+30.51
48.00' LT

CP12

CP12

CP12

CP12

CP12

CP12

CP12

829SB

828SB

827SB

826SB

825SB

IH 41 SB

R/L SB

CB56

CR01

829NB

828NB

827NB

826NB

825NB

IH 41 NB

R/L NB

MATCH LINE STA. 824NB+50

MATCH LINE STA. 830NB+00

STA 825NB+93 - LB110- MB2
CONCRETE BASE MEDIAN BARRIER TYPE 2

STA 828NB+53 - LB111- MB2
CONCRETE BASE MEDIAN BARRIER TYPE 2

830CD

829CD

828CD

827CD

826CD

825CD

IH 41 CD

R/L CD

NB+00.02
26.21' RT

CP12

CB56

CP12

CP12

12'

15'

CD+49.92
15.40' RT

825OWC

AP02

CP10.5

15'

8'

826OWC

827OWC

828OWC

829OWC

830OWC

IH 41 CD OFF-RAMP TO ONEIDA ST

R/L OWC

CB42

AG01

END CONSTRUCTION
STA 825OWC+49.90
MATCH EXISTING
SAW CUT REQ'D

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN DETAILS - IH 41	SHEET 48	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 02

PLOT DATE : 7/30/2025 3:22 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

830OWB

R/L OWB

BG32

AG01

AP05

CP12

CP12

CP12

830SB

831SB

832SB

833SB

834SB

835SB

IH 41 SB

R/L SB

CP12

CP12

CB56

MATCH LINE STA. 830NB+00

STA 831NB+14 - LB112- MB2
CONCRETE BASE MEDIAN BARRIER TYPE 2

CR01

STA 833NB+74 - LB113- MB2
CONCRETE BASE MEDIAN BARRIER TYPE 2

MATCH LINE STA. 835NB+50

NB

831NB

832NB

CP12

833NB

IH 41 NB

834NB

835NB

R/L NB

CP12

CP12

CP12

NB+19.79
26.13' RT

CB56

831CD

832CD

CP12

833CD

834CD

835CD

R/L CD

IH 41 CD

CP12

CP12

AP05

CD+45.67
28.00' RT

EAT TAPER
CD+29.16
27.00' RT

POST #1
CD+49.02
29.00' RT

POST #5
CD+73.82
28.06' RT

POST #9
CD+98.63
27.12' RT

AG01

BG32

MGS GUARDRAIL TERMINAL EAT
(STA 831CD+48.99 - STA 832CD+01.82)
(SEE S.D.D.)

4'

10'

14'

12'

12'

12'

16.75'

16.75'

12'

12'

14'

10.25'

12.25'

15'

12'

4'

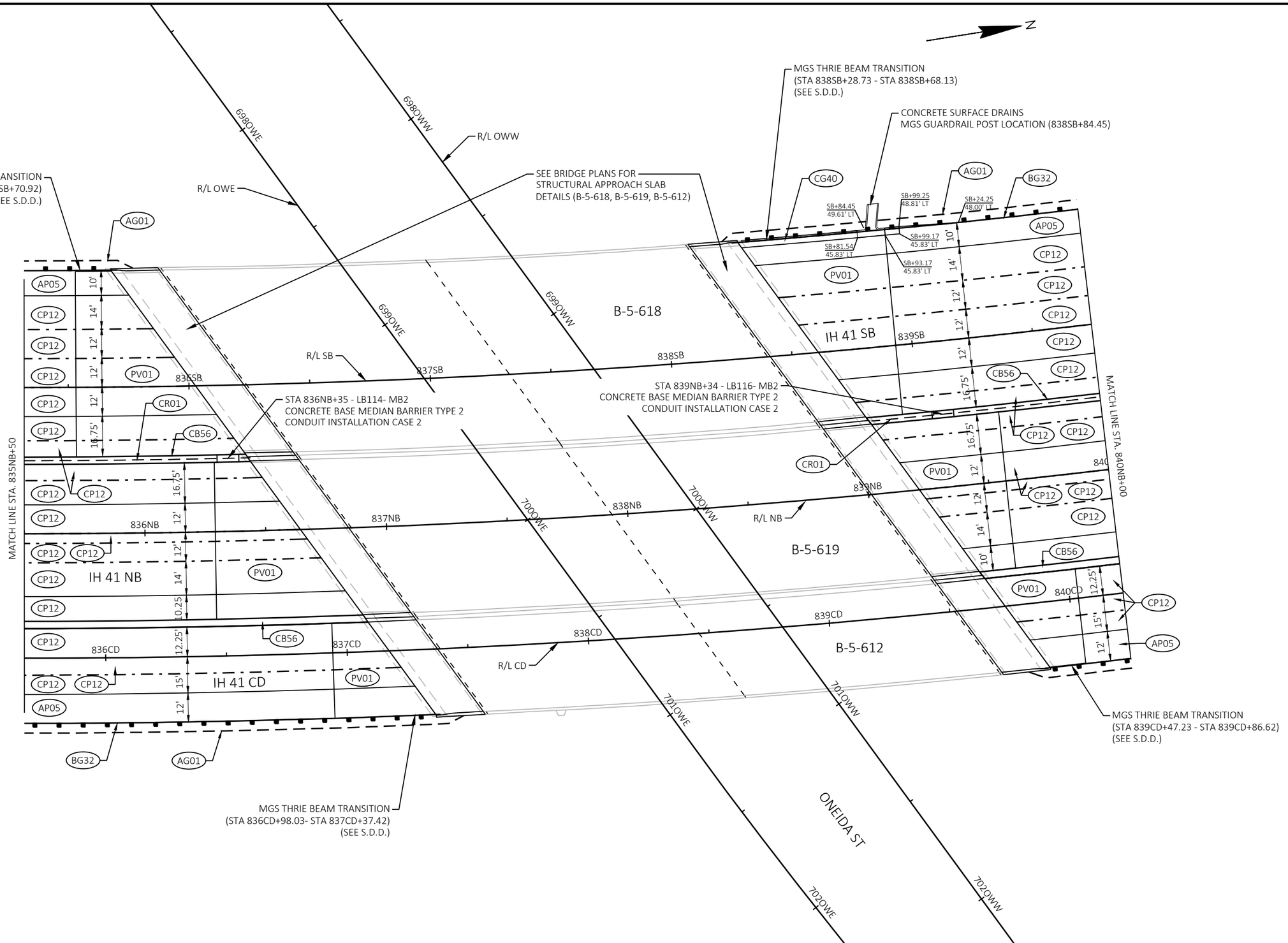
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN DETAILS - IH 41	SHEET 49	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 03

PLOT DATE : 4/15/2026 2:55 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

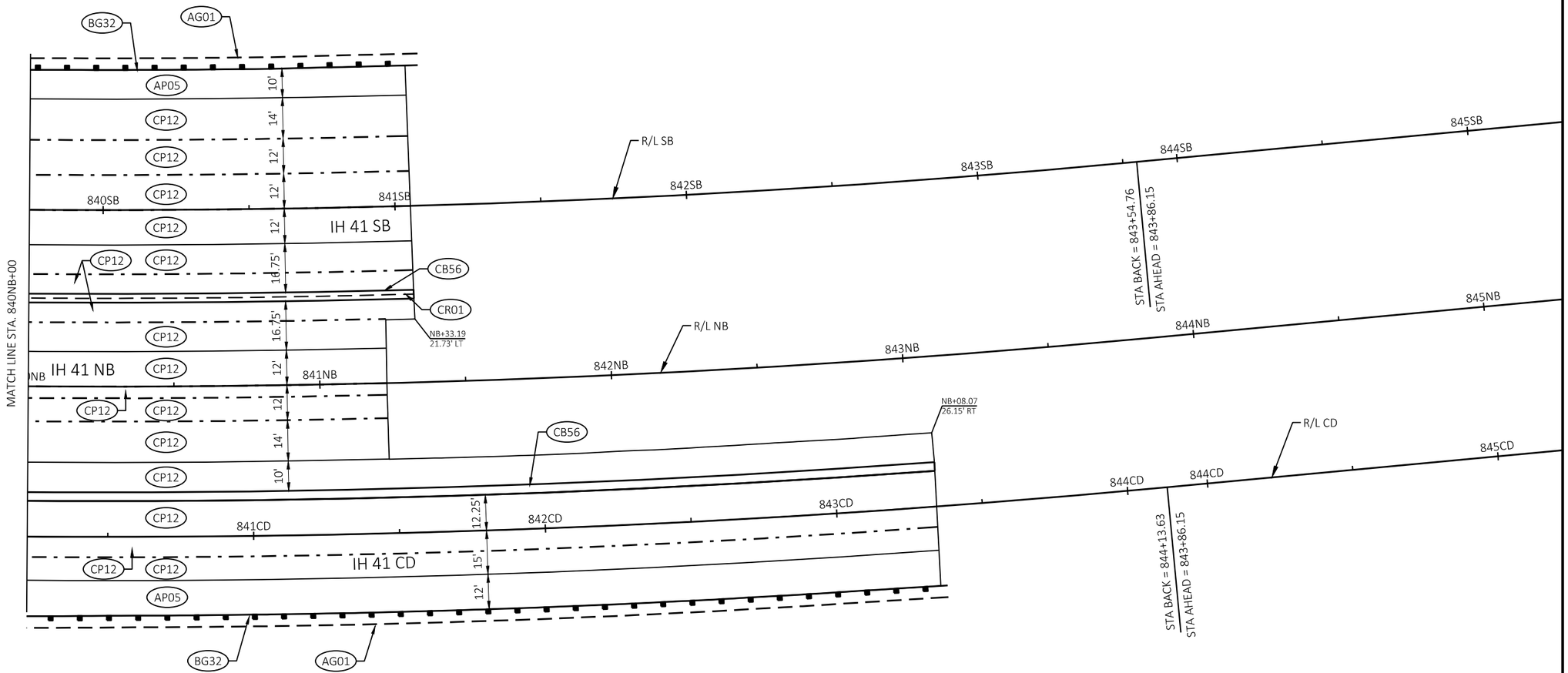
2



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN DETAILS - IH 41	SHEET 50	E

2

N

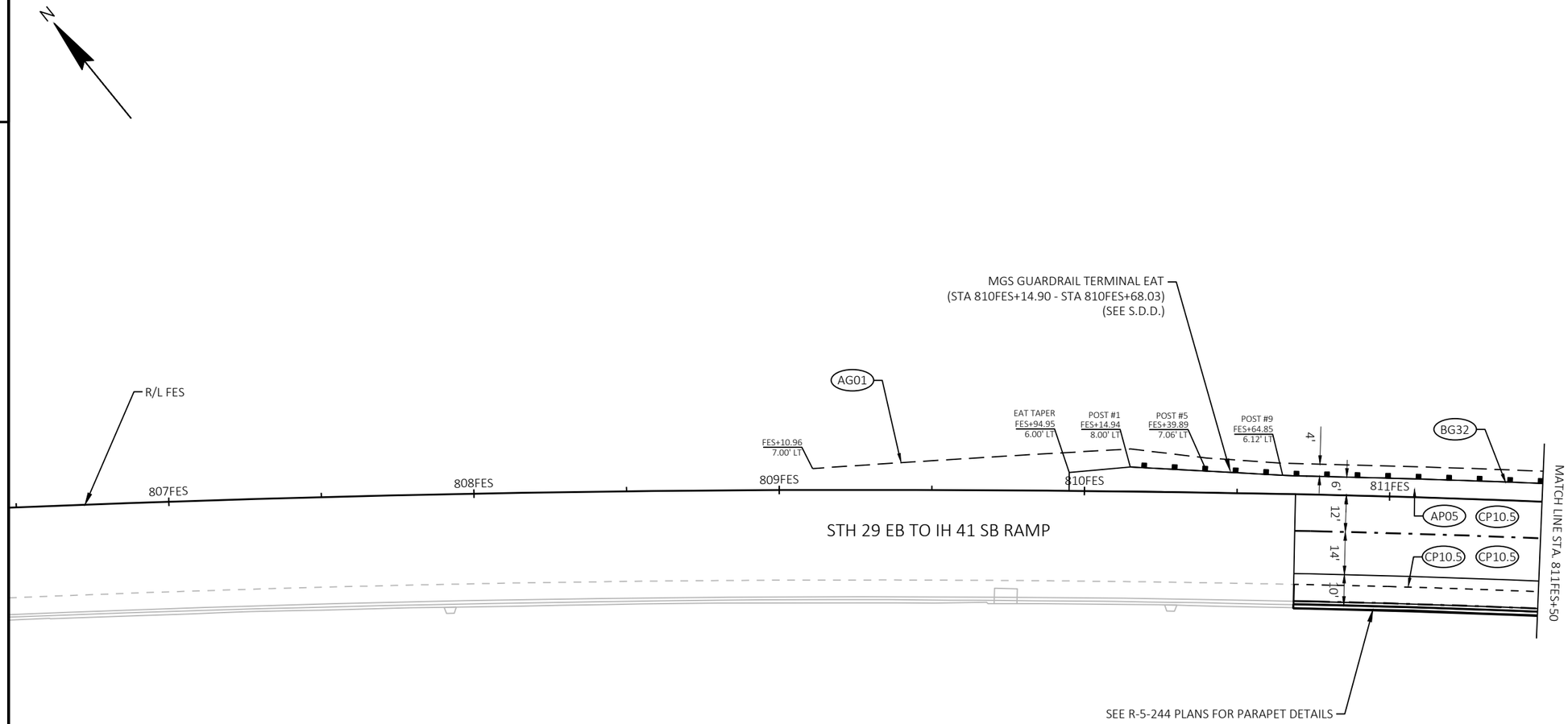


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN DETAILS - IH 41	SHEET 51	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 05

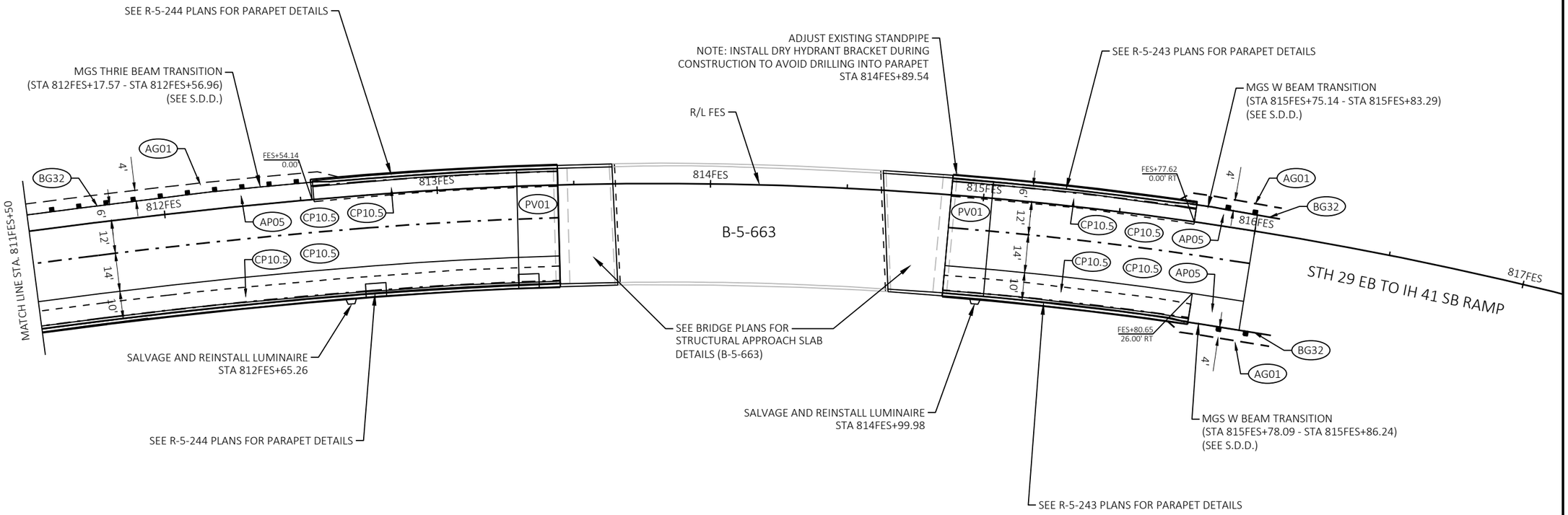
PLOT DATE : 7/30/2025 3:22 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN DETAILS - STH 29	SHEET 52	E

2


N
SEE R-5-244 PLANS FOR PARAPET DETAILS
MGS THRIE BEAM TRANSITION
(STA 812FES+17.57 - STA 812FES+56.96)
(SEE S.D.D.)
ADJUST EXISTING STANDPIPE
NOTE: INSTALL DRY HYDRANT BRACKET DURING
CONSTRUCTION TO AVOID DRILLING INTO PARAPET
STA 814FES+89.54
SEE R-5-243 PLANS FOR PARAPET DETAILS
MGS W BEAM TRANSITION
(STA 815FES+75.14 - STA 815FES+83.29)
(SEE S.D.D.)
R/L FES
MATCH LINE STA. 811FES+50
812FES
813FES
814FES
815FES
816FES
817FES
FES+54.14
0.00'
FES+77.62
0.00' RT
FES+80.65
26.00' RT
BG32
AG01
AP05
CP10.5
PV01
4'
6'
12'
14'
10'
B-5-663
STH 29 EB TO IH 41 SB RAMP
SEE BRIDGE PLANS FOR
STRUCTURAL APPROACH SLAB
DETAILS (B-5-663)
SALVAGE AND REINSTALL LUMINAIRE
STA 812FES+65.26
SEE R-5-244 PLANS FOR PARAPET DETAILS
SALVAGE AND REINSTALL LUMINAIRE
STA 814FES+99.98
MGS W BEAM TRANSITION
(STA 815FES+78.09 - STA 815FES+86.24)
(SEE S.D.D.)
SEE R-5-243 PLANS FOR PARAPET DETAILS

2

LEGEND

(X) LANE NUMBER (SEE SUPERELEVATION TABLE FOR CROSS SLOPES)

N

198PRK

199PRK

200PRK

201PRK

104CNW RR

105CNW RR

106CNW RR

107CNW RR

R/L PRK

R/L CNW RR

R/L SB

R/L NB

R/L CD

R/L OWB

B-5-616

B-5-617

B-5-621

PARKVIEW ROAD

CNW RAILROAD

IH 41 CD

IH 41 SB

IH 41 NB

819SB 820SB 821SB 822SB 823SB 824SB

819NB 820NB 821NB 822NB 823NB 824NB

819CD 820CD 821CD 822CD 823CD 824CD

820OWB 821OWB 822OWB 823OWB 824OWB

824OWC

MATCH LINE STA. 824NB+50

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PAVING GRADES - IH 41	SHEET 54 E

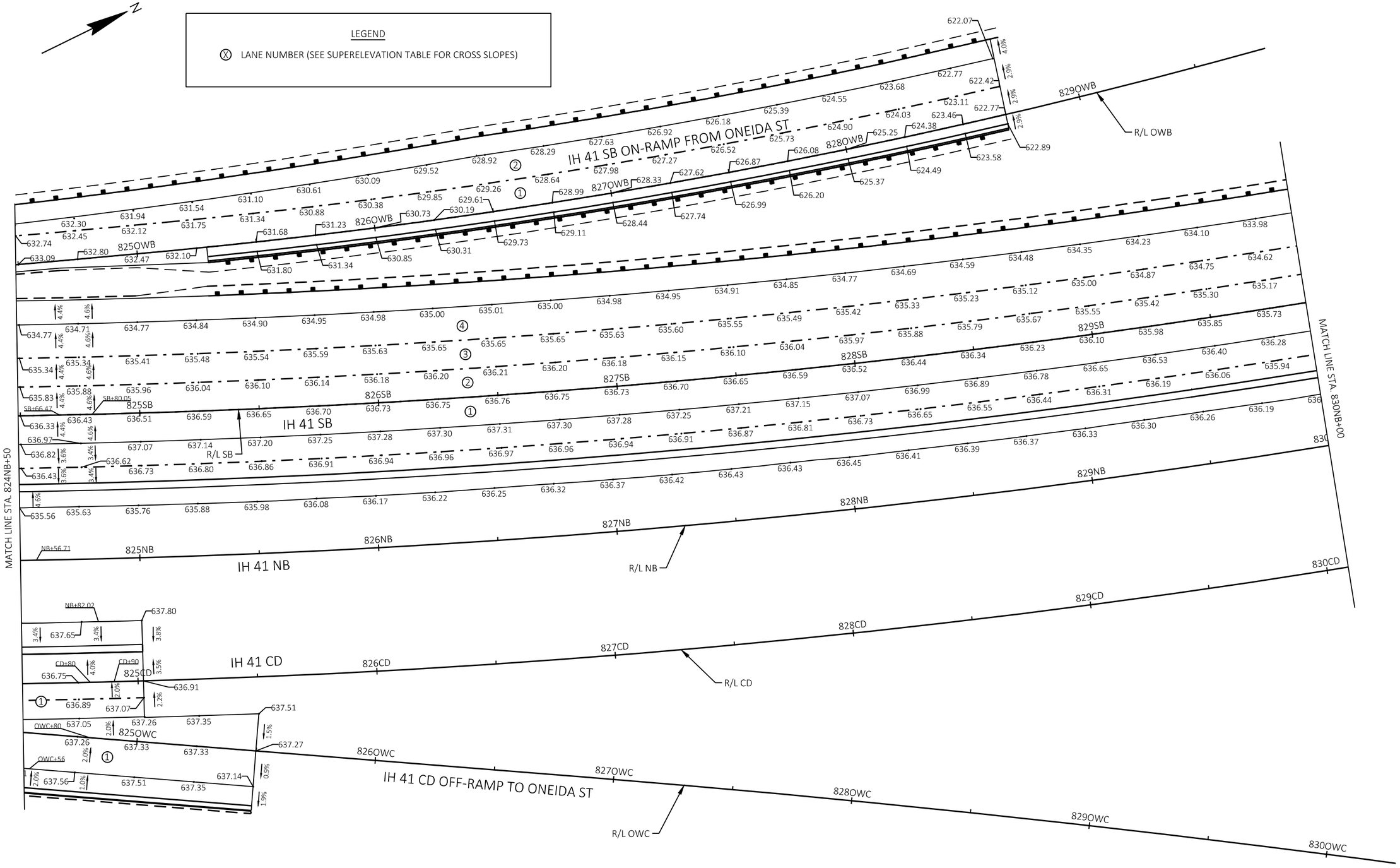
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021401-JD.DWG
LAYOUT NAME - 03

PLOT DATE : 7/9/2025 9:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

(X) LANE NUMBER (SEE SUPERELEVATION TABLE FOR CROSS SLOPES)



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PAVING GRADES - IH 41	SHEET 55	E

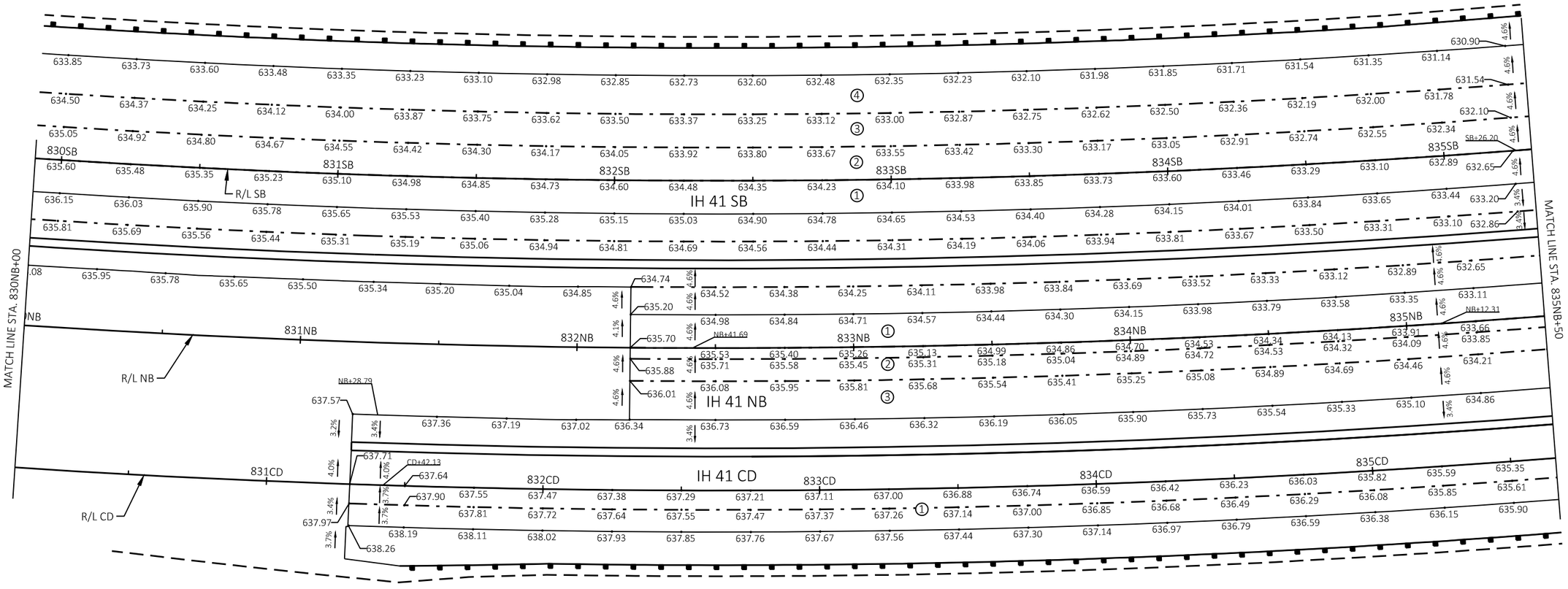
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021401-JD.DWG
LAYOUT NAME - 04

PLOT DATE : 7/9/2025 9:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

Ⓧ LANE NUMBER (SEE SUPERELEVATION TABLE FOR CROSS SLOPES)

N



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PAVING GRADES - IH 41	SHEET 56	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021401-JD.DWG
LAYOUT NAME - 05

PLOT DATE : 7/9/2025 9:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

6980WE

6980WW

R/L OWW

R/L OWE

6990WE

6990WW

6990WW

B-5-618

B-5-619

B-5-612

IH 41 SB

IH 41 NB

IH 41 CD

MATCH LINE STA. 835NB+50

MATCH LINE STA. 840NB+00

836SB

837SB

838SB

839SB

R/L SB

836NB

837NB

838NB

839NB

R/L NB

836CD

837CD

838CD

839CD

840CD

R/L CD

7000WE

7000WW

7010WE

7010WW

7020WE

7020WW

ONEIDA ST

624.85
626.12 625.78 625.25 625.06 624.51 623.96
626.29 626.14 625.61 625.21 625.85 625.16 624.61
626.85 626.25 625.70 625.71 625.16
626.41 626.81 626.26
627.26 626.81 626.26 625.71
627.36 626.81
627.67 627.36 626.96 626.81 626.26
627.91 627.51 627.03 626.47 625.92
628.06 627.19 625.67 625.27
627.61 626.40 625.84 625.73
626.75 626.13
627.09 626.29 626.85 626.28
626.84 626.68 626.87 626.47
627.49 627.03 627.40 627.23 626.83
627.62 627.88 627.88
628.03 627.48
628.33
628.93 628.30
629.12 628.56
629.35 628.85

630.67 630.42
631.32 630.94 631.07
631.87 631.62 631.38
632.35 632.10 631.75
632.90 632.65 632.34 632.21
632.56 632.31 632.00 631.76
632.39 631.80 631.56 631.29
632.10 631.67
632.85 632.26 631.96 631.59
632.56
633.40 631.95
633.11 632.81 632.44 632.15
633.58 633.30 633.00 632.60 632.31 632.10
633.67 633.37 632.92 632.63 632.39
633.95 632.89
634.59 634.31 634.01 633.48 633.19 632.93
633.32
635.09 634.81 634.52 634.22 633.90 633.65 633.58
635.35 635.07 634.78 634.48 634.16 633.90 633.87
635.64 635.37 635.08 634.77 634.45 634.20

SB+53.20 SB+68.40 SB+42.32
SB+93.17 SB+02.17
NB+02.31 NB+29.31 NB+44.42 NB+70.70
NB+42.51 NB+57.37
CD+74.03 CD+94.03 CD+03.59

LEGEND

(X) LANE NUMBER (SEE SUPERELEVATION TABLE FOR CROSS SLOPES)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PAVING GRADES - IH 41	SHEET 57	E

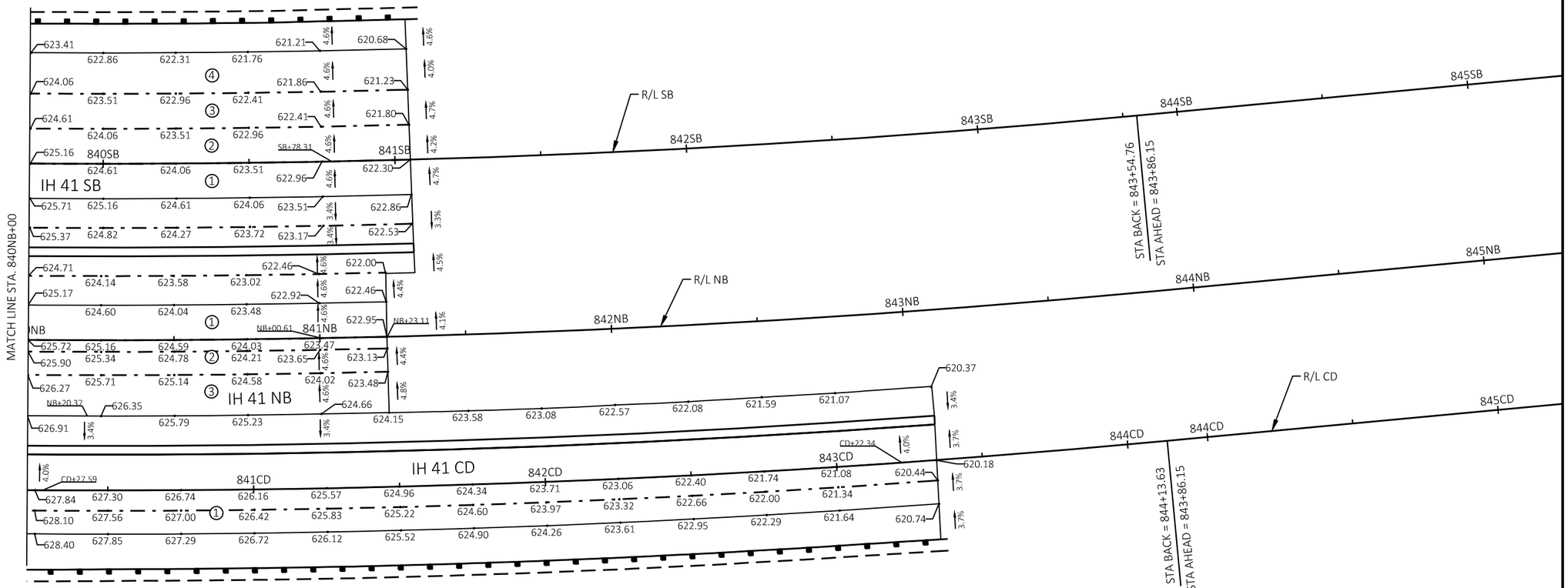
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021401-JD.DWG
LAYOUT NAME - 06

PLOT DATE : 2/24/2026 1:44 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

Ⓧ LANE NUMBER (SEE SUPERELEVATION TABLE FOR CROSS SLOPES)

N



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PAVING GRADES - IH 41	SHEET 58	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021401-JD.DWG
LAYOUT NAME - 07

PLOT DATE : 7/9/2025 9:28 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

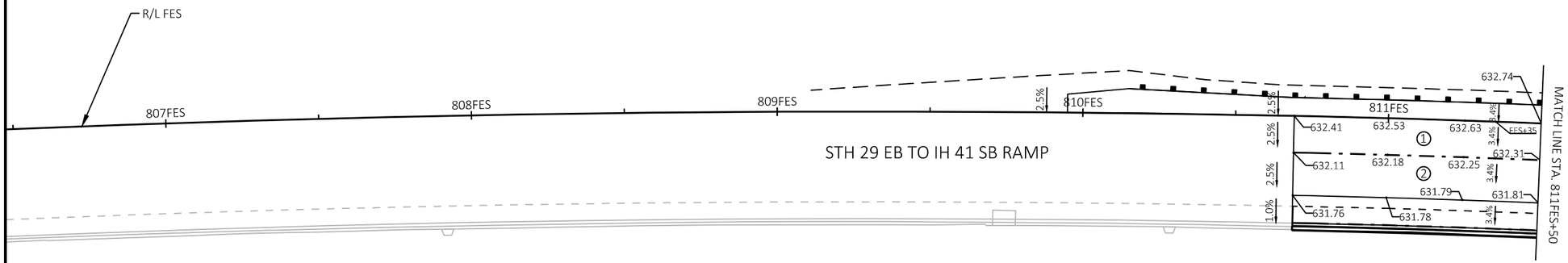
WISDOT/CADDS SHEET 42

2

N

LEGEND

Ⓧ LANE NUMBER (SEE SUPERELEVATION TABLE FOR CROSS SLOPES)



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PAVING GRADES - STH 29	SHEET 59	E

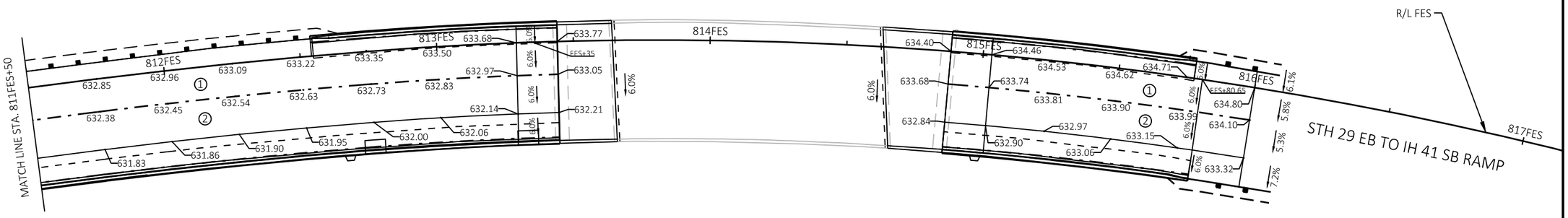
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021402-JD.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2025 9:42 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

Ⓧ LANE NUMBER (SEE SUPERELEVATION TABLE FOR CROSS SLOPES)



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PAVING GRADES - STH 29	SHEET 60	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\021402-JD.DWG
LAYOUT NAME - 02

PLOT DATE : 7/9/2025 9:43 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- INLET PROTECTION
- A B C D — INLET PROTECTION TYPE
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK

PARKVIEW ROAD

CNW RAILROAD

R/L CNW RR

R/L PRK

R/L SB

IH 41 SB

820OWB

820SB

B-5-616

105CNW RR

IH 41

820NB

200PRK

IH 41 NB

B-5-617

820CD

B-5-621

SLOPE INTERCEPT (TYP.)

825OWB

825SB

825NB

825CD

825OWC

RAMADA WAY

110CNW RR

R/L OWB

MATCH LINE STA. 830SB+00

830N

830CD

R/L CD

R/L NB

830OWC

R/L OWC

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EROSION CONTROL PLAN - IH 41 - STAGE 2	SHEET 61	E

2

N

6950WE

6950WW

R/L OWW

R/L OWE

ONEIDA STREET

IH 41 SB OFF-RAMP TO ONEIDA STREET

IH 41 SB ON-RAMP FROM ONEIDA STREET

00WB

MATCH LINE STA. 830SB+00

SIGN

IH 41 SB

835SB

835NB

IH 41 NB

835CD

R/L CD

IH 41 CD OFF-RAMP TO ONEIDA STREET

SLOPE INTERCEPT (TYP.)

SEE CONSTRUCTION DETAIL, TYPICAL SILT FENCE DETAIL AT PIPE INLET

B-5-618

B-5-619

B-5-612

7000WE

7000WW

840SB

840NB

840CD

R/L SB

R/L NB

IH 41 CD

7050WE

7050WW

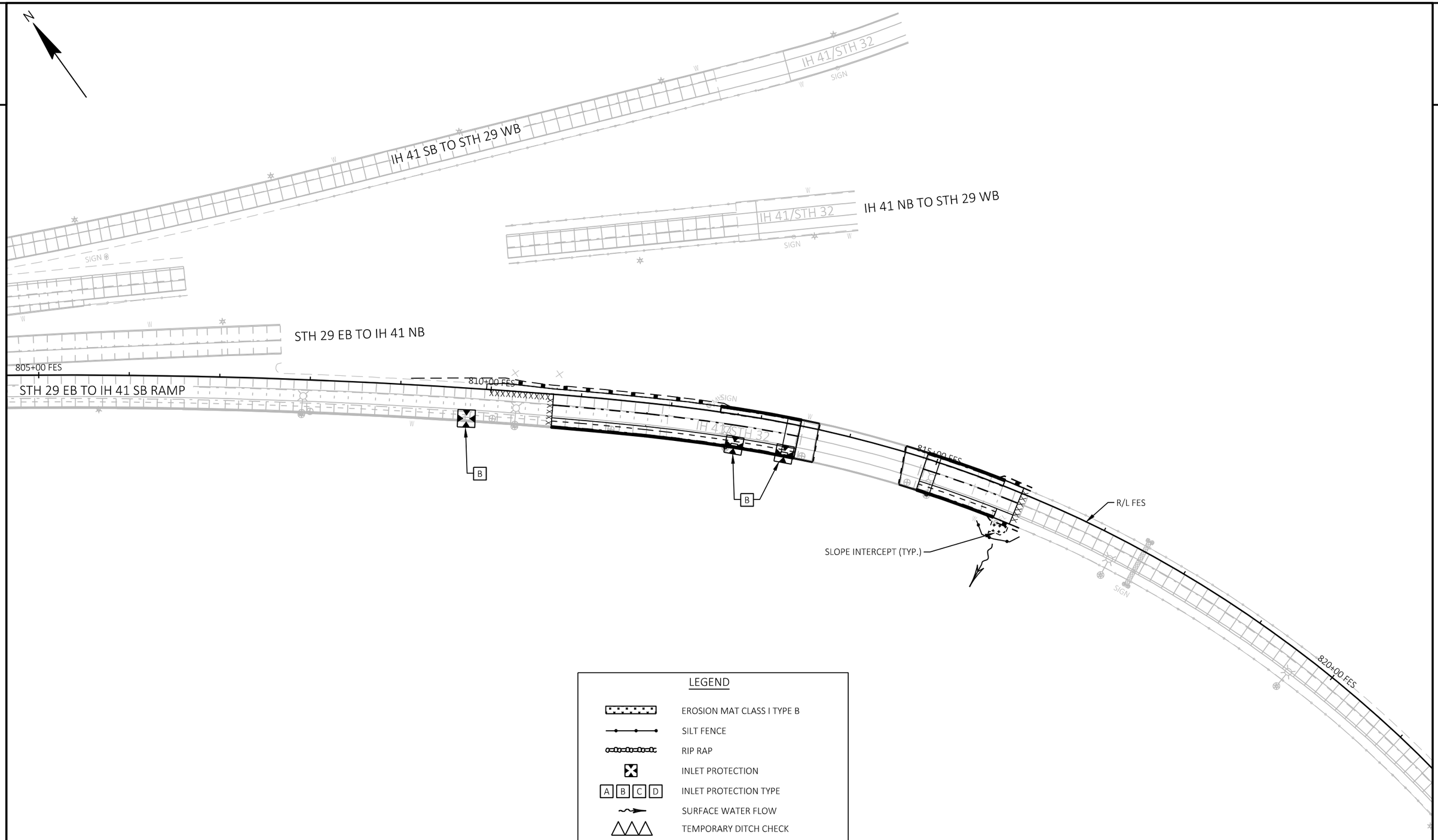
LEGEND

- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- INLET PROTECTION
- A B C D — INLET PROTECTION TYPE
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EROSION CONTROL PLAN - IH 41 - STAGE 2	SHEET 62	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\022001-EC2.DWG
LAYOUT NAME - 02

PLOT DATE : 7/28/2025 3:34 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT



LEGEND

- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- INLET PROTECTION
- A B C D — INLET PROTECTION TYPE
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK

2

N

R/L CNW RR

PARKVIEW ROAD

CNW RAILROAD

SLOPE INTERCEPT (TYP.)

SEE S.D.D. CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES FOR RIPRAP INFORMATION

R/L OWB

C

820OWB

825OWB

R/L SB

IH 41 SB

820SB

B-5-616

105CNW RR

825SB

MATCH LINE STA. 830SB+00

830N

IH 41

820NB

825NB

B

R/L CD

R/L NB

IH 41 NB

200PRK

B-5-617

820CD

825CD

B-5-621

825OWC

830CD

SIGN

830OWC

R/L OWC

B

RAMADA WAY

R/L PRK

110CNW RR

LEGEND

- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- INLET PROTECTION
- A B C D — INLET PROTECTION TYPE
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EROSION CONTROL PLAN - IH 41 - STAGE 3	SHEET 64	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\022001-EC3.DWG
LAYOUT NAME - 01

PLOT DATE : 7/15/2025 3:33 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

6950WE

6950WW

R/L OWW

R/L OWE

ONEIDA STREET

SEE S.D.D. CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES FOR RIPRAP INFORMATION

SLOPE INTERCEPT (TYP.)

IH 41 SB ON-RAMP FROM ONEIDA STREET

0OWB

0SB

IH 41 SB

835SB

835NB

IH 41 NB

835CD

MATCH LINE STA. 830SB+00

R/L CD

B

B

B-5-618

B-5-619

B-5-612

7000WE

7000WW

IH 41

IH 41

IH 41

R/L SB

R/L NB

840SB

840NB

840CD

IH 41 CD

C

B

7050WE

7050WW

IH 41 CD OFF-RAMP TO ONEIDA STREET

LEGEND

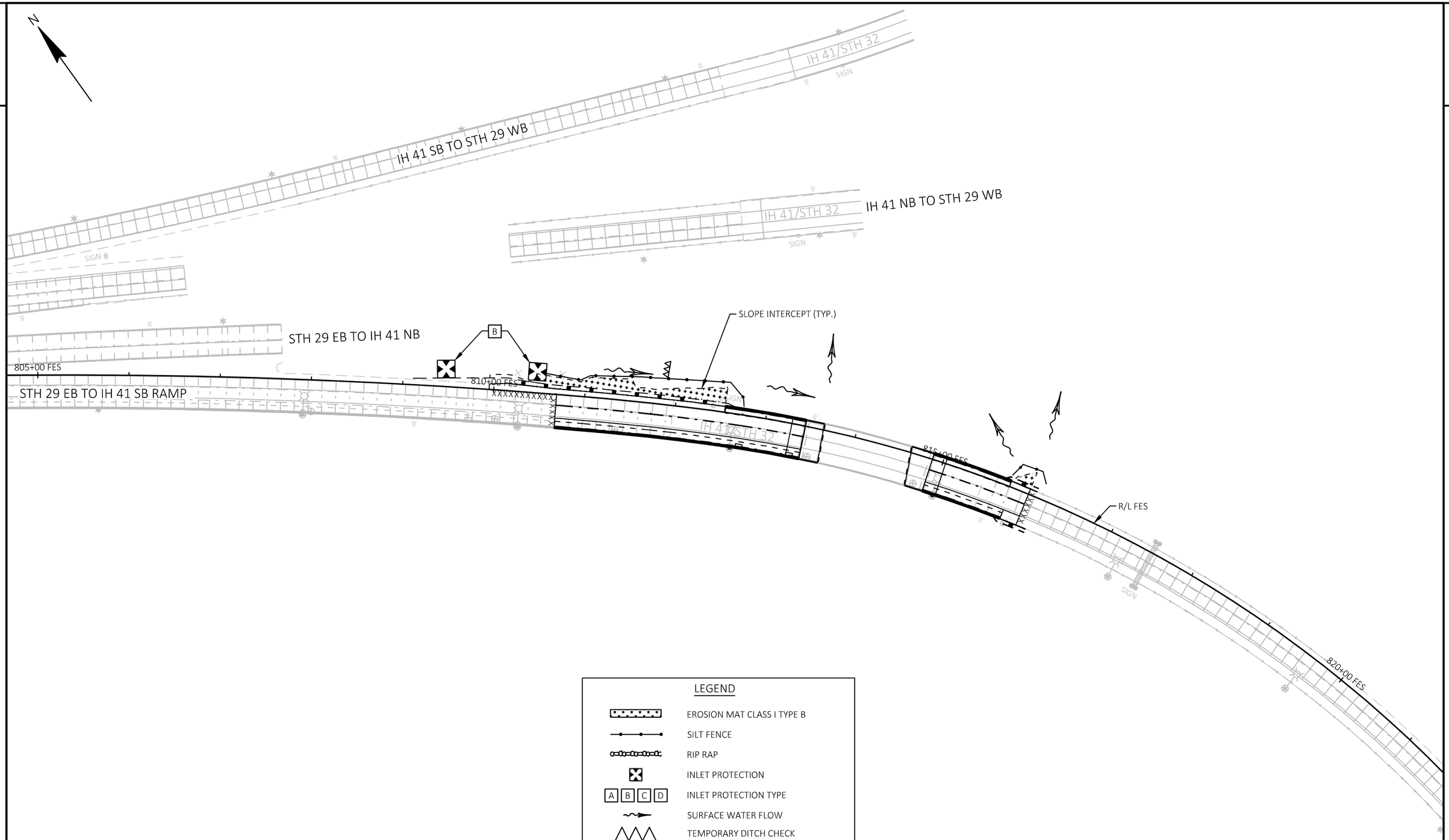
- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- INLET PROTECTION
- A B C D — INLET PROTECTION TYPE
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EROSION CONTROL PLAN - IH 41 - STAGE 3	SHEET 65	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\022001-EC3.DWG
LAYOUT NAME - 02

PLOT DATE : 7/15/2025 3:33 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



LEGEND

- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- INLET PROTECTION
- A B C D — INLET PROTECTION TYPE
- SURFACE WATER FLOW
- TEMPORARY DITCH CHECK

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	EROSION CONTROL PLAN - STH 29 - STAGE 3	SHEET 66	E

2

2

IH 41 SB

775SB

780SB

R/L SB

785SB

MATCH LINE STA. 790NB+00

775NB

780NB

IH 41 NB

R/L NB

NB+24.17
1' LT

785NB

2L

BEGIN PAVEMENT MARKING
MATCH EXISTING

ASHLAND AVE

PAVEMENT MARKING AND SIGNING LEGEND

	EXISTING SIGN TO BE MOVED		
XM-XX	DENOTES MOVE SIGN NUMBER		
1W	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)	W1	MARKING LINE EPOXY 4-INCH (WHITE)
1Y	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)	Y1	MARKING LINE EPOXY 4-INCH (YELLOW)
2L	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP	WD	MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)	T	MARKING LINE EPOXY 8-INCH (WHITE)
3D	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP	TD	MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - IH 41	SHEET 67	E

2

2

GLORY RD

BEGIN PAVEMENT MARKING
MATCH EXISTING

SB+77.53
11' LT

1W

SB+37.42
35' LT

3D

SB+47.57
23' LT

R/L SB

800SB

795SB

IH 41 SB

NB+50.16
1' LT

R/L NB

800NB

795NB

IH 41 NB

NB+51.53
1' LT

NB+50.25
11' RT

2L

2L

MATCH LINE STA. 790NB+00

MATCH LINE STA. 805NB+00

PAVEMENT MARKING AND SIGNING LEGEND

EXISTING SIGN TO BE MOVED

XM-XX — DENOTES MOVE SIGN NUMBER

1W	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)	W1	MARKING LINE EPOXY 4-INCH (WHITE)
1Y	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)	Y1	MARKING LINE EPOXY 4-INCH (YELLOW)
2L	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP	WD	MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)	T	MARKING LINE EPOXY 8-INCH (WHITE)
3D	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP	TD	MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - IH 41	SHEET 68	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\023201-PSM.DWG
LAYOUT NAME - 02
PLOT DATE : 6/22/2026 12:46 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

NOTE: THE PROPOSED LINE WORK IS SCREENED FOR CLARITY

N

MATCH LINE STA. 805NB+00

MATCH LINE STA. 820NB+00

R/L OWB

(END) 3D 3 (BEGIN)

SB+77.01 35' LT

SB+13.35 35' LT

SB+27.27 12' LT

SB+67.50 35' LT

1W

3D

SB+76.59 23' LT

2L

SB+41.84 1' RT

R/L SB

810SB

815SB

NB+10.05 12' LT

NB+65.31 1' LT

R/L NB

SB+09.87 12' RT

1Y

NB+52.77 0' LT

2L

810NB

810CD

815NB

815CD

NB+75.29 24' RT

NB+75.16 37' RT

3

R/L CD

CD+48.95 1' RT

1W

CD+92.10 12' RT

3

IH 41 RAMP CD

CD+09.19 11' RT

3

PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - IH 41	SHEET 69	E

2

NOTE: THE PROPOSED LINE WORK IS SCREENED FOR CLARITY

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

PARKVIEW RD

CNW RAILROAD

MATCH LINE STA. 820NB+00

MATCH LINE STA. 833NB+00

IH 41 SB ON-RAMP FROM ONEIDA STREET

IH 41 SB

IH 41 NB

IH 41 RAMP CD

IH 41 CD OFF-RAMP TO ONEIDA STREET

RAMADA WAY

B-5-616

B-5-617

B-5-621

825OWB

825SB

825NB

825CD

825OWC

830OWB

830SB

830NB

830CD

OWB+68.90
22' LT

OWB+68.63
11' LT

OWB+68.39
1' LT

OWB+61.81
0' RT

OWB+53.04
11' LT

SB+64.81
36' LT

NB+02.81
1' LT

NB+19.23
1' LT

CD+02.22
11' RT

CD+30.01
11' RT

OWC+47.65
0'

OWC+49.90
0' LT

OWC+49.90
15' RT

R/L OWB

R/L SB

R/L NB

R/L CD

R/L OWC

END PAVEMENT MARKING
MATCH EXISTING

END PAVEMENT MARKING
MATCH EXISTING

NORTH 41 MILE 164 .2 D10-5

NORTH 41 MILE 164 .2 D10-5

W4-2R

1M-01

1M-02

1M-03

EXIT 164A

E5-1B

PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - IH 41	SHEET 70	E

PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

NOTE: THE PROPOSED LINE WORK IS SCREENED FOR CLARITY

N

IH 41 SB OFF-RAMP TO ONEIDA STREET

MATCH LINE STA. 833NB+00

IH 41 NB

835SB

835NB

835CD

R/L CD

840SB

SB+05.35
12' LT

R/L SB

IH 41 SB

845SB

SB+29.76
36' LT

840NB

NB+23.01
1' LT

R/L NB

NB+32.56
1' LT

845NB

NB+61.25
11' RT

NB+28.66
24' RT

840CD

IH 41 RAMP CD

845CD

CD+34.11
11' RT

CD+61.63
12' RT

MATCH LINE STA. 847NB+00

(END) 1W W1 (BEGIN)
(END) 2L WD (BEGIN)
(END) WD 2L (BEGIN)
(END) W1 1W (BEGIN)
(END) 1W 3 (BEGIN)
(END) 1Y Y1 (BEGIN)
(END) Y1 1Y (BEGIN)
(END) 1W W1 (BEGIN)
Y1 (BEGIN)
1M-04
1M-05
(END) 1W W1 (BEGIN)
(END) Y1
(END) 1W W1 (BEGIN)
(END) WD 2L (BEGIN)
(END) 2L WD (BEGIN)
3

NORTH 41 MILE 164 .4 CD

W4-3R

IH 41 CD ON-RAMP FROM ONEIDA STREET

IH 41 CD OFF-RAMP TO ONEIDA STREET

ONEIDA STREET

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - IH 41	SHEET 71	E

2

2

MATCH LINE STA. 847NB+00

N

3

SB+13.06
36' LT

END PAVEMENT MARKING
MATCH EXISTING

SB+13.26
23' LT

SB+07.15
11' LT

SB+48.69
23' LT

2L

SB+85.89
22' LT

IH 41 SB

850SB

855SB

860SB

SB+81.56
11' LT

R/L SB

2L

1Y

NB+23.10
13' LT

SB+77.65
12' RT

SB+10.74
1' RT

850NB

855NB

860NB

IH 41 NB

R/L NB

NB+96.11
1' LT

END PAVEMENT MARKING
MATCH EXISTING

1Y

CD+91.71
0' RT

850CD

855CD

860CD

IH 41 RAMP CD

R/L CD

CD+94.21
12' RT

END PAVEMENT MARKING
MATCH EXISTING

3

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - IH 41	SHEET 72	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\023201-PSM.DWG
LAYOUT NAME - 06

PLOT DATE : 6/22/2026 12:47 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

NORTH RD

SB+54.49
11' LT

2L

SB+74.50
11' LT

905SB

910SB

915SB

IH 41 SB

R/L SB

905NB

910NB

915NB

IH 41 NB

R/L NB

IH 41 RAMP CD

PILGRIM WAY

MATCH LINE STA. 920NB+00

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - IH 41	SHEET 73	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\023201-PSM.DWG
LAYOUT NAME - 07

PLOT DATE : 6/22/2026 12:47 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

NORTH RD

CORMIER RD

PILGRIM WAY

IH 41 SB

IH 41 NB

MATCH LINE STA. 920NB+00

925SB

930SB

935SB

925NB

930NB

935NB

R/L SB

R/L NB

SB+14.39
1' RT

SB+93.43
0

SB+34.61
1' RT

SB+34.39
1' RT

2L

(END) 2L WD (BEGIN)

(END) WD 2L (BEGIN)

END PAVEMENT MARKING
MATCH EXISTING

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

2

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

2

2

N

SHAWANO AVE

STH 29 WB

STH 29 EB

MATCH LINE

MATCH LINE STA. 798FES+00

R/L FES

FES+19.09
24' RT

FES+54.22
12' RT

2L

1W

CARDINAL LN

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

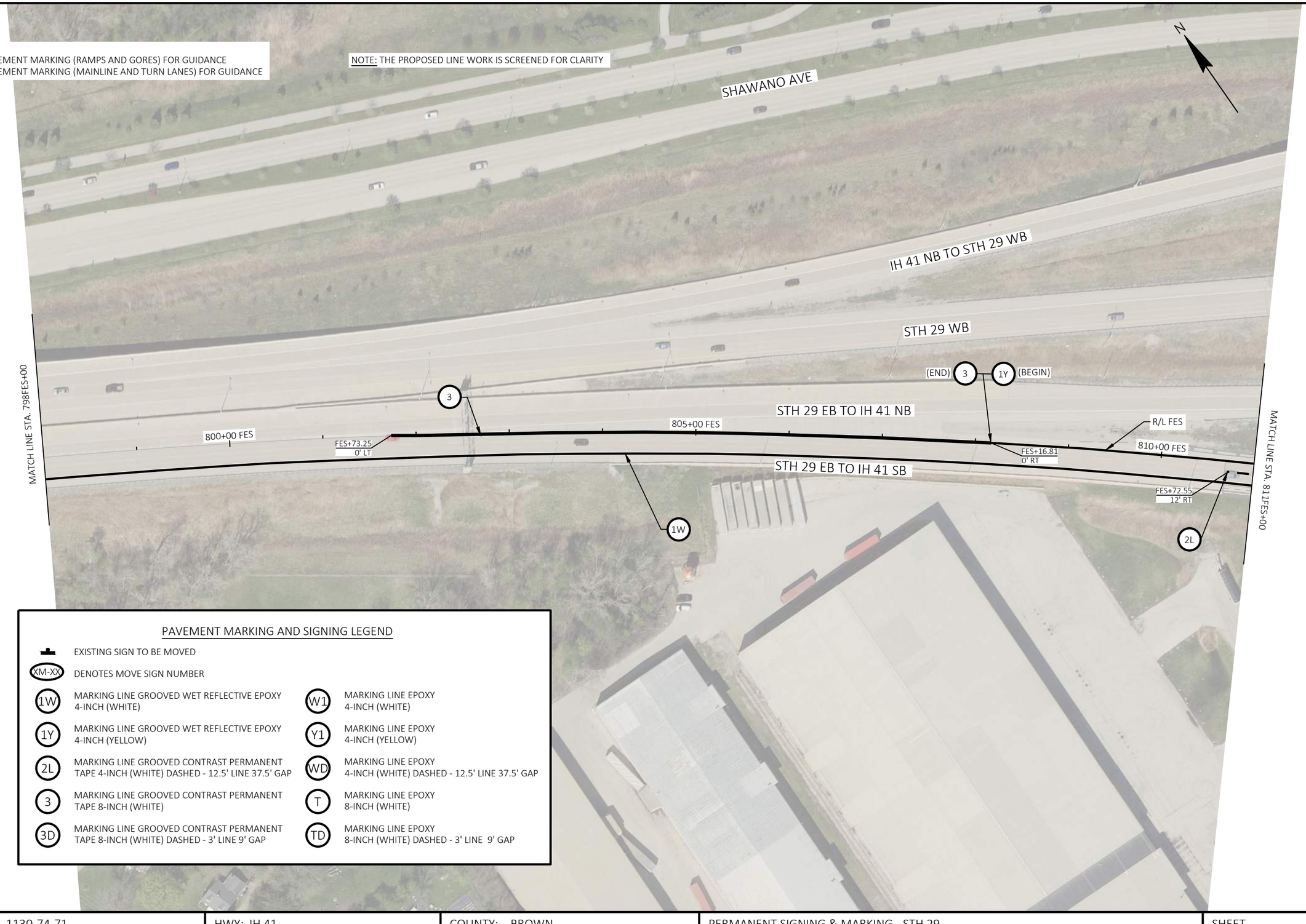
PAVEMENT MARKING AND SIGNING LEGEND

	EXISTING SIGN TO BE MOVED		
XM-XX	DENOTES MOVE SIGN NUMBER		
1W	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)	W1	MARKING LINE EPOXY 4-INCH (WHITE)
1Y	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)	Y1	MARKING LINE EPOXY 4-INCH (YELLOW)
2L	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP	WD	MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)	T	MARKING LINE EPOXY 8-INCH (WHITE)
3D	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP	TD	MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - STH 29	SHEET 76	E

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

NOTE: THE PROPOSED LINE WORK IS SCREENED FOR CLARITY



PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - STH 29	SHEET 77	E

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

NOTE: THE PROPOSED LINE WORK IS SCREENED FOR CLARITY

IH 41 SB TO STH 29 WB

IH 41 NB TO STH 29 WB

STH 29 EB TO IH 41 NB

STH 29 EB TO IH 41 SB

RAMP 32 MILE 257 .4 E-S

1M-06

2L

(END) 1Y
(BEGIN) Y1

2L (END)
WD (BEGIN)

1Y (BEGIN)
Y1 (END)

815+00 FES

820+00 FES

FES+44.13
12' RT

FES+88.01
12' RT

(END) WD 2L (BEGIN)

(END) 1W W1 (BEGIN)

W1 (END)
1W (BEGIN)

R/L FES

MATCH LINE STA. 811+65+00

MATCH LINE STA. 824FES+00

DUCK CREEK PKWY

PAVEMENT MARKING AND SIGNING LEGEND

- EXISTING SIGN TO BE MOVED
- XM-XX — DENOTES MOVE SIGN NUMBER
- 1W — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)
- W1 — MARKING LINE EPOXY 4-INCH (WHITE)
- 1Y — MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)
- Y1 — MARKING LINE EPOXY 4-INCH (YELLOW)
- 2L — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- WD — MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
- 3 — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)
- T — MARKING LINE EPOXY 8-INCH (WHITE)
- 3D — MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP
- TD — MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - STH 29	SHEET 78	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\023202-PSM.DWG
LAYOUT NAME - 04
PLOT DATE : 6/22/2026 12:35 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

NOTES:
SEE SDD PAVEMENT MARKING (RAMPS AND GORES) FOR GUIDANCE
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE

N

IH 41 NB TO STH 29 WB

IH 41 NB

IH 41 SB

STH 29 EB TO IH 41 SB

1085

1085SB

1080

1080SB

1075

1075SB

1Y

1W

END PAVEMENT MARKING
MATCH EXISTING

FES+33.96
0' LT

FES+37.73
24' RT

825+00 FES

830+00 FES

835+00 FES

R/L FES

MATCH LINE STA. 824FES+00

PAVEMENT MARKING AND SIGNING LEGEND

EXISTING SIGN TO BE MOVED

XM-XX — DENOTES MOVE SIGN NUMBER

1W	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)	W1	MARKING LINE EPOXY 4-INCH (WHITE)
1Y	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)	Y1	MARKING LINE EPOXY 4-INCH (YELLOW)
2L	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP	WD	MARKING LINE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
3	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE)	T	MARKING LINE EPOXY 8-INCH (WHITE)
3D	MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (WHITE) DASHED - 3' LINE 9' GAP	TD	MARKING LINE EPOXY 8-INCH (WHITE) DASHED - 3' LINE 9' GAP

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT SIGNING & MARKING - STH 29	SHEET 79	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\023202-PSM.DWG
LAYOUT NAME - 05
PLOT DATE : 6/22/2026 12:35 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

BAETEN RD

NORTH RD

S ASHLAND AVE

1Y

S ASHLAND AVE

1W

2L

3

CANADIAN NATIONAL RAILROAD

MATCH LINE

NOTES:
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE
SEE SDD SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSINGS

PAVEMENT MARKING LEGEND

1W	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)	2L	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
1Y	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)	3	MARKING RAILROAD CROSSING EPOXY

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT MARKING - ASHLAND AVENUE	SHEET 80 E

2

2

NORTH RD

HANSEN RD

S ASHLAND AVE

MATCH LINE

1Y

3

2L

1W

S ASHLAND AVE

CANADIAN NATIONAL RAILROAD

N

PAVEMENT MARKING LEGEND

1W	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE)	2L	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) DASHED - 12.5' LINE 37.5' GAP
1Y	MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (YELLOW)	3	MARKING RAILROAD CROSSING EPOXY

NOTES:
SEE SDD PAVEMENT MARKING (MAINLINE AND TURN LANES) FOR GUIDANCE
SEE SDD SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSINGS

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PERMANENT MARKING - ASHLAND AVENUE	SHEET 81	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\023203-PSM.DWG
LAYOUT NAME - 02
PLOT DATE : 6/22/2026 12:33 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

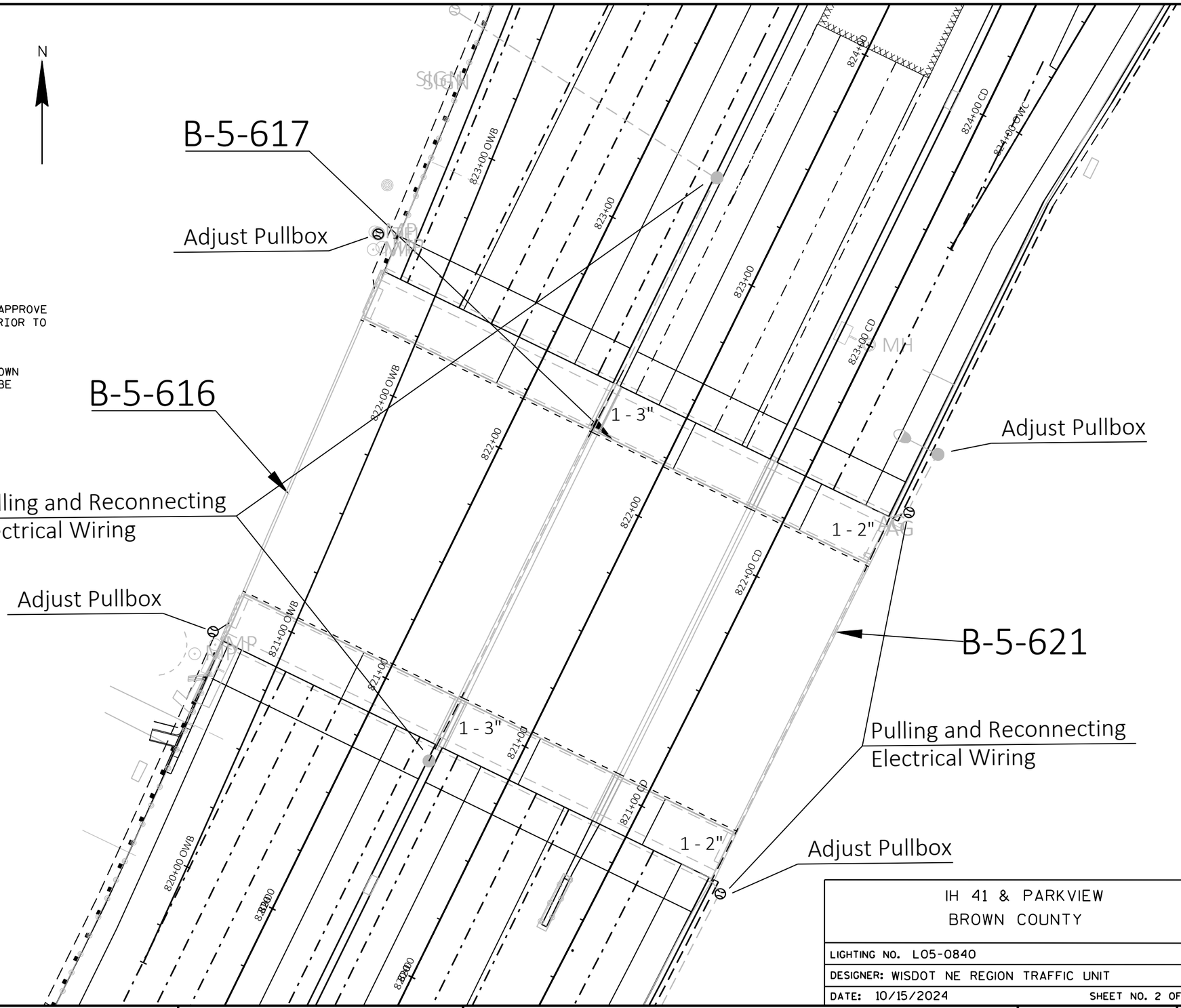
- 2" CONDUIT, NON-METALLIC (unless otherwise noted)
- LIGHTING UNIT
- PULL BOX 24" X 42"
- UTILITY POLE
- ELECTRIC, UNDERGROUND — E —
- ELECTRIC, OVERHEAD — OH —

N

NOTES:

WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT THEM 3 DAYS IN ADVANCE.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.



2

IH 41 & PARKVIEW
BROWN COUNTY

LIGHTING NO. L05-0840
DESIGNER: WISDOT NE REGION TRAFFIC UNIT
DATE: 10/15/2024 SHEET NO. 2 OF 3

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAIL - LIGHTING B-5-621	SHEET 82	E

FILE NAME : C:\USERS\DOTMXT\DESKTOP\TEMP\L05-0823.DWG
LAYOUT NAME - B-05-621
PLOT DATE : 2/19/2025 2:07 PM
PLOT BY : TALCOTT, MATTHEW J
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

LEGEND

2" CONDUIT, NON-METALLIC (unless otherwise noted)

LIGHTING UNIT

PULL BOX 24" X 42"

UTILITY POLE

ELECTRIC, UNDERGROUND — E —

ELECTRIC, OVERHEAD — OH —

Salvage and reinstall Luminaire

Pulling and Reconnecting Electrical Wiring

LB1

1 - 2"

R-5-244

B-5-663

Salvage and reinstall Luminaire

Pulling and Reconnecting Electrical Wiring

LB2

1 - 2"

R-5-243

N

IH 41/STH 32

MHSIGN

813+00 FES

814+00 FES

815+00 FES

818+00 FES

105

110

NOTES:

WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT THEM 3 DAYS IN ADVANCE.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

STH 29 & DUCK CREEK
BROWN COUNTY

LIGHTING NO. L05-0823

DESIGNER: WISDOT NE REGION TRAFFIC UNIT

DATE: 10/15/2024 SHEET NO. 1 OF 3

PROJECT NO: 1130-74-71	HWY: STH 29	COUNTY: BROWN	CONSTRUCTION DETAIL - LIGHTING B-5-663	SHEET 83	E

FILE NAME : C:\USERS\DOTMXT\DESKTOP\TEMP\L05-0823.DWG
LAYOUT NAME - B-05-663

PLOT DATE : 2/19/2025 2:07 PM PLOT BY : TALCOTT, MATTHEW J PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

2" CONDUIT, NON-METALLIC (unless otherwise noted) ——— – – –

LIGHTING UNIT ———

PULL BOX 24" X 42" ———

UTILITY POLE ———

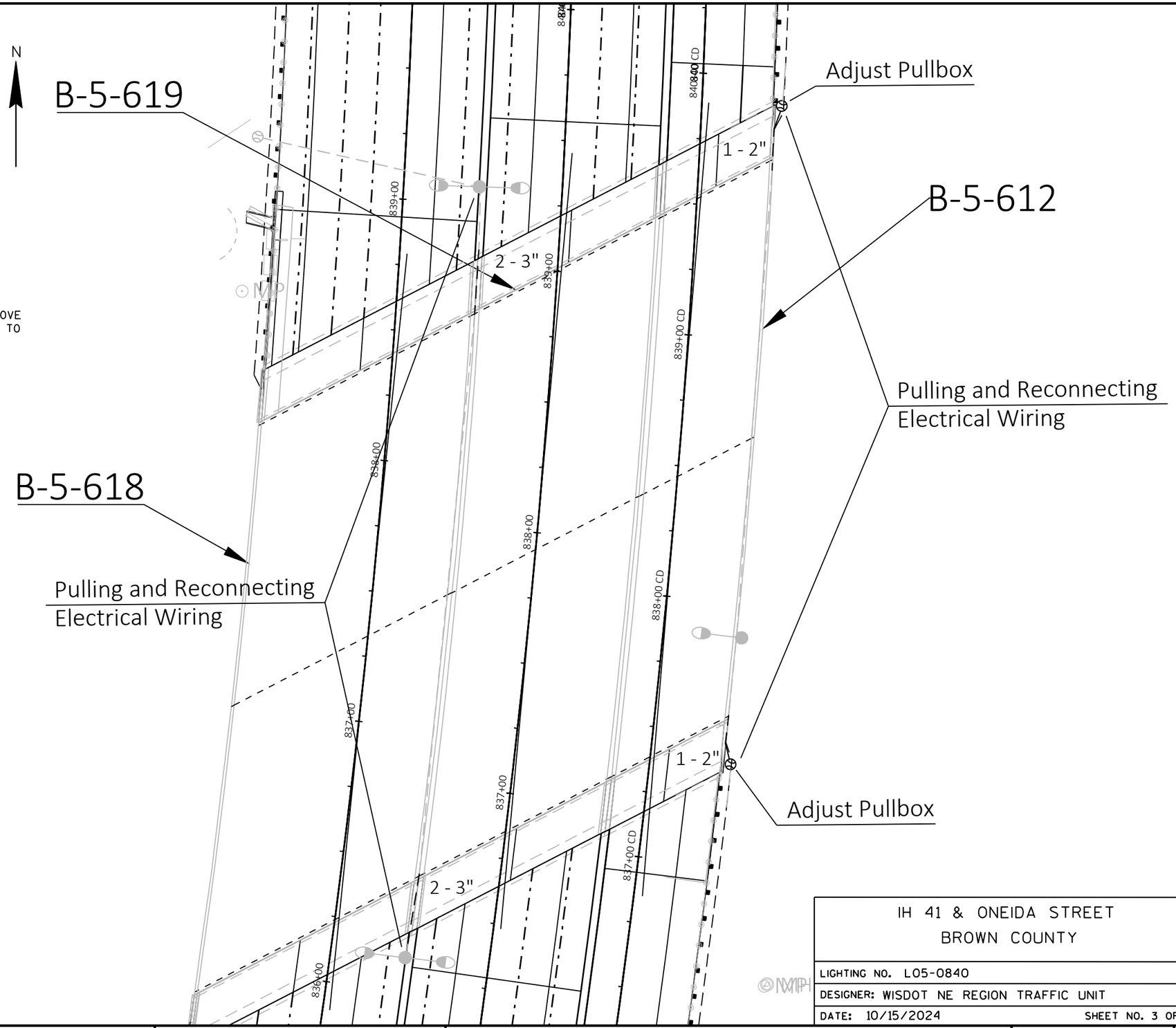
ELECTRIC, UNDERGROUND ——— — E —

ELECTRIC, OVERHEAD ——— — OH —

NOTES:

WISCONSIN DOT NORTHEAST REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION. CONTACT THEM 3 DAYS IN ADVANCE.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.



2

IH 41 & ONEIDA STREET
BROWN COUNTY

LIGHTING NO. L05-0840

DESIGNER: WISDOT NE REGION TRAFFIC UNIT

DATE: 10/15/2024 SHEET NO. 3 OF 3

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONSTRUCTION DETAIL - LIGHTING B-5-612	SHEET 84	E

FILE NAME : C:\USERS\DOTMXT\DESKTOP\TEMP\L05-0823.DWG
LAYOUT NAME - B-05-612

PLOT DATE : 2/19/2025 2:07 PM PLOT BY : TALCOTT, MATTHEW J PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

GENERAL NOTES FOR TRAFFIC CONTROL

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. FOR FREEWAYS REFERENCE SDD-TRAFFIC CONTROL, INGRESS/EGRESS.

3) ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

5) ALL TYPE III BARRICADES SHALL BE 8' WIDE, UNLESS OTHERWISE NOTED, AND EQUIPPED WITH TWO TYPE "A" (LOW INTENSITY FLASHING) LIGHTS.

6) DIMENSIONS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF THE BARRIER ADJACENT TO TRAFFIC. STATION CALL-OUTS TO CONCRETE BARRIER TEMPORARY PRECAST ARE TO THE FACE OF THE BARRIER.

7) WORK AREAS SHOWN MAY NOT ILLUSTRATE ALL REMOVALS, SEE REMOVAL SHEETS FOR ADDITIONAL INFORMATION.

8) WHEN A SEGMENT OF THE PROJECT IS NOT SHOWN ON THE STAGING PLANS, USE THE SAME TRAFFIC CONTROL AS THE PREVIOUS STAGE FOR THE SEGMENT.

9) TRAFFIC CONTROL DRUM SPACING SHALL BE 50' UNLESS OTHERWISE NOTED.

10) 16"x16" ORANGE FLAGS SHALL BE INCIDENTAL TO TRAFFIC CONTROL SIGN BID ITEM.

11) TYPE I RAISED PAVEMENT MARKERS SHALL BE ADDED TO TEMPORARY PAVEMENT MARKINGS AT LANE SHIFTS AND CROSSOVERS.

12) INSTALL PROPOSED TRAFFIC CONTROL SIGNS ON BOTH OUTSIDE SHOULDER AND MEDIAN SIDE OF ALL DIVIDED ROADWAYS.

13) CONCRETE BARRIER TEMPORARY PRECAST SHALL BE ANCHORED AT LOCATIONS AS PROVIDED ON THE PLAN SHEETS AND AT THE CONNECTIONS TO TEMPORARY CRASH CUSHIONS.

14) TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH TRAFFIC CONTROL WARNING LIGHTS TYPE "C", ONE WAY LIGHTS IN TAPERS ONLY.

15) ALL SIGNS TEMPORARY OR EXISTING WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE COVERED OR REMOVED AS NEEDED AND/OR AS DIRECTED BY THE ENGINEER.

16) ALL EXISTING CONFLICTING PAVEMENT MARKING SHALL BE REMOVED.

17) GRADING AND HMA TO ACCOMMODATE CRASH CUSHIONS TEMPORARY IS INCIDENTAL TO THE CRASH CUSHION BID ITEMS.

18) FOR LANE CLOSURES ON IH 41 COORDINATE WITH THE QWS CORRIDOR PROJECT TO IMPLEMENT TRAFFIC QUEUE WARNING SYSTEM.

19) CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR DETAILS OF THE TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN IN THESE PLANS.

20) ADDITIONAL TEMPORARY INGRESS/EGRESS TO BE SUBMITTED AND APPROVED BY THE ENGINEER. SEE SDD 15D47 FOR DETAILS.

TEMPORARY BARRIER LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST

PAVEMENT MARKING LEGEND

01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5 FT LINE, 37.5 FT SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3 FT LINE, 9 FT SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

LEGEND

	TYPE III BARRICADE
	TYPE III BARRICADE WTH ATTACHED SIGN
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	TYPE "A" WARNING LIGHT (FLASHING)
	CONNECTED ARROW BOARD
FBS	FLASHING BEACON SIGN
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
S	PORTABLE TRAFFIC SENSOR (PTS)
((S))	WORK ZONE START LOCATION MARKER
((E))	WORK ZONE END LOCATION MARKER
	DIRECTION OF TRAFFIC
CC	CRASH CUSHION TEMPORARY
	CONCRETE BARRIER TEMPORARY PRECAST (CBTP)
	TEMPORARY TAPE RUMBLE STRIPS (VARIABLE SPACING)
	WORK AREA - AS NOTED IN PLANS

2

N

ONEIDA STREET

CNW RAILROAD

PARKVIEW ROAD

GLORY RD

R/L SB

B-5-618

B-5-612

B-5-619

R/L NB

R/L OWB

R/L OWC

B-5-616

B-5-621

B-5-617

R/L CD

850SB 850NB 850CD

845SB 845NB 845CD

840SB 840NB 840CD

835SB 835NB 835CD

830OWB 830SB 830NB 830CD 830OWC

825OWB 825SB 825NB 825OWC

820OWB 820SB 820NB 820CD

815SB 815NB 815CD

810SB 810NB 810CD

805SB 805NB

STAGE 1 SUMMARY

MAINTENANCE OF TRAFFIC:

- IH 41 WILL REMAIN OPEN TO ALL LANES OF TRAFFIC DURING PEAK HOURS.
- IH 41 NORTHBOUND WILL HAVE LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS DURING OFF-PEAK HOURS. LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS MAY NOT OCCUR SIMULTANEOUSLY.
- IH 41 SOUTHBOUND WILL HAVE LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS DURING OFF-PEAK HOURS. LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS MAY NOT OCCUR SIMULTANEOUSLY.

CONSTRUCTION TO BE COMPLETED:

- IH 41 NORTHBOUND MEDIAN AND OUTSIDE SHOULDER RUMBLE STRIP REMOVAL AND/OR FILLING FROM APPROXIMATELY 806NB+00 TO 848NB+88.
- IH 41 SOUTHBOUND MEDIAN AND OUTSIDE SHOULDER RUMBLE STRIP REMOVAL AND/OR FILLING FROM APPROXIMATELY 804SB+09 TO 851SB+00.

REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:

- TRAFFIC CONTROL, LANE CLOSURE

NOTE: PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON IH 41 SB AND IH 41 NB 7 DAYS PRIOR TO CONSTRUCTION.

PCMS MESSAGING

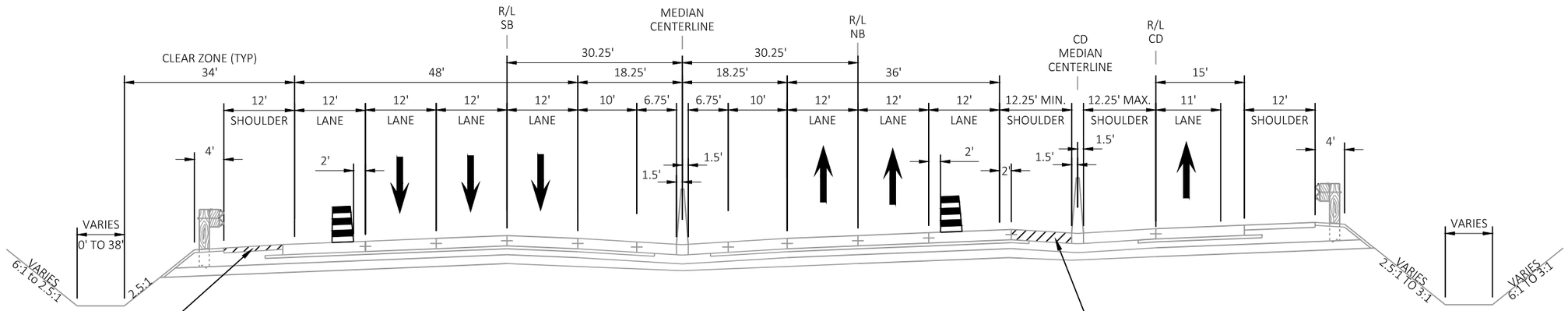
FRAME 1	FRAME 2
ROAD WORK BEGINS	XXXDAY XX XX XX

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - OVERVIEW STAGE 1 - IH 41	SHEET	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025100-TC_OVERVIEW-IH 41.DWG
LAYOUT NAME - OVERVIEW STAGE 1

PLOT DATE : 2/16/2026 2:02 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42



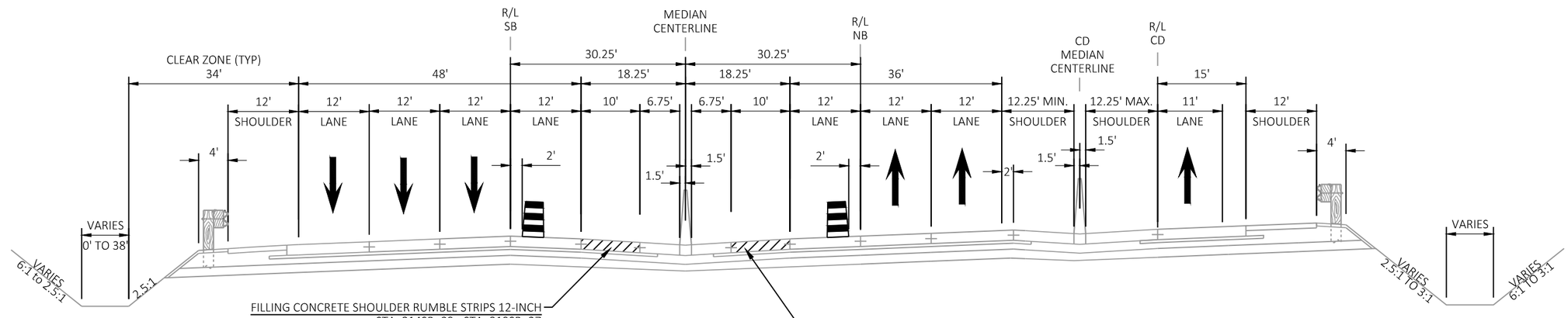
FILLING CONCRETE SHOULDER RUMBLE STRIPS 12-INCH
STA. 804SB+37 - STA. 811SB+16
STA. 823SB+20 - STA. 835SB+00
STA. 839SB+59 - STA. 846SB+80

REMOVING RUMBLE STRIPS
STA. 811SB+16 - STA. 820SB+59
STA. 835SB+00 - STA. 835SB+52
STA. 838SB+92 - STA. 839SB+59

FILLING CONCRETE SHOULDER RUMBLE STRIPS 12-INCH
STA. 806NB+75 - STA. 808NB+78
STA. 823NB+25 - STA. 835NB+60
STA. 840NB+25 - STA. 845NB+37

REMOVING RUMBLE STRIPS
STA. 822NB+73 - STA. 823NB+25
STA. 835NB+60 - STA. 836NB+20
STA. 839NB+27 - STA. 840NB+25

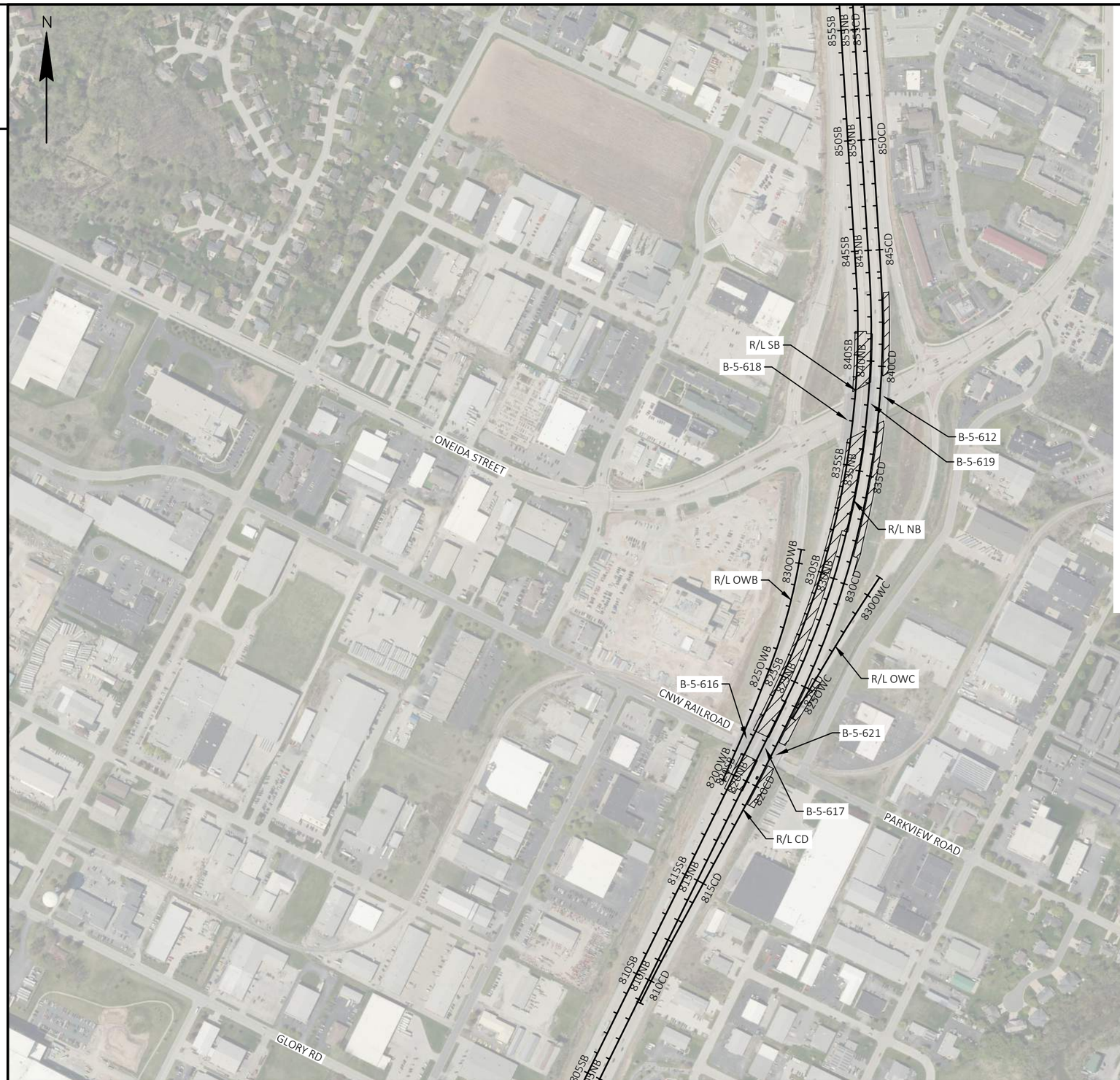
STAGE 1 TYPICAL SECTION IH 41
(OFF-PEAK HOURS)
STA 804SB+37 - STA 846SB+80
STA 806NB+75 - STA 845NB+37



FILLING CONCRETE SHOULDER RUMBLE STRIPS 12-INCH
STA. 814SB+09 - STA. 819SB+27
STA. 829SB+36 - STA. 831SB+14
STA. 841SB+05 - STA. 851SB+00

FILLING CONCRETE SHOULDER RUMBLE STRIPS 12-INCH
STA. 806NB+00 - STA. 819NB+52
STA. 824NB+02 - STA. 832NB+20
STA. 841NB+22 - STA. 848NB+88

STAGE 1 TYPICAL SECTION IH 41
(OFF-PEAK HOURS)
STA 814SB+09 - STA 851SB+00
STA 806NB+00 - STA 848NB+88



STAGE 2 SUMMARY

MAINTENANCE OF TRAFFIC:

- IH 41 WILL REMAIN OPEN TO TWO (2) 12' LANES OF TRAFFIC AT ALL TIMES.
- IH 41 SPEED TO BE REDUCED TO 55 MPH THROUGH THE WORK ZONE.
- IH 41 NORTHBOUND EXIT RAMP TO ONEIDA STREET TO BE CLOSED.
- IH 41 NORTHBOUND EXIT RAMP TO STH 172 WILL REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- IH 41 NORTHBOUND TRAFFIC WILL BE SHIFTED TO THE OUTSIDE LANE(S) AND SHOULDER THROUGH THE WORK ZONE.
- IH 41 NORTHBOUND CD RAMP TRAFFIC WILL BE SHIFTED TO THE INSIDE LANE AND SHOULDER THROUGH THE WORK ZONE.
- IH 41 SOUTHBOUND EXIT RAMP TO ONEIDA STREET WILL REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- IH 41 SOUTHBOUND ENTRANCE RAMP FROM ONEIDA STREET WILL REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- IH 41 SOUTHBOUND TRAFFIC WILL BE SHIFTED TO THE OUTSIDE LANE(S) AND SHOULDER THROUGH THE WORK ZONE.

CONSTRUCTION TO BE COMPLETED:

- REMOVE AND REPLACE INSIDE LANES AND SHOULDERS OF IH 41 NORTHBOUND AND SOUTHBOUND.
- CONSTRUCT INSIDE PORTION OF CONCRETE PAVEMENT APPROACH SLABS AND STRUCTURAL APPROACH SLABS FOR B-5-616, B-5-617, B-5-618, AND B-5-619 ALONG IH 41 NORTHBOUND AND SOUTHBOUND.
- REMOVE AND REPLACE THE OUTSIDE LANE AND SHOULDER OF THE IH 41 NORTHBOUND CD RAMP.
- REMOVE AND REPLACE PAVEMENT OF THE ONEIDA STREET EXIT RAMP.
- CONSTRUCT OUTSIDE PORTION OF THE CONCRETE PAVEMENT APPROACH SLABS AND STRUCTURAL APPROACH SLABS FOR B-5-612 AND B-5-621 ALONG IH 41 CD RAMP.

REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:

- TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM
- TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY
- TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY TAPE RUMBLE STRIPS
- TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
- TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
- TRAFFIC CONTROL, MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD

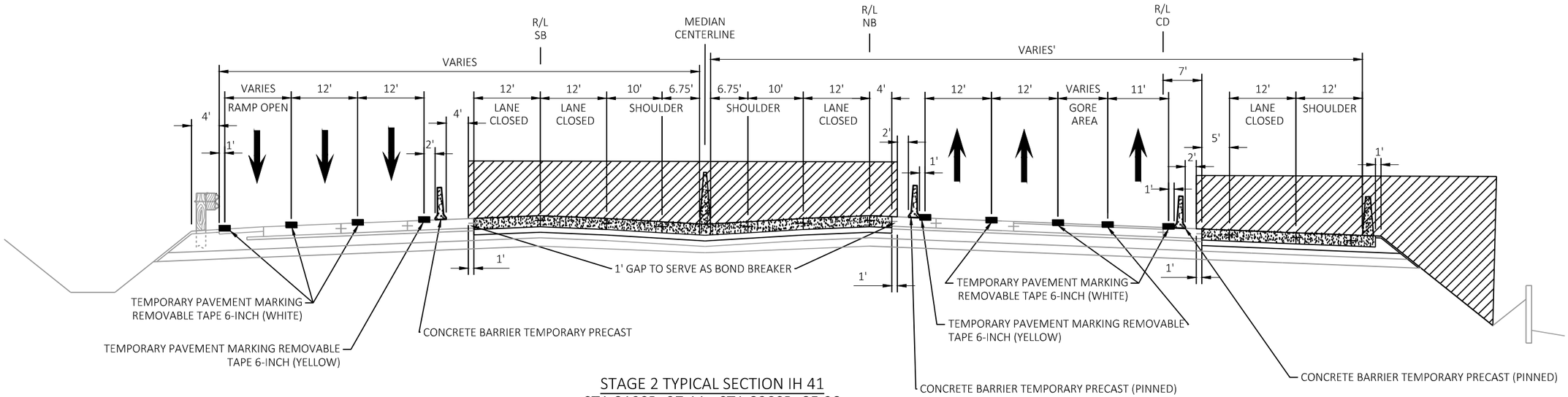
NOTE: PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON IH 41 SB AND IH 41 NB DURING SWITCH FROM STAGE 1 TO STAGE 2

PCMS MESSAGING

FRAME 1	FRAME 2
NEW TRAFFIC PATTERN	AHEAD XX MILES

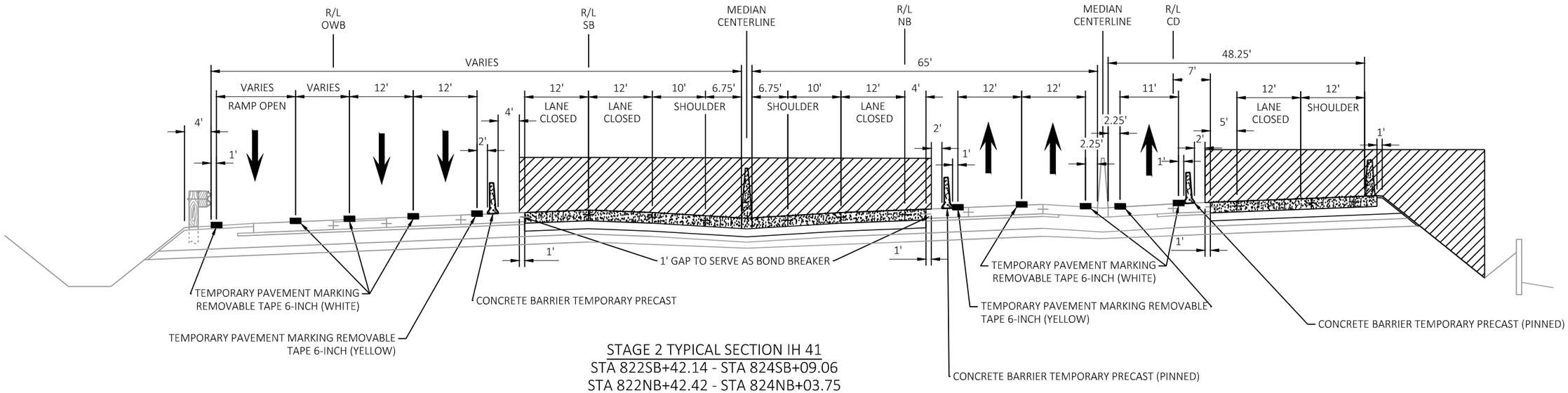
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - OVERVIEW STAGE 2 - IH 41	SHEET 88	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025100-TC_OVERVIEW-IH 41.DWG
LAYOUT NAME - OVERVIEW STAGE 2
PLOT DATE : 6/22/2026 8:46 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42



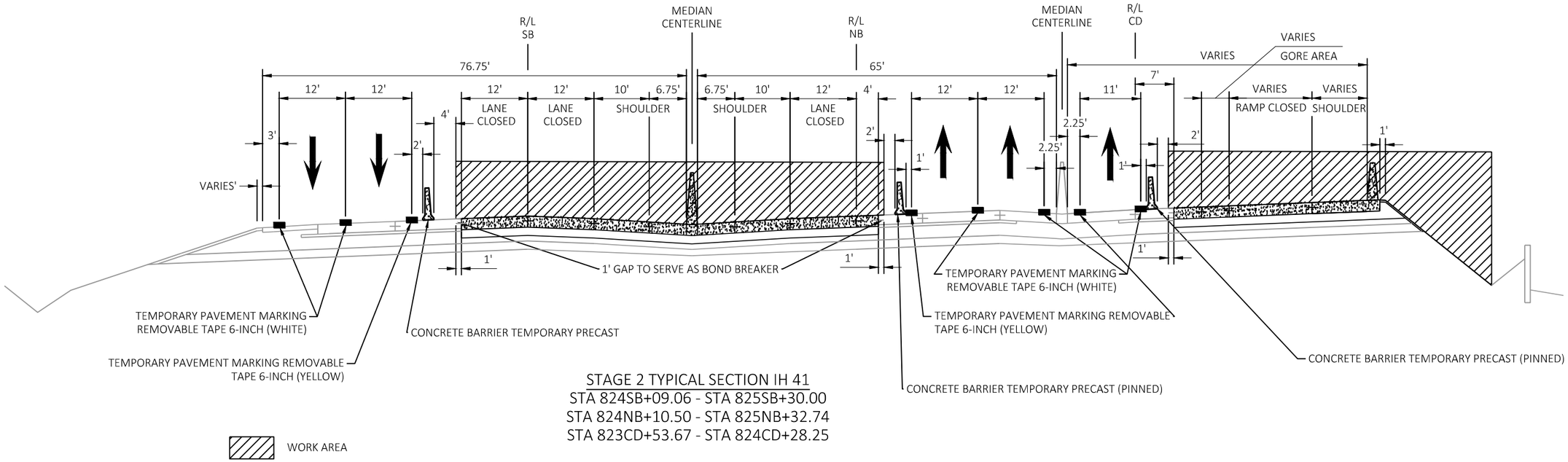
STAGE 2 TYPICAL SECTION IH 41
STA 819SB+27.11 - STA 820SB+85.28
STA 819NB+52.77 - STA 820NB+85.53
STA 819CD+09.07 - STA 820CD+86.50

WORK AREA

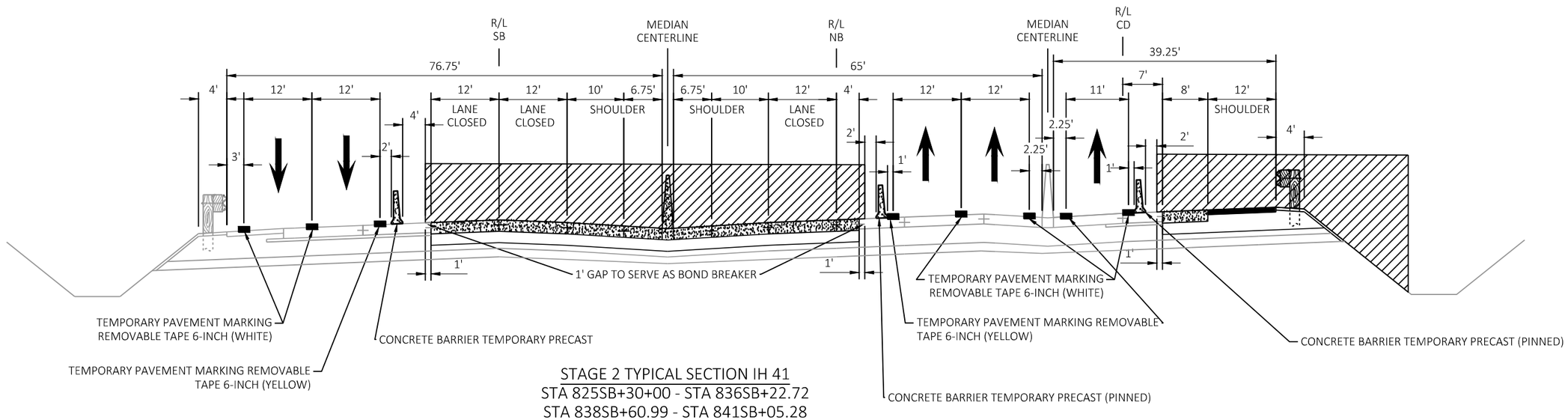


STAGE 2 TYPICAL SECTION IH 41
STA 822SB+42.14 - STA 824SB+09.06
STA 822NB+42.42 - STA 824NB+03.75
STA 822CD+43.41 - STA 823CD+53.67
STA 822OWB+42.23 - STA 824OWB+09.25

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2	SHEET 89	E



STAGE 2 TYPICAL SECTION IH 41
STA 824SB+09.06 - STA 825SB+30.00
STA 824NB+10.50 - STA 825NB+32.74
STA 823CD+53.67 - STA 824CD+28.25



STAGE 2 TYPICAL SECTION IH 41
STA 825SB+30+00 - STA 836SB+22.72
STA 838SB+60.99 - STA 841SB+05.28
STA 825NB+32.74 - STA 836NB+84.37
STA 839NB+01.21 - STA 841NB+23.00
STA 824CD+28.25 - STA 837CD+37.37
STA 839CD+53.07 - STA 843CD+34.34

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2	SHEET 90	E

2

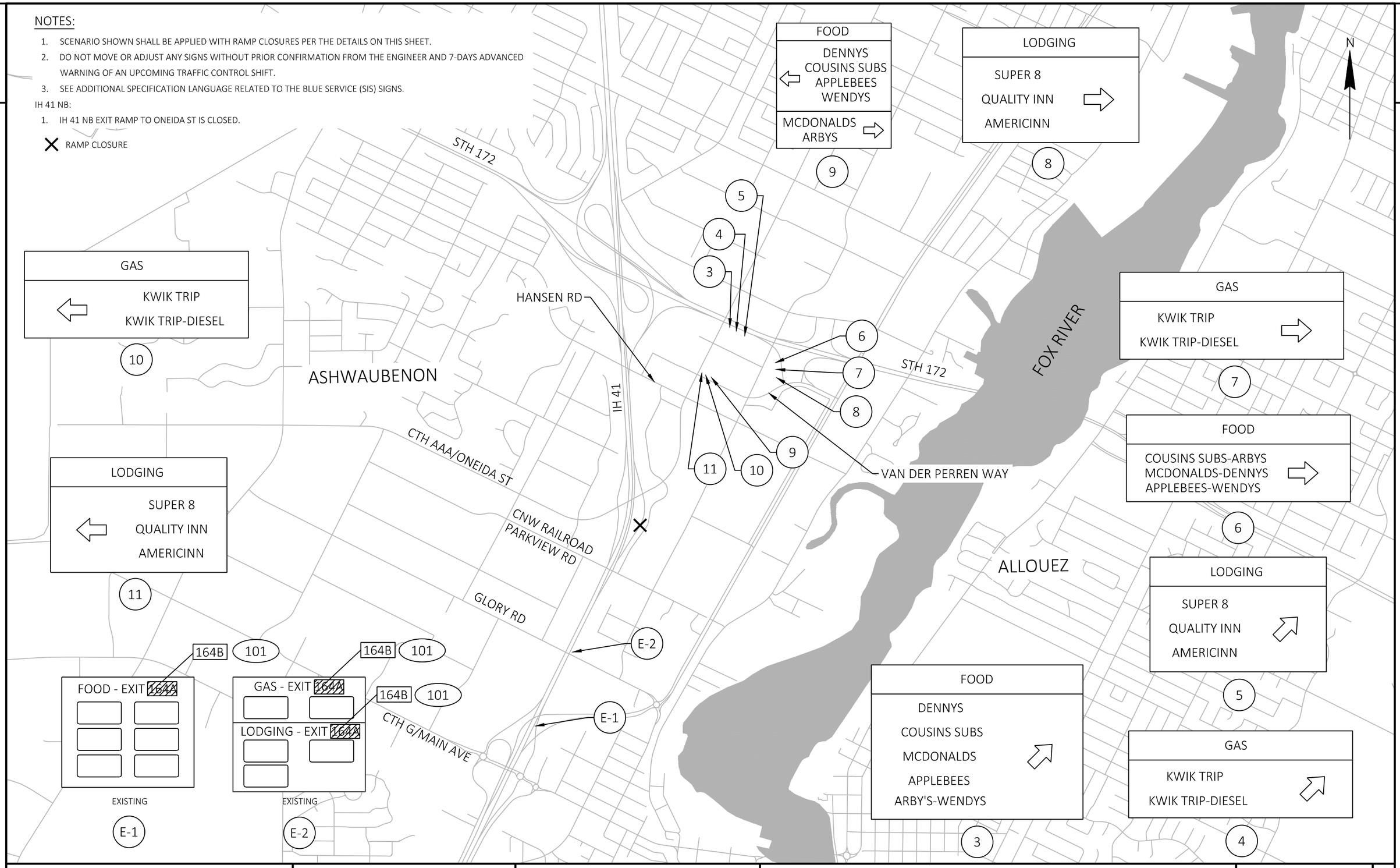
NOTES:

1. SCENARIO SHOWN SHALL BE APPLIED WITH RAMP CLOSURES PER THE DETAILS ON THIS SHEET.
2. DO NOT MOVE OR ADJUST ANY SIGNS WITHOUT PRIOR CONFIRMATION FROM THE ENGINEER AND 7-DAYS ADVANCED WARNING OF AN UPCOMING TRAFFIC CONTROL SHIFT.
3. SEE ADDITIONAL SPECIFICATION LANGUAGE RELATED TO THE BLUE SERVICE (SIS) SIGNS.

IH 41 NB:

1. IH 41 NB EXIT RAMP TO ONEIDA ST IS CLOSED.

✕ RAMP CLOSURE



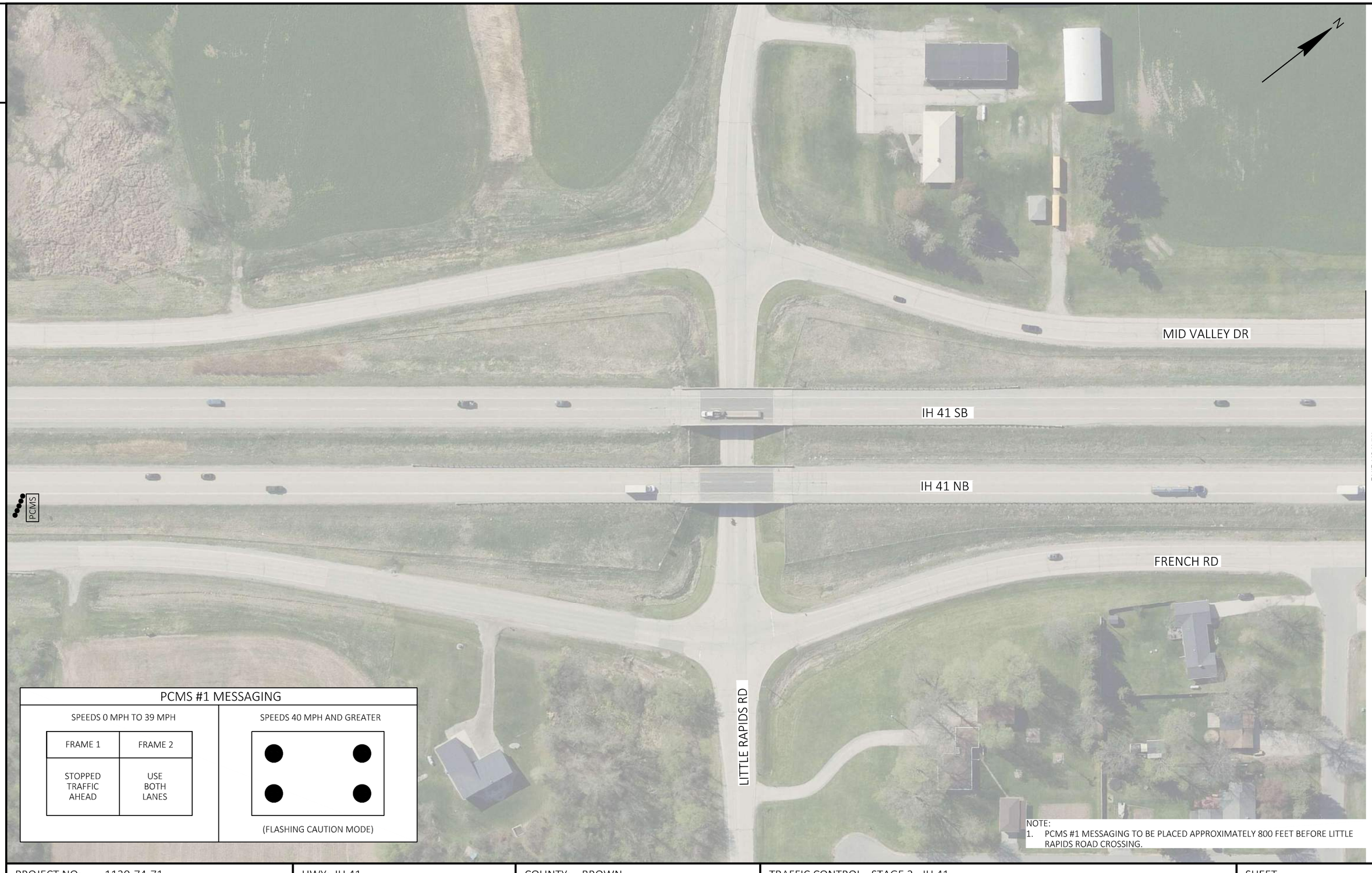
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - SIS MITIGATION - IH 41 - STAGE 2	SHEET 91	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025000-SIS-IH 41.DWG
LAYOUT NAME - 02

PLOT DATE : 2/18/2026 9:16 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:2000 FT

WISDOT/CADDS SHEET 42

2



PCMS #1 MESSAGING	
SPEEDS 0 MPH TO 39 MPH	SPEEDS 40 MPH AND GREATER
FRAME 1: STOPPED TRAFFIC AHEAD / FRAME 2: USE BOTH LANES	(FLASHING CAUTION MODE)

NOTE:
1. PCMS #1 MESSAGING TO BE PLACED APPROXIMATELY 800 FEET BEFORE LITTLE RAPIDS ROAD CROSSING.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 92	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 02
PLOT DATE : 2/18/2026 10:29 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE

MID VALLEY DR

IH 41 SB

IH 41 NB

FBS

FRENCH RD

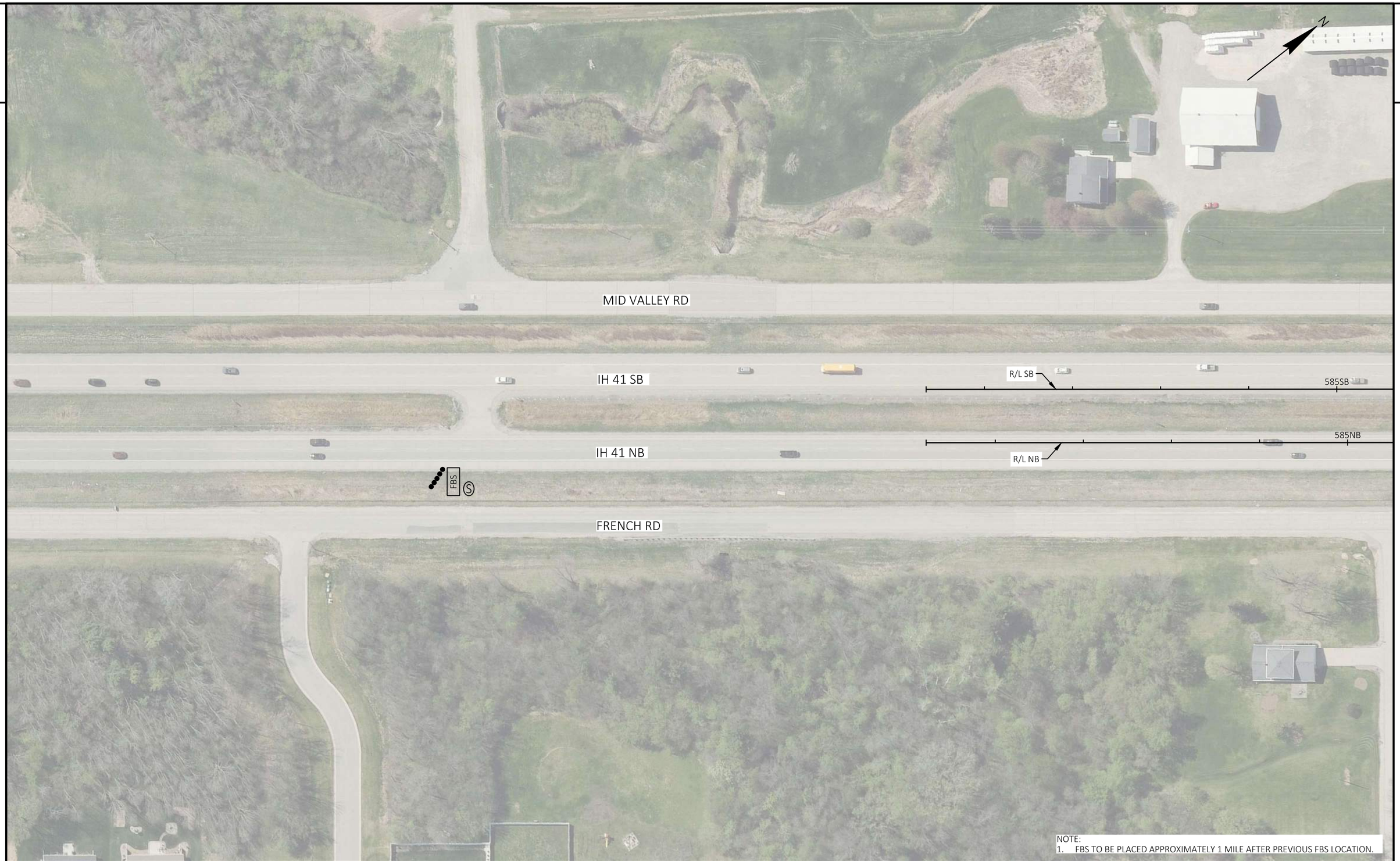
NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1800 FEET AFTER LITTLE RAPIDS ROAD CROSSING.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 93	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 03

PLOT DATE : 2/18/2026 10:29 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 94	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 07
PLOT DATE : 2/18/2026 10:29 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MID VALLEY DR

630SB

IH 41 SB

635SB

R/L SB

640SB

FBS

630NB

635NB

640NB

IH 41 NB

R/L NB

FBS

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 95	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 11

PLOT DATE : 2/18/2026 10:29 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MID VALLEY DR

IH 41 SB

675SB

680SB

R/L SB

685SB

675NB

680NB

FBS

685NB

IH 41 NB

R/L NB

FBS

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 96	E

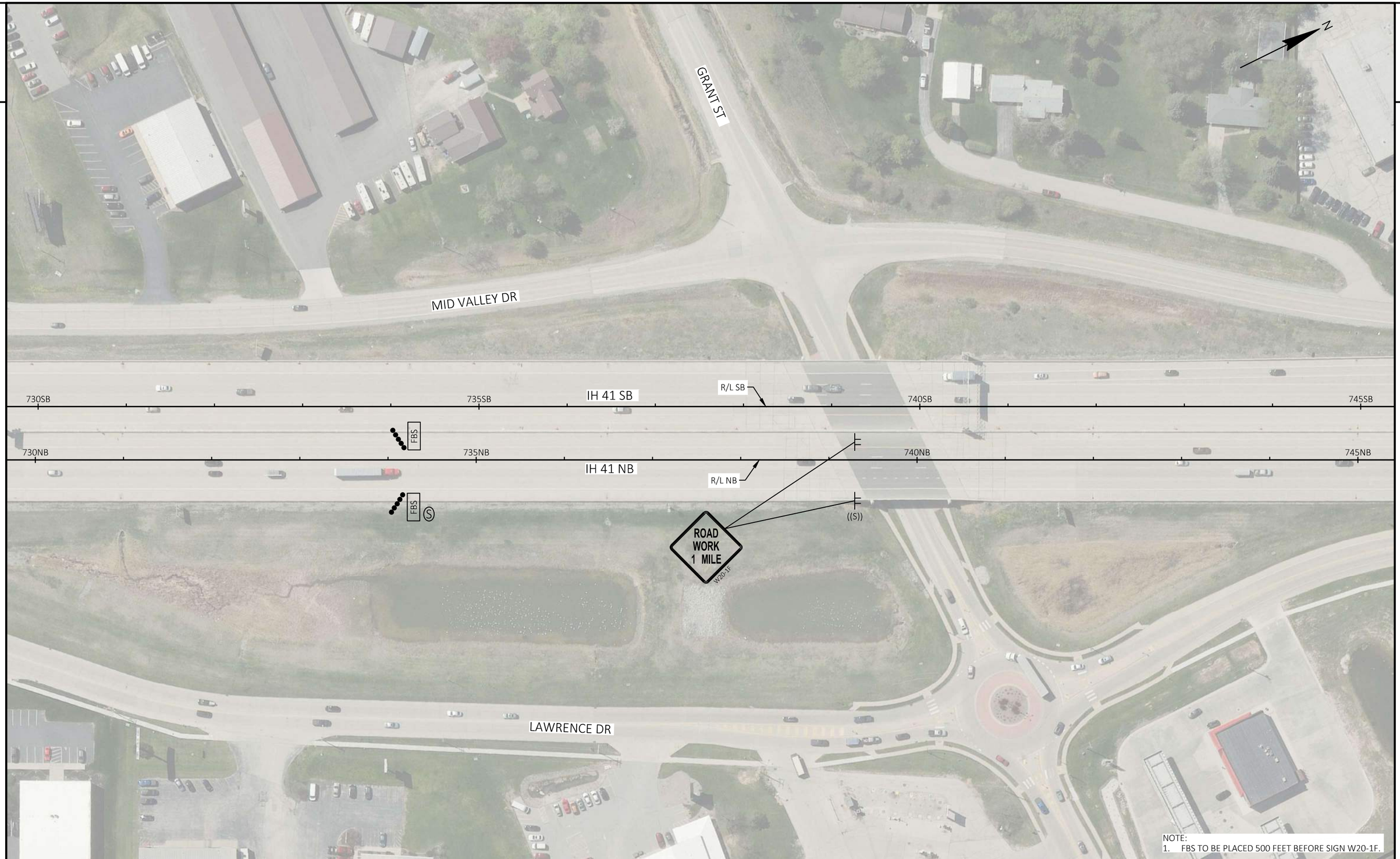
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 14

PLOT DATE : 2/18/2026 10:29 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2



NOTE:
1. FBS TO BE PLACED 500 FEET BEFORE SIGN W20-1F.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 97	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 18

PLOT DATE : 2/18/2026 10:29 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

MID VALLEY DR

MAIN AVE

TEMPORARY TAPE RUMBLE STRIP ORANGE
(10' SPACING)

TEMPORARY TAPE RUMBLE STRIP ORANGE
(5' SPACING)

760SB 765SB IH 41 SB R/L SB 770SB 77

PCMS

760NB 765NB IH 41 NB 770NB 775

NB+30.14
0'

R/L NB

LEFT LANE
CLOSED
1/2 MILE
W20-5SG

SPEED
LIMIT
60
W3-5

MATCH LINE STA. 775NB+00

PCMS #2 MESSAGING	
SPEEDS 0 MPH TO 39 MPH	SPEEDS 40 MPH AND GREATER
FRAME 1: STAY IN LANE / FRAME 2: DO NOT MERGE	(FLASHING CAUTION MODE)

LAWRENCE DR

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 98	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 20

PLOT DATE : 4/15/2026 2:41 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

COMBINATION WORK ZONE DIGITAL SPEED LIMIT
- SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

TEMPORARY TAPE RUMBLE STRIP ORANGE
(1.5' SPACING)

MATCH LINE STA. 775NB+00

5SB

IH 41 SB

780SB

785SB

R/L SB

79

MATCH LINE STA. 790NB+00

NB

IH 41 NB

780NB

785NB

790

PCMS

R/L NB

NB+80.16
0'

SPEED LIMIT 60

SPEED LIMIT 60

W04-2L

ROAD WORK AHEAD
W20-1A

ASHLAND AVE

PCMS #3 MESSAGING

SPEEDS 0 MPH TO 39 MPH		SPEEDS 40 MPH AND GREATER
FRAME 1	FRAME 2	(FLASHING CAUTION MODE)
MERGE HERE	TAKE TURNS	

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 99	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 21

PLOT DATE : 4/30/2026 2:25 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
X-X-X- MARKING REMOVAL LINE	04 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
	10 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

GLORY RD

MATCH LINE STA. 790NB+00

MATCH LINE STA. 805NB+00

SPEED LIMIT 70 R2-1 24"X30"

END ROAD WORK G20-2A 48"X24"

((E))

795SB IH 41 SB

50' TYP.

795NB

IH 41 NB

NB+30.16 -12' LT

02 (BEGIN)

100' TYP.

RAMP CLOSED AHEAD W20-5A

COVERING SIGNS (TYPE II)

SPEED LIMIT 70

R/L SB

R/L NB

NB+50.16 -1' LT

(BEGIN) 02 800SB

SB+77.42 1' RT

800NB

01 (BEGIN)

SB+37.42 -35' LT

100' TYP.

SPEED LIMIT 60

WO1-4CR 48"X48"

R11-2L 48" X 30" LANE CLOSED

TYPE III BARRICADE

COMBINATION WORK ZONE DIGITAL SPEED LIMIT - SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 100	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 22

PLOT DATE : 4/30/2026 2:25 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- B1 — CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
- B2 — CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
- B3 — ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
- X-X-X — MARKING REMOVAL LINE
- 01 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- 02 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 03 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
- 04 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
- 10 — TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

MATCH LINE STA. 805NB+00

IH 41 SB

IH 41 NB

IH 41 RAMP CD

50' TYP.

100' TYP.

25' TYP.

SB+87.42 -33' LT

SB+37.42 -21' LT

SB+87.42 -45' LT

SB+87.42 -57' LT

SB+27.42 -45' LT

810SB

815SB

01 (END) 03 (BEGIN)

04 (BEGIN) R/L OWB

R/L SB

B1 (BEGIN)

B3 (BEGIN)

B1 (BEGIN)

NB+80.16 10' RT

810NB

810CD

R/L NB

NB+30.16 22' RT

815NB

815CD

R/L CD

NB+50.16 11' RT

NB+49.53 34' RT

01 (BEGIN)

03 (BEGIN) 01 (END)

04 (BEGIN) 01 (END)

B1 (BEGIN)

B3 (BEGIN)

10 (BEGIN) 01 (BEGIN) 10 (END)

10 (END) 02 (BEGIN)

COVERING SIGNS (TYPE II)

W01-4BL

WO5-52L 12"X36"

WO1-6 48" X 24"

TYPE III BARRICADE

RAMP CLOSED 1000 FT W20-5C

WO5-52R 12"X36"

COVERING SIGNS (TYPE I), ADD THRU ARROWS AND EXIT ONLY W/ARROW

EXIT 164 B

EXIT 164 A

North 41 TO 172 43

AAA

A Straubel Airport

Oneida St Waube La

EXIT ONLY

CLOSED
G20-60
108"X24"

EXIT ONLY

MATCH LINE STA. 820NB+00

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 101	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 23

PLOT DATE : 2/18/2026 10:30 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- B1 — CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
- B2 — CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
- B3 — ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
- MARKING REMOVAL LINE
- 01 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- 02 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 03 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
- 04 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
- 10 — TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

PARKVIEW RD

MATCH LINE STA. 820NB+00

MATCH LINE STA. 833NB+00

04 (END) 02 (BEGIN) — SB+67.42, -45' LT

02 (BEGIN) 10 (END) 01 — OWB+58.44, -16' LT

10 (END) 01 (BEGIN) 02 (END) 02 03

WO4-5R 48"X48"

WO4-1R

ROAD WORK AHEAD W20-1A

R/L OWB — 830OWB

B1

825OWB — OWB+88.98, 0' RT

825SB — 830SB

R/L SB — IH 41 SB

825NB — IH 41 NB — R/L NB — 830NB

825CD — 830CD

825OWC — R/L CD — IH 41 RAMP CD

01 B1 B3 — 03 — 02

R11-2R 48" X 30" RAMP CLOSED — TYPE III BARRICADE

SPEED LIMIT 60

WO1-4BL

830OWC — R/L OWC

RAMADA WAY

COMBINATION WORK ZONE DIGITAL SPEED LIMIT - SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

EXIT 164 B — EXIT 164 A

TO 172 43 AAA

A Straubel Airport — Oneida St Waube La

COVERING SIGNS (TYPE I)

CLOSED

G20-60 108"X24"

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 102	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 24

PLOT DATE : 4/30/2026 2:25 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

COMBINATION WORK ZONE DIGITAL SPEED LIMIT
- SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

SPEED LIMIT 60

MATCH LINE STA. 833NB+00

835SB

835NB

835CD

IH 41 SB

IH 41 NB

IH 41 RAMP CD

840SB

840NB

840CD

845SB

845NB

845CD

WO1-4R

WO5-52L
12"X36"

01 02 03 01
(END) (BEGIN)

SB+67.88
-33' LT

100'
TYP.

(END)
B1
R/L SB

50'
TYP.

NB+84.57
22' RT

NB+33.20
10' RT

(END) (END)
B1 B3

NB+63.23
-1' LT

02
(END)
R/L NB

01 (END)

CD+06.71
-10' LT

50'
TYP.

03 01 02 01
(END) (BEGIN)
R/L CD

(END) (END)
B1 B3

ONEIDA ST

WO1-6
48" X 24"

TYPE III BARRICADE

WO1-6
48" X 24"

TYPE III BARRICADE

MATCH LINE STA. 847NB+00

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 103	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 25

PLOT DATE : 4/30/2026 2:25 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
X-X-X	MARKING REMOVAL LINE	04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
		10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

WO1-6
48" X 24"
TYPE III BARRICADE

COVERING SIGNS (TYPE I)

South
Northern 41

EXIT 164 A
South
Northern 41
AAA
Oneida St
Waube La
EXIT ONLY

WO1-4BR

MATCH LINE STA. 847NB+00

50' TYP.
01 (END)
02
SB+17.69
-21' LT
SB+17.69
-11' LT

850SB
855SB
860SB
IH 41 SB
100' TYP.
R/L SB

850NB
855NB
860NB
IH 41 NB
R/L NB

50' TYP.
CD+91.54
0'
02 (END)
01 (END)

850CD
((E))
855CD
860CD
IH 41 RAMP CD
R/L CD

END ROAD WORK
G20-2A
48"X24"

SPEED LIMIT 70
R2-1
24"X30"

END ROAD WORK
G20-2A
48"X24"

((E))

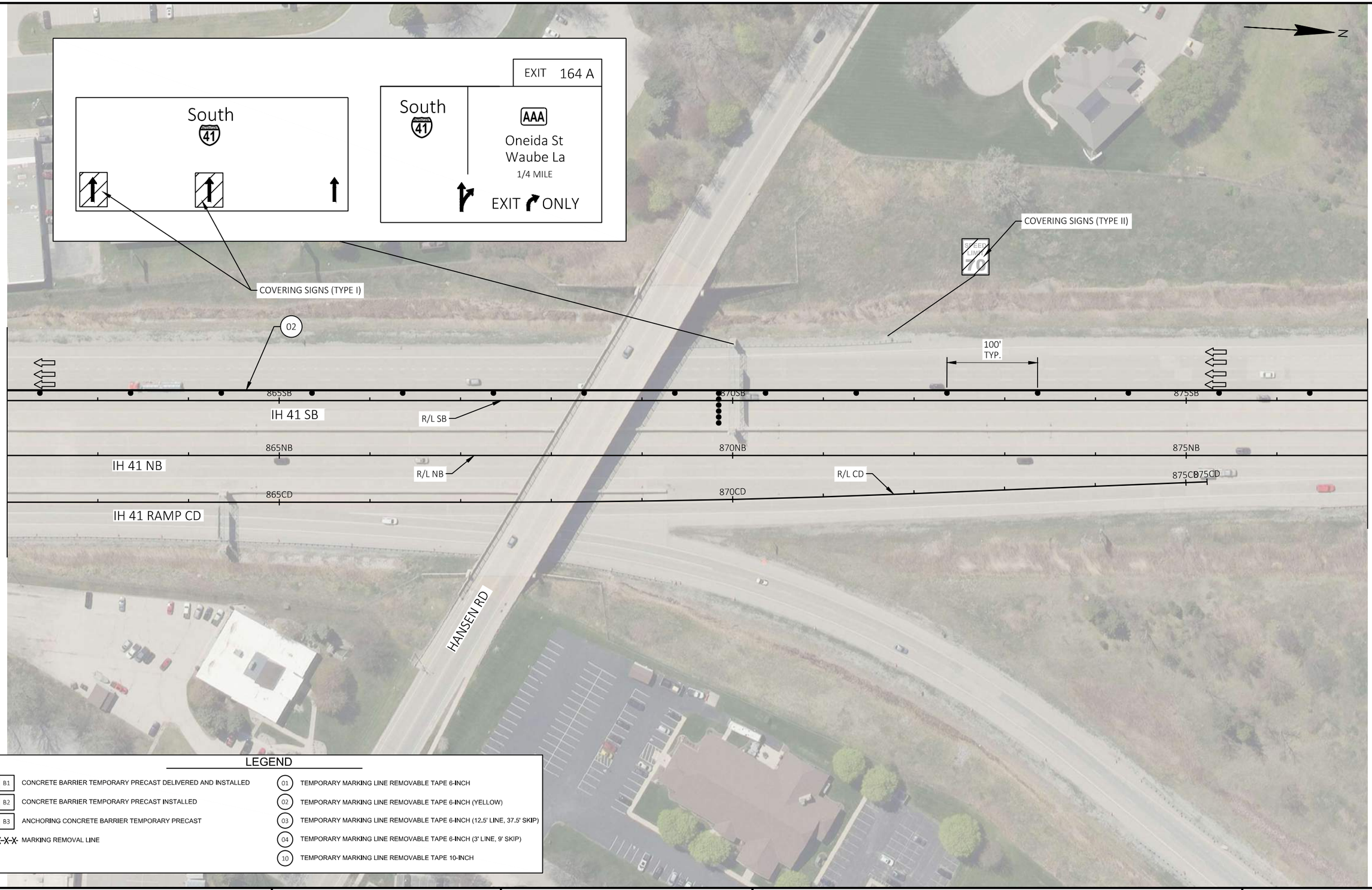
MATCH LINE STA. 862NB+00

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 104	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 26
PLOT DATE : 2/18/2026 10:30 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
-X-X-X-	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 105	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 27

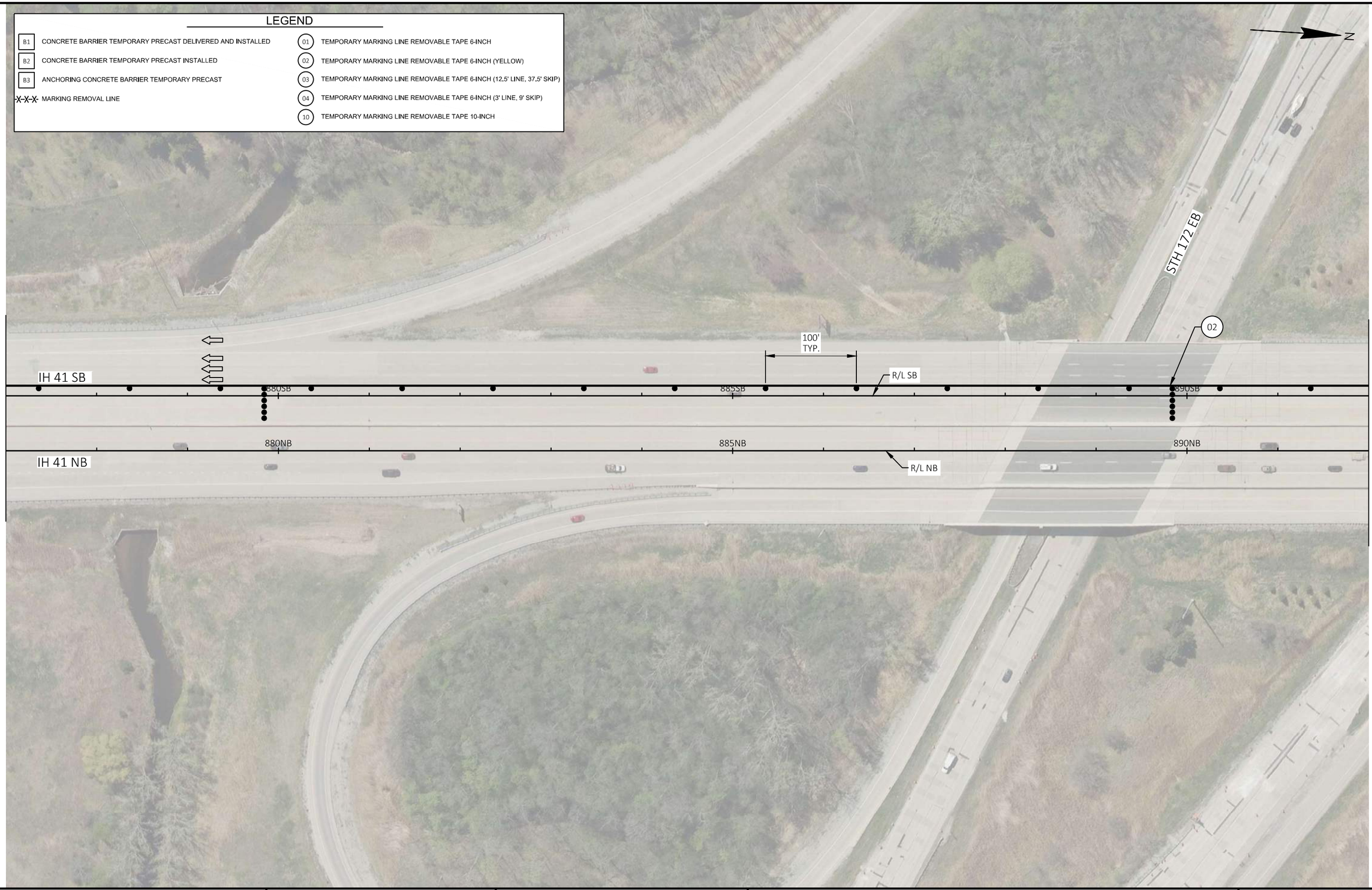
PLOT DATE : 2/18/2026 10:30 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
X-X-X- MARKING REMOVAL LINE	04 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
	10 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH



2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 106	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 28

PLOT DATE : 2/18/2026 10:30 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
X-X-X MARKING REMOVAL LINE	04 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
	10 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

STH 172 WB

COMBINATION WORK ZONE DIGITAL SPEED LIMIT
- SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SPEED LIMIT 60

SPEED LIMIT 60

100' TYP.

50' TYP.

02

IH 41 SB

895SB

900SB

905SB

R/L SB

SB+54.50
-11' LT

IH 41 NB

895NB

900NB

905NB

R/L NB

MATCH LINE STA. 892NB+00

MATCH LINE STA. 907NB+00

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 107	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 29

PLOT DATE : 4/30/2026 2:25 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
-X-X-X-	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

NORTH RD

MATCH LINE STA. 907NB+00

50' TYP.

910SB

SB+74.39
1' RT

50' TYP.

915SB

IH 41 SB

R/L SB

920SB

910NB

915NB

IH 41 NB

920NB

R/L NB

MATCH LINE STA. 922NB+00

PILGRIM WAY

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 108	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 30

PLOT DATE : 2/18/2026 10:30 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
X-X-X- MARKING REMOVAL LINE	04 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
	10 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

NORTH RD

MATCH LINE STA. 922NB+00

IH 41 SB

50' TYP.

50' TYP.

925SB

SB+14.39 1' RT

R/L SB

930SB

SB+34.39 12' RT

02 (END)

935SB

PCMS

925NB

IH 41 NB

930NB

R/L NB

935NB

MATCH LINE STA. 937NB+00

W04-2L

PILGRIM WAY

CORMIER RD

PCMS #3 MESSAGING

SPEEDS 0 MPH TO 39 MPH

FRAME 1	FRAME 2
MERGE HERE	TAKE TURNS

SPEEDS 40 MPH AND GREATER

(FLASHING CAUTION MODE)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 109	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 31

PLOT DATE : 2/18/2026 10:30 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 937NB+00

TEMPORARY TAPE RUMBLE STRIPS
(1.5' SPACING)

WO4-2L

COVERING SIGNS (TYPE II)

SPEED LIMIT 70

TEMPORARY TAPE RUMBLE STRIPS
(5' SPACING)

SB+84.39
0'

SB+34.39
0'

940SB

IH 41 SB

945SB

R/L SB

950SB

SPEED LIMIT 60

940NB

IH 41 NB

945NB

R/L NB

950NB

COMBINATION WORK ZONE DIGITAL SPEED LIMIT
- SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

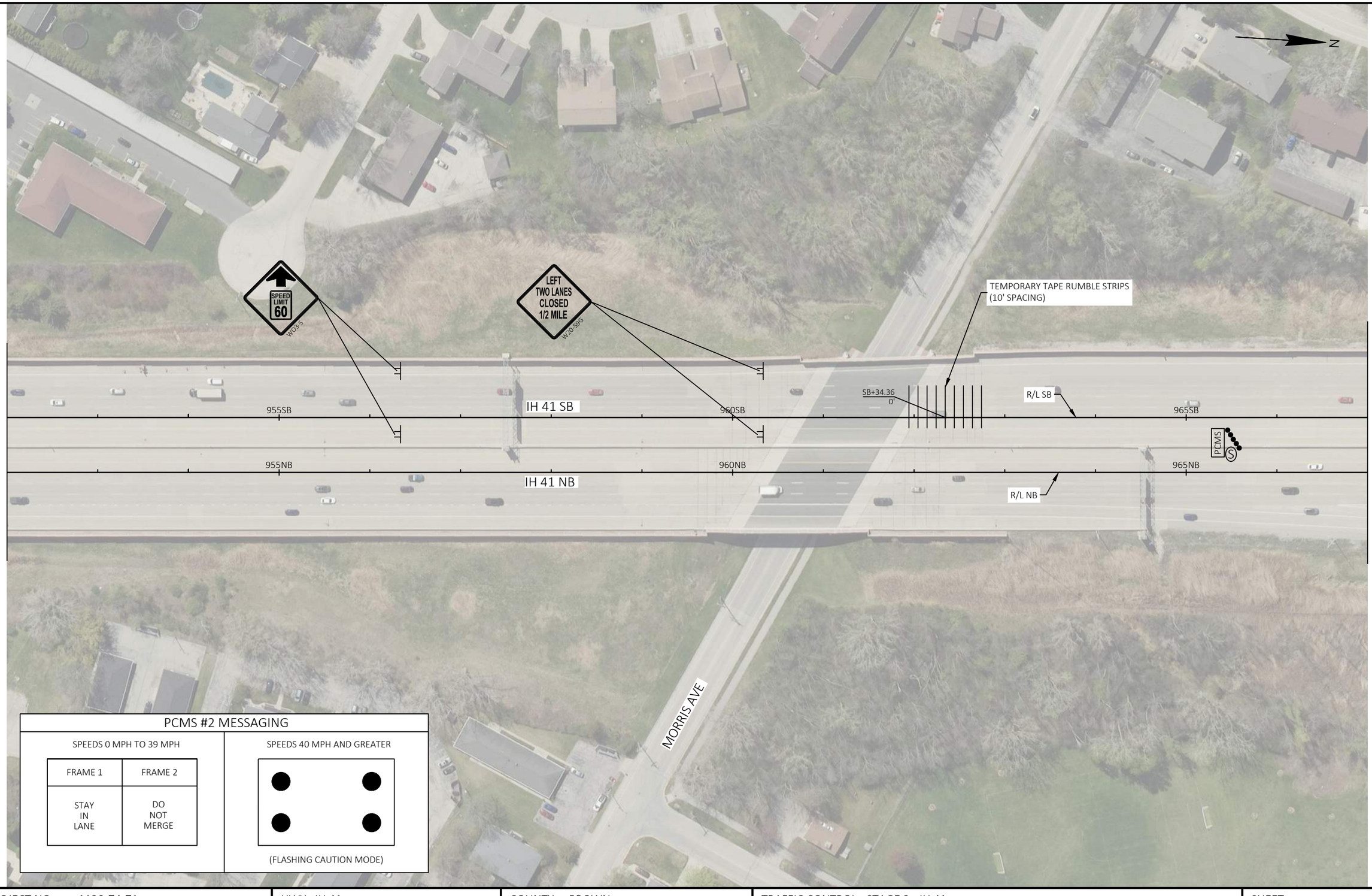
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 110	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 32

PLOT DATE : 4/30/2026 2:25 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PCMS #2 MESSAGING

SPEEDS 0 MPH TO 39 MPH	
FRAME 1	FRAME 2
STAY IN LANE	DO NOT MERGE

SPEEDS 40 MPH AND GREATER

(FLASHING CAUTION MODE)

2

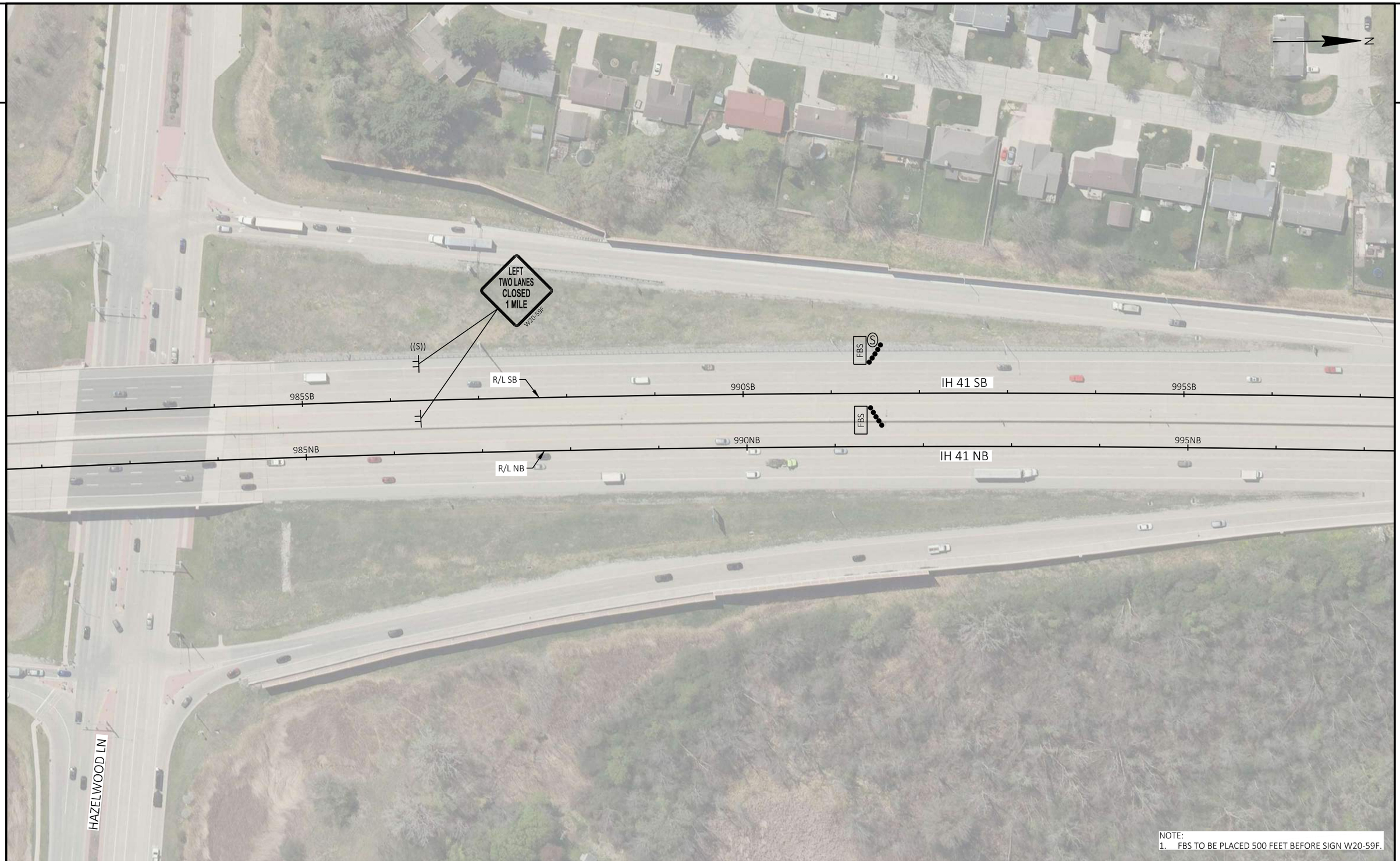
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 111	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 33

PLOT DATE : 4/15/2026 2:41 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



NOTE:
1. FBS TO BE PLACED 500 FEET BEFORE SIGN W20-59F.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 112	E

2

2

N

ROAD WORK 2 MILES
W20-1E

LAMBEAU ST

FBS

FBS

S

R/L SB

1035SB

1040SB

1045SB

IH 41 SB

1035NB

1040NB

1045NB

R/L NB

IH 41 NB

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

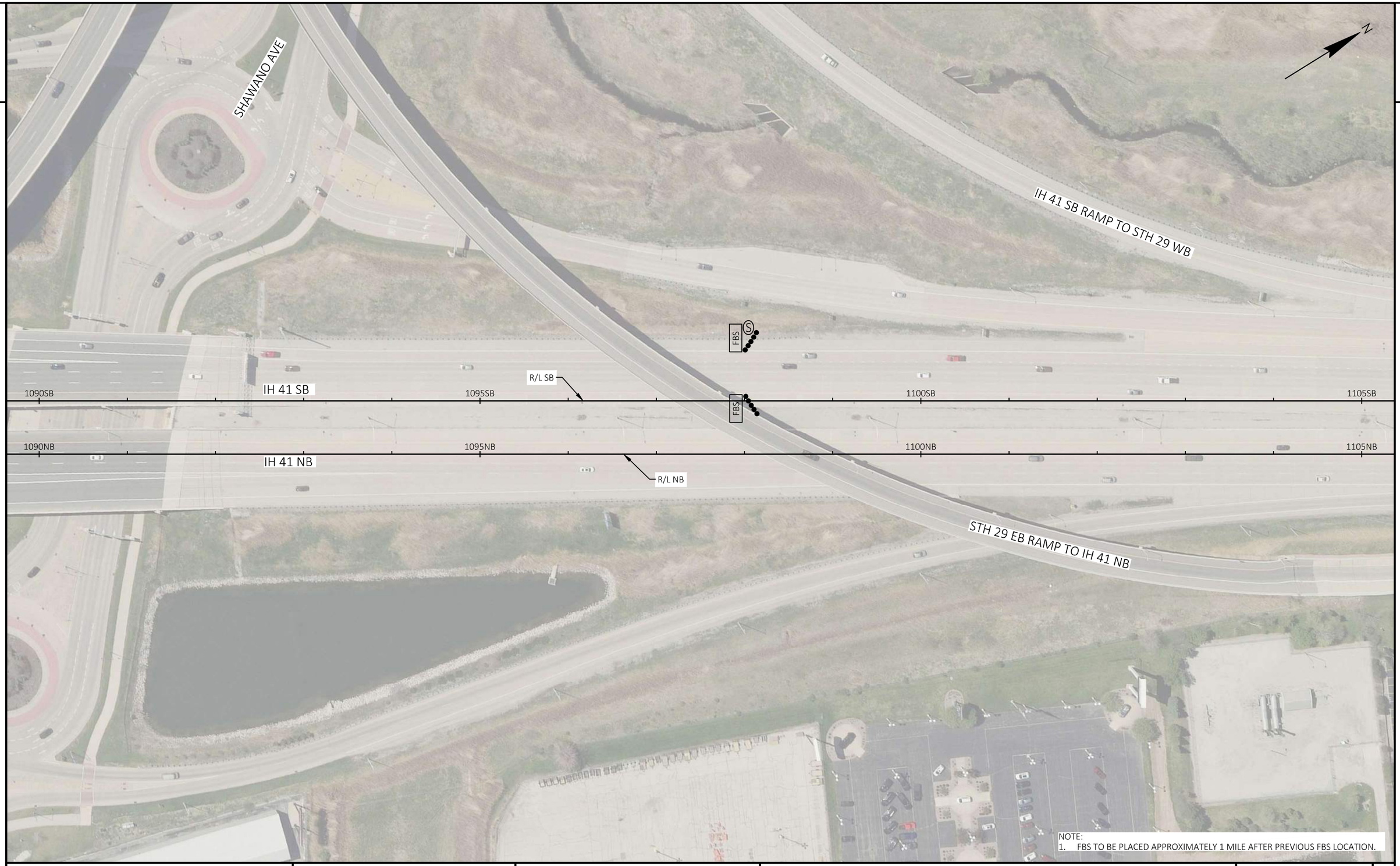
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 113	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 39

PLOT DATE : 2/18/2026 10:30 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 114	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 43

PLOT DATE : 2/18/2026 10:30 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

PCMS

PCMS

1140SB

IH 41 SB

R/L SB

1145SB

1150SB

1140NB

1145NB

1150NB

IH 41 NB

R/L NB

PCMS #1 MESSAGING	
SPEEDS 0 MPH TO 39 MPH	SPEEDS 40 MPH AND GREATER
FRAME 1: STOPPED TRAFFIC AHEAD / FRAME 2: USE BOTH LANES	(FLASHING CAUTION MODE)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - IH 41	SHEET 115	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S2.DWG
LAYOUT NAME - 46

PLOT DATE : 2/13/2026 8:32 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

STAGE 3 SUMMARY

MAINTENANCE OF TRAFFIC:

- IH 41 WILL REMAIN OPEN TO TWO (2) 12' LANES OF TRAFFIC AT ALL TIMES.
- IH 41 SPEED TO BE REDUCED TO 55 MPH THROUGH THE WORK ZONE.
- IH 41 NORTHBOUND EXIT RAMP TO ONEIDA STREET WILL REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- IH 41 NORTHBOUND EXIT RAMP TO STH 172 WILL REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- IH 41 NORTHBOUND TRAFFIC WILL BE SHIFTED TO THE INSIDE LANE(S) AND SHOULDER THROUGH THE WORK ZONE.
- IH 41 NORTHBOUND CD RAMP TRAFFIC WILL BE SHIFTED TO THE OUTSIDE LANE AND SHOULDER THROUGH THE WORK ZONE.
- IH 41 SOUTHBOUND EXIT RAMP TO ONEIDA STREET WILL REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- IH 41 SOUTHBOUND ENTRANCE RAMP FROM ONEIDA STREET TO BE CLOSED.
- IH 41 SOUTHBOUND TRAFFIC WILL BE SHIFTED TO THE INSIDE LANE(S) AND SHOULDER THROUGH THE WORK ZONE.

CONSTRUCTION TO BE COMPLETED:

- REMOVE AND REPLACE OUTSIDE LANES AND SHOULDERS OF IH 41 NORTHBOUND AND SOUTHBOUND.
- CONSTRUCT OUTSIDE PORTION OF CONCRETE PAVEMENT APPROACH SLABS AND STRUCTURAL APPROACH SLABS FOR B-5-616, B-5-617, B-5-618, AND B-5-619 ALONG IH 41 NORTHBOUND AND SOUTHBOUND.
- REMOVE AND REPLACE PAVEMENT OF THE ONEIDA STREET ENTRANCE RAMP TO IH 41 SOUTHBOUND.
- REMOVE AND REPLACE THE INSIDE LANE AND SHOULDER OF THE IH 41 NORTHBOUND CD RAMP.
- CONSTRUCT INSIDE PORTION OF THE CONCRETE PAVEMENT APPROACH SLABS AND STRUCTURAL APPROACH SLABS FOR B-5-612 AND B-5-621 ALONG IH 41 CD RAMP.
- CONSTRUCT CONCRETE RUMBLE STRIPS ALONG IH 41 NORTHBOUND OUTSIDE SHOULDERS.
- CONSTRUCT CONCRETE RUMBLE STRIPS AND/OR ASPHALTIC RUMBLE STRIPS ALONG IH 41 SOUTHBOUND OUTSIDE SHOULDERS.

REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:

- TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM
- TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY
- TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY TAPE RUMBLE STRIPS
- TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
- TRAFFIC CONTROL, MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD

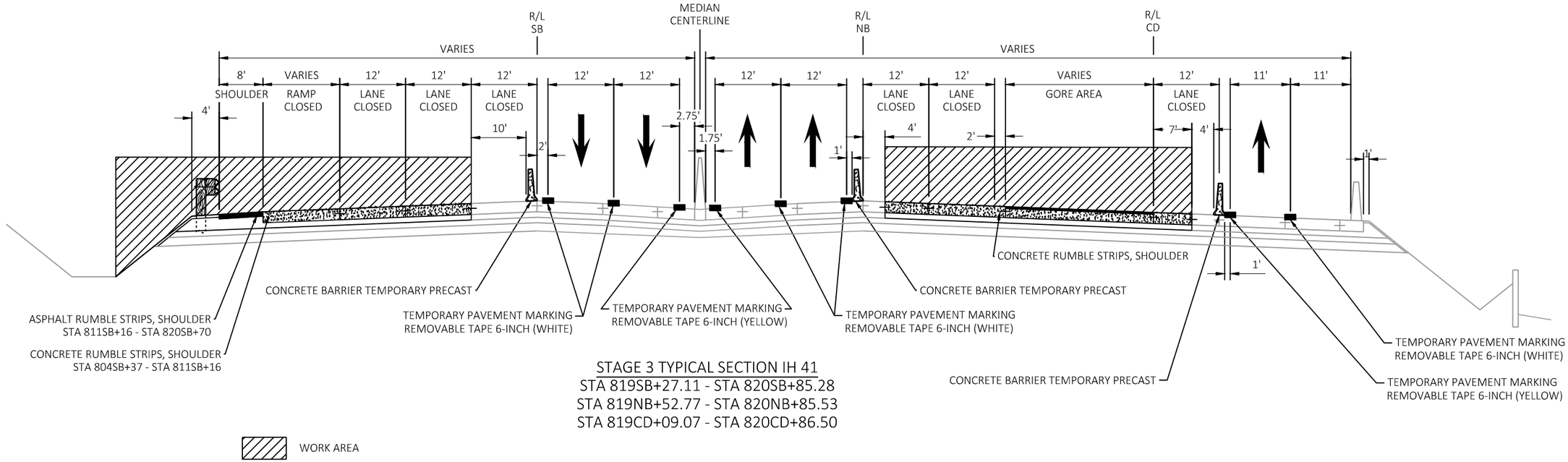
NOTE: PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON IH 41 SB AND IH 41 NB DURING SWITCH FROM STAGE 2 TO STAGE 3

PCMS MESSAGING

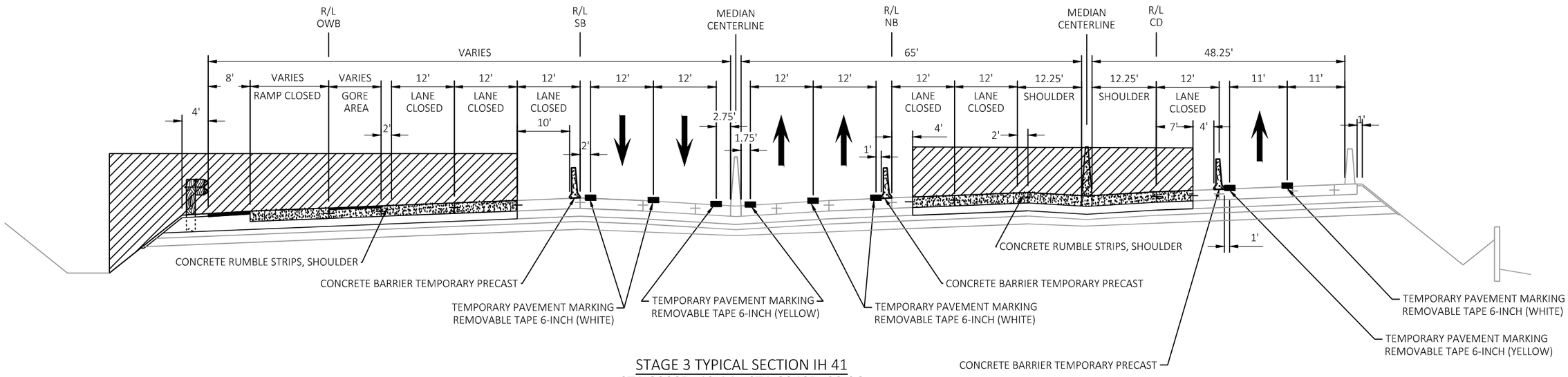
FRAME 1	FRAME 2
NEW TRAFFIC PATTERN	AHEAD XX MILES

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - OVERVIEW STAGE 3 - IH 41	SHEET 116	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025100-TC_OVERVIEW-IH 41.DWG
LAYOUT NAME - OVERVIEW STAGE 3
PLOT DATE : 6/22/2026 8:46 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

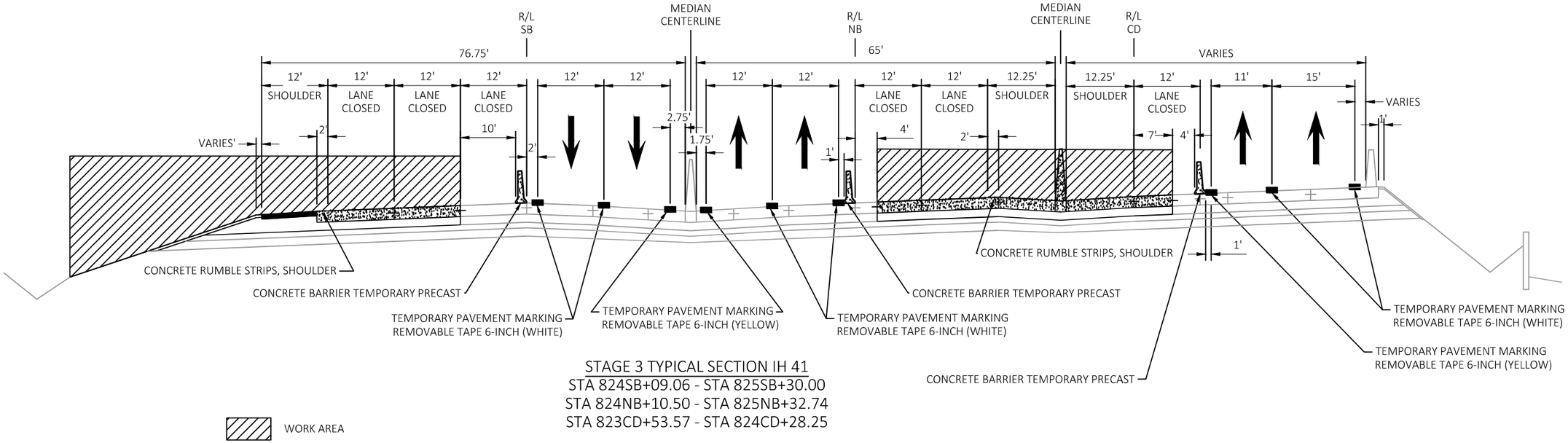


STAGE 3 TYPICAL SECTION IH 41
STA 819SB+27.11 - STA 820SB+85.28
STA 819NB+52.77 - STA 820NB+85.53
STA 819CD+09.07 - STA 820CD+86.50

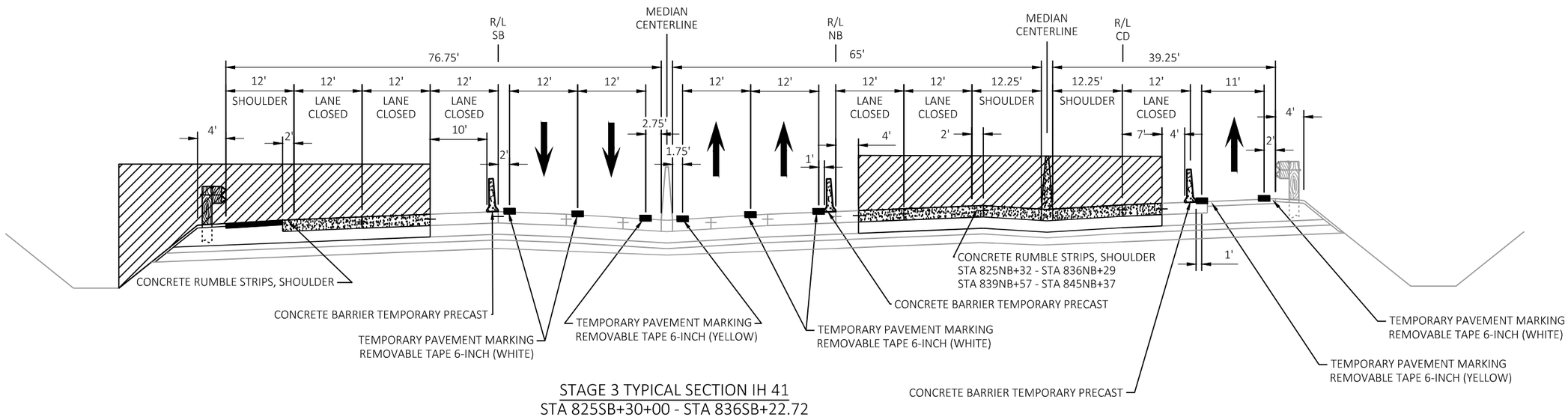


STAGE 3 TYPICAL SECTION IH 41
STA 822SB+42.14 - STA 824SB+09.06
STA 822NB+42.42 - STA 824NB+03.75
STA 822CD+43.41 - STA 823CD+53.67
STA 822OWB+42.23 - STA 824OWB+09.25

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 3	SHEET 117	E



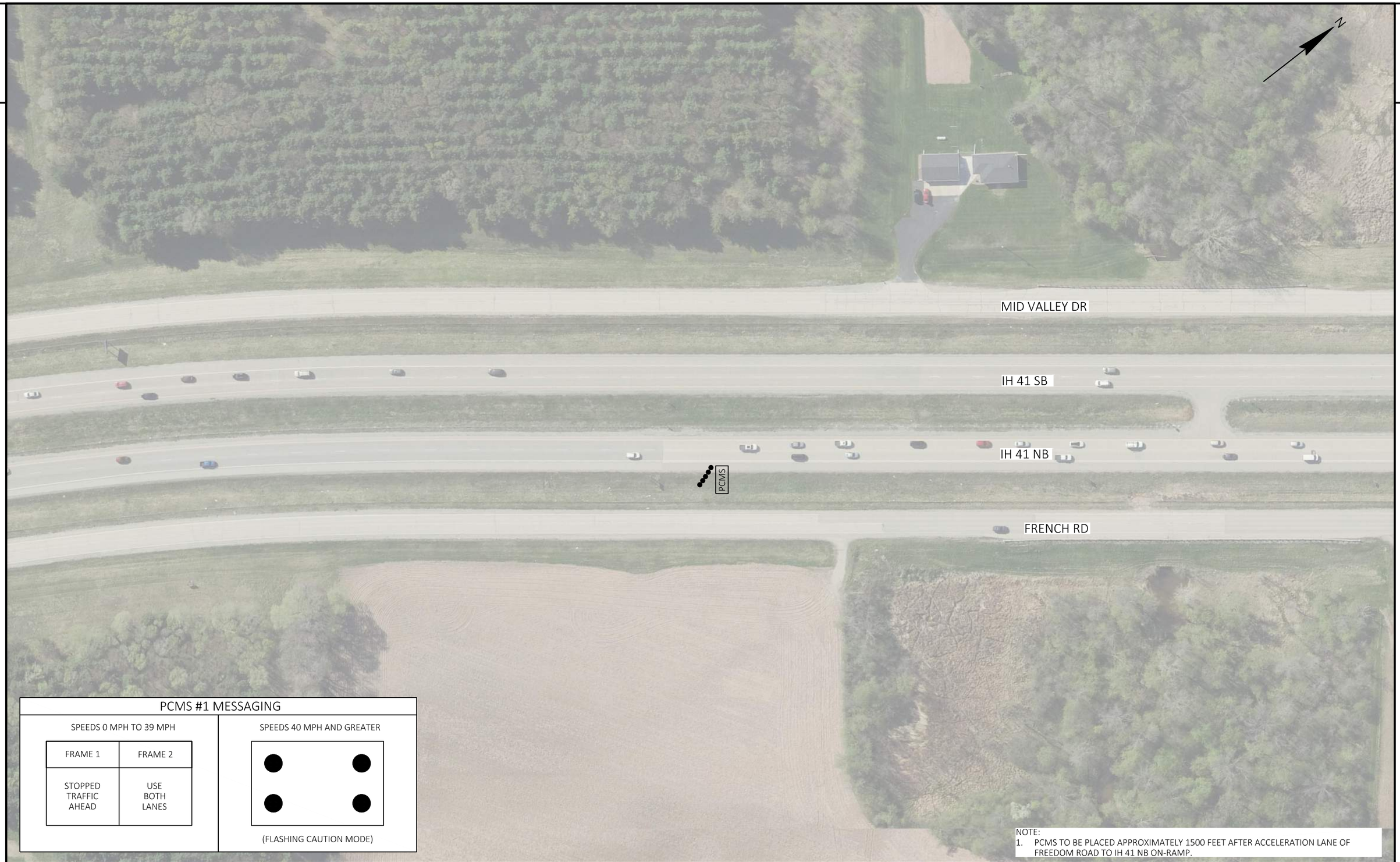
STAGE 3 TYPICAL SECTION IH 41
STA 824SB+09.06 - STA 825SB+30.00
STA 824NB+10.50 - STA 825NB+32.74
STA 823CD+53.57 - STA 824CD+28.25



STAGE 3 TYPICAL SECTION IH 41
STA 825SB+30+00 - STA 836SB+22.72
STA 838SB+60.99 - STA 841SB+05.28
STA 825NB+32.74 - STA 836NB+84.37
STA 839NB+01.21 - STA 841NB+23.00
STA 824CD+28.25 - STA 837CD+37.37
STA 839CD+53.07 - STA 843CD+34.34

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 3	SHEET 118	E

2



PCMS #1 MESSAGING

SPEEDS 0 MPH TO 39 MPH		SPEEDS 40 MPH AND GREATER
FRAME 1	FRAME 2	(FLASHING CAUTION MODE)
STOPPED TRAFFIC AHEAD	USE BOTH LANES	

NOTE:
1. PCMS TO BE PLACED APPROXIMATELY 1500 FEET AFTER ACCELERATION LANE OF FREEDOM ROAD TO IH 41 NB ON-RAMP.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 119	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 01
PLOT DATE : 2/18/2026 10:37 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

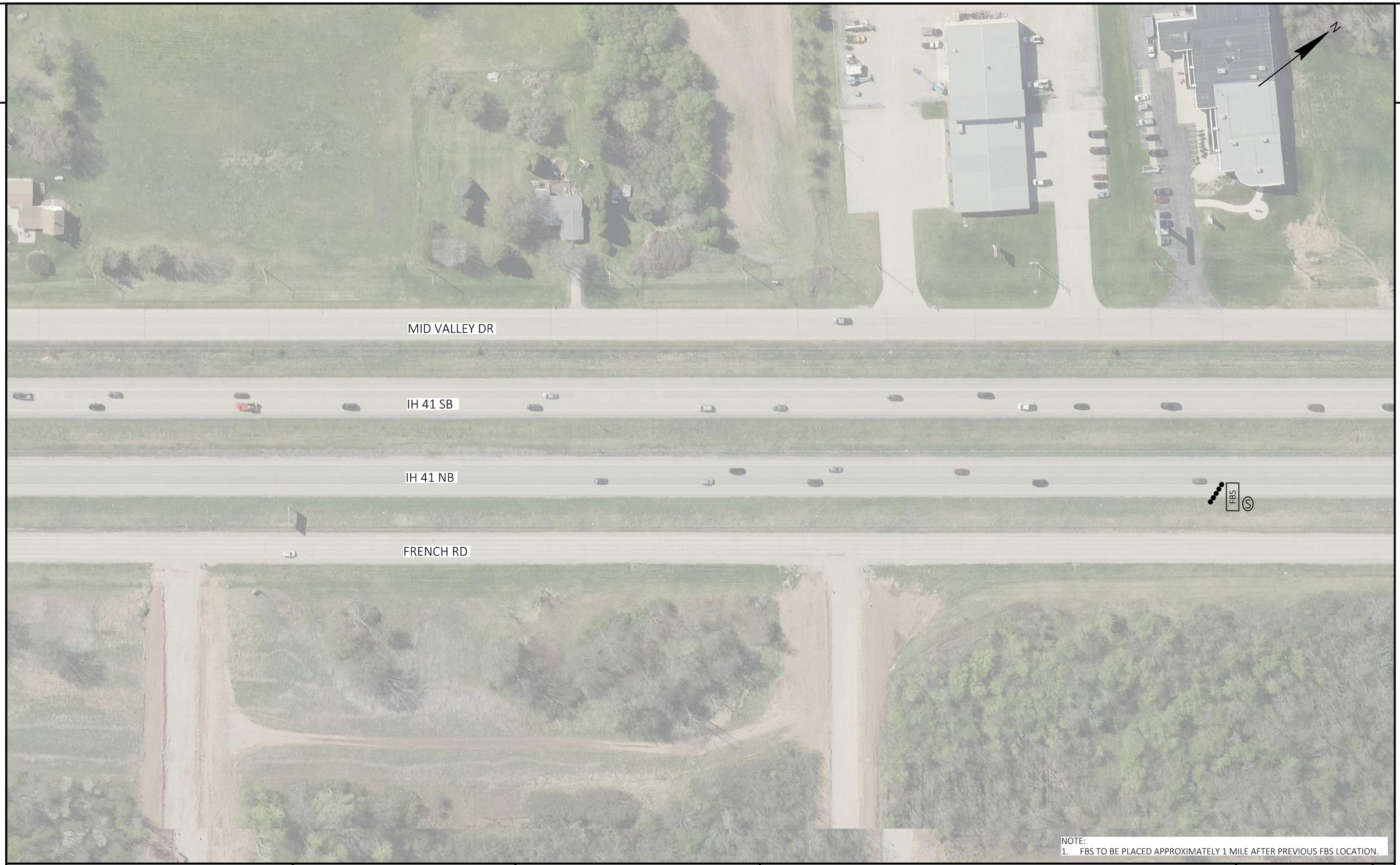
2

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1300 FEET AFTER LITTLE RAPIDS ROAD CROSSING.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 120	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 03
PLOT DATE : 2/18/2026 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 121	E

2

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 122	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 10

PLOT DATE : 2/18/2026 10:38 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

MID VALLEY DR

675SB

680SB

IH 41 SB

R/L SB

685SB

675NB

680NB

685NB

IH 41 NB

R/L NB

FBS

FBS

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 123	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 14

PLOT DATE : 2/18/2026 10:38 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MID VALLEY DR

715SB

720SB

IH 41 SB

R/L SB

725SB

73

715NB

720NB

725NB

730

IH 41 NB

R/L NB

FBS

FBS

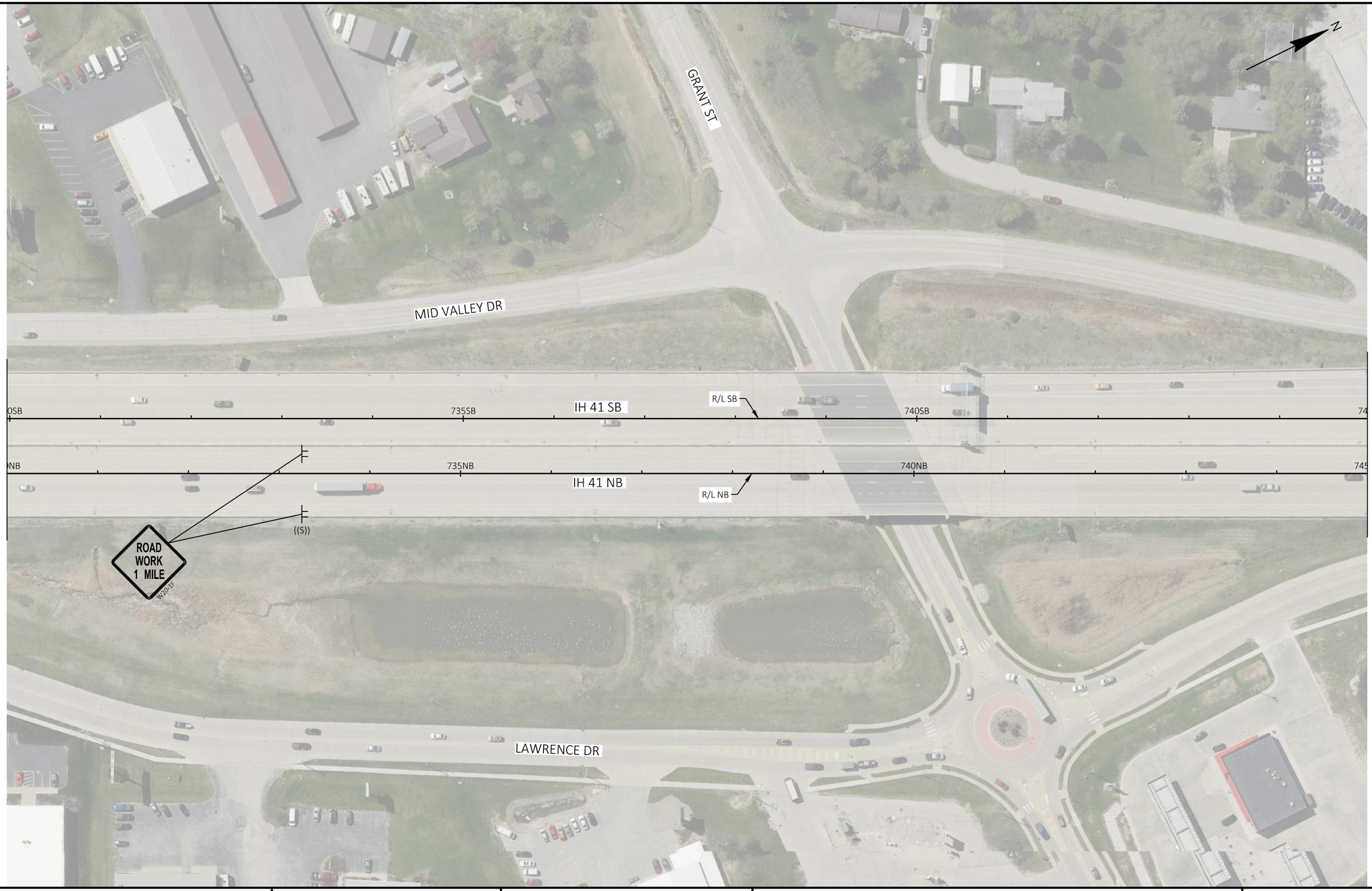
MATCH LINE STA. 730NB+00

LAWRENCE DR

NOTE:
1. FBS TO BE PLACED 500 FEET BEFORE SIGN W20-1F.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 124	E

2



2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 125	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 18

PLOT DATE : 2/18/2026 10:38 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MID VALLEY DR

TEMPORARY TAPE RUMBLE STRIPS ORANGE
(10' SPACING)

R/L SB

IH 41 SB

MATCH LINE STA. 745NB+00

5SB

750SB

755SB

76

NB

750NB

755NB

760

MATCH LINE STA. 760NB+00

PCMS

R/L NB

IH 41 NB

NB+24.14
0'

LEFT LANE
CLOSED
1/2 MILE
W20-5SG

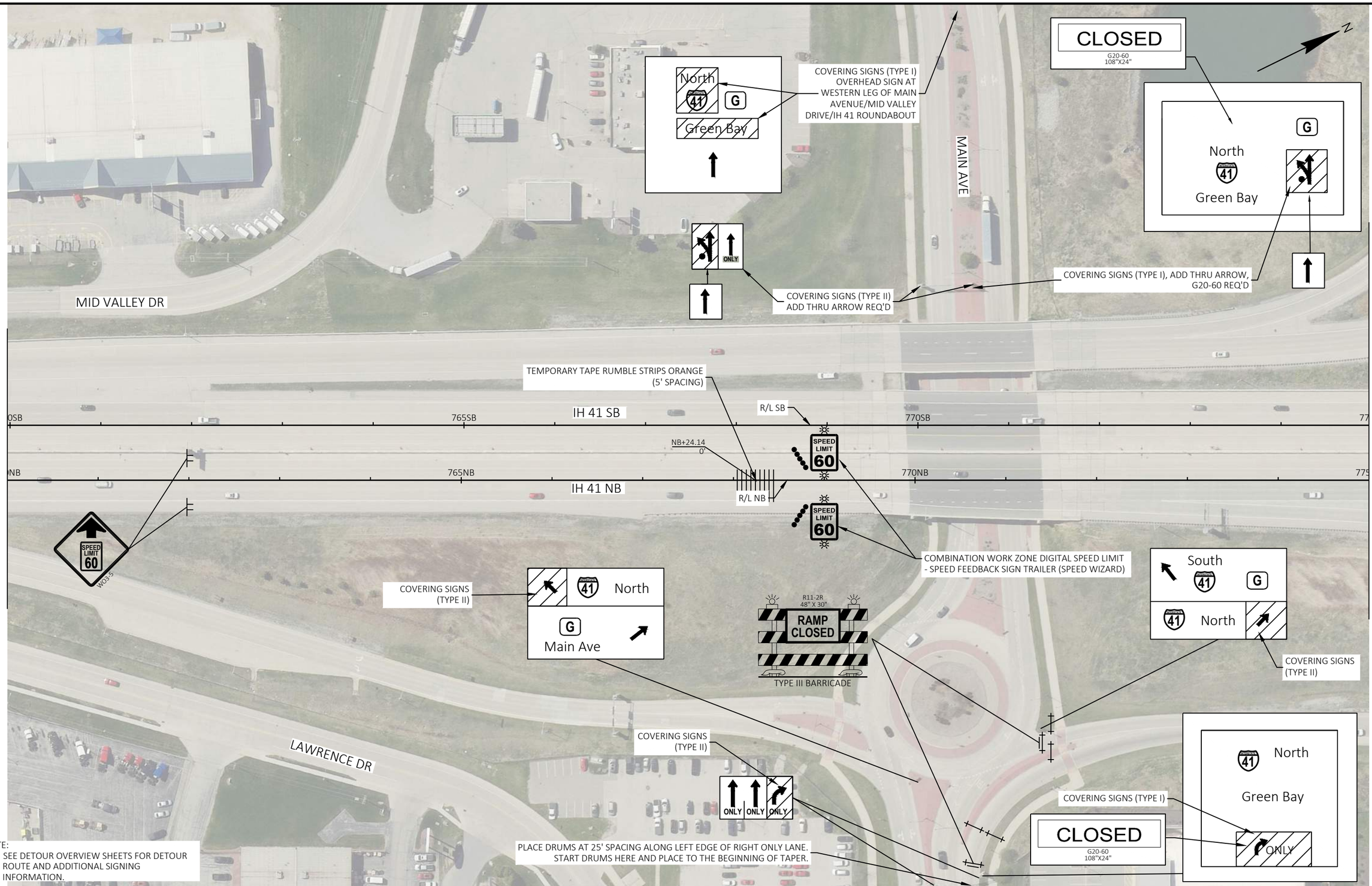
LAWRENCE DR

PCMS #2 MESSAGING

SPEEDS 0 MPH TO 39 MPH		SPEEDS 40 MPH AND GREATER
FRAME 1	FRAME 2	● ●
STAY IN LANE	DO NOT MERGE	● ●
		(FLASHING CAUTION MODE)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 126	E

2



NOTE:
1. SEE DETOUR OVERVIEW SHEETS FOR DETOUR ROUTE AND ADDITIONAL SIGNING INFORMATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 127 E

2

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

TEMPORARY TAPE RUMBLE STRIPS ORANGE
(1.5' SPACING)

MATCH LINE STA. 775NB+00

5SB IH 41 SB 780SB 785SB R/L SB 79

NB IH 41 NB 780NB 785NB 790

PCMS

NB+74.15
0'

R/L NB

S

50'
TYP.

NB+24.17
-12' LT

02
(BEGIN)

MATCH LINE STA. 790NB+00

W04-2L

PCMS

ASHLAND AVE

CTHG/MAIN AVENUE TO IH 41 NB
ON-RAMP PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

PCMS #3 MESSAGING

SPEEDS 0 MPH TO 39 MPH

FRAME 1	FRAME 2
MERGE HERE	TAKE TURNS

SPEEDS 40 MPH AND GREATER

(FLASHING CAUTION MODE)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 128	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 21
PLOT DATE : 4/15/2026 2:46 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X-	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

GLORY RD

MATCH LINE STA. 790NB+00

MATCH LINE STA. 805NB+00

SPEED LIMIT 70 R2-1 24"X30"

END ROAD WORK G20-2A 48"X24"

((E))

COMBINATION WORK ZONE DIGITAL SPEED LIMIT - SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

R/L SB

795SB

800SB

805SB

50' TYP.

IH 41 SB

100' TYP.

SPEED LIMIT 60

50' TYP.

795NB

02

R/L NB

800NB

NB+51.53 -1' LT

NB+44.25 0'

IH 41 NB

01 (BEGIN)

R11-2L 48" X 30"

LANE CLOSED

TYPE III BARRICADE

LANE SPLIT WO6-50P 60"X12"

SPEED LIMIT 70

COVERING SIGNS (TYPE II)

EXIT 164 B

EXIT 164 A

North

TO

41

172

43

AAA

A Straubel Airport

Oneida St Waube La

EXIT ONLY

COVERING SIGNS (TYPE I), ADD THRU ARROW AND RIGHT ARROW REQ'D

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 129	E

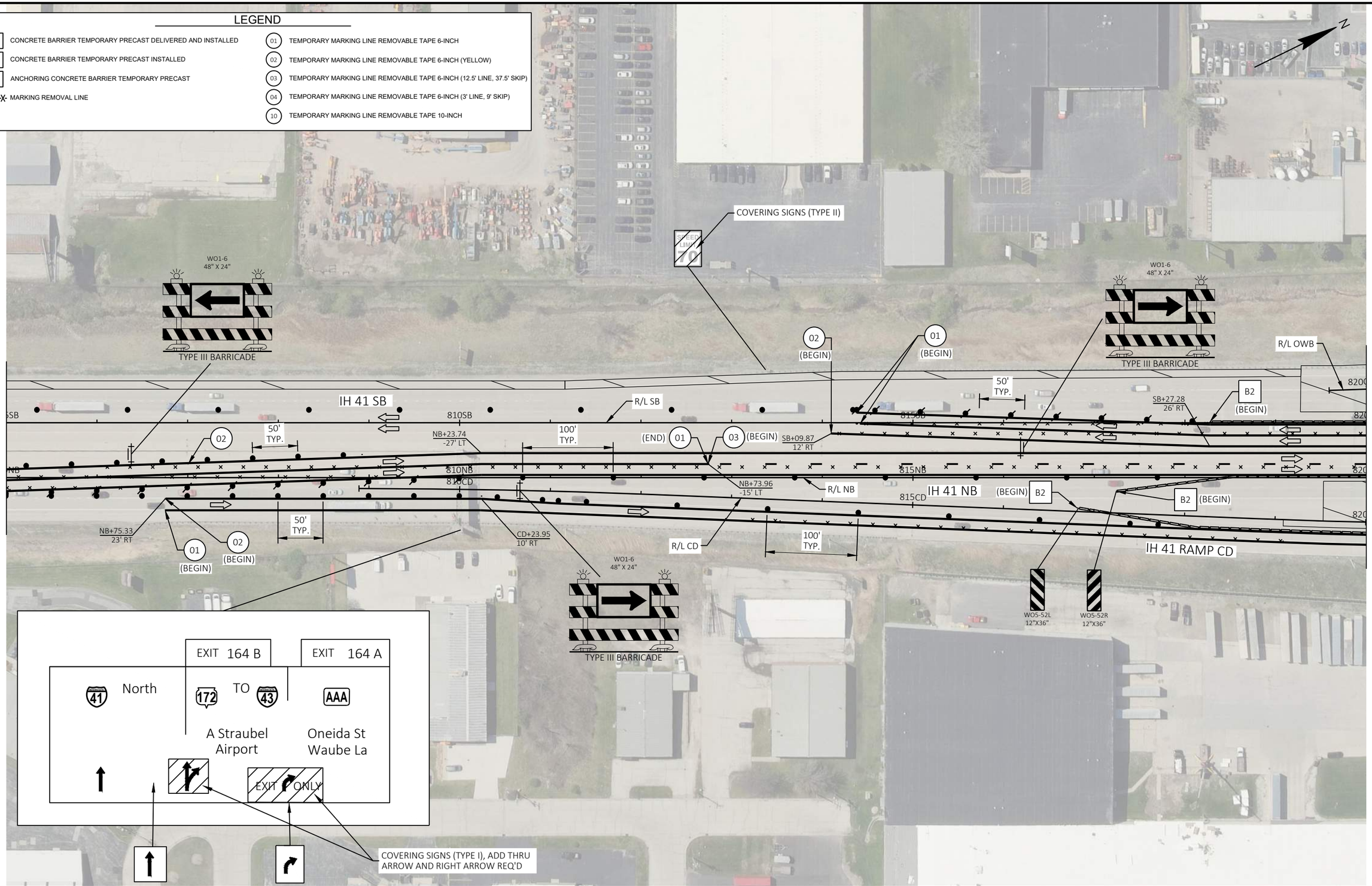
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 22

PLOT DATE : 4/30/2026 2:29 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

- B1 — CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
- B2 — CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
- B3 — ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
- MARKING REMOVAL LINE
- 01 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- 02 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 03 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
- 04 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
- 10 — TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 130	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 23

PLOT DATE : 4/29/2026 2:25 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

B1 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
X-X-X MARKING REMOVAL LINE	04 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
	10 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

IH 41 SB ON-RAMP FROM ONEIDA ST PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

N

PCMS

MATCH LINE STA. 820NB+00

MATCH LINE STA. 833NB+00

825OWB

830OWB

R/L OWB

B2

SB+77.50
14' RT

825SB

IH 41 SB

830SB

R/L SB

825NB

830NB

IH 41 NB

R/L NB

825CD

830CD

IH 41 RAMP CD

825OWC

CD+27.94
25' RT

OWC+98.33
0'

OWC+49.90
15' RT

OWC+35.84
0'

CD+95.94
25' RT

R/L CD

100'
TYP.

B2

SPEED LIMIT 60

COMBINATION WORK ZONE DIGITAL SPEED LIMIT - SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

10 (BEGIN)

01 (END)

10 (END)

01 (BEGIN)

25'
TYP.

830OWC

R/L OWC

INSTALL CRASH CUSHION PERMANENT

END ROAD WORK
G20-2A
48"X24"

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 131	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 24
PLOT DATE : 4/30/2026 2:29 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

COVERING SIGNS (TYPE I) (OVERHEAD SIGNS)

SOUTH INTERSTATE 41 EXIT ONLY

50' TYP.

R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

R11-2R 48" X 30" RAMP CLOSED TYPE III BARRICADE

R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

COMBINATION WORK ZONE DIGITAL SPEED LIMIT - SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

WO5-52R 12"X36"

WO1-6 48" X 24" TYPE III BARRICADE

SPEED LIMIT 60

MATCH LINE STA. 833NB+00

835SB

R/L SB

IH 41 SB

840SB

835NB

840NB

835CD

R/L NB

R/L CD

IH 41 NB

840CD

IH 41 RAMP CD

WO1-4BR

WO1-4L

02

01

B2 (END)

01 (BEGIN) 03 (END)

SB+46.08 2' RT

SB+86.15 14' RT

845SB

845NB

845CD

NB+56.94 -15' LT

NB+07.66 -3' LT

CD+06.63 14' RT

50' TYP.

50' TYP.

03 (END) 01 (BEGIN)

B1 (BEGIN) B2 (END)

(END) B2

B1 (END)

MATCH LINE STA. 847NB+00

ONEIDA ST

R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

SOUTH INTERSTATE 41 EXIT ONLY

COVERING SIGNS (TYPE I) (OVERHEAD SIGNS)

WO1-6 48" X 24" TYPE III BARRICADE

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 132	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 25
PLOT DATE : 4/30/2026 2:29 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

B1 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
MARKING REMOVAL LINE	04 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
	10 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

EXIT 164 A

South 41

AAA

Oneida St
Waube La

EXIT ONLY

COVERING SIGNS (TYPE I)

WO1-6
48" X 24"

TYPE III BARRICADE

MATCH LINE STA. 847NB+00

50' TYP.

50' TYP.

845SB

850NB

NB+57.66
11' RT

01 (END)

02 (END)

850CD

CD+96.75
0' RT

01 (END)

02 (END)

((E))

((E))

855SB

855NB

855CD

IH 41 SB

IH 41 NB

IH 41 RAMP CD

01 (END)

02

SB+81.56
-11' LT

R/L SB

R/L NB

R/L CD

860SB

860NB

860CD

100' TYP.

MATCH LINE STA. 862NB+00

END ROAD WORK
G20-2A
48"X24"

END ROAD WORK
G20-2A
48"X24"

SPEED LIMIT 70
R2-1
24"X30"

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 133	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 26

PLOT DATE : 2/18/2026 10:39 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

COVERING SIGNS (TYPE II)

SPEED LIMIT 70

02

W01-4BL

100' TYP.

MATCH LINE STA. 862NB+00

865SB

870SB

875SB

IH 41 SB

R/L SB

865NB

870NB

875NB

IH 41 NB

R/L NB

R/L CD

875CB

875CD

865CD

870CD

IH 41 RAMP CD

HANSEN RD

MATCH LINE STA. 877NB+00

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 134	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 27

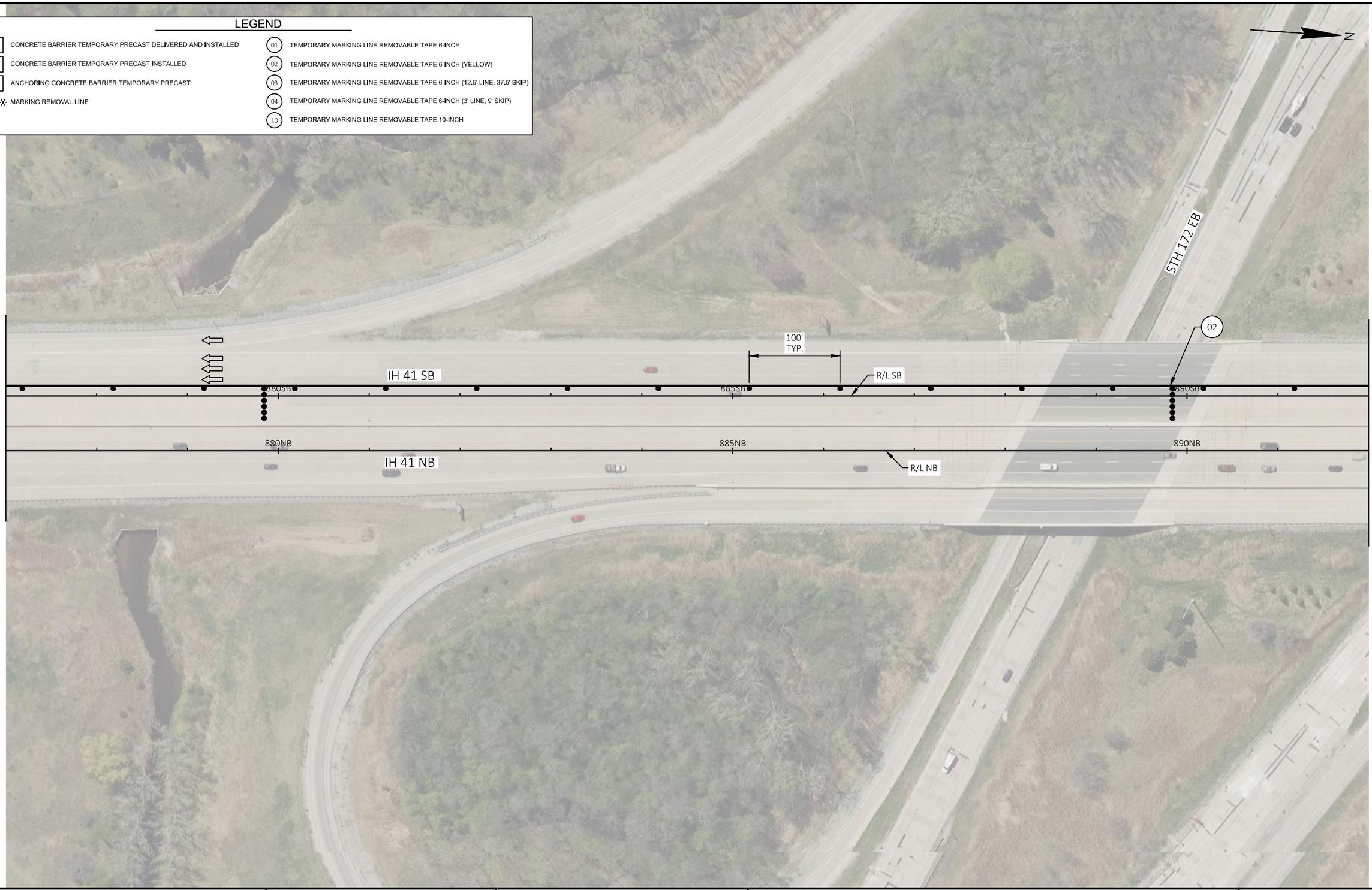
PLOT DATE : 2/18/2026 10:39 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- B1 — CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
- B2 — CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
- B3 — ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
- X-X-X — MARKING REMOVAL LINE
- 01 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- 02 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 03 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
- 04 — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
- 10 — TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH



2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 135	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 28

PLOT DATE : 2/18/2026 10:39 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
X-X-X	MARKING REMOVAL LINE	04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
		10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

STH 172 WB

COMBINATION WORK ZONE DIGITAL SPEED LIMIT
- SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

SPEED LIMIT 60

SPEED LIMIT 60

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

IH 41 SB

895SB

900SB

905SB

100' TYP.

R/L SB

02

50' TYP.

SB+54.50
-11' LT

MATCH LINE STA. 892NB+00

895NB

900NB

905NB

IH 41 NB

R/L NB

MATCH LINE STA. 907NB+00

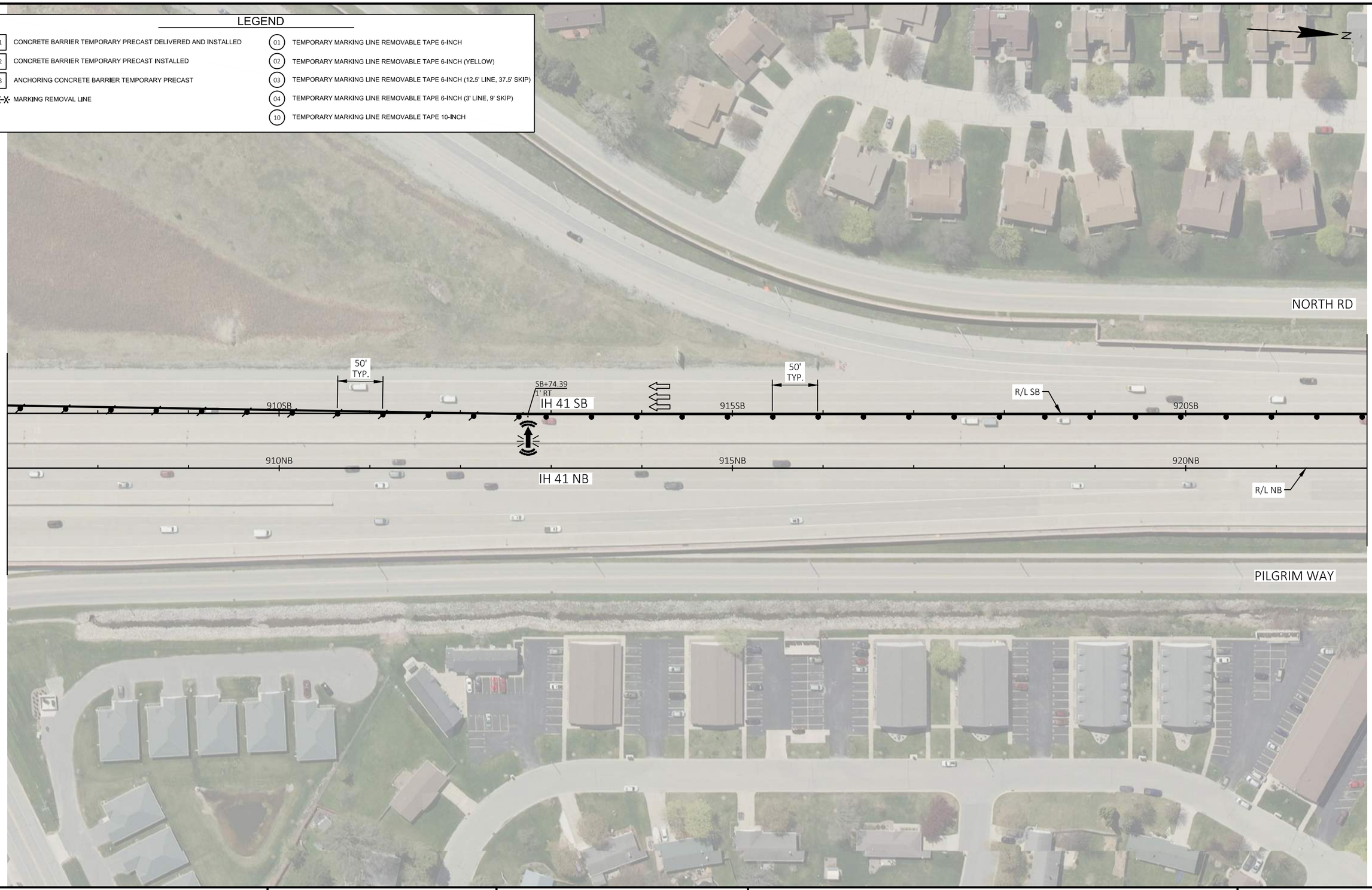
2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 136	E

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 137 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 30

PLOT DATE : 2/18/2026 10:39 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

NORTH RD

MATCH LINE STA. 922NB+00

IH 41 SB

50' TYP.

50' TYP.

925SB

SB+14.39
1' RT

R/L SB

930SB

SB+34.39
12' RT

02 (END)

935SB

PCMS

925NB

IH 41 NB

930NB

R/L NB

935NB

MATCH LINE STA. 937NB+00

W04-2L

PILGRIM WAY

CORMIER RD

PCMS #3 MESSAGING

SPEEDS 0 MPH TO 39 MPH

FRAME 1	FRAME 2
MERGE HERE	TAKE TURNS

SPEEDS 40 MPH AND GREATER

(FLASHING CAUTION MODE)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 138 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 31

PLOT DATE : 2/18/2026 10:39 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

TEMPORARY TAPE RUMBLE STRIPS ORANGE
(1.5' SPACING)

WO4-2L

COVERING SIGNS (TYPE II)

SPEED LIMIT 60

TEMPORARY TAPE RUMBLE STRIPS ORANGE
(5' SPACING)

SB+84.39
0'

SB+34.39
0'

940SB

IH 41 SB

945SB

R/L SB

950SB

SPEED LIMIT 60

940NB

945NB

950NB

IH 41 NB

R/L NB

COMBINATION WORK ZONE DIGITAL SPEED LIMIT
- SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

MATCH LINE STA. 937NB+00

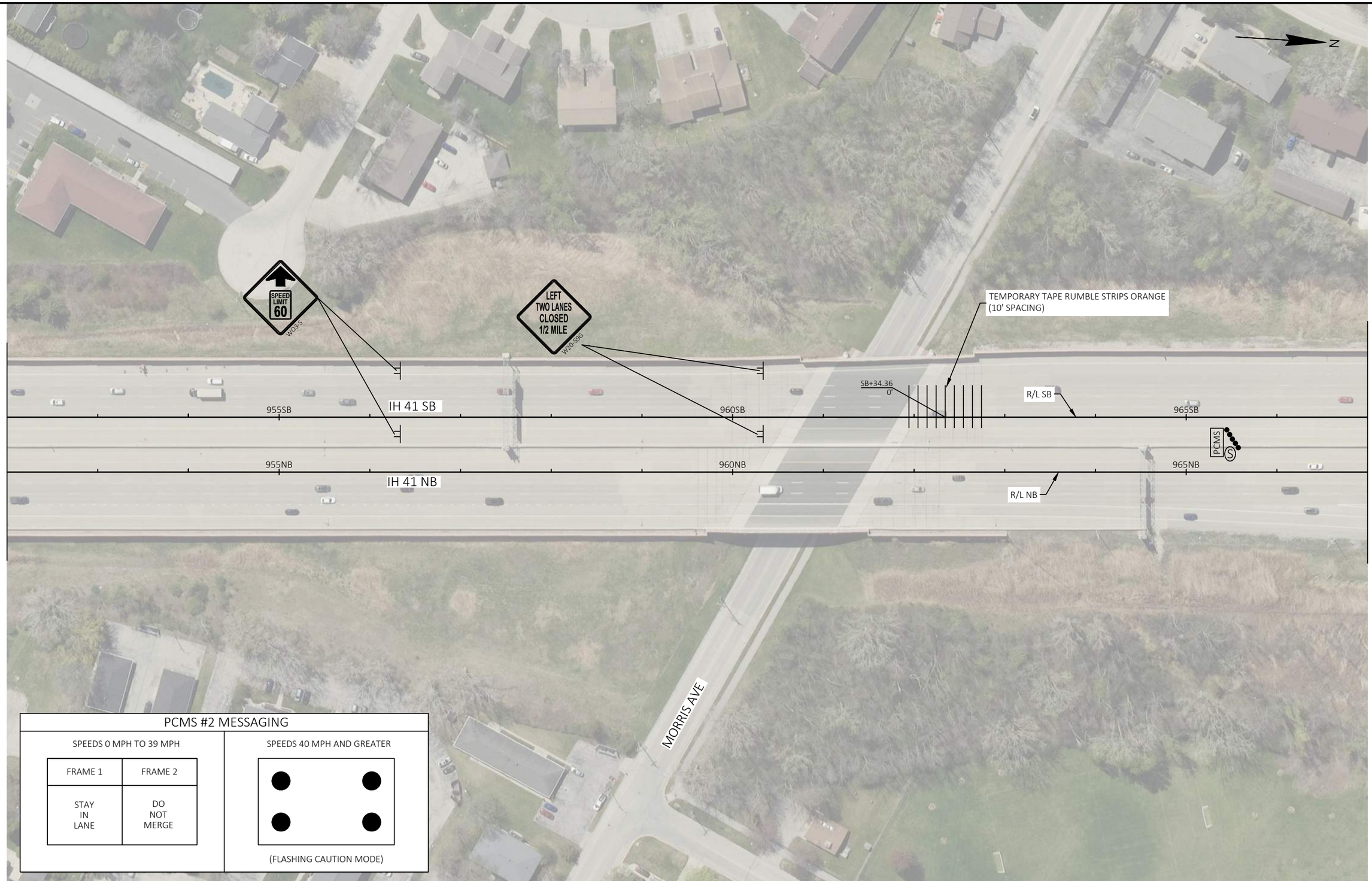
MATCH LINE STA. 952NB+00

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 139	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 32

PLOT DATE : 4/30/2026 2:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

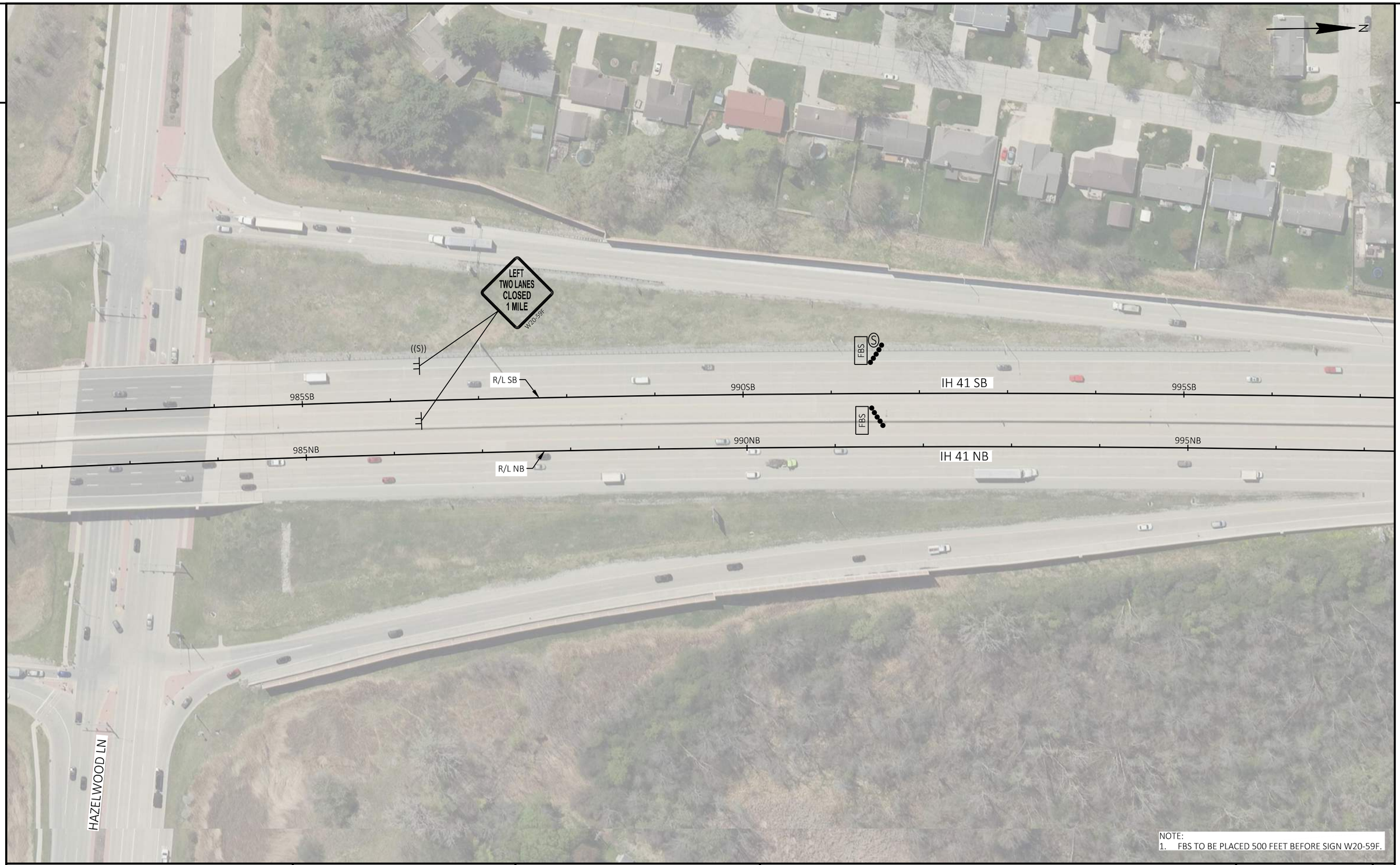


PCMS #2 MESSAGING	
SPEEDS 0 MPH TO 39 MPH	SPEEDS 40 MPH AND GREATER
FRAME 1: STAY IN LANE / FRAME 2: DO NOT MERGE	(FLASHING CAUTION MODE)

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 140	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 33
PLOT DATE : 4/15/2026 2:46 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



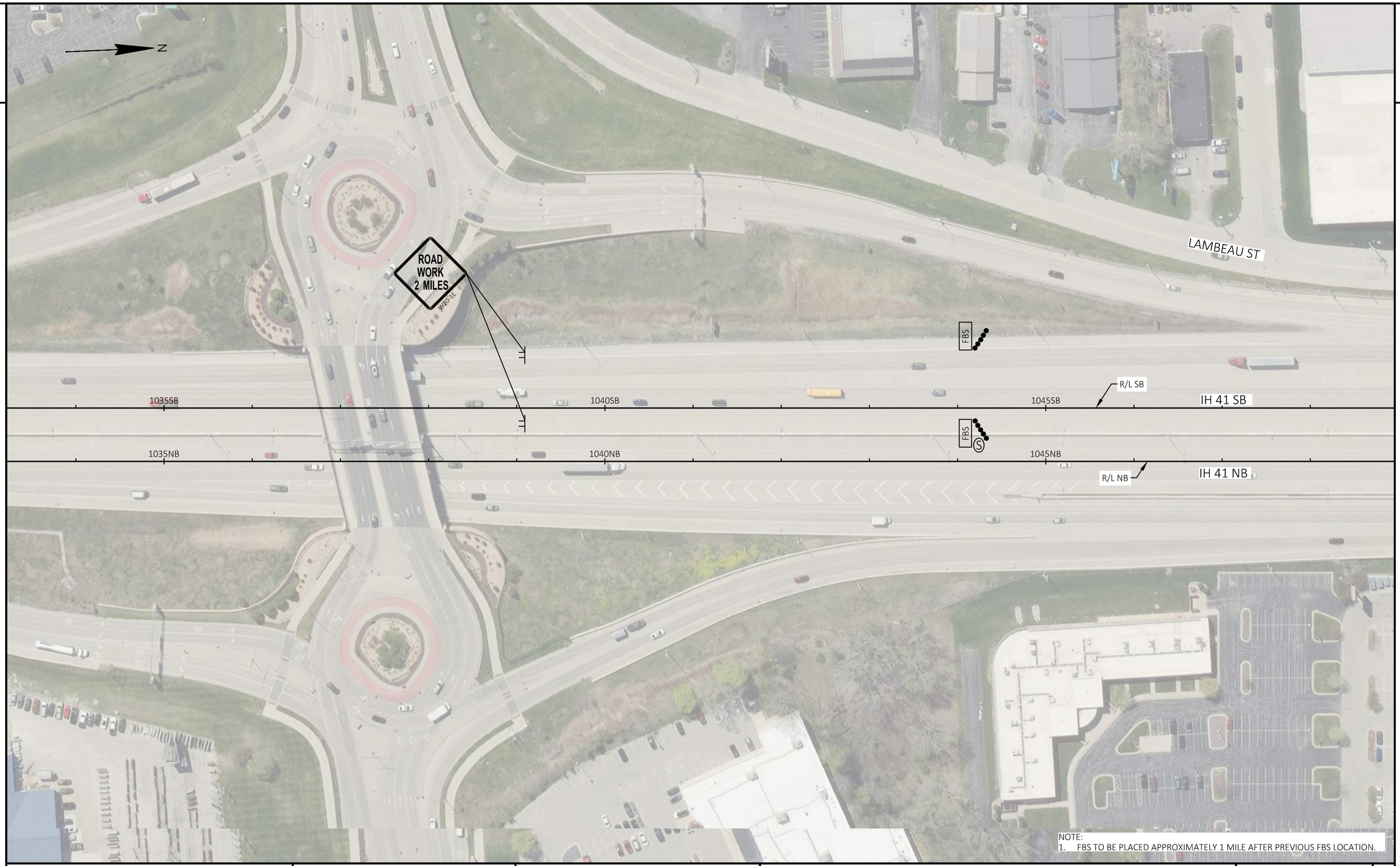
NOTE:
1. FBS TO BE PLACED 500 FEET BEFORE SIGN W20-59F.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 141	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 35

PLOT DATE : 2/18/2026 10:39 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



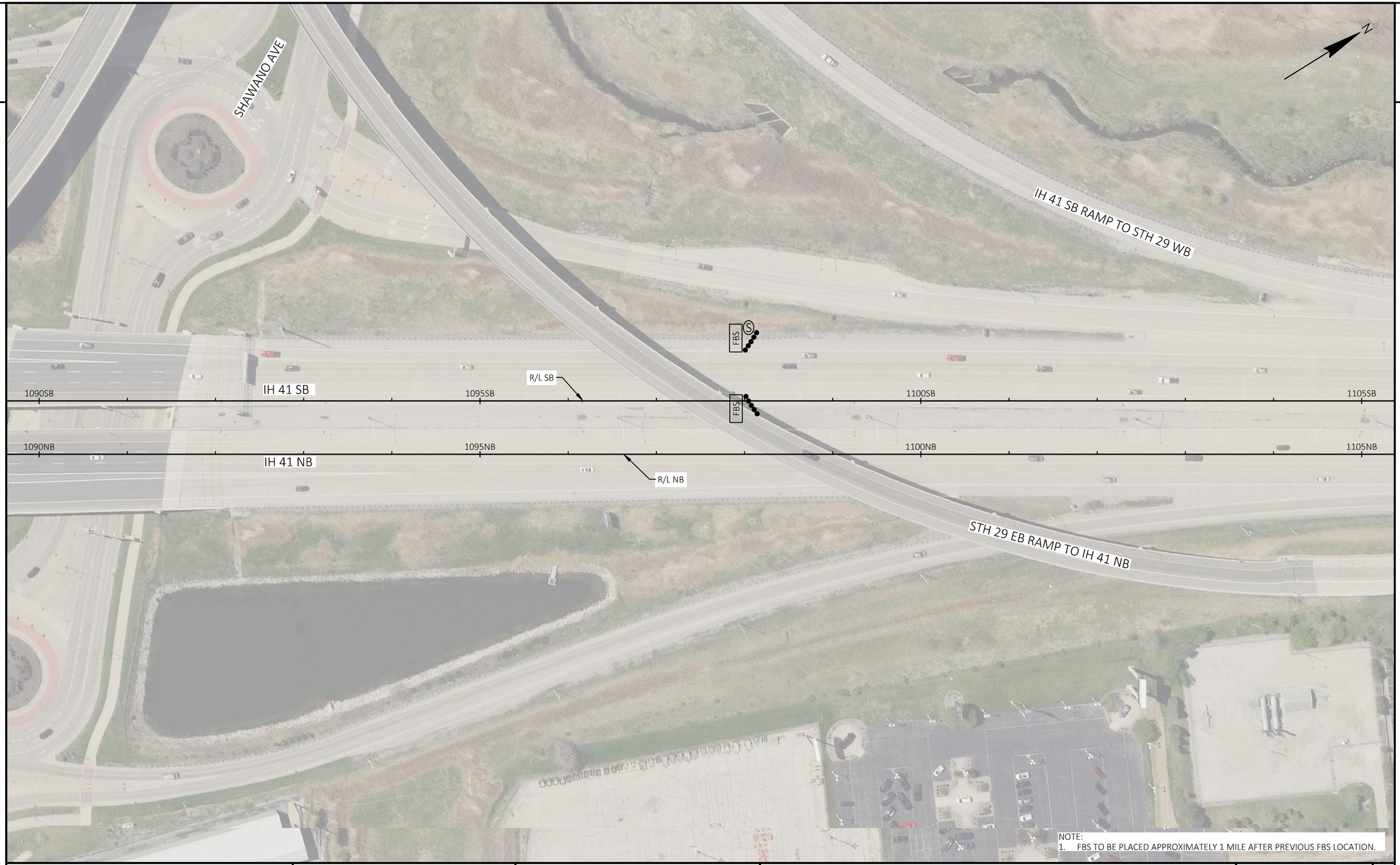
NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 142	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 39

PLOT DATE : 2/18/2026 10:39 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE AFTER PREVIOUS FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 143	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025102-TC-S3.DWG
LAYOUT NAME - 43

PLOT DATE : 2/18/2026 10:39 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

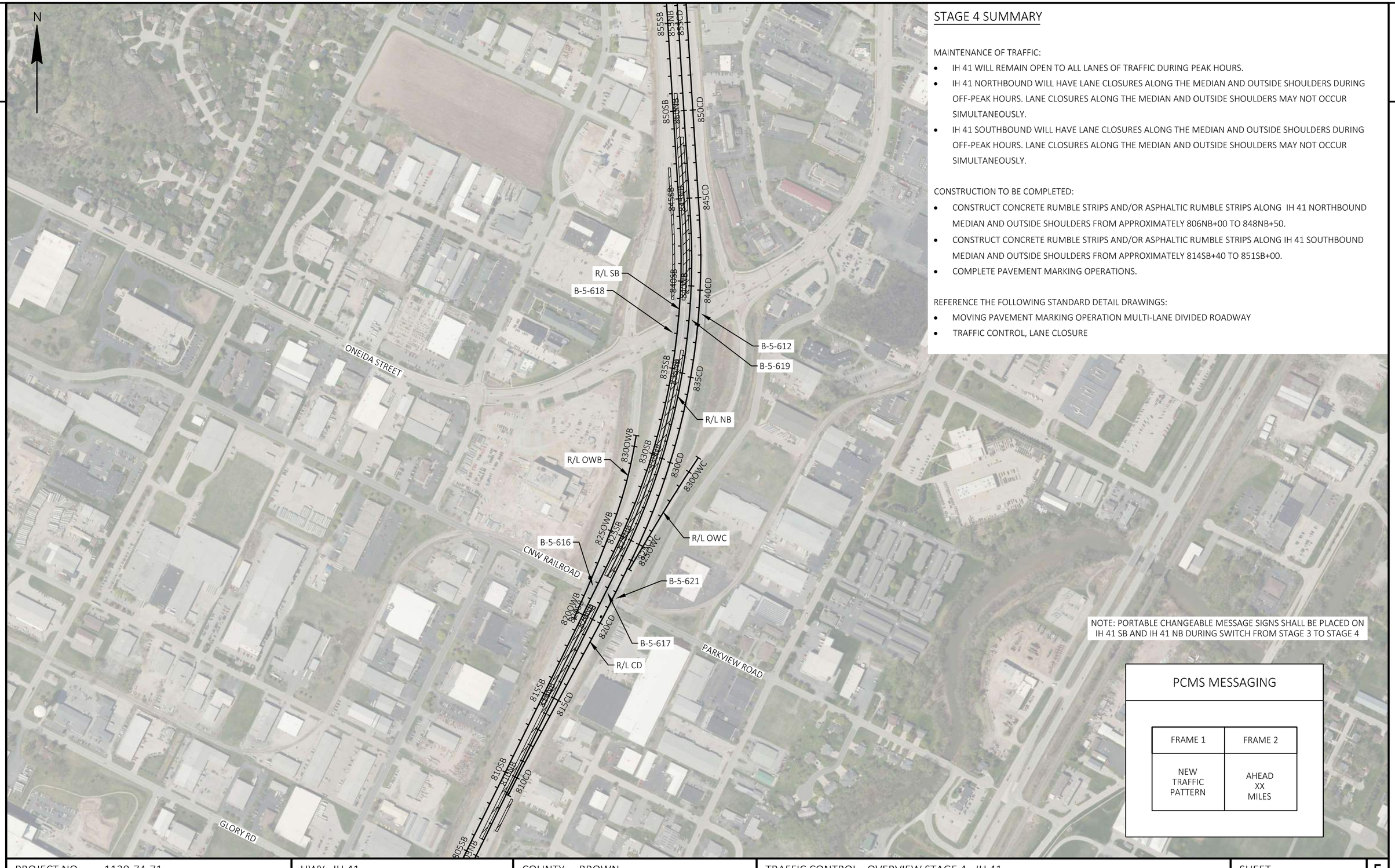
WISDOT/CADDS SHEET 42

2

PCMS #1 MESSAGING

SPEEDS 0 MPH TO 39 MPH		SPEEDS 40 MPH AND GREATER
FRAME 1	FRAME 2	(FLASHING CAUTION MODE)
STOPPED TRAFFIC AHEAD	USE BOTH LANES	

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - IH 41	SHEET 144	E



STAGE 4 SUMMARY

MAINTENANCE OF TRAFFIC:

- IH 41 WILL REMAIN OPEN TO ALL LANES OF TRAFFIC DURING PEAK HOURS.
- IH 41 NORTHBOUND WILL HAVE LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS DURING OFF-PEAK HOURS. LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS MAY NOT OCCUR SIMULTANEOUSLY.
- IH 41 SOUTHBOUND WILL HAVE LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS DURING OFF-PEAK HOURS. LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS MAY NOT OCCUR SIMULTANEOUSLY.

CONSTRUCTION TO BE COMPLETED:

- CONSTRUCT CONCRETE RUMBLE STRIPS AND/OR ASPHALTIC RUMBLE STRIPS ALONG IH 41 NORTHBOUND MEDIAN AND OUTSIDE SHOULDERS FROM APPROXIMATELY 806NB+00 TO 848NB+50.
- CONSTRUCT CONCRETE RUMBLE STRIPS AND/OR ASPHALTIC RUMBLE STRIPS ALONG IH 41 SOUTHBOUND MEDIAN AND OUTSIDE SHOULDERS FROM APPROXIMATELY 814SB+40 TO 851SB+00.
- COMPLETE PAVEMENT MARKING OPERATIONS.

REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:

- MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
- TRAFFIC CONTROL, LANE CLOSURE

NOTE: PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON IH 41 SB AND IH 41 NB DURING SWITCH FROM STAGE 3 TO STAGE 4

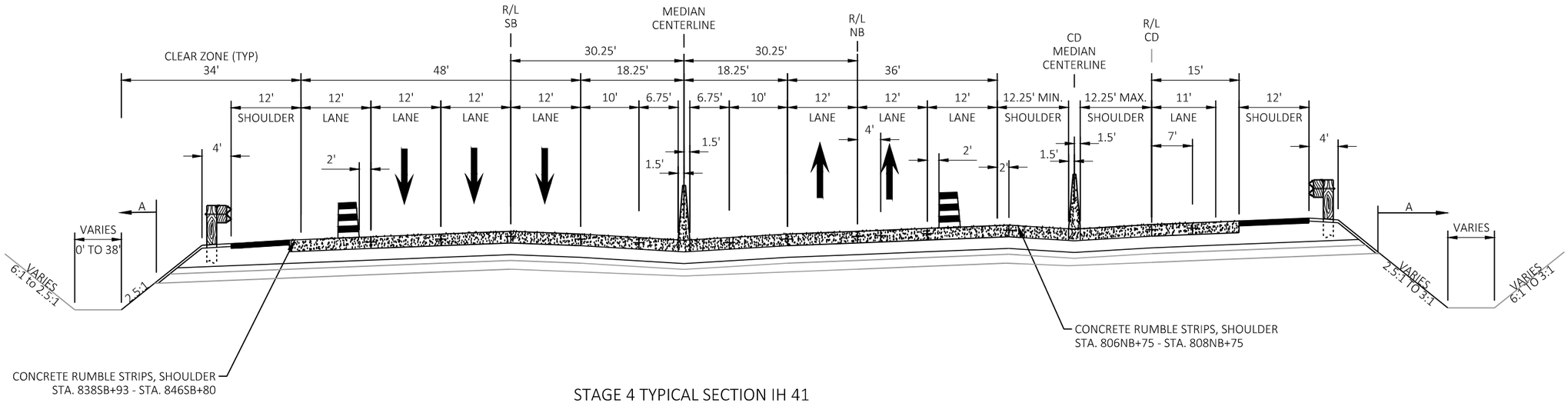
PCMS MESSAGING

FRAME 1	FRAME 2
NEW TRAFFIC PATTERN	AHEAD XX MILES

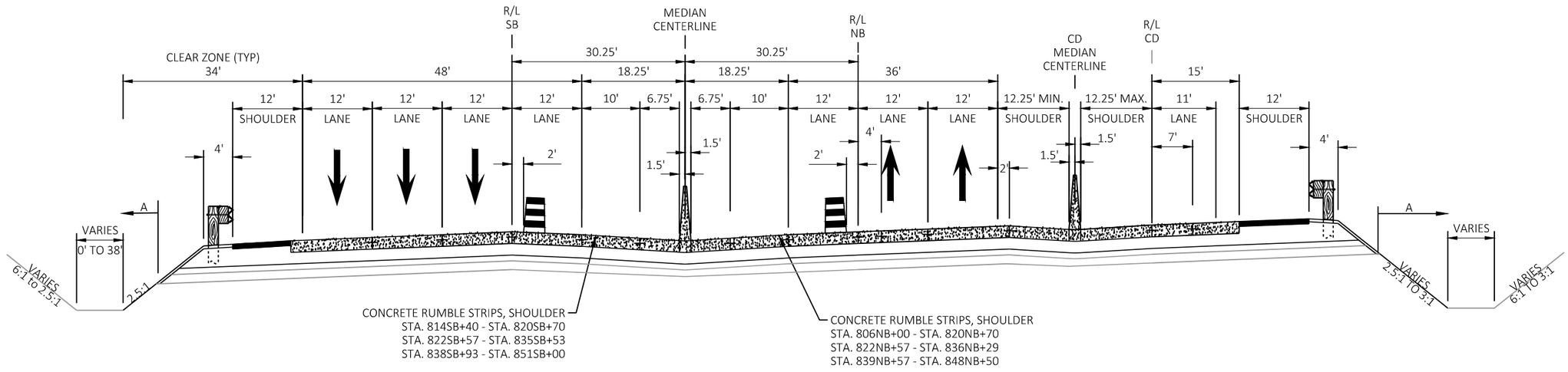
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - OVERVIEW STAGE 4 - IH 41	SHEET 145	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025100-TC_OVERVIEW-IH 41.DWG
LAYOUT NAME - OVERVIEW STAGE 4

PLOT DATE : 2/16/2026 2:02 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:500 FT



STAGE 4 TYPICAL SECTION IH 41
(OFF-PEAK HOURS)
STA 838SB+93 - STA 846SB+80
STA 806NB+75 - STA 808NB+75



STAGE 4 TYPICAL SECTION IH 41
(OFF-PEAK HOURS)
STA 814SB+40 - STA 851SB+00
STA 806NB+00 - STA 848NB+50

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 4	SHEET 146	E

STAGE 1 SUMMARY

MAINTENANCE OF TRAFFIC:

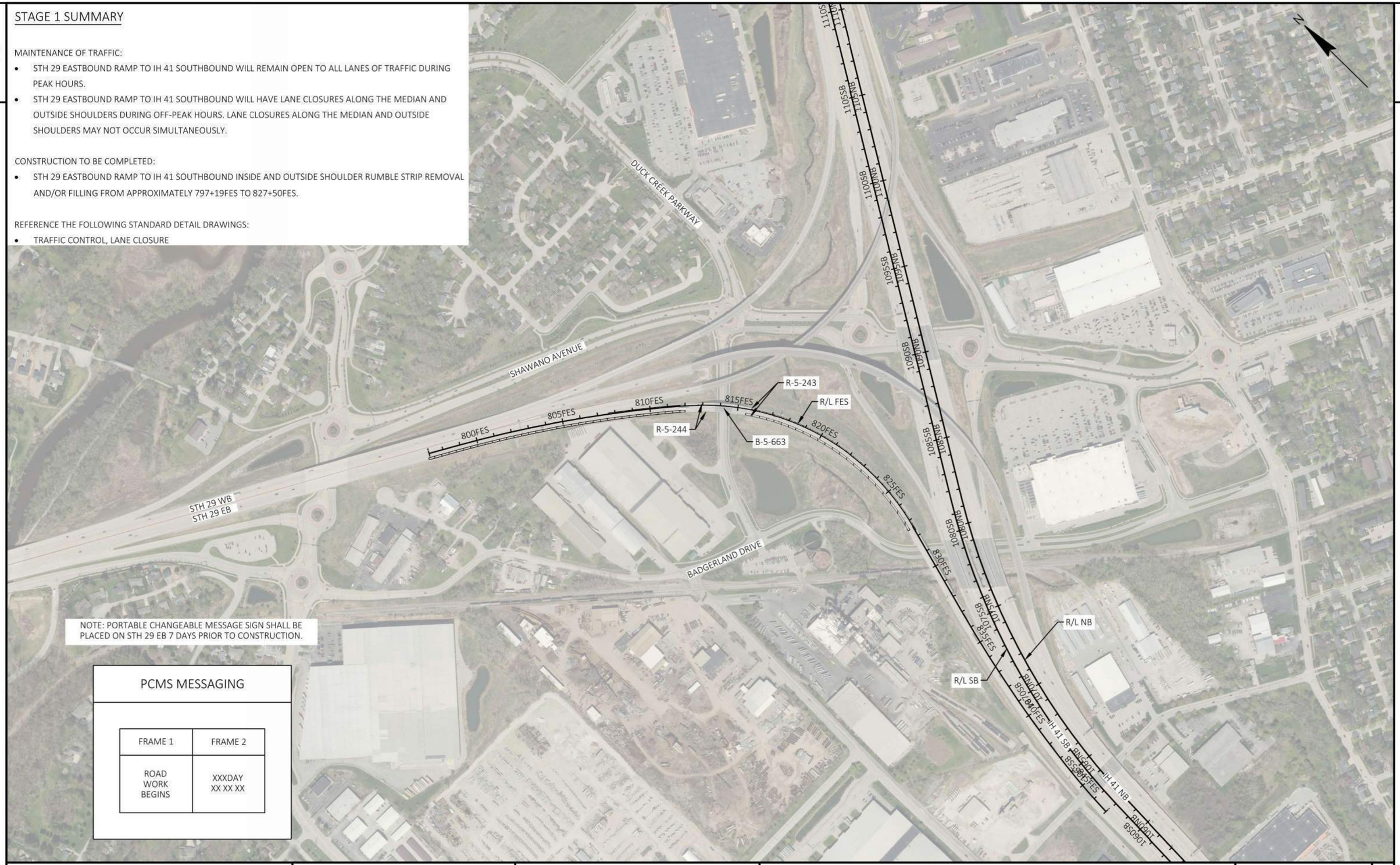
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND WILL REMAIN OPEN TO ALL LANES OF TRAFFIC DURING PEAK HOURS.
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND WILL HAVE LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS DURING OFF-PEAK HOURS. LANE CLOSURES ALONG THE MEDIAN AND OUTSIDE SHOULDERS MAY NOT OCCUR SIMULTANEOUSLY.

CONSTRUCTION TO BE COMPLETED:

- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND INSIDE AND OUTSIDE SHOULDER RUMBLE STRIP REMOVAL AND/OR FILLING FROM APPROXIMATELY 797+19FES TO 827+50FES.

REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:

- TRAFFIC CONTROL, LANE CLOSURE



NOTE: PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE PLACED ON STH 29 EB 7 DAYS PRIOR TO CONSTRUCTION.

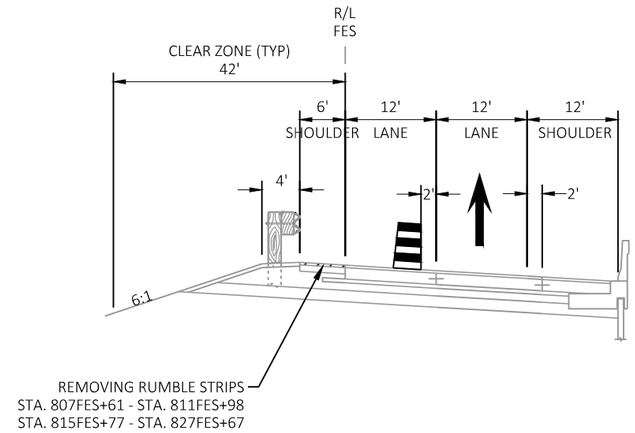
PCMS MESSAGING

FRAME 1	FRAME 2
ROAD WORK BEGINS	XXXDAY XX XX XX

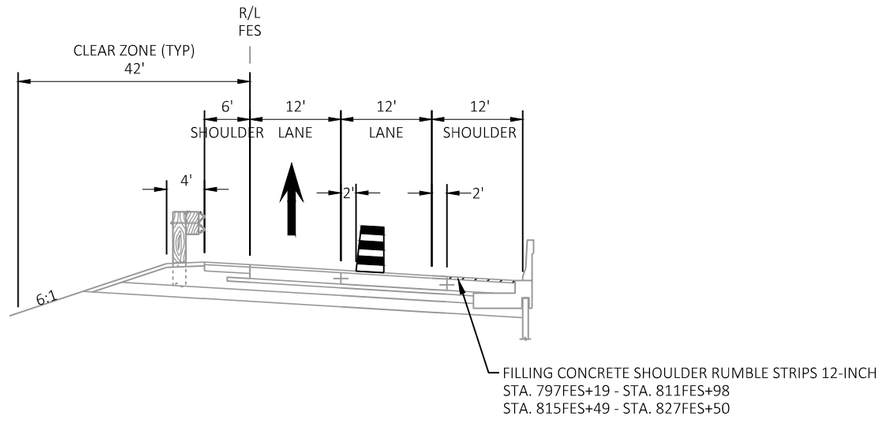
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - OVERVIEW STAGE 1 - STH 29 EB RAMP TO IH 41 SB	SHEET 147	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025100-TC_OVERVIEW-STH 29.DWG
LAYOUT NAME - Overview Stage 1
PLOT DATE : 2/16/2026 2:10 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2



STAGE 1 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
(OFF-PEAK HOURS)
STA 801FES+61 - STA 827FES+67



STAGE 1 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
(OFF-PEAK HOURS)
STA 797FES+19 - STA 827FES+50

2

STAGE 2 SUMMARY

MAINTENANCE OF TRAFFIC:

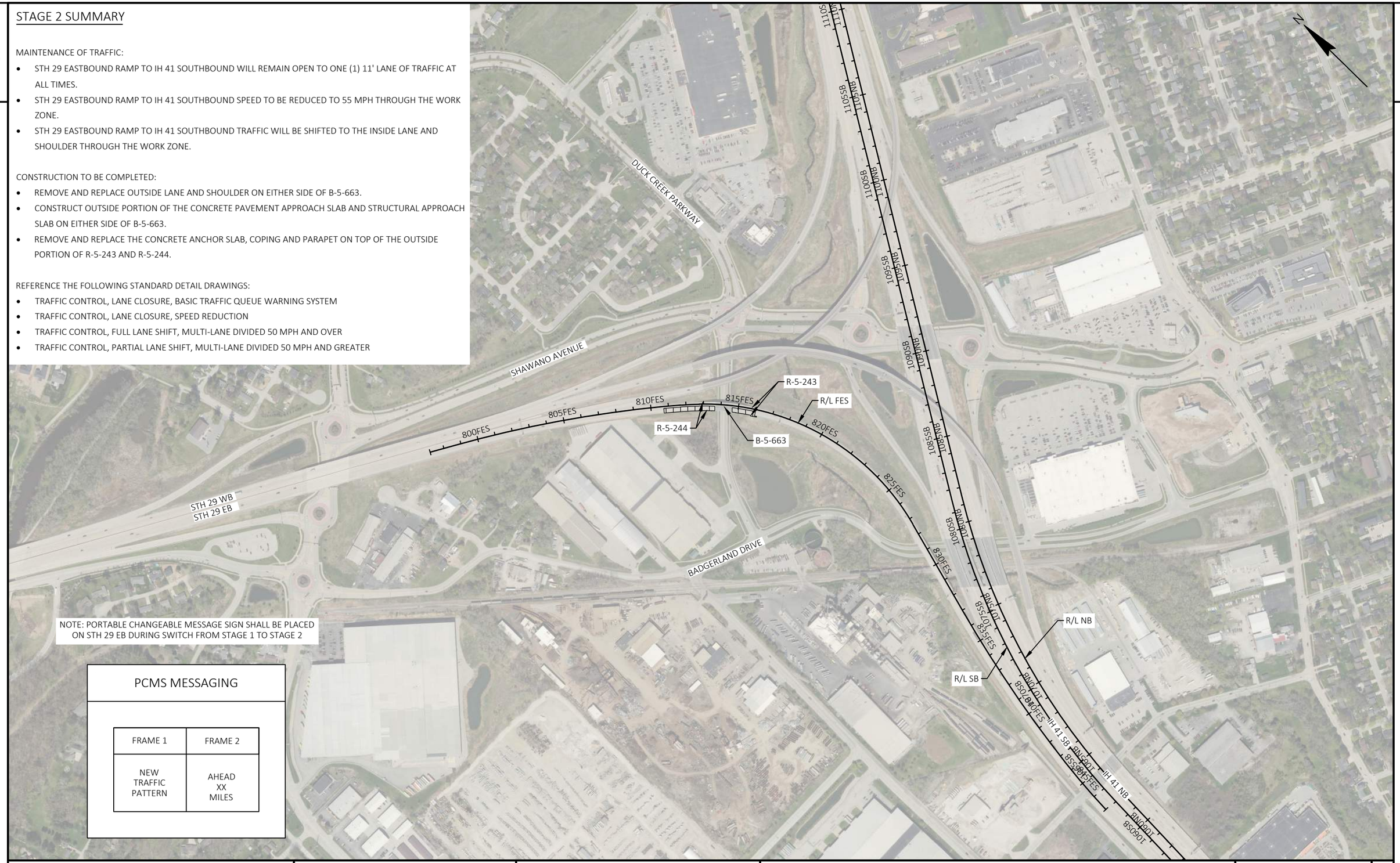
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND WILL REMAIN OPEN TO ONE (1) 11' LANE OF TRAFFIC AT ALL TIMES.
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND SPEED TO BE REDUCED TO 55 MPH THROUGH THE WORK ZONE.
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND TRAFFIC WILL BE SHIFTED TO THE INSIDE LANE AND SHOULDER THROUGH THE WORK ZONE.

CONSTRUCTION TO BE COMPLETED:

- REMOVE AND REPLACE OUTSIDE LANE AND SHOULDER ON EITHER SIDE OF B-5-663.
- CONSTRUCT OUTSIDE PORTION OF THE CONCRETE PAVEMENT APPROACH SLAB AND STRUCTURAL APPROACH SLAB ON EITHER SIDE OF B-5-663.
- REMOVE AND REPLACE THE CONCRETE ANCHOR SLAB, COPING AND PARAPET ON TOP OF THE OUTSIDE PORTION OF R-5-243 AND R-5-244.

REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:

- TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
- TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
- TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER
- TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND GREATER



NOTE: PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE PLACED ON STH 29 EB DURING SWITCH FROM STAGE 1 TO STAGE 2

PCMS MESSAGING

FRAME 1	FRAME 2
NEW TRAFFIC PATTERN	AHEAD XX MILES

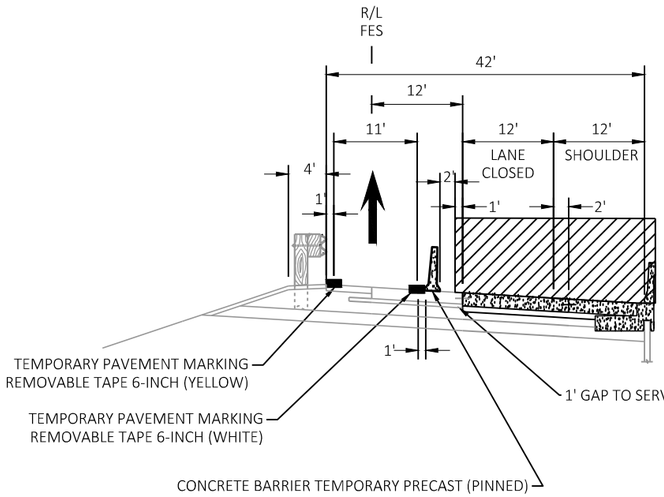
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - OVERVIEW STAGE 2 - STH 29 EB RAMP TO IH 41 SB	SHEET 149	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025100-TC_OVERVIEW-STH 29.DWG
LAYOUT NAME - Overview Stage 2

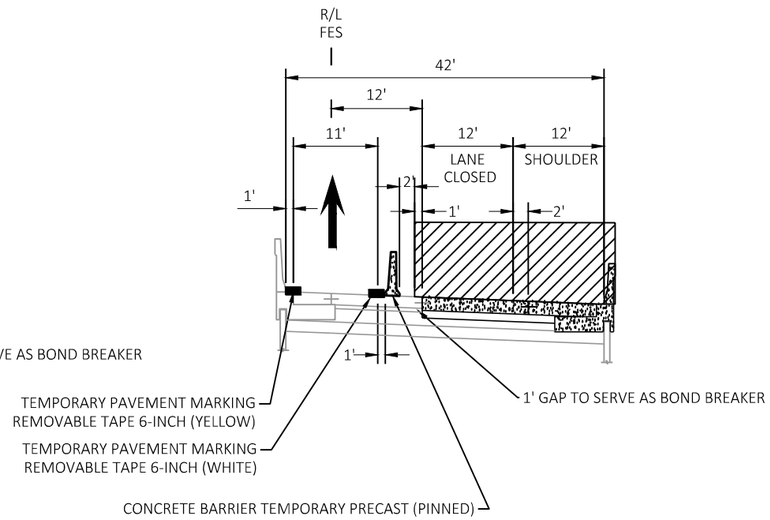
PLOT DATE : 6/22/2026 8:44 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

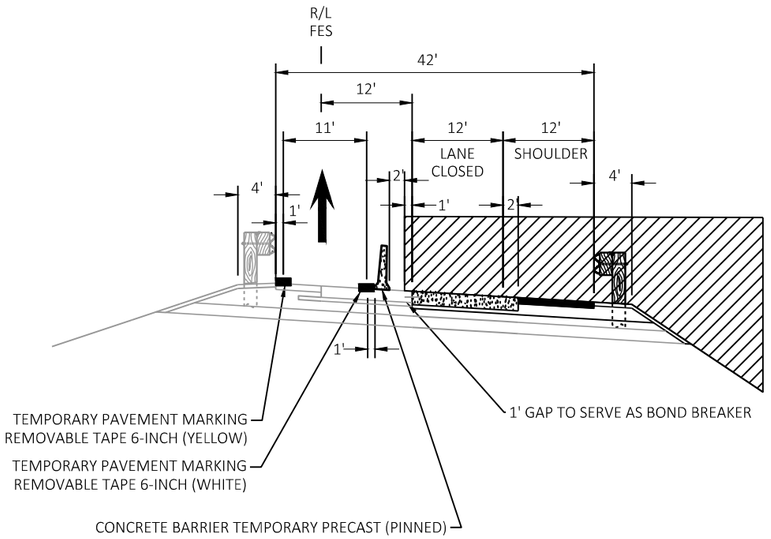
2



STAGE 2 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
STA 810FES+72.55 - 812FES+54.15



STAGE 2 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
STA 812FES+54.15 - STA 813FES+44.16
STA 814FES+88.15 - STA 815FES+77.62



STAGE 2 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
STA 815FES+77.62 - STA 816FES+00.00

WORK AREA

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL TYPICAL SECTIONS - STAGE 2	SHEET 150	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\026102-TC-TS-S2.DWG
LAYOUT NAME - 01
PLOT DATE : 7/10/2025 1:51 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE BEFORE THE SECOND FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 151	E

2

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE BEFORE THE FIRST FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 152	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S2.DWG
LAYOUT NAME - 04
PLOT DATE : 2/13/2026 8:37 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

STH 29 WB

STH 29 EB

FBS

ROAD WORK 1 MILE

W20-1F

((S))

NOTE:
1. FBS TO BE PLACED APPROXIMATELY 500 FEET BEFORE SIGN W20-1F.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 153	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S2.DWG
LAYOUT NAME - 08

PLOT DATE : 2/13/2026 8:37 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE

MATCH LINE

STH 29 WB

STH 29 EB

RIGHT LANE CLOSED 1/2 MILE

W20-5G

SPEED LIMIT 60

W3-5

COUNTY RK

RIVERDALE DR

N

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 154 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S2.DWG
LAYOUT NAME - 10

PLOT DATE : 2/13/2026 8:37 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE

MATCH LINE

N

W04-2R

SPEED LIMIT 60

SPEED LIMIT 60

COMBINATION WORK ZONE DIGITAL SPEED LIMIT
- SPEED FEEDBACK SIGN TRAILER (SPEED WIZARD)

STH 29 WB

STH 29 EB

COUNTY RK

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 155	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S2.DWG
LAYOUT NAME - 11

PLOT DATE : 4/30/2026 2:37 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
-X-X-X-	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

SHAWANO AVE

MATCH LINE

STH 29 WB

STH 29 EB

R/L FES

MATCH LINE STA. 798FES+00

01 (BEGIN)

50' TYP.

100' TYP.

W01-4L

ON RAMP
M4-50
36"X18"

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

CARDINAL LN

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 156	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S2.DWG
LAYOUT NAME - 12

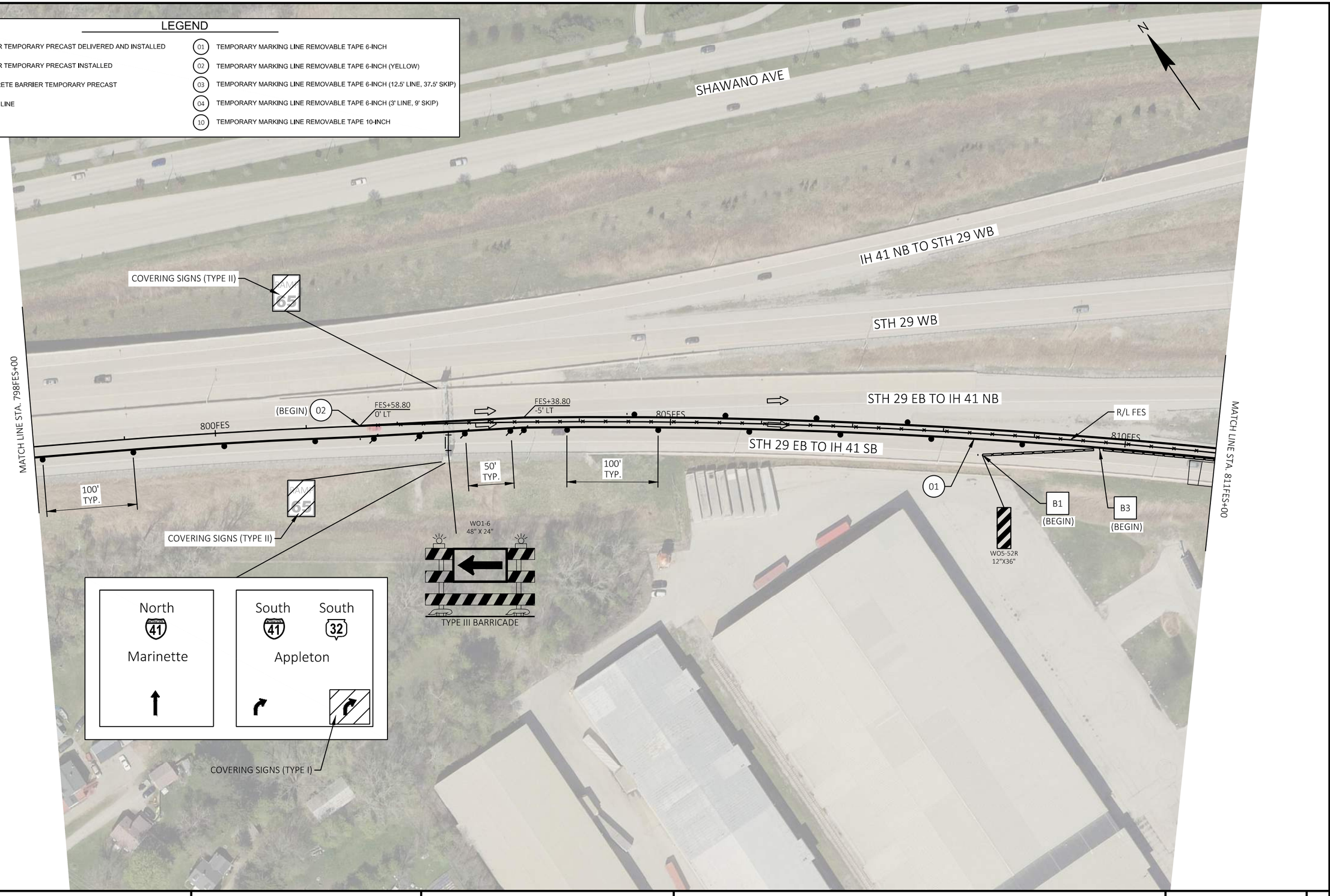
PLOT DATE : 2/13/2026 8:37 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
MARKING REMOVAL LINE	04 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
	10 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 157	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S2.DWG
LAYOUT NAME - 13

PLOT DATE : 2/13/2026 8:37 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

IH 41 SB TO STH 29 WB

IH 41 NB TO STH 29 WB

STH 29 EB TO IH 41 NB

SPEED LIMIT 70
R2-1
24"X30"

END ROAD WORK
G20-2A
48"X24"

((E))

815FES

820FES

02

01

STH 29 EB TO IH 41 SB

50' TYP.

R/L FES

B3 (END)

B1 (END)

MATCH LINE STA. 821FES+00

MATCH LINE STA. 824FES+00

DUCK CREEK PKWY

N

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
-X-X-X-	MARKING REMOVAL LINE

01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 158	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S2.DWG
LAYOUT NAME - 14

PLOT DATE : 2/13/2026 8:37 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

IH 41 NB TO STH 29 WB

IH 41 NB

IH 41 SB

1085NB

1085SB

1080NB

1080SB

1075NB

1075SB

50'
TYP.

02
(END)

FES+34.04
0'

01
(END)

825FES

MATCH LINE STA. 824FES+00

STH 29 EB TO IH 41 SB

830FES

835FES

((E))

R/L FES

END
ROAD WORK
G20-2A
48"X24"

SPEED
LIMIT
70
R2-1
24"X30"

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 2 - STH 29	SHEET 159	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S2.DWG
LAYOUT NAME - 15

PLOT DATE : 2/13/2026 8:37 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

STAGE 3 SUMMARY

MAINTENANCE OF TRAFFIC:

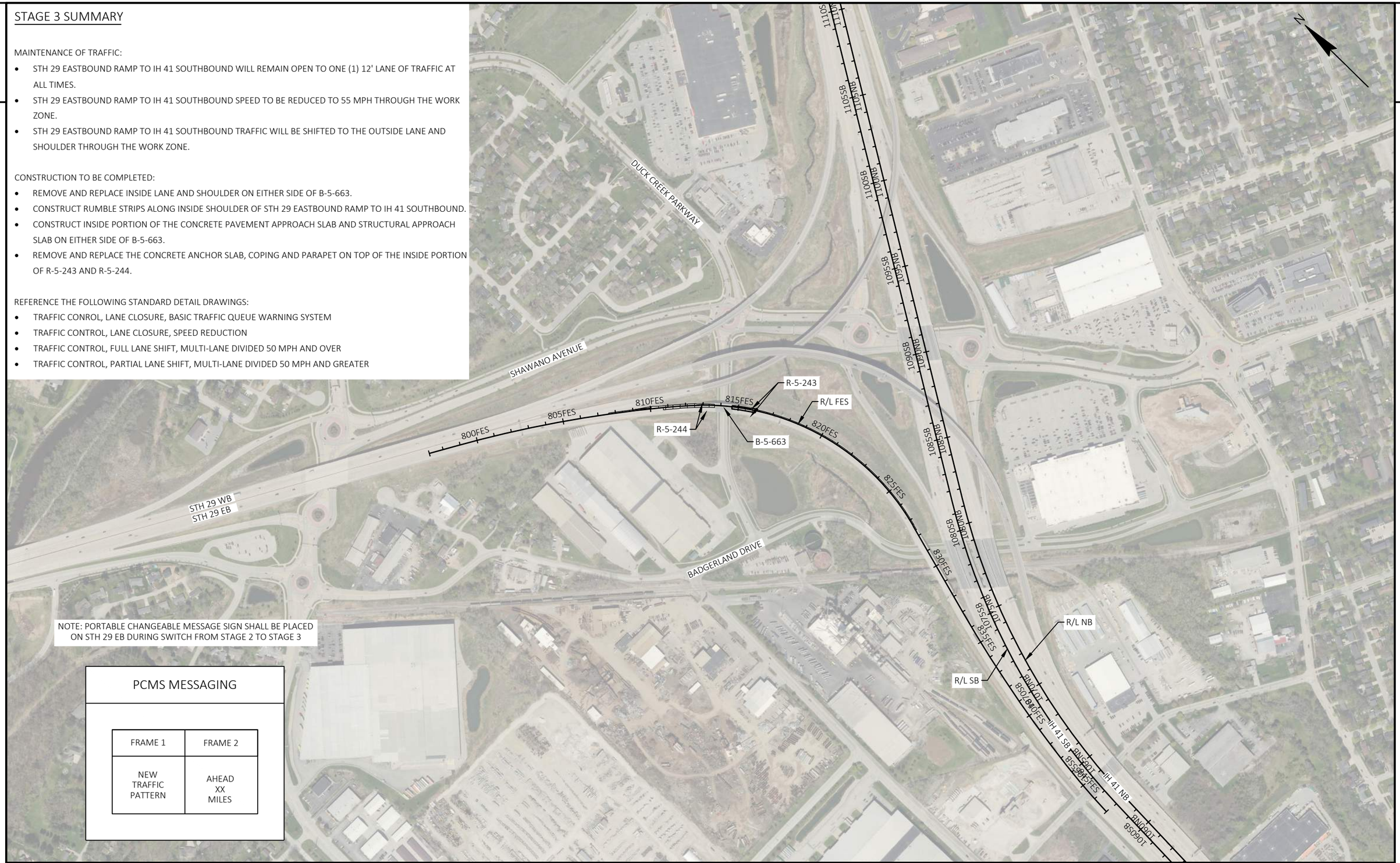
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND WILL REMAIN OPEN TO ONE (1) 12' LANE OF TRAFFIC AT ALL TIMES.
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND SPEED TO BE REDUCED TO 55 MPH THROUGH THE WORK ZONE.
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND TRAFFIC WILL BE SHIFTED TO THE OUTSIDE LANE AND SHOULDER THROUGH THE WORK ZONE.

CONSTRUCTION TO BE COMPLETED:

- REMOVE AND REPLACE INSIDE LANE AND SHOULDER ON EITHER SIDE OF B-5-663.
- CONSTRUCT RUMBLE STRIPS ALONG INSIDE SHOULDER OF STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND.
- CONSTRUCT INSIDE PORTION OF THE CONCRETE PAVEMENT APPROACH SLAB AND STRUCTURAL APPROACH SLAB ON EITHER SIDE OF B-5-663.
- REMOVE AND REPLACE THE CONCRETE ANCHOR SLAB, COPING AND PARAPET ON TOP OF THE INSIDE PORTION OF R-5-243 AND R-5-244.

REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:

- TRAFFIC CONROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
- TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
- TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER
- TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND GREATER



NOTE: PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE PLACED ON STH 29 EB DURING SWITCH FROM STAGE 2 TO STAGE 3

PCMS MESSAGING

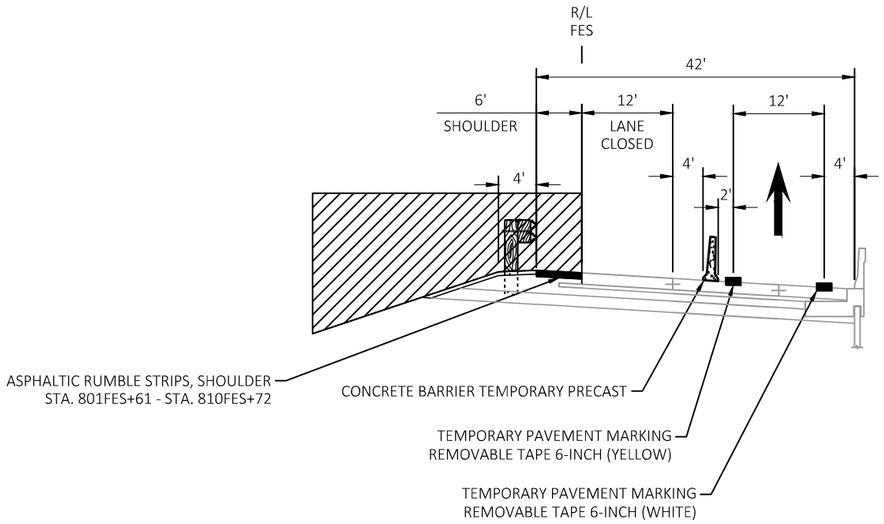
FRAME 1	FRAME 2
NEW TRAFFIC PATTERN	AHEAD XX MILES

2

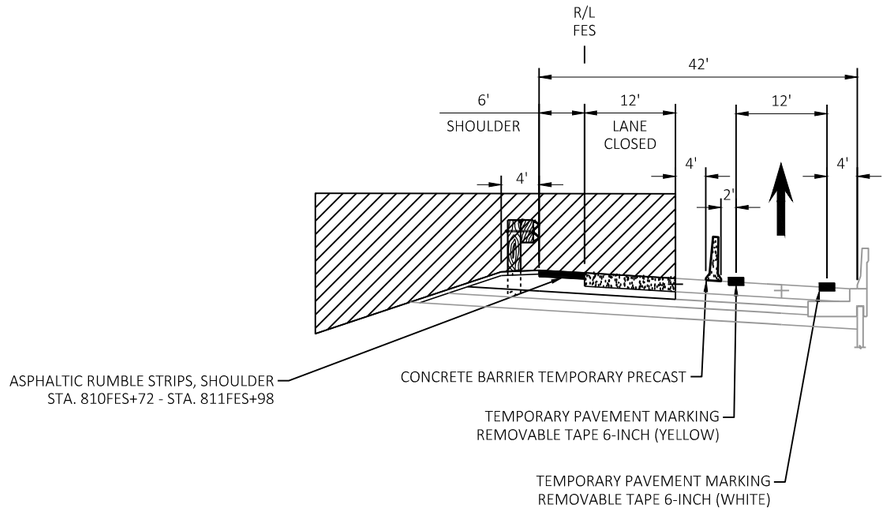
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - OVERVIEW STAGE 3 - STH 29 EB RAMP TO IH 41 SB	SHEET 160	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025100-TC_OVERVIEW-STH 29.DWG
LAYOUT NAME - Overview Stage 3

PLOT DATE : 6/22/2026 8:44 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:500 FT

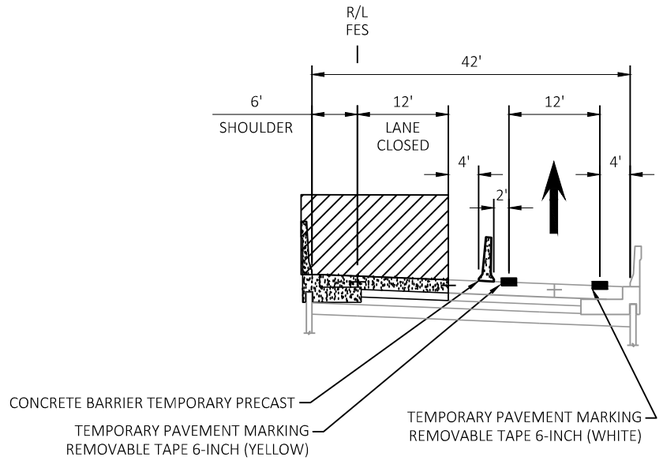


STAGE 3 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
STA 809FES+94.95 - 810FES+69.14

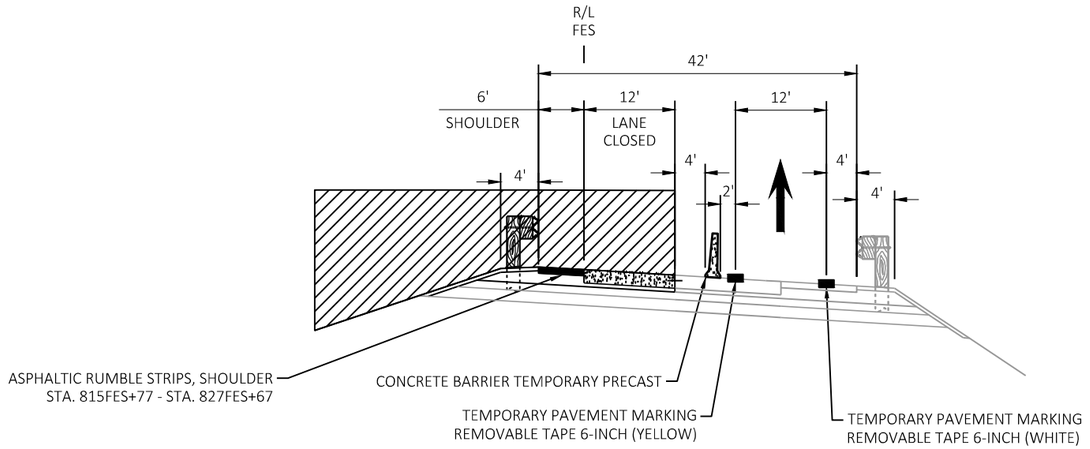


STAGE 3 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
STA 810FES+69.14 - 812FES+54.15

WORK AREA

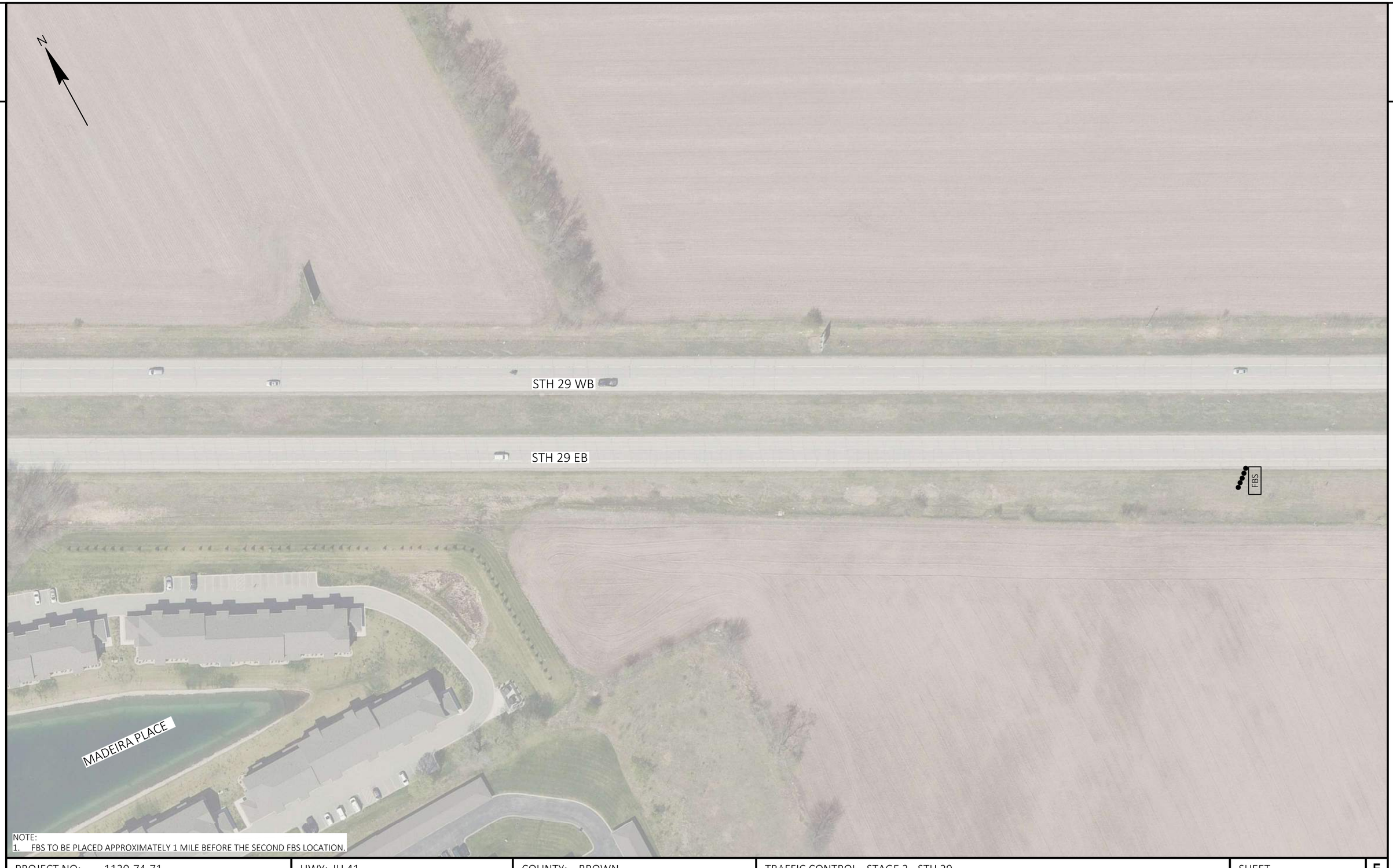


STAGE 3 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
STA 812FES+54.15 - STA 813FES+44.16
STA 814FES+88.15 - STA 815FES+77.62



STAGE 3 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
STA 815FES+77.62 - STA 816FES+00.00

WORK AREA



NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE BEFORE THE SECOND FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 163	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S3.DWG
LAYOUT NAME - 01
PLOT DATE : 2/13/2026 10:51 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

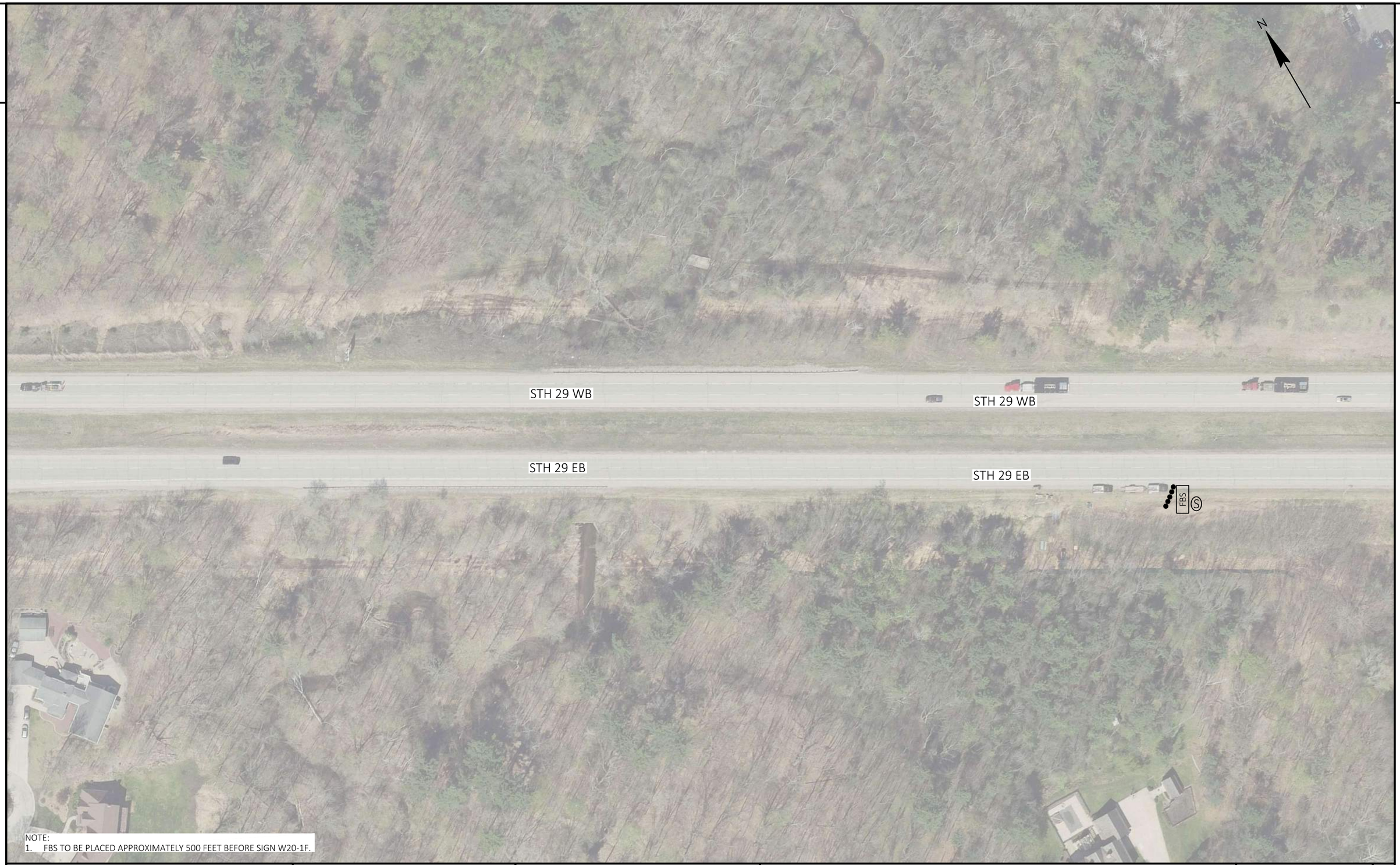
NOTE:
1. FBS TO BE PLACED APPROXIMATELY 1 MILE BEFORE THE FIRST FBS LOCATION.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 164	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S3.DWG
LAYOUT NAME - 04

PLOT DATE : 2/13/2026 10:51 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



NOTE:
1. FBS TO BE PLACED APPROXIMATELY 500 FEET BEFORE SIGN W20-1F.

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 165	E

2

N

ROAD
WORK
1 MILE
W20-1F

((S))

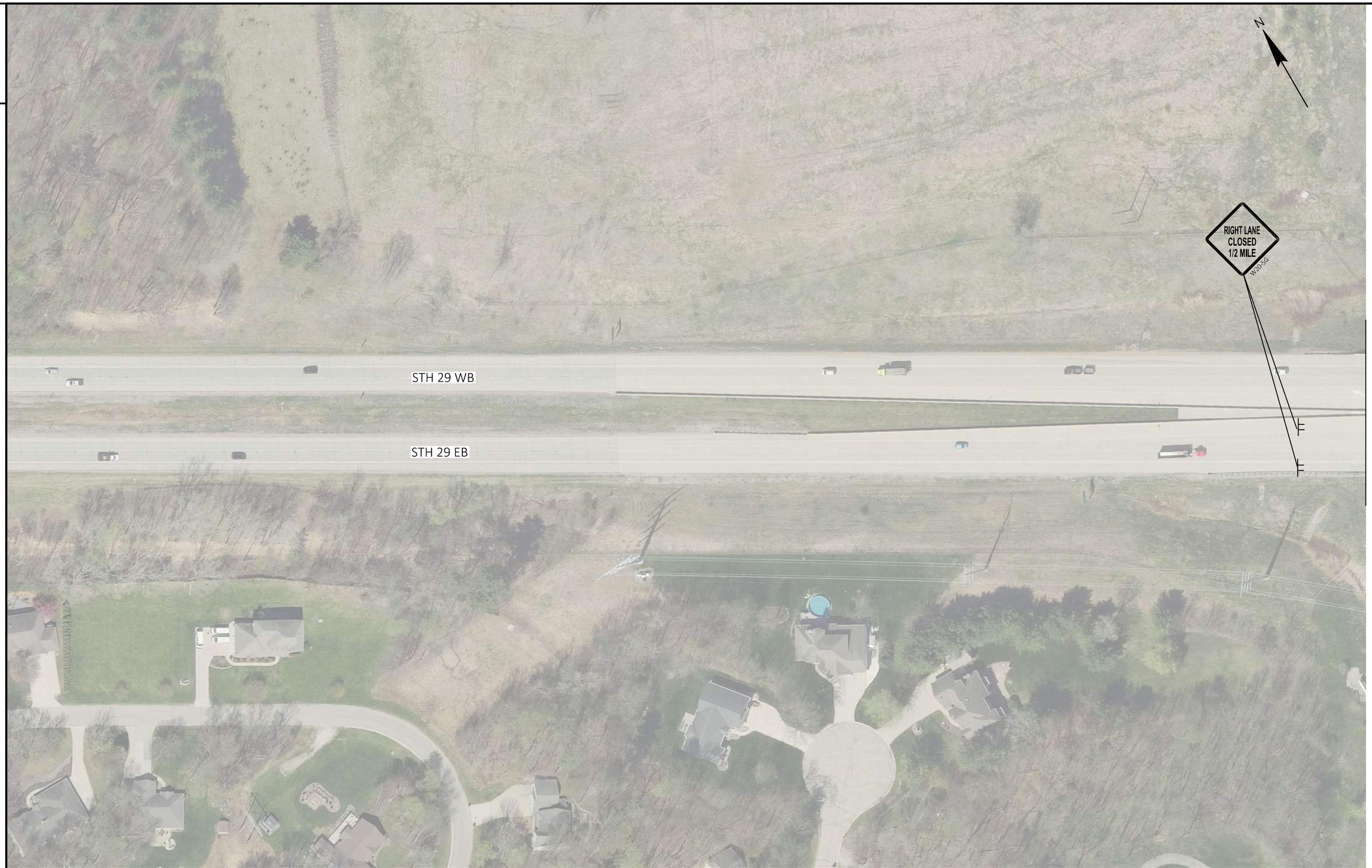
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 166	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S3.DWG
LAYOUT NAME - 08

PLOT DATE : 2/13/2026 10:51 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

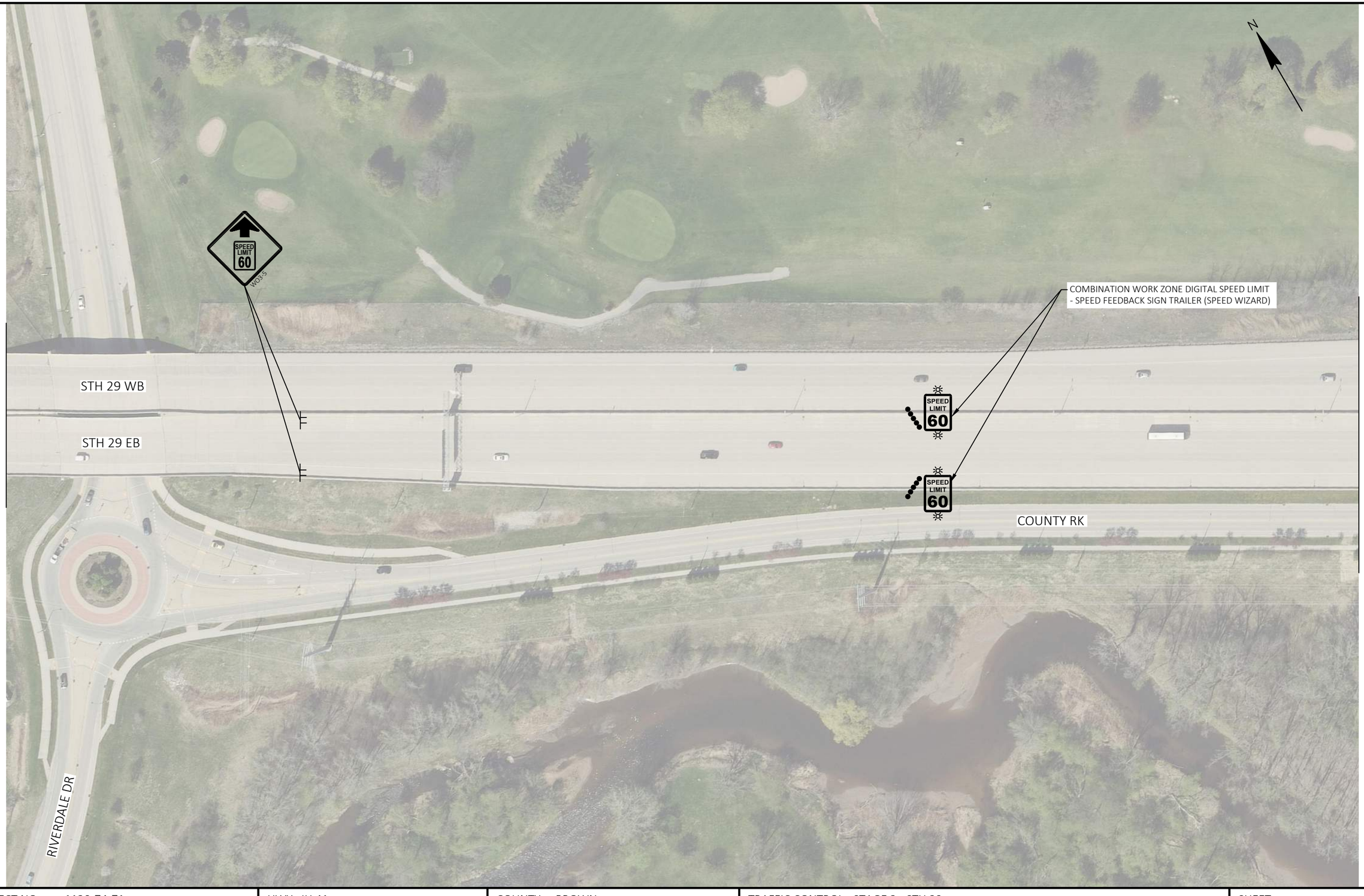


2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 167	E

2

2



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 168	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S3.DWG
LAYOUT NAME - 10

PLOT DATE : 4/30/2026 2:39 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 169 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S3.DWG
LAYOUT NAME - 11

PLOT DATE : 2/13/2026 10:52 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12,5' LINE, 37,5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

N

SHAWANO AVE

MATCH LINE

WO1-4R

566'

STH 29 WB

STH 29 EB

02
(BEGIN)

100'
TYP.

100'
TYP.

50'
TYP.

R/L FES

MATCH LINE STA. 798+50

01

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

WO1-6
48" X 24"

TYPE III BARRICADE

CARDINAL LN

2

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 170	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S3.DWG
LAYOUT NAME - 12

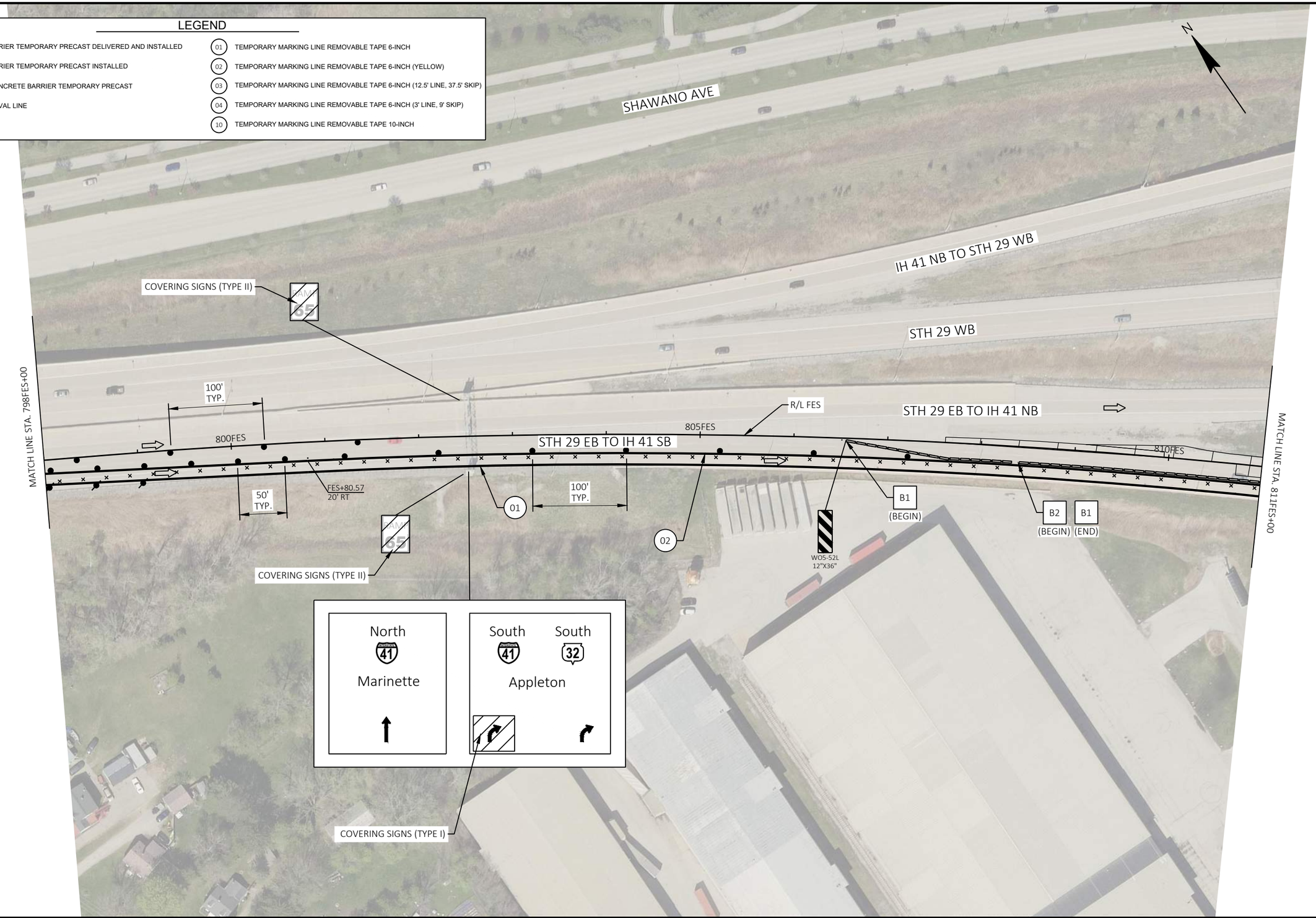
PLOT DATE : 2/13/2026 10:52 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST
X-X-X	MARKING REMOVAL LINE
01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

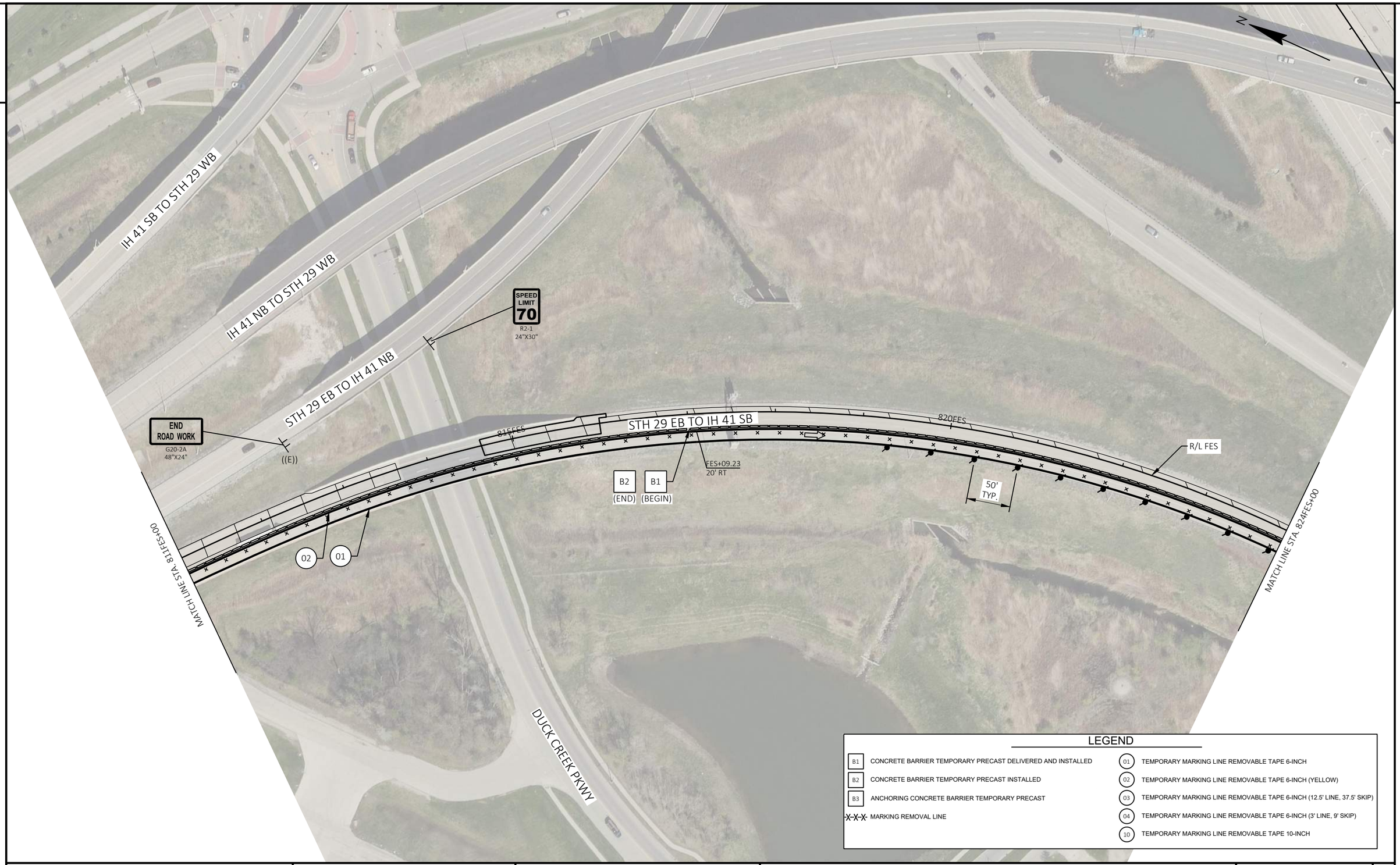


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 171 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S3.DWG
LAYOUT NAME - 13

PLOT DATE : 2/18/2026 10:42 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

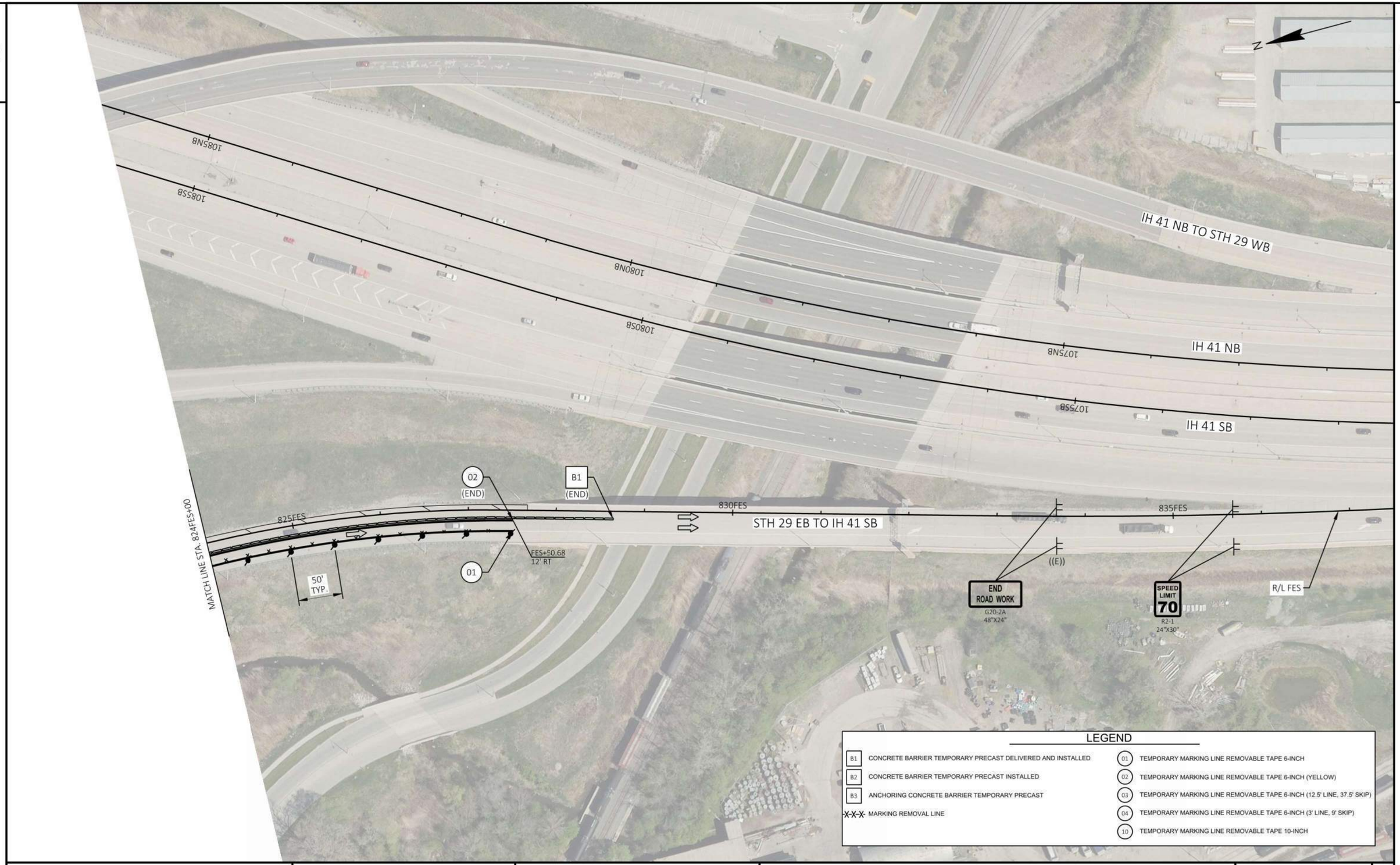


LEGEND

B1	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED AND INSTALLED	01	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
B2	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	02	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
B3	ANCHORING CONCRETE BARRIER TEMPORARY PRECAST	03	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (12.5' LINE, 37.5' SKIP)
X-X-X	MARKING REMOVAL LINE	04	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (3' LINE, 9' SKIP)
		10	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 172	E

2



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - STAGE 3 - STH 29	SHEET 173	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025103-TC-S3.DWG
LAYOUT NAME - 15

PLOT DATE : 2/13/2026 10:52 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

STAGE 4 SUMMARY

MAINTENANCE OF TRAFFIC:

- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND WILL REMAIN OPEN TO ALL LANES OF TRAFFIC DURING PEAK HOURS.
- STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND WILL HAVE A LANE CLOSURE ALONG THE OUTSIDE SHOULDER DURING OFF-PEAK HOURS.

CONSTRUCTION TO BE COMPLETED:

- CONSTRUCT CONCRETE RUMBLE STRIPS AND/OR ASPHALTIC RUMBLE STRIPS ALONG STH 29 EASTBOUND RAMP TO IH 41 SOUTHBOUND OUTSIDE SHOULDER FROM APPROXIMATELY 797+19FES TO 827+50FES.
- COMPLETE PAVEMENT MARKING OPERATIONS.

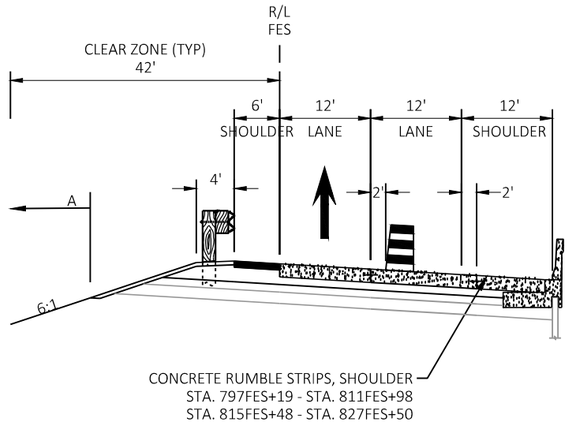
REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:

- MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
- TRAFFIC CONTROL, LANE CLOSURE

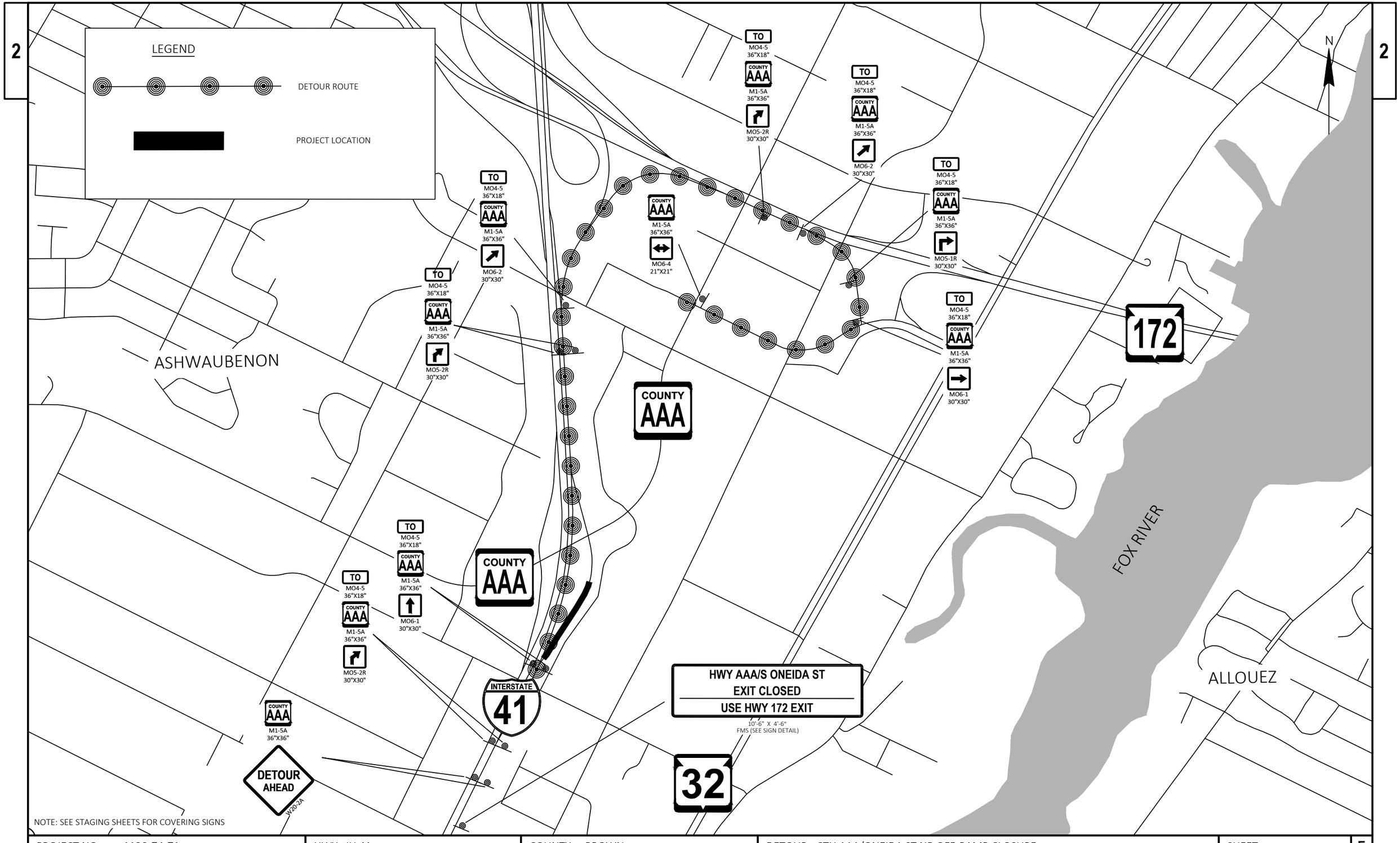
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TRAFFIC CONTROL - OVERVIEW STAGE 4 - STH 29 EB RAMP TO IH 41 SB	SHEET 174	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\025100-TC_OVERVIEW-STH 29.DWG
LAYOUT NAME - Overview Stage 4
PLOT DATE : 2/18/2026 12:13 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2



STAGE 4 TYPICAL SECTION
STH 29 EB TO IH 41 SB RAMP
(OFF-PEAK HOURS)
STA 797FES+19 - 827FES+50

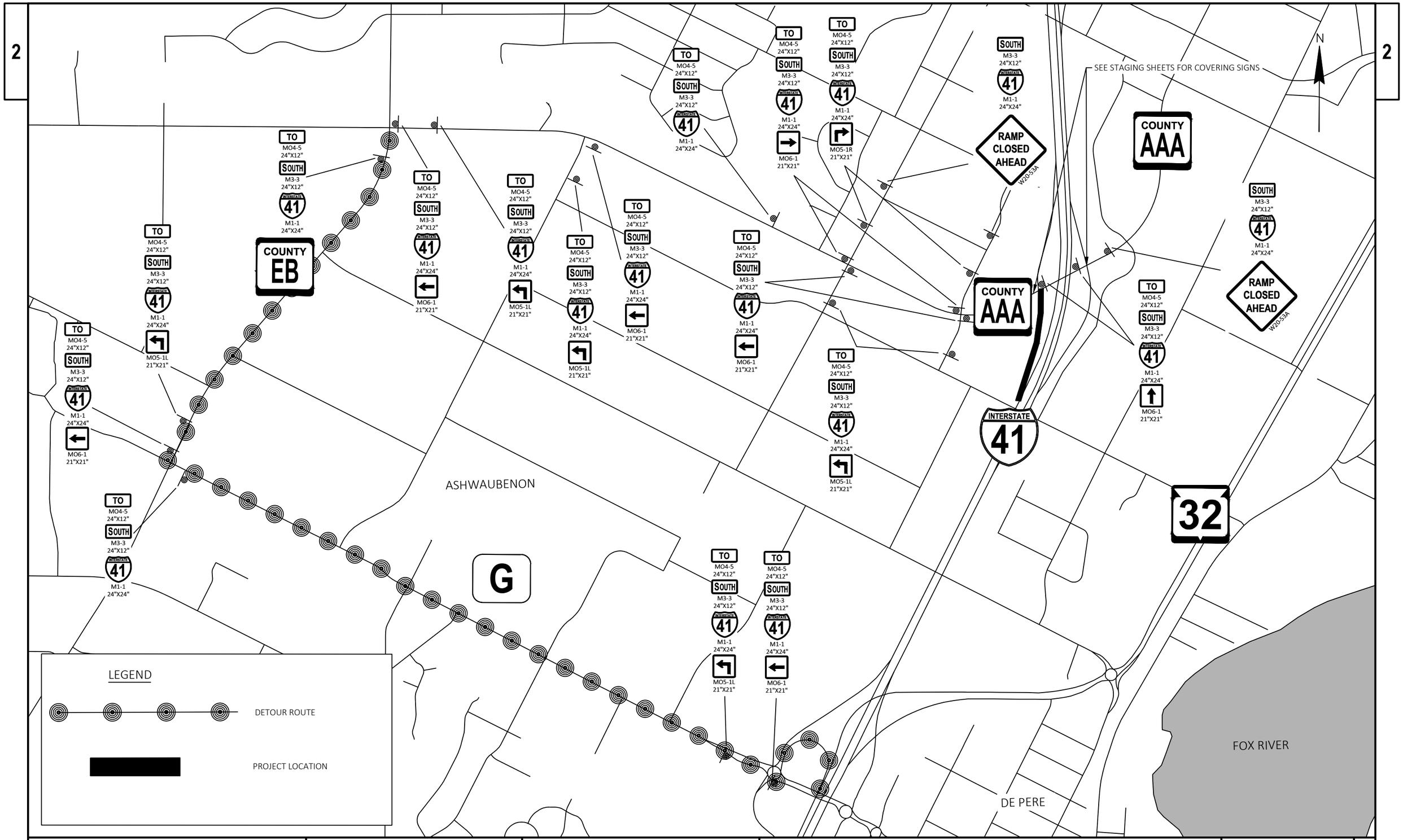


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	DETOUR - CTH AAA/ONEIDA ST NB OFF-RAMP CLOSURE	SHEET 176	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 02

PLOT DATE : 4/15/2026 2:34 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

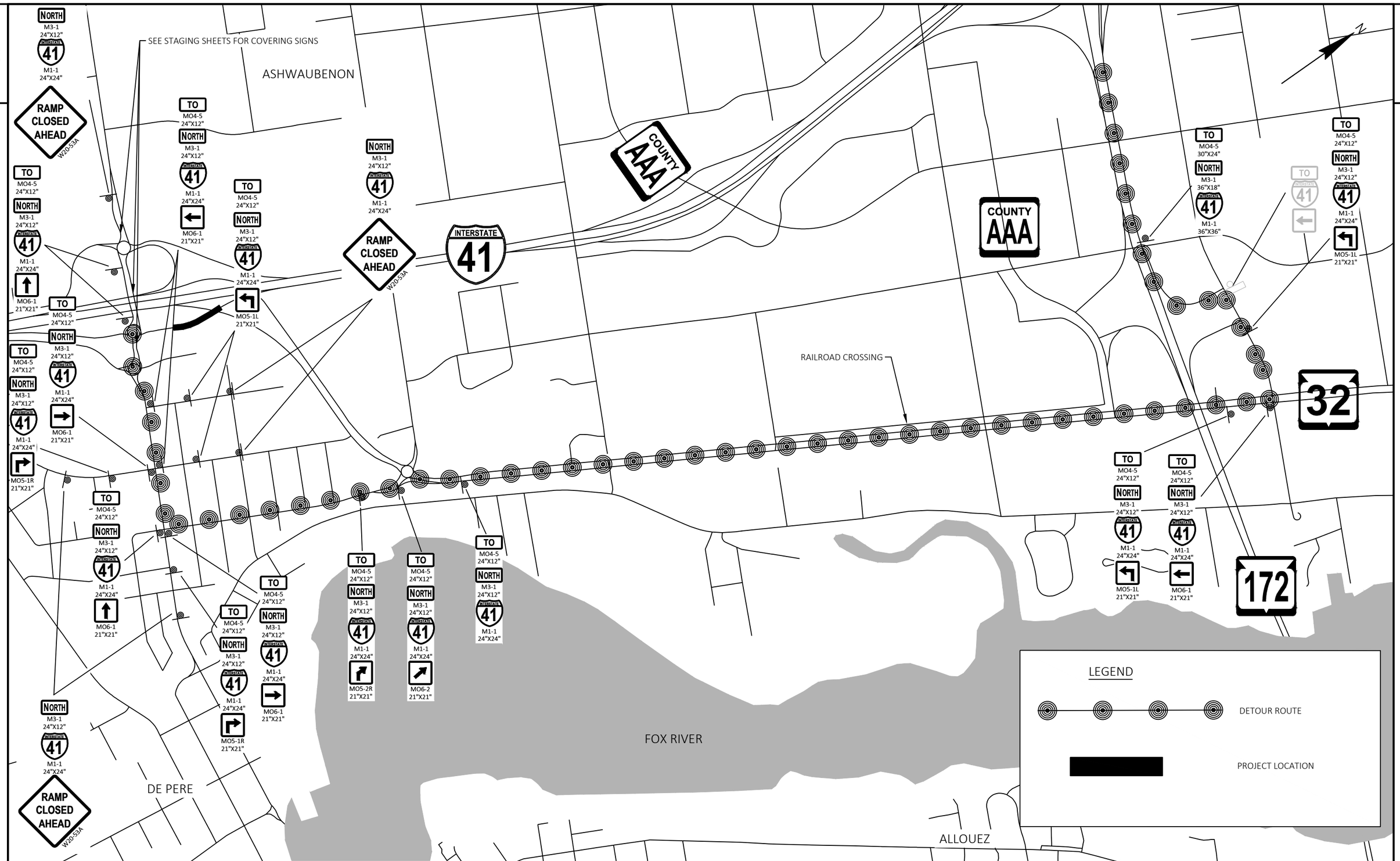


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	DETOUR - CTH AAA/ONEIDA ST SB ON-RAMP CLOSURE	SHEET 177 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 01

PLOT DATE : 4/15/2026 2:34 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:1000 FT

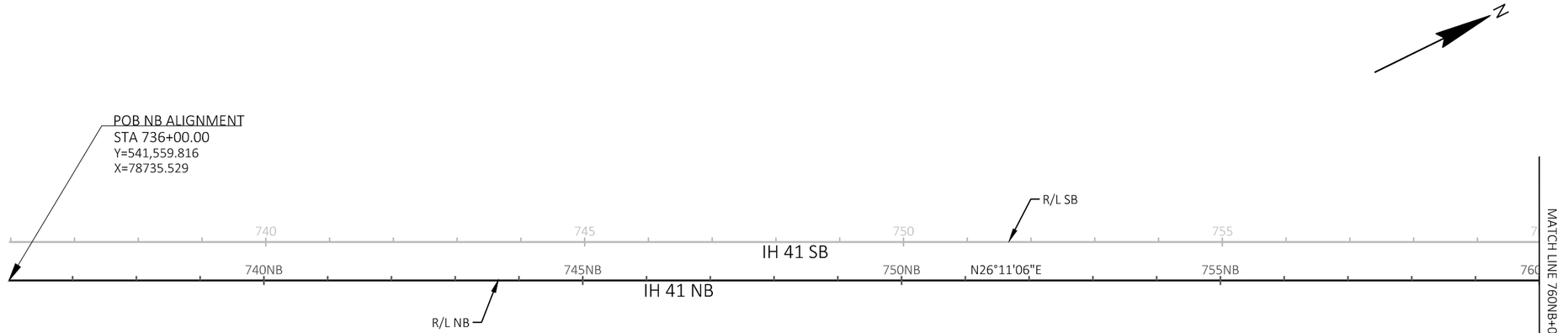
WISDOT/CADDS SHEET 42

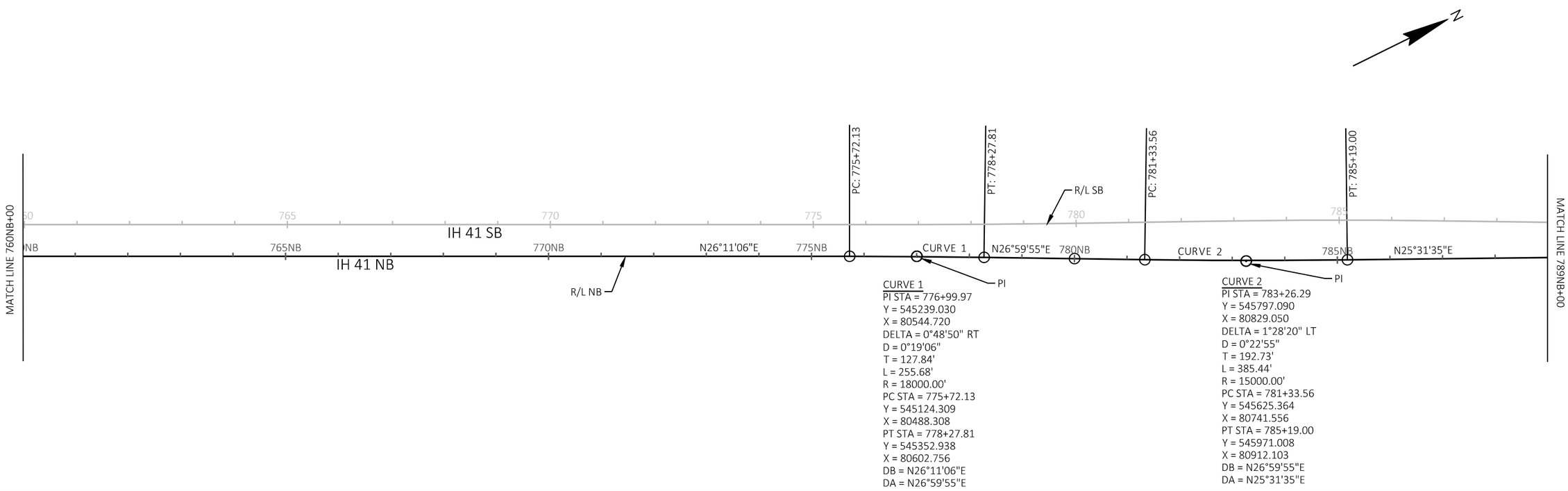


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	DETOUR - CTH G/MAIN AVE NB ON-RAMP CLOSURE	SHEET 178 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027001-DT.DWG
LAYOUT NAME - 07

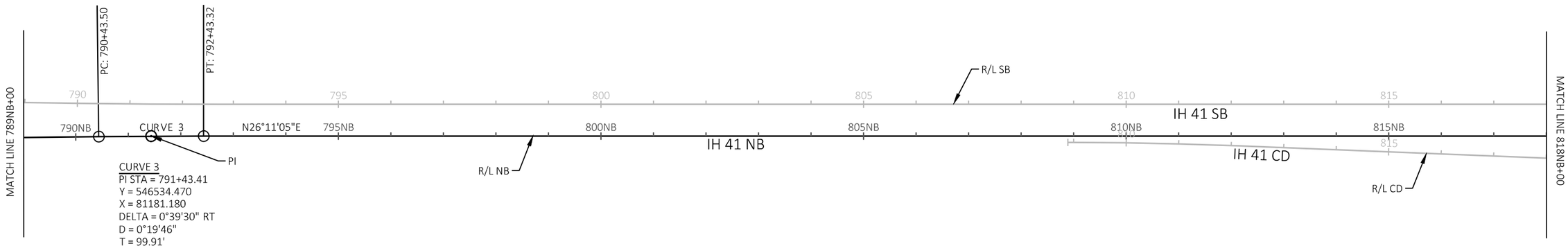
PLOT DATE : 4/15/2026 2:35 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:1000 FT



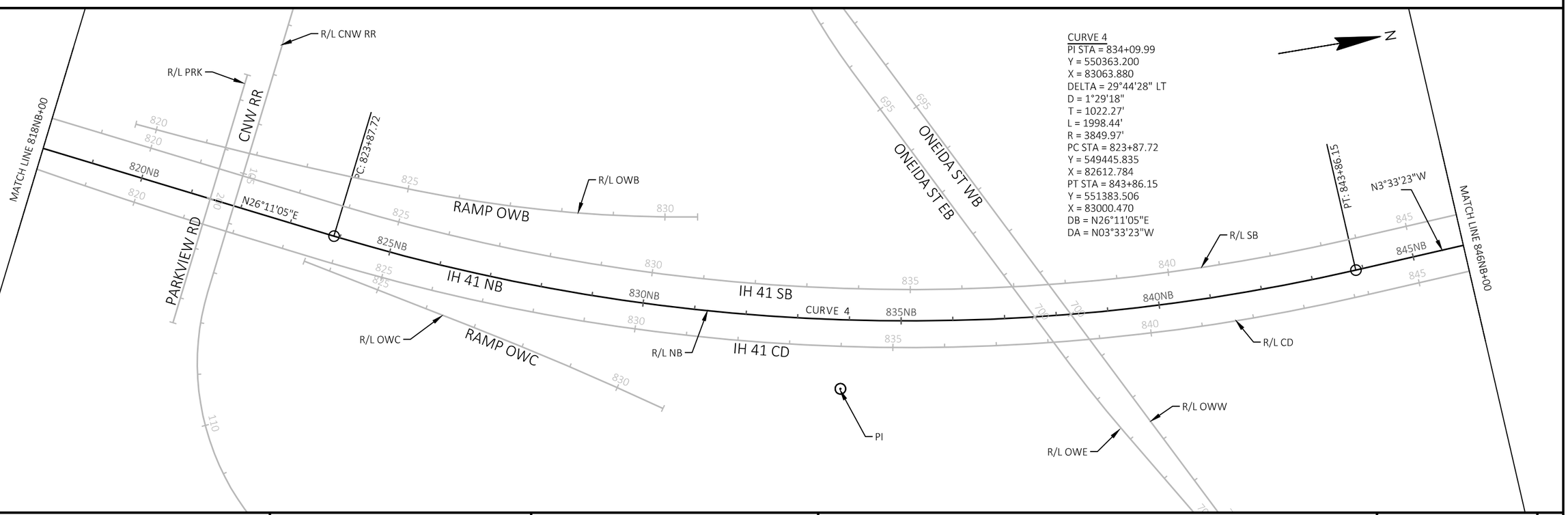


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 NB	SHEET 179	E

2



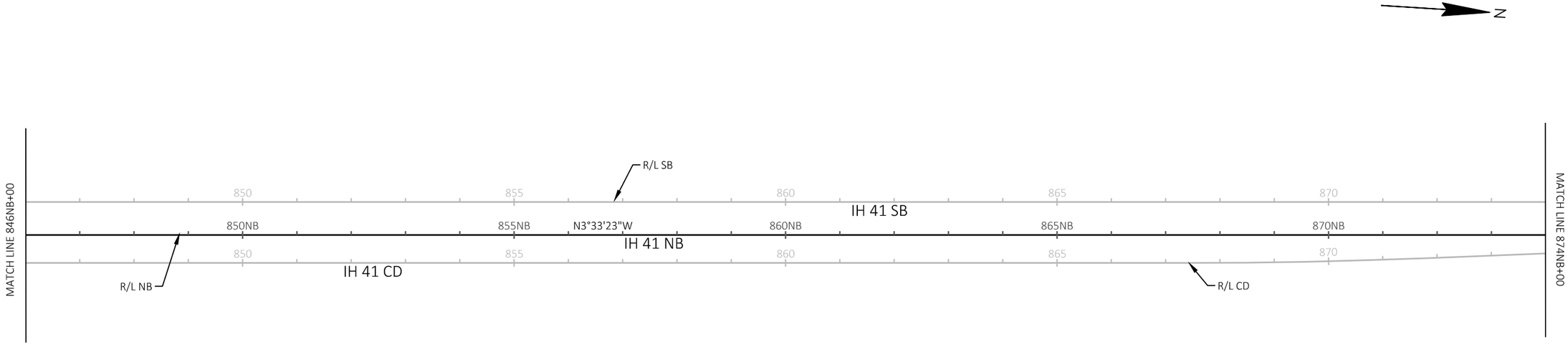
CURVE 3
PI STA = 791+43.41
Y = 546534.470
X = 81181.180
DELTA = 0°39'30" RT
D = 0°19'46"
T = 99.91'
L = 199.82'
R = 17391.88'
PC STA = 790+43.50
Y = 546444.313
X = 81138.126
PT STA = 792+43.32
Y = 546624.126
X = 81225.266
DB = N25°31'35"E
DA = N26°11'05"E

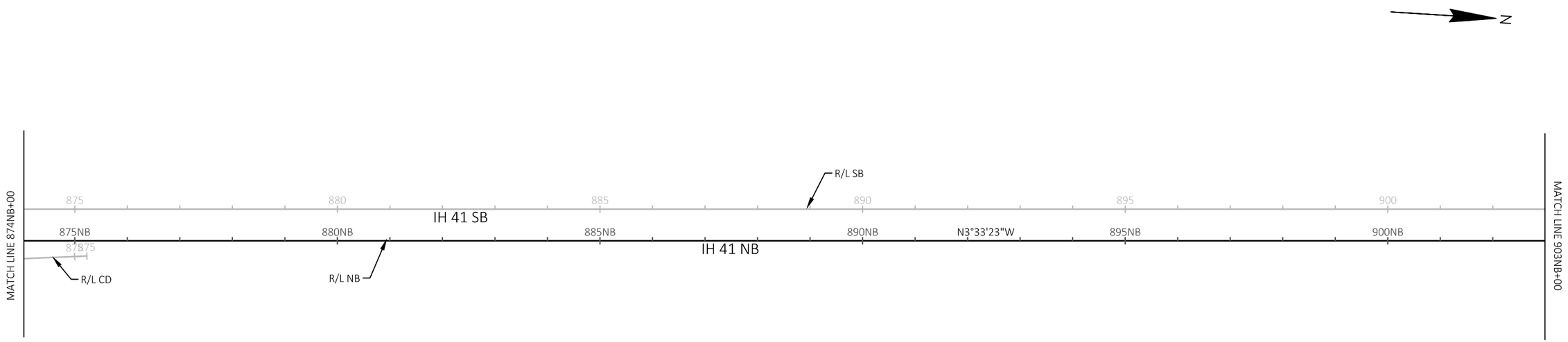


CURVE 4
PI STA = 834+09.99
Y = 550363.200
X = 83063.880
DELTA = 29°44'28" LT
D = 1°29'18"
T = 1022.27'
L = 1998.44'
R = 3849.97'
PC STA = 823+87.72
Y = 549445.835
X = 82612.784
PT STA = 843+86.15
Y = 551383.506
X = 83000.470
DB = N26°11'05"E
DA = N03°33'23"W

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 NB	SHEET 180	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 7/9/2025 9:54 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44



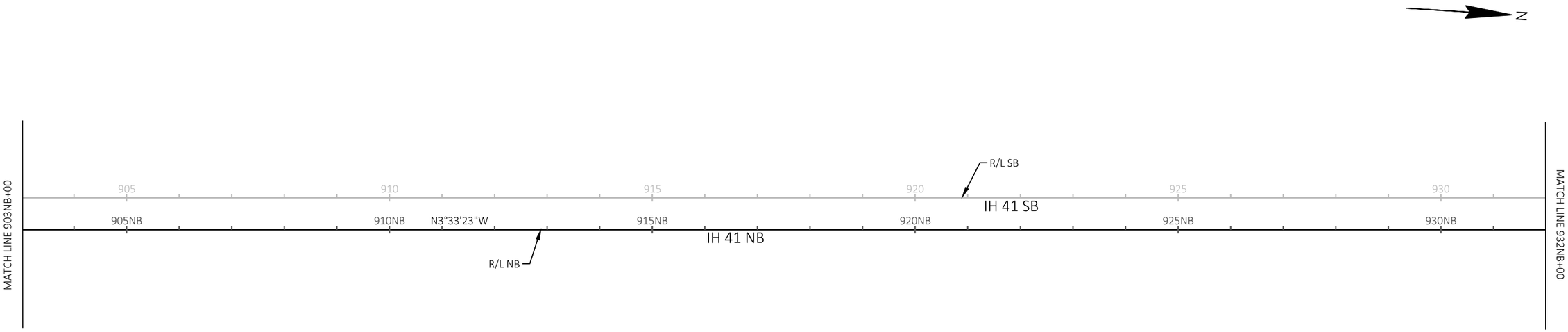


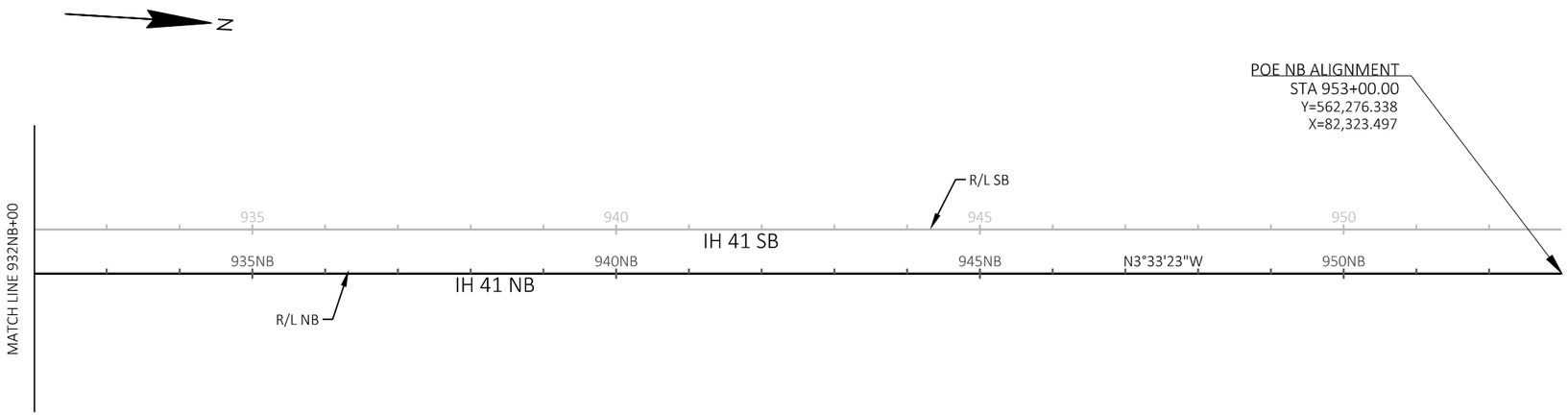
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 NB	SHEET 181	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 03

PLOT DATE : 7/9/2025 9:54 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

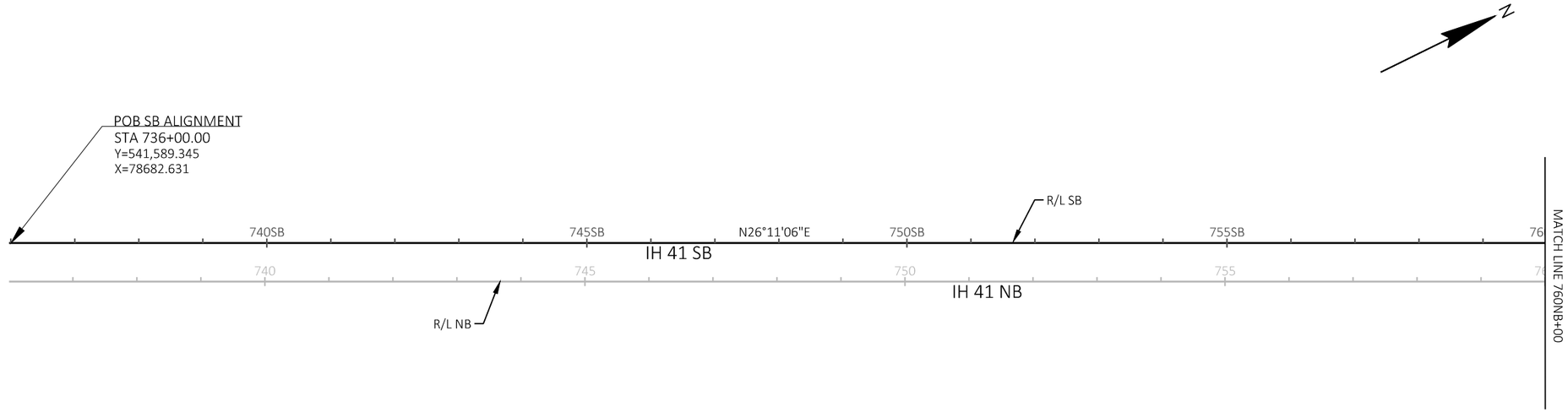


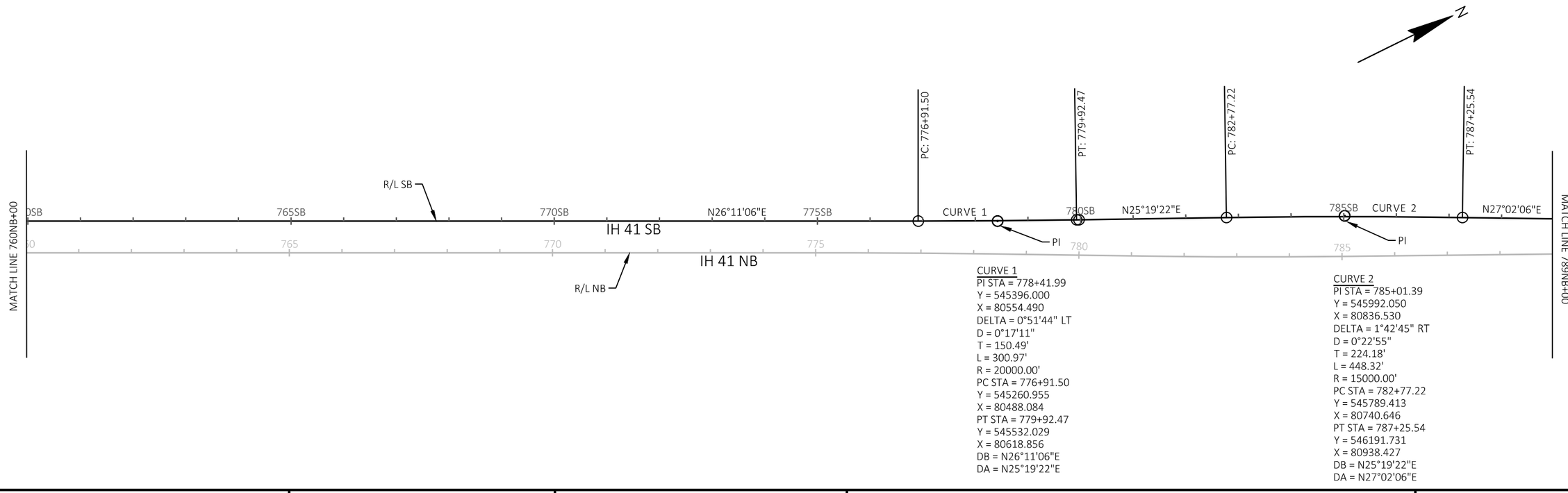


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 NB	SHEET 182	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 04

PLOT DATE : 7/9/2025 9:54 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:200 FT



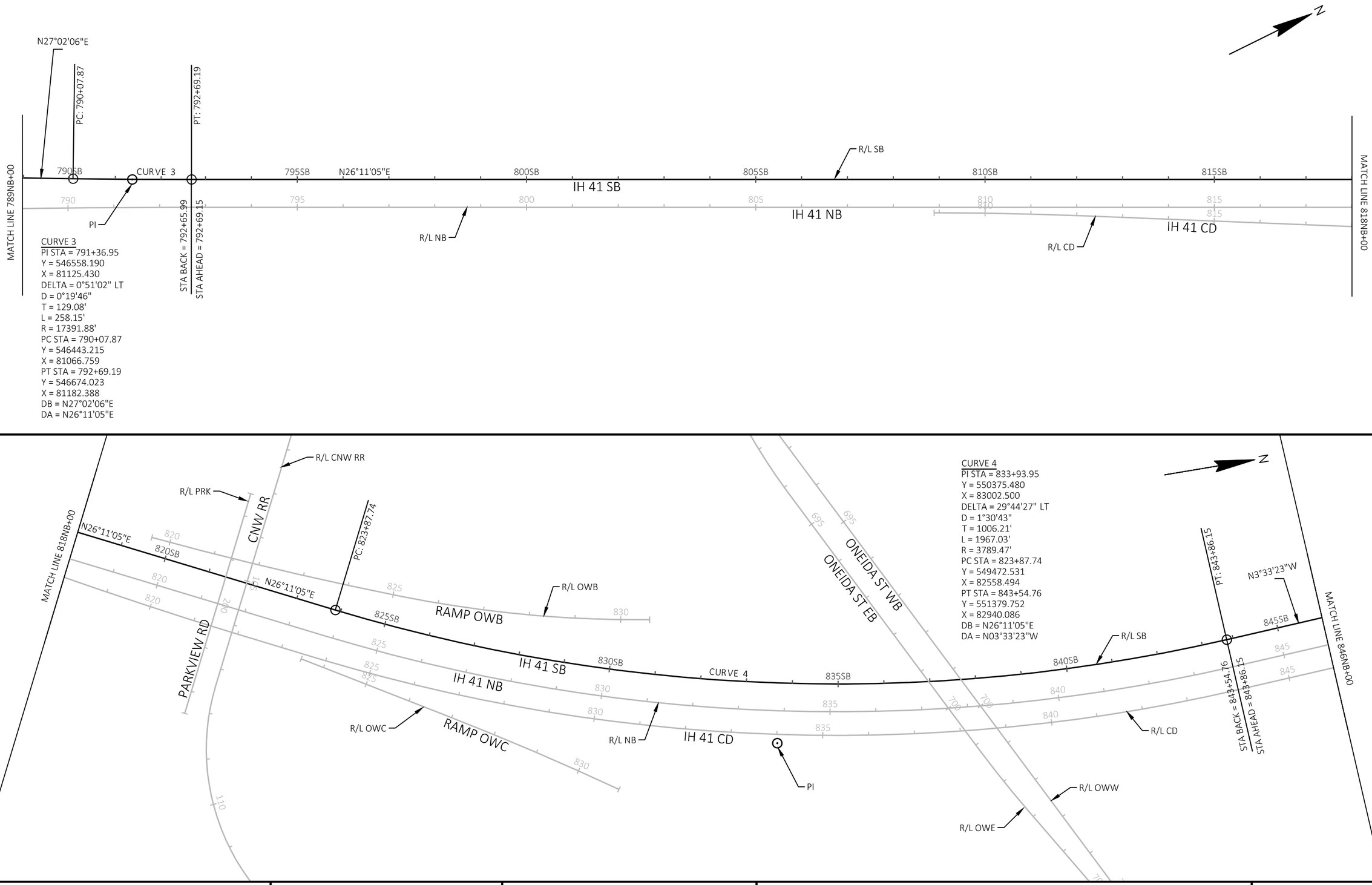


CURVE 1
PI STA = 778+41.99
Y = 545396.000
X = 80554.490
DELTA = 0°51'44" LT
D = 0°17'11"
T = 150.49'
L = 300.97'
R = 20000.00'
PC STA = 776+91.50
Y = 545260.955
X = 80488.084
PT STA = 779+92.47
Y = 545532.029
X = 80618.856
DB = N26°11'06"E
DA = N25°19'22"E

CURVE 2
PI STA = 785+01.39
Y = 545992.050
X = 80836.530
DELTA = 1°42'45" RT
D = 0°22'55"
T = 224.18'
L = 448.32'
R = 15000.00'
PC STA = 782+77.22
Y = 545789.413
X = 80740.646
PT STA = 787+25.54
Y = 546191.731
X = 80938.427
DB = N25°19'22"E
DA = N27°02'06"E

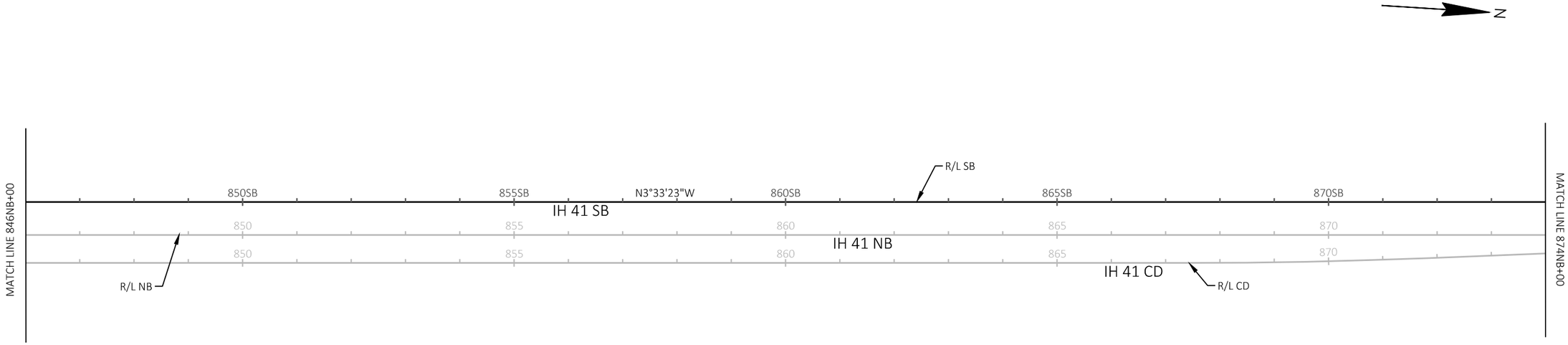
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 SB	SHEET 183	E

2

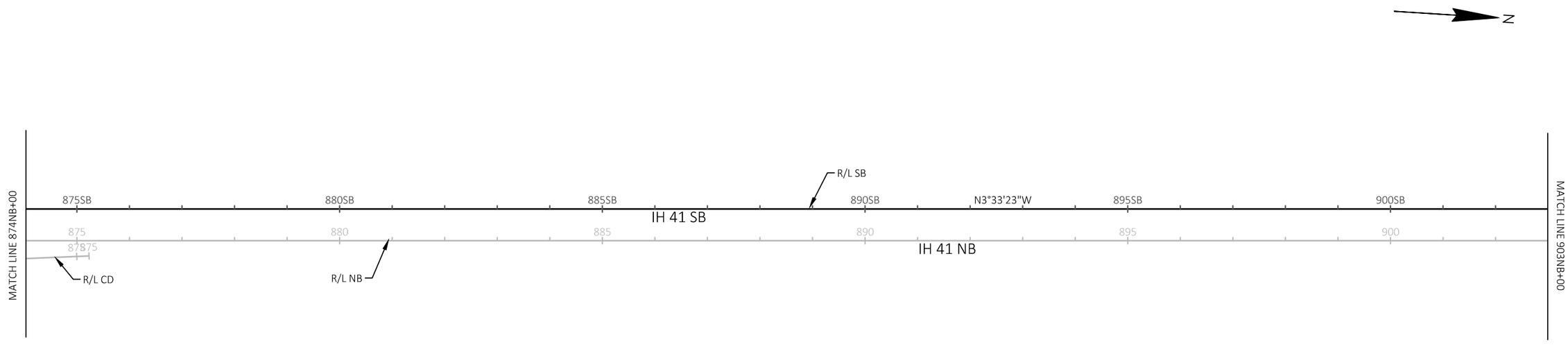


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 SB	SHEET 184	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 02
PLOT DATE : 7/16/2025 9:34 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44



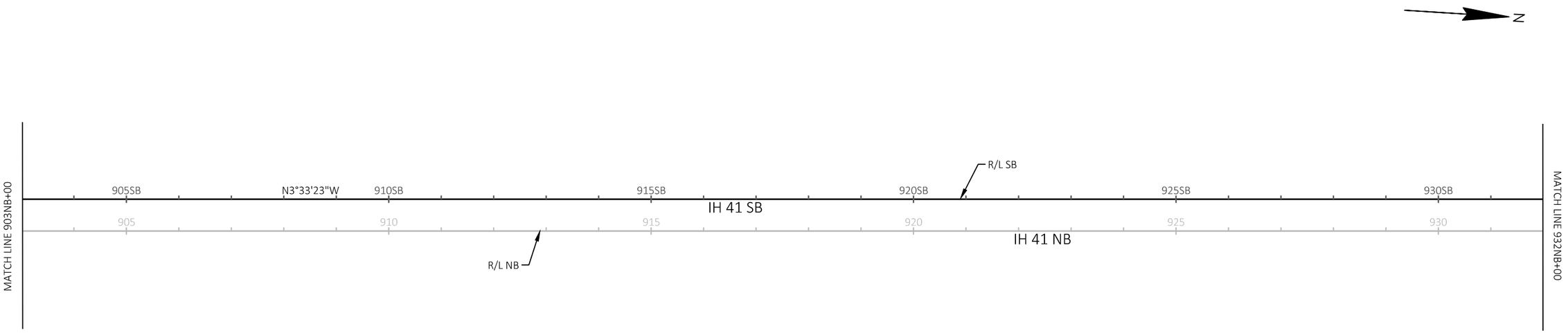
2

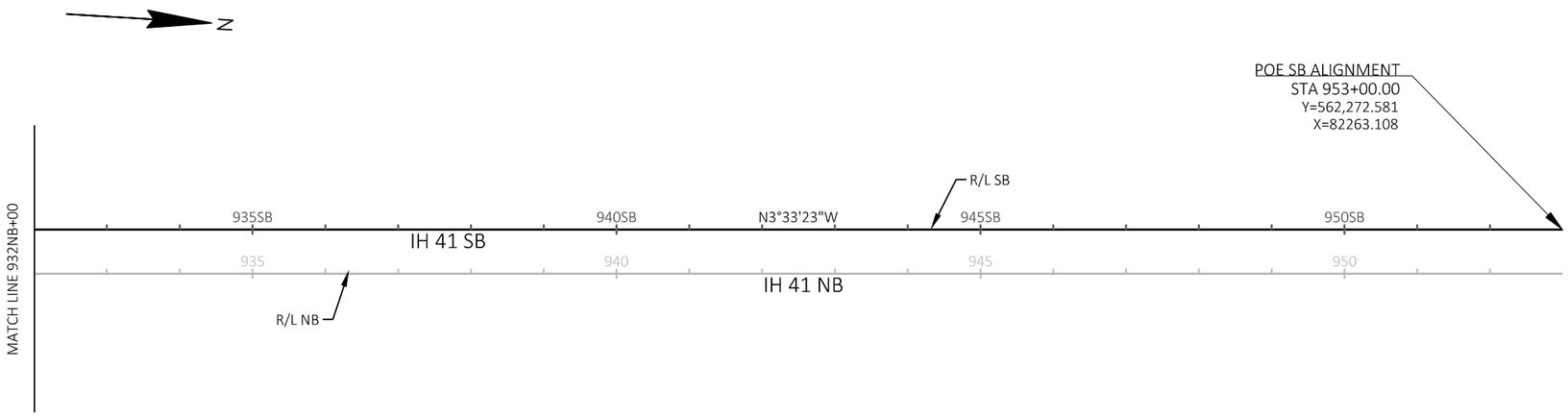


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 SB	SHEET 185	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 03
PLOT DATE : 7/16/2025 9:34 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

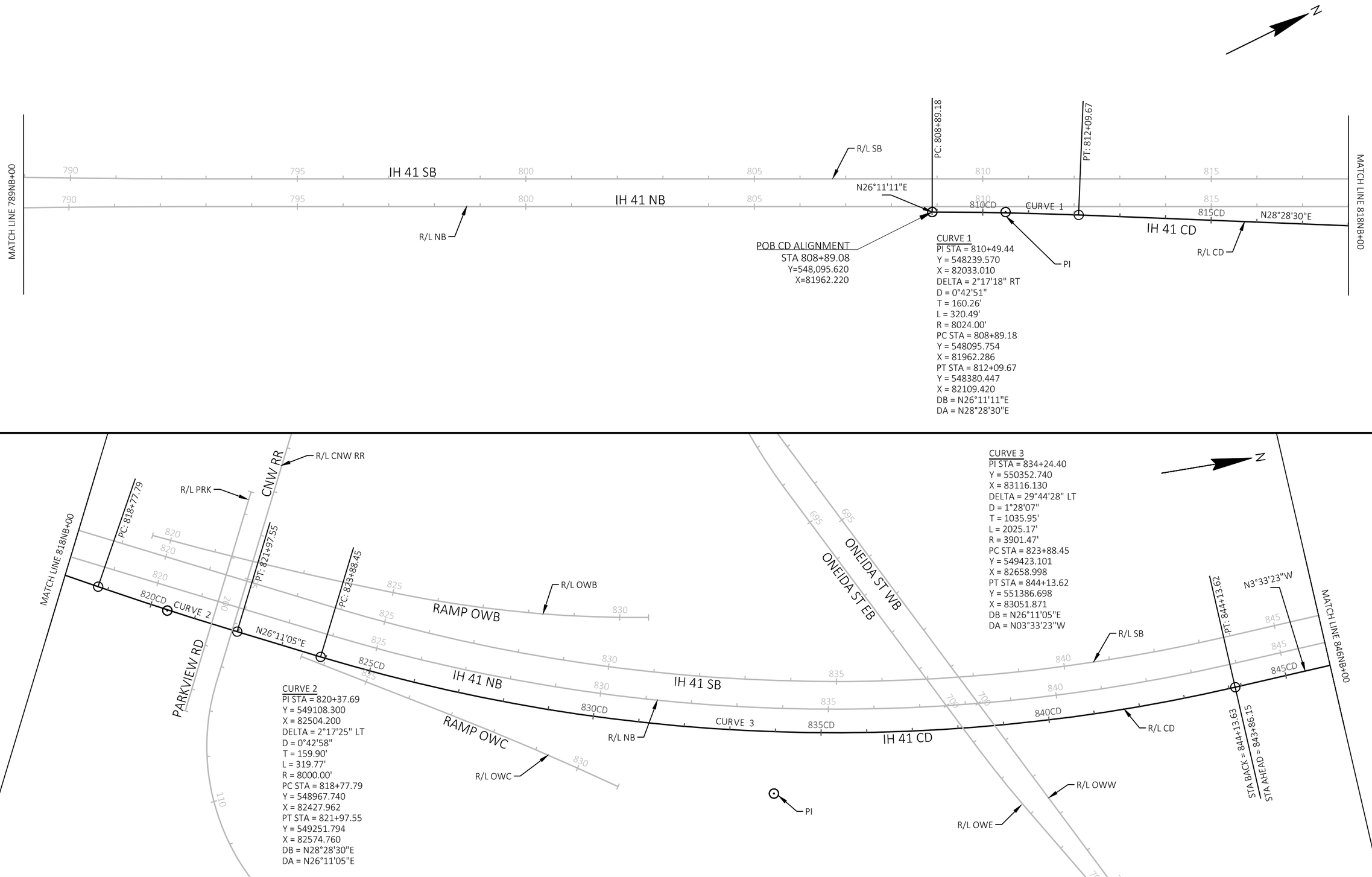




PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 SB	SHEET 186	E

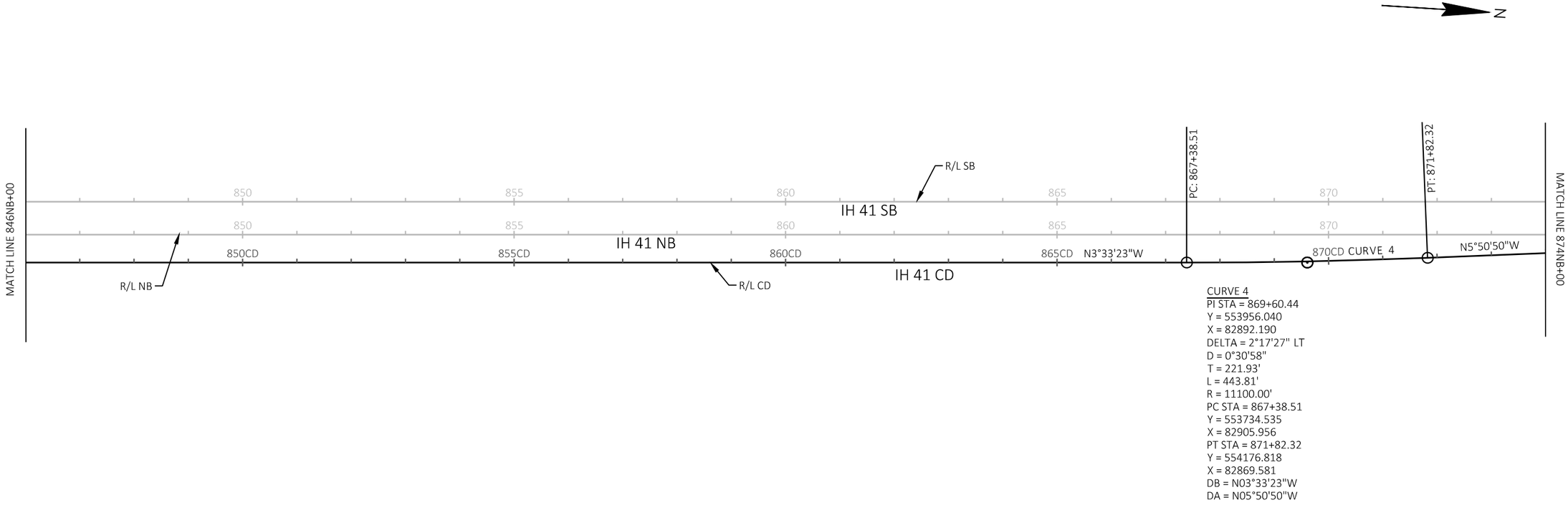
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 04
PLOT DATE : 7/16/2025 9:34 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

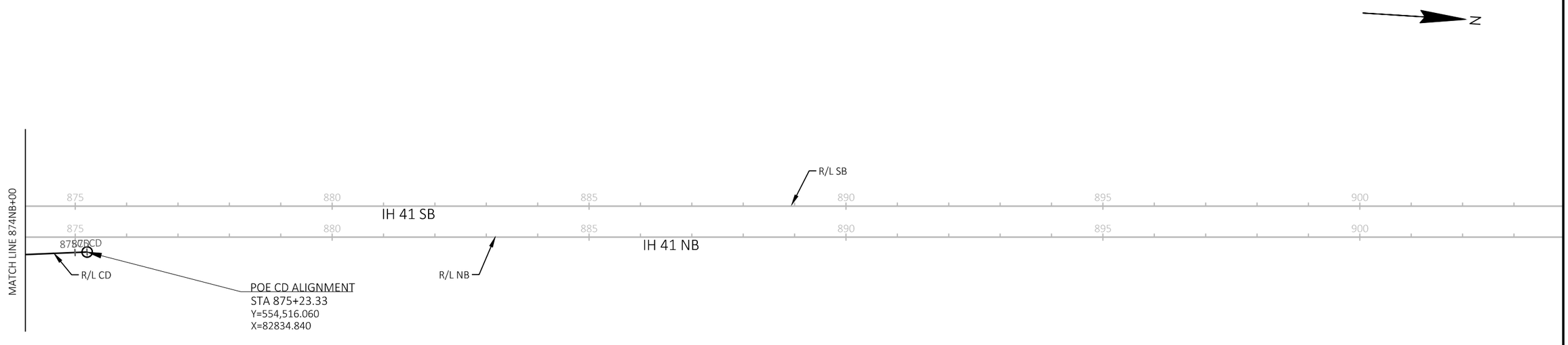


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 CD	SHEET 187	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027203-AD.DWG
LAYOUT NAME - 01
PLOT DATE : 7/9/2025 10:00 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44



CURVE 4
PI STA = 869+60.44
Y = 553956.040
X = 82892.190
DELTA = 2°17'27" LT
D = 0°30'58"
T = 221.93'
L = 443.81'
R = 11100.00'
PC STA = 867+38.51
Y = 553734.535
X = 82905.956
PT STA = 871+82.32
Y = 554176.818
X = 82869.581
DB = N03°33'23"W
DA = N05°50'50"W



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - IH 41 CD	SHEET 188	E

2

N

R/L PRK

CNW RR

POB RAMP OWB ALIGNMENT
STA 819+59.00
Y=549,103.554
X=82337.175

PC: 819+59.00

820OWB

PI

CURVE 1

825OWB

PCC: 825+14.65

RAMP OWB

PI

CURVE 2

830OWB

PT: 830+63.04

POE RAMP OWB ALIGNMENT
STA 830+63.04
Y=550,145.290
X=82691.474

R/L OWB

R/L OWE

R/L OWW

ONEIDA ST WB

ONEIDA ST EB

PARKVIEW RD

PC: 826+88.03

825OWC N30°44'05"E

PC: 823+47.65

POB RAMP OWC ALIGNMENT
STA 823+47.65
Y=549,381.417
X=82651.340

CURVE 1

PI

830OWC

PT: 830+97.12

R/L OWC

RAMP OWC

POE RAMP OWC ALIGNMENT
STA 830+97.12
Y=550,018.779
X=83045.342

R/L NB

IH 41 SB

IH 41 NB

IH 41 CD

R/L SB

R/L CD

R/L CNW RR

690 695 700 705 710

820 825 830 835 840 845

110 150 200

RAMP OWB

CURVE 1
PI STA = 822+36.93
Y = 549356.193
X = 82453.020
DELTA = 3°52'30" LT
D = 0°41'51"
T = 277.93'
L = 555.65'
R = 8216.00'
PC STA = 819+59.00
Y = 549103.554
X = 82337.175
PCC STA = 825+14.65
Y = 549616.083
X = 82551.527
DB = N24°38'00"E
DA = N20°45'30"E

CURVE 2
PI STA = 827+89.83
Y = 549873.399
X = 82649.059
DELTA = 11°53'30" LT
D = 2°10'07"
T = 275.18'
L = 548.38'
R = 2642.20'
PCC STA = 825+14.65
Y = 549616.083
X = 82551.527
PT STA = 830+63.04
Y = 550145.290
X = 82691.474
DB = N20°45'30"E
DA = N08°52'00"E

RAMP OWC

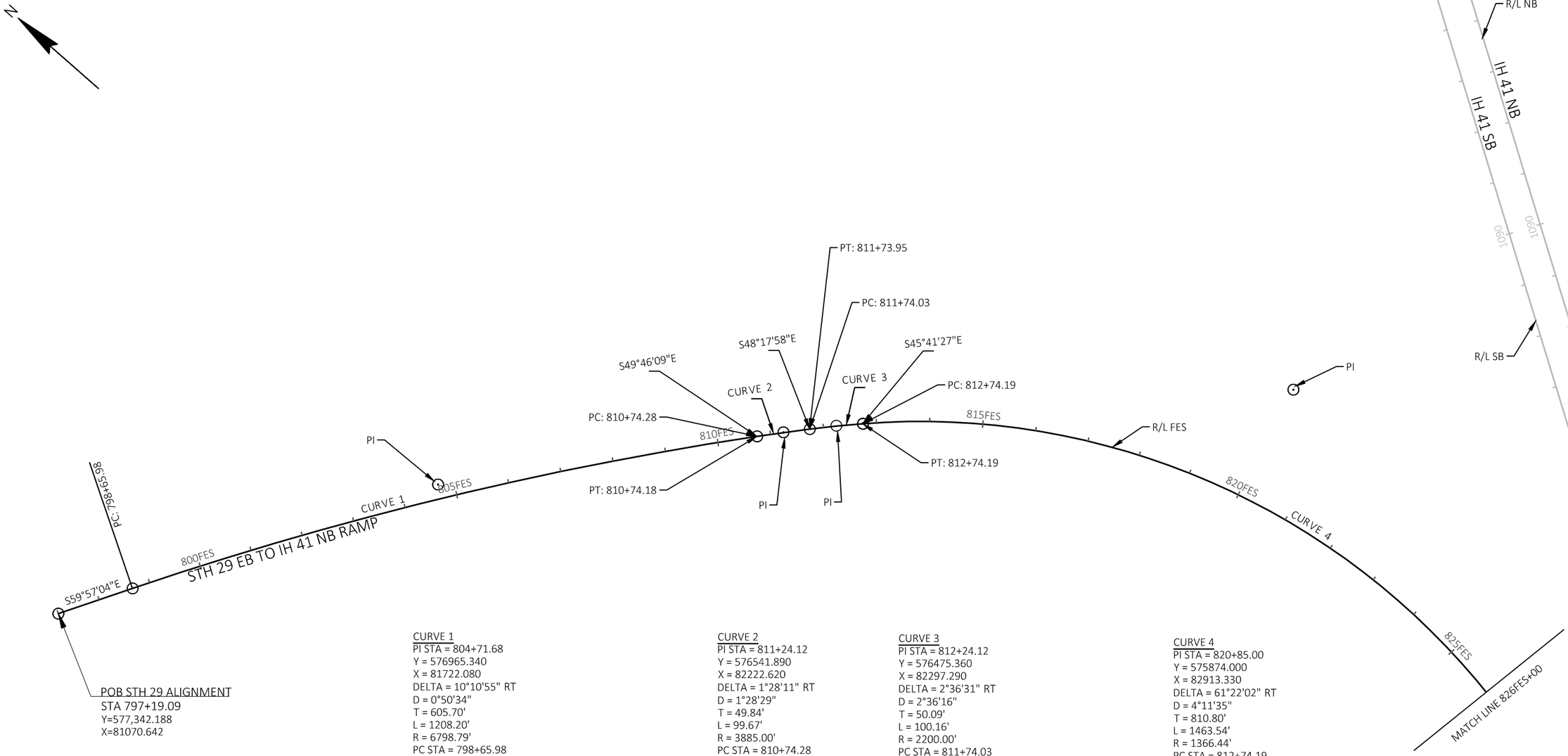
CURVE 1
PI STA = 828+92.65
Y = 549849.866
X = 82929.867
DELTA = 3°37'24" RT
D = 0°53'08"
T = 204.61'
L = 409.09'
R = 6469.07'
PC STA = 826+88.03
Y = 549673.993
X = 82825.298
PT STA = 830+97.12
Y = 550018.779
X = 83045.342
DB = N30°44'05"E
DA = N34°21'28"E

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS: RAMP OWB & RAMP OWC	SHEET 189	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027204-AD.DWG
LAYOUT NAME - 01

PLOT DATE : 7/9/2025 10:03 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:200 FT

2



POB STH 29 ALIGNMENT
STA 797+19.09
Y=577,342.188
X=81070.642

CURVE 1
PI STA = 804+71.68
Y = 576965.340
X = 81722.080
DELTA = 10°10'55" RT
D = 0°50'34"
T = 605.70'
L = 1208.20'
R = 6798.79'
PC STA = 798+65.98
Y = 577268.635
X = 81197.789
PT STA = 810+74.18
Y = 576574.140
X = 82184.499
DB = S59°57'04"E
DA = S49°46'09"E

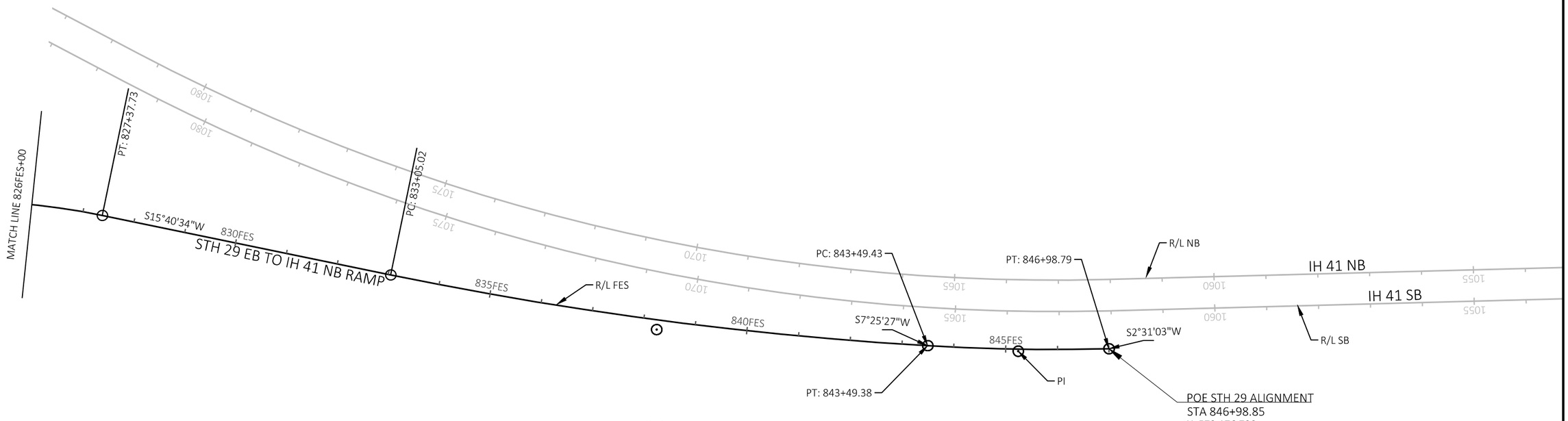
CURVE 2
PI STA = 811+24.12
Y = 576541.890
X = 82222.620
DELTA = 1°28'11" RT
D = 1°28'29"
T = 49.84'
L = 99.67'
R = 3885.00'
PC STA = 810+74.28
Y = 576574.077
X = 82184.573
PT STA = 811+73.95
Y = 576508.738
X = 82259.829
DB = S49°46'09"E
DA = S48°17'58"E

CURVE 3
PI STA = 812+24.12
Y = 576475.360
X = 82297.290
DELTA = 2°36'31" RT
D = 2°36'16"
T = 50.09'
L = 100.16'
R = 2200.00'
PC STA = 811+74.03
Y = 576508.681
X = 82259.892
PT STA = 812+74.19
Y = 576440.372
X = 82333.132
DB = S48°17'58"E
DA = S45°41'27"E

CURVE 4
PI STA = 820+85.00
Y = 575874.000
X = 82913.330
DELTA = 61°22'02" RT
D = 4°11'35"
T = 810.80'
L = 1463.54'
R = 1366.44'
PC STA = 812+74.19
Y = 576440.370
X = 82333.134
PT STA = 827+37.73
Y = 575093.355
X = 82694.250
DB = S45°41'27"E
DA = S15°40'34"W

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - STH 29 EB TO IH 41 NB RAMP	SHEET 190	E

2



POE STH 29 ALIGNMENT
STA 846+98.85
Y=573,176.790
X=82301.770

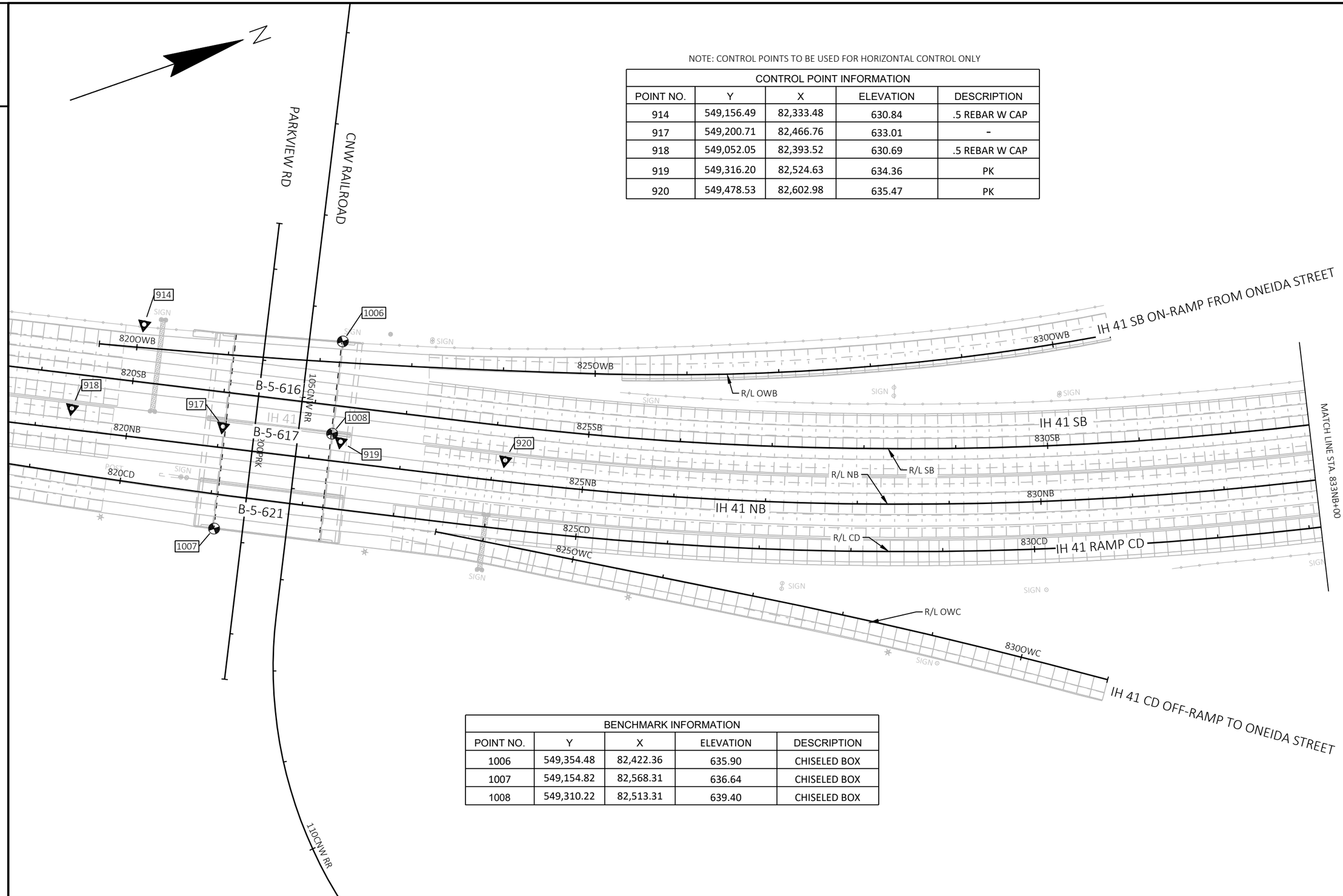
CURVE 5
PI STA = 838+28.11
Y = 574043.540
X = 82399.630
DELTA = 8°15'08" LT
D = 0°47'25"
T = 523.09'
L = 1044.36'
R = 7251.14'
PC STA = 833+05.02
Y = 574547.169
X = 82540.968
PT STA = 843+49.38
Y = 573524.840
X = 82332.041
DB = S15°40'34"W
DA = S07°25'27"W

CURVE 6
PI STA = 845+24.22
Y = 573351.470
X = 82309.450
DELTA = 4°54'24" LT
D = 1°24'16"
T = 174.79'
L = 349.36'
R = 4079.54'
PC STA = 843+49.43
Y = 573524.791
X = 82332.035
PT STA = 846+98.79
Y = 573176.852
X = 82301.773
DB = S07°25'27"W
DA = S02°31'03"W

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	ALIGNMENT DETAILS - STH 29 EB TO IH 41 NB RAMP	SHEET 191	E

NOTE: CONTROL POINTS TO BE USED FOR HORIZONTAL CONTROL ONLY

CONTROL POINT INFORMATION				
POINT NO.	Y	X	ELEVATION	DESCRIPTION
914	549,156.49	82,333.48	630.84	.5 REBAR W CAP
917	549,200.71	82,466.76	633.01	-
918	549,052.05	82,393.52	630.69	.5 REBAR W CAP
919	549,316.20	82,524.63	634.36	PK
920	549,478.53	82,602.98	635.47	PK



BENCHMARK INFORMATION				
POINT NO.	Y	X	ELEVATION	DESCRIPTION
1006	549,354.48	82,422.36	635.90	CHISELED BOX
1007	549,154.82	82,568.31	636.64	CHISELED BOX
1008	549,310.22	82,513.31	639.40	CHISELED BOX

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONTROL POINT AND BENCHMARK DIAGRAM - IH 41	SHEET 192	E

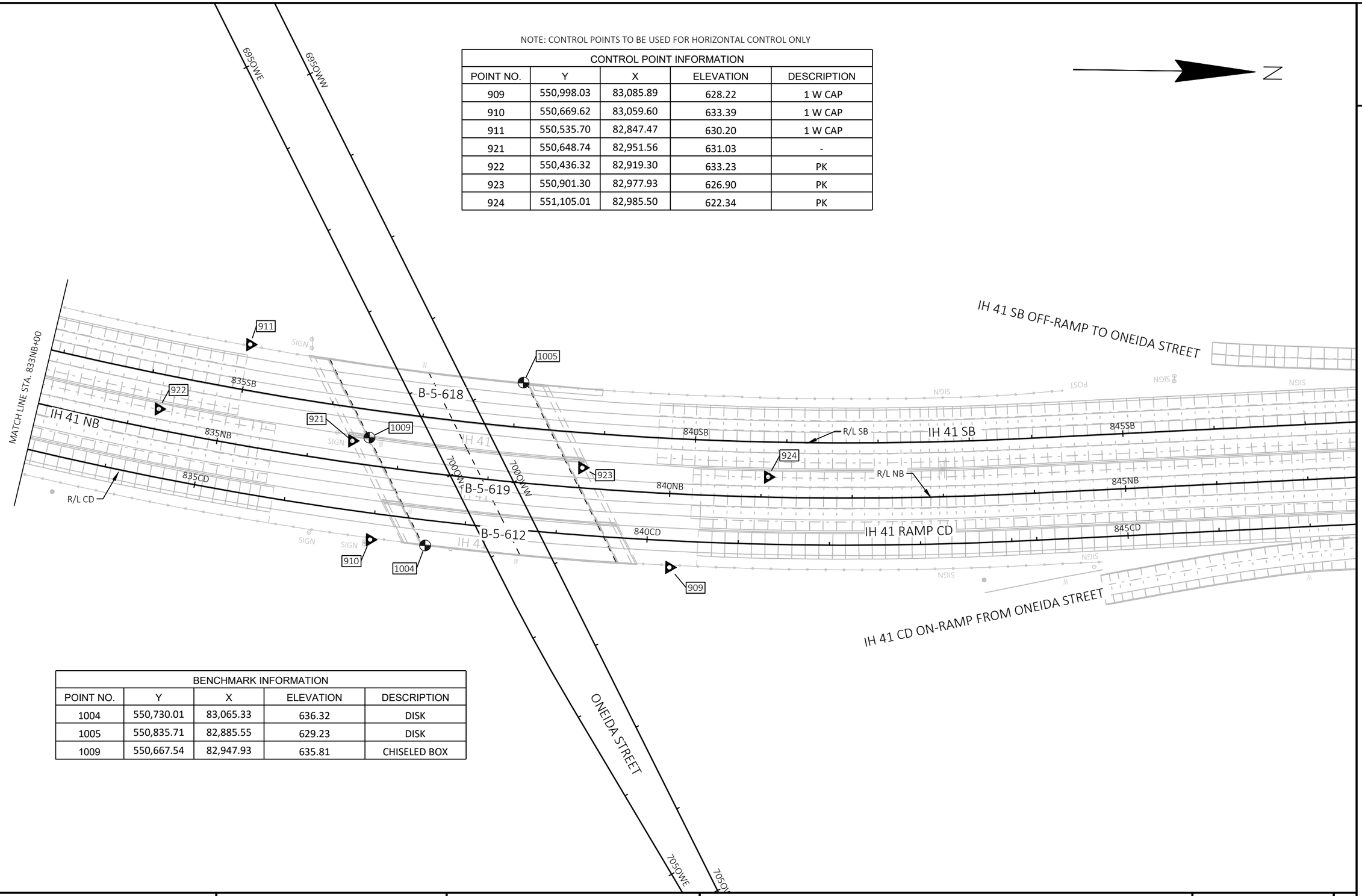
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\027301_CP.DWG
LAYOUT NAME - 01

PLOT DATE : 4/28/2026 1:30 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

NOTE: CONTROL POINTS TO BE USED FOR HORIZONTAL CONTROL ONLY

CONTROL POINT INFORMATION				
POINT NO.	Y	X	ELEVATION	DESCRIPTION
909	550,998.03	83,085.89	628.22	1 W CAP
910	550,669.62	83,059.60	633.39	1 W CAP
911	550,535.70	82,847.47	630.20	1 W CAP
921	550,648.74	82,951.56	631.03	-
922	550,436.32	82,919.30	633.23	PK
923	550,901.30	82,977.93	626.90	PK
924	551,105.01	82,985.50	622.34	PK

N



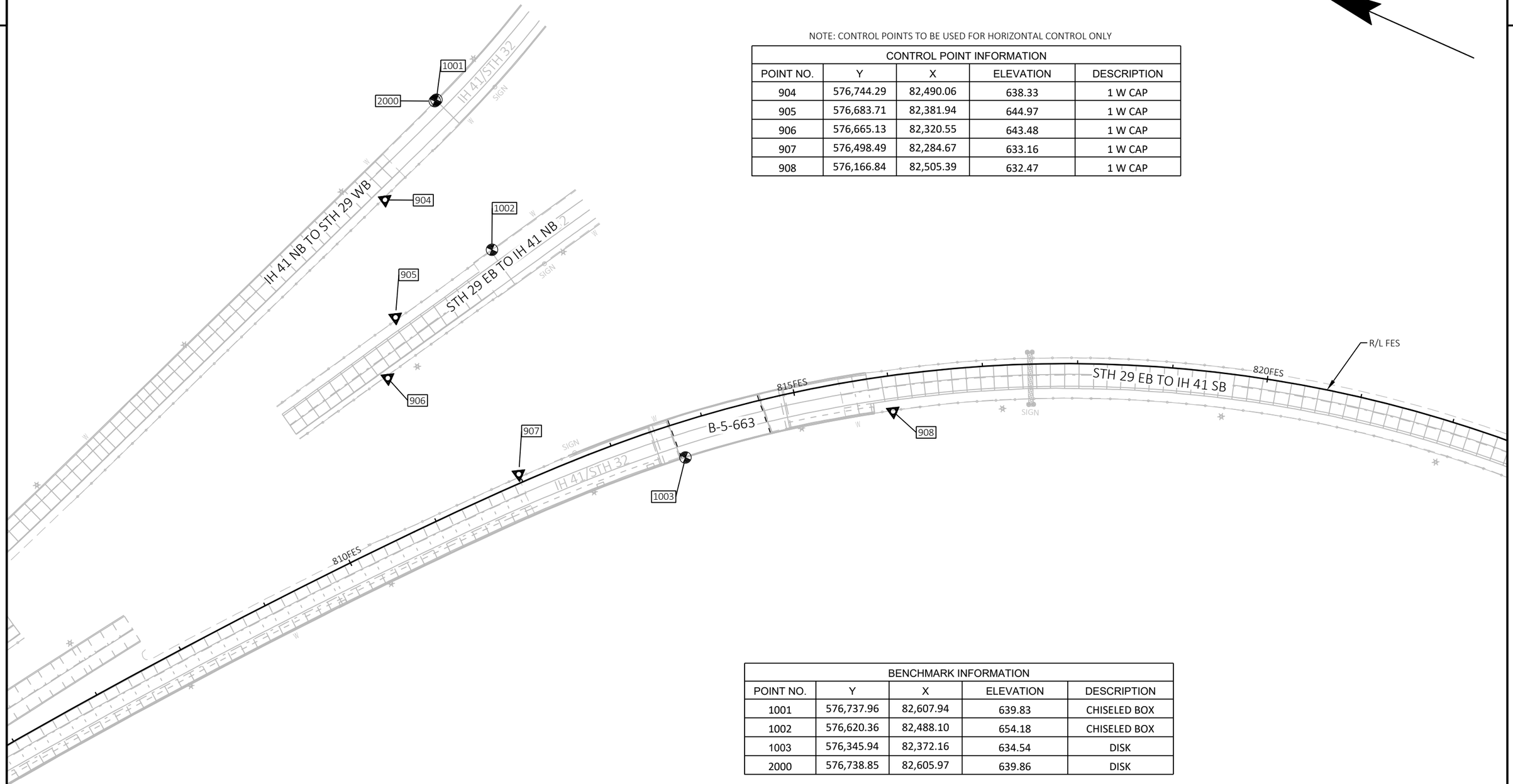
BENCHMARK INFORMATION				
POINT NO.	Y	X	ELEVATION	DESCRIPTION
1004	550,730.01	83,065.33	636.32	DISK
1005	550,835.71	82,885.55	629.23	DISK
1009	550,667.54	82,947.93	635.81	CHISELED BOX

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONTROL POINT AND BENCHMARK DIAGRAM - IH 41	SHEET 193	E

2

NOTE: CONTROL POINTS TO BE USED FOR HORIZONTAL CONTROL ONLY

CONTROL POINT INFORMATION				
POINT NO.	Y	X	ELEVATION	DESCRIPTION
904	576,744.29	82,490.06	638.33	1 W CAP
905	576,683.71	82,381.94	644.97	1 W CAP
906	576,665.13	82,320.55	643.48	1 W CAP
907	576,498.49	82,284.67	633.16	1 W CAP
908	576,166.84	82,505.39	632.47	1 W CAP



BENCHMARK INFORMATION				
POINT NO.	Y	X	ELEVATION	DESCRIPTION
1001	576,737.96	82,607.94	639.83	CHISELED BOX
1002	576,620.36	82,488.10	654.18	CHISELED BOX
1003	576,345.94	82,372.16	634.54	DISK
2000	576,738.85	82,605.97	639.86	DISK

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CONTROL POINT AND BENCHMARK DIAGRAM - STH 29	SHEET 194	E

SUPERELEVATION TABLE R/L NB				
	LANE			
Station	1	2	3	Remarks
819+52.77 NB	-2.00%	-1.30%	-1.30%	Match Existing
820+70.53 NB	-2.00%	1.40%	1.40%	Start of Concrete Pavement Approach Slab
820+85.53 NB	-2.30%	1.75%	1.75%	Start of Structural Approach Slab
820+96.50 NB	-2.30%	2.00%	2.00%	Begin Reverse Crown
821+05.53 NB	-2.30%	2.00%	2.00%	Start of Bridge Deck
822+22.42 NB	-2.20%	1.90%	2.00%	End of Bridge Deck
822+42.42 NB	-2.20%	1.90%	2.00%	End of Structural Approach Slab
822+57.42 NB	-2.00%	2.00%	2.00%	End of Concrete Pavement Approach Slab
823+39.71 NB	-2.00%	2.00%	2.00%	End Reverse Crown
824+02.81 NB	-2.70%	3.00%	3.00%	Match Existing

SUPERELEVATION TABLE R/L NB				
	LANE			
Station	1	2	3	Remarks
832+19.19 NB	-4.10%	4.60%	4.60%	Match Existing
832+41.69 NB	-4.60%	4.60%	4.60%	Transition
836+02.31 NB	-4.60%	4.60%	4.60%	Transition
836+29.31 NB	-4.00%	4.00%	4.00%	Start of Concrete Pavement Approach Slab
836+44.42 NB	-4.00%	4.00%	4.00%	Start of Structural Approach Slab
837+08.70 NB	-4.00%	4.00%	4.00%	Start of Bridge Deck
838+83.75 NB	-4.60%	4.60%	4.50%	End of Bridge Deck
839+42.51 NB	-4.60%	4.60%	4.50%	End of Structural Approach Slab
839+57.37 NB	-4.60%	4.60%	4.60%	End of Concrete Pavement Approach Slab
841+00.61 NB	-4.60%	4.60%	4.60%	Transition

SUPERELEVATION TABLE R/L SB					
	LANE				
Station	1	2	3	4	Remarks
819+27.11 SB	-2.10%	-2.20%	-2.00%	-2.20%	Match Existing
819+36.11SB	-1.86%	-2.00%	-2.00%	-2.00%	Transition
820+70.28SB	1.70%	-2.00%	-2.00%	-2.00%	Start of Concrete Pavement Approach Slab
820+85.28 SB	2.10%	-2.10%	-2.00%	-2.20%	Start of Structural Approach Slab
821+05.28 SB	2.10%	-2.10%	-2.00%	-2.20%	Start of Bridge Deck
822+22.14 SB	2.00%	-2.00%	-2.00%	-2.00%	End of Bridge Deck
822+42.14SB	2.00%	-2.00%	-2.00%	-2.00%	End of Structural Approach Slab
822+57.14 SB	2.00%	-2.00%	-2.00%	-2.00%	End of Concrete Pavement Approach Slab
823+23.47 SB	2.00%	-2.00%	-2.00%	-2.00%	End Reverse Crown
823+50.00 SB	2.50%	-2.50%	-2.50%	-2.50%	Transition
824+00.00 SB	3.33%	-3.33%	-3.33%	-3.33%	Transition
824+50.00 SB	4.10%	-4.10%	-4.10%	-4.10%	Transition
824+80.05 SB	4.60%	-4.60%	-4.60%	-4.60%	Begin Full Super
835+26.20 SB	4.60%	-4.60%	-4.60%	-4.60%	Transition
835+53.20 SB	4.60%	-4.00%	-4.60%	-4.60%	Start of Concrete Pavement Approach Slab
835+68.40 SB	4.60%	-4.00%	-4.60%	-4.60%	Start of Structural Approach Slab
836+42.32 SB	4.60%	-4.00%	-4.60%	-4.60%	Start of Bridge Deck
838+10.44 SB	4.60%	-4.60%	-4.60%	-4.50%	End of Bridge Deck
838+78.28 SB	4.60%	-4.60%	-4.60%	-4.50%	End of Structural Approach Slab
838+93.17 SB	4.60%	-4.60%	-4.60%	-4.60%	End of Concrete Pavement Approach Slab
840+78.31 SB	4.60%	-4.60%	-4.60%	-4.60%	Transition
841+05.30 SB	4.70%	-4.20%	-4.70%	-4.00%	Match Existing

SUPERELEVATION TABLE R/L CD			
	LANE		
Station	1	2	Remarks
819+09.07 CD	0.40%	0.20%	Match Existing
819+81.07 CD	2.00%	2.00%	Begin Reverse Crown
820+71.50 CD	2.00%	2.00%	Start of Concrete Pavement Approach Slab
820+86.50 CD	2.10%	2.30%	Start of Structural Approach Slab
821+06.50 CD	2.10%	2.30%	Start of Bridge Deck
822+23.39 CD	2.30%	2.30%	End of Bridge Deck
822+43.41 CD	2.30%	2.30%	End of Structural Approach Slab
822+58.41 CD	2.00%	2.00%	End of Concrete Pavement Approach Slab
824+90.00 CD	2.00%	N/A	Transition
825+00.02 CD	2.25%	N/A	Match Existing

SUPERELEVATION TABLE R/L CD		
	LANE	
Station	1	Remarks
831+30.13 CD	3.40%	Match Existing
831+42.13 CD	3.70%	Transition
836+94.03 CD	3.70%	Start of Concrete Pavement Approach Slab
837+09.07 CD	3.70%	Start of Structural Approach Slab
837+55.87 CD	3.70%	Start of Bridge Deck
839+45.84 CD	3.80%	End of Bridge Deck
839+89.31 CD	3.80%	End of Structural Approach Slab
840+03.59 CD	3.70%	End of Concrete Pavement Approach Slab
843+34.34 CD	3.70%	Match Existing

SUPERELEVATION TABLE R/L OWB			
	LANE		
Station	1	2	Remarks
822+22.20 OWB	-2.50%	N/A	End of Bridge Deck
822+42.23 OWB	-2.50%	N/A	End of Structural Approach Slab
822+57.26 OWB	-2.50%	N/A	End of Concrete Pavement Approach Slab
824+24.42 OWB	-2.50%	N/A	Transition
824+33.42 OWB	-2.90%	N/A	Begin Full Super
826+46.41 OWB	-2.90%	-2.90%	Two Lanes
828+68.36 OWB	-2.90%	-2.90%	Match Existing

SUPERELEVATION TABLE R/L OWC		
	LANE	
Station	1	Remarks
824+80.00 OWC	2.00%	Transition
825+49.90 OWC	-0.90%	Match Existing

SUPERELEVATION TABLE R/L FES			
	LANE		
Station	1	2	Remarks
810+69.14 FES	-2.50%	-2.50%	Match Existing
811+35.00 FES	-3.40%	-3.40%	Transition
813+35.00 FES	-6.00%	-6.00%	Begin Full Super
815+80.65 FES	-6.00%	-6.00%	End of Retaining Wall R-5-243
816+00.00 FES	-5.80%	-5.30%	Match Existing

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Line	Item	Item Description	Unit	Total	Qty
0002	108.3100.S	Incentive/Disincentive for Interim Completion of Work	CD	15.000	15.000
0004	203.0220	Removing Structure (structure) 01. B-5-0612	EACH	1.000	1.000
0006	203.0220	Removing Structure (structure) 01. B-5-0618	EACH	1.000	1.000
0008	203.0220	Removing Structure (structure) 02. B-5-0616	EACH	1.000	1.000
0010	203.0220	Removing Structure (structure) 03. B-5-0617	EACH	1.000	1.000
0012	203.0220	Removing Structure (structure) 05. B-5-0619	EACH	1.000	1.000
0014	203.0220	Removing Structure (structure) 06. B-5-0621	EACH	1.000	1.000
0016	203.0220	Removing Structure (structure) 07. B-5-0663	EACH	1.000	1.000
0018	203.0220	Removing Structure (structure) 08. R-5-0243	EACH	1.000	1.000
0020	203.0220	Removing Structure (structure) 09. R-5-0244	EACH	1.000	1.000
0022	204.0100	Removing Concrete Pavement	SY	31,700.000	31,700.000
0024	204.0110	Removing Asphaltic Surface	SY	26,800.000	26,800.000
0026	204.0157	Removing Concrete Barrier	LF	3,480.000	3,480.000
0028	204.0165	Removing Guardrail	LF	3,650.000	3,650.000
0030	205.0100	Excavation Common	CY	13,796.000	13,796.000
0032	213.0100	Finishing Roadway (project) 01. 1130-74-71	EACH	1.000	1.000
0034	305.0110	Base Aggregate Dense 3/4-Inch	TON	340.000	340.000
0036	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	12,200.000	12,200.000
0038	310.0115	Base Aggregate Open-Graded	CY	1.000	1.000
0040	312.0110	Select Crushed Material	TON	510.000	510.000
0042	320.0165	Concrete Base 10-Inch	SY	755.000	755.000
0044	416.0610	Drilled Tie Bars	EACH	439.000	439.000
0046	416.0620	Drilled Dowel Bars	EACH	433.000	433.000
0048	416.9112.S	Filling Concrete Shoulder Rumble Strips 12-Inch	LF	11,840.000	11,840.000
0050	450.4000	HMA Cold Weather Paving	TON	90.000	90.000
0052	455.0605	Tack Coat	GAL	306.000	306.000
0054	460.2000	Incentive Density HMA Pavement	DOL	710.000	710.000
0056	460.5224	HMA Pavement 4 LT 58-28 S	TON	1,100.000	1,100.000
0058	465.0520	Asphaltic Rumble Strips, Shoulder	LF	2,730.000	2,730.000
0060	502.3200	Protective Surface Treatment	SY	1,998.000	1,998.000
0062	502.3210	Pigmented Surface Sealer	SY	525.000	525.000
0064	502.4207	Adhesive Anchors No. 7 Bar	EACH	621.000	621.000
0066	504.0500	Concrete Masonry Retaining Walls	CY	257.000	257.000
0068	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	202,280.000	202,280.000
0070	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	3,220.000	3,220.000
0072	505.0905	Bar Couplers No. 5	EACH	594.000	594.000
0074	516.0500	Rubberized Membrane Waterproofing	SY	19.000	19.000
0076	517.1010.S	Concrete Staining (structure) 01. B-5-0612	SF	45.000	45.000
0078	517.1010.S	Concrete Staining (structure) 04. B-5-0618	SF	45.000	45.000
0080	517.1010.S	Concrete Staining (structure) 07. B-5-0663	SF	434.000	434.000
0082	517.1010.S	Concrete Staining (structure) 08. R-5-0243	SF	991.000	991.000
0084	517.1010.S	Concrete Staining (structure) 09. R-5-0244	SF	1,903.000	1,903.000
0086	517.1015.S	Concrete Staining Multi-Color (structure) 01. B-5-0612	SF	64.000	64.000
0088	517.1015.S	Concrete Staining Multi-Color (structure) 04. B-5-0618	SF	64.000	64.000
0090	517.1050.S	Architectural Surface Treatment (structure) 01. B-5-0612	SF	64.000	64.000
0092	517.1050.S	Architectural Surface Treatment (structure) 04. B-5-0618	SF	64.000	64.000
0094	531.8990	Anchor Assemblies Poles on Structures	EACH	2.000	2.000
0096	601.0574	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type G	LF	340.000	340.000
0098	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	97.000	97.000

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Line	Item	Item Description	Unit	Total	Qty
0100	602.3010	Concrete Surface Drains	CY	8.000	8.000
0102	602.3210	Concrete Rumble Strips, Shoulder Divided Roadway	LF	14,740.000	14,740.000
0104	603.1142	Concrete Barrier Type S42	LF	431.000	431.000
0106	603.3113	Concrete Barrier Transition Type NJ32SF to S36	EACH	2.000	2.000
0108	603.3535	Concrete Barrier Transition Type S36 to S42	EACH	2.000	2.000
0110	603.8000	Concrete Barrier Temporary Precast Delivered	LF	10,300.000	10,300.000
0112	603.8125	Concrete Barrier Temporary Precast Installed	LF	18,930.000	18,930.000
0114	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	5,770.000	5,770.000
0116	606.0200	Riprap Medium	CY	50.000	50.000
0118	611.0535	Manhole Covers Type J-Special	EACH	1.000	1.000
0120	611.0633	Inlet Covers Type HM-GJ-S	EACH	2.000	2.000
0122	611.0654	Inlet Covers Type V	EACH	22.000	22.000
0124	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0126	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	20.000	20.000
0128	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	7.000	7.000
0130	614.0805	Crash Cushions Permanent Low Maintenance	EACH	1.000	1.000
0132	614.2300	MGS Guardrail 3	LF	3,283.000	3,283.000
0134	614.2500	MGS Thrie Beam Transition	LF	289.000	289.000
0136	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0138	614.2620	MGS Guardrail Terminal Type 2	EACH	2.000	2.000
0140	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1130-74-71	EACH	1.000	1.000
0142	619.1000	Mobilization	EACH	1.000	1.000
0144	623.0200	Dust Control Surface Treatment	SY	28,000.000	28,000.000
0146	624.0100	Water	MGAL	240.000	240.000
0148	625.0500	Salvaged Topsoil	SY	6,550.000	6,550.000
0150	628.1504	Silt Fence	LF	5,180.000	5,180.000
0152	628.1520	Silt Fence Maintenance	LF	5,180.000	5,180.000
0154	628.1905	Mobilizations Erosion Control	EACH	9.000	9.000
0156	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0158	628.2004	Erosion Mat Class I Type B	SY	6,550.000	6,550.000
0160	628.7010	Inlet Protection Type B	EACH	30.000	30.000
0162	628.7015	Inlet Protection Type C	EACH	4.000	4.000
0164	628.7504	Temporary Ditch Checks	LF	90.000	90.000
0166	628.7570	Rock Bags	EACH	50.000	50.000
0168	629.0210	Fertilizer Type B	CWT	4.400	4.400
0170	630.0130	Seeding Mixture No. 30	LB	300.000	300.000
0172	630.0500	Seed Water	MGAL	150.000	150.000
0174	633.1000	Delineators Barrier Wall	EACH	35.000	35.000
0176	638.2102	Moving Signs Type II	EACH	6.000	6.000
0178	638.4000	Moving Small Sign Supports	EACH	9.000	9.000
0180	642.5201	Field Office Type C	EACH	1.000	1.000
0182	643.0300	Traffic Control Drums	DAY	78,817.000	78,817.000
0184	643.0320.S	Temporary Tape Rumble Strip Orange	LF	3,348.000	3,348.000
0186	643.0420	Traffic Control Barricades Type III	DAY	2,885.000	2,885.000
0188	643.0705	Traffic Control Warning Lights Type A	DAY	5,352.000	5,352.000
0190	643.0715	Traffic Control Warning Lights Type C	DAY	18,811.000	18,811.000
0192	643.0810	Traffic Control Connected Arrow Boards	DAY	553.000	553.000
0194	643.0900	Traffic Control Signs	DAY	29,005.000	29,005.000
0196	643.0910	Traffic Control Covering Signs Type I	EACH	27.000	27.000

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Line	Item	Item Description	Unit	Total	Qty
0198	643.0920	Traffic Control Covering Signs Type II	EACH	18.000	18.000
0200	643.1000	Traffic Control Signs Fixed Message	SF	450.000	450.000
0202	643.1050	Traffic Control Signs PCMS	DAY	98.000	98.000
0204	643.1100.S	Dynamic Late Merge System	DAY	278.000	278.000
0206	643.1205.S	Basic Traffic Queue Warning System	DAY	106.000	106.000
0208	643.1220	Traffic Control Connected Work Zone Start and End Location Markers	DAY	414.000	414.000
0210	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	86,240.000	86,240.000
0212	643.3280	Temporary Marking Line Removable Tape 10-Inch	LF	860.000	860.000
0214	643.5000	Traffic Control	EACH	1.000	1.000
0216	645.0111	Geotextile Type DF Schedule A	SY	7.000	7.000
0218	645.0120	Geotextile Type HR	SY	100.000	100.000
0220	646.1020	Marking Line Epoxy 4-Inch	LF	2,800.000	2,800.000
0222	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	27,265.000	27,265.000
0224	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	5,320.000	5,320.000
0226	646.3020	Marking Line Epoxy 8-Inch	LF	325.000	325.000
0228	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	5,430.000	5,430.000
0230	646.5320	Marking Railroad Crossing Epoxy	EACH	2.000	2.000
0232	646.6464	Cold Weather Marking Epoxy 4-Inch	LF	7,850.000	7,850.000
0234	646.6468	Cold Weather Marking Epoxy 8-Inch	LF	83.000	83.000
0236	646.9000	Marking Removal Line 4-Inch	LF	23,700.000	23,700.000
0238	646.9055	Marking Removal Line Grooved Contrast Permanent Tape 4-Inch	LF	4,570.000	4,570.000
0240	646.9100	Marking Removal Line 8-Inch	LF	520.000	520.000
0242	646.9155	Marking Removal Line Grooved Contrast Permanent Tape 8-Inch	LF	4,480.000	4,480.000
0244	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	55.000	55.000
0246	650.7000	Construction Staking Concrete Pavement	LF	11,514.000	11,514.000
0248	650.8501	Construction Staking Electrical Installations (project) 01. 1130-74-71	EACH	1.000	1.000
0250	650.9911	Construction Staking Supplemental Control (project) 01. 1130-74-71	EACH	1.000	1.000
0252	650.9920	Construction Staking Slope Stakes	LF	4,099.000	4,099.000
0254	652.0125	Conduit Rigid Metallic 2-Inch	LF	204.000	204.000
0256	652.0135	Conduit Rigid Metallic 3-Inch	LF	120.000	120.000
0258	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	467.000	467.000
0260	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	3,960.000	3,960.000
0262	653.0222	Junction Boxes 18x12x6-Inch	EACH	2.000	2.000
0264	653.0900	Adjusting Pull Boxes	EACH	23.000	23.000
0266	690.0150	Sawing Asphalt	LF	72.000	72.000
0268	690.0250	Sawing Concrete	LF	7,650.000	7,650.000
0270	715.0502	Incentive Strength Concrete Structures	DOL	8,084.000	8,084.000
0272	715.0603	Incentive Strength Concrete Barrier	DOL	1,455.000	1,455.000
0274	715.0715	Incentive Flexural Strength Concrete Pavement	DOL	8,656.000	8,656.000
0276	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,500.000	2,500.000
0278	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	3,280.000	3,280.000
0280	SPV.0035	Special 01. HPC Masonry Structures	CY	1,095.000	1,095.000
0282	SPV.0045	Special 01. Combination Work Zone Digital Speed Limit - Speed Feedback Trailer	DAY	544.000	544.000
0284	SPV.0060	Special 01. Sawing Concrete Barrier Single Slope	EACH	17.000	17.000
0286	SPV.0060	Special 03. Concrete Barrier Transition Type V56 To S56	EACH	4.000	4.000
0288	SPV.0060	Special 04. Pulling and Reconnecting Electrical Wiring	EACH	10.000	10.000
0290	SPV.0060	Special 05. Salvage and Reinstall Luminaire	EACH	4.000	4.000
0292	SPV.0060	Special 06. Stand Pipe Connection	EACH	1.000	1.000
0294	SPV.0060	Special 07. Manhole Covers Type J Bolted	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0296	SPV.0060	Special 08. Drain Slotted Vane Type A 3-Foot	EACH	16.000	16.000
0298	SPV.0060	Special 09. Concrete Base Median Barrier Type 1	EACH	1.000	1.000
0300	SPV.0060	Special 10. Concrete Base Median Barrier Type 2	EACH	7.000	7.000
0302	SPV.0060	Special 11. Anchor Bolt Cover Shroud	EACH	8.000	8.000
0304	SPV.0090	Special 01. Concrete Barrier Type S56 (36-Inch Wide Base)	LF	2,910.000	2,910.000
0306	SPV.0090	Special 02. Removing Rumble Strips	LF	2,890.000	2,890.000
0308	SPV.0165	Special 01. Longitudinal Grooving Bridge Deck	SF	17,395.000	17,395.000
0310	SPV.0180	Special 01. Concrete Pavement 10 1/2-Inch Special	SY	3,300.000	3,300.000
0312	SPV.0180	Special 02. Concrete Pavement 12-Inch Special	SY	24,730.000	24,730.000
0314	SPV.0180	Special 03. Concrete Pavement Approach Slab Special	SY	1,350.000	1,350.000

REMOVAL ITEMS

LOCATION	STATION - STATION	204.0100 REMOVING CONCRETE PAVEMENT (SY)	204.0110 REMOVING ASPHALTIC SURFACE (SY)	204.0157 REMOVING CONCRETE BARRIER (LF)	204.0165 REMOVING GUARDRAIL (LF)
CATEGORY 0010					
STAGE 2					
IH 41 NB	819+52'NB' - 820+85'NB'	590	450	150	--
IH 41 NB	822+42'NB' - 836+64'NB'	2990	2270	1390	--
IH 41 NB	839+21'NB' - 843+08'NB'	860	690	230	--
IH 41 SB	819+27'SB' - 820+85'SB'	820	670	--	--
IH 41 SB	822+42'SB' - 836+03'SB'	6520	5770	--	--
IH 41 SB	838+61'SB' - 841+05'SB'	1200	1020	--	--
IH 41 NB C/D	819+09'CD' - 820+86'CD'	600	690	180	--
IH 41 NB C/D	822+43'CD' - 837+18'CD'	1470	1060	180	590
IH 41 NB C/D	839+73'CD' - 843+34'CD'	380	470	--	350
RAMP OWC	823+48'OWC' - 825+50'OWC'	310	380	120	--
STH 29	807+33'FES' - 813+44'FES'	730	550	--	--
STH 29	814+89'FES' - 816+00'FES'	280	220	--	--
STAGE 2 SUBTOTAL		16750	14240	2250	940
STAGE 3					
IH 41 NB	819+52'NB' - 820+85'NB'	540	460	--	--
IH 41 NB	822+42'NB' - 836+64'NB'	2520	1720	--	--
IH 41 NB	839+21'NB' - 843+08'NB'	930	570	--	--
IH 41 SB	819+27'SB' - 820+85'SB'	830	740	--	170
IH 41 SB	822+42'SB' - 836+03'SB'	4190	4380	--	1030
IH 41 SB	838+61'SB' - 841+05'SB'	860	800	--	280
IH 41 NB C/D	819+09'CD' - 820+86'CD'	340	340	30	--
IH 41 NB C/D	822+43'CD' - 837+18'CD'	1720	850	830	--
IH 41 NB C/D	839+73'CD' - 843+34'CD'	740	360	370	--
RAMP OWB	822+42'OWB' - 828+68'OWB'	1710	1720	--	970
STH 29	807+33'FES' - 813+44'FES'	380	450	--	230
STH 29	814+89'FES' - 816+00'FES'	190	170	--	30
STAGE 3 SUBTOTAL		14950	12560	1230	2710
PROJECT TOTAL		**31700**	**26800**	**3480**	**3650**

BASE AGGREGATE

LOCATION	STATION - STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	623.0200 DUST CONTROL SURFACE TREATMENT (SY)	624.0100 WATER (MGAL)
CATEGORY 0010					
STAGE 2					
IH 41 NB	819+52'NB' - 821+05'NB'	--	100	475	2
IH 41 NB	822+22'NB' - 836+84'NB'	--	600	2700	12
IH 41 NB	839+01'NB' - 843+08'NB'	--	110	700	2
IH 41 SB	819+27'SB' - 821+05'SB'	--	190	670	4
IH 41 SB	822+22'SB' - 836+23'SB'	--	1500	6020	28
IH 41 SB	838+41'SB' - 841+05'SB'	--	180	1000	4
IH 41 NB C/D	819+09'CD' - 821+06'CD'	4	200	500	4
IH 41 NB C/D	822+23'CD' - 837+37'CD'	62	1340	1160	27
IH 41 NB C/D	839+53'CD' - 843+34'CD'	29	570	320	11
RAMP OWC	824+29'OWC' - 825+50'OWC'	3	240	280	5
STH 29	809+10'FES' - 813+64'FES'	--	240	670	5
STH 29	814+63'FES' - 816+00'FES'	3	80	240	2
STAGE 2 SUBTOTAL		101	5350	14735	105
STAGE 3					
IH 41 NB	819+52'NB' - 821+05'NB'	--	110	305	2
IH 41 NB	822+22'NB' - 836+84'NB'	--	740	2300	15
IH 41 NB	839+01'NB' - 843+08'NB'	--	210	825	4
IH 41 SB	819+27'SB' - 821+05'SB'	12	280	640	6
IH 41 SB	822+22'SB' - 836+23'SB'	90	2260	3760	43
IH 41 SB	838+41'SB' - 841+05'SB'	21	310	660	6
IH 41 NB C/D	819+09'CD' - 821+06'CD'	--	100	145	2
IH 41 NB C/D	822+23'CD' - 837+37'CD'	--	790	1770	16
IH 41 NB C/D	839+53'CD' - 843+34'CD'	--	300	755	6
RAMP OWB	822+22'OWB' - 828+68'OWB'	83	1370	1530	27
STH 29	809+10'FES' - 813+64'FES'	29	310	395	6
STH 29	814+63'FES' - 816+00'FES'	3	70	180	1
STAGE 3 SUBTOTAL		239	6850	13265	135
PROJECT TOTAL		**340**	**12200**	**28000**	**240**

RUMBLE STRIPS REMOVALS

LOCATION	STATION - STATION	416.9112.S FILLING CONCRETE SHOULDER 12-INCH (LF)	SPV.0090.02 REMOVING RUMBLE STRIPS (LF)
CATEGORY 0010			
STAGE 1			
IH 41 NB	806+00'NB' - 819+52'NB'	1555	--
IH 41 NB	822+73'NB' - 836+20'NB'	2053	112
IH 41 NB	839+27'NB' - 848+88'NB'	1278	89
IH 41 SB	804+37'SB' - 820+59'SB'	1200	943
IH 41 SB	823+20'SB' - 835+52'SB'	1358	52
IH 41 SB	838+92'SB' - 851+00'SB'	1716	67
STH 29	797+19'FES' - 811+98'FES'	1479	437
STH 29	815+49'FES' - 827+67'FES'	1201	1190
STAGE 1 SUBTOTAL		11840	2890
PROJECT TOTAL		**11840**	**2890**

HMA PAVEMENT

LOCATION	STATION - STATION	450.4000 HMA COLD WEATHER PAVING (TON)	455.0605 TACK COAT (GAL)	460.5224 HMA PAVEMENT 4 LT 58-28S (TON)	465.0520 ASPHALTIC RUMBLE STRIPS, SHOULDER (LF)
CATEGORY 0010					
STAGE 2					
IH 41 NB C/D	822+43'CD' - 837+18'CD'	57	62	229	--
IH 41 NB C/D	839+73'CD' - 843+34'CD'	31	31	124	--
STH 29	814+89'FES' - 816+00'FES'	2	2	6	--
STAGE 2 SUBTOTAL		90	95	360	--
STAGE 3					
IH 41 NB	819+52'NB' - 820+85'NB'	--	10	16	--
IH 41 SB	811+16'SB' - 820+85'SB'	--	8	32	970
IH 41 SB	822+42'SB' - 836+03'SB'	--	108	384	--
IH 41 SB	838+61'SB' - 841+05'SB'	--	16	65	--
IH 41 NB C/D	819+09'CD' - 820+86'CD'	--	14	23	--
RAMP OWB	822+42'OWB' - 828+68'OWB'		41	164	--
STH 29	807+61'FES' - 812+54'FES'	--	13	51	495
STH 29	815+78'FES' - 827+67'FES'	--	1	4	1265
STAGE 3 SUBTOTAL		--	211	740	2730
PROJECT TOTAL		**90**	**306**	**1100**	**2730**

3

DIVISION CATEGORY 0010	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (CY) (1) CUT (CY) (2)	 EBS EXCAVATION (CY) (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (CY) (4)	AVAILABLE MATERIAL (CY) (5)	REDUCED EBS IN FILL (9) FACTOR 1.00	EXPANDED EBS BACKFILL (11) FACTOR 1.00	UNEXPANDED FILL (CY)	EXPANDED FILL (13) FACTOR 1.00	MASS ORDINATE +/- (CY) (14)	WASTE (CY)	312.0110 SELECT CRUSHED MATERIAL (TON)	COMMENT
DIVISION 1														
STAGE 2														
STH 29 - LANES AND SHOULDERS	810+69.14/816+00.00	STH 29 - 'FES'	338	8	297	41	8	8	0	0	41	41	15	EXCESS MATERIAL AVAILABLE
DIVISION 1 SUBTOTAL			338	8	297	41	8	8	0	0	41	41	15	
DIVISION 2														
STAGE 3														
STH 29 - LANES AND SHOULDERS	809+94.95/816+00.00	STH 29 - 'FES'	332	7	202	130	7	7	8	8	130	130	13	EXCESS MATERIAL AVAILABLE
DIVISION 2 SUBTOTAL			332	7	202	130	7	7	8	8	130	130	13	
DIVISION 3														
STAGE 2														
IH 41 NB - LANES AND SHOULDERS	819+52.77/841+33.19	IH 41 NB - 'NB'	1,500	20	1,442	58	20	20	0	0	48	48	39	EXCESS MATERIAL AVAILABLE
IH 41 SB - LANES AND SHOULDERS	819+27.28/841+05.28	IH 41 SB - 'SB'	3,186	69	3,035	151	69	69	0	0	151	151	131	EXCESS MATERIAL AVAILABLE
RAMP OWC	823+56.85/825+49.90	RAMP OWC - 'OWC'	254	5	233	21	5	5	1	1	21	21	10	EXCESS MATERIAL AVAILABLE
IH 41 CD - LANES AND SHOULDERS	819+09.07/843+34.33	IH 41 CD - 'CD'	1,288	27	762	526	27	27	153	153	526	526	51	EXCESS MATERIAL AVAILABLE
DIVISION 3 SUBTOTAL			6,228	121	5,472	756	121	121	154	154	746	746	231	
DIVISION 4														
STAGE 3														
RAMP OWB	822+43.52/828+68.36	RAMP OWB - 'OWB'	1,031	21	628	403	21	21	178	178	403	403	40	EXCESS MATERIAL AVAILABLE
IH 41 CD - LANES AND SHOULDERS	819+09.07/843+34.33	IH 41 CD - 'CD'	1,241	26	1,117	124	26	26	0	0	124	124	49	EXCESS MATERIAL AVAILABLE
IH 41 SB - LANES AND SHOULDERS	819+27.28/841+05.28	IH 41 SB - 'SB'	2,934	65	2,071	863	65	65	112	112	863	863	124	EXCESS MATERIAL AVAILABLE
IH 41 NB - LANES AND SHOULDERS	819+52.77/843+07.91	IH 41 NB - 'NB'	1,424	20	1,370	54	20	20	0	0	54	54	38	EXCESS MATERIAL AVAILABLE
DIVISION 4 SUBTOTAL			6,630	132	5,186	1,444	132	132	290	290	1,444	1,444	251	
GRAND TOTAL			13,528	268	11,157	2,371	268	268	452	452	2,361	2,361	510	EXCESS MATERIAL AVAILABLE
TOTAL COMMON EXC			13,796											

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT CRUSHED MATERIAL. ITEM NUMBER 312.0110

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(9) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = 1.00

(11) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT CRUSHED MATERIAL. EBS BACKFILL FACTOR = 1.00. ITEM NUMBER 312.0110

(13) EXPANDED FILL FACTOR = 1.00

DEPENDING ON SELECTIONS: **EXPANDED FILL = (UNEXPANDED FILL) * FILL FACTOR**

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

CONCRETE CURB & GUTTER

LOCATION	STATION - STATION	601.0574 4-INCH SLOPED 30-INCH TYPE G (LF)	601.0590 4-INCH SLOPED 36-INCH TYPE TBTT (LF)
CATEGORY 0010			
STAGE 3			
IH 41 SB	819+27'SB' - 820+85'SB'	--	43
IH 41 SB	838+61'SB' - 841+05'SB'	--	54
RAMP OWB	822+42'OWB' - 828+68'OWB'	340	--
STAGE 4 SUBTOTAL		--	97
PROJECT TOTAL		**340**	**97**

CONCRETE PAVEMENT APPROACH SLAB SPECIAL

LOCATION	STATION - STATION	SPV.0180.03 (SY)
CATEGORY 0010		
STAGE 2		
IH 41 NB	819+52'NB' - 820+85'NB'	25
IH 41 NB	822+42'NB' - 836+64'NB'	85
IH 41 NB	839+21'NB' - 843+08'NB'	70
IH 41 SB	819+27'SB' - 820+85'SB'	40
IH 41 SB	822+42'SB' - 836+03'SB'	170
IH 41 SB	838+61'SB' - 841+05'SB'	85
IH 41 NB C/D	819+09'CD' - 820+86'CD'	30
IH 41 NB C/D	822+43'CD' - 837+18'CD'	60
IH 41 NB C/D	839+73'CD' - 843+34'CD'	20
STH 29	807+33'FES' - 813+44'FES'	25
STH 29	814+89'FES' - 816+00'FES'	25
STAGE 2 SUBTOTAL		635
STAGE 3		
IH 41 NB	819+52'NB' - 820+85'NB'	35
IH 41 NB	822+42'NB' - 836+64'NB'	150
IH 41 NB	839+21'NB' - 843+08'NB'	65
IH 41 SB	819+27'SB' - 820+85'SB'	70
IH 41 SB	822+42'SB' - 836+03'SB'	135
IH 41 SB	838+61'SB' - 841+05'SB'	135
IH 41 NB C/D	819+09'CD' - 820+86'CD'	10
IH 41 NB C/D	822+43'CD' - 837+18'CD'	30
IH 41 NB C/D	839+73'CD' - 843+34'CD'	20
RAMP OWB	822+42'OWB' - 828+68'OWB'	25
STH 29	807+33'FES' - 813+44'FES'	20
STH 29	814+89'FES' - 816+00'FES'	20
STAGE 3 SUBTOTAL		715
PROJECT TOTAL		**1350**

CONCRETE PAVEMENT

LOCATION	STATION - STATION	OFFSET	320.0165 CONCRETE BASE 10-INCH (SY)	416.0610 DRILLED TIE BARS (EACH)	416.0620 DRILLED DOWEL BARS (EACH)	602.3210 CONCRETE RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY (LF)	SPV.0180.01 CONCRETE PAVEMENT 10 1/2-INCH SPECIAL (SY)	SPV.0180.02 CONCRETE PAVEMENT 12-INCH SPECIAL (SY)
CATEGORY 0010								
STAGE 2								
IH 41 NB	819+52'NB'- 820+85'NB'		--	8	22	--	--	475
IH 41 NB	822+42'NB' - 836+64'NB'		--	271	34	--	--	2700
IH 41 NB	839+21'NB' - 843+08'NB'		--	3	22	--	--	700
IH 41 SB	819+27'SB' - 820+85'SB'		--	--	27	--	--	675
IH 41 SB	822+42'SB' - 836+03'SB'		--	--	--	--	--	6025
IH 41 SB	838+61'SB' - 841+05'SB'		--	--	27	--	--	1000
IH 41 NB C/D	819+09'CD' - 820+86'CD'		--	--	19	--	--	505
IH 41 NB C/D	822+43'CD' - 837+18'CD'		125	15	16	--	--	1160
IH 41 NB C/D	839+73'CD' - 843+34'CD'		--	--	5	--	--	320
RAMP OWC	823+48'OWC' - 825+50'OWC'		--	--	14	--	285	--
STH 29	807+33'FES' - 813+44'FES'		--	--	17	--	670	--
STH 29	814+89'FES' - 816+00'FES'		--	--	10	--	240	--
STAGE 2 SUBTOTAL			125	297	213	--	1195	13560
STAGE 3								
IH 41 NB	819+52'NB' - 820+85'NB'		145	--	23	118	--	305
IH 41 NB	822+42'NB' - 836+64'NB'		--	65	44	1380	--	2300
IH 41 NB	839+21'NB' - 846+90'NB'		--	61	22	582	--	825
IH 41 SB	798+25'SB' - 820+85'SB'		--	--	26	678	--	645
IH 41 SB	822+42'SB' - 836+03'SB'		280	--	--	1285	--	3760
IH 41 SB	838+61'SB' - 845+60'SB'		--	--	17	--	--	660
IH 41 NB C/D	819+09'CD' - 820+86'CD'		205	14	12	--	--	145
IH 41 NB C/D	822+43'CD' - 837+18'CD'		--	--	28	--	--	1775
IH 41 NB C/D	839+73'CD' - 843+34'CD'		--	--	13	--	--	755
RAMP OWB	822+42'OWB' - 828+68'OWB'		--	2	19	--	1530	--
STH 29	807+33'FES' - 813+44'FES'		--	--	8	75	395	--
STH 29	814+89'FES' - 816+00'FES'		--	--	8	75	180	--
STAGE 3 SUBTOTAL			630	142	220	4193	2105	11170
STAGE 4								
IH 41 NB	806+00'NB' - 820+85'NB'		--	--	--	1670	--	--
IH 41 NB	822+57'NB' - 836+29'NB'		--	--	--	1372	--	--
IH 41 NB	839+57'NB' - 848+50'NB'		--	--	--	893	--	--
IH 41 SB	814+40'SB' - 820+70'SB'		--	--	--	630	--	--
IH 41 SB	822+57'SB' - 835+53'SB'		--	--	--	1300	--	--
IH 41 SB	838+93'SB' - 851+00'SB'		--	--	--	2000	--	--
STH 29	797+19'FES' - 811+98'FES'		--	--	--	1480	--	--
STH 29	815+48'FES' - 827+50'FES'		--	--	--	1202	--	--
STAGE 4 SUBTOTAL			--	--	--	10547	--	--
PROJECT TOTAL			**755**	**439**	**433**	**14740**	**3300**	**24730**

CONCRETE BARRIER

LOCATION	STATION - STATION	603.1142 CONCRETE BARRIER TYPE S42 (LF)	603.3113 CONCRETE BARRIER TRANSITION TYPE NJ32SF TO S36 (EACH)	603.3535 CONCRETE BARRIER TRANSITION TYPE S36 TO S42 (EACH)	SPV.0090.01 CONCRETE BARRIER TYPE S56 (36-INCH WIDE BASE) (LF)	SPV.0060.03 CONCRETE BARRIER TRANSITION TYPE V56 TO S56 (EACH)
CATEGORY 0010						
STAGE 2						
IH 41 NB	819+52'NB' - 820+85'NB'	--	--	--	110	2
IH 41 NB	822+42'NB' - 836+64'NB'	--	--	--	1393	--
IH 41 NB	839+21'NB' - 843+08'NB'	--	--	--	227	--
IH 41 NB C/D	819+09'CD' - 820+86'CD'	152	1	1	--	--
IH 41 NB C/D	822+43'CD' - 837+18'CD'	158	1	1	--	--
RAMP OWC	823+47'OWC' - 825+50'OWC'	121	--	--	--	--
STAGE 2 SUBTOTAL		431	2	2	1730	2
STAGE 3						
IH 41 NB C/D	819+09'CD' - 820+86'CD'	--	--	--	24	--
IH 41 NB C/D	822+43'CD' - 837+18'CD'	--	--	--	788	2
IH 41 NB C/D	839+73'CD' - 843+34'CD'	--	--	--	368	--
STAGE 3 SUBTOTAL		--	--	--	1180	2
PROJECT TOTAL		**431**	**2**	**2**	**2910**	**4**

INLET COVERS AND SLOTTED VANE DRAINS

LOCATION	STATION - STATION	611.0633 INLET COVERS TYPE HM-GJ-S (EACH)	611.0654 INLET COVERS TYPE V (EACH)	SPV.0060.08 DRAIN SLOTTED VANE TYPE A 3-FOOT (EACH)
CATEGORY 0010				
STAGE 2				
IH 41 NB	822+42'NB' - 836+64'NB'	--	5	4
IH 41 NB	839+21'NB' - 843+08'NB'	--	1	-
IH 41 SB	822+42'SB' - 836+03'SB'	--	5	3
IH 41 SB	838+61'SB' - 841+05'SB'	--	1	1
STH 29	807+33'FES' - 813+44'FES'	--	2	--
STAGE 2 SUBTOTAL		--	14	8
STAGE 3				
IH 41 NB	822+42'NB' - 836+64'NB'	--	2	2
IH 41 SB	819+27'SB' - 820+85'SB'	--	1	1
IH 41 SB	838+61'SB' - 841+05'SB'	2	1	1
IH 41 NB C/D	822+43'CD' - 837+18'CD'	--	3	3
IH 41 NB C/D	839+73'CD' - 843+34'CD'	--	1	1
STAGE 3 SUBTOTAL		2	8	8
PROJECT TOTAL		**2**	**22**	**16**

MANHOLE COVERS

LOCATION	STATION - STATION	611.0535 MANHOLE COVERS TYPE J-SPECIAL (EACH)	SPV.0060.07 MANHOLE COVERS TYPE J BOLTED (EACH)
CATEGORY 0010			
STAGE 2			
IH 41 SB	838+61'SB' - 841+05'SB'	1	--
STAGE 2 SUBTOTAL		1	--
STAGE 3			
IH 41 NB C/D	822+43'CD' - 837+18'CD'	--	1
STAGE 3 SUBTOTAL		--	1
PROJECT TOTAL		**1**	**1**

CONCRETE SURFACE DRAIN

LOCATION	STATION - STATION	602.3010 (CY)
CATEGORY 0010		
STAGE 3		
IH 41 SB	819+27'SB' - 820+85'SB'	4
IH 41 SB	838+61'SB' - 841+05'SB'	4
STAGE 3 SUBTOTAL		8
PROJECT TOTAL		**8**

3

ADJUSTING COVERS & PULLBOXES

LOCATION	STATION - STATION	611.8110 ADJUSTING MANHOLE COVERS (EACH)	*653.0900 ADJUSTING PULL BOXES (EACH)
CATEGORY 0010			
STAGE 2			
IH 41 NB C/D	822+43'CD' - 837+18'CD'	--	1
RAMP OWC	823+47'OWC' - 825+50'OWC'	--	1
STH 29	807+33'FES' - 813+44'FES'	1	2
STH 29	814+89'FES' - 816+00'FES'	--	2
STAGE 2 SUBTOTAL		1	6
STAGE 3			
IH 41 SB	822+42'SB' - 836+03'SB'	--	7
RAMP OWB	822+42'OWB' - 828+68'OWB'	--	4
STAGE 3 SUBTOTAL		--	11
PROJECT TOTAL		**1**	**17**

*ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

PIPE UNDERDRAIN 6-INCH

LOCATION	STATION - STATION	310.0115 BASE AGGREGATE OPEN-GRADED (CY)	612.0106 PIPE UNDERDRAIN 6-INCH (LF)	645.0111 GEOTEXTILE TYPE DF SCHEDULE A (SY)
CATEGORY 0010				
STAGE 3				
IH 41 NB C/D	839+73'CD' - 843+34'CD'	1	20	7
STAGE 3 SUBTOTAL		1	20	7
PROJECT TOTAL		**1**	**20**	**7**

GUARDRAIL

LOCATION	STATION - STATION	614.2300 MGS GUARDRAIL 3 (LF)	614.2500 MGS THRIE BEAM TRANSITION (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 (EACH)
CATEGORY 0010					
STAGE 2					
IH 41 NB C/D	831+49'CD' - 837+37'CD'	500	39	1	--
IH 41 NB C/D	839+47'CD' - 843+34'CD'	312	39	--	--
STH 29	815+78'FES' - 816+00'FES'	25	8	--	--
STAGE 2 SUBTOTAL		837	86	1	--
STAGE 3					
IH 41 SB	819+27'SB' - 820+87'SB'	125	39	--	--
IH 41 SB	825+30'SB' - 835+71'SB'	988	39	--	1
IH 41 SB	838+28'SB' - 841+05'SB'	237	39	--	--
RAMP OWB	822+40'OWB' - 828+68'OWB'	927	39	--	1
STH 29	810+15'FES' - 812+57'FES'	144	39	1	--
STH 29	815+75'FES' - 816+00'FES'	25	8	--	--
STAGE 3 SUBTOTAL		2446	203	1	2
PROJECT TOTAL		**3283**	**289**	**2**	**2**

3

EROSION CONTROL

LOCATION	STATION - STATION	606.0200 RIRPRAP MEDIUM (CY)	645.0120 GEOTEXTILE FABRIC TYPE HR (SY)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2004 EROSION MAT CLASS I TYPE B (SY)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7570 ROCK BAGS (EACH)
CATEGORY 0010								
STAGE 2								
IH 41 NB C/D	819+09'CD' - 820+86'CD'	--	--	216	216	450	--	--
IH 41 NB C/D	822+43'CD' - 837+18'CD'	--	--	1025	1025	1360	--	--
IH 41 NB C/D	839+73'CD' - 843+34'CD'	--	--	395	395	380	--	--
STH 29	814+89'FES' - 816+00'FES'	--	--	60	60	20	--	--
STAGE 2 SUBTOTAL		--	--	1696	1696	2210	--	--
STAGE 3								
IH 41 SB	819+27'SB' - 820+85'SB'	20	40	254	254	190	--	--
IH 41 SB	822+42'SB' - 836+03'SB'	--	--	744	744	1020	--	--
IH 41 SB	838+61'SB' - 841+05'SB'	20	40	378	378	150	--	--
RAMP OWB	822+42'OWB' - 828+68'OWB'	--	--	776	776	1390	60	--
STH 29	807+33'FES' - 813+44'FES'	--	--	238	238	240	10	--
STH 29	814+89'FES' - 816+00'FES'	--	--	54	54	20	--	--
STAGE 3 SUBTOTAL		40	80	2444	2444	3010	70	--
UNDISTRIBUTED		10	20	1040	1040	1330	20	50
PROJECT TOTAL		**50**	**100**	**5180**	**5180**	**6550**	**90**	**50**

INLET PROTECTION

LOCATION	STATION - STATION	628.7010 INLET PROTECTION TYPE B (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)
CATEGORY 0010			
STAGE 2			
IH 41 NB	819+52'NB' - 820+85'NB'	1	--
IH 41 NB	822+42'NB' - 836+64'NB'	5	--
IH 41 NB	839+21'NB' - 843+08'NB'	1	--
IH 41 SB	817+00'SB' - 820+85'SB'	1	--
IH 41 SB	822+42'SB' - 836+03'SB'	5	--
IH 41 SB	838+61'SB' - 841+05'SB'	1	--
IH 41 NB C/D	817+00'CD' - 820+86'CD'	3	--
STH 29	807+33'FES' - 813+44'FES'	3	--
STAGE 2 SUBTOTAL		20	--
STAGE 3			
IH 41 NB	822+42'NB' - 836+64'NB'	3	--
IH 41 SB	819+27'SB' - 820+85'SB'	--	1
IH 41 SB	838+61'SB' - 841+05'SB'	--	3
IH 41 NB C/D	822+43'CD' - 837+18'CD'	4	--
IH 41 NB C/D	839+73'CD' - 843+34'CD'	1	--
STH 29	807+33'FES' - 813+44'FES'	2	--
STAGE 3 SUBTOTAL		10	4
PROJECT TOTAL		**30**	**4**

LANDSCAPING

LOCATION	STATION - STATION	625.0500 SALVAGED TOPSOIL (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0130 SEEDING MIXTURE NO. 30 (LB)	630.0500 SEED WATER (MGAL)
CATEGORY 0010					
STAGE 2					
IH 41 NB C/D	819+09'CD' - 820+86'CD'	560	0.4	25	13
IH 41 NB C/D	822+43'CD' - 837+18'CD'	1700	1.1	80	38
IH 41 NB C/D	839+73'CD' - 843+34'CD'	480	0.3	22	11
STH 29	814+89'FES' - 816+00'FES'	30	0.1	1	1
STAGE 2 SUBTOTAL		2770	1.9	128	62
STAGE 3					
IH 41 SB	819+27'SB' - 820+85'SB'	240	0.2	10	5
IH 41 SB	822+42'SB' - 836+03'SB'	1280	0.8	58	30
IH 41 SB	838+61'SB' - 841+05'SB'	190	0.1	9	4
RAMP OWB	822+42'OWB' - 828+68'OWB'	1740	1.1	80	40
STH 29	807+33'FES' - 813+44'FES'	300	0.2	14	7
STH 29	814+89'FES' - 816+00'FES'	30	0.1	1	1
STAGE 3 SUBTOTAL		3780	2.5	171	87
PROJECT TOTAL		**6550**	**4.4**	**300**	**150**

MOBILIZATION EROSION CONTROL

LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EROSION CONTROL EMERGENCY (EACH)
CATEGORY 0010		
STAGE 1	1	--
STAGE 2	3	2
STAGE 3	4	2
STAGE 4	1	--
PROJECT TOTAL	**9**	**4**

CONCRETE BARRIER TEMPORARY PRECAST

LOCATION	STATION - STATION	OFFSET	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	603.8500 CONCRETE BARRIER TEMPORARY PRECAST ANCHORING (LF)
CATEGORY 0010					
STAGE 2					
IH 41 NB	815NB+00 - 822NB+42	RT/LT	560	560	430
IH 41 NB	822NB+42 - 839NB+21	RT	1680	1680	1680
IH 41 NB	839NB+21 - 846NB+00	RT	310	310	310
IH 41 SB	815SB+00 - 822SB+42	LT	420	420	--
IH 41 SB	822SB+42 - 838SB+97	LT	1650	1650	--
IH 41 SB	838SB+97 - 846SB+00	LT	420	420	--
IH 41 NB C/D	815CD+00 - 822CD+43	RT	560	560	430
IH 41 NB C/D	822CD+43 - 839CD+42	RT	1700	1700	1700
IH 41 NB C/D	839CD+42 - 846CD+00	RT	490	490	490
STH 29	806FES+00 - 814FES+89	RT	650	650	520
STH 29	814FES+89 - 829FES+00	RT	210	210	210
STAGE 2 SUBTOTAL			8650	8650	5770
STAGE 3					
IH 41 NB	815NB+00 - 822NB+42	RT/LT	--	520	--
IH 41 NB	822NB+42 - 839NB+21	LT	--	1680	--
IH 41 NB	839NB+21 - 846NB+00	RT/LT	305	620	--
IH 41 SB	815SB+00 - 822SB+42	LT	--	410	--
IH 41 SB	822SB+42 - 838SB+97	LT	--	1660	--
IH 41 SB	838SB+97 - 846SB+00	LT	--	440	--
IH 41 NB C/D	815CD+00 - 822CD+43	RT/LT	--	560	--
IH 41 NB C/D	822CD+43 - 839CD+42	RT	--	1700	--
IH 41 NB C/D	839CD+42 - 846CD+00	RT	--	490	--
STH 29	806FES+00 - 814FES+89	RT	190	830	--
STH 29	814FES+89 - 829FES+00	RT	1155	1370	--
STAGE 3 SUBTOTAL			1650	10280	--
PROJECT TOTAL			**10300**	**18930**	**5770**

CRASH CUSHIONS

LOCATION	STATION - STATION	614.0805 CRASH CUSHIONS PERMANENT LOW MAINTENANCE (EACH)	BACK WIDTH	OBJECT MARKING PATTERN	CRASH TEST LEVEL	TRAFFIC LOCATION	TRAFFIC DIRECTION	CRASH CUSHION SHIELDS
CATEGORY 0010								
STAGE 3								
IH 41 NB C/D	819+09'CD' - 820+86'CD'	1	2'	OM-3C (W5-58M)	TL-3	UNIDIRECTIONAL	L AND R	PERMANENT CONCRETE BARRIER IN MEDIAN
STAGE 3 SUBTOTAL		1						
PROJECT TOTAL		**1**						

BASIC TRAFFIC QUEUE WARNING SYSTEM

LOCATION	STAGE	# OF DAYS	PORTABLE TRAFFIC SENSORS (PTS)	FLASHING BEACON SIGNS (FBS)	643.0810 ** CONNECTED ARROW BOARDS (DAY)	643.1205.S BASIC TRAFFIC QUEUE WARNING SYSTEM (DAY)	643.1220 ** CONNECTED WORK ZONE START AND END LOCATION MARKERS (DAY)
CATEGORY 0010							
STH 29 EB	STAGE 1	5	--	--	5	--	5
STH 29 EB	STAGE 2	56	3	3	56	56	56
STH 29 EB	STAGE 3	50	3	3	50	50	50
STH 29 EB	STAGE 4	5	--	--	5	--	5
PROJECT TOTAL					**116**	**106**	**116**

** SEE DYNAMIC LATE MERGE SYSTEM FOR ADDITIONAL QUANTITY

DYNAMIC LATE MERGE SYSTEM

LOCATION	STAGE	# OF DAYS	PORTABLE CHNAGEABLE MESSAGE SIGN (PCMS)	PORTABLE TRAFFIC SENSORS (PTS)	FLASHING BEACON SIGNS (FBS)	643.1100.S DYNAMIC LATE MERGE SYSTEM (DAY)	643.0810 ** CONNECTED ARROW BOARDS (DAY)	643.1220 ** CONNECTED WORK ZONE START AND END LOCATION MARKERS (DAY)
CATEGORY 0010								
IH 41 NB	STAGE 1	5	--	--	--	--	5	5
IH 41 SB	STAGE 1	5	--	--	--	--	5	5
IH 41 NB	STAGE 2	68	3	7	8	68	68	68
IH 41 SB	STAGE 2	68	4	5	6	68	136	68
IH 41 NB	STAGE 3	71	3	7	7	71	71	71
IH 41 SB	STAGE 3	71	4	5	6	71	142	71
IH 41 NB	STAGE 4	5	--	--	--	--	5	5
IH 41 SB	STAGE 4	5	--	--	--	--	5	5
PROJECT TOTAL						**278**	**437**	**298**

** SEE BASIC TRAFFIC QUEUE WARNING SYSTEM FOR ADDITIONAL QUANTITY

COMBINATION WORK ZONE DIGITAL SPEED LIMIT SPEED FEEDBACK TRAILERS

LOCATION	STAGE	# OF DAYS	COMBINATION WORK ZONE DIGITAL SPEED LIMIT SPEED FEEDBACK TRAILER (CWZDSLT)	SPV.0045.01 COMBINATION WORK ZONE DIGITAL SPEED LIMIT SPEED FEEDBACK TRAILER (DAY)
CATEGORY 0010				
IH 41 NB	STAGE 2	68	5	68
IH 41 SB	STAGE 2	68	4	68
IH 41 CD	STAGE 2	68	1	68
IH 41 NB	STAGE 3	71	4	71
IH 41 SB	STAGE 3	71	5	71
IH 41 CD	STAGE 3	71	1	82
STH 29 EB	STAGE 2	56	2	56
STH 29 EB	STAGE 3	50	2	50
PROJECT TOTAL				**544**

DELINEATORS

LOCATION	STATION - STATION	633.1000 DELINEATORS BARRIER WALL (EACH)
CATEGORY 0010		
STAGE 2		
IH 41 NB	819+52'NB' - 820+85'NB'	2
IH 41 NB	822+42'NB' - 836+64'NB'	15
IH 41 NB	839+21'NB' - 843+08'NB'	3
STAGE 2 SUBTOTAL		20
STAGE 3		
IH 41 NB C/D	819+09'CD' - 820+86'CD'	1
IH 41 NB C/D	822+43'CD' - 837+18'CD'	9
IH 41 NB C/D	839+73'CD' - 843+34'CD'	5
STAGE 3 SUBTOTAL		15
PROJECT TOTAL		**35**

TRAFFIC CONTROL DEVICES

			643.0300	643.0320.S	643.0420	643.0705	643.0715	643.0900	643.0910				643.0920			*643.1000	643.1050
				TEMPORARY TAPE RUMBLE STRIP		WARNING LIGHTS			COVERING SIGNS								
		# OF DAYS	DRUMS (DAYS)	ORANGE (LF)	BARRICADES TYPE III (DAYS)	TYPE A (DAYS)	TYPE C (DAYS)	SIGNS (DAYS)	TYPE I SIGNS	TYPE I CYCLES	TYPE I (EA)	TYPE II SIGNS	TYPE II CYCLES	TYPE II (EA)	SIGNS FIXED MESSAGE (SF)	SIGNS PCMS (DAYS)
CATEGORY 0010																	
IH 41																	
	STAGE 1	5	1405	--	70	140	320	230	--	--	--	--	--	--	--	14
	STAGE 2	68	31620	2376	544	995	5644	3876	8	1	8	4	1	4	--	14
	STAGE 3	71	28865	972	1065	1805	7029	5167	10	1	10	10	1	10	32	14
	STAGE 4	5	1030	--	45	90	320	205	--	--	--	--	--	--	--	14
	IH 41 SUBTOTAL		62920	3348	1724	3030	13313	9478			18			14	32	56
IH 41 RAMPS																	
	STAGE 2	68	--	--	204	408	--	285	1	1	1	--	--	--	--	--
	STAGE 3	71	3692	--	710	1420	568	575	6	1	6	--	--	--	--	--
	IH 41 RAMPS SUBTOTAL		3692	--	914	1828	568	860			7			--	--	--
STH 29																	
	STAGE 1	5	535	--	25	50	160	105	--	--	--	--	--	--	--	7
	STAGE 2	56	5880	--	112	224	2240	1120	1	1	1	2	1	2	--	7
	STAGE 3	50	5500	--	100	200	2450	950	1	1	1	2	1	2	--	7
	STAGE 4	5	290	--	10	20	80	50	--	--	--	--	--	--	--	7
	STH 29 SUBTOTAL		12205	--	247	494	4930	2225			2			4	--	28
DETOURS																	
	CTH AAA/ONEIDA ST NB OFF-RAMP CLOSURE	68	--	--	--	--	--	2720	--	--	--	--	--	--	47.25	--
	CTH AAA/ONEIDA ST SB ON-RAMP CLOSURE	71	--	--	--	--	--	6177	--	--	--	--	--	--	--	7
	CTH G/ MAIN AVE NB ON-RAMP CLOSURE	71	--	--	--	--	--	7545	--	--	--	--	--	--	--	7
	DETOURS SUBTOTAL		--	--	--	--	--	16442			--			--	47.25	14
	PROJECT TOTAL		**78817**	**3348**	**2885**	**5352**	**18811**	**29005**			**27**			**18**	**79.25**	**98**

*ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

TEMPORARY MARKING LINE

			643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH		643.3280 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH
LOCATION	STATION - STATION	OFFSET	WHITE (LF)	YELLOW (LF)	WHITE (LF)
CATEGORY 0010					
STAGE 2					
IH 41 NB	791+30'NB' - 822+42'NB'	RT/LT	3110	3112	50
IH 41 NB	822+42'NB' - 839+21'NB'	RT	2115	1683	--
IH 41 NB	839+21'NB' - 845+63'NB'	RT	1210	643	--
IH 41 SB	800+77'SB' - 822+42'SB'	LT	3073	2165	200
IH 41 SB	822+42'SB' - 838+97'SB'	LT	2048	1647	--
IH 41 SB	838+97'SB' - 934+34'SB'	RT/LT	1763	9504	--
IH 41 NB C/D	818+50'CD' - 822+43'CD'	RT/LT	393	343	50
IH 41 NB C/D	822+43'CD' - 839+42'CD'	RT/LT	1700	1696	--
IH 41 NB C/D	839+42'CD' - 847+92'CD'	RT/LT	877	876	--
RAMP OWB	822+42'OWB' - 825+89'OWB'	RT/LT	145	--	220
STH 29	797+19'FES' - 814+89'FES'	RT	3048	1332	--
STH 29	814+89'FES' - 827+34'FES'	RT	1237	1248	--
			20719	24249	520
STAGE 2 SUBTOTAL			44968		520
STAGE 3					
IH 41 NB	785+24'NB' - 822+42'NB'	RT/LT	3264	3718	--
IH 41 NB	822+42'NB' - 839+21'NB'	LT	2097	1670	--
IH 41 NB	839+21'NB' - 848+87'NB'	RT/LT	1694	963	--
IH 41 SB	814+10'SB' - 822+42'SB'	RT/LT	1482	832	--
IH 41 SB	822+42'SB' - 838+97'SB'	RT	2072	1665	--
IH 41 SB	838+97'SB' - 857+86'SB'	RT/LT	3367	1857	--
IH 41 NB C/D	808+89'CD' - 822+43'CD'	RT	1568	1568	--
IH 41 NB C/D	822+43'CD' - 839+42'CD'	RT	1340	1705	200
IH 41 NB C/D	839+42'CD' - 847+97'CD'	RT	882	884	--
RAMP OWC	823+48'OWC' - 826+36'OWC'	RT/LT	221	--	140
STH 29	797+19'FES' - 814+89'FES'	RT	3614	2328	--
STH 29	814+89'FES' - 827+50'FES'	RT	1235	1246	--
			22836	18436	340
STAGE 3 SUBTOTAL			41272		340
PROJECT TOTAL			**86240**		**860**

PAVEMENT MARKING

		646.1020			646.1040			646.1555	646.3020		646.3555		646.5320	646.6464	646.6468
		MARKING LINE EPOXY 4-INCH			MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH			MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH	MARKING LINE EPOXY 8-INCH		MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH		MARKING RAILROAD CROSSING EPOXY	COLD WEATHER MARKING EPOXY 4-INCH	COLD WEATHER MARKING EPOXY 8-INCH
LOCATION	STATION - STATION	WHITE (LF)	DASHED (LF)	YELLOW (LF)	WHITE (LF)	DASHED (LF)	YELLOW (LF)	DASHED (LF)	WHITE (LF)	DASHED (LF)	WHITE (LF)	DASHED (LF)	(EACH)	(LF)	(LF)
CATEGORY 0010															
IH 41 NB	785+24'NB' - 822+42'NB'	157	49	157	--	--	1476	1002	--	--	737	--	--	710	--
IH 41 NB	822+42'NB' - 839+21'NB'	256	74	257	1445	--	1410	512	--	--	--	--	--	989	--
IH 41 NB	839+21'NB' - 845+37'NB'	--	--	--	597	--	908	301	--	--	--	--	--	451	--
IH 41 SB	800+77'SB' - 822+42'SB'	157	89	157	1648	--	675	545	315	--	380	219	--	818	80
IH 41 SB	822+42'SB' - 838+61'SB'	259	140	258	1101	--	1373	1014	--	--	222	--	--	1037	--
IH 41 SB	838+61'SB' - 934+35'SB'	--	--	--	754	--	1180	1334	--	--	383	--	--	817	--
IH 41 NB C/D	808+89'CD' - 822+43'CD'	40	--	157	1412	--	--	--	--	10	1834	--	--	402	3
IH 41 NB C/D	822+43'CD' - 839+73'CD'	40	--	257	716	--	1475	--	--	--	155	26	--	622	--
IH 41 NB C/D	839+73'CD' - 847+92'CD'	--	--	--	355	--	845	--	--	--	333	--	--	301	--
RAMP OWB	822+42'OWB' - 828+68'OWB'	--	--	--	698	--	407	54	--	--	296	--	--	290	--
RAMP OWC	823+50'OWC' - 825+50'OWC'	--	--	--	187	--	--	--	--	--	202	--	--	47	--
STH 29	797+19'FES' - 813+44'FES'	142	11	144	1610	--	1773	560	--	--	643	--	--	1061	--
STH 29	814+89'FES' - 827+38'FES'	--	--	--	1220	--	--	--	--	--	--	--	--	306	--
ASHLAND AVENUE	-	--	--	--	1775	445	1780	--	--	--	--	--	2	--	--
SUBTOTAL		1051	362	1387	13518	445	13302	5320	315	10	5185	245	2	7850	83
PROJECT TOTAL			**2800**			**27265**		**5320**		**325**		**5430**	**2**	**7850**	**83**

TRAFFIC CONTROL FIXED MESSAGE SIGNING ITEMS

SIGN NO.	NO. OF SIGNS EACH	SF	*643.1000 SIGNS FIXED MESSAGE (TOTAL SF)	MESSAGE
CATEGORY 0010				
3	1	88.00	88.00	FOOD (ANGLED RIGHT ARROW)
4	1	54.00	54.00	GAS (ANGLED RIGHT ARROW)
5	1	54.00	54.00	LODGING (ANGLED RIGHT ARROW)
6	1	34.00	34.00	FOOD (RIGHT ARROW)
7	1	21.00	21.00	GAS (RIGHT ARROW)
8	1	22.00	22.00	LODGING (RIGHT ARROW)
9	1	39.00	39.00	FOOD (LEFT/RIGHT ARROW)
10	1	21.00	21.00	GAS (LEFT ARROW)
11	1	22.00	22.00	LODGING (LEFT ARROW)
101	3	5.25	15.75	164 B
PROJECT TOTAL			**370.75**	

*ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

PAVEMENT MARKING REMOVAL

LOCATION	STATION - STATION	OFFSET	646.9000 MARKING REMOVAL LINE 4-INCH (LF)	646.9055 MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH (LF)	646.9100 MARKING REMOVAL LINE 8-INCH (LF)	646.9155 MARKING REMOVAL LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH (LF)
CATEGORY 0010						
STAGE 2						
IH 41 NB	791+30'NB' - 822+42'NB'	RT	189	533	41	710
IH 41 NB	822+42'NB' - 839+21'NB'	RT	1775	339	--	--
IH 41 NB	839+21'NB' - 845+61'NB'	RT	614	159	--	--
IH 41 SB	800+77'SB' - 822+42'SB'	LT	1855	498	386	420
IH 41 SB	822+42'SB' - 838+61'SB'	LT	1516	318	93	175
IH 41 SB	838+61'SB' - 934+35'SB'	LT/RT	700	631	--	381
IH 41 NB C/D	808+89'CD' - 822+43'CD'	RT	792	--	--	1640
IH 41 NB C/D	822+43'CD' - 839+73'CD'	RT	1700	--	--	--
IH 41 NB C/D	839+73'CD' - 847+92'CD'	RT	876	--	--	--
RAMP OWB	822+42'OWB' - 824+89'OWB'	LT	144	--	--	172
STH 29	797+19'FES' - 814+89'FES'	LT	670	180	--	650
STH 29	814+89'FES' - 827+34'FES'	LT	1247	--	--	--
STAGE 2 SUBTOTAL			12078	2658	520	4148
STAGE 3						
IH 41 NB	785+24'NB' - 822+42'NB'	RT/LT	1633	437	--	--
IH 41 NB	822+42'NB' - 839+21'NB'	LT	1676	--	--	--
IH 41 NB	839+21'NB' - 848+23'NB'	LT	900	83	--	--
IH 41 SB	801+32'SB' - 822+42'SB	RT	880	153	--	--
IH 41 SB	822+42'SB' - 838+61'SB'	RT	1755	319	--	--
IH 41 SB	838+61'SB' - 857+85'SB'	RT/LT	1152	625	--	--
IH 41 NB C/D	812+94'CD' - 822+43'CD	RT	616	--	--	--
IH 41 NB C/D	839+73'CD' - 847+94'CD'	RT	--	--	--	332
STH 29	797+19'FES' - 814+89'FES'	RT	1770	295	--	--
STH 29	814+89'FES' - 827+38'FES'	RT	1240	--	--	--
STAGE 3 SUBTOTAL			11622	1912	--	332
PROJECT TOTAL			**23700**	**4570**	**520**	**4480**

Conduit Rigid Nonmetallic Schedule 40

LOCATION		652.0225	*652.0235
L05-0823 (29 & Duck Creek)(B-5-663)		2-Inch	3-Inch
FROM	TO	LF	LF
South side bridge	Splice	100	
North side bridge	Splice	125	
LOCATION			
L05-0840 (41 & Parkview)(B-5-617/621)			
FROM	TO		
South side bridge	Splice		50
North side bridge	Splice		50
South side bridge	Splice	50	
North side bridge	Splice	50	
LOCATION			
L05-0840 (41 & Oneida Street)(B-5-612/619)			
FROM	TO		
South side bridge	Splice		50
South side bridge	Splice		50
North side bridge	Splice		50
North side bridge	Splice		50
South side bridge	Splice	50	
North side bridge	Splice	50	
	TOTAL	425	300

*ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

3

	*653.0900	SPV.0060.05
	Adjusting	Salvage and Reinstall Luminaire
	Pull Boxes	
LOCATION	EACH	EACH
L05-0840 (41 & Parkview)(B-5-616)	2	0
L05-0840 (41 & Parkview)(B-5-621)	2	2
L05-0840 (41 & Oneida Street)(B-5-612)	2	0
L05-0823 (29 & Duck Creek)(R-5-244/R-5-243/B-5-663)	0	2
TOTAL	6	4

*ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

	SPV.0060.04
	Pulling and Reconnecting
	Electrical Wiring
LOCATION	EACH
L05-0823 (29 & Duck Creek)(B-5-663)	2
L05-0840 (41 & Parkview)(B-5-617/621)	4
L05-0840 (41 & Oneida Street)(B-5-612/619)	4
TOTAL	10

LIGHTING

LOCATION	STATION - STATION	652.0235 *CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH (LF)	SPV.0060.09 CONCRETE BASE MEDIAN BARRIER TYPE 1 (EACH)	SPV.0060.10 CONCRETE BASE MEDIAN BARRIER TYPE 2 (EACH)	SPV.0060.11 ANCHOR BOLT COVER SHROUD (EACH)
CATEGORY 0010					
STAGE 2					
IH 41 NB	819+52'NB' - 820+85'NB'	360	1	--	1
IH 41 NB	822+42'NB' - 836+64'NB'	2820	--	6	6
IH 41 NB	839+21'NB' - 843+08'NB'	480	--	1	1
STAGE 2 SUBTOTAL		3660	1	7	8
PROJECT TOTAL		**3660**	**1**	**7**	**8**

*ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

SIGNING

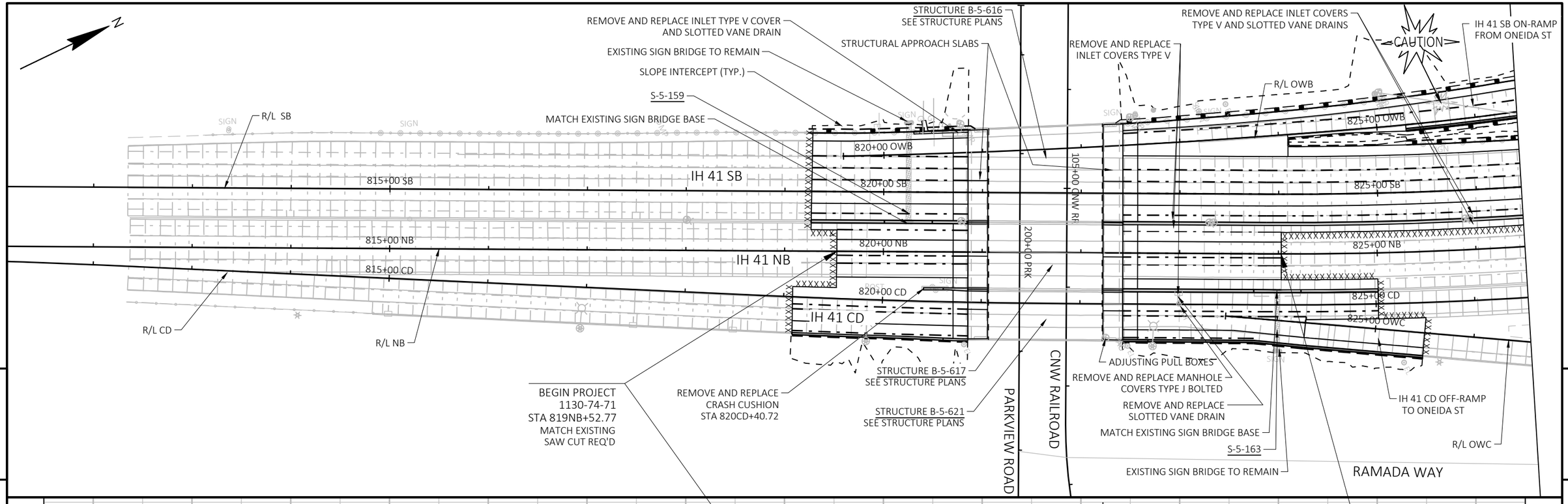
SIGN #	SIGN CODE	638.2102 MOVING SIGNS TYPE II (EACH)	638.4000 MOVING SMALL SIGN SUPPORTS (EACH)	NOTES
CATEGORY 0010				
1M-01	E5-1B(1)	1	2	EXIT NUMBER AND LETTER (ARROW) 1 DIGITS
1M-02	W4-2L	1	2	LANE REDUCTION TRANSITION SYMBOL (LEFT)
1M-03	D10-5	1	1	ENHANCED REFERENCE MARKER (1 SHEILD)
1M-04	D10-5	1	1	ENHANCED REFERENCE MARKER (1 SHEILD)
1M-05	W4-3R	1	2	ENTERING ROADWAY ADDED LANE SYMBOL FROM RIGHT
1M-06	D10-5	1	1	ENHANCED REFERENCE MARKER (1 SHEILD)
PROJECT TOTAL		**6**	**9**	

CONSTRUCTION STAKING

LOCATION	STATION - STATION	650.5500 CURB GUTTER AND CURB & GUTTER (LF)	650.7000 CONCRETE PAVEMENT (LF)	650.9920 SLOPE STAKES (LF)
CATEGORY 0010				
STAGE 2				
IH 41 NB	819+52'NB' - 821+05'NB'	--	178	--
IH 41 NB	822+22'NB' - 836+84'NB'	--	1462	--
IH 41 NB	839+01'NB' - 841+23'NB'	--	233	--
IH 41 SB	819+27'SB' - 821+05'SB'	--	178	--
IH 41 SB	822+22'SB' - 836+23'SB'	--	1401	--
IH 41 SB	838+41'SB' - 841+05'SB'	--	264	--
IH 41 NB C/D	819+09'CD' - 821+06'CD'	--	198	178
IH 41 NB C/D	822+23'CD' - 837+38'CD'	--	886	711
IH 41 NB C/D	839+53'CD' - 843+34'CD'	--	381	381
RAMP OWC	823+48'OWC' - 825+50'OWC'	--	202	202
STH 29	810+72'FES' - 813+64'FES'	--	293	--
STH 29	814+69'FES' - 816+00'FES'	--	135	30
STAGE 2 SUBTOTAL		--	5811	1502
STAGE 3				
IH 41 NB	819+52'NB' - 821+05'NB'	--	153	--
IH 41 NB	822+22'NB' - 836+84'NB'	--	762	--
IH 41 NB	839+01'NB' - 843+08'NB'	--	406	--
IH 41 SB	819+27'SB' - 821+05'SB'	55	178	158
IH 41 SB	822+22'SB' - 836+23'SB'	--	1401	1169
IH 41 SB	838+41'SB' - 841+05'SB'	--	264	264
IH 41 NB C/D	819+09'CD' - 821+06'CD'	--	198	--
IH 41 NB C/D	822+43'CD' - 837+38'CD'	--	886	--
IH 41 NB C/D	839+53'CD' - 843+34'CD'	--	381	--
RAMP OWB	822+22'OWB' - 828+68'OWB'	--	646	626
STH 29	810+73'FES' - 813+64'FES'	--	293	349
STH 29	814+69'FES' - 816+00'FES'	--	135	31
STAGE 3 SUBTOTAL		55	5703	2597
PROJECT TOTAL		**55**	**11514**	**4099**

SAWING

LOCATION	STATION - STATION	690.0150 ASPHALT (LF)	690.0250 CONCRETE (LF)	SPV.0060.01 CONCRETE BARRIER SINGLE SLOPE (EACH)
CATEGORY 0010				
STAGE 2				
IH 41 NB	819+52'NB' - 820+85'NB'	--	245	2
IH 41 NB	822+42'NB' - 836+64'NB'	--	1585	2
IH 41 NB	839+21'NB' - 843+08'NB'	--	300	2
IH 41 SB	819+27'SB' - 820+85'SB'	--	260	--
IH 41 SB	822+42'SB' - 836+03'SB'	--	1480	--
IH 41 SB	838+61'SB' - 841+05'SB'	--	360	--
IH 41 NB C/D	819+09'CD' - 820+86'CD'	--	255	2
IH 41 NB C/D	822+43'CD' - 837+18'CD'	12	1025	1
IH 41 NB C/D	839+73'CD' - 843+34'CD'	12	410	--
RAMP OWC	823+38'OWC' - 825+50'OWC'	--	25	1
STH 29	810+73'FES' - 813+44'FES'	--	345	--
STH 29	814+89'FES' - 816+00'FES'	10	175	--
STAGE 2 SUBTOTAL		34	6465	10
STAGE 3				
IH 41 NB	819+52'NB' - 820+85'NB'	--	65	--
IH 41 NB	822+42'NB' - 836+64'NB'	--	335	--
IH 41 NB	839+21'NB' - 843+08'NB'	--	235	--
IH 41 SB	819+27'SB' - 820+85'SB'	8	90	--
IH 41 SB	822+42'SB' - 836+03'SB'	--	80	--
IH 41 SB	838+61'SB' - 841+05'SB'	10	70	--
IH 41 NB C/D	819+09'CD' - 820+86'CD'	--	80	1
IH 41 NB C/D	822+43'CD' - 837+18'CD'	--	80	4
IH 41 NB C/D	839+73'CD' - 843+34'CD'	--	40	2
RAMP OWB	822+42'OWB' - 828+68'OWB'	8	50	--
STH 29	810+73'FES' - 813+44'FES'	6	30	--
STH 29	814+89'FES' - 816+00'FES'	6	30	--
STAGE 3 SUBTOTAL		38	1185	7
PROJECT TOTAL		**72**	**7650**	**17**

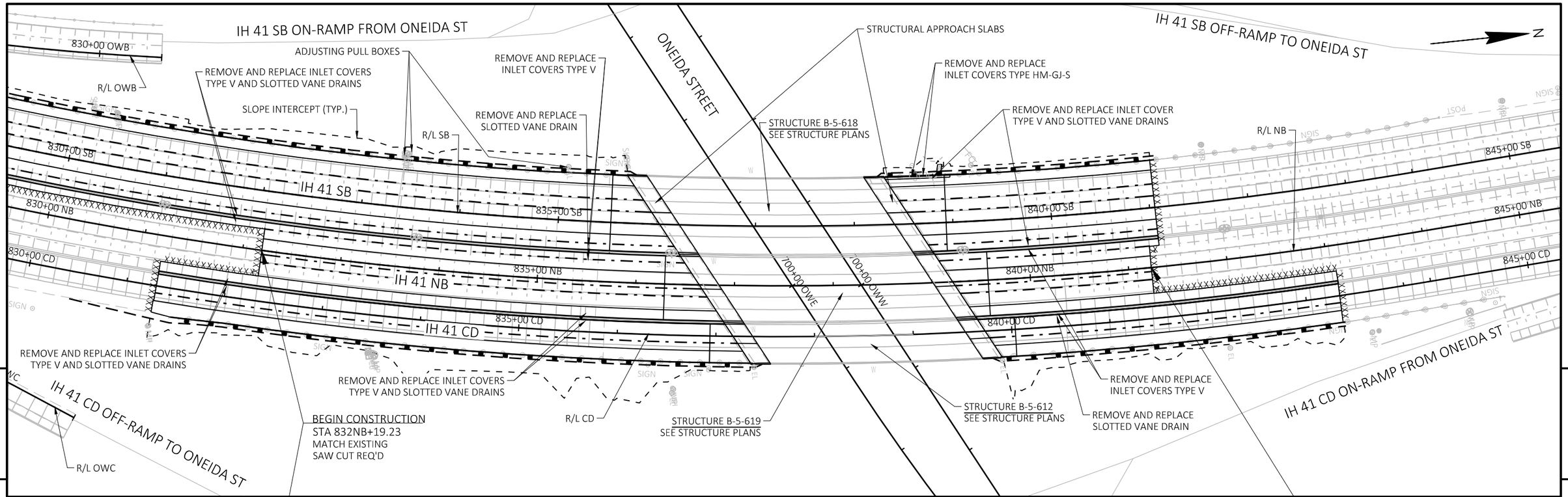


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: IH 41 NB (B-5-617)	SHEET 211 E

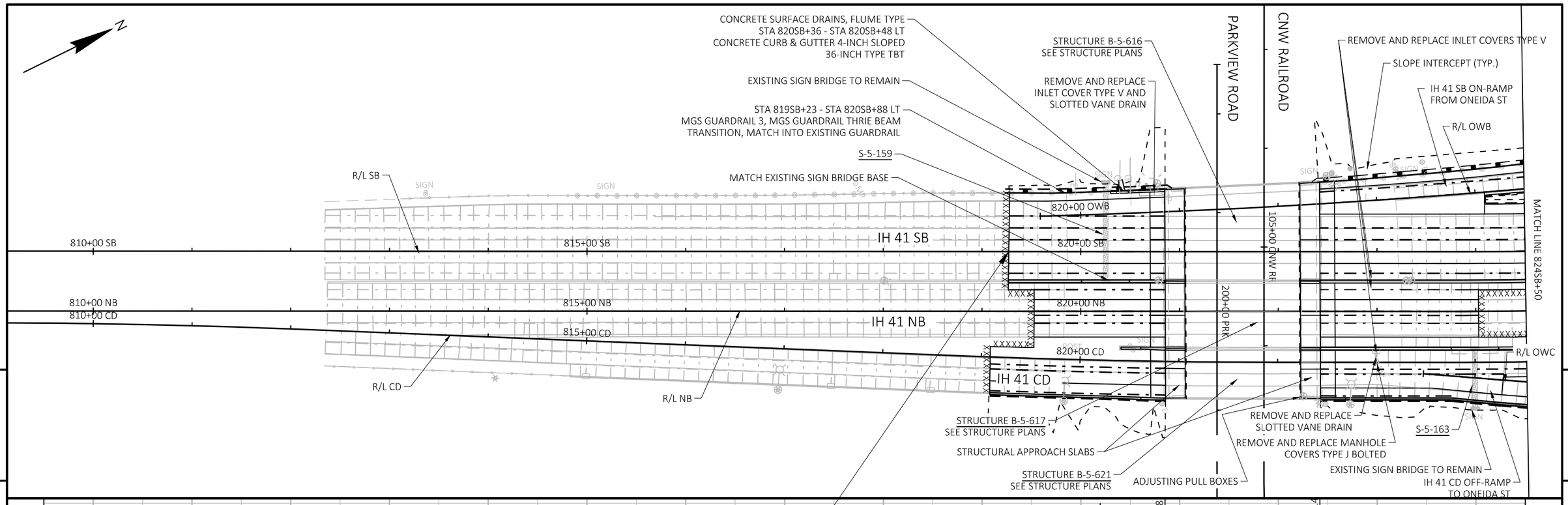
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 01

PLOT DATE : 6/22/2026 9:08 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: IH 41 NB (B-5-619)	SHEET 212	E

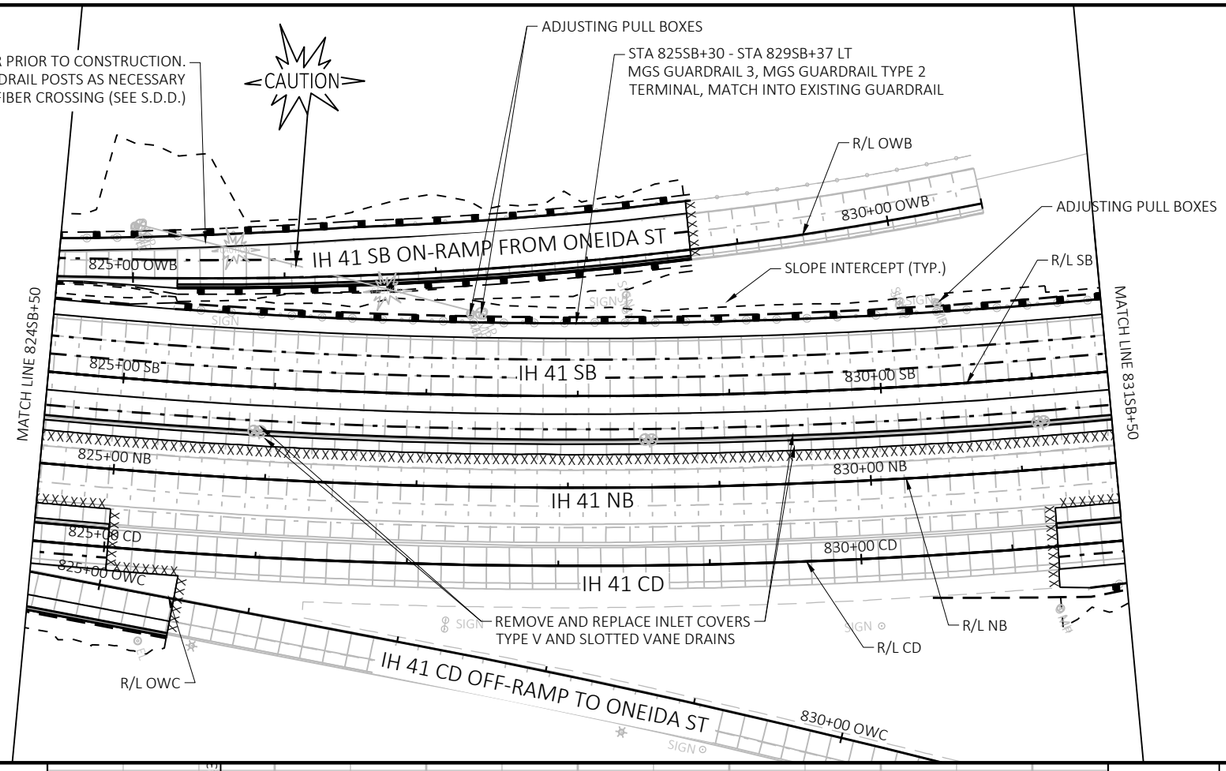


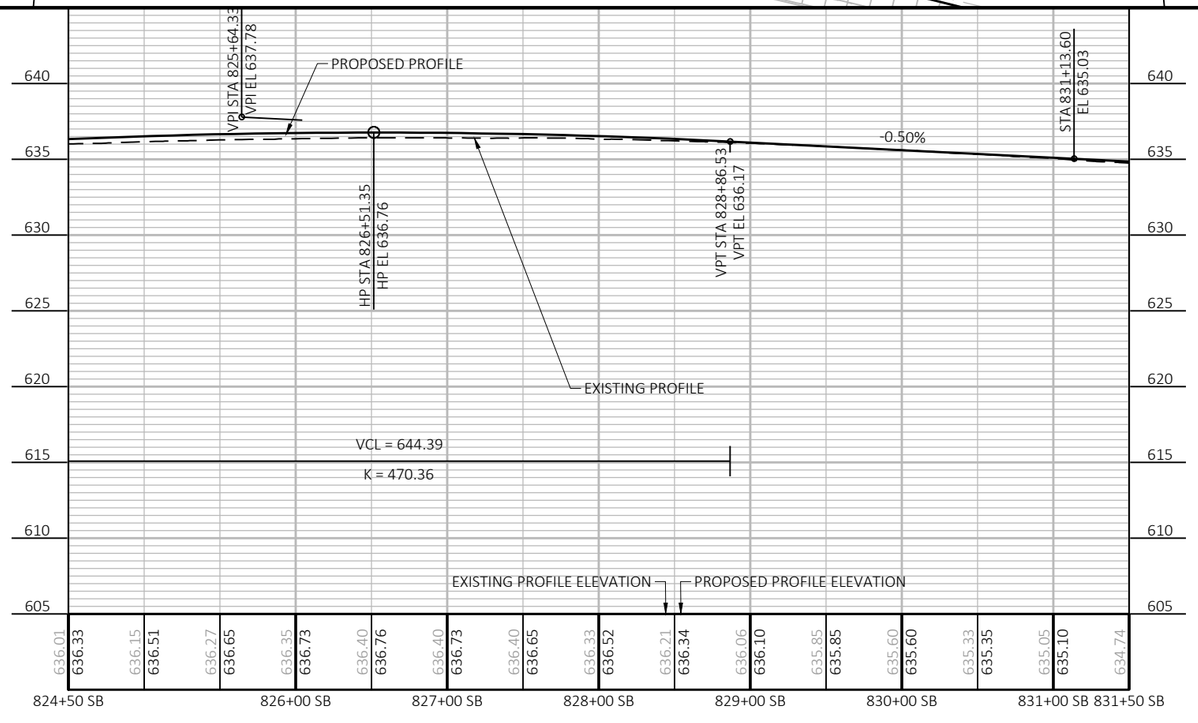
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: IH 41 SB (B-5-616)	SHEET 213 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 04

PLOT DATE : 7/30/2025 4:17 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

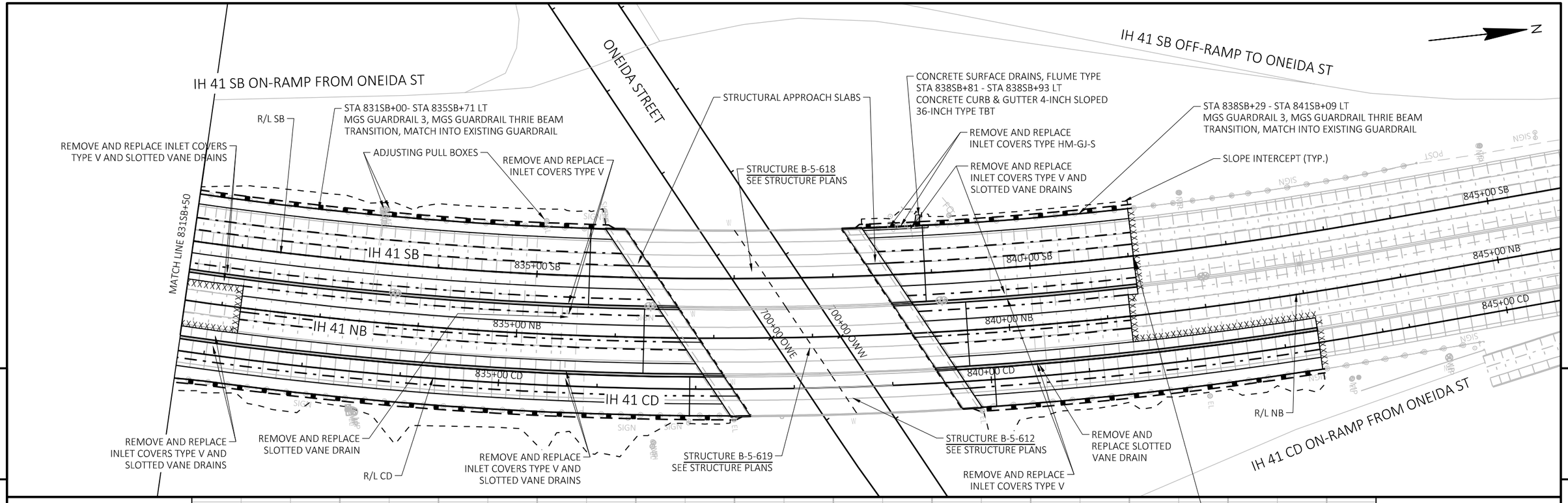
WISDOT/CADDS SHEET 44

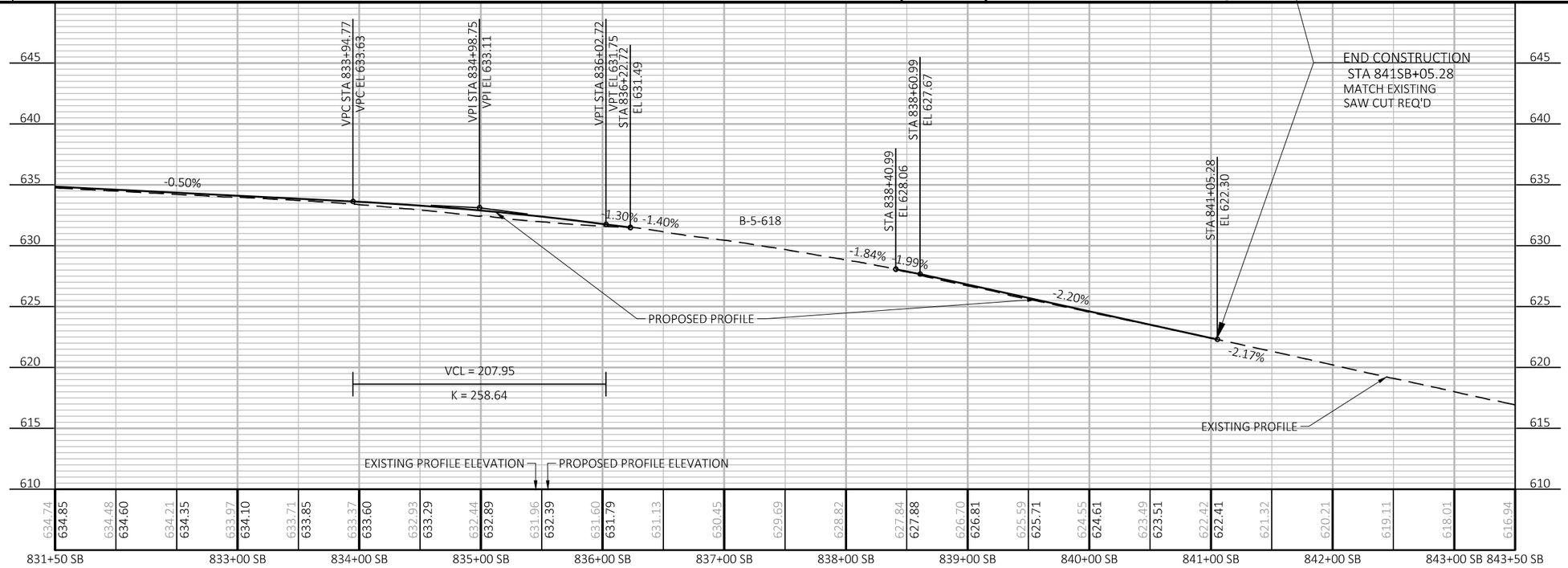




PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: IH 41 SB (B-5-616)	SHEET 214 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 05
PLOT DATE : 6/22/2026 9:08 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



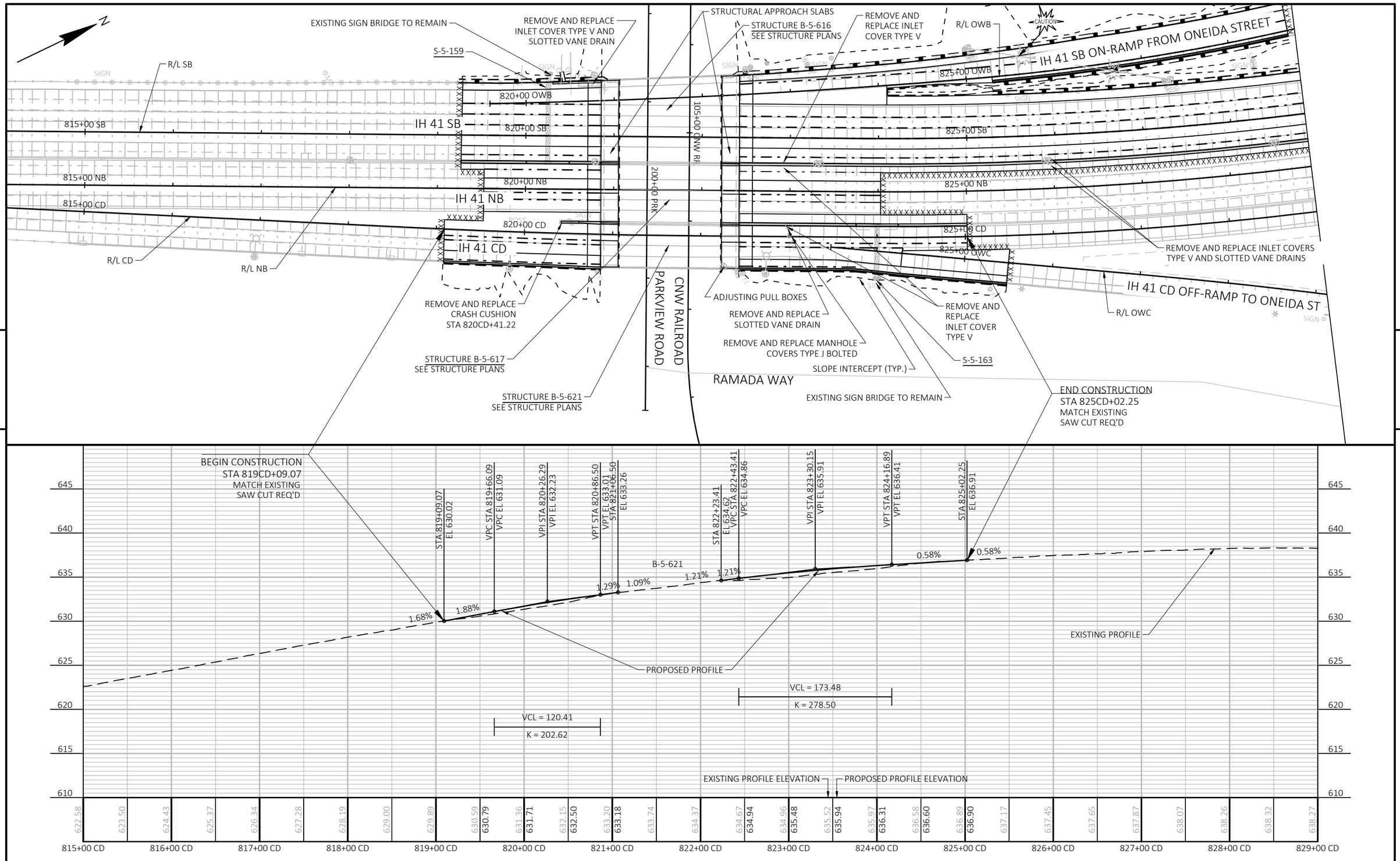


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: IH 41 SB (B-5-618)	SHEET 215	E

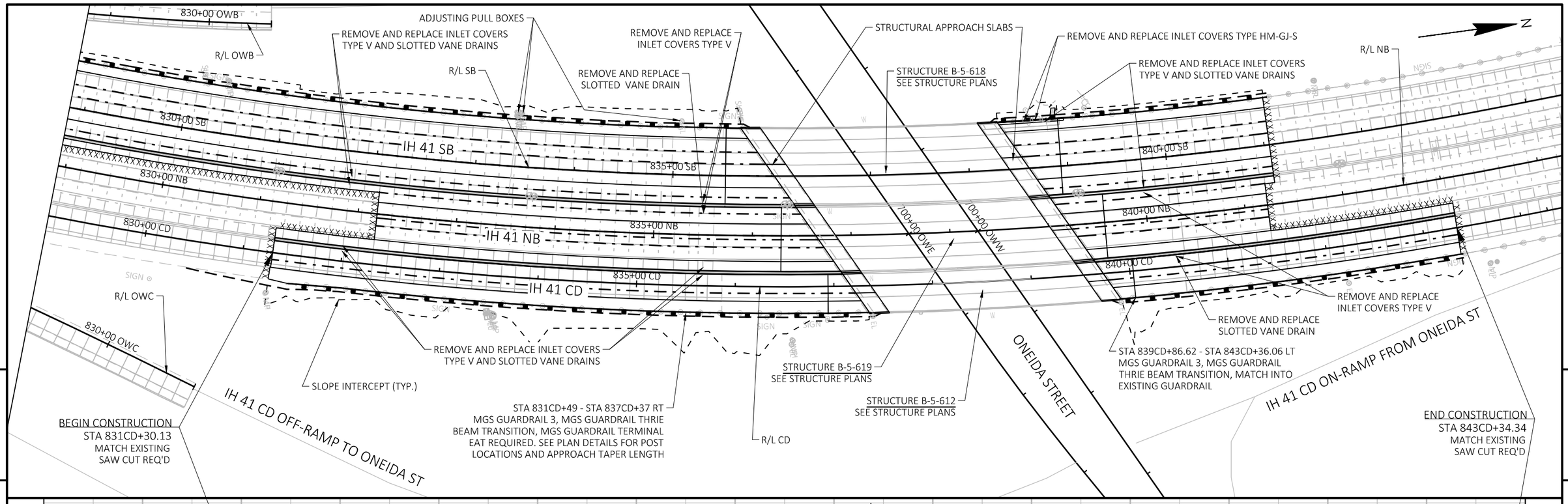
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 06

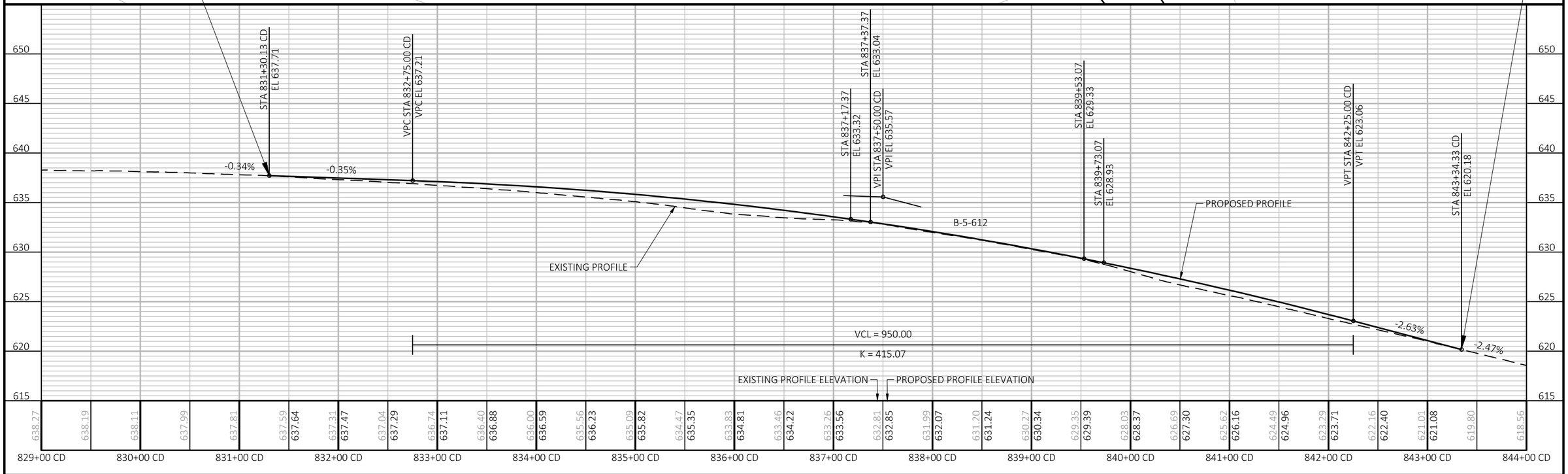
PLOT DATE : 7/30/2025 4:17 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: IH 41 CD (B-5-621)	SHEET 216	E





PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: IH 41 CD (B-5-612)	SHEET 217	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 07
PLOT DATE : 7/30/2025 4:18 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

STRUCTURAL APPROACH SLABS

REMOVE AND REPLACE INLET COVER TYPE V AND SLOTTED VANE DRAIN

EXISTING SIGN BRIDGE TO REMAIN

S-5-159

R/L SB

PARKVIEW ROAD

CNW RAILROAD

STA 822OWB+40.91 - STA 828OWB+72.62 LT
MGS GUARDRAIL 3, MGS GUARDRAIL THRIE BEAM TRANSITION, MATCH INTO EXISTING GUARDRAIL

LOCATE FIBER PRIOR TO CONSTRUCTION.
ADJUST GUARDRAIL POSTS AS NECESSARY FOR FIBER CROSSING (SEE S.D.D.)

ADJUSTING PULL BOXES

SLOPE INTERCEPT (TYP.)

ADJUSTING PULL BOXES

CAUTION

CAUTION

STA 825OWB+29.26 - STA 828OWB+68.27 RT
MGS GUARDRAIL 3, MGS GUARDRAIL TYPE 2 TERMINAL, MATCH INTO EXISTING GUARDRAIL
CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE G

N

R/L OWB

IH 41 SB ON-RAMP FROM ONEIDA STREET

820+00 OWB

820+00 SB

820+00 NB

820+00 CD

825+00 OWB

825+00 SB

825+00 NB

825+00 CD

825+00 OWC

830+00 OWB

830+00 SB

830+00 NB

830+00 CD

IH 41

105+00 CNW RR

200+00 PRK

IH 41 SB

IH 41 NB

IH 41 CD

IH 41 CD OFF-RAMP TO ONEIDA ST

R/L CD

R/L NB

R/L OWC

STRUCTURE B-5-617
SEE STRUCTURE PLANS

STRUCTURE B-5-621
SEE STRUCTURE PLANS

STRUCTURE B-5-616
SEE STRUCTURE PLANS

S-5-163

5

5

BEGIN CONSTRUCTION
STA 822OWB+42.23

STA 821+05.23
EL 632.86

VPC STA 821+54.95
VPC EL 633.32

STA 822+22.20
EL 633.78

STA 822+42.23
EL 633.86

VPI STA 825+04.95
VPI EL 636.50

VPT STA 828+54.95
VPT EL 623.28

END CONSTRUCTION
STA 828OWB+68.37
MATCH EXISTING
SAW CUT REQ'D

STA 828+68.37
EL 622.77

PROPOSED PROFILE

EXISTING PROFILE

1.20%

0.91%

2.78%

3.62%

HP STA 822+90.76
HP EL 633.93

VCL = 700.00

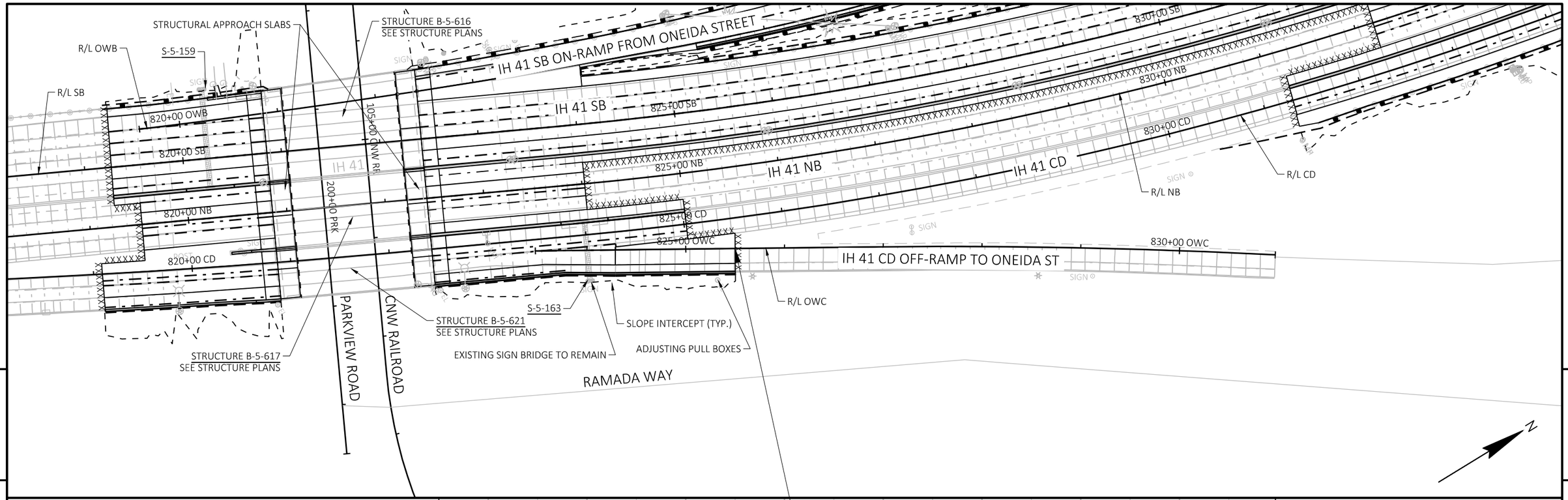
K = 149.31

645
640
635
630
625
620
615
610

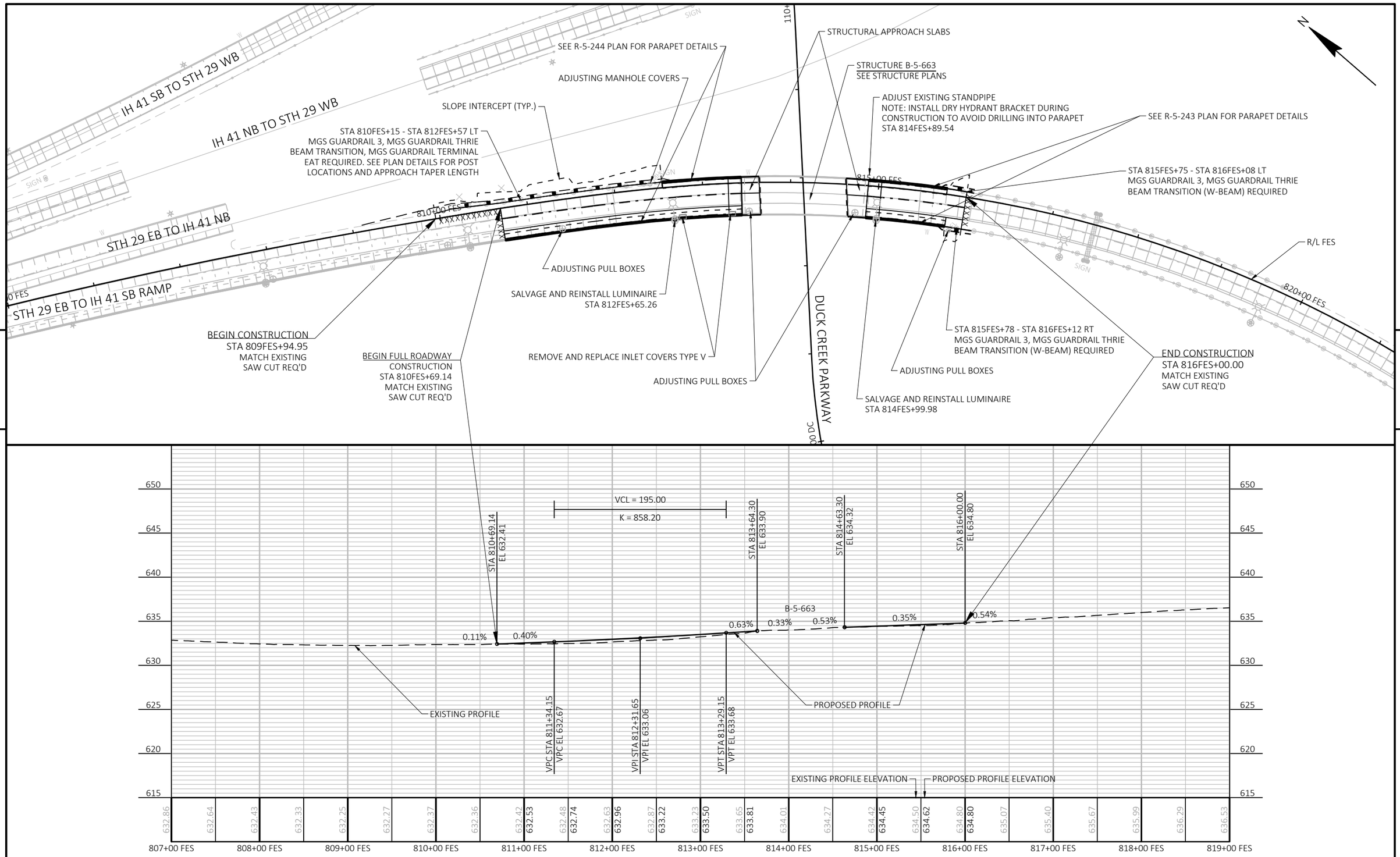
EXISTING PROFILE ELEVATION

PROPOSED PROFILE ELEVATION

| | | |



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: RAMP OWC	SHEET 219	E



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	PLAN AND PROFILE: STH 29 EB TO IH 41 SB RAMP (B-5-663)	SHEET 220	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 08

PLOT DATE : 4/16/2026 9:14 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:100 FT

Standard Detail Drawing List

08A05-22C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08A05-22D	INLET COVERS TYPE V, V-B, & VV-B
08A05-22E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08D01-24A	CONCRETE CURB & GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-10	CONDUIT
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
13A03-07	CONCRETE PAVEMENT SHOULDERS
13A05-06A	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A05-06B	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A10-03B	SHOULDER RUMBLE STRIPS - CONCRETE
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-15A	RURAL DOWELED CONCRETE PAVEMENT
13C11-15B	RURAL DOWELED CONCRETE PAVEMENT
13C15-08A	CONCRETE BASE
13C15-08B	CONCRETE BASE
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C18-08G	CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B32-11A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11E	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11F	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11G	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-11H	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B35-02C	32-INCH SINGLE-FACED NJ SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B35-02D	32-INCH SINGLE-FACED NJ SHAPE CONCRETE BARRIER TO 36-INCH SSCB TRANSITION
14B39-02B	36-INCH SSCB TO 42-INCH SSCB HEIGHT TRANSITION
14B40-02I	56-INCH VERTICAL SHAPE CONCRETE BARRIER TO 56-INCH SSCB TRANSITION
14B40-02J	56-INCH VERTICAL SHAPE CONCRETE BARRIER TO 56-INCH SSCB TRANSITION
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

Standard Detail Drawing List

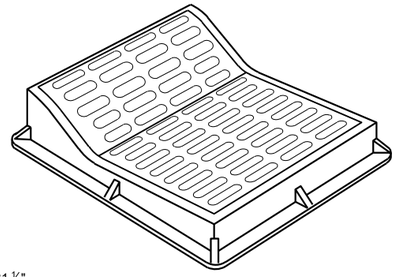
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-06A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A04-08B	BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING
15C02-10A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-10B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-10D	ON RAMP LANE CLOSURE
15C02-10E	OFF RAMP LANE CLOSURE
15C02-10G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-24C	PAVEMENT MARKING (TURN LANES)
15C09-13A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-11B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C19-11C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-08C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15D12-16A	TRAFFIC CONTROL, LANE CLOSURE
15D12-16B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D12-16C	TRAFFIC CONTROL, DYNAMIC LATE MERGE SYSTEM
15D12-16D	TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
15D12-16F	TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY TAPE RUMBLE STRIPS
15D14-10	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY
15D15-08A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-08B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-08E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-07	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-05	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D40-07B	TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND OVER
15D40-07D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
15D41-06A	TRAFFIC CONTROL, MULTIPLE LANE SHIFT, MULTILANE DIVIDED ROAD

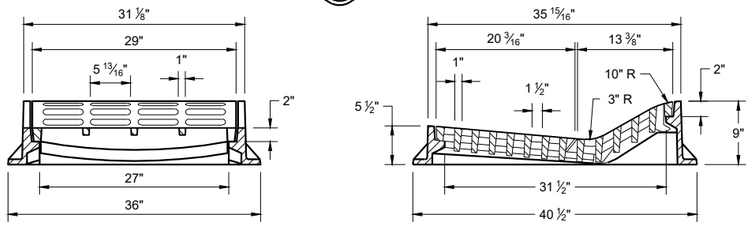
6

GENERAL NOTES

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

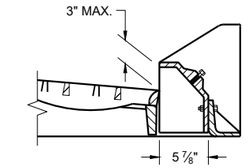
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

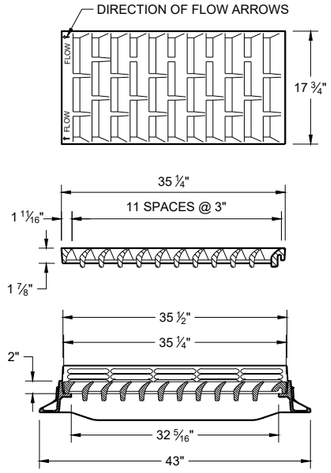


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

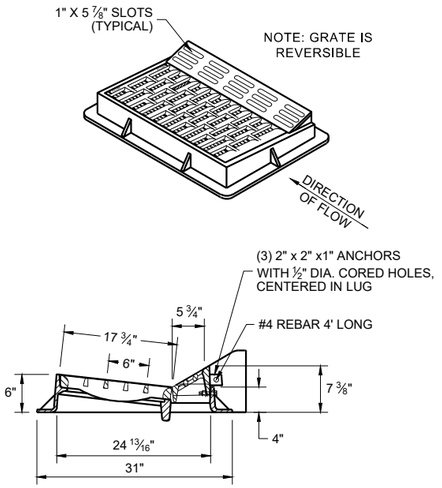
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



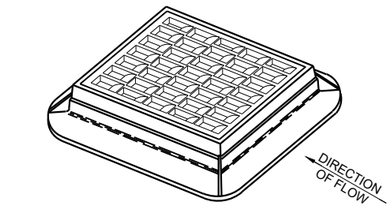
TYPE "HM"

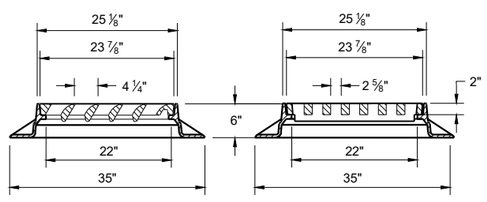
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



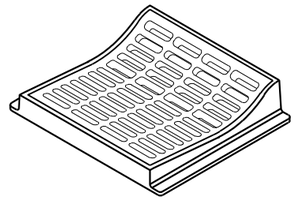
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

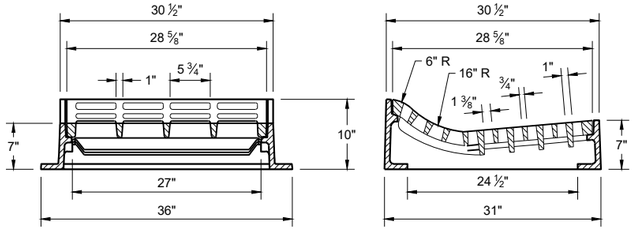
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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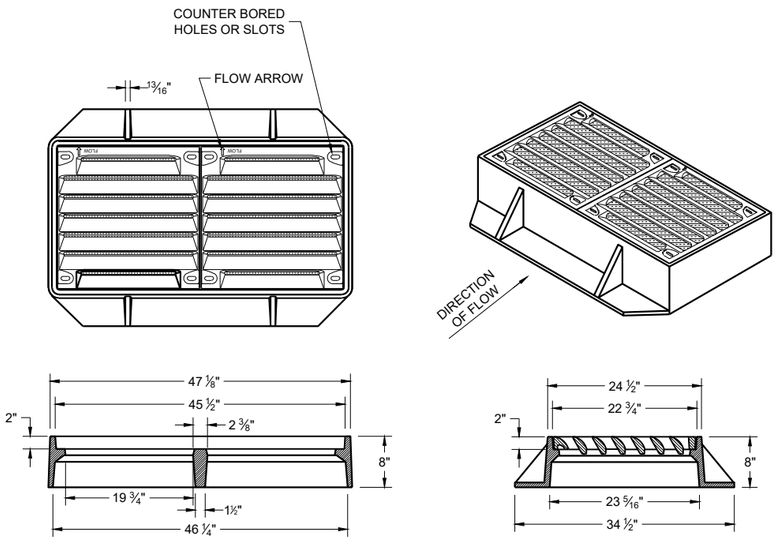
SDD 08A05-22c

GENERAL NOTES

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

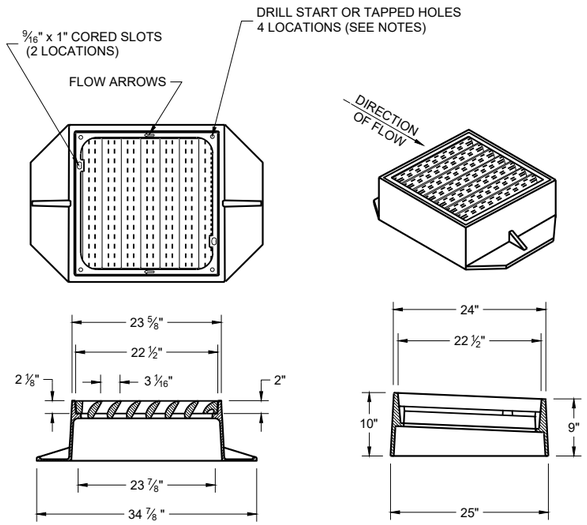
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER
ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

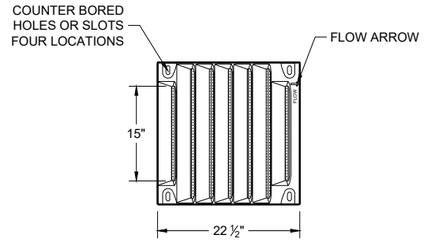
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
⅜" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



TYPE "V"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A
⅜" DIA. X 1/16" DRILL START IN 4 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



BOLT DOWN GRATE FOR TYPE "V" AND "VV-B" COVER

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER NOTED AS TYPE "V-B" OR "VV-B" (FOR DOUBLE GRATE) ON DRAINAGE TABLE

TAP ½" -13 HOLES IN FOUR LOCATIONS PER GRATE IN FRAME TO BOLT GRATE(S).
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A

GRATE - CAST DUCTILE IRON ASTM A536, 55+KSI YIELD
BOLTS - ½" -13 STAINLESS STEEL BOLTS WITH WASHERS
TORQUE BOLTS TO MANUFACTURER SPECIFICATION DO NOT OVERTIGHTEN.

INLET COVERS
TYPES V, V-B, AND VV-B

STATE OF WISCONSIN
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FHWA

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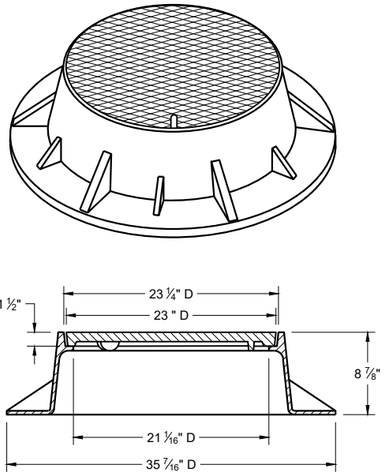
SDD 08A05-22d

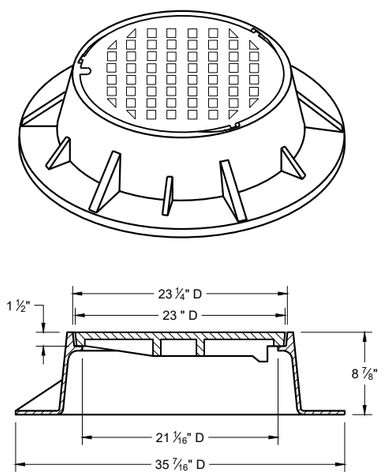
GENERAL NOTES

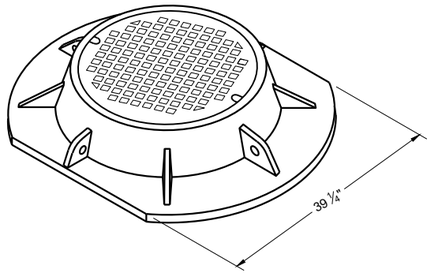
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

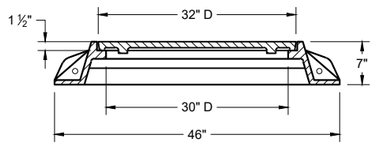
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

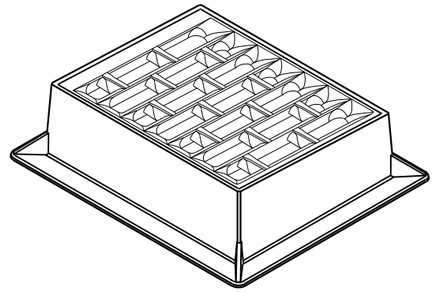


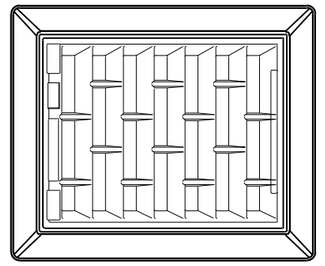


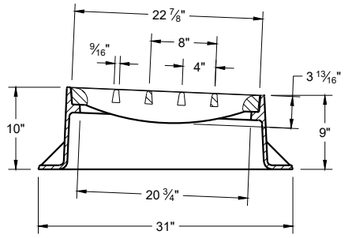


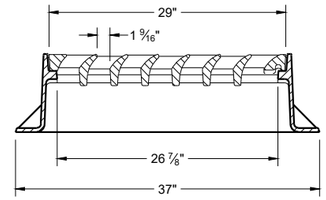


TYPE "K"

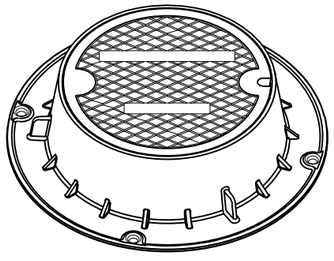


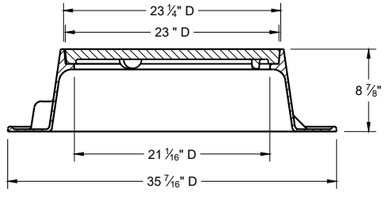






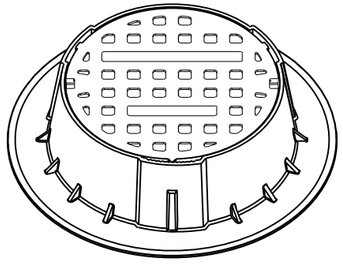
INLET COVER TYPE "BW"

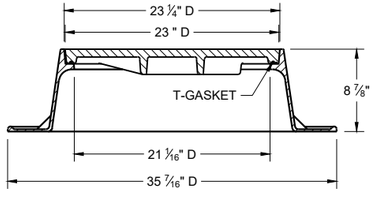




TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

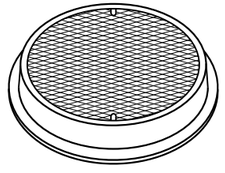


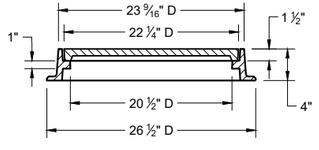


TYPE "J" SPECIAL

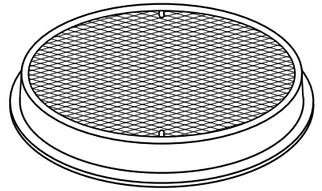
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

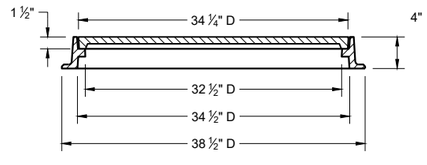
NOTE: EITHER CASTING IS ACCEPTABLE





TYPE "L"





TYPE "M"

INLET COVERS TYPES BW
MANHOLE COVERS TYPES K, J, J-S, L, AND M

STATE OF WISCONSIN
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APPROVED
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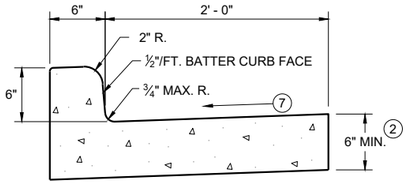
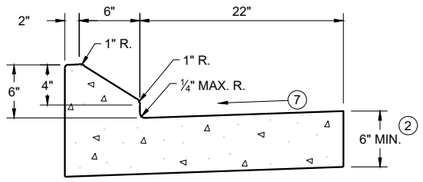
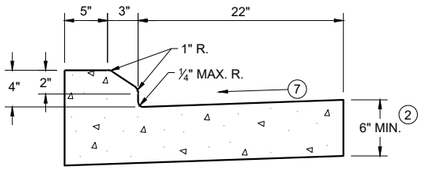


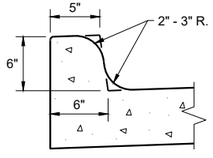
TYPES A (1) & D



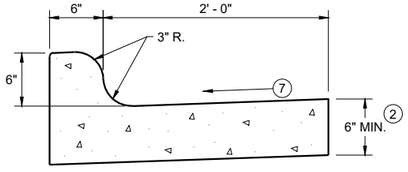
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

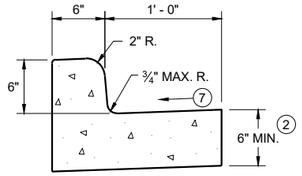


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



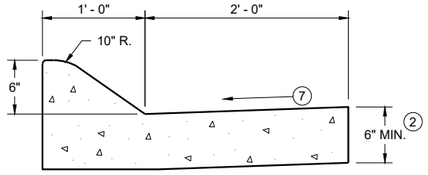
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

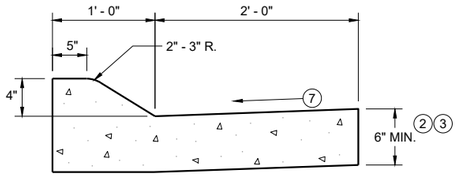


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

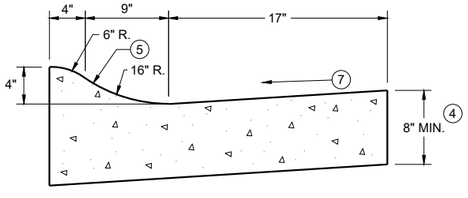


6" SLOPED CURB TYPES A (1) & D



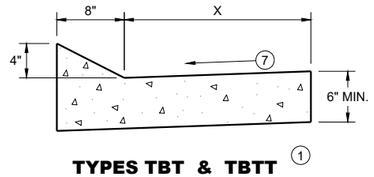
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T
CONCRETE CURB AND GUTTER 30"

TBT & TBTT	X
30"	22"
36"	28"

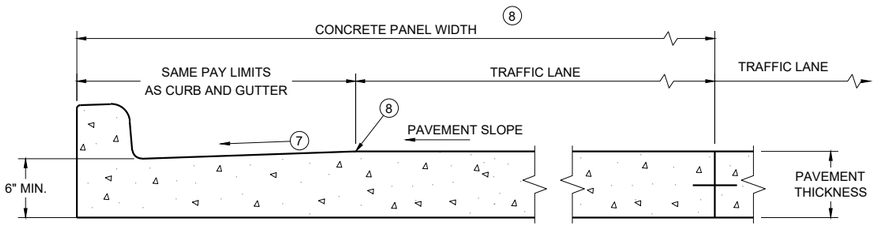


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

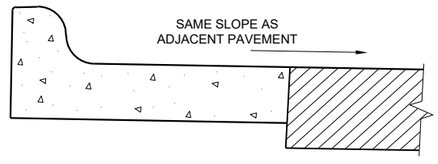
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

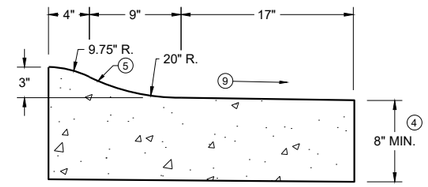
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

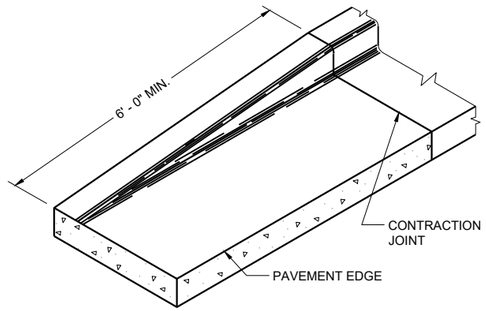
(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY



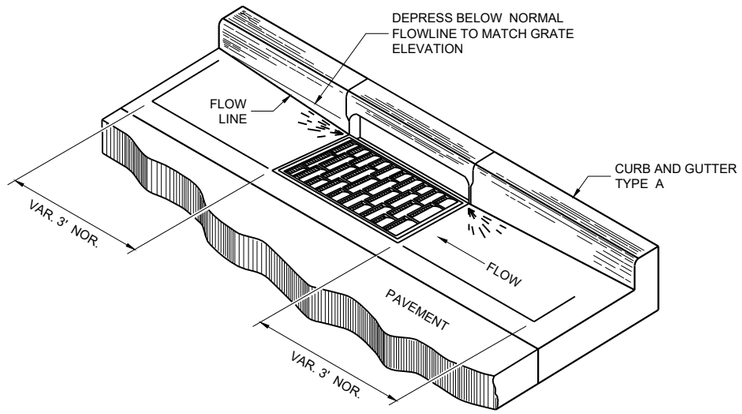
3" SLOPED CURB TYPES R (1) & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

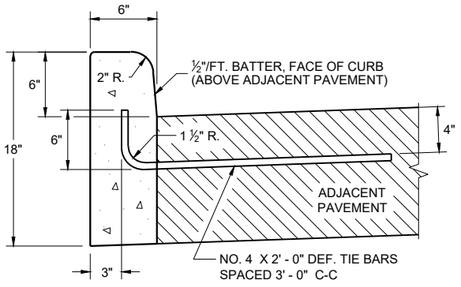
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

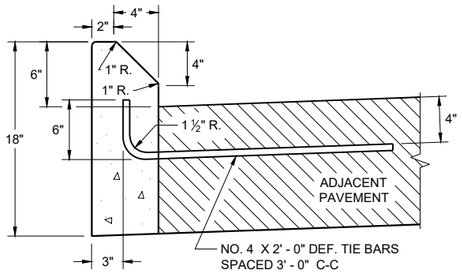
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

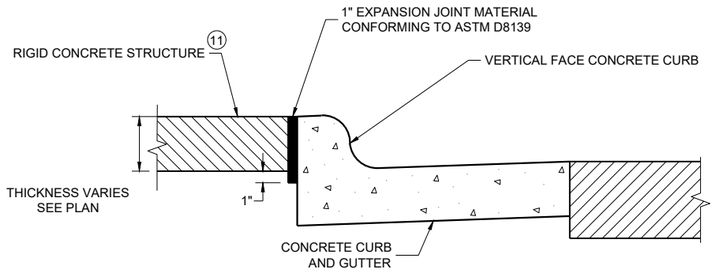


TYPES A (1) & D

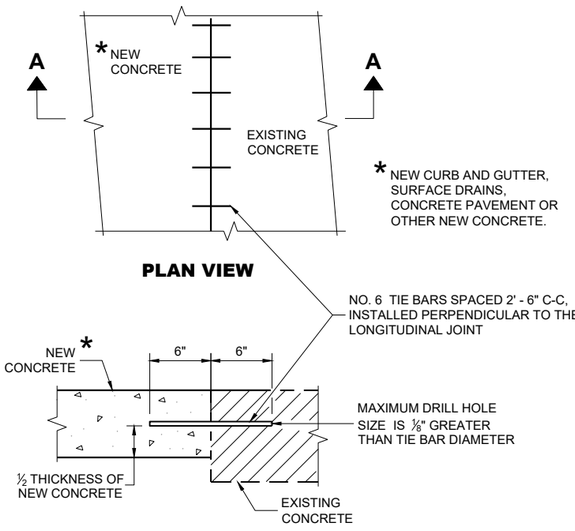


TYPES G (1) & J

CONCRETE CURB



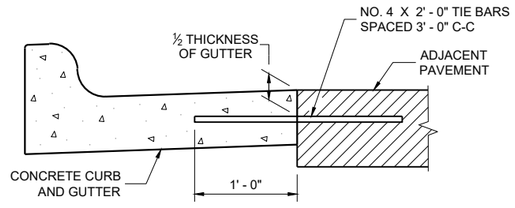
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



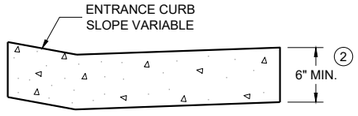
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 08D01-24b

GENERAL NOTES

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

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

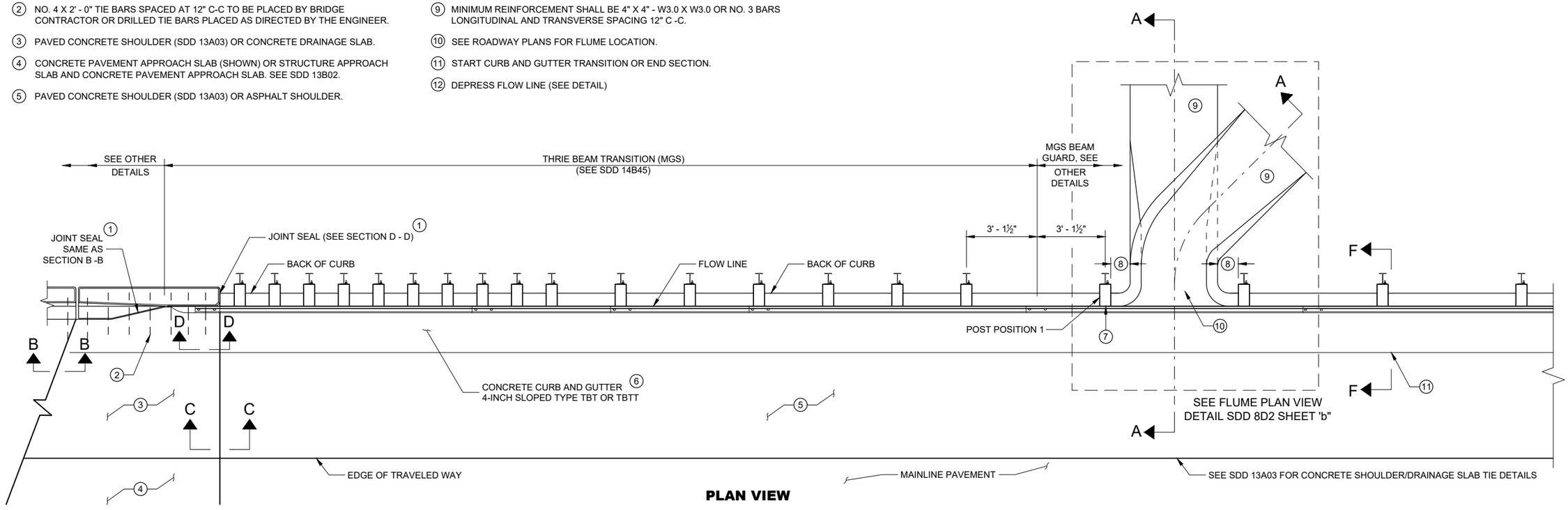
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

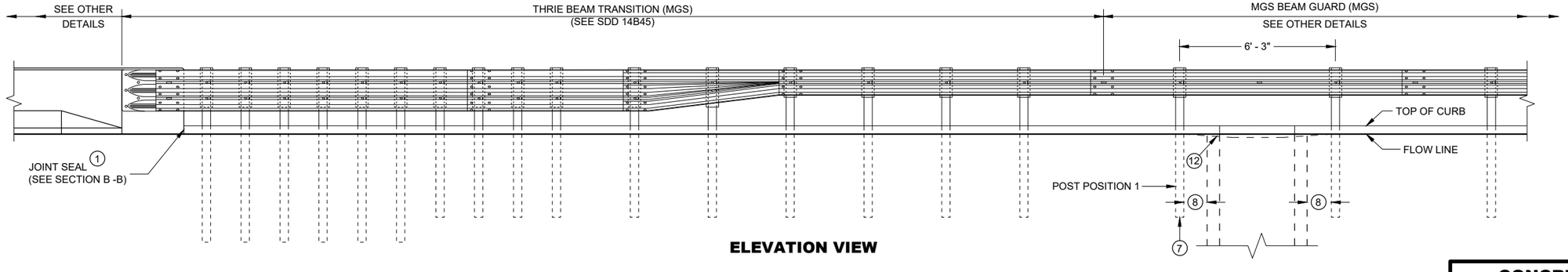
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

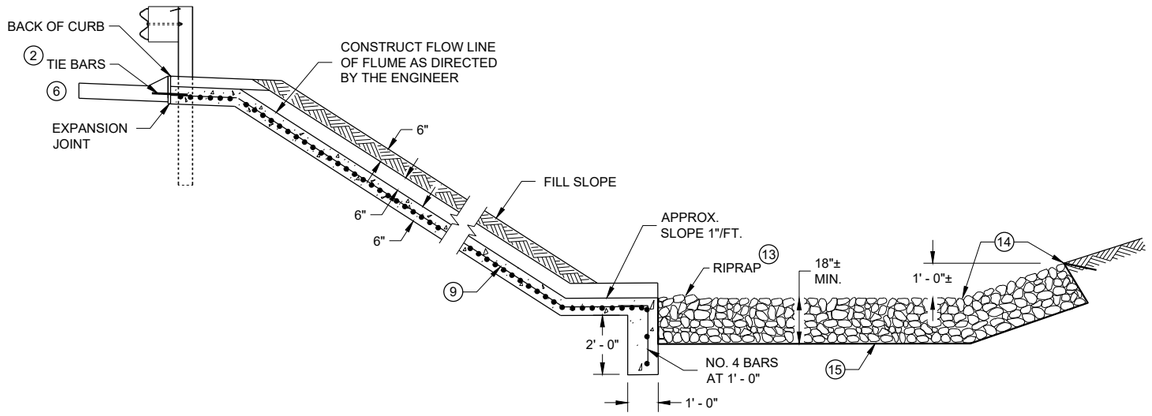
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

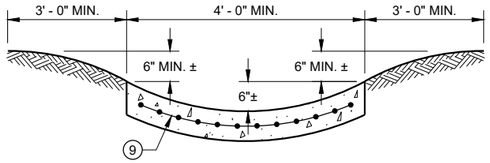
SDD 08D02 - 08a

6

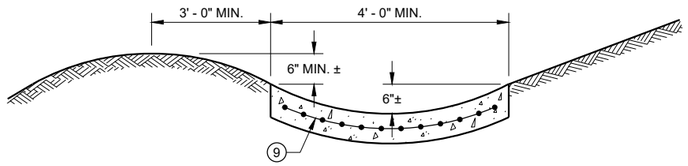
SDD 08D02 - 08a



SECTION A - A



SECTION G - G



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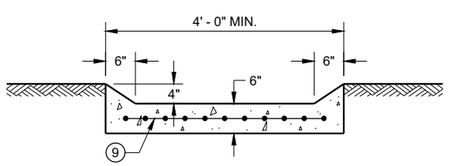
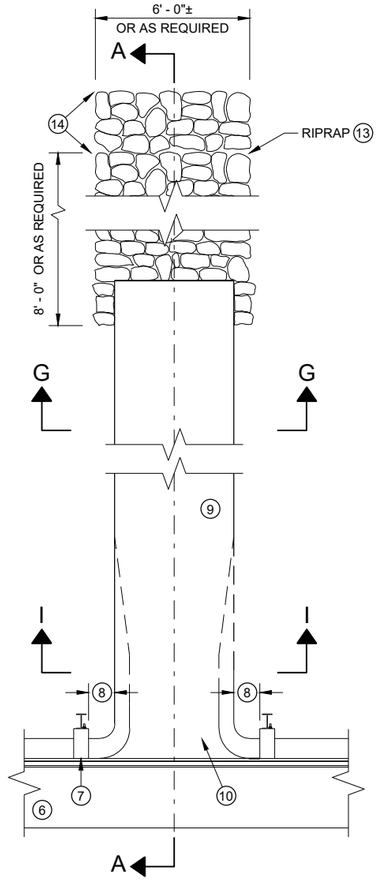
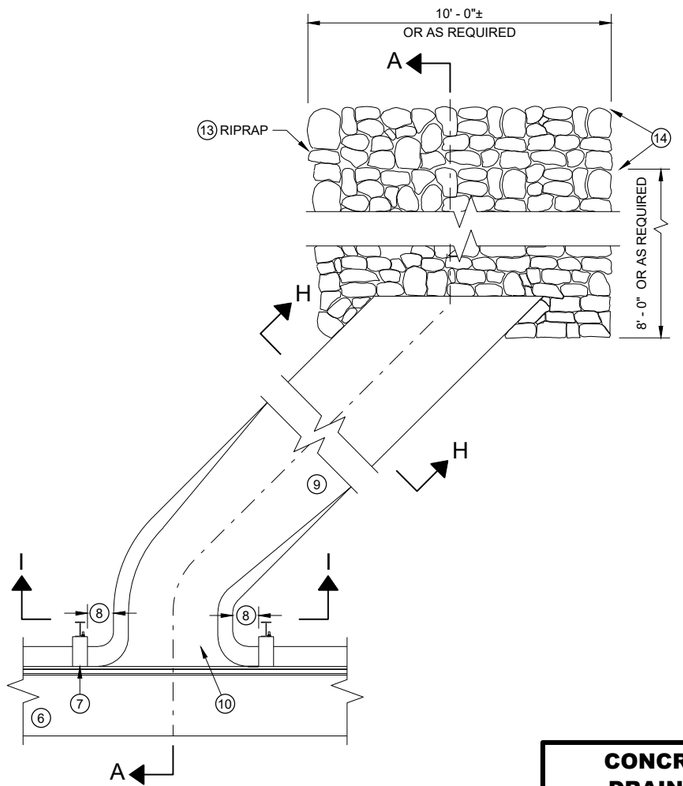


SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

GENERAL NOTES

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

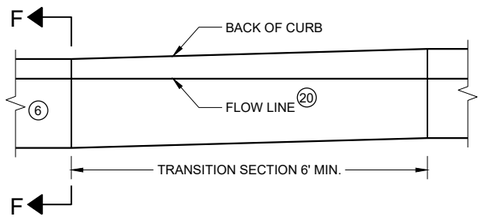
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

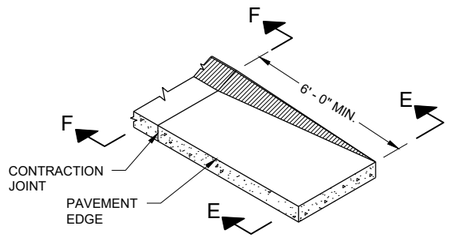
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

6

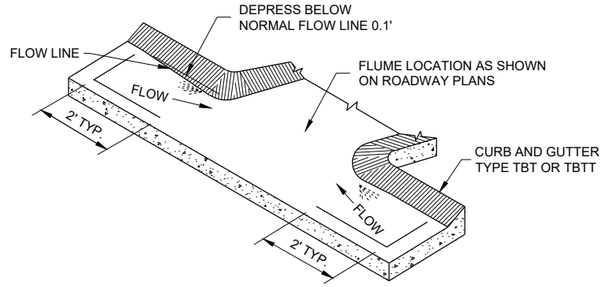
SDD 08D02 - 08b



CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

GENERAL NOTES

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

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

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

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

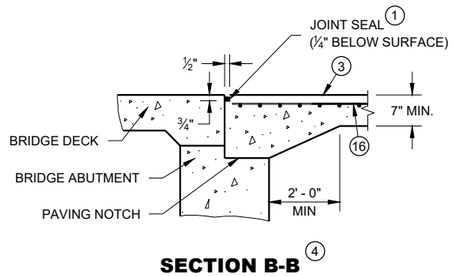
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

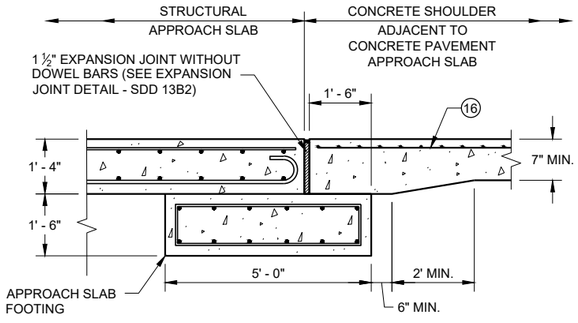
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

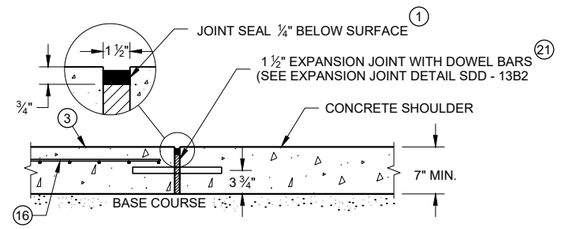
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



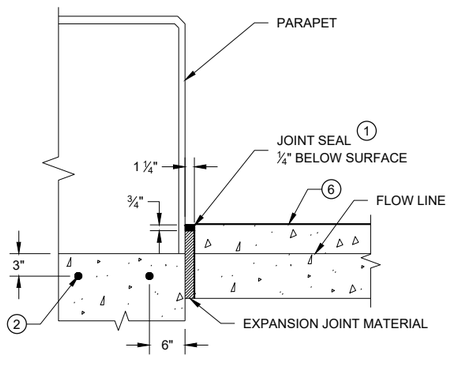
SECTION B-B (4)



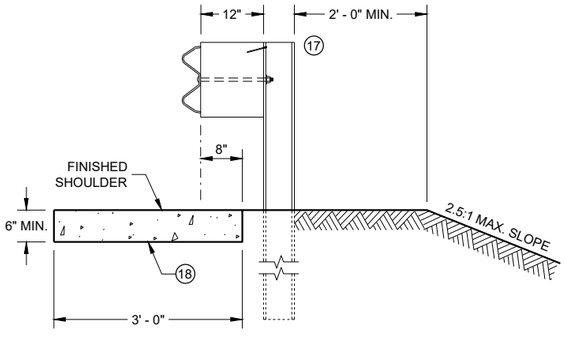
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



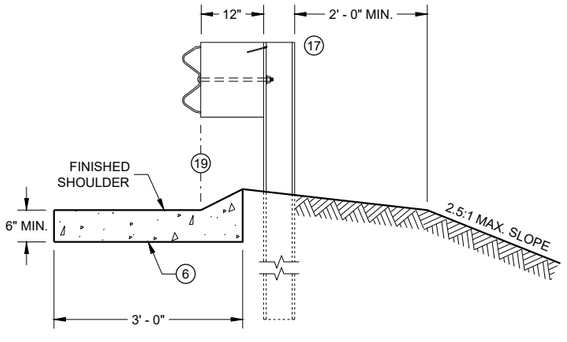
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

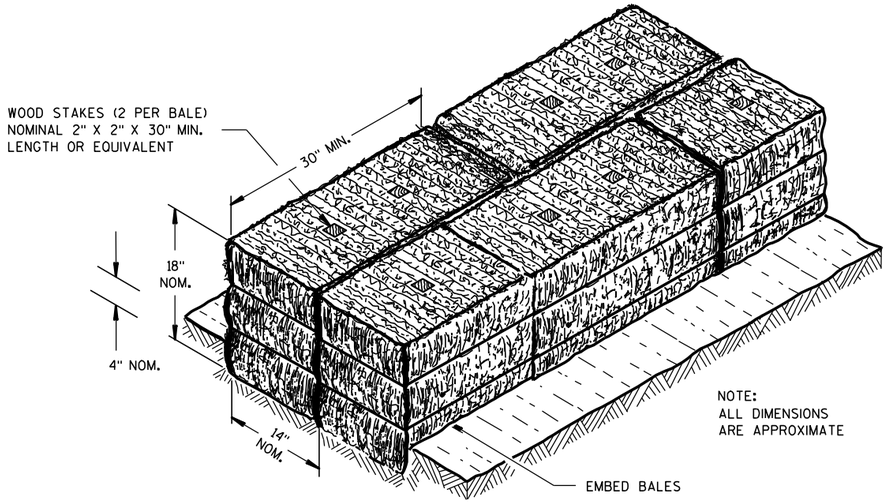
FHWA

6

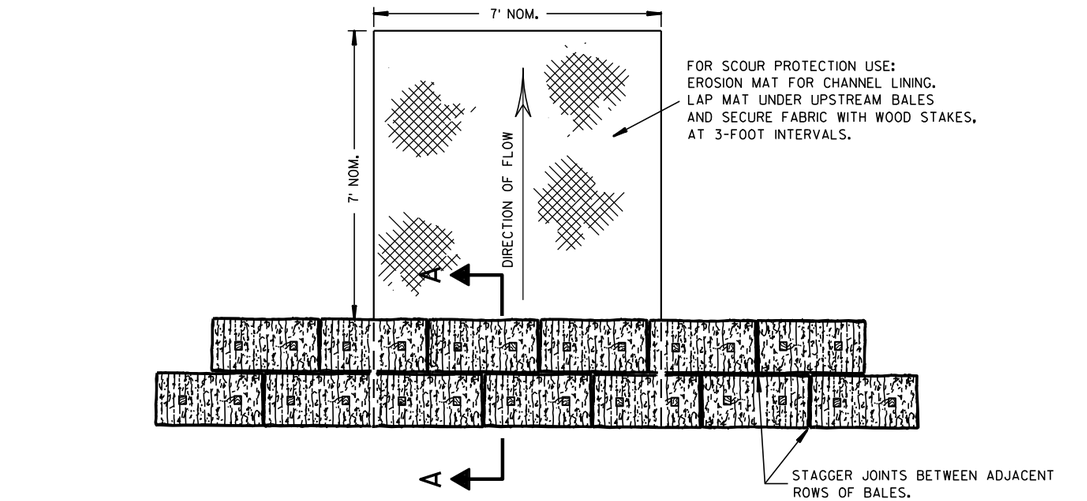
SDD 08D02 - 08c

6

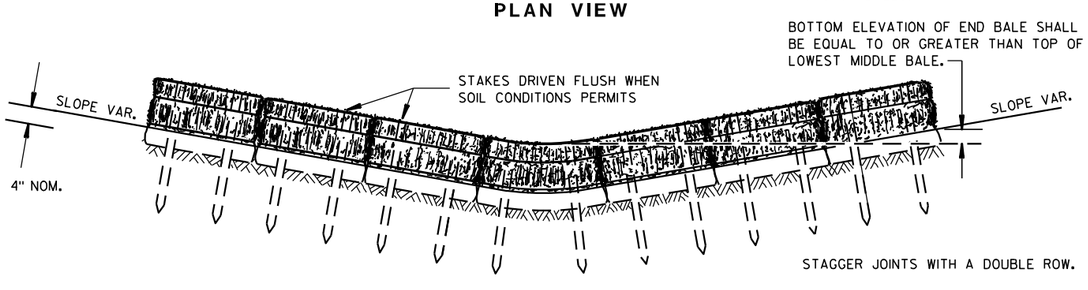
SDD 08D02 - 08c



SECTION A-A



PLAN VIEW



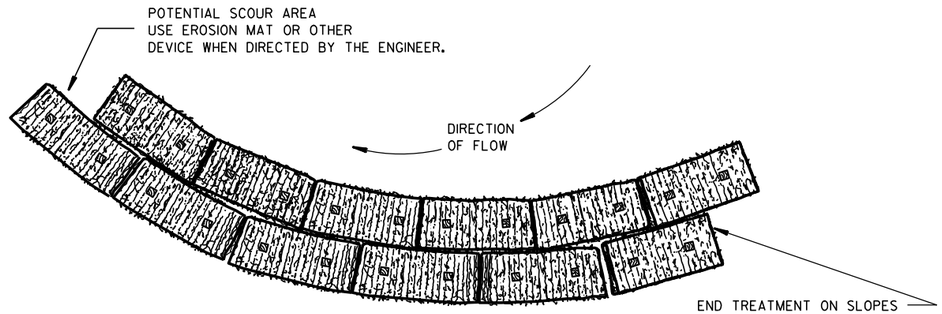
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

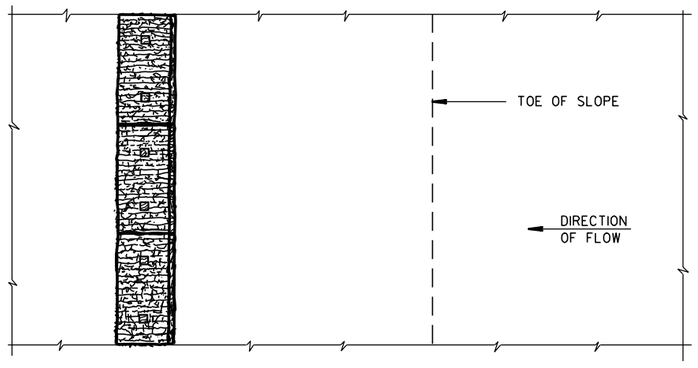
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

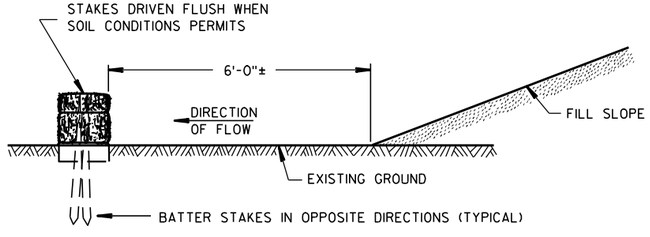


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

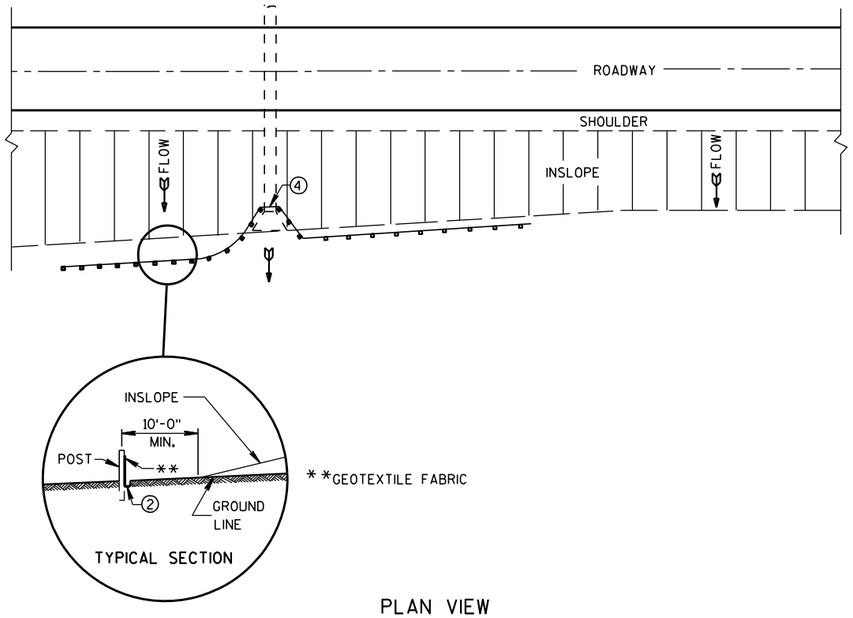
FHWA

6

S.D.D. 8 E 8-3

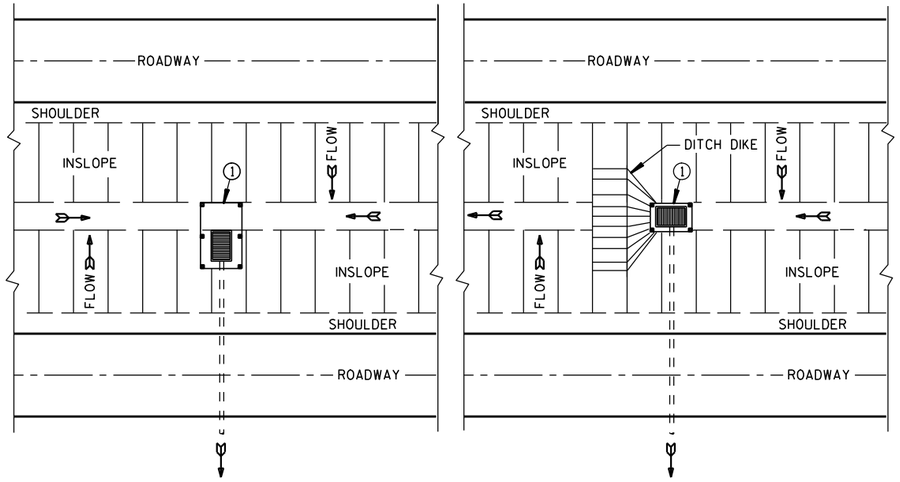
6

S.D.D. 8 E 8-3



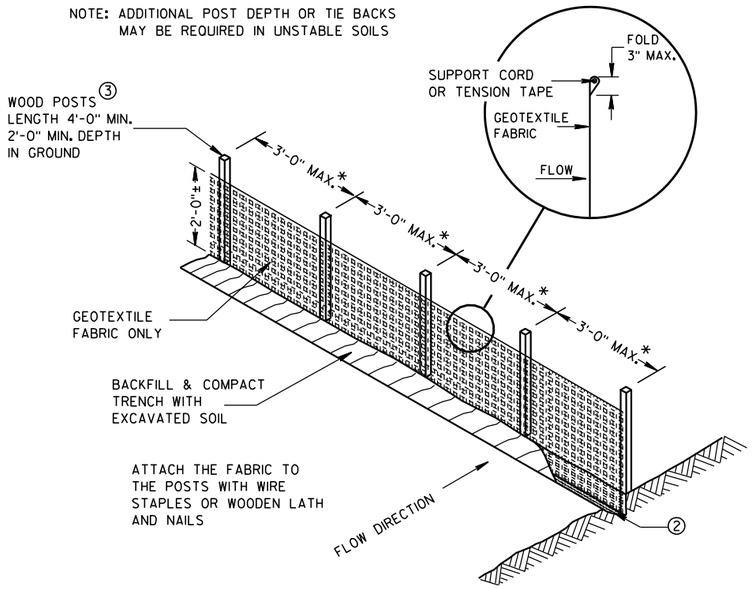
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



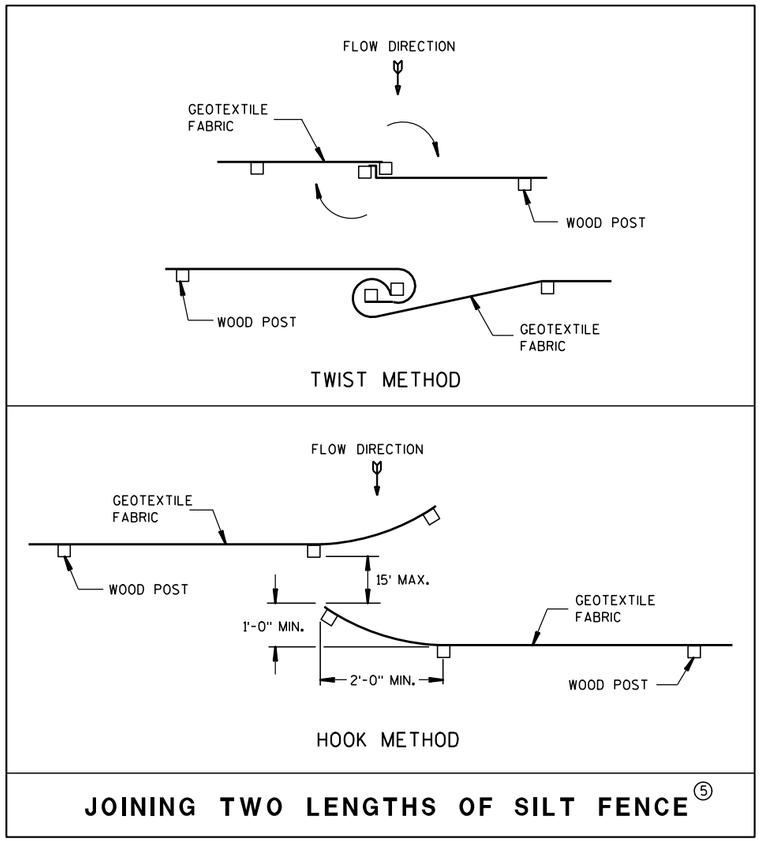
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

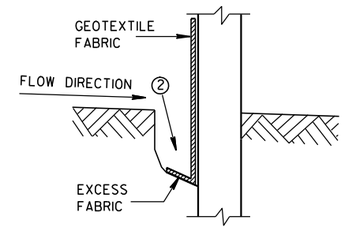


JOINING TWO LENGTHS OF SILT FENCE 5

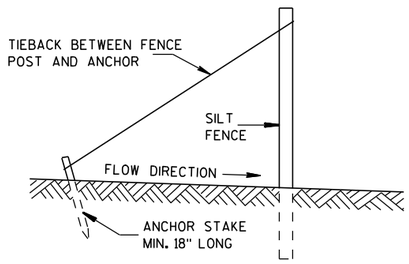
GENERAL NOTES

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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

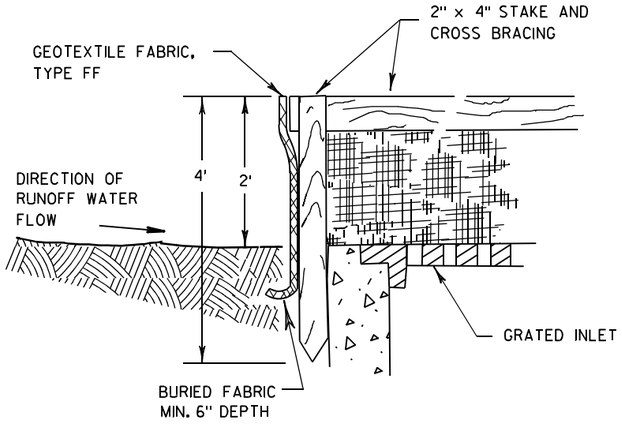
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

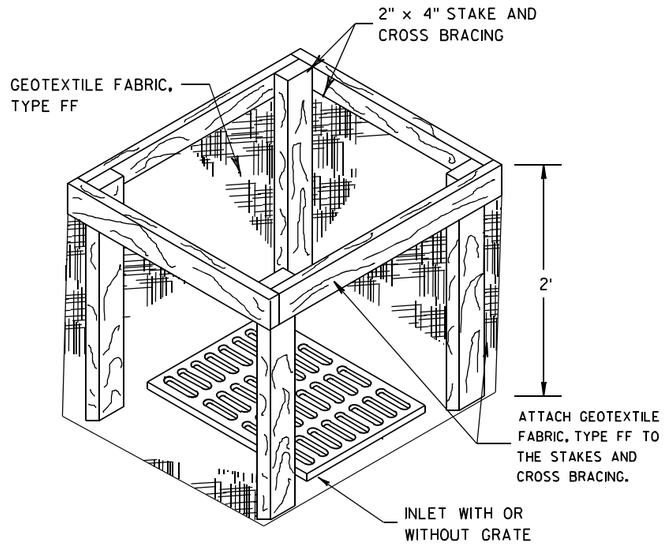
6

S.D.D. 8 E 9-6

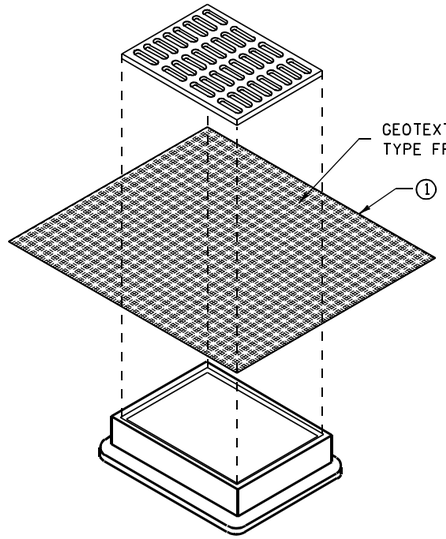
6

S.D.D. 8 E 9-6



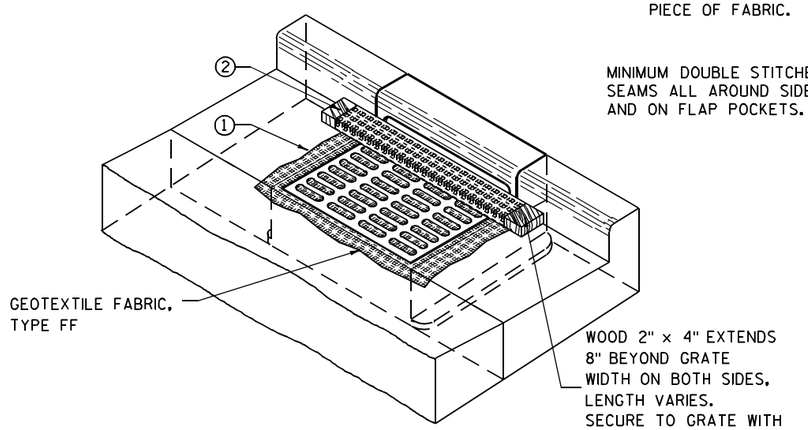


INLET PROTECTION, TYPE A

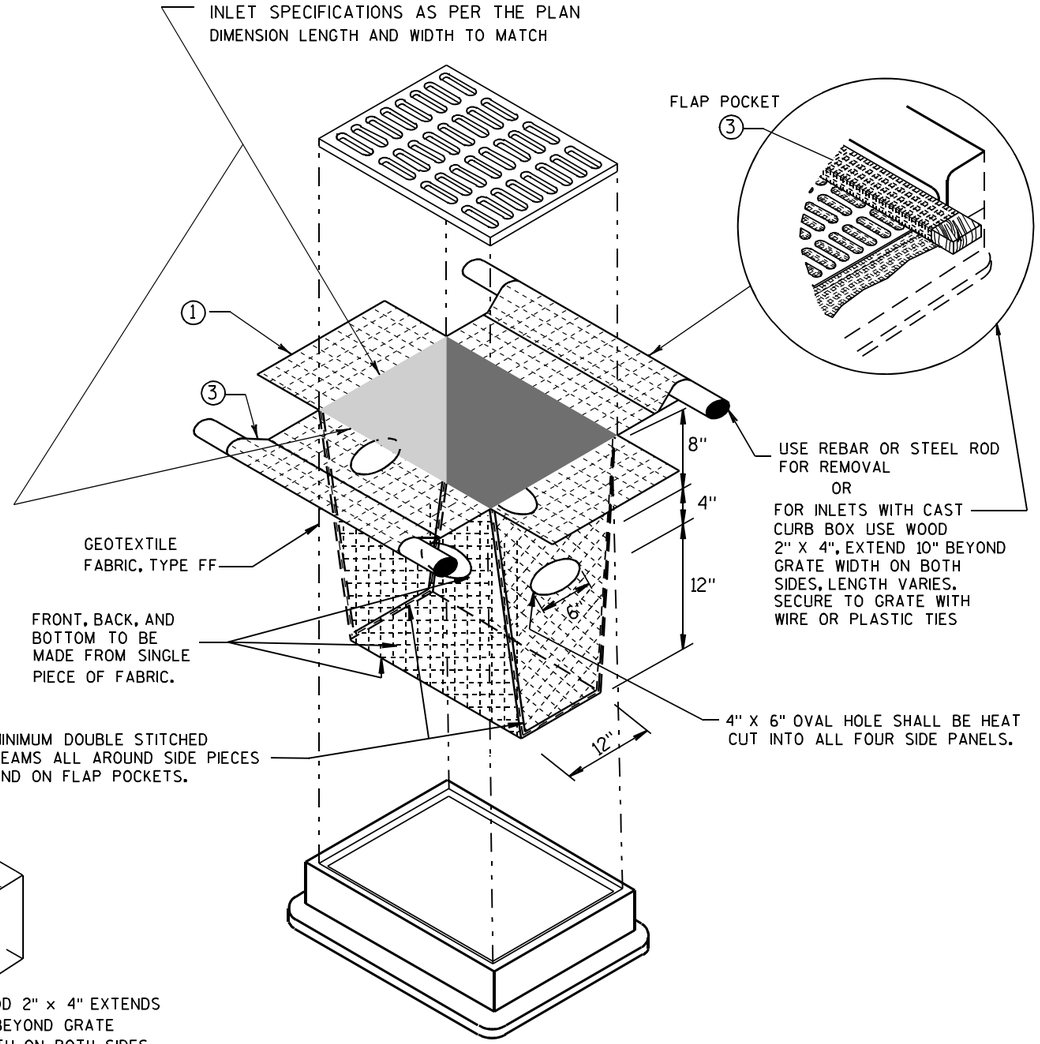


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

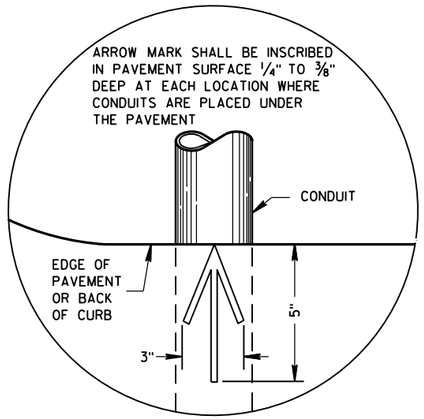
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 10-2

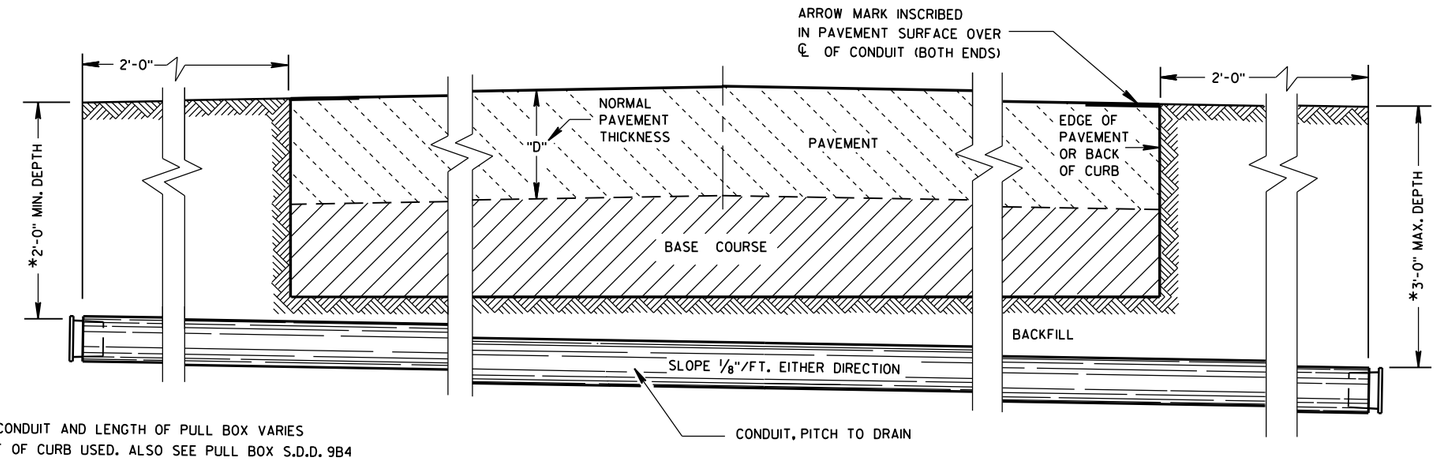
6

S.D.D. 8 E 10-2



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

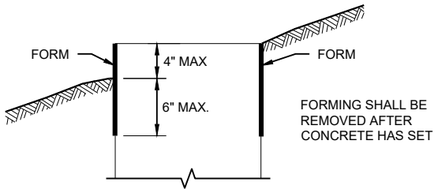
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 2-10

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

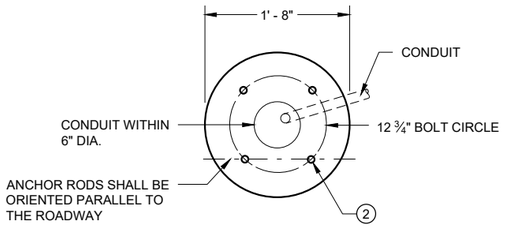
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

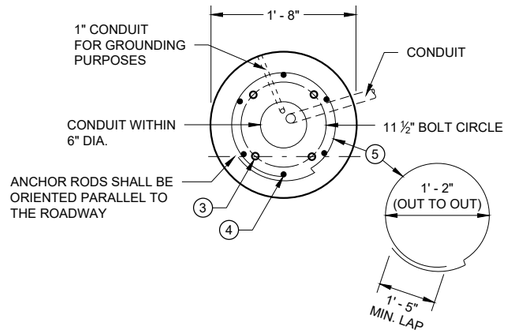
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

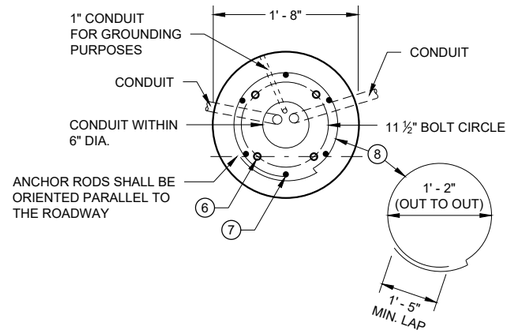
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

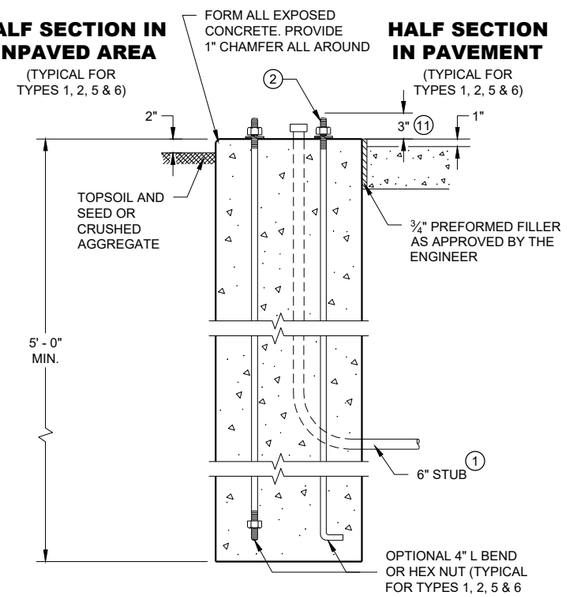
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

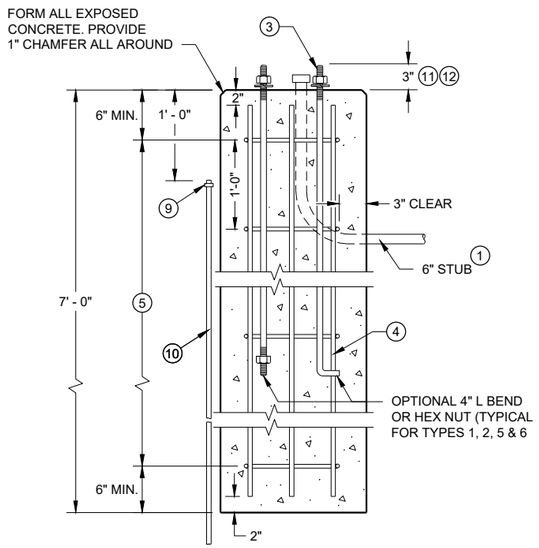
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

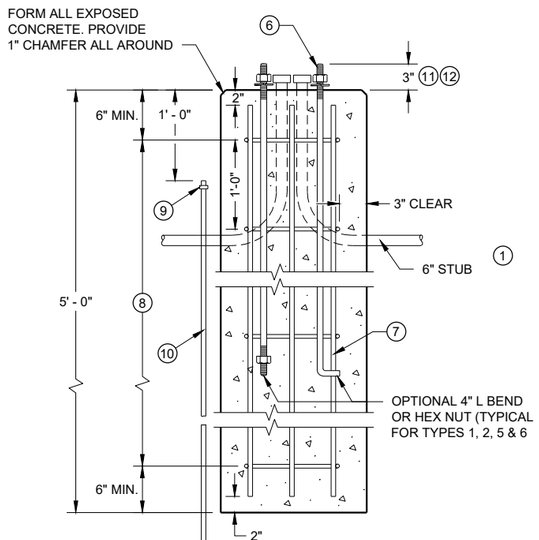
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



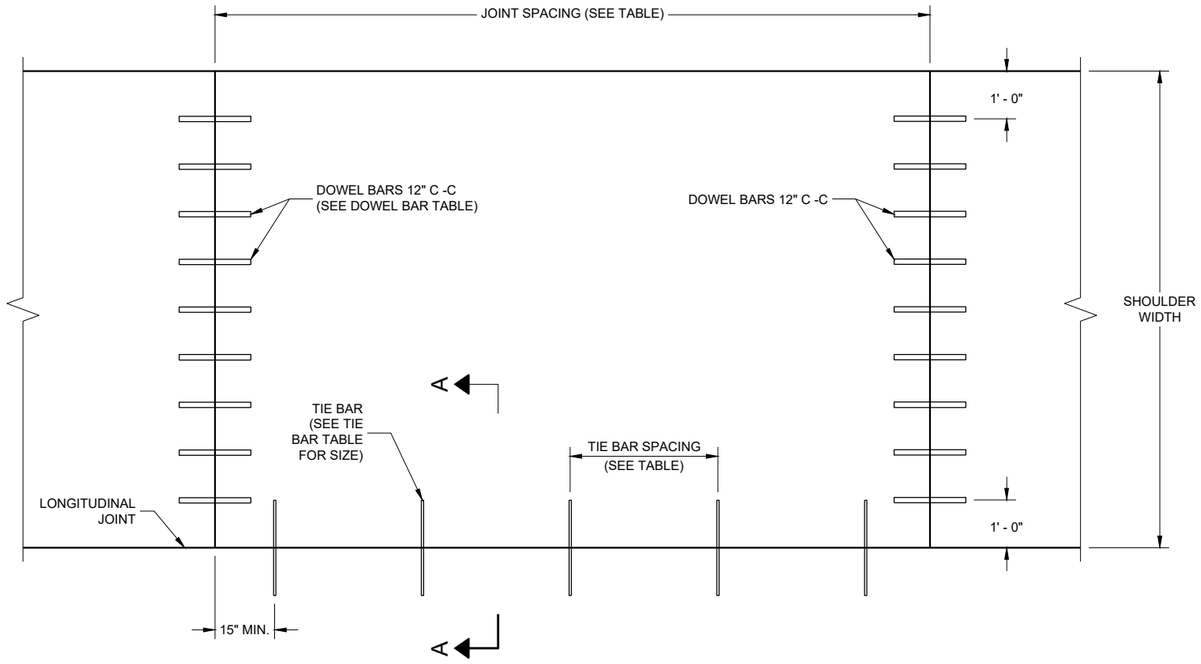
TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 235
FHWA



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

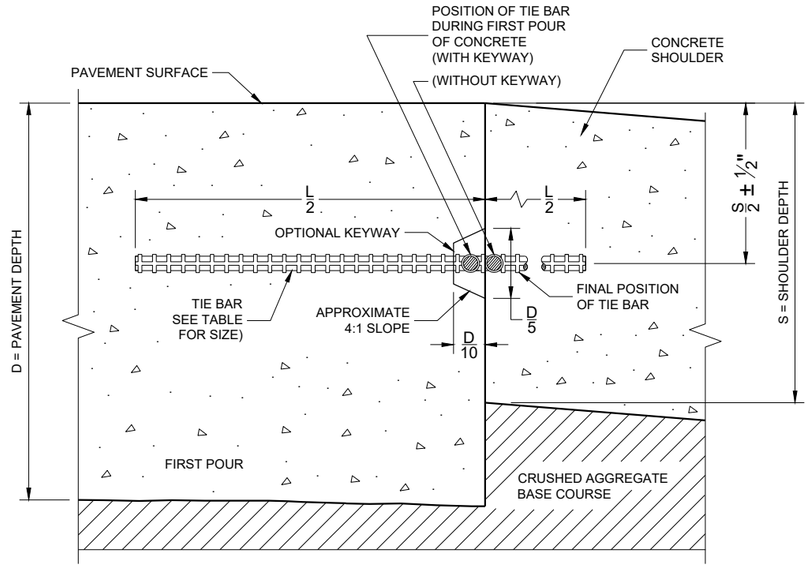
GENERAL NOTES

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

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A - A

LONGITUDINAL CONSTRUCTION JOINT

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 BATS 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 ***	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12"
7", 7 ½"	1"	14"
8" & ABOVE	1 ¼"	15"

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FRO THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp
PAVEMENT SUPERVISOR

FHWA

6

SDD 13A03 - 07

6

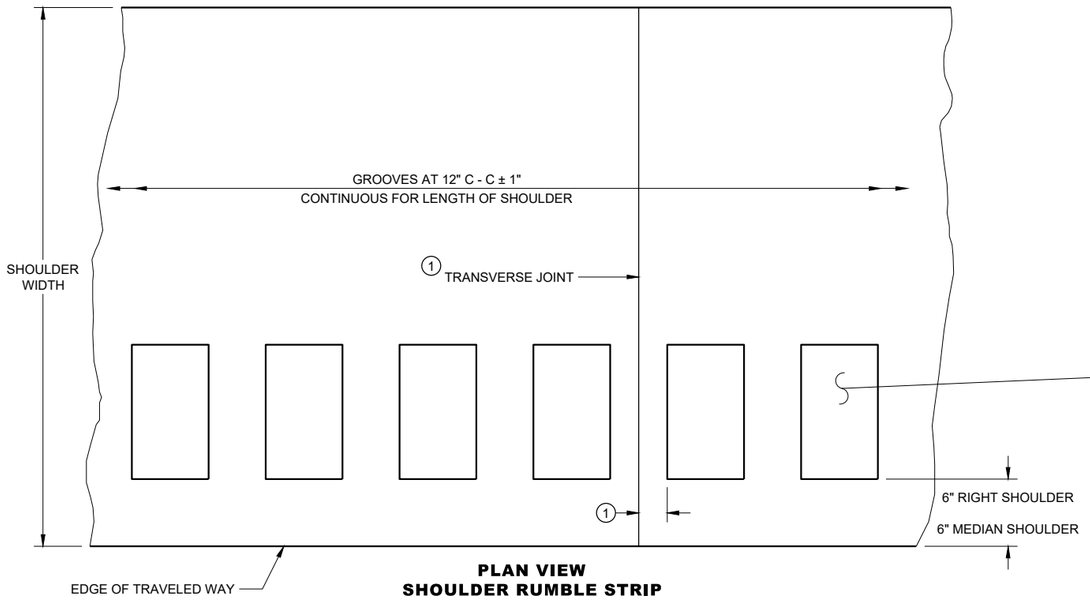
SDD 13A03 - 07

GENERAL NOTES

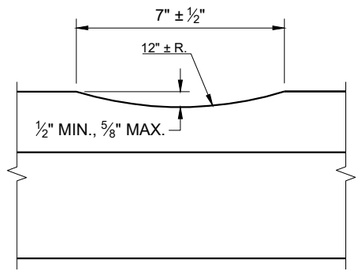
SDD 13A5, SHEET "b" SHOWS THE LOCATION OF THE RUMBLE STRIPS AT RAMP AND GORE LOCATIONS.

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.

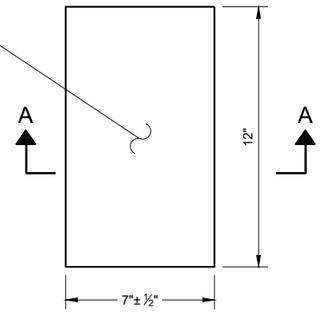
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES AWAY FROM TRANSVERSE JOINTS.



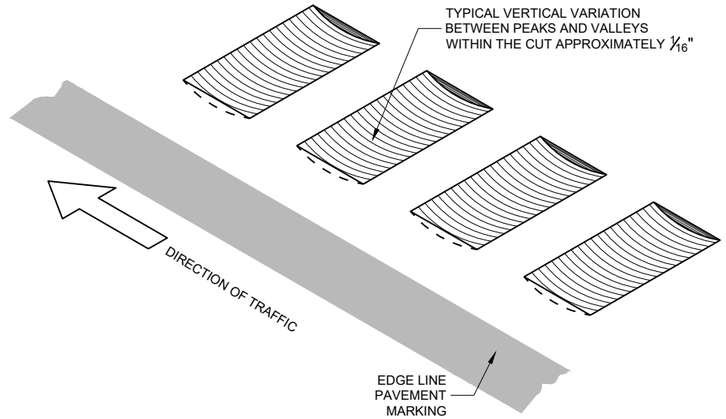
PLAN VIEW
SHOULDER RUMBLE STRIP



SECTION A - A

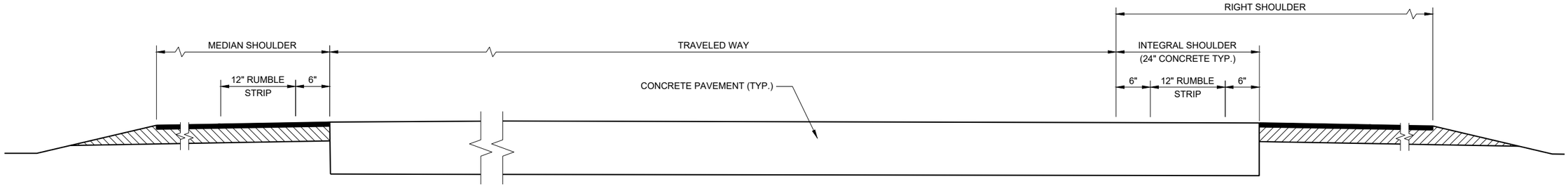


PLAN VIEW
(SINGLE GROOVE)



ISOMETRIC

PLACEMENT DETAIL FOR RUMBLE STRIP



SECTION VIEW

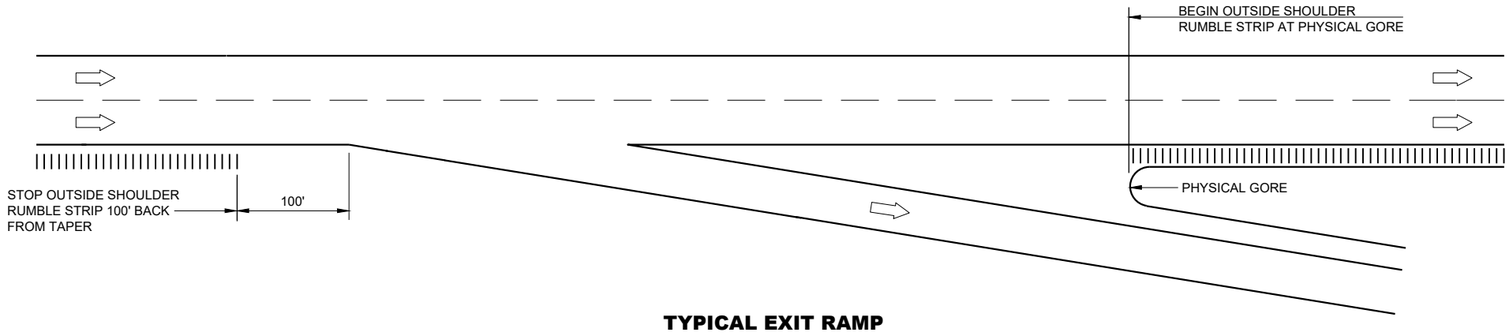
TYPICAL SHOULDER RUMBLE STRIPS
(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

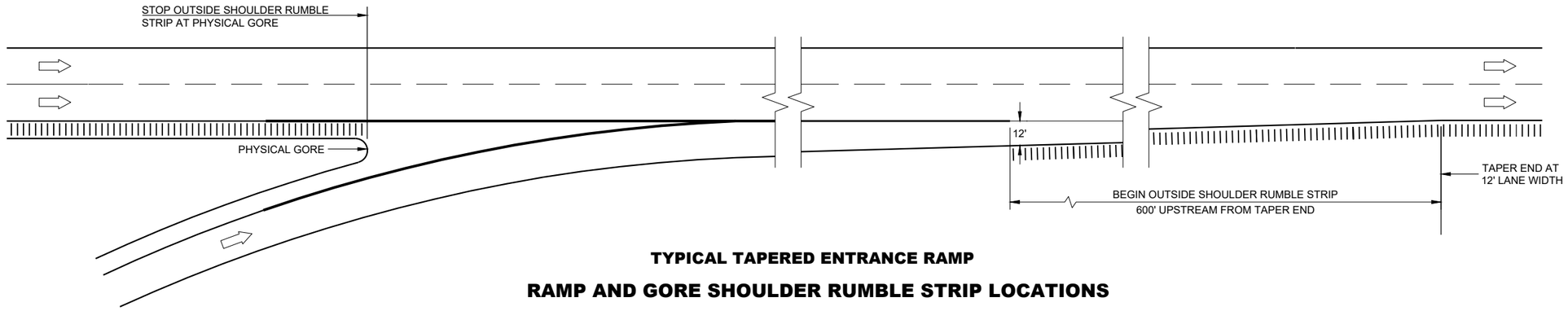
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A05-06a

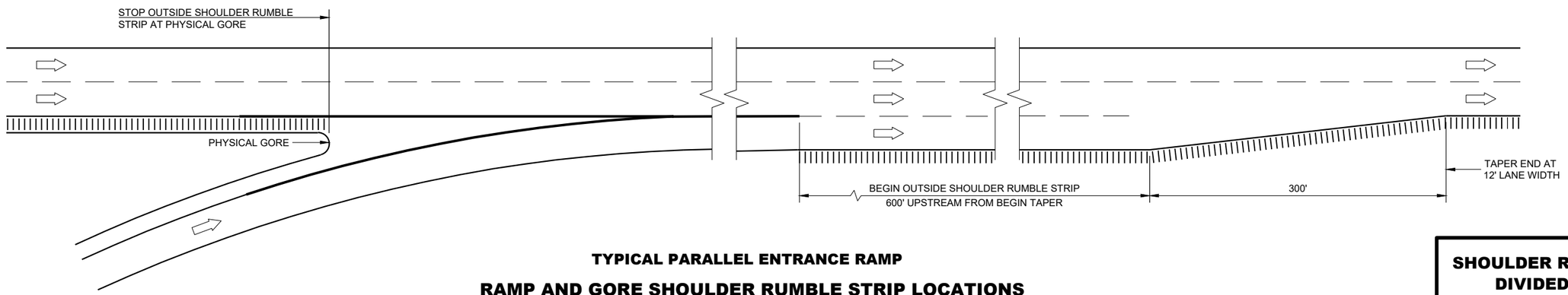


TYPICAL EXIT RAMP



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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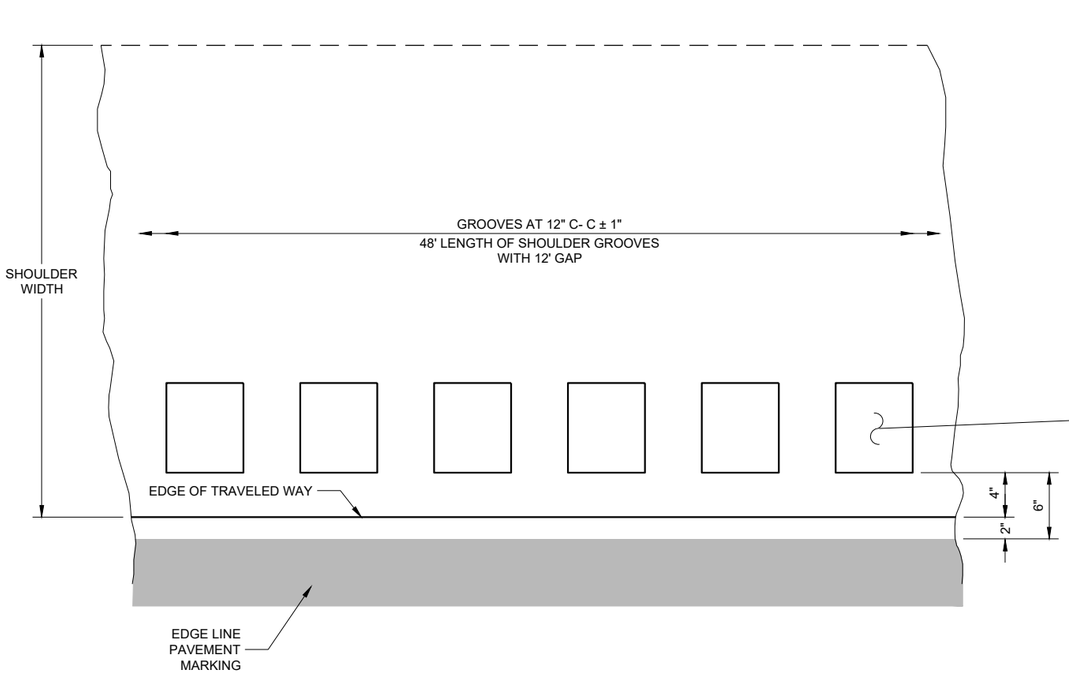
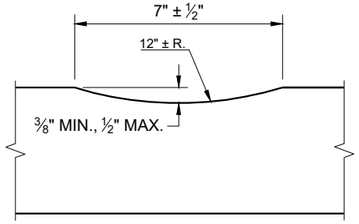
SDD 13A05-06b

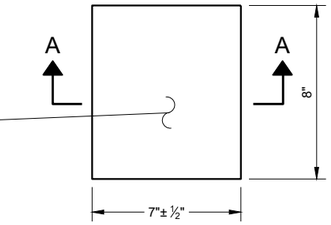
SDD 13A05-06b



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

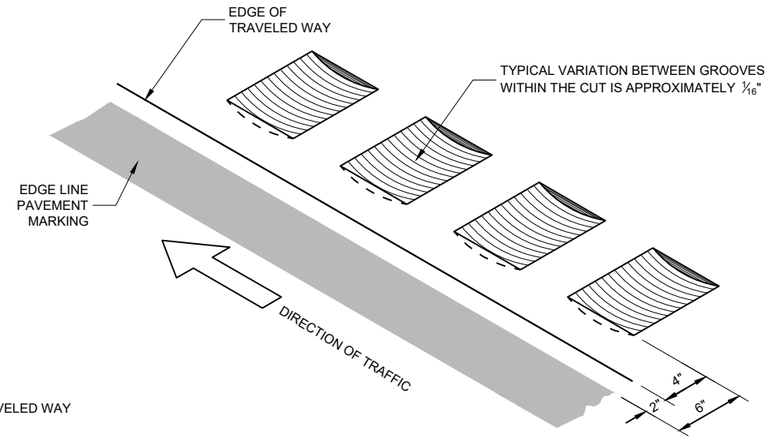


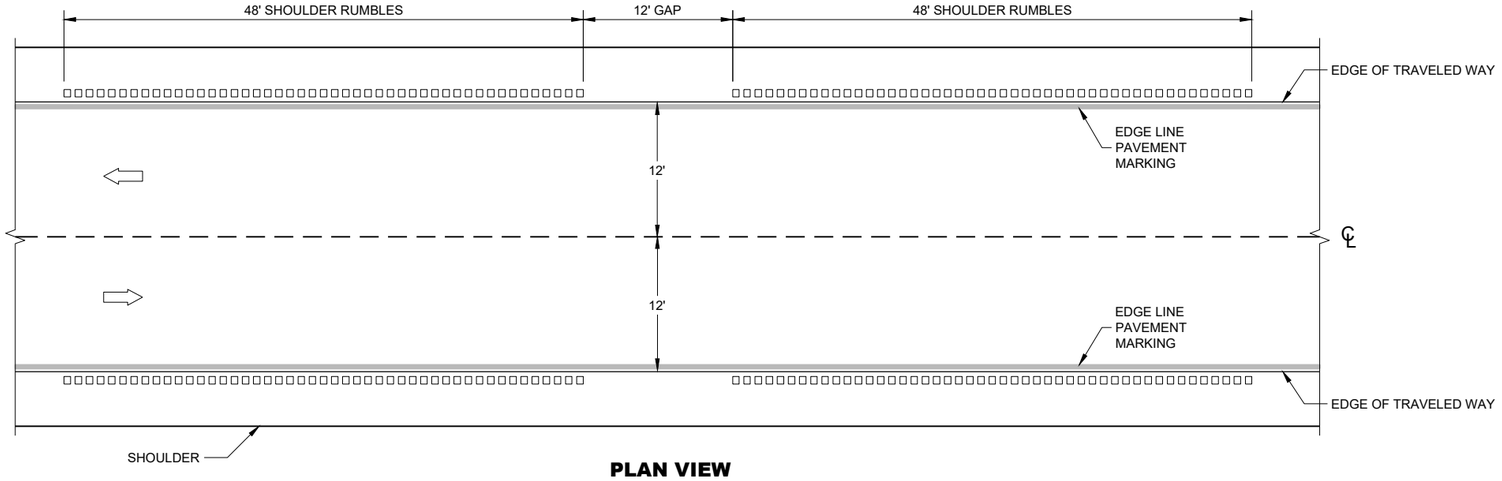
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.





PLAN VIEW

SHOULDER RUMBLE STRIPS - ASPHALT

6

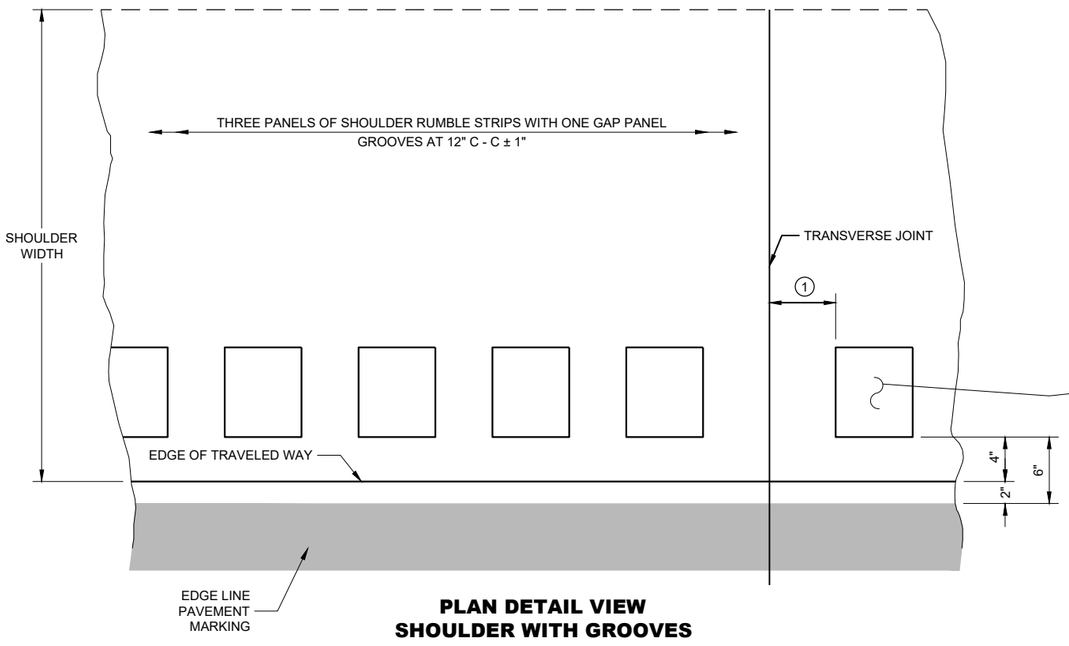
SDD 13A10 - 03a

SHOULDER RUMBLE STRIPS ASPHALT

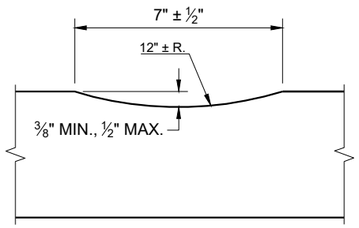
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

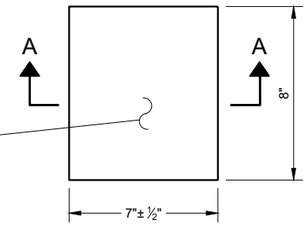
SDD 13A10 - 03a



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A



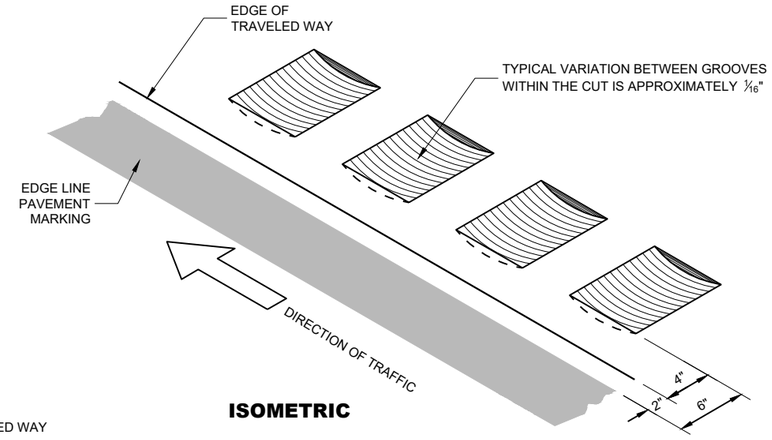
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.

(1) FOR CONCRETE PAVEMENTS, RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES FROM TRANSVERSE JOINTS.



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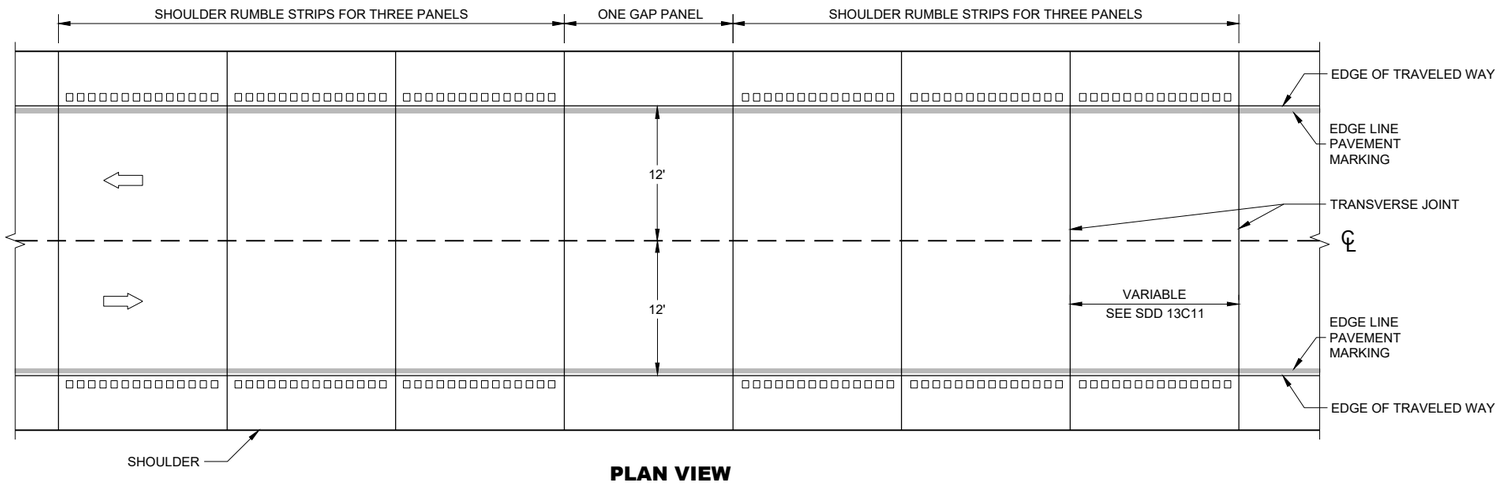

PLAN VIEW

SHOULDER RUMBLE STRIPS - CONCRETE

6

SDD 13A10 - 03b

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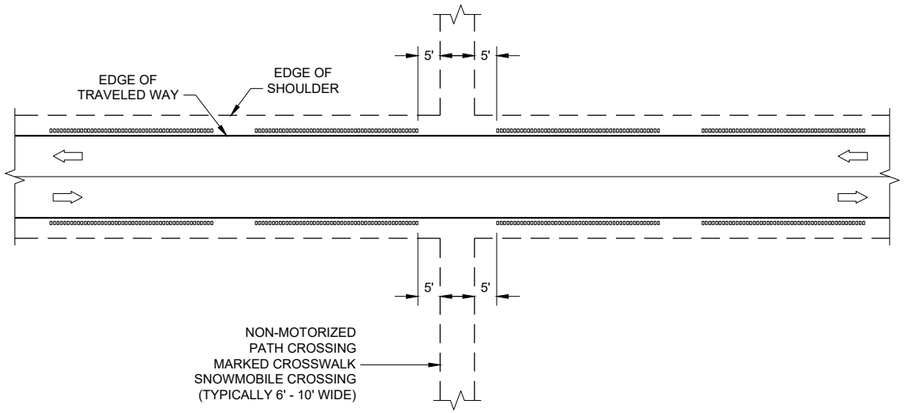
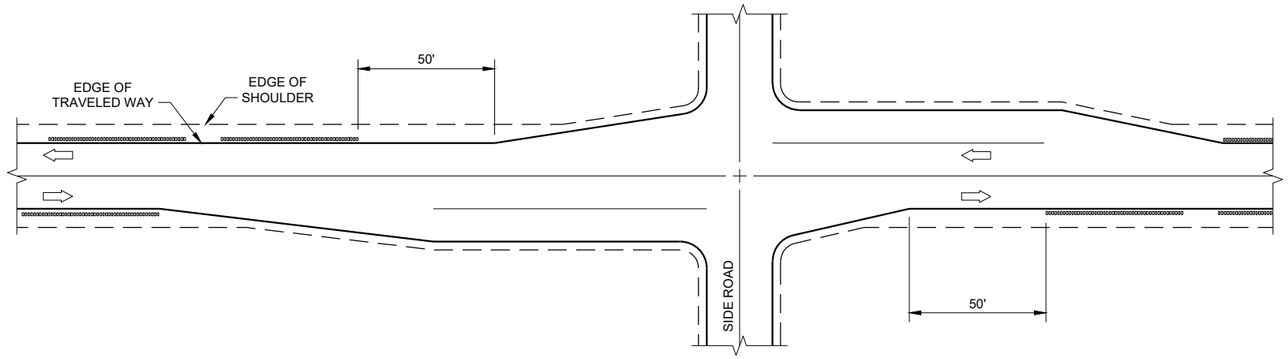
SDD 13A10 - 03b

SHOULDER RUMBLE STRIPS - CONCRETE

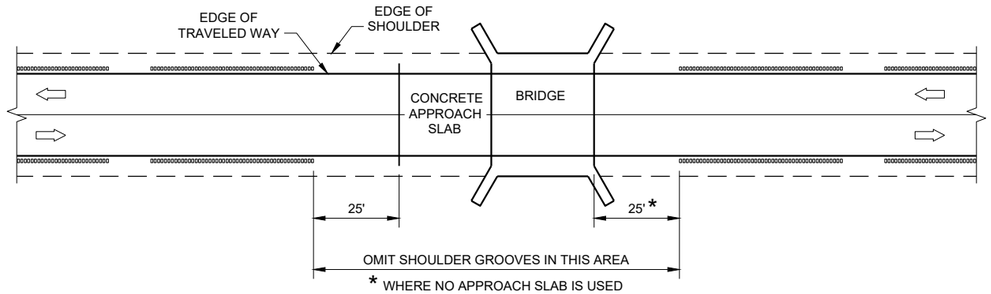
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



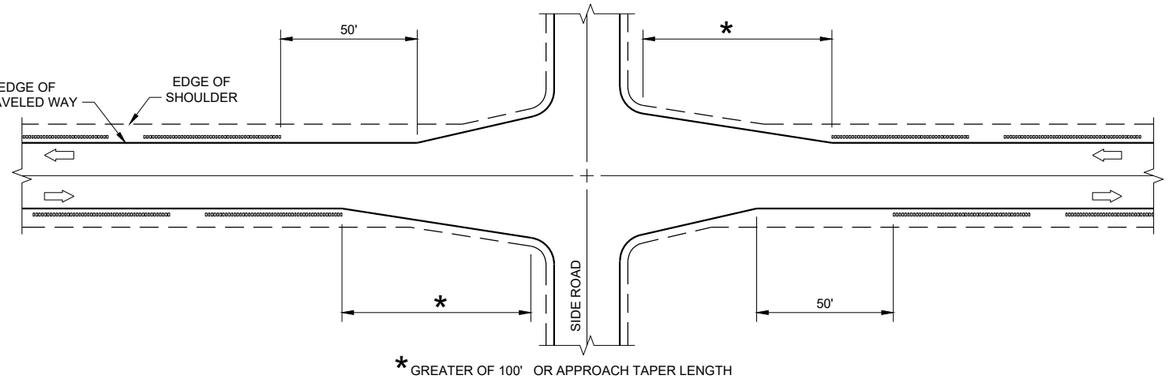
GROOVES AT MISCELLANEOUS CROSSINGS



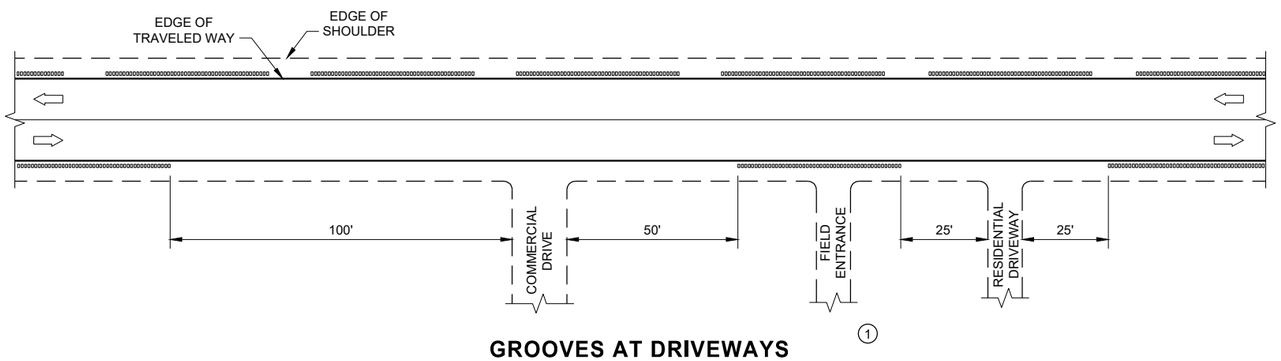
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

GENERAL NOTES

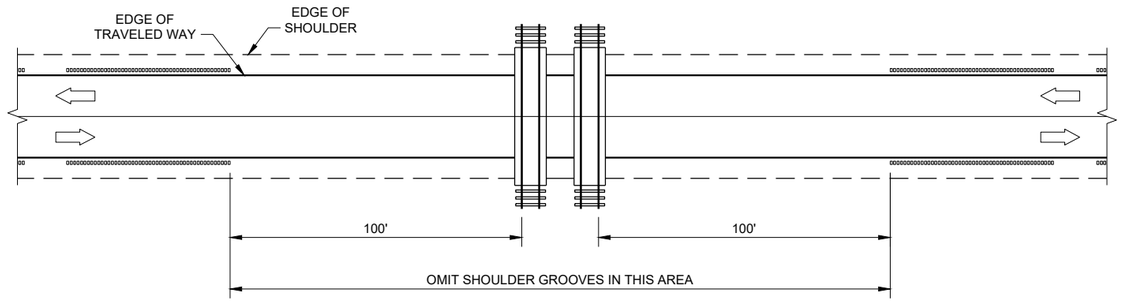
① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

SHOULDER AND EDGE LINE RUMBLE STRIPS CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS

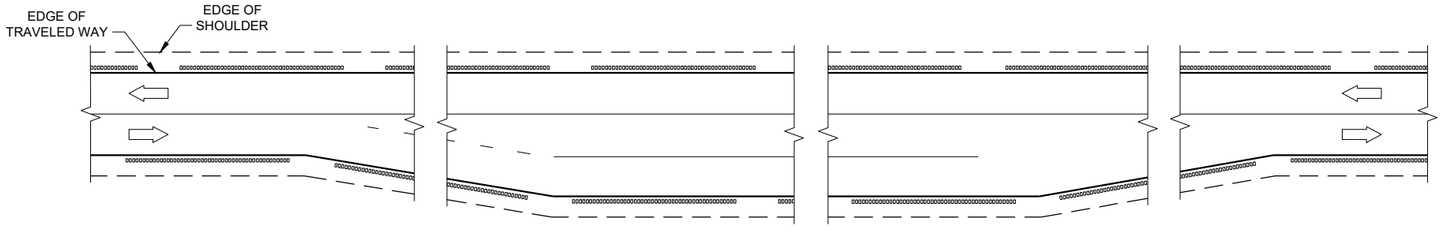
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

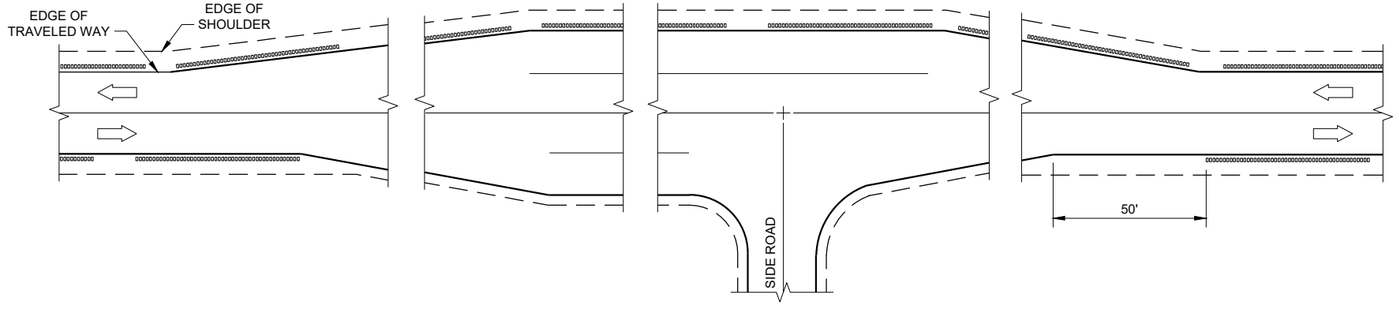
SDD 13A10 - 03g



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

6

SDD 13A10 - 03h

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

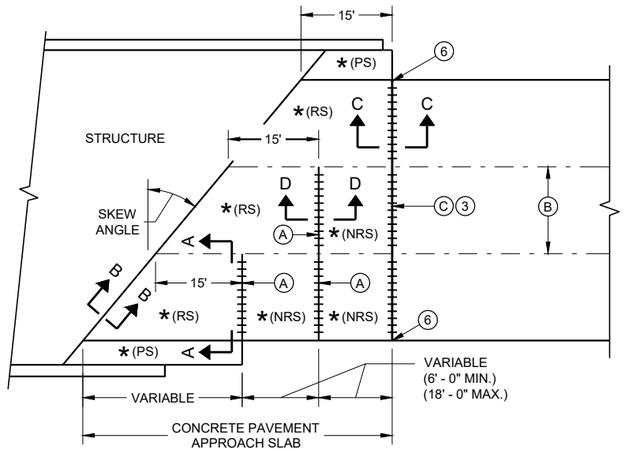
May 2023
DATE

/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

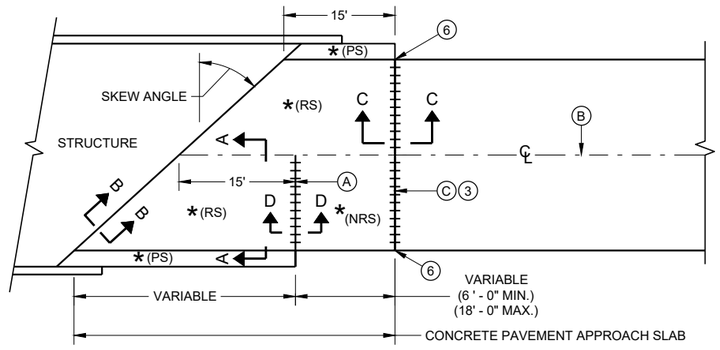
FHWA

6

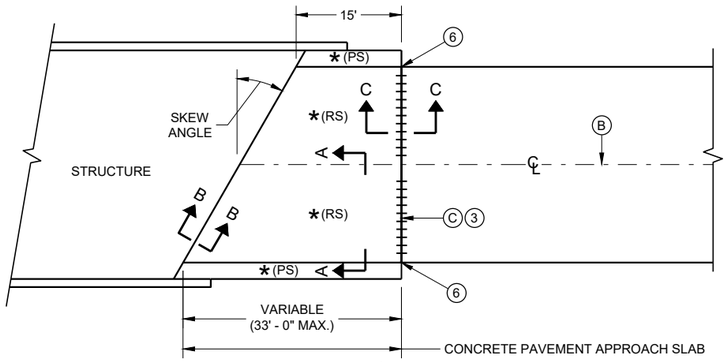
SDD 13A10 - 03h



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

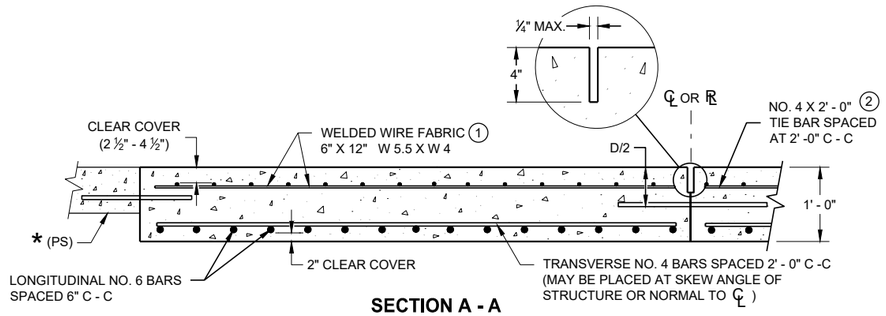
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

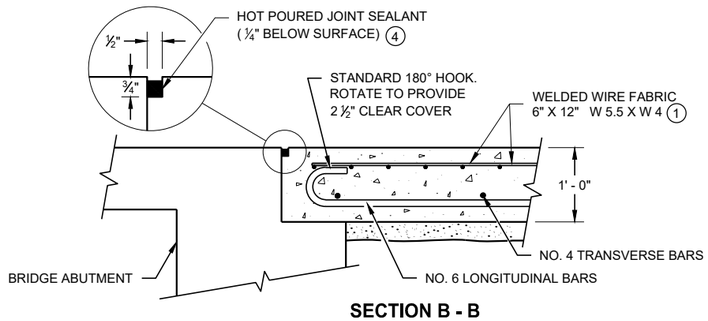
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

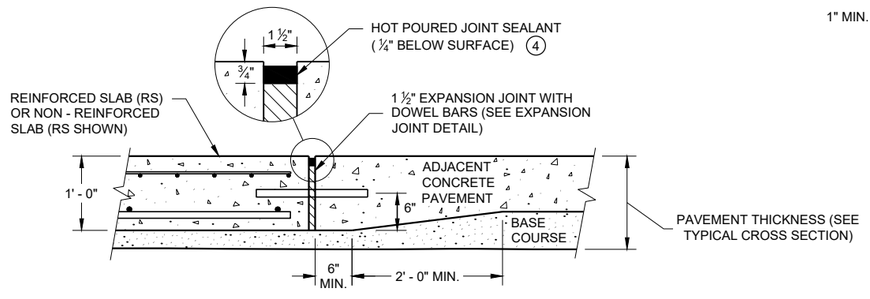
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



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.

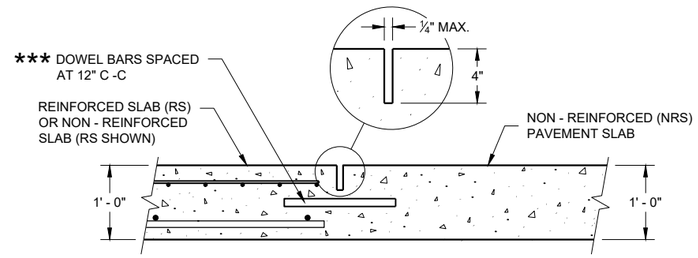
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

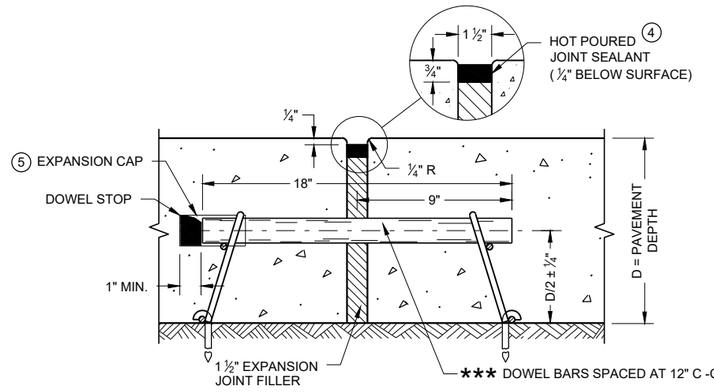
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(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 SUPERVISO

FHWA

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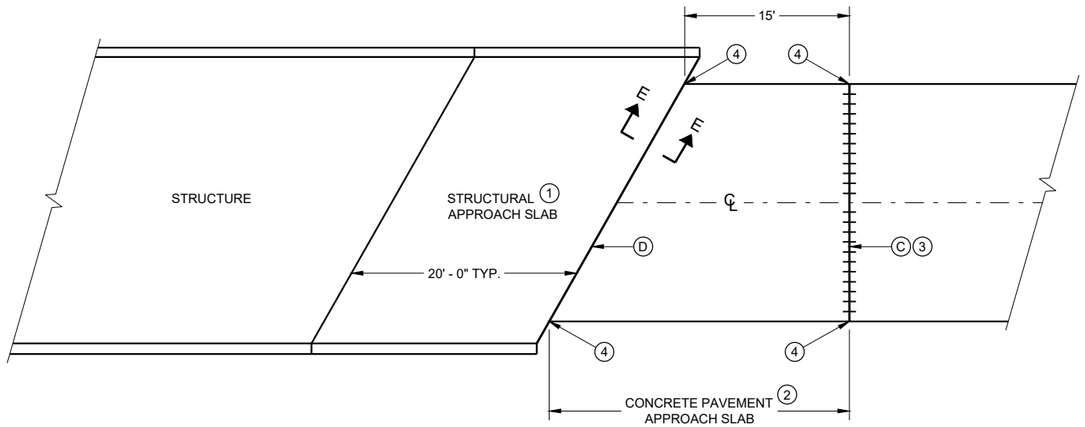
SDD 13B02 - 09a



BRIDGE APPROACHES

GENERAL NOTES

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

(1) SEE BRIDGE PLAN.

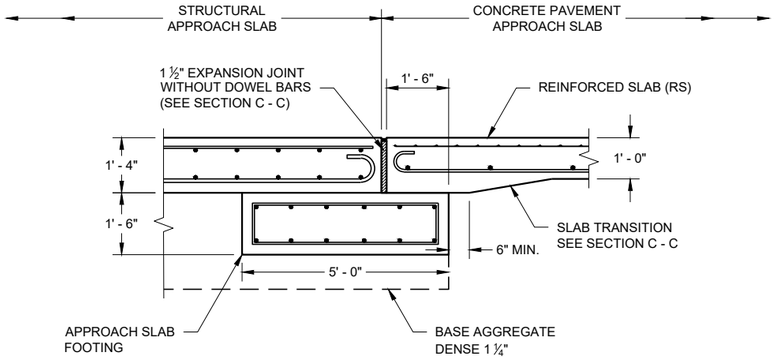
(2) CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS

(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

FHWA

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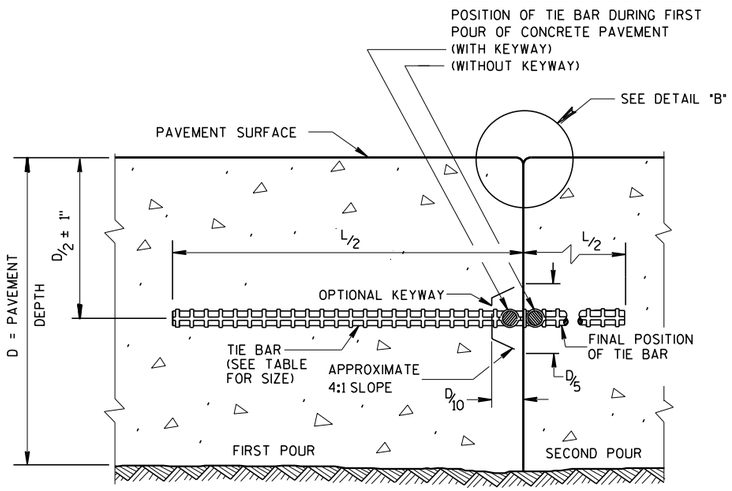
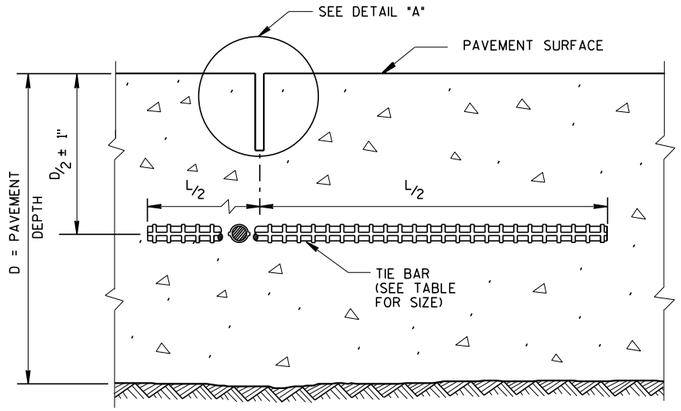
SDD 13B02 - 09b



CONSTRUCTION JOINT



SAWED JOINT

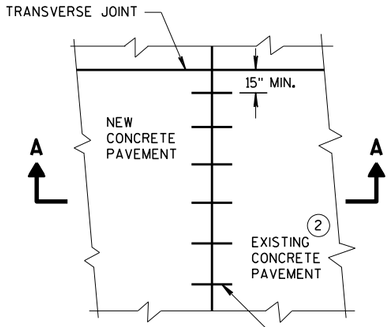
GENERAL NOTES

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

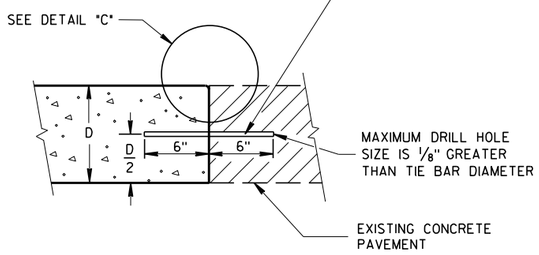
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

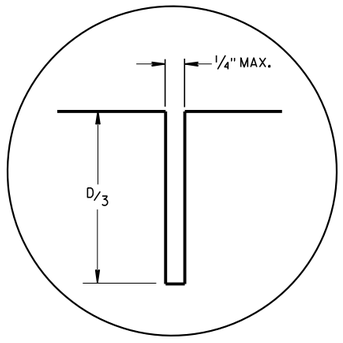


PLAN VIEW

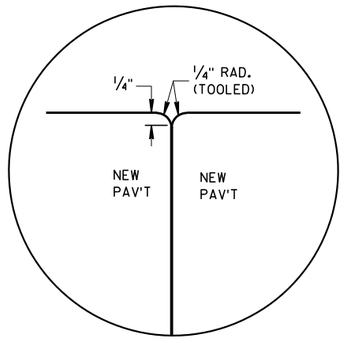


SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



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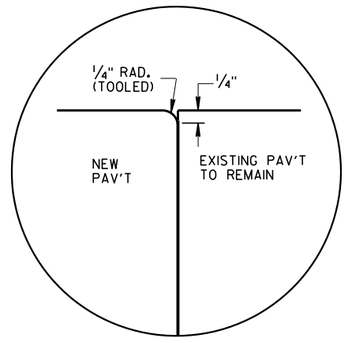


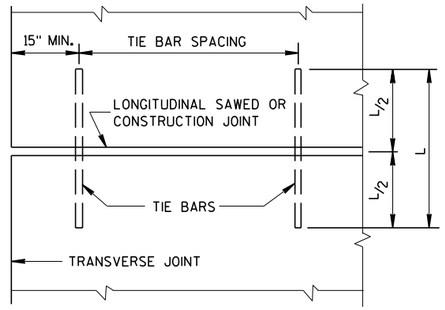
DETAIL "C"

TIE BAR TABLE

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

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

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

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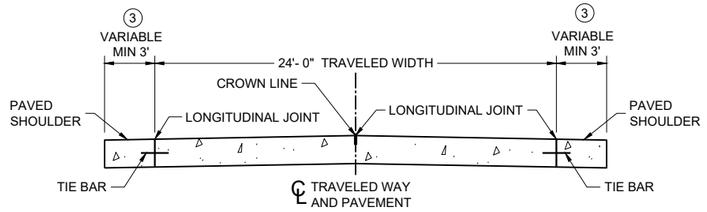
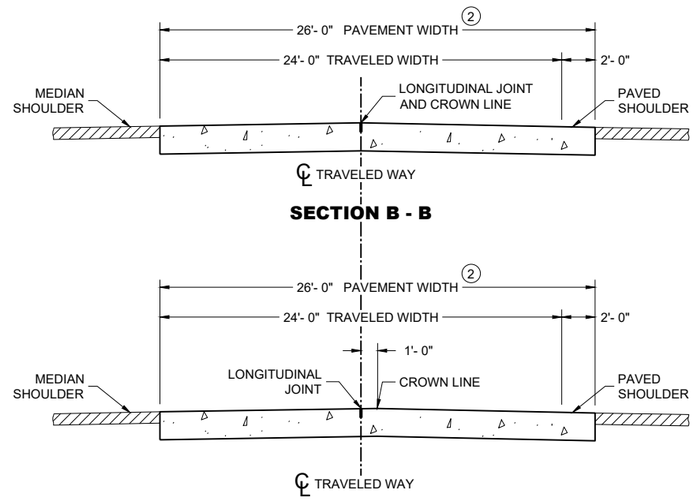
S.D.D. 13 C 1-19



SECTION A - A

TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B - B

ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY (1)

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

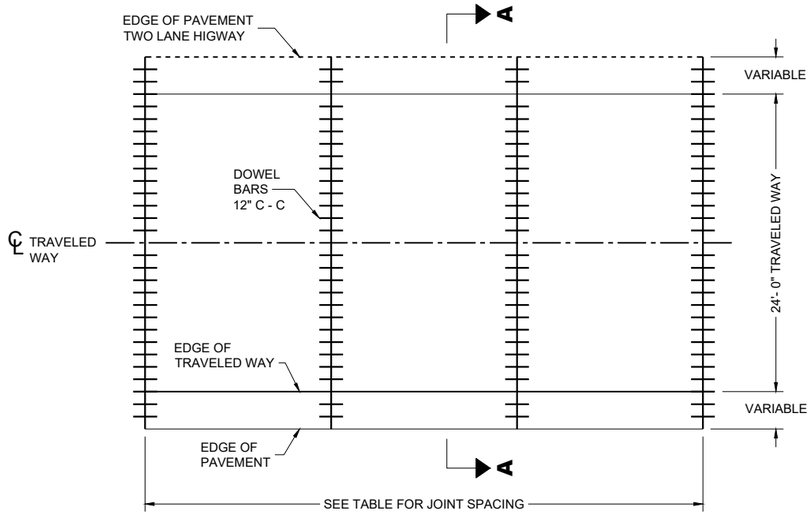
(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

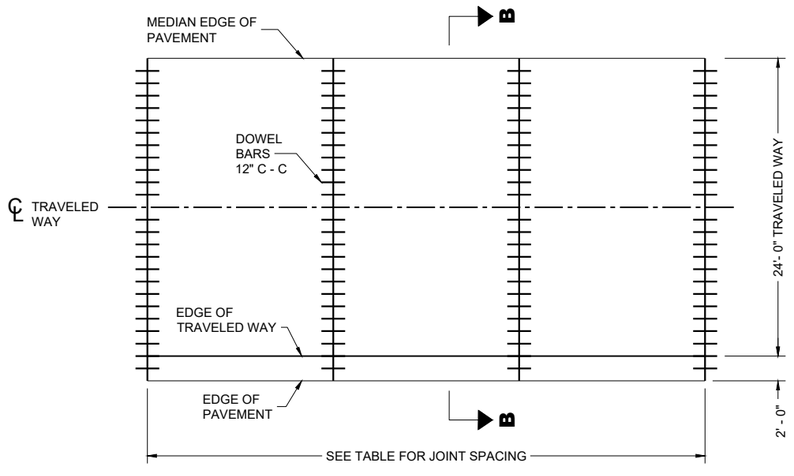
(3) SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13C11-15a

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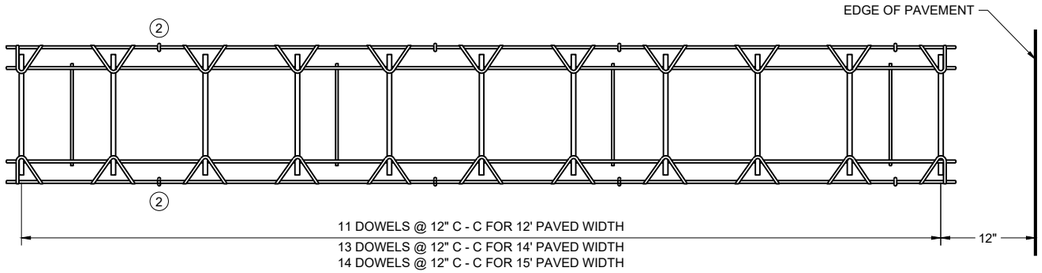


PLAN VIEW

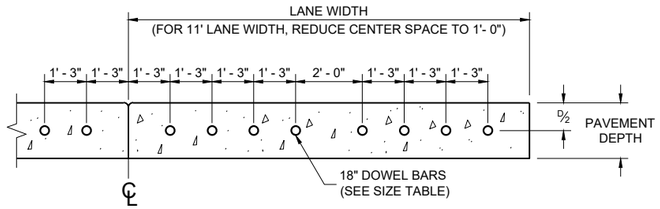
SIDE VIEW

(NORMAL TO CENTERLINE)

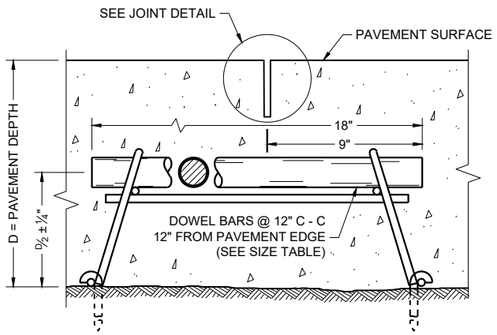
CONTRACTION JOINT DOWEL ASSEMBLY (1)

GENERAL NOTES

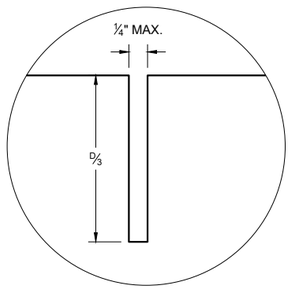
1. OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
2. SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
3. FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.
4. PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
5. INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.
6. APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
7. ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



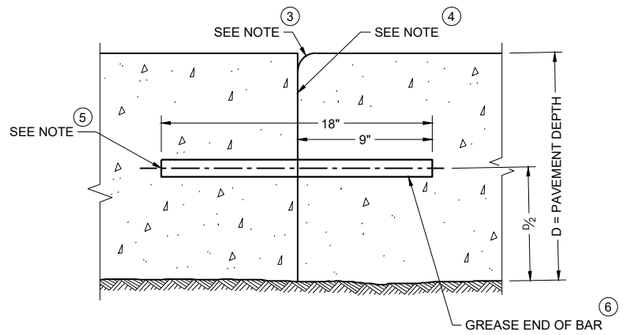
DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



DOWELED CONTRACTION JOINT



JOINT DETAIL



TRANSVERSE CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVISOR

FHWA

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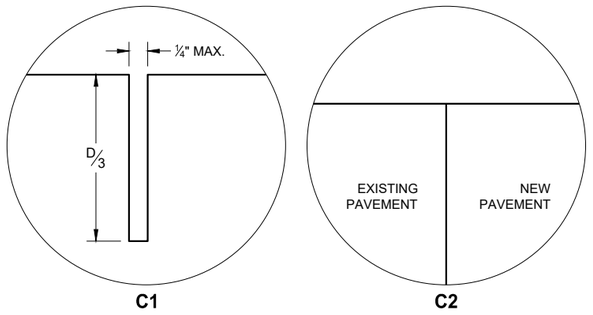
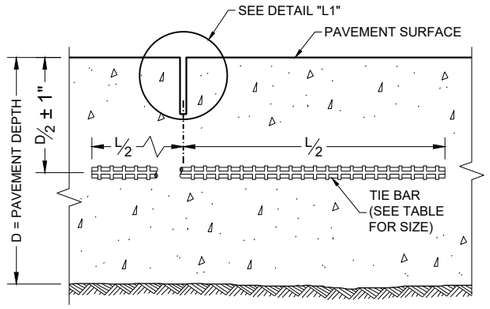
SDD 13C11-15b

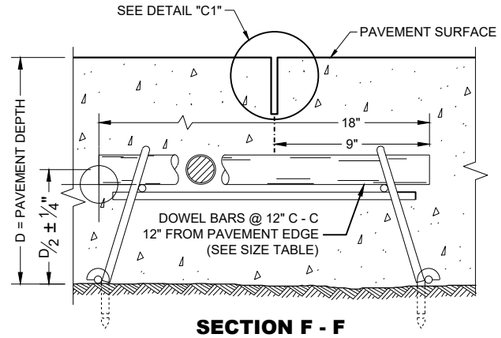
SDD 13C11-15b



TRANSVERSE JOINTS



SECTION C - C
SAWED JOINT



SECTION F - F
CONTRACTION JOINT

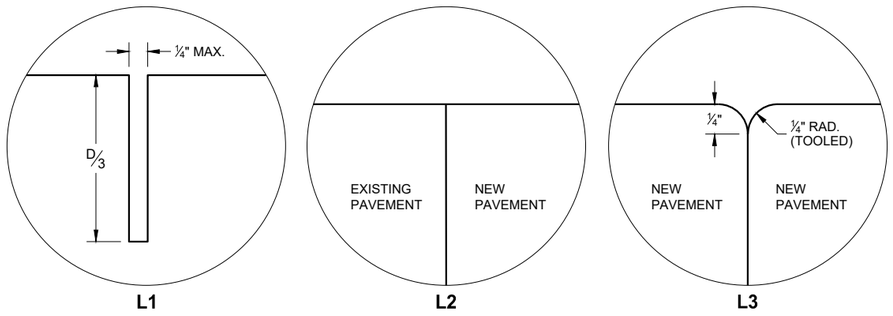
GENERAL NOTES

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

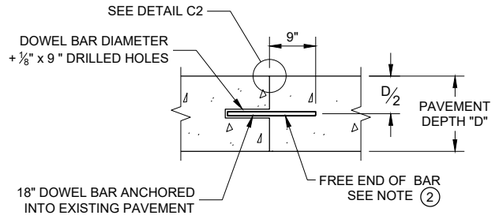
PROVIDE A MIMIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

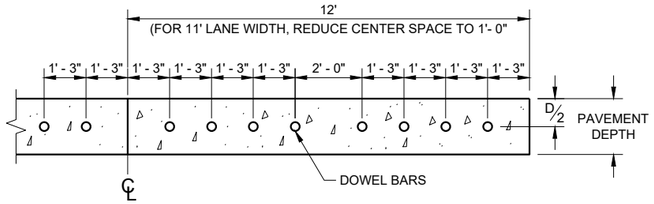
(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



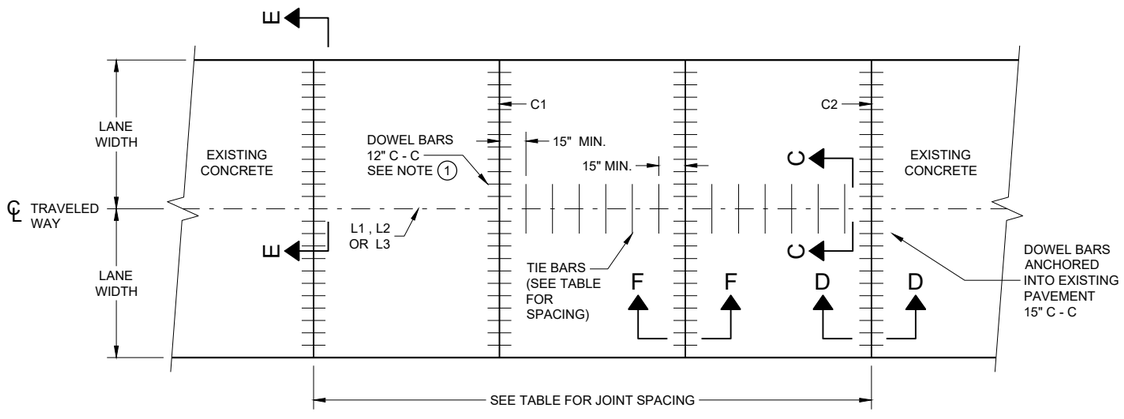
LONGITUDINAL JOINTS



SECTION D - D



SECTION E - E
SPACING OF DOWEL BARS
ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW
CONCRETE BASE
CONTRACTION JOINT LOCATIONS

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	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'

CONCRETE BASE

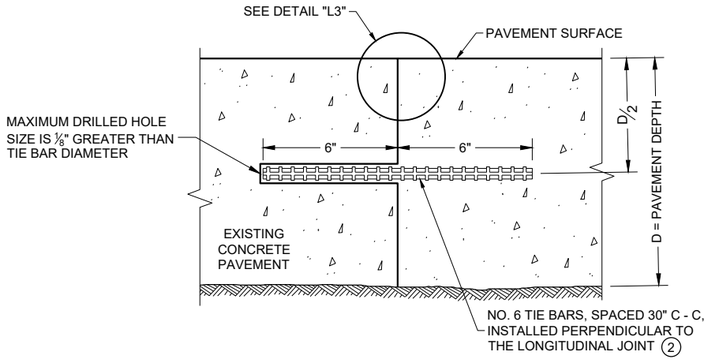
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C15 - 08a

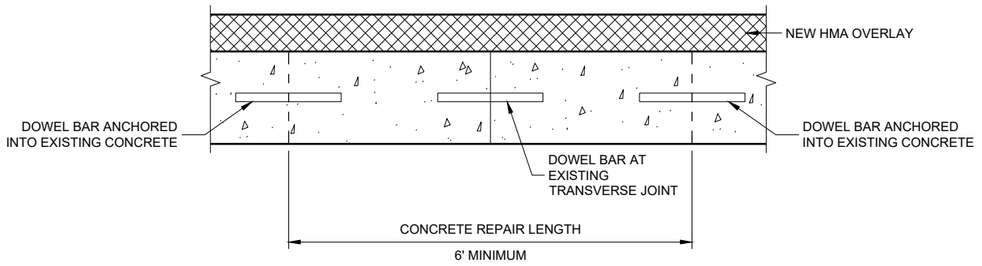
GENERAL NOTES

1. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.
2. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
3. PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

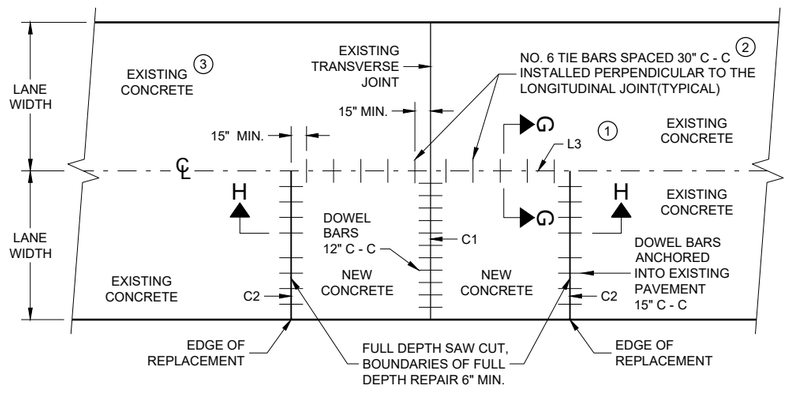


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H - H



PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

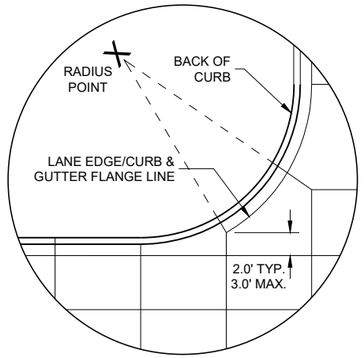
APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

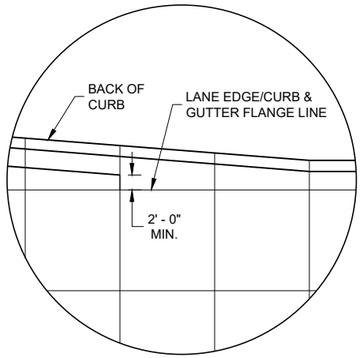
FHWA

6

SDD 13C15 - 08b
SDD 13C15 - 08b



DETAIL "A"



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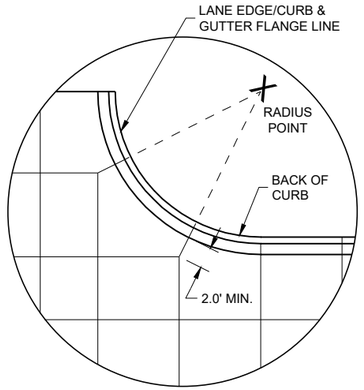

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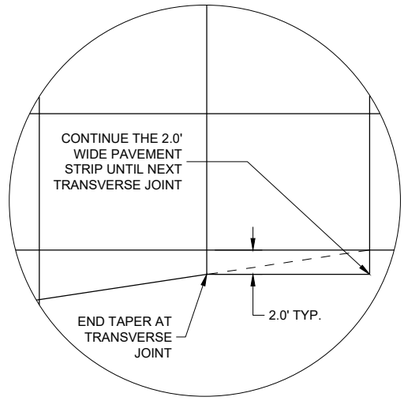


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

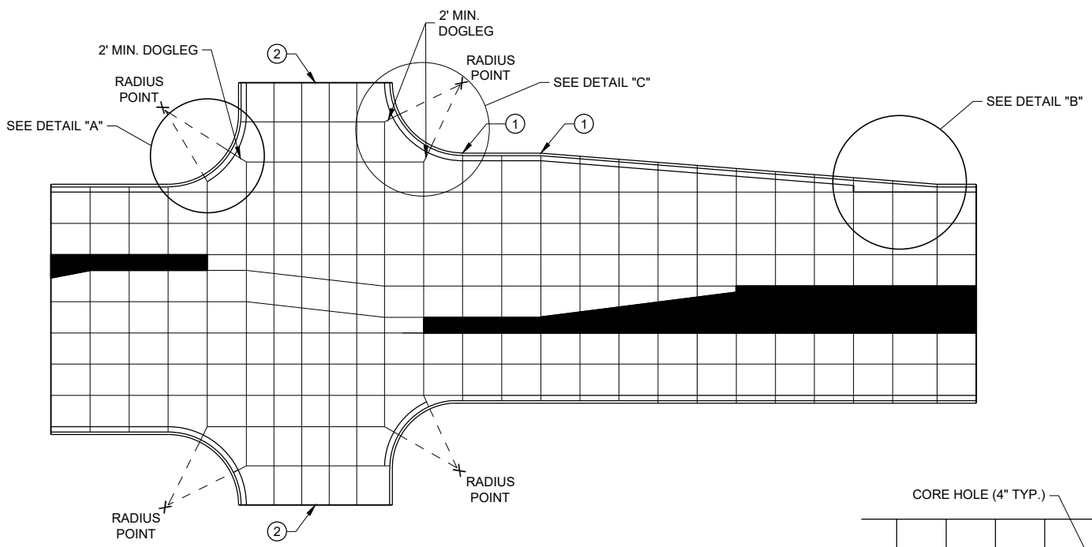
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

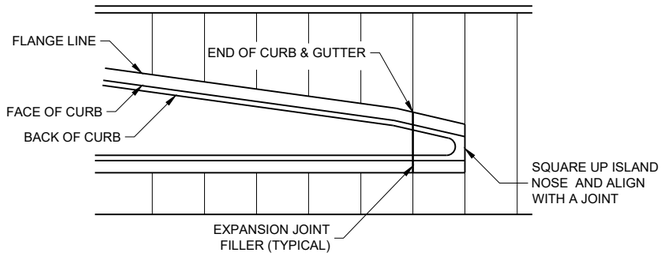
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



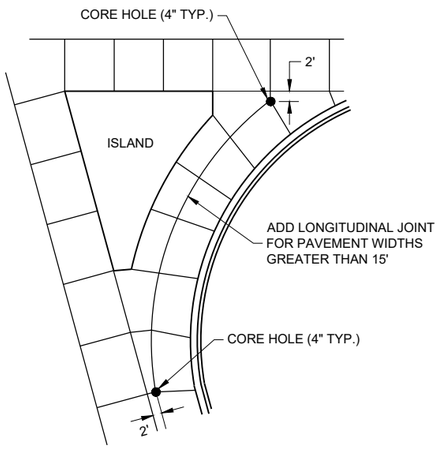
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

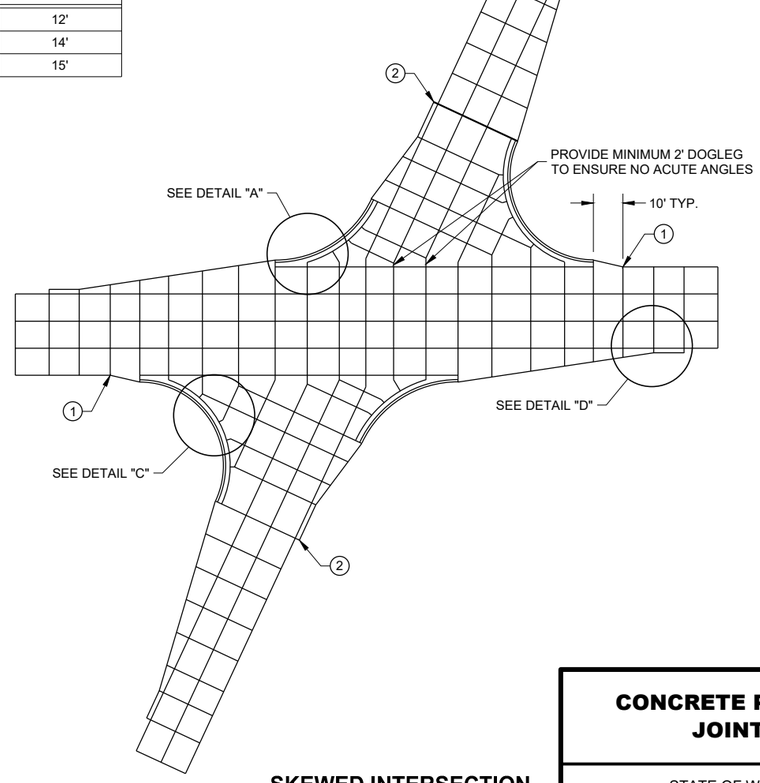
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

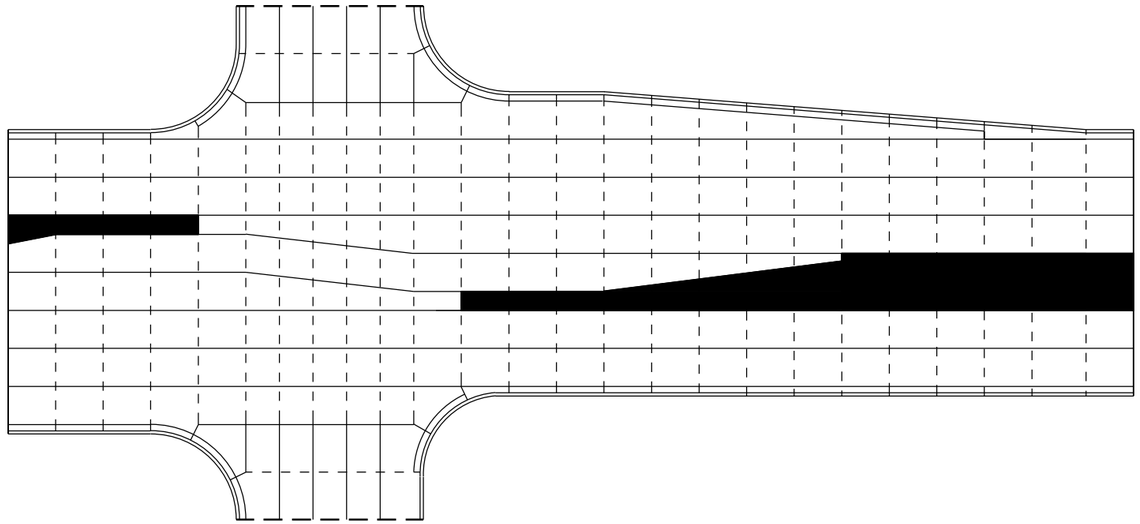
SDD 13C18 - 08a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

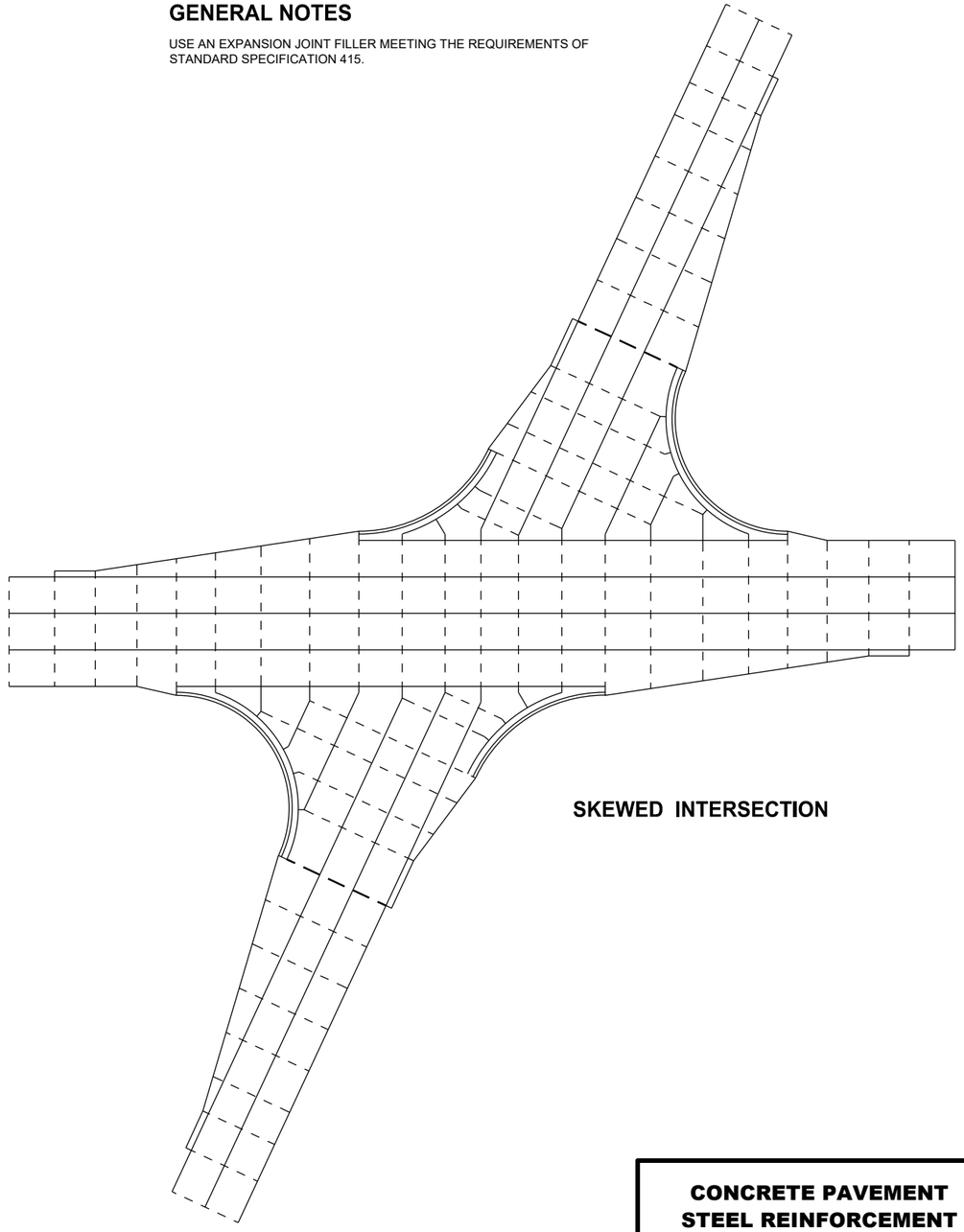
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

6

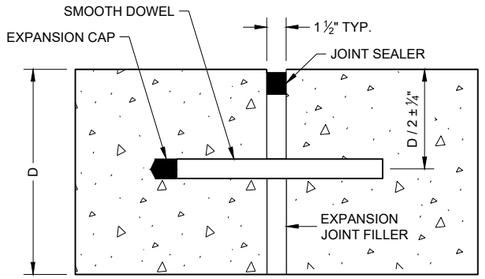
SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

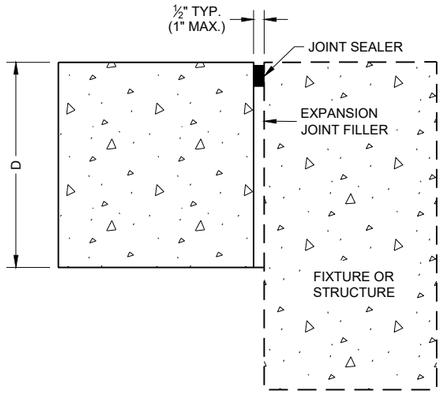
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

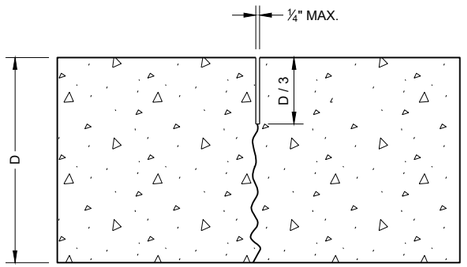
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

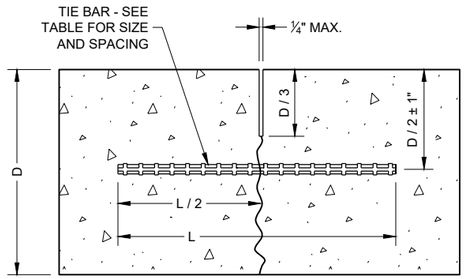
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

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



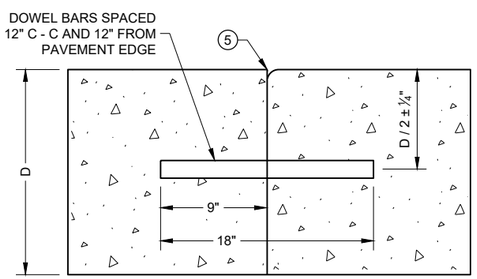
UNDOWELED TRANSVERSE



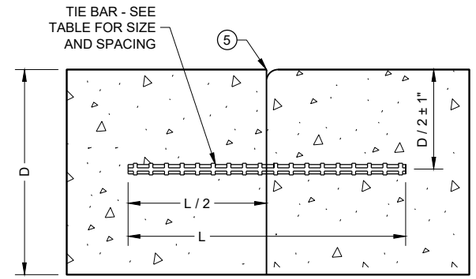
TIED LONGITUDINAL

DOWELED TRANSVERSE

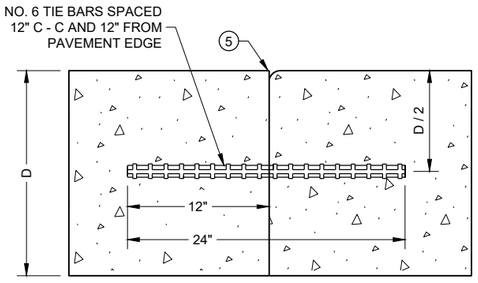
CONTRACTION JOINTS (2)



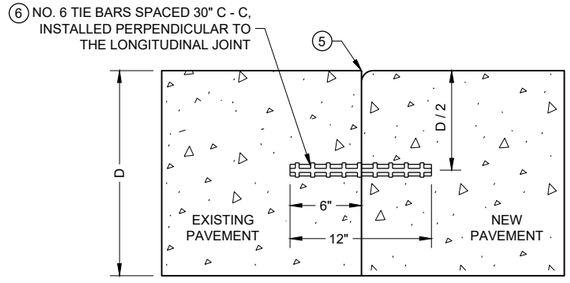
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



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



TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13C18 - 08c

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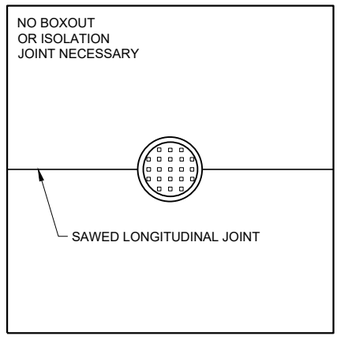
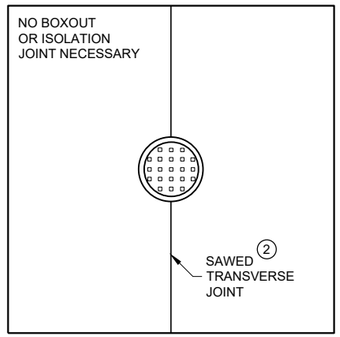
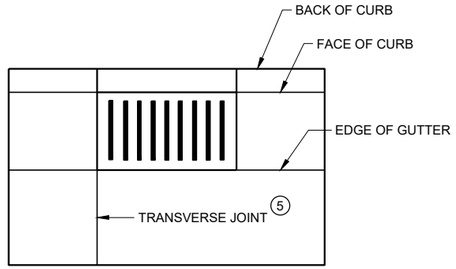


MANHOLE WITH LONGITUDINAL JOINT



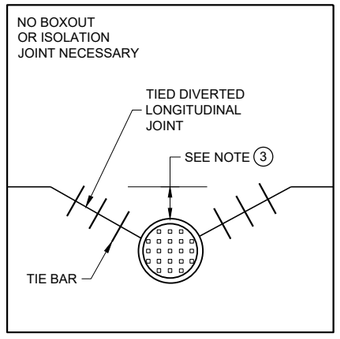
MANHOLE WITH TRANSVERSE JOINT



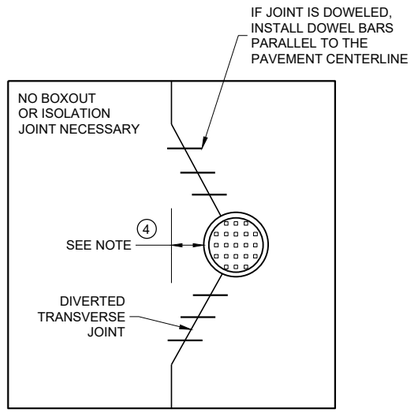
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

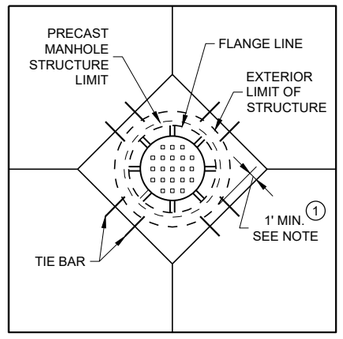
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF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



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISO

FHWA

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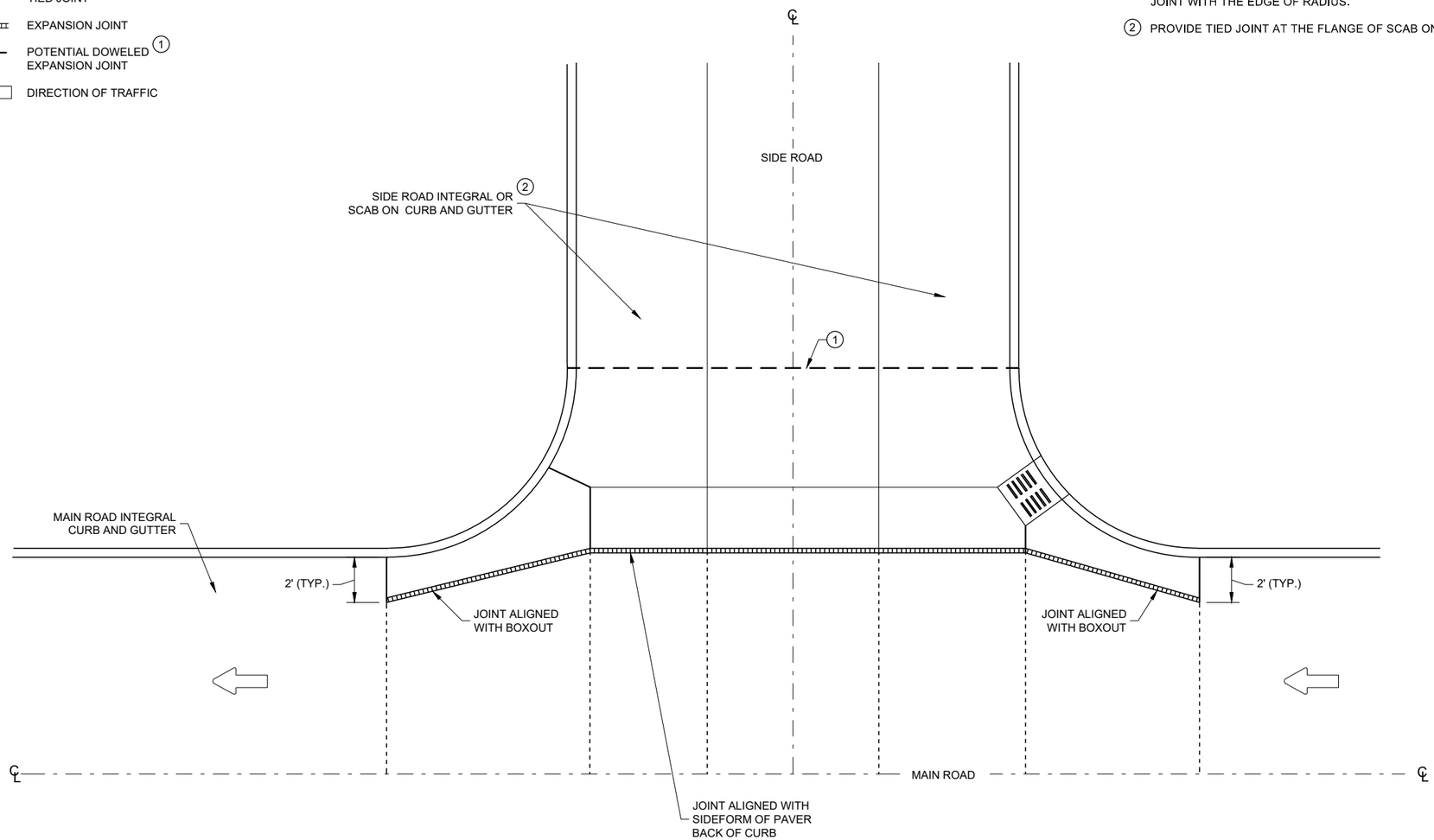
SDD13C18 - 08d

LEGEND

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



GENERAL NOTES

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

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

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

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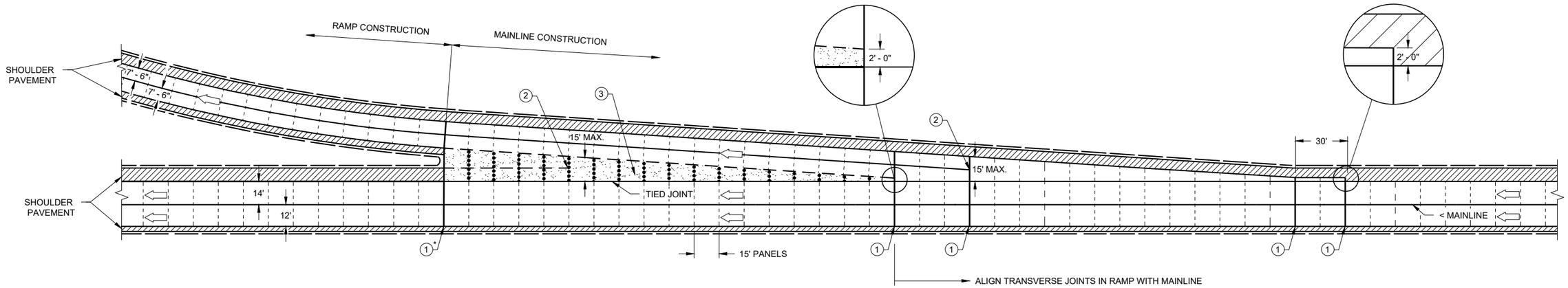
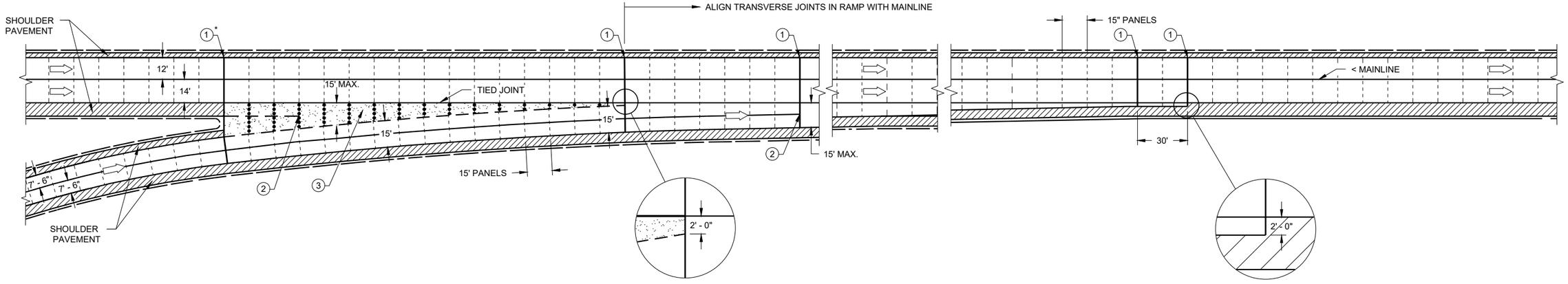


DECELERATION LANE



ACCELERATION LANE

GENERAL NOTES

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

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

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

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

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

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

LEGEND

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

CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Peter Kemp P.E.
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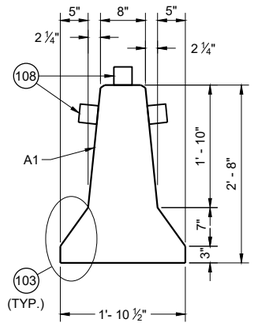
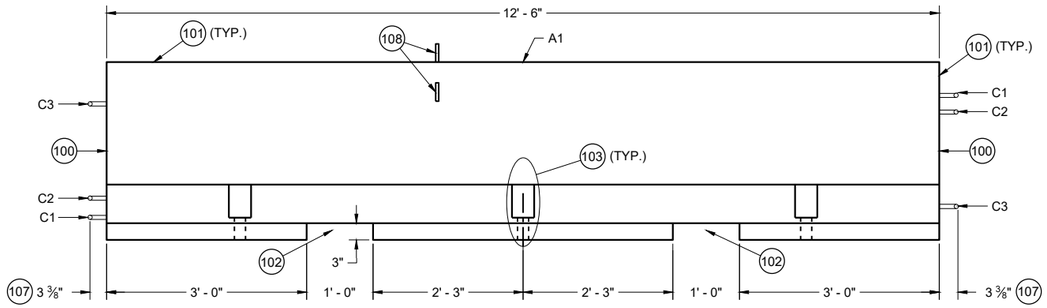


CROSS SECTION



PROFILE VIEW

GENERAL NOTES

PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

(100) PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
- A. TYPE OF BARRIER: WI-CBTP
- B. MANUFACTURER
- C. DATE OF MANUFACTURE (MONTH AND YEAR)

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

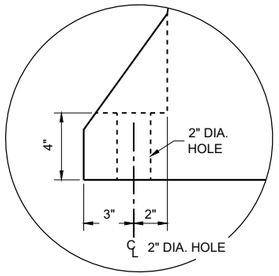
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

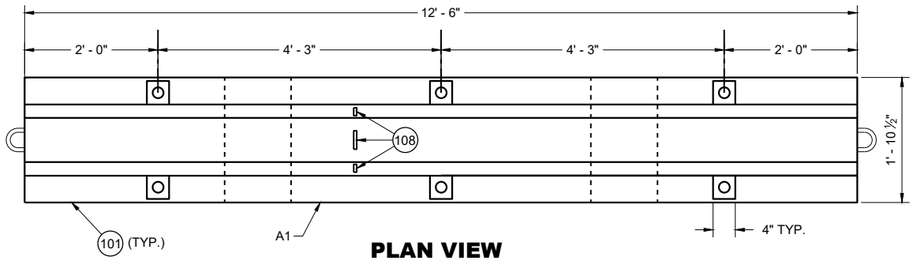
(106) 1" MIN. CLEAR COVER

(107) ± ⅛" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)

(108) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAT 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

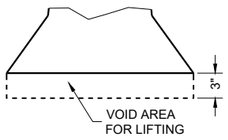


ANCHOR BLOCK DETAIL

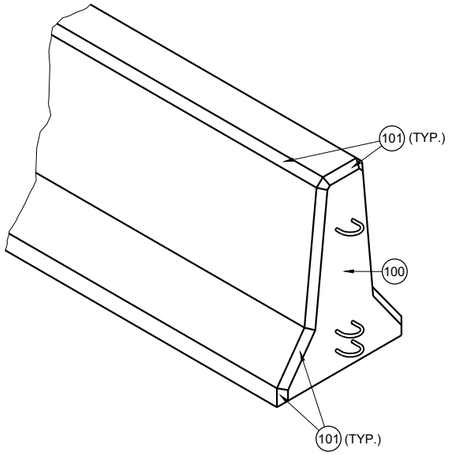


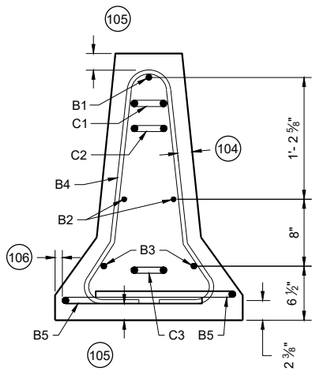
PLAN VIEW

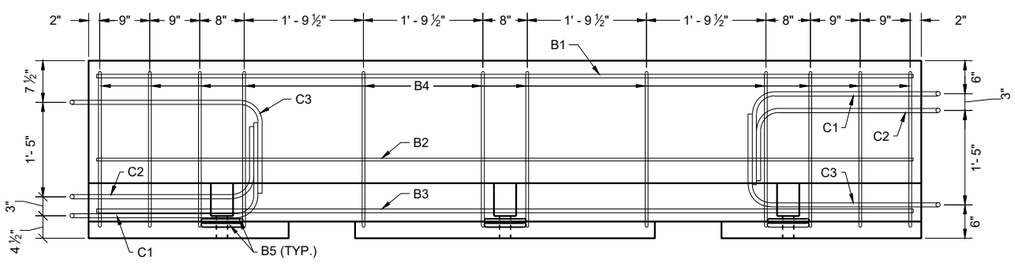
TEMPORARY BARRIER



LIFTING SLOT DETAIL (TYP.)







PROFILE VIEW

TEMPORARY BARRIER REINFORCEMENT

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B07-16a

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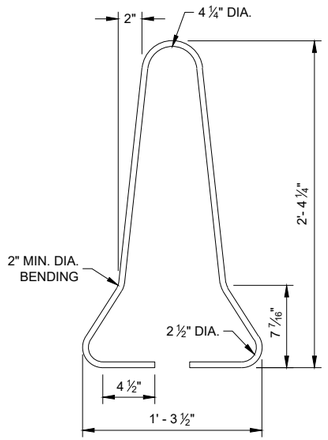
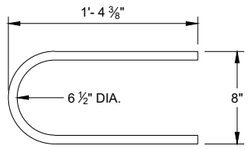
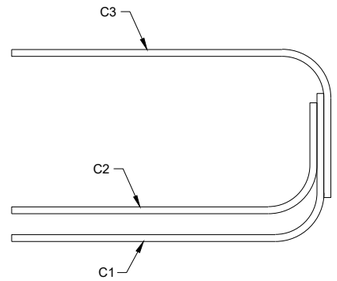
SDD 14B07-16a



B4 BAR DETAIL

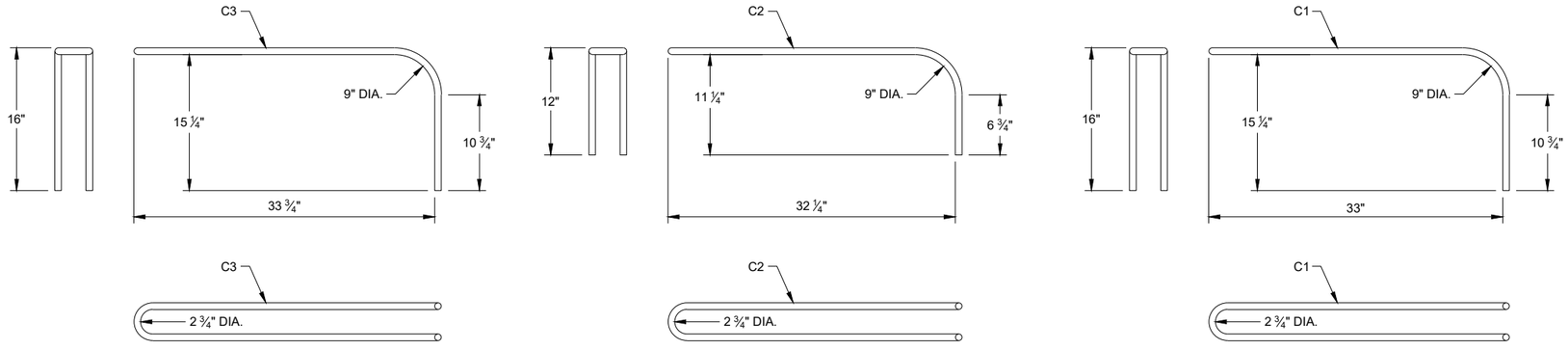


B5 BAR DETAIL



PROFILE VIEW

LOOP BAR ASSEMBLY



C BAR DETAILS

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SDD 14B07-16b

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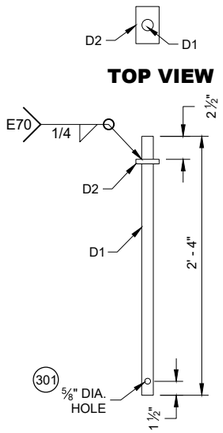
SDD 14B07-16b

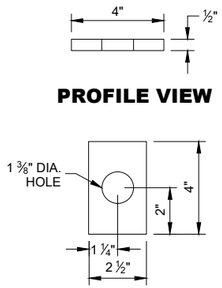
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"



TOP VIEW

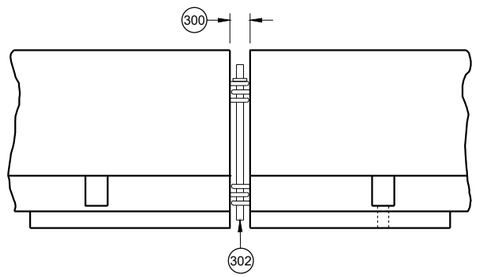
PROFILE VIEW

CONNECTOR PIN ASSEMBLY



PROFILE VIEW

TOP VIEW D2



CONNECTING TEMPORARY BARRIER SECTIONS

GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

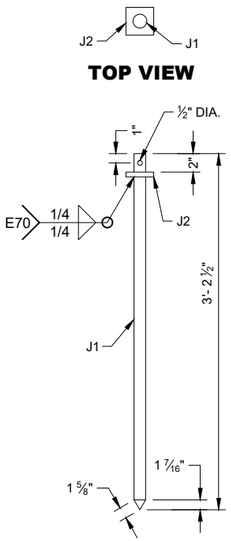
305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

306 MINIMUM OF 2" OF ASPHALT.

307 ASPHALT ANCHOR PIN ASSEMBLY

308 IF DRILLING A PILOT HOLE, THE MAX, DIA. OF THE HOLE IS 3/4"

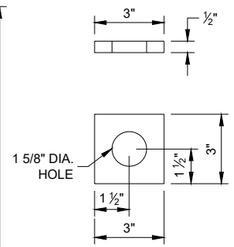
309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.



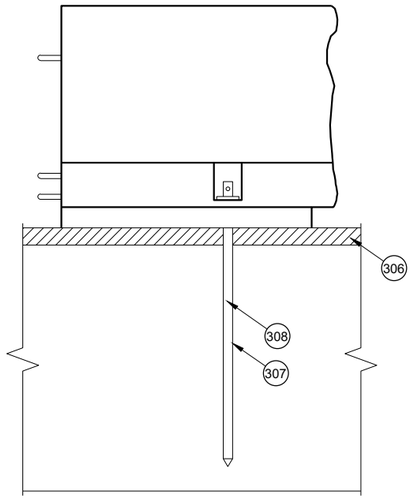
TOP VIEW

PROFILE VIEW

ASPHALT ANCHOR PIN ASSEMBLY

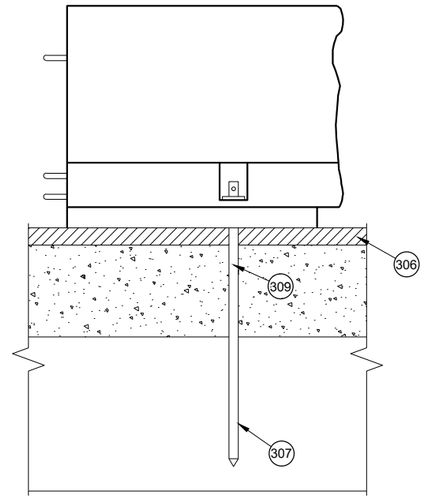


TOP VIEW J2



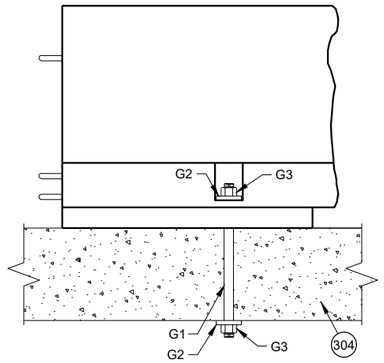
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT



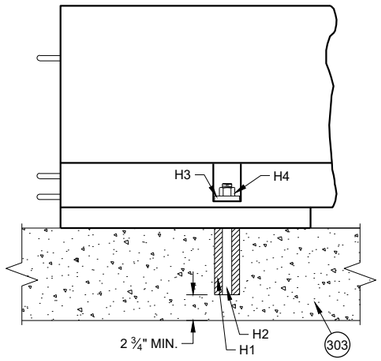
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT



SIDE VIEW

THROUGH BOLT ANCHOR INSTALLATION 305



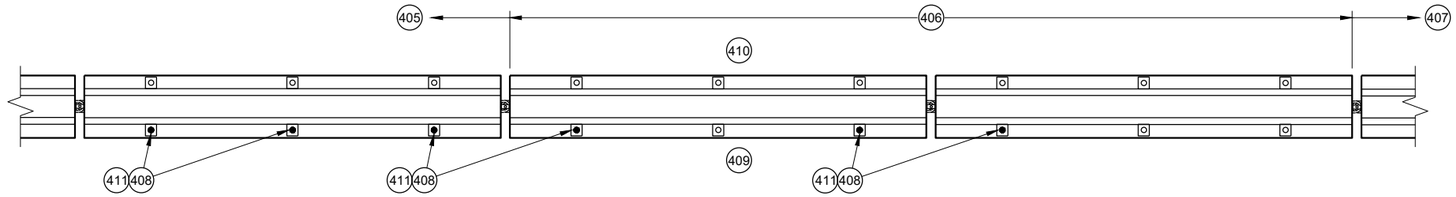
SIDE VIEW

ADHESIVE ANCHOR INSTALLATION 305

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

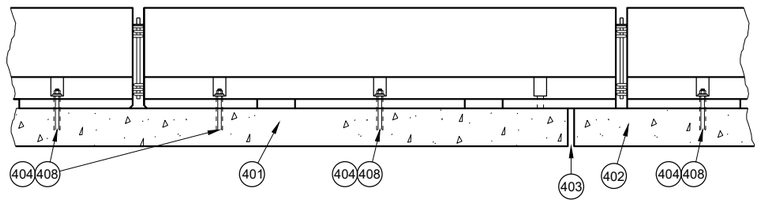
6

SDD 14B07-16c



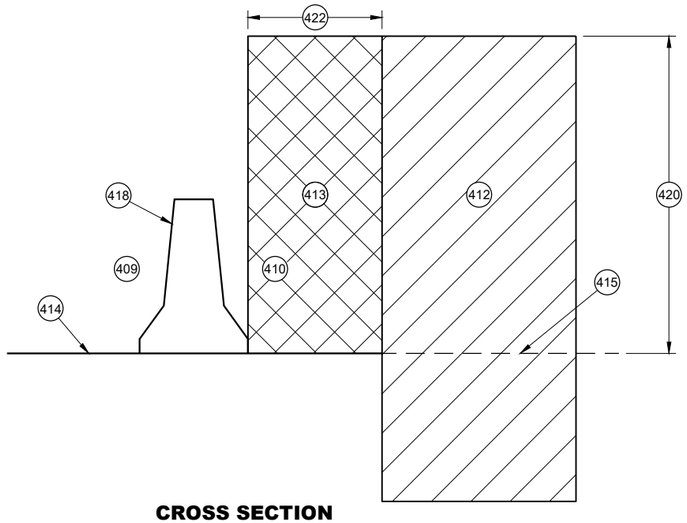
PLAN VIEW

TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



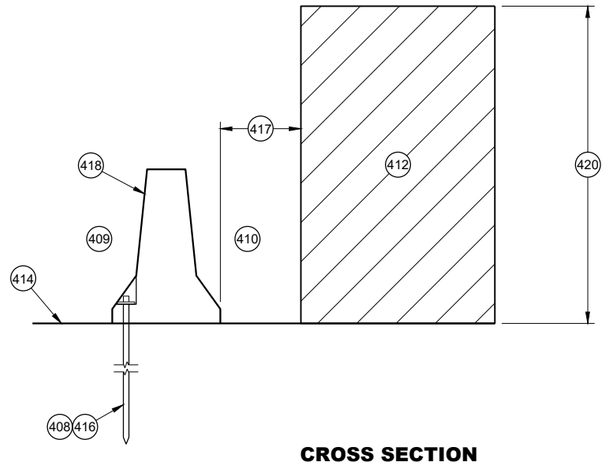
PROFILE VIEW

ANCHORED BARRIER NEAR EXPANSION JOINT (400)



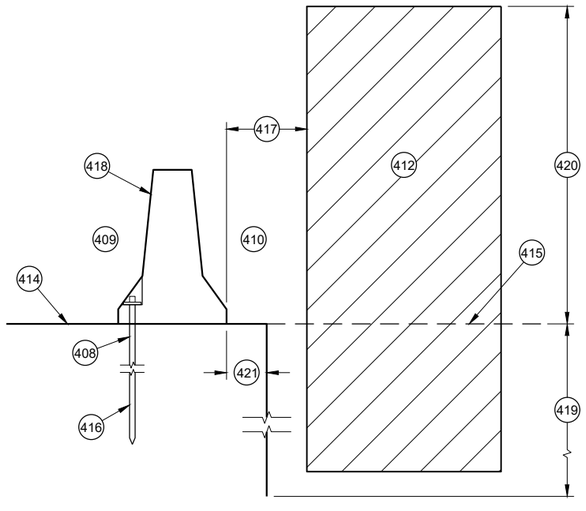
CROSS SECTION

FREE STANDING BARRIER



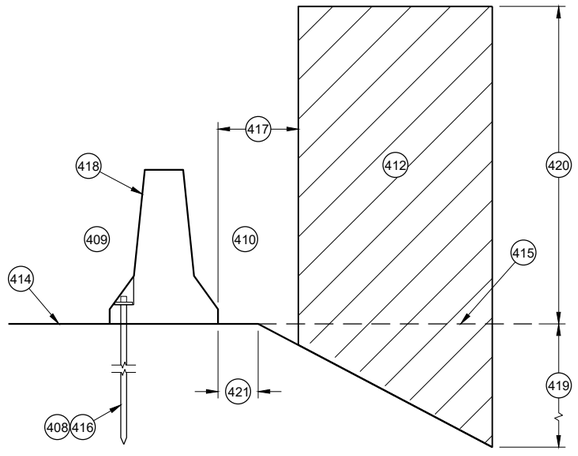
CROSS SECTION

ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER



CROSS SECTION

ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION

ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

(400) NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

(408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

(416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.

(417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.

(418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

CONCRETE PAVEMENT	0.5'
ASPHALT	0.5'

(422) POSTED SPEED (MPH):

45 OR GREATER	4.0'
40 OR LOWER	2.0'

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

GENERAL NOTES

500 EXISTING RIGID BARRIERS (VARIES)

501 TEMPORARY BARRIER

502 SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

503 ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

504 NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

505 TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.

506 TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

507 VERTICAL BARRIER

508 SAFETY SHAPE BARRIER

509 SINGLE SLOPE BARRIER

510 CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

511 BENT THRIE BEAM TO FIT.

512 THRIE BEAM PIECES ARE OFFSET 15 ¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.

513 TWO (2) P1, P2 AND P3 ARE REQUIRED

514 FIVE (5) N1, N2 AND N3 ARE REQUIRED

515 TWO (2) R1, R2 AND R3 ARE REQUIRED

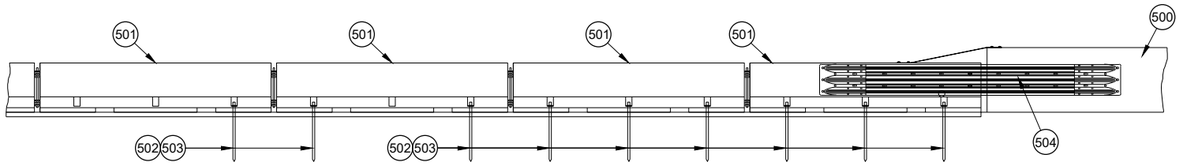
516 CUT WOOD BLOCK TO FIT.

517 SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

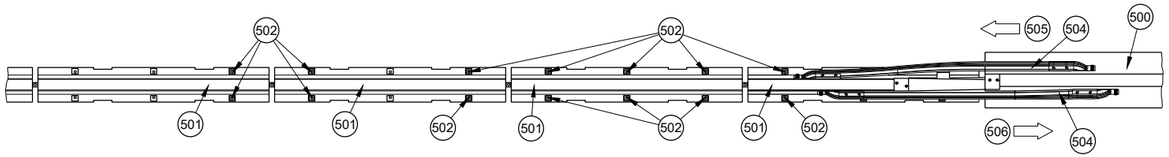
518 CAP ASSEMBLY

519 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

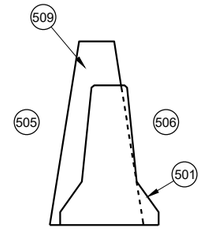
520 ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



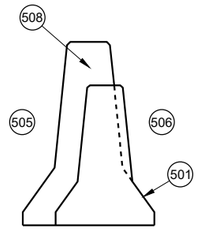
PROFILE VIEW



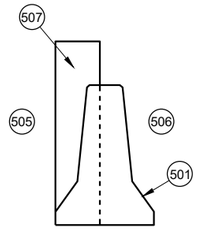
PLAN VIEW



CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE

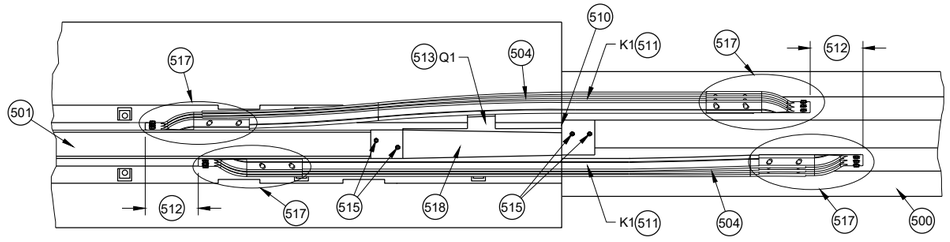


CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE

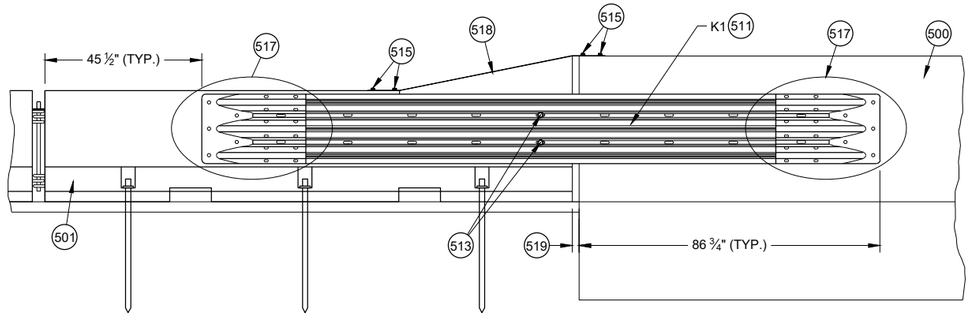


CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL

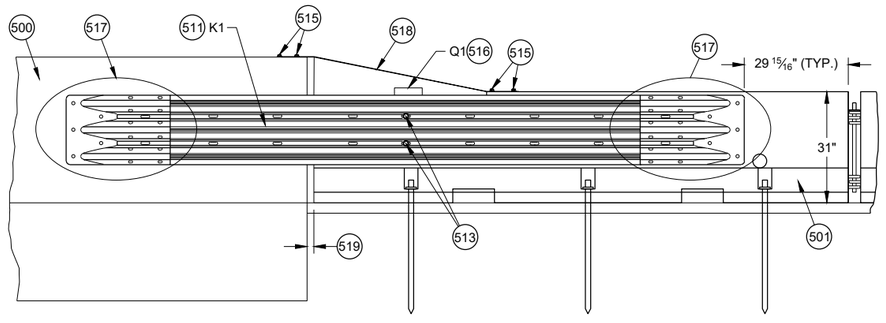
PLAN VIEW
TRANSITION TO RIGID BARRIER



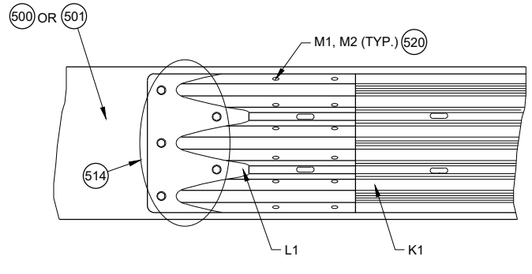
PLAN DETAIL VIEW
TRANSITION TO RIGID BARRIER



FRONT DETAIL VIEW
TRANSITION TO RIGID BARRIER



BACK DETAIL VIEW
TRANSITION TO RIGID BARRIER



517 DETAIL PLAN VIEW
THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

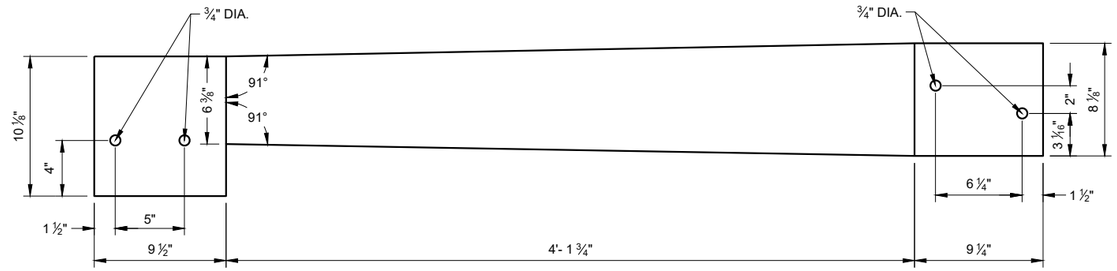
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16e

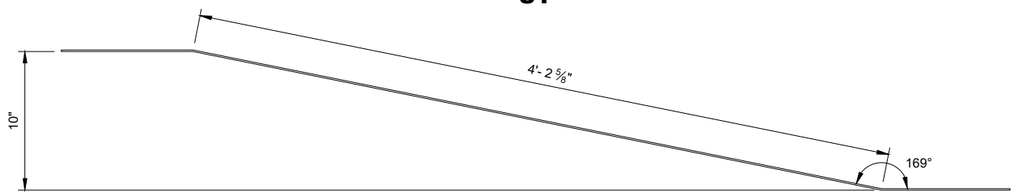
6

SDD 14B07-16e



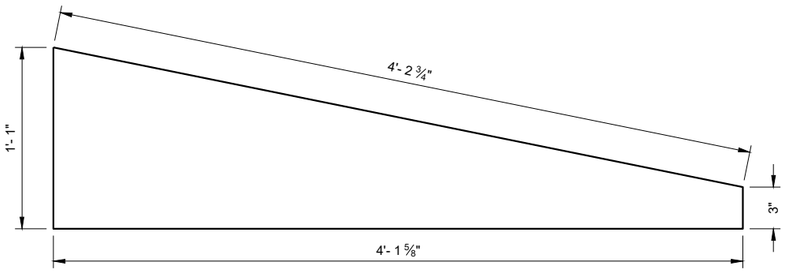
TOP VIEW

S1



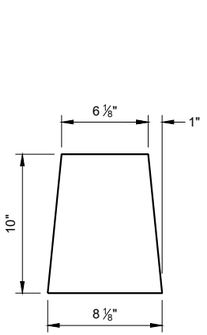
ELEVATION VIEW

S1

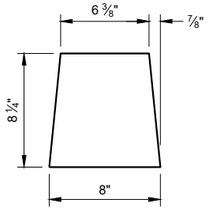


SIDE VIEW

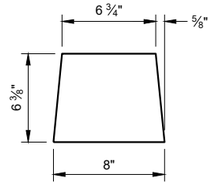
S3



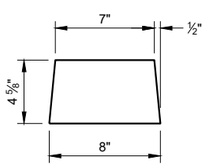
S2



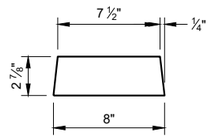
S4



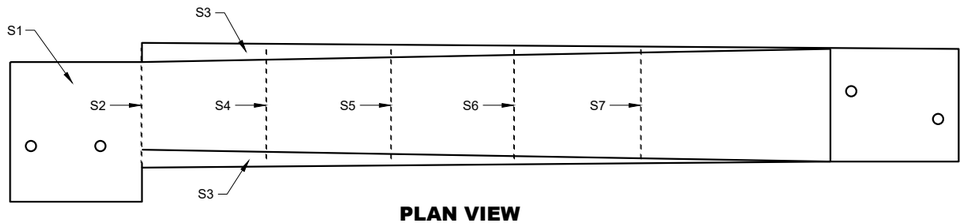
S5



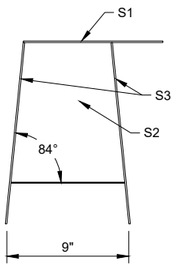
S6



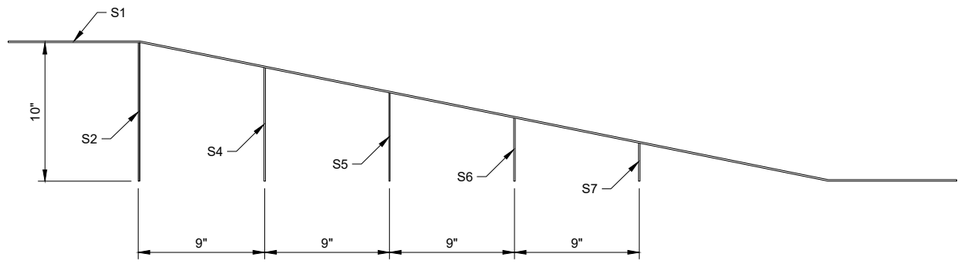
S7



PLAN VIEW



BACK VIEW



SIDE VIEW (600)

42" TOP CAP ASSEMBLY

GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

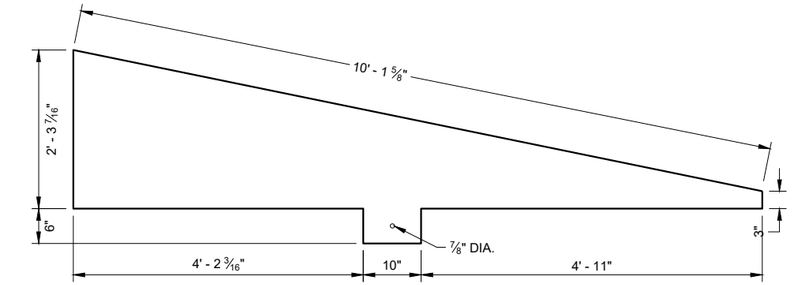
(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

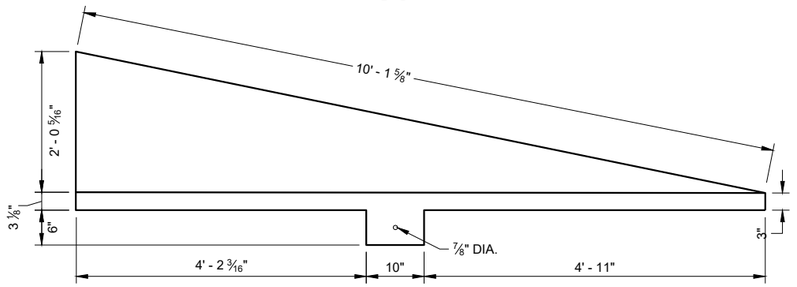
6

SDD 14B07-16f



SIDE VIEW
T4

END VIEW



SIDE VIEW
T3

END VIEW

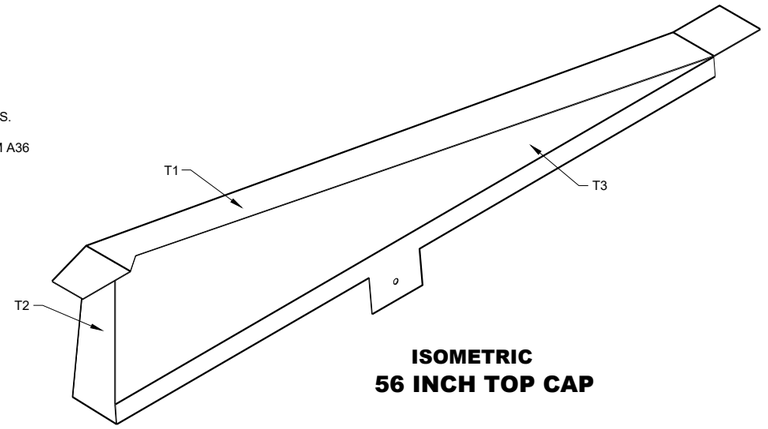
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

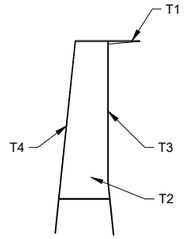
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

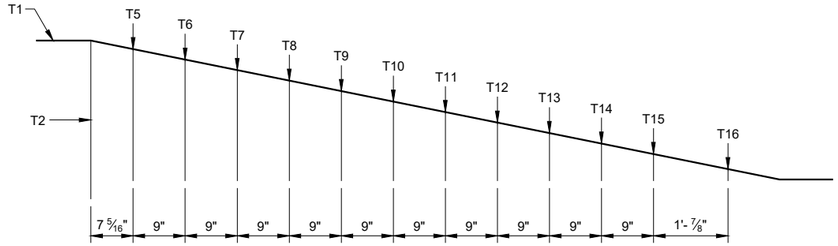
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



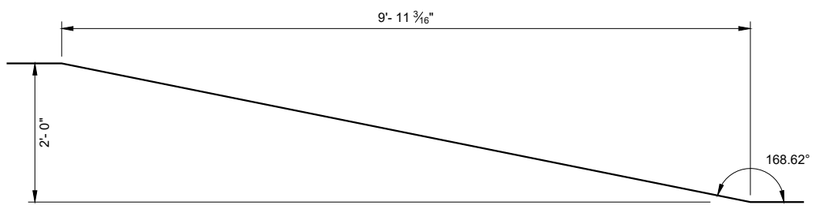
ISOMETRIC
56 INCH TOP CAP



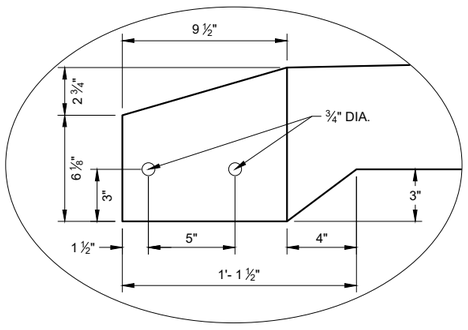
END VIEW
56 INCH TOP CAP



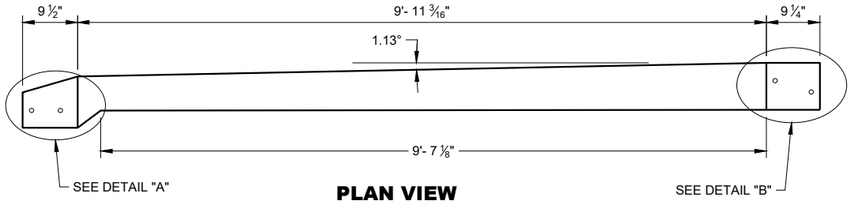
SIDE VIEW (700)
56 INCH TOP CAP



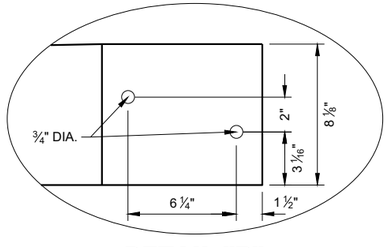
SIDE VIEW
TOP PLATE T1



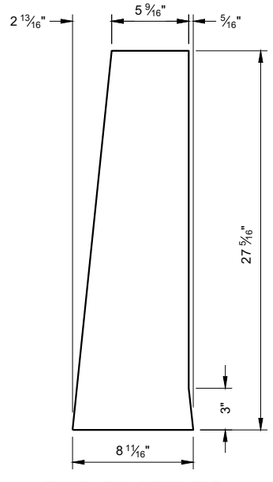
DETAIL "A"



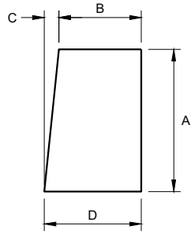
PLAN VIEW
TOP PLATE T1



DETAIL "B"



END PLATE T2



GUSSET PLATES
T5 - T16

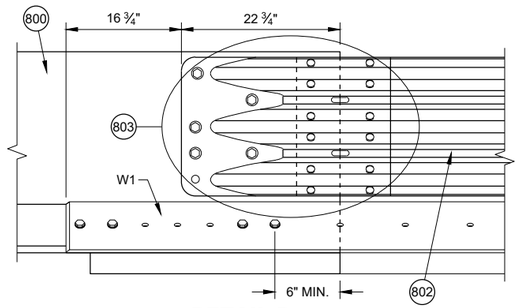
GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 5/16"	6 7/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 11/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

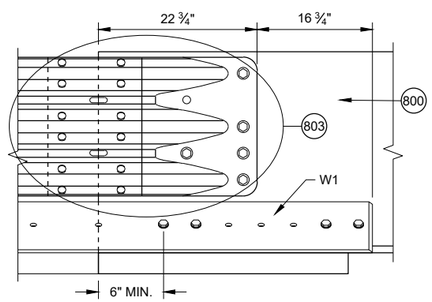
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16g



DETAIL D



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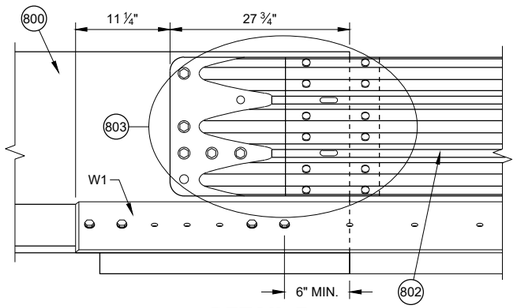

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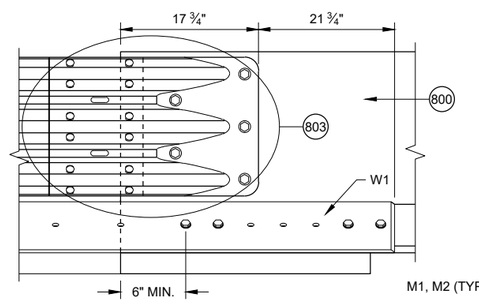
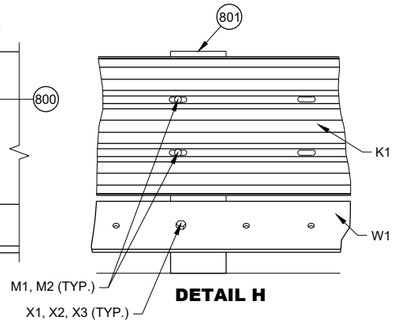
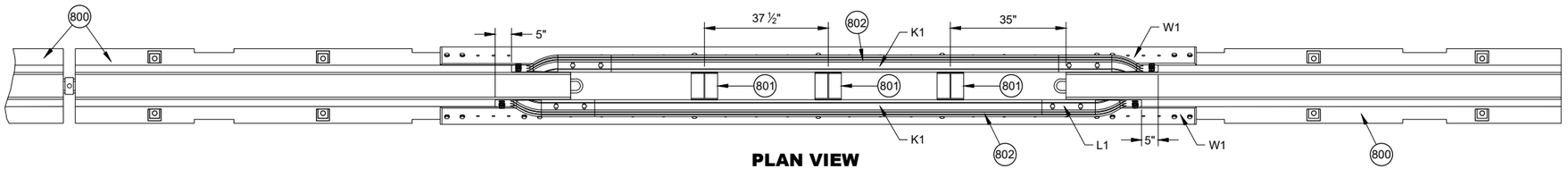


DETAIL G



DETAIL H



PLAN VIEW

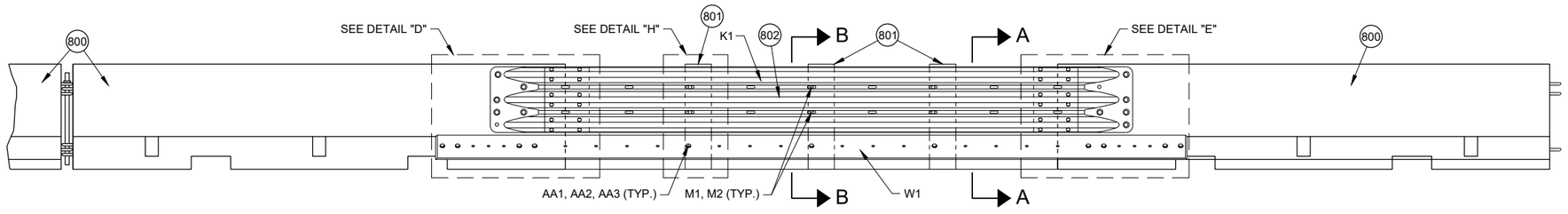
GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

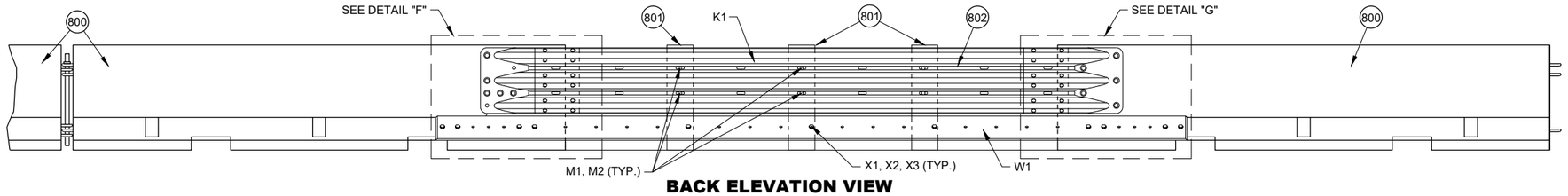
(801) GAP STIFFENER ASSEMBLY

(802) THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



FRONT ELEVATION VIEW



BACK ELEVATION VIEW

PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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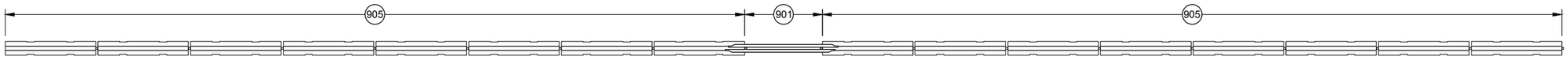
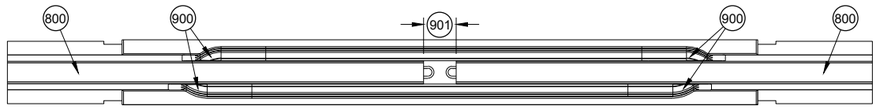
SDD 14B07-16h



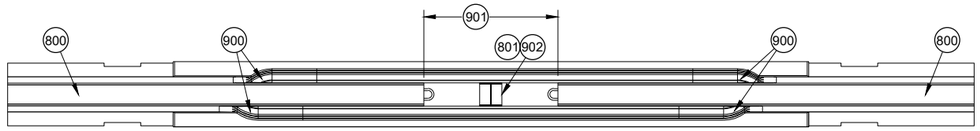
PLAN VIEW
GAP WITHIN SPACING



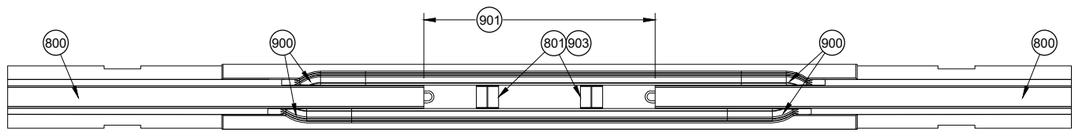
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. (904)

GENERAL NOTES

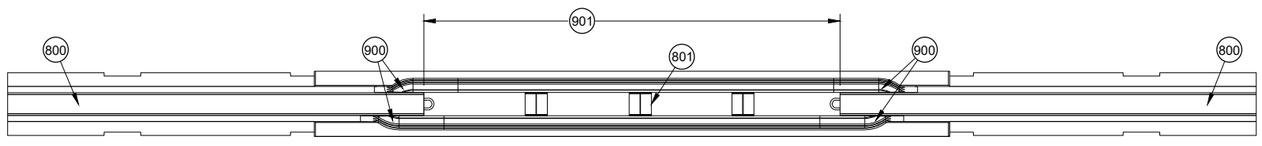
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS



PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX. (904)



PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX. (904)



PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX. (904)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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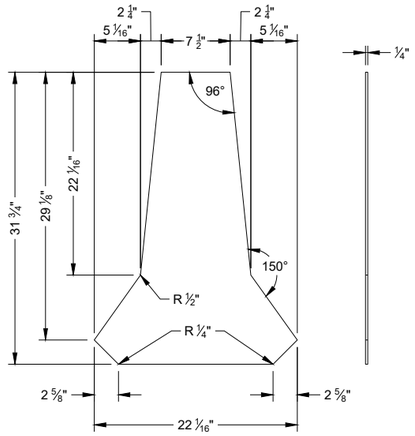
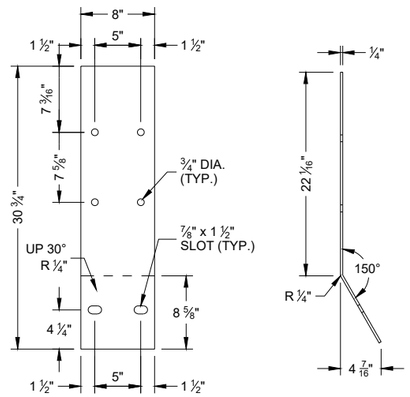
SDD 14B07-16i



PROFILE VIEW SIDE VIEW

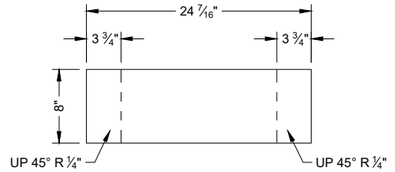
STIFFENER ASSEMBLY CENTER PANEL U1



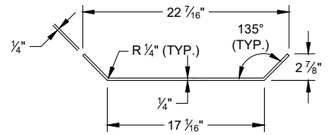
FLAT PATTERN

SIDE VIEW

STIFFENER ASSEMBLY SIDE PANEL U2

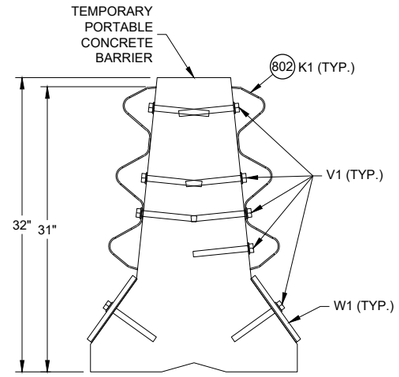


FLAT PATTERN

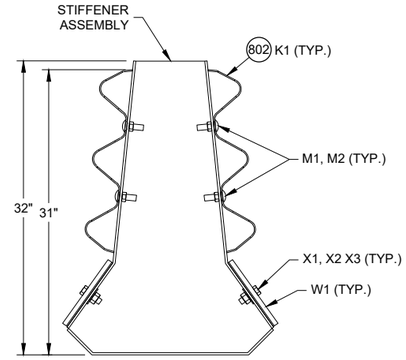


PROFILE VIEW

STIFFENER ASSEMBLY BOTTOM PANEL U3

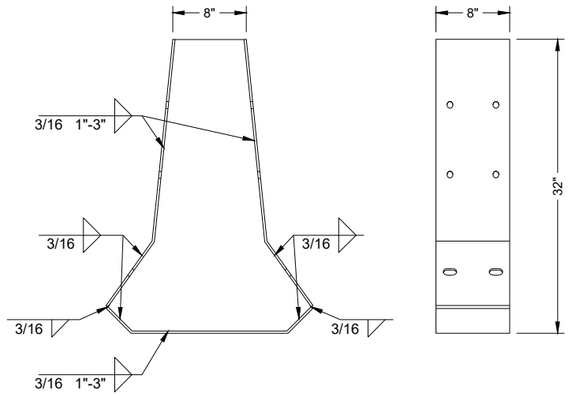


SECTION A - A



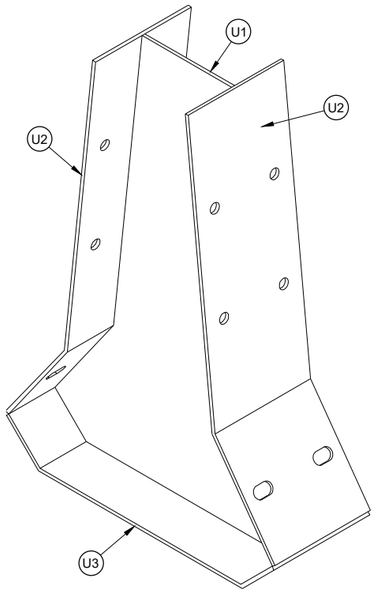
SECTION B - B

PLAN VIEW



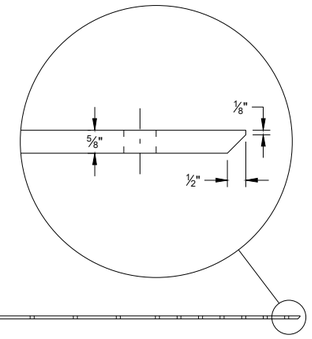
PROFILE VIEW

SIDE VIEW

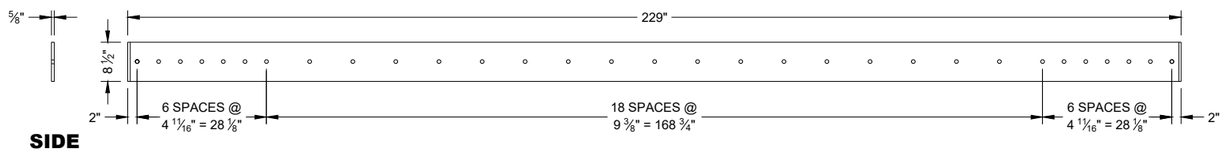


ISOMETRIC

GAP STIFFENER ASSEMBLY



PLAN VIEW



SIDE VIEW

ELEVATION VIEW

W1 TOE PLATE

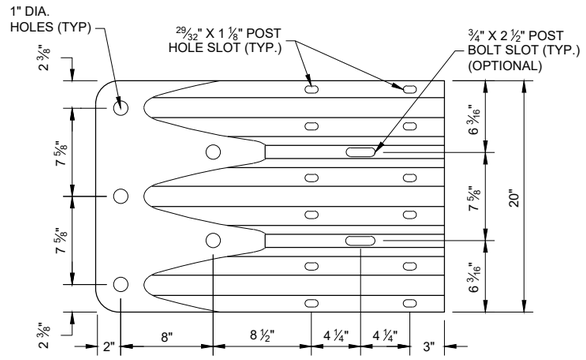
6

SDD 14B07-16j

6

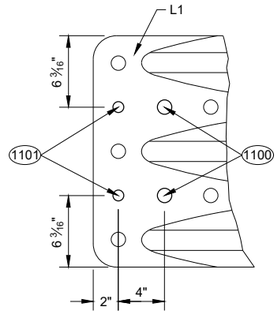
SDD 14B07-16j

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"



ELEVATION VIEW

THRIE BEAM TERMINAL CONNECTOR



ELEVATION VIEW

ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL

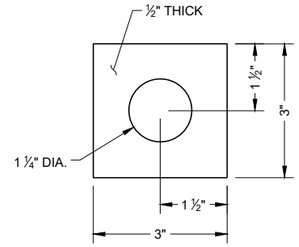


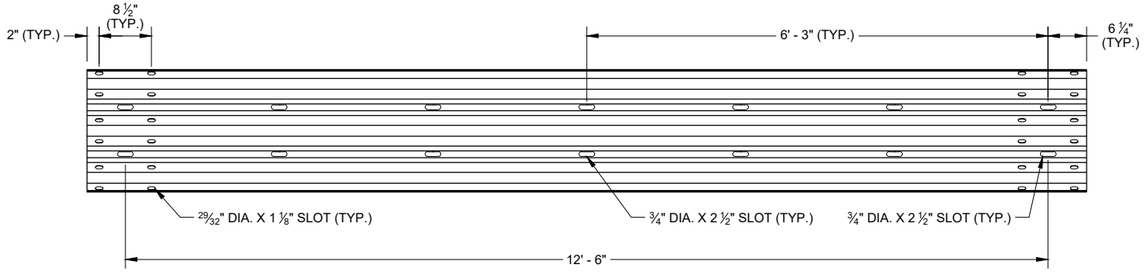
PLATE WASHER DETAIL G2, H3

GENERAL NOTES

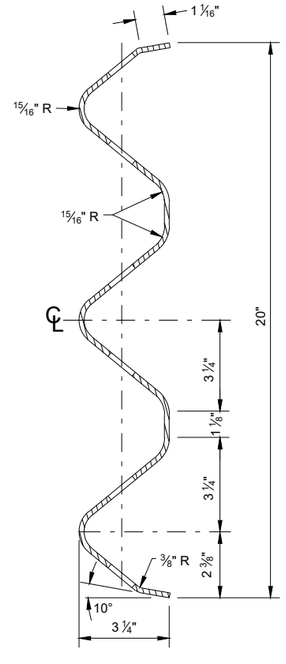
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

(1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.



SLOTTED THRIE BEAM RAIL K1



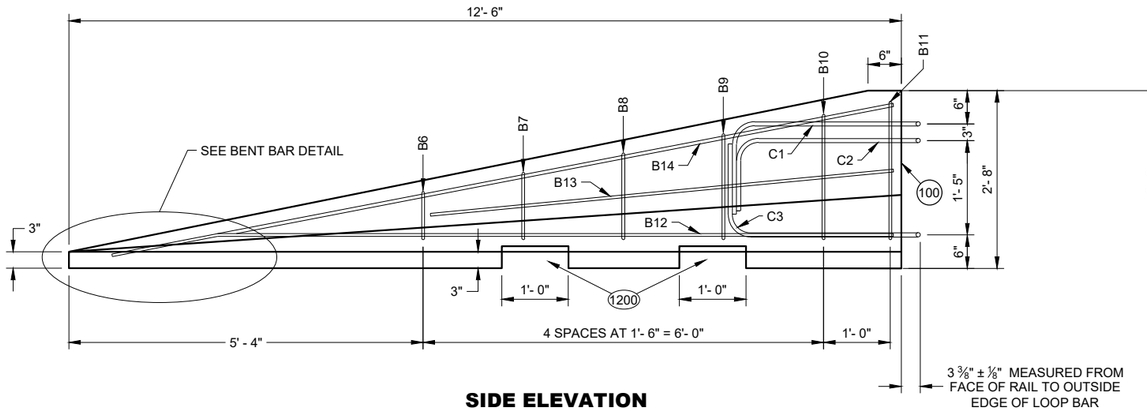
SECTION THROUGH BEAM K1

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

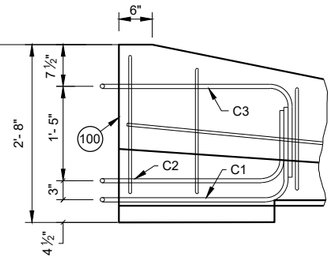
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16k



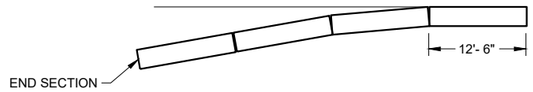
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

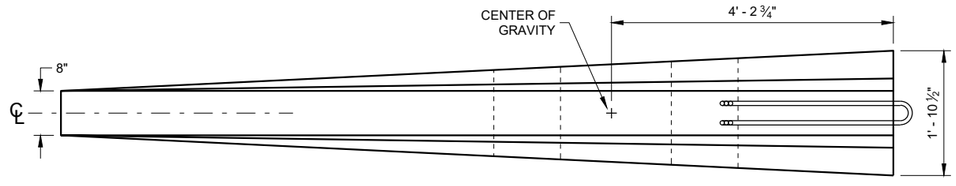
GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

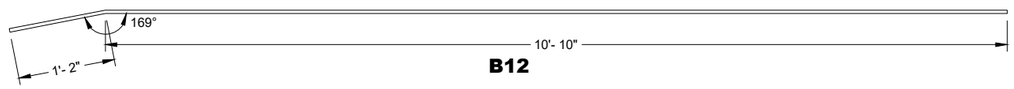


FLARE AT BARRIER END

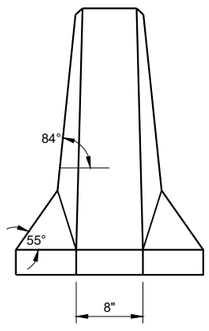
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



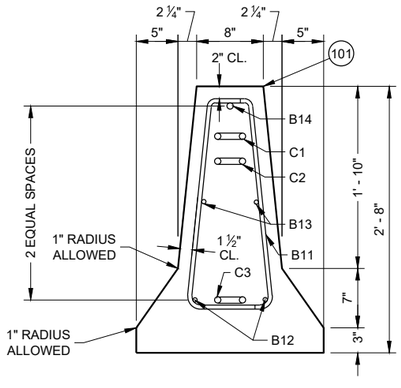
PLAN VIEW



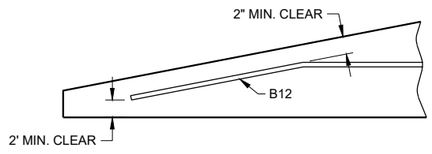
B12



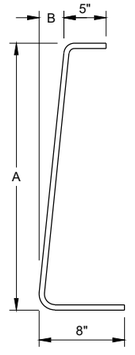
FRONT ELEVATION



END SECTION



BENT BAR DETAIL



BAR	A	B
B6	10"	1"
B7	1'- 1"	1 ¼"
B8	1'- 5"	1 ⅝"
B9	1'- 8"	1 ⅞"
B10	2'- 0 ½"	2 ⅜"
B11	2'- 3"	2 ¾"

B BARS
2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

6
SDD 14B07-16I

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	PRECAST TEMPORARY BARRIER - CONCRETE	MIN. = f'c 5000 PSI	
B1	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B2	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-2"
B3	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B4	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 6'-0"
B5	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#6 REBAR, LENGTH 2'-11"
B6	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 1'-11"
B7	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-2"
B8	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-6"
B9	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-9"
B10	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-2"
B11	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-4"
B12	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-0"
B13	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 7'-9"
B14	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 11'-9"
C1	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C2	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C3	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
D1	CONNECTION PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ¼" DIA.
D2	CONNECTION PIN - TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G1	BOLT THROUGH ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC	1 ⅛" DIA.
G2	BOLT THROUGH ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G3	BOLT THROUGH ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
H1	ADHESIVE ANCHOR - ADHESIVE	ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
H2	ADHESIVE ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC	1 ⅛" DIA.
H3	ADHESIVE ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
H4	ADHESIVE ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
J1	ASPHALT ANCHOR PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ½" DIA.
J2	ASPHALT ANCHOR PIN - STOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
K1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE
L1	THRIE BEAM RAIL - TERMINAL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
M1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	⅝" DIA.
M2	SPLICE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
N1	THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA. LENGTH 6"
N2	THRIE BEAM RAIL TERMINAL - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
N3	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
P1	THRIE BEAM RAIL CONNECTION 1-BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA.
P2	THRIE BEAM RAIL CONNECTION 1-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
P3	THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
Q1	BLOCK WOOD	SEE STANDARD SPEC. 614	
R1	CAP - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	⅝" DIA.
R2	CAP- BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
R3	CAP - BOLT - MECHANICAL ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	12 GAUGE
S1	CAP 42-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S2	CAP 42-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S3	CAP 42-INCH SIDE PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S4	CAP 42-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S5	CAP 42-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S6	CAP 42-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
S7	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE

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SDD 14B07-16m

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
T1	CAP 56-INCH TOP PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T2	CAP 56-INCH END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T3	CAP 56-INCH SIDE PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T4	CAP 56-INCH SIDE PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T5	CAP 56-INCH GUSSET 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T6	CAP 56-INCH GUSSET 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T7	CAP 56-INCH GUSSET 3	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T8	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T9	CAP 42-INCH GUSSET 5	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T10	CAP 42-INCH GUSSET 6	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T11	CAP 42-INCH GUSSET 7	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T12	CAP 42-INCH GUSSET 8	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T13	CAP 42-INCH GUSSET 9	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T14	CAP 42-INCH GUSSET 10	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T15	CAP 42-INCH GUSSET 11	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
T16	CAP 42-INCH GUSSET 12	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	12 GAUGE
U1	GAP STIFFENER	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U2	GAP STIFFENER - CONNECTOR PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
U3	GAP STIFFENER - CONNECTOR PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
V1	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	¾" DIA.
V2	GAP STIFFENER - BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
W1	TOE PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI	
X1	TOE PLATE - CONNECTION BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	¾" DIA.
X2	TOE PLATE - CONNECTION BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY)	
X3	TOE PLATE - CONNECTION BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	

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SDD 14B07-16n

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

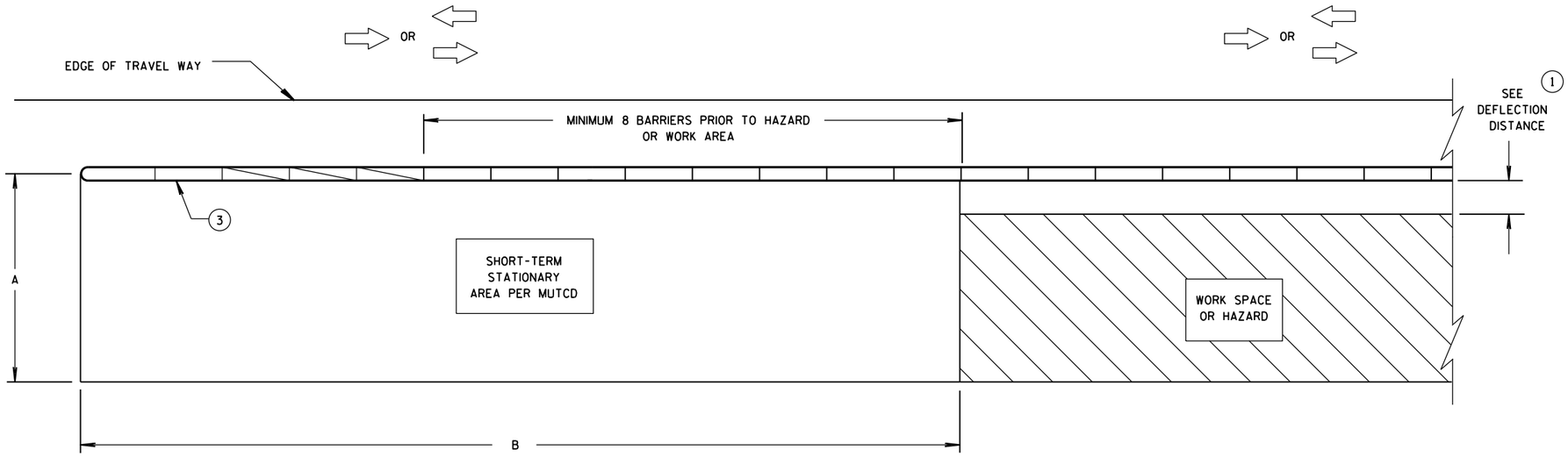
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B07-16n



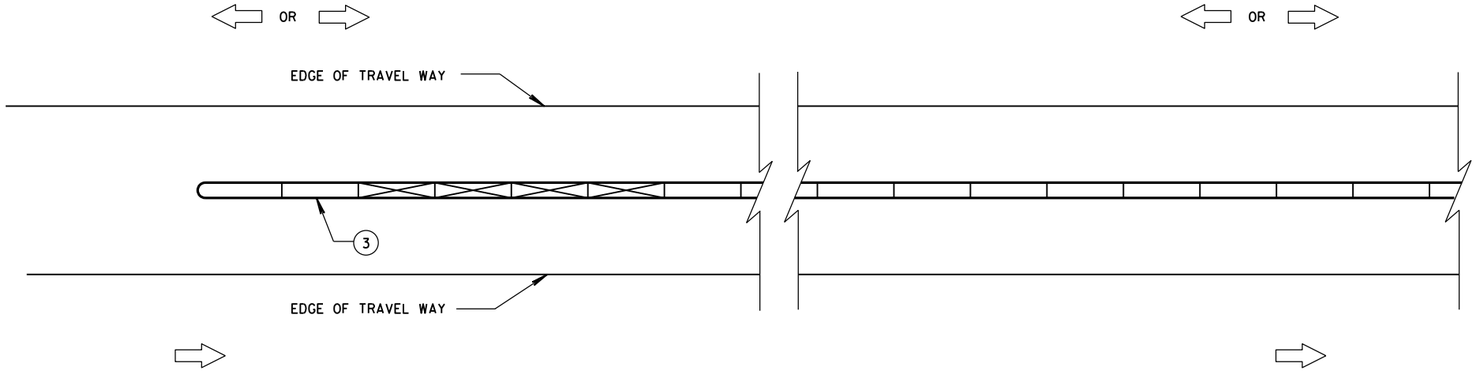
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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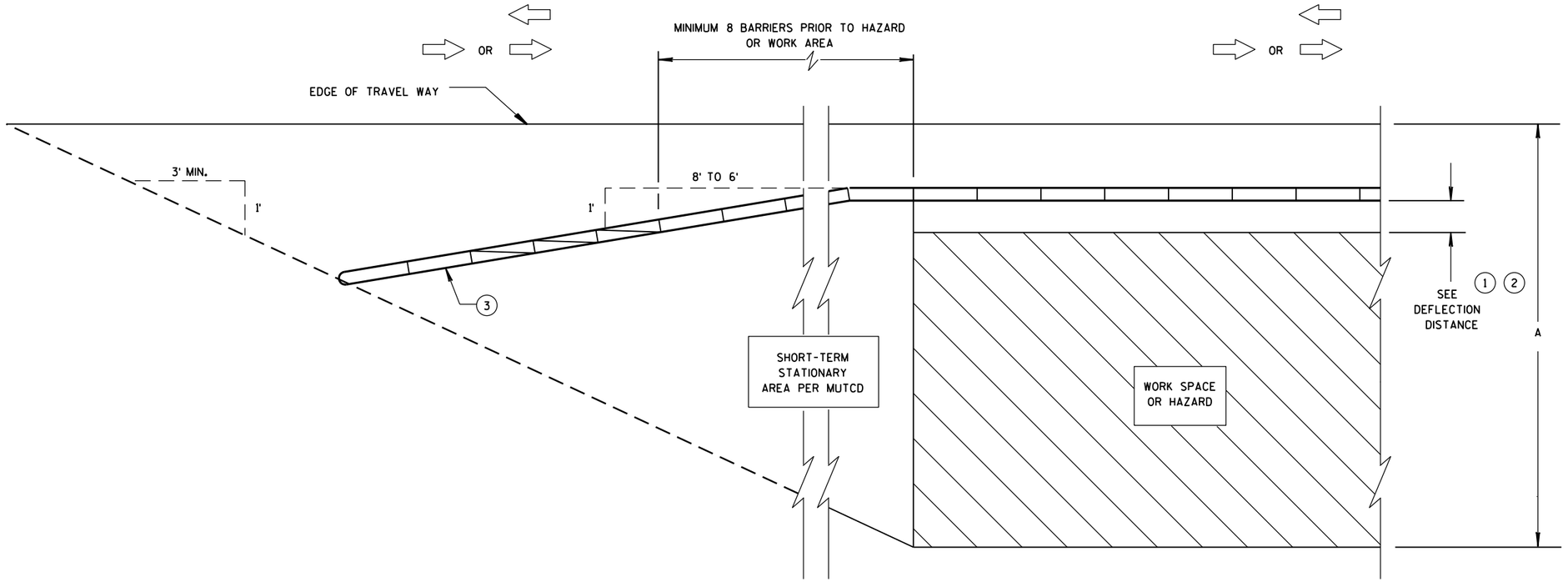
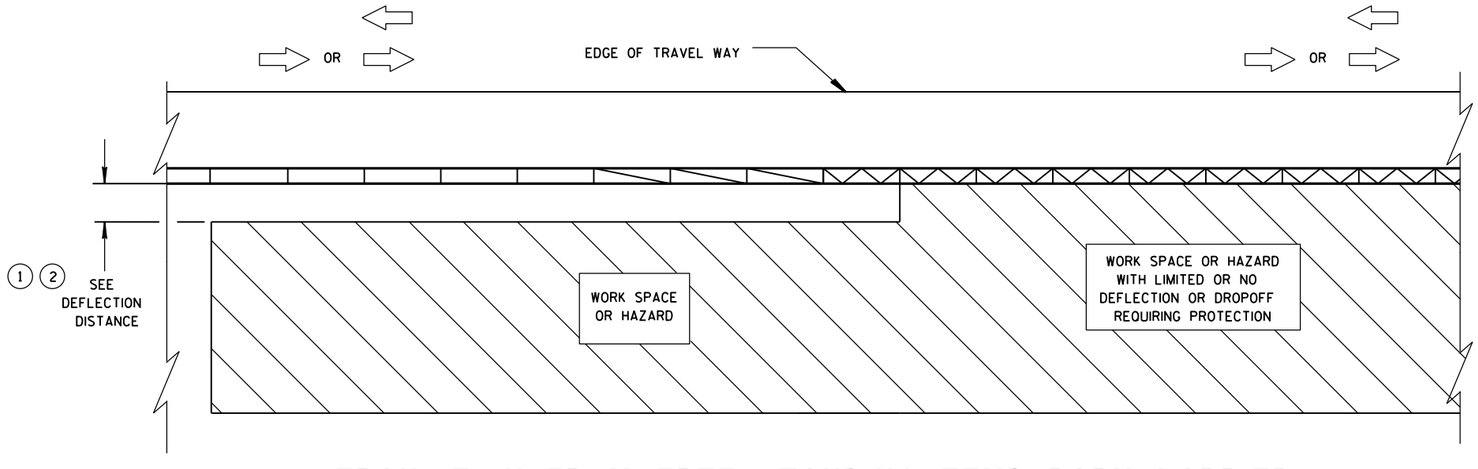
S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 8-2b

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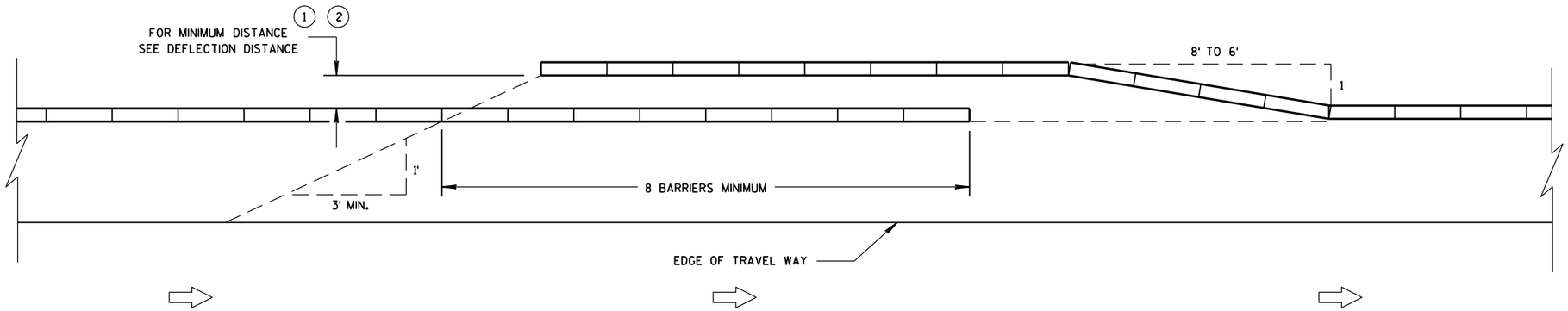
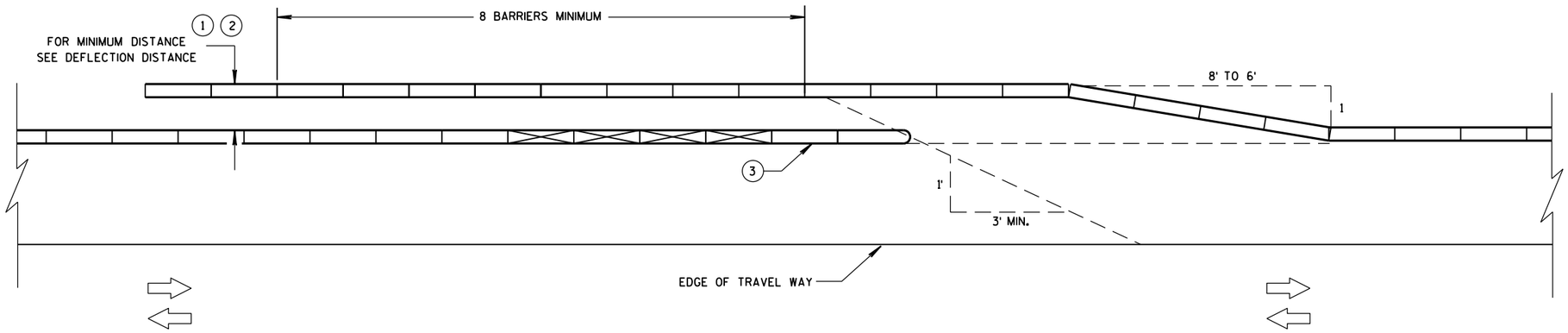
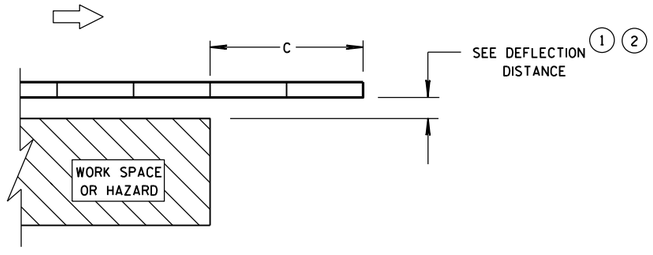
S.D.D. 14 B 8-2b



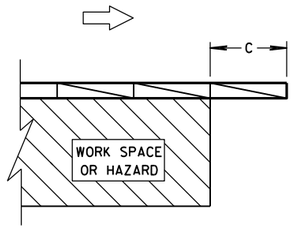
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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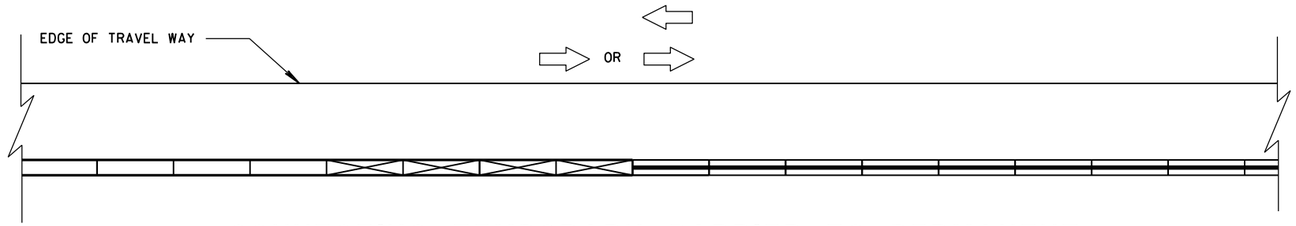
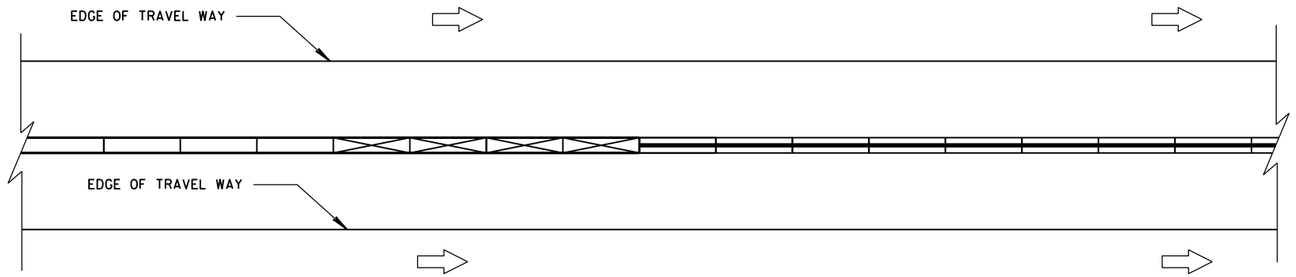
S.D.D. 14 B 8-2c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

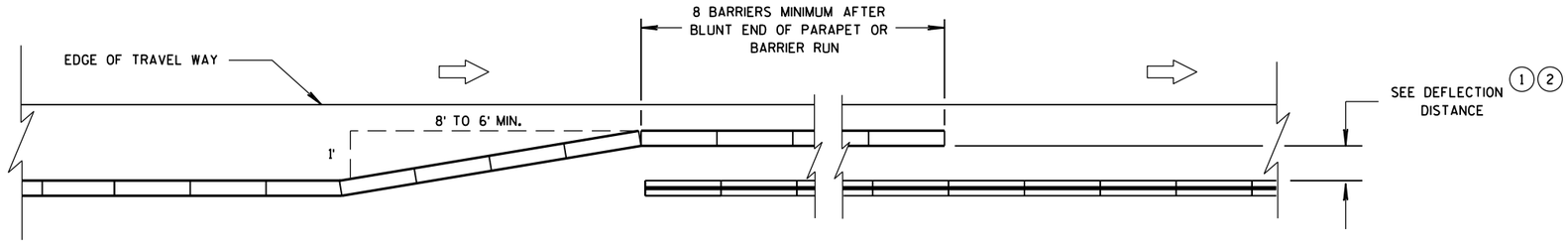
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

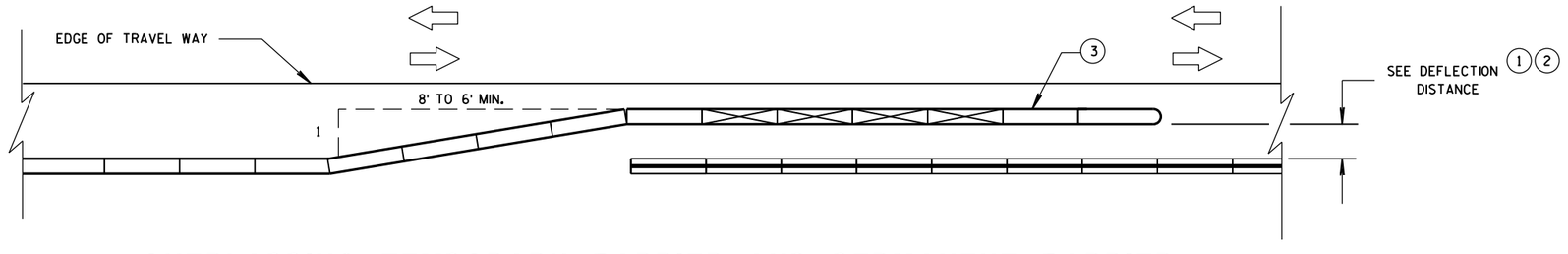
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

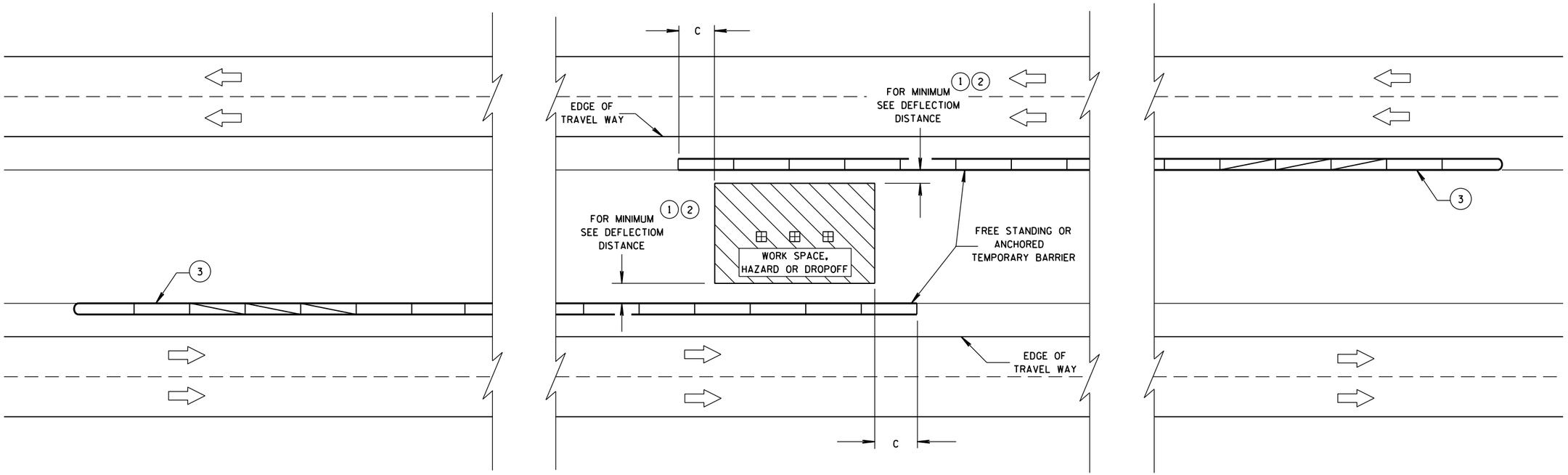
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



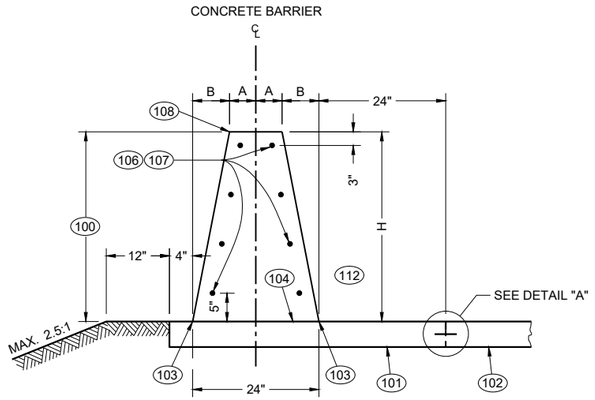
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINNER
FHWA

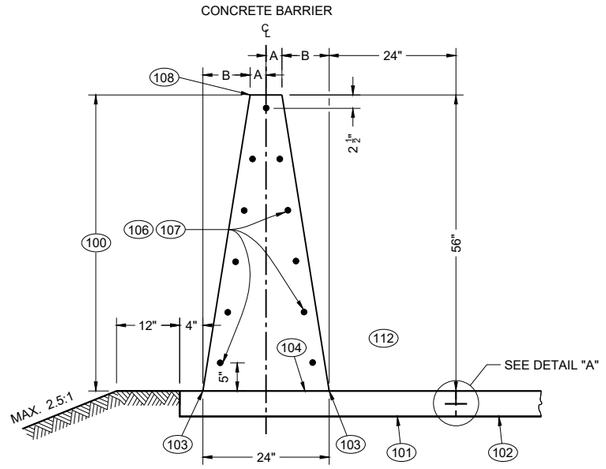
6

S.D.D. 14 B 8-2e



32 - INCH, 36 - INCH OR 42 - INCH SINGLE SLOPE CONCRETE BARRIER

(TYPE S32, TYPE S36, TYPE S42)

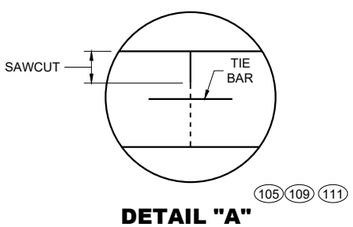


56 - INCH SINGLE SLOPE CONCRETE BARRIER

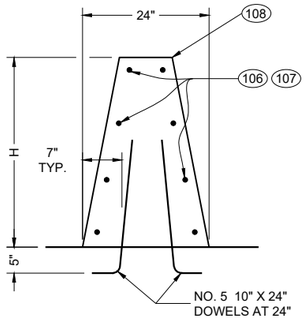
(TYPE S56)

TABLE "A"

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6 ¼	5 ¾	8
42	5 ¼	6 ¾	10
56	3	9	11

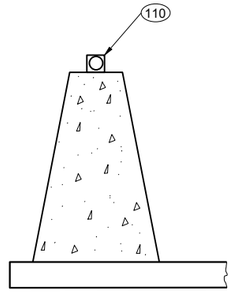


DETAIL "A"



SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

(NON OUTER PARAPET APPLICATION)



DELINEATION

GENERAL NOTES

WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.

LOCATE EXPANSION JOINTS IN CONCRETE BARRIER SHALL AT ALL DECK AND PRINCIPAL WALL JOINTS. FILL EXPANSION JOINT WITH EXPANSION JOINT MATERIAL. SEAL THE EXPANSION JOINT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

2" CLEAR COVER TYPICAL

ANCHORS ARE REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN IN THIS SDD OR DETAIL SHOWN ON SDD 14B33. ANCHORS INCIDENTAL TO CBSS.

PROVIDE A 1" DEEP CONTRACTION JOINT IN BARRIER PAD AND BARRIER. JOINT IS TO MATCH ADJACENT CONCRETE JOINTS. NO DOWEL BARS ARE REQUIRED FOR BARRIER PAD. IF ADJACENT TO ASPHALT, CONTRACTION JOINT IS REQUIRED EVERY 15'.

ALL REBAR SHALL BE EPOXY COATED M31 TYPE S. SEE STANDARD SPECIFICATION 505.

CONCRETE BARRIER, UPPER CONCRETE BARRIER, LOWER CONCRETE BARRIER, CONCRETE BARRIER PAD, AND FOOTINGS ARE TERMS USED TO DESCRIBE PARTS OF SINGLE SLOPE CONCRETE BARRIER BID ITEMS. THESE PARTS ARE INCIDENTAL TO THE SINGLE SLOPE CONCRETE BARRIER BID ITEMS.

(100) CONCRETE BARRIER

(101) CONCRETE BARRIER PAD

(102) PAVEMENT

(103) WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1 ½", USE TYPE A SINGLE SLOPE BARRIER.

(104) OPTIONAL CONSTRUCTION JOINT.

(105) CONSTRUCTION JOINTS MAY BE ELIMINATED WHEN CONCRETE SHOULDER IS LESS THAT 10'.

(106) STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL IS 2' BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.

(107) NO. 5 CONTINUOUS BARS EVENLY SPACED (SEE TABLE "A").

(108) USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

(109) CONCRETE BARRIER PAD UNDER CBSS MAY BE PLACED SEPARATELY OR PLACED WITH CONCRETE SHOULDER AND SAWED ⅓ DEPTH. CONCRETE BARRIER PAD AND SAWING OF CONCRETE SHOULDER IS INCIDENTAL TO CONCRETE BARRIER BID ITEM. CONCRETE BARRIER PAD MINIMUM DEPTH IS 6", OR EQUAL TO THE DEPTH OF THE CONCRETE SHOULDER.

(110) SEE SDD 15A04 FOR DELINEATOR DETAILS AND SPACING.

(111) SEE SDD 13C01 FOR DETAILS TYPING CONCRETE BARRIER TO ADJACENT CONCRETE

(112) TRAFFIC SIDE

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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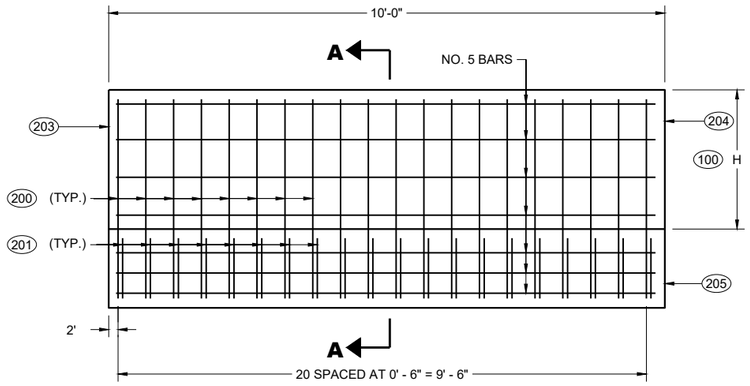
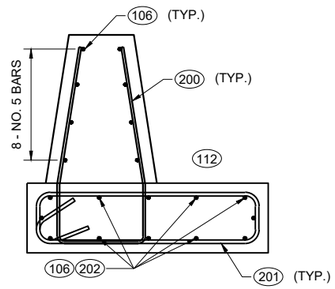
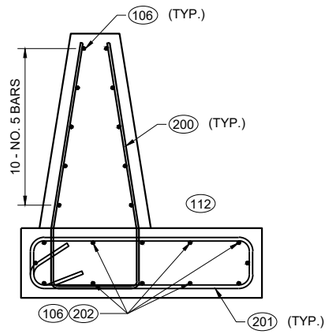
SDD 14B32-11a



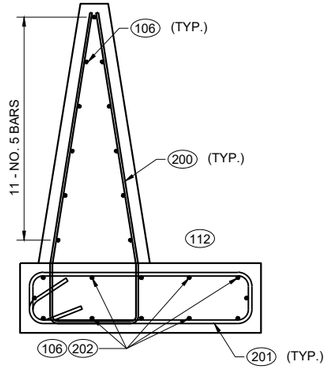
END ANCHOR SINGLE
SLOPE CONCRETE BARRIER



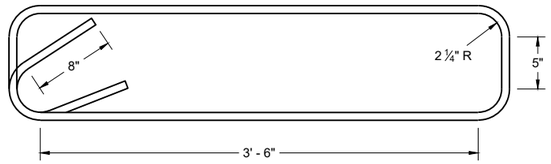
32" AND 36" CBSS



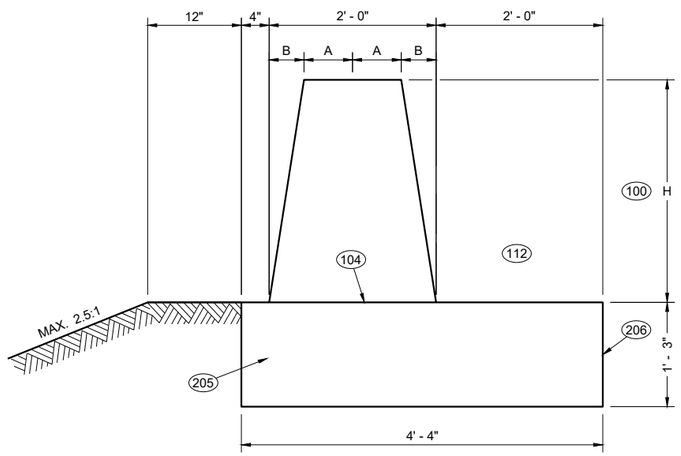
42" CBSS



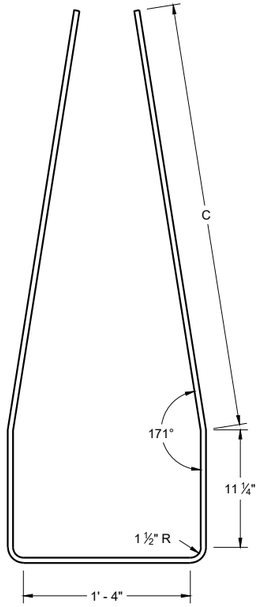
56" CBSS



STIRRUP BAR
BENDING DETAIL



SECTION A - A



V1 BAR
BENDING DETAIL

TABLE "B"

BARRIER HEIGHT H INCHES	C INCHES
32	2' - 6"
36	2' - 11"
42	3' - 4"
56	4' - 6 ½"

GENERAL NOTES

200 V1 BARS ARE NO. 5 BARS. (SEE BAR BENDING DETAIL)

201 STIRRUPS ARE NO. 6 BARS. (SEE BAR BENDING DETAIL)

202 TWELVE (12) NO. 5 BARS EVENLY SPACED

203 END OF INSTALLATION OR EXPANSION JOINT.

204 SEE COLD JOINT DETAIL TO CONNECT END ANCHOR SINGLE SLOPE CONCRETE BARRIER TO SINGLE SLOPE CONCRETE BARRIER.

205 FOOTING

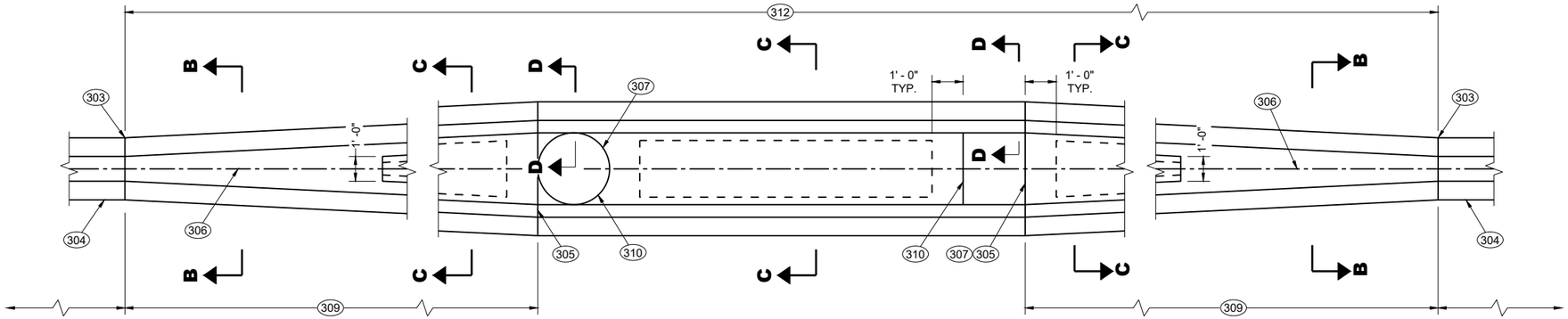
206 DO NOT TIE TO FOOTING TO ADJACENT PAVEMENT.

6

SDD 14B32-11b

CONCRETE BARRIER
SINGLE SLOPE (CBSS)

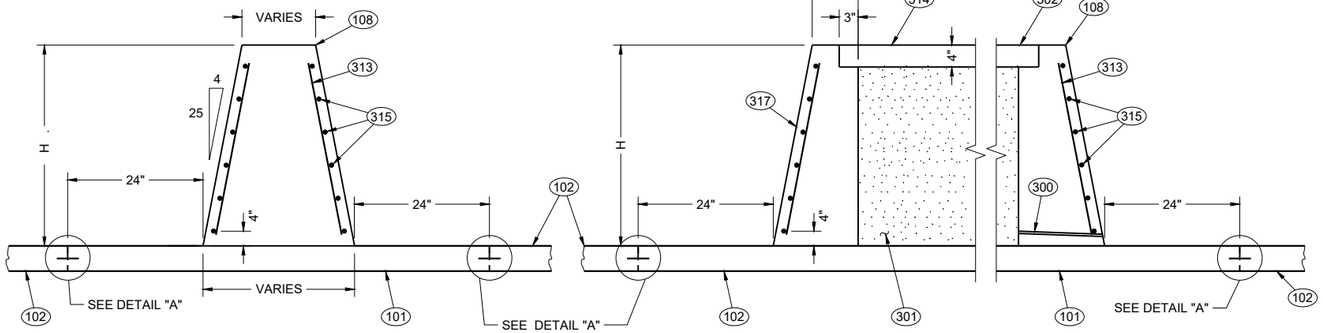
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



LARGE FIXED OBJECTS PROTECTION
(TYPE S32, TYPE S36, TYPE S42, TYPE S56)

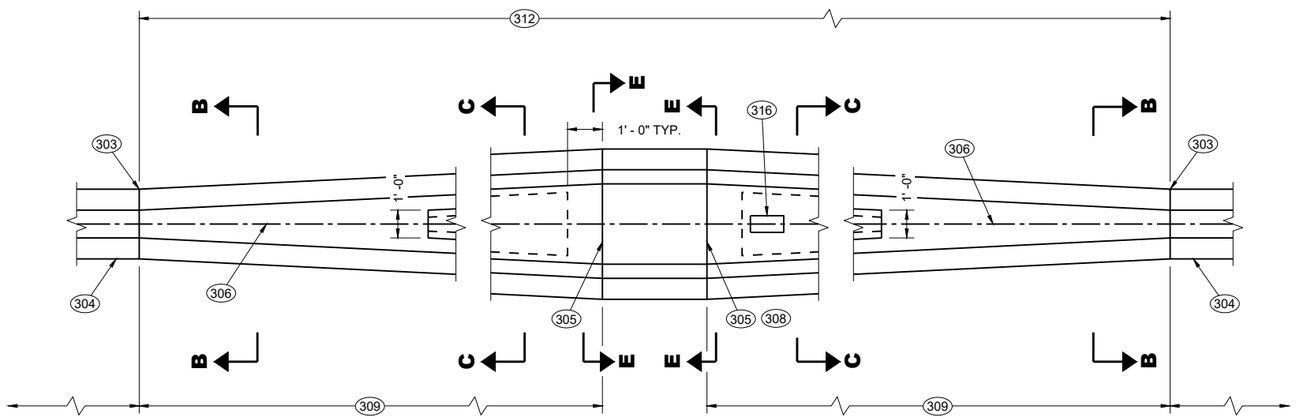
TABLE "C"

BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	6

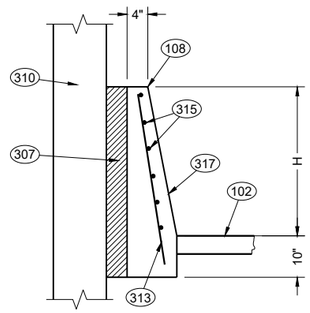


SECTION B - B

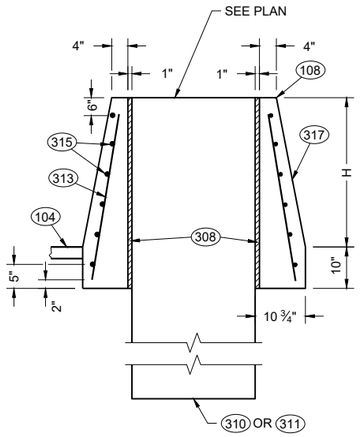
SECTION C - C



SMALL FIXED OBJECTS PROTECTION
(TYPE S32, TYPE S36, TYPE S42, TYPE S56)



SECTION D - D



SECTION E - E

GENERAL NOTES

(300) INSTALL 1 INCH DIAMETER DRAIN PIPE EVERY 20 FEET OF CROSS SECTION B -B. MINIMUM ONE DRAIN CAVITY.

(301) BETWEEN CONCRETE BARRIER WALLS FILL WITH FOUNDATION BACKFILL.

(302) LEVEL THE TOP OF CONCRETE BARRIER CAP ACROSS TOP OF BARRIER. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.

(303) USE COLD JOINTS BETWEEN FIXED OBJECT PROTECTION AND CONCRETE BARRIER ANCHOR.

(304) INSTALL END ANCHOR SINGLE SLOPE CONCRETE BARRIER.

(305) SEE COLD JOINT DETAIL

(306) CENTERLINE OF CONCRETE BARRIER.

(307) INSTALL 4" EXPANDED POLYSTYRENE BETWEEN COLUMN AND CONCRETE BARRIER.

(308) INSTALL 1" EXPANDED POLYSTYRENE BETWEEN PEDESTAL AND CONCRETE BARRIER.

(309) 20:1 MIN. TRANSITION.

(310) COLUMN

(311) PEDESTAL

(312) LIMITS OF PAYMENT FOR LARGE FIXED OBJECT PROTECTION (SEE PLAN)

(313) NO. 4 BARS SPACED 12" CENTER TO CENTER (TYP.)

(314) USE NO. 3 BAR SPACED 12 INCHES CENTER TO CENTER (PLACED IN EACH DIRECTION) OR EQUIVALENT WIRE MESH.

(315) SEE TABLE "C" FOR BAR INFORMATION

(316) ELECTRICAL PULL BOX FOR SIGN FLUSH WITH TOP OF CONCRETE BARRIER.

(317) VARIABLE SLOPE

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

(400) END ANCHOR SINGLE SLOPE CONCRETE BARRIER.

(401) PARAPET, SIGN BRIDGE BASE, LIGHT POLE BASE OR OTHER OBJECT SINGLE SLOPE CONCRETE BARRIER CANNOT TIE INTO.

(402) JOINT SEAL CONFORMING TO STANDARD SPECIFICATION 415.2.6

(403) EXPANSION JOINT MATERIAL.

(404) INLET (SEE PLAN)

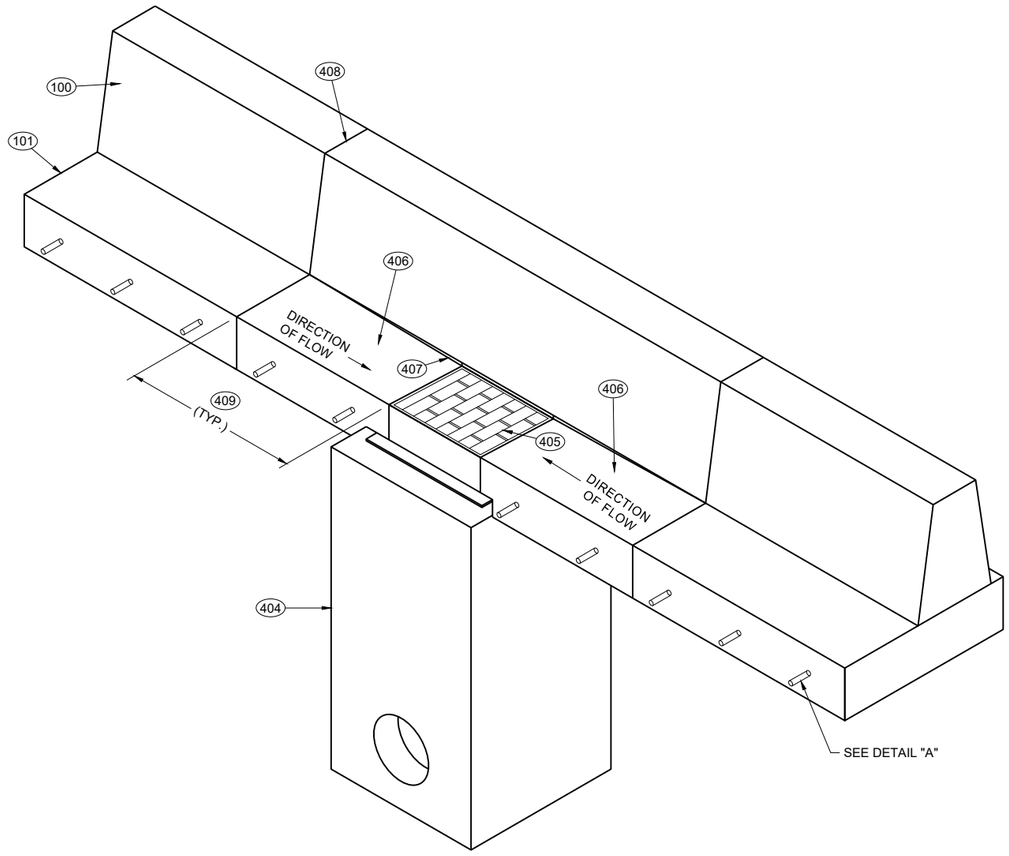
(405) INLET COVER BW (SEE PLAN)

(406) WARP PAN TO MATCH INLET COVER.

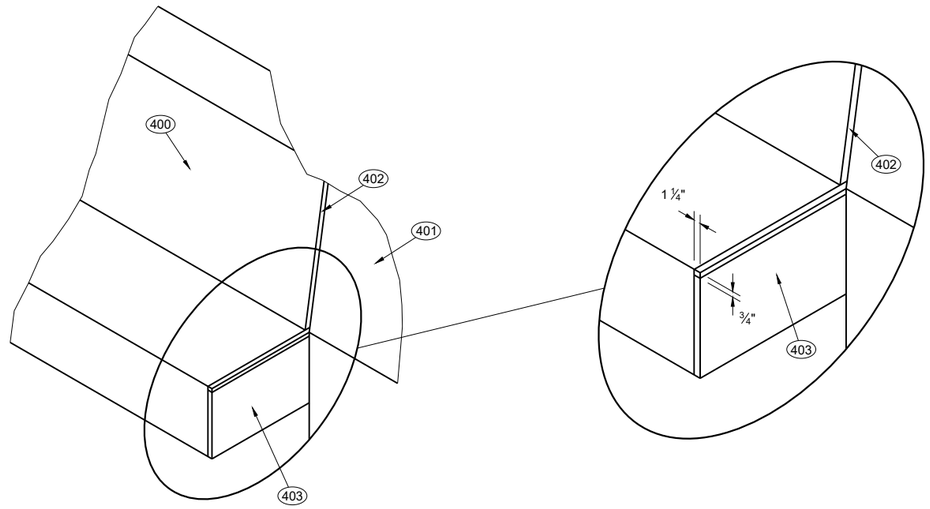
(407) EXTEND BARRIER SLOPE TO INLET. SEE PLAN FOR THE LENGTH OF EXTENSION.

(408) CONTRACTION JOINT.

(409) WHEN ADJACENT TO CONCRETE PAVEMENT OR SHOULDER, JOINT SHOULD MATCH CONCRETE JOINTS. OTHERWISE, 3' (TYP.). SEE SDD 13C18 FOR MORE INFORMATION.



DRAINAGE DETAIL



EXPANSION JOINT DETAIL

6

SDD 14B32-11d

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32-11d

GENERAL NOTES

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

(500) SEE TABLE "A" FOR DIMENSIONS

(501) SEE TABLE "D"

(502) MULTIPLE HEIGHT TRANSITION MAY BE USED IN SEQUENCE TO GET APPROPRIATE HEIGHT.

(503) COLD JOINT

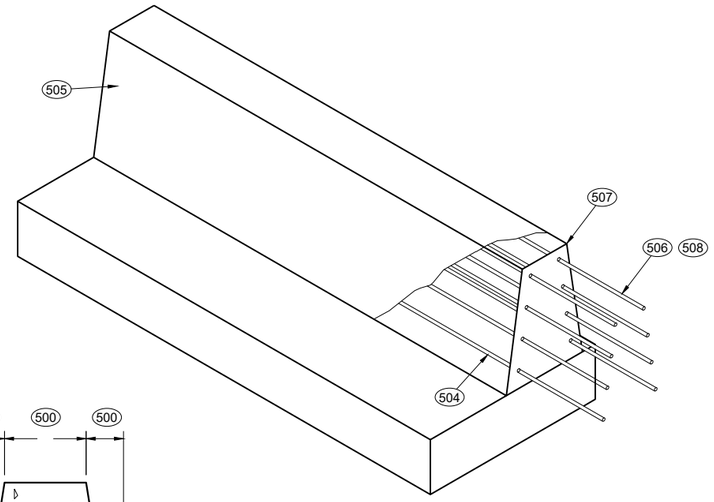
(504) BARRIER REBAR (SEE OTHER DETAILS FOR BAR SIZE, QUANTITY AND LOCATION). SINGLE SLOPE BARRIER SHOWN. SIMILAR DETAIL CAN BE USED FOR COLD JOINT IN

(505) END ANCHORS AND TRANSITIONS.

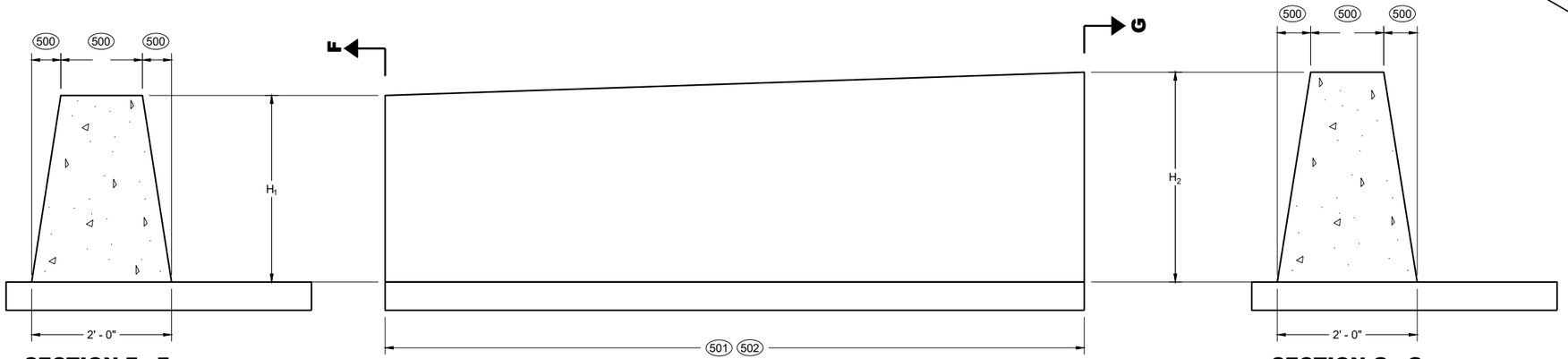
(506) NO. 5 REBAR FOR SPLICE. 3' OF SPLICE REBAR IS LAPPED AND TIED TO BARRIER REBAR. EXTEND 3' OF SPLICE REBAR BEYOND END OF POUR. ALL BARS ARE FIRMLY TIED OR CONNECTED. EVERY REBAR IN THE BARRIER SECTION REQUIRES A SPLICE BAR.

(507) END OF POUR.

(508) LAP AND TIE 3' OF NEXT POUR'S REBAR TO SPLICE REBAR.



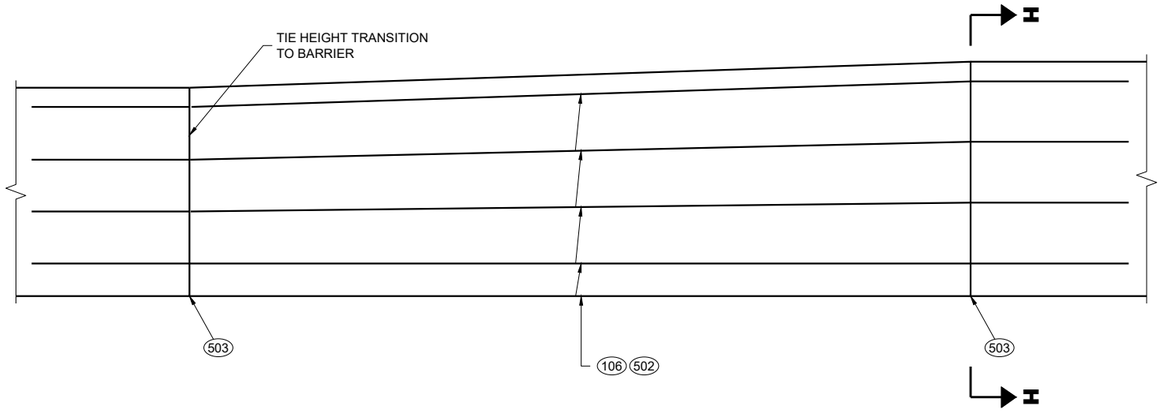
COLD JOINT DETAIL



SECTION F - F

SECTION G - G

DOUBLE COLD JOINT HEIGHT TRANSITION

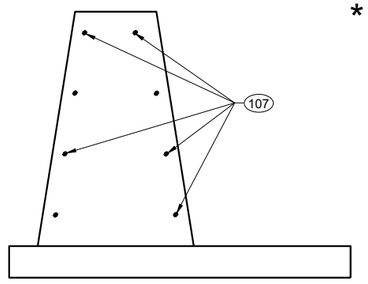


STEEL REINFORCEMENT DETAIL

TABLE "D"

H_1	H_2	L *	NUMBER OF NO. 5 BARS
32"	36"	10' - 0"	8
36"	42"	10' - 6"	10
42"	56"	24' - 6"	11

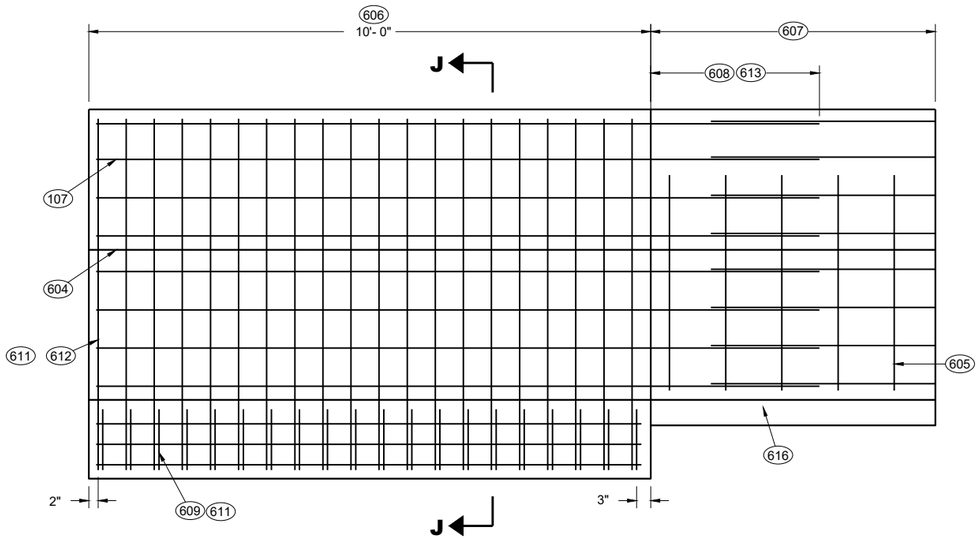
* LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.



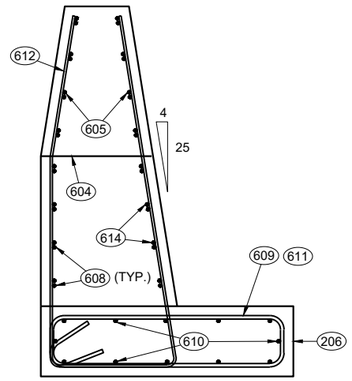
SECTION H - H

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



END ANCHOR MEDIAN BARRIER AND RETAINING WALL



SECTION J - J
END ANCHOR AND MEDIAN WALL END ANCHOR REINFORCEMENT DETAIL

GENERAL NOTES

600 UPPER CONCRETE BARRIER

601 LOWER CONCRETE BARRIER

602 MAX HEIGHT 36".

603 VERTICAL OFFSET FROM TOP ROADWAY SURFACES

604 OPTIONAL CONSTRUCTION JOINT WHEN HEIGHT IS GREATER THAN 1 ½".

605 NO. 4 BARRIER LOOP BARS ARE NOT REQUIRED FOR ROADWAY OFFSETS ARE LESS THAN 1'- 0", EXCEPT WHEN USED IN ANCHORS. BARRIER LOOP BARS ARE SPACED 12" CENTER TO CENTER OUTSIDE OF MEDIAN BARRIER AND RETAINING WALL END ANCHOR.

606 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL ANCHOR

607 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (SEE OTHER DETAILS)

608 NO. 5 REBAR 3' OF LAP OF LONGITUDINAL STEEL.

609 NO. 6 REBAR END ANCHOR FOOTING LOOP

610 TWELVE (12) NO. 5 BARS EVENLY SPACED.

611 SS ANCHOR END LOOP AND END ANCHOR FOOTING LOOP ARE SPACED 6" CENTER TO CENTER.

612 END ANCHOR LOOP BAR IS NO. 5 REBAR.

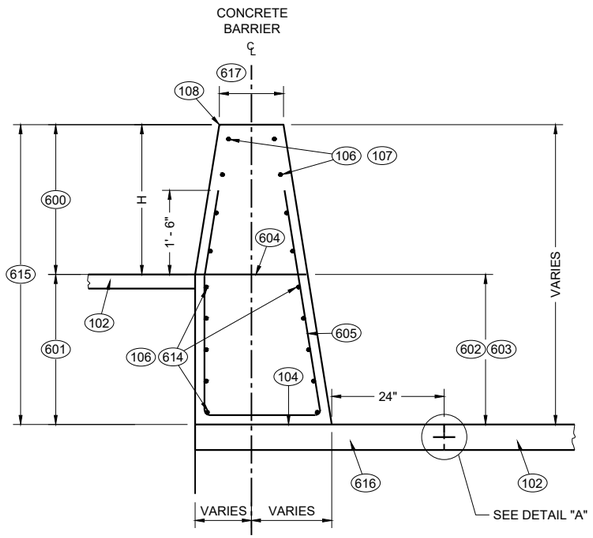
613 SEE COLD JOINT DETAIL.

614 SEE TABLE "E" FOR REQUIRED REBAR

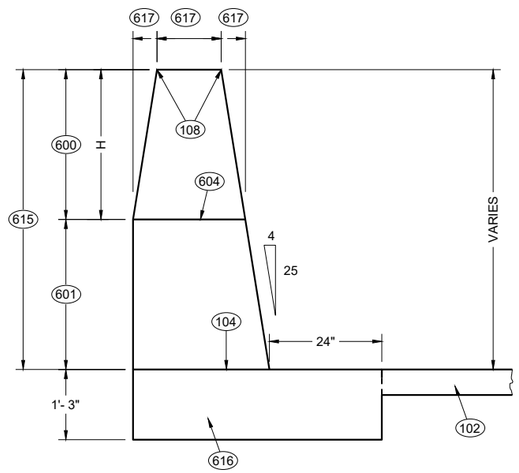
615 TOTAL BARRIER HEIGHT (SEE PLAN FOR HEIGHT)

616 FOR SOME LOCATIONS, NO PAN IS NEEDED. SEE OTHER DETAILS.

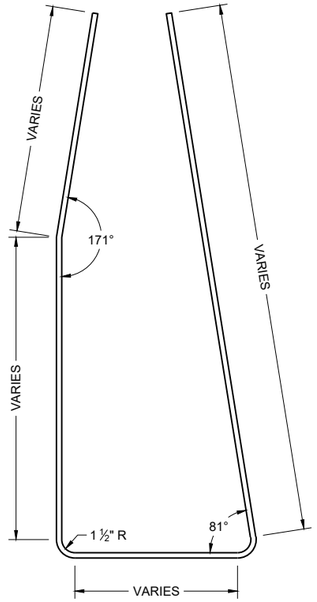
617 SEE TABLE "A" FOR DIMENSIONS



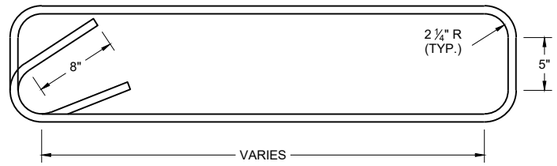
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)
(BETWEEN ADJACENT ROADWAYS)



SECTION J - J
MEDIAN BARRIER AND RETAINING WALL END ANCHOR DIMENSIONS



LOOP BAR BENDING DETAIL



END ANCHOR STIRRUP BAR BENDING DETAIL

TABLE "E"

HEIGHT BETWEEN ROADWAY	QUANTITY OF NO. 6 BARS
0 TO 3"	0
GREATER THAN 3" TO 8"	2
GREATER THAN 8" TO 12"	4
GREATER THAN 12" TO 36"	8

CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B32-11f

GENERAL NOTES

700 END ANCHOR SINGLE SLOPE CONCRETE BARRIER

701 SEE EXPANSION JOINT DETAIL

702 END ANCHOR SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL

703 PAY LIMIT FOR SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL

704 SEE COLD JOINT DETAIL

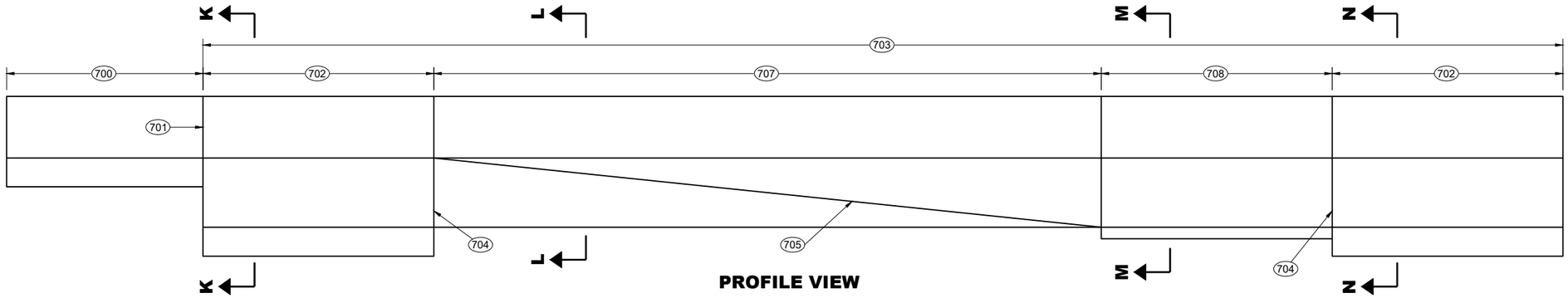
705 LOW SIDE SHOULDER

706 HIGH SIDE SHOULDER

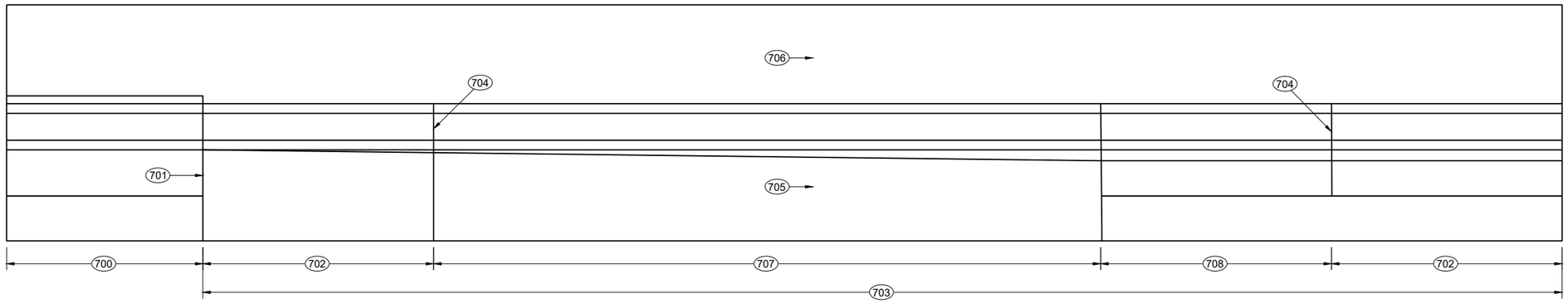
707 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL INSTALLED WITHOUT A PAN.

708 SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL INSTALLED WITH A PAN.

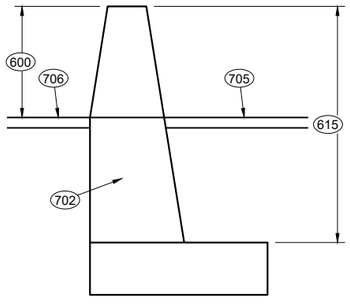
709 EXCAVATION AND COMPACTION



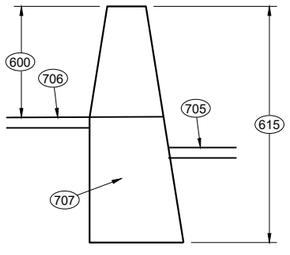
PROFILE VIEW
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL



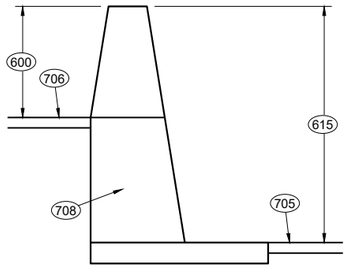
PLAN VIEW
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL



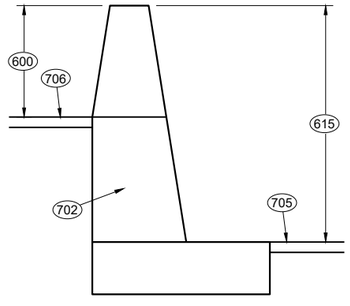
SECTION K - K



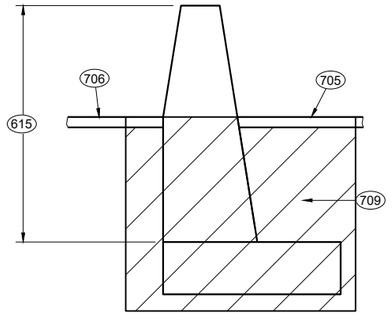
SECTION L - L



SECTION M - M

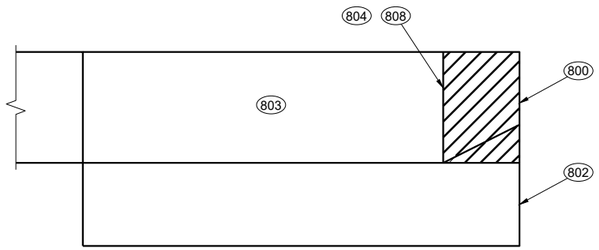


SECTION N - N

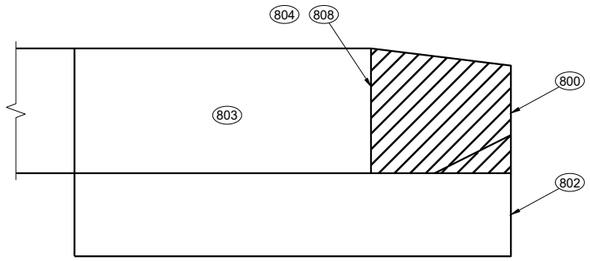


CONCRETE BARRIER
SINGLE SLOPE (CBSS)

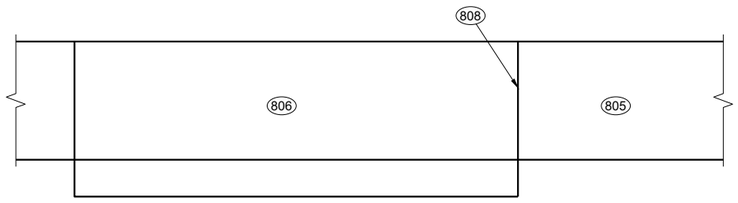
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



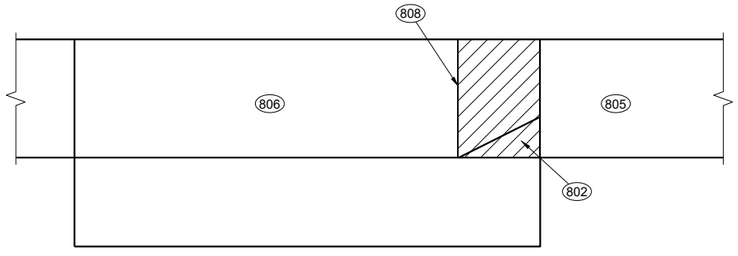
REMOVAL AREA OF
32" CONCRETE THRIE BEAM ANCHORAGE



REMOVAL AREA OF CONCRETE THRIE BEAM ANCHORAGE WITH HEIGHT GREATER THAN 32"



CONCRETE BARRIER EXTENSION NEAR END ANCHORAGE



CONCRETE BARRIER EXTENSION NEAR THRIE BEAM TERMINAL

GENERAL NOTES

END ANCHORAGE MAY OR MAY NOT BE PRESENT ON EXISTING BARRIER.

REMOVE THRIE BEAM ANCHORAGE AS SHOWN.

(800) AREA OF BARRIER REMOVAL AN NEW CONCRETE AND STEEL IS INSTALLED.

(801) MINIMUM LENGTH OF REMOVAL IS 15'

(802) FOOTING BELOW GROUND MAY REMAIN IN PLACE.

(803) CONCRETE BARRIER SINGLE SLOPE THRIE BEAM ANCHOR TO REMAIN.

(804) SAW CUT

(805) NEW SINGLE SLOPE CONCRETE BARRIER.

(806) CONCRETE BARRIE SINGLE SLOPE TO REMAIN.

(807) SINGLE SLOPE CONCRETE BARRIER OR CONCRETE BARRIER SINGLE SLOPE THRIE BEAM ANCHOR TO REMAIN.

(808) SEE CONNECTION DETAIL.

(809) NO. 5 CONTINUOUS BAR.

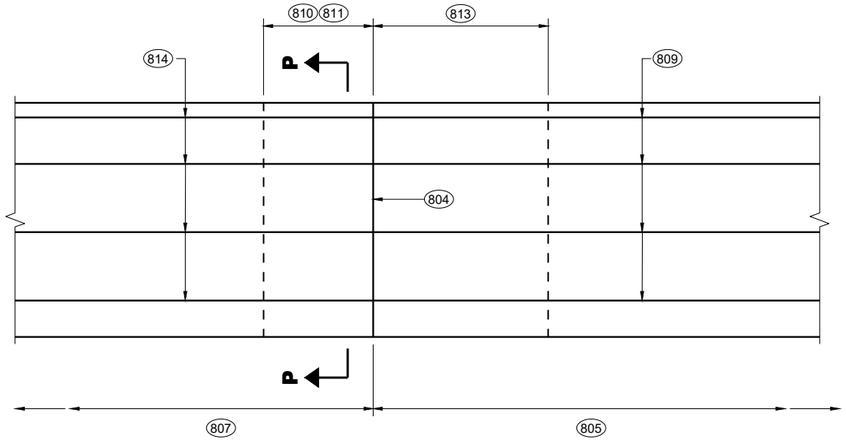
(810) 3' MIN. DRILL HOLES. USES NO. 5 ADHESIVE ANCHORS.

(811) THE NUMBER OF DRILL HOLES IS EQUAL TO THE NUMBER OF HORIZONTAL REBAR IN BARRIER. DRILL HOLES ARE TO BE A MINIMUM OF 4" FROM EDGE OF CONCRETE.

(812) EXISTING REBAR IN EXISTING BARRIER OR END ANCHOR.

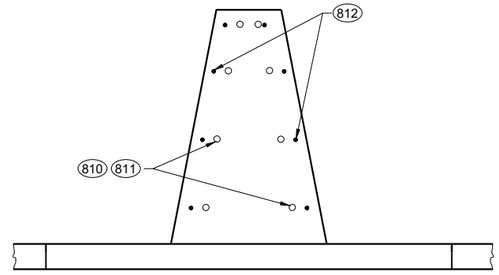
(813) 3' BAR OVERLAP

(814) EXISTING REINFORCEMENT

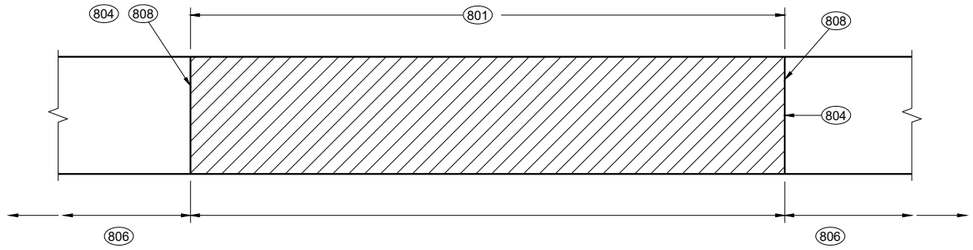


CONNECTION DETAIL

SINGLE SLOPE CONCRETE BARRIER TO
NEW SINGLE SLOPE CONCRETE BARRIER



SECTION P - P



BARRIER REMOVAL AND REPLACEMENT

RETROFIT OR REPAIR SINGLE SLOPE CONCRETE BARRIER

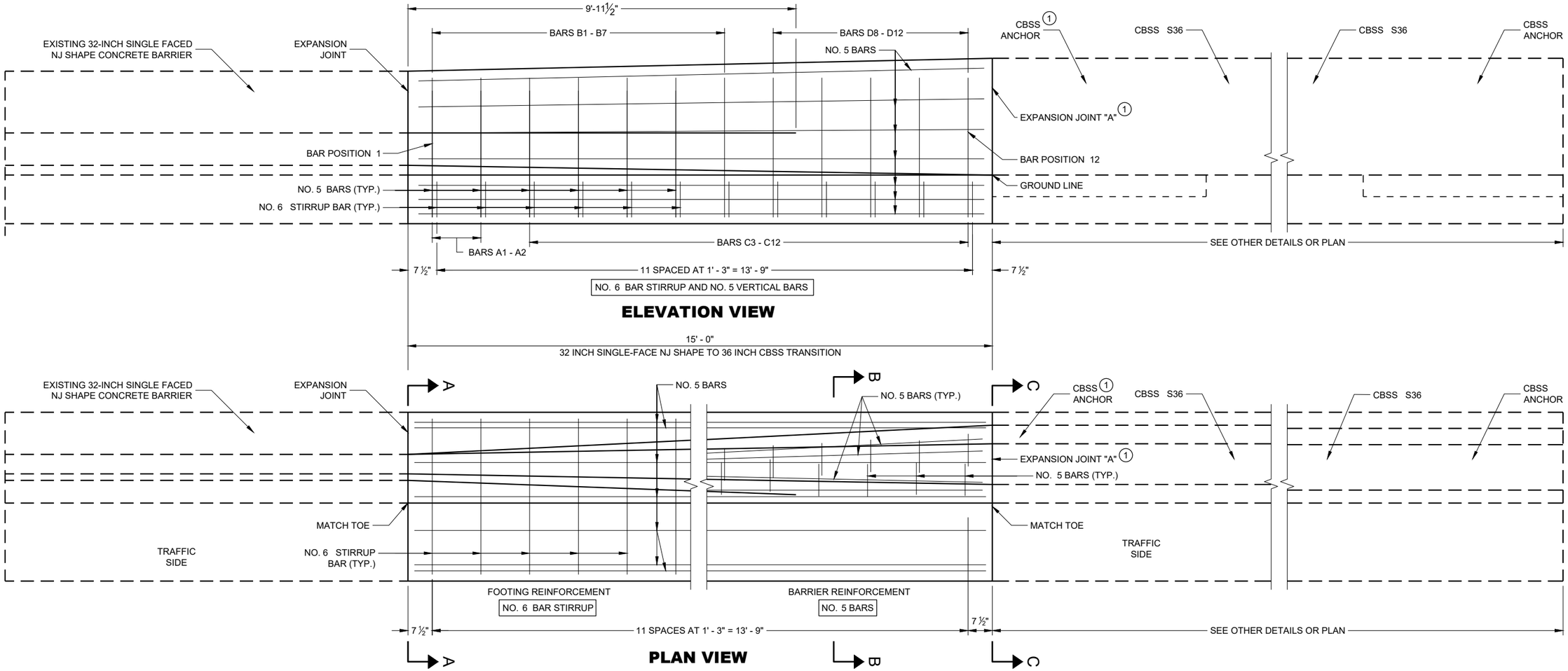
CONCRETE BARRIER
SINGLE SLOPE (CBSS)

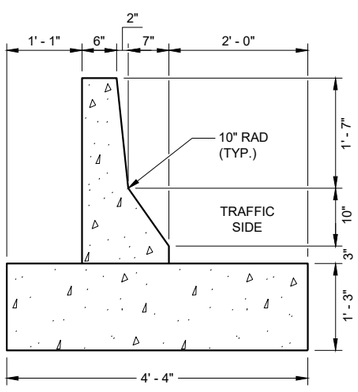
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

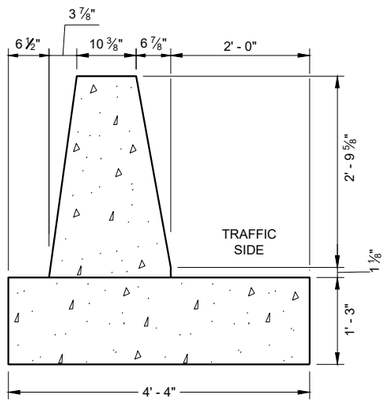
6

SDD 14B32-11h

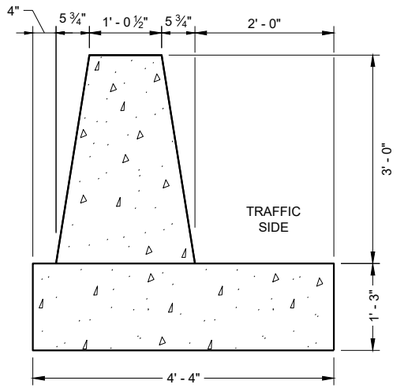




SECTION A - A



SECTION B - B



SECTION C - C

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

32 - INCH SINGLE FACED NJ SHAPE CONCRETE BARRER TO 36 - INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

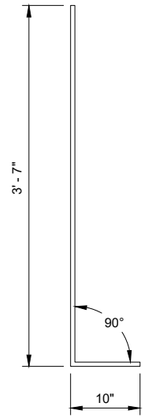
6

SDD 14B35 - 02c

6

SDD 14B35 - 02c

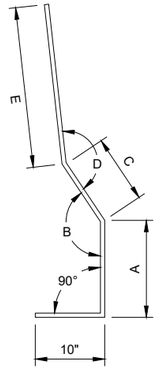
"A" BAR POSITIONS 1 - 2



"A" BAR BENDING DETAIL

"B" BAR CHART BAR POSITIONS 1 - 7

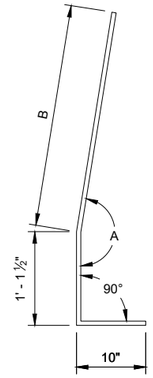
BAR	A	B	C	D	E
B1	1' - 2 ¼"	148°	1' - 1 ¼"	154°	1' - 5 ½
B2	1' - 2 ¼"	151°	1' - 1"	158°	1' - 6"
B3	1' - 2"	154°	1' - ¾"	161°	1' - 6 ½"
B4	1' - 2"	157°	1' - ½"	164°	1' - 7"
B5	1' -1 ½"	159°	1' - ¼"	168°	1' - 8"
B6	1' -1 ½"	162°	1' - ¼"	173°	1' - 8"
B7	1' -1 ½"	165°	1' - ¼"	176°	1' - 8"



"B" BAR BENDING DETAIL

"C" BAR CHART BAR POSITIONS 3 - 12

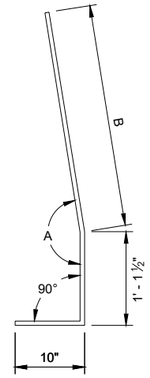
BAR	A	B
C3	178°	2' - 6"
C4	178°	2' - 6 ½"
C5	177°	2' - 7"
C6	176°	2' - 7 ½"
C7	174°	2' - 8"
C8	174°	2' - 8"
C9	174°	2' - 8 ½"
C10	173°	2' - 9"
C11	173°	2' - 9"
C12	172°	2' - 9 ½"



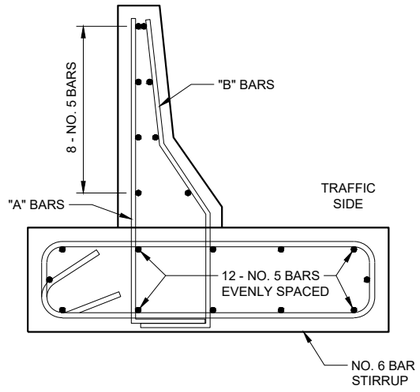
"C" BAR BENDING DETAIL

"D" BAR CHART BAR POSITIONS 8 - 12

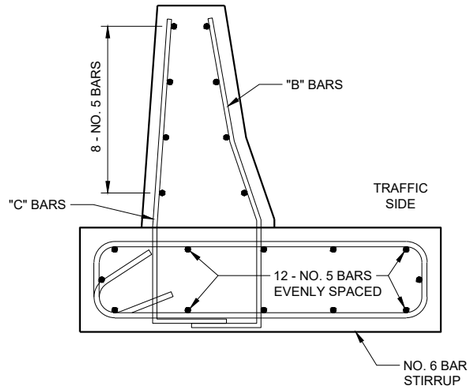
BAR	A	B
D8	169°	2' - 8"
D9	170°	2' - 8 ½"
D10	170°	2' - 9"
D11	171°	2' - 9"
D12	171°	2' - 9 ½"



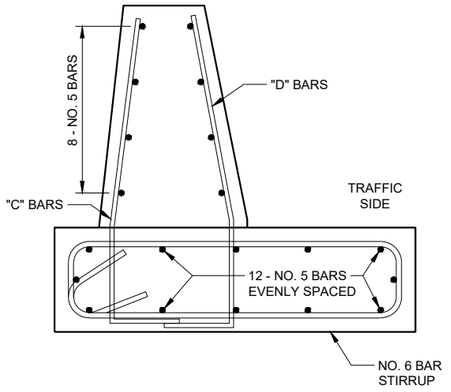
"D" BAR BENDING DETAIL



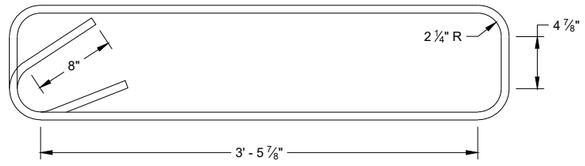
BAR DETAIL BAR POSITIONS 1 - 2



BAR DETAIL BAR POSITIONS 3 - 7



BAR DETAIL BAR POSITIONS 8 - 12



STIRRUP BAR BENDING DETAIL

32 - INCH SINGLE FACED NJ SHAPE CONCRETE BARRIER TO 36 - INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

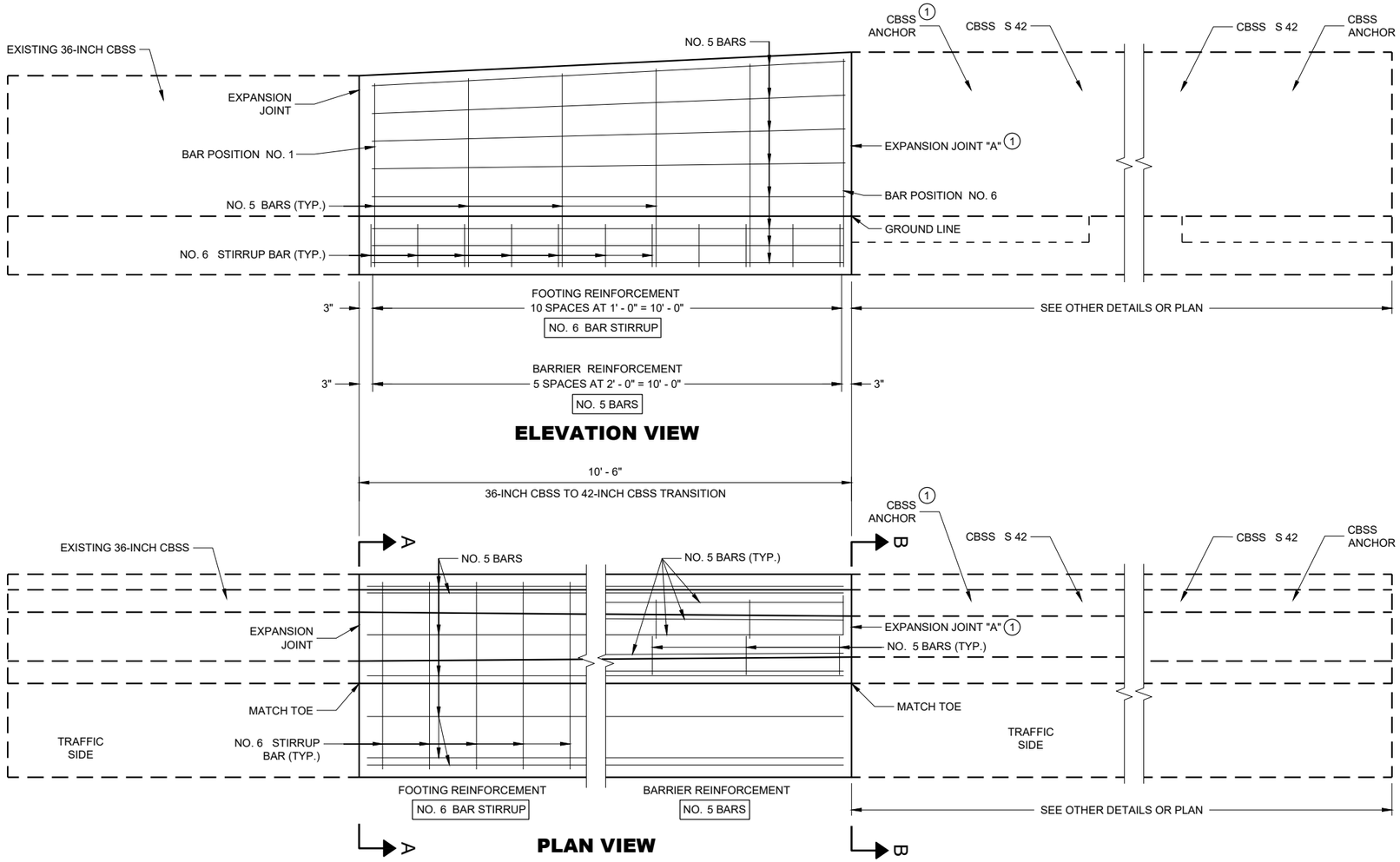
APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B35 - 02d



ELEVATION VIEW

PLAN VIEW

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

STIRRUP BAR BENDING DETAIL

SECTION A - A

SECTION B - B

BAR DETAIL
BAR POSITIONS V1 - V6

BAR CHART
BAR POSITIONS
V1 - V6

BAR	A	B
V1	170°	2' - 7 ½"
V2	170°	2' - 9"
V3	170°	2' - 9 ¾"
V4	170°	2' - 11 ¼"
V5	170°	3' - 0 ½"
V6	170°	3' - 2"

BENDING DETAIL
FOR BARS V1 - V6

36" SINGLE SLOPE CONCRETE BARRIER TO 42" SINGLE SLOPE CONCRETE BARRIER HEIGHT TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

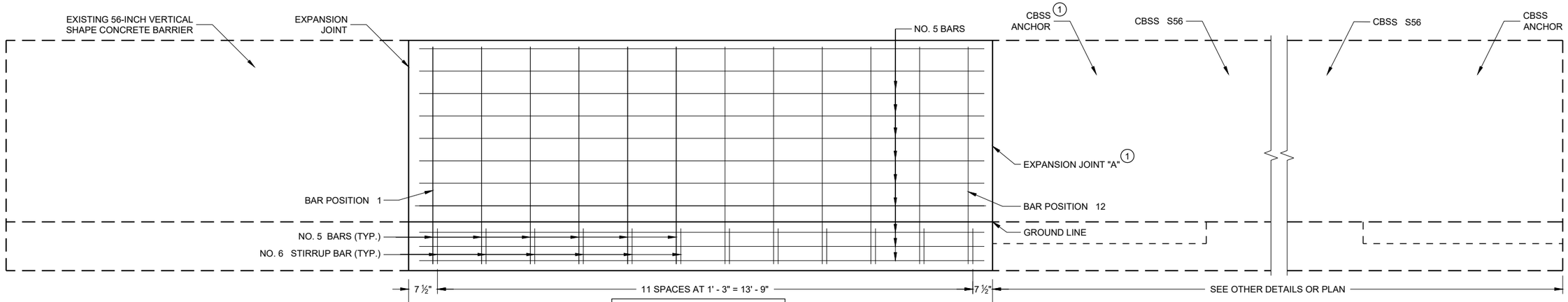
APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 14B39 - 02b

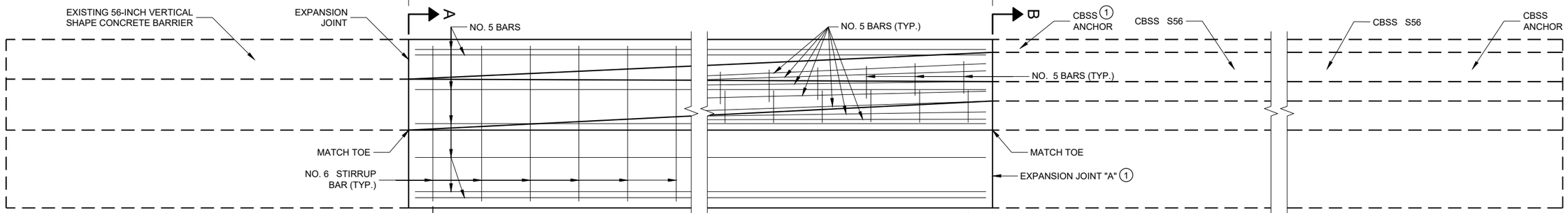
SDD 14B39 - 02b



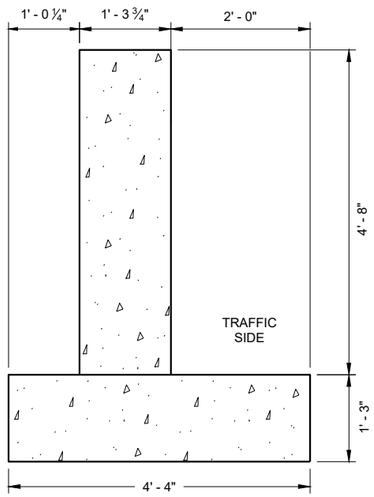
ELEVATION VIEW

15' - 0"

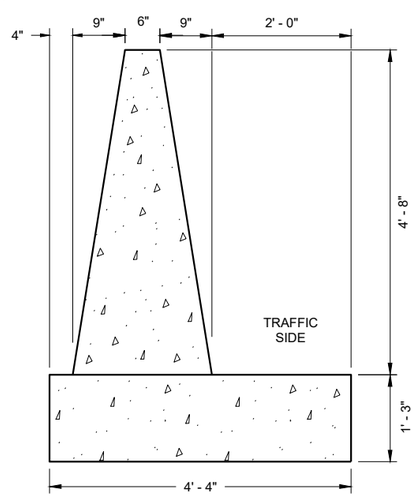
56-INCH VERTICAL SHAPE CONCRETE BARRIER TO 51-INCH CBSS TRANSITION



PLAN VIEW



SECTION A - A



SECTION B - B

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

(1) EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

56-INCH VERTICAL SHAPE CONCRETE BARRIER TO 56-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B40 - 02i

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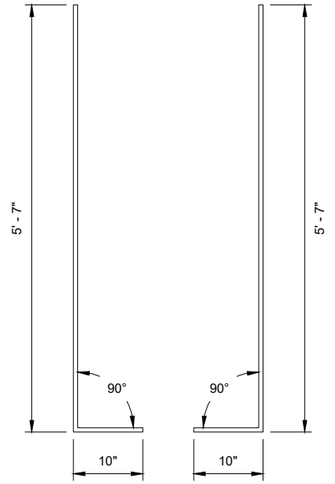
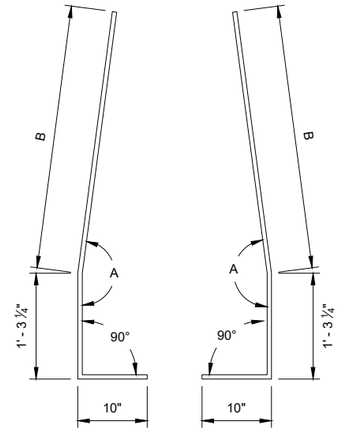
SDD 14B40 - 02i



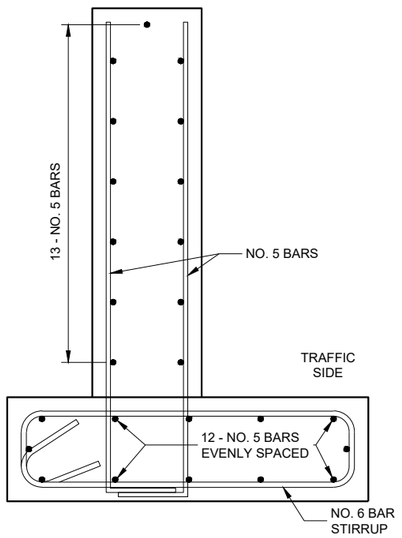
BENDING DETAIL
BAR 1

BAR CHART
BAR POSITIONS
2 - 12

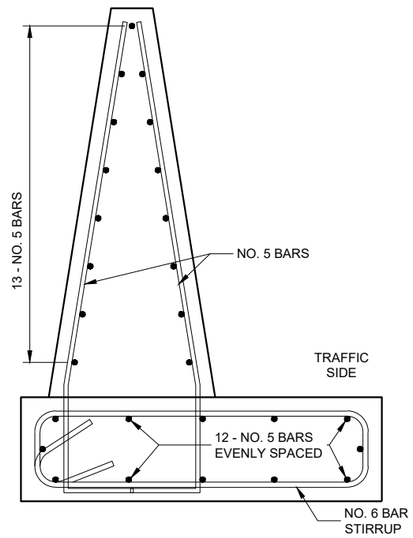
BAR	A	B
2	179°	4' - 3 ¾"
3	178°	4' - 3 ¾"
4	177°	4' - 3 ¾"
5	176°	4' - 3 ¾"
6	176°	4' - 3 ¾"
7	175°	4' - 4"
8	174°	4' - 4"
9	173°	4' - 4"
10	172°	4' - 4"
11	172°	4' - 4 ¼"
12	171°	4' - 4 ½"



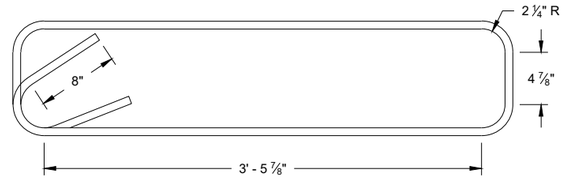
BENDING DETAIL
BARS 2 - 12



BAR DETAIL
BAR POSITION 1



BAR DETAIL
BAR POSITIONS 2 - 12



STIRRUP BAR
BENDING DETAIL

6

6

SDD 14B40 - 02j

SDD 14B40 - 02j

56-INCH VERTICAL SHAPE CONCRETE BARRIER TO 56-INCH SINGLE SLOPE CONCRETE BARRIER TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

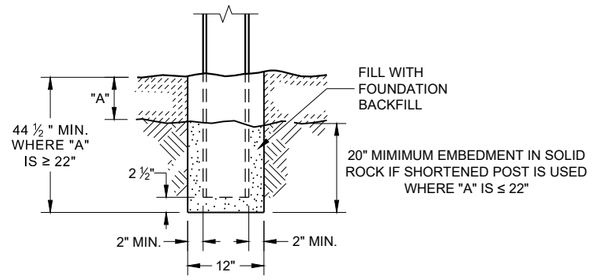
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

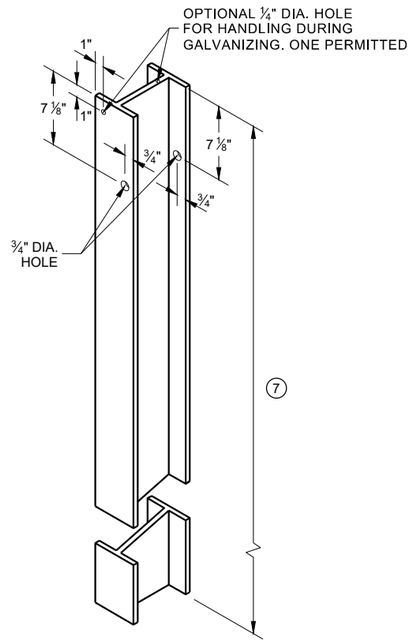
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST 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.

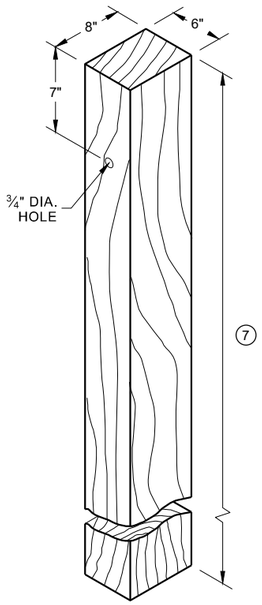
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



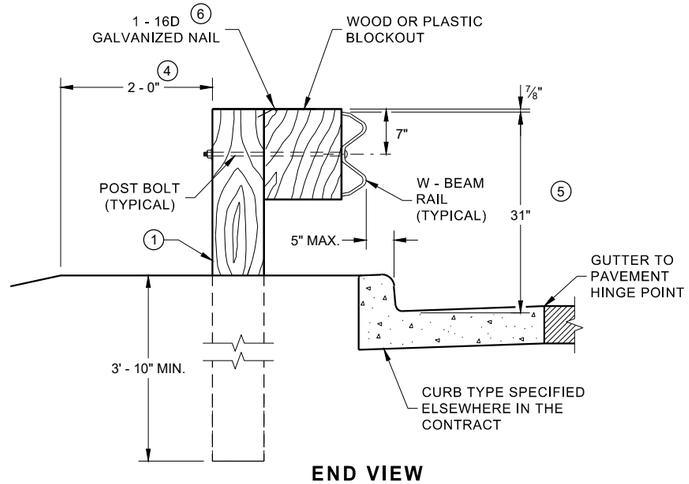
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



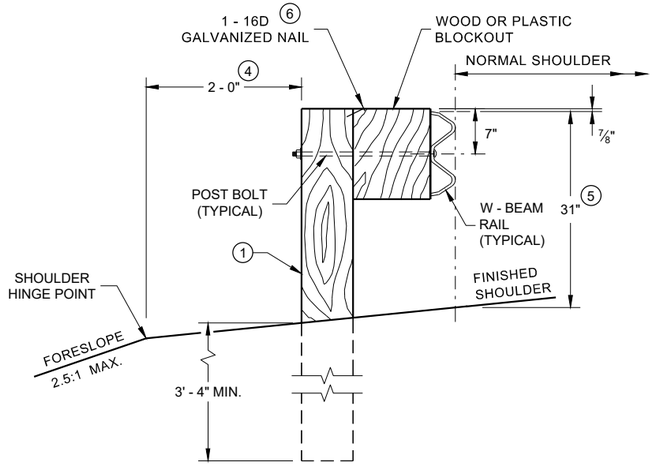
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



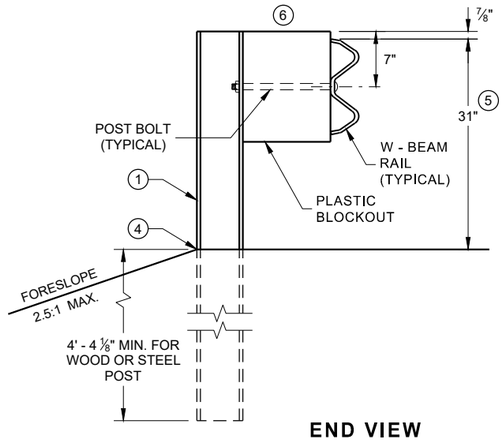
WOOD POST (6" X 8") NOMINAL (1)



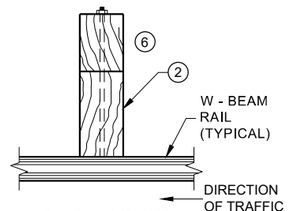
END VIEW
LOCATED ALONG A CURBED ROADWAY



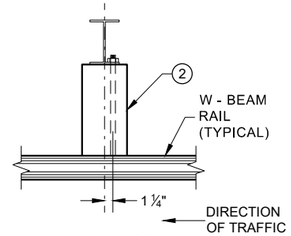
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



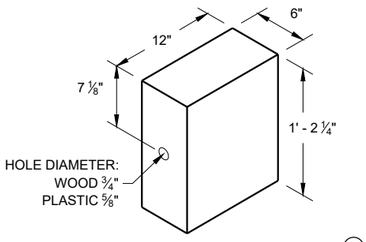
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



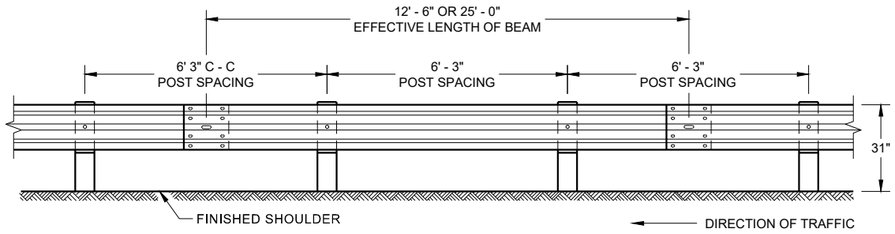
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

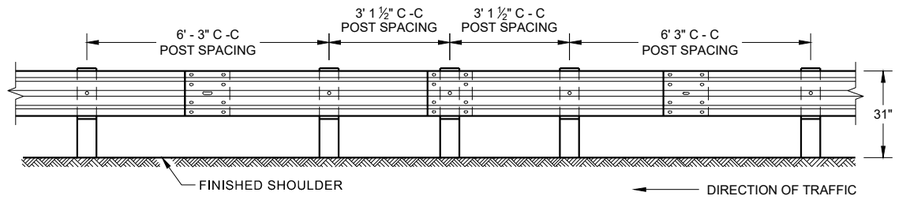
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

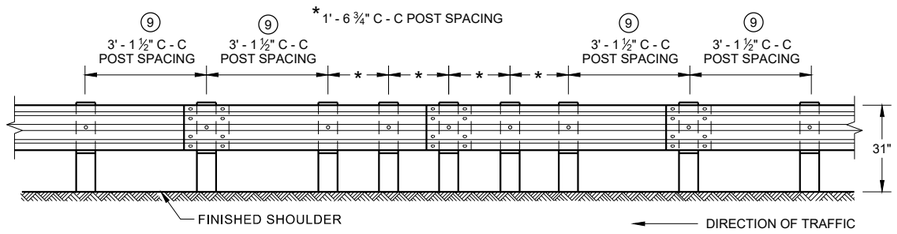
SDD 14B42 - 07a



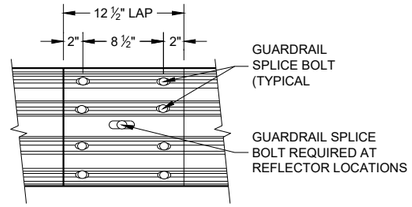
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

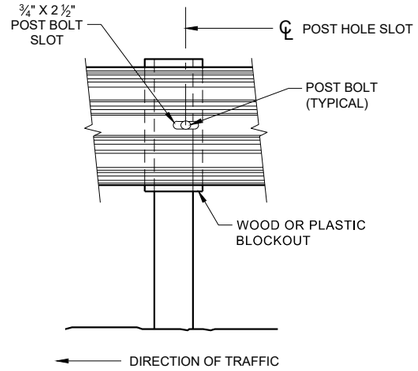
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

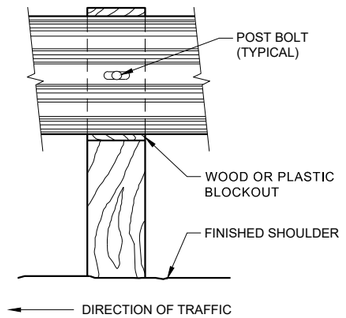
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

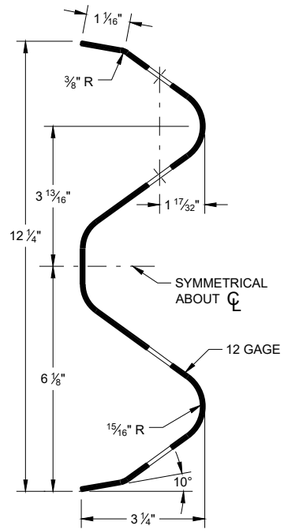
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



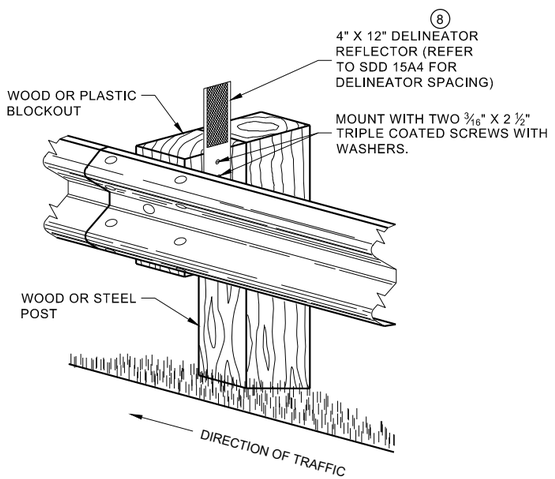
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



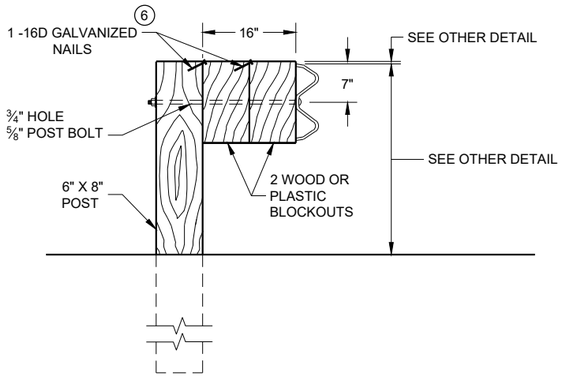
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

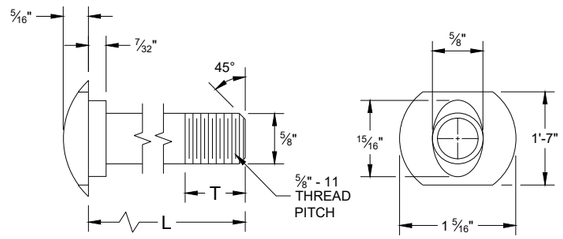


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

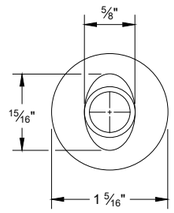
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

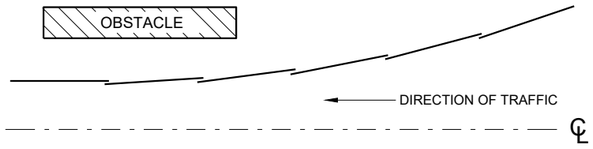


POST BOLT TABLE

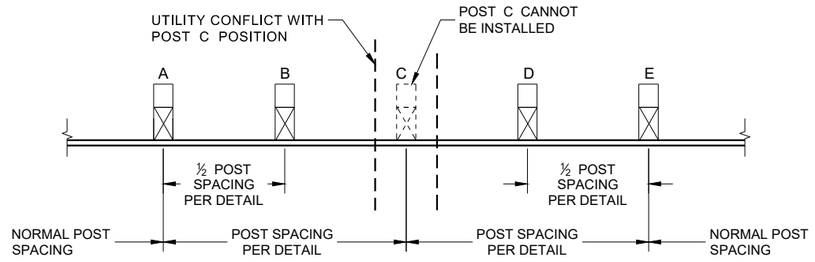
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



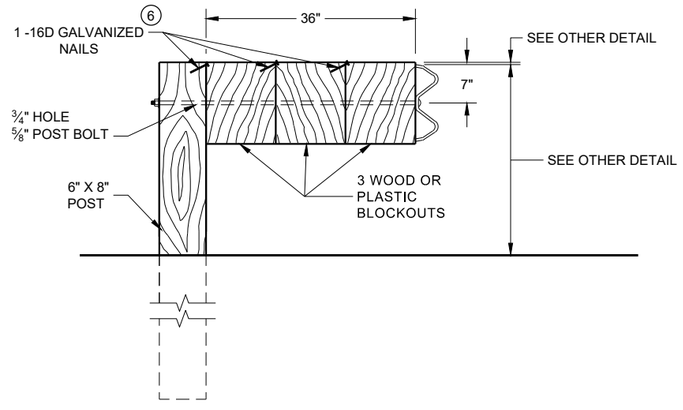
ALTERNATE BOLT HEAD



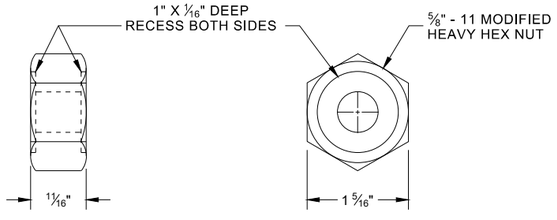
PLAN VIEW
BEAM LAPPING DETAIL



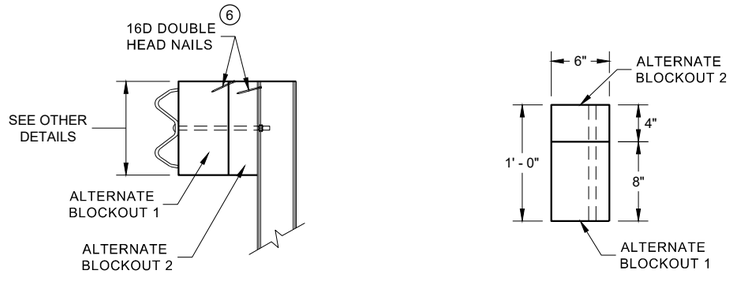
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW PLAN VIEW

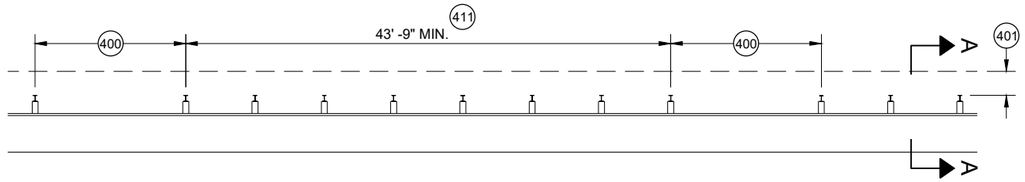
ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

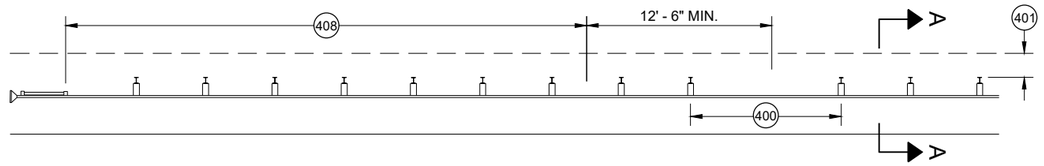
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD 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.

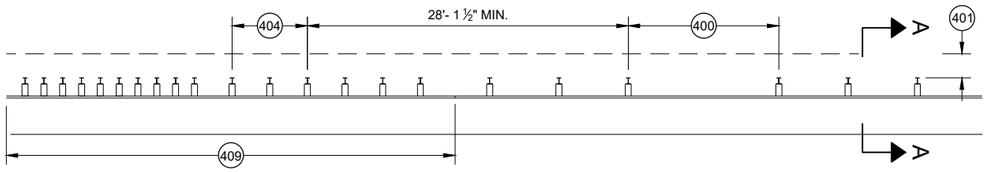
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



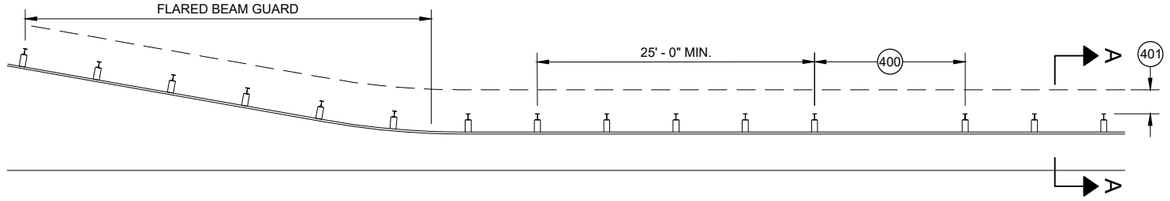
MISSING POST IN MGS GUARDRAIL



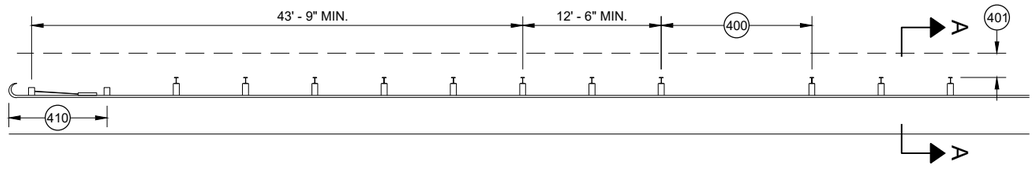
MISSING POST IN MGS GUARDRAIL NEAR EAT



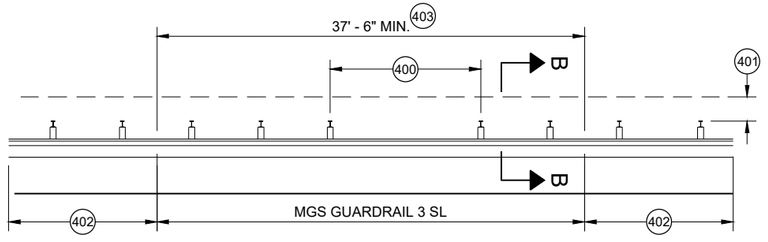
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

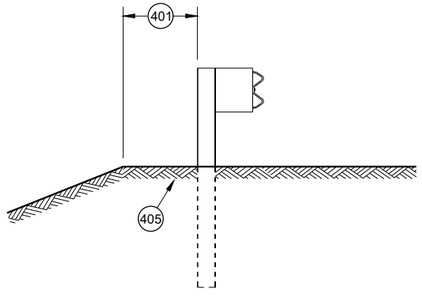


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

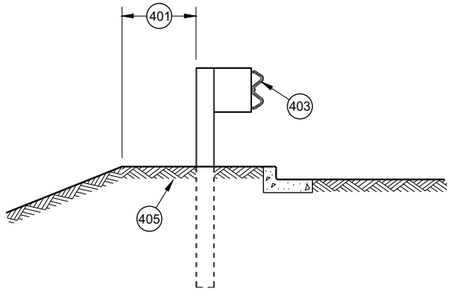


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

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SDD 14B42 - 07d

SDD 14B42 - 07d

GENERAL NOTES

(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

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

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

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

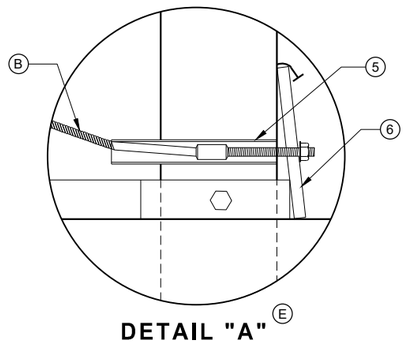
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

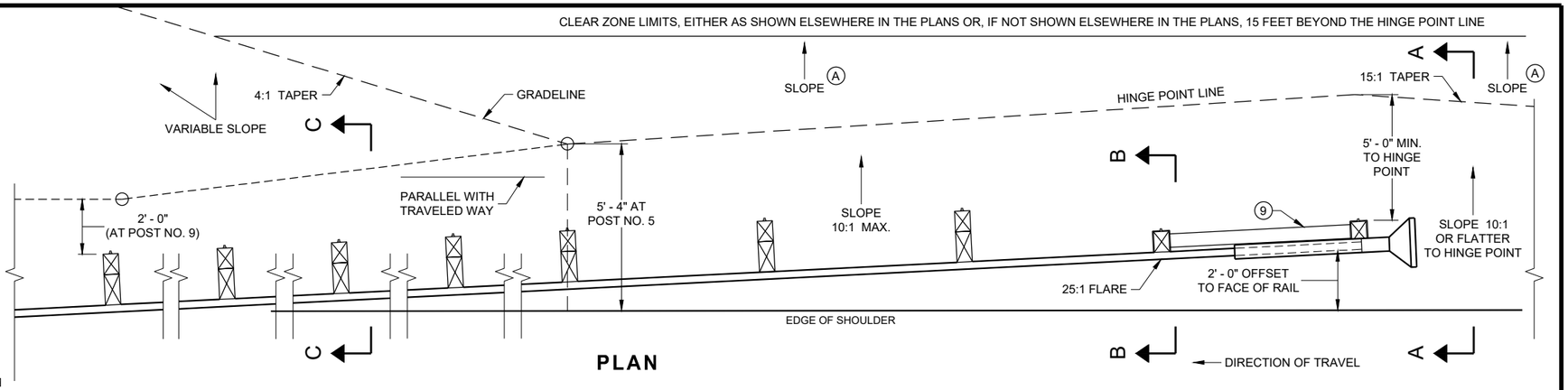
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

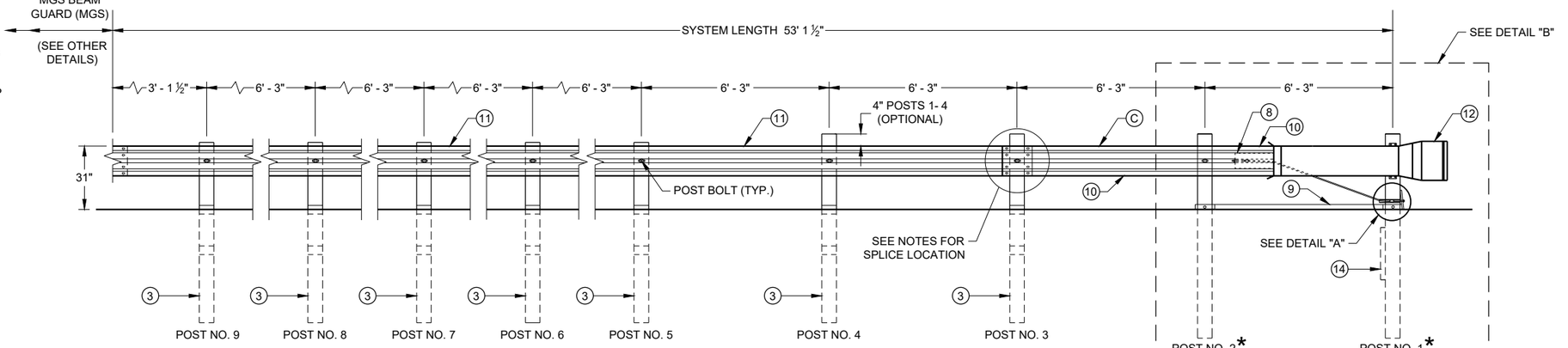
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



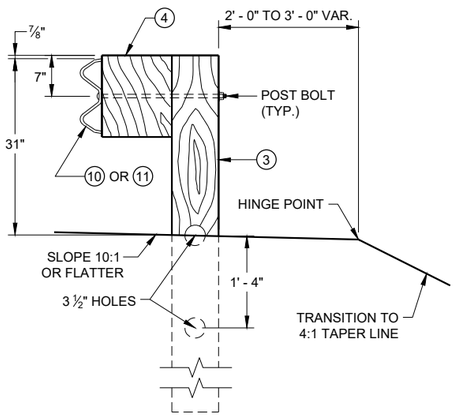
DETAIL "A" (E)



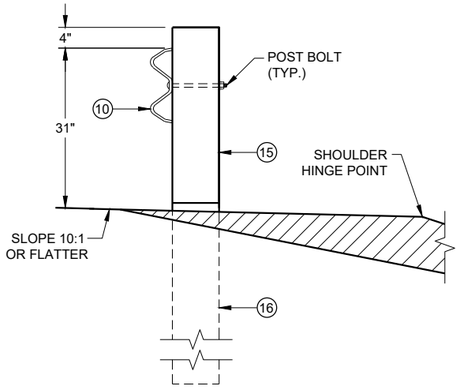
PLAN



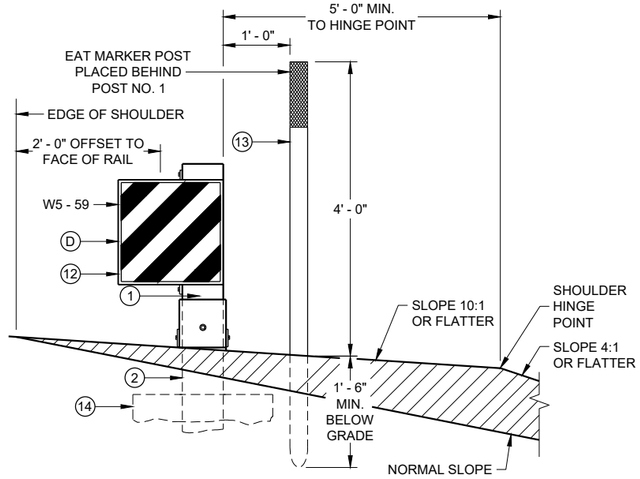
ELEVATION



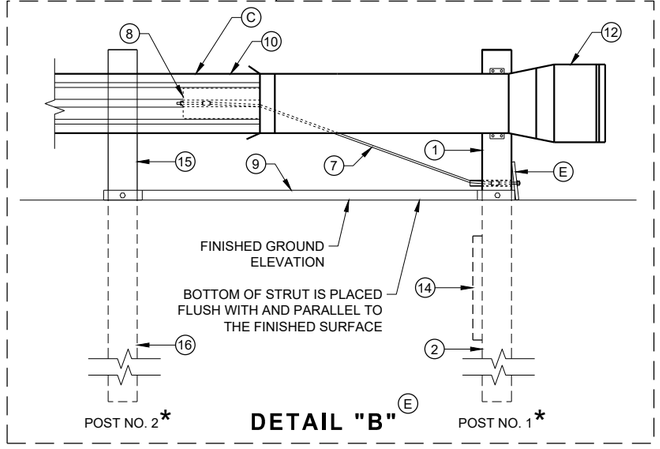
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

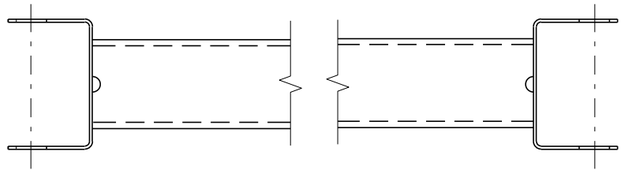
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

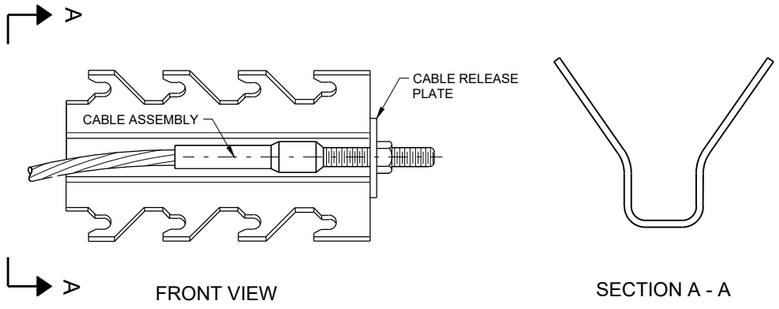
SDD 14B44 - 04a

BILL OF MATERIALS

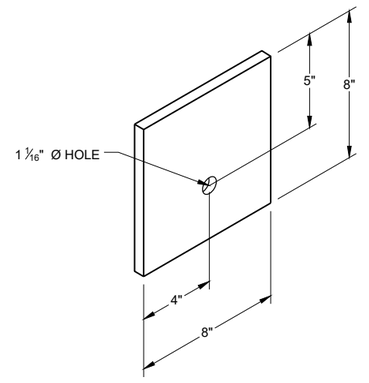
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC GROUND STRUT ⑨ Ⓔ



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



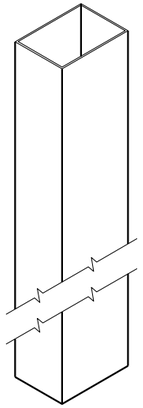
BEARING PLATE ⑥ Ⓔ

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

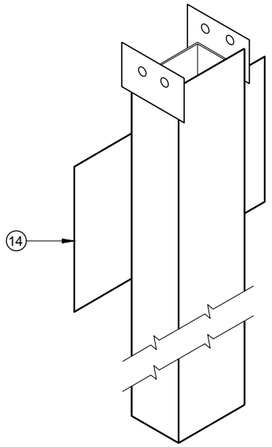
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

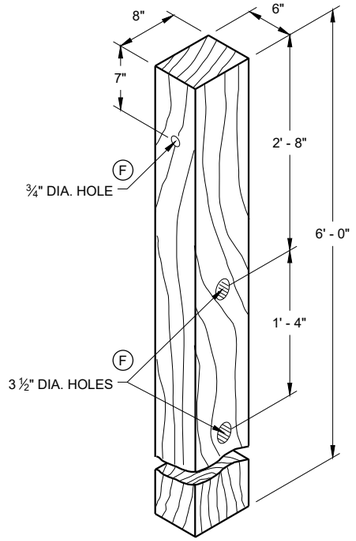
SDD 14B44 - 04b



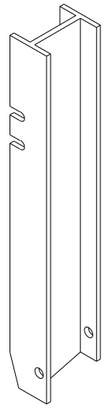
UPPER POST NO. 1 (1) (E)



LOWER POST NO. 1 (2) (E)



WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



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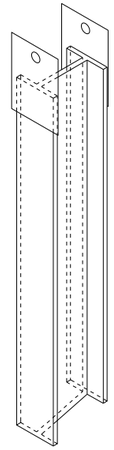
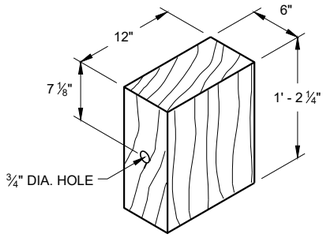
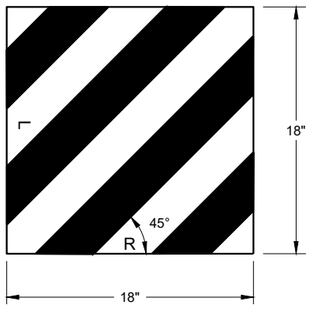


LOWER POST NO. 2 (16) (E)

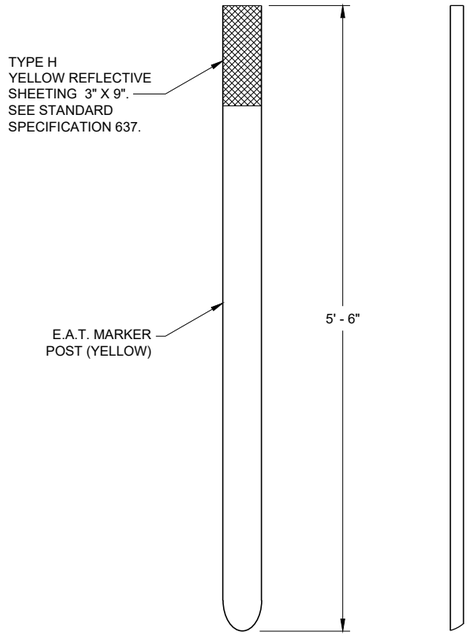


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



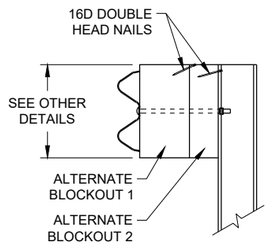
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

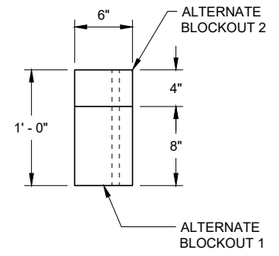


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

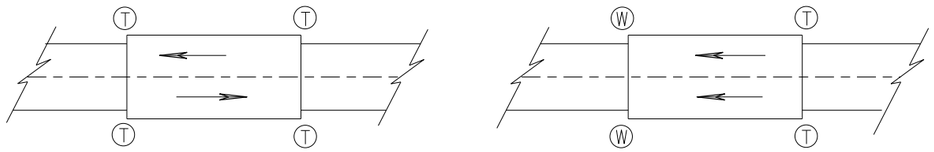
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

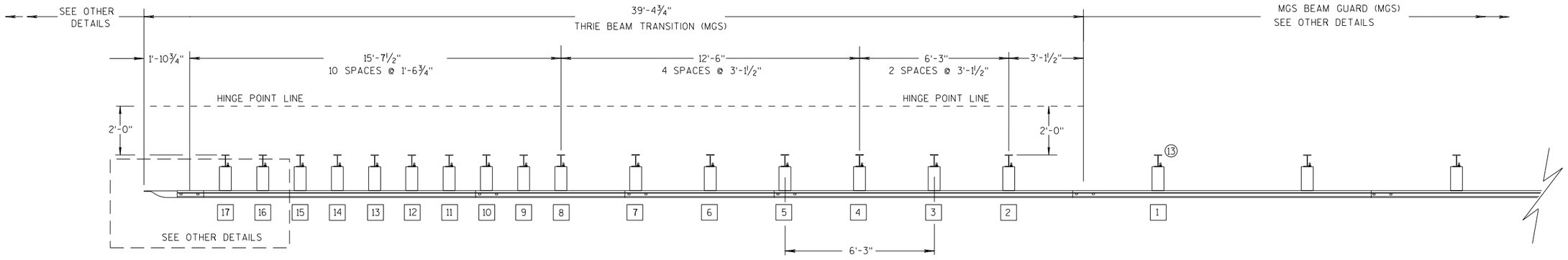
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

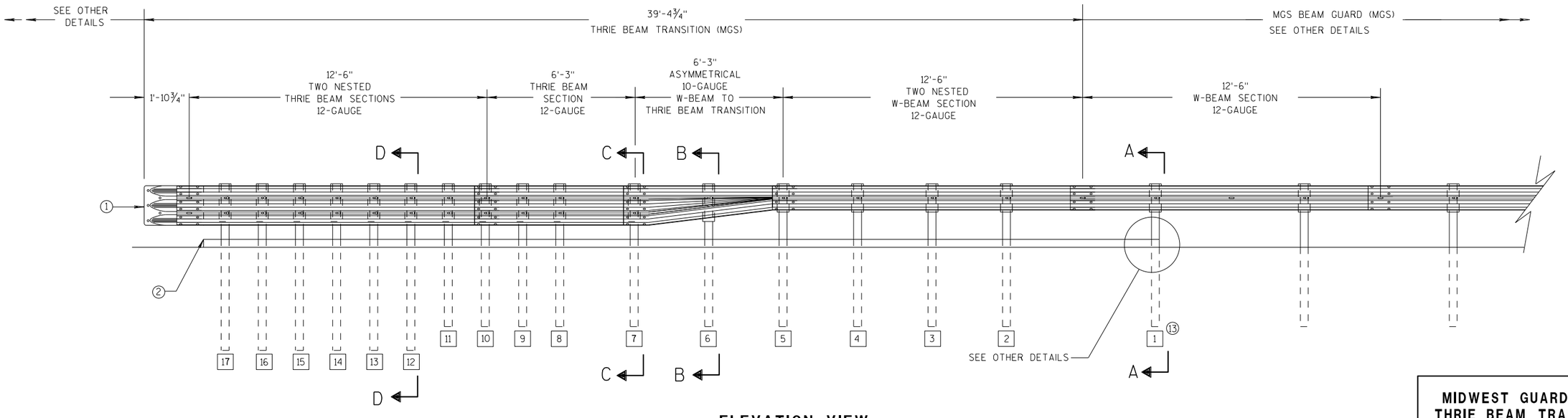
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 295

6

S.D.D. 14 B 45-5a

6

S.D.D. 14 B 45-5a

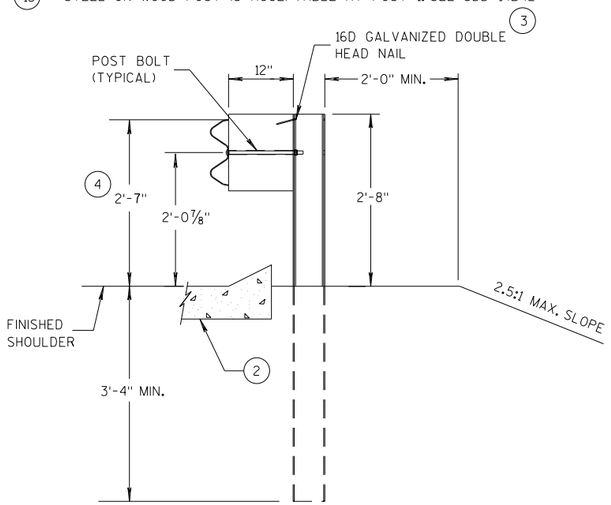
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

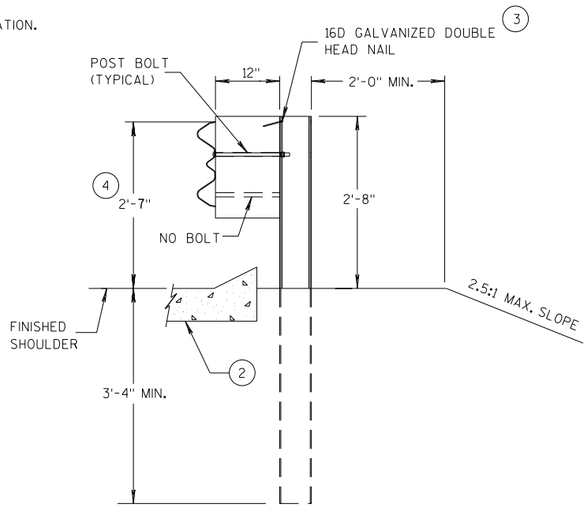
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



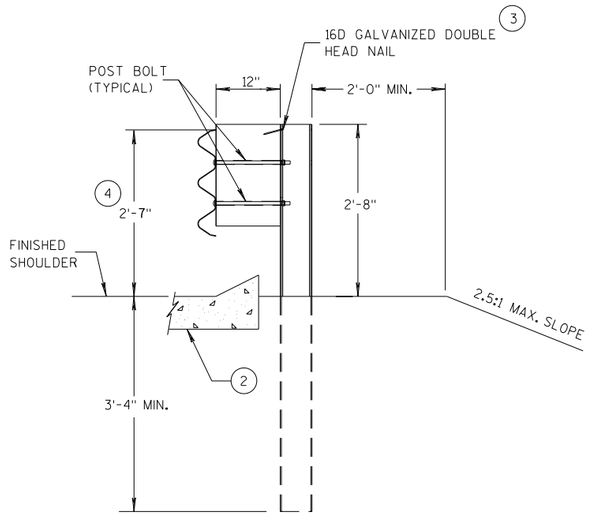
SECTION A-A (13)

POSTS 1-5



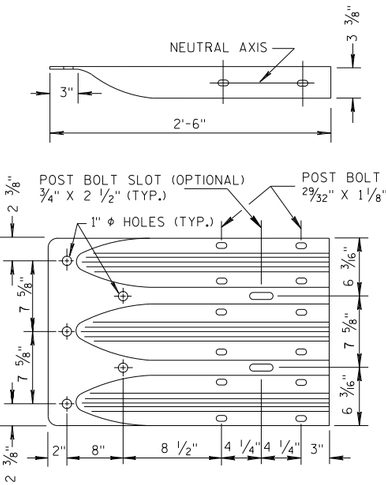
SECTION B-B

POST 6

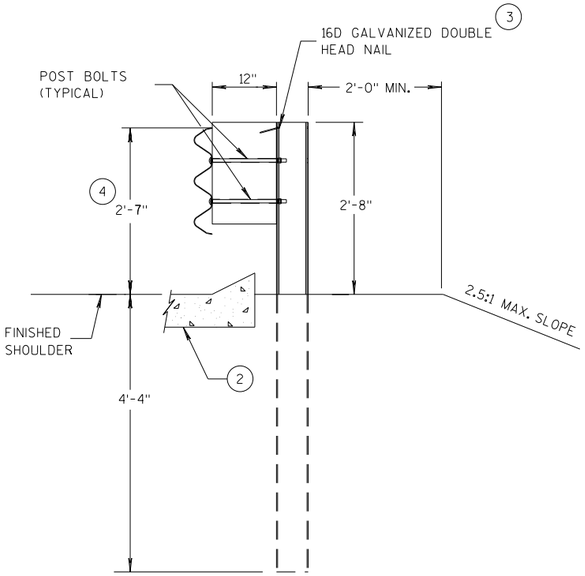


SECTION C-C

POSTS 7-11

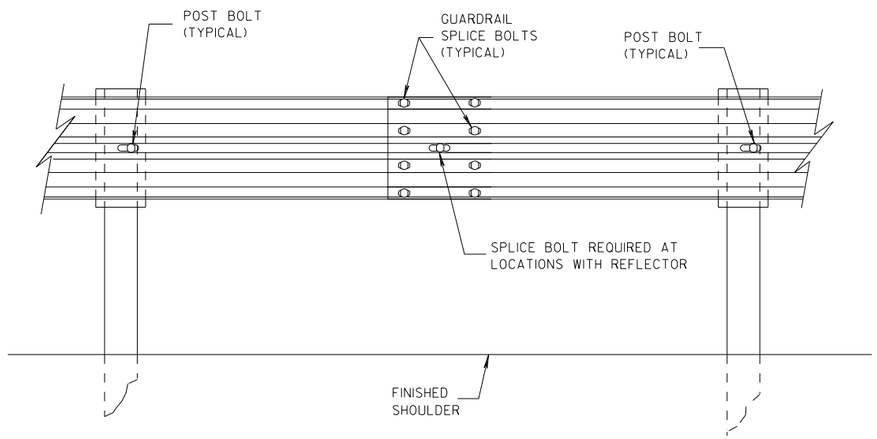


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

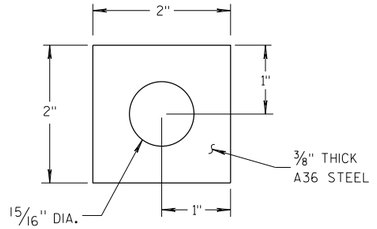
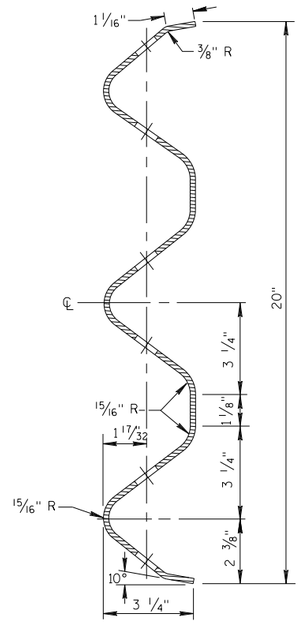


PLATE WASHER DETAIL



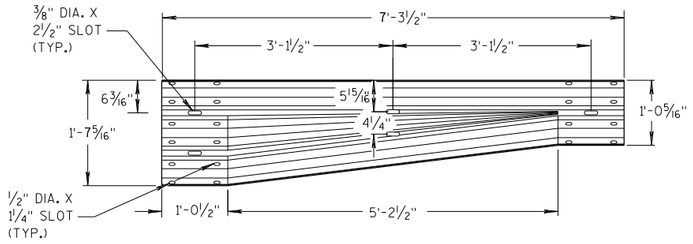
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

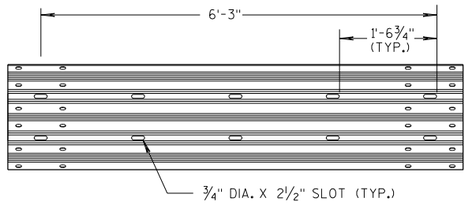
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

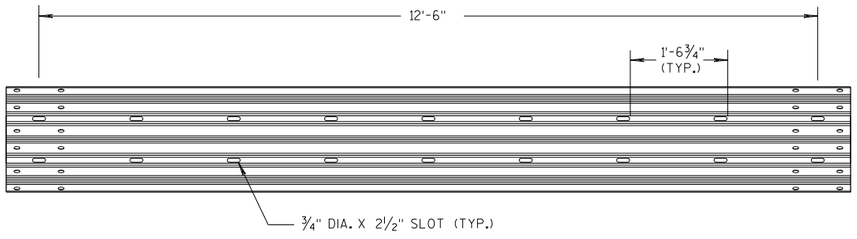
S.D.D. 14 B 45-5b



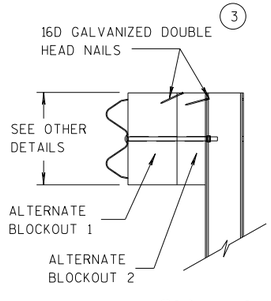
W-BEAM TO THRIE BEAM TRANSITION SECTION



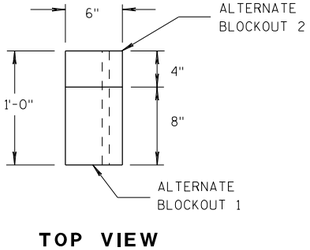
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

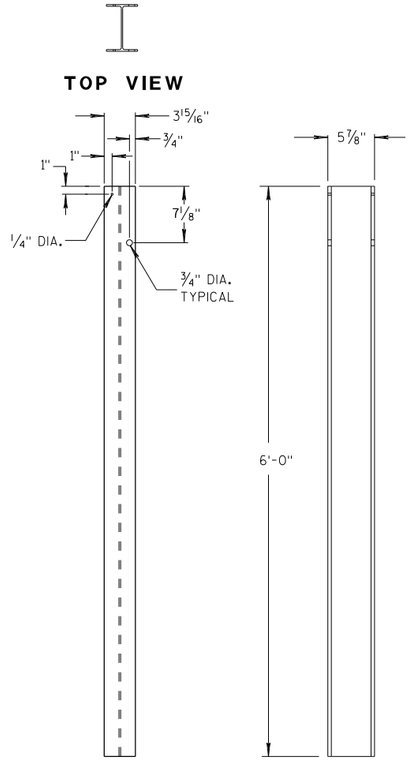


SIDE VIEW



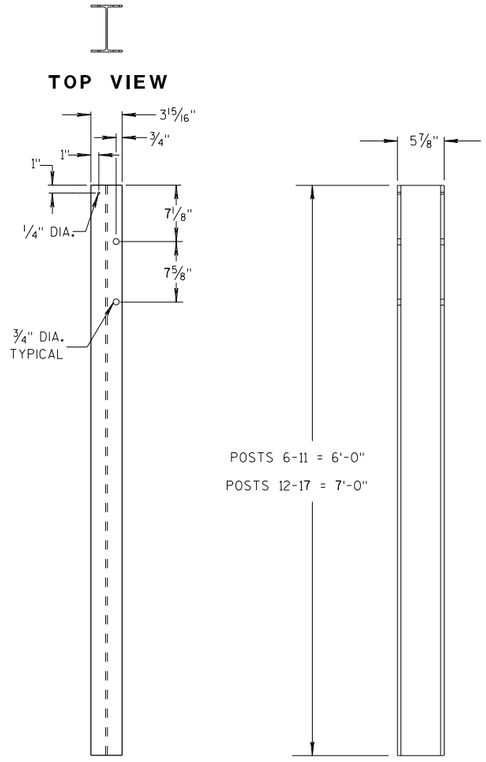
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



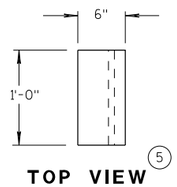
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

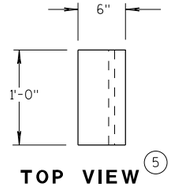


FRONT VIEW SIDE VIEW

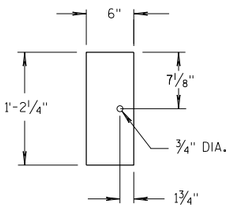
STEEL POSTS 6-17



TOP VIEW (5)

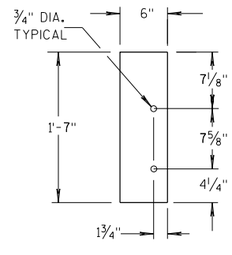


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) 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.

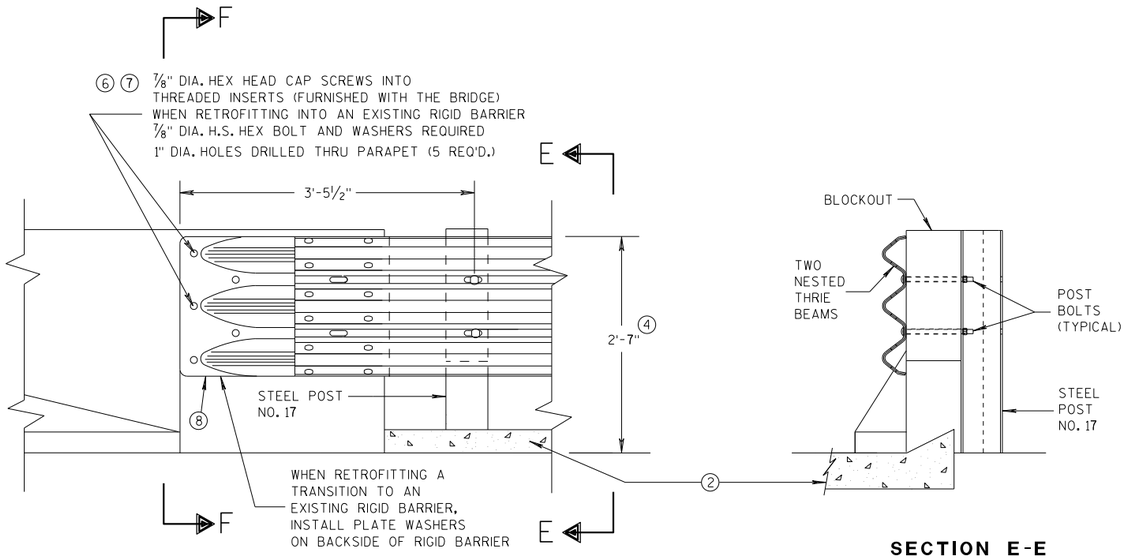
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 297

6
S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

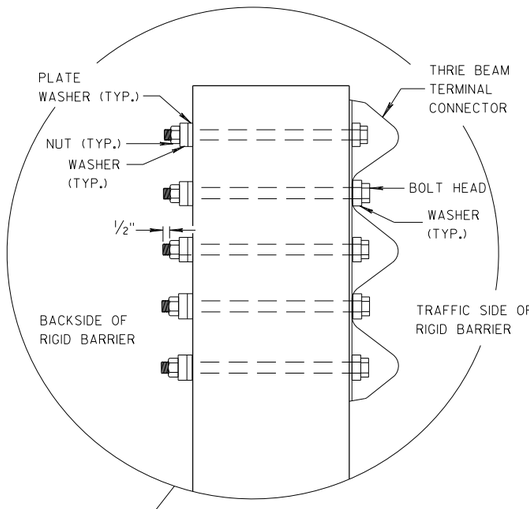
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

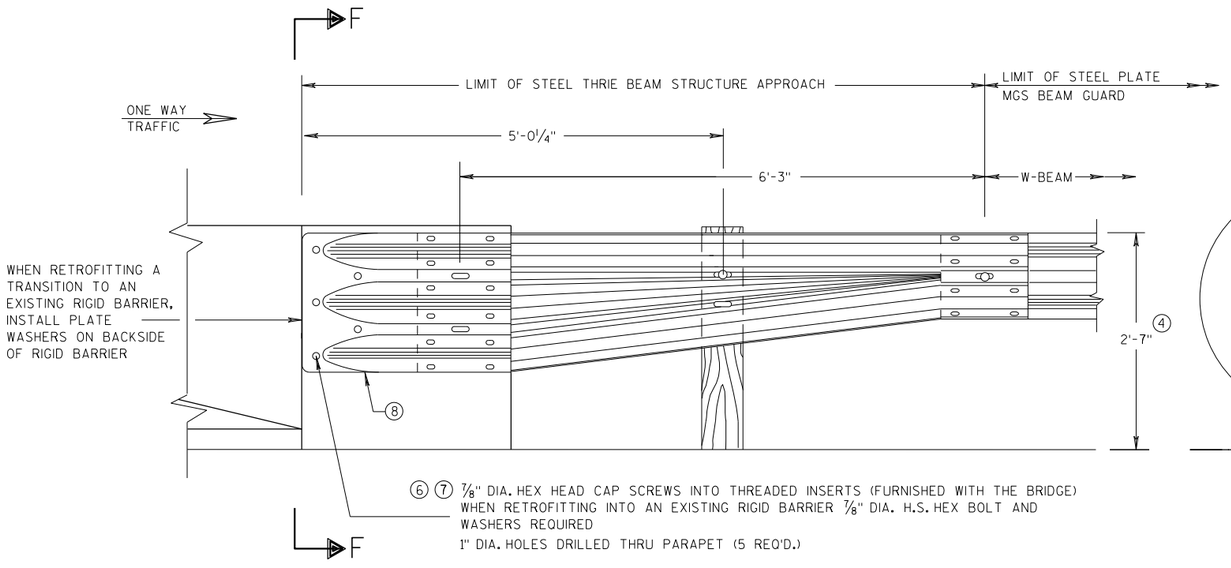
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

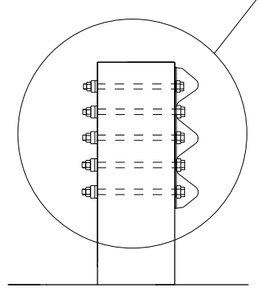
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

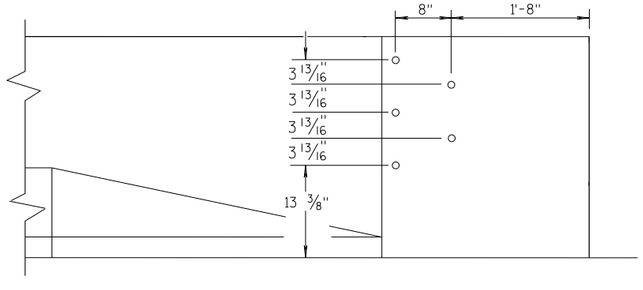




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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07/2018 — DATE
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GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

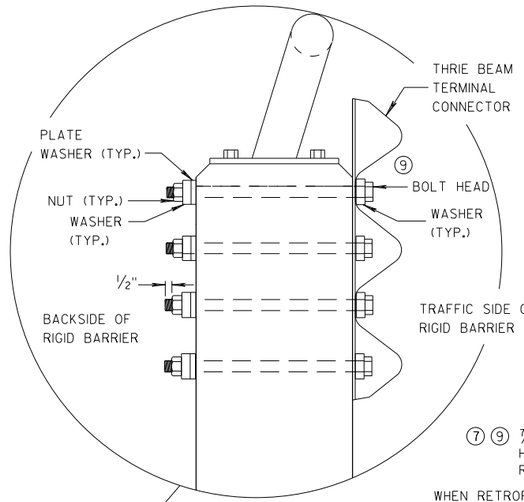
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

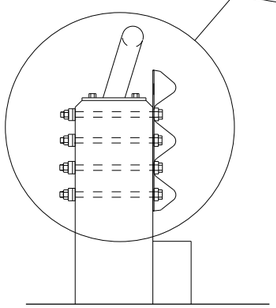
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

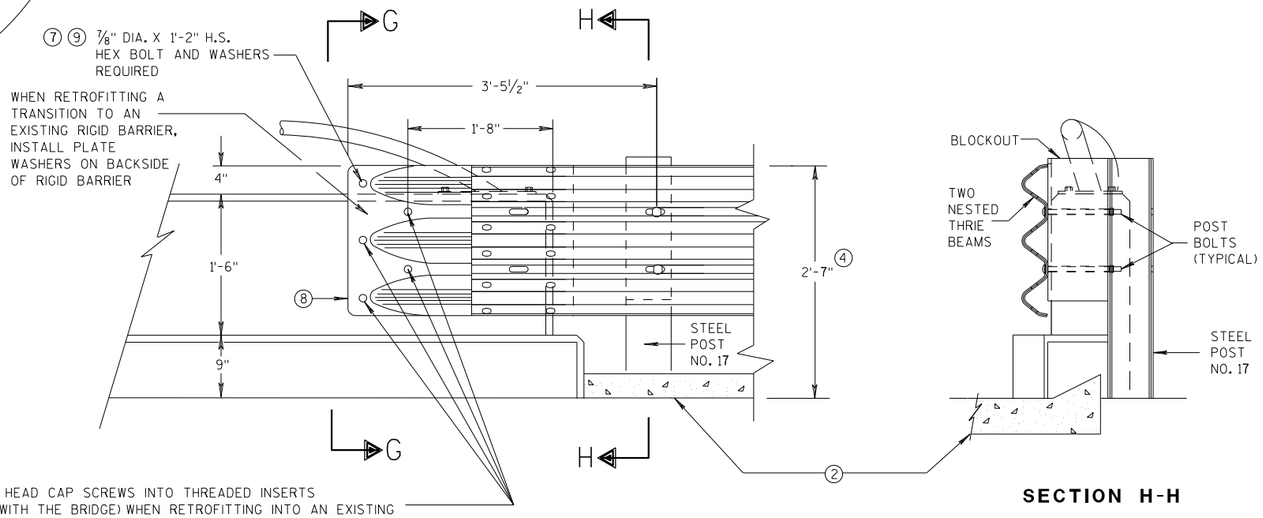
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





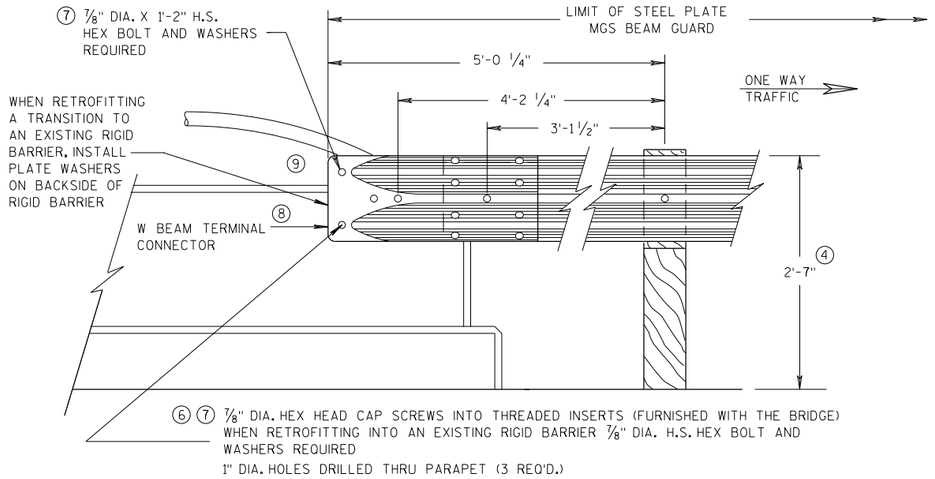
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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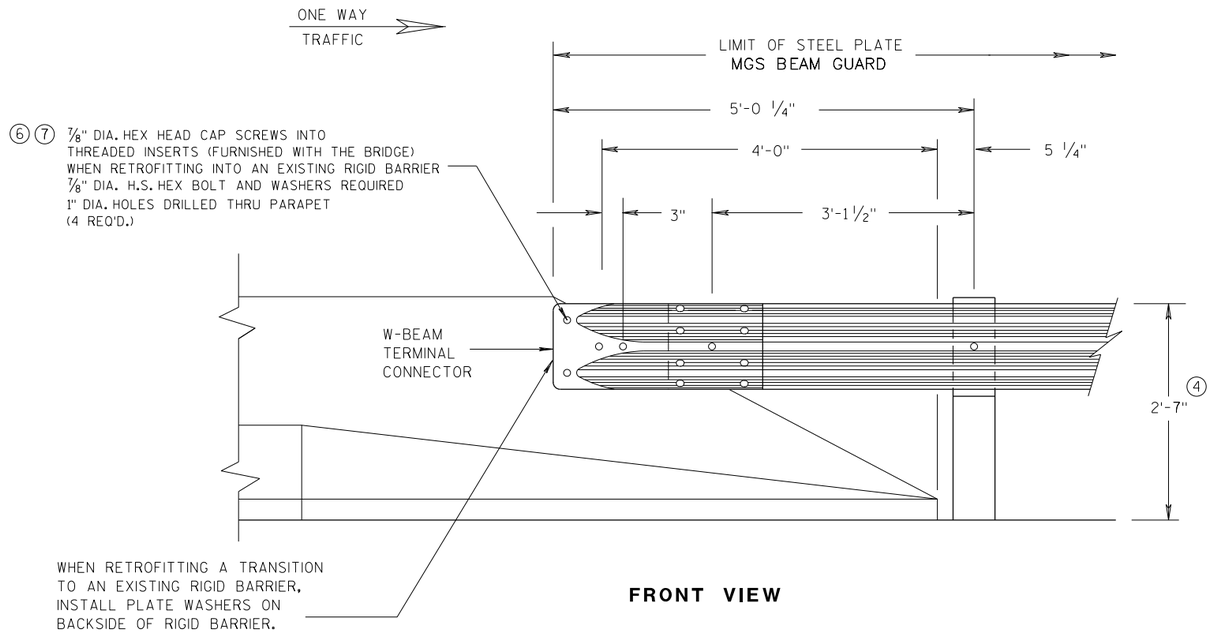


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

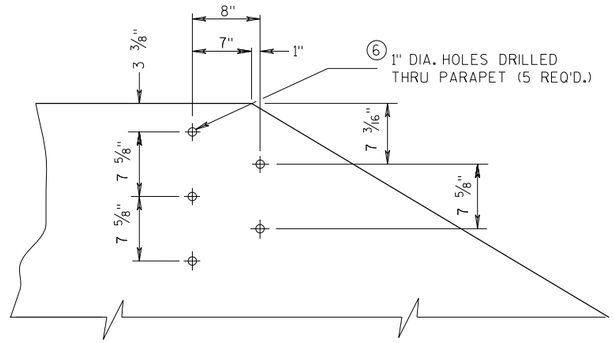
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

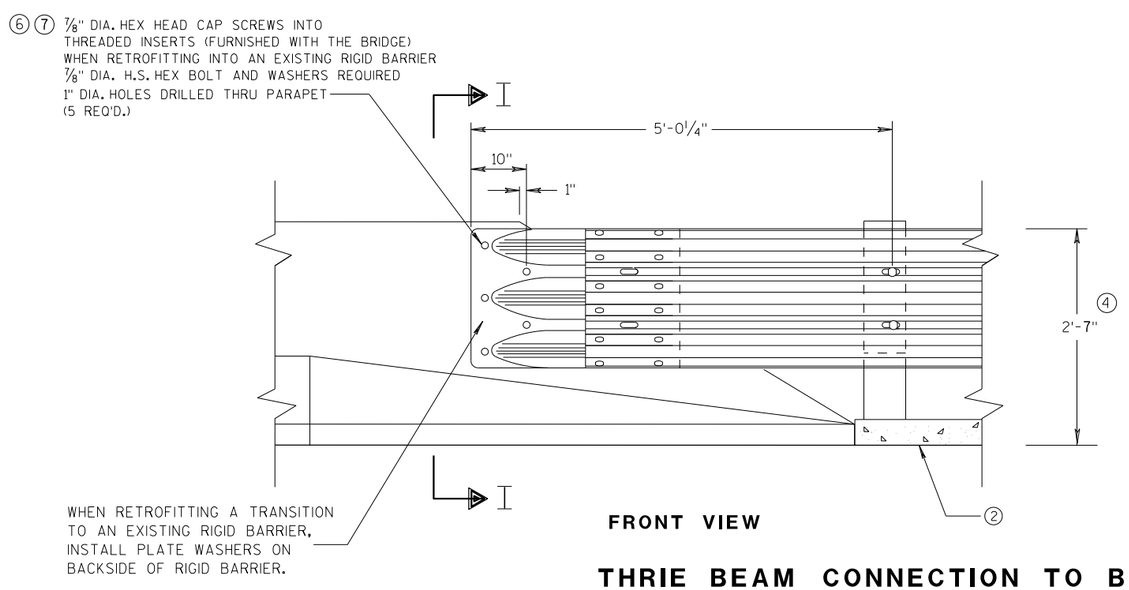
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

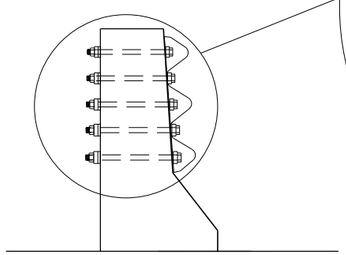
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



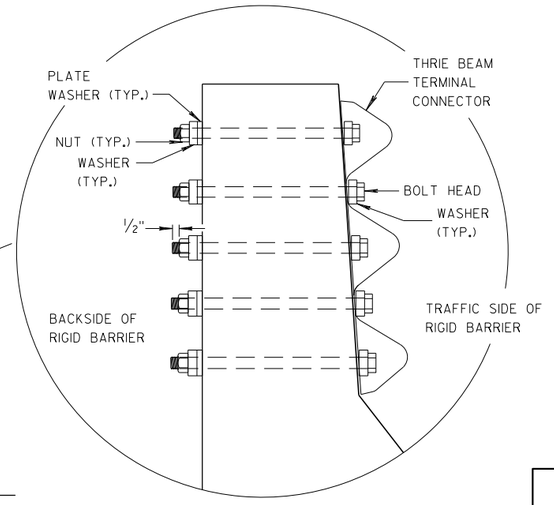
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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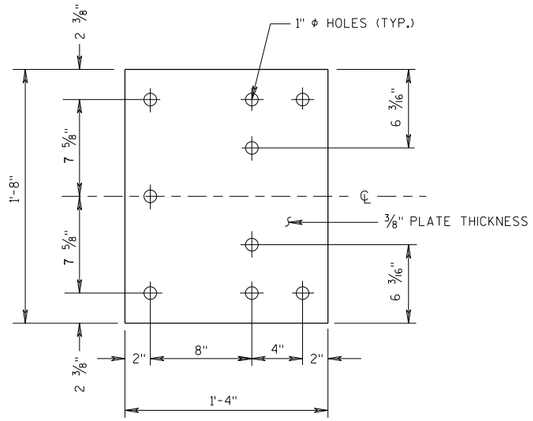
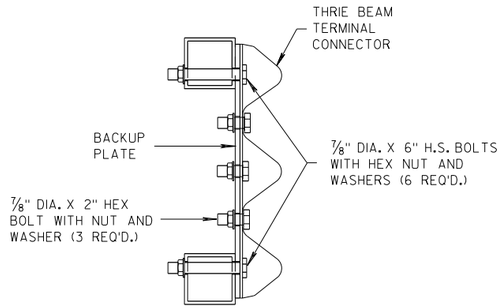
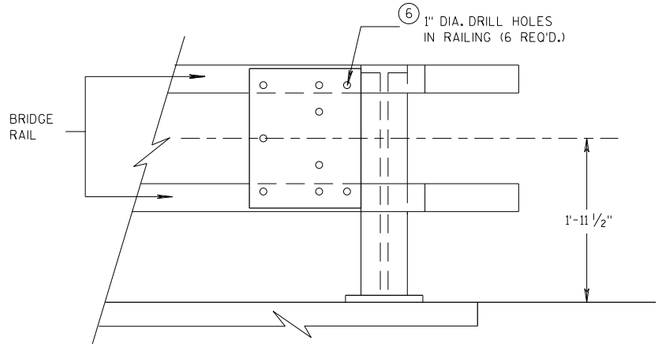


BACK-UP PLATE DETAIL



SECTION J-J

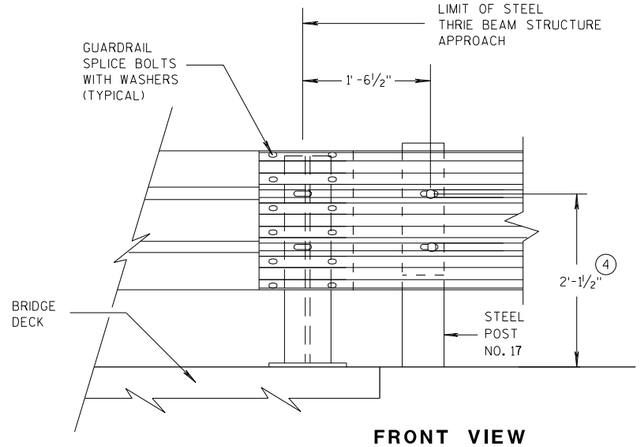


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

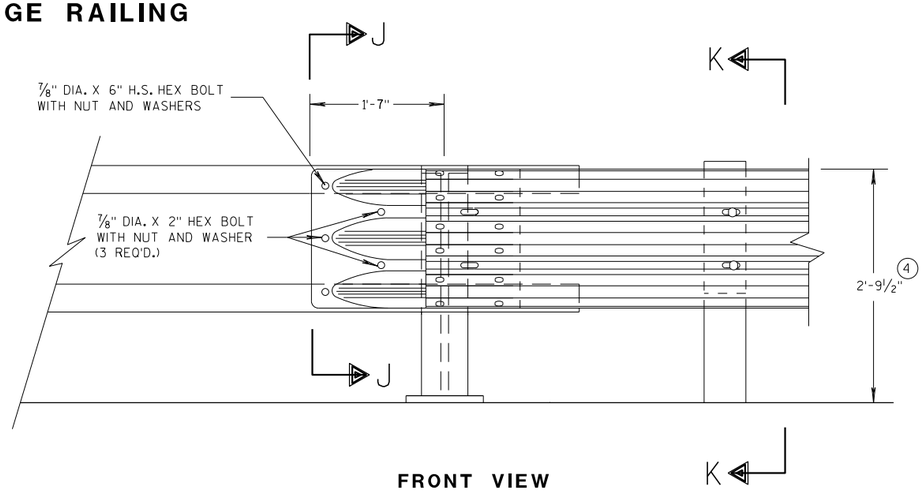
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

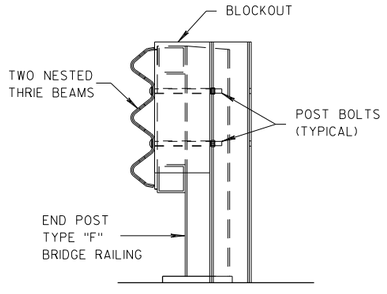


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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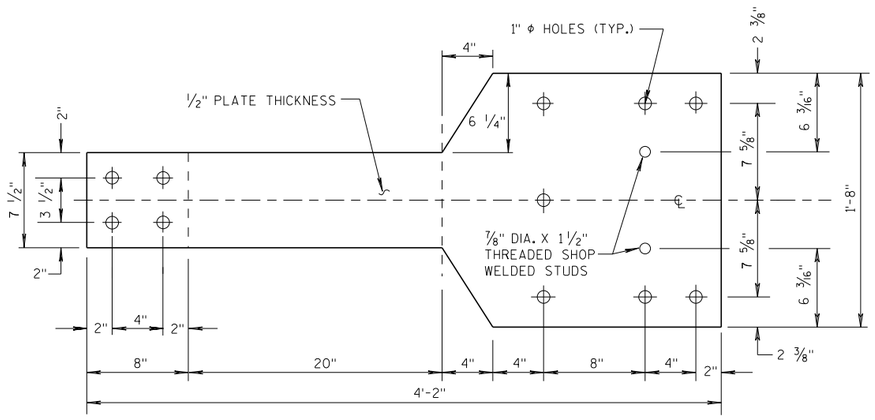
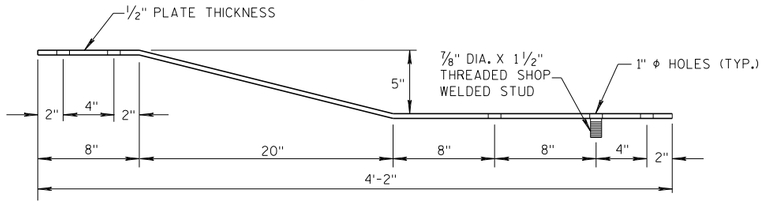
GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

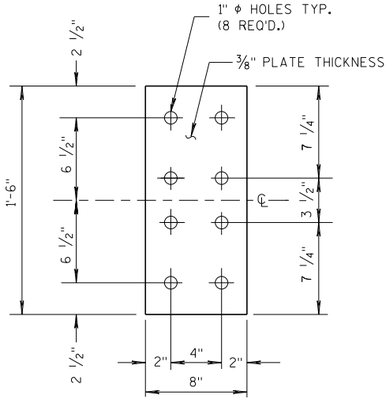


FRONT VIEW



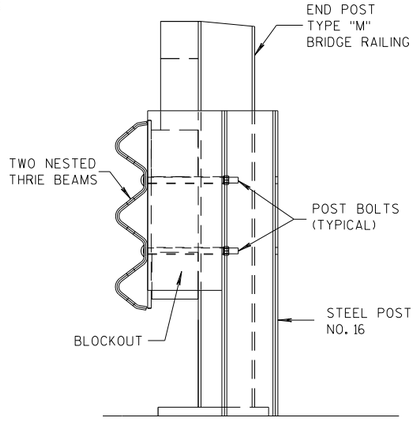
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

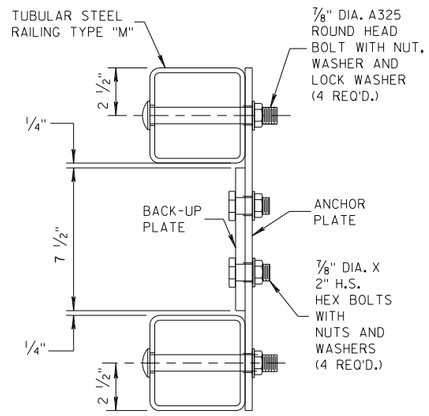


FRONT VIEW

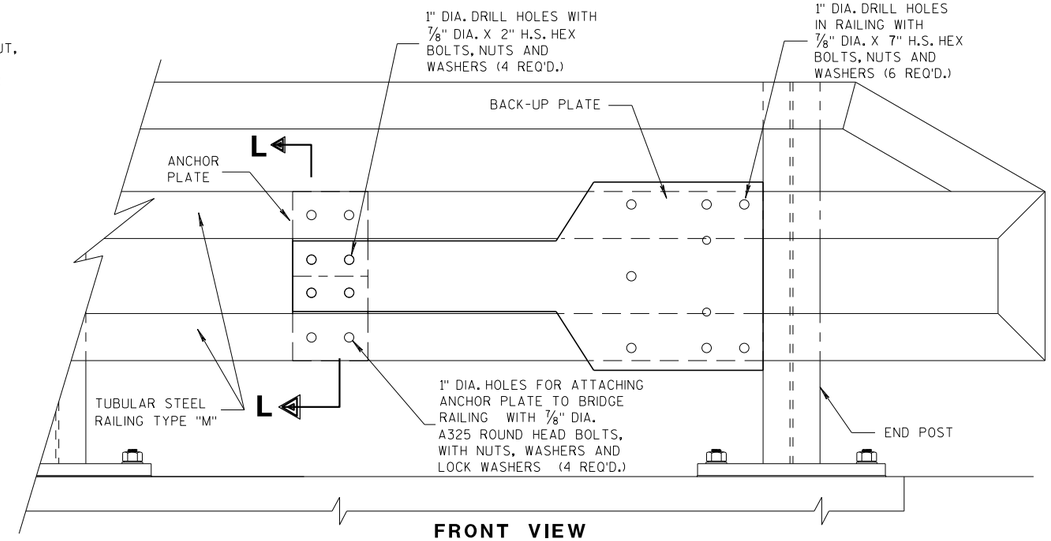
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

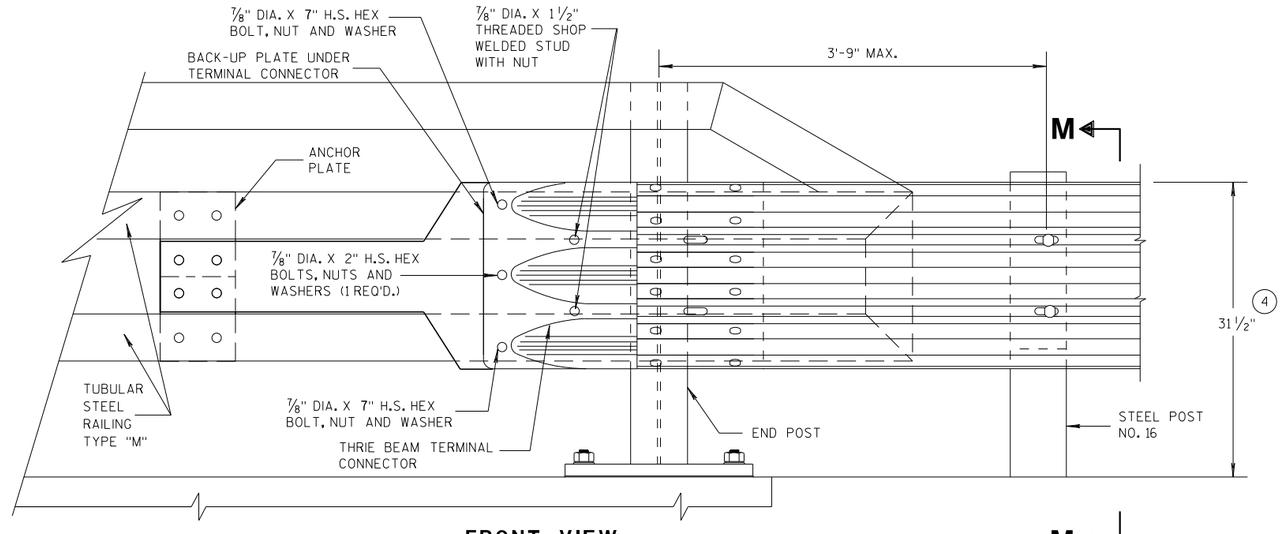


SECTION L-L

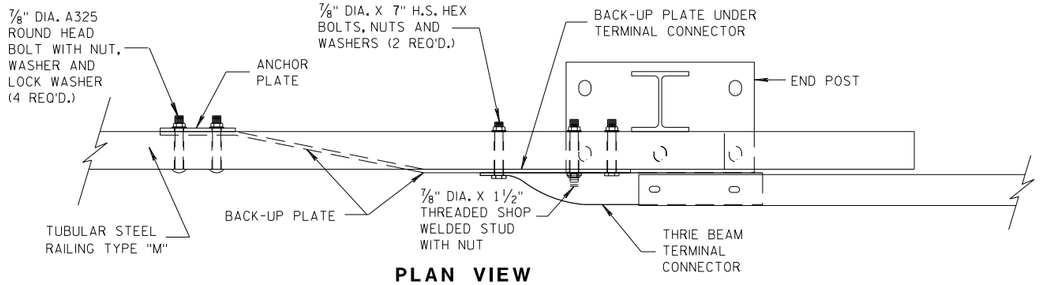


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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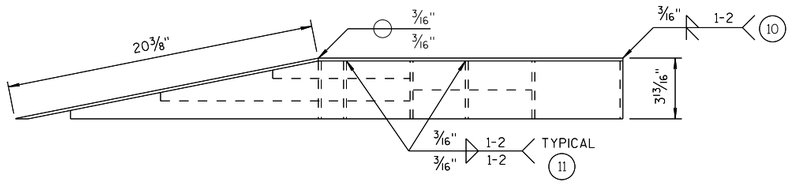

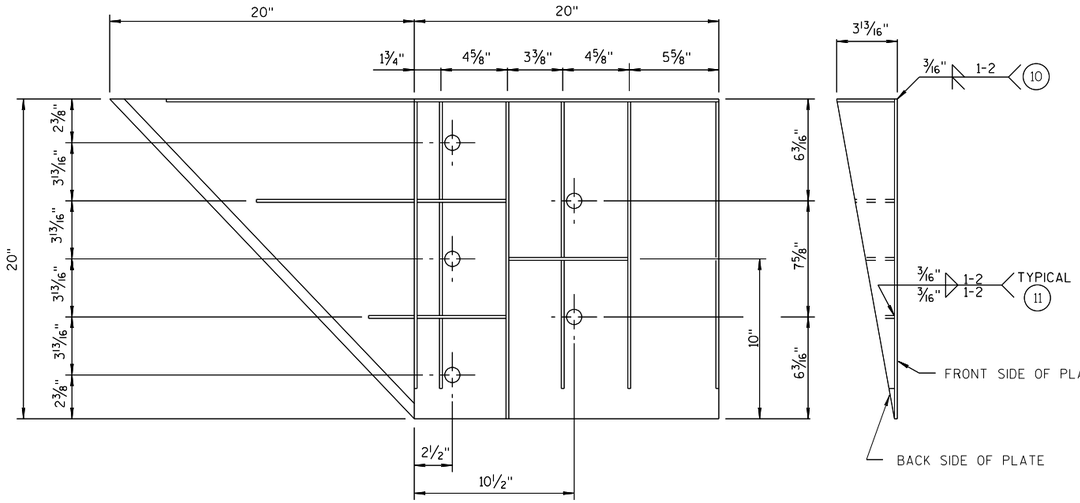

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

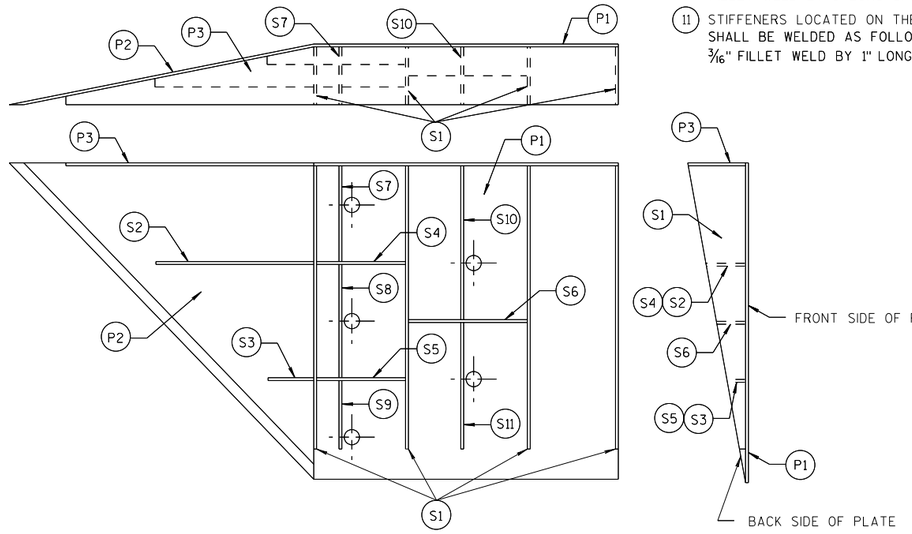

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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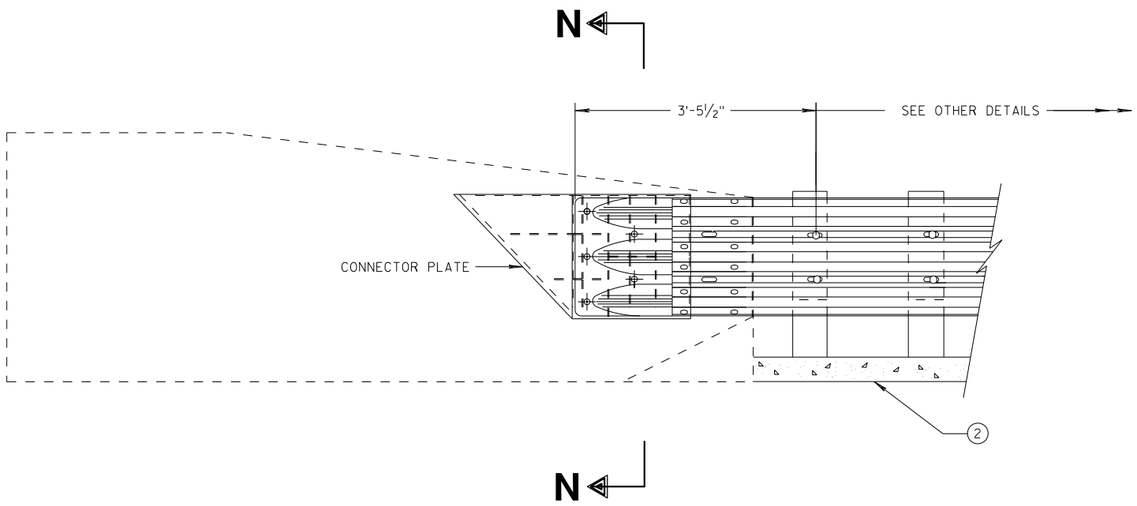
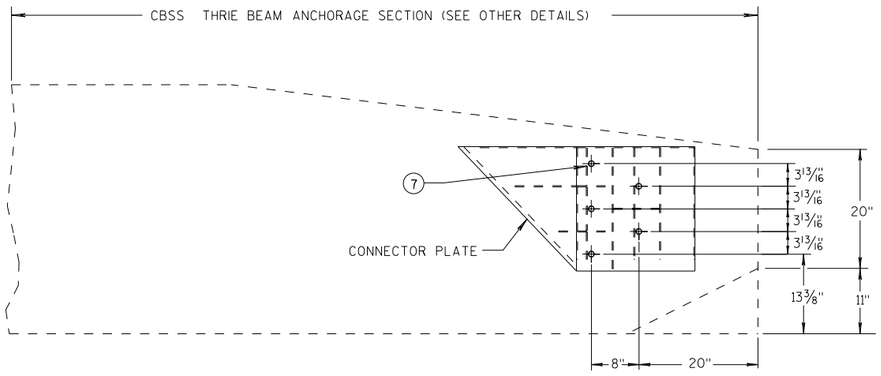


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



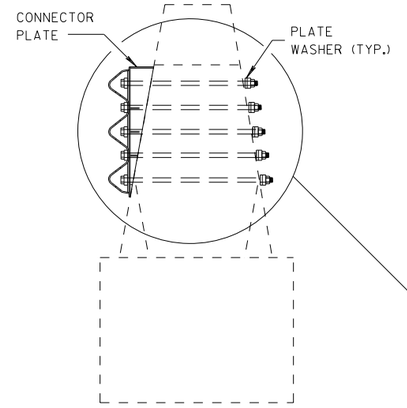
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

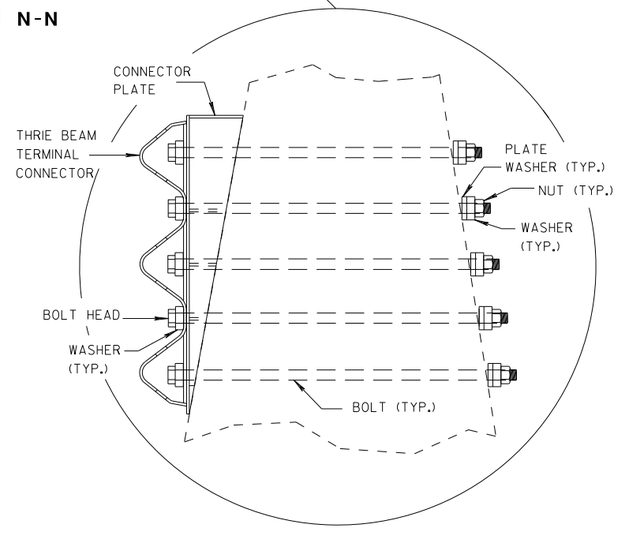
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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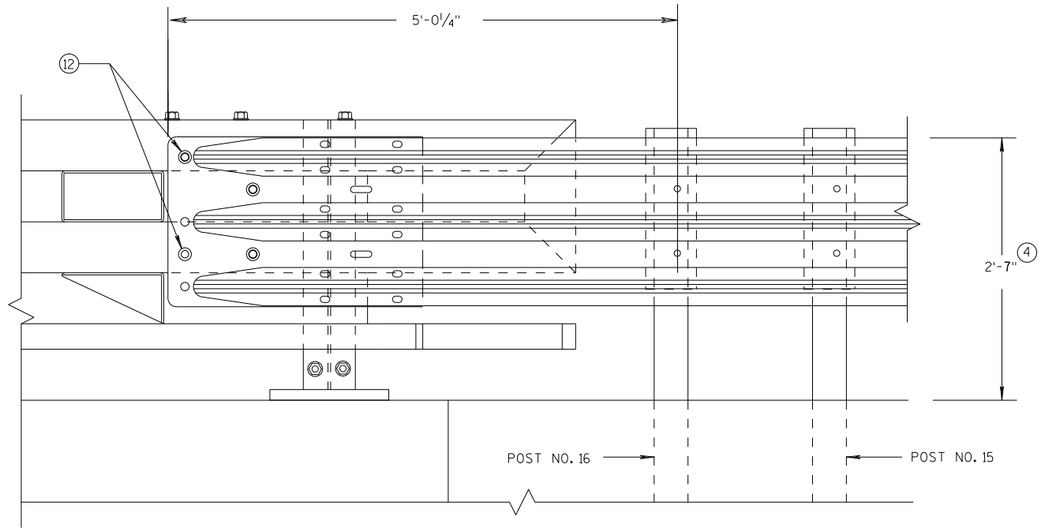
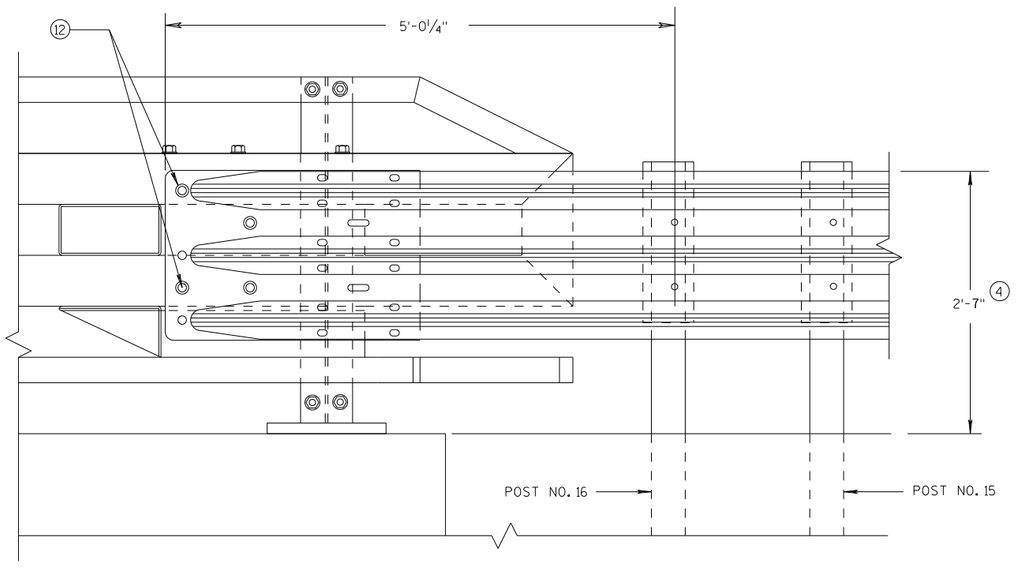
S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

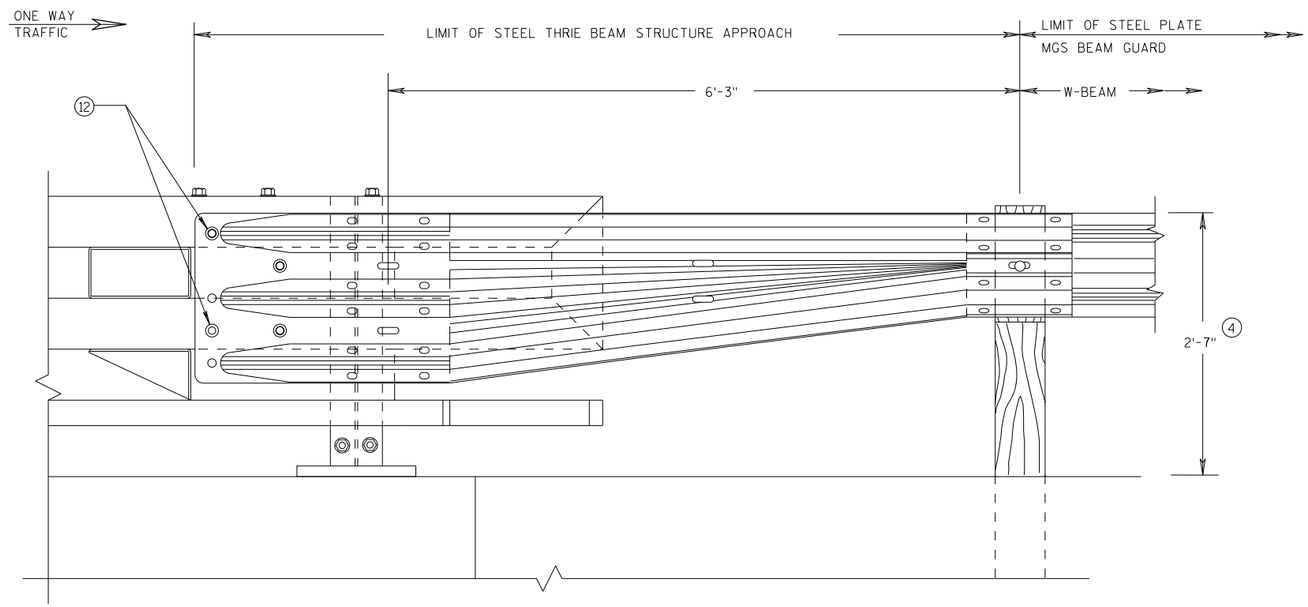
NT

6

S.D.D. 14 B 45-5k

6

S.D.D. 14 B 45-5k



FRONT VIEW

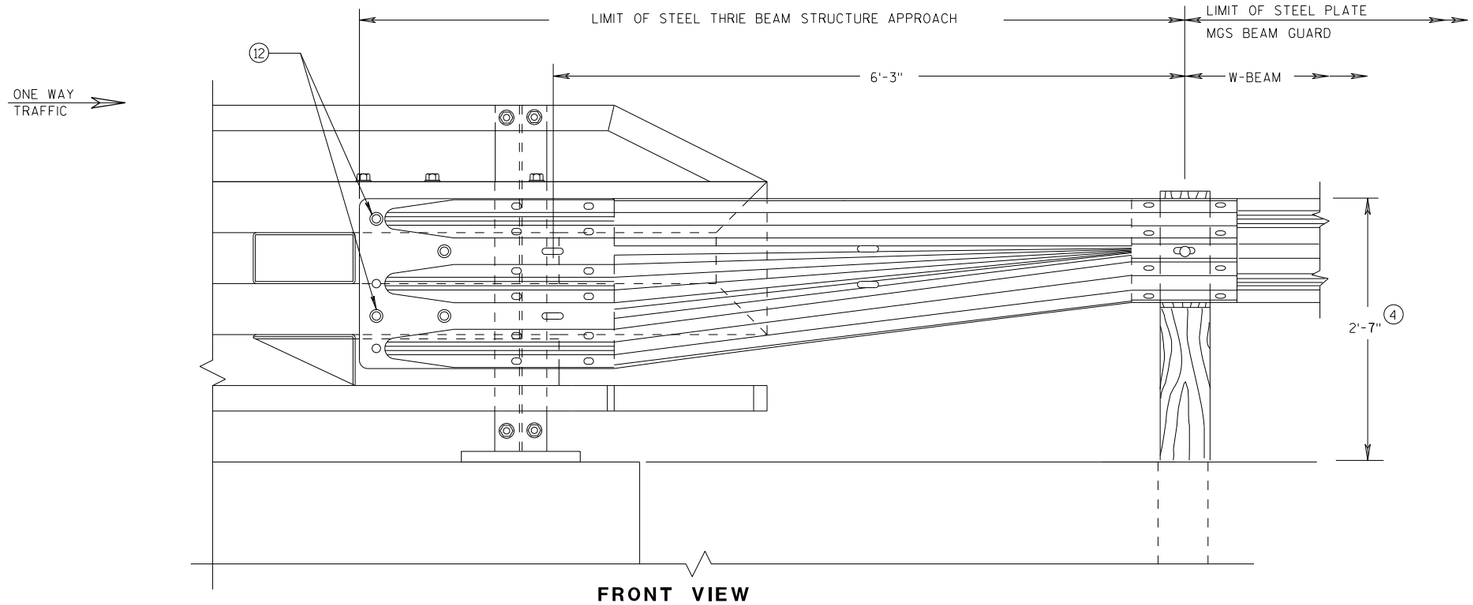
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

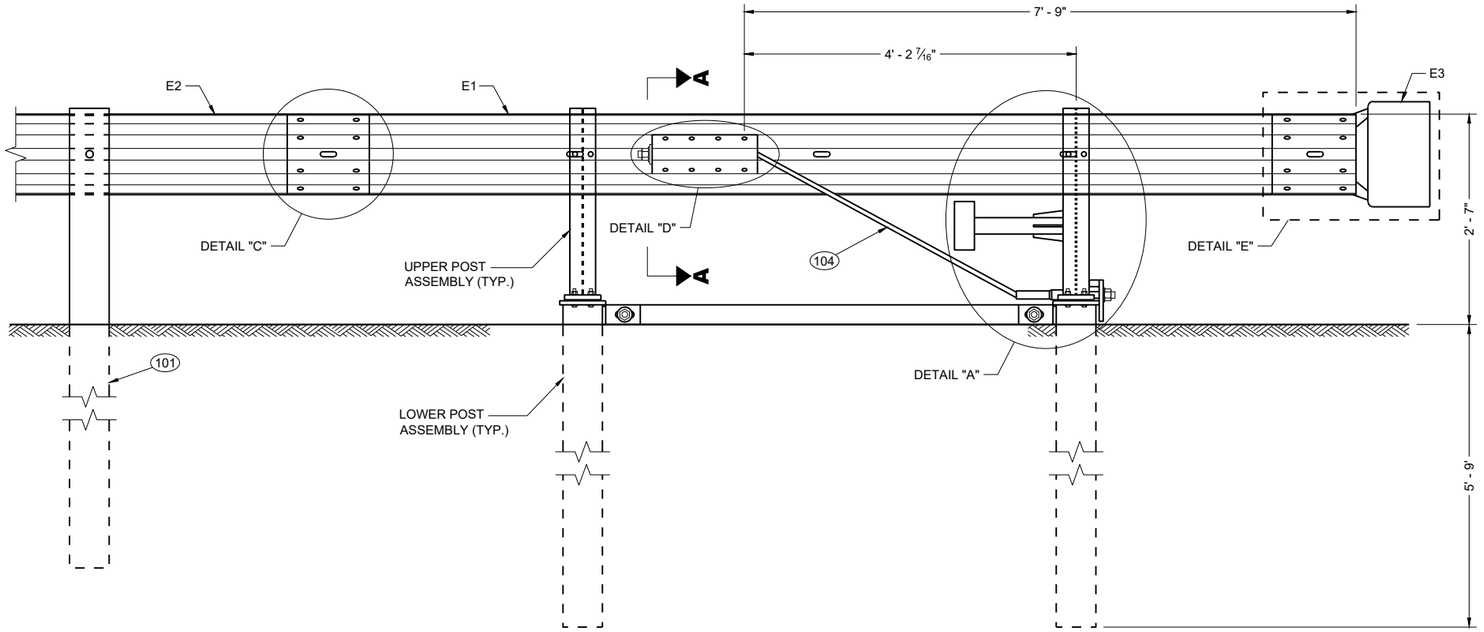
APPROVED
7/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS
NT
FHWA

6

S.D.D. 14 B 45-5L

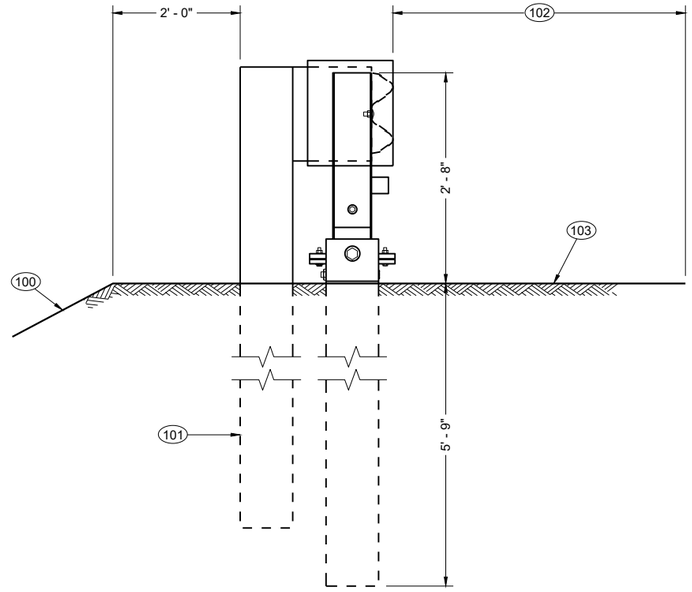
6

S.D.D. 14 B 45-5L



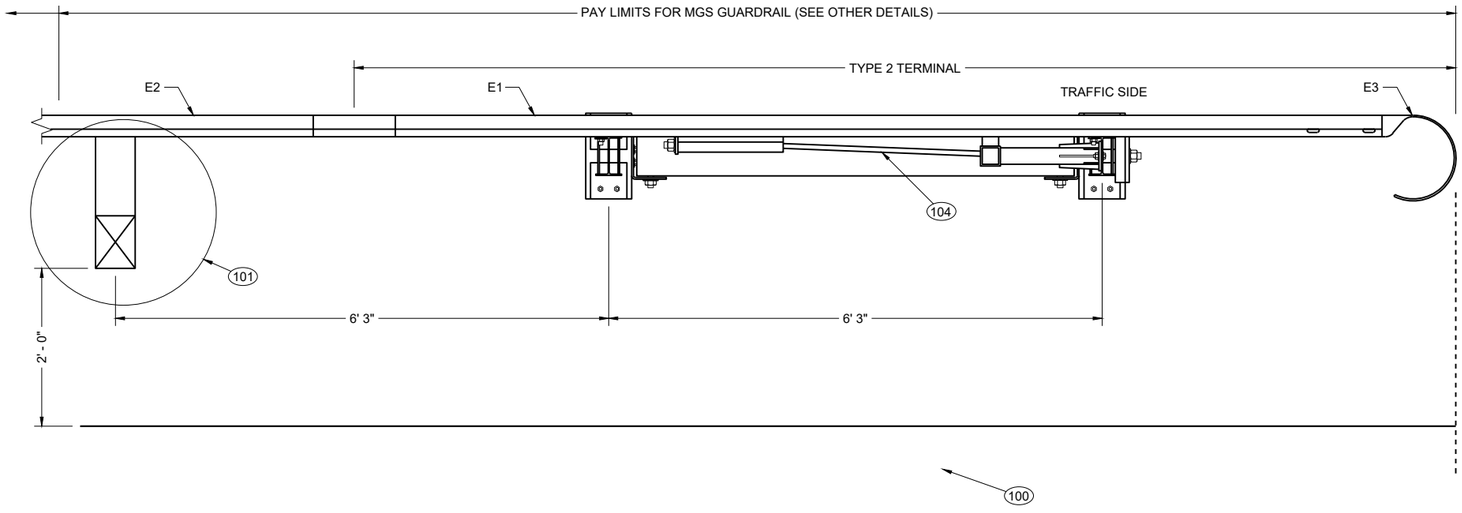
BACK VIEW

TYPE 2 TERMINAL



SIDE VIEW

TYPE 2 TERMINAL



TOP VIEW

TYPE 2 TERMINAL

GENERAL NOTES

SEE SDD 14B42 FOR MORE INFORMATION

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

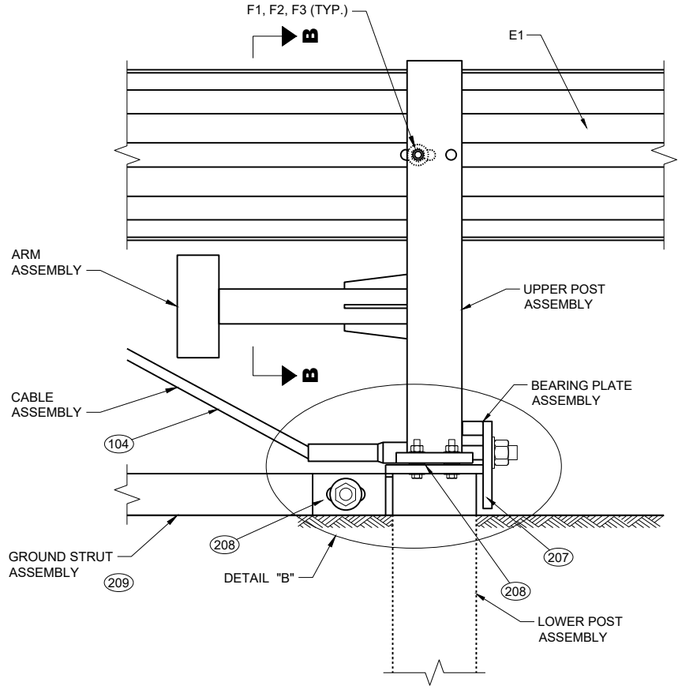
(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

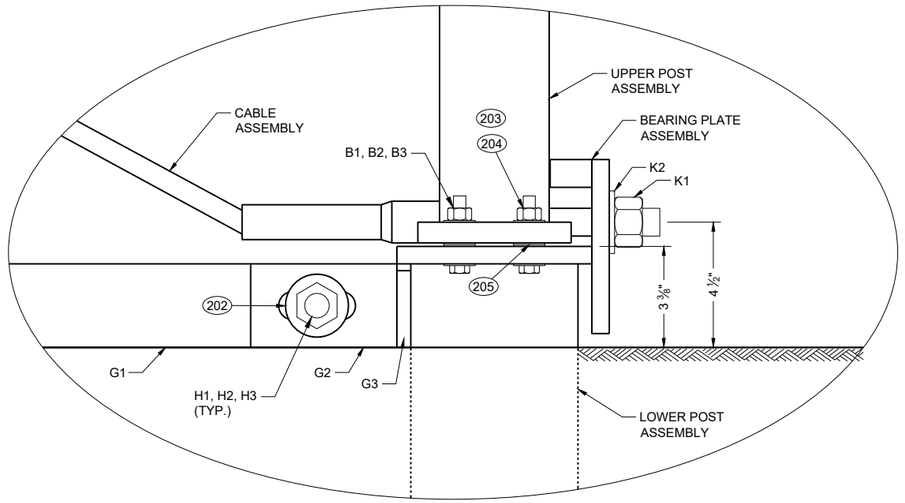
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

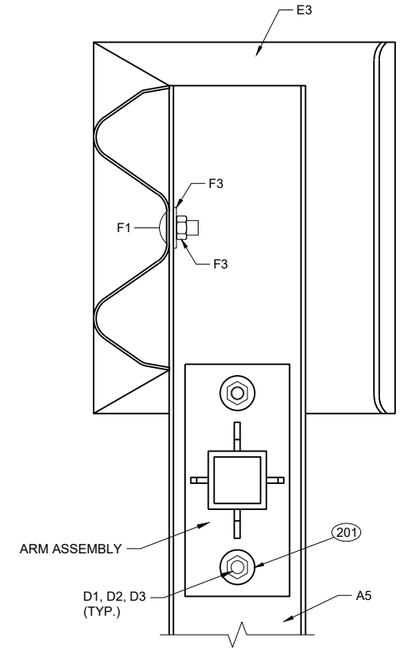
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



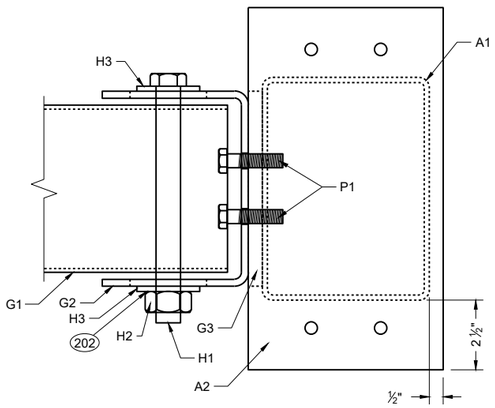
DETAIL "A"



DETAIL "B"

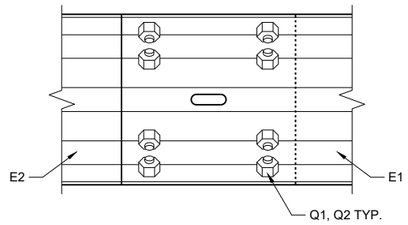


SECTION B - B

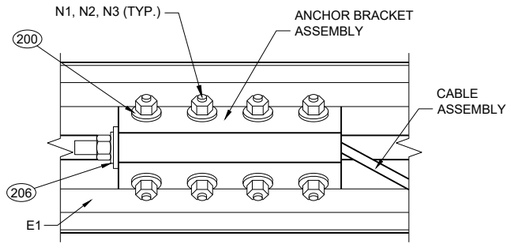


TOP VIEW

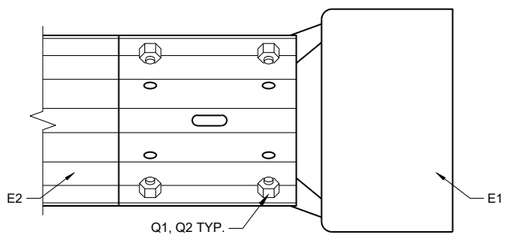
GROUND STRUT CONNECTION DETAIL



DETAIL "C"



DETAIL "D"



DETAIL "E"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

207 NO MATERIAL IS TO BE PLACED AGAINST THE VERTICAL FACES OF BEARING PLATE.

208 PREVENT OR REMOVE MATERIALS THAT BLOCK ACCESS TO BOLTS FOR POST ASSEMBLIES AND GROUND STRUT.

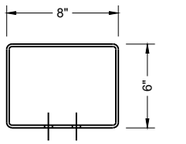
209 PREVENT OR REMOVE MATERIALS THAT IMPEDE REMOVAL OF GROUND STRUT.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

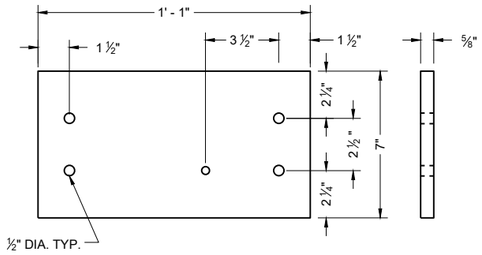
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

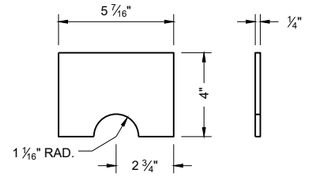
(300) TAP FOR 1/2" AFTER GALVANIZATION



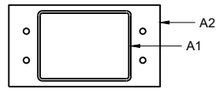
TOP VIEW



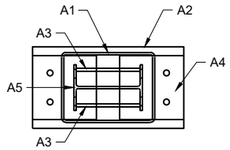
LOWER PLATE (A2)

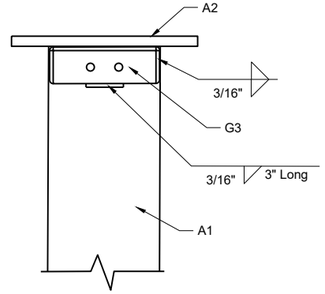


POST GUSSET (A3)

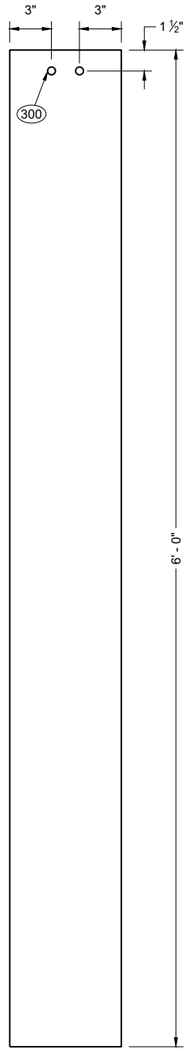


PLAN VIEW



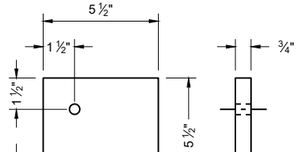


WELDING DETAIL
G3 AND A1

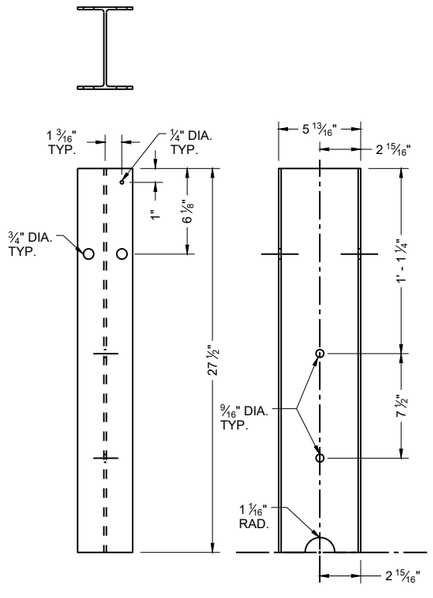


SIDE VIEW

FOUNDATION
TUBE (A1)

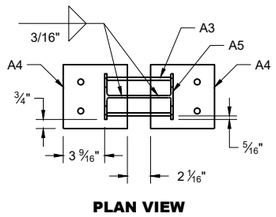


UPPER PLATE (A4)

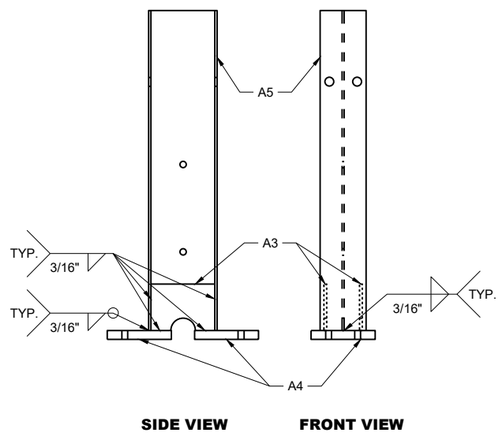


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

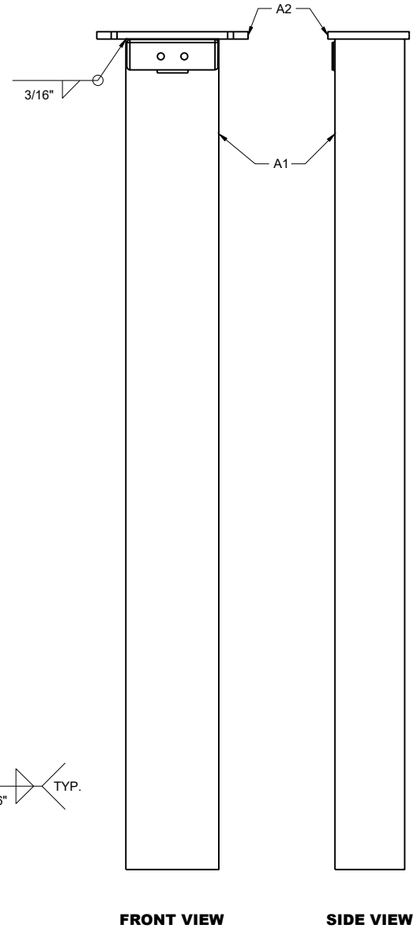


PLAN VIEW



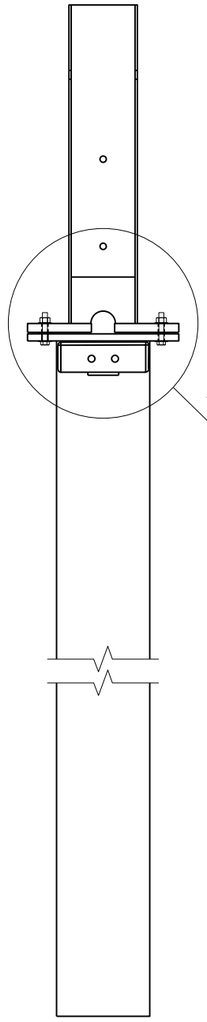
SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY

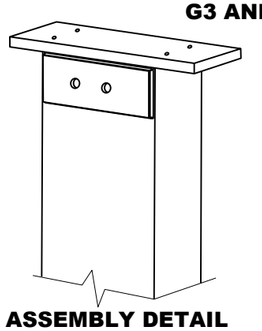


FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY

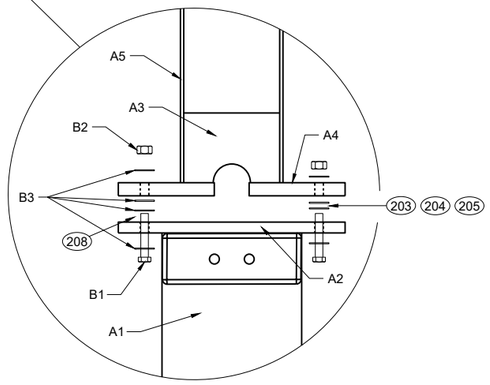


ASSEMBLED POST



ASSEMBLY DETAIL
ISOMETRIC

A1



POST CONNECTION DETAIL

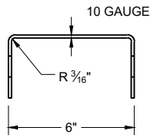
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	

6

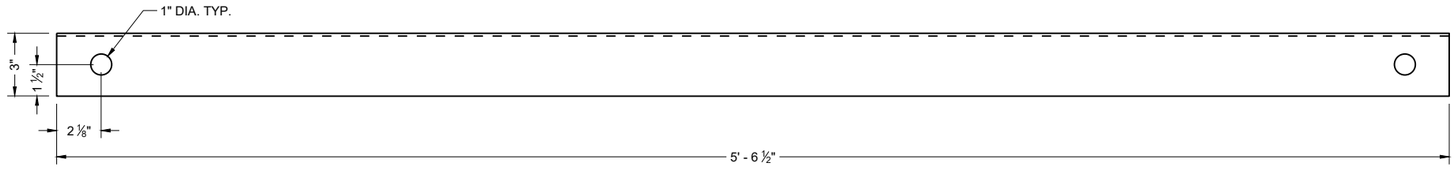
SDD 14B47-07c

6

SDD 14B47-07c

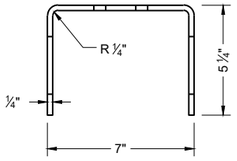


SIDE VIEW

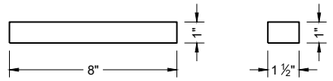


FRONT VIEW

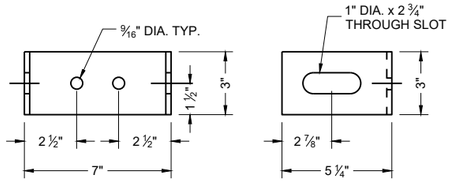
GROUND STRUT CHANNEL (G1)



TOP VIEW



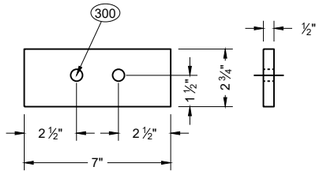
BEARING PLATE FLANGE (L2)



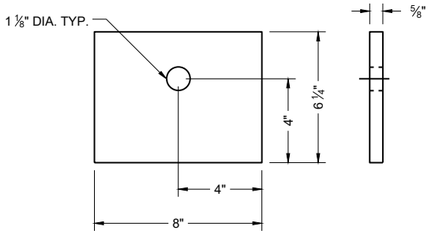
FRONT VIEW

SIDE VIEW

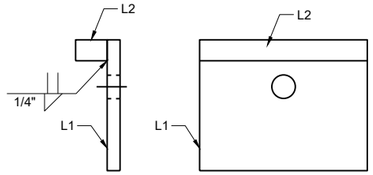
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)



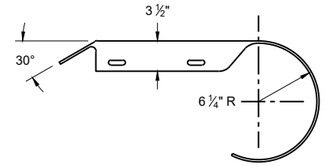
BEARING PLATE (L1)



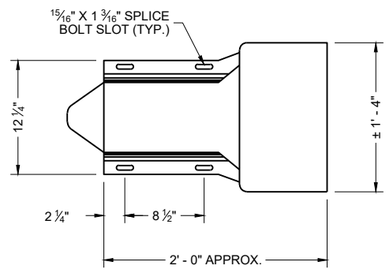
SIDE VIEW

FRONT VIEW

BEARING PLATE ASSEMBLY

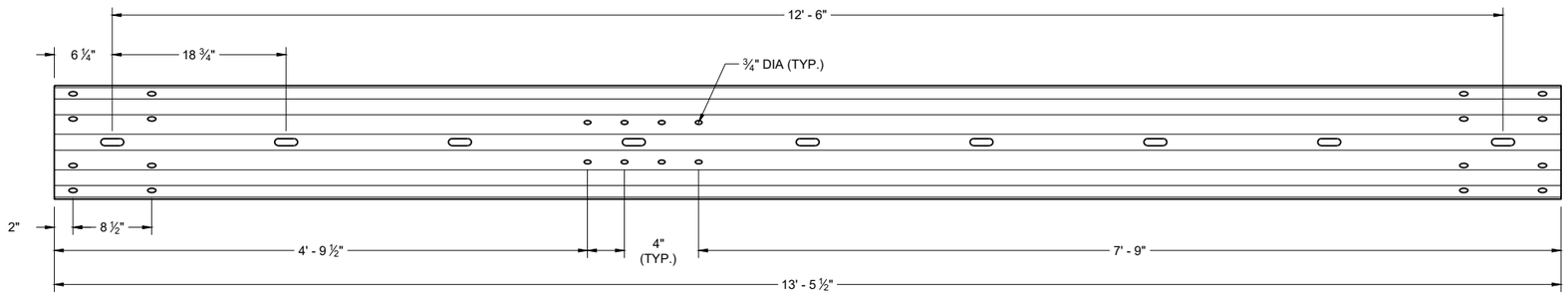


PLAN VIEW

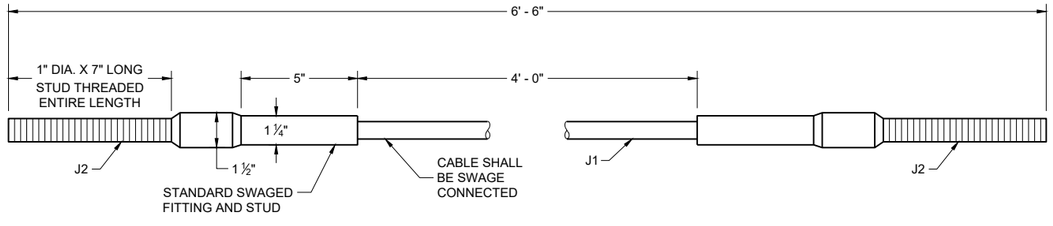


ELEVATION VIEW

ROUNDED BUFFER END (E3)



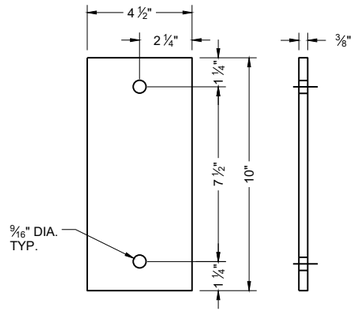
TYPE 2 GUARDRAIL (E1)



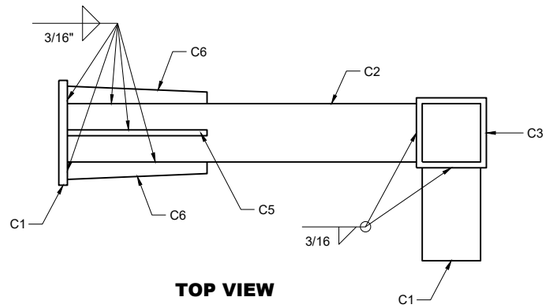
CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

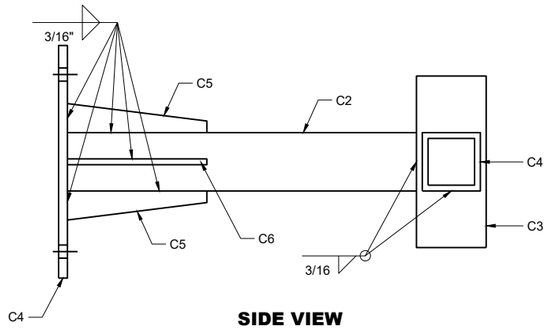
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



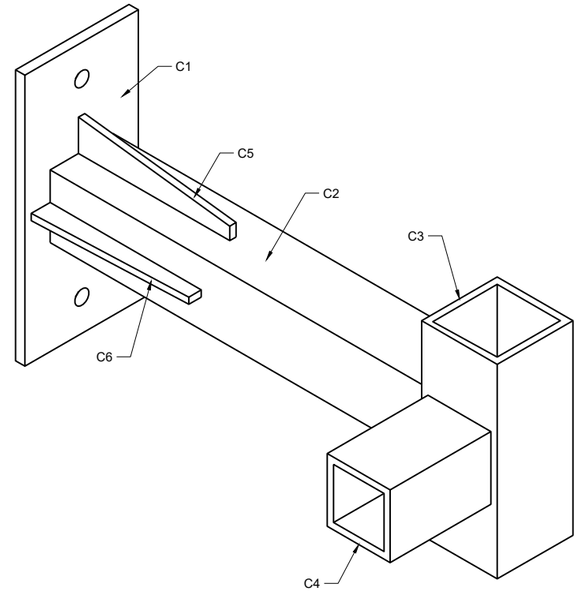
ARM PLATE (C1)



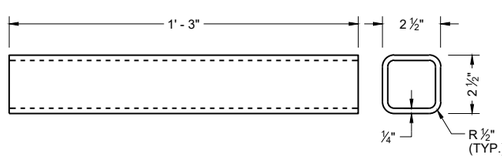
TOP VIEW
ARM ASSEMBLY



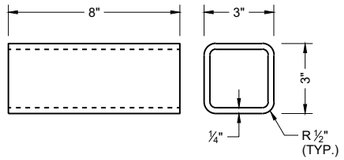
SIDE VIEW
ARM ASSEMBLY



ISOMETRIC VIEW
ARM ASSEMBLY



ARM TUBE 1 (C2)



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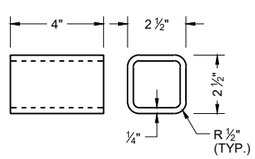
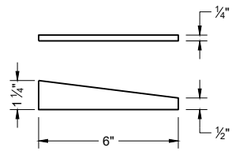
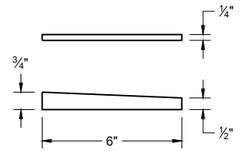


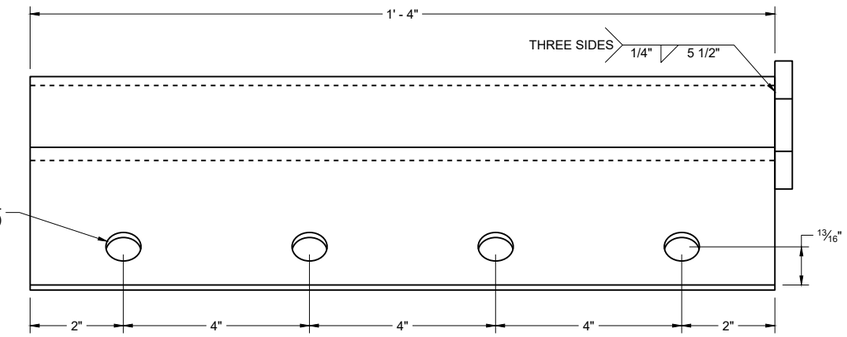
ARM TUBE 3 (C4)

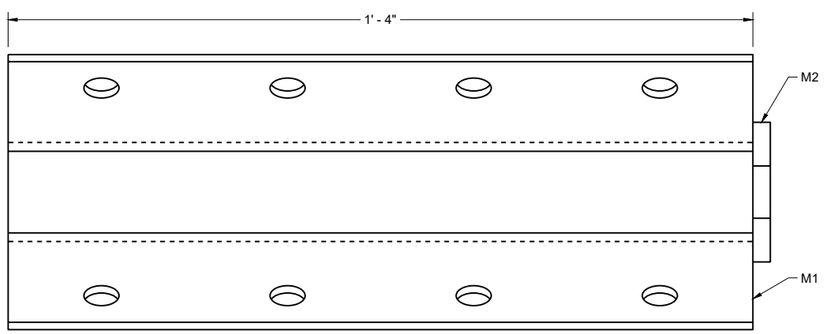


ARM GUSSET PLATE 1 (C5)

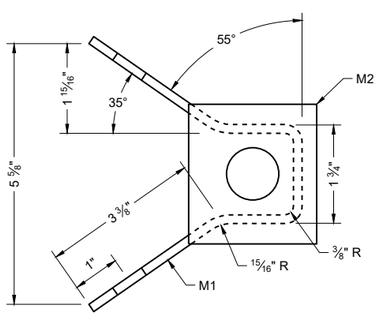


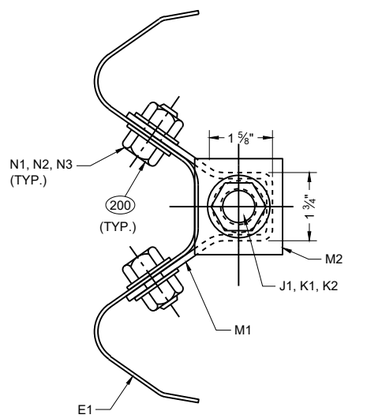
ARM GUSSET PLATE 2 (C6)

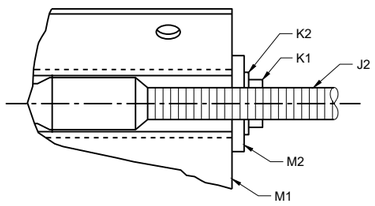




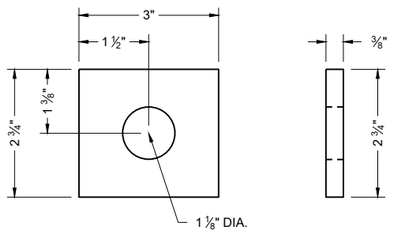
ANCHOR BRACKET (M1, M2)







SECTION A - A



ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
A3	POST GUSSET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
A4	UPPER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/4" THICKNESS
A5	TYPE 2 POST	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI, w6x9 or w6x8.5	
B1	BREAKAWAY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED . PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	7/16" DIA.
B2	BREAKAWAY BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/16" DIA.
B3	BREAKAWAY BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
C1	ARM ASSEMBLY PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
D1	ARM ASSEMBLY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	1/2" DIA.
D2	ARM ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	1/2" DIA.
D3	ARM ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	POST BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
F3	POST BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
G1	GROUND STRUT CHANNEL	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
G3	GROUND STRUT PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" THICKNESS

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47-07f

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	7/8" DIA.
H2	GROUND STRUT BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/8" DIA.
H3	GROUND STRUT BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	3/4" DIA.
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. MIN BREAKING STRENGTH OF 42.7 KIPS ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."	
K1	CABLE ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	BEARING PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
L2	BEARING PLATE FLANGE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1" THICKNESS
M1	BEAM GUARD ANCHOR BRACKET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	
M2	BEAM GUARD ANCHOR END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
N1	ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	ANCHOR BRACKET BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
N3	ANCHOR BRACKET BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 /ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
P1	FOUNDATION TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
Q1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
Q2	SPLICE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	5/8" DIA.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

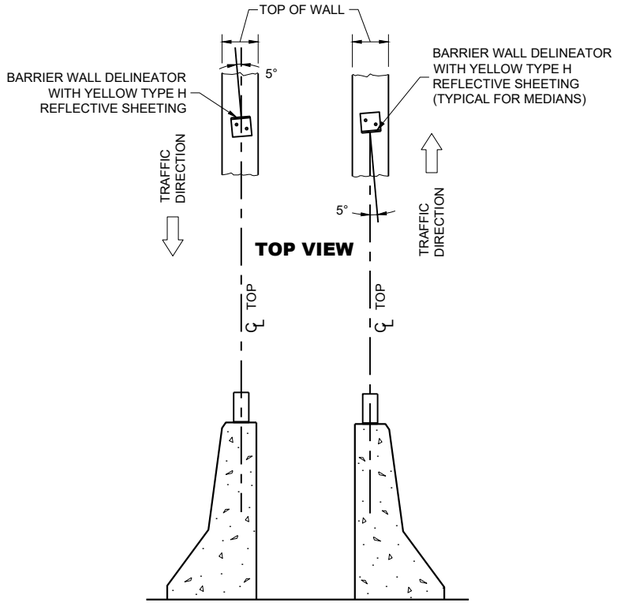
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2025 — DATE
/S/ Rodney Taylor — <position>

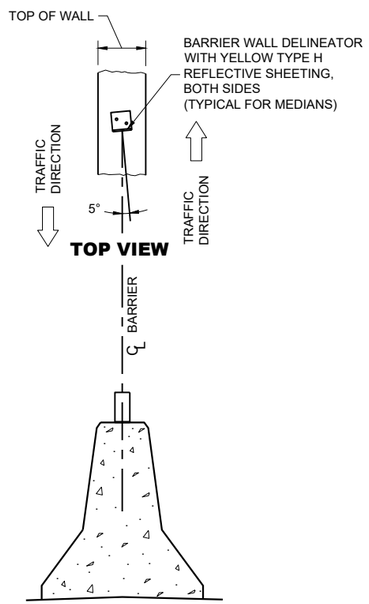
FHWA

6

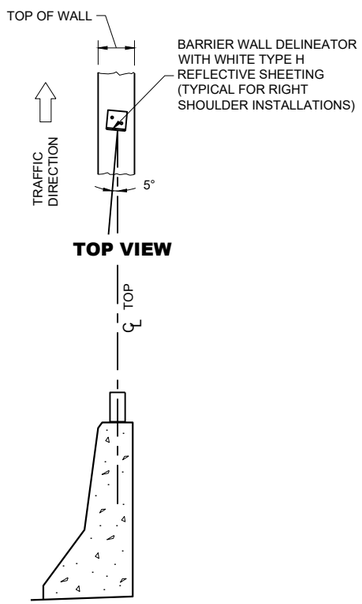
SDD 14B47-07g



SIDE VIEW
DOUBLE BARRIERS IN MEDIAN

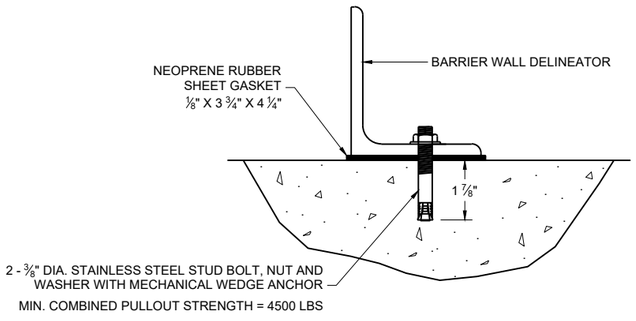


SIDE VIEW
MEDIAN BARRIER

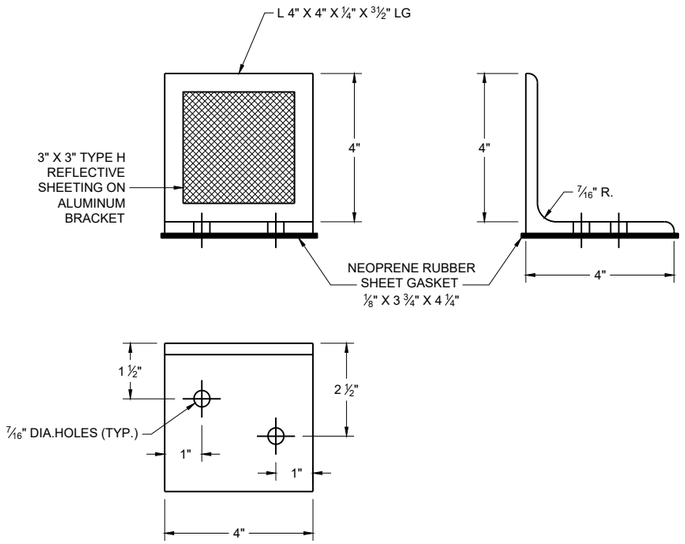


SIDE VIEW
TO RIGHT OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR BARRIER WALL DELINEATOR MOUNTED ON CONCRETE BARRIERS



BARRIER WALL DELINEATOR
MOUNTING DETAIL



BARRIER WALL DELINEATOR

REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer

FHWA

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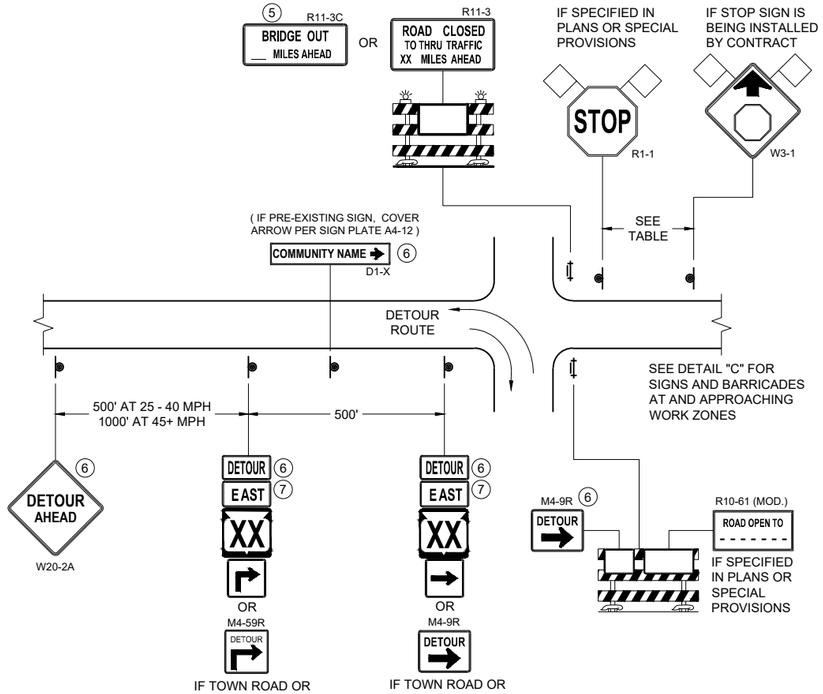
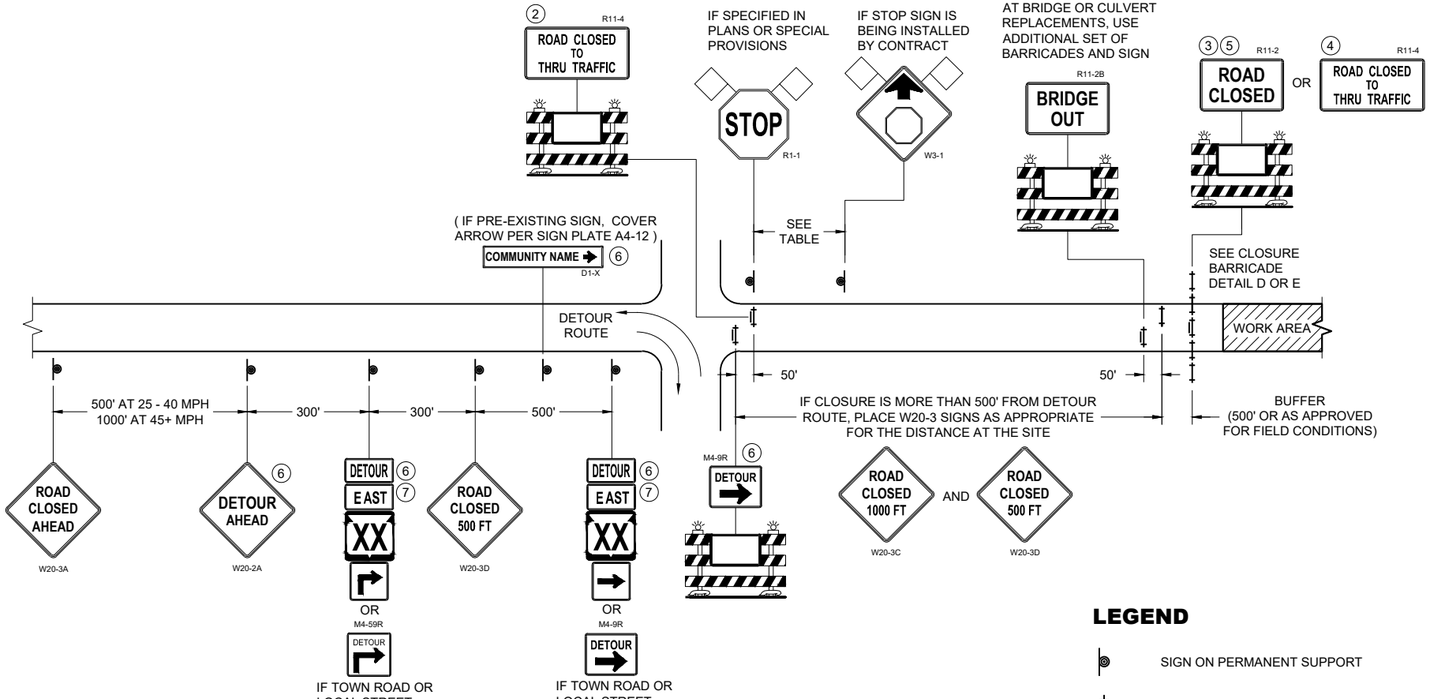
SDD 15A04-08b



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)

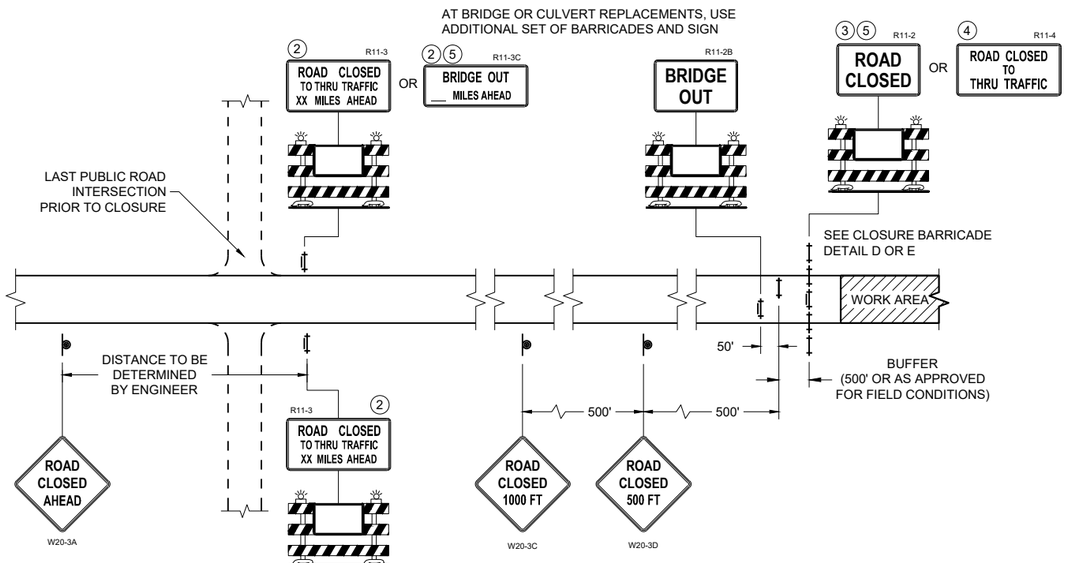
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

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

LEGEND

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

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

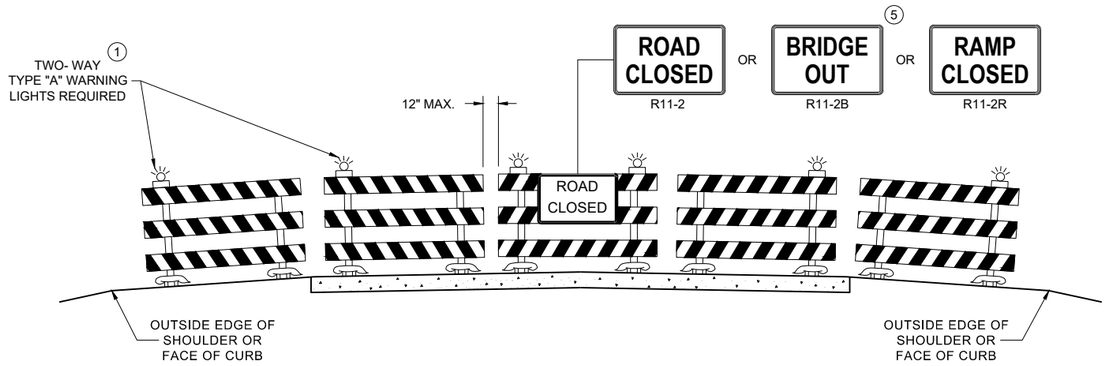
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

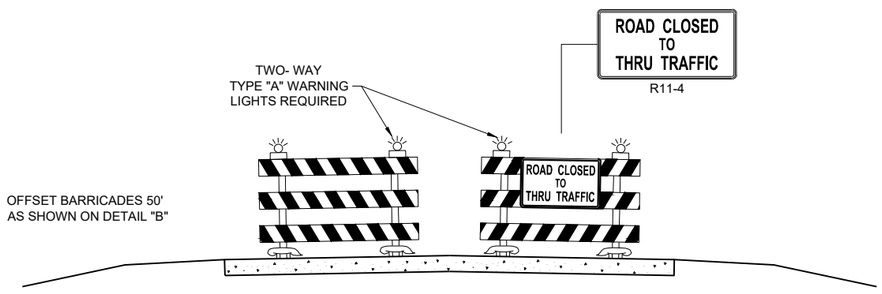
6
SDD 15C02-10a



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.

PARTIAL NUMBERS ON SIGNS SHALL BE DISPLAYED AS A WHOLE NUMBER(AS NEEDED) FOLLOWED BY A FRACTION. SIGNS SHALL NOT DISPLAY NUMBERS IN DECIMAL FORM.

"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"

SIGNS PLACED ON TYPE III BARRICADES THAT ARE SIZES OTHER THAN 48"X30" SHALL HAVE A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE.

(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

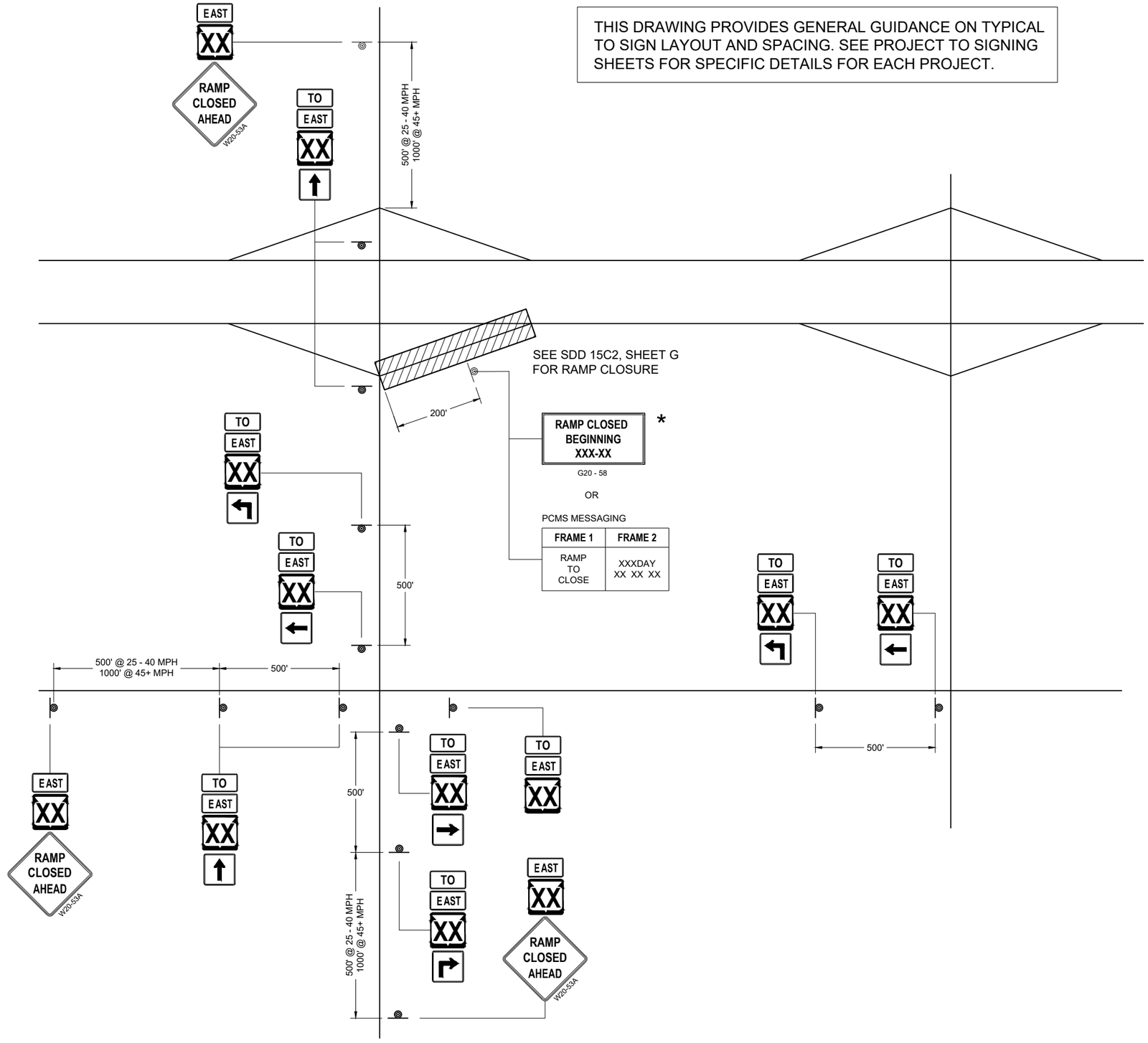
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15C02-10b



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
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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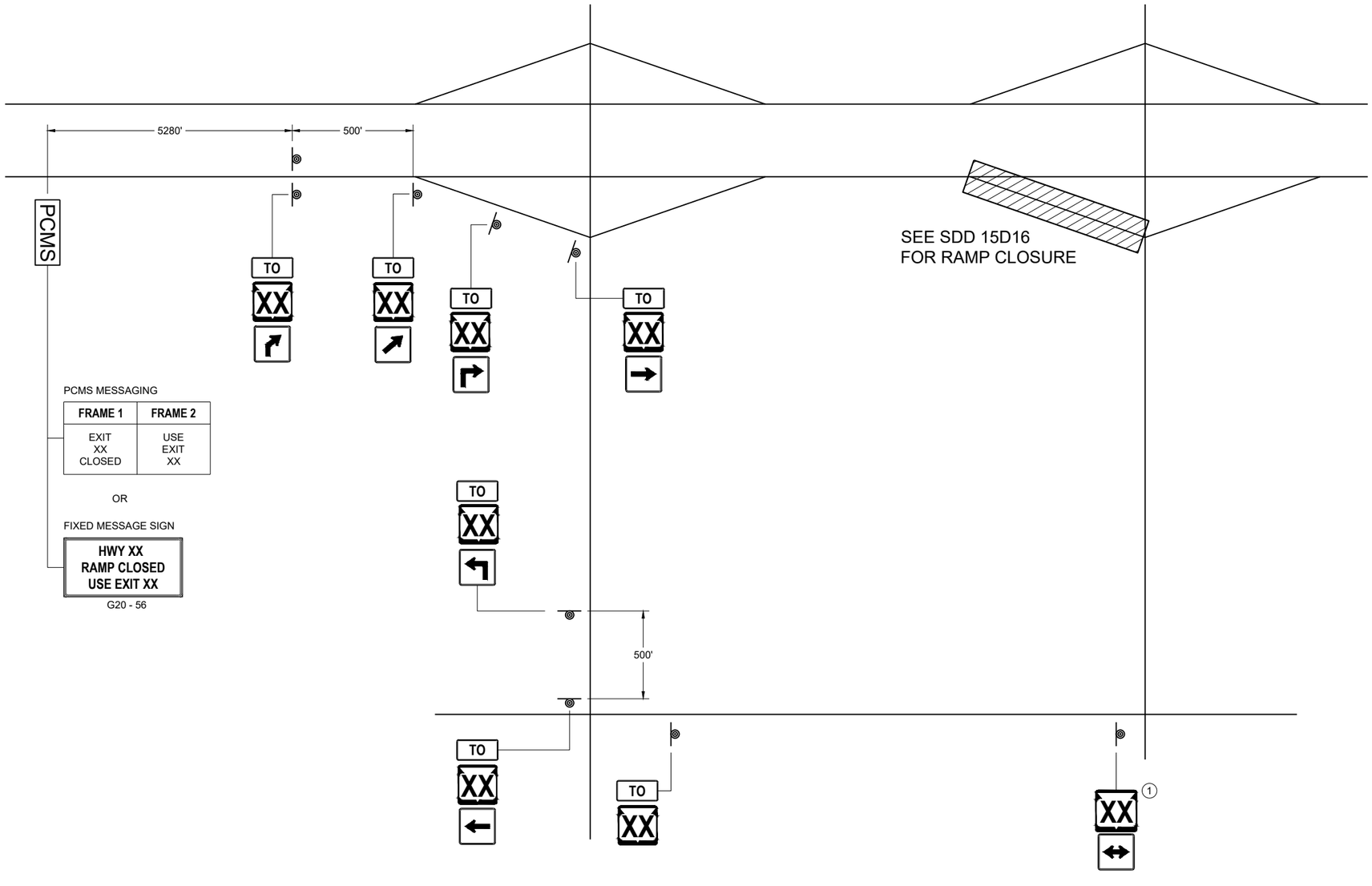
SDD 15C02-10d

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
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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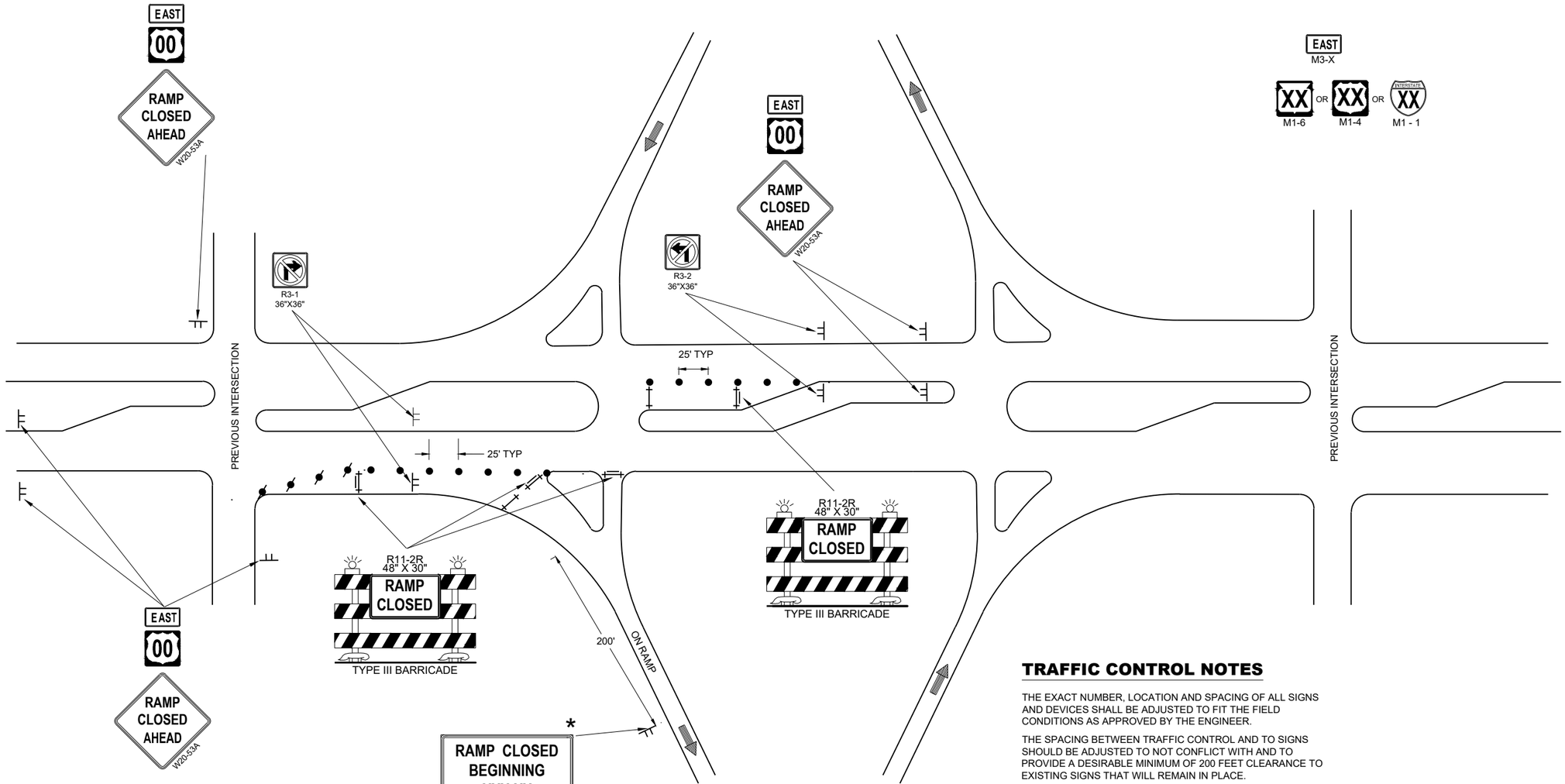
SDD 15C02-10e



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

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

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 THE 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.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

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

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

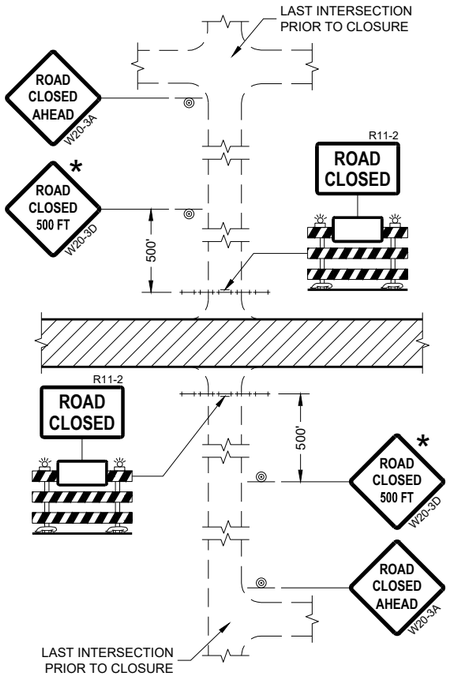
APPROVED
November 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

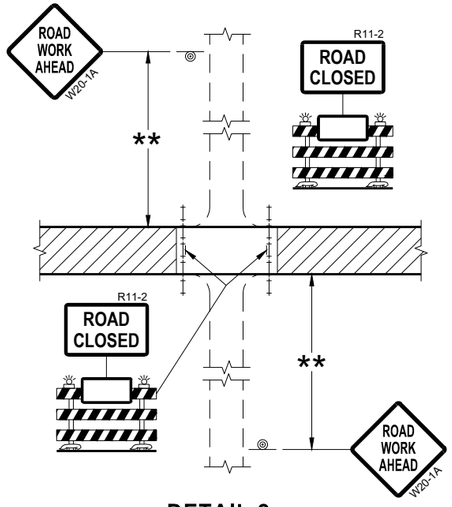
FHWA

6

SDD 15C02-10g



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

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 (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES 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.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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.

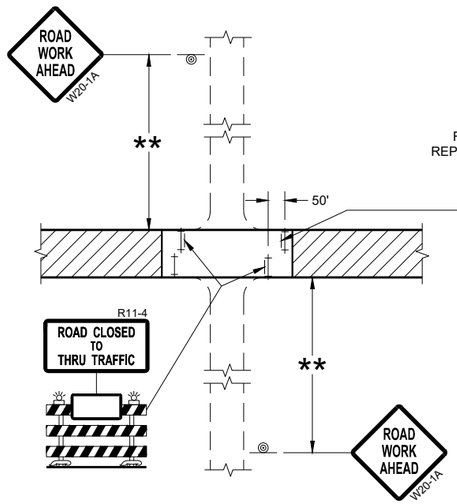
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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

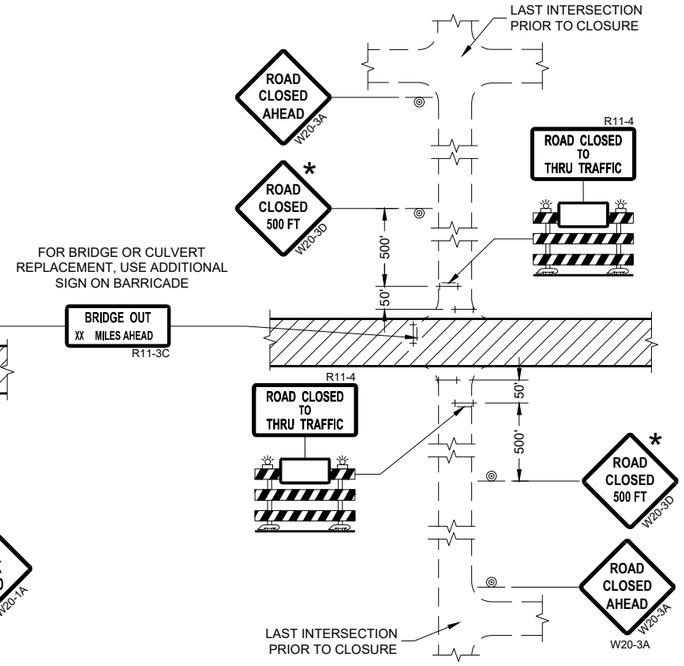
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C03 - 05

SDD 15C03 - 05

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.

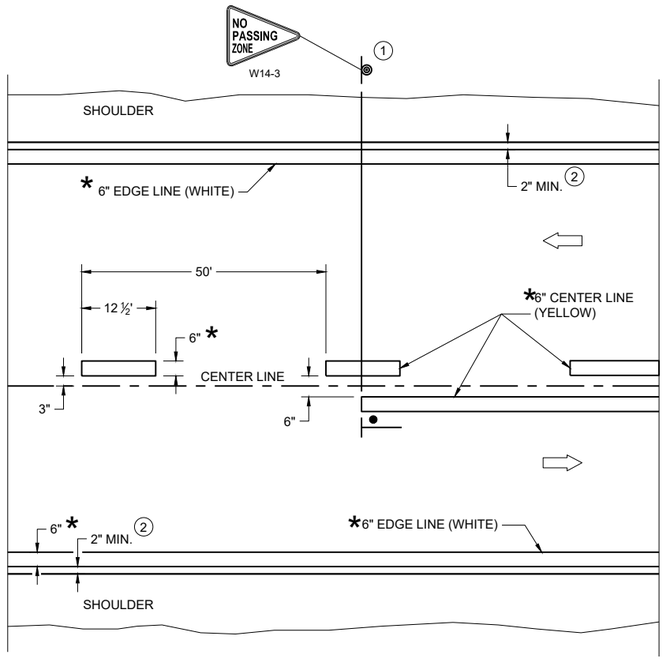
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

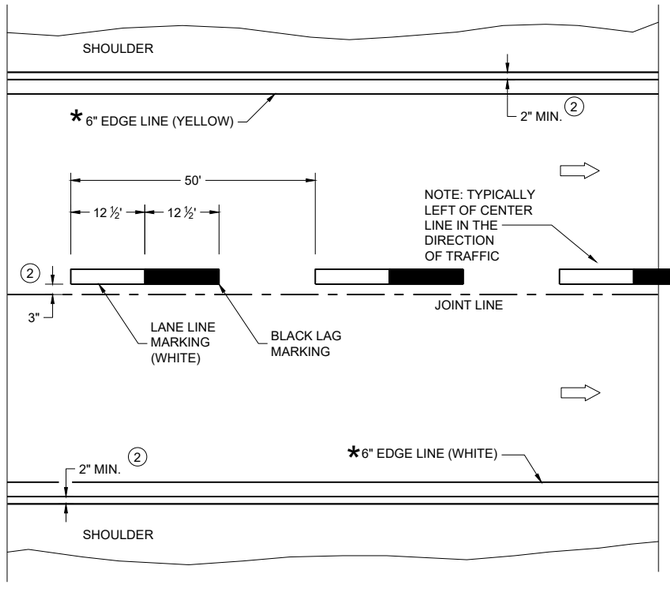
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

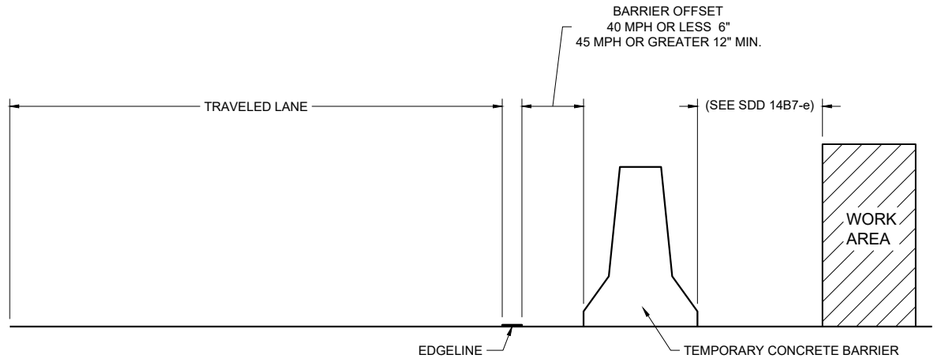
APPROVED
December 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

SDD 15C08-24a

SDD 15C08-24a



TEMPORARY BARRIER OFFSET FROM EDGELINE

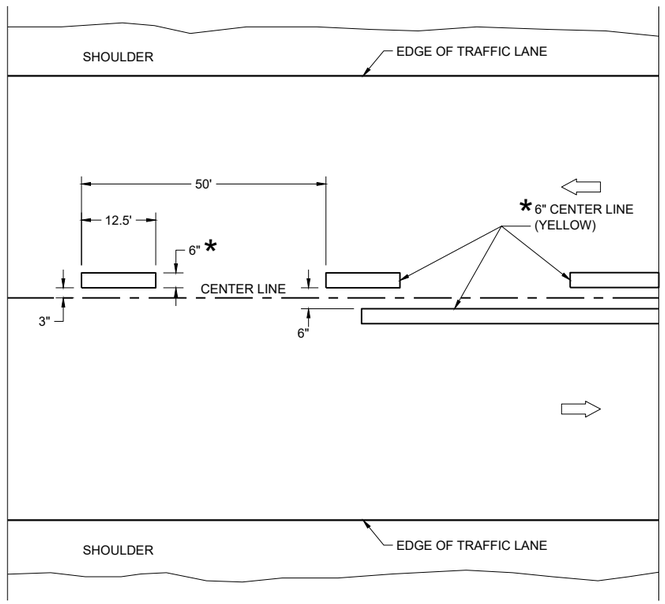
GENERAL NOTES

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

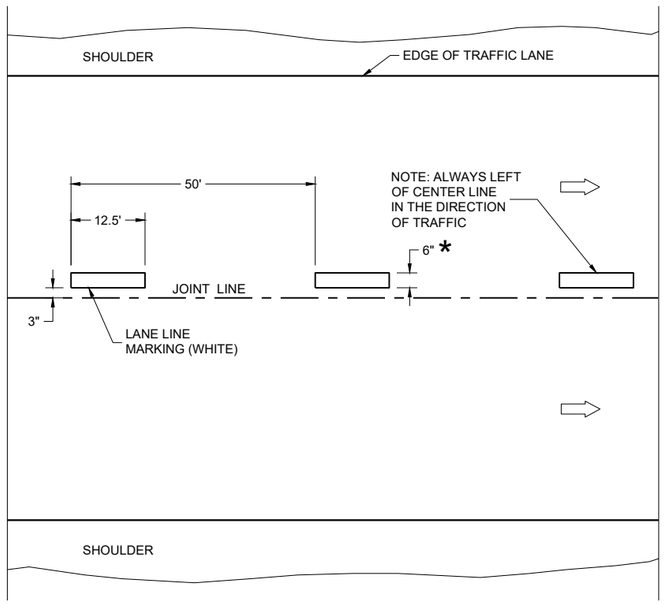
LEGEND

⇨ DIRECTION OF TRAFFIC

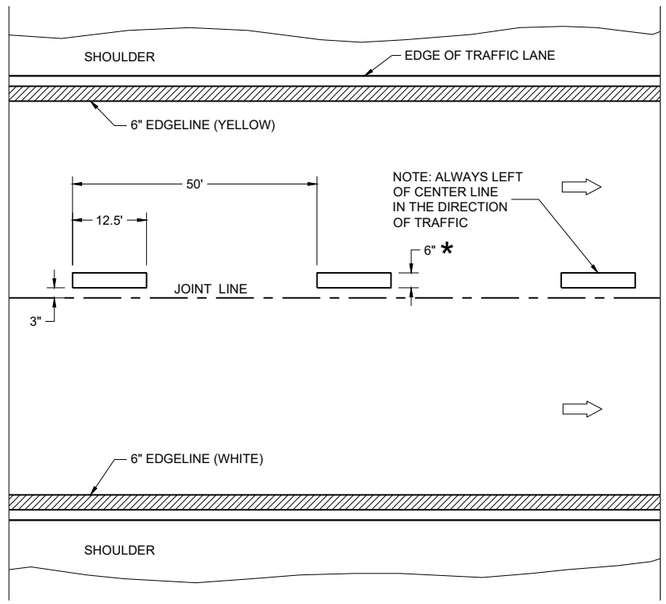
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

SDD 15C08-24b

6

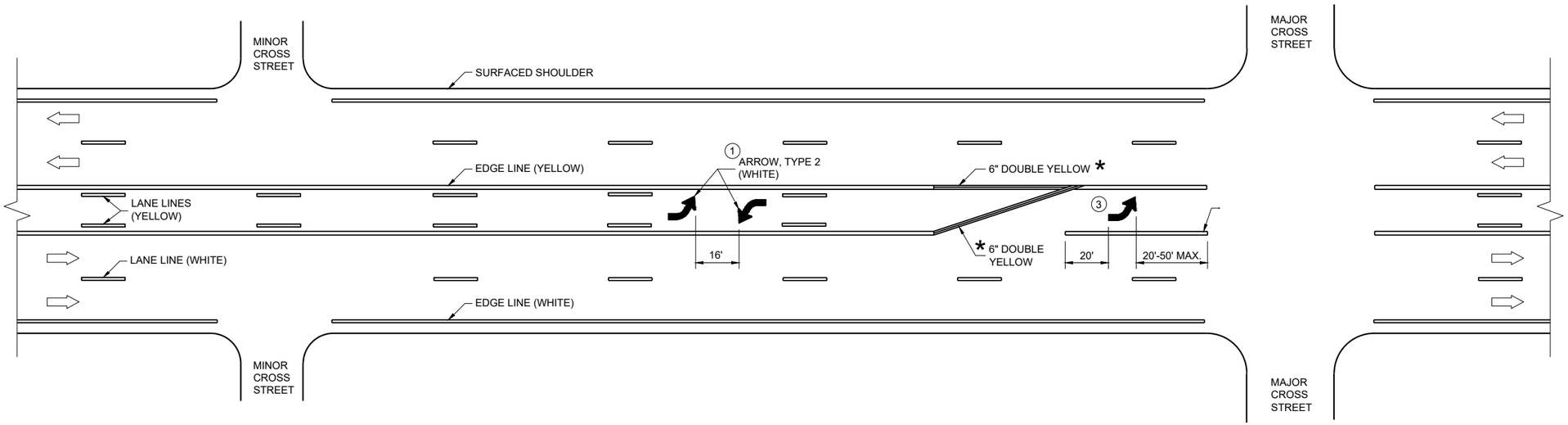
SDD 15C08-24b

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



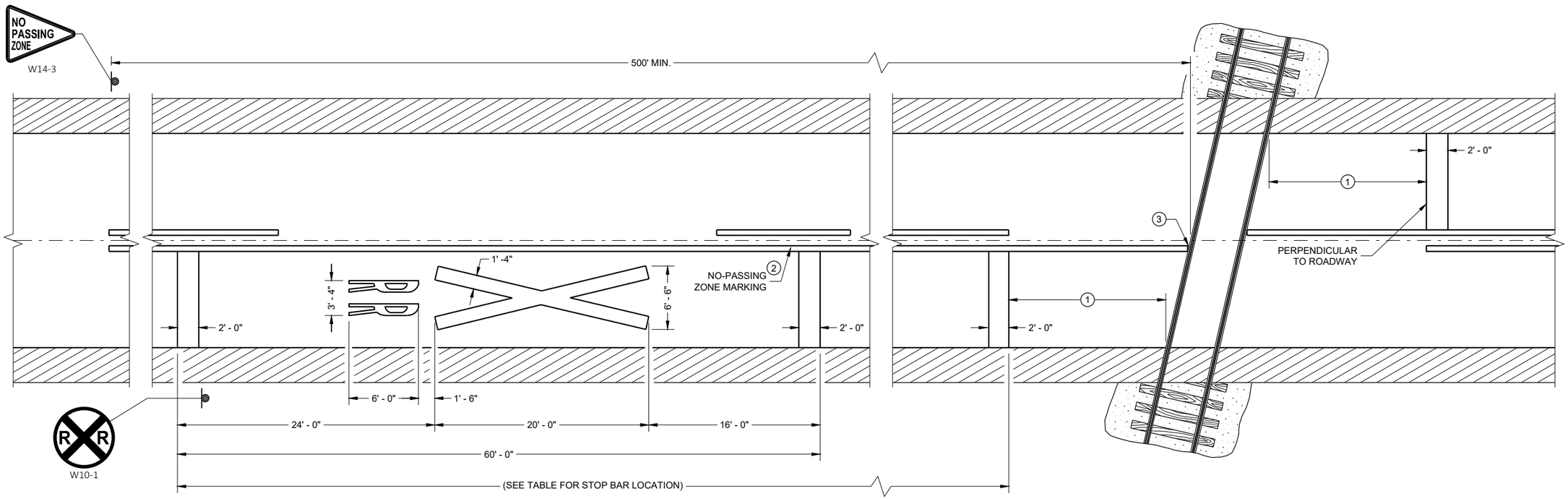
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

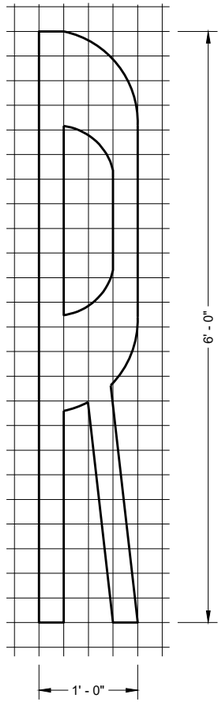
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-24c



PAVEMENT MARKING



LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

TRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

(1) PLACE STOP BAR APPROXIMATELY 8 FEET IN ADVANCE OF THE GATE (IF PRESENT), BUT NO CLOSER THAN 15 FEET IN ADVANCE OF THE NEAREST RAIL. FIELD-FIT STOP BAR TO MAXIMIZE VIEW OF APPROACHING TRAIN.

(2) 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.

(3) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

DISTANCE TABLE

TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

POSTED SPEED (M.P.H.)	DIMENSION RANGE (FEET)
25	150* - 250'
30	200* - 300'
35	250* - 450'
40	300* - 500'
45	400* - 650'
50	550* - 800'
55	750* - 1000'
60	1000* - 1250'
65	1000* - 1250'

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSED PROXIMITY OF DRIVEWAYS, BRIDGES, SIDE ROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

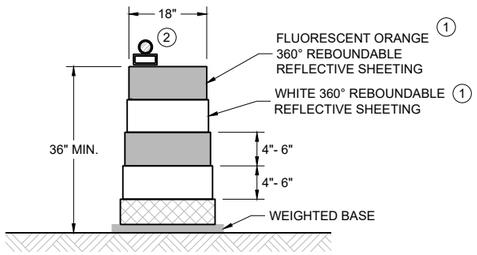
SDD 15C09-13a

SDD 15C09-13a

GENERAL NOTES

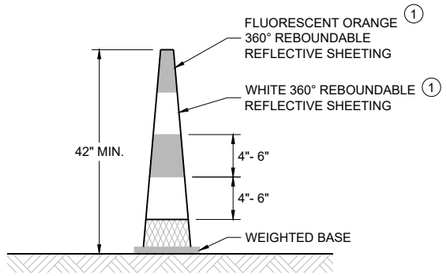
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

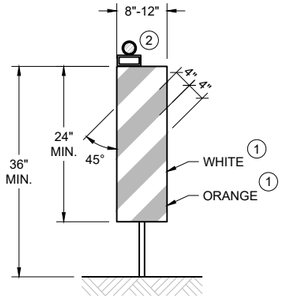
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

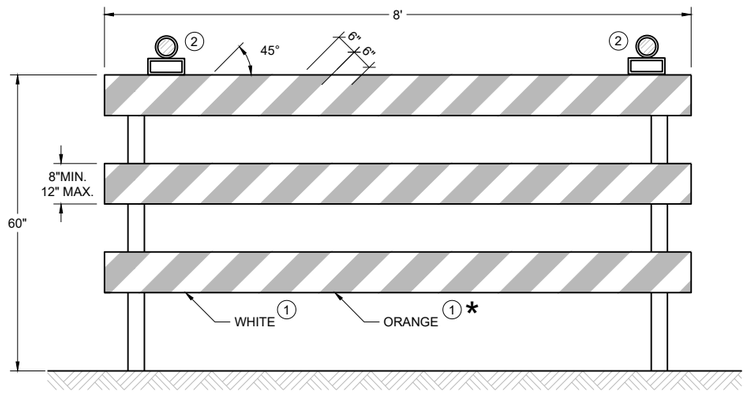
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



VERTICAL PANEL

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



TYPE 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
February 2026 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6
SDD 15C11-11b

LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

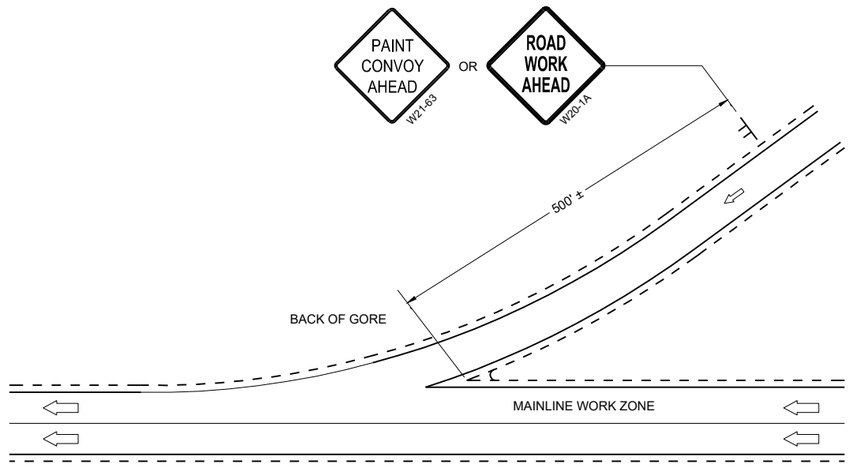
V3 TRAIL VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

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

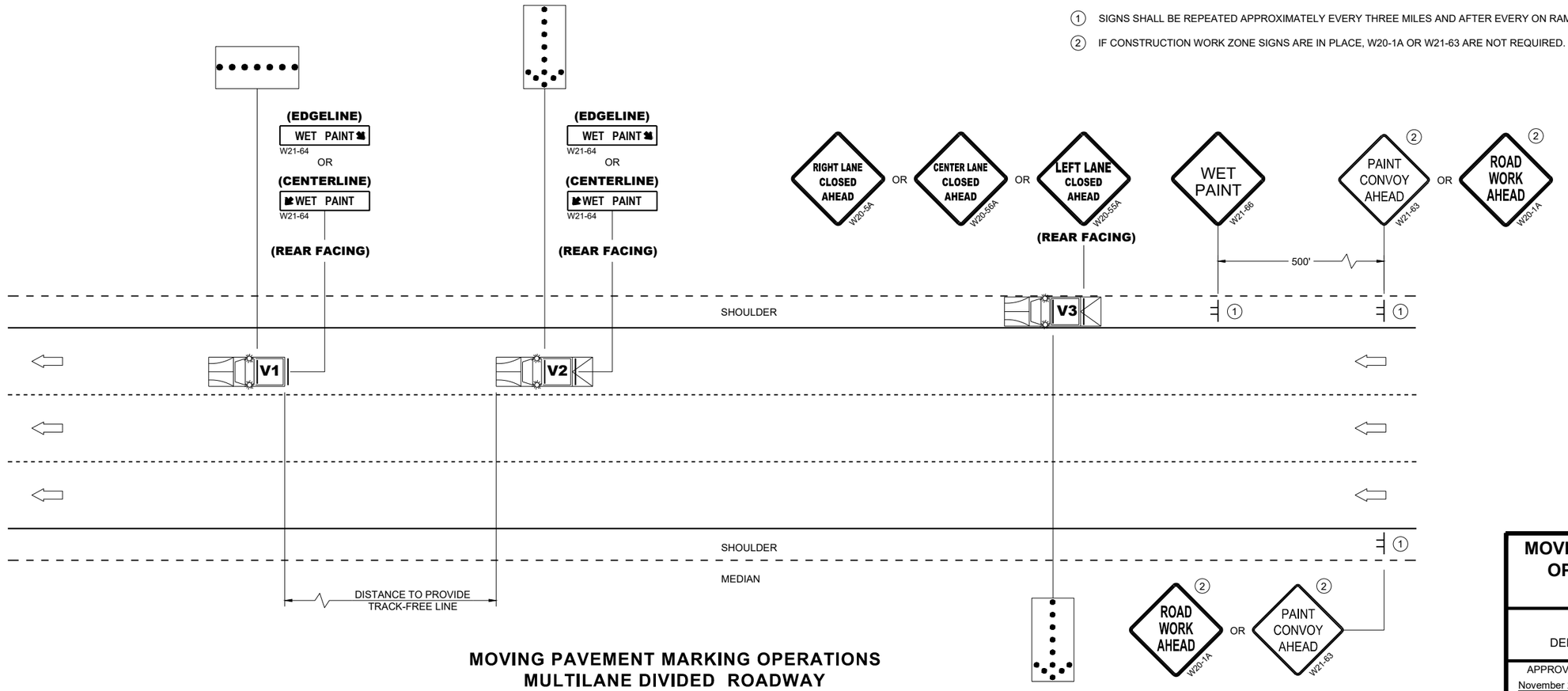
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

(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
November 2025
DATE

/S/ Andrew Heidtke
STATE ELECTRICAL ENGINEER

FHWA

6

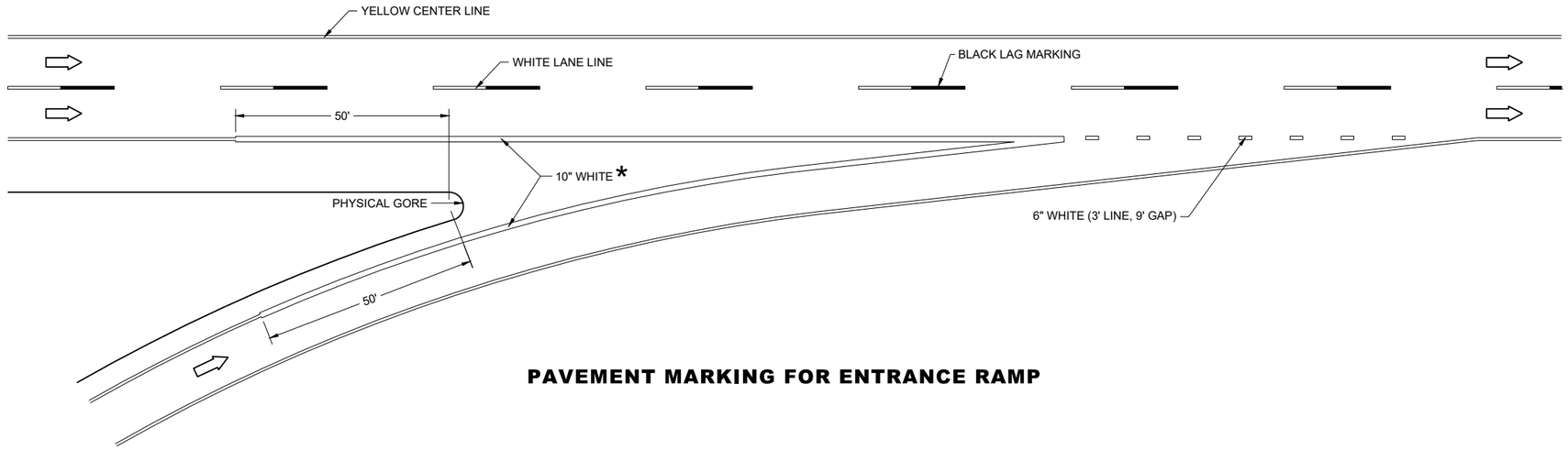
SDD 15C19-11c

6

SDD 15C19-11c

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

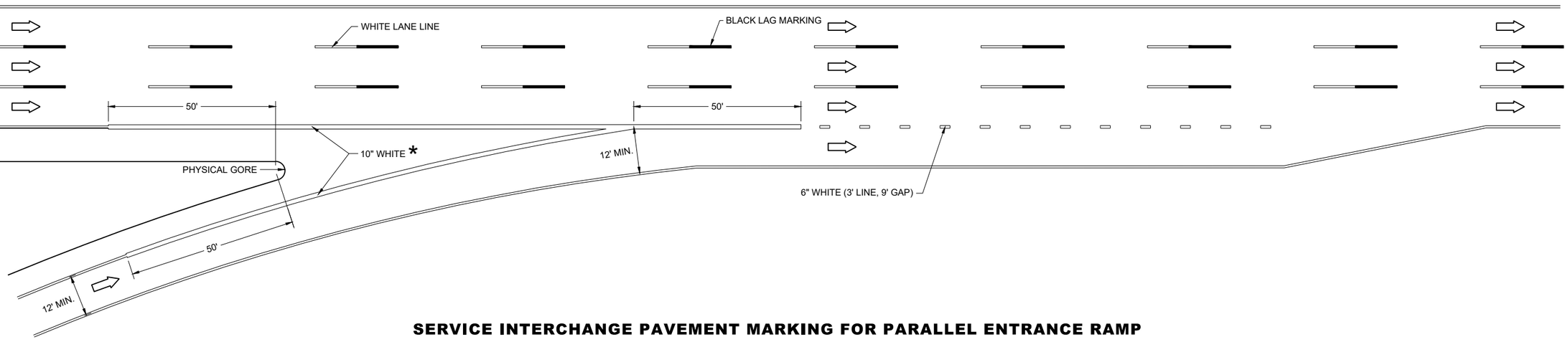


PAVEMENT MARKING FOR ENTRANCE RAMP

LEGEND

DIRECTION OF TRAVEL

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

SDD 15C31-08c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31-08c

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.

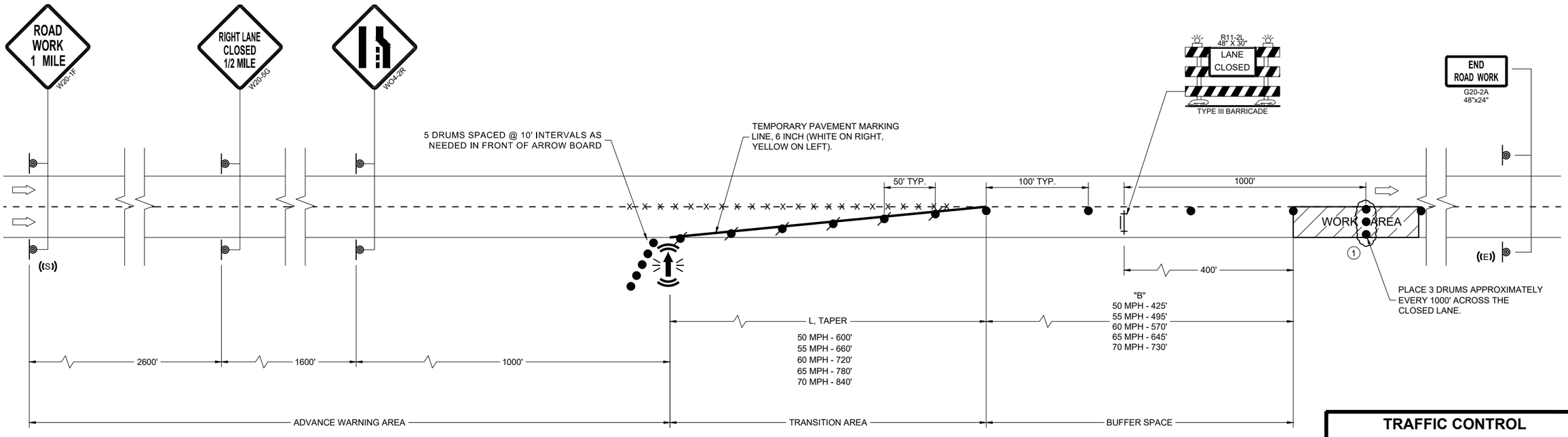
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE 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.

(1) DRUMS 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.

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
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6

SDD 15D12-16a

6

SDD 15D12-16a

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

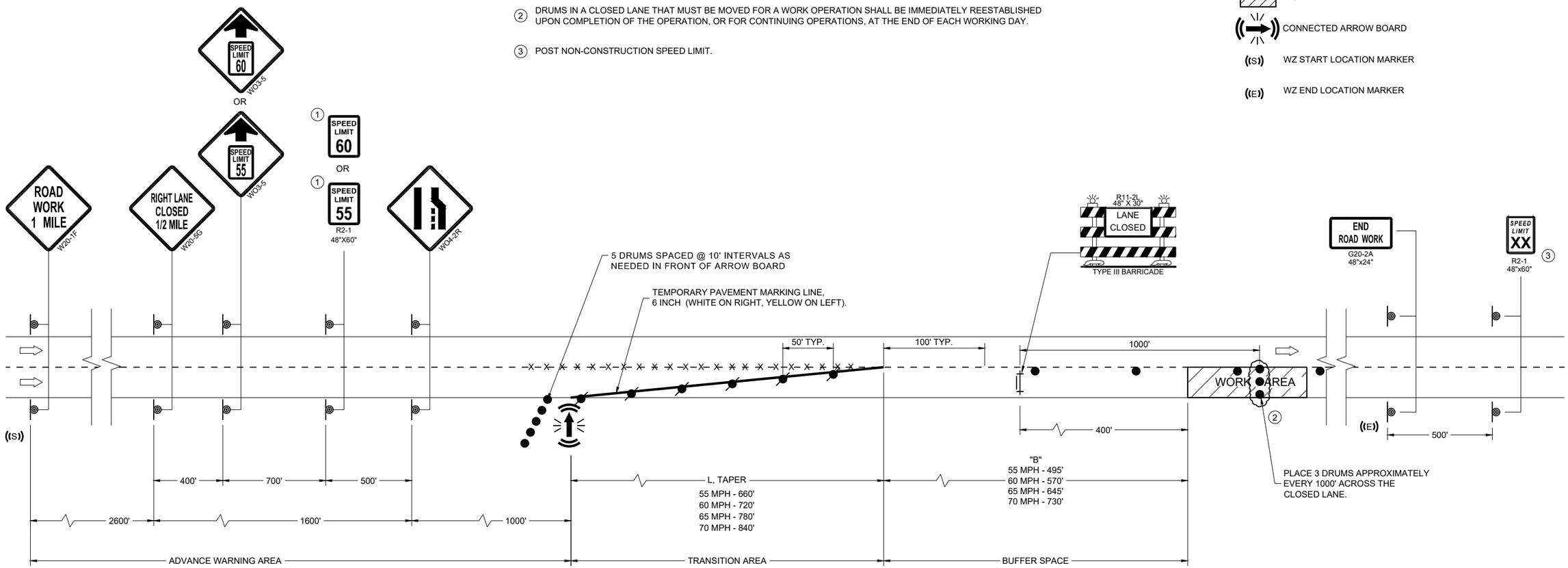
① A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES.

② DRUMS 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.

③ POST NON-CONSTRUCTION SPEED LIMIT.

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
- CONNECTED ARROW BOARD
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 15D12-16b

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
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER
- CONNECTED ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- (S) — PORTABLE TRAFFIC SENSOR (PTS)
- FBS — FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
WO8-76
96" x 48"

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.

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.

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.

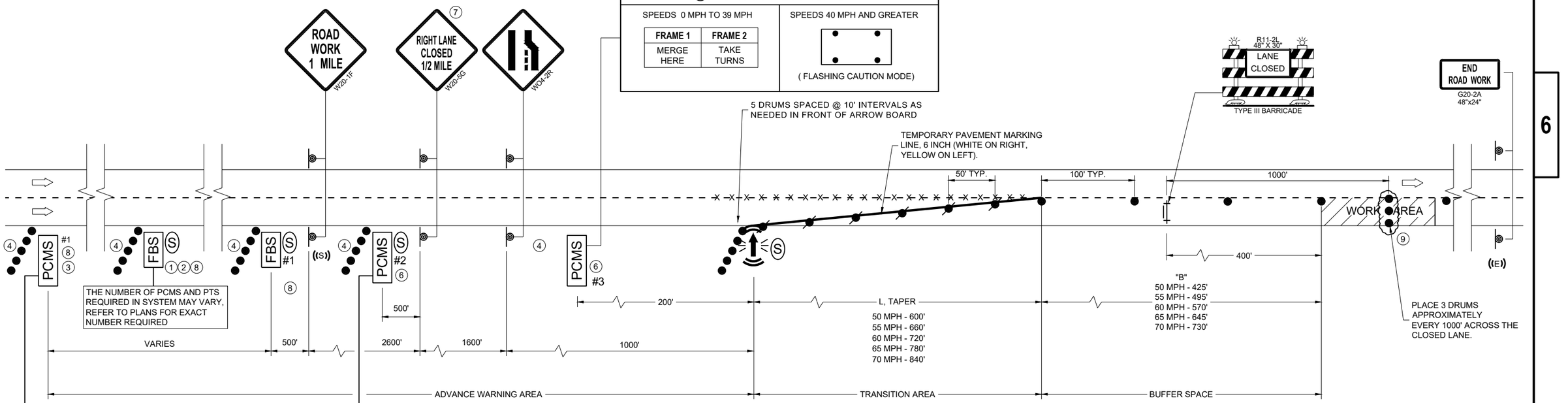
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION. ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP 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.

THIS DETAIL IS FOR RIGHT LANE CLOSURES ONLY. IF LEFT LANE CLOSURE IS NEEDED WITH THE DLMS, TAKE A RIGHT LANE CLOSURE AND SHIFT TRAFFIC TO THE RIGHT LANE.

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 PCMS, FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

1. FURTHEST UPSTREAM FBS DOES NOT HAVE A PTS.
2. PLACE FLASHING BEACON SIGNS EVERY ONE MILE BETWEEN PCMS #1 AND FBS #1. THE NUMBER OF FBS MAY BE MORE THAN SHOWN ON THIS DETAIL.
3. FOR THREE LANE CONFIGURATION, CHANGE PCMS #1 FRAME 2 MESSAGE TO "USE ALL LANES".
4. 5 DRUMS SPACED @ 10' INTERVALS AS NEEDED.
5. PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE.
6. TO REMOVE OBSTRUCTION OF THE ARROW BOARD BY THE PCMS, OFFSET THE PCMS AS NEEDED FROM THE EDGE LINE
7. 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.
8. IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE PCMS AND FBS ON BOTH SIDES OF THE ROADWAY.
9. DRUMS 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.



3 5 1 PCMS #1 MESSAGING

SPEEDS 0 MPH TO 39 MPH

FRAME 1	FRAME 2
STOPPED TRAFFIC AHEAD	USE BOTH LANES

SPEEDS 40 MPH AND GREATER

(FLASHING CAUTION MODE)

5 PCMS #2 MESSAGING

SPEEDS 0 MPH TO 39 MPH

FRAME 1	FRAME 2
STAY IN LANE	DO NOT MERGE

SPEEDS 40 MPH AND GREATER

(FLASHING CAUTION MODE)

TRAFFIC CONTROL, DYNAMIC LATE MERGE SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Erin Schwark — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6 SDD 15D12-16c

6 SDD 15D12-16c

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
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER
- CONNECTED ARROW BOARD
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- (S) — PORTABLE TRAFFIC SENSOR (PTS)
- FBS — FLASHING BEACON SIGNS
- STOPPED OR SLOW TRAFFIC WHEN FLASHING — WO8-76, 96" x 48"

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.

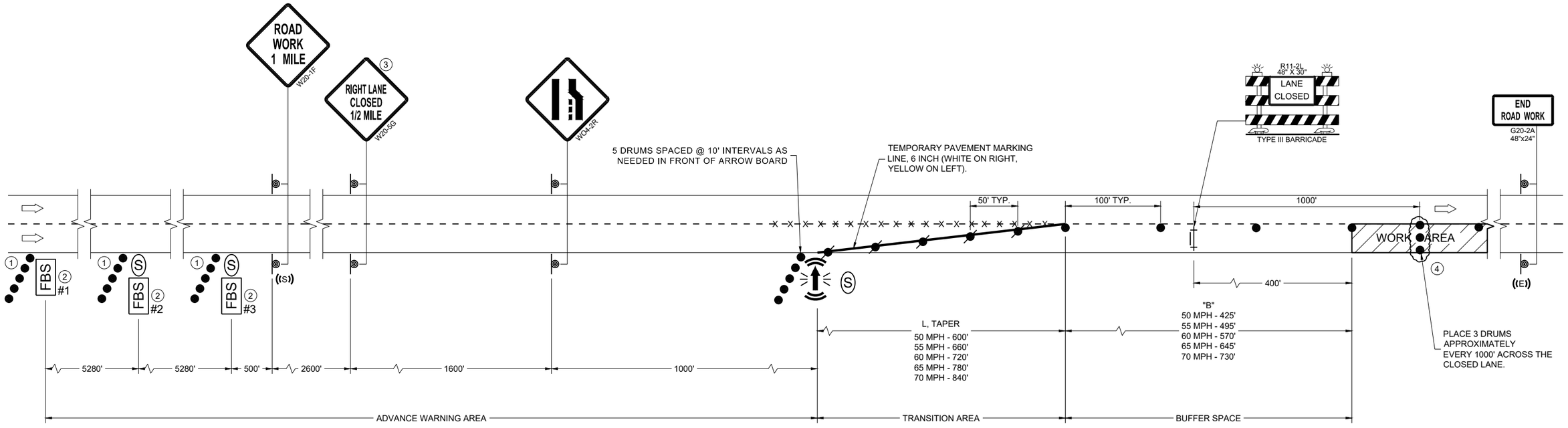
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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
4. DRUMS 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.



TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Erin Schwark — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6 SDD 15D12-16d

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
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER
- TEMPORARY TAPE RUMBLE STRIPS (VARIABLE SPACING)
- PORTABLE TRAFFIC SENSOR (PTS)

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 ADVANCE 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.

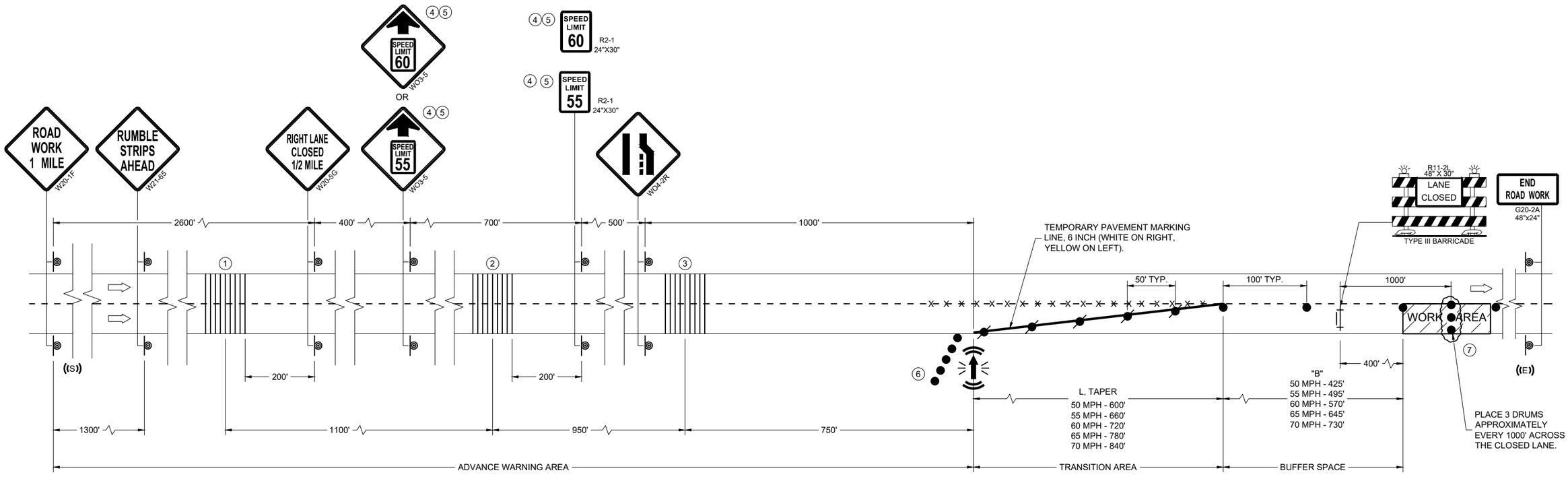
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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 TAPE 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.
7. DRUMS 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.



TRAFFIC CONTROL, LANE CLOSURE, WITH TEMPORARY TAPE RUMBLE STRIPS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 15D12-16f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

GENERAL NOTES

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

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

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

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

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

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

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

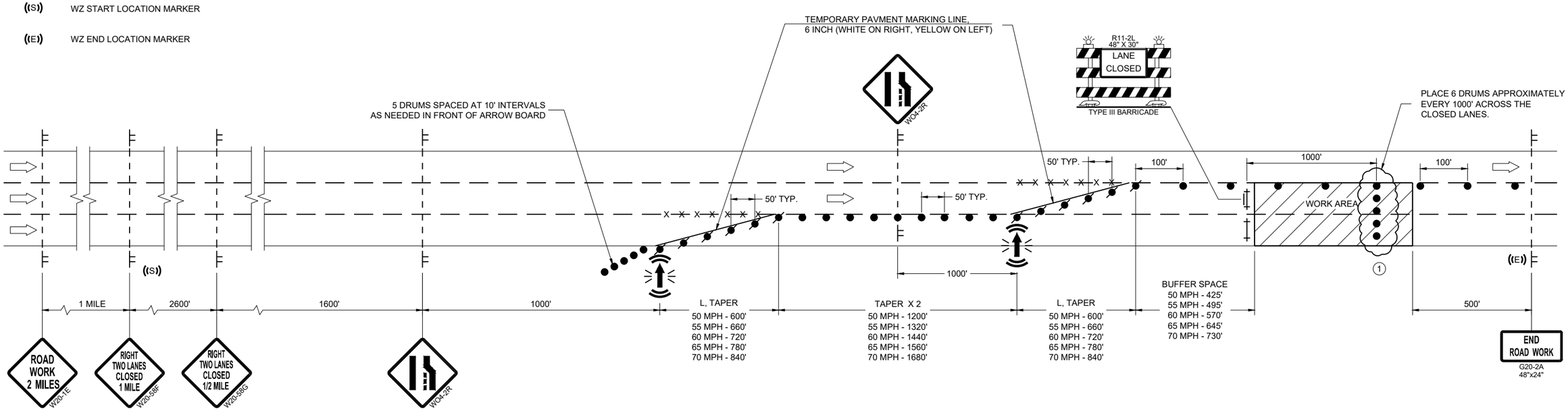
WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

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.

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

(1) DRUMS 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.



TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEFR

FHWA

6

SDD 15D14-10

6

SDD 15D14-10

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.

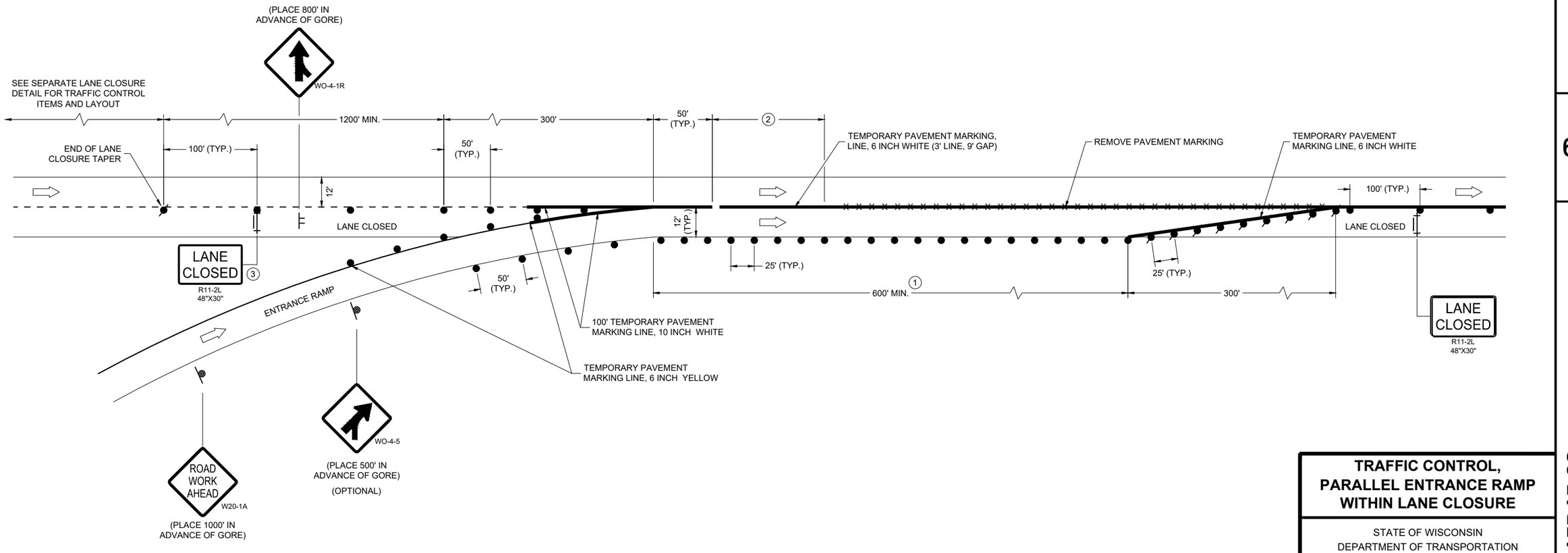
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

(3) IF LOCATED AFTER INITIAL LANE CLOSURE BARRICADE AND "LANE CLOSED" SIGN, USE 3 DRUMS IN PLACE OF BARRICADE AND SIGN.



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D15-08a

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.

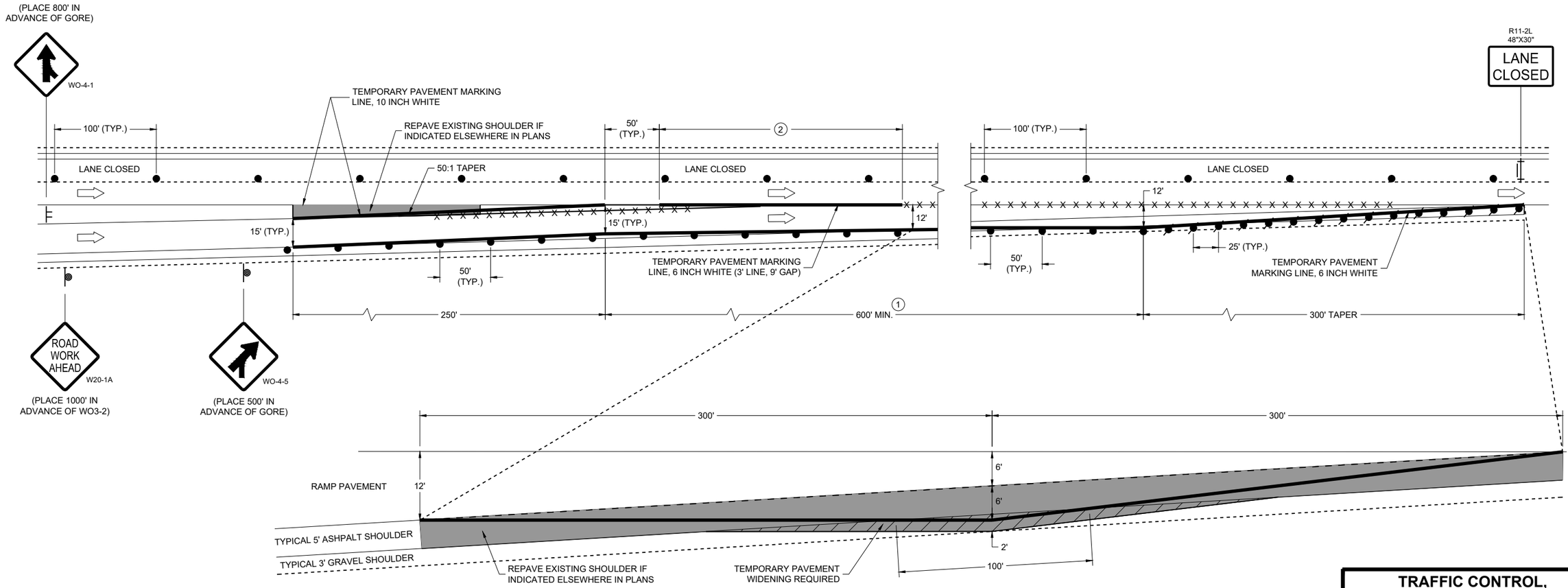
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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 1/2 THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TEMPORARY PAVEMENT DETAIL

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

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6
SDD 15D15-08b

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.

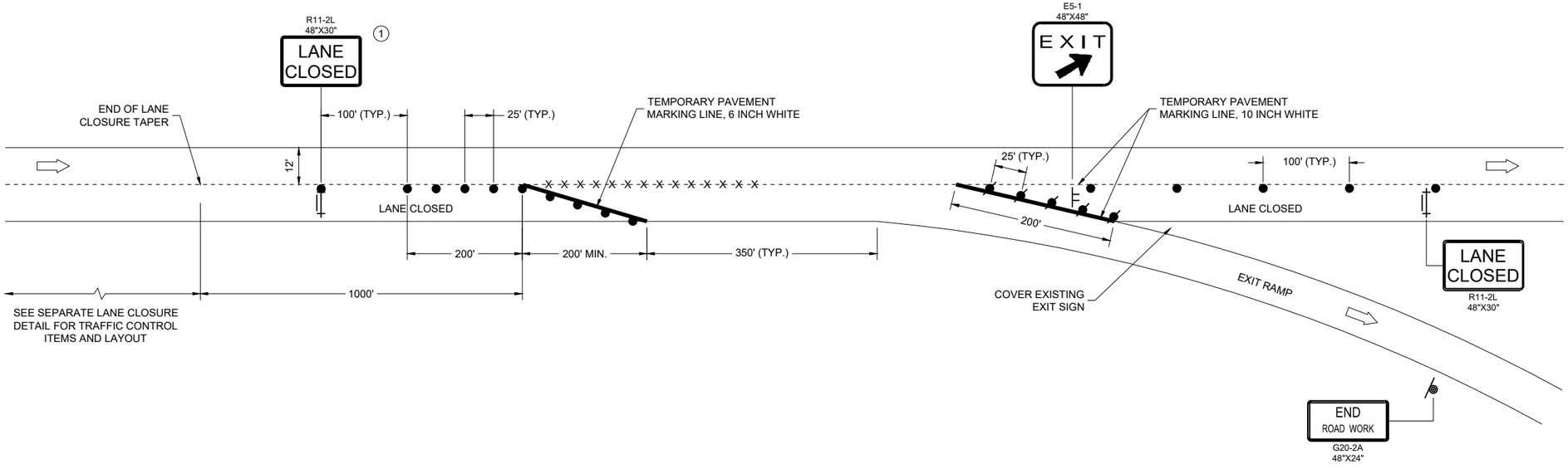
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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.

(1) IF LOCATED AFTER INITIAL LANE CLOSURE BARRICADE AND "LANE CLOSED" SIGN, USE 3 DRUMS IN PLACE OF BARRICADE AND SIGN.



TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D15-08e

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.

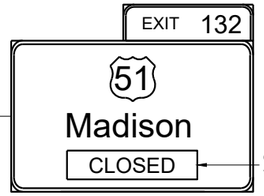
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(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.

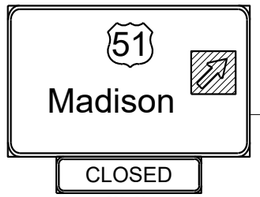
G20 - 60
108" X 24"

OR



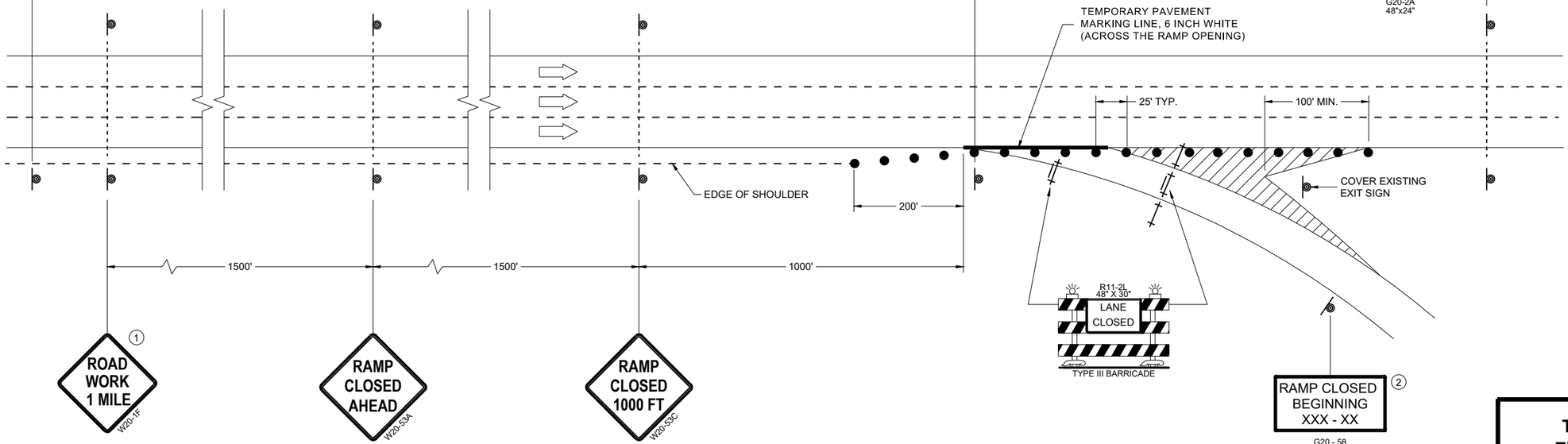
G20 - 60
108" X 24"

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



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

G20 - 61
120 ' X 30"



FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — <position>

FHWA

6
SDD 15D16-07

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- CONNECTED ARROW BOARD
- WORK AREA
- (S) WZ START LOCATION MARKER
- (E) WZ END LOCATION MARKER

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.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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.

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

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

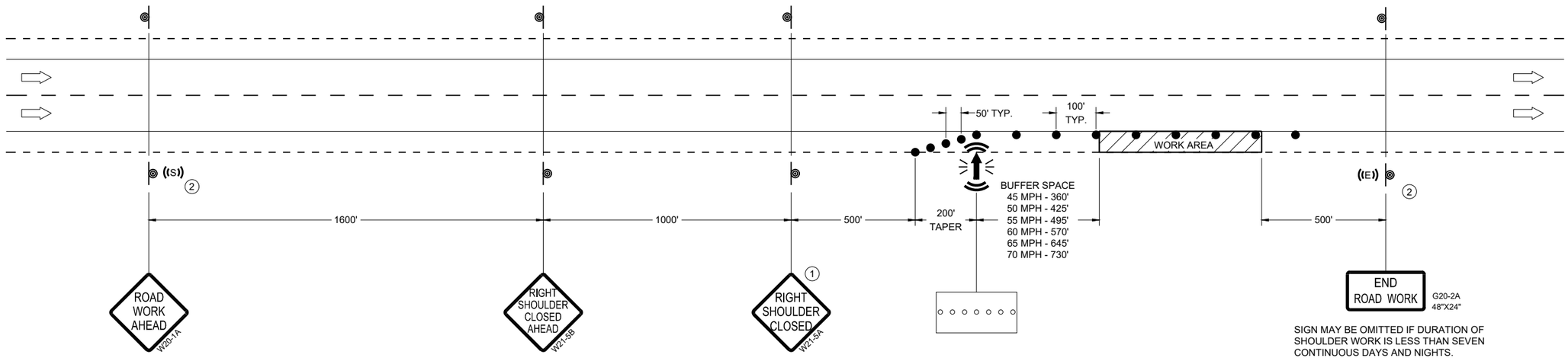
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

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

(1) FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR THE W21-5A SIGN MAY BE OMITTED.

(2) IF ALREADY PRESENT WITHIN PROJECT , DO NOT INCLUDE ADDITIONAL DEVICE.



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Noveber 2025
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6
SDD 15D27-05

LEGEND

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
	10	11	12	13	14	
50	250	275	300	325	350	425
55	275	303	330	358	385	495
60	300	330	360	390	420	570
65	325	358	390	423	455	645
70	350	385	420	455	490	730

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

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

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

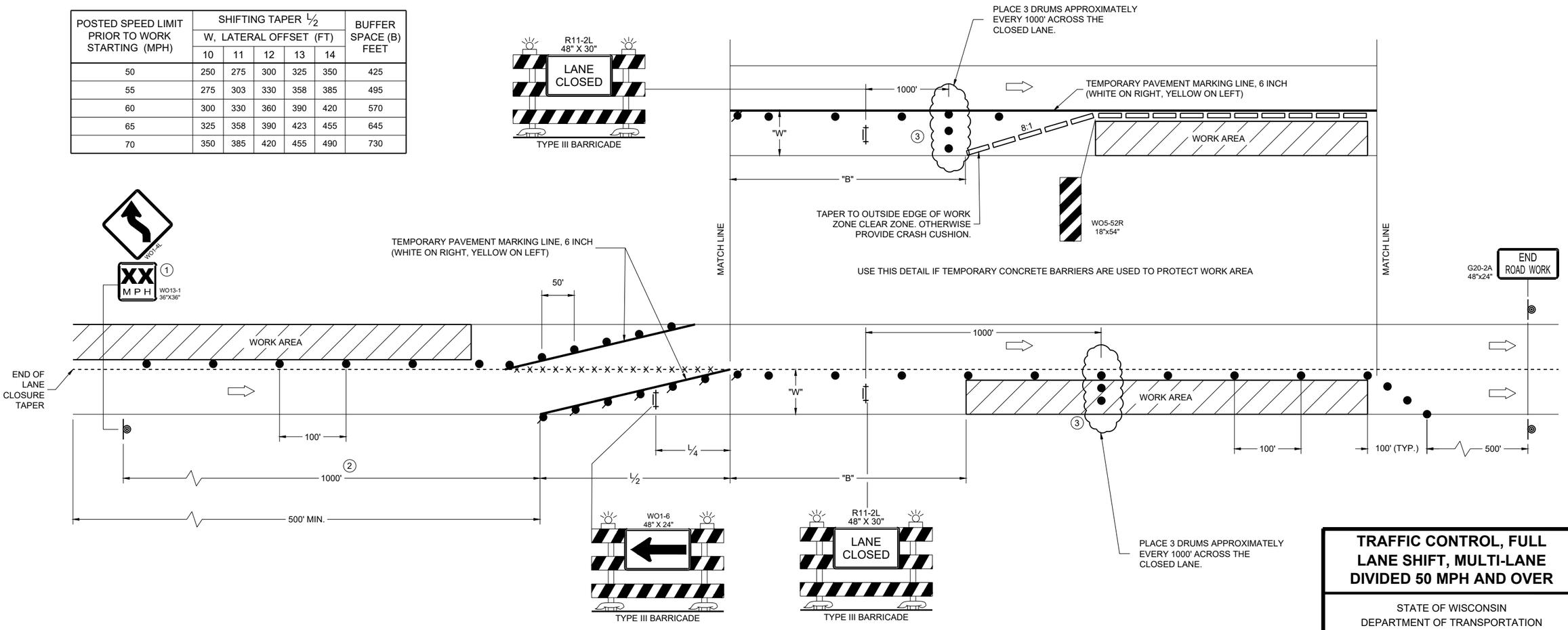
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE THE LENGTH OF ½ THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) IF BEGINNING OF LANE SHIFT IS 1200' OF LESS FROM THE END OF THE LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.

(3) DRUMS 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.



TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6
SDD 15D40-07b

LEGEND

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

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

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

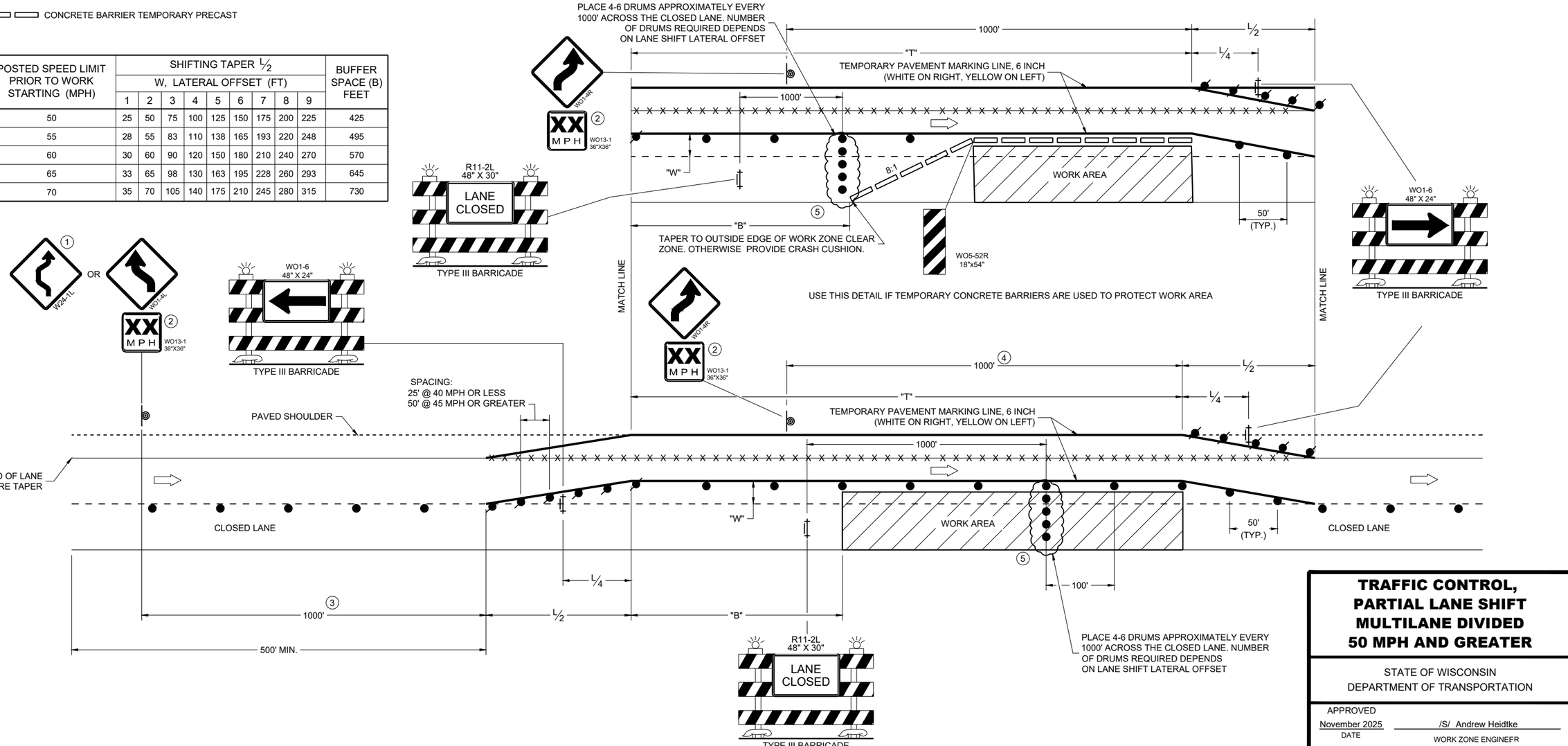
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

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

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER 1/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
	1	2	3	4	5	6	7	8	9	
50	25	50	75	100	125	150	175	200	225	425
55	28	55	83	110	138	165	193	220	248	495
60	30	60	90	120	150	180	210	240	270	570
65	33	65	98	130	163	195	228	260	293	645
70	35	70	105	140	175	210	245	280	315	730



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6
SDD 15D40-07d

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

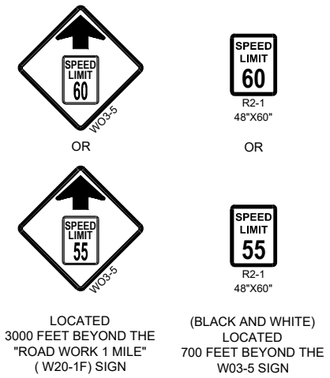
TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

CONCRETE BARRIER TEMPORARY PRECAST

TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA



IF THE REGULATORY SPEED HAS BEEN REDUCED, 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 INCORPORATED A MINIMUM OF EVERY 3 MILES.

GENERAL NOTES

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

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

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

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.

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

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

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

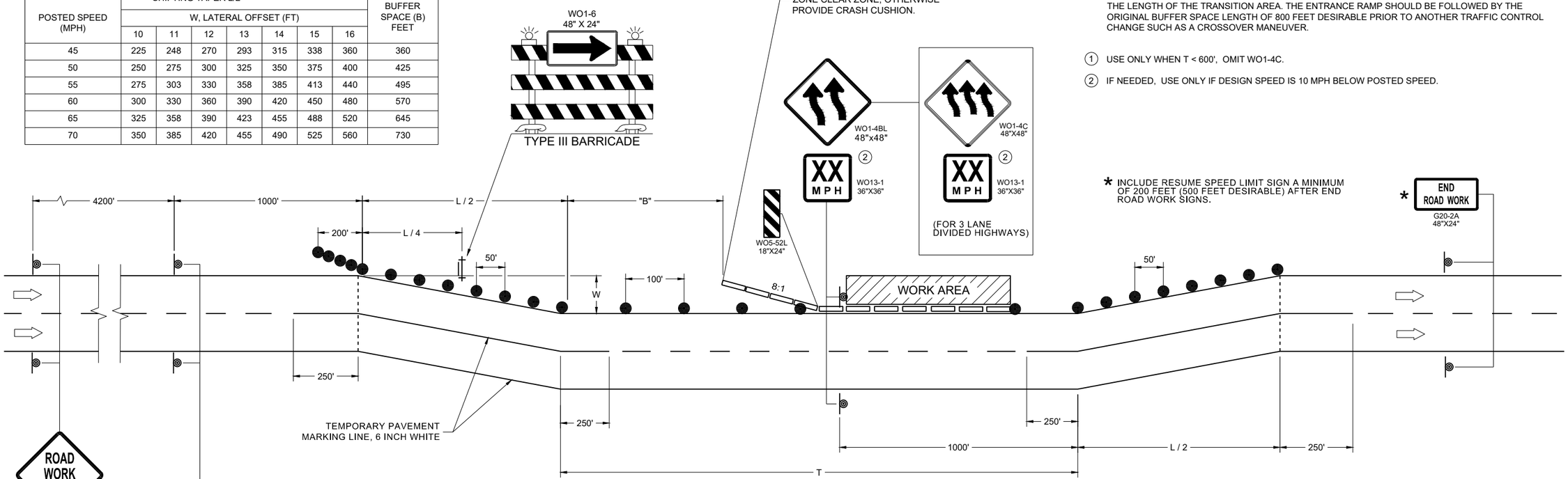
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP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

(1) USE ONLY WHEN T < 600', OMIT WO1-4C.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

FULL SHIFT

POSTED SPEED (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)							BUFFER SPACE (B) FEET
	10	11	12	13	14	15	16	
45	225	248	270	293	315	338	360	360
50	250	275	300	325	350	375	400	425
55	275	303	330	358	385	413	440	495
60	300	330	360	390	420	450	480	570
65	325	358	390	423	455	488	520	645
70	350	385	420	455	490	525	560	730



PARTIAL SHIFT

POSTED SPEED PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
	1	2	3	4	5	6	7	8	9	
45	23	45	68	90	113	135	158	180	203	360
50	25	50	75	100	125	150	175	200	225	425
55	28	55	83	110	138	165	193	220	248	495
60	30	60	90	120	150	180	210	240	270	570
65	33	65	98	130	163	195	228	260	293	645
70	35	70	105	140	175	210	245	280	315	730

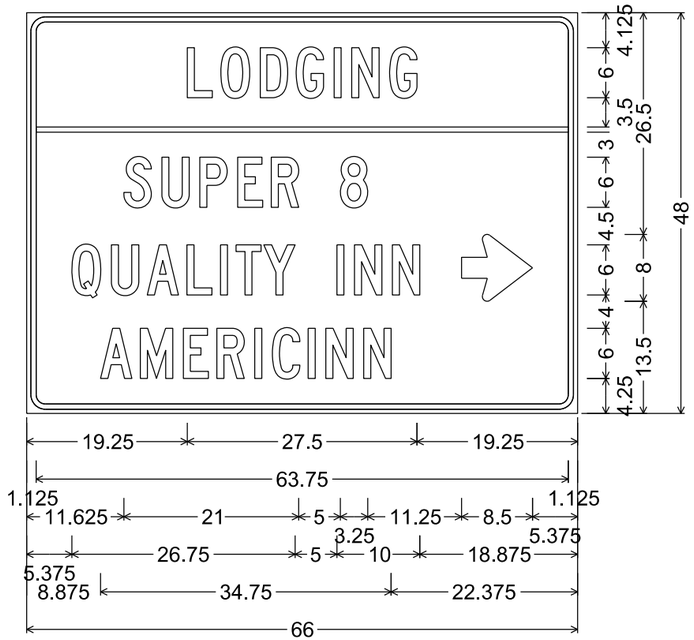
TRAFFIC CONTROL
MULTIPLE LANE SHIFT
MULTILANE DIVIDED ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

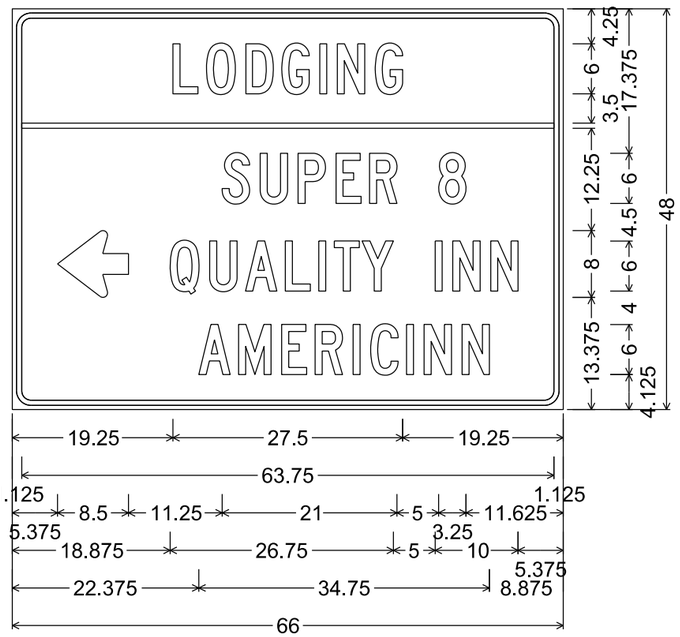
APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6
SDD 15D41-06a



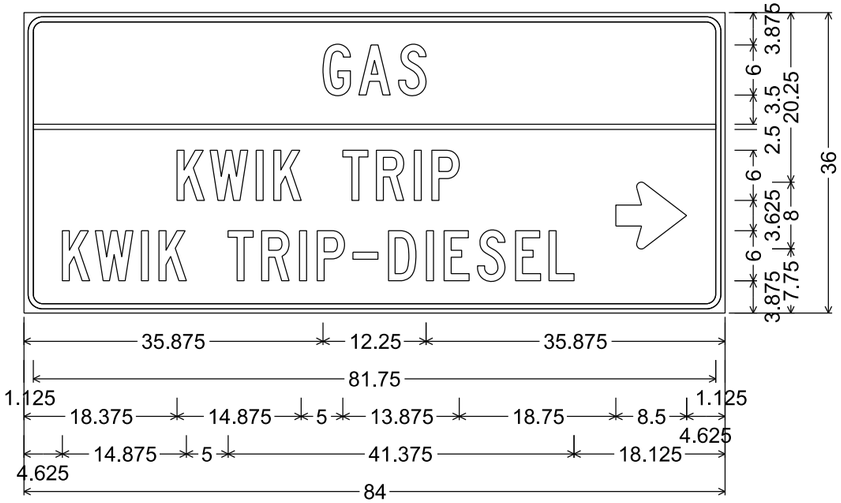
2.250" Radius, 0.625" Border, 0.500" Indent



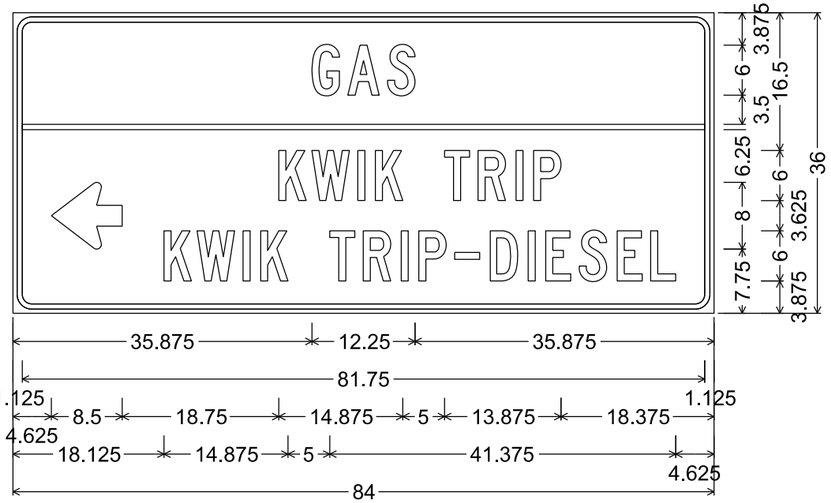
2.250" Radius, 0.625" Border, 0.500" Indent

NOTES

1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



2.250" Radius, 0.625" Border, 0.500" Indent



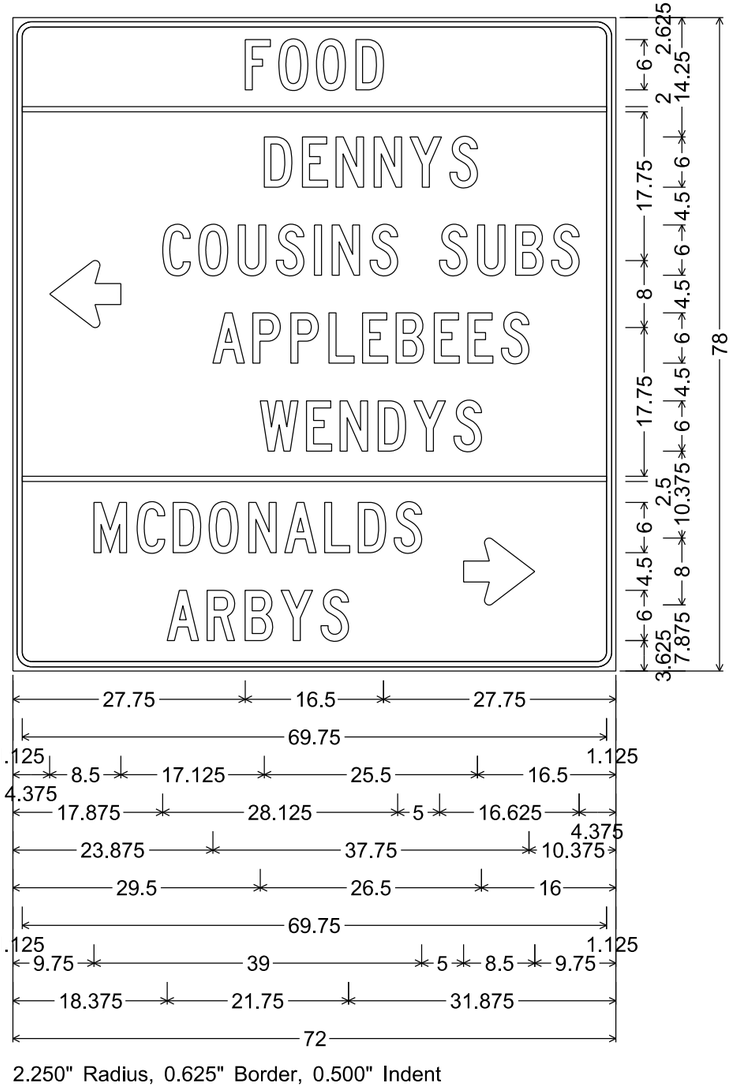
2.250" Radius, 0.625" Border, 0.500" Indent

7

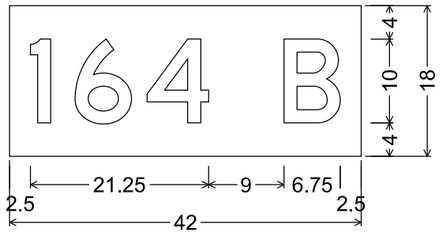
7

NOTES

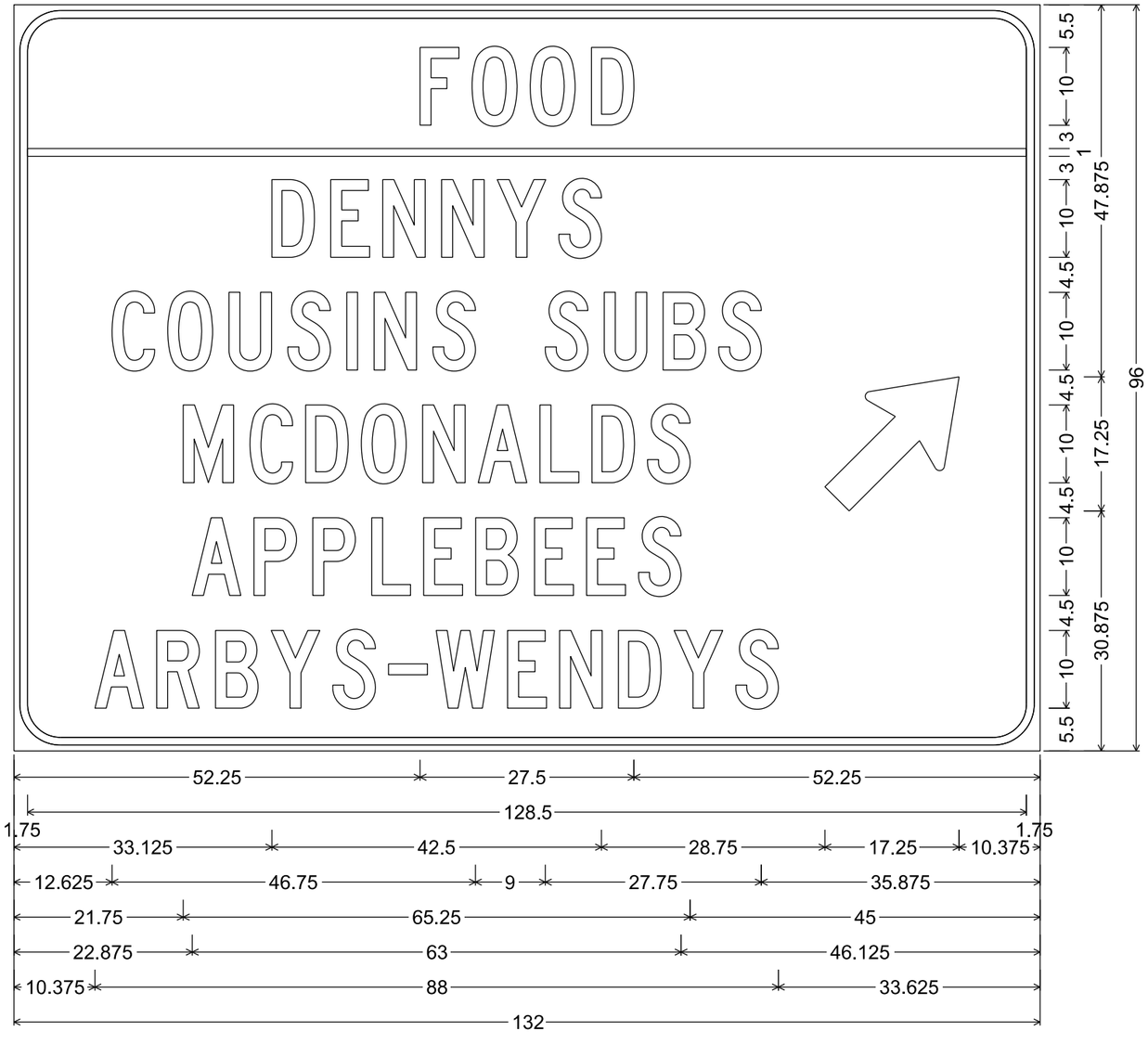
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C or as noted



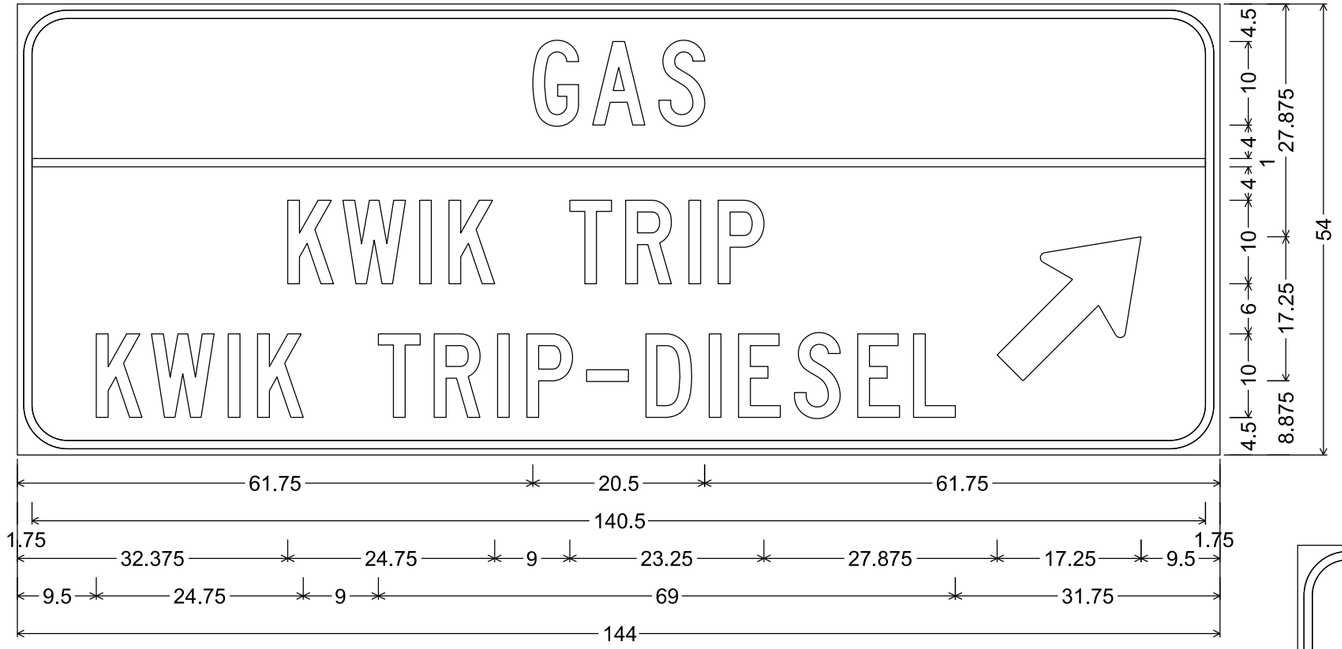
2.250" Radius, 0.625" Border, 0.500" Indent



No border, White on Fluorescent orange;
"164" Black, D; "B" Black, D



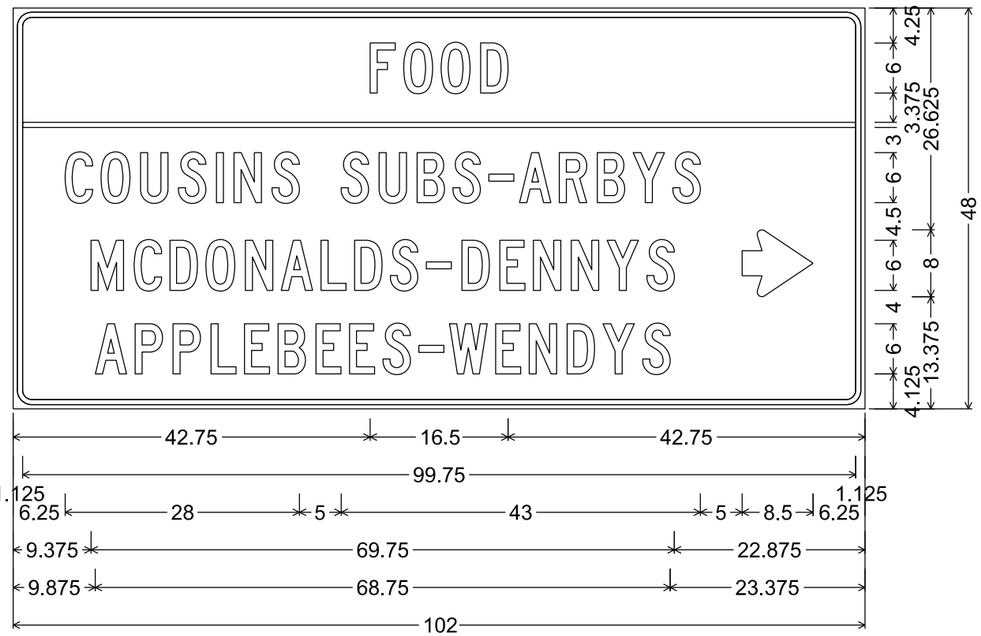
6.000" Radius, 1.000" Border, 0.750" Indent



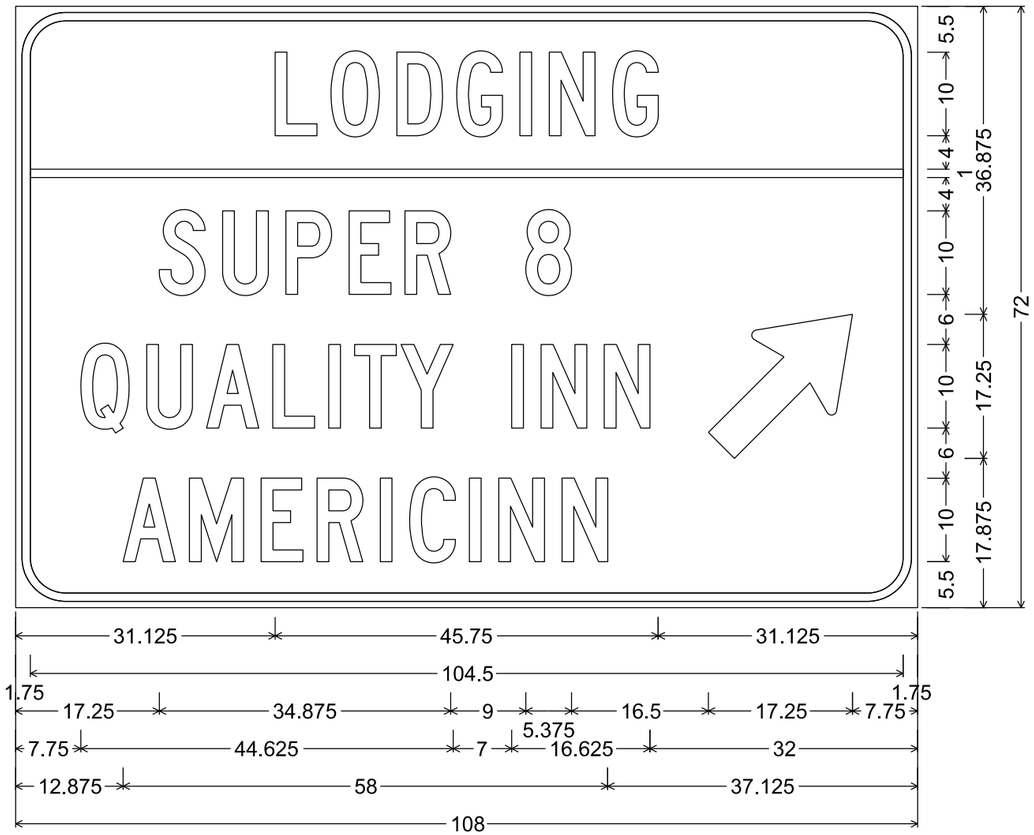
6.000" Radius, 1.000" Border, 0.750" Indent

NOTES

1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C

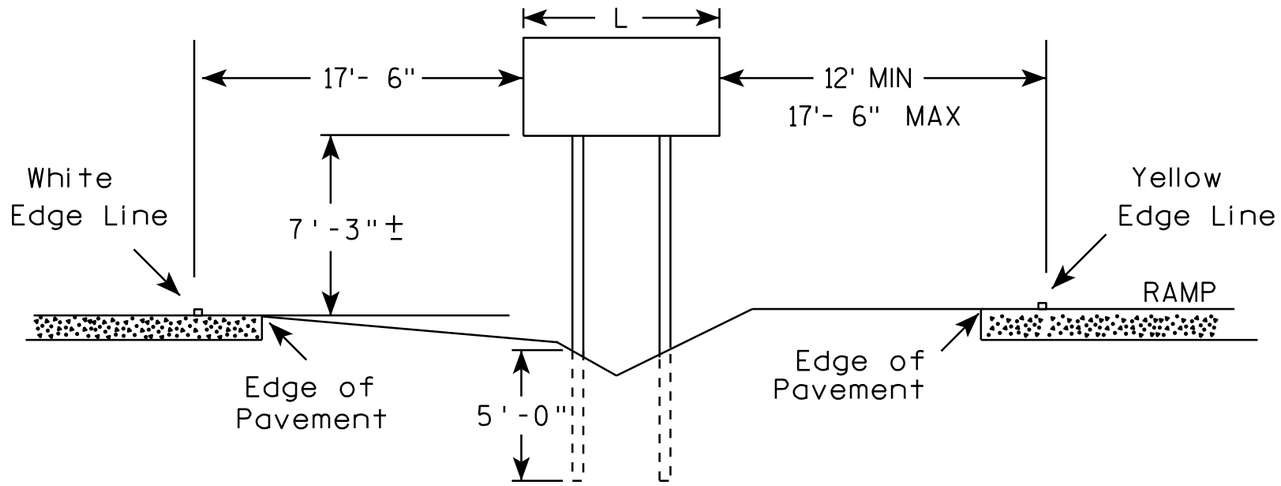


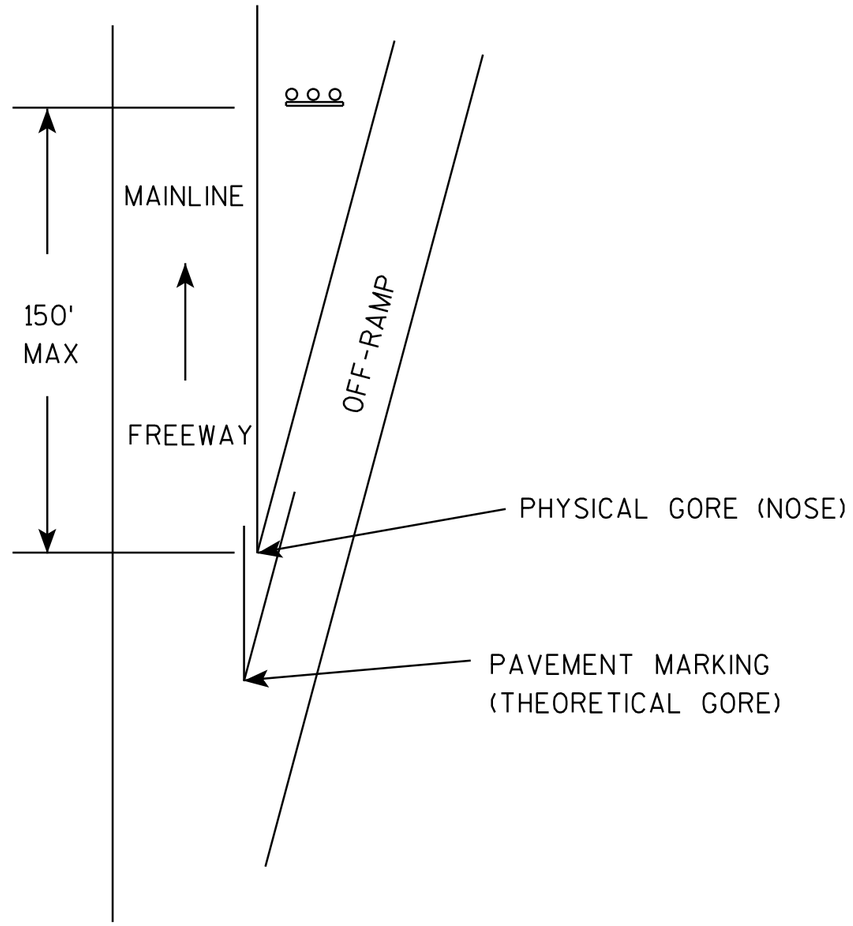
2.250" Radius, 0.625" Border, 0.500" Indent



6.000" Radius, 1.000" Border, 0.750" Indent

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	TEMPORARY SIGNING	SHEET NO: 344	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.

7

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TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

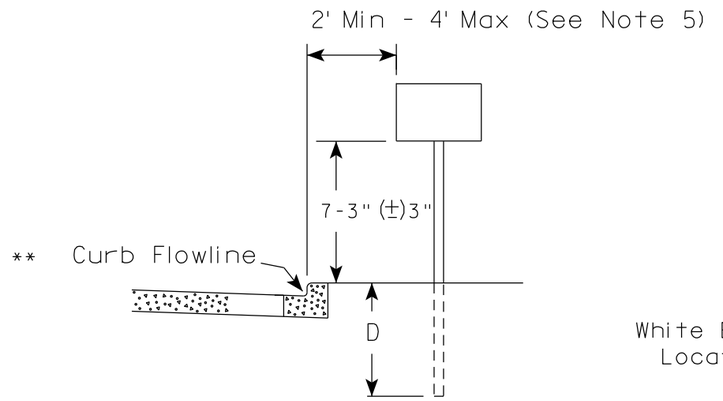
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

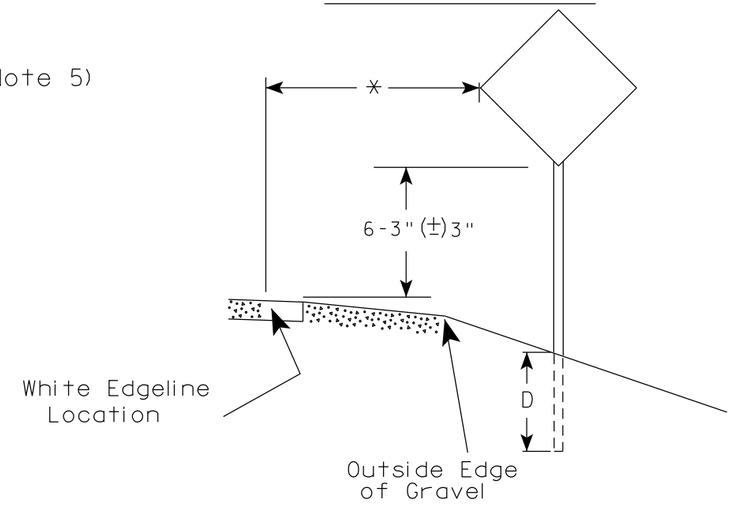
DATE 2/06/14 PLA 345 A4-2.3

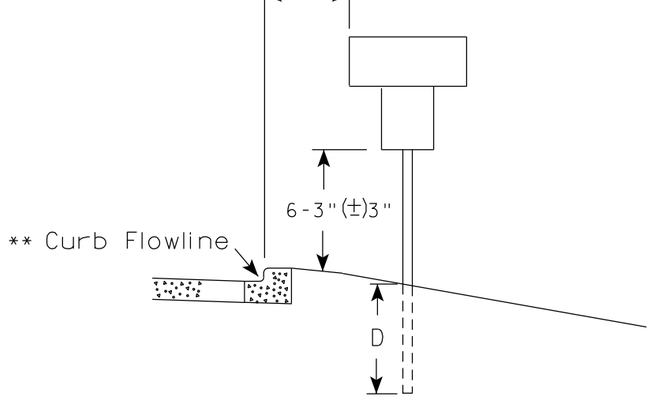
PROJECT NO: | SHEET NO: E

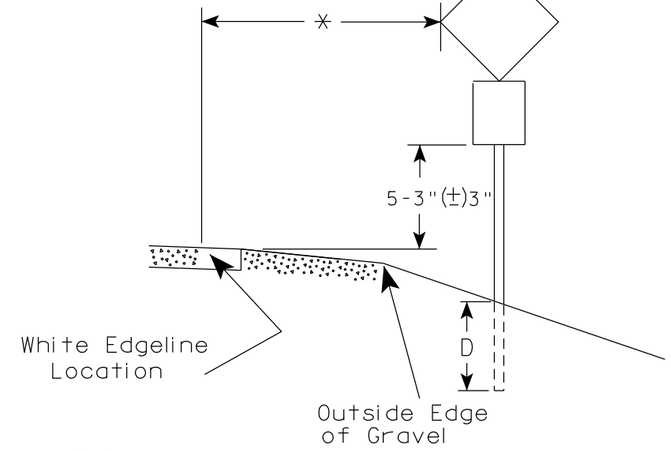
URBAN AREA



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.

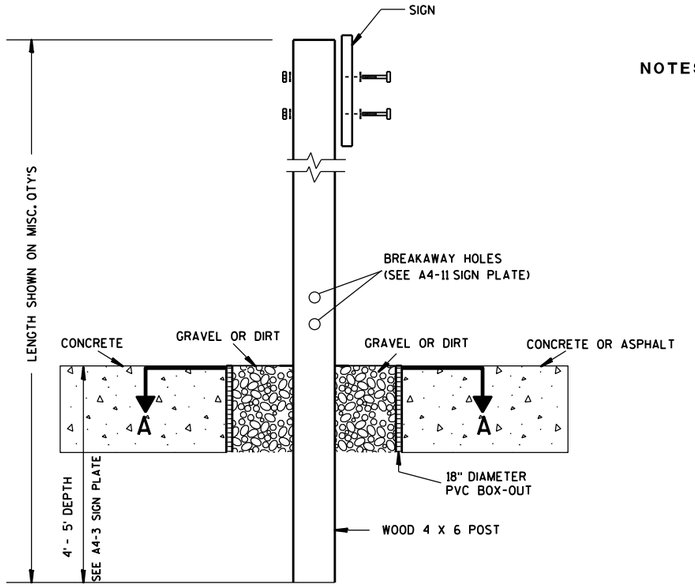
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

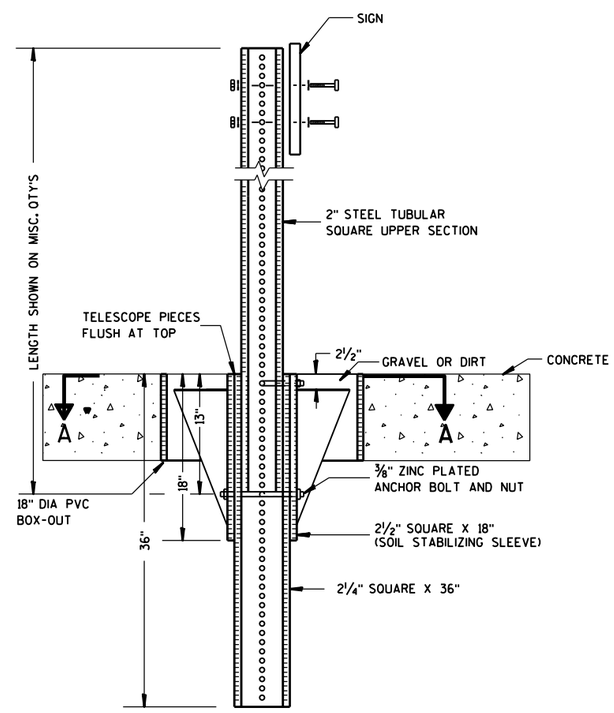
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 346	E



ELEVATION VIEW

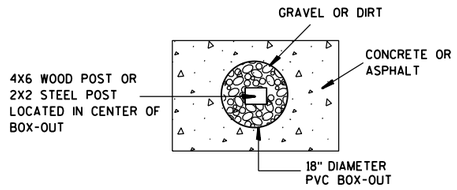
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

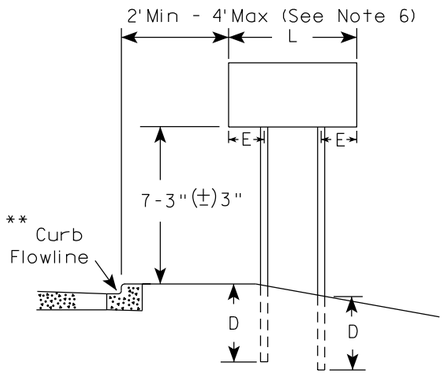
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

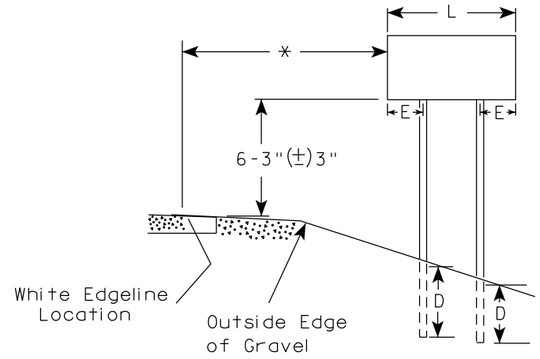
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

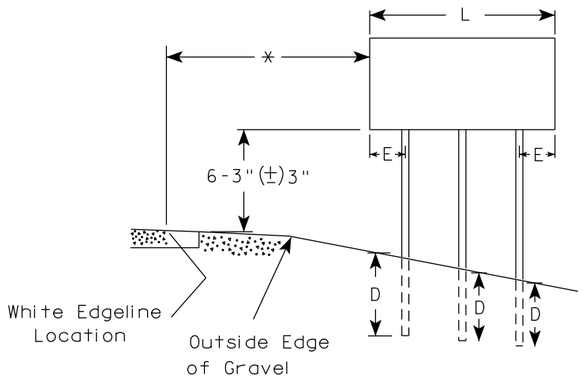
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

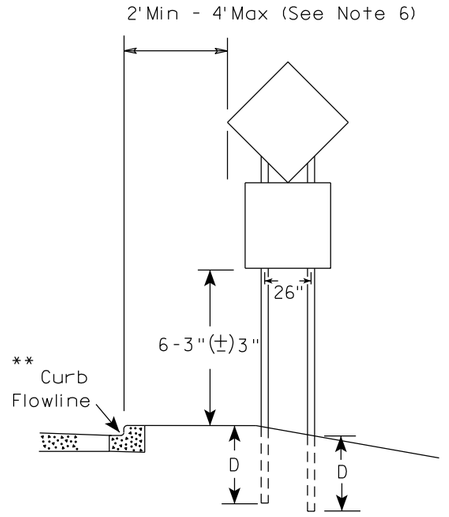
URBAN AREA



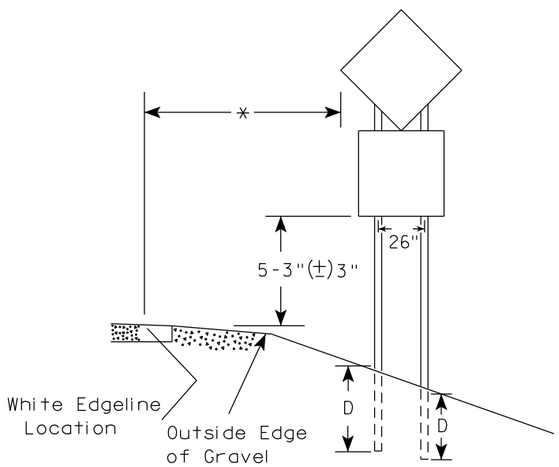
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



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'

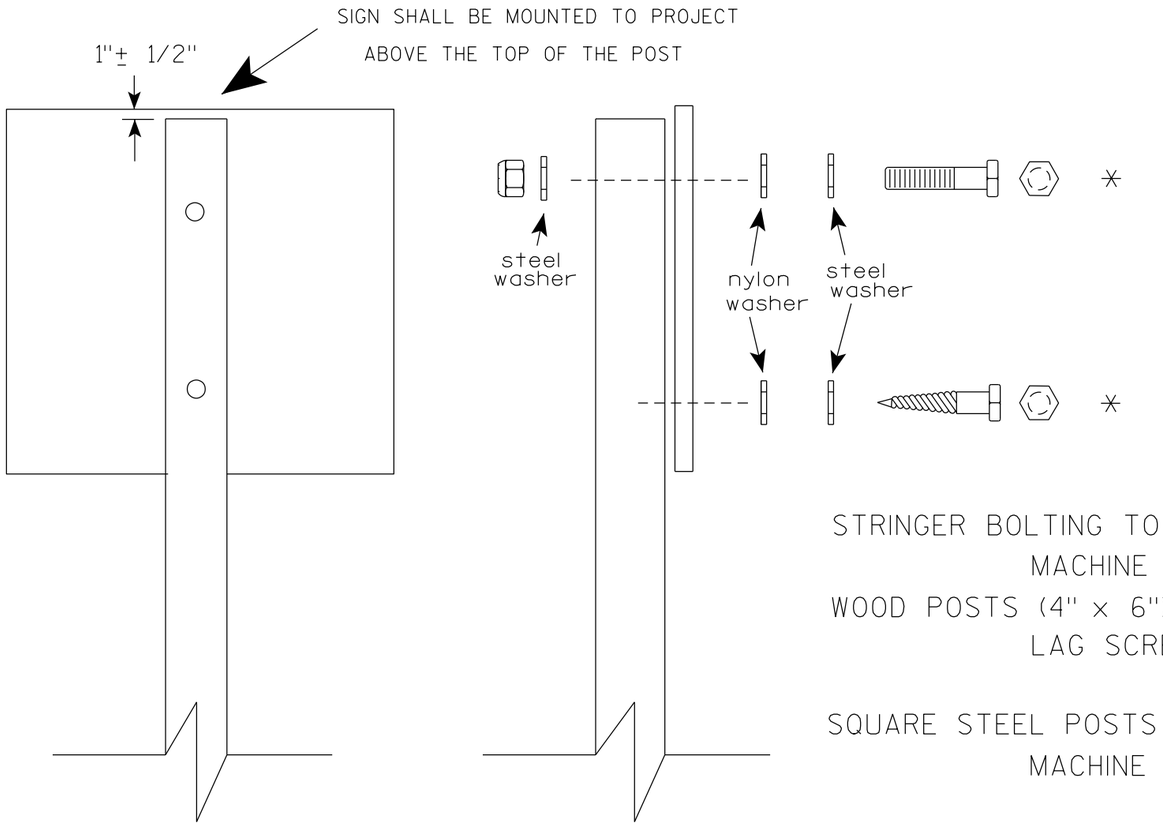
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 348	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

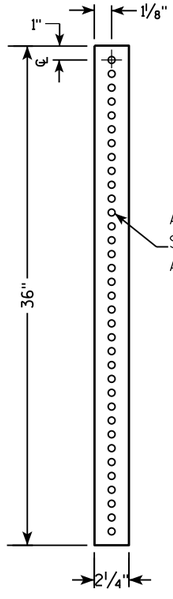
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

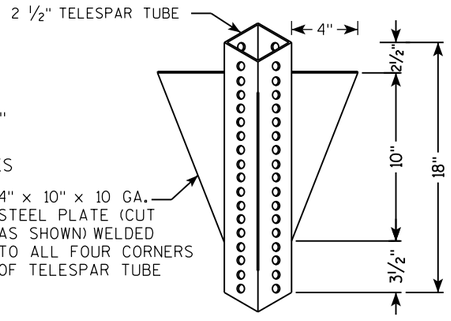
SHEET NO: 349 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

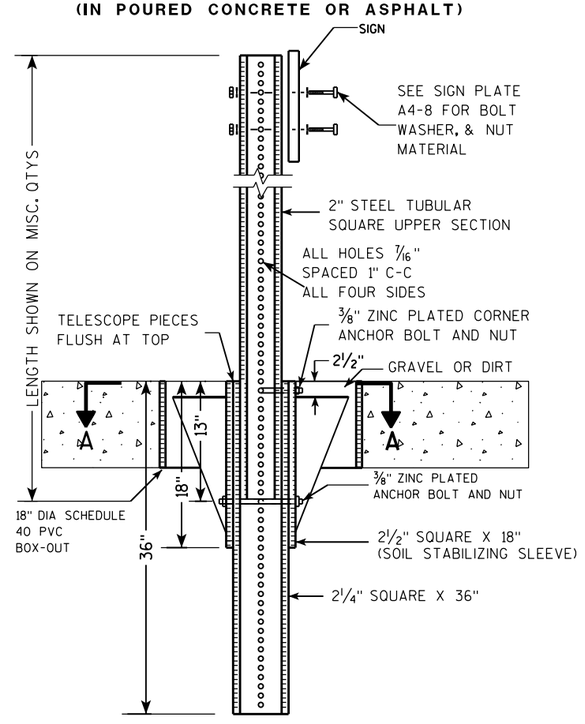
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



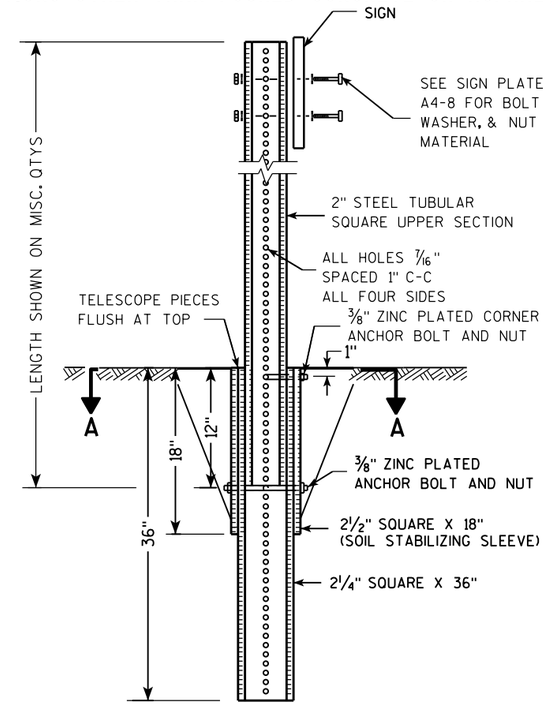
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

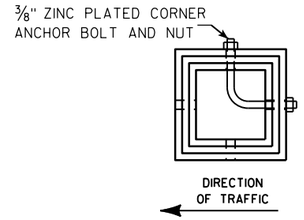


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

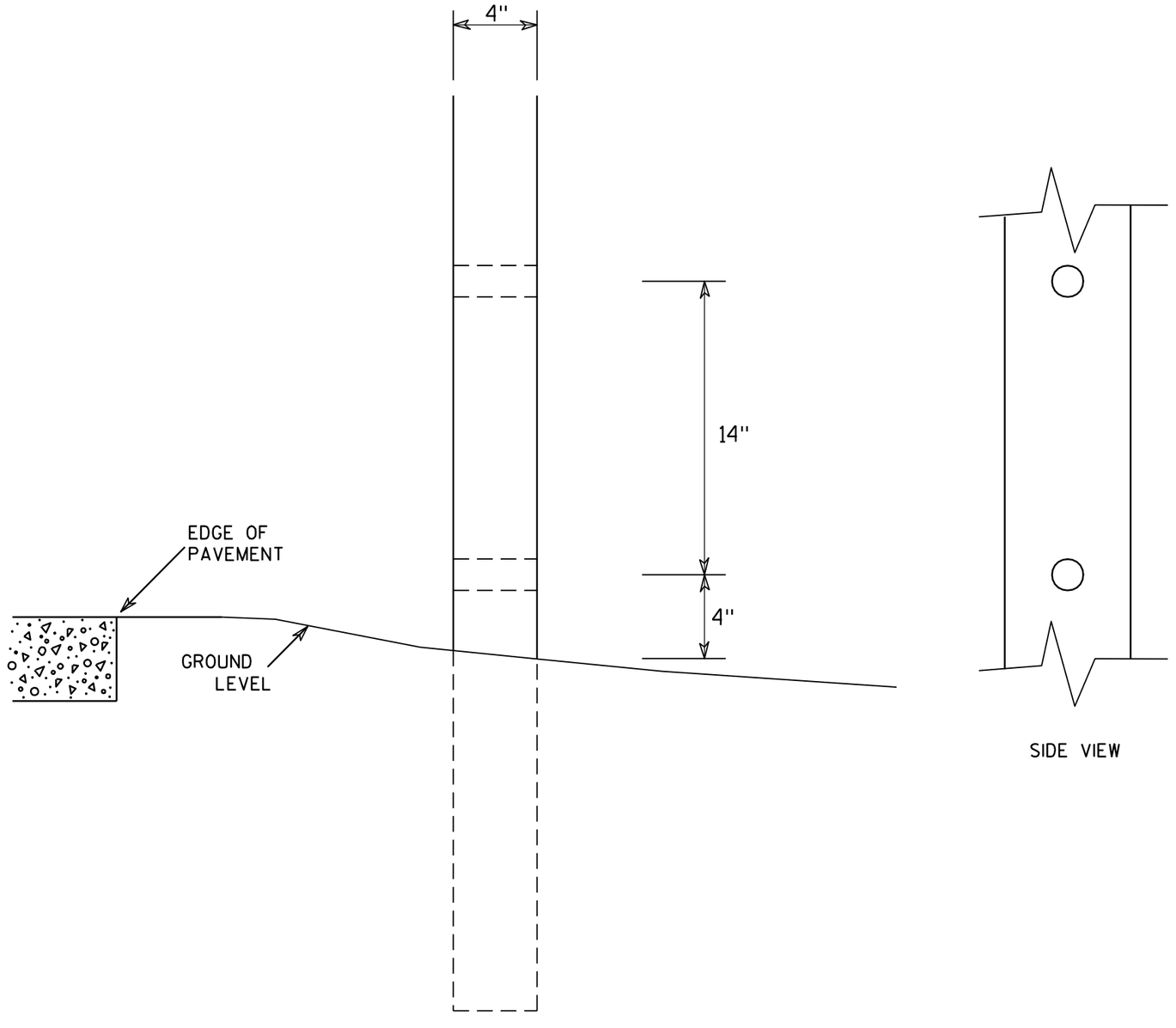
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 350 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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.

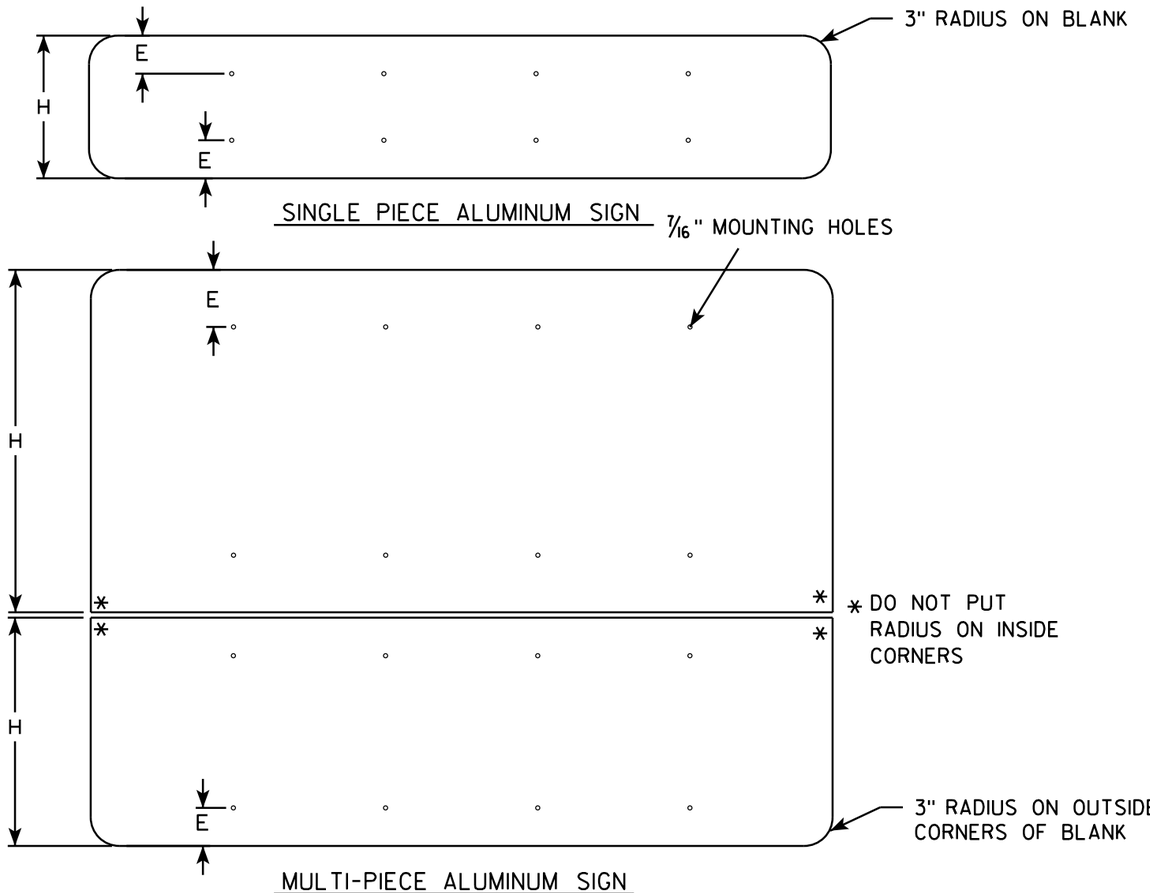
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

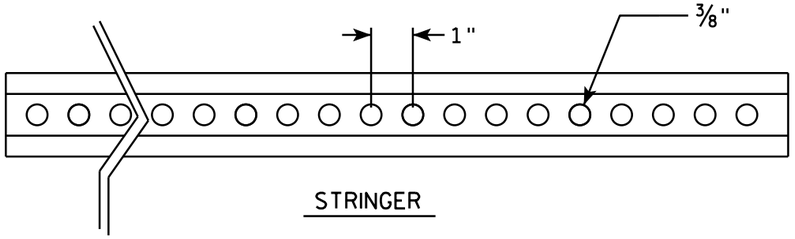
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 351	E



GENERAL NOTES

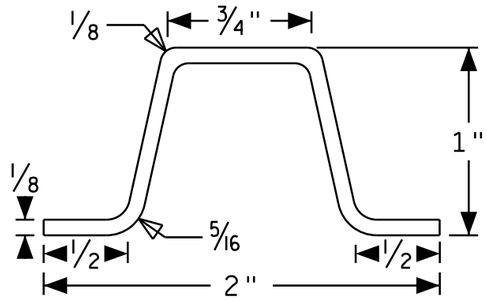
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

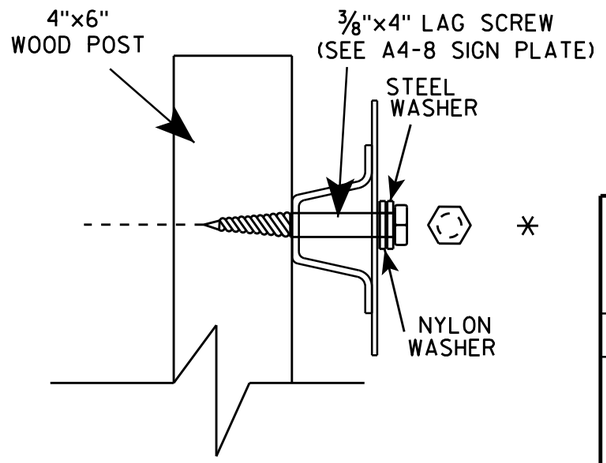


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

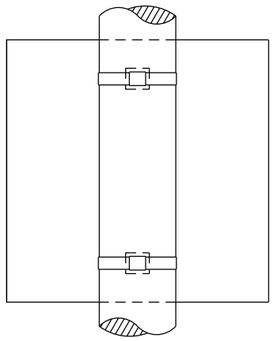
DATE 4/26/16 PLATE NO A4-18.1

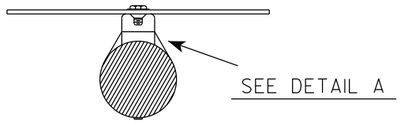
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

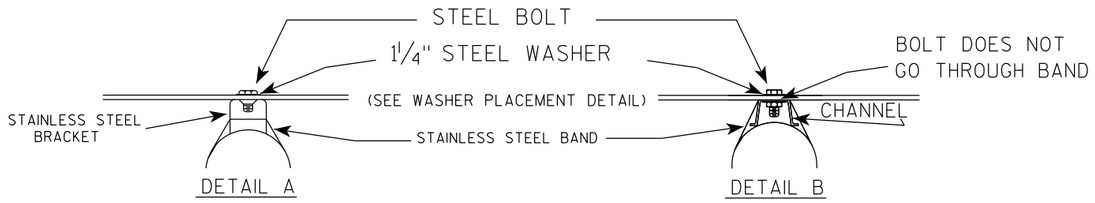
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

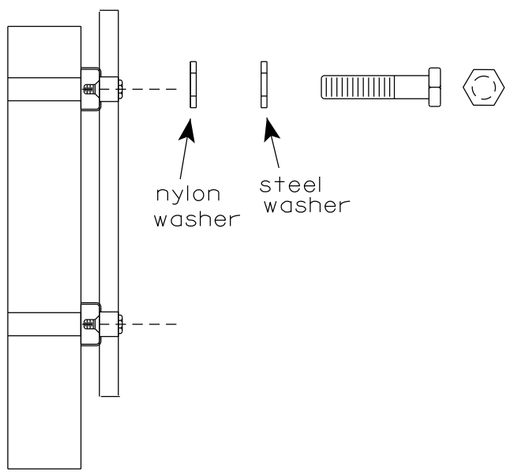
SINGLE SIGN







WASHER PLACEMENT

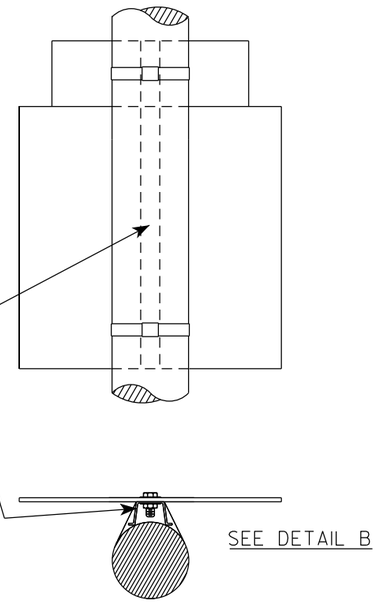


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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



STANDARD SIGN
SIGN BANDING DETAILS

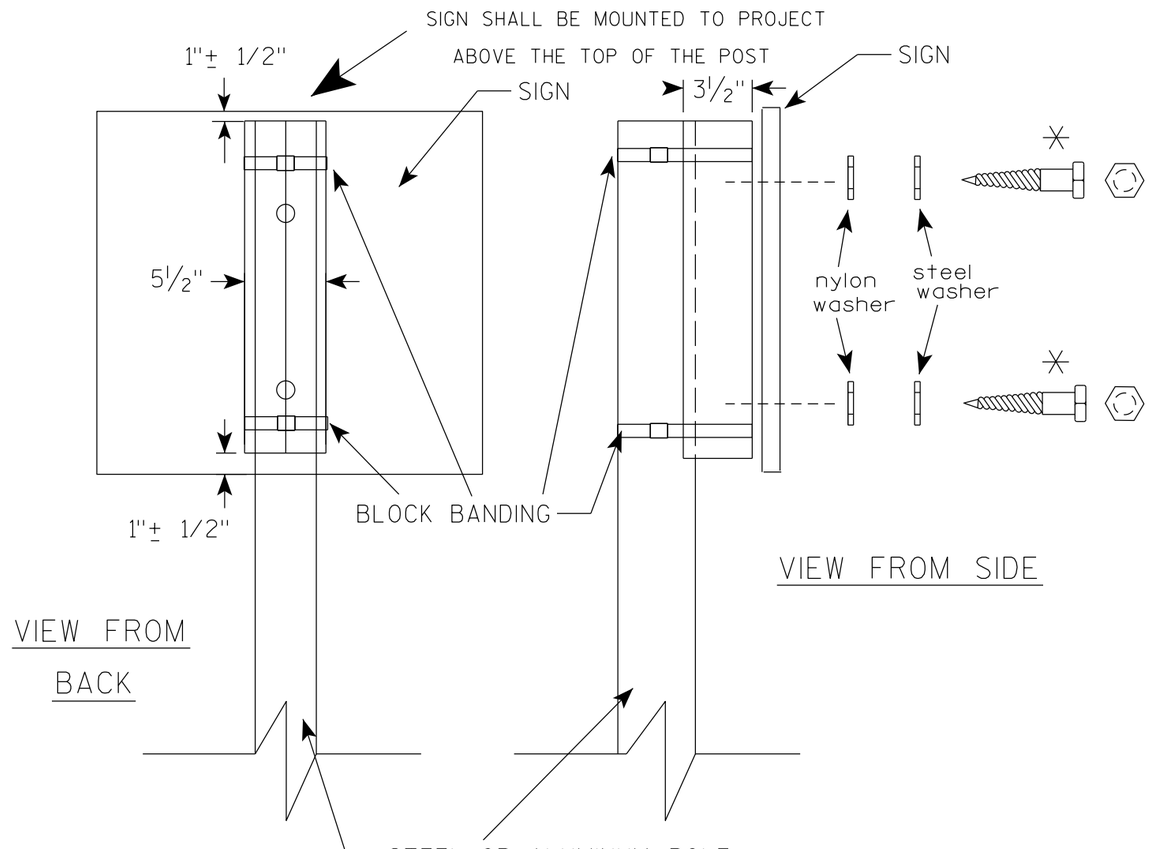
WISCONSIN DEPT OF TRANSPORTATION

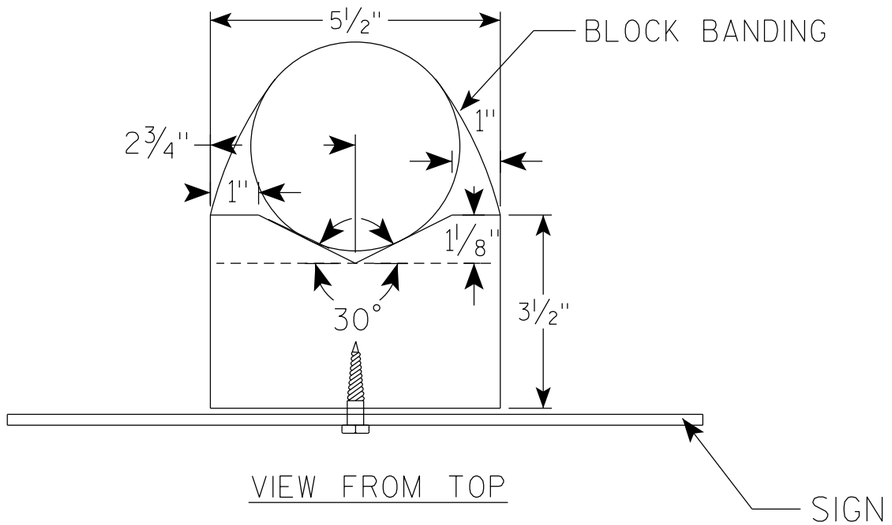
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 353	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)

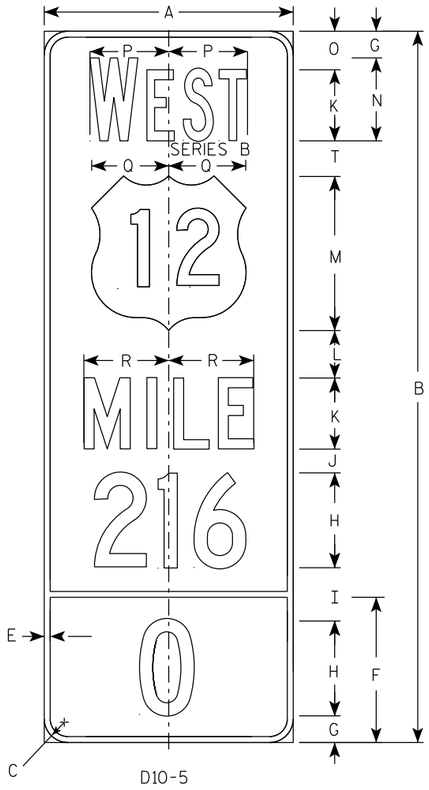
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

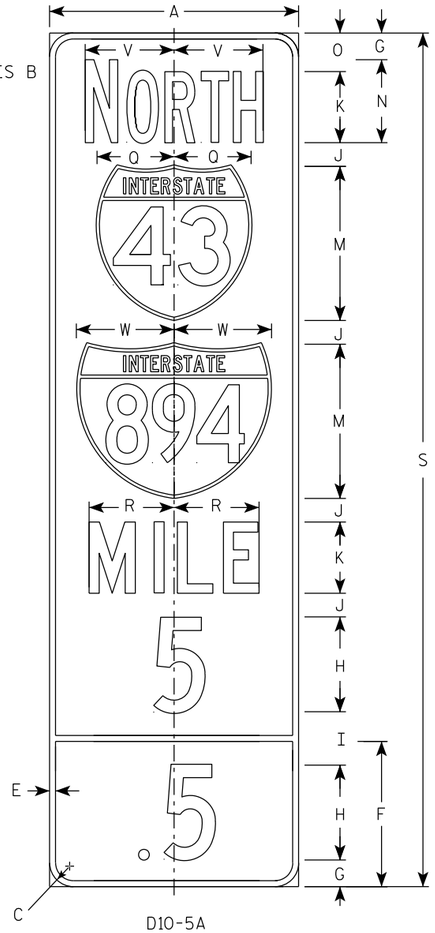
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

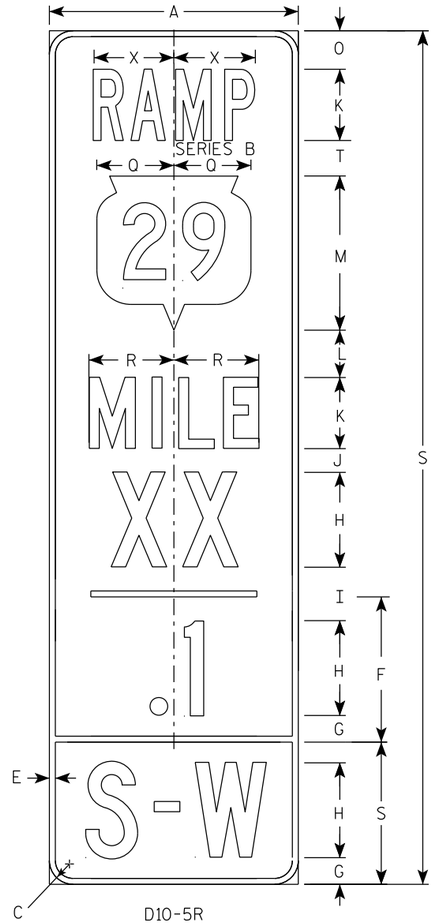
SHEET NO: 354 E



D10-5



D10-5A



D10-5R

SERIES B

SERIES B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Interstate Shield Color
   Background - Top Red
   - Bottom Blue
   Message - White
4. Message Series - C or as noted on the Sign.
5. The decimal point is required for all digits except "0".
6. Optically adjust mileage numbers about the centerline of the sign to achieve proper balance.
7. Optically adjust Ramp direction letters about the centerline of the sign 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	D10-5 Area sq. ft.	D10-5A Area sq. ft.	D10-5R Area sq. ft.
1																													
2																													
3																													
4	21	60	1 1/2		1/2	12 1/4	2 1/4	8	4 1/2	2	6	4	13	6 5/8	3 1/4	7	6 1/2	7 1/8	72	3		7 1/2	8 1/4	6 3/4			8.75	10.5	10.5
5	21	60	1 1/2		1/2	12 1/4	2 1/4	8	4 1/2	2	6	4	13	6 5/8	3 1/4	7	6 1/2	7 1/8	72	3		7 1/2	8 1/4	6 3/4			8.75	10.5	10.5

STANDARD SIGN
D10-5

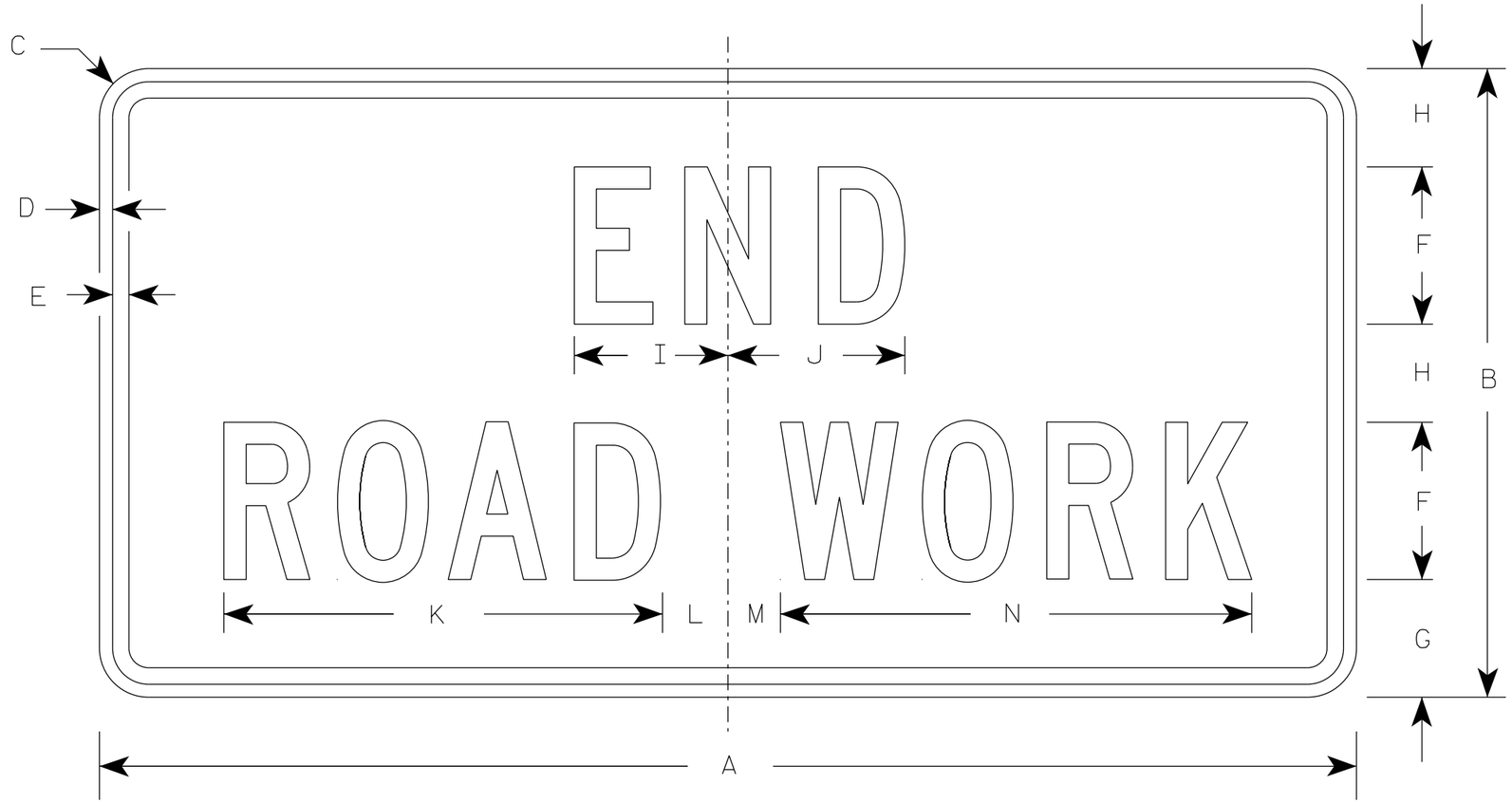
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/2025 PLATE NO. D10-5.4

PROJECT NO:

SHEET NO: 355 E



G20-2A

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	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 356 E

7

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Material shall be .040 aluminmum

G20-60

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	108	24				12	6	14 7/8	78 1/4																		18.0
5																											

STANDARD SIGN
G20-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

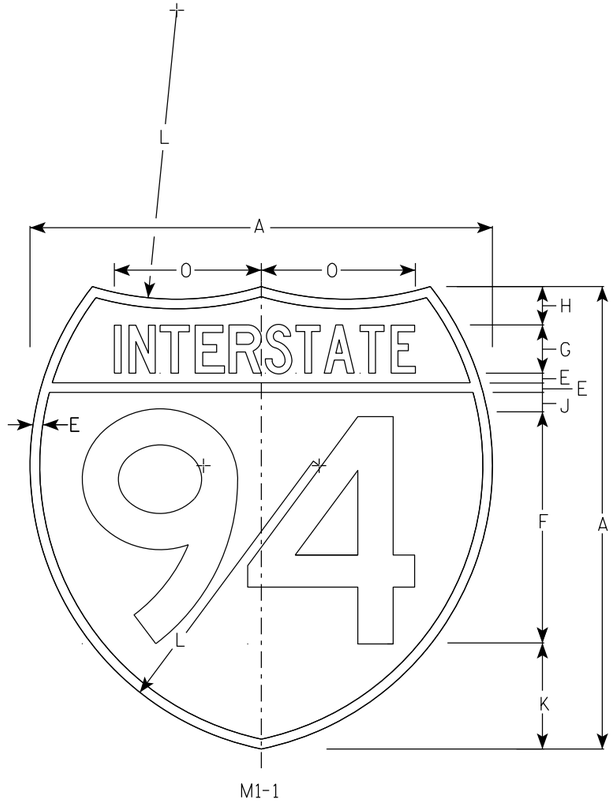
DATE 5/13/15 PLATE NO G20-60.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

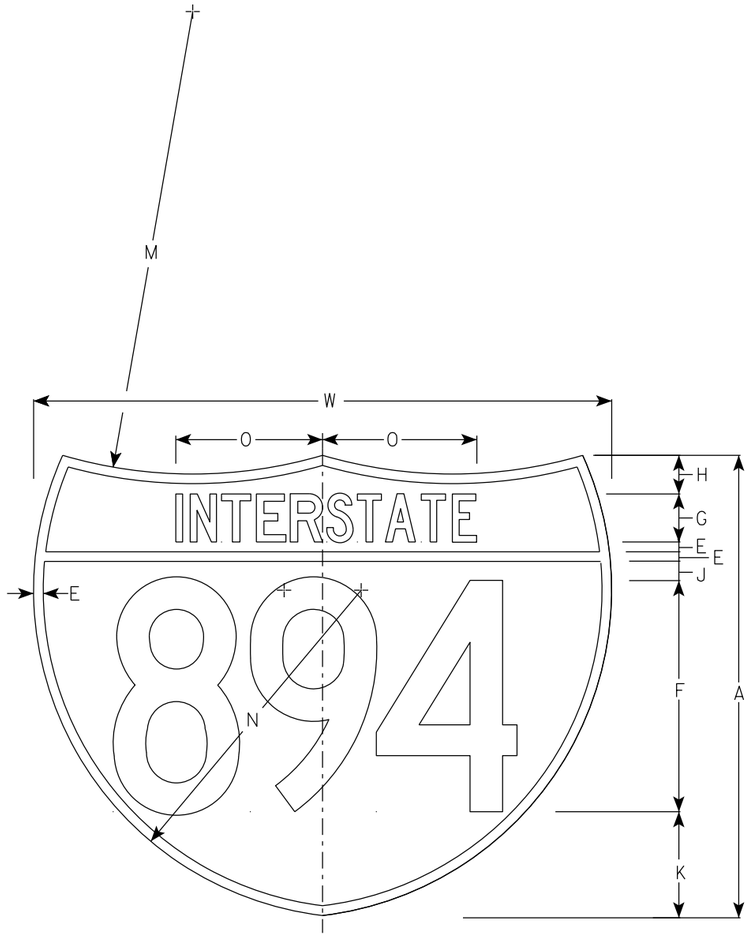
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2060.DGN PLOT DATE : 13-MAY-2015 08:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.431338:1.000000
WISDOT/CADDS SHEET 42

7

7



M1-1



M1-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Top Red - Bottom Blue
   Message - White
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - 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	M1-1 Area sq. ft.	M1-1A Area sq. ft.
1																											
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
2M	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79

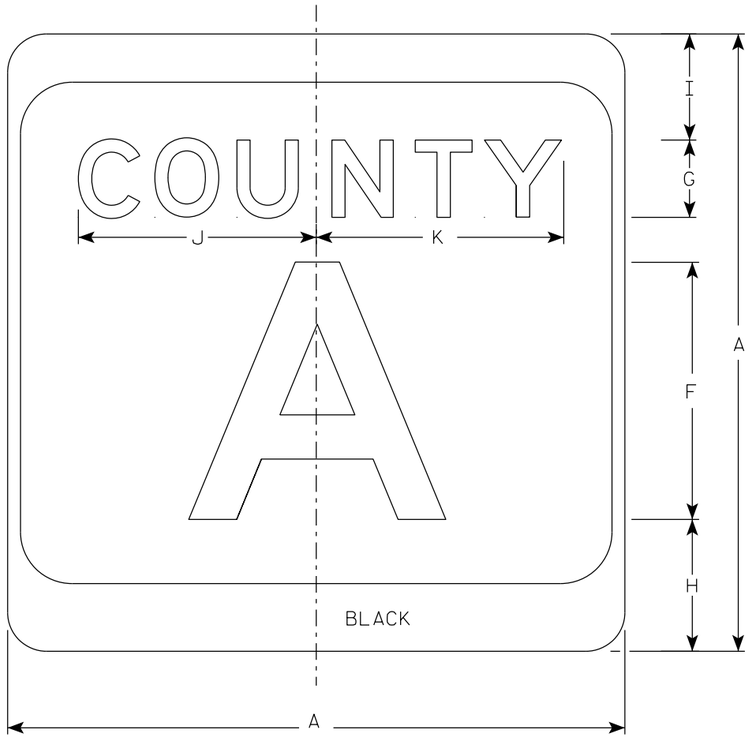
INTERSTATE ROUTE MARKER M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

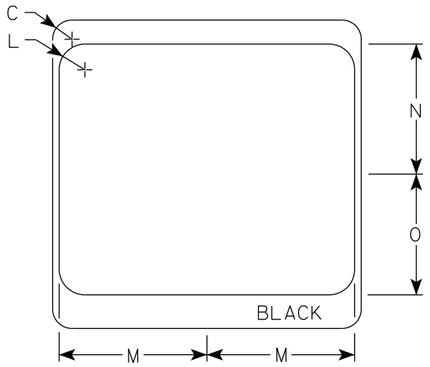
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/7/2022 PLATE NO. M1-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 358 | E

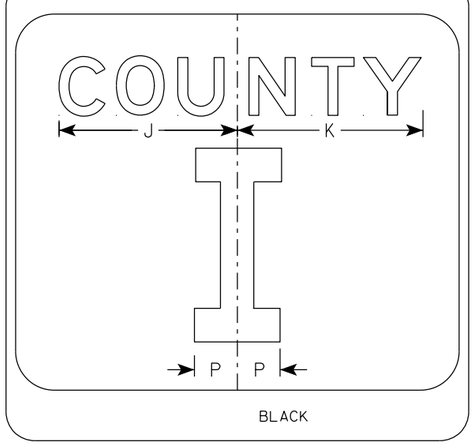


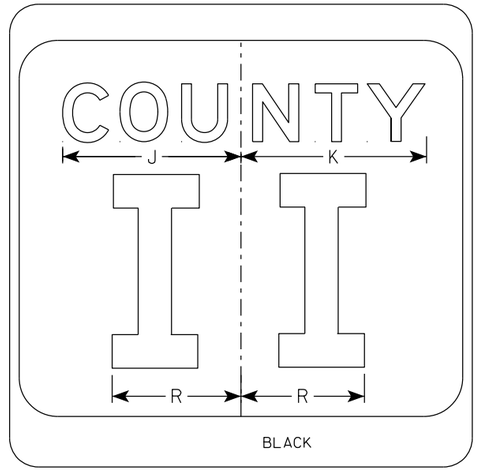
M1-5A



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

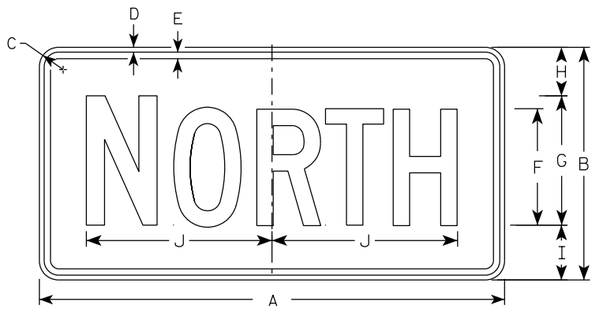
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

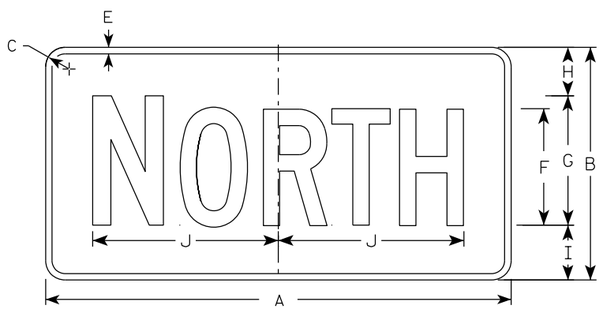
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M15A.dgn PLOT DATE : 8-NOV 2022 8:26 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

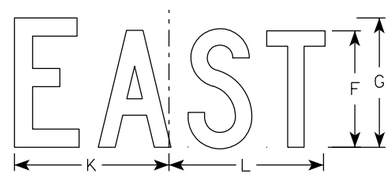
7



M3-1
MM3-1
MP3-1

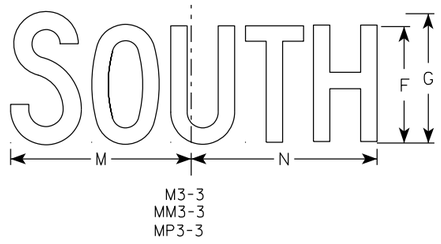


MB3-1
MK3-1
MN3-1

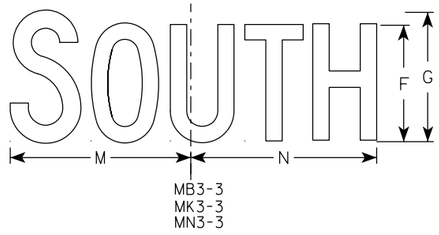


M3-2
MM3-2
MP3-2

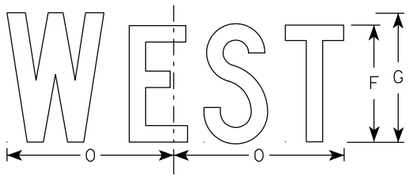
MB3-2
MK3-2
MN3-2



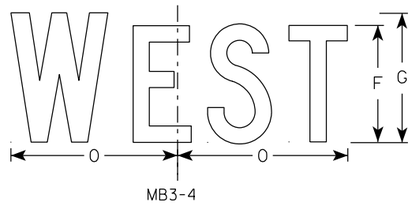
M3-3
MM3-3
MP3-3



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

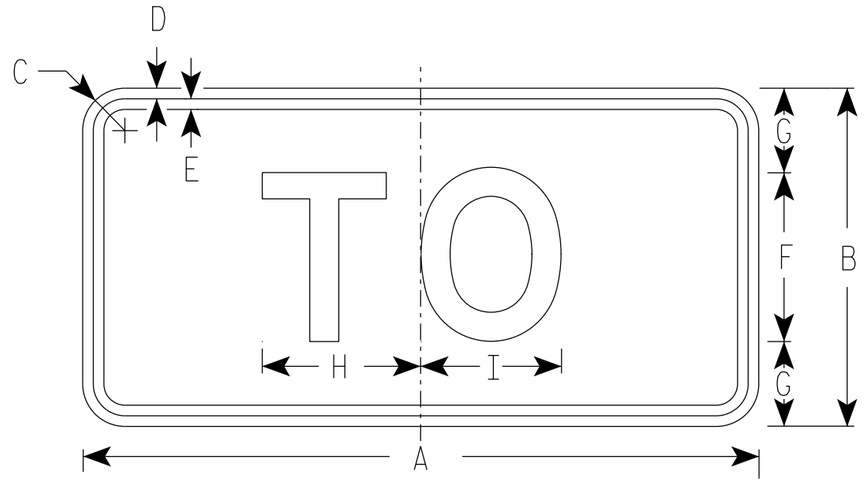
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

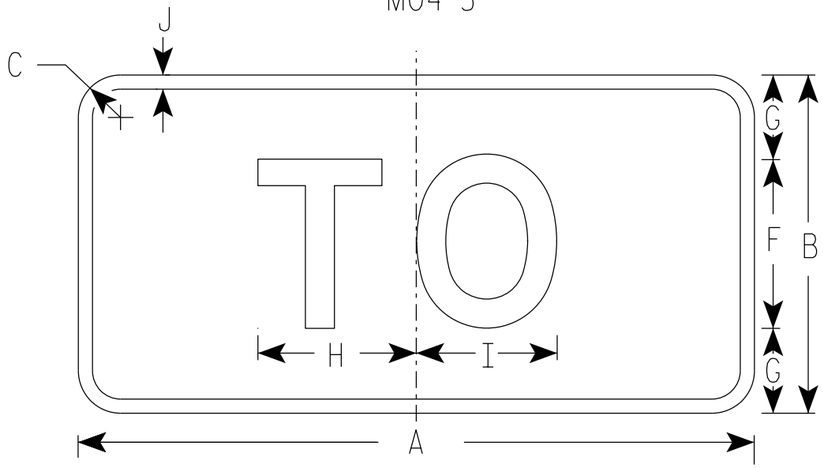
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 360 | E



M4-5
MM4-5
MP4-5
M04-5



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
   M04-5 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: 361 E

7

M4-50

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	12	1 1/2	3/8	3/8	5	3 1/2	2 1/4	5 1/8	3	11 3/8																2.0
2M	24	12	1 1/2	3/8	3/8	5	3 1/2	2 1/4	5 1/8	3	11 3/8																2.0
3	36	18	1 1/2	3/8	1/2	8	5	2 1/4	8 1/4	5	18 1/4																4.5
4																											
5																											

STANDARD SIGN
M4-50

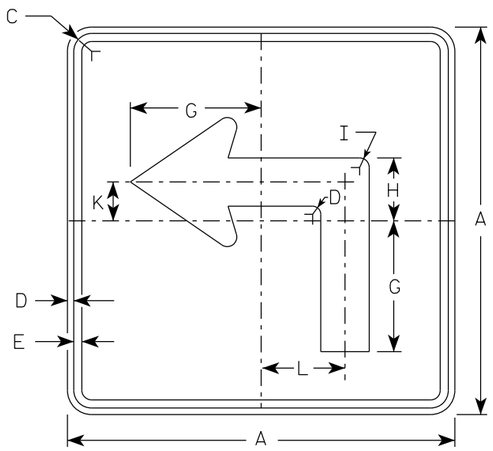
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

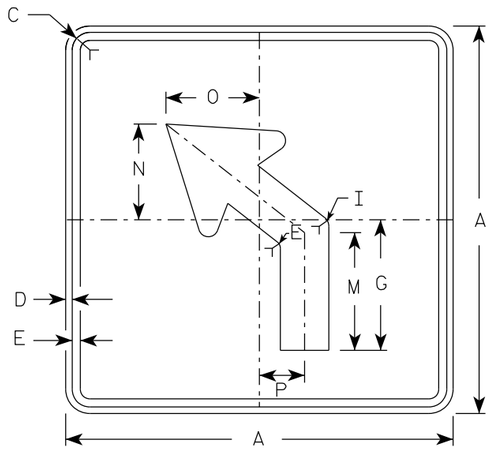
DATE 12/17/2024 PLATE NO. M4-50.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

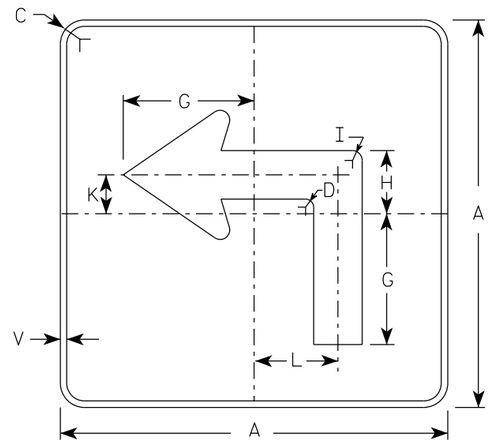
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M450.dgn PLOT DATE : 17-DEC 2024 7:00 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



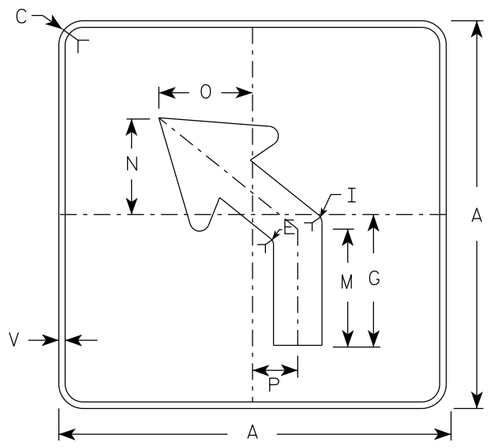
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

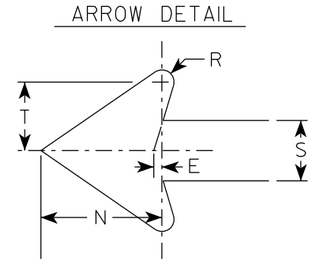


MB5-2L
MK5-2L
MN5-2L
MR5-2L

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

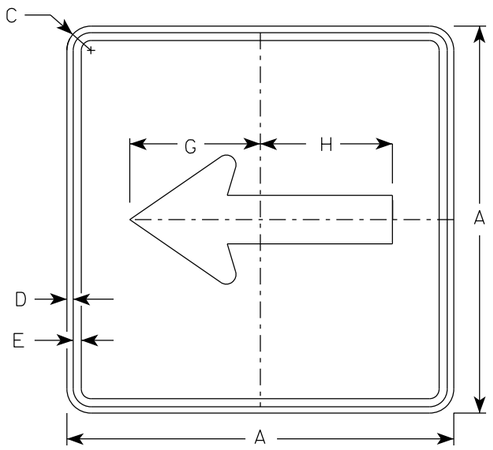
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

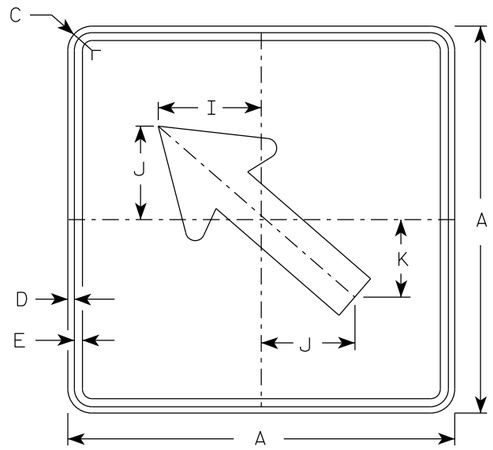
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

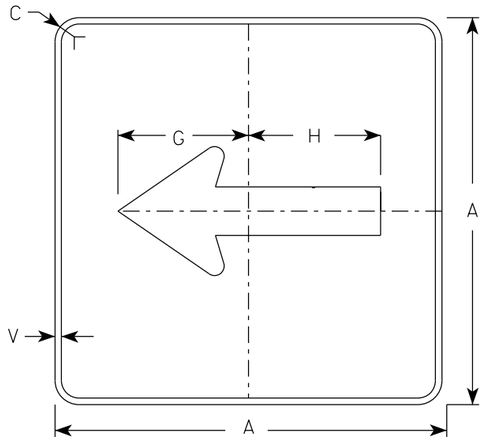
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 363 | E



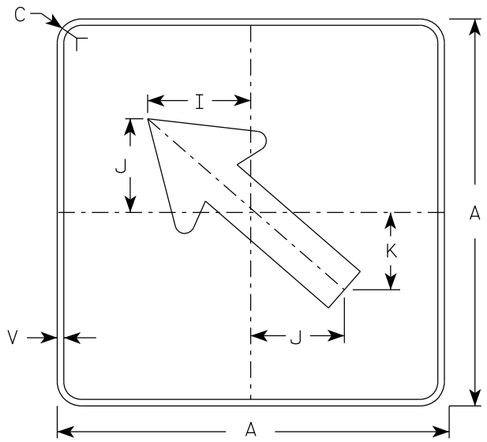
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

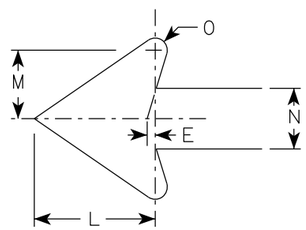


MB6-2
MK6-2
MN6-2
MR6-2

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

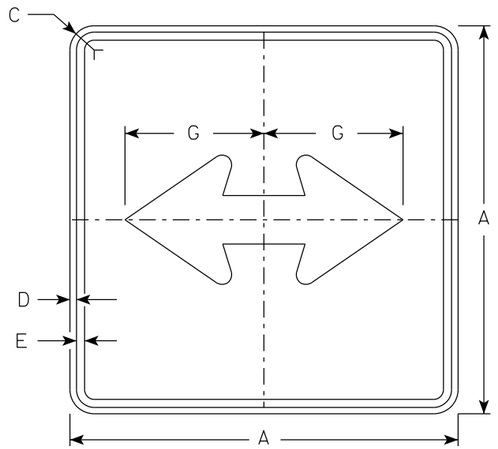
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

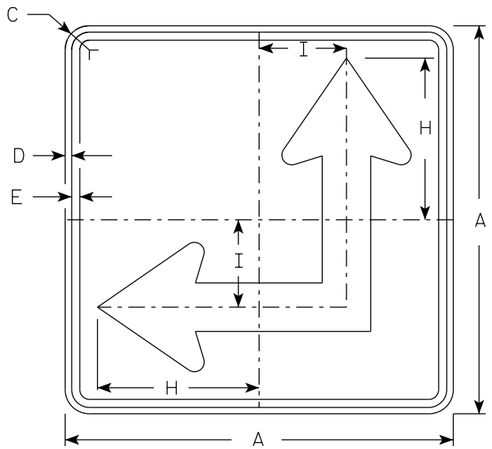
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

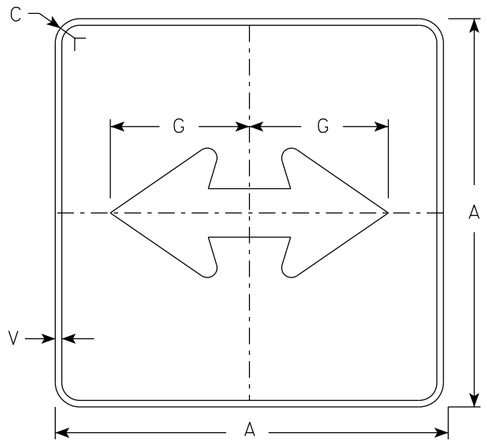
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 364 | E



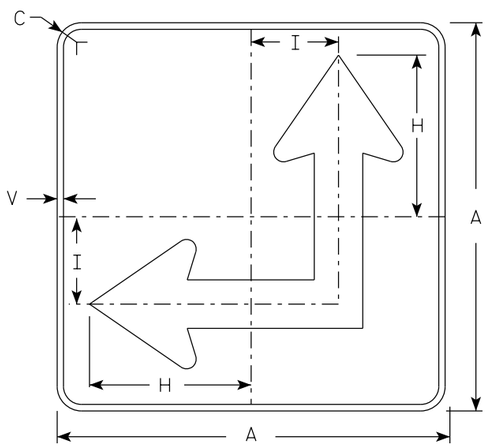
M6-4
MM6-4
MO6-4
MP6-4



M6-6
MM6-6
MO6-6
MP6-6



MB6-4
MK6-4
MN6-4
MR6-4

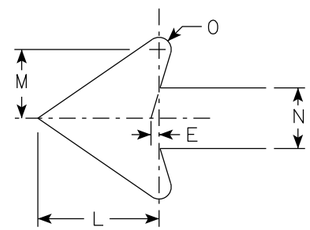


MB6-6
MK6-6
MN6-6
MR6-6

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. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and 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 1/2	8 3/4	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	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

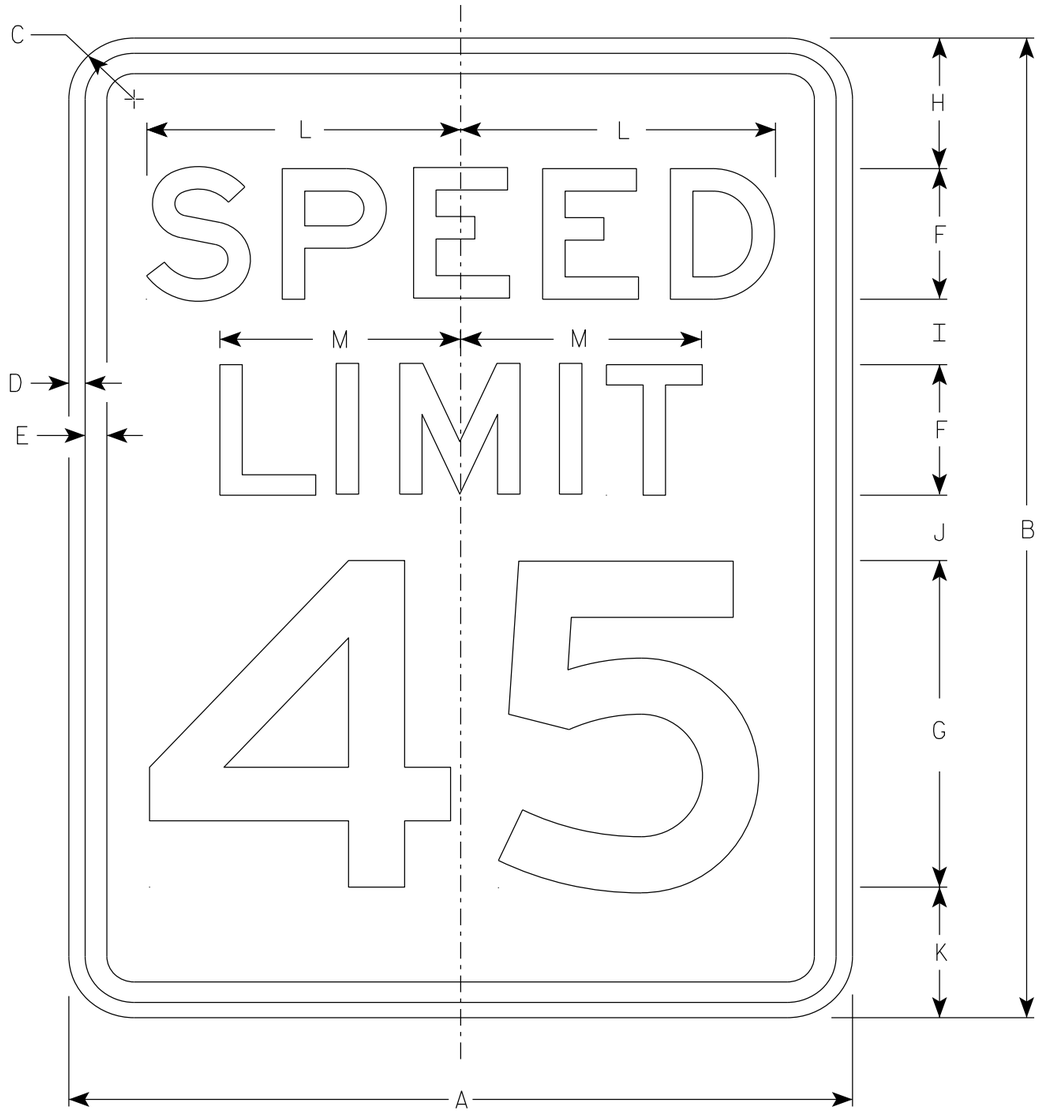
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 365 | E



R2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. 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	18	24	1 1/2	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/2	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 7/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	3	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

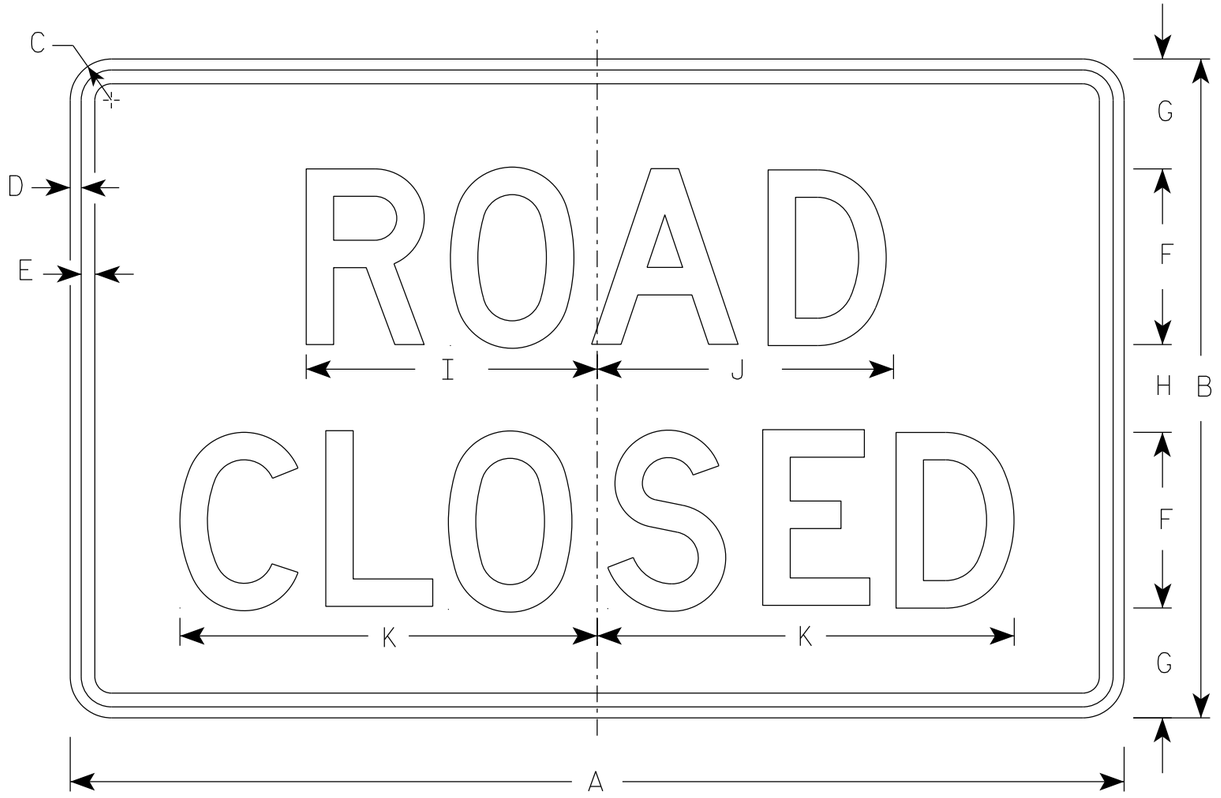
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

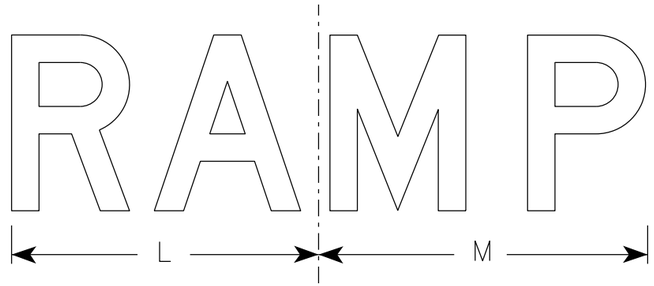
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 366 | E



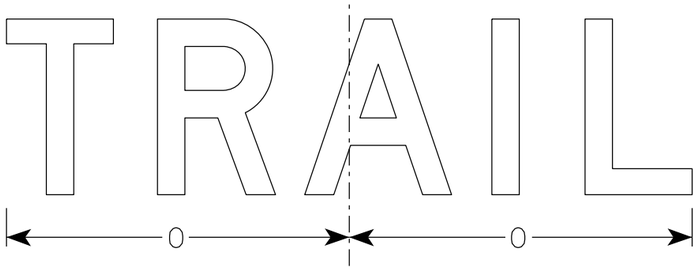
R11-2

NOTES

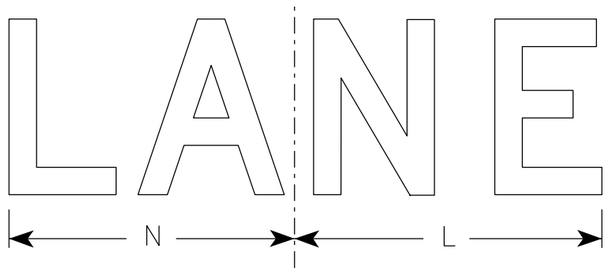
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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

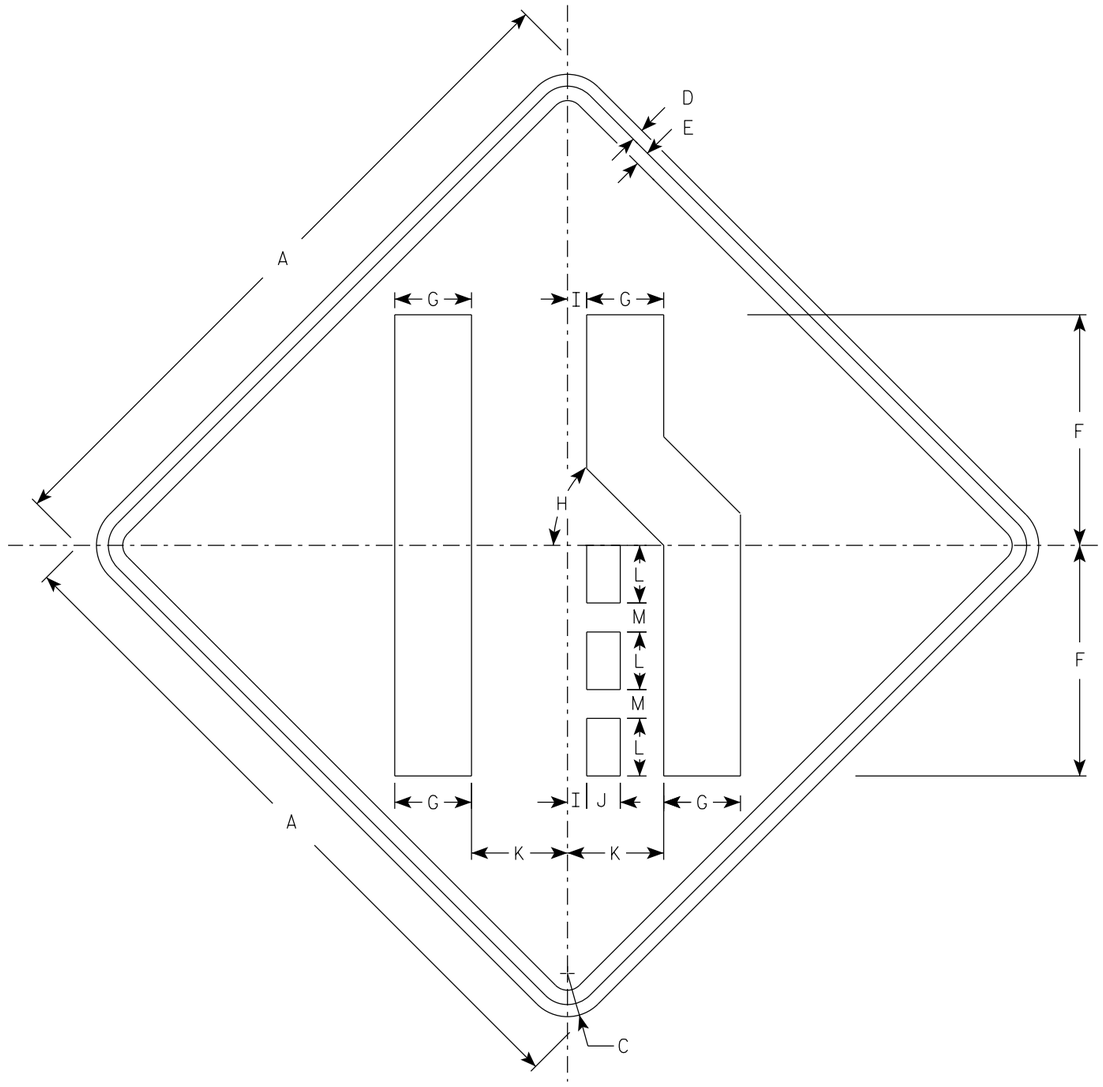
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	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



W4-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W4-2L is the same as W4-2R except the symbolis 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	30		1 7/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
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
W4-2

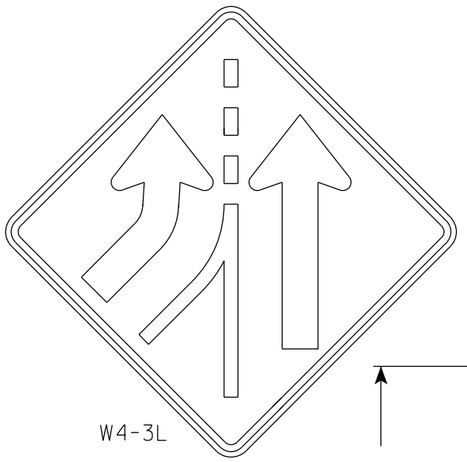
WISCONSIN DEPT OF TRANSPORTATION

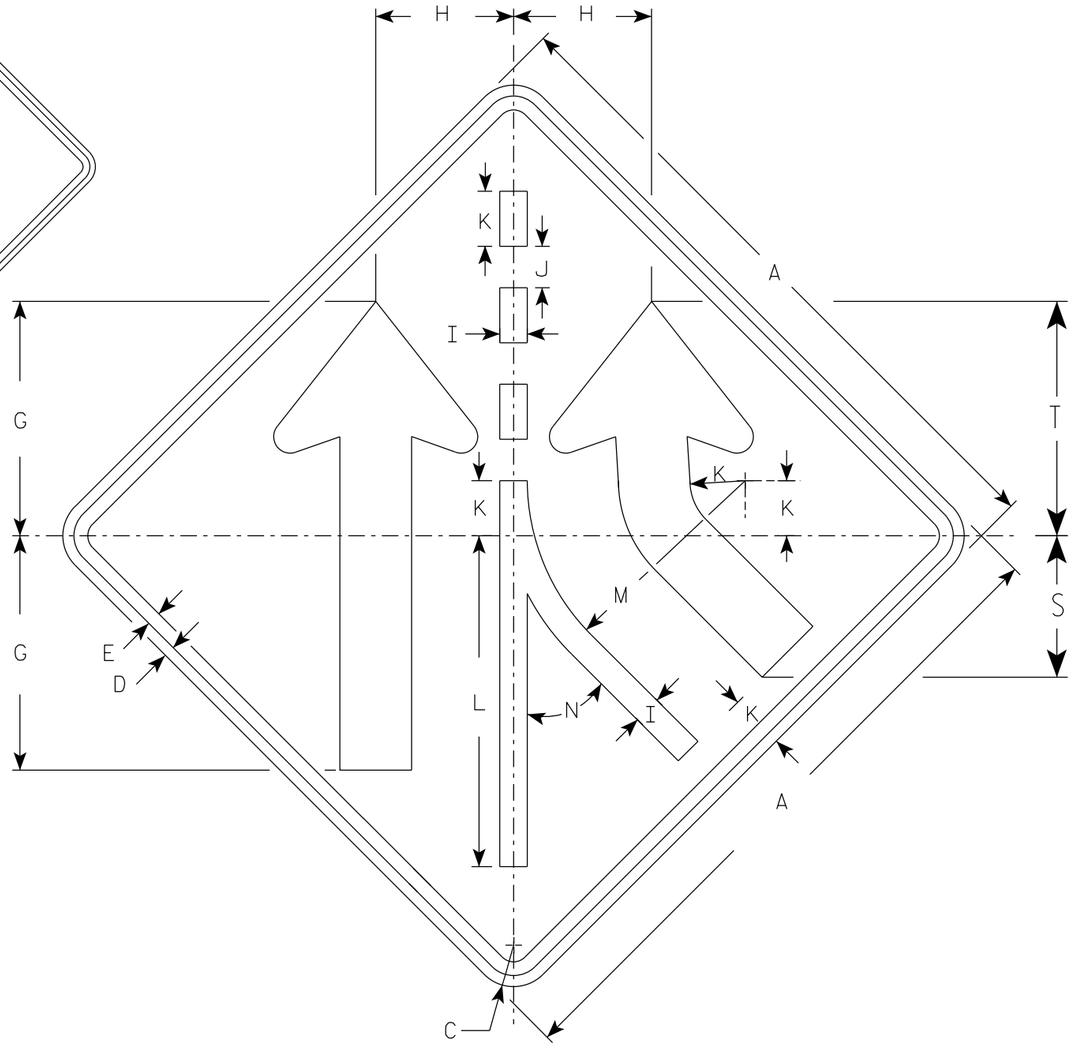
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/31/2023 PLATE NO. W4-2.15

PROJECT NO:

SHEET NO: E

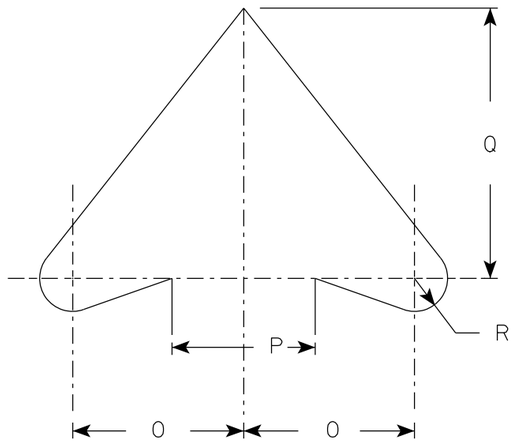




W4-3R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   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. W4-3 L is the same as W4-3 R except the arrow is reversed along the vertical centerline.



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	30		1 7/8	1/2	5/8		10 5/8	6 1/4	1 1/4	1 7/8	2 1/2	15	9 7/8	45°	3 7/8	3 1/4	6 1/8	3/4	6 3/8	10 5/8							6.25
2S	36		2 1/4	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2M	36		2 1/4	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
3	36		2 1/4	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
4	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN
W4-3

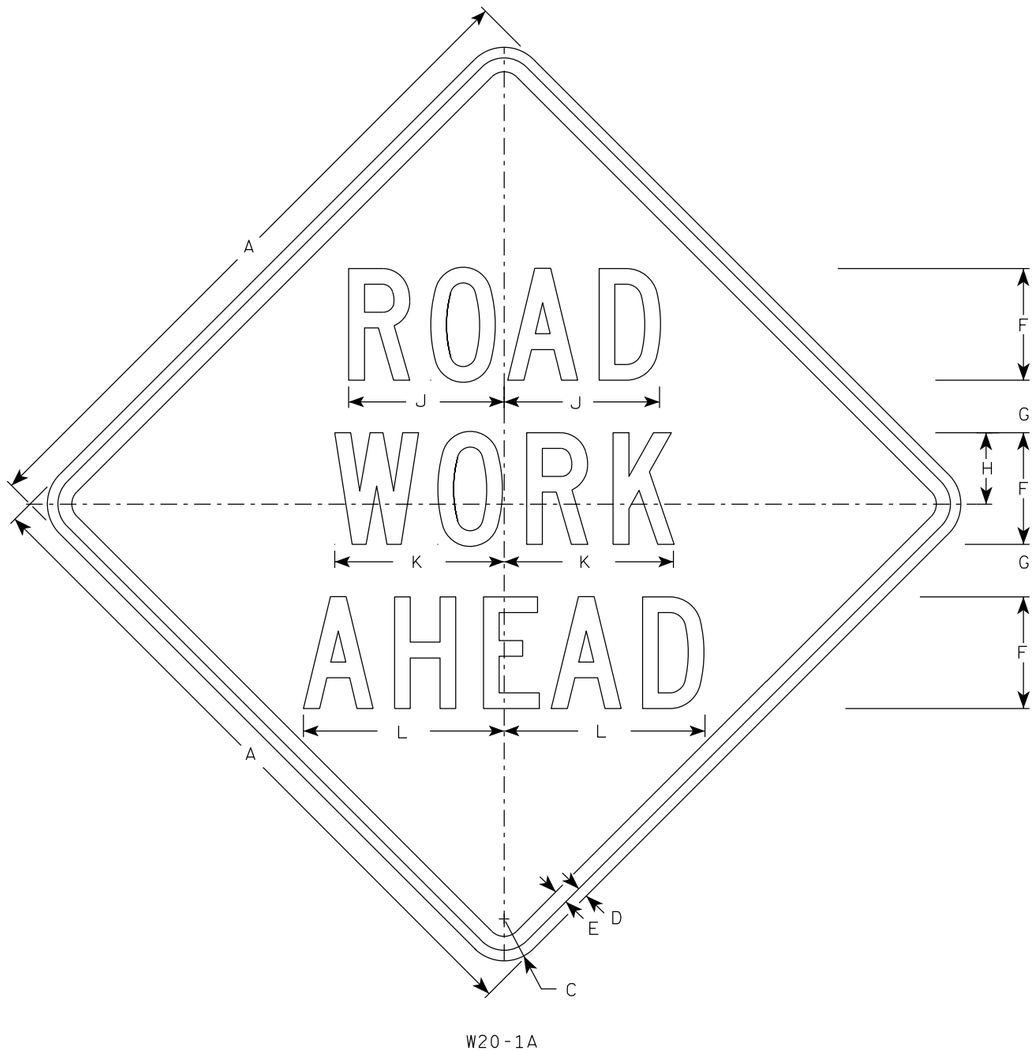
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

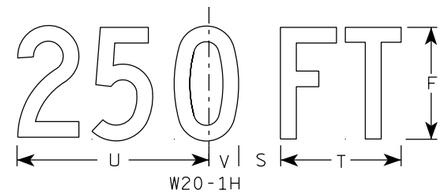
DATE 8/31/2023 PLATE NO. W4-3.10

PROJECT NO:

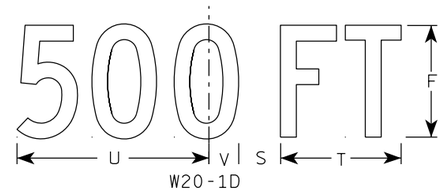
SHEET NO: 369 E



W20-1A

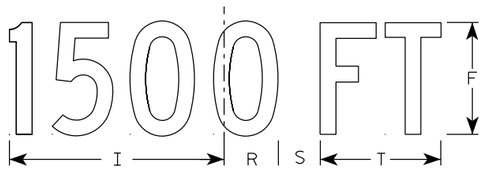


W20-1H



W20-1D

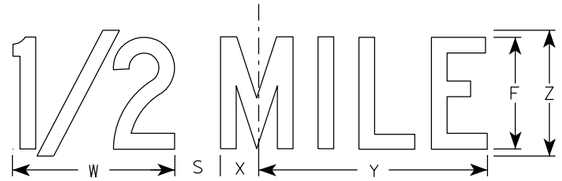
W20-1C



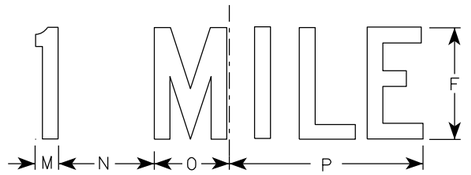
W20-1B

NOTES

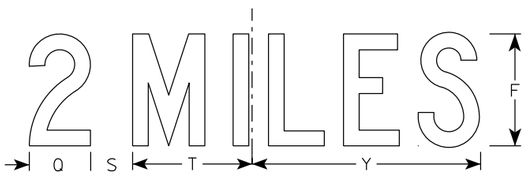
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

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:

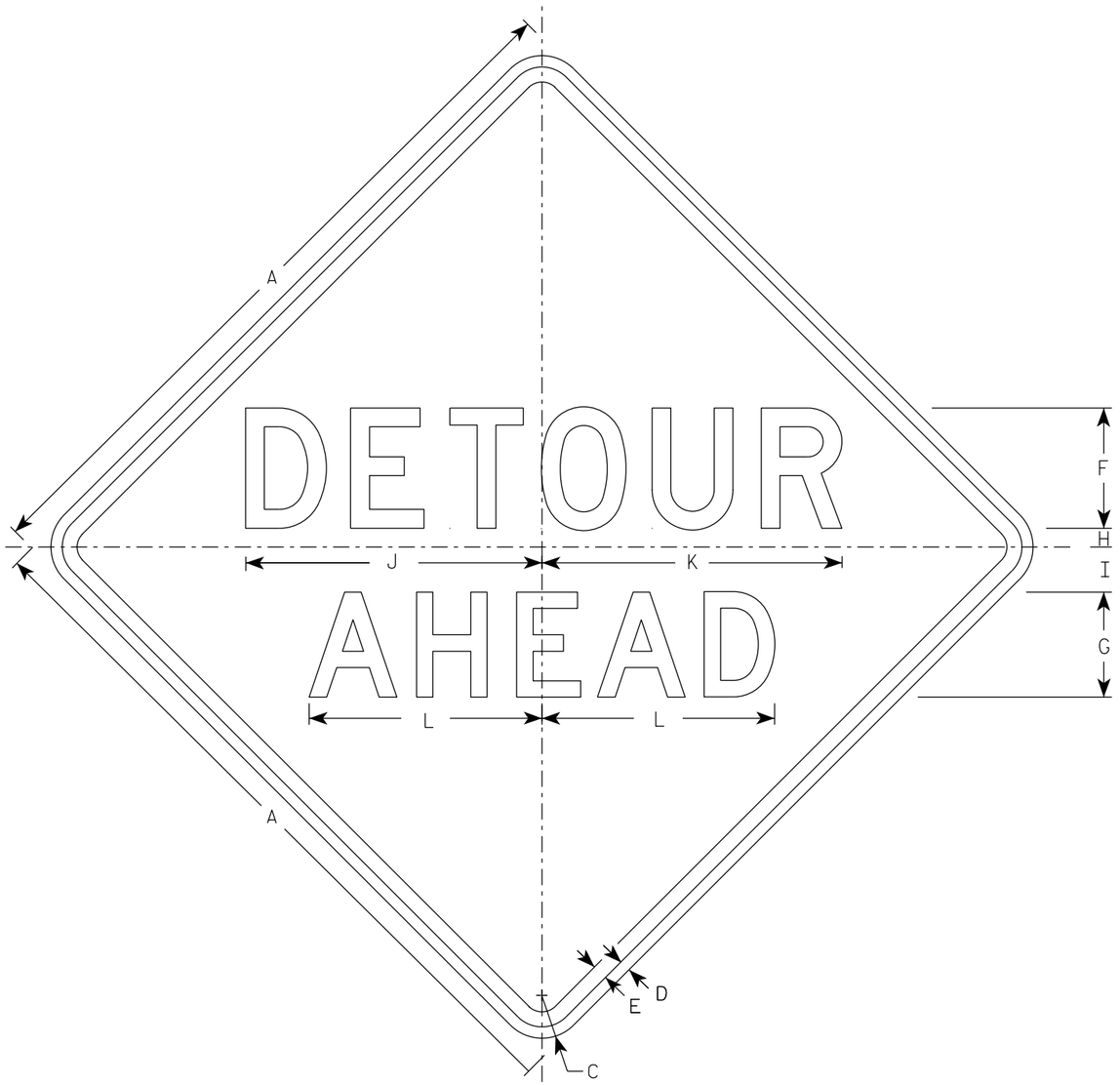
SHEET NO: 370 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

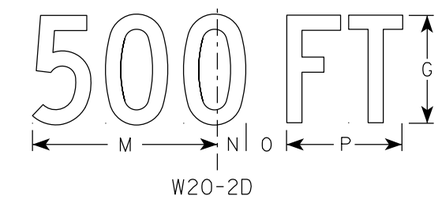
WISDOT/CADDS SHEET 42

7

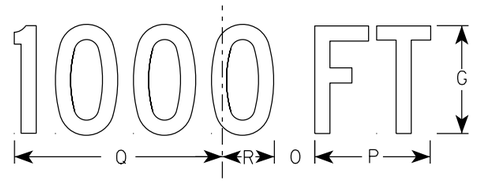
7



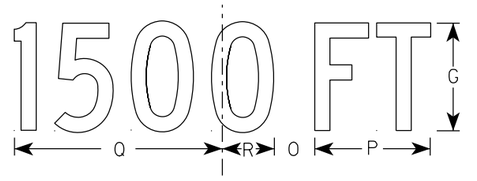
W20-2A



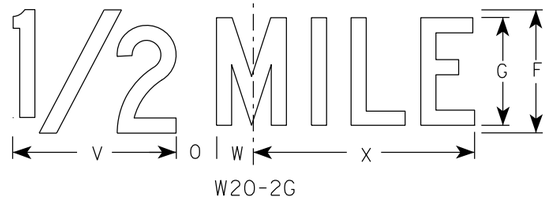
W20-2D



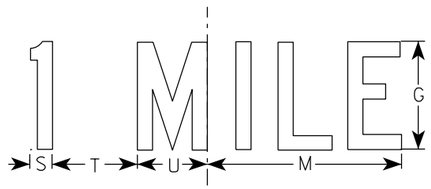
W20-2C



W20-2B



W20-2G



W20-2F

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. Line 1 is Series D.
   Line 2 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	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

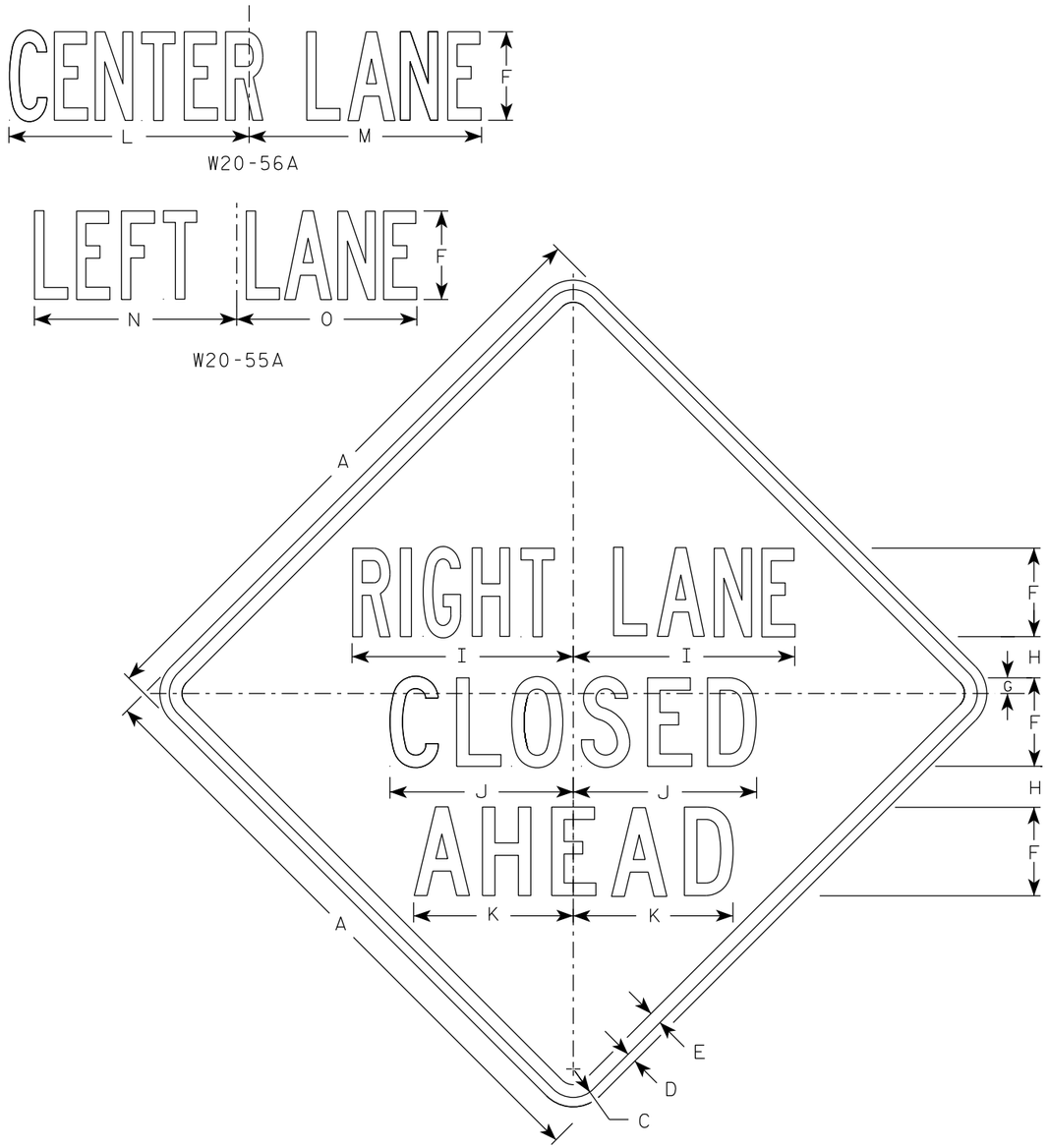
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

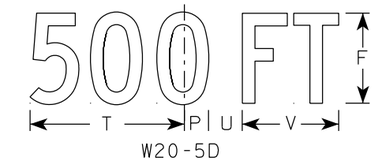
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

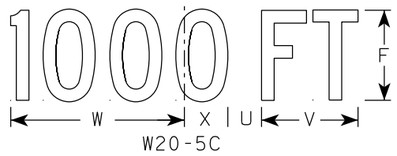
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



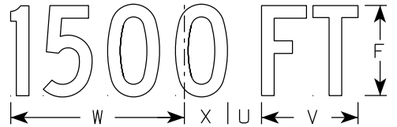
W20-5A



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

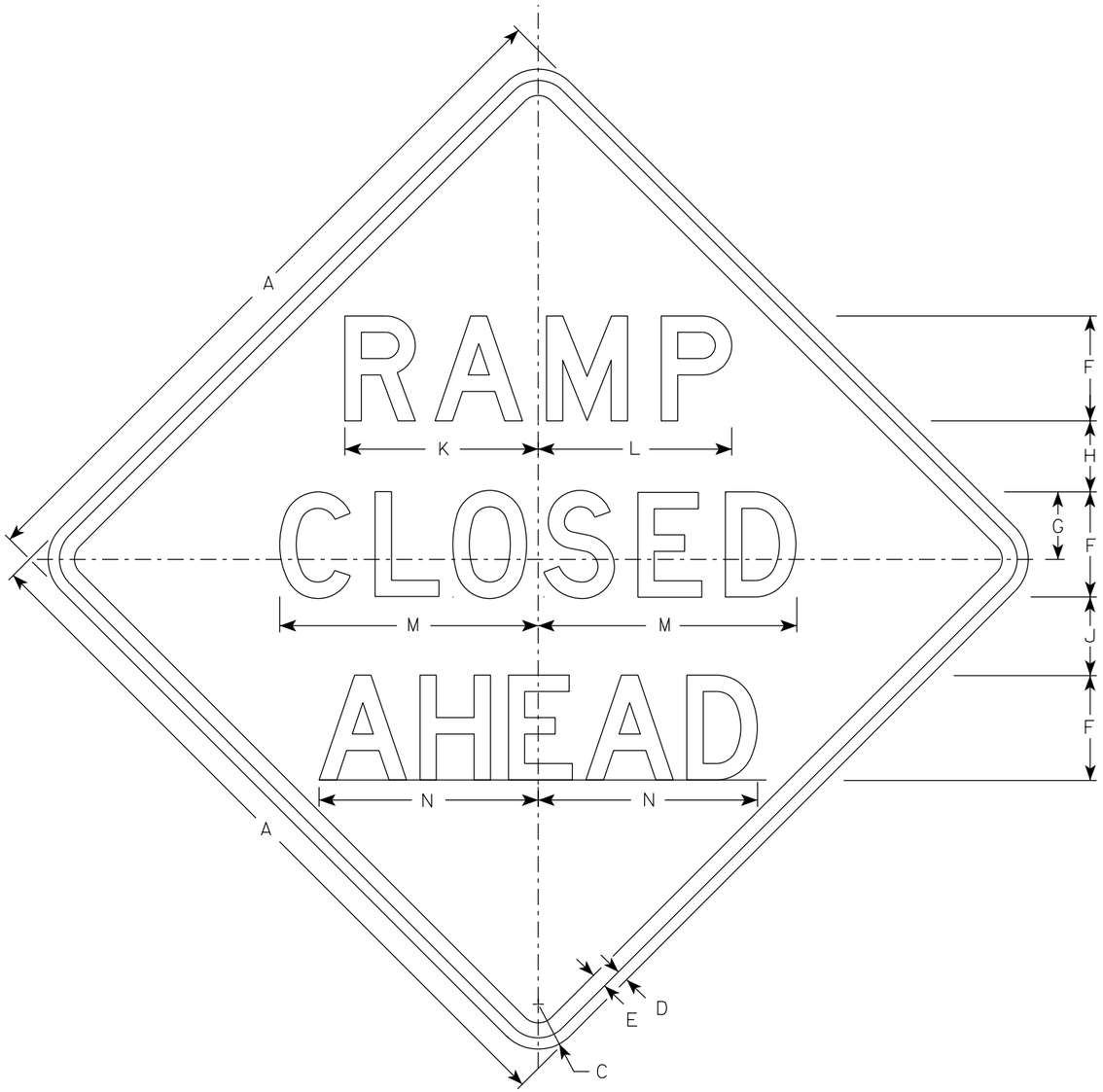
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

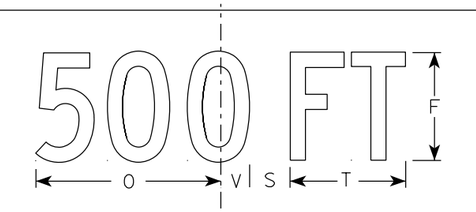
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

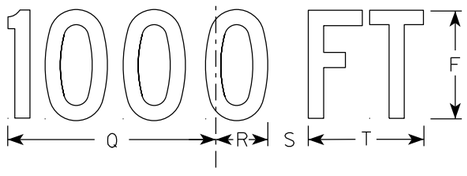
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 372	E



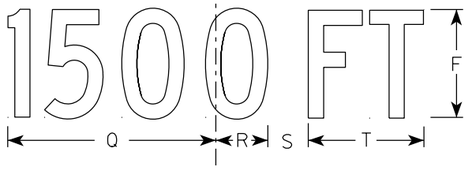
W20-53A



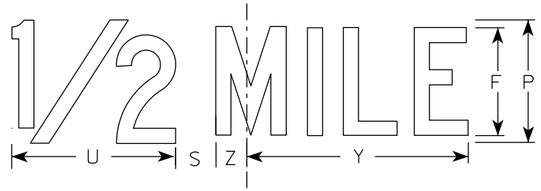
W20-53D



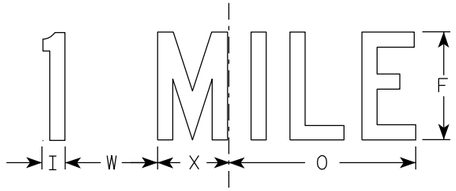
W20-53C



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

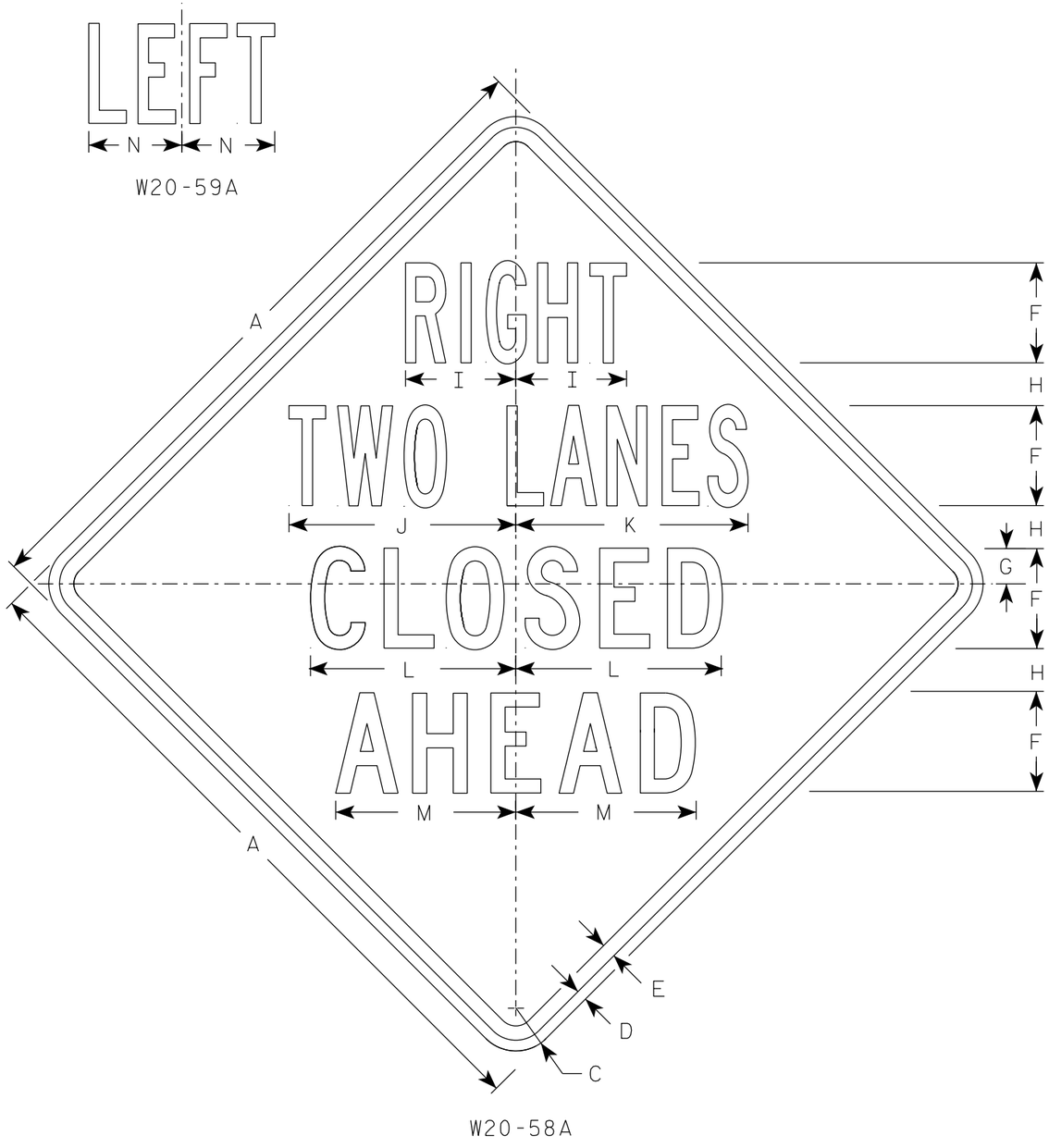
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-53.2

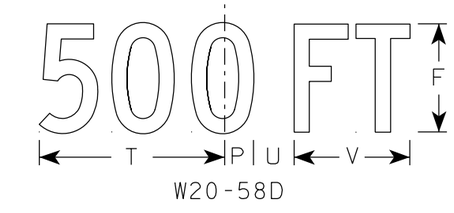
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 10-JAN 2024 2:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

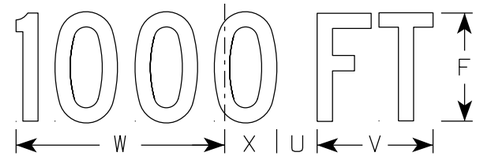
7



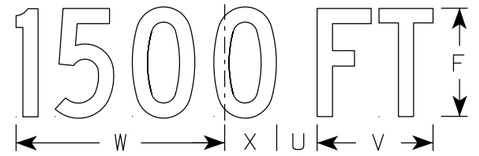
W20-58A



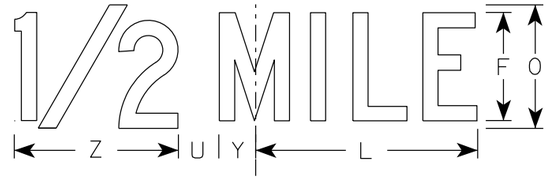
W20-58D



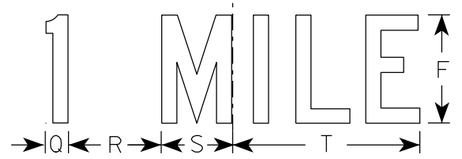
W20-58C



W20-58B



W20-58G



W20-58F

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 & 2 Series B.
   Lines 3 & 4 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		2 1/4	5/8	3/4	5	1 7/8	2 1/4	5 7/8	11 7/8	12 1/8	10 3/4	9 1/2	4 7/8	6	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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		3	3/4	1	7	2 1/2	3	7 3/4	15 7/8	16 1/4	14 3/8	12 5/8	6 1/2	8	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
W20-58A, B, C, D, F & G

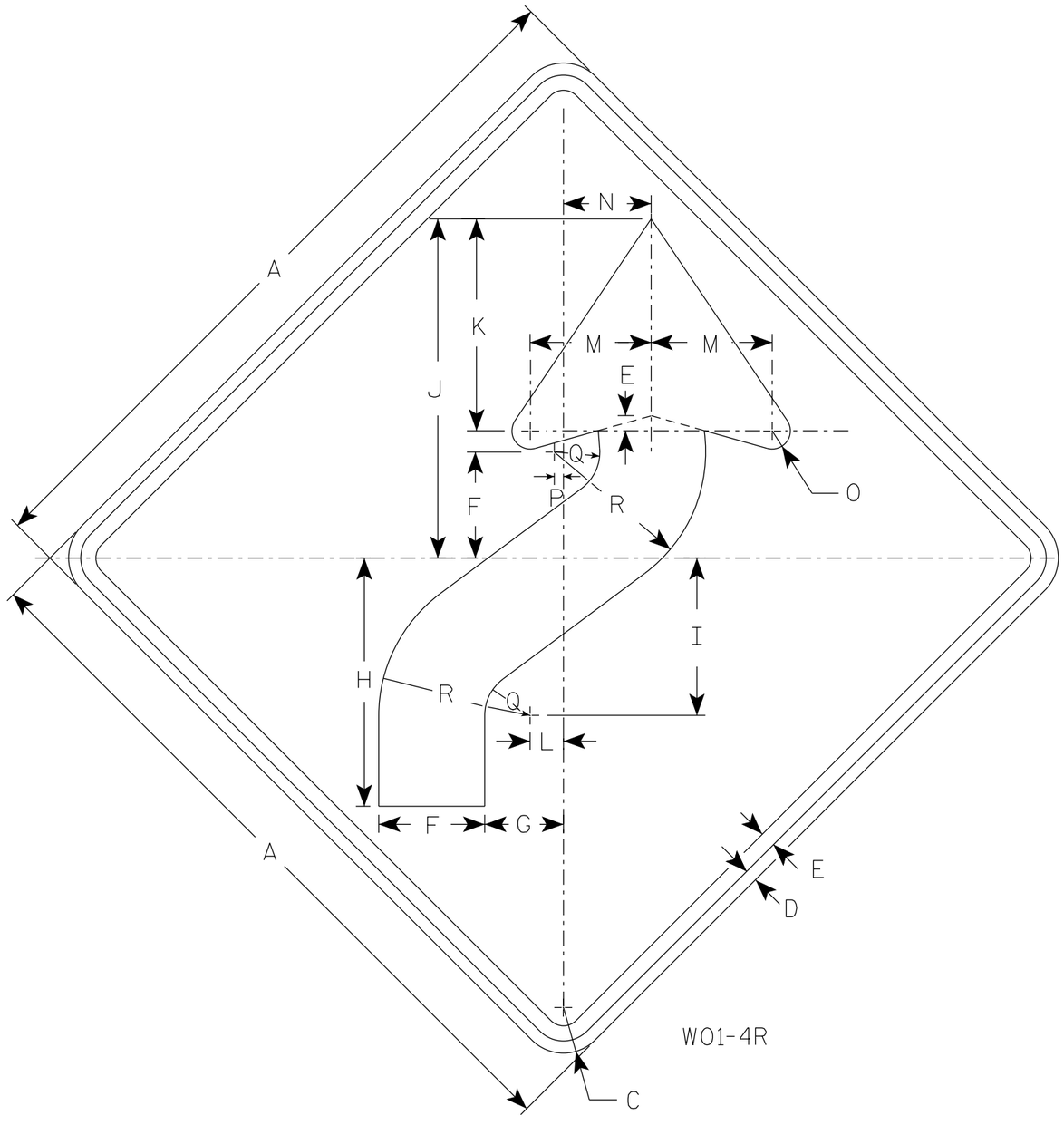
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-58.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 374 E

7



W01-4R

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. W01-4L is the same as W01-4R 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	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

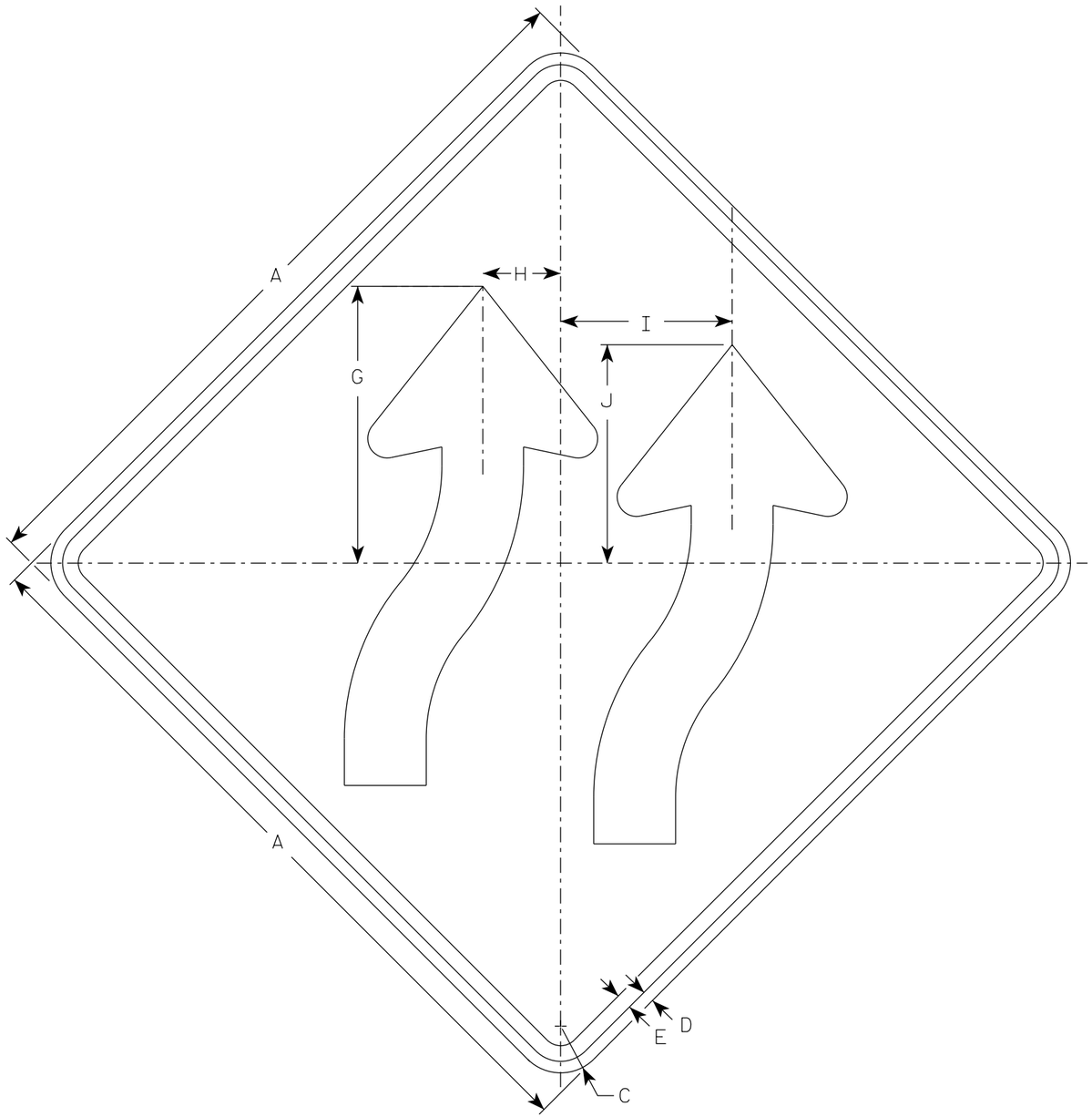
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

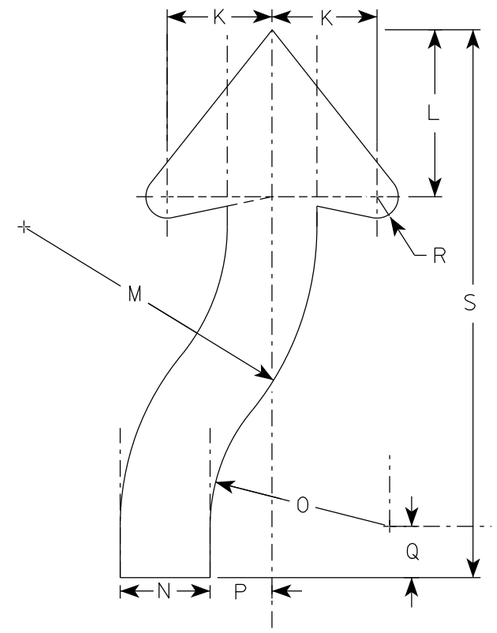
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 375 | E



WO1-4BR

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. W01-4BL is the same as W014-BR exept arrows are reversed along the vertical centerline



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	36		2 1/4	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

STANDARD SIGN
W01-4B

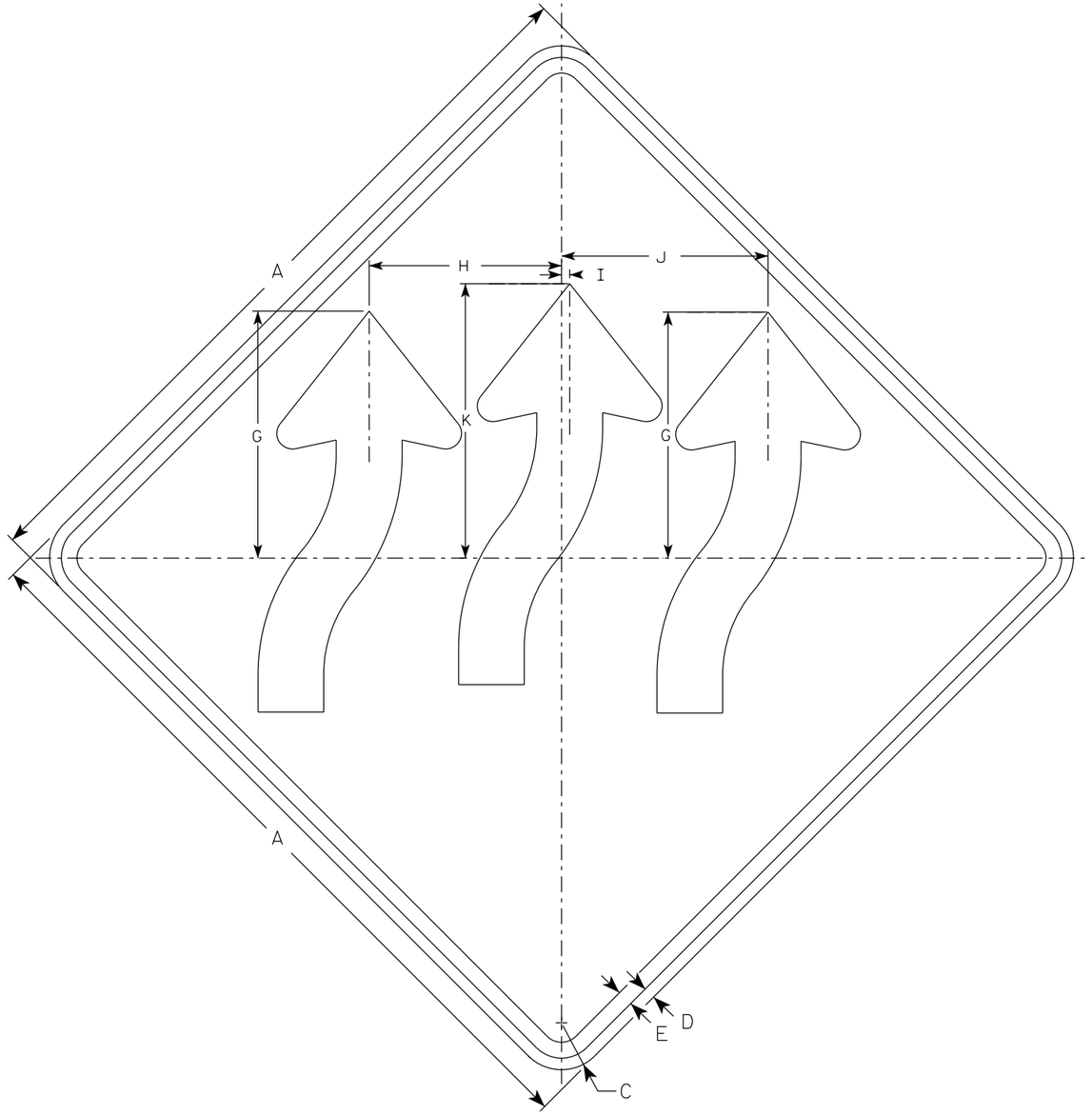
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

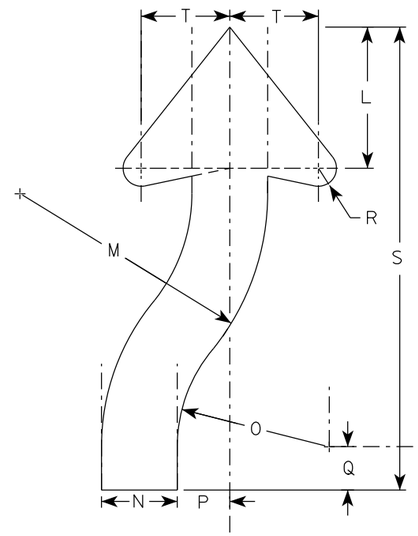
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014B.dgn PLOT DATE : 29-JAN 2024 3:41 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W01-4CR

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. W01-4CL is the same as W01-4CR except arrows are reversed along the vertical centerline.



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	36		2 1/4	5/8	3/4		11 3/4	9 1/4	3/8	9 7/8	13 1/8	5 7/8	10 1/4	3 1/8	6 1/4	2 1/4	1 7/8	3/4	19 1/4	3 3/4							9.0
2S	48		3	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
2M	48		3	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
3	48		3	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
4	48		3	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0
5	48		3	3/4	1		15 3/4	12 1/4	1/2	13 1/4	17 1/2	7 3/4	13 3/4	4 1/4	8 1/2	2 7/8	2 3/8	1	25 5/8	4 7/8							16.0

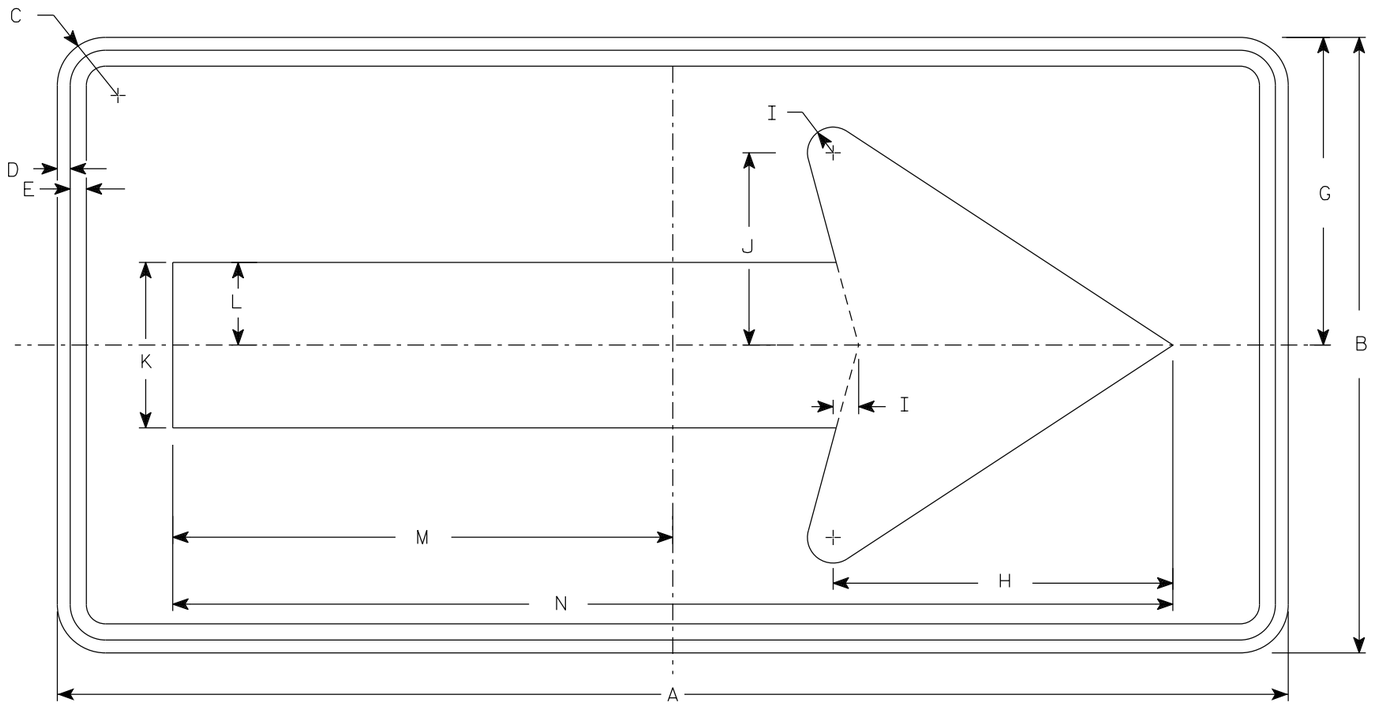
STANDARD SIGN
W01-4C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4C.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 377	E



WO1-6

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.

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	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

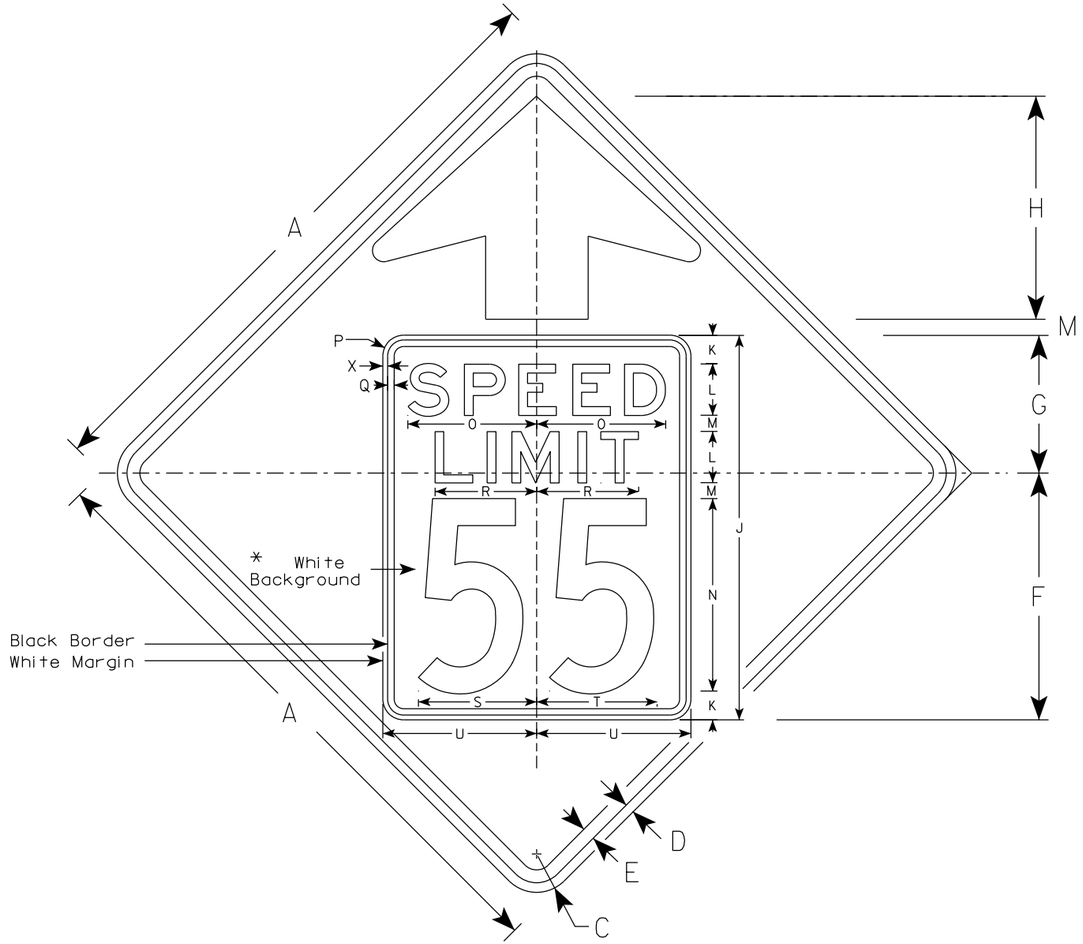
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

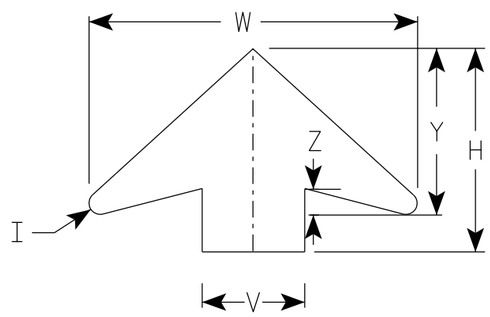


W03-5

NOTES

1. Sign is Type II - Type F Reflective
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



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	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

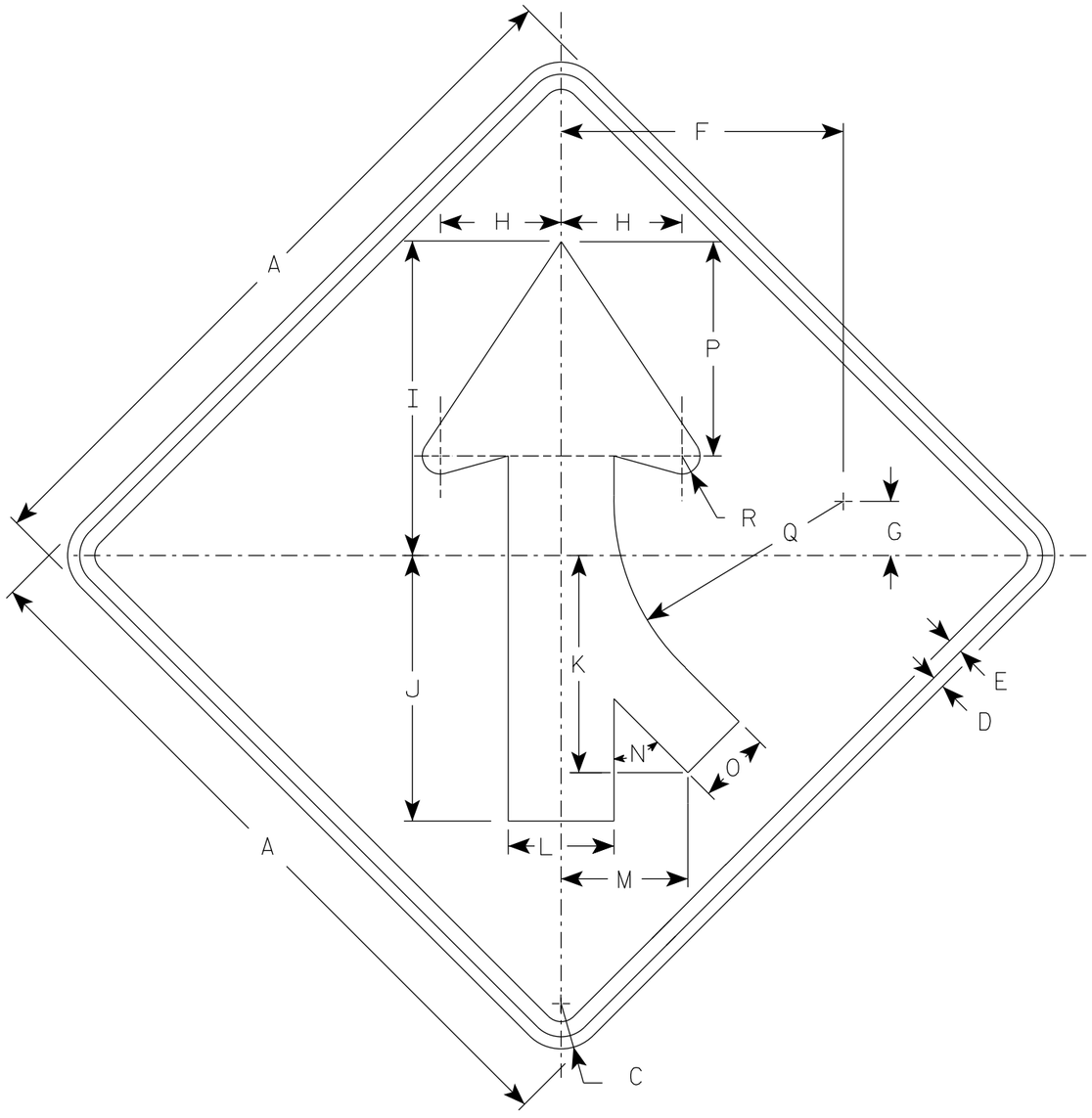
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W03-5.2

PROJECT NO:

SHEET NO: 379 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

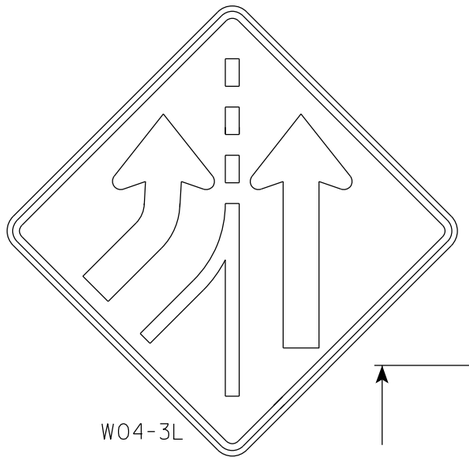
STANDARD SIGN
W04-1

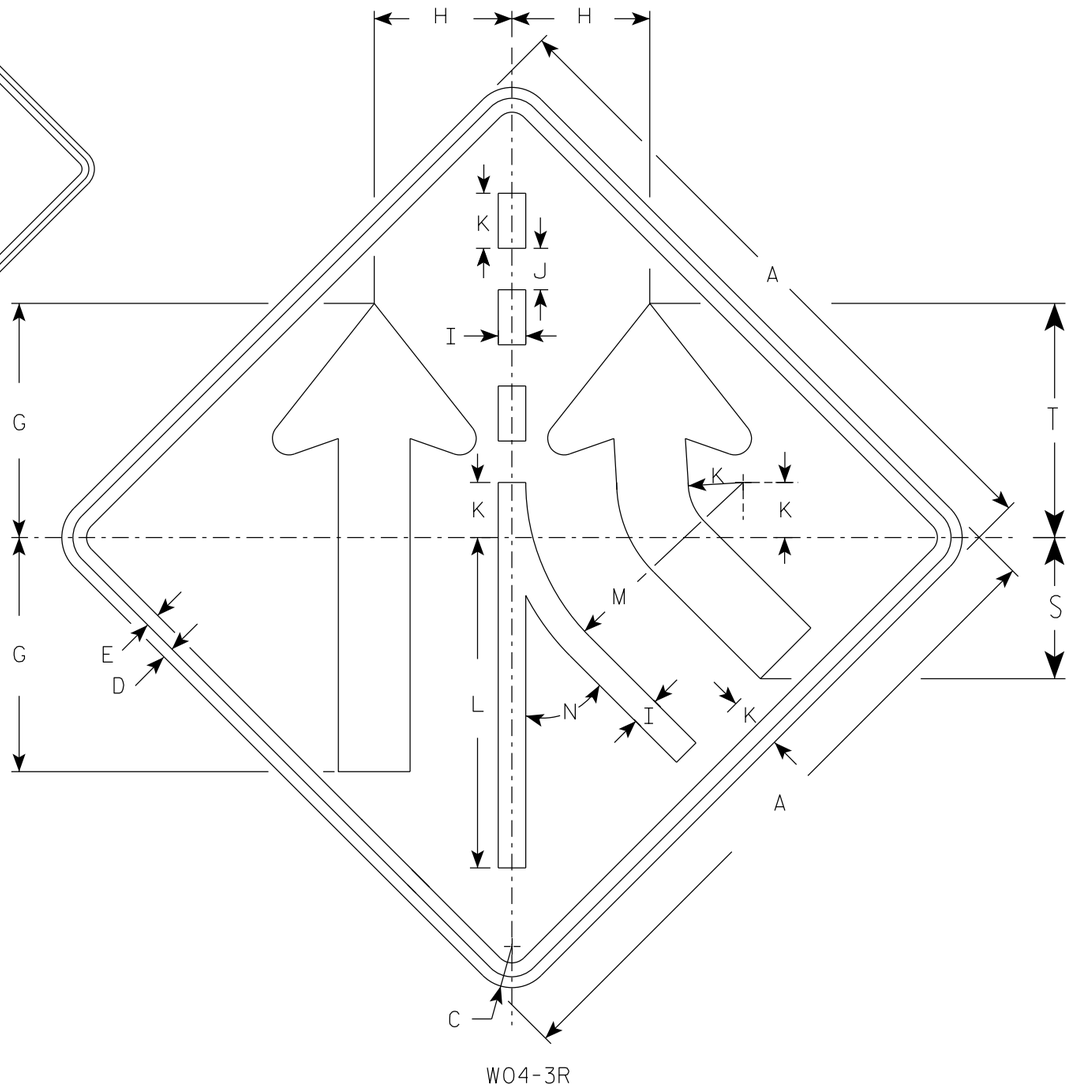
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-1.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 380 | E

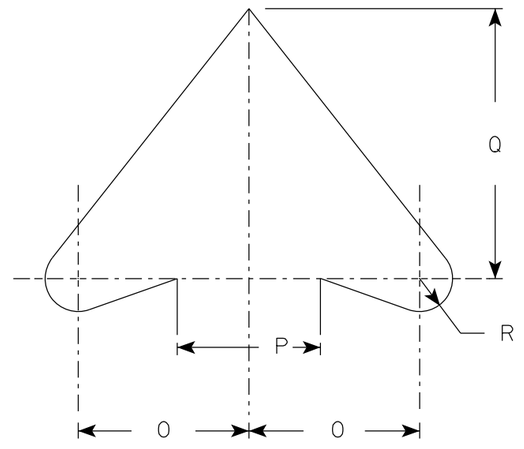




W04-3R

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. W04-3L is the same as W04-3R except the arrow is reversed along the vertical centerline.



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	36		2 1/4	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2S	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
2M	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
3	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
4	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN
W04-3

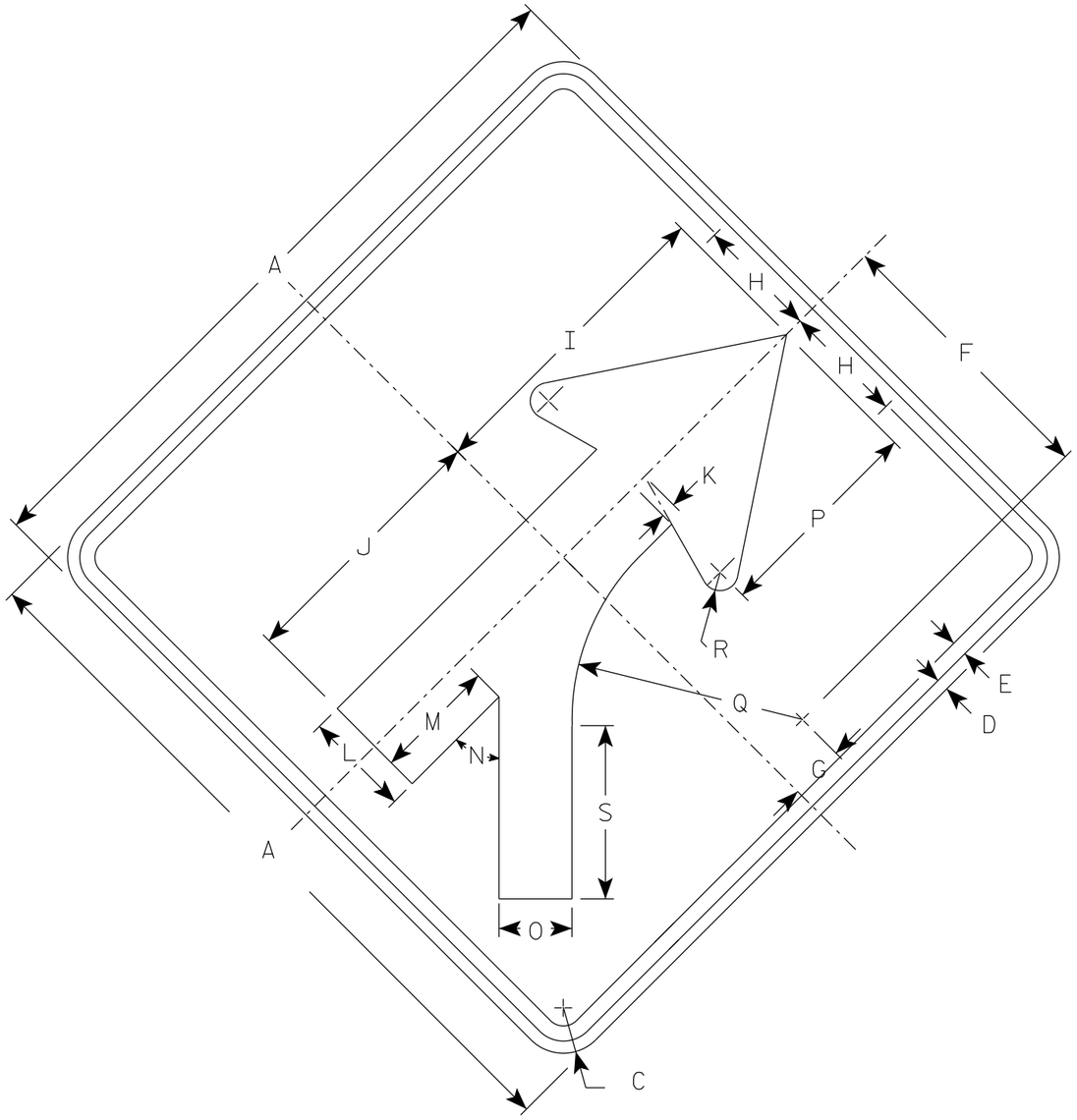
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-3.2

PROJECT NO:

SHEET NO: 381 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

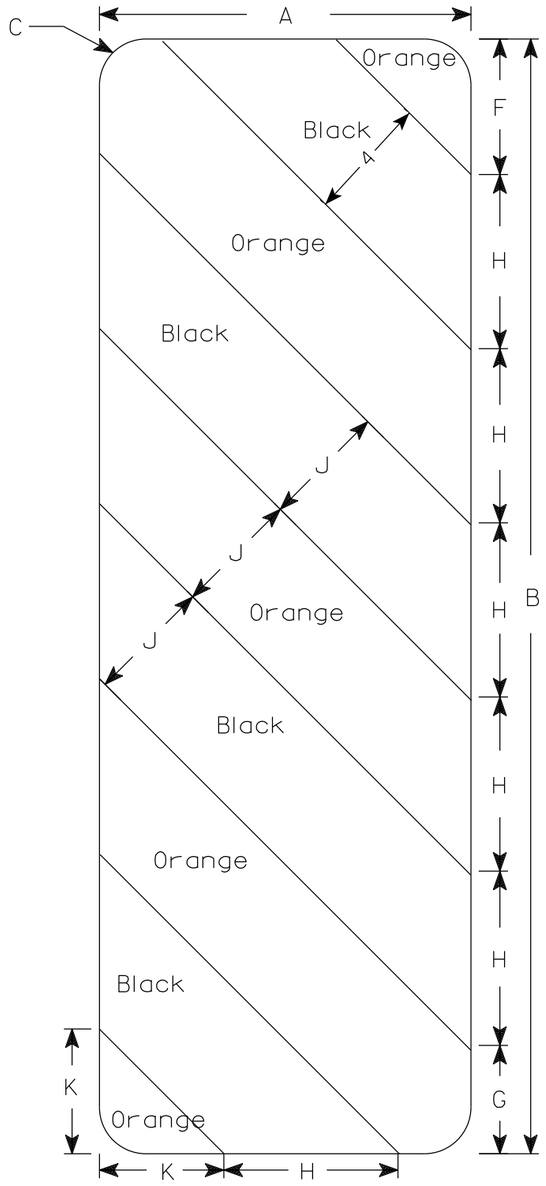
STANDARD SIGN
W04-5

WISCONSIN DEPT OF TRANSPORTATION

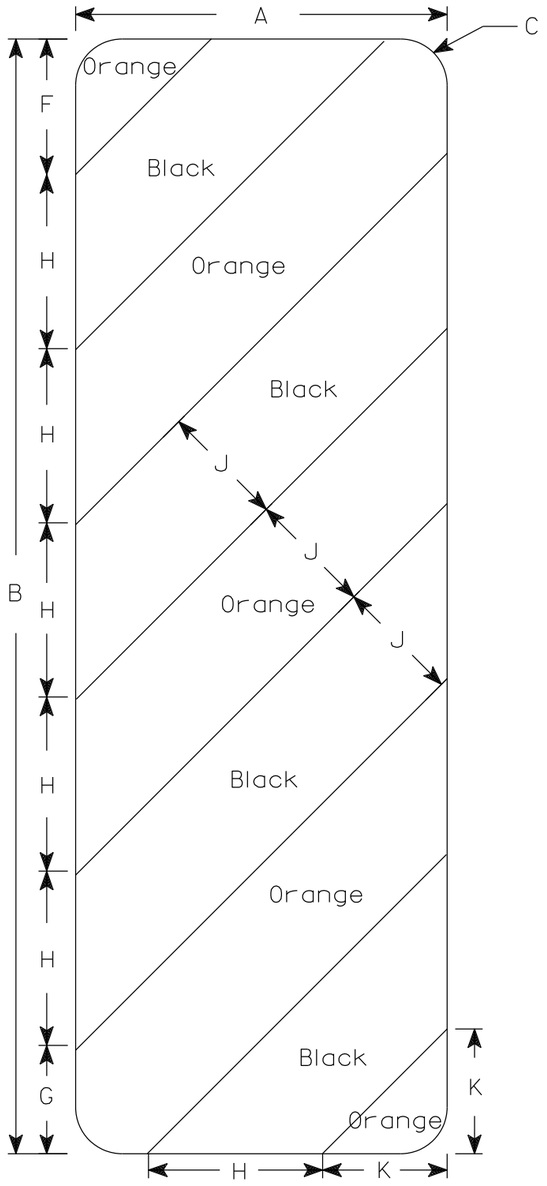
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-5.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 382 | E



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
4. Alternate colors of stripes as shown.

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	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

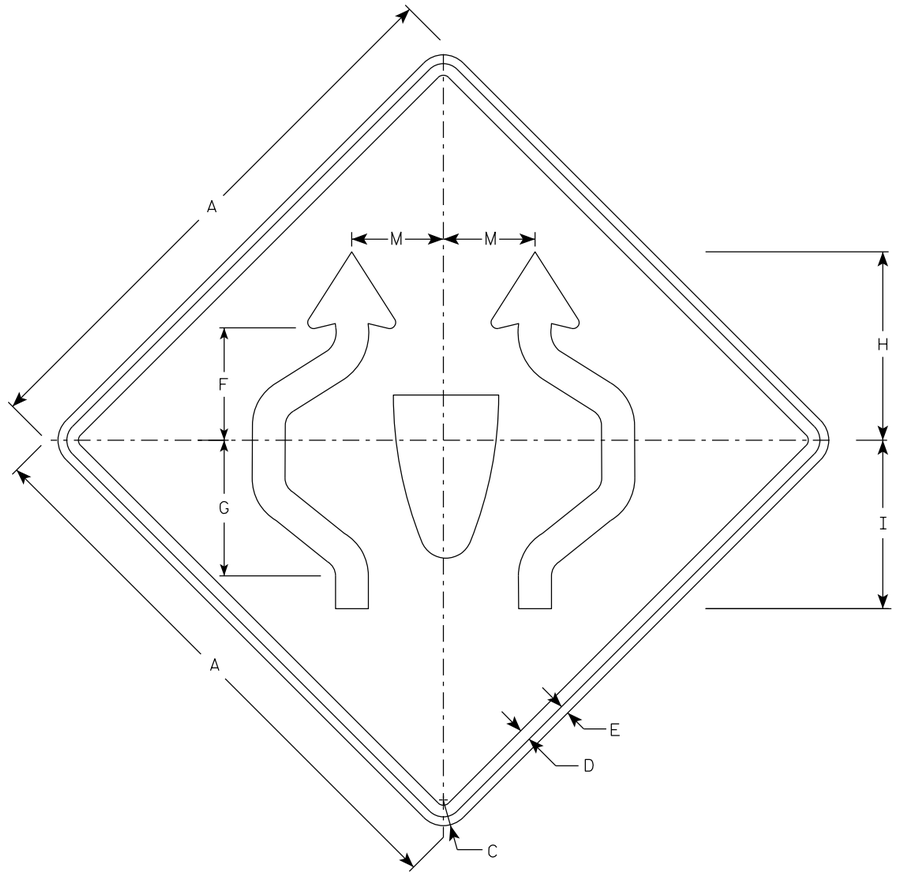
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

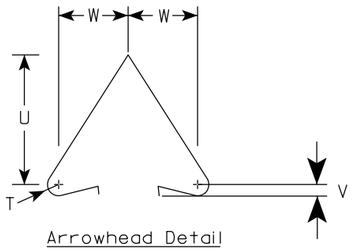
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/2024 PLATE NO. W05-52.2

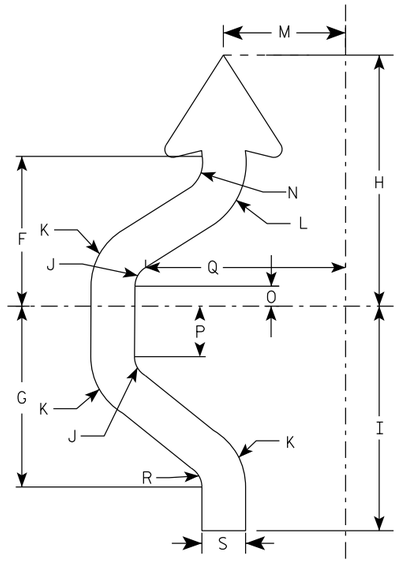
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 383	E



W06-50



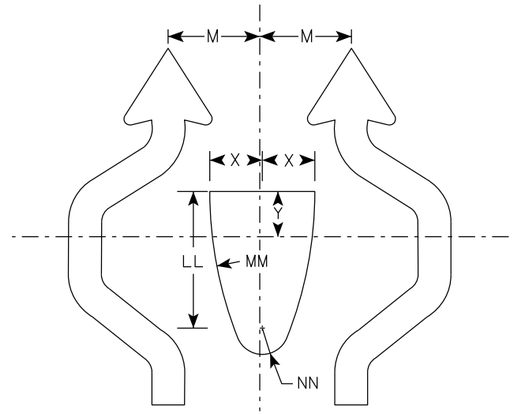
Arrowhead Detail



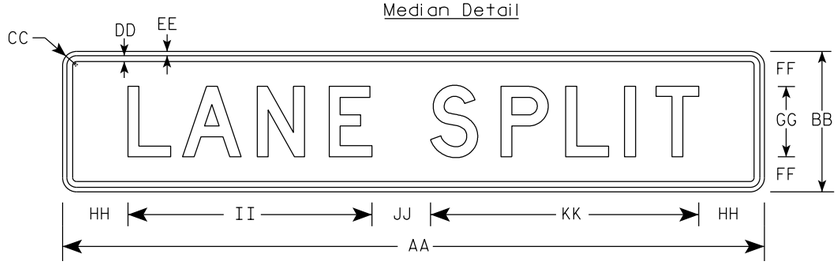
Arrow Detail

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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.



Median Detail



W06-50P

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	W06-50 Area sq. ft.	W06-50P Area sq. ft.
1																												
2S	48		3	1	¾	9 ⅝	11 ⅝	16 ⅜	14 ⅜	1 ⅜	4 ¼	4 ¾	7 ⅞	2 ⅛	1 ¼	3 ¼	12 ⅞	1 ⅜	2 ¾	½	5 ¾	½	3 ¼	4 ½	3 ⅞		16.0	5.0
2M	48		3	1	¾	9 ⅝	11 ⅝	16 ⅜	14 ⅜	1 ⅜	4 ¼	4 ¾	7 ⅞	2 ⅛	1 ¼	3 ¼	12 ⅞	1 ⅜	2 ¾	½	5 ¾	½	3 ¼	4 ½	3 ⅞		16.0	5.0
3	48		3	1	¾	9 ⅝	11 ⅝	16 ⅜	14 ⅜	1 ⅜	4 ¼	4 ¾	7 ⅞	2 ⅛	1 ¼	3 ¼	12 ⅞	1 ⅜	2 ¾	½	5 ¾	½	3 ¼	4 ½	3 ⅞		16.0	5.0
4	48		3	1	¾	9 ⅝	11 ⅝	16 ⅜	14 ⅜	1 ⅜	4 ¼	4 ¾	7 ⅞	2 ⅛	1 ¼	3 ¼	12 ⅞	1 ⅜	2 ¾	½	5 ¾	½	3 ¼	4 ½	3 ⅞		16.0	5.0
5	48		3	1	¾	9 ⅝	11 ⅝	16 ⅜	14 ⅜	1 ⅜	4 ¼	4 ¾	7 ⅞	2 ⅛	1 ¼	3 ¼	12 ⅞	1 ⅜	2 ¾	½	5 ¾	½	3 ¼	4 ½	3 ⅞		16.0	5.0

SIZE	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ
1																										
2S	60	12	1 ½	½	⅜	3	6	5 ⅝	20 ⅞	5	22 ⅞	11 ¾	33 ¾	2 ¼												
2M	60	12	1 ½	½	⅜	3	6	5 ⅝	20 ⅞	5	22 ⅞	11 ¾	33 ¾	2 ¼												
3	60	12	1 ½	½	⅜	3	6	5 ⅝	20 ⅞	5	22 ⅞	11 ¾	33 ¾	2 ¼												
4	60	12	1 ½	½	⅜	3	6	5 ⅝	20 ⅞	5	22 ⅞	11 ¾	33 ¾	2 ¼												
5	60	12	1 ½	½	⅜	3	6	5 ⅝	20 ⅞	5	22 ⅞	11 ¾	33 ¾	2 ¼												

STANDARD SIGN

W06-50

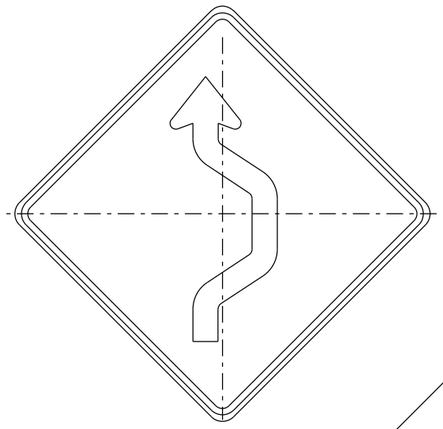
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

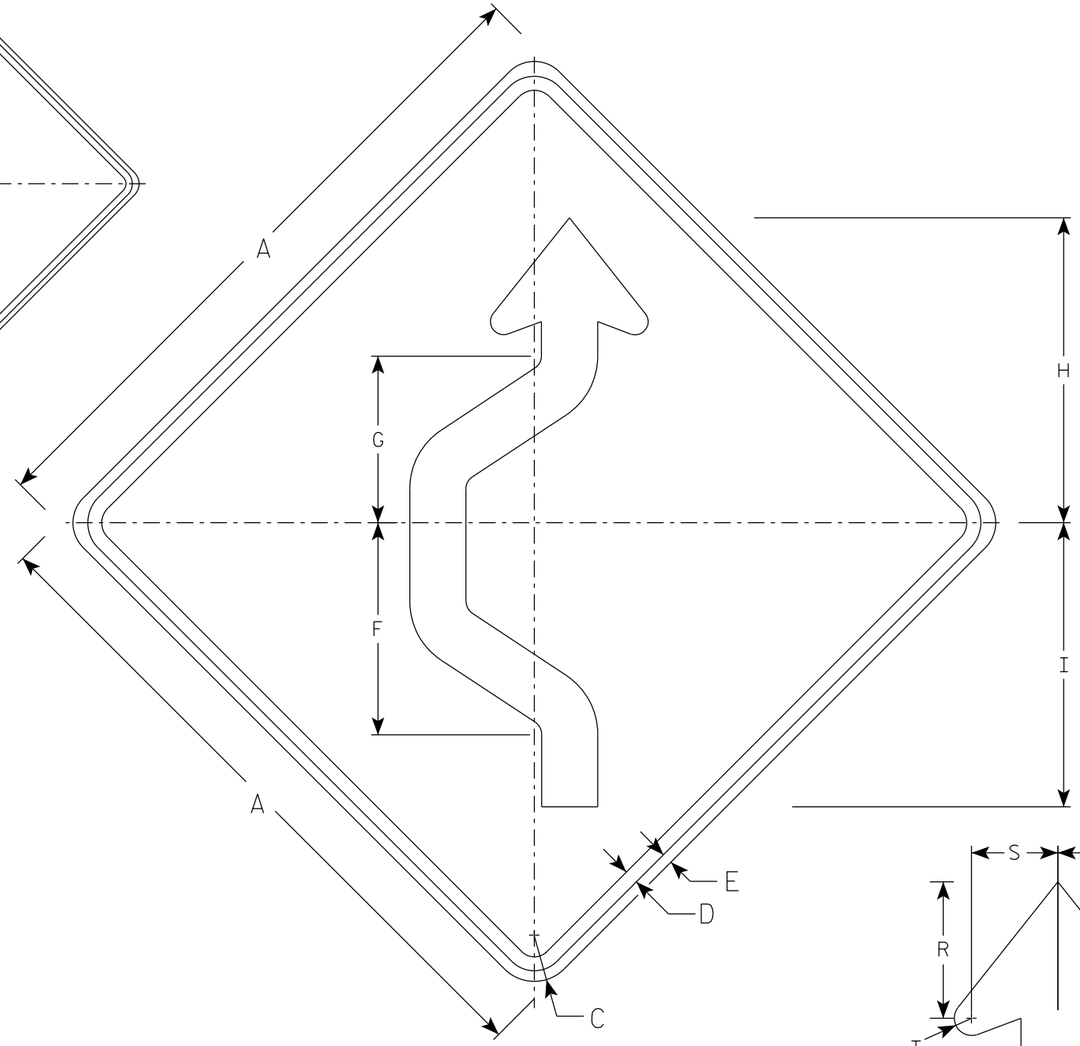
for State Traffic Engineer

DATE 1/30/2024 PLATE NO. W06-50.3

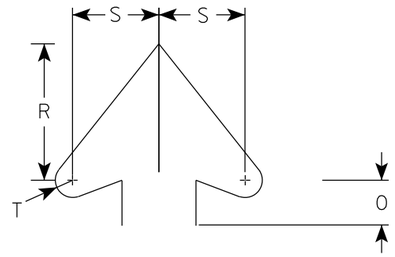
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 384 E



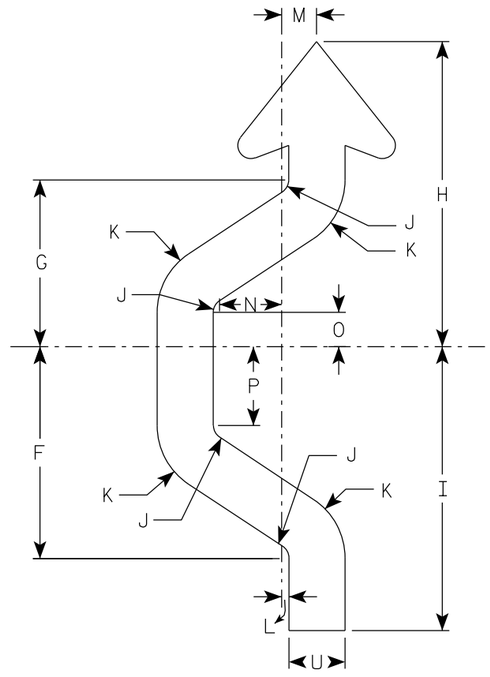
W024-1R



W024-1L



Arrowhead Detail



Arrow Detail

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. W024-1R is the same as W024-1L except 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	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9.0
2S	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
2M	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
3	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
4	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
5	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0

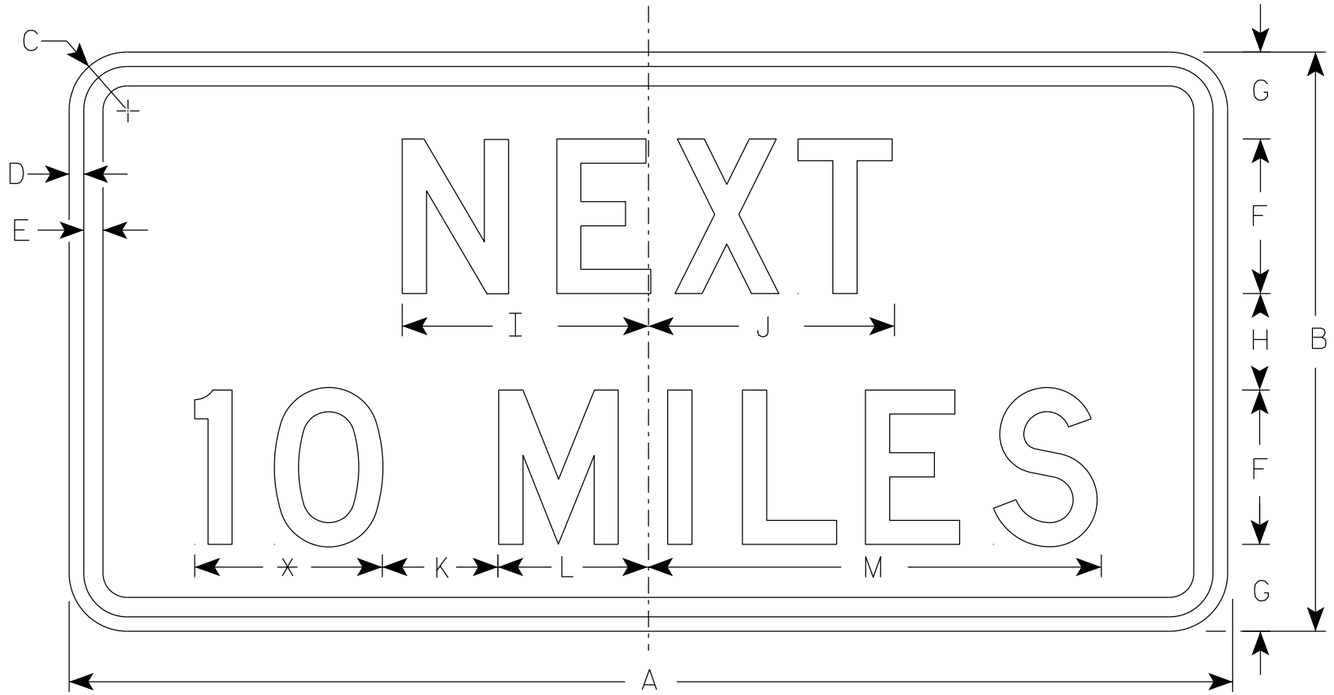
STANDARD SIGN
W024-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W024-1.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W057-51

* See note 5

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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. Round distance to the 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	36	18	1 1/2	3/8	1/2	5	2 3/4	2 1/2	7 7/8	8	5	4 1/8	15 3/8														4.5
2S	48	24	1 7/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
2M	48	24	1 7/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
3	48	24	1 7/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
4	48	24	1 7/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
5	48	24	1 7/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0

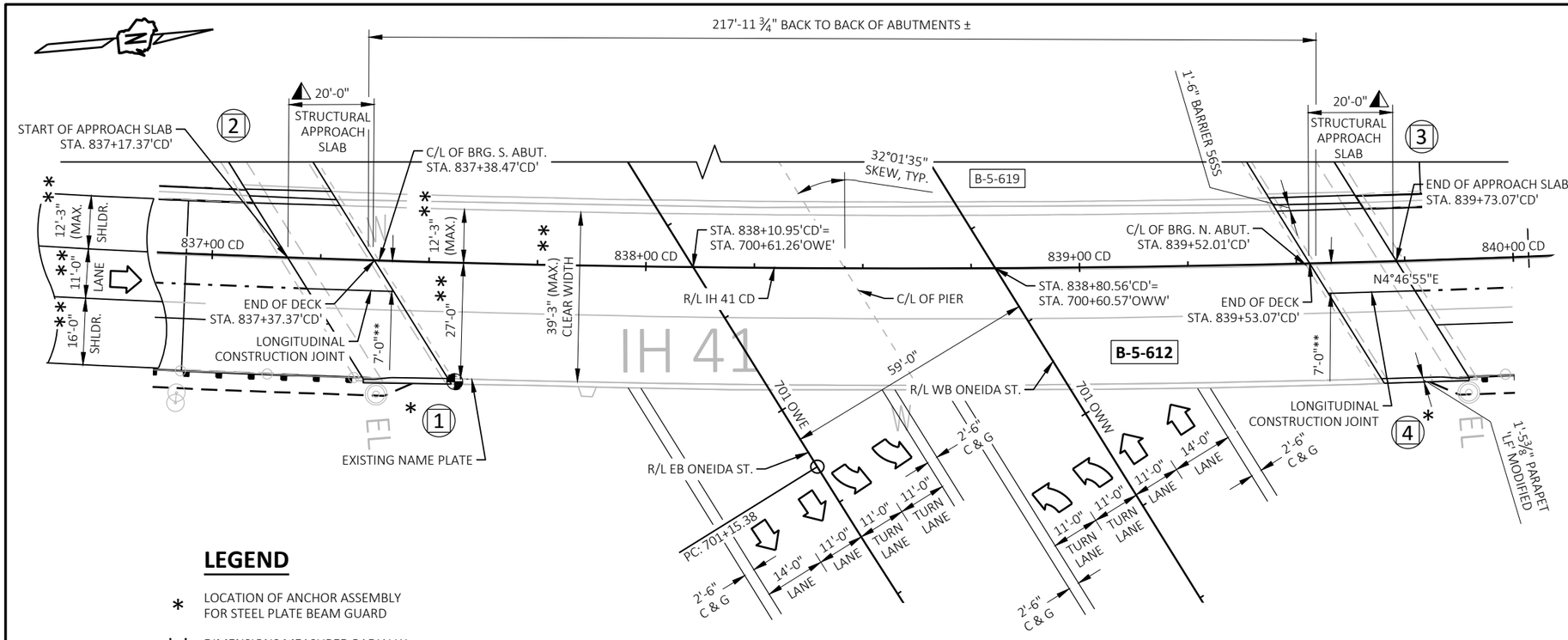
STANDARD SIGN
W057-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W057-51.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 386	E



PLAN

(STRUCTURAL APPROACH SLAB AND PARAPET REPLACEMENT)

LEGEND

- * LOCATION OF ANCHOR ASSEMBLY FOR STEEL PLATE BEAM GUARD
- ** DIMENSIONS MEASURED RADIALLY
- ▲ MEASURED ALONG R/L
- (#) INDICATES WING/CORNER NUMBER
- INDICATES BENCHMARK/CONTROL POINT

NOTES:

BRIDGE LENGTH DIMENSION AND SKEW ANGLE BASED OFF OF AS-BUILT TANGENT LINE.

MEDIAN BARRIER DIMENSION IS MEASURED TO THE C/L OF ½" FILLER BETWEEN BRIDGES.

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. STRUCT. APPR. SLAB	N. STRUCT. APPR. SLAB	TOTAL
203.0220.01	REMOVING STRUCTURE B-5-612	EACH	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	88	88	176
502.3210	PIGMENTED SURFACE SEALER	SY	21	21	42
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	9,030	8,610	17,640
505.0905	BAR COUPLERS NO. 5	EACH	44	42	86
517.1010.S.01	CONCRETE STAINING B-5-612	SF	23	22	45
517.1015.S.01	CONCRETE STAINING MULTI-COLOR B-5-612	SF	33	31	64
517.1050.S.01	ARCHITECTURAL SURFACE TREATMENT B-5-612	SF	33	31	64
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1	1	2
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	21	21	42
SPV.0035.01	HPC MASONRY STRUCTURES	CY	51.5	51.5	103
SPV.0165.01	LONGITUDINAL GROOVING BRIDGE DECK	SF	785	785	1,570
	NON-BID ITEMS				
	FILLER	SIZE			1/2", 3/4" & 1 1/2"

ALL BID ITEMS SHOWN ARE CATEGORY 0020

SCOPE OF WORK

- REPLACEMENT OF STRUCTURAL APPROACH SLABS AND APPROACH SLAB PARAPETS

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, PROFILE & CROSS SECTION
3. STRUCTURAL APPROACH SLAB REMOVAL LIMITS
4. CONSTRUCTION STAGING
5. STRUCTURAL APPROACH SLAB PLAN
6. STRUCTUAL APPROACH SLAB DETAILS
7. SLOPED FACED PARAPET "LF" (MODIFIED)
8. SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS
9. APPROACH SLAB BILL OF BARS
10. AESTHETIC DETAILS

BENCH MARK

NO.	STATION IH 41 CD	OFFSET	DESCRIPTION	ELEV.
1004	837+58.95'CD'	27.886' RT	BM DISK	636.317

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 3/20/2025
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.14
OPERATING RATING: RF = 1.48
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

HPC MASONRY:
STRUCTURAL APPROACH SLAB — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

TRAFFIC DATA

IH 41

ADT (2026) = 79,260
ADT (2046) = 90,500
DESIGN SPEED = 70 MPH

CURVE DATA

PI STA = 834+24.40 'CD'
Y = 550352.740
X= 83116.130
Δ = 29°44'28" LT
D = 01°28'07"
T = 1035.95'
L = 2025.17'
R = 3901.47'
PC STA = 823+88.45 'CD'
Y = 549423.101
X = 82658.998
PT STA = 844+13.62 'CD'
Y = 551386.698
X = 83051.871
DB = N26°11'05"E
DA = N03°33'23"W

WISCONSIN
SHELLY K. HARRIS
E-100266-6
MONDOVI, WI
PROFESSIONAL ENGINEER

May 30, 2025

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
SHELLY HARRIS (715) 309-5224

NO.	DATE	REVISION	BY

KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STATE PROJECT NUMBER
1130-74-71

STRUCTURE B-5-612

IH 41 NB RAMP OVER ONEIDA STREET

COUNTY	VILLAGE
BROWN	ASHWAUBENON

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JBN	SKH	STD	SKH

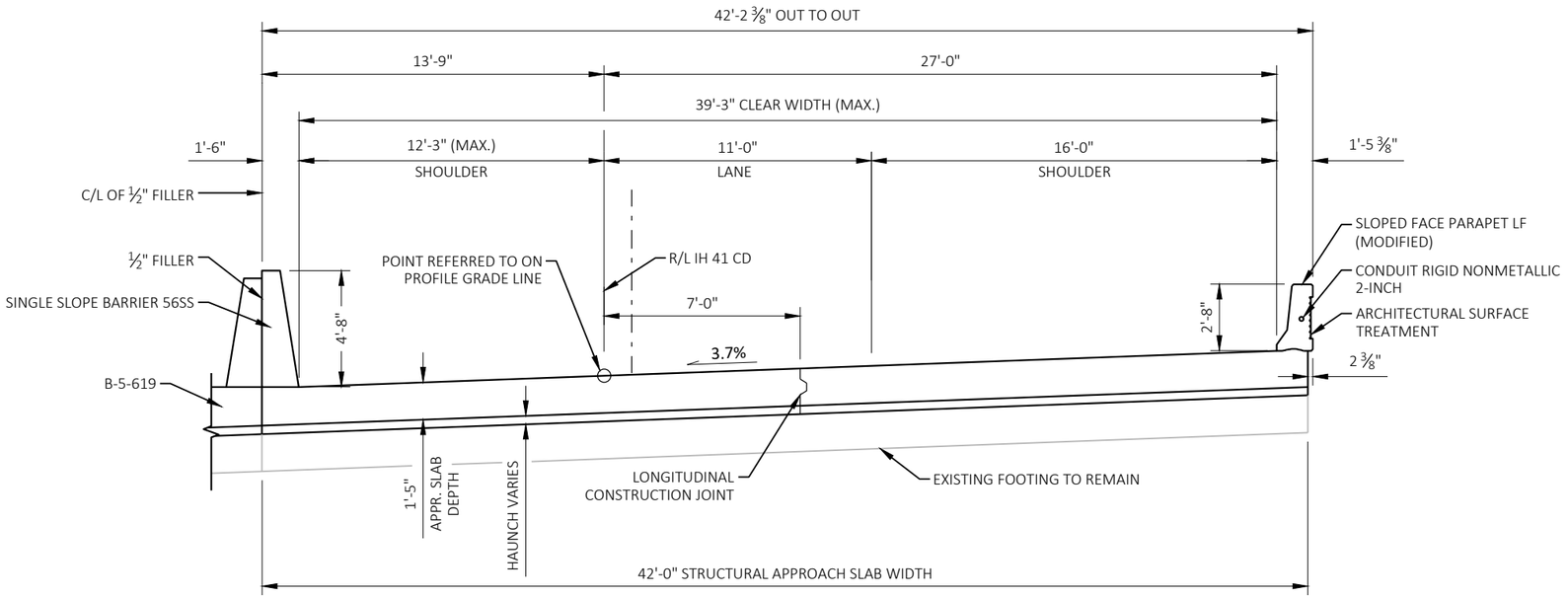
GENERAL PLAN

SHEET 1 OF 10
387

I.D.
DATE:

8

8

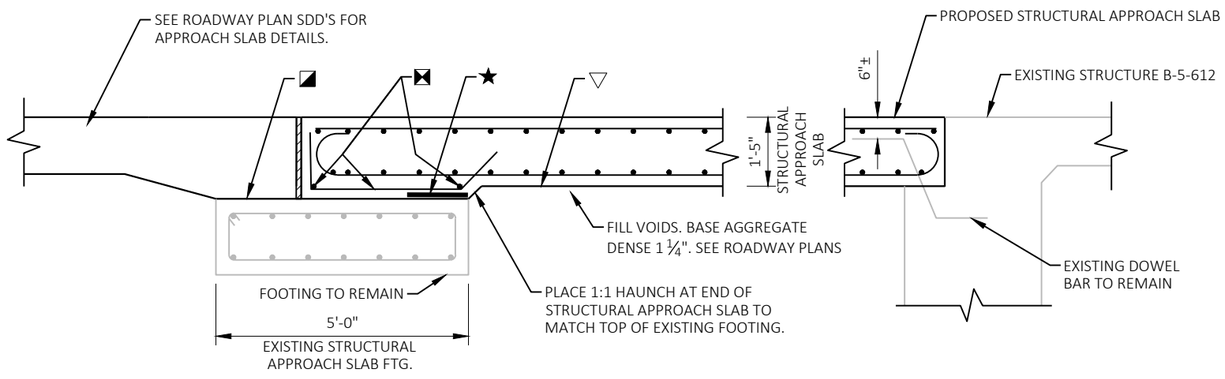


CROSS SECTION AT STRUCTURAL APPROACH SLAB

(LOOKING NORTH)

NOTE:

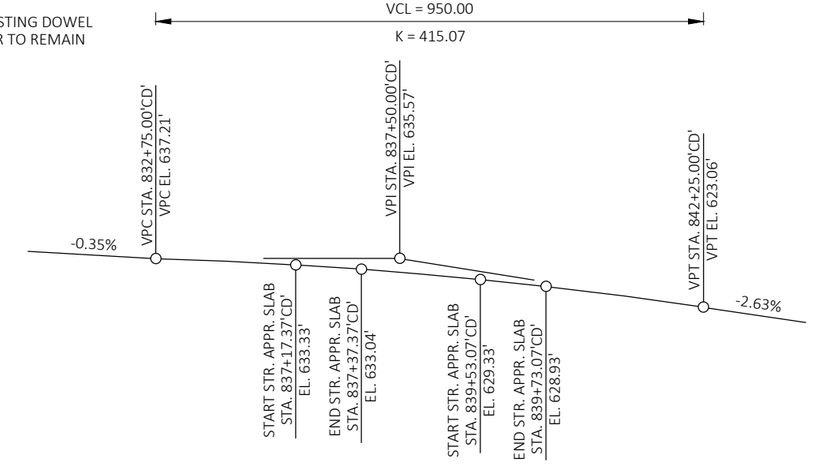
ALL DIMENSIONS IN CROSS SECTION ARE RADIAL UNLESS NOTED OTHERWISE.



LONGITUDINAL SECTION OF STRUCTURAL APPROACH SLAB

LEGEND

- PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- 3/4" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7.
- BAR STEEL ONLY PRESENT AT SOUTH APPROACH SLAB.



PROFILE GRADE LINE IH 41 CD

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD 83 (2011). ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT, UNLESS SPECIFIED OTHERWISE.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE EXISTING STRUCTURE, B-5-612, IS A TWO SPAN PRESTRESSED GIRDER BRIDGE WITH A MAXIMUM CLEAR WIDTH OF 39'-3". THE NORTH AND SOUTH STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP SURFACE OF THE NEW STRUCTURAL APPROACH SLAB.

PARAPETS ON TOP OF EXISTING STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF THE NEW CONCRETE PARAPETS. ARCHITECTURAL SURFACE TREATMENT CONCRETE STAINING AND CONCRETE STAINING MULTI-COLOR SHALL BE APPLIED ON PARAPETS WHERE APPLICABLE.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING STAINLESS STEEL REINFORCING BARS CONNECTING THE ABUTMENT DIAPHRAGM TO THE STRUCTURAL APPROACH SLAB.

SEE ROADWAY PLANS AND QUANTITIES FOR BASE AGGREGATE DENSE REQUIRED UNDER APPROACH SLAB.

THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE STRUCTURAL APPROACH SLAB SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE B-5-612".

REMOVAL OF HMA OVERLAY ON TOP OF STRUCTURAL APPROACH SLABS TO BE INCLUDED IN BID ITEM "REMOVING STRUCTURE B-5-612".

REMOVAL OF CONDUIT TO BE INCLUDED IN BID ITEM "REMOVING STRUCTURE B-5-612".

ANY DAMAGED WIRING OR CONDUIT, INCLUDING WITHIN THE APPROACH SLAB REPAIR LIMITS, SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.

ALL STATIONS ARE BASED ON PROPOSED ALIGNMENT.

STATE PROJECT NUMBER

1130-74-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-612

DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES, PROFILE & CROSS SECTION

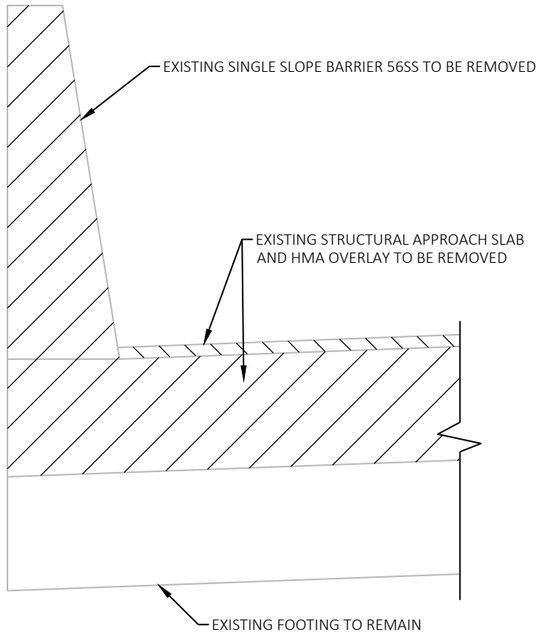
SHEET 2
388

8

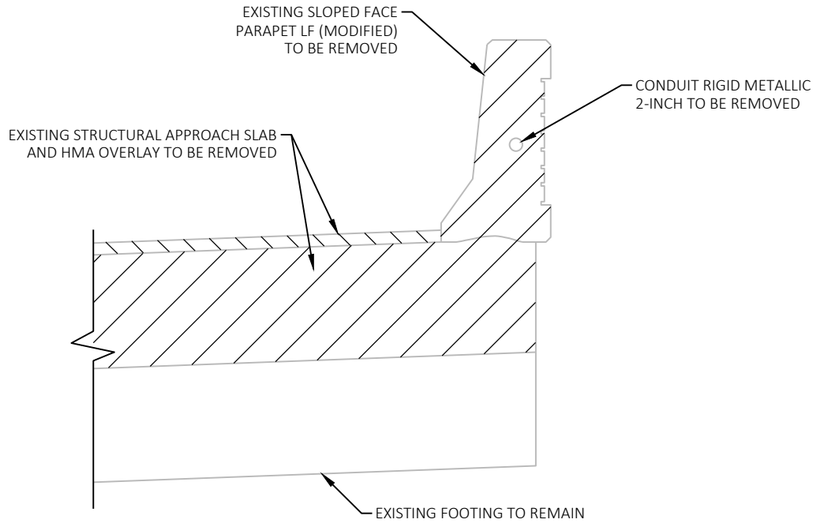
8

STATE PROJECT NUMBER

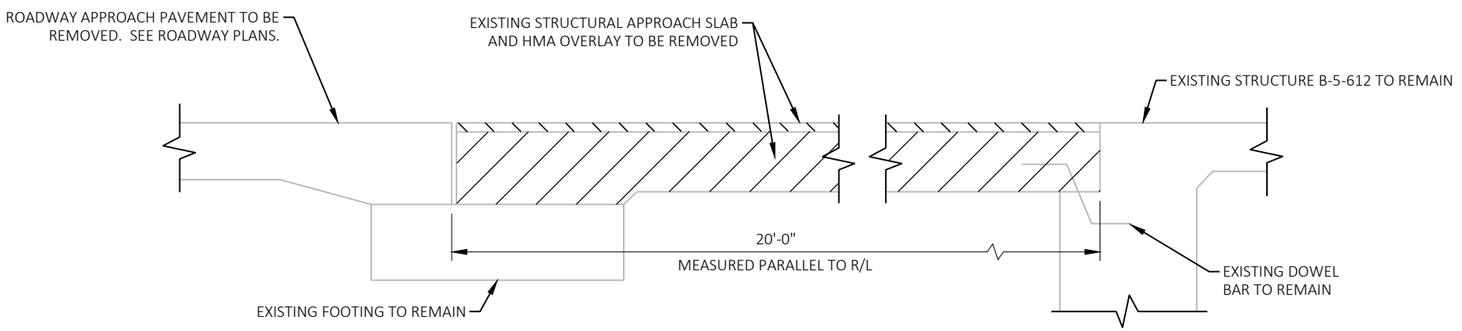
1130-74-71



REMOVAL LIMITS AT WEST EDGE OF SLAB



REMOVAL LIMITS AT EAST EDGE OF SLAB



LONGITUDINAL REMOVAL LIMITS DETAIL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-612

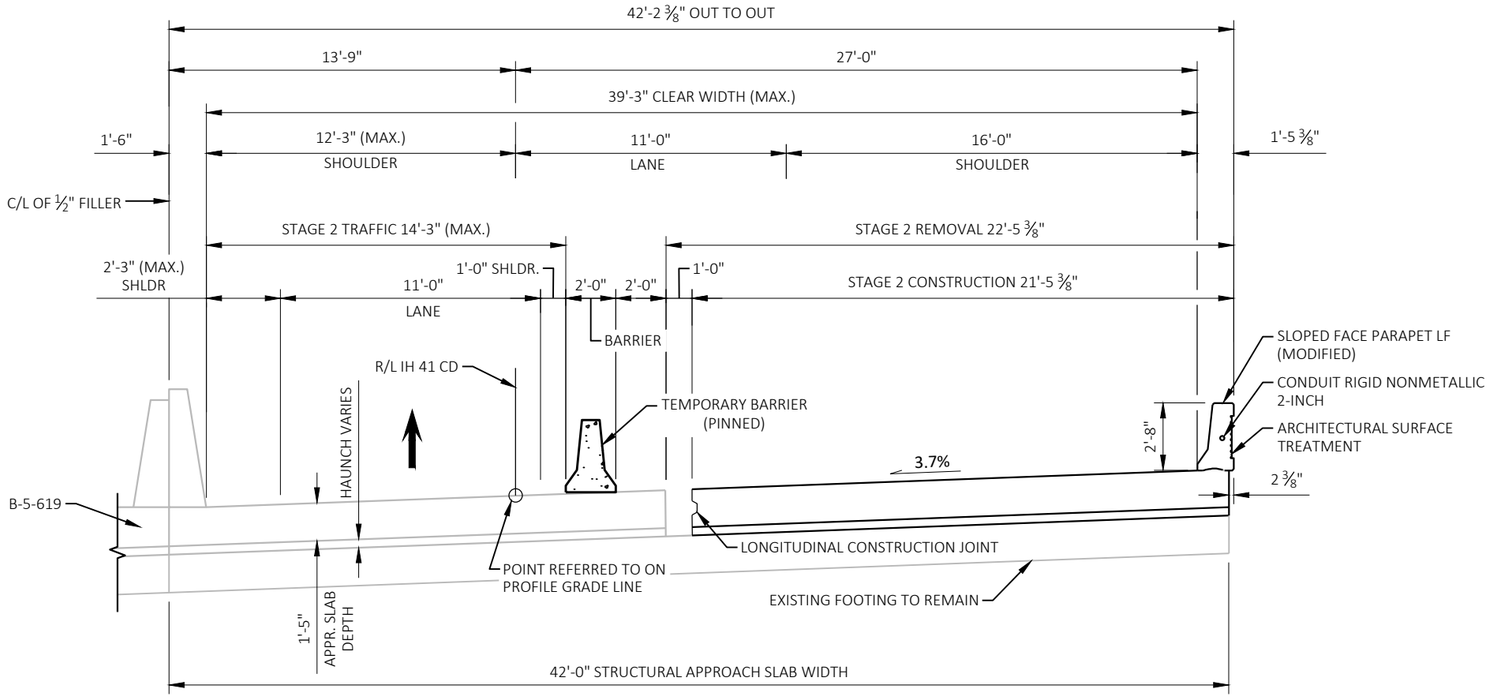
DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB REMOVAL LIMITS

SHEET 3

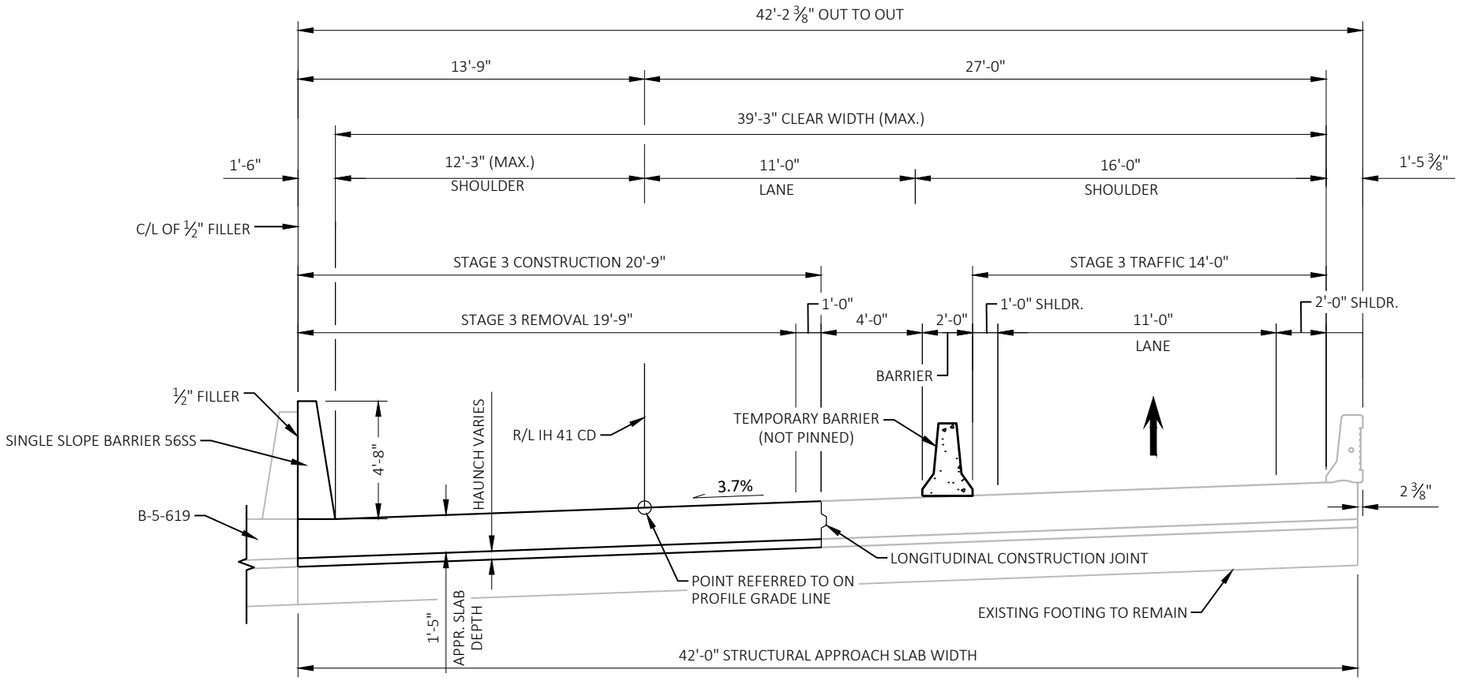
STATE PROJECT NUMBER

1130-74-71



STAGE 2

(LOOKING NORTH)



STAGE 3

(LOOKING NORTH)

NOTES:

ALL DIMENSIONS ARE GIVEN ALONG RADIAL LINES.

STAGE 1 AND 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS. SEE ROADWAY PLANS FOR DETAILS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-612

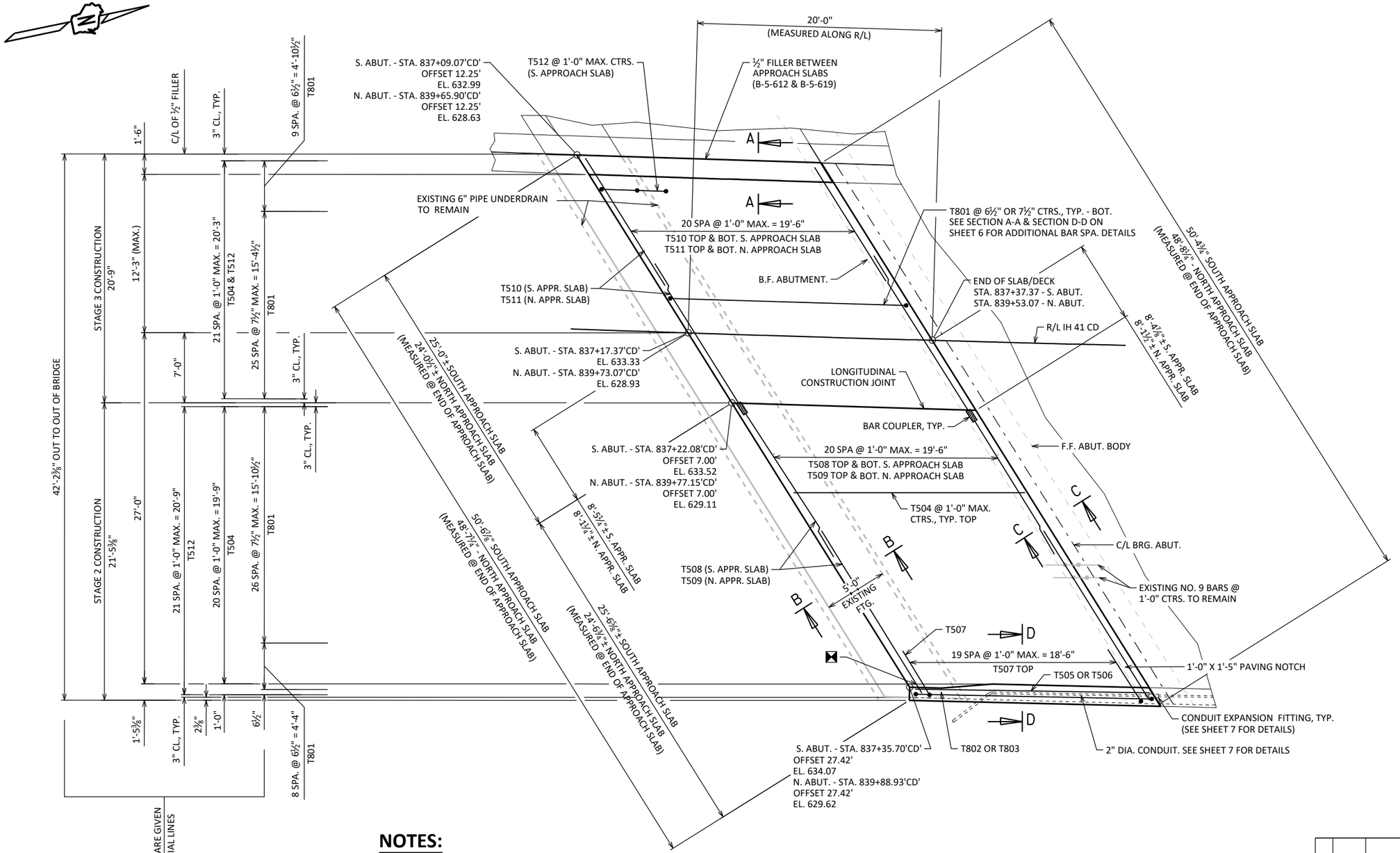
DRAWN BY STD | PLANS CK'D SKH

CONSTRUCTION STAGING

SHEET 4

STATE PROJECT NUMBER

1130-74-71



NOTES:

LAP NO. 5 BARS 2'-11" MIN.

PLACE LONGITUDINAL BARS CONCENTRIC TO R/L IH 41 CD

LEGEND

FIELD BEND T508 OR T509 ALONG EDGE OF APPROACH SLAB AT CORNERS 1 AND 4

APPROACH SLAB PLAN

(SOUTH APPROACH SLAB SHOWN, NORTH APPROACH SLAB SIMILAR, UNLESS NOTED OTHERWISE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-612

DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB PLAN

SHEET 5
391

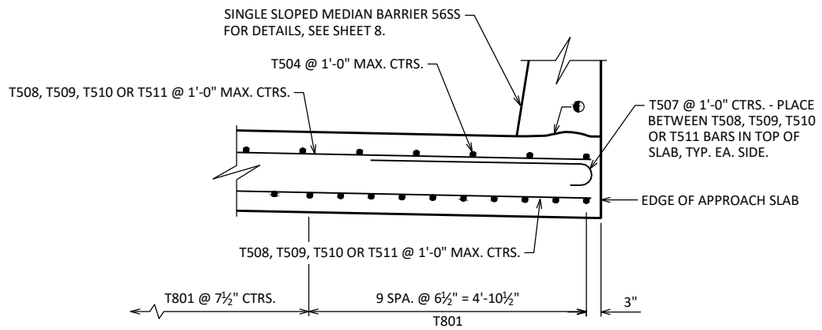
SCALE = 2.00

STATE PROJECT NUMBER

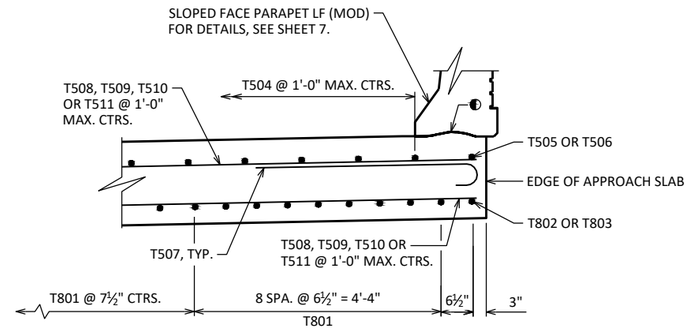
1130-74-71

LEGEND

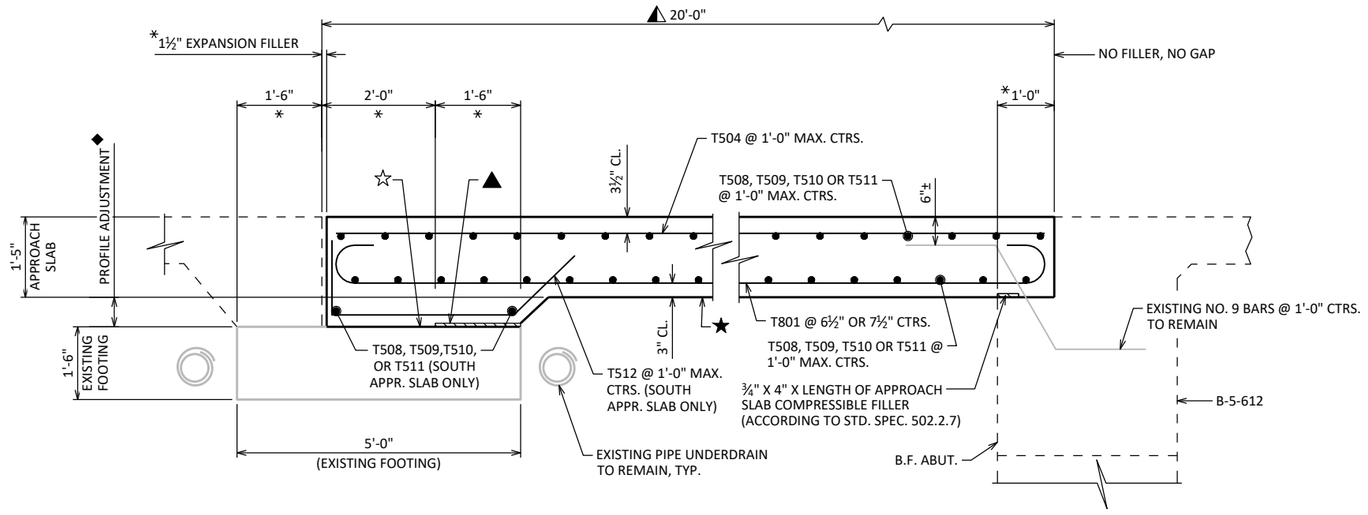
- ⚹ DIMENSIONS ARE GIVEN NORMAL C/L SUBSTRUCTURE.
- ◭ DIMENSION ARE GIVEN ALONG R/L IH 41 CD ROADWAY.
- ☆ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF FOOTING. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ▲ ¾" X 1'-6" X LENGTH OF FOOTING PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC 502.2.7
- ◐ CONST. JT. - STRIKE OFF AS SHOWN.
- ◆ QUANTITY CALCULATED ASSUMING A 3" AVERAGE HAUNCH.



SECTION A-A



SECTION D-D



SECTION B-B

SECTION C-C

LONGITUDINAL SECTION AT APPROACH SLAB

(SECTION SHOWN AT SOUTH APPROACH SLAB, NORTH APPROACH SLAB SIMILAR)

NOTES:

BARS STEEL REINFORCEMENT FOR THE APPROACH SLABS AND THE SINGLE SLOPE CONCRETE BARRIER 56SS. LOCATED ON THE WEST SIDE FOR B-5-612 IS INCLUDED IN THE BILL OF BARS ON SHEET 9.

FOR BAR STEEL REINFORCEMENT AND DETAILS FOR THE SLOPED FACE PARAPET LF (MODIFIED) LOCATED ON THE EAST SIDE OF THE APPROACH SLABS, SEE SHEET 7.

PLACE LONGITUDINAL BAR STEEL REINFORCEMENT CONCENTRIC TO R/L IH 41 CD.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-612

DRAWN BY STD | PLANS CK'D CDH

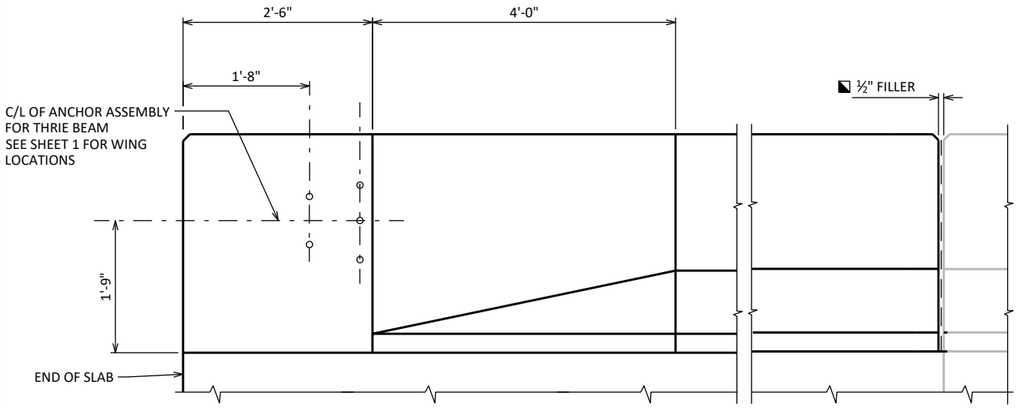
STRUCTURAL APPROACH SLAB DETAILS

SHEET 6
392

SCALE = 2.00

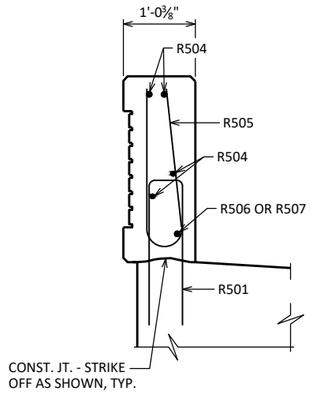
STATE PROJECT NUMBER

1130-74-71

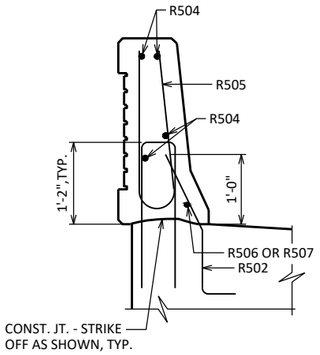


INSIDE ELEVATION - CORNERS 1 & 4

(CORNER 4 SHOWN, CORNER 1 SIMILAR, CONDUIT NOT SHOWN FOR CLARITY)



SECTION A-A



SECTION B-B

BILL OF BARS

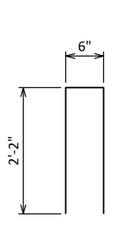
TOTAL COATED = 1,950 LBS.

BAR MARK	NO. REQ'D		LENGTH	BENT	BAR SERIES	LOCATION
	STAGE 2	STAGE 3				
R501	28	--	4'-7"	X		PARAPET VERT.
R502	16	--	3'-1"	X		PARAPET VERT.
R503	41	--	4'-2"	X		PARAPET VERT.
R504	16	--	10'-11"			PARAPET HORIZ.
R505	69	--	4'-10"	X		PARAPET VERT.
R506	1	--	19'-3"	X		PARAPET HORIZ - CORNER 1
R507	1	--	19'-9"	X		PARAPET HORIZ - CORNER 4

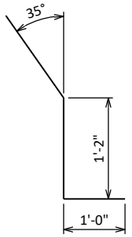
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
ALL REINFORCEMENT BARS IN THIS BILL SHALL BE EPOXY COATED.

LEGEND

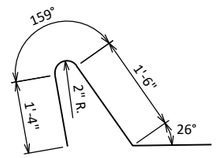
- ● R502 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R502 BARS CORRECTLY ALONG TRANSITION TO PARAPET.
- ✳ LAP R504 BARS 1'-9" MIN.
- ✳✳ EXISTING EXPANSION FITTING AT SEMI-EXPANSION JOINT TO REMAIN.
- ◐ NONMETALLIC CONDUIT TO METALLIC CONDUIT ADAPTER FITTING (UL OR NRTL LISTED FOR ELECTRICAL SHALL BE USED). ITEM INCIDENTAL TO BID ITEM "CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH.
- ◥ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). MATCH COLOR OF ADJACENT SURFACE.



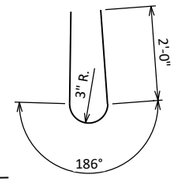
R501



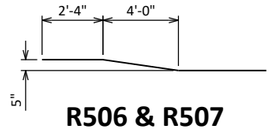
R502



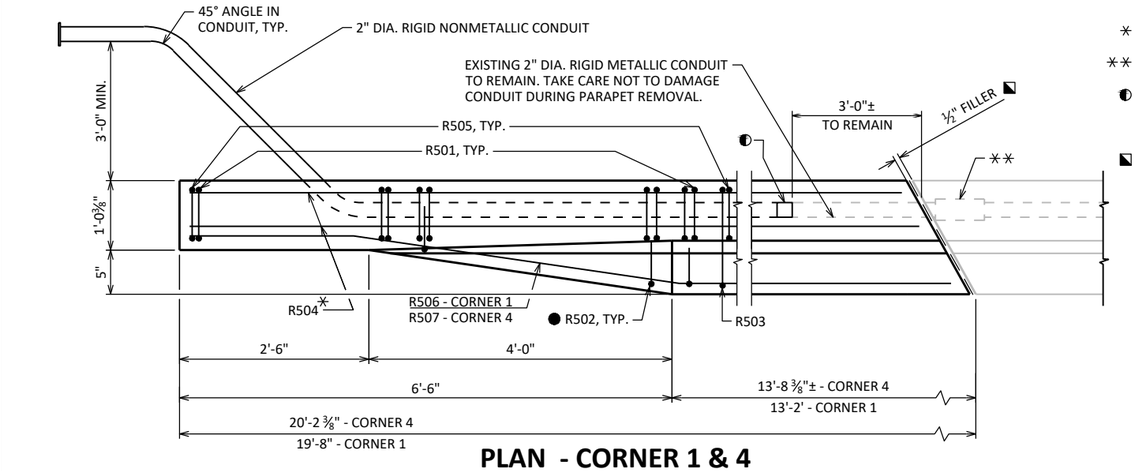
R503



R505

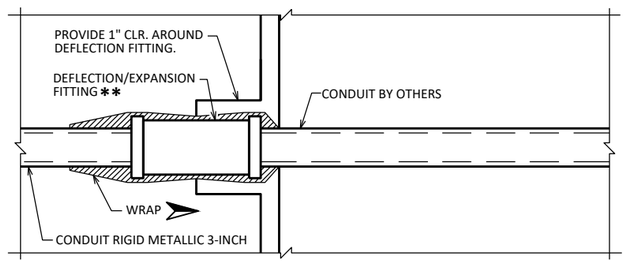


R506 & R507

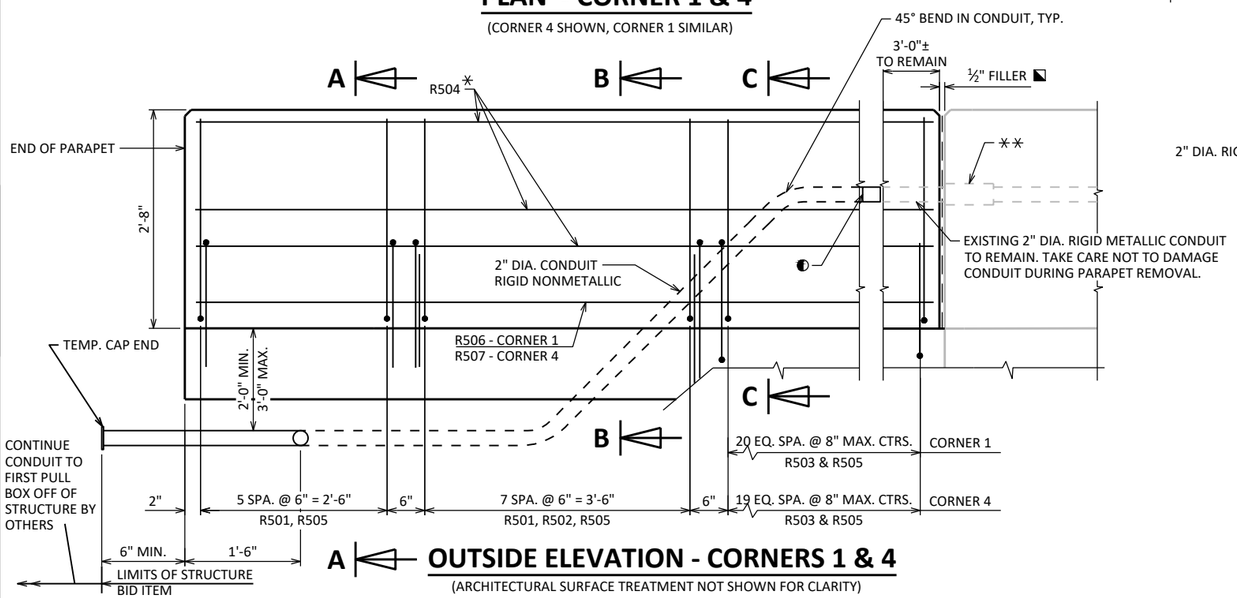


PLAN - CORNER 1 & 4

(CORNER 4 SHOWN, CORNER 1 SIMILAR)

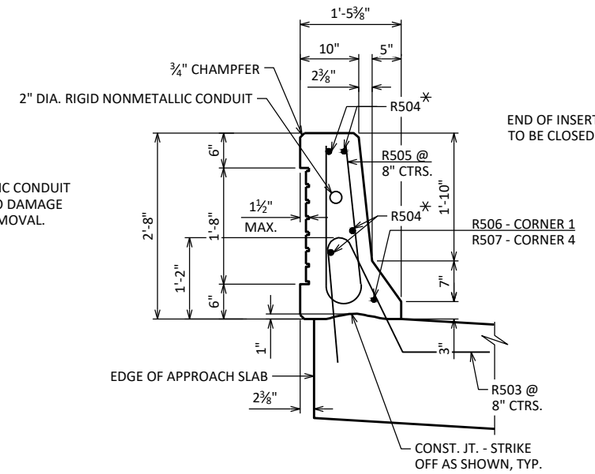


DEFLECTION/EXPANSION FITTING



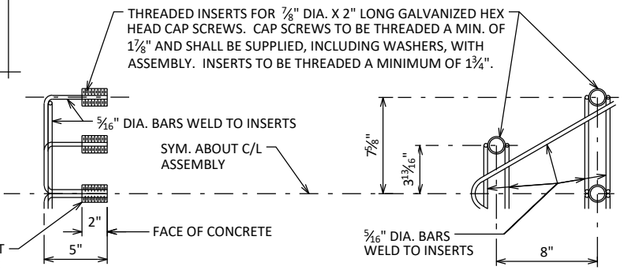
OUTSIDE ELEVATION - CORNERS 1 & 4

(ARCHITECTURAL SURFACE TREATMENT NOT SHOWN FOR CLARITY)



SECTION C-C

(LOOKING SOUTH AT PARAPET ON APPROACH SLAB, EAST SIDE ONLY)



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-612

DRAWN BY STD | PLANS CK'D CDH

SLOPED FACE PARAPET "LF" (MODIFIED)

SHEET 7
393

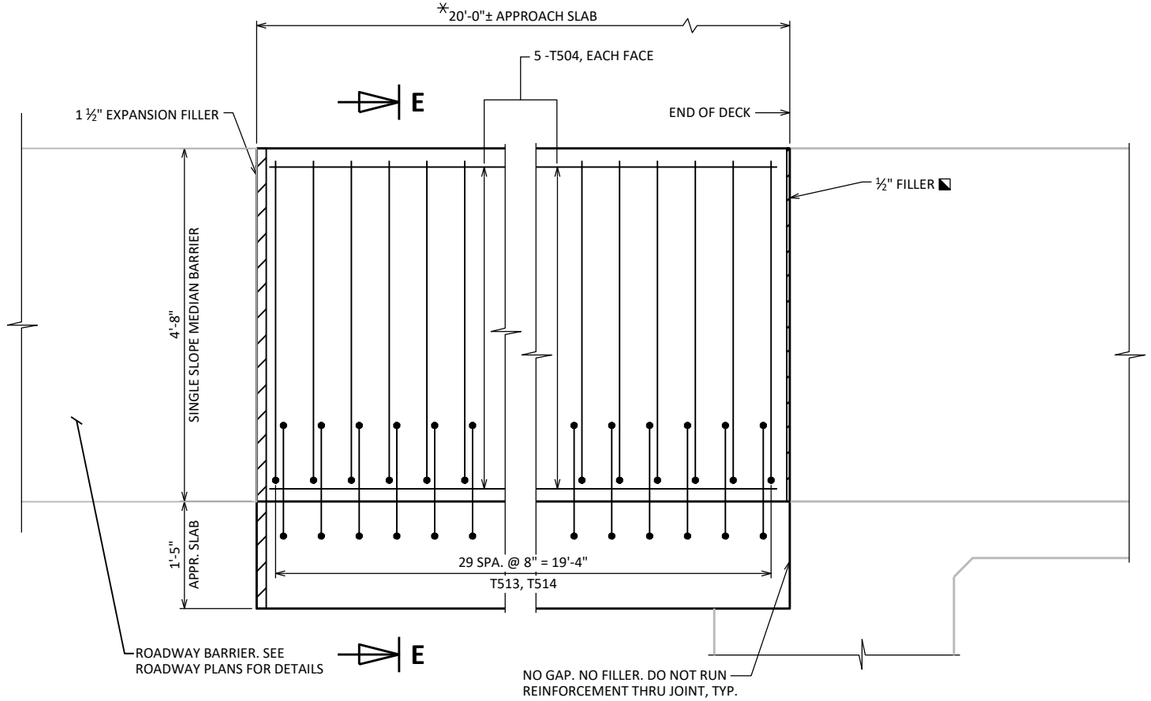
SCALE = 2.00

8

8

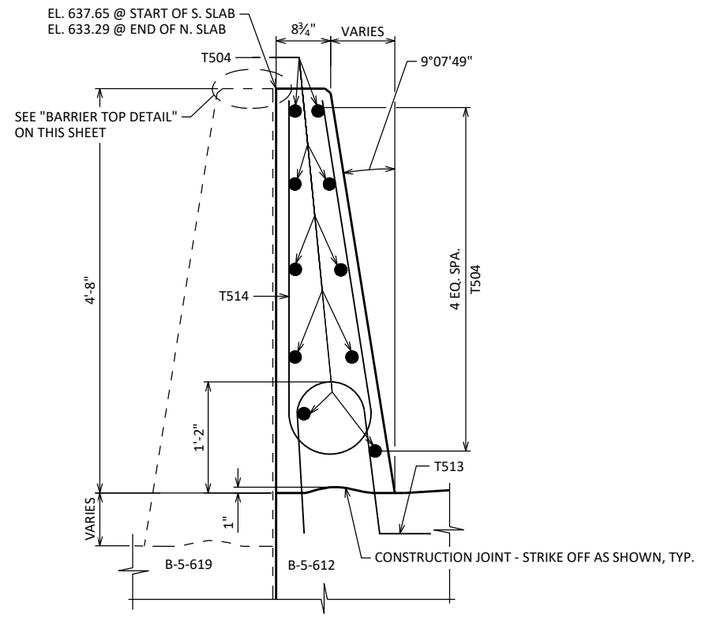
STATE PROJECT NUMBER

1130-74-71



PART ELEVATION

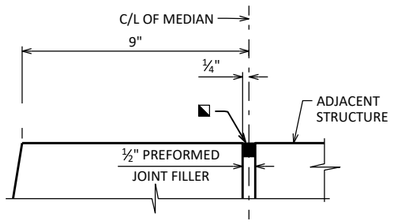
(SOUTH END SHOWN, NORTH END SIMILAR)



SECTION E-E

LOOKING NORTH - WEST EDGE OF DECK

(TYPICAL AT ENDS OF BARRIER)



BARRIER TOP DETAIL

LEGEND

* DIMENSIONS ARE GIVEN PARALLEL TO R/L IH 41 CD AT F.F. OF BARRIER.

◪ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). MATCH COLOR OF ADJACENT SURFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-612

DRAWN BY STD | PLANS CK'D CDH

SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS

SHEET 8
394

SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71

BILL OF BARS

TOTAL WEIGHT = 16,710 LBS.

	BAR MARK	NO. REQ'D STAGE 2	NO. REQ'D STAGE 3	LENGTH	BENT	BAR SERIES	LOCATION
	T801	70	70	21'-4"	X		APPROACH SLAB BOT. LONG.
	T802	1	--	21'-10"	X		SOUTH APPROACH SLAB BOT. LONG.
	T803	1	--	19'-10"	X		NORTH APPROACH SLAB BOT. LONG.
	T504	42	64	19'-6"			APPROACH SLAB TOP & MEDIAN BARRIER LONG.
	T505	1	--	20'-0"			SOUTH APPROACH SLAB TOP LONG.
	T506	1	--	19'-0"			NORTH APPROACH SLAB TOP LONG.
	T507	40	40	4'-1"	X		APPROACH SLAB TOP TRANS.
★	T508	88	--	14'-2"			SOUTH APPROACH SLAB TOP & BOT. TRANS.
★	T509	84	--	13'-11"			NORTH APPROACH SLAB TOP & BOT. TRANS.
★	T510	--	88	14'-0"			SOUTH APPROACH SLAB TOP & BOT. TRANS.
★	T511	--	84	13'-7"			NORTH APPROACH SLAB TOP & BOT. TRANS.
	T512	22	22	4'-11"	X		APPROACH SLAB HAUNCH STIRRUP
	T513	--	60	4'-6"	X		MEDIAN BARRIER VERT.
	T514	--	60	9'-1"	X		MEDIAN BARRIER VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

ALL BAR STEEL REINFORCEMENT IN THIS BILL SHALL BE EPOXY COATED.

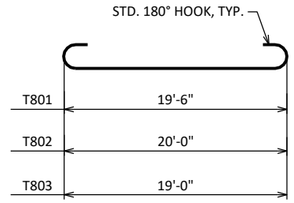
BOTH STRUCTURAL APPROACH SLABS ARE IN THE BILL OF BARS.

★ BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

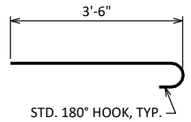
ESTIMATED QUANTITIES

CONST. STAGE	HPC MASONRY STRUCTURES	BAR STEEL REINFORCEMENT HS COATED BRIDGES
STAGE 2	65 CY	8,740 LB
STAGE 3	38 CY	8,900 LB

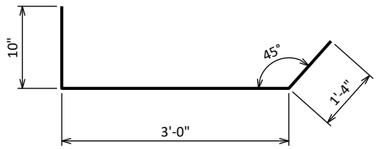
QUANTITIES INCLUDE SLOPED FACE PARAPET 'LF' (MODIFIED) BARRIER 56SS CONCRETE AND BAR STEEL REINFORCEMENT.



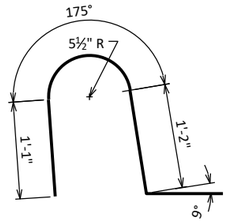
T801, T802, T803



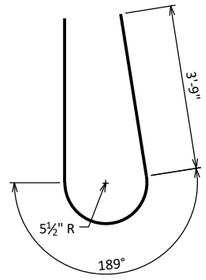
T507



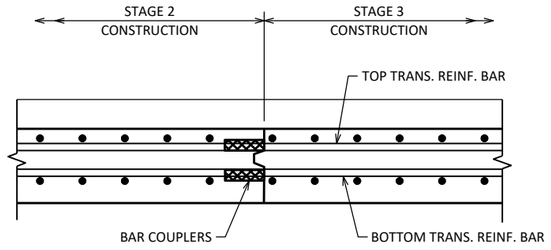
T512



T513

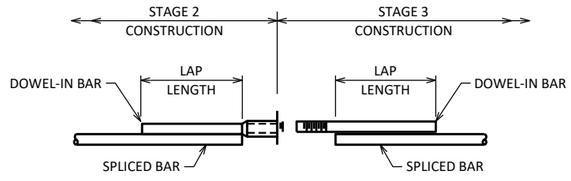


T514



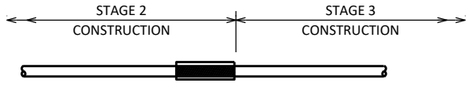
SECTION THRU APPROACH SLAB

ONE PIECE THREADED COUPLER SHOWN



DOWEL BAR COUPLER

STAGE 3 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 2



ONE-PIECE THREADED COUPLER

BAR COUPLER ALTERNATIVE

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-612

DRAWN BY STD | PLANS CK'D CDH

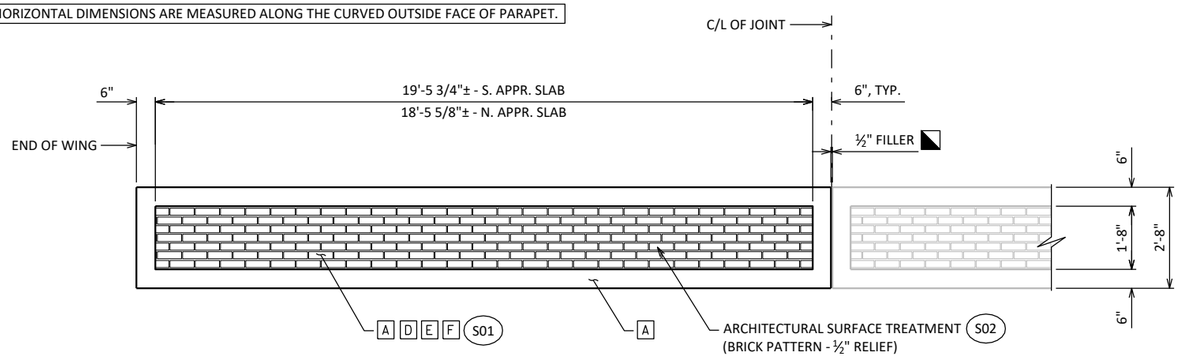
APPROACH SLAB BILL OF BARS

SHEET 9
395

SCALE = 2.00

STATE PROJECT NUMBER
1130-74-71

NOTE: HORIZONTAL DIMENSIONS ARE MEASURED ALONG THE CURVED OUTSIDE FACE OF PARAPET.



PART ELEVATION - PARAPET ON APPROACH SLAB

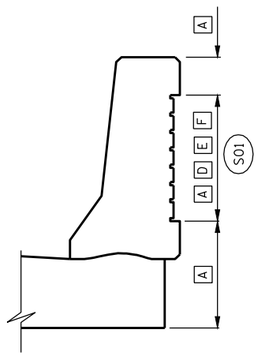
(PARAPET ON SOUTH APPROACH SLAB SHOWN, NORTH APPROACH SLAB PARAPET SIMILAR)

NOTES

THE FINAL COLOR OF THE CONCRETE FOLLOWING APPLICATION OF THE STAIN SYSTEM SHALL MATCH THE SHERWIN WILLIAMS COLOR SYSTEM. SHERWIN WILLIAMS COLOR DESIGNATION IS FOR COLOR ONLY; ALL COLORS SHALL BE A FLAT (LUSTERLESS) FINISH.

BASE COLOR BASKET BEIGE – SW 6143
ACCENT COLOR 3 ROOKWOOD TERRA COTTA – SW 2803
ACCENT COLOR 4 CAJUN RED – SW 0008
ACCENT COLOR 5 MEADOW LARK – SW 7522

BRICK SURFACES SHALL BE STAINED IN A RANDOMLY MIXED COLOR ARRANGEMENT. STAIN 70% OF THE "BRICK" SURFACE WITH ACCENT COLOR 3, 15% WITH ACCENT COLOR 4 AND 15% WITH ACCENT COLOR 5. LEAVE ALL PREVIOUSLY STAINED RECESSED "MORTAR" JOINTS AS THE BASE COLOR (BASKET BEIGE).



AT APPROACH SLAB

SLOPED FACE PARAPET LF (MODIFIED)

(EAST SIDE ONLY - LOOKING NORTH)

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION
A	BASE COLOR	BRIDGES, PARAPETS, WALLS
D	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)
E	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)
F	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)

LEGEND

S01 STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS ARE PAID FOR AS "CONCRETE STAINING MULTI-COLOR B-5-612". APPLICATION OF STAIN OUTSIDE BRICK PATTERN AREAS IS PAID FOR AS "CONCRETE STAINING B-5-612".

S02 THE COST OF BRICK PATTERN FORMLINER TREATMENT IS PAID FOR UNDER "ARCHITECTURAL SURFACE TREATMENT B-5-612", SEE SPECIAL PROVISIONS FOR DESCRIPTION OF BRICK PATTERN FORMLINER.

SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). MATCH COLOR OF ADJACENT SURFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-5-612

DRAWN BY STD | PLANS CK'D CDH

AESTHETIC DETAILS

SHEET 10
396

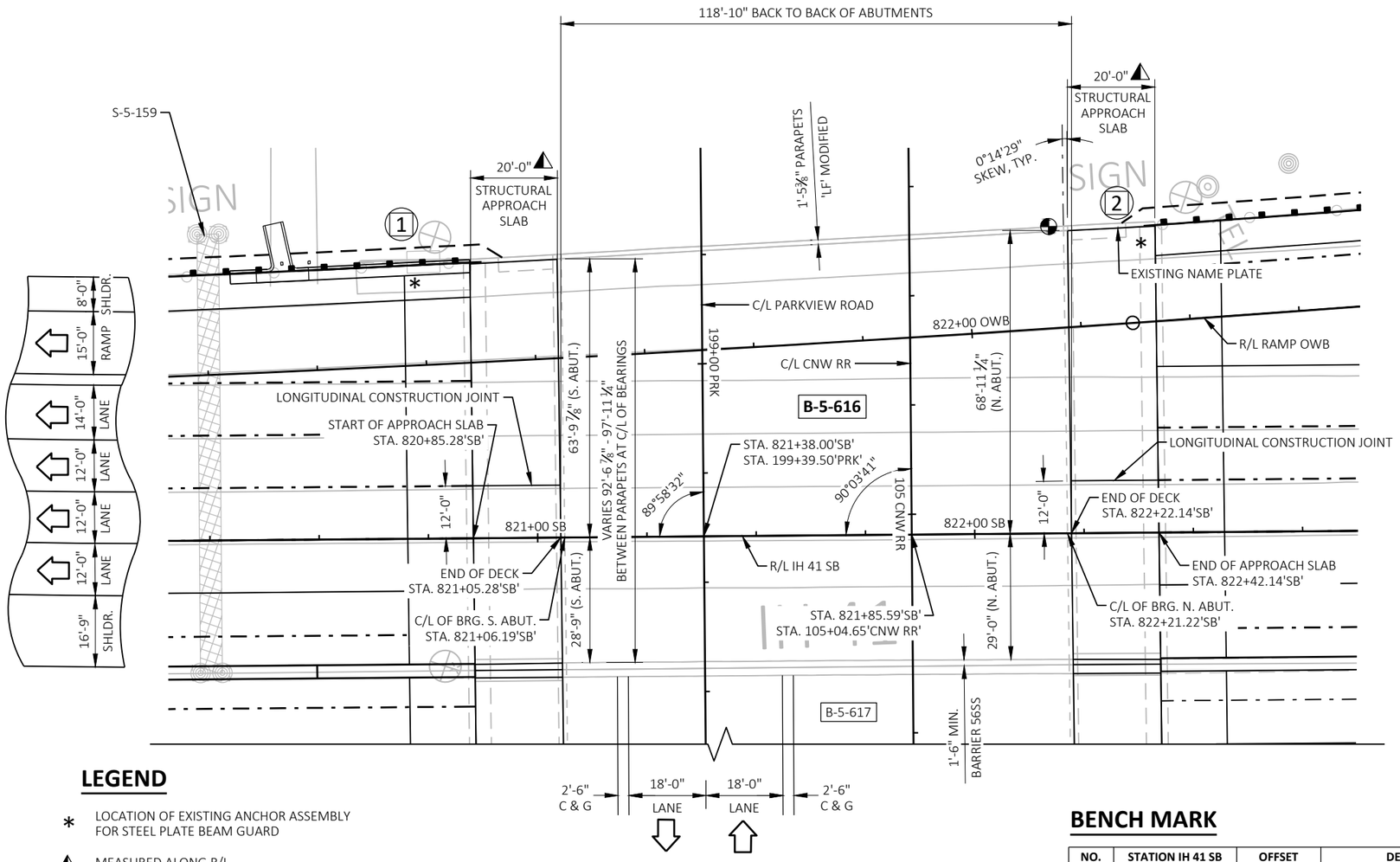
SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71



LEGEND

- * LOCATION OF EXISTING ANCHOR ASSEMBLY FOR STEEL PLATE BEAM GUARD
- ◭ MEASURED ALONG R/L
- (#) INDICATES WING NUMBER
- ◔ INDICATES BENCHMARK/CONTROL POINT

PLAN

(STRUCTURAL APPROACH SLAB AND PARAPET REPLACEMENT)

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 03/18/2025
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.43
OPERATING RATING: RF = 1.81
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

HPC MASONRY:
STRUCTURAL APPROACH SLAB — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI
STAINLESS, GRADE 60 — f_y = 60,000 PSI

TRAFFIC DATA

IH 41

ADT (2026) = 79,260
ADT (2046) = 90,500
DESIGN SPEED = 70 MPH

BENCH MARK

NO.	STATION IH 41 SB	OFFSET	DESCRIPTION	ELEV.
1006	822+21.73	70.08' LT	BM DISK	635.90

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. STRUCT. APPR. SLAB	N. STRUCT. APPR. SLAB	TOTAL
203.0220.02	REMOVING STRUCTURE B-5-616	EACH	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	205	219	424
502.3210	PIGMENTED SURFACE SEALER	SY	13	13	26
502.4207	ADHESIVE ANCHORS NO. 7 BAR	EACH	94	99	193
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	15,530	16,510	32,040
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	490	510	1,000
505.0905	BAR COUPLERS NO. 5	EACH	42	42	84
SPV.0035.01	HPC MASONRY STRUCTURES	CY	109	109	218
SPV.0165.01	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,841	1,969	3,810
	NON-BID ITEMS				
	FILLER	SIZE			1/2", 3/4", & 1 1/2"

ALL BID ITEMS SHOWN ARE CATEGORY 0030

SCOPE OF WORK

- REPLACEMENT OF STRUCTURAL APPROACH SLABS AND APPROACH SLAB PAPAPETS

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, PROFILE & CROSS SECTION
3. STRUCTURAL APPROACH SLAB REMOVAL LIMITS
4. CONSTRUCTION STAGING (1 OF 2)
5. CONSTRUCTION STAGING (2 OF 2)
6. SOUTH APPROACH SLAB DETAILS
7. NORTH APPROACH SLAB DETAILS
8. APPROACH SLAB DETAILS
9. SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
SHELLY HARRIS (715) 309-5224

WISCONSIN
SHELLY K. HARRIS
E-100266-6
MONDOVI, WI
PROFESSIONAL ENGINEER

May 30, 2025

NO.	DATE	REVISION	BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-5-616

IH 41 SB OVER PARKVIEW ROAD & CNW RR

COUNTY	VILLAGE
BROWN	ASHWAUBENON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JBN	SKH	STD	SKH

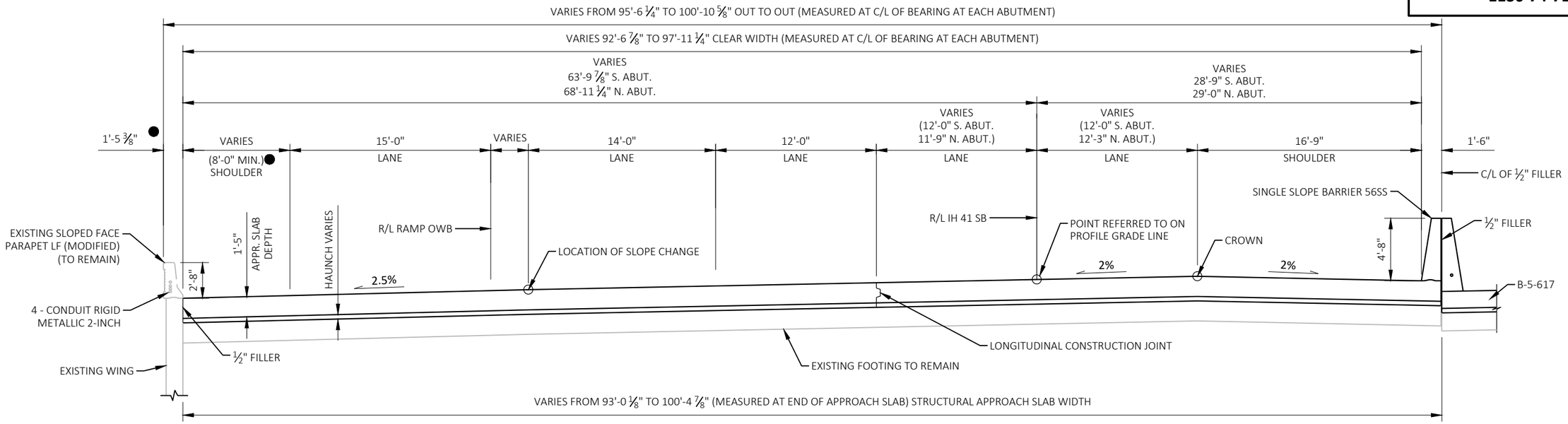
GENERAL PLAN

SHEET 1 OF 9
397

I.D. DATE:

STATE PROJECT NUMBER

1130-74-71



CROSS SECTION AT STRUCTURAL APPROACH SLAB

(LOOKING NORTH)

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT, UNLESS SPECIFIED OTHERWISE.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE PRESENT AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE EXISTING STRUCTURE, B-5-616, IS A SINGLE SPAN PRESTRESSED GIRDER BRIDGE WITH A CLEAR WIDTH THAT VARIES FROM 92'-6 ⅞" TO 97'-11 ¼". THE NORTH AND SOUTH STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED WITH THE PROPOSED STRUCTURAL APPROACH SLABS.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP SURFACE OF THE NEW STRUCTURAL APPROACH SLAB.

PARAPETS ON TOP OF EXISTING STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF THE NEW CONCRETE PARAPETS.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING STAINLESS STEEL REINFORCING BARS CONNECTING THE ABUTMENT DIAPHRAGM TO THE STRUCTURAL APPROACH SLAB.

SEE ROADWAY PLANS AND QUANTITIES FOR BASE AGGREGATE DENSE REQUIRED UNDER APPROACH SLAB.

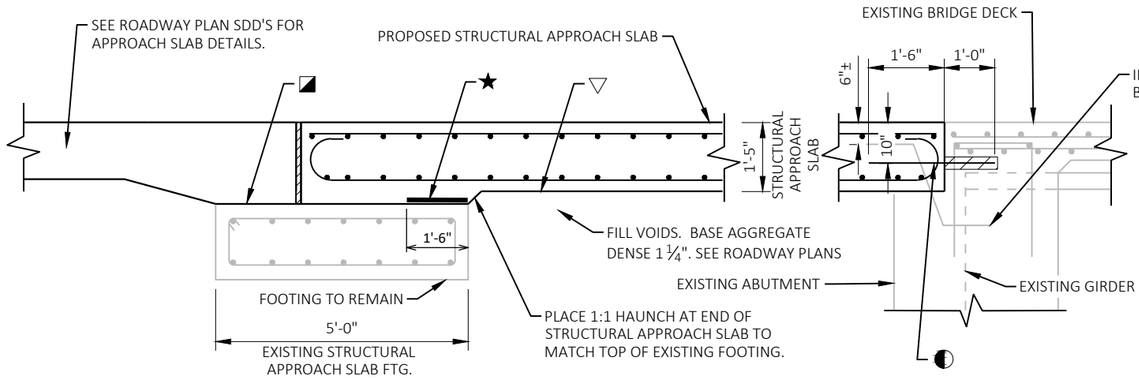
THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE STRUCTURAL APPROACH SLAB SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE B-5-616".

ALL STATIONS ARE BASED ON PROPOSED ALIGNMENT.

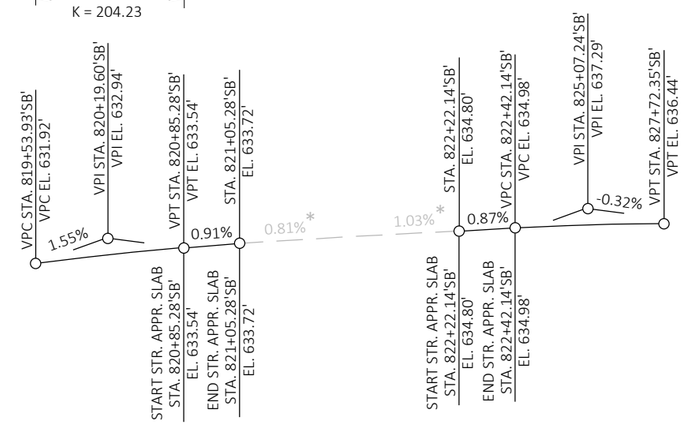
COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD 83 (2011). ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

LEGEND

- ◪ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- ▽ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- ☆ ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7.
- ● DIMENSION MEASURED PARALLEL TO WEST EDGE OF DECK.
- ◑ #7 @ 1'-0". EMBEDDED 1'-0", PROPOSED BAR TO CONNECT APPROACH SLAB AND ABUTMENT. (LOCATED ALONG THE FULL WIDTH OF REPLACEMENT)
- * EXISTING PROFILE ON CURRENT BRIDGE DECK.



LONGITUDINAL SECTION OF STRUCTURAL APPROACH SLAB



PROFILE GRADE LINE IH 41 SB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-616

DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES, PROFILE & CROSS SECTION

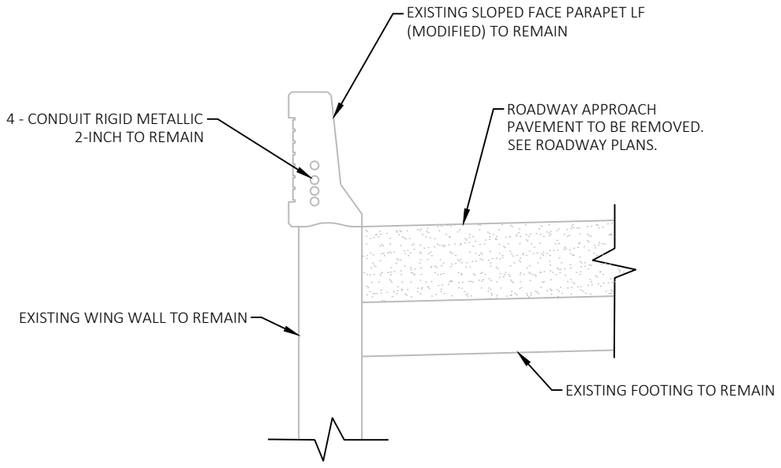
SHEET 2

8

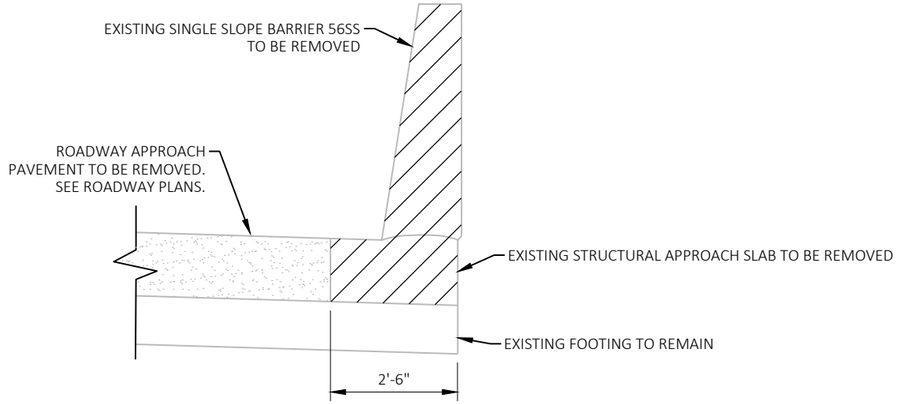
8

STATE PROJECT NUMBER

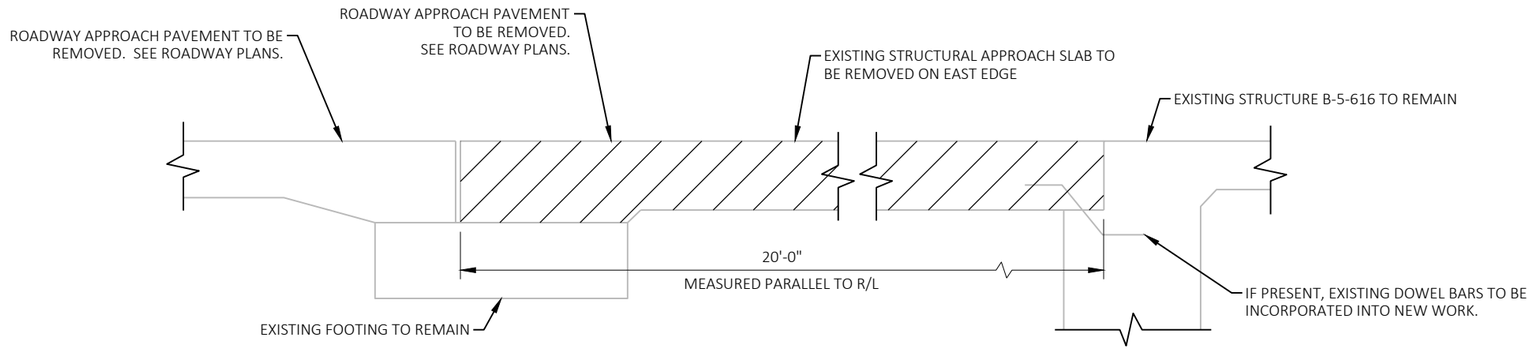
1130-74-71



REMOVAL LIMITS AT WEST EDGE OF SLAB



REMOVAL LIMITS OF EXISTING STRUCTURAL APPROACH SLAB AT EAST EDGE OF STRUCTURE



LONGITUDINAL REMOVAL LIMITS DETAIL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-616

DRAWN BY STD | PLANS CK'D SKH

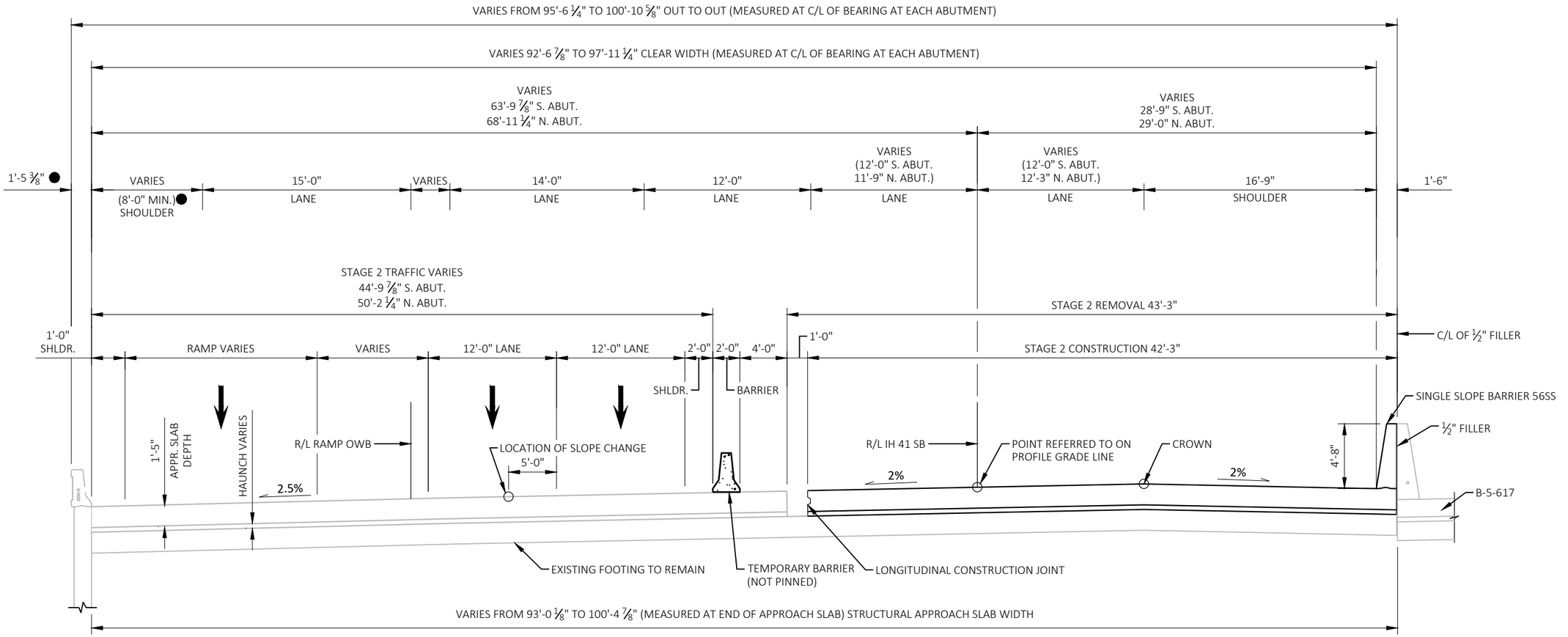
STRUCTURAL APPROACH SLAB REMOVAL LIMITS

SHEET 3

399

STATE PROJECT NUMBER

1130-74-71



STAGE 2

(LOOKING NORTH)

NOTE:

STAGE 1 & 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS, SEE ROADWAY PLANS FOR DETAILS.

LEGEND

● DIMENSION MEASURED PARALLEL TO WEST EDGE OF DECK

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-616

DRAWN BY STD | PLANS CK'D SKH

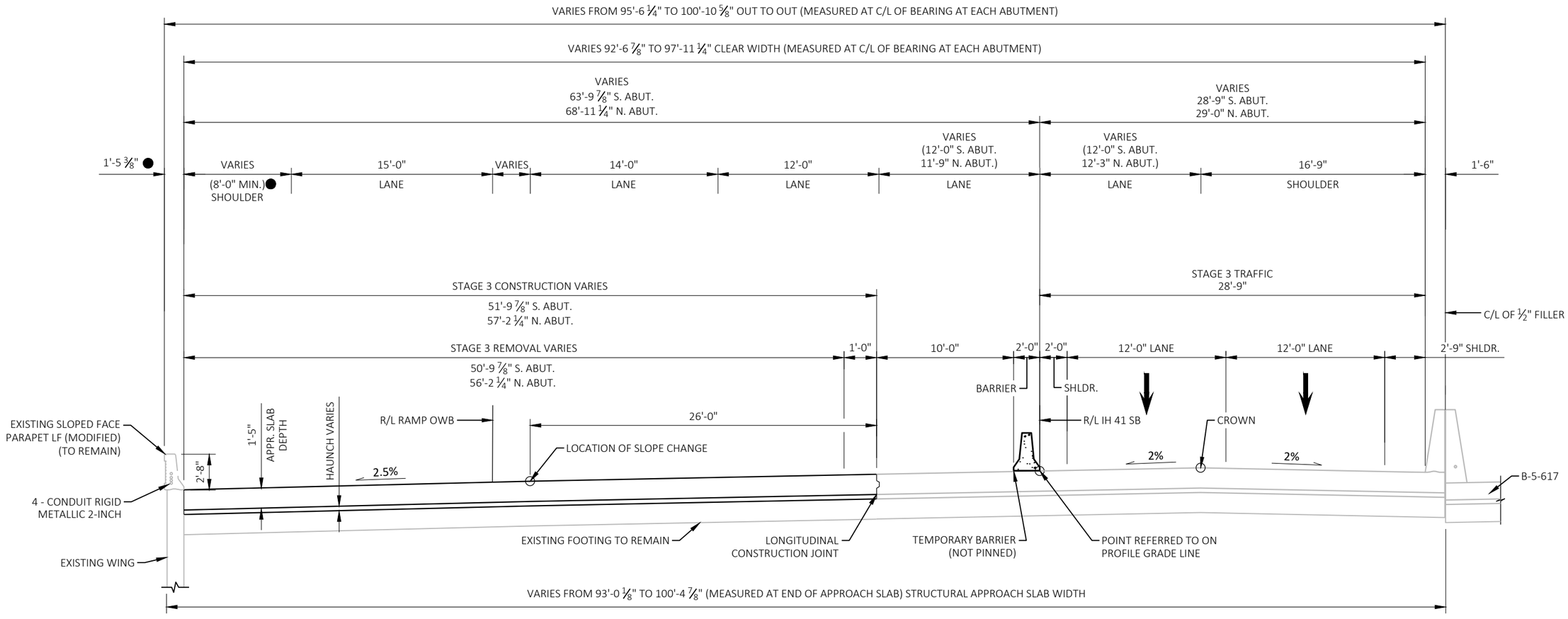
CONSTRUCTION STAGING (1 OF 2)

SHEET 4
400

8

8

STATE PROJECT NUMBER
1130-74-71



STAGE 3

(LOOKING NORTH)

NOTE:

STAGE 1 & 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS, SEE ROADWAY PLANS FOR DETAILS.

LEGEND

● DIMENSION MEASURED PARALLEL TO WEST EDGE OF DECK

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-616

DRAWN BY STD | PLANS CK'D SKH

CONSTRUCTION STAGING (2 OF 2)

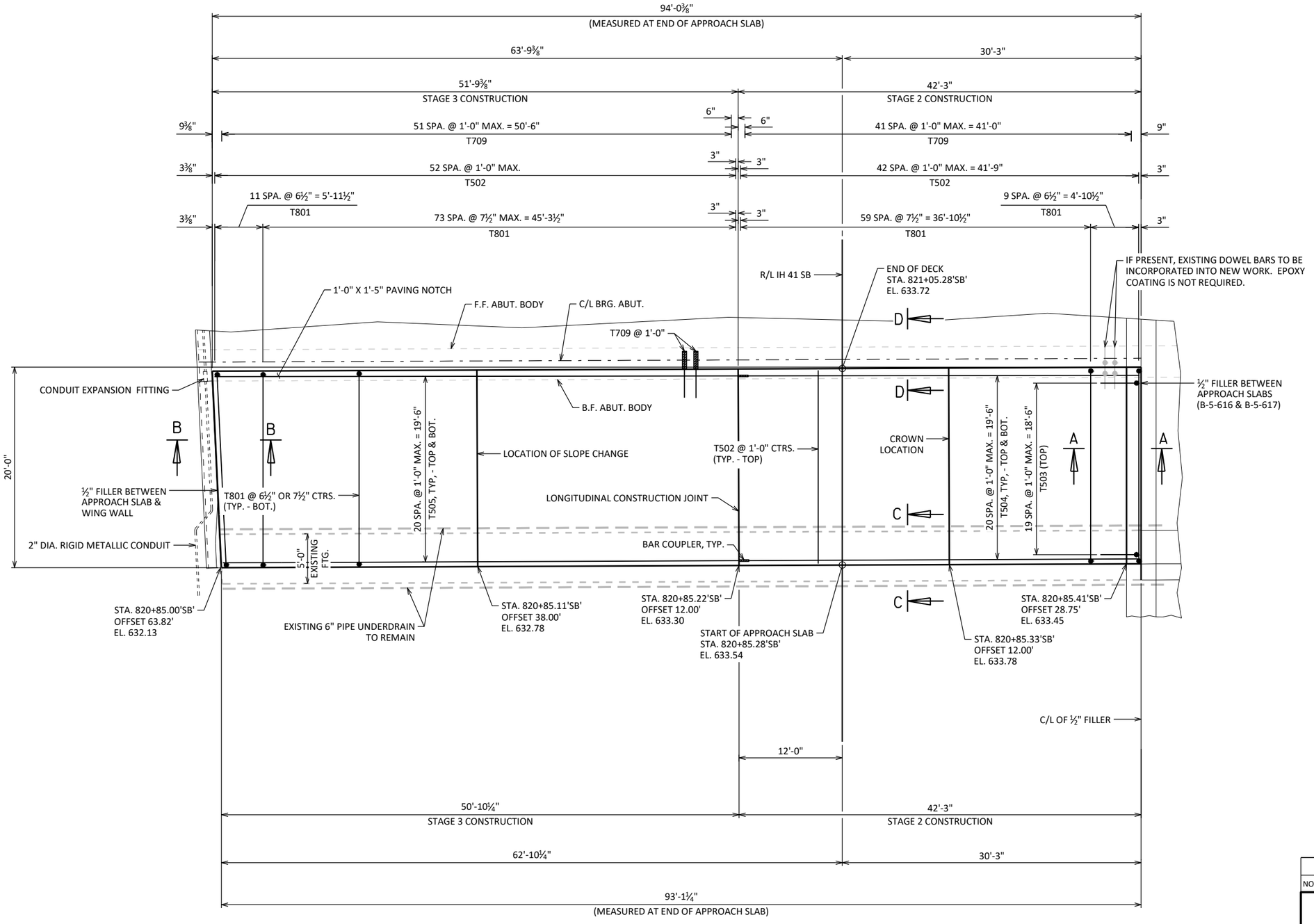
SHEET 5
401

8

8

STATE PROJECT NUMBER

1130-74-71



SOUTH APPROACH SLAB PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-616

DRAWN BY STD | PLANS CK'D SKH

SOUTH APPROACH SLAB DETAILS

SHEET 6
402

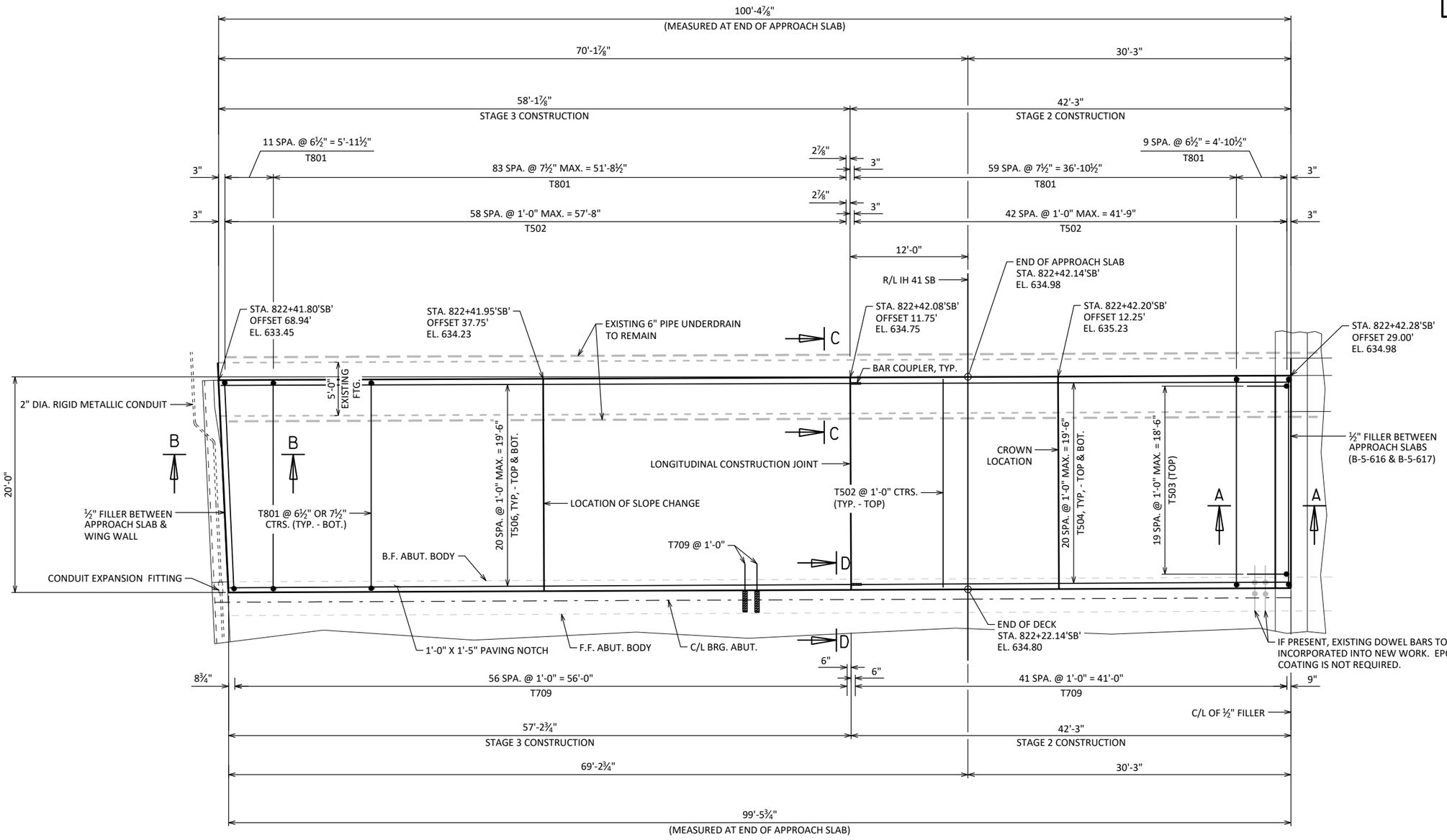
SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71



NORTH APPROACH SLAB PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-616

DRAWN BY STD | PLANS CK'D SKH

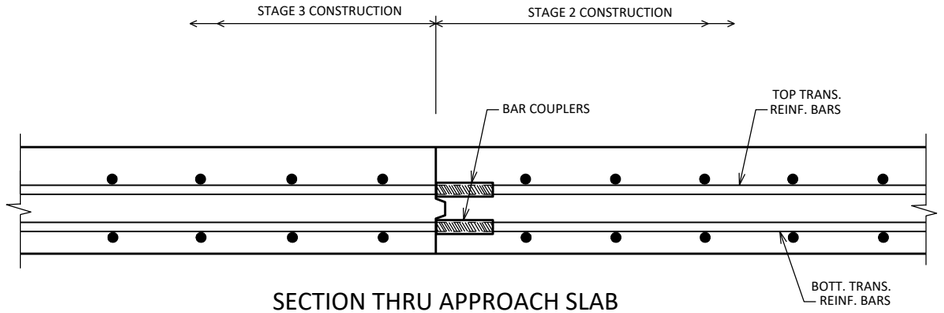
NORTH APPROACH SLAB DETAILS

SHEET 7
403

SCALE = 2.00

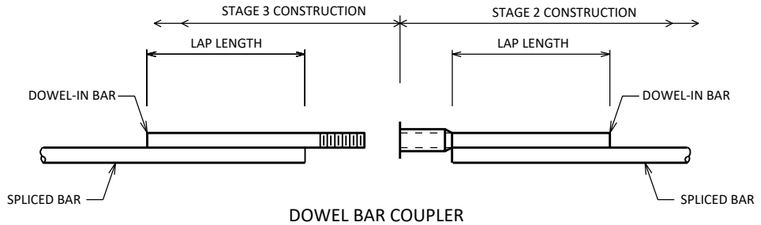
STATE PROJECT NUMBER

1130-74-71



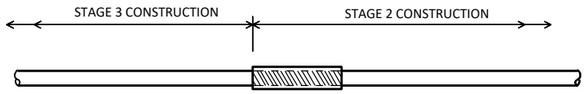
SECTION THRU APPROACH SLAB

ONE-PIECE THREADED COUPLER SHOWN



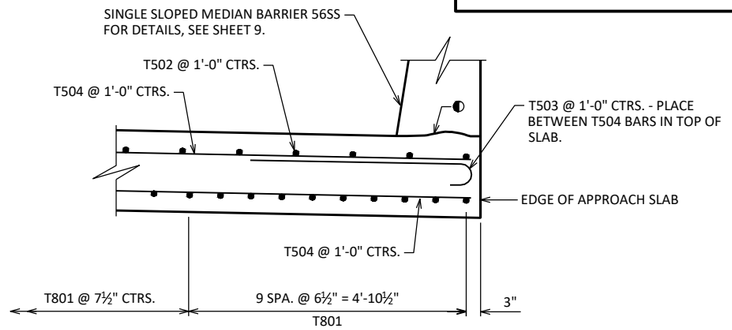
DOWEL BAR COUPLER

STAGE 3 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 2

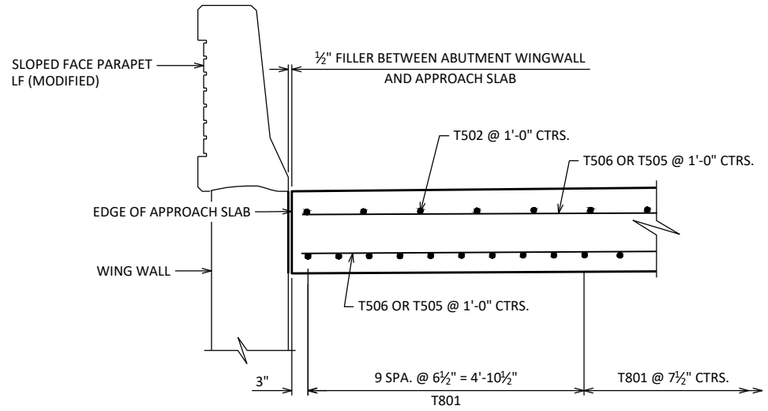


ONE-PIECE THREADED COUPLER

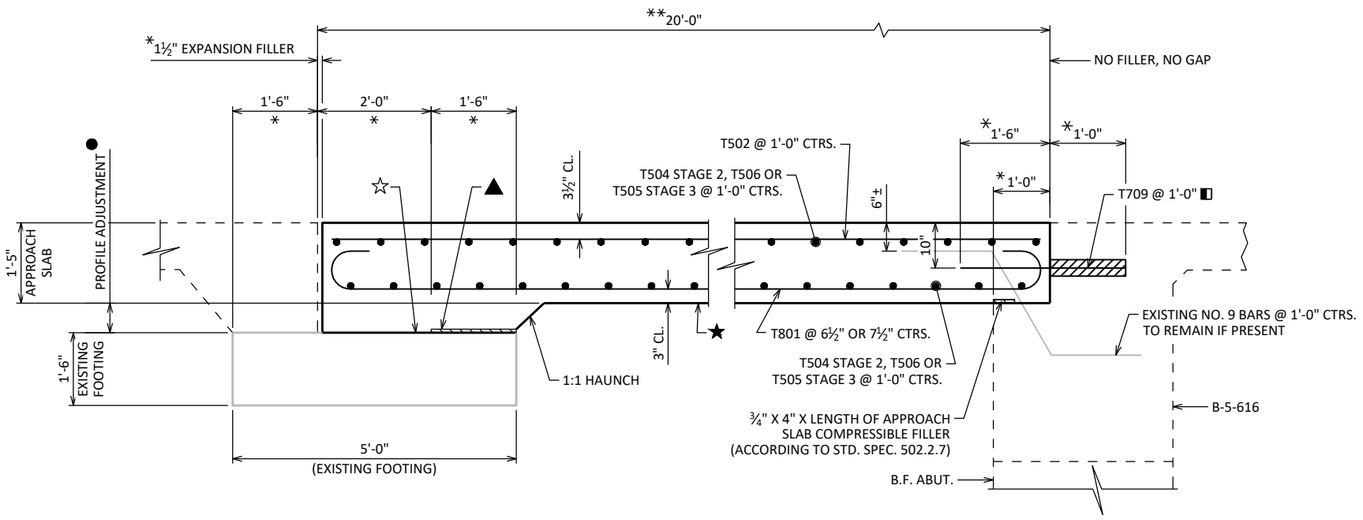
BAR COUPLER ALTERNATIVES



SECTION A-A



SECTION B-B



SECTION C-C

SECTION D-D

LONGITUDINAL SECTION AT APPROACH SLAB

(SECTION SHOWN AT SOUTH APPROACH SLAB, NORTH APPROACH SLAB SIMILAR)

NOTES

BARS STEEL REINFORCEMENT FOR THE APPROACH SLABS AND THE SINGLE SLOPE CONCRETE BARRIER 56SS LOCATED ON THE EAST SIDE OF THE APPROACH SLAB AND THE EAST SIDE OF THE DECK FOR B-5-616 IS INCLUDED IN THE BILL OF BARS ON SHEET 9.

FOR DOWEL BAR COUPLERS, ALL DOWEL BARS SHALL BE LAPPED AND TIED TO THE REINFORCEMENT BARS.

BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

LEGEND

- ⁎ DIMENSIONS ARE GIVEN NORMAL C/L SUBSTRUCTURE.
- ⁎⁎ DIMENSION ARE GIVEN ALONG R/L IH 41 SB.
- ☆ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF FOOTING. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ▲ ¾" X 1'-6" X LENGTH OF FOOTING COMPRESSIBLE FILLER ACCORDING TO STD. SPEC. 502.2.7.
- ◐ CONST. JT. - STRIKE OFF AS SHOWN.
- ◧ ADHESIVE ANCHORS NO. 7 BAR. EMBED 1'-0" IN CONCRETE. ANCHORS SHALL BE APPROVED FOR USE IN CRACKED CONCRETE.
- ● QUANTITY CALCULATED ASSUMING A 3" AVERAGE HAUNCH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-616

DRAWN BY STD | PLANS CK'D SKH

APPRAOCH SLAB DETAILS

SHEET 8
404

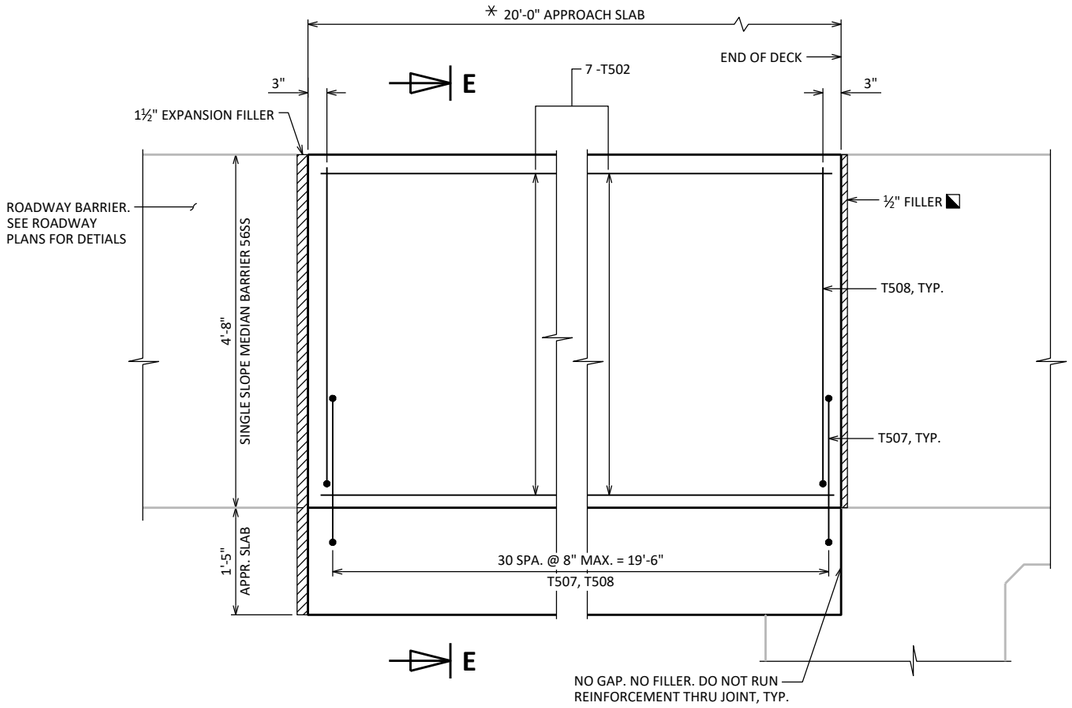
SCALE = 2.00

8

8

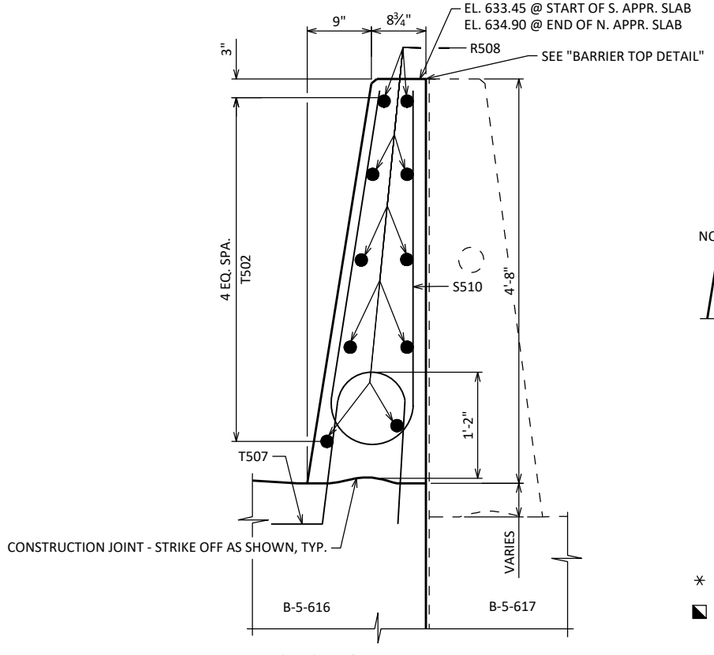
STATE PROJECT NUMBER

1130-74-71



PART ELEVATION

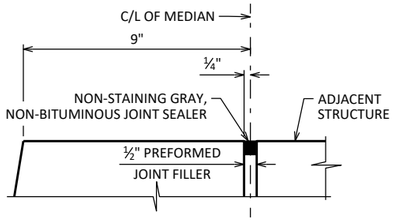
(SOUTH END SHOWN, NORTH END SIMILAR)



SECTION E-E

(TYPICAL AT ENDS OF BARRIER)

LOOKING NORTH - EAST EDGE OF DECK



BARRIER TOP DETAIL

LEGEND

⁎ DIMENSIONS ARE GIVEN PARALLEL TO R/L IH 41 SB.

◪ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

TOTAL COATED = 32,040 LBS.

TOTAL STAINLESS = 1,000 LBS.

BILL OF BARS

	BAR MARK	NO. REQ'D STAGE 2	NO. REQ'D STAGE 3	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
	T801	138	180	21'-4"	X		X		APPROACH SLAB - BOTTOM
	T502	106	112	19'-6"	X				APPROACH SLAB & MEDIAN BARRIER - TOP - LONGIT.
	T503	40	---	4'-1"	X		X		APPROACH SLAB - TOP - TRANS.
★	T504	84	---	42'-0"	X				APPROACH SLAB - TOP & BOTTOM TRANS.
◭ ★	T505	---	42	51'-1"	X			X	SOUTH APPROACH SLAB - TOP & BOTTOM TRANS.
◭ ★	T506	---	42	57'-6"	X			X	NORTH APPROACH SLAB - TOP & BOTTOM TRANS.
	T507	62	---	4'-6"	X		X		MEDIAN BARRIER - APPR. SLAB - VERT.
	T508	62	---	9'-1"	X		X		MEDIAN BARRIER - APPR. SLAB - VERT.
	T709	84	109	2'-6"		X			APPROACH SLAB & DECK CONNECTION

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

BOTH STRUCTURAL APPROACH SLABS ARE INCLUDED IN THE BILL OF BARS.

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

★ BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

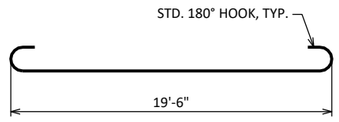
ESTIMATED QUANTITIES

CONST. STAGE	HPC MASONRY STRUCTURES	BAR STEEL REINFORCEMENT HS COATED BRIDGES
STAGE 2	99 CY	14,750 LB
STAGE 3	118 CY	17,290 LB

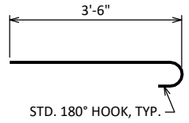
BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
T506	2 SERIES OF 21	57'-0" TO 57'-11"
T505	2 SERIES OF 21	50'-7" TO 51'-6"

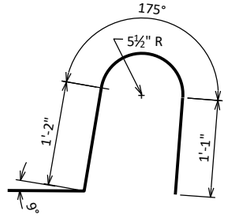
BUNDLE AND TAG EACH SERIES SEPARATELY



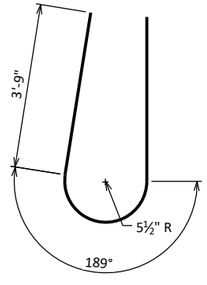
T801



T503



T507



T508

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-616

DRAWN BY STD | PLANS CK'D SKH

SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS

SHEET 9

405

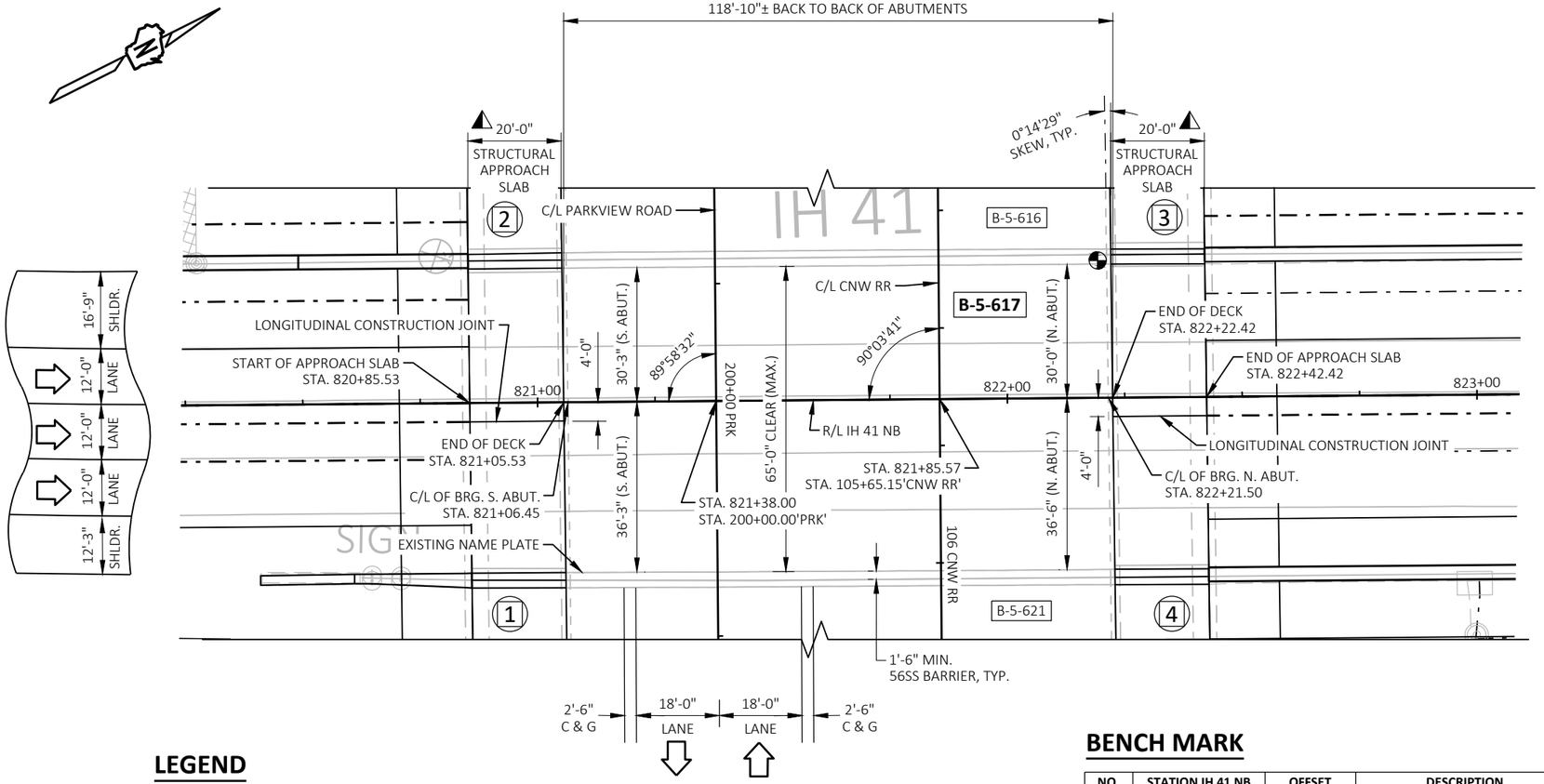
SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71



PLAN

(STRUCTURAL APPROACH SLAB AND PARAPET REPLACEMENT)

LEGEND

- (#) INDICATES WING/CORNER NUMBER
- MEASURED ALONG R/L
- INDICATES BENCHMARK/CONTROL POINT

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 11/21/2023
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.44
OPERATING RATING: RF = 1.87
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

HPC MASONRY:
STRUCTURAL APPROACH SLAB — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI
STAINLESS GRADE 60 — f_y = 60,000 PSI

TRAFFIC DATA

IH 41

ADT (2026) = 79,260
ADT (2046) = 90,500
DESIGN SPEED = 70 MPH

BENCH MARK

NO.	STATION IH 41 NB	OFFSET	DESCRIPTION	ELEV.
1008	822+22.12	29.431' LT	BM DISK	639.40

SCOPE OF WORK

- REPLACEMENT OF STRUCTURAL APPROACH SLAB AND APPROACH SLAB PARAPETS

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. STRUCT. APPR. SLAB	N. STRUCT. APPR. SLAB	TOTAL
203.0220.03	REMOVING STRUCTURE B-5-617	EACH	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	145	145	290
502.3210	PIGMENTED SURFACE SEALER	SY	27	27	54
502.4207	ADHESIVE ANCHORS NO. 7 BAR	EACH	68	68	136
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	12,335	12,335	24,670
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	350	350	700
505.0905	BAR COUPLERS NO. 5	EACH	42	42	84
652.0135	CONDUIT RIGID METALLIC 3-INCH	LF	20	20	40
SPV.0035.01	HPC MASONRY STRUCTURES	CY	82	82	164
SPV.0165.01	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,300	1,300	2,600
	NON-BID ITEMS				
	FILLER	SIZE			1/2", 3/4", & 1 1/2"

ALL BID ITEMS SHOWN ARE CATEGORY 0040

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, PROFILE & CROSS SECTION
3. STRUCTURAL APPROACH SLAB REMOVAL LIMITS
4. CONSTRUCTION STAGING
5. APPROACH SLAB DETAILS
6. SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS (1 OF 2)
7. SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS (2 OF 2)

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
SHELLY HARRIS (715) 309-5224

WISCONSIN
SHELLY K. HARRIS
E-100266-6
MONDOVI, WI
PROFESSIONAL ENGINEER

May 30, 2025

NO.	DATE	REVISION	BY

KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-5-617

IH 41 NB OVER PARKVIEW ROAD & CNW RR

COUNTY	VILLAGE
BROWN	ASHWAUBENON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JBN	SKH	STD	SKH

GENERAL PLAN

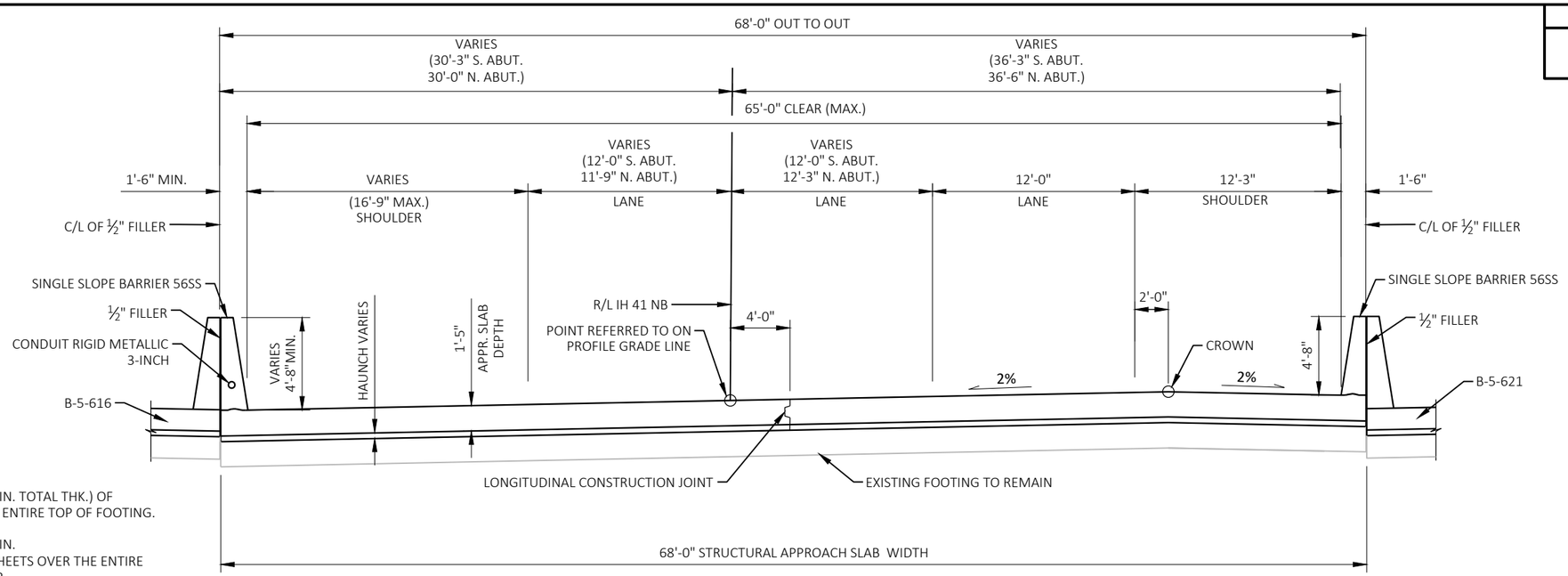
SHEET 1 OF 7
406

I.D. DATE:

8

8

STATE PROJECT NUMBER
1130-74-71



CROSS SECTION AT STRUCTURAL APPROACH SLAB

(LOOKING NORTH)

LEGEND

- ◪ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- ▽ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- ★ ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7.
- ◐ #7 @ 1'-0". EMBEDDED 1'-0" PROPOSED BAR TO CONNECT APPROACH SLAB AND ABUTMENT. (LOCATED ALONG FULL WIDTH OF REPLACEMENT)
- * EXISTING PROFILE ON CURRENT BRIDGE DECK.

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT, UNLESS SPECIFIED OTHERWISE.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE PRESENT AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE EXISTING STRUCTURE, B-5-617, IS A SINGLE SPAN PRESTRESSED GIRDER BRIDGE WITH A MAXIMUM CLEAR WIDTH OF 65'-0". THE NORTH AND SOUTH STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED WITH THE PROPOSED STRUCTURAL APPROACH SLABS.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP SURFACE OF THE NEW STRUCTURAL APPROACH SLAB.

PARAPETS ON TOP OF EXISTING STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF THE NEW CONCRETE PARAPETS.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING STAINLESS STEEL REINFORCING BARS CONNECTING THE ABUTMENT DIAPHRAGM TO THE STRUCTURAL APPROACH SLAB.

SEE ROADWAY PLANS AND QUANTITIES FOR BASE AGGREGATE DENSE REQUIRED UNDER APPROACH SLAB.

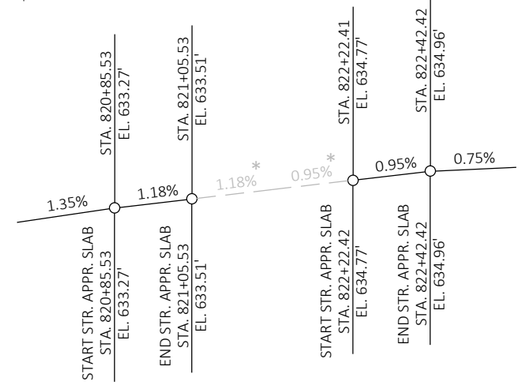
THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE STRUCTURAL APPROACH SLAB SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE B-5-617".

ALL STATIONS ARE BASED ON PROPOSED ALIGNMENT.

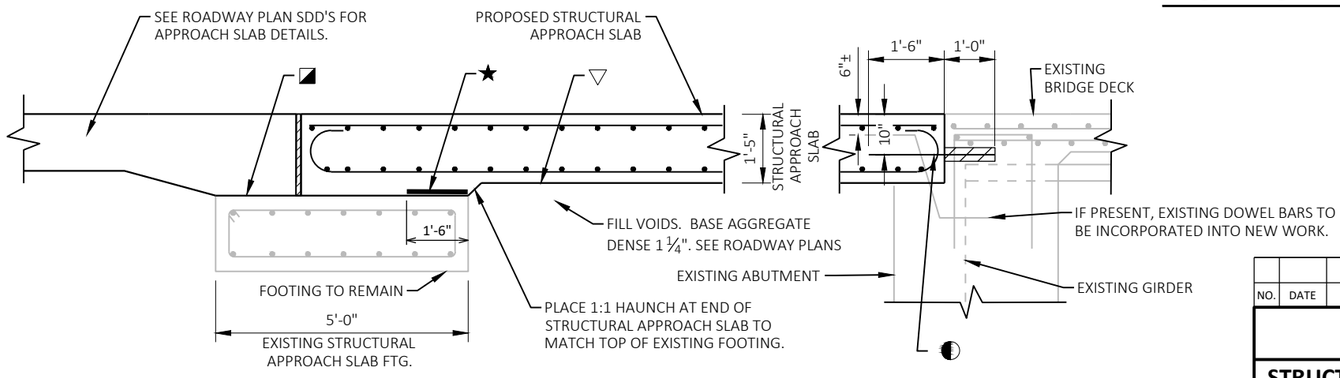
REMOVAL OF CONDUIT TO BE INCLUDED IN BID ITEM "REMOVING STRUCTURE B-5-617".

ANY DAMAGED WIRING OR CONDUIT, INCLUDING WITHIN THE APPROACH SLAB REPAIR LIMITS, SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD 83 (2011). ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).



PROFILE GRADE LINE IH 41 NB



LONGITUDINAL SECTION OF STRUCTURAL APPROACH SLAB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-617

DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES, PROFILE & CROSS SECTION

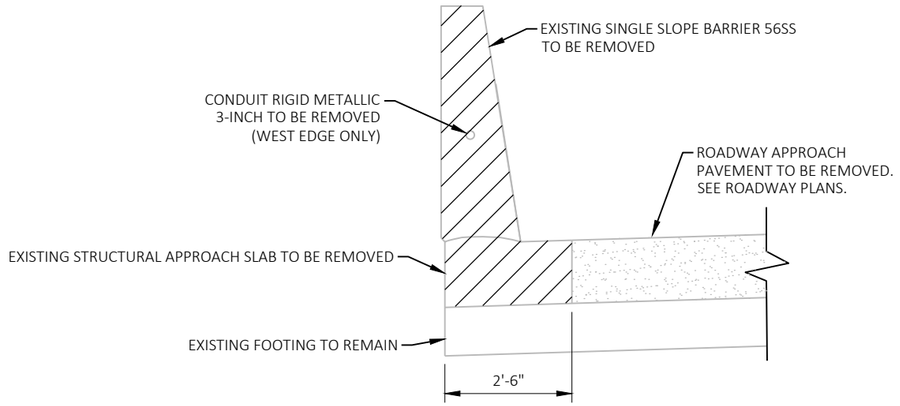
SHEET 2
407

8

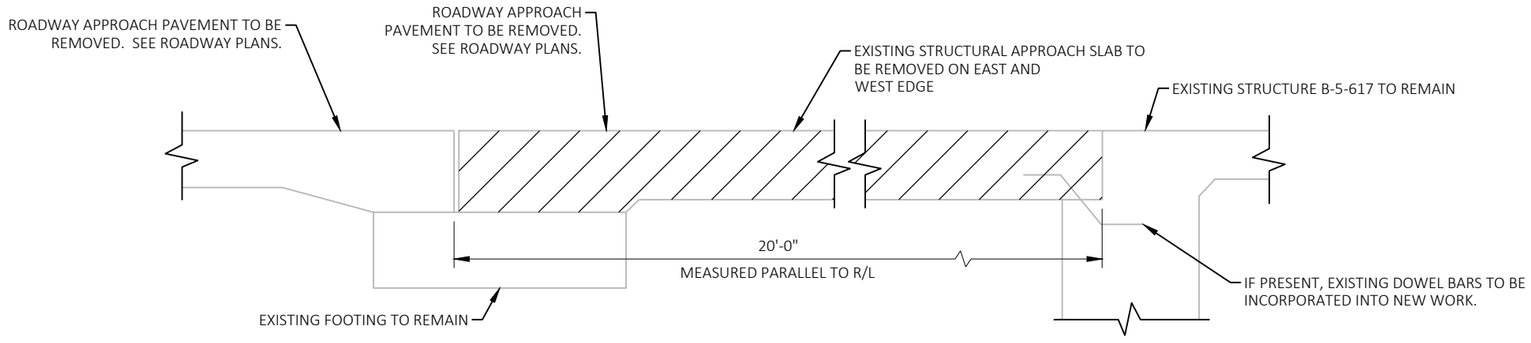
8

STATE PROJECT NUMBER

1130-74-71



REMOVAL LIMITS OF EXISTING STRUCTURAL APPROACH SLAB AT EAST AND WEST EDGE OF STRUCTURE



LONGITUDINAL REMOVAL LIMITS DETAIL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-617

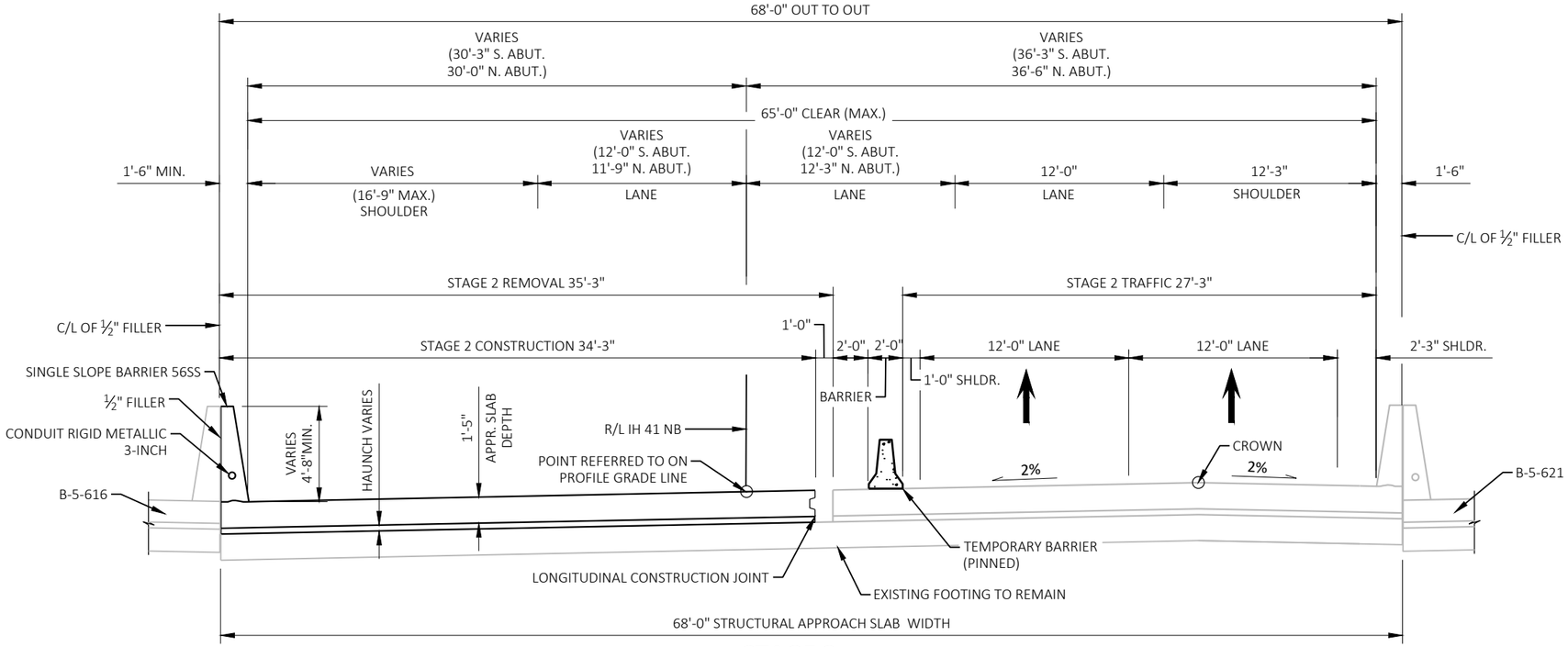
DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB REMOVAL LIMITS

SHEET 3
408

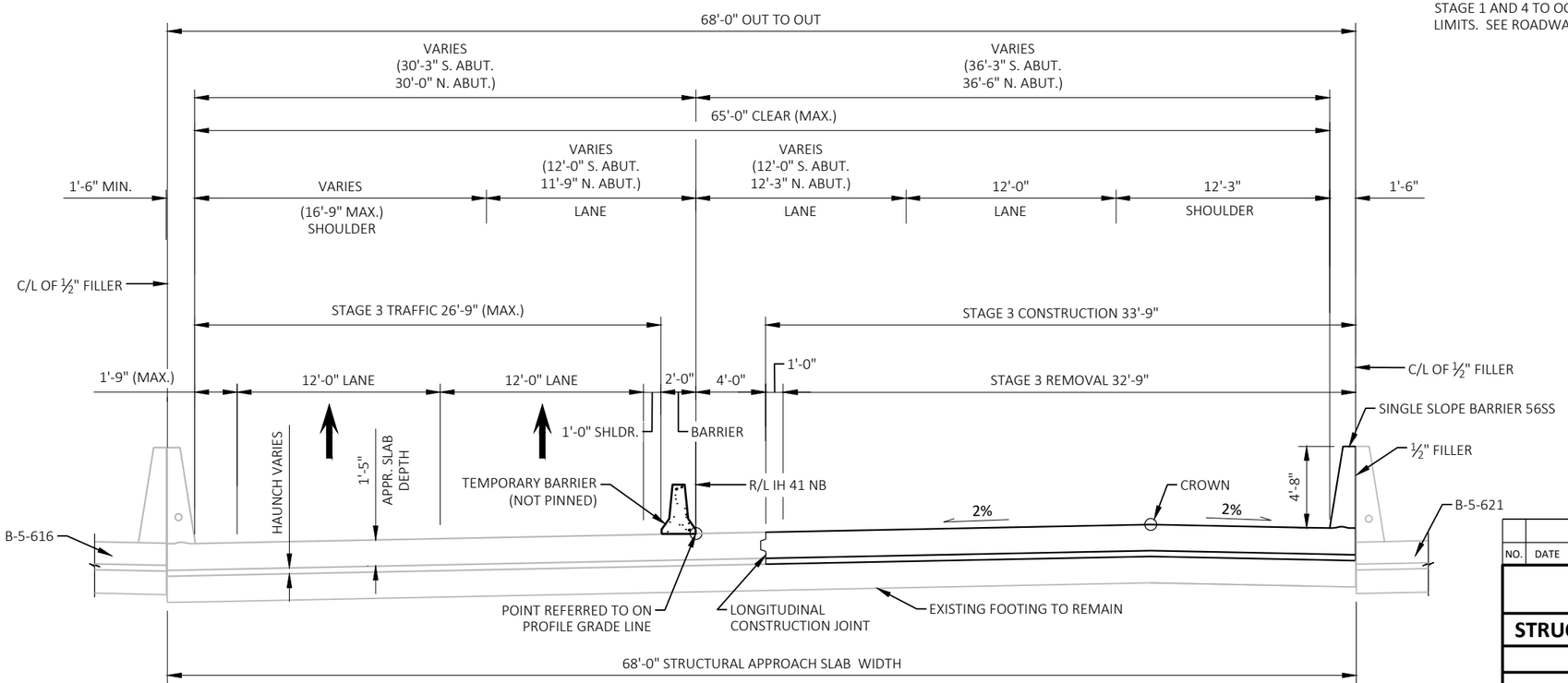
STATE PROJECT NUMBER

1130-74-71



STAGE 2

(LOOKING NORTH)



STAGE 3

(LOOKING NORTH)

NOTE:

STAGE 1 AND 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS. SEE ROADWAY PLANS FOR DETAILS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-617

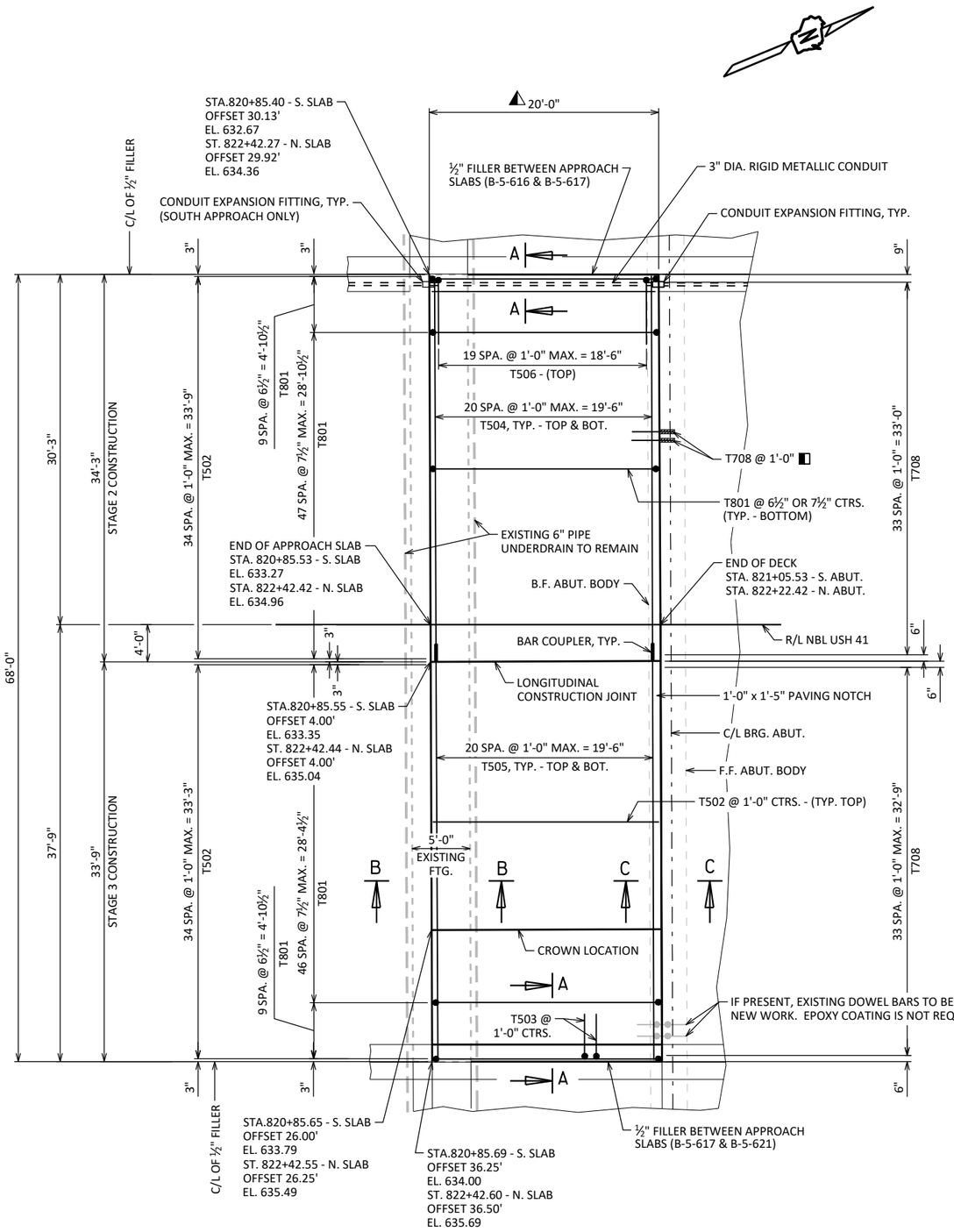
DRAWN BY STD | PLANS CK'D SKH

CONSTRUCTION STAGING

SHEET 4

STATE PROJECT NUMBER

1130-74-71

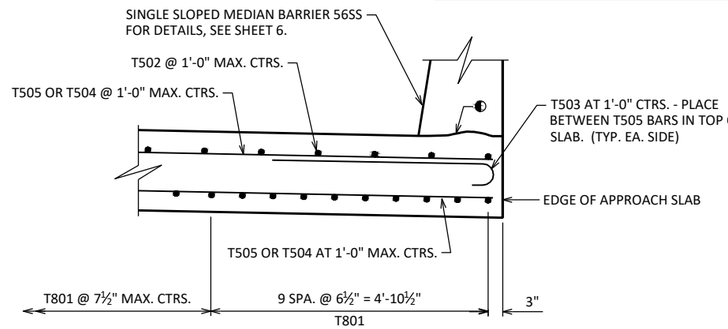


APPROACH SLAB PLAN

(SOUTH APPROACH SLAB SHOWN , NORTH APPROACH SLAB SIMILAR UNLESS NOTED OTHERWISE)

LEGEND

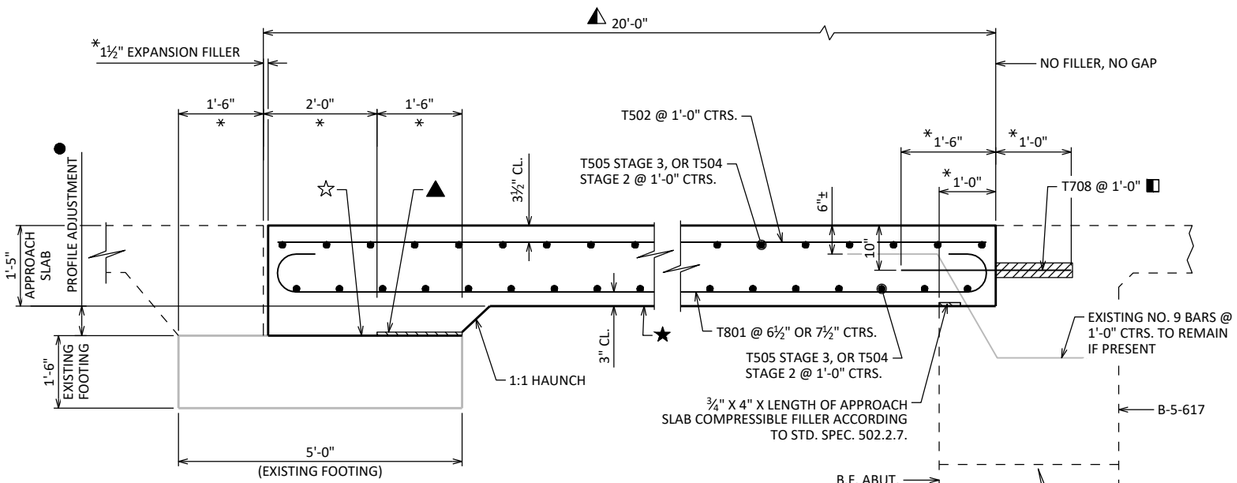
- ⁎ DIMENSIONS ARE GIVEN NORMAL C/L SUBSTRUCTURE.
- ◭ DIMENSION ARE GIVEN ALONG R/L IH 41 NB.
- ☆ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF FOOTING. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ▲ ¾" X 1'-6" X LENGTH OF FOOTING COMPRESSIBLE FILLER. ACCORDING TO STD. SPEC. 502.2.7.
- ◐ CONST. JT. - STRIKE OFF AS SHOWN.
- ◧ ADHESIVE ANCHORS NO. 7 BAR. EMBED 1'-0" IN CONCRETE. ANCHORS SHALL BE APPROVED FOR USE IN CRACKED CONCRETE.
- ● QUANTITY CALCULATED ASSUMING A 3" AVERAGE HAUNCH.



SECTION A-A

NOTES:

BARS STEEL REINFORCEMENT FOR THE APPROACH SLABS AND THE SINGLE SLOPE CONCRETE BARRIER 56SS LOCATED ON EACH SIDE OF THE APPROACH SLAB AND ON EACH SIDE OF THE DECK FOR N-5-617 IS INCLUDED IN THE BILL OF BARS ON SHEET 6.



SECTION B-B

SECTION C-C

LONGITUDINAL SECTION AT APPROACH SLAB

(SECTION SHOWN AT SOUTH APPROACH SLAB, NORTH APPROACH SLAB SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-617

DRAWN BY STD | PLANS CK'D SKH

APPROACH SLAB DETAILS

SHEET 5
410

SCALE = 2.00

8

8

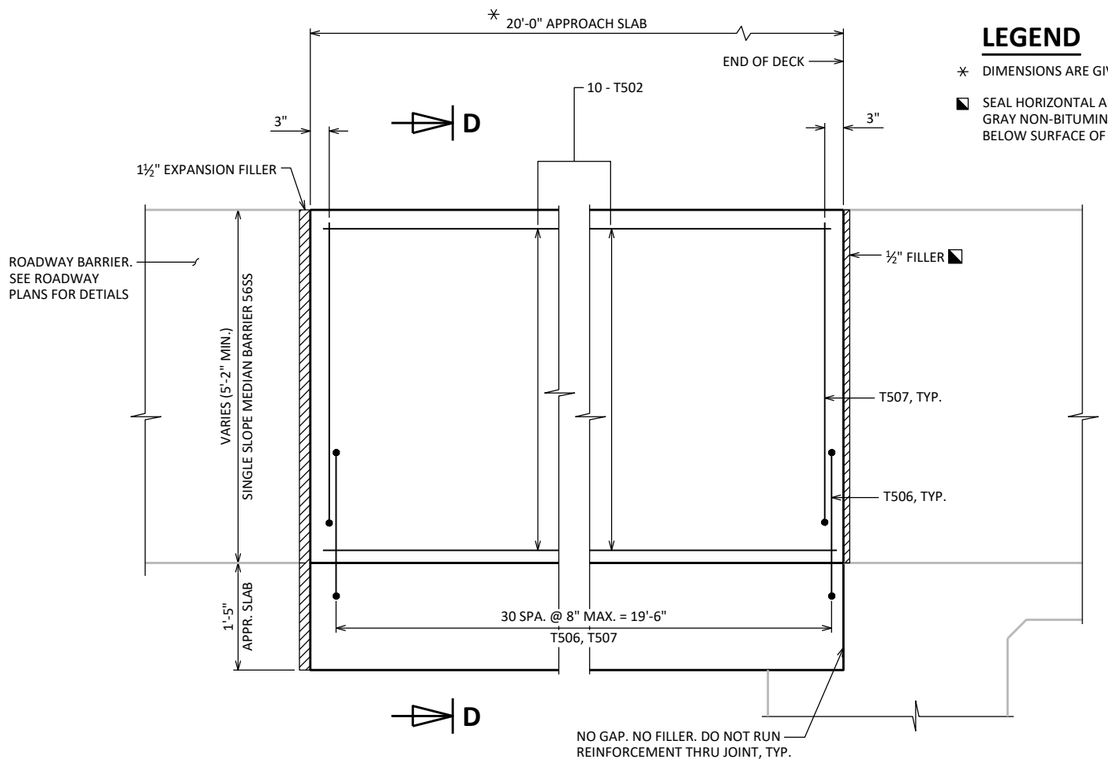
STATE PROJECT NUMBER

1130-74-71

LEGEND

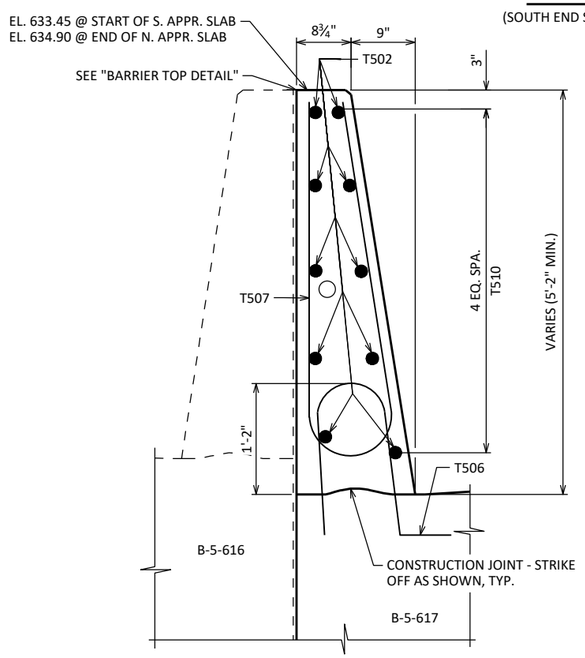
⁎ DIMENSIONS ARE GIVEN PARALLEL TO R/L IH 41 NB.

◪ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).



PART ELEVATION

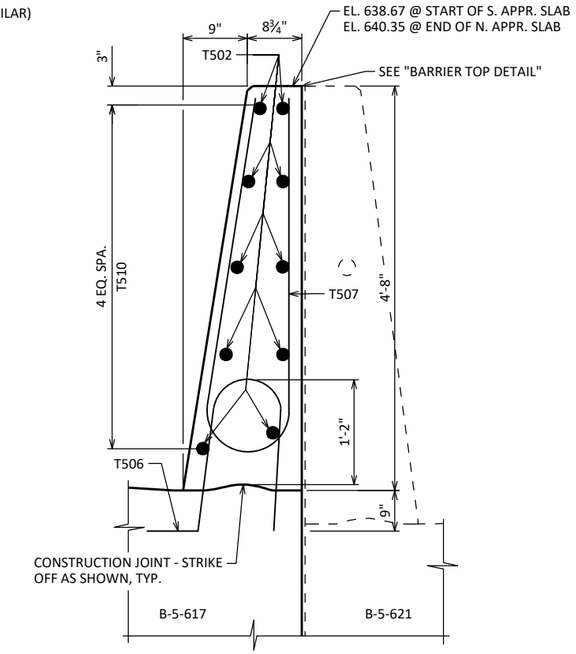
(SOUTH END SHOWN, NORTH END SIMILAR)



SECTION D-D

(TYPICAL AT ENDS OF BARRIER)

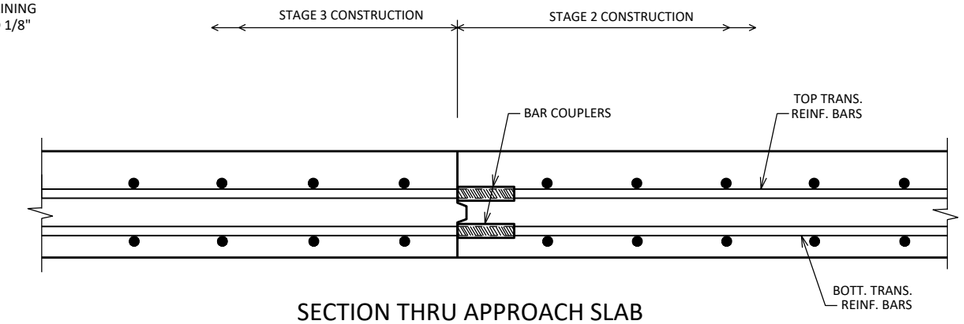
LOOKING NORTH - WEST EDGE OF DECK



SECTION D-D

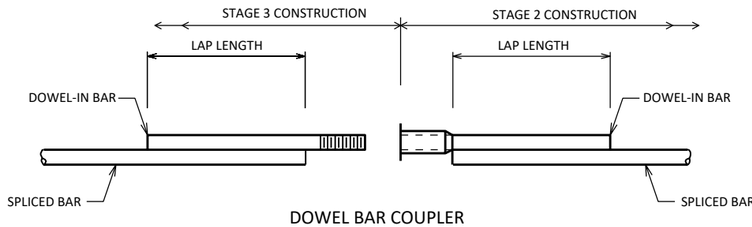
(TYPICAL AT ENDS OF BARRIER)

LOOKING NORTH - EAST EDGE OF DECK



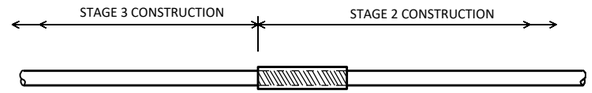
SECTION THRU APPROACH SLAB

ONE-PIECE THREADED COUPLER SHOWN



DOWEL BAR COUPLER

STAGE 3 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 2



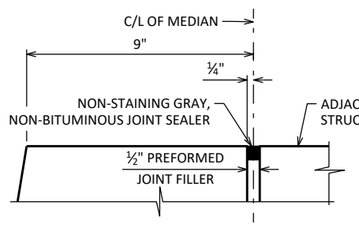
ONE-PIECE THREADED COUPLER

BAR COUPLER ALTERNATIVES

NOTES

FOR DOWEL BAR COUPLERS, ALL DOWEL BARS SHALL BE LAPPED AND TIED TO THE REINFORCEMENT BARS.

BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.



BARRIER TOP DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-617

DRAWN BY STD | PLANS CK'D SKH

SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS (1 OF 2)

SHEET 6
411

SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71

TOTAL COATED = 24,670 LBS.

TOTAL STAINLESS = 700 LBS.

BILL OF BARS

BAR MARK	NO. REQ'D STAGE 2	NO. REQ'D STAGE 3	LENGTH	COAT	STAINLESS STEEL	BENT	LOCATION
T801	114	112	21'-4"	X		X	APPROACH SLAB - BOTTOM - LONGIT.
T502	90	90	19'-6"	X			APPROACH SLAB & MEDIAN BARRIER - LONGIT.
T503	40	40	4'-1"	X		X	APPROACH SLAB - TOP - TRANS.
★ T504	84	---	34'-1"	X			APPROACH SLAB - TOP & BOTTOM TRANS.
★ T505	---	84	33'-7"	X			APPROACH SLAB - TOP & BOTTOM TRANS.
T506	62	62	4'-6"	X		X	MEDIAN BARRIER - APPR. SLAB - VERT.
T507	62	62	9'-11"	X		X	MEDIAN BARRIER - APPR. SLAB - VERT.
T708	68	68	2'-6"		X		APPROACH SLAB & DECK CONNECTION

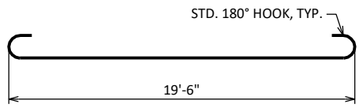
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

BOTH STRUCTURAL APPROACH SLABS ARE INCLUDED IN THE BILL OF BARS.

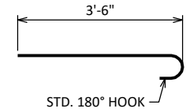
★ BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

ESTIMATED QUANTITIES

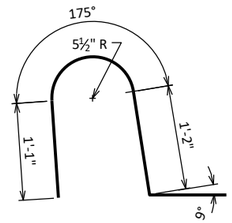
CONST. STAGE	HPC MASONRY STRUCTURES	BAR STEEL REINFORCEMENT HS COATED BRIDGES
STAGE 2	83 CY	12,415 LB
STAGE 3	81 CY	12,255 LB



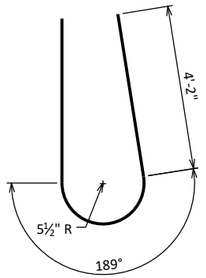
T801



T503



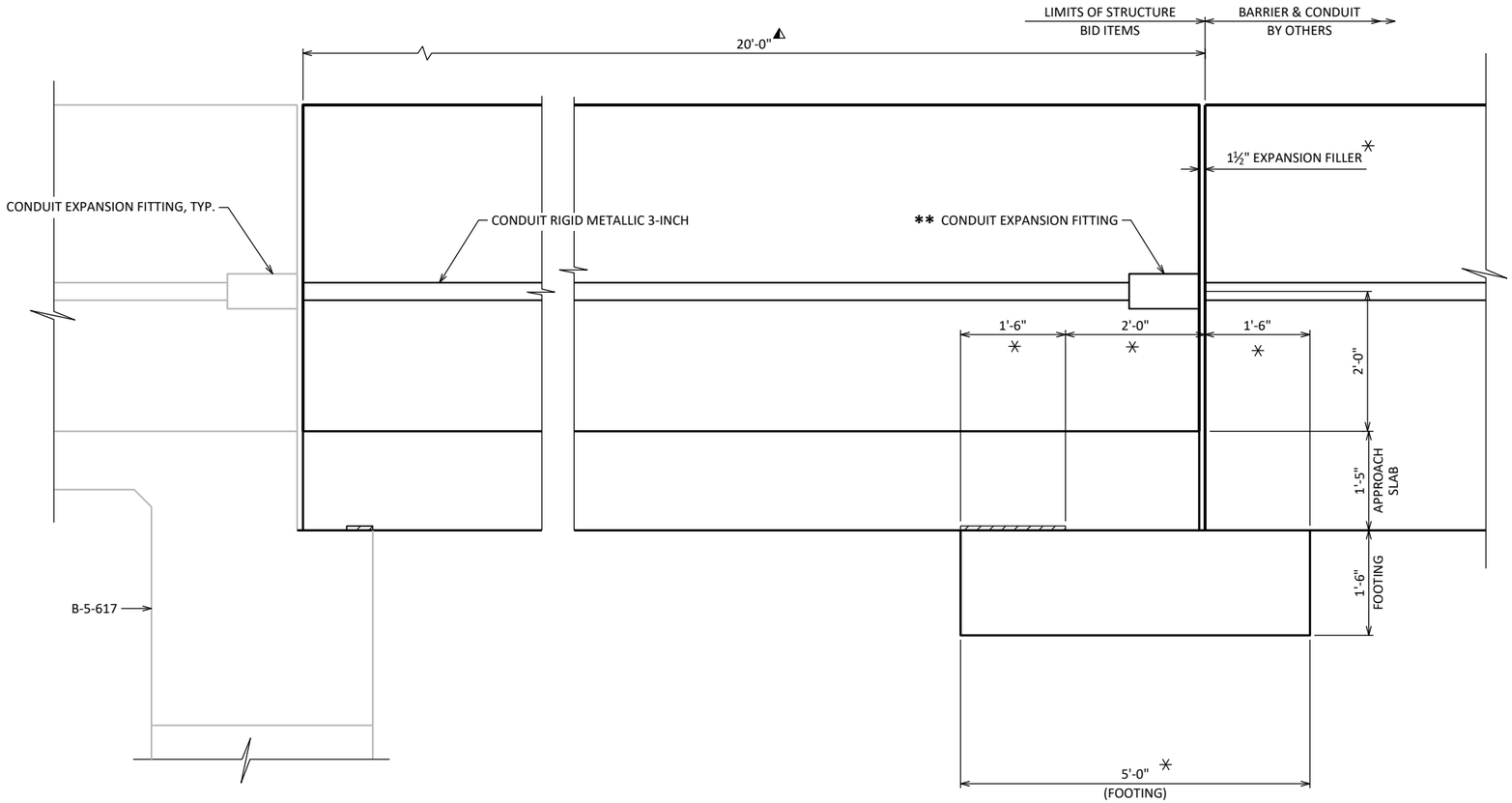
T506



T507

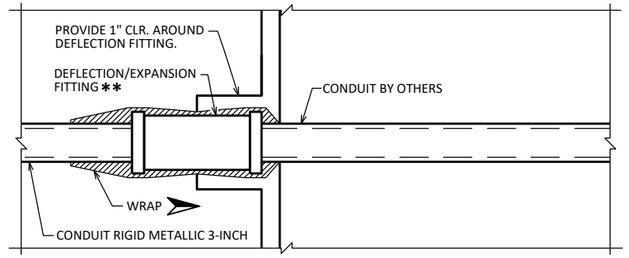
LEGEND

- ⚹ DIMENSIONS ARE GIVEN NORMAL TO C/L SUBSTRUCTURE.
- ◭ DIMENSIONS ARE GIVEN ALONG R/L IH 41 NB.
- ➤ SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN.
- ** DEFLECTION/EXPANSION FITTING REQUIREMENTS
  - UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.



CONDUIT DETAILS

(NORTH APPROACH SLAB SHOWN, SOUTH APPROACH SLAB SIMILAR)



DEFLECTION/EXPANSION FITTING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-617

DRAWN BY STD | PLANS CK'D SKH

SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS (2 OF 2)

SHEET 7

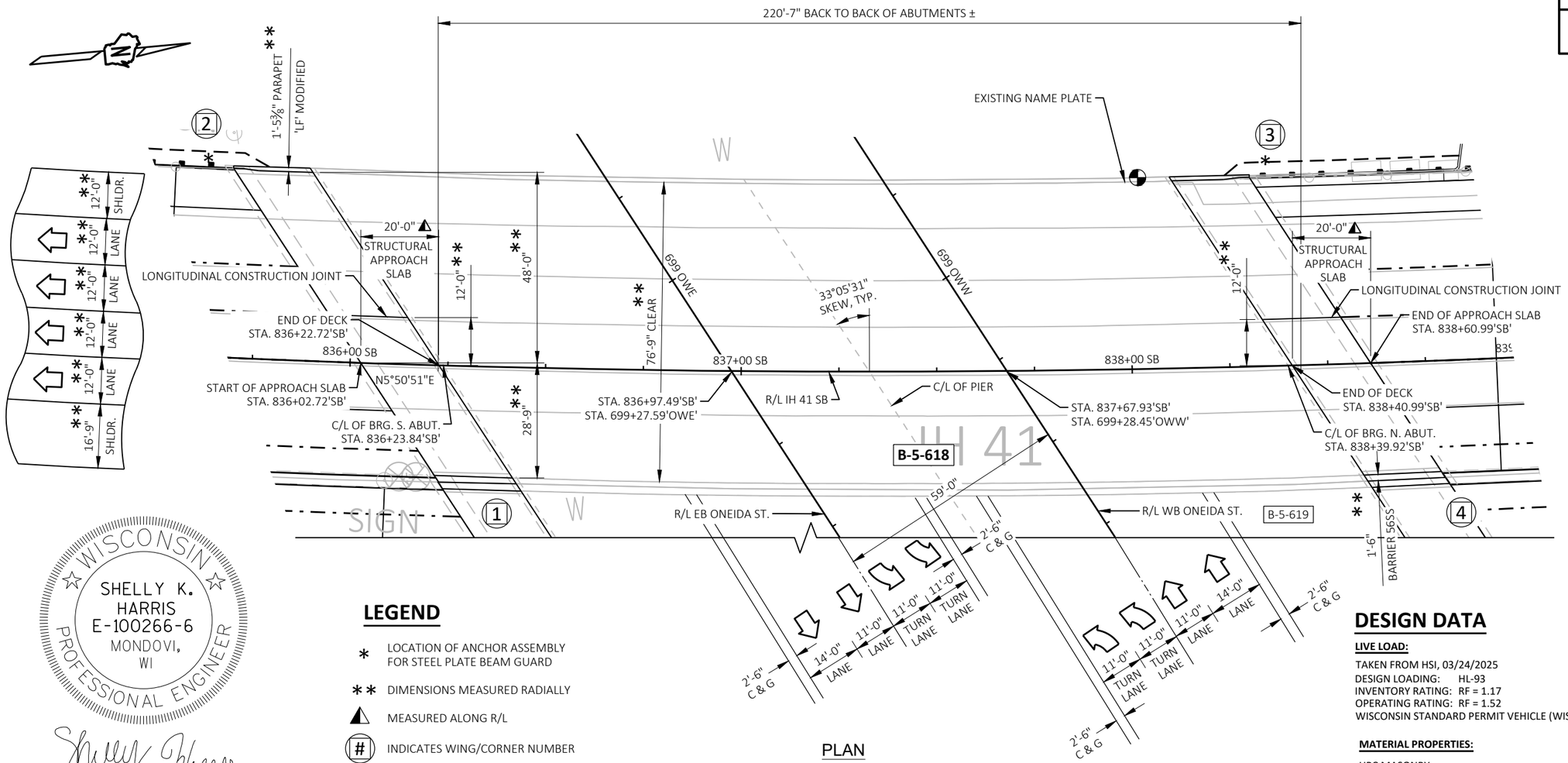
412

SCALE = 2.00

8

8

STATE PROJECT NUMBER
1130-74-71



PLAN

(STRUCTURAL APPROACH SLAB AND PARAPET REPLACEMENT)

CURVE DATA

PI STA = 833+93.95'SB'
Y = 550375.480
X= 83002.500
Δ = 29°44'27" LT
D = 01°30'43"
T = 1006.21'
L = 1967.03'
R = 3789.47'
PC STA = 823+87.74'SB'
Y = 549472.531
X = 82558.494
PT STA = 843+86.15'SB'
Y = 551379.752
X = 82940.086
DB = N26°11'05"E
DA = N03°33'23"W

LEGEND

* LOCATION OF ANCHOR ASSEMBLY FOR STEEL PLATE BEAM GUARD

** DIMENSIONS MEASURED RADIALLY

MEASURED ALONG R/L

(#) INDICATES WING/CORNER NUMBER

INDICATES BENCHMARK/CONTROL POINT

WISCONSIN
SHELLY K. HARRIS
E-100266-6
MONDOVI, WI
PROFESSIONAL ENGINEER

May 30, 2025

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 03/24/2025
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.17
OPERATING RATING: RF = 1.52
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

HPC MASONRY:
STRUCTURAL APPROACH SLAB — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI
STAINLESS STEEL — f_y = 60,000 PSI

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. STRUCT. APPR. SLAB	N. STRUCT. APPR. SLAB	TOTAL
203.0220.04	REMOVING STRUCTURE B-5-618	EACH	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	171	171	342
502.3210	PIGMENTED SURFACE SEALER	SY	21	21	42
502.4207	ADHESIVE ANCHORS NO. 7 BAR	EACH	79	79	158
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	14,840	14,670	29,510
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	410	410	820
505.0905	BAR COUPLERS NO. 5	EACH	42	42	84
517.1010.S.04	CONCRETE STAINING B-5-618	SF	22	23	45
517.1015.S.04	CONCRETE STAINING MULTI-COLOR B-5-618	SF	31	33	64
517.1050.S.04	ARCHITECTURAL SURFACE TREATMENT B-5-618	SF	31	33	64
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1	1	2
SPV.0035.01	HPC MASONRY STRUCTURES	CY	92	92	184
SPV.0165.01	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,535	1,535	3,070
	NON-BID ITEMS				
	FILLER	SIZE			1/2", 3/4" & 1 1/2"

ALL ITEMS ARE CATEGORY 0050

SCOPE OF WORK

- REPLACEMENT OF STRUCTURAL APPROACH SLABS AND APPROACH SLAB PARAPETS

BENCH MARK

NO.	STATION IH 41 SB	OFFSET	DESCRIPTION	ELEV.
1005	838+06.16'SB'	49.055' LT	BM DISK	629.23

TRAFFIC DATA

IH 41

ADT (2026) = 79,260
ADT (2046) = 90,500
DESIGN SPEED = 70 MPH

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, PROFILE & CROSS SECTION
3. STRUCTURAL APPROACH SLAB REMOVAL LIMITS
4. CONSTRUCTION STAGING (1 OF 2)
5. CONSTRUCTION STAGING (2 OF 2)
6. STRUCTURAL APPROACH SLAB PLAN
7. STRUCTURAL APPROACH SLAB DETAILS
8. SLOPED FACE PARAPET LF (MODIFIED)
9. SINGLE SLOPED MEDIAN BARRIER 56SS DETAILS
10. APPROACH SLAB BILL OF BARS
11. AESTHETIC DETAILS

NOTES:

BRIDGE LENGTH DIMENSION AND SKEW ANGLE BASED OFF OF AS-BUILT TANGENT LINE.

MEDIAN BARRIER DIMENSION IS MEASURED TO THE C/L OF ½" FILLER BETWEEN BRIDGES

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
SHELLY HARRIS (715) 309-5224

NO.	DATE	REVISION	BY

KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-5-618

IH 41 SB OVER ONEIDA STREET

COUNTY	VILLAGE
BROWN	ASHWAUBENON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	JBN	DESIGNED CK'D	SKH	DRAWN BY	STD	PLANS CK'D	SKH

GENERAL PLAN

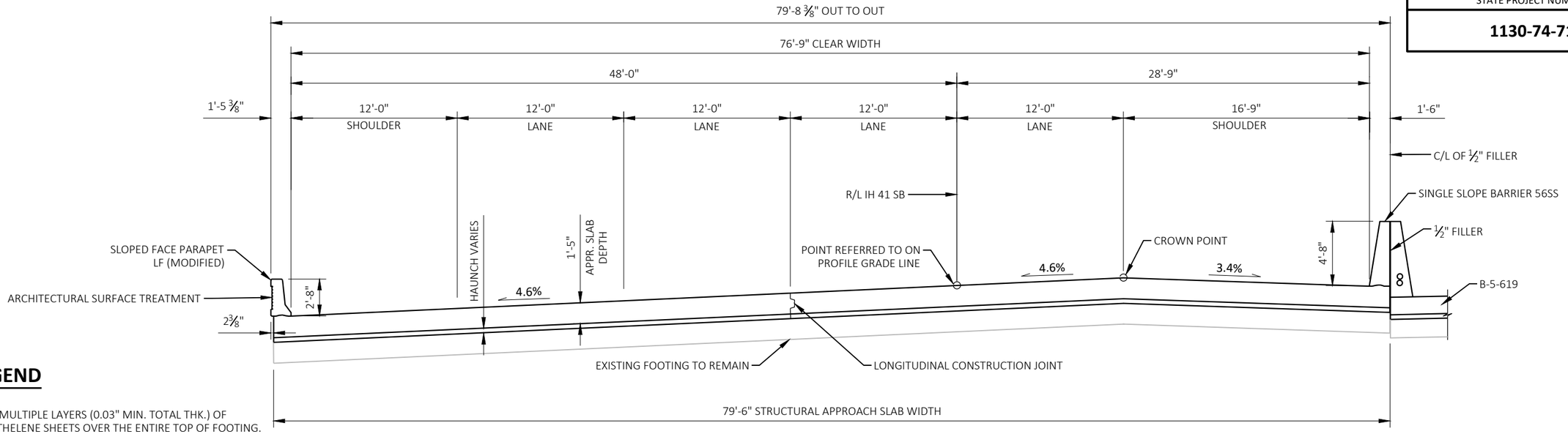
SHEET 1 OF 11
413

I.D. DATE:

8 8

STATE PROJECT NUMBER

1130-74-71



LEGEND

◪ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

▽ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

★ 3/4" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7.

◐ #7 @ 1'-0". PROPOSED BAR TO CONNECT APPROACH SLAB AND ABUTMENT. (LOCATED ALONG FULL WIDTH REPLACEMENT)

* EXISTING PROFILE ON CURRENT BRIDGE DECK.

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD 83 (2011). ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT, UNLESS SPECIFIED OTHERWISE.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE EXISTING STRUCTURE, B-5-618, IS A TWO SPAN PRESTRESSED GIRDER BRIDGE WITH A CLEAR WIDTH OF 76'-9". THE NORTH AND SOUTH STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP SURFACE OF THE NEW STRUCTURAL APPROACH SLAB.

PARAPETS ON TOP OF EXISTING STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF THE NEW CONCRETE PARAPETS. ARCHITECTURAL SURFACE TREATMENT, CONCRETE STAINING AND CONCRETE STAINING MULTI-COLOR SHALL BE REPLACED ON PARAPETS WHERE APPLICABLE.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING STAINLESS STEEL REINFORCING BARS CONNECTING THE ABUTMENT DIAPHRAGM TO THE STRUCTURAL APPROACH SLAB.

SEE ROADWAY PLANS AND QUANTITIES FOR BASE AGGREGATE DENSE REQUIRED UNDER APPROACH SLAB.

THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE STRUCTURAL APPROACH SLAB SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE B-5-618".

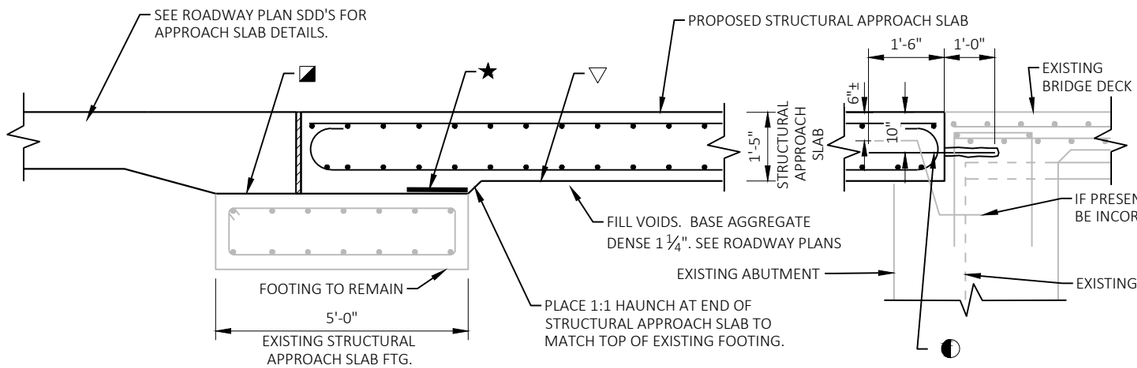
ALL STATIONS ARE BASED ON PROPOSED ALIGNMENT.

CROSS SECTION AT STRUCTURAL APPROACH SLAB

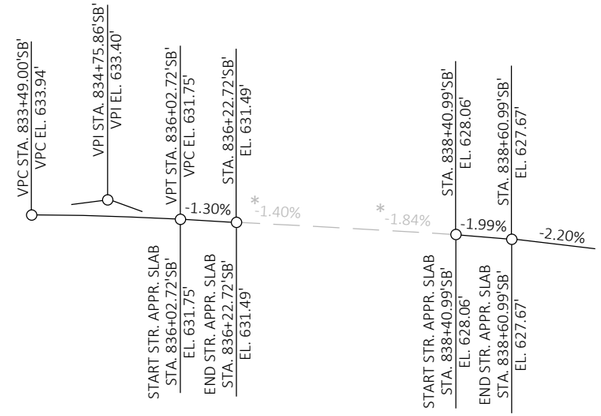
(LOOKING NORTH)

NOTE

ALL DIMENSIONS IN CROSS SECTION ARE RADIAL UNLESS NOTED OTHERWISE.



LONGITUDINAL SECTION OF STRUCTURAL APPROACH SLAB



PROFILE GRADE LINE IH 41 SB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES, PROFILE & CROSS SECTION

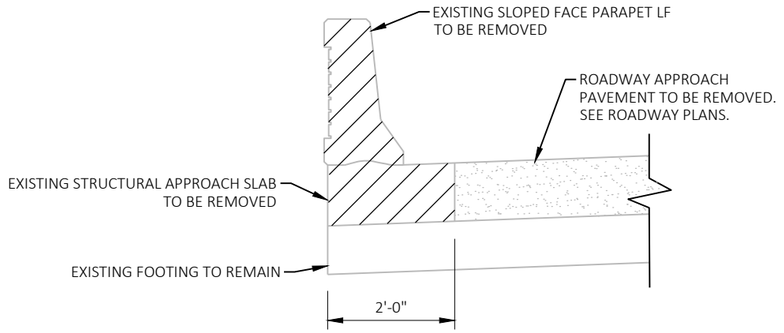
SHEET 2
414

8

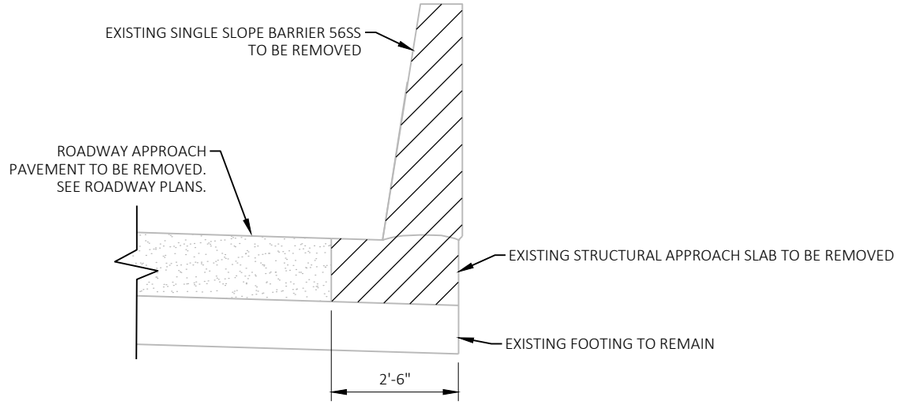
8

STATE PROJECT NUMBER

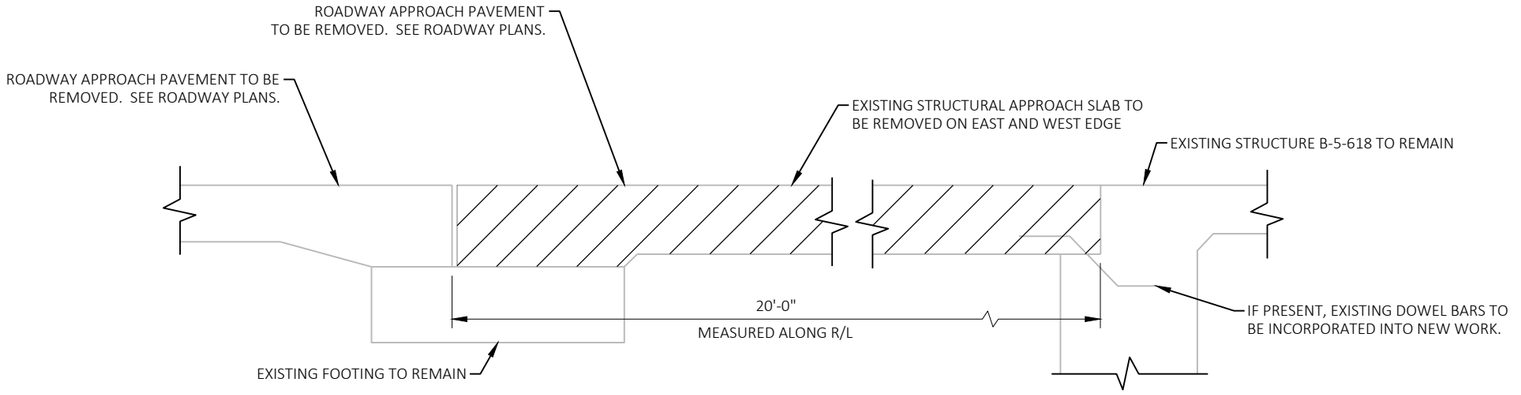
1130-74-71



REMOVAL LIMITS OF EXISTING STRUCTURAL APPROACH SLAB ON WEST EDGE OF STRUCTURE



REMOVAL LIMITS OF EXISTING STRUCTURAL APPROACH SLAB ON EAST EDGE OF STRUCTURE



LONGITUDINAL REMOVAL LIMITS DETAIL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

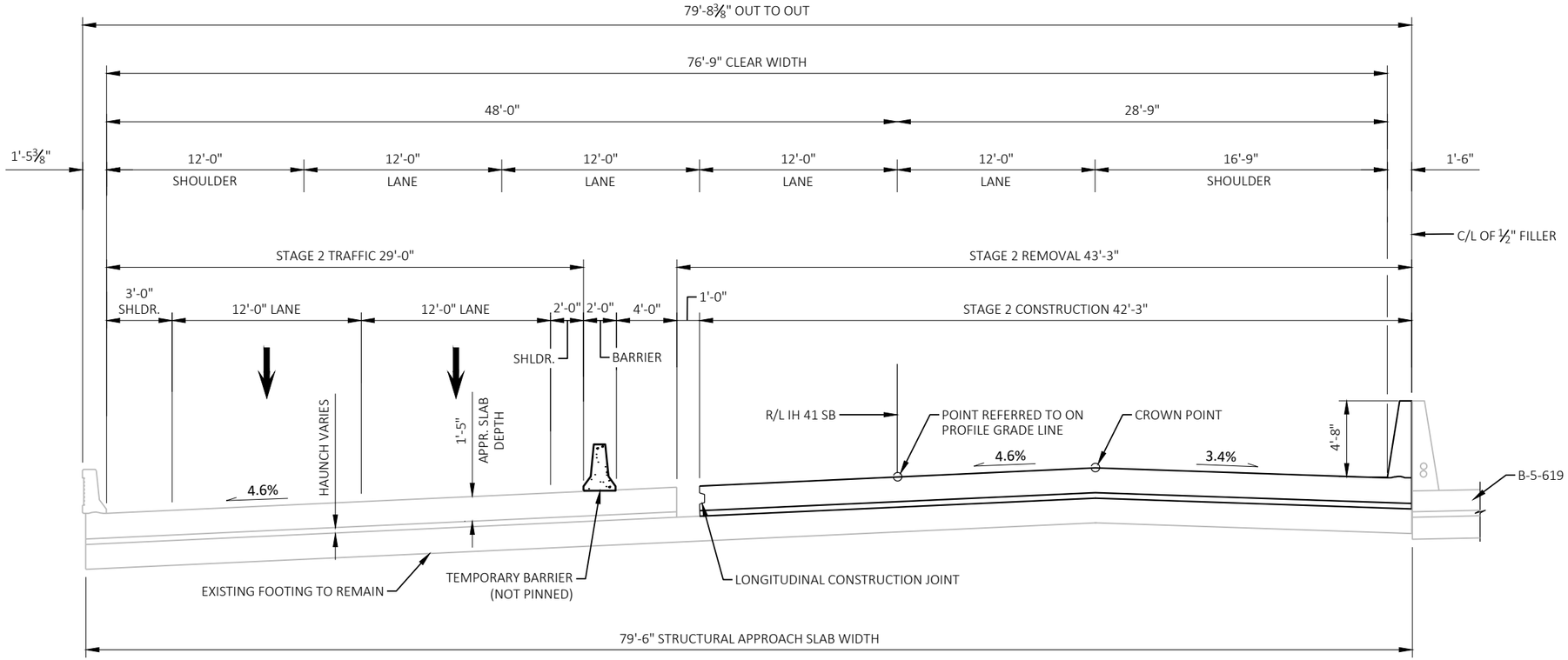
DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB REMOVAL LIMITS

SHEET 3

STATE PROJECT NUMBER

1130-74-71



STAGE 2

(LOOKING NORTH)

NOTES

ALL DIMENSIONS ARE GIVEN ALONG RADIAL LINES.

STAGE 1 & 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

DRAWN BY STD | PLANS CK'D SKH

CONSTRUCTION STAGING (1 OF 2)

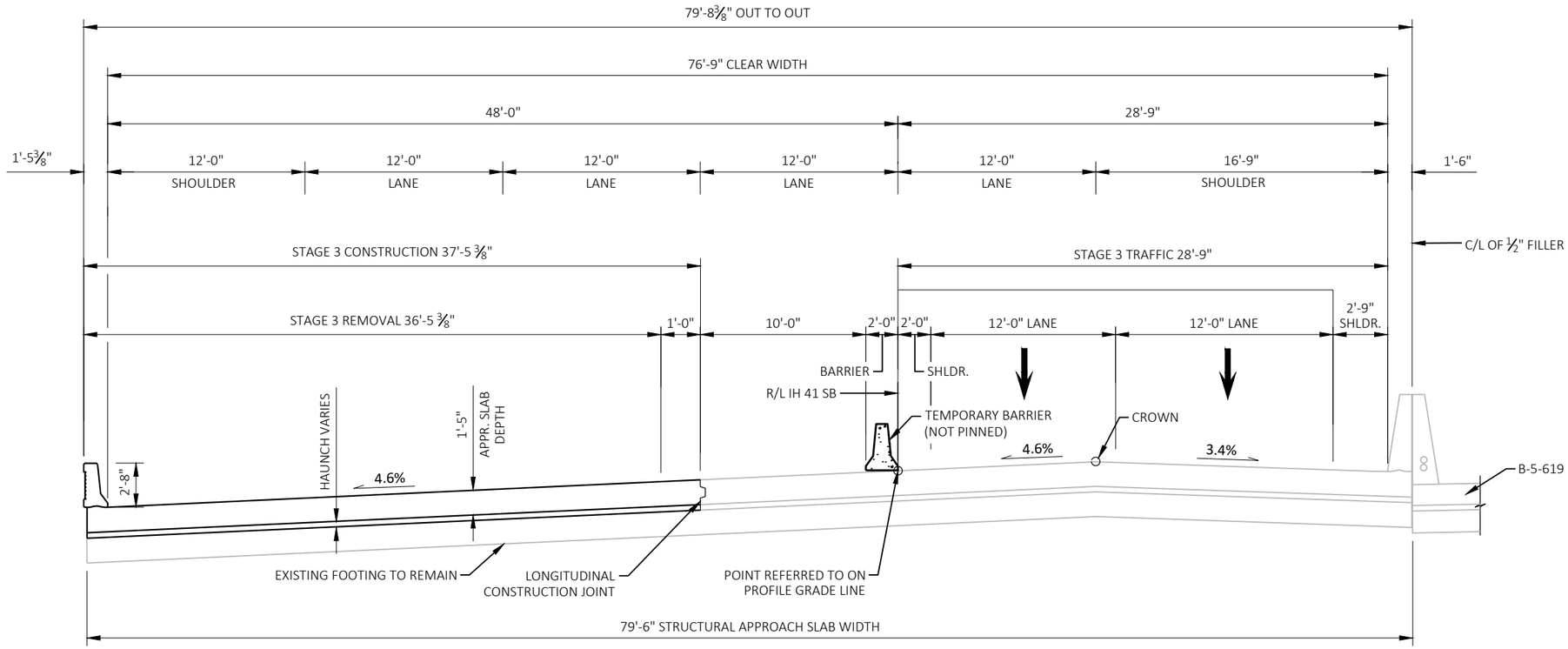
SHEET 4
416

8

8

STATE PROJECT NUMBER

1130-74-71



STAGE 3

(LOOKING NORTH)

NOTES

ALL DIMENSIONS ARE GIVEN ALONG RADIAL LINES.

STAGE 1 & 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

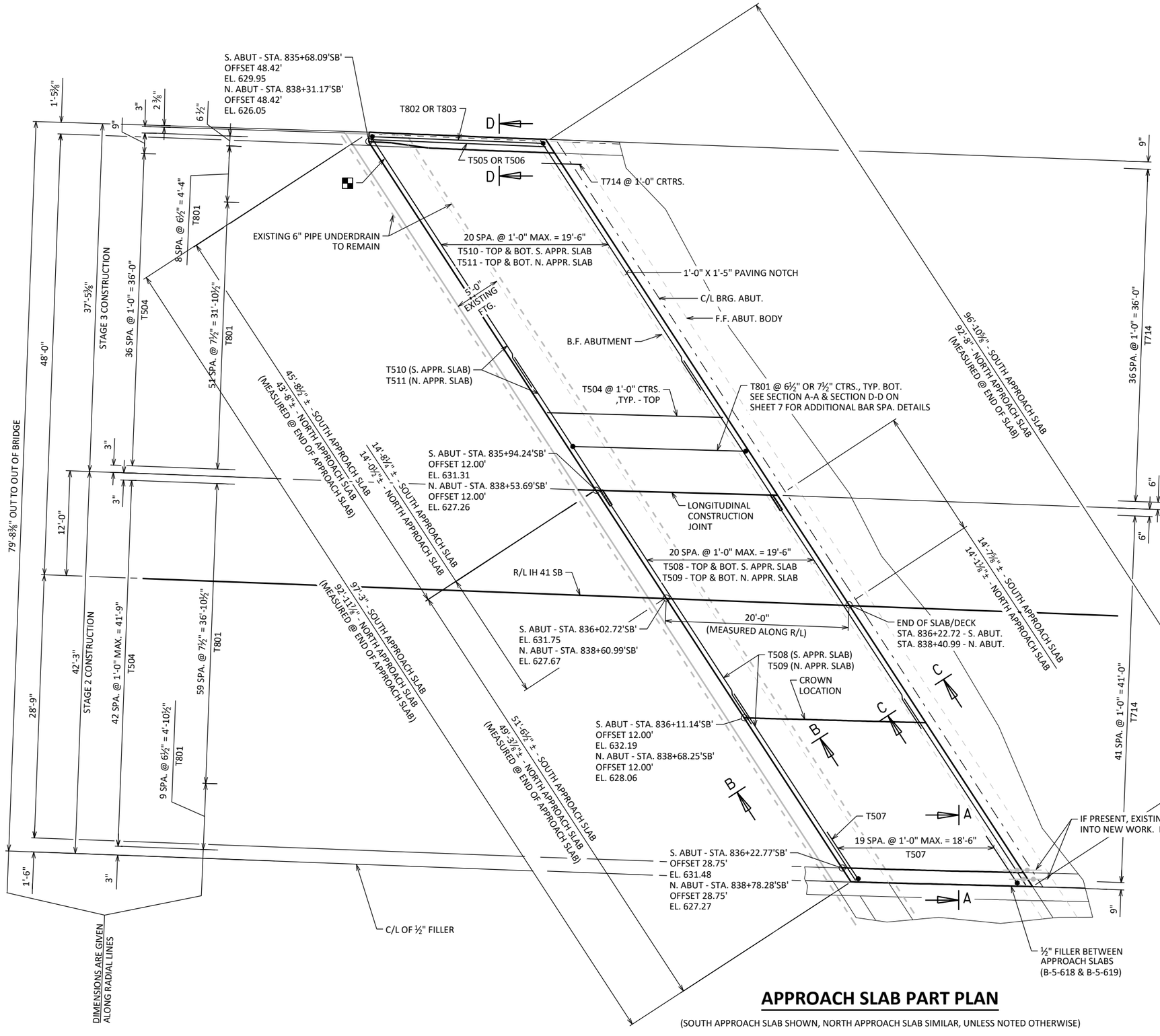
DRAWN BY STD | PLANS CK'D SKH

CONSTRUCTION STAGING (2 OF 2)

SHEET 5

STATE PROJECT NUMBER

1130-74-71



APPROACH SLAB PART PLAN

(SOUTH APPROACH SLAB SHOWN, NORTH APPROACH SLAB SIMILAR, UNLESS NOTED OTHERWISE)

NOTES

LAP NO. 5 BARS 2'-11" MIN.

PLACE LONGITUDINAL BARS CONCENTRIC TO R/L IH 41 SB.

LEGEND

FIELD BEND T508 AND T509 ALONG EDGE OF APPROACH SLAB AT CORNERS 2 AND 3.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB PLAN

SHEET 6
418

SCALE = 2.00

8

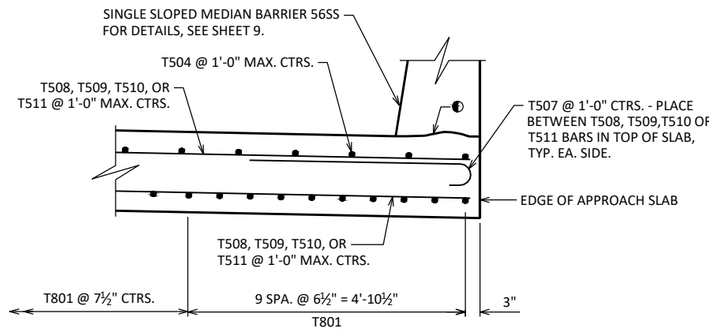
8

STATE PROJECT NUMBER

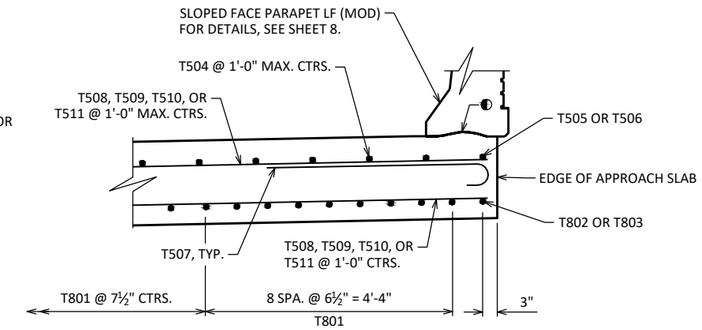
1130-74-71

LEGEND

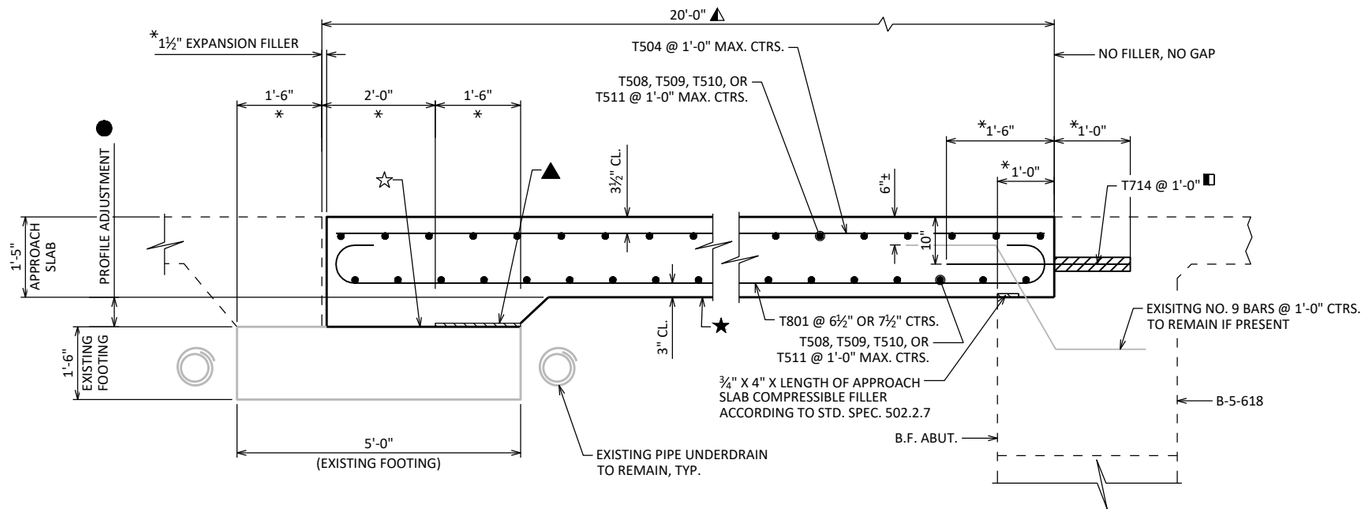
- ⚹ DIMENSIONS ARE GIVEN NORMAL C/L SUBSTRUCTURE.
- ◭ DIMENSION ARE GIVEN ALONG R/L IH 41 SB.
- ☆ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF FOOTING. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ▲ ¾" X 1'-6" X LENGTH OF FOOTING PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC 502.2.7
- ◐ CONST. JT. - STRIKE OFF AS SHOWN.
- ◧ ADHESIVE ANCHORS NO. 7 BAR. EMBED 1'-0" IN CONCRETE. ANCHORS SHALL BE APPROVED FOR USE IN CRACKED CONCRETE.
- ● QUANTITY CALCULATED ASSUMING A 3" AVERAGE HAUNCH.



SECTION A-A



SECTION D-D



SECTION B-B

SECTION C-C

NOTES

BAR STEEL REINFORCEMENT FOR THE APPROACH SLABS AND THE SINGLE SLOPE CONCRETE BARRIER 56SS LOCATED ON THE EAST SIDE OF THE APPROACH SLABS FOR B-5-618 IS INCLUDED IN THE BILL OF BARS ON SHEET 10.

FOR BAR STEEL REINFORCEMENT AND DETAILS FOR THE SLOPED FACE PARAPET LF (MODIFIED) LOCATED ON THE WEST SIDE OF THE APPROACH SLABS, SEE SHEET 8.

PLACE LONGITUDINAL BAR STEEL REINFORCEMENT CONCENTRIC TO R/L IH 41 SB.

LONGITUDINAL SECTION AT APPROACH SLAB

(SECTION SHOWN AT SOUTH APPROACH SLAB, NORTH APPROACH SLAB SIMILAR)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

DRAWN BY STD | PLANS CK'D SKH

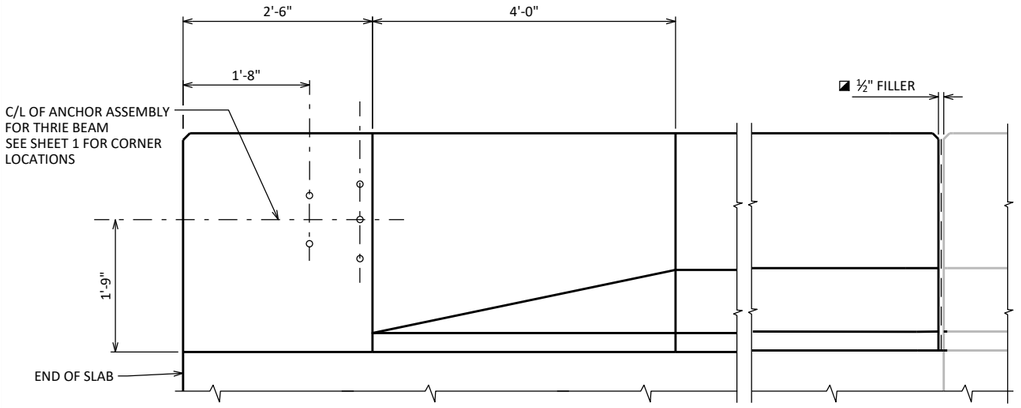
STRUCTURAL APPROACH SLAB DETAILS

SHEET 7
419

SCALE = 2.00

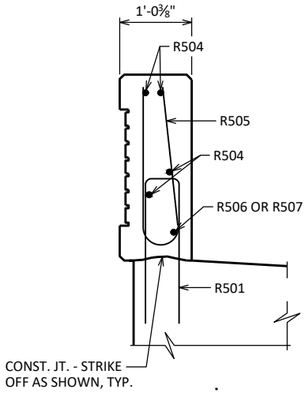
STATE PROJECT NUMBER

1130-74-71

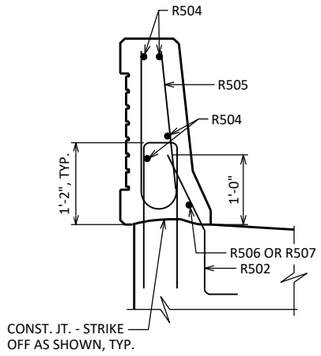


INSIDE ELEVATION - CORNERS 2 & 3

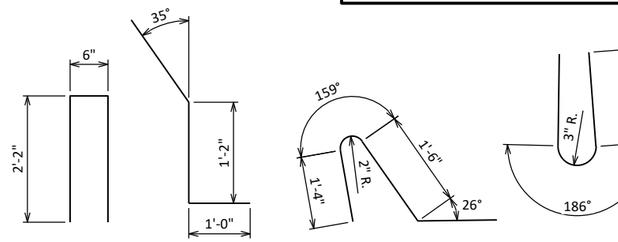
(CORNER 2 SHOWN, CORNER 3 SIMILAR)



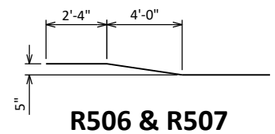
SECTION A-A



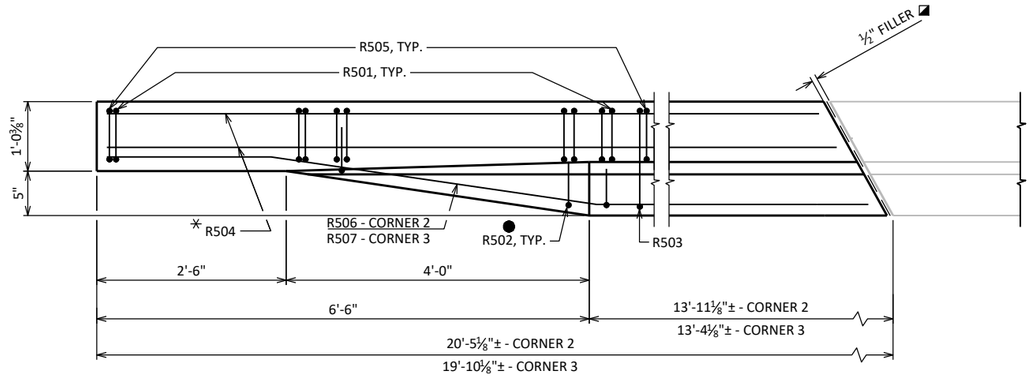
SECTION B-B



R501 **R502** **R503** **R505**



R506 & R507



PLAN - CORNER 2 & 3

(CORNER 2 SHOWN, CORNER 3 SIMILAR)

LEGEND

- ● R502 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R502 BARS CORRECTLY ALONG TRANSITION TO PARAPET.
- ✳ LAP R504 BARS 1'-9" MIN.
- ◪ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). MATCH COLOR OF ADJACENT SURFACE.

BILL OF BARS

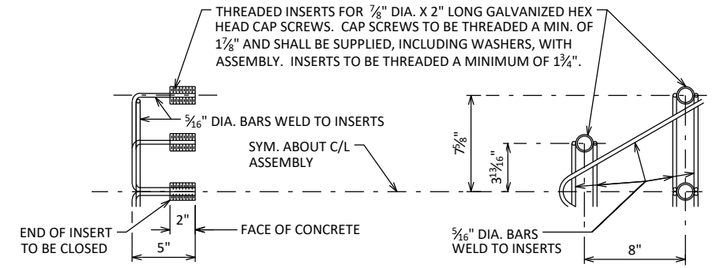
TOTAL COATED = 960 LBS.

BAR MARK	NO. REQ'D STAGE 2	NO. REQ'D STAGE 3	LENGTH	BENT	BAR SERIES	LOCATION
R501	--	28	4'-7"	X		PARAPET VERT.
R502	--	16	3'-1"	X		PARAPET VERT.
R503	--	42	4'-2"	X		PARAPET VERT.
R504	--	16	10'-11"			PARAPET HORIZ.
R505	--	70	4'-10"	X		PARAPET VERT.
R506	--	1	19'-11"	X		PARAPET HORIZ - CORNER 2
R507	--	1	19'-6"	X		PARAPET HORIZ - CORNER 3

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

PARAPETS AT BOTH STRUCTURAL APPROACH SLABS ARE INCLUDED IN BILL OF BARS.

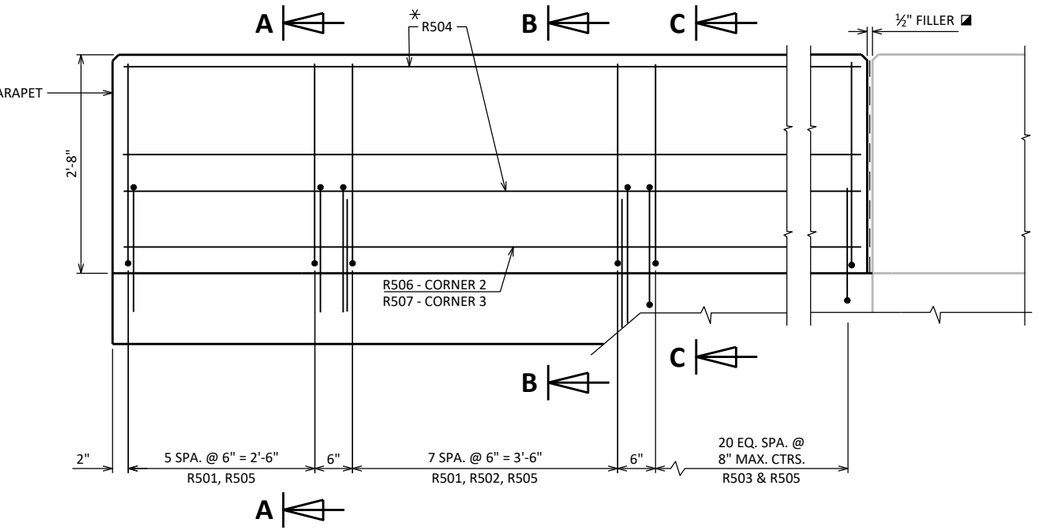
ALL BARS ARE EPOXY COATED.



DETAIL OF ANCHOR ASSEMBLY

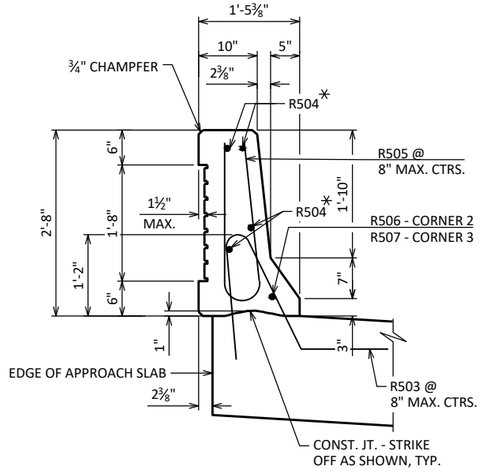
NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



OUTSIDE ELEVATION - CORNERS 2 & 3

(ARCHITECTURAL SURFACE TREATMENT NOT SHOWN FOR CLARITY)



SECTION C-C

(LOOKING SOUTH AT PARAPET ON APPROACH SLAB, EAST SIDE ONLY)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

DRAWN BY STD | PLANS CK'D SKH

SLOPED FACE PARAPET "LF" (MODIFIED)

SHEET 8
420

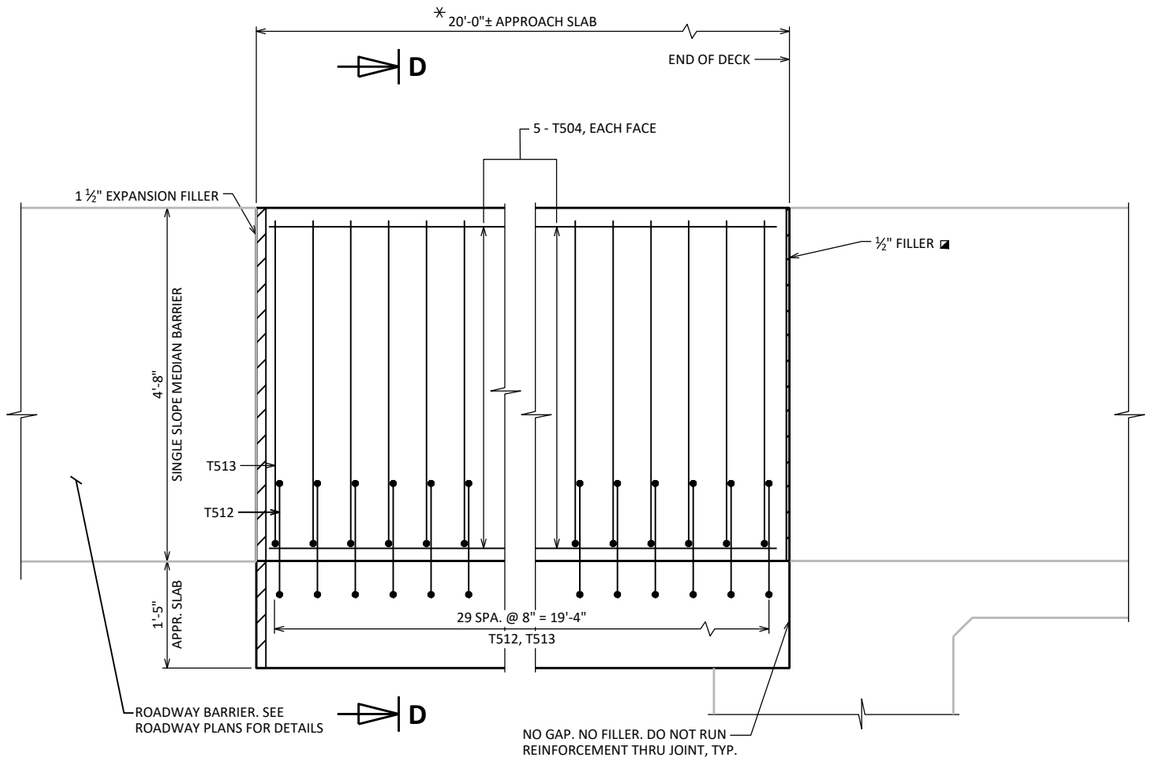
SCALE = 2.00

8

8

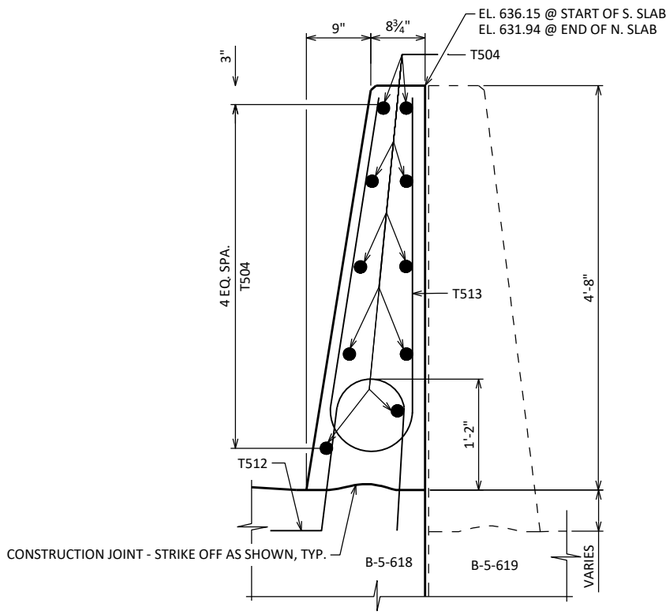
STATE PROJECT NUMBER

1130-74-71



PART ELEVATION

(SOUTH END SHOWN, NORTH END SIMILAR)



SECTION D-D

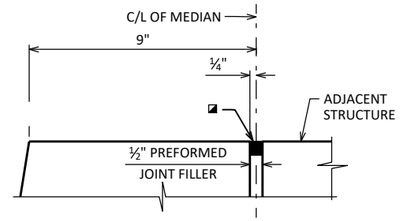
(TYPICAL AT ENDS OF BARRIER)

LOOKING NORTH - EAST EDGE OF DECK

LEGEND

* DIMENSIONS ARE GIVEN PARALLEL TO R/L IH 41 SB AT F.F. OF BARRIER.

◪ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). MATCH COLOR OF ADJACENT SURFACE.



BARRIER TOP DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

DRAWN BY STD | PLANS CK'D SKH

SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS

SHEET 9
421

SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71

TOTAL COATED = 28,550 LBS

TOTAL STAINLESS = 820 LBS

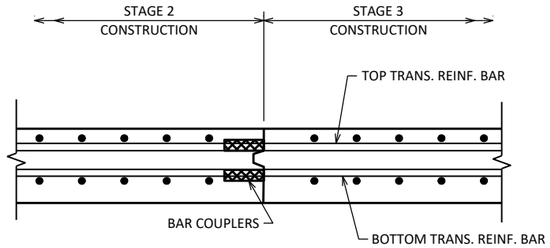
BILL OF BARS

BAR MARK	NO. REQ'D STAGE 2	NO. REQ'D STAGE 3	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
T801	138	120	21'-4"	X		X		APPROACH SLAB BOT. LONG.
T802	--	1	21'-10"	X		X		SOUTH APPROACH SLAB BOT. LONG.
T803	--	1	20'-10"	X		X		NORTH APPROACH SLAB BOT. LONG.
T504	106	74	19'-6"	X				APPROACH SLAB TOP & MEDIAN BARRIER LONG.
T505	--	1	20'-0"	X				SOUTH APPROACH SLAB TOP LONG.
T506	--	1	19'-1"	X				NORTH APPROACH SLAB TOP LONG.
T507	40	40	4'-1"	X		X		APROACH SLAB TOP TRANS.
★ T508	84	--	27'-2"	X				SOUTH APROACH SLAB TOP & BOT. TRANS.
★ T509	84	--	26'-2"	X				NORTH APROACH SLAB TOP & BOT. TRANS.
★ T510	--	84	24'-3"	X				SOUTH APROACH SLAB TOP & BOT. TRANS.
★ T511	--	84	23'-4"	X				NORTH APROACH SLAB TOP & BOT. TRANS.
T512	60	--	4'-6"	X		X		MEDIAN BARRIER VERT.
T513	60	--	9'-1"	X		X		MEDIAN BARRIER VERT.
T714	84	74	2'-6"		X			APPROACH SLAB & DECK CONNECTION

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

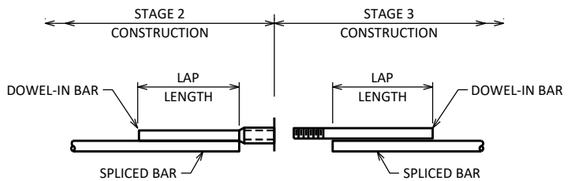
BOTH STRUCTURAL APPROACH SLABS ARE INCLUDED IN THE BILL OF BARS.

★ BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.



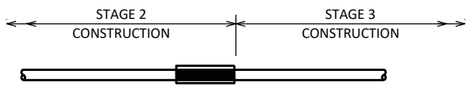
SECTION THRU APPROACH SLAB

ONE PIECE THREADED COUPLER SHOWN



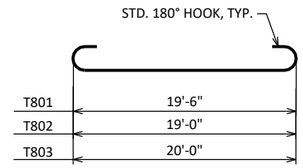
DOWEL BAR COUPLER

STAGE 2 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 1

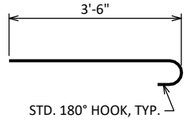


ONE-PIECE THREADED COUPLER

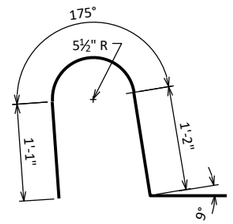
BAR COUPLER ALTERNATIVE



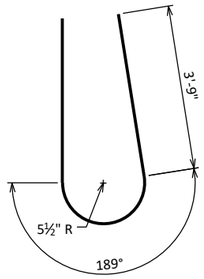
T801, T802, T803



T507



T512



T513

ESTIMATED QUANTITIES

CONST. STAGE	HPC MASONRY STRUCTURES	BAR STEEL REINFORCEMENT HS COATED BRIDGES
STAGE 2	99 CY	15,710 LB
STAGE 3	85 CY	13,800 LB

QUANTITIES INCLUDE SLOPED FACE PARAPET 'LF' (MODIFIED) CONCRETE AND BAR STEEL REINFORCEMENT.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

DRAWN BY STD | PLANS CK'D SKH

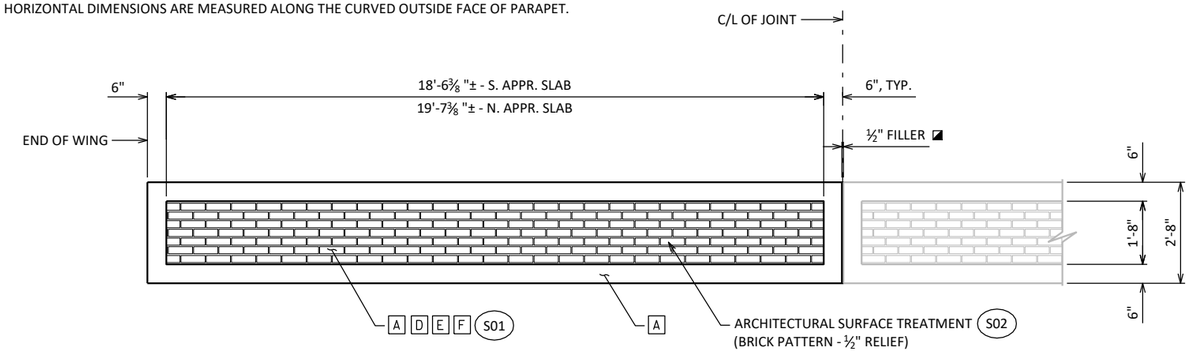
APPROACH SLAB BILL OF BARS

SHEET 10
422

SCALE = 2.00

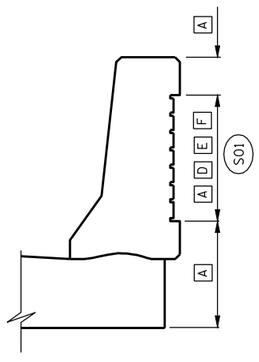
STATE PROJECT NUMBER
1130-74-71

NOTE: HORIZONTAL DIMENSIONS ARE MEASURED ALONG THE CURVED OUTSIDE FACE OF PARAPET.



PART ELEVATION - PARAPET ON APPROACH SLAB

(PARAPET ON NORTH APPROACH SLAB SHOWN, SOUTH APPROACH SLAB PARAPET SIMILAR)



AT APPROACH SLAB

SLOPED FACE PARAPET LF (MODIFIED)

(EAST SIDE ONLY - LOOKING NORTH)

CONCRETE STAINING SCHEDULE

MARK	COLOR	LOCATION
A	BASE COLOR	BRIDGES, PARAPETS, WALLS
D	ACCENT COLOR #3	BRICK COLOR (70% OF BRICK)
E	ACCENT COLOR #4	BRICK COLOR (15% OF BRICK)
F	ACCENT COLOR #5	BRICK COLOR (15% OF BRICK)

LEGEND

S01 STAIN ALL BRICK PATTERN AREAS WITH BASE COLOR PRIOR TO STAINING WITH THE THREE BRICK ACCENT COLORS. APPLICATION OF ALL FOUR STAIN COLORS AT BRICK PATTERN AREAS ARE PAID FOR AS "CONCRETE STAINING MULTI-COLOR B-5-618". APPLICATION OF STAIN OUTSIDE OF BRICK PATTERN AREAS IS PAID FOR AS "CONCRETE STAINING B-5-618".

S02 THE COST OF BRICK PATTERN FORMLINER TREATMENT IS PAID FOR UNDER "ARCHITECTURAL SURFACE TREATMENT B-5-618", SEE SPECIAL PROVISIONS FOR DESCRIPTION OF BRICK PATTERN FORMLINER.

◪ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). MATCH COLOR OF ADJACENT SURFACE.

NOTES

THE FINAL COLOR OF THE CONCRETE FOLLOWING APPLICATION OF THE STAIN SYSTEM SHALL MATCH THE SHERWIN WILLIAMS COLOR SYSTEM. SHERWIN WILLIAMS COLOR DESIGNATION IS FOR COLOR ONLY; ALL COLORS SHALL BE A FLAT (LUSTERLESS) FINISH.

BASE COLOR BASKET BEIGE – SW 6143
ACCENT COLOR 3 ROOKWOOD TERRA COTTA – SW 2803
ACCENT COLOR 4 CAJUN RED – SW 0008
ACCENT COLOR 5 MEADOW LARK – SW 7522

BRICK SURFACES SHALL BE STAINED IN A RANDOMLY MIXED COLOR ARRANGEMENT. STAIN 70% OF THE "BRICK" SURFACE WITH ACCENT COLOR 3, 15% WITH ACCENT COLOR 4 AND 15% WITH ACCENT COLOR 5. LEAVE ALL PREVIOUSLY STAINED RECESSED "MORTAR" JOINTS AS THE BASE COLOR (BASKET BEIGE).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-618

DRAWN BY STD | PLANS CK'D SKH

AESTHETIC DETAILS

SHEET 11
423

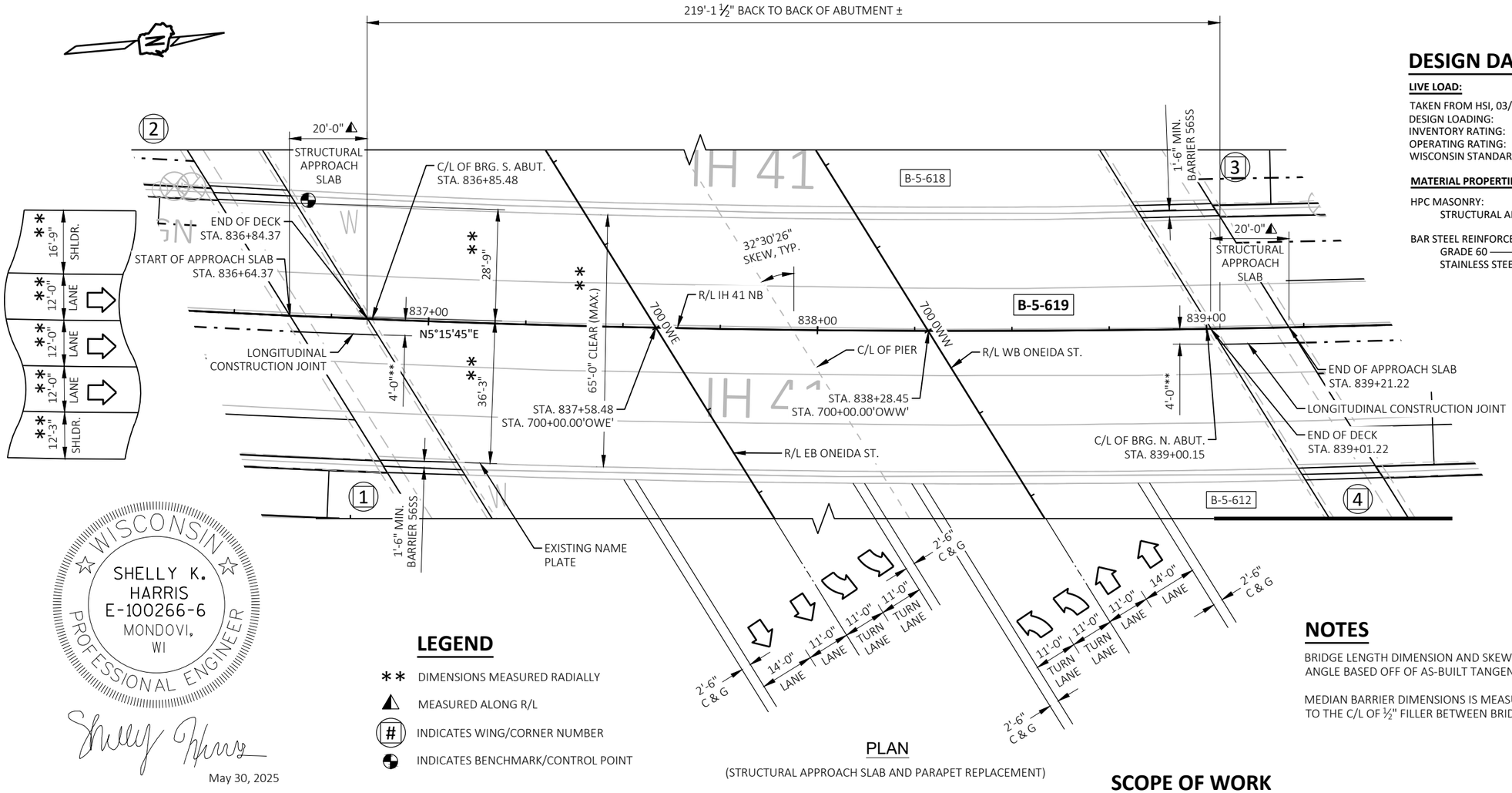
SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71



PLAN

(STRUCTURAL APPROACH SLAB AND PARAPET REPLACEMENT)

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 03/18/2025
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 0.97
OPERATING RATING: RF = 1.25
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

HPC MASONRY:
STRUCTURAL APPROACH SLAB — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI
STAINLESS STEEL — f_y = 60,000 PSI

TRAFFIC DATA

IH 41
ADT (2026) = 79,260
ADT (2046) = 90,500
DESIGN SPEED = 70 MPH

CURVE DATA

PI STA = 834+09.99
Y = 550363.200
X= 83063.880
Δ = 29°44'28" LT
D = 01°29'18"
T = 1022.27'
L = 1998.44'
R = 3849.97'
PC STA = 823+87.72
Y = 549445.835
X = 82612.784
PT STA = 843+86.15
Y = 551383.506
X = 83000.470
DB = N26°11'05"E
DA = N03°33'23"W

LEGEND

** DIMENSIONS MEASURED RADIALLY
MEASURED ALONG R/L
(#) INDICATES WING/CORNER NUMBER
INDICATES BENCHMARK/CONTROL POINT

NOTES

BRIDGE LENGTH DIMENSION AND SKEW ANGLE BASED OFF OF AS-BUILT TANGENT LINE.

MEDIAN BARRIER DIMENSIONS IS MEASURED TO THE C/L OF ½" FILLER BETWEEN BRIDGES.

SCOPE OF WORK

- REPLACEMENT OF STRUCTURAL APPROACH SLAB AND APPROACH SLAB PARAPETS

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. STRUCT. APPR. SLAB	N. STRUCT. APPR. SLAB	TOTAL
203.0220.05	REMOVING STRUCTURE B-5-619	EACH	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	145	145	290
502.3210	PIGMENTED SURFACE SEALER	SY	28	28	56
502.4207	ADHESIVE ANCHORS NO. 7 BAR	EACH	67	67	134
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	13,780	13,090	26,870
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	350	350	700
505.0905	BAR COUPLERS NO. 5	EACH	44	42	86
652.0135	CONDUIT RIGID METALLIC 3-INCH	LF	40	40	80
SPV.0035.01	HPC MASONRY STRUCTURES	CY	83	83	166
SPV.0165.01	LONGITUDINAL GROOVING BRIDGE DECK	SF	1,300	1,300	2,600
	NON-BID ITEMS				
	FILLER	SIZE			1/2", 3/4" & 1 1/2"

ALL ITEMS ARE CATEGORY 0060

BENCHMARK

NO.	STATION IH 41 NB	OFFSET	DESCRIPTION	ELEV.
1009	836+65.02	30.039' LT	BM CHISLED BOX	635.81

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, PROFILE & CROSS SECTION
3. STRUCTURAL APPROACH SLAB REMOVAL LIMITS
4. CONSTRUCTION STAGING
5. STRUCTURAL APPROACH SLAB PLAN
6. STRUCTURAL APPROACH SLAB DETAILS
7. SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS
8. APPROACH SLAB BILL OF BARS

STRUCTURE DESIGN CONTACTS:
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
SHELLY HARRIS (715) 309-5224

WISCONSIN
SHELLY K. HARRIS
E-100266-6
MONDOVI, WI
PROFESSIONAL ENGINEER

May 30, 2025

NO.	DATE	REVISION	BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-5-619

IH 41 NB OVER ONEIDA STREET

COUNTY	VILLAGE
BROWN	ASHWAUBENON

DESIGN SPEC.
REHABILITATION N/A

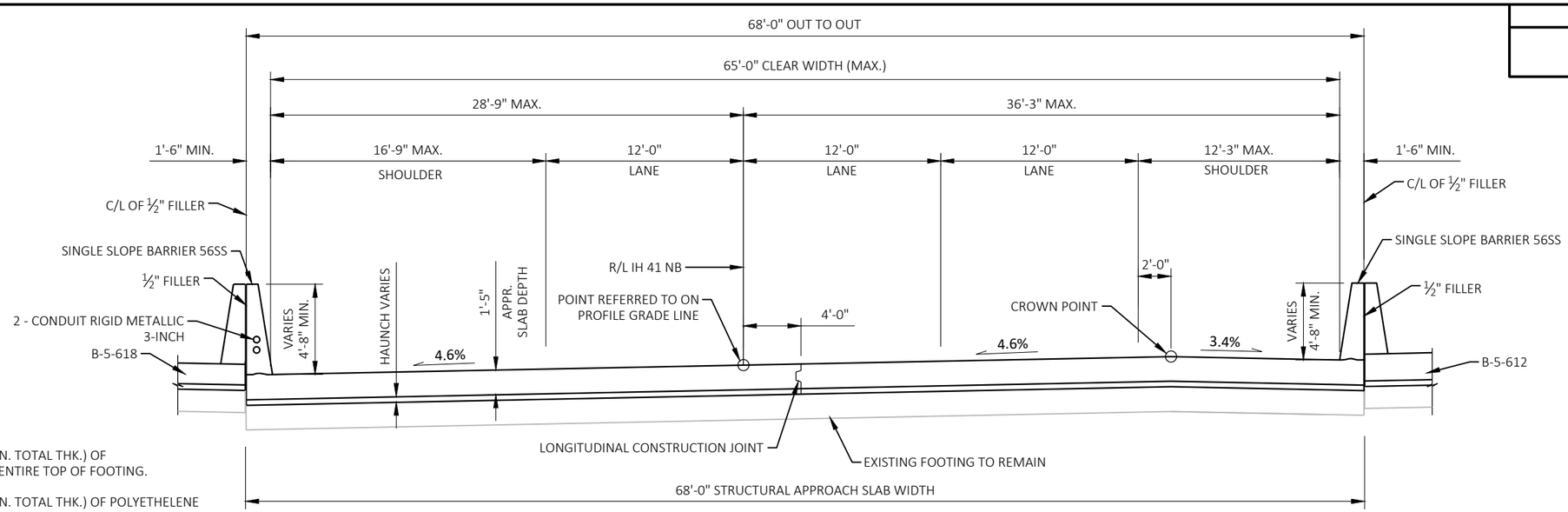
DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JBN	SKH	STD	SKH

GENERAL PLAN

SHEET 1 OF 8
424

I.D. DATE:

STATE PROJECT NUMBER
1130-74-71



CROSS SECTION AT STRUCTURAL APPROACH SLAB

(LOOKING NORTH)

LEGEND

- ◪ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- ▽ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- ★ ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7.
- ◐ #7 @ 1'-0". EMBEDDED 1'-0", PROPOSED BAR TO CONNECT APPROACH SLAB AND ABUTMENT. (LOCATED ALONG FULL WIDTH OF REPLACEMENT)
- * EXISTING PROFILE ON CURRENT BRIDGE DECK.
- ⧓ BAR STEEL ONLY PRESENT AT SOUTH APPROACH SLAB.

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD 83 (2011). ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT, UNLESS SPECIFIED OTHERWISE.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE EXISTING STRUCTURE, B-5-619, IS A TWO SPAN PRESTRESSED GIRDER BRIDGE WITH A MAXIMUM CLEAR WIDTH OF 65'-0". THE NORTH AND SOUTH STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP SURFACE OF THE NEW STRUCTURAL APPROACH SLAB.

PARAPETS ON TOP OF EXISTING STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF THE NEW CONCRETE PARAPETS.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING STAINLESS STEEL REINFORCING BARS CONNECTING THE ABUTMENT DIAPHRAGM TO THE STRUCTURAL APPROACH SLAB.

SEE ROADWAY PLANS AND QUANTITIES FOR BASE AGGREGATE DENSE REQUIRED UNDER APPROACH SLAB.

THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE STRUCTURAL APPROACH SLAB SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE B-5-619".

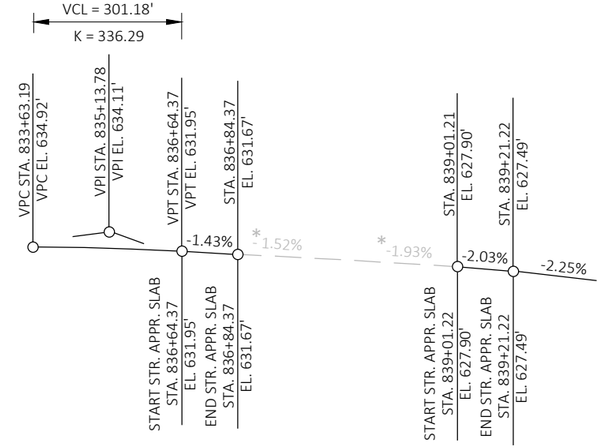
REMOVAL OF CONDUIT TO BE INCLUDED IN BID ITEM "REMOVING STRUCTURE B-5-619".

ANY DAMAGED WIRING OR CONDUIT, INCLUDING WITHIN THE APPROACH SLAB REPAIR LIMITS, SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.

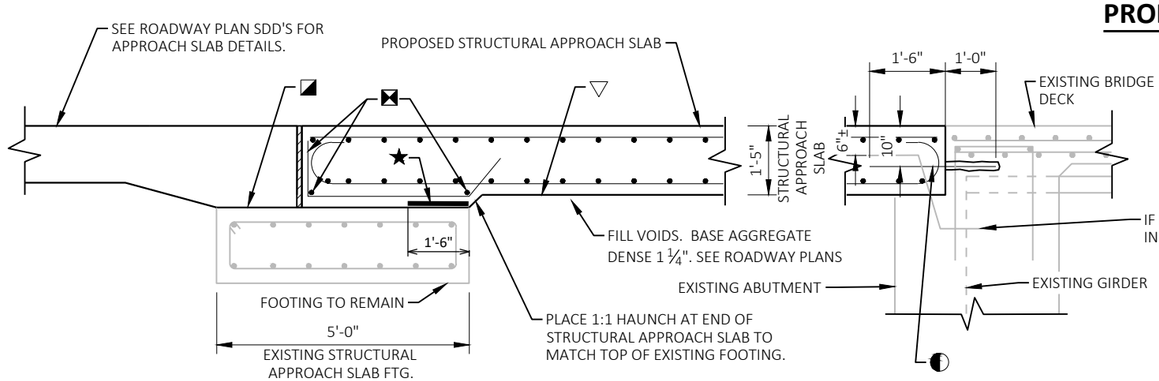
ALL STATIONS ARE BASED ON PROPOSED ALIGNMENT.

NOTE

ALL DIMENSIONS IN CROSS SECTION ARE RADIAL UNLESS NOTED OTHEWISE.



PROFILE GRADE LINE IH 41 NB



LONGITUDINAL SECTION OF STRUCTURAL APPROACH SLAB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-619

DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES, PROFILE & CROSS SECTION

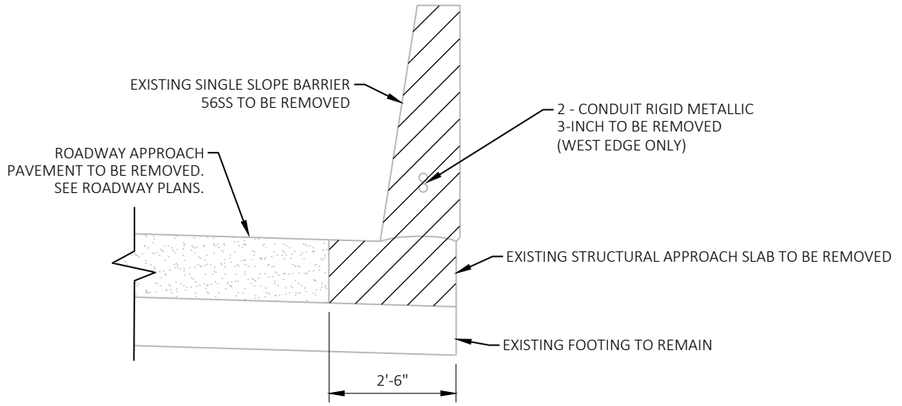
SHEET 2
425

8

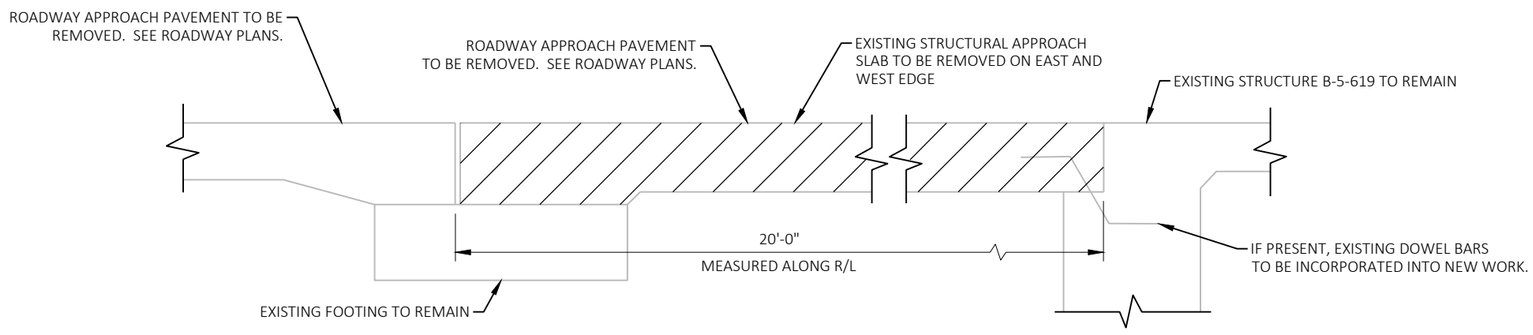
8

STATE PROJECT NUMBER

1130-74-71



REMOVAL LIMITS OF EXISTING STRUCTURAL APPROACH SLAB AT EAST AND WEST EDGE OF STRUCTURE



LONGITUDINAL REMOVAL LIMITS DETAIL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

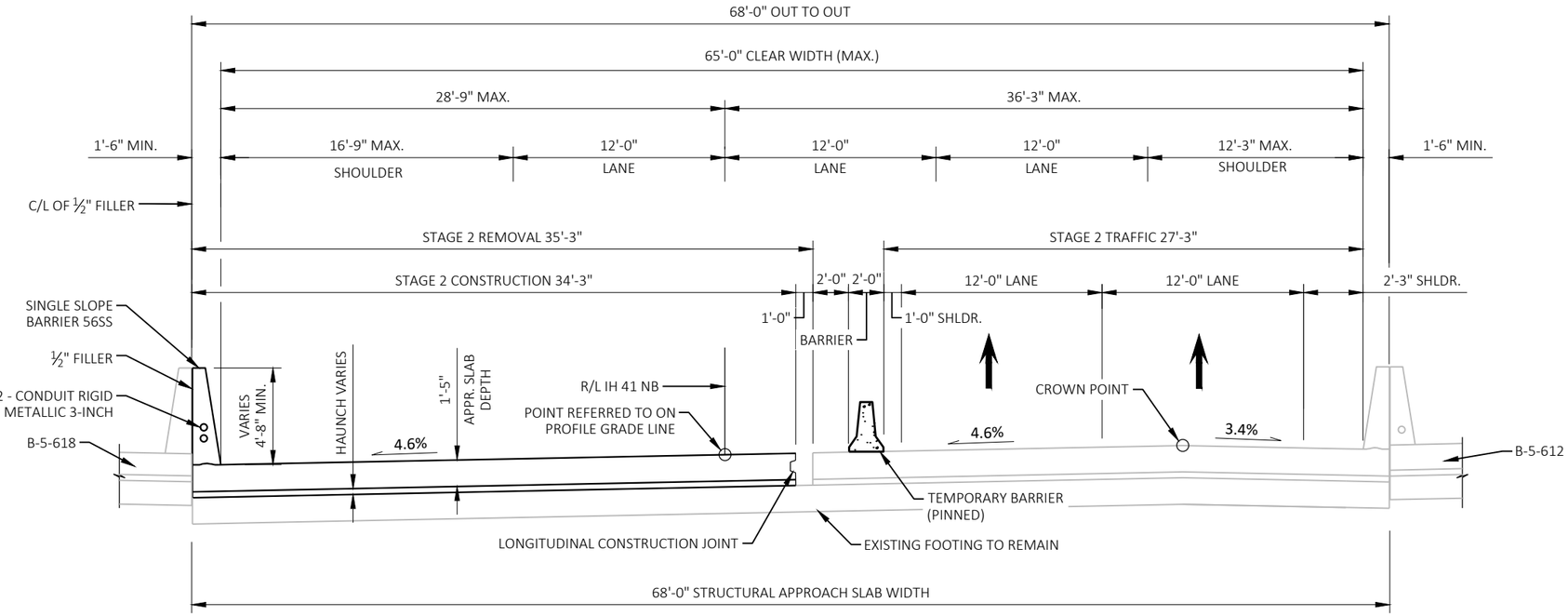
STRUCTURE B-5-619

DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB REMOVAL LIMITS

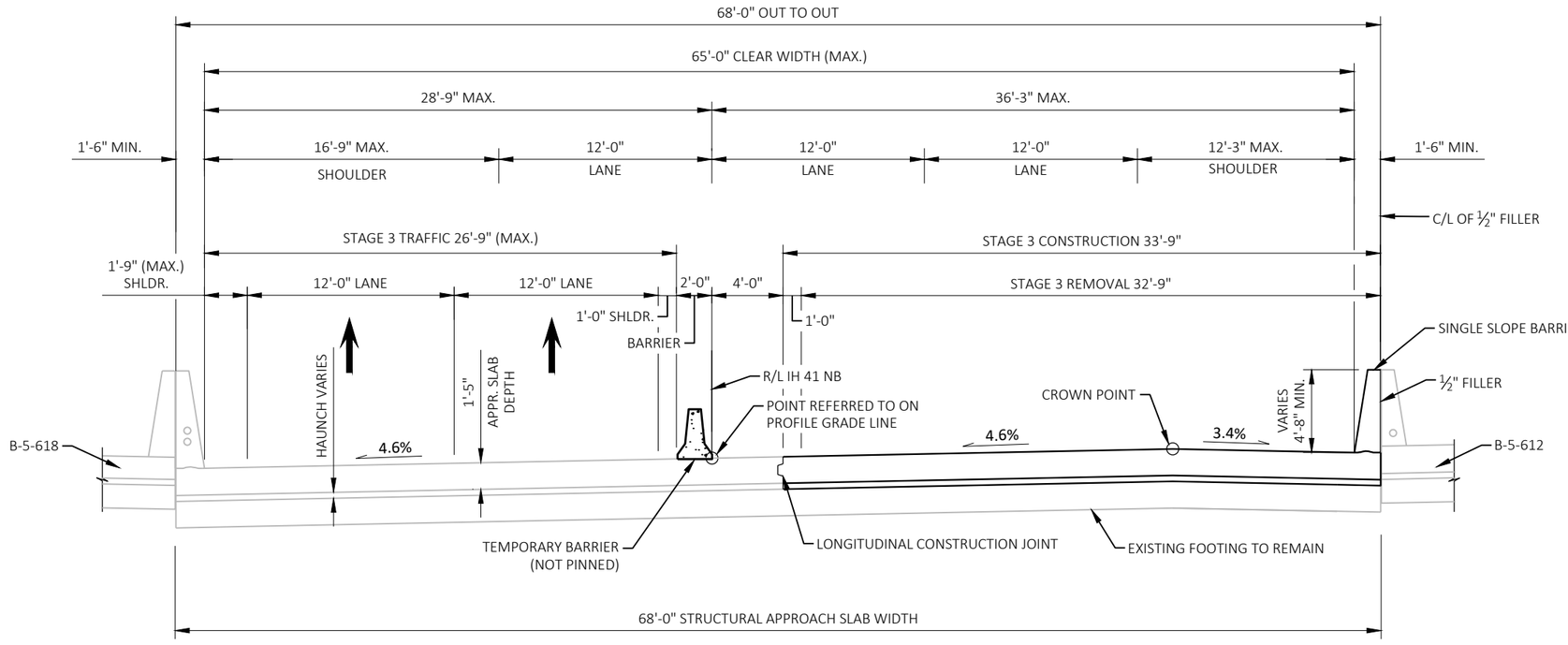
SHEET 3

STATE PROJECT NUMBER
1130-74-71



STAGE 2

(LOOKING NORTH)



STAGE 3

(LOOKING NORTH)

NOTES

ALL DIMENSIONS ARE GIVEN ALONG RADIAL LINES.

STAGE 1 AND 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS. SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-619

DRAWN BY STD | PLANS CK'D SKH

CONSTRUCTION STAGING

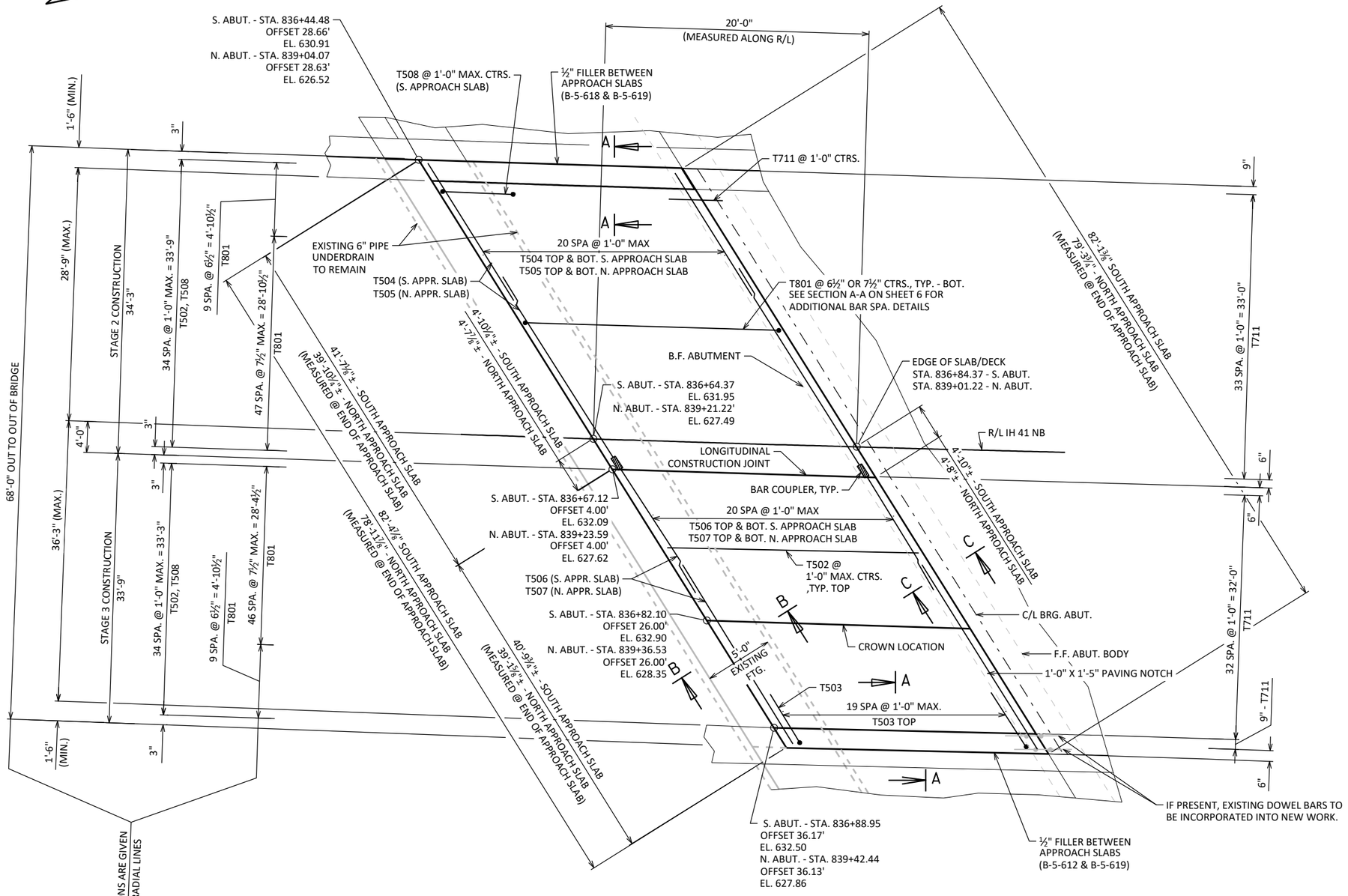
SHEET 4
427

8

8

STATE PROJECT NUMBER

1130-74-71



APPROACH SLAB PLAN

(SOUTH APPROACH SLAB SHOWN, NORTH APPROACH SLAB SIMILAR, UNLESS NOTED OTHERWISE)

NOTES

LAP NO. 5 BARS 2'-11" MIN.

PLACE LONGITUDINAL BARS CONCENTRIC TO R/L IH 41 NB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-619

DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB PLAN

SHEET 5
428

SCALE = 2.00

8

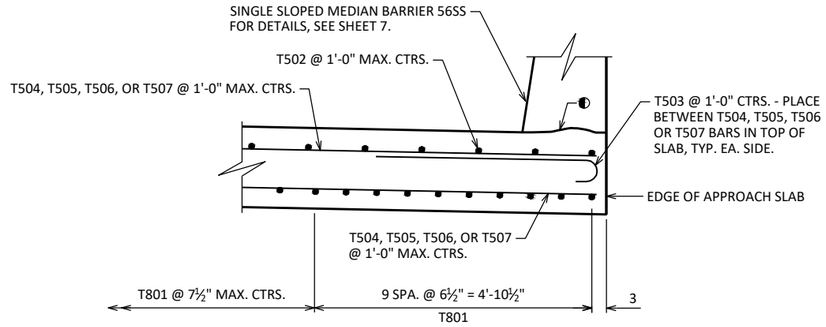
8

STATE PROJECT NUMBER

1130-74-71

LEGEND

- ⁎ DIMENSIONS ARE GIVEN NORMAL C/L SUBSTRUCTURE.
- ◭ DIMENSION ARE GIVEN ALONG R/L IH 41 NB.
- ☆ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF FOOTING. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ▲ ¾" X 1'-6" X LENGTH OF FOOTING PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC 502.2.7
- ◐ CONST. JT. - STRIKE OFF AS SHOWN.
- ◧ ADHESIVE ANCHORS NO. 7 BAR. EMBED 1'-0" IN CONCRETE. ANCHORS SHALL BE APPROVED FOR USE IN CRACKED CONCRETE.
- ● QUANTITY CALCULATED ASSUMING A 3" AVERAGE HAUNCH.

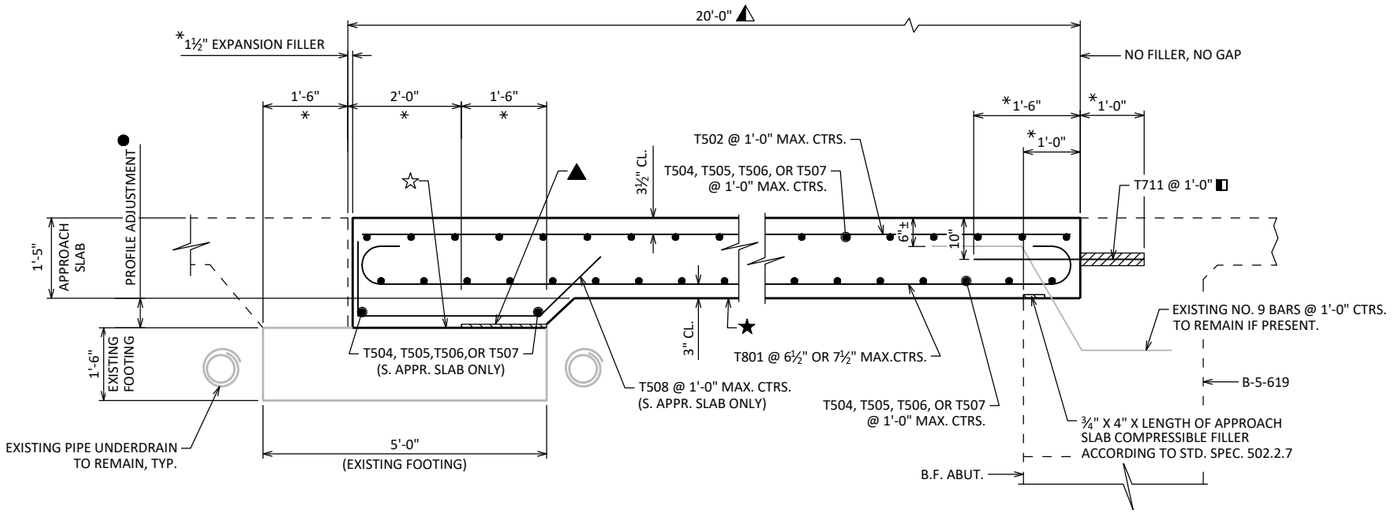


SECTION A-A

NOTES

BARS STEEL REINFORCEMENT FOR THE APPROACH SLABS AND THE SINGLE SLOPE CONCRETE BARRIERS 56SS LOCATED ON THE WEST AND EAST SIDE FOR B-5-619 IS INCLUDED IN THE BILL OF BARS ON SHEET 9.

PLACE LONGITUDINAL BAR STEEL REINFORCEMENT CONCENTRIC TO R/L IH 41 NB.



SECTION B-B

SECTION C-C

LONGITUDINAL SECTION AT APPROACH SLAB

(SECTION SHOWN AT SOUTH APPROACH SLAB, NORTH APPROACH SLAB SIMILAR)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-619

DRAWN BY STD | PLANS CK'D SKH

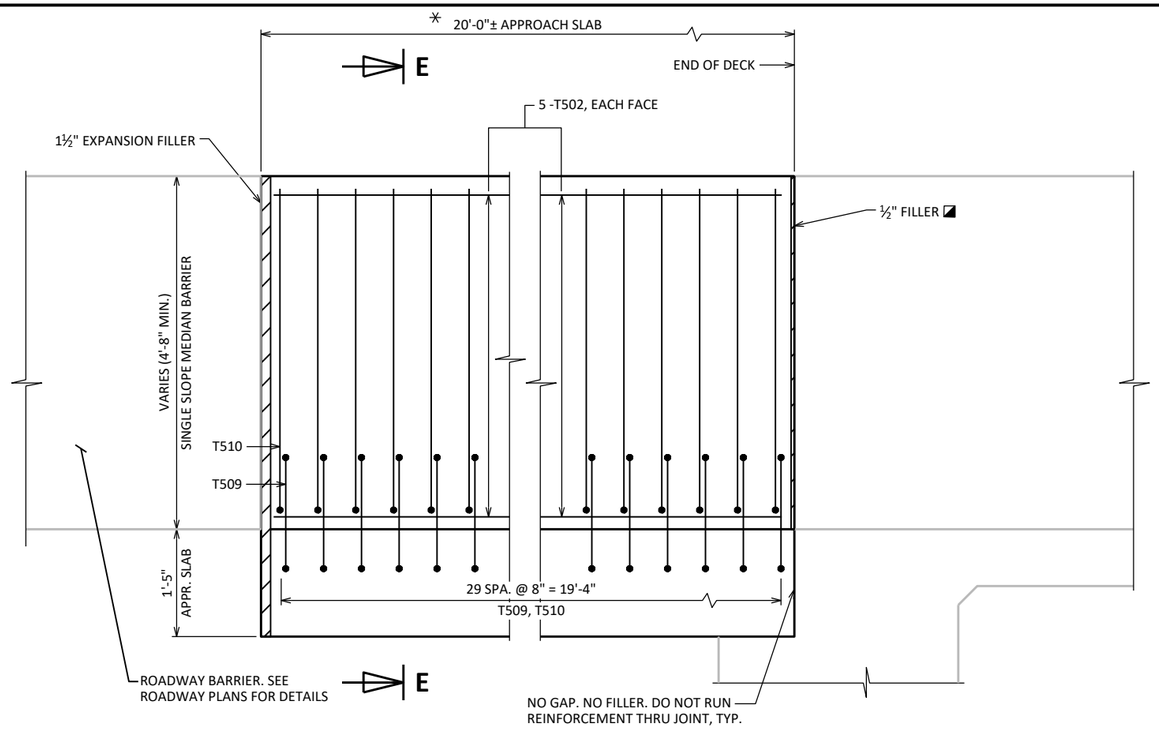
STRUCTURAL APPROACH SLAB DETAILS

SHEET 6
429

SCALE = 2.00

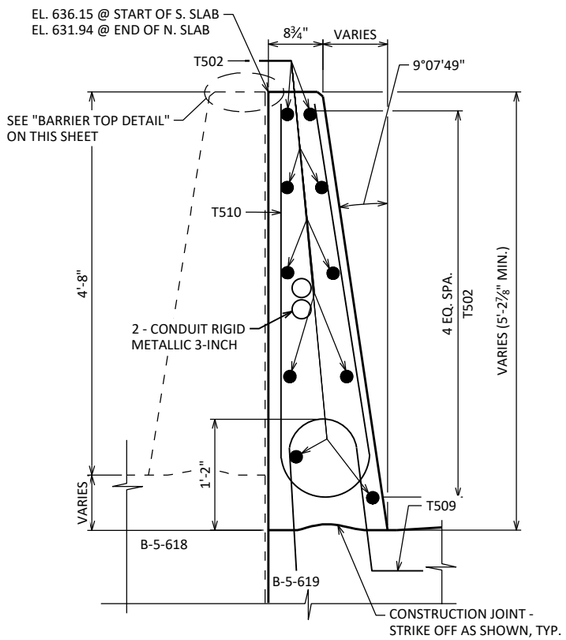
STATE PROJECT NUMBER

1130-74-71



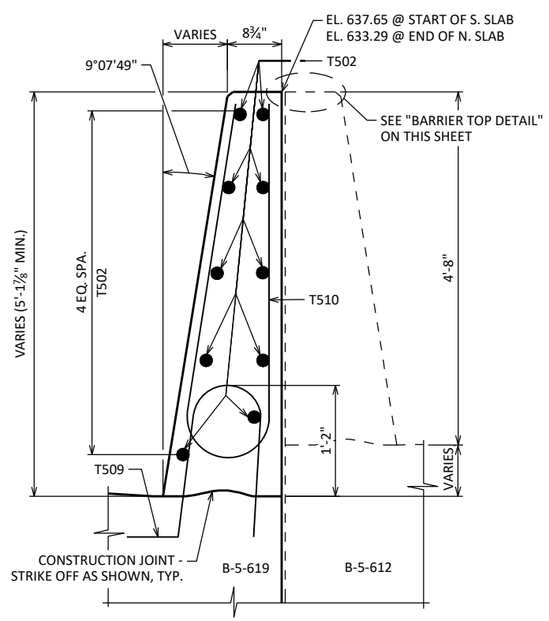
PART ELEVATION

(SOUTH END SHOWN, NORTH END SIMILAR)



SECTION E-E

LOOKING NORTH - WEST EDGE OF SLAB



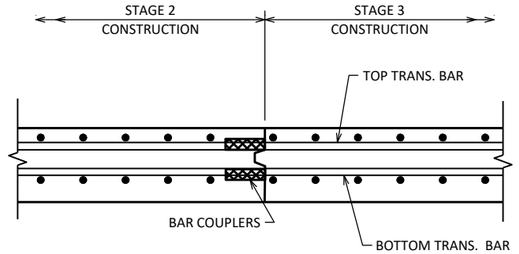
SECTION E-E

LOOKING NORTH - EAST EDGE OF SLAB

LEGEND

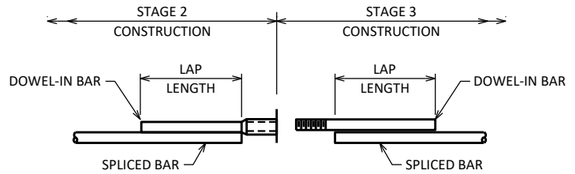
⁎ DIMENSIONS ARE GIVEN PARALLEL TO R/L IH 41 NB AT F.F. OF BARRIER.

◪ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING, NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). MATCH COLOR OR ADJACENT SURFACE.



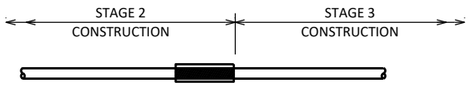
SECTION THRU APPROACH SLAB

ONE PIECE THREADED COUPLER SHOWN



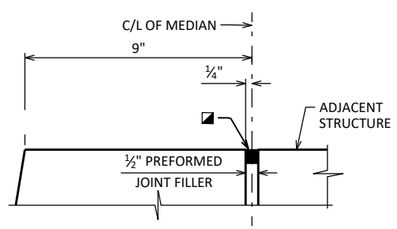
DOWEL BAR COUPLER

STAGE 3 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 2



ONE-PIECE THREADED COUPLER

BAR COUPLER ALTERNATIVE



BARRIER TOP DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-619

DRAWN BY STD | PLANS CK'D SKH

SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS

SHEET 7
430

SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71

BILL OF BARS

TOTAL COATED = 26,870 LBS.
TOTAL STAINLESS = 700 LBS.

BAR MARK	NO. REQ'D STAGE 2	NO. REQ'D STAGE 3	LENGTH	COAT	STAINLESS STEEL	BENT	BAR SERIES	LOCATION
T801	114	112	21'-4"	X		X		APPROACH SLAB BOT. LONG.
T502	90	90	19'-6"	X				APPROACH SLAB TOP & MEDIAN BARRIER LONG.
T503	40	40	4'-1"	X		X		APPROACH SLAB TOP TRANS.
★ T504	88	--	22'-6"	X				SOUTH APPROACH SLAB TOP & BOT. TRANS.
★ T505	84	--	21'-7"	X				NORTH APPROACH SLAB TOP & BOT. TRANS.
★ T506	--	88	21'-10"	X				SOUTH APPROACH SLAB TOP & BOT. TRANS.
★ T507	--	84	21'-1"	X				NORTH APPROACH SLAB TOP & BOT. TRANS.
T508	35	35	4'-11"	X		X		APPROACH SLAB HAUNCH STIRRUP
T509	60	60	4'-6"	X		X		MEDIAN BARRIER VERT.
T510	60	60	10'-1"	X		X		MEDIAN BARRIER VERT.
T711	68	68	2'-6"		X			APPROACH SLAB & DECK CONNECTION

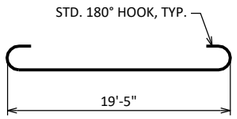
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

BOTH STRUCTURAL APPROACH SLABS ARE IN BILL OF BARS.

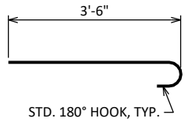
BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

ESTIMATED QUANTITIES

CONST. STAGE	HPC MASONRY STRUCTURES	BAR STEEL REINFORCEMENT HS COATED BRIDGES
STAGE 2	84 CY	13,545 LB
STAGE 3	82 CY	13,325 LB



T801



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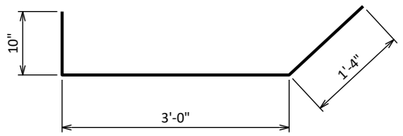

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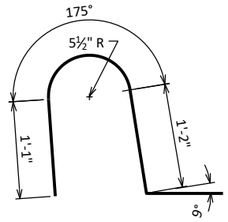

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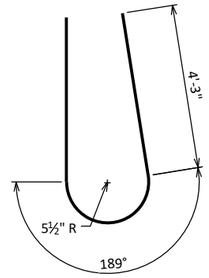
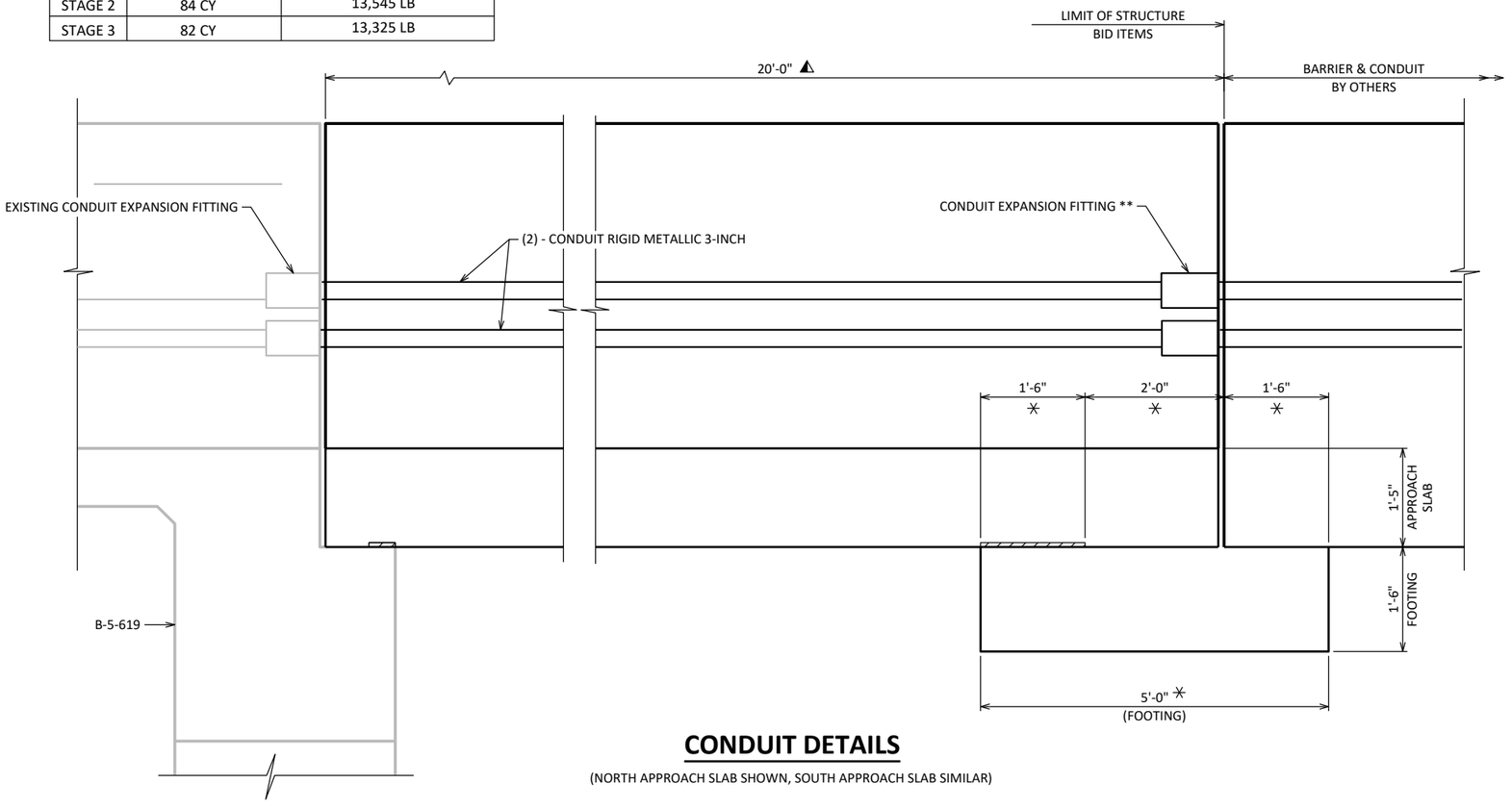


T510

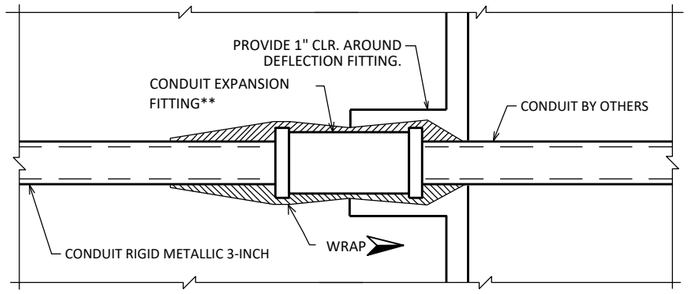
LEGEND

- ◭ DIMENSIONS ARE ALONG R/L IH 41 NB.
- ✳ DIMENSIONS ARE GIVEN NORMAL TO C/L OF SUBSTRUCTURE.
- ➢ SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN.
- ✳✳ DEFLECTION/EXPANSION FITTING REQUIREMENTS
  - UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.



CONDUIT DETAILS

(NORTH APPROACH SLAB SHOWN, SOUTH APPROACH SLAB SIMILAR)



DEFLECTION/EXPANSION FITTING

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-619

DRAWN BY STD | PLANS CK'D SKH

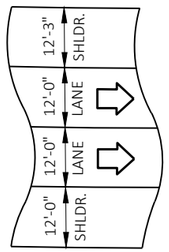
APPROACH SLAB BILL OF BARS

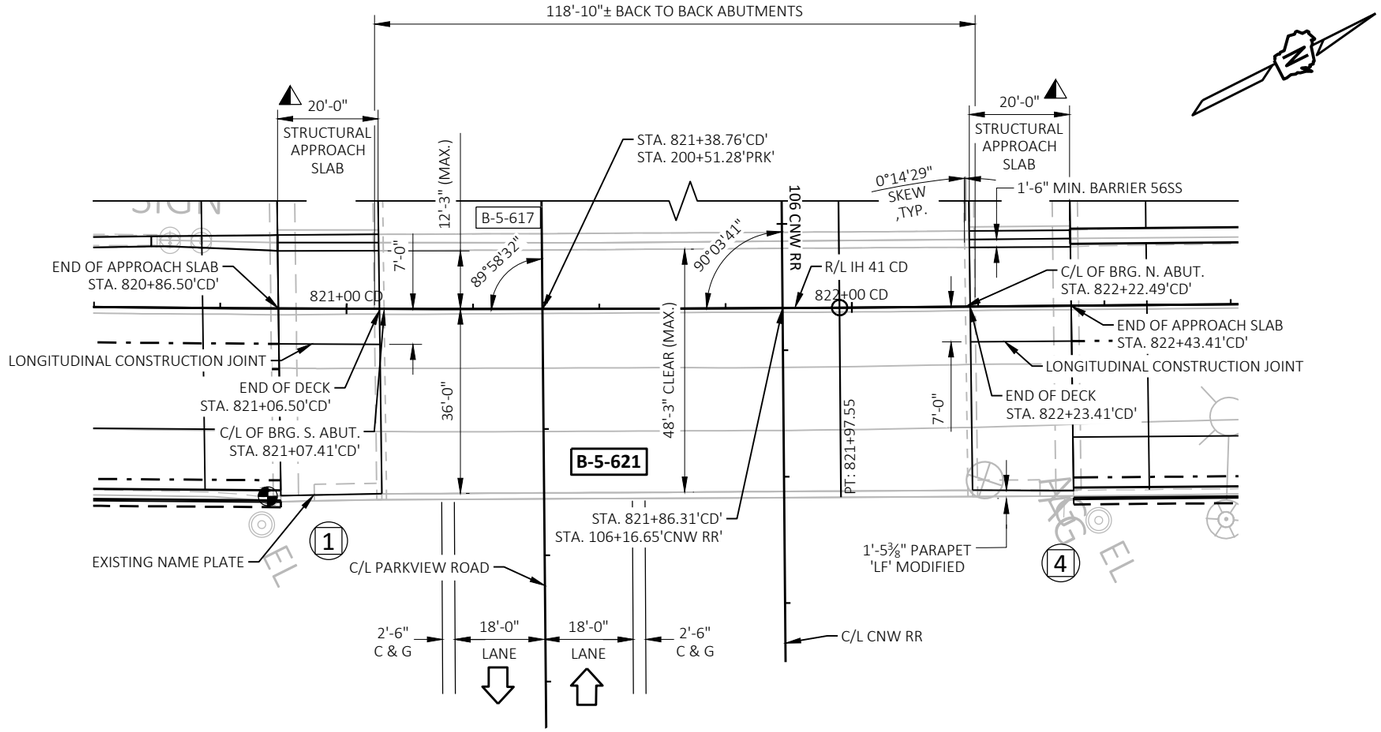
SHEET 8
431

SCALE = 2.00

STATE PROJECT NUMBER

1130-74-71





PLAN

(STRUCTURAL APPROACH SLAB AND PARAPET REPLACEMENT)

BENCH MARK

NO.	STATION IH 41 CD	OFFSET	DESCRIPTION	ELEV.
1007	821+08.10	37.508' RT	BM DISK	636.64

LEGEND

- (#) INDICATES WING NUMBER
- INDICATES BENCHMARK/CONTROL POINT
- MEASURED ALONG R/L

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	S. STRUCT. APPR. SLAB	N. STRUCT. APPR. SLAB	TOTAL
203.0220.06	REMOVING STRUCTURE B-5-621	EACH	--	--	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	107	107	214
502.3210	PIGMENTED SURFACE SEALER	SY	16	15	31
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	8,965	8,965	17,930
505.0905	BAR COUPLERS NO. 5	EACH	42	42	84
SPV.0035.01	HPC MASONRY STRUCTURES	CY	60.0	60.0	120
SPV.0165.01	LONGITUDINAL GROOVING BRIDGE DECK	SF	965	965	1,930
	NON-BID ITEMS				
	FILLER	SIZE			1/2", 3/4", & 1 1/2"

ALL BID ITEMS SHOWN ARE CATEGORY 0070

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 03/18/2025
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.43
OPERATING RATING: RF = 1.85
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

HPC MASONRY:
STRUCTURAL APPROACH SLAB — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

TRAFFIC DATA

IH-41

ADT (2026) = 79,260
ADT (2046) = 90,500
DESIGN SPEED = 60 MPH

CURVE DATA

PI STA = 820+37.69'CD'
Y = 549108.300
X= 82504.200
Δ = 2°17'25" LT
D = 00°42'58"
T = 159.90'
L = 319.77'
R = 8000.00'
PC STA = 818+77.79'CD'
Y = 548967.740
X = 82427.962
PT STA = 821+97.55'CD'
Y = 549251.794
X = 82574.760
DB = N28°28'30"E
DA = N26°11'05"E

WISCONSIN
SHELLY K. HARRIS
E-100266-6
MONDOVI, WI
PROFESSIONAL ENGINEER

May 30, 2025

SCOPE OF WORK

- REPLACEMENT OF STRUCTURAL APPROACH SLAB AND APPROACH SLAB PARAPETS

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, PROFILE & CROSS SECTION
3. STRUCTURAL APPROACH SLAB REMOVAL LIMITS
4. CONSTRUCTION STAGING
5. APPROACH SLAB DETAILS
6. SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS
7. APPROACH SLAB BILL OF BARS

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
SHELLY HARRIS (715) 309-5224

NO.	DATE	REVISION	BY

KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-5-621

IH 41 OFF-RAMP TO ONEIDA ST. - PARKVIEW RD. & CNW RR

COUNTY	VILLAGE
BROWN	ASHWAUBENON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JBN	SKH	STD	SKH

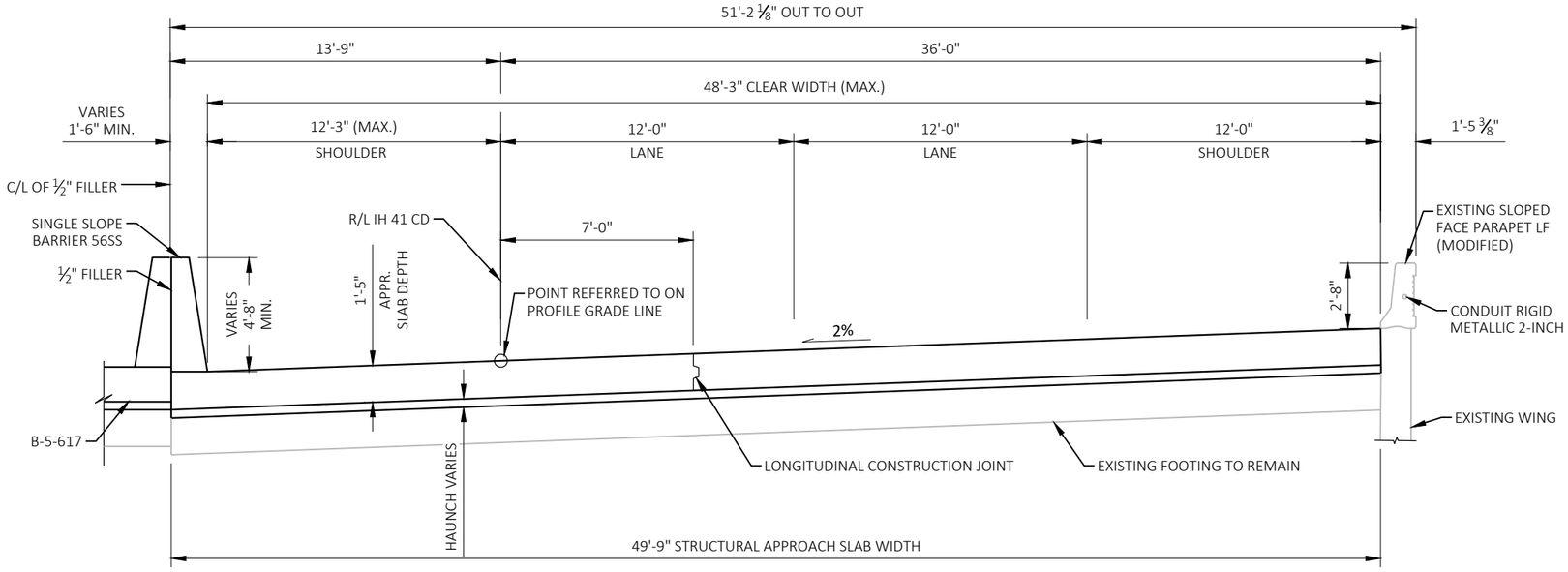
GENERAL PLAN

SHEET 1 OF 7
432

I.D. DATE:

STATE PROJECT NUMBER

1130-74-71

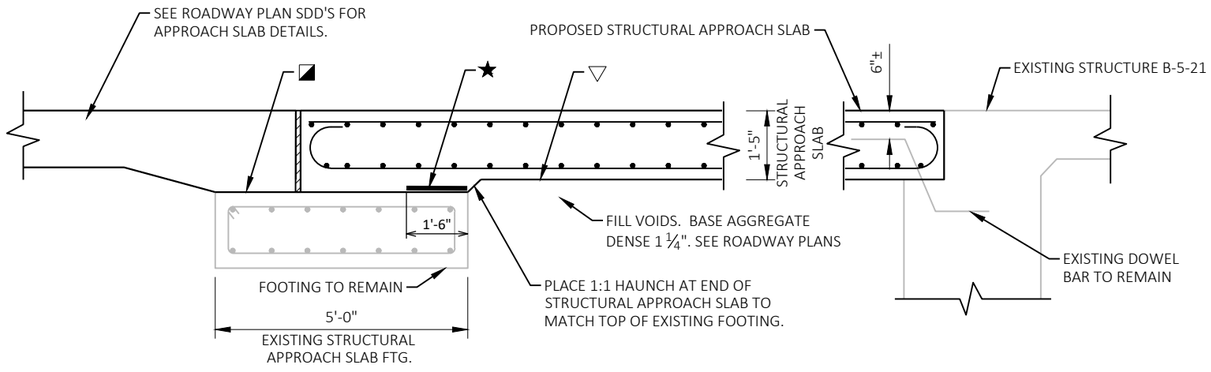


CROSS SECTION AT STRUCTURAL APPROACH SLAB

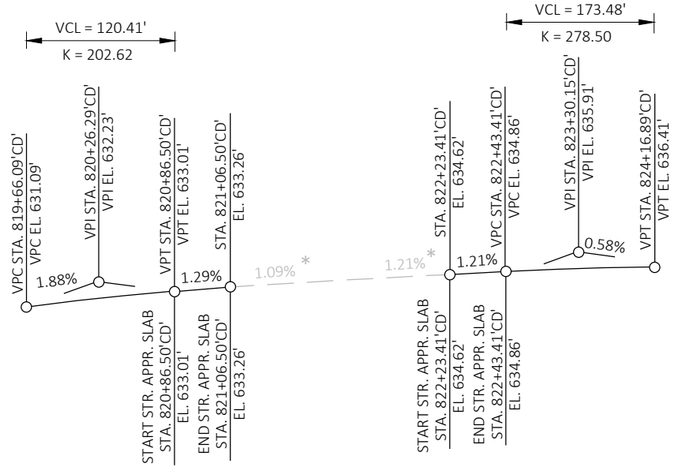
(LOOKING NORTH)

LEGEND

- ◪ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF FOOTING.
- ▽ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.
- ★ ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7.
- * EXISTING PROFILE ON CURRENT BRIDGE DECK.



LONGITUDINAL SECTION OF STRUCTURAL APPROACH SLAB



PROFILE GRADE LINE IH 41 CD

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD 83 (2011). ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT, UNLESS SPECIFIED OTHERWISE.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE EXISTING STRUCTURE, B-5-621, IS A SINGLE SPAN PRESTRESSED GIRDER BRIDGE WITH A MAXIMUM CLEAR WIDTH OF 48'-3". THE NORTH AND SOUTH STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP SURFACE OF THE NEW STRUCTURAL APPROACH SLAB.

PARAPETS ON TOP OF EXISTING STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF THE NEW CONCRETE PARAPETS.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING STAINLESS STEEL REINFORCING BARS CONNECTING THE ABUTMENT DIAPHRAGM TO THE STRUCTURAL APPROACH SLAB.

SEE ROADWAY PLANS AND QUANTITIES FOR BASE AGGREGATE DENSE REQUIRED UNDER APPROACH SLAB.

THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE STRUCTURAL APPROACH SLAB SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE B-5-621".

REMOVAL OF HMA OVERLAY ON TOP OF STRUCTURAL APPROACH SLABS TO BE INCLUDED IN BID ITEM "REMOVING STRUCTURE B-5-621".

ALL STATIONS ARE BASED ON PROPOSED ALIGNMENT.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-621

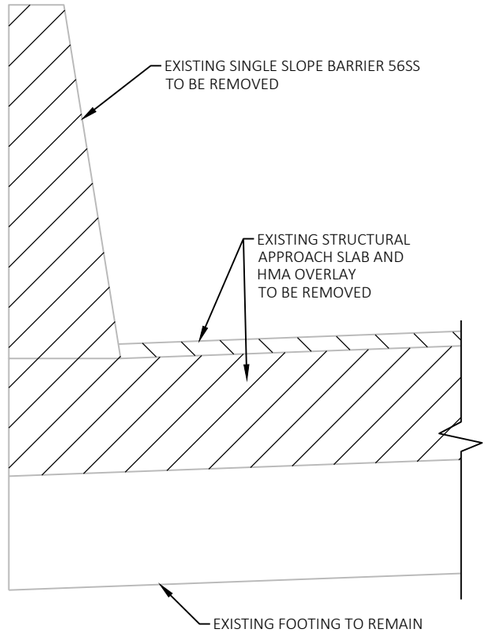
DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES, PROFILE & CROSS SECTION

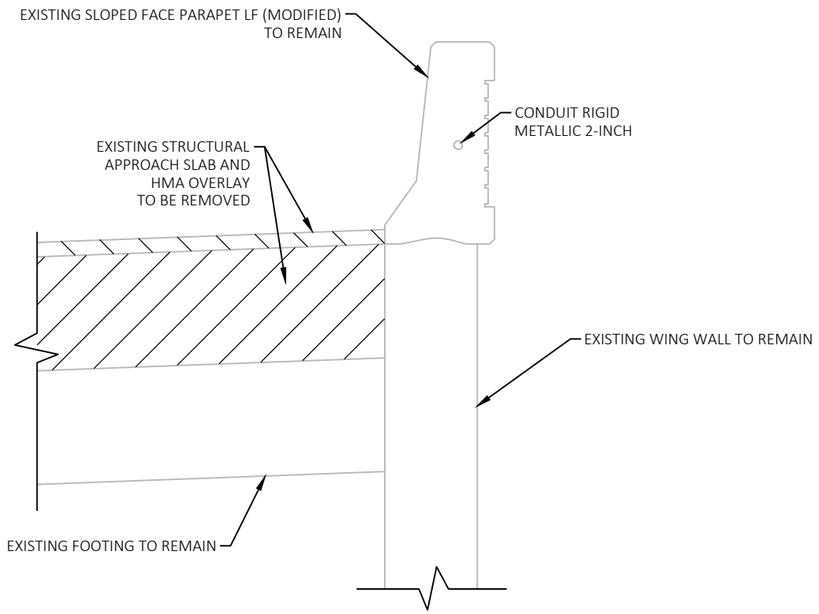
SHEET 2
433

STATE PROJECT NUMBER

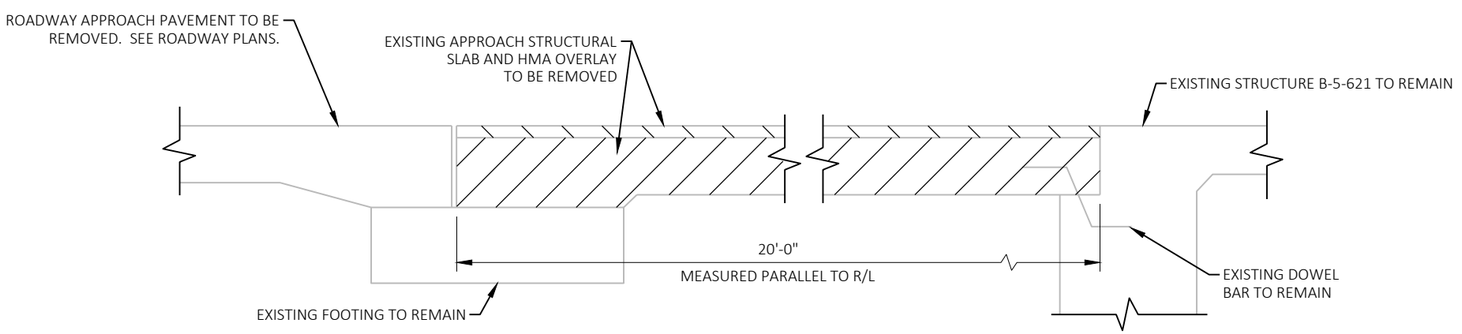
1130-74-71



REMOVAL LIMITS AT WEST EDGE OF SLAB



REMOVAL LIMITS AT EAST EDGE OF SLAB



LONGITUDINAL REMOVAL LIMITS DETAIL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-621

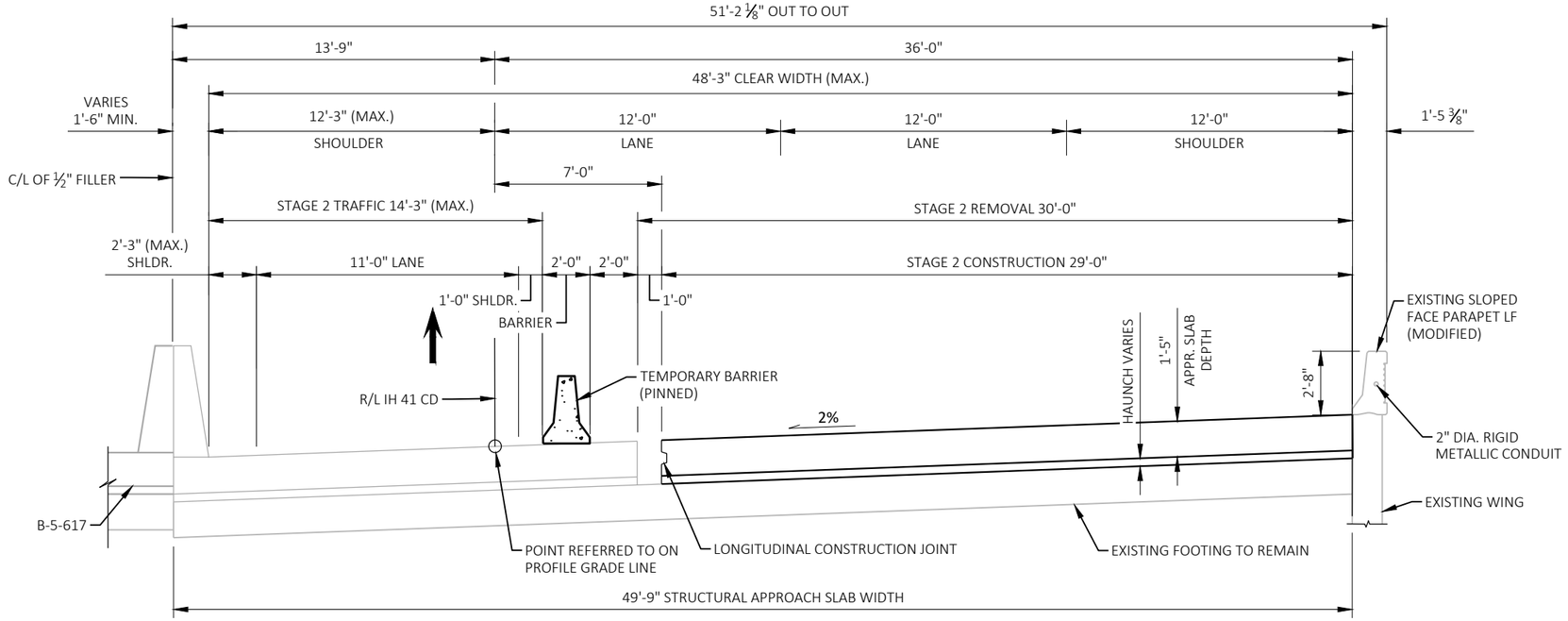
DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB REMOVAL LIMITS

SHEET 3

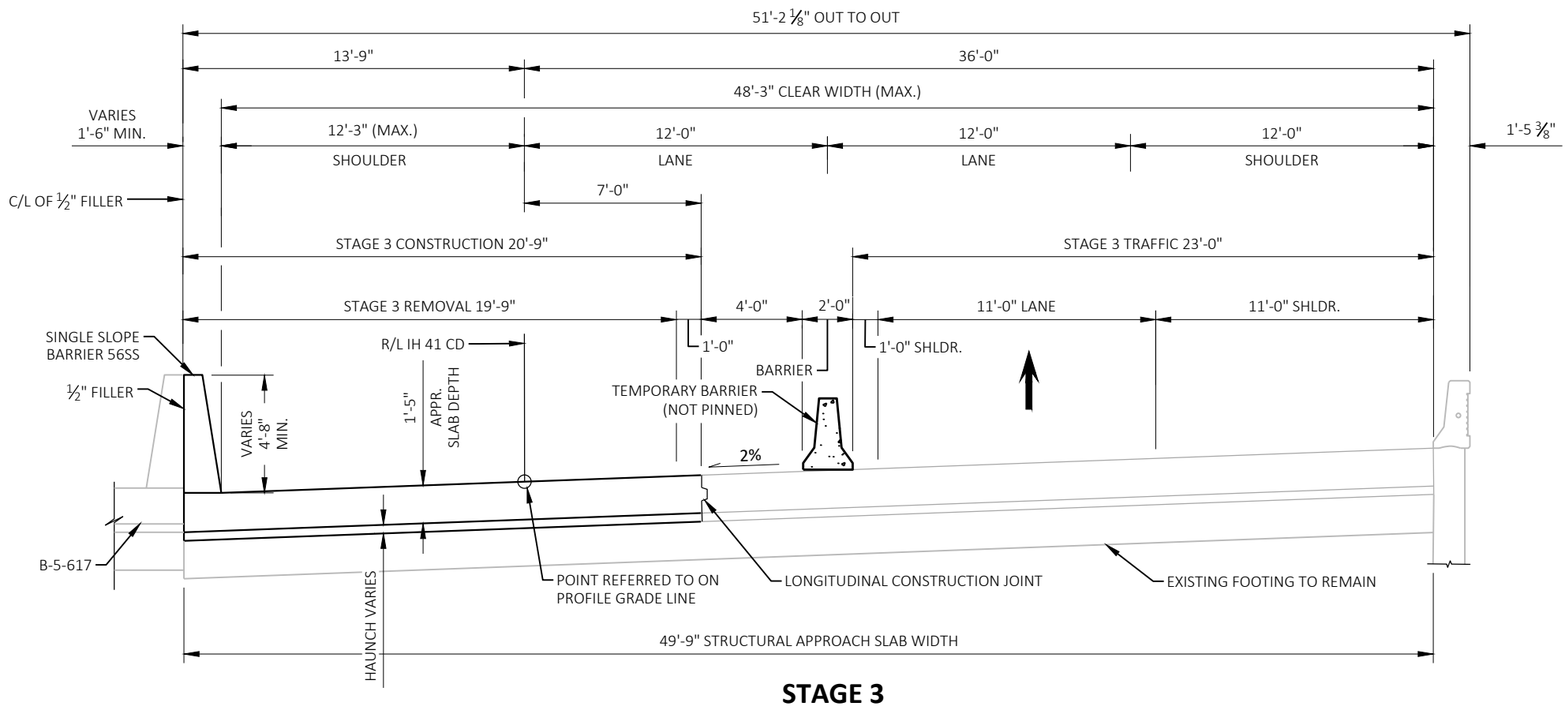
STATE PROJECT NUMBER

1130-74-71



STAGE 2

(LOOKING NORTH)



STAGE 3

(LOOKING NORTH)

NOTE:

ALL DIMENSIONS ARE GIVEN ALONG RADIAL LINES.

STAGE 1 & 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS, SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-621

DRAWN BY STD | PLANS CK'D SKH

CONSTRUCTION STAGING

SHEET 4

435

8

8

STATE PROJECT NUMBER

1130-74-71

LEGEND

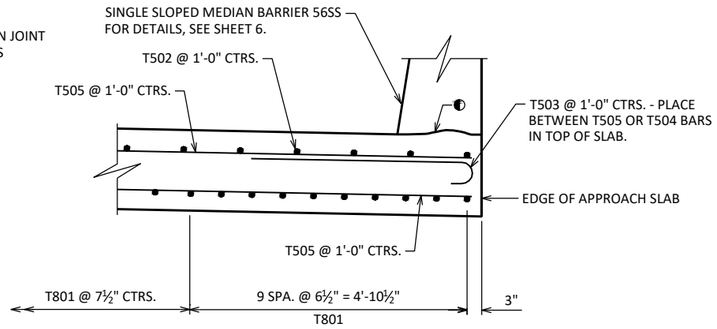
- ⁎ DIMENSIONS ARE GIVEN NORMAL C/L SUBSTRUCTURE.
- ⁎⁎ DIMENSION ARE GIVEN ALONG R/L IH 41 CD.
- ☆ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF FOOTING. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ▲ ¾" X 1'-6" X LENGTH OF FOOTING COMPRESSIBLE FILLER. PREFORMED JOINT FILLER ACCORDING TO STANDARD SPC. 502.2.7
- ◐ CONST. JT. - STRIKE OFF AS SHOWN.
- ● QUANITY CALCULATED ASSUMING A 3" AVERAGE HAUNCH

NOTES:

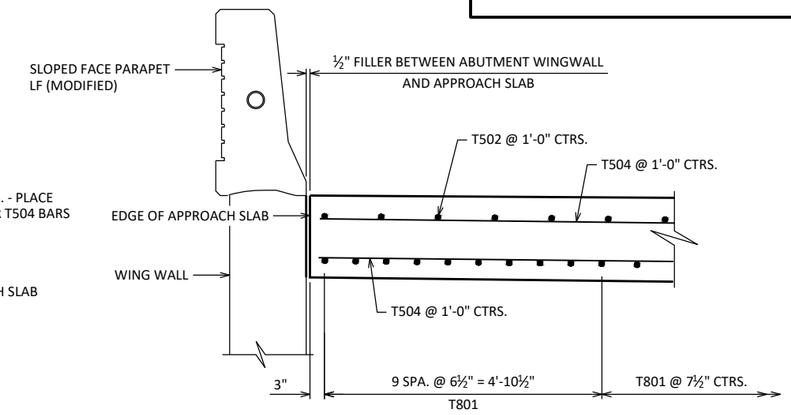
BARS STEEL REINFORCEMENT FOR THE APPROACH SLABS AND THE SINGLE SLOPE CONCRETE BARRIER 56SS LOCATED ON THE WEST SIDE FOR B-5-621 IS INCLUDED IN THE BILL OF BARS ON SHEET 7.

PLACE LONGITUDINAL BAR STEEL REINFORCEMENT CONCENTRIC TO R/L IH 41 CD.

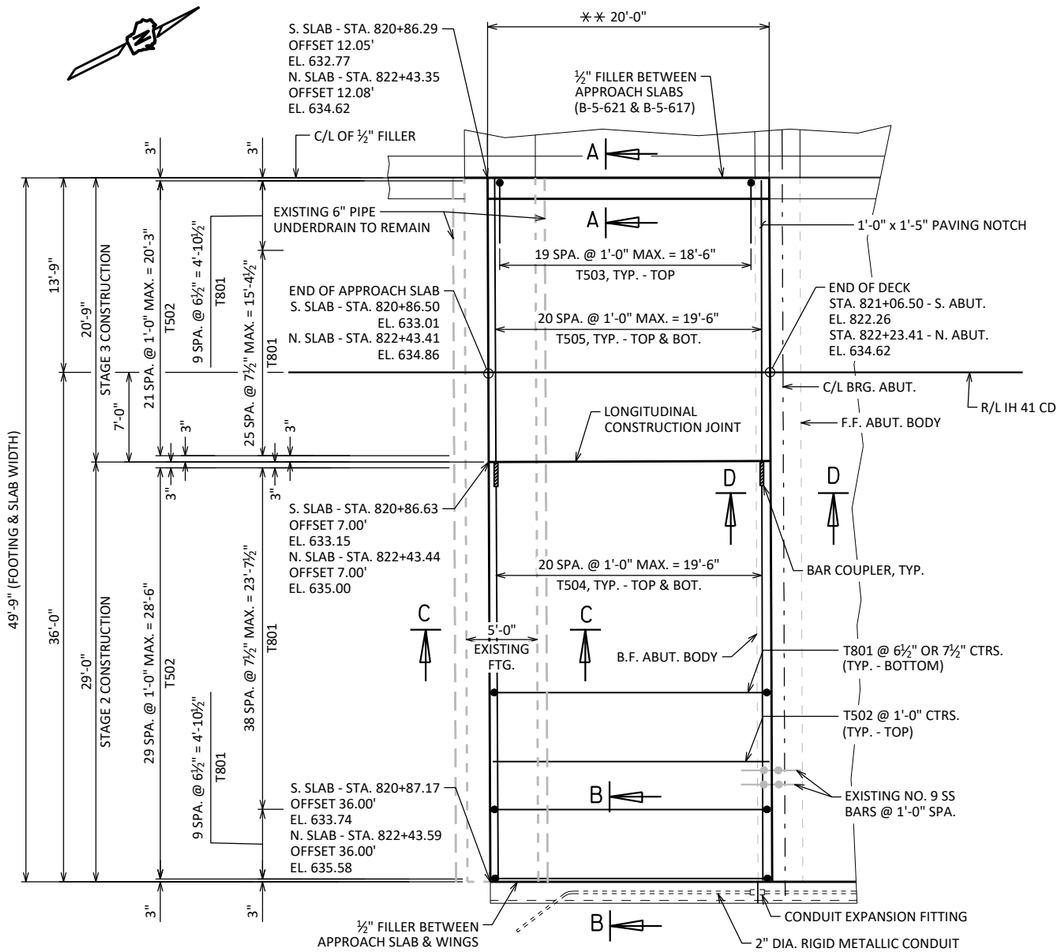
BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.



SECTION A-A

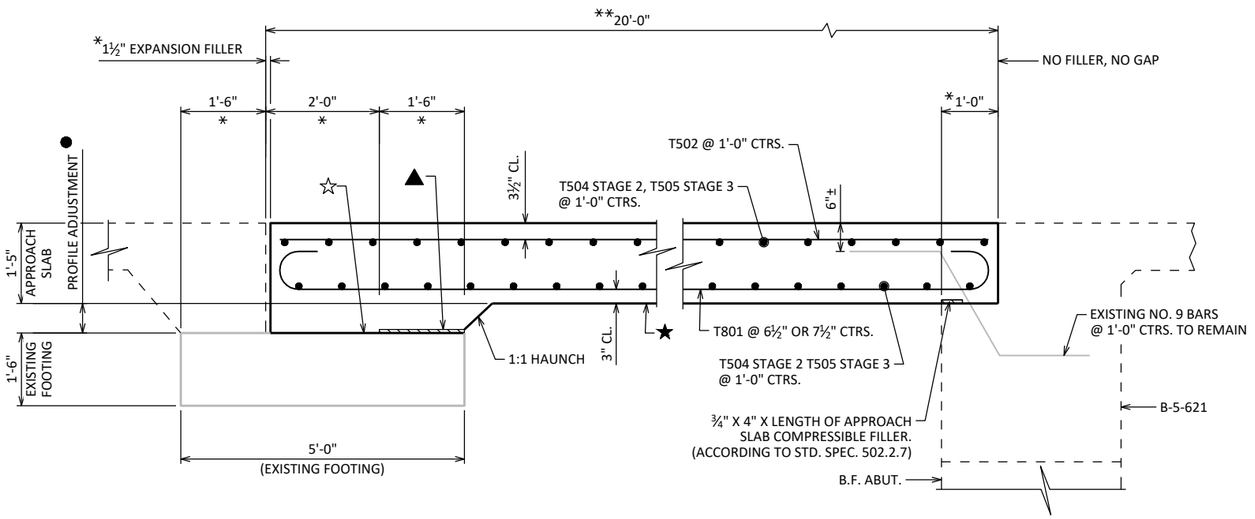


SECTION B-B



APPROACH SLAB PLAN

(SOUTH APPROACH SLAB, NORTH APPROACH SLAB SIMILAR UNLESS NOTED OTHERWISE)



SECTION C-C

SECTION D-D

LONGITUDINAL SECTION AT APPROACH SLAB

(SECTION SHOWN AT SOUTH APPROACH SLAB, NORTH APPROACH SLAB SIMILAR)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-621

DRAWN BY STD | PLANS CK'D SKH

APPROACH SLAB DETAILS

SHEET 5
436

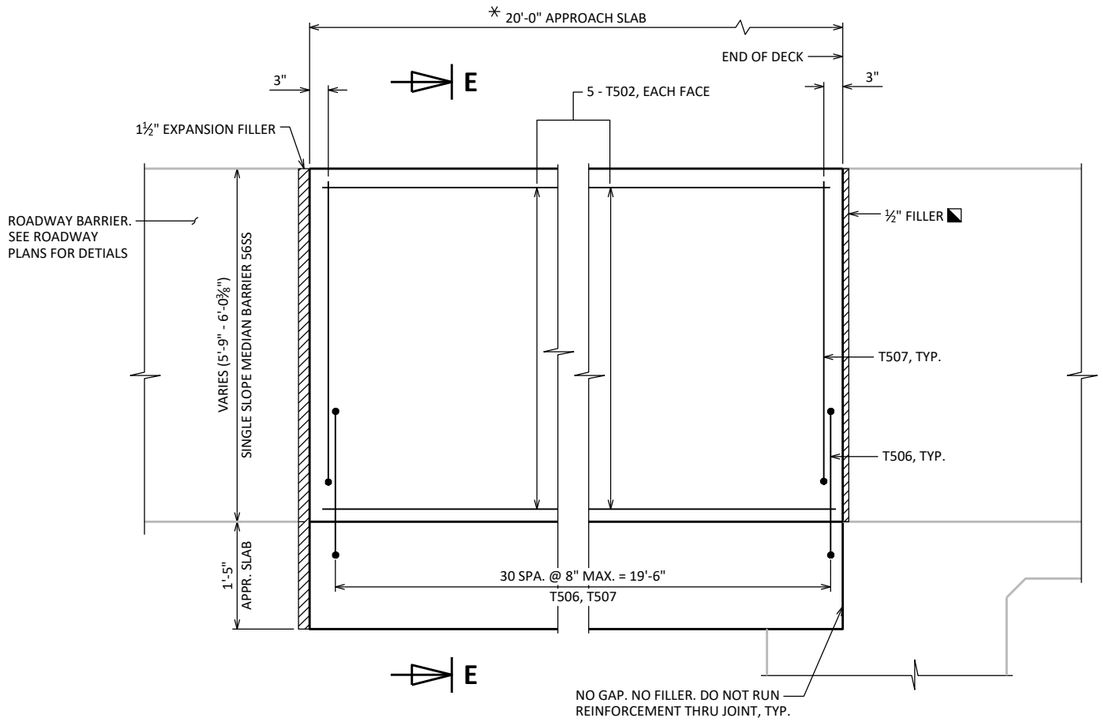
SCALE = 2.00

8

8

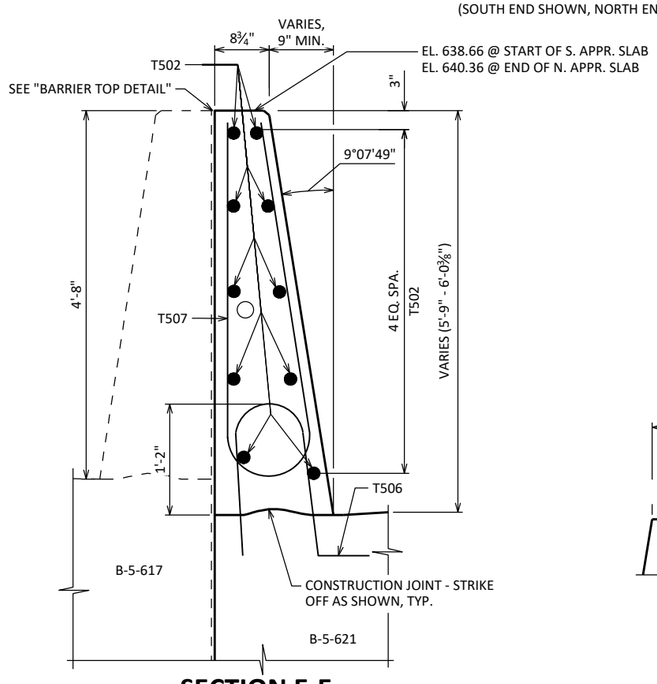
STATE PROJECT NUMBER

1130-74-71



PART ELEVATION

(SOUTH END SHOWN, NORTH END SHOWN SIMILAR)



SECTION E-E

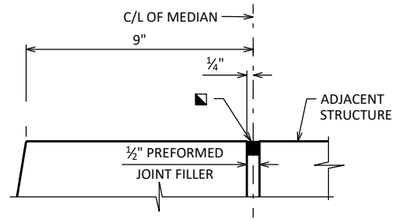
(TYPICAL AT ENDS OF BARRIER)

LOOKING NORTH - WEST EDGE OF DECK

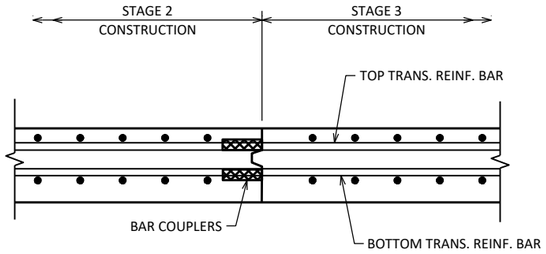
LEGEND

* DIMENSIONS ARE GIVEN PARALLEL TO R/L IH 41 CD.

SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

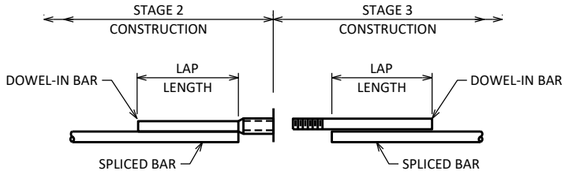


BARRIER TOP DETAIL



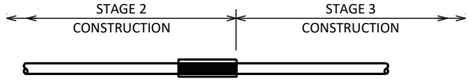
SECTION THRU APPROACH SLAB

ONE PIECE THREADED COUPLER SHOWN



DOWEL BAR COUPLER

STAGE 3 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 2



ONE-PIECE THREADED COUPLER

BAR COUPLER ALTERNATIVE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-621

DRAWN BY STD | PLANS CK'D SKH

SINGLE SLOPE MEDIAN BARRIER 56SS DETAILS

SHEET 6
437

SCALE = 2.00

8

8

STATE PROJECT NUMBER

1130-74-71

BILL OF BARS

TOTAL WEIGHT = 17,930 LBS.

	BAR MARK	NO. REQ'D STAGE 2	NO. REQ'D STAGE 3	LENGTH	COAT	BENT	LOCATION
	T801	96	70	21'-4"	X	X	APPROACH SLAB - BOTTOM
	T502	80	64	19'-6"	X		APPROACH SLAB & MEDIAN BARRIER - LONGIT.
	T503	---	40	4'-1"	X	X	APPROACH SLAB - TOP - TRANS.
★	T504	84	---	28'-9"	X		APPROACH SLAB - TOP & BOTTOM TRANS.
★	T505	---	84	20'-6"	X		APPROACH SLAB - TOP & BOTTOM TRANS.
	T506	---	62	4'-6"	X	X	MEDIAN BARRIER - APPR. SLAB - VERT.
	T507	---	62	11'-9"	X	X	MEDIAN BARRIER - APPR. SLAB - VERT.

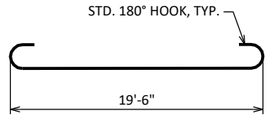
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

BOTH STRUCTURAL APPROACH SLABS ARE IN THE BILL OF BARS.

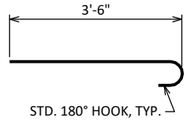
★ BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

ESTIMATED QUANTITIES

CONST. STAGE	HPC MASONRY STRUCTURES	BAR STEEL REINFORCEMENT HS COATED BRIDGES
STAGE 2	63 CY	9,620 LB
STAGE 3	56 CY	8,310 LB



T801



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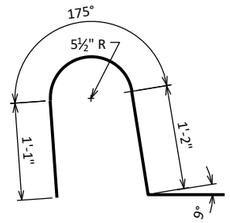

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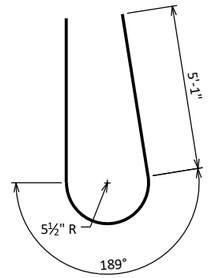


T507

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-621

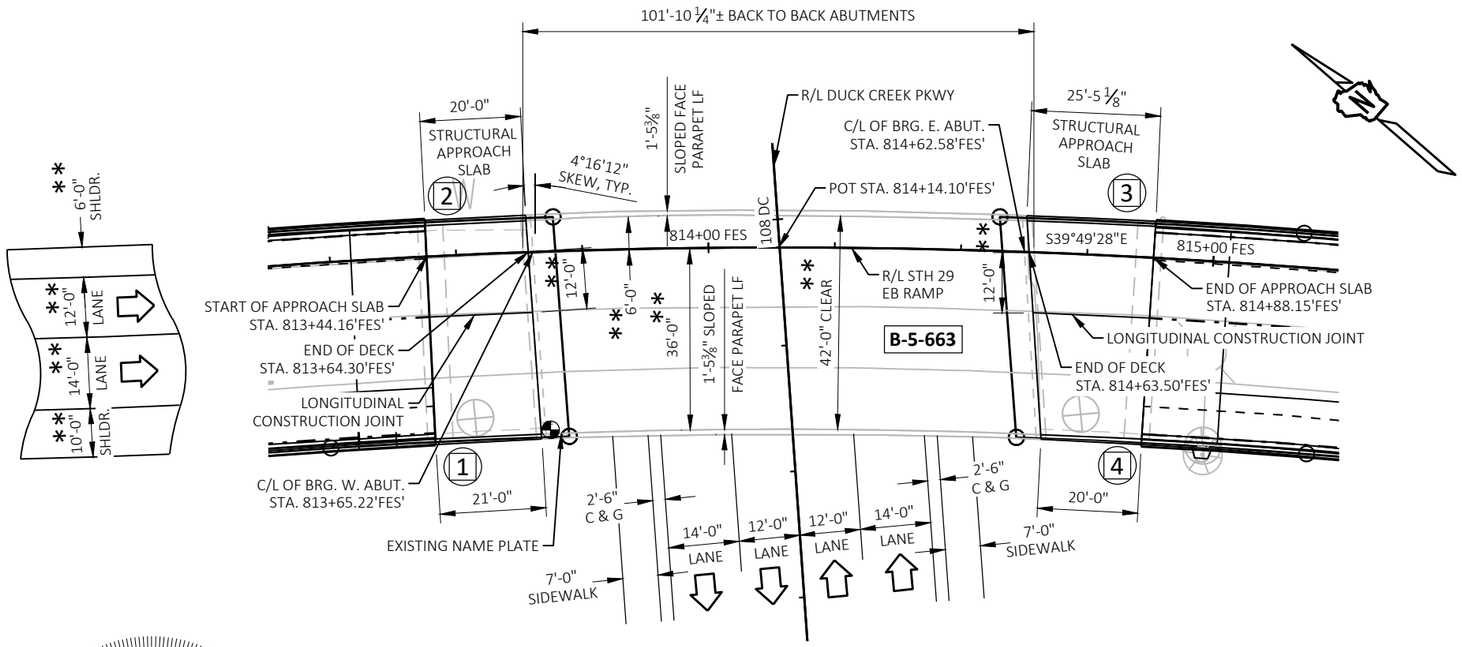
DRAWN BY STD | PLANS CK'D SKH

APPRAOCH SLAB BILL OF BARS

SHEET 7
438

SCALE = 2.00

STATE PROJECT NUMBER
1130-74-71



PLAN

(STRUCTURAL APPROACH SLAB AND PARAPET REPLACEMENT)

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 04/01/2025
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.43
OPERATING RATING: RF = 1.84
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

HPC MASONRY:
STRUCTURAL APPROACH SLAB ——— f'_c = 4,000 PSI

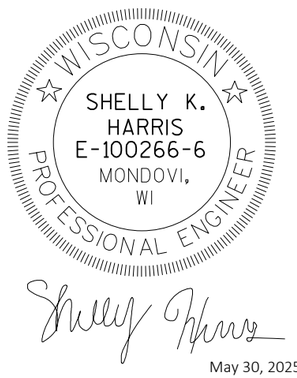
BAR STEEL REINFORCEMENT
GRADE 60 ——— f_y = 60,000 PSI

TRAFFIC DATA

ADT (2026) = 9,570
ADT (2046) = 9,570
DESIGN SPEED = 60 MPH

CURVE DATA

PI STA = 820+85.00'FES'
Y = 575874.000
X= 82913.330
Δ = 61°22'02" RT
D = 04°11'35"
T = 810.80'
L = 1463.54'
R = 1366.44'
PC STA = 812+74.19'FES'
Y = 576440.370
X = 82333.134
PT STA = 827+37.73'FES'
Y = 575093.355
X = 82694.250
DB = S45°41'27"E
DA = S15°40'34"W



May 30, 2025

NOTE:

BRIDGE LENGTH DIMENSION AND SKEW ANGLE BASED OFF OF AS-BUILT TANGENT LINE.

SCOPE OF WORK

- REPLACEMENT OF STRUCTURAL APPROACH SLAB AND APPROACH SLAB PARAPETS

LEGEND

** DIMENSIONS MEASURED RADIALLY
(#) INDICATES WING/CORNER NUMBER
INDICATES BENCHMARK/CONTROL POINT

BENCH MARK

NO.	STATION STH 29 EB	OFFSET	DESCRIPTION	ELEV.
1003	813+70.78	36.995' RT	BM DISK	634.54

TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	W. STRUCT. APPR. SLAB	E. STRUCT. APPR. SLAB	TOTAL
203.0220.07	REMOVING STRUCTURE B-5-663	EACH	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	96	106	202
502.3210	PIGMENTED SURFACE SEALER	SY	18	20	38
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	SY	10,330	9,800	20,130
505.0905	BAR COUPLERS NO. 5	EACH	40	46	86
517.1010.S.07	CONCRETE STAINING B-5-663	SF	204	230	434
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	19	18	37
SBV.0035.01	HPC MASONRY STRUCTURES	CY	70	70	140
SPV.0165.01	LONGITUDINAL GROOVING BRIDGE DECK	SF	861	954	1,815
	NON-BID ITEMS				
	FILLER	SIZE			1/2", 3/4", & 1 1/2"

ALL BID ITEMS SHOWN ARE CATEGORY 0080.

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES, PROFILE & CROSS SECTION
3. STRUCTURAL APPROACH SLAB REMOVAL LIMITS
4. CONSTRUCTION STAGING
5. APPROACH SLAB DETAILS (1 OF 2)
6. APPROACH SLAB DETAILS (2 OF 2)
7. APPROACH SLAB DETAILS & BILL OF BARS
8. CONDUIT & AESTHETIC DETAILS

STRUCTURE DESIGN CONTACTS:
BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261
CONSULTANT:
SHELLY HARRIS (715) 309-5224

NO.	DATE	REVISION	BY

KL Engineering [A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/13/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-5-663

STH 29 EB RAMP TO IH 41 SB OVER DUCK CREEK PKWY

COUNTY	VILLAGE
BROWN	ASHWAUBENON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JBN	SKH	STD	SKH

GENERAL PLAN

SHEET 1 OF 8
439

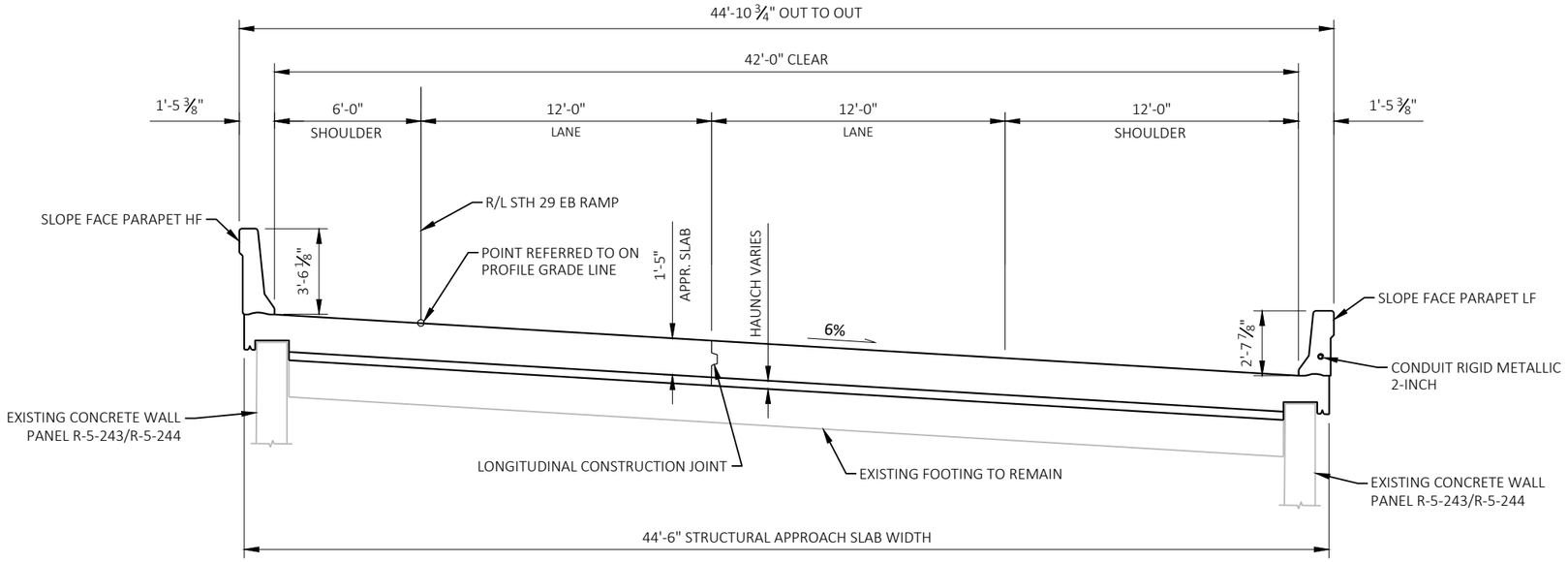
I.D. DATE:

8

8

STATE PROJECT NUMBER

1130-74-71



CROSS SECTION AT STRUCTURAL APPROACH SLAB

(LOOKING EAST)

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAWCUT, UNLESS SPECIFIED OTHERWISE.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

THE EXISTING STRUCTURE, B-5-663, IS A SINGLE SPAN PRESTRESSED GIRDER BRIDGE WITH A CLEAR WIDTH OF 42'-0". THE WEST AND EAST STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP SURFACE OF THE NEW STRUCTURAL APPROACH SLAB.

PARAPETS ON TOP OF EXISTING STRUCTURAL APPROACH SLABS ARE TO BE REMOVED AND REPLACED.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF THE NEW CONCRETE PARAPETS.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING STAINLESS STEEL REINFORCING BARS CONNECTING THE ABUTMENT DIAPHRAGM TO THE STRUCTURAL APPROACH SLAB.

SEE ROADWAY PLANS AND QUANTITIES FOR BASE AGGREGATE DENSE REQUIRED UNDER APPROACH SLAB.

REMOVAL OF CONDUIT TO BE INCLUDED IN BID ITEM "REMOVING STRUCTURE B-5-663".

ANY DAMAGED WIRING OR CONDUIT, INCLUDING WITHIN THE APPROACH SLAB REPAIR LIMITS, SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD 83 (2011). ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE STRUCTURAL APPROACH SLAB SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE B-5-663".

ALL STATIONS ARE BASED ON PROPOSED ALIGNMENT.

LEGEND

◪ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF FOOTING.

▽ PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHELENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

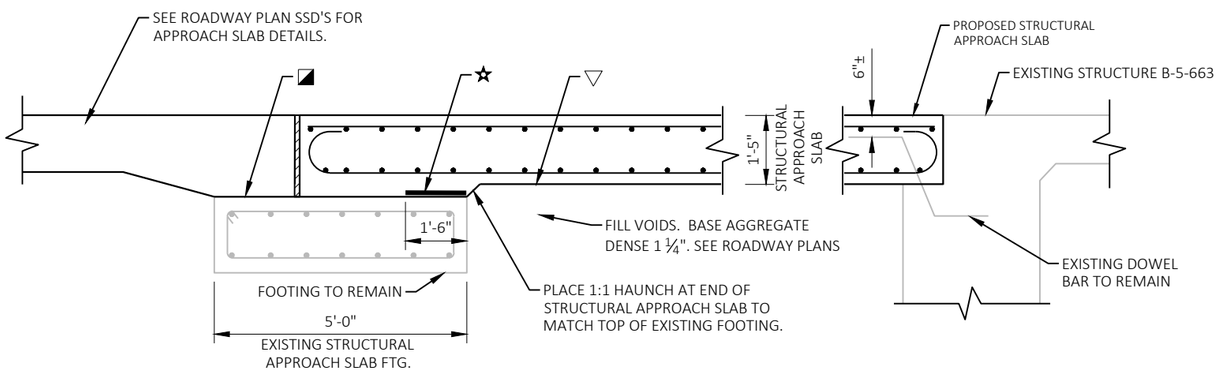
☆ ¾" PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7.

● DIMENSION IS PERPENDICULAR TO THE TANGENT LINE.

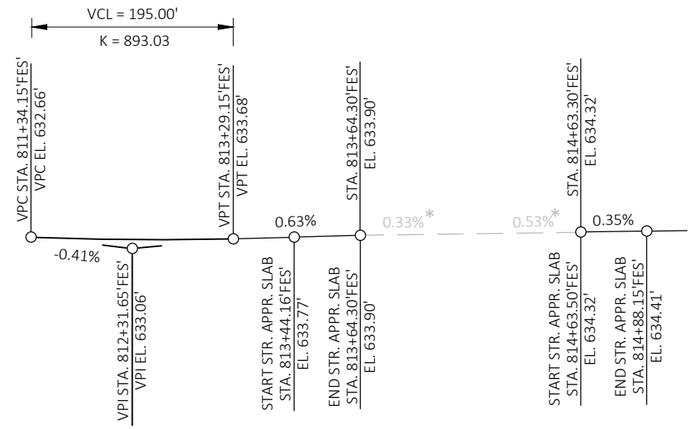
* EXISTING PROFILE ON CURRENT BRIDGE DECK.

NOTE:

ALL DIMENSIONS IN CROSS SECTION ARE RADIAL UNLESS NOTED OTHERWISE.



LONGITUDINAL SECTION OF STRUCTURAL APPROACH SLAB



PROFILE GRADE LINE STH 29 EB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-663

DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES, PROFILE & CROSS SECTION

SHEET 2

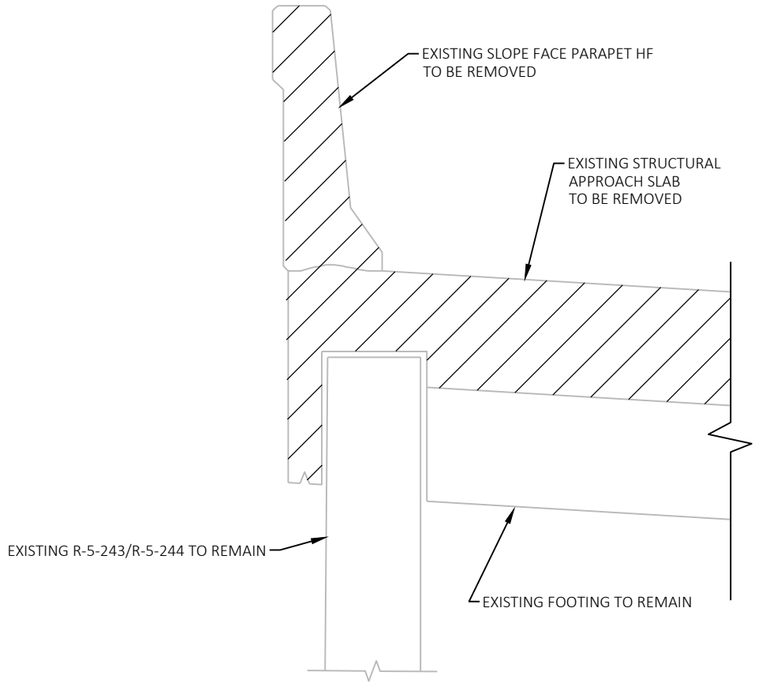
440

8

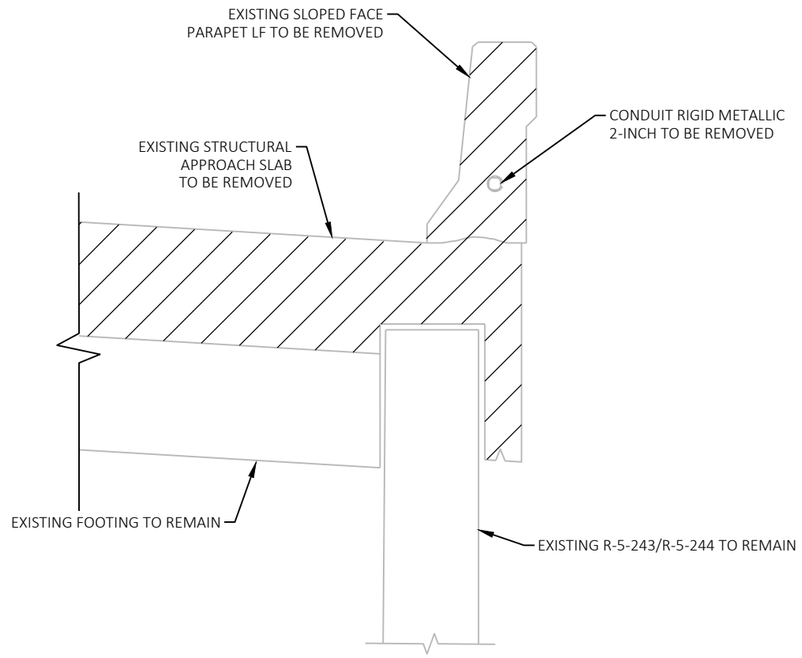
8

STATE PROJECT NUMBER

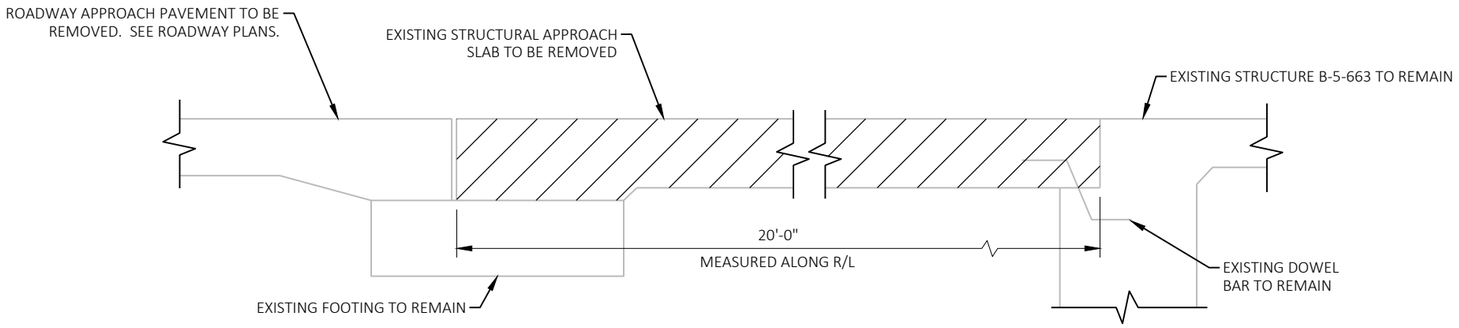
1130-74-71



REMOVAL LIMITS AT NORTH EDGE OF SLAB



REMOVAL LIMITS AT SOUTH EDGE OF SLAB



LONGITUDINAL REMOVAL LIMITS DETAIL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

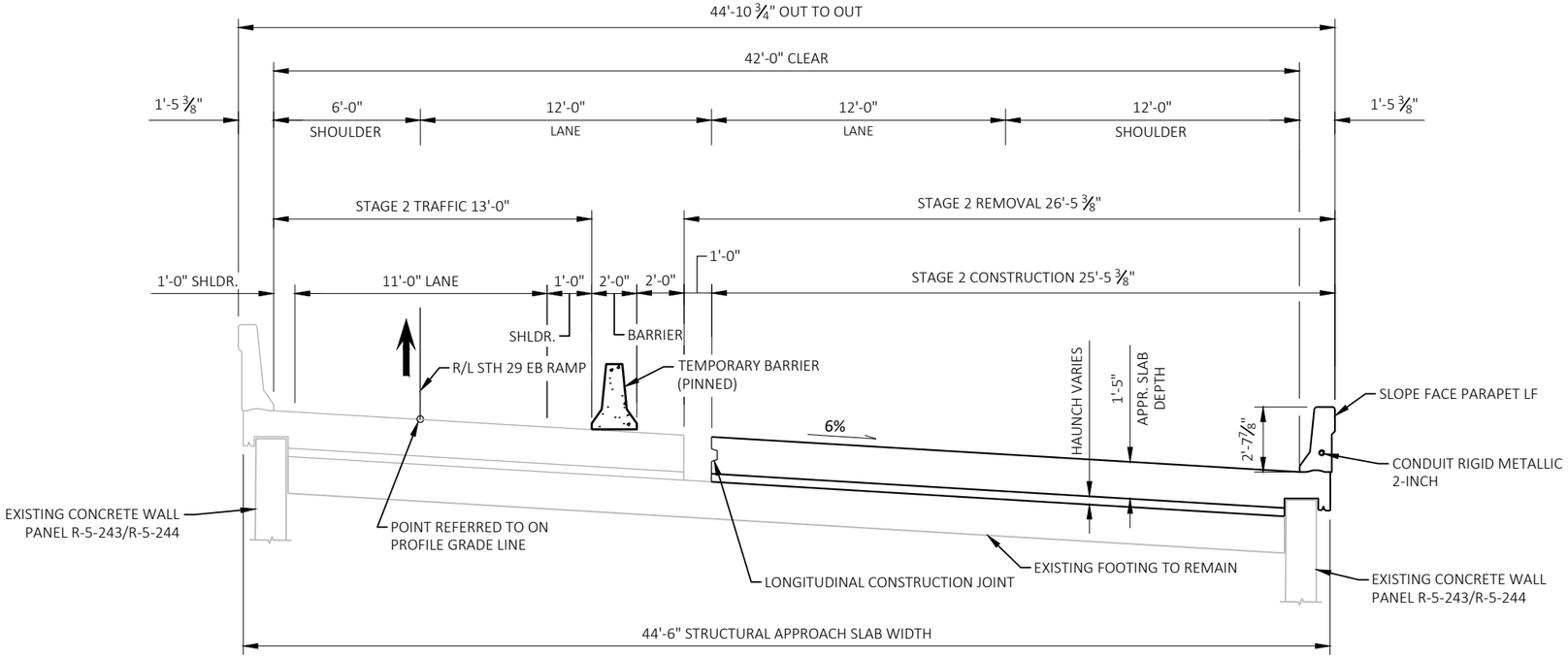
STRUCTURE B-5-663

DRAWN BY STD | PLANS CK'D SKH

STRUCTURAL APPROACH SLAB REMOVAL LIMITS

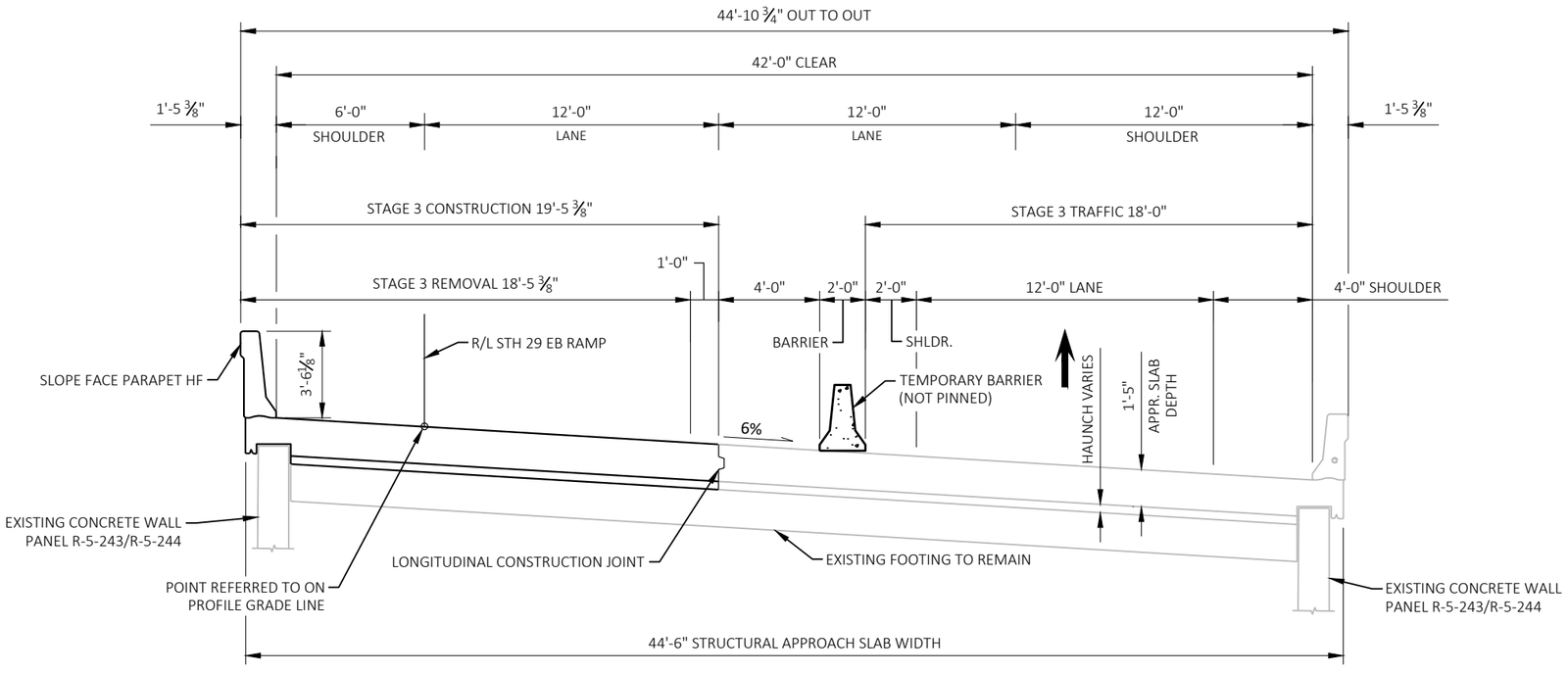
SHEET 3
441

STATE PROJECT NUMBER
1130-74-71



STAGE 2

(LOOKING EAST)



STAGE 3

(LOOKING EAST)

NOTE:

ALL DIMENSIONS ARE GIVEN ALONG RADIAL LINES.

STAGE 1 & 4 TO OCCUR OUTSIDE OF BRIDGE LIMITS, SEE ROADWAY PLANS FOR DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-663

DRAWN BY STD | PLANS CK'D SKH

CONSTRUCTION STAGING

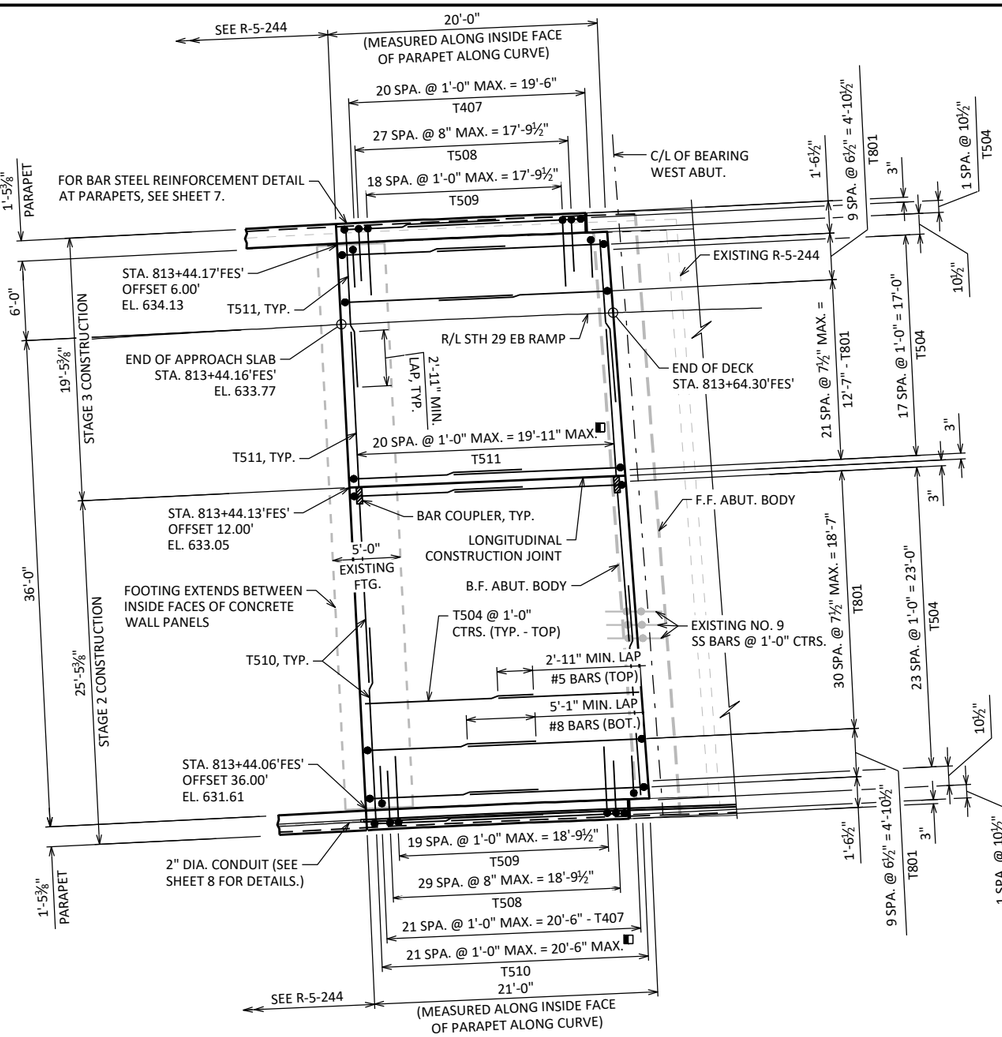
SHEET 4
442

8

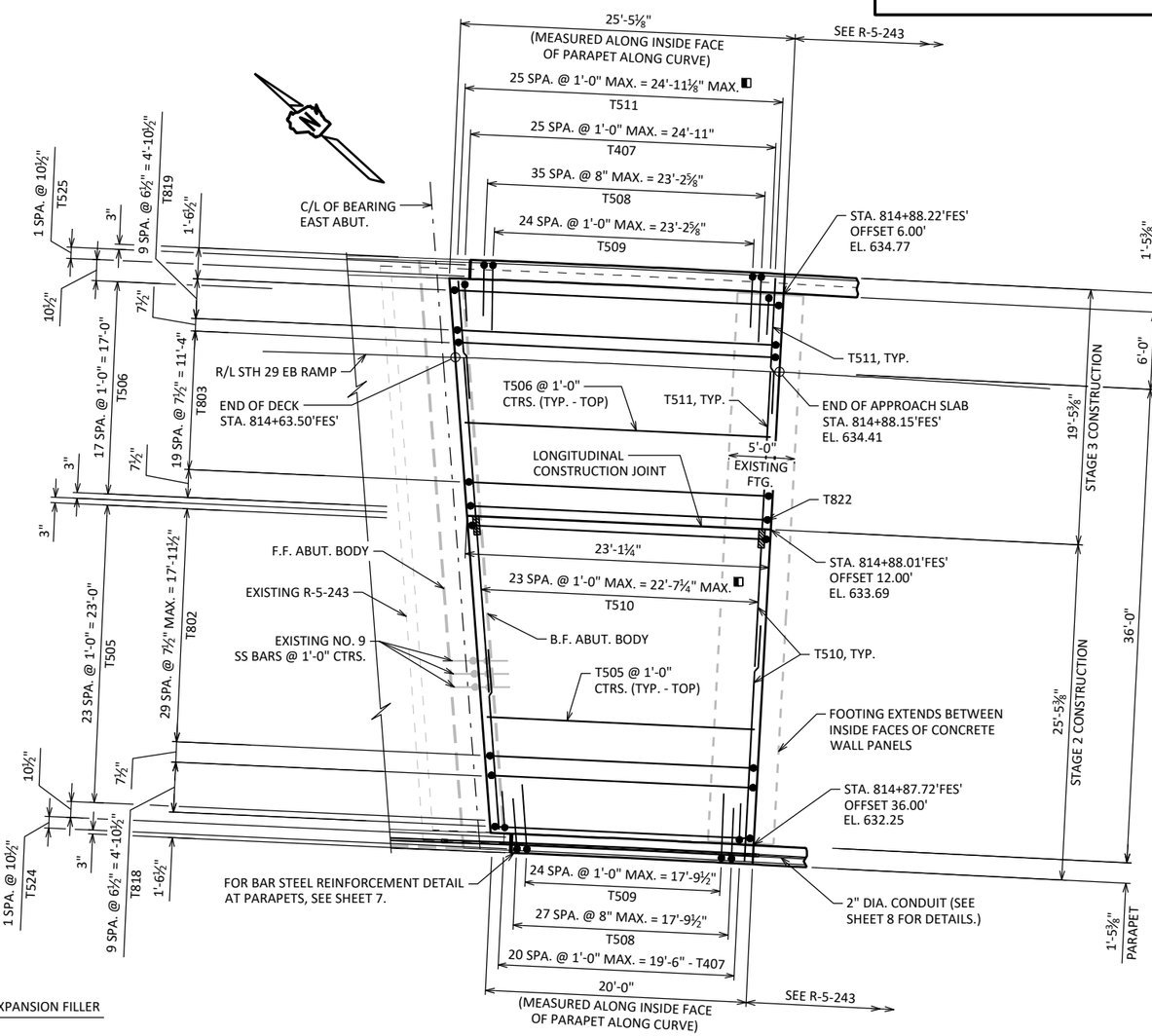
8

STATE PROJECT NUMBER

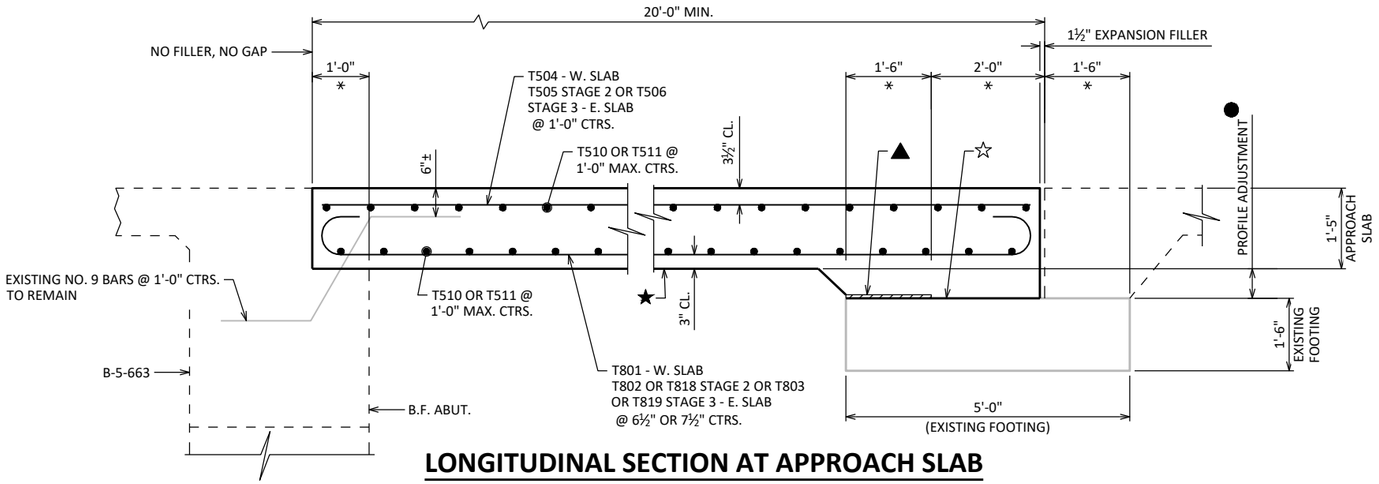
1130-74-71



PLAN AT WEST APPROACH SLAB



PLAN AT EAST APPROACH SLAB



LONGITUDINAL SECTION AT APPROACH SLAB

(SECTION SHOWN AT EAST APPROACH SLAB, WEST APPROACH SLAB SIMILAR EXCEPT AS NOTED)

LEGEND

- * DIMENSIONS ARE GIVEN NORMAL TO C/L OF SUBSTRUCTURE.
- ☆ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF FOOTING. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".
- ▲ ¾" X 1'-6" X LENGTH OF FOOTING COMPRESSIBLE FILLER. PREFORMED JOINT FILLER ACCORDING TO STANDARD SPEC. 502.2.7
- ● QUANTITY CALCULATED ASSUMING A 3" AVERAGE HAUNCH.
- ◧ TRANSVERSE REINFORCEMENT IS PLACED RADIALLY ALONG R/L STH 29 EB RAMP.

NOTES:

DIMENSIONS ARE GIVEN ALONG RADIAL LINES

PLACE LONGITUDINAL BARS CONCENTRIC TO R/L STH 29 EB RAMP

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-663

DRAWN BY STD | PLANS CK'D SKH

APPROACH SLAB DETAILS (1 OF 2)

SHEET 5
443

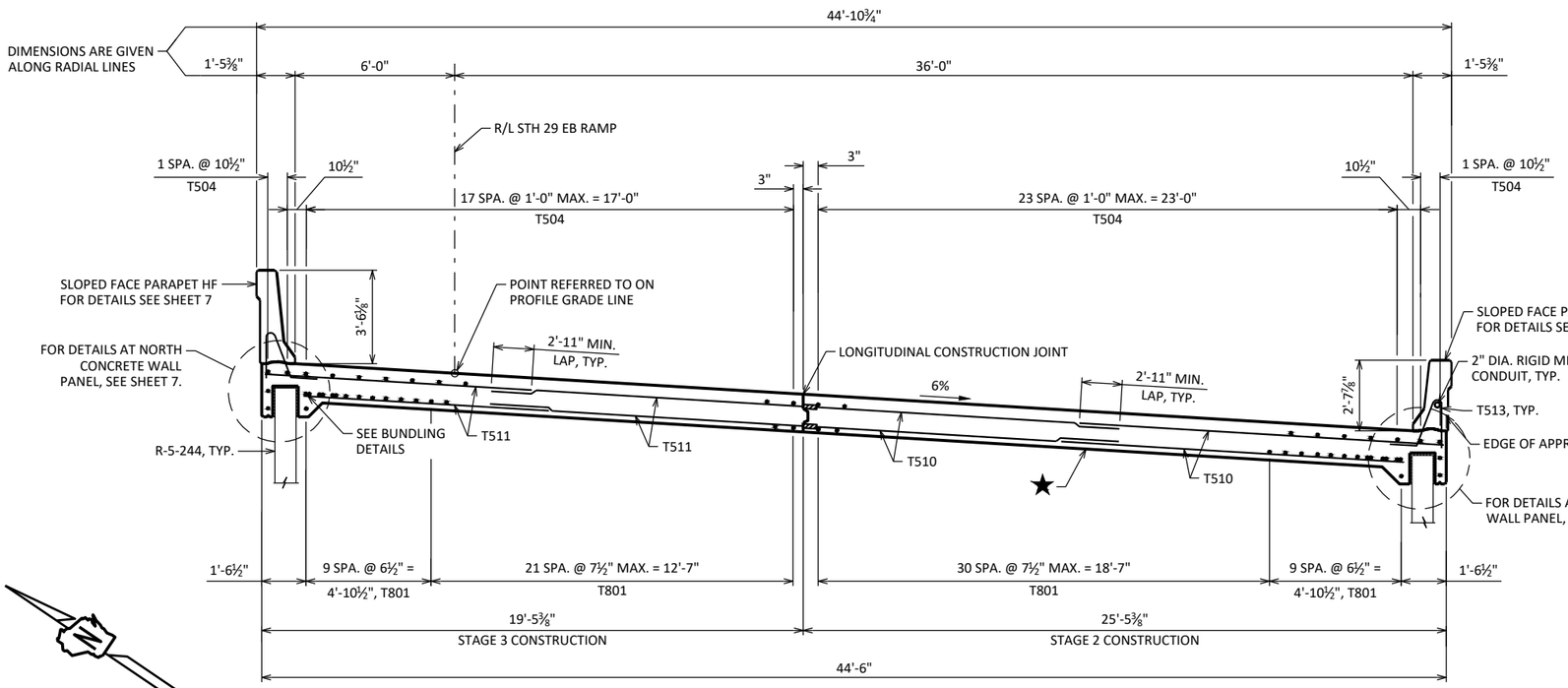
SCALE = 2.00

8

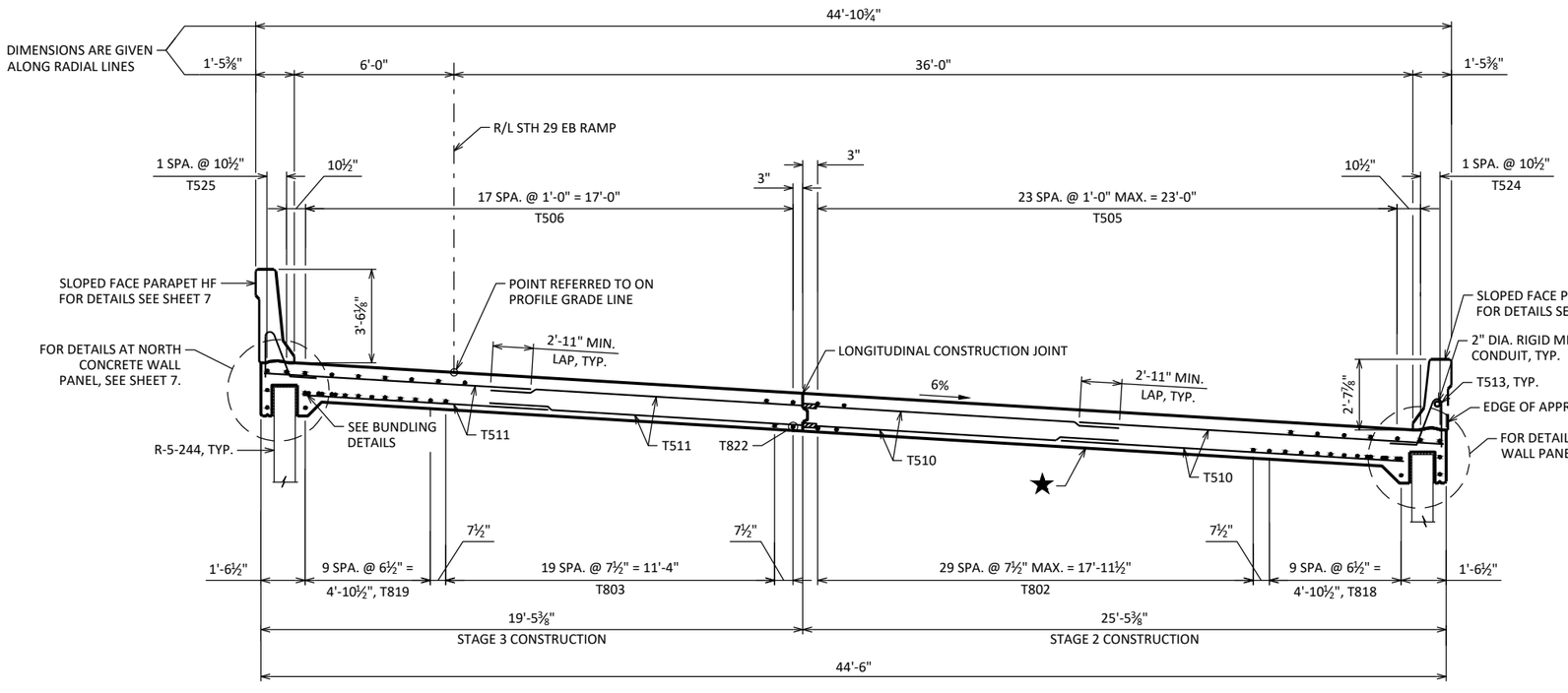
8

STATE PROJECT NUMBER

1130-74-71



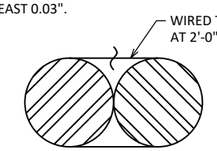
SECTION THRU WEST APPROACH SLAB



SECTION THRU EAST APPROACH SLAB

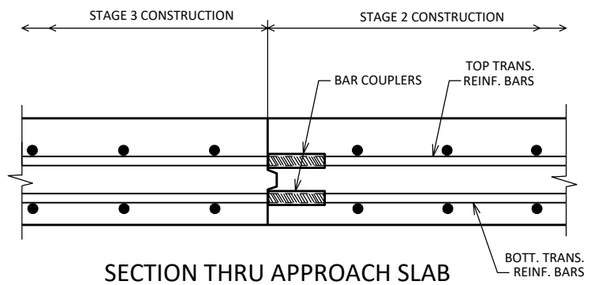
LEGEND

★ PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF SUBGRADE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".



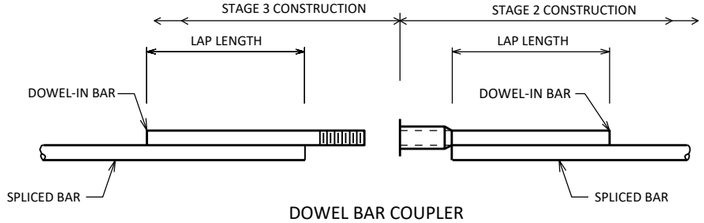
BUNDLING DETAIL - APPROACH SLABS

WEST APPR. SLAB (NORTH) - BUNDLE 3 SETS OF T801 BARS WITH T821 BARS AS SHOWN
WEST APPR. SLAB (SOUTH) - BUNDLE 3 SETS OF T801 BARS WITH T820 BARS AS SHOWN
EAST APPR. SLAB (NORTH) - BUNDLE 3 SETS OF T819 BARS WITH T823 BARS AS SHOWN
EAST APPR. SLAB (SOUTH) - BUNDLE 3 SETS OF T818 BARS WITH T821 BARS AS SHOWN



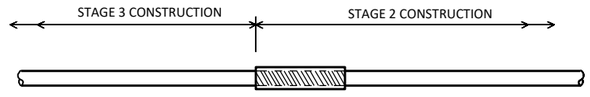
SECTION THRU APPROACH SLAB

ONE-PIECE THREADED COUPLER SHOWN



DOWEL BAR COUPLER

STAGE 3 DOWEL SCREWS INTO COUPLER PLACED IN STAGE 2



ONE-PIECE THREADED COUPLER

BAR COUPLER ALTERNATIVES

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-663

DRAWN BY STD | PLANS CK'D SKH

APPROACH SLAB DETAILS (2 OF 2)

SHEET 6
444

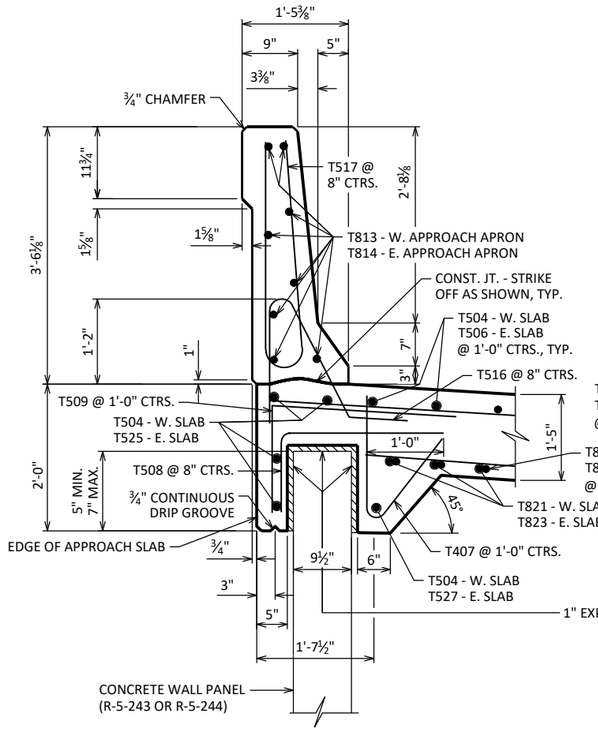
SCALE = 2.00

8

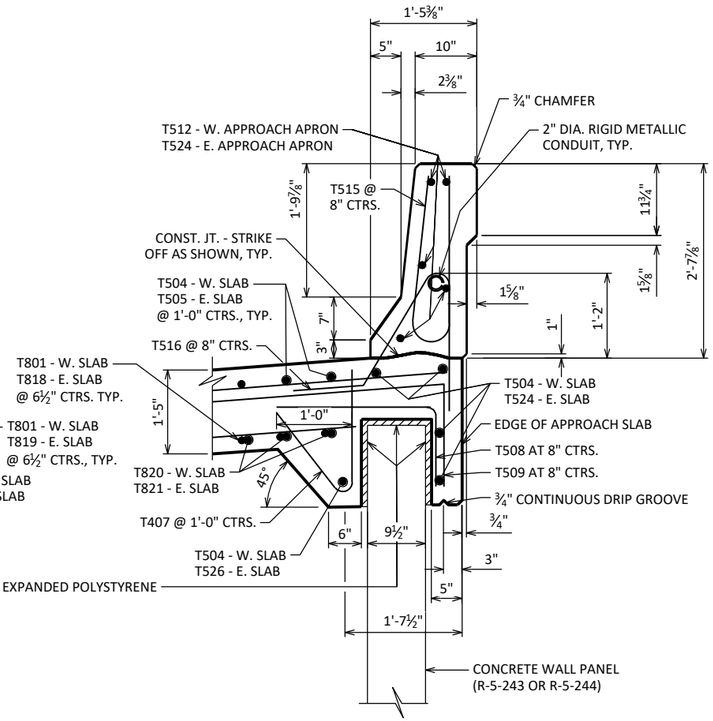
8

STATE PROJECT NUMBER

1130-74-71



SECTION THRU PARAPET ON BRIDGE (NORTH SIDE)



SECTION THRU PARAPET ON BRIDGE (SOUTH SIDE)

BILL OF BARS

TOTAL COATED = 20,130 LBS

BAR MARK	NO. REQ'D STAGE 2	NO. REQ'D STAGE 3	LENGTH	COAT	BENT	BAR SEIRES	LOCATION
T801	80	62	13'-9"	X	X		WEST APPROACH SLAB - BOTTOM - LONGIT.
T802	30	---	23'-3"	X	X	◭	EAST APPROACH SLAB - BOTTOM - LONGIT.
T803	---	20	25'-3"	X	X	◭	EAST APPROACH SLAB - BOTTOM - LONGIT.
T504	58	46	11'-9"	X			WEST APPROACH SLAB - TOP - LONGIT.
T505	24	---	21'-1"	X		◭	EAST APPROACH SLAB - TOP - LONGIT.
T506	---	18	23'-10"	X		◭	EAST APPROACH SLAB - TOP - LONGIT.
T407	43	47	3'-0"	X	X		APPROACH SLAB - BOTTOM - VERT. - WALL
T508	58	64	3'-3"	X	X		APPROACH SLAB - BOTTOM - TRANS. - WALL
T509	39	44	4'-10"	X	X		APPROACH SLAB - TOP - TRANS. - WALL
★ T510	184	---	14'-3"	X			APPROACH SLAB - TOP & BOTTOM - TRANS.
T511	---	188	11'-1"	X			APPROACH SLAB - TOP & BOTTOM - TRANS.
T512	5	---	18'-11"	X			WEST APPROACH SLAB - PARAPET - LONGIT.
T813	---	8	17'-11"	X			EAST APPROACH SLAB - PARAPET - LONGIT.
T814	---	8	23'-5"	X			EAST APPROACH SLAB - PARAPET - LONGIT.
T515	58	---	4'-10"	X	X		APPROACH SLAB - PARAPET - VERT.
T516	58	65	4'-2"	X	X		APPROACH SLAB - PARAPET - VERT.
T517	---	65	6'-6"	X	X		APPROACH SLAB - PARAPET - VERT.
T818	10	---	21'-9"	X	X	◭	EAST APPROACH SLAB - BOTTOM - LONGIT.
T819	---	10	26'-5"	X	X	◭	EAST APPROACH SLAB - BOTTOM - LONGIT.
T820	3	---	22'-5"	X	X		WEST APPROACH SLAB - BOTTOM - LONGIT.
T821	3	3	21'-5"	X	X		APPROACH SLAB - BOTTOM - LONGIT.
T822	---	1	24'-6"	X	X		EAST APPROACH SLAB - BOTTOM - LONGIT.
T823	---	3	26'-9"	X	X		EAST APPROACH SLAB - BOTTOM - LONGIT.
T524	9	---	17'-11"	X			EAST APPROACH SLAB - TOP & PARAPET - LONGIT.
T525	---	4	23'-5"	X			EAST APPROACH SLAB - TOP - LONGIT.
T526	1	---	16'-2"	X			EAST APPROACH SLAB - TOP - LONGIT. WALL NOTCH
T527	---	1	21'-7"	X			EAST APPROACH SLAB - TOP - LONGIT. WALL NOTCH

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

BOTH STRUCTURAL APPROACH SLABS ARE INCLUDED IN THE BILL OF BARS.

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

★ BAR COUPLER REQUIRED. BAR LENGTHS ARE COMPUTED TO THE C/L OF THE CONSTRUCTION JOINT AND SHALL BE MODIFIED BY THE BAR COUPLER MANUFACTURERS RECOMMENDATIONS.

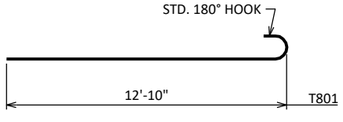
ESTIMATED QUANTITES

CONST. STAGE	HPC MASONRY STRUCTURES	BAR STEEL REINFORCEMENT HS COATED BRIDGES
STAGE 2	75 CY	10,480 LB
STAGE 3	65 CY	9,650 LB

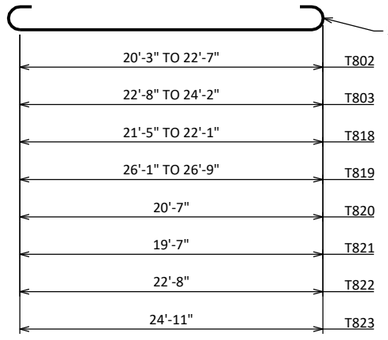
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
T802	1 SEIRES OF 30	22'-1" TO 24'-5"
T803	1 SEIRES OF 20	24'-6" TO 26'-0"
T505	1 SEIRES OF 24	19'-7" TO 22'-7"
T506	1 SEIRES OF 18	22'-8" TO 25'-0"
T818	1 SEIRES OF 10	21'-5" TO 22'-1"
T819	1 SEIRES OF 10	26'-1" TO 26'-9"

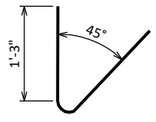
BUNDLE AND TAG EACH SERIES SEPARATELY



T801



T802, T803, T818, T819, T820, T821, T822, T823



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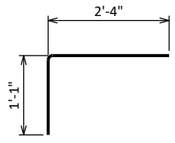

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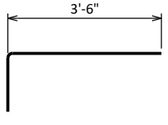
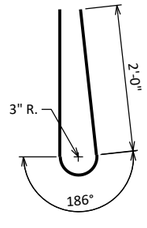
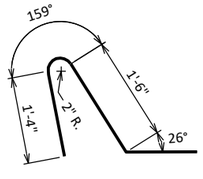


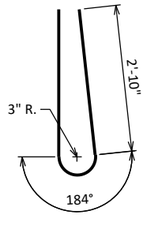
T509



T515



T516



T517

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-663

DRAWN BY STD | PLANS CK'D SKH

APPROACH SLAB DETAILS & BILL OF BARS

SHEET 7
445

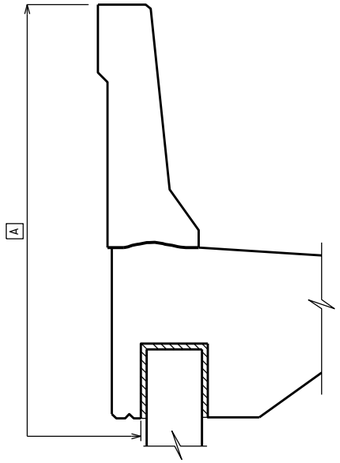
SCALE = 2.00

8

8

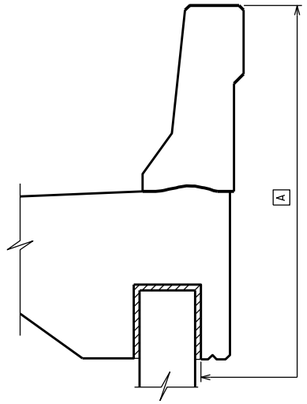
STATE PROJECT NUMBER

1130-74-71



AT APPROACH SLAB

SLOPED FACE PARAPET HF

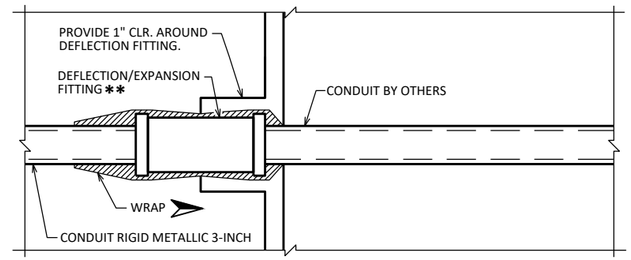


AT APPROACH SLAB

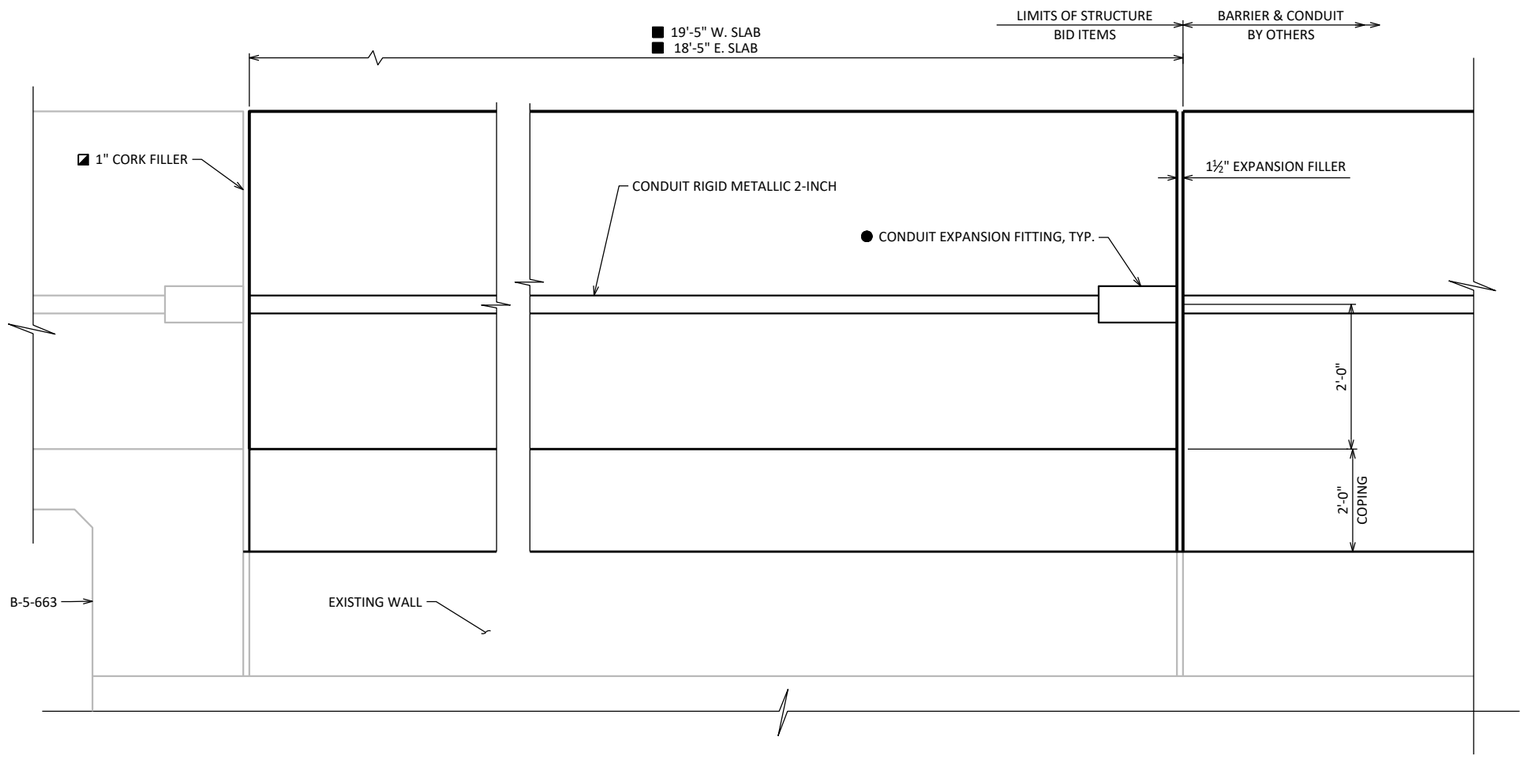
SLOPED FACE PARAPET LF

CONCRETE STAINING SCHEDULE

MARK	COLOR	AMS COLOR	LOCATION
A	BASE COLOR	33522	PARAPETS, WALLS



DEFLECTION/EXPANSION FITTING



CONDUIT DETAILS

(EAST APPROACH SLAB SHOWN, WEST APPROACH SLAB SIMILAR)

LEGEND

■ DIMENSIONS ARE GIVEN ALONG INSIDE FACE OF PARAPET ALONG CURVE.

● EXPANSION FITTING REQUIRED AT EACH EXPANSION JOINT IN PARAPET. EXPANSION FITTINGS TO BE INCIDENTAL TO BID ITEM "CONDUIT RIGID METALLIC 2-INCH". SEE RETAINING WALL PLANS FOR DETAILS.

◪ SEAL HORIZONTAL AND VERTICAL SURFACES WITH NON-STAINING NON-BITUMINOUS JOINT SEALER. (1" DEED AND HOLD ⅛" BELOW SURFACE OF CONCRETE). MATCH COLOR OF ADJACENT SURFACE.

➢ SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN.

** DEFLECTION/EXPANSION FITTING REQUIREMENTS

- UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER. TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-663

DRAWN BY STD | PLANS CK'D SKH

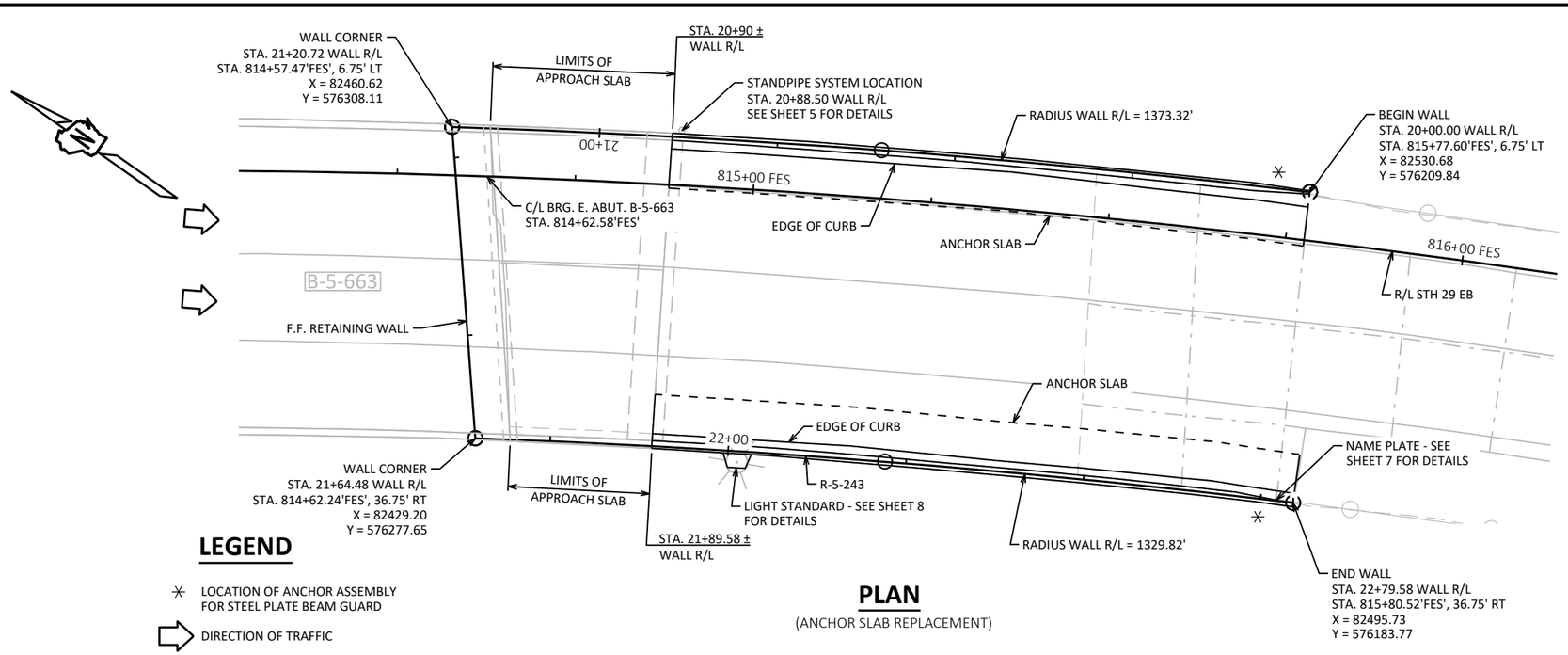
CONDUIT & AESTHETIC DETAILS

SHEET 8
446

SCALE = 2.00

STATE PROJECT NUMBER

1130-74-71

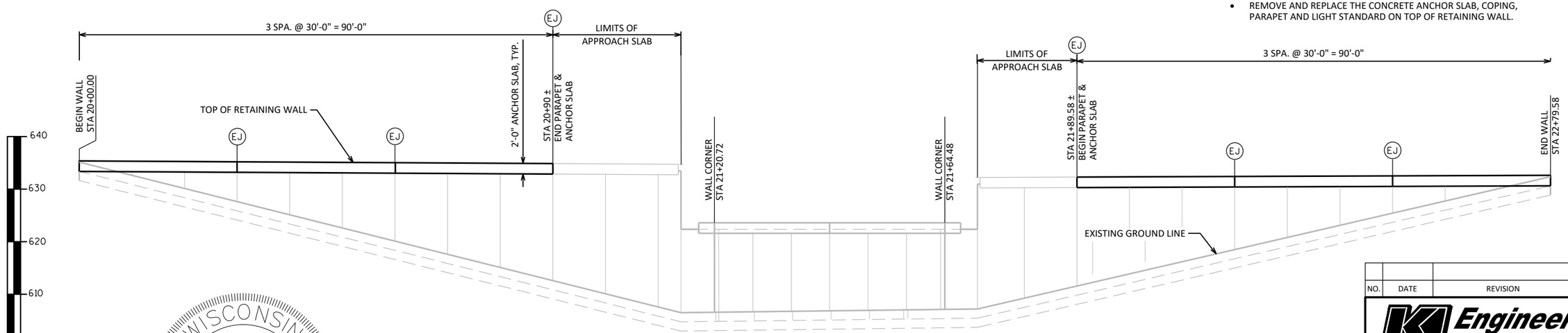


LEGEND

- ✳ LOCATION OF ANCHOR ASSEMBLY FOR STEEL PLATE BEAM GUARD
- DIRECTION OF TRAFFIC
- (EJ) EXPANSION JOINT LOCATION IN COPING / ANCHOR SLAB

PLAN

(ANCHOR SLAB REPLACEMENT)



ELEVATION

(LOOKING AT F.F. OF WALL)

BENCH MARK

NO.	STATION STH 29 EB	OFFSET	DESCRIPTION	ELEV.
1003	813+70.78	36.995' RT	BM DISK	634.54

DESIGN DATA

MATERIAL PROPERTIES:

CONCRETE MASONRY:
ANCHOR SLAB & PARAPET — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

CURVE DATA

R/L STH 29 EB TO IH 41 SB RAMP:
PI STA = 820+85.00 FES
Y = 575874.000
X = 82913.330
Δ = 61°22'02" RT
D = 4°11'35"
T = 810.80'
L = 1463.54'
R = 1366.44'
PC STA = 812+74.19 FES
Y = 576440.370
X = 82333.134
PT STA = 827+37.73 FES
Y = 575093.355
X = 82694.250
DB = S45°41'27"E
DA = S15°40'34"W

TRAFFIC DATA

STH 29 EB TO IH 41 SB RAMP:
ADT (2026) = 9,570
ADT (2046) = 9,570
R.D.S. = 60 MPH

SCOPE OF WORK

- REMOVE AND REPLACE THE CONCRETE ANCHOR SLAB, COPING, PARAPET AND LIGHT STANDARD ON TOP OF RETAINING WALL.

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. TYPICAL SECTIONS
4. WALL DETAILS
5. STANDPIPE SYSTEM DETAILS
6. SECTIONS AND DETAILS (1 OF 2)
7. SECTIONS AND DETAILS (2 OF 2)
8. SLOPED FACE PARAPET TYPE LF
9. LIGHT STANDARD BASE DETAILS
10. SLOPED FACE PARAPET TYPE HF
11. BILL OF BARS
12. AESTHETIC DETAILS

STRUCTURE DESIGN CONTACTS:
SHELLY HARRIS 715-309-5224
AARON BONK 608-261-0261

WISCONSIN
SHELLY K. HARRIS
E-100266-6
MONDOVI, WI
PROFESSIONAL ENGINEER

July 24, 2025

NO.	DATE	REVISION	BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-5-243

STH 29 EB TO IH 41 SB RAMP RETAINING WALL

COUNTY	VILLAGE
BROWN	HOWARD

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JBN	SKH	STD	SKH

GENERAL PLAN

SHEET 1 OF 12
447

I.D.

DATE:

8

8

STATE PROJECT NUMBER
1130-74-71

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY REFERENCE SYSTEM (WISCRS), BROWN COUNTY NAD 83 (2011). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL STATIONS AND DIMENSIONS ARE ALONG THE FRONT FACE OF WALL, UNLESS SHOWN OTHERWISE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT, UNLESS SPECIFIED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER, UNLESS SHOWN OTHERWISE.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. BAR DIMENSIONS ARE OUT TO OUT OF THE BAR.

ALL BAR STEEL REINFORCEMENT IN CAST-IN-PLACE CONCRETE IS TO BE EPOXY COATED.

APPLY PROTECTIVE SURFACE TREATMENT TO THE EXPOSED TOP SURFACE OF THE ANCHOR SLAB.

APPLY PIGMENTED SURFACE SEALER TO THE TOP AND INSIDE FACES OF THE PARAPET.

THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE ANCHOR SLAB, COPING, AND PARAPET SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE R-5-243".

THE QUANTITIES FOR CONCRETE MASONRY AND BAR STEEL REINFORCEMENT FOR THE CAST-IN-PLACE ANCHOR SLAB, PARAPETS, AND LIGHT STANDARDS ARE PAID FOR UNDER THE BID ITEMS "CONCRETE MASONRY RETAINING WALLS" AND "BAR STEEL REINFORCEMENT HS COATED STRUCTURES", RESPECTIVELY.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR (2012).

REMOVAL OF EXISTING CONDUIT AND JUNCTION BOXES IS INCLUDED IN THE BID ITEM "REMOVING STRUCTURE R-5-243".

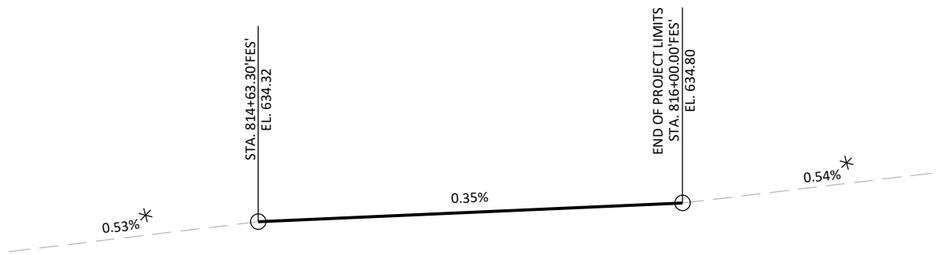
SEE ROADWAY PLANS FOR STAGING DETAILS.

EXPANSION JOINT SPACING SHOWN ON SHEET 1 IS BASED ON THE AS-BUILT PLANS. EXPANSION JOINTS SHALL BE LOCATED OVER WALL JOINTS AND SPACED AT A MINIMUM OF 20' AND A MAXIMUM OF 30', ACTUAL JOINT LOCATIONS TO BE DETERMINED BY THE CONTRACTOR AND LONGITUDINAL REBAR LENGTHS MODIFIED AS NECESSARY.

TOTAL ESTIMATED QUANITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL
203.0220.08	REMOVING STRUCTURE R-5-243	EACH	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	20
502.3210	PIGMENTED SURFACE SEALER	SY	82
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	88
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	11,790
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	6
517.1010.S.08	CONCRETE STAINING R-5-243	SF	991
531.8990	ANCHOR ASSEMBLIES POLES ON STRUCTURES	EACH	1
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	90
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	1
SPV.0060.06	STANDPIPE CONNECTION	EACH	1
	NON-BID ITEMS		
	PREFORMED FILLER	SIZE	3/4" & 1" & 1 1/2"
	NON-BITUMINOUS JOINT SEALER		
	EXPANDED POLYSTYRENE	SIZE	1"
	NAME PLATE	EACH	1

ALL ITEMS SHOWN IN CATEGORY 0090



PROFILE GRADE LINE STH 29 EB TO IH 41 SB RAMP

WALL STATION	TOP OF WALL / FLOW LINE ELEVATION
20+00.00	635.08
20+30.00	634.98
20+60.00	634.87
20+90.00	634.77
21+89.58	632.25
22+19.58	632.36
22+49.58	632.46
22+79.58	632.57

FLOW LINE ELEVATION

LEGEND

✳ EXISTING GRADES ON B-5-663 BRIDGE DECK OR EXISTING GRADES OUTSIDE LIMITS OF PROJECT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES & QUANTITIES

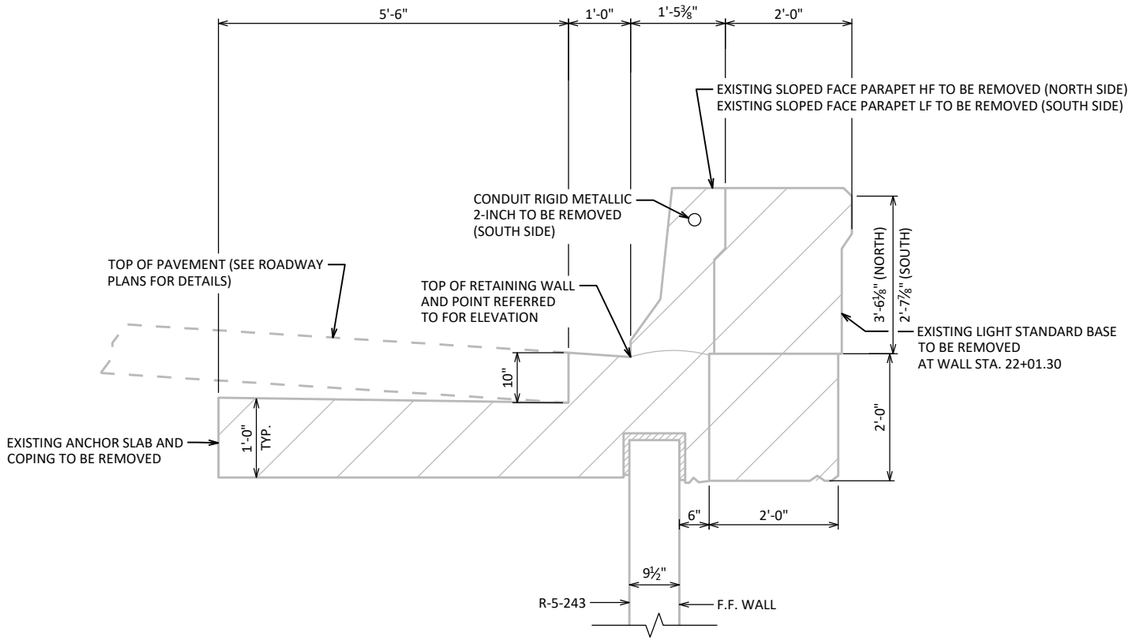
SHEET 2
448

8

8

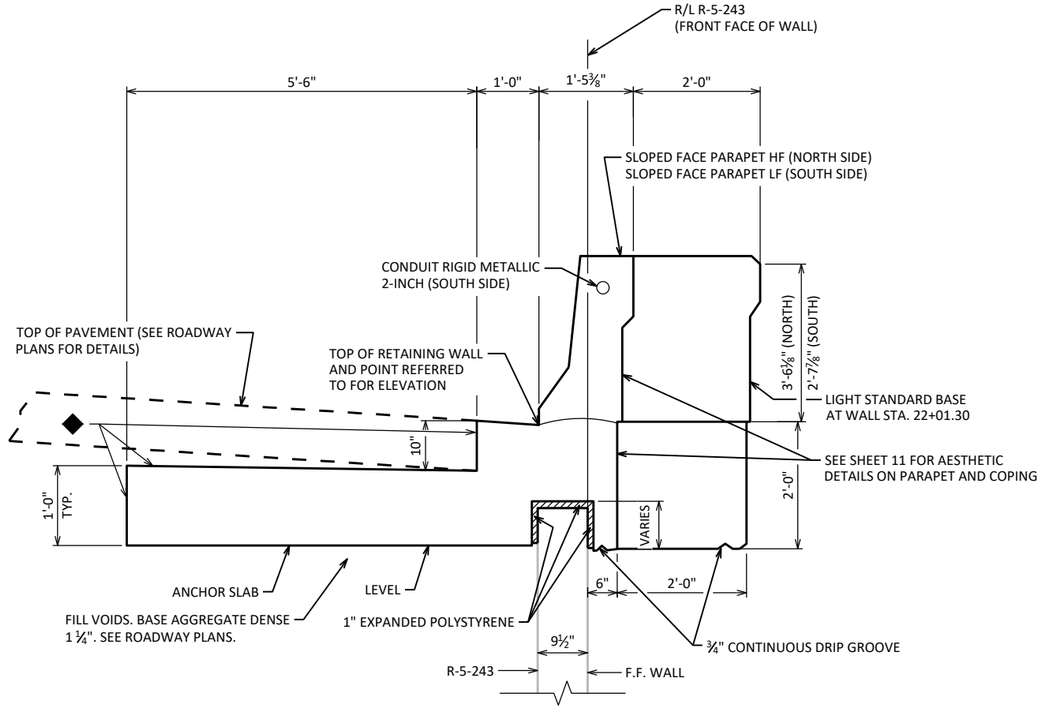
STATE PROJECT NUMBER

1130-74-71



REMOVAL LIMITS

(SOUTH SIDE SHOWN - NORTH SIDE SIMILAR)



PROPOSED TYPICAL SECTION

(SOUTH SIDE SHOWN - NORTH SIDE SIMILAR)

LEGEND

◆ 18" RUBBERIZED MEMBRANE WATERPROOFING - SEAL ALL HORIZONTAL AND VERTICAL JOINTS IN ANCHOR SLAB

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

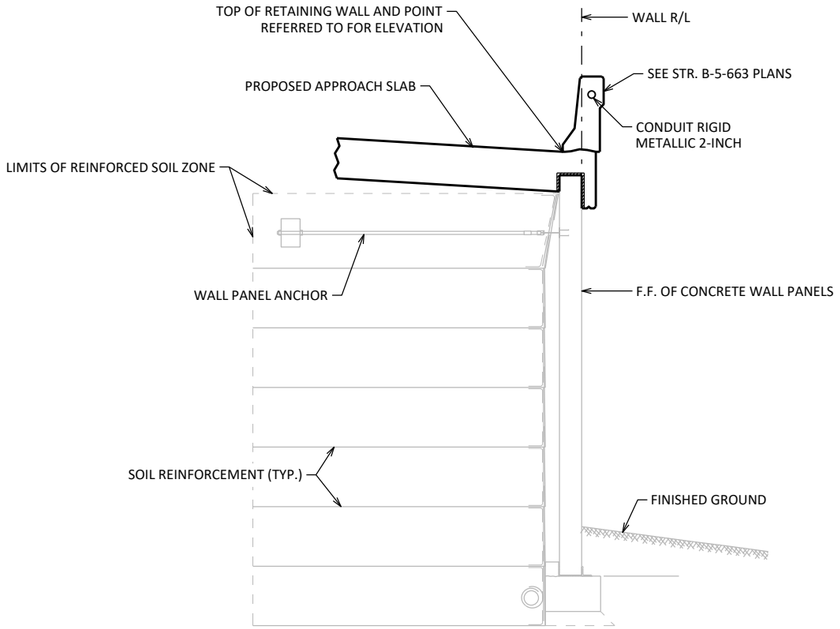
DRAWN BY STD | PLANS CK'D SKH

TYPICAL SECTIONS

SHEET 3

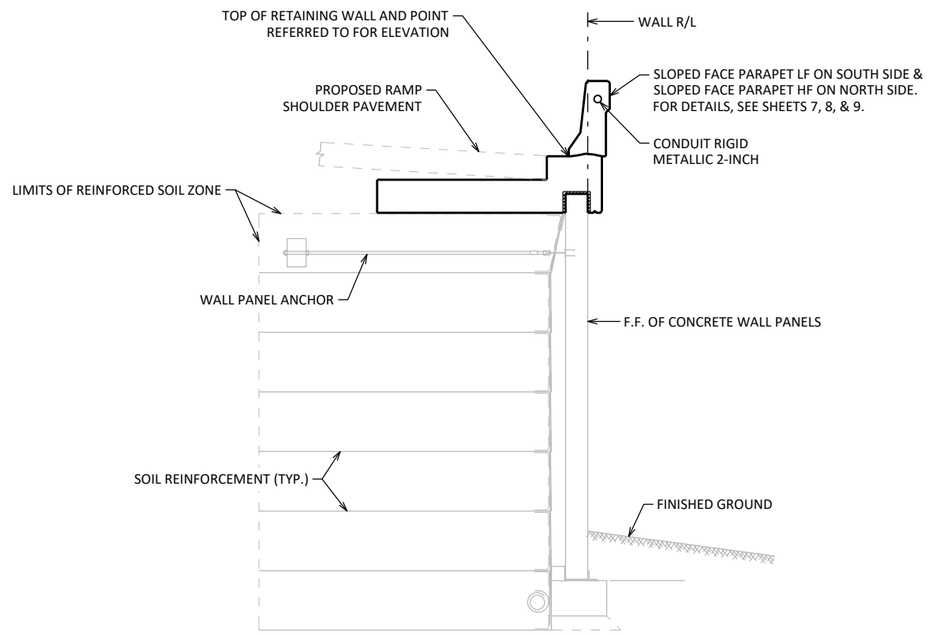
STATE PROJECT NUMBER

1130-74-71



SECTION THRU RETAINING WALL AT APPROACH SLAB

(LOOKING EAST THRU WALL ON SOUTH SIDE OF RAMP, NORTH SIDE SIMILAR)



SECTION THRU RETAINING WALL AT ANCHOR SLAB

(LOOKING EAST THRU WALL ON SOUTH SIDE OF RAMP, NORTH SIDE SIMILAR)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

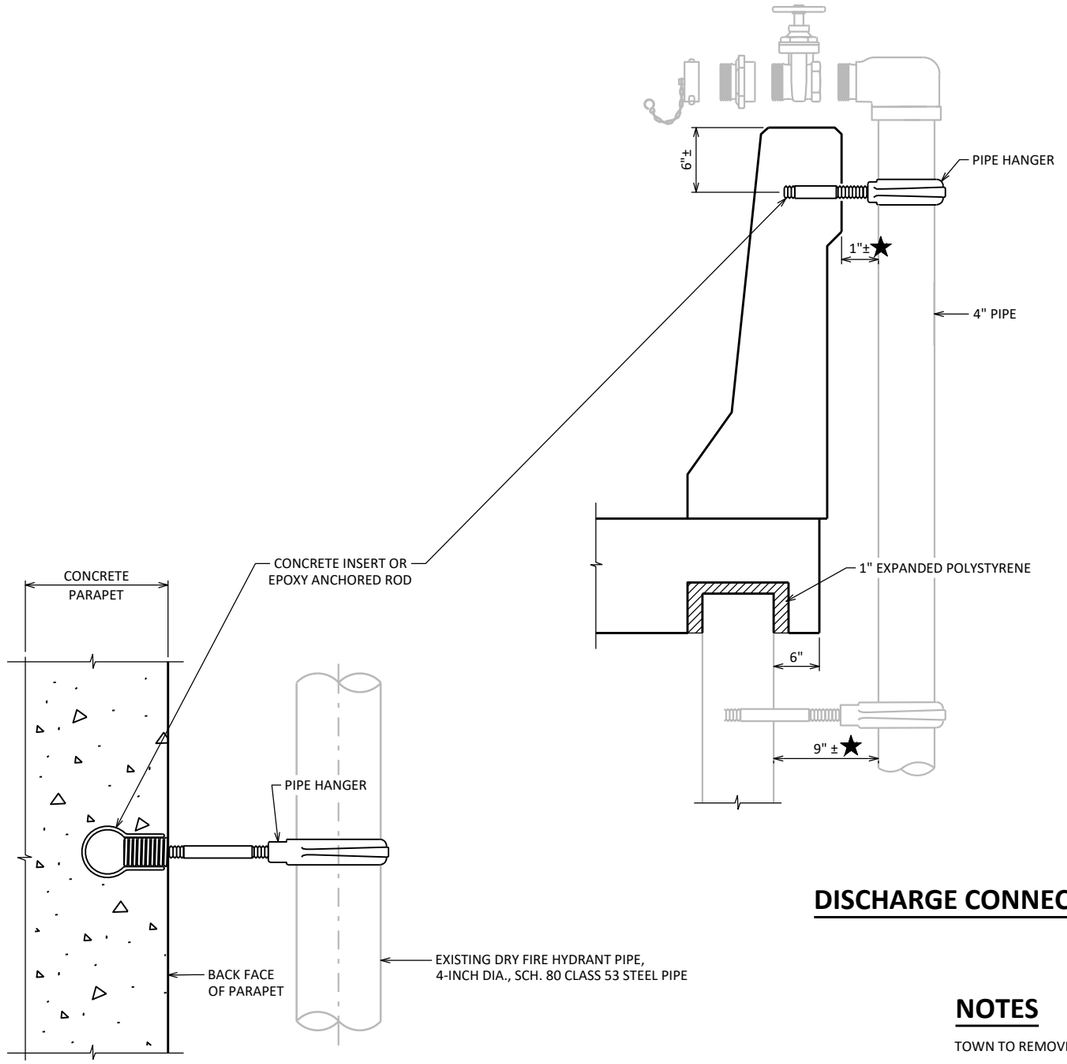
DRAWN BY STD | PLANS CK'D SKH

WALL DETAILS

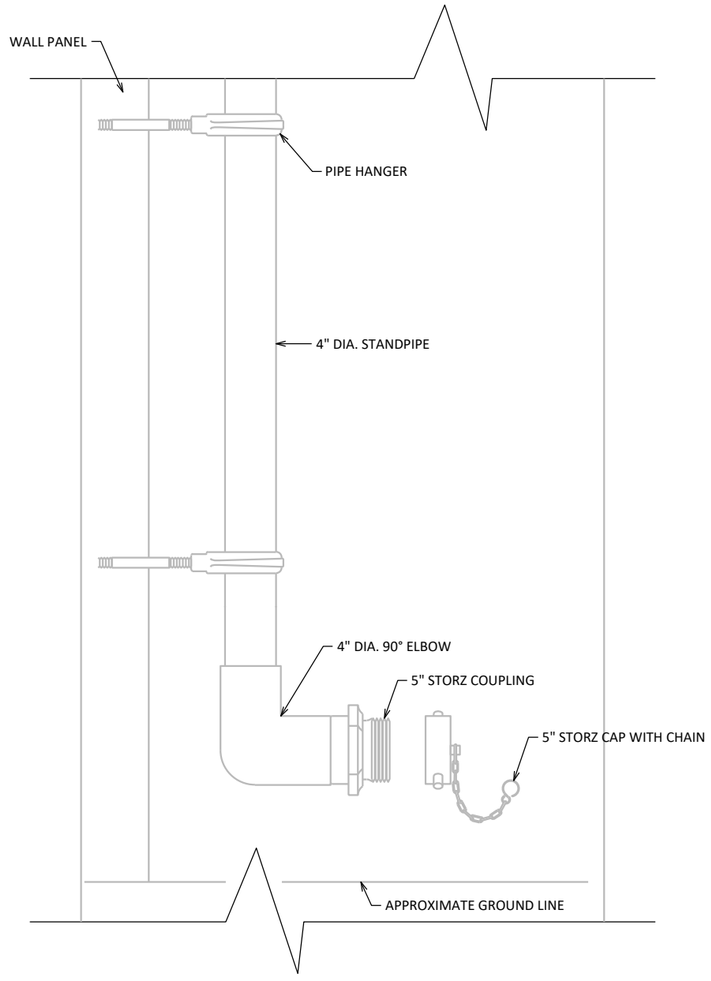
SHEET 4
450

STATE PROJECT NUMBER

1130-74-71



CONCRETE INSERT



DISCHARGE CONNECTION ELEVATION

NOTES

TOWN TO REMOVE AND RESET EXSITING STANDPIPE.

PROVIDE CONCRETE INSERT OR EPOXY ANCHORED ROD, PIPE CLAMP AND HANGER. PAINT ITEMS TO MATCH EXISTING SYSTEM. ITEMS ARE INCLUDED IN BID ITEM "STANDPIPE CONNECTION".

LEGEND

★ DIMENSIONS SHOWN PER FIELD MEASUREMENT. ADJUST AS REQUIRED TO MATCH EXISTING CONDITIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

DRAWN BY STD | PLANS CK'D SKH

STANDPIPE SYSTEM DETAILS

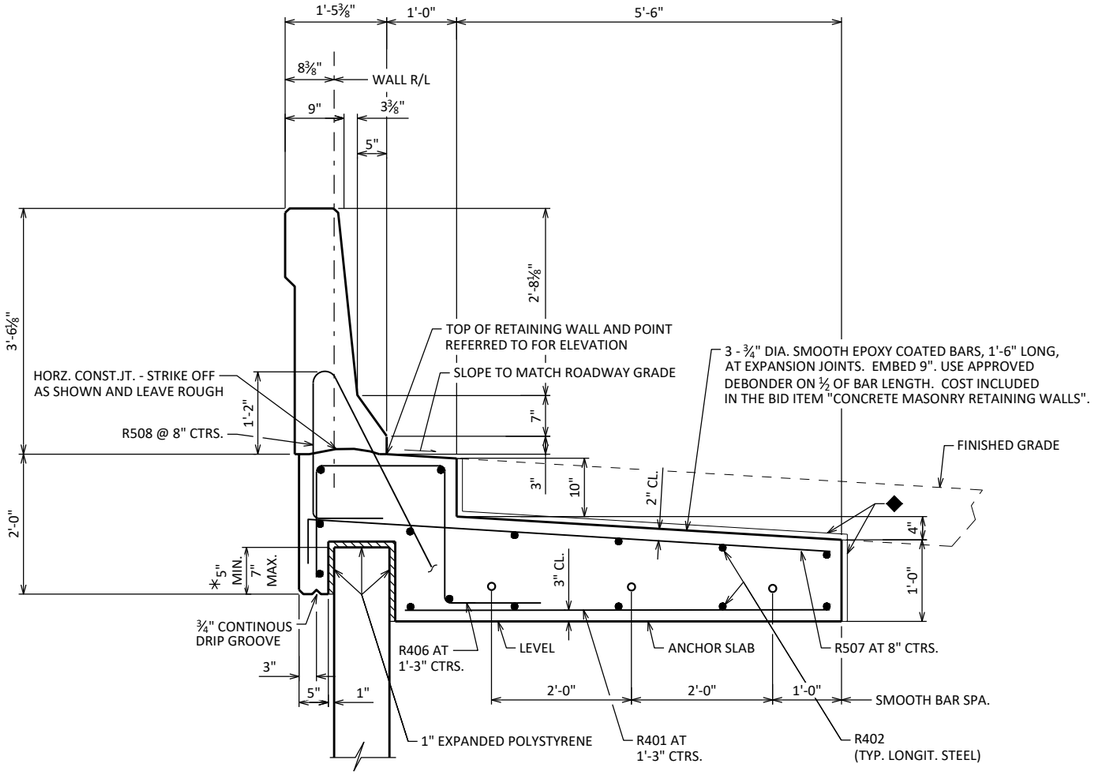
SHEET 5
451

8

8

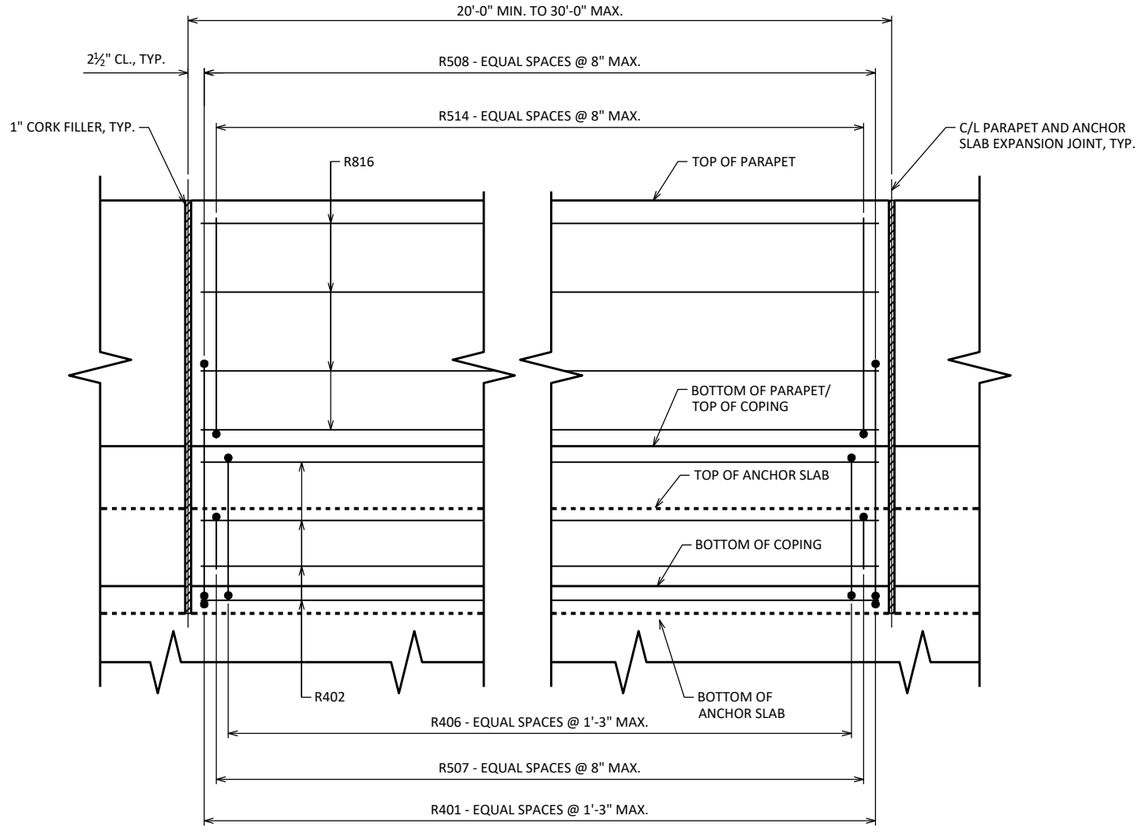
STATE PROJECT NUMBER

1130-74-71



PARAPET AND ANCHOR SLAB DETAIL - NORTH SIDE

(LOOKING EAST)
STA. 20+00.00 TO STA. 20+90.00 WALL R/L, LT.



TYP. OUTSIDE ELEVATION OF SLOPE FACE PARAPET HF/COPING/ANCHOR SLAB DETAIL FOR REINFORCEMENT

8

8

NOTES

SEE SHEET 7 FOR LEGEND.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

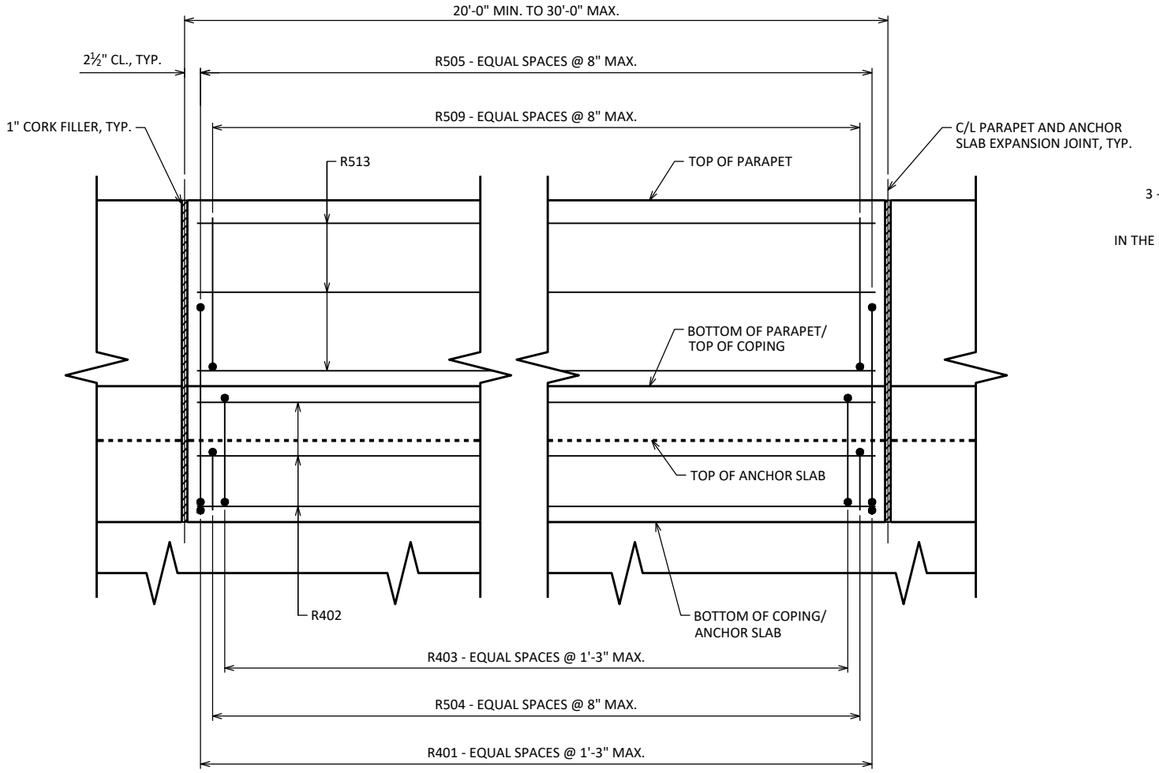
DRAWN BY STD | PLANS CK'D SKH

SECTIONS & DETAILS

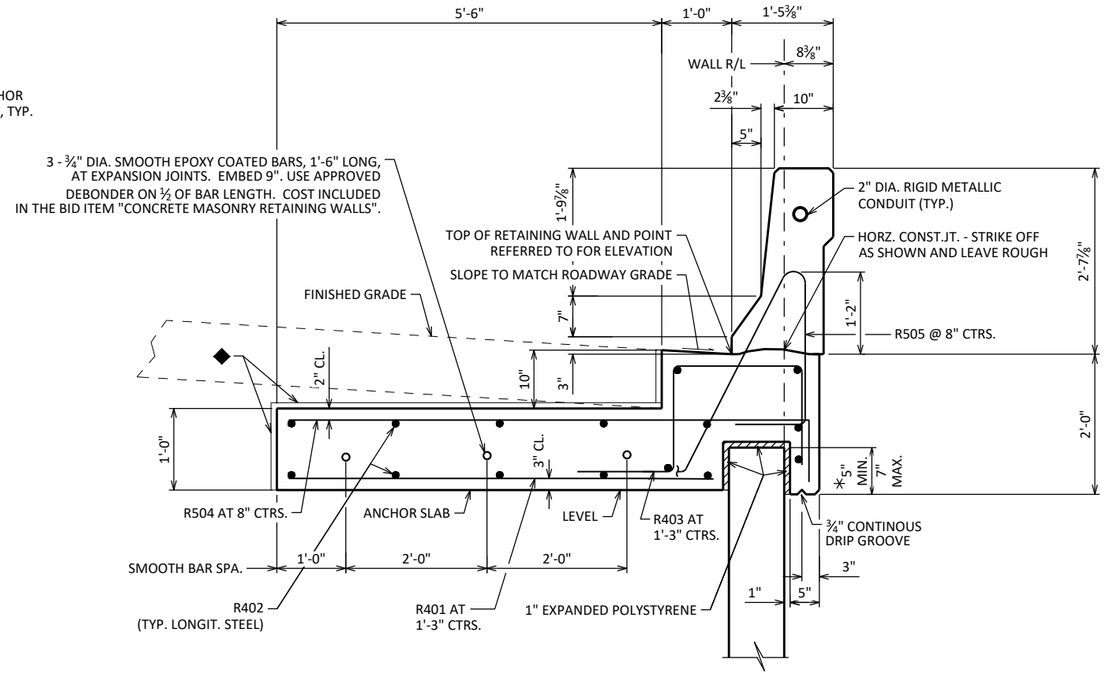
SHEET 6
452

STATE PROJECT NUMBER

1130-74-71

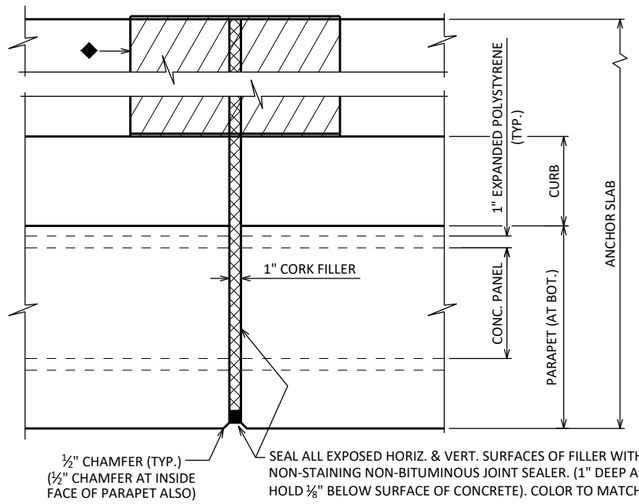


TYP. OUTSIDE ELEVATION OF SLOPE FACE PARAPET LF/COPING/ANCHOR SLAB DETAIL FOR REINFORCEMENT



PARAPET AND ANCHOR SLAB DETAIL - SOUTH SIDE

(LOOKING EAST)
STA. 21+89.58 TO STA. 22+79.58 WALL R/L, RT.



CONCRETE PARAPET/ANCHOR SLAB EXPANSION JOINT DETAIL

EXPANSION JOINTS TO BE SPACED AT A MINIMUM OF 20' AND A MAXIMUM OF 30'±.
LOCATE EXPANSION JOINTS OVER WALL JOINTS. DO NOT RUN BAR STEEL THRU JOINT.

LEGEND

◆ 18" RUBBERIZED MEMBRANE WATERPROOFING - SEAL ALL HORIZONTAL AND VERTICAL JOINTS IN ANCHOR SLAB.

⁎ NOTIFY ENGINEER IF THESE DIMENSIONS CANNOT BE MET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

DRAWN BY STD | PLANS CK'D SKH

SECTIONS & DETAILS (2 OF 2)

SHEET 7
453

8

8

STATE PROJECT NUMBER

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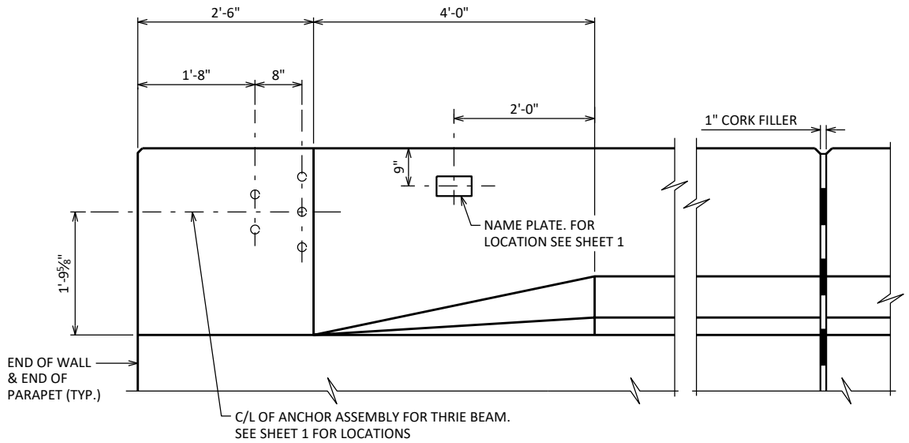
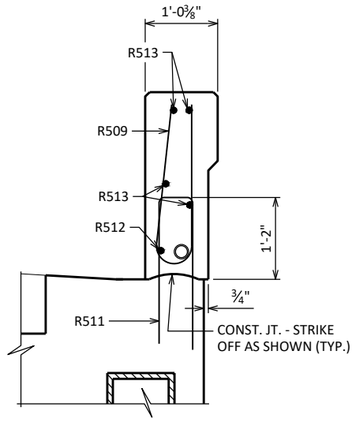
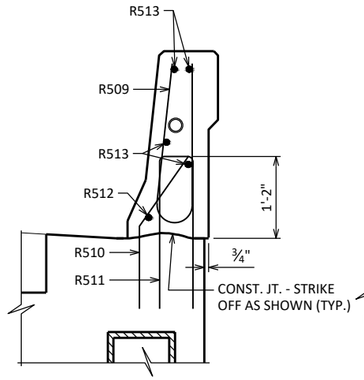


INSIDE ELEVATION - END OF WALL



SECTION A-A



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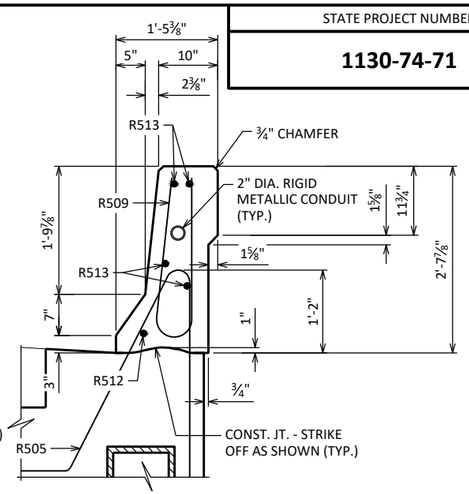

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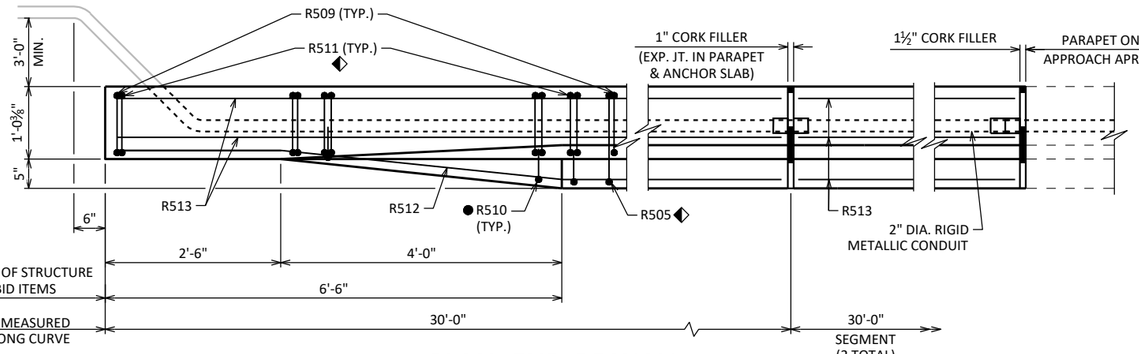
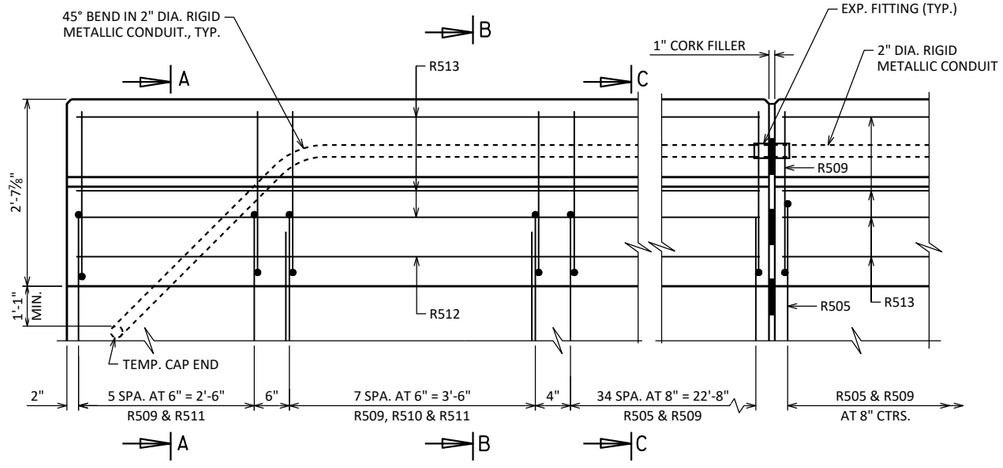


PLAN- END OF WALL



OUTSIDE ELEVATION - END OF WALL

LEGEND

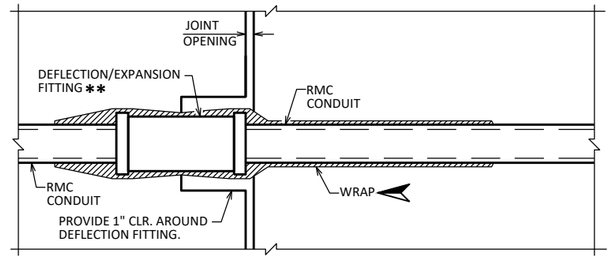
- ● R510 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R510 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ◆ R505 AND R511 BARS TO BE TIED TO ANCHOR SLAB STEEL BEFORE ANCHOR SLAB IS POURED.
- SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".
- ** EXPANSION FITTING REQUIREMENTS:
  - UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER
  - EXPANSION FITTING REQUIRED AT EACH EXPANSION JOINT IN PARAPET. EXPANSION FITTINGS TO BE INCIDENTAL TO BID ITEM "CONDUIT RIGID METALLIC 2-INCH". (APPROX. 3 FITTINGS REQUIRED)

NOTES

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

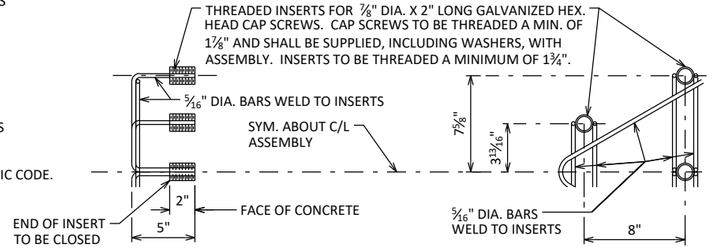
CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.



DEFLECTION/EXPANSION FITTING

THIS DETAIL ACCOMMODATES A MAXIMUM OF ¾" TOTAL MOVEMENT AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION. BOND JUMPER NOT SHOWN FOR CLARITY (CONCRETE TO CONCRETE FITTING)



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

ASSEMBLY SHALL BE PAID FOR BY BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE R-5-243

DRAWN BY STD | PLANS CK'D SKH

SLOPED FACE PARAPET LF

SHEET 8
454

8

8

STATE PROJECT NUMBER

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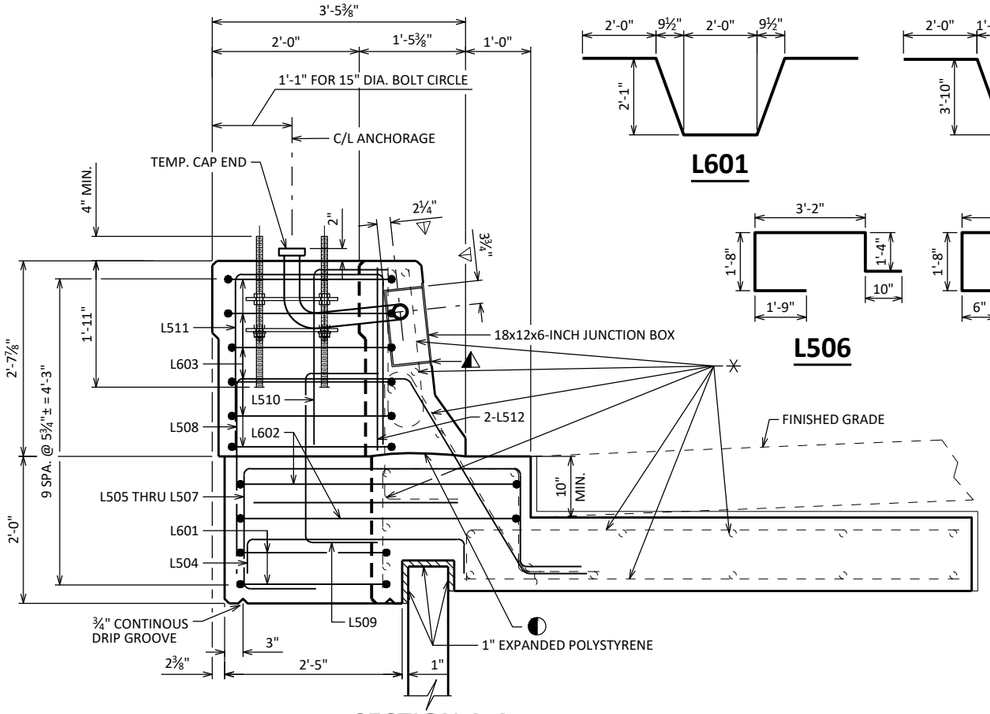
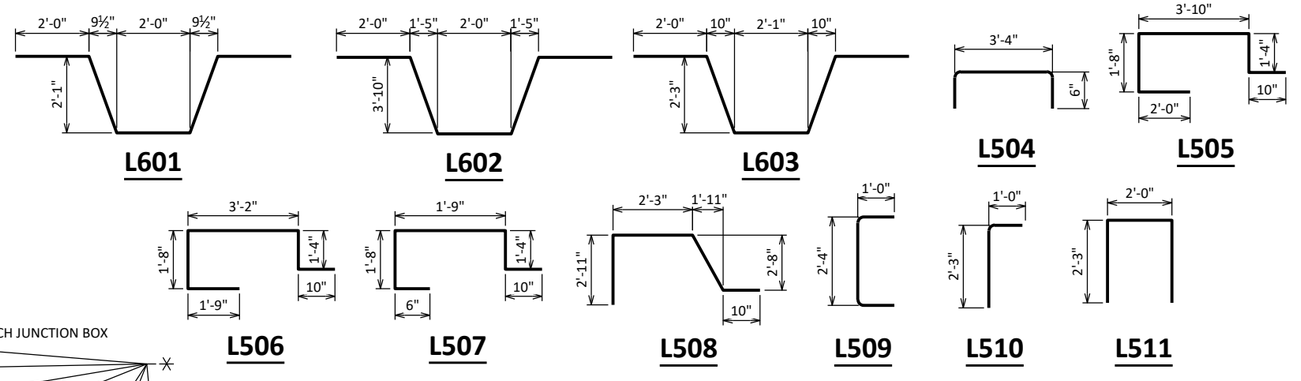
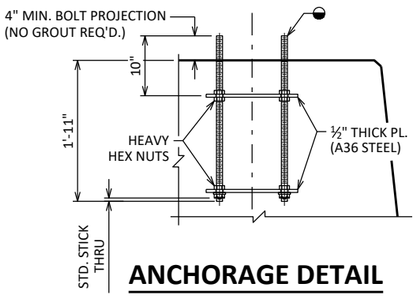


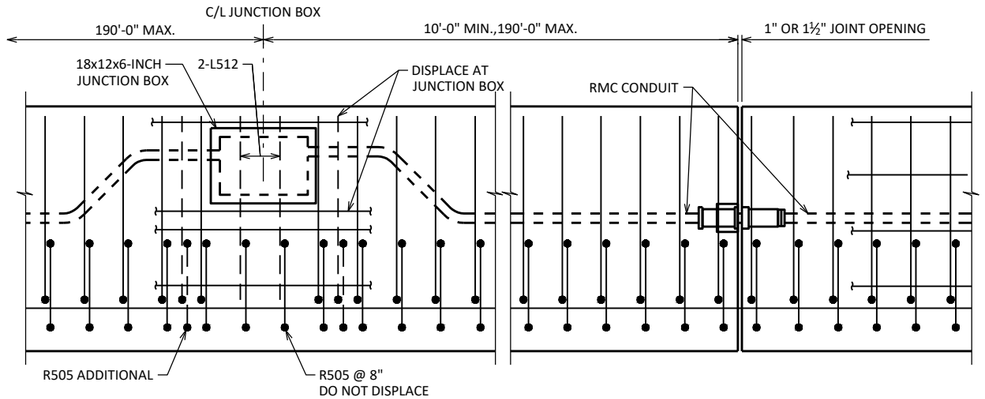
SECTION A-A





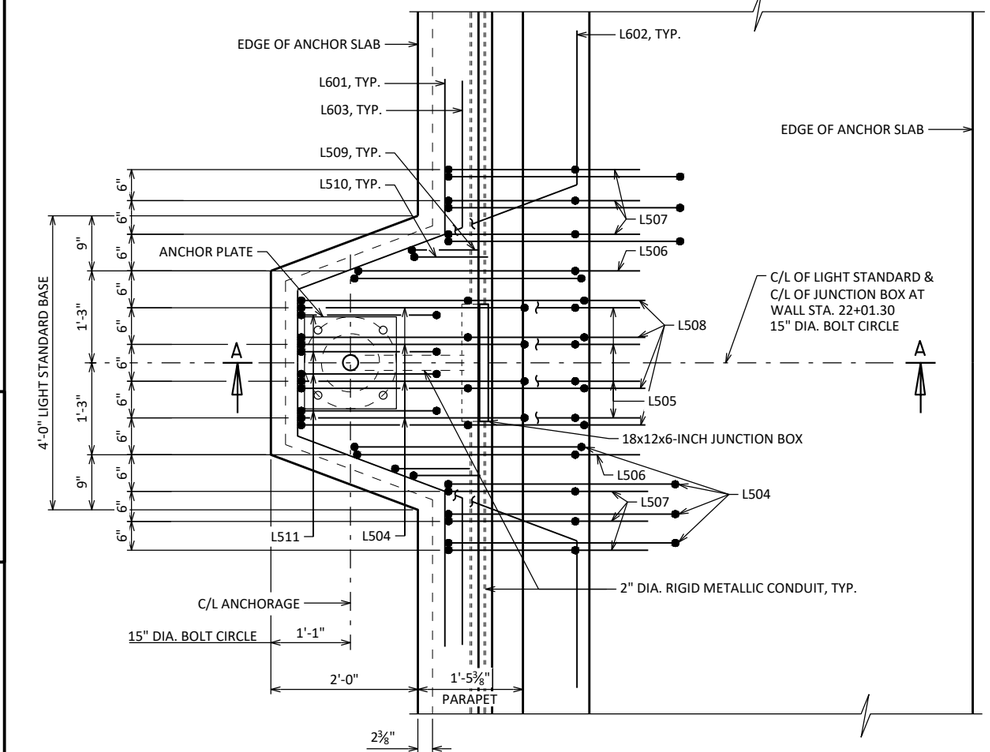
ANCHORAGE DETAIL

(1 REQ'D.)



INSIDE ELEVATION AT JUNCTION BOX AT JOINT

(ANCHOR SLAB STEEL NOT SHOWN FOR CLARITY)



PLAN AT LIGHT STANDARD

NOTES

BID ITEMS SHALL BE:
"ANCHOR ASSEMBLIES POLES ON STRUCTURES", EACH.
"JUNCTION BOXES 18x12x6-INCH", EACH.
"CONDUIT RIGID METALLIC 2-INCH", LF.

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LIST.

EXPANSION FITTING REQUIRED AT EACH EXPANSION JOINT IN PARAPET. EXPANSION FITTINGS TO BE INCIDENTAL TO BID ITEM "CONDUIT RIGID METALLIC 2-INCH". SEE SHEET 7 FOR DETAILS.

BILL OF BARS

TOTAL COATED WEIGHT = 390 LBS

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	LOCATION
L601	2	10'-0"	X	X	LIGHT STANARD BASE - HORIZ.
L602	2	13'-8"	X	X	LIGHT STANARD BASE - HORIZ.
L603	6	10'-5"	X	X	LIGHT STANARD BASE - HORIZ.
L504	12	4'-1"	X	X	LIGHT STANARD BASE - VERT.
L505	4	9'-2"	X	X	LIGHT STANARD BASE - VERT.
L506	2	8'-3"	X	X	LIGHT STANARD BASE - VERT.
L507	6	5'-7"	X	X	LIGHT STANARD BASE - VERT.
L508	4	9'-0"	X	X	LIGHT STANARD BASE - VERT.
L509	2	4'-1"	X	X	LIGHT STANARD BASE - VERT.
L510	2	3'-2"	X	X	LIGHT STANARD BASE - VERT.
L511	4	6'-3"	X	X	LIGHT STANARD BASE - VERT.
L512	2	2'-3"	X		LIGHT STANARD BASE - VERT.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

LEGEND

- ◐ CONST. JT. - STRIKE OFF AS SHOWN.
- ◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.
- ▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- ◒ 1" Ø THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.
- ✳ TYPICAL BARS STEEL REINFORCEMENT IN SLOPED FACE PARAPET & ANCHOR SLAB. FOR DETAILS SEE SHEET 6 AND 7. (ALL BAR STEEL REINFORCEMENT SHOWN FOR THE LIGHT STD. IS IN ADDITION TO THE BAR STEEL REINFORCEMENT SHOWN ON SHEET 6 AND 7. DISPLACE BAR STEEL AS NECESSARY TO CLEAR JUNCTION BOX BY 2" MIN.)

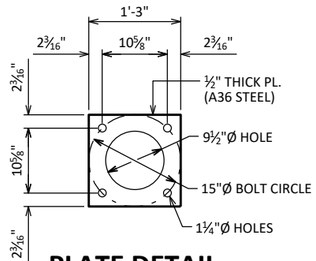


PLATE DETAIL

(1 REQ'D.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

DRAWN BY STD | PLANS CK'D SKH

LIGHT STANDARD BASE DETAILS

SHEET 9
455

8

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STATE PROJECT NUMBER

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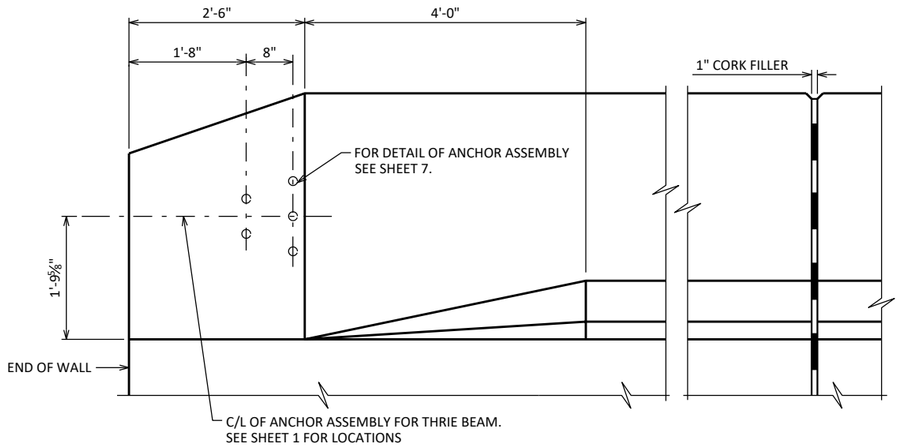
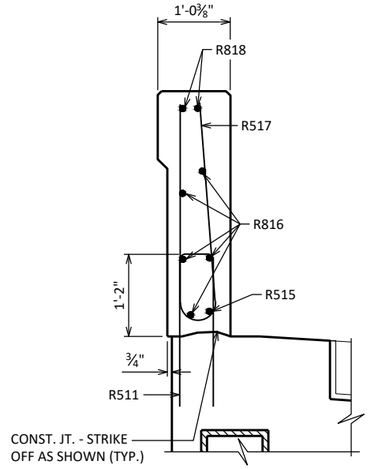
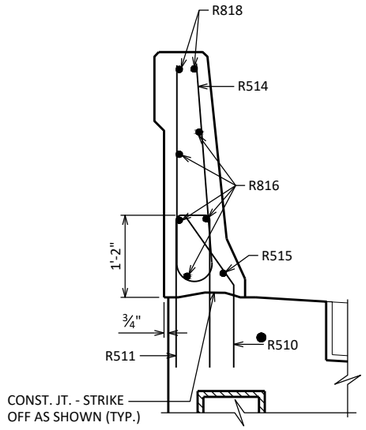


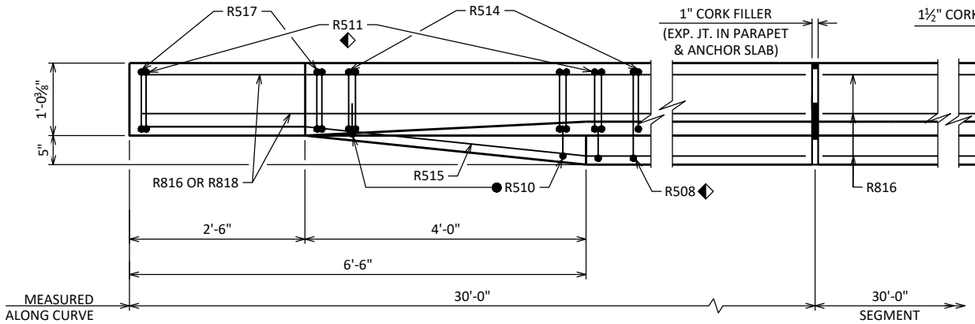
INSIDE ELEVATION - END OF WALL



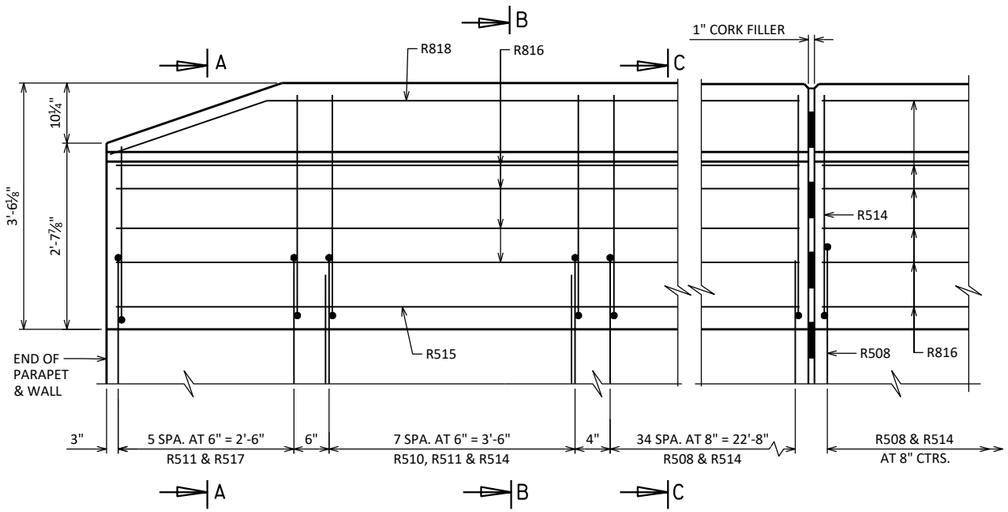
SECTION A-A



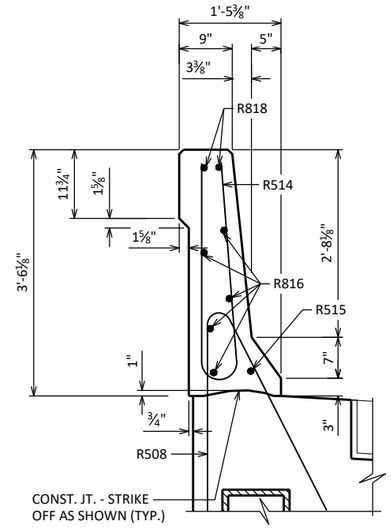
SECTION B-B



PLAN- END OF WALL



OUTSIDE ELEVATION - END OF WALL



SECTION C-C

LEGEND

- ● R510 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R510 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ◆ R508 AND R511 BARS TO BE TIED TO ANCHOR SLAB STEEL BEFORE ANCHOR SLAB IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

DRAWN BY STD | PLANS CK'D SKH

SLOPED FACE PARAPET TYPE HF

SHEET 10
456

8

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STATE PROJECT NUMBER

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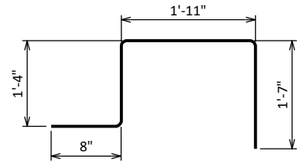
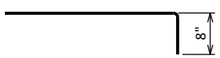
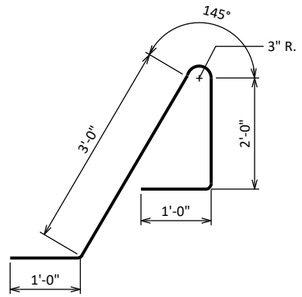


R403



R504



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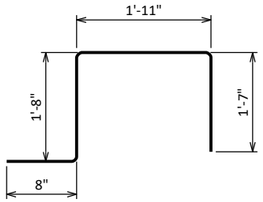
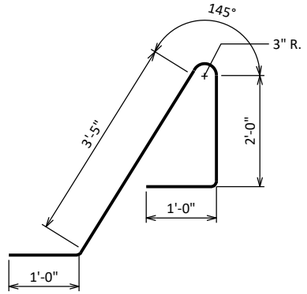
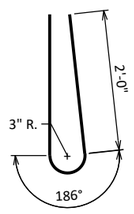


R406

R507



R508



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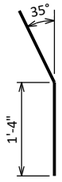

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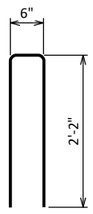
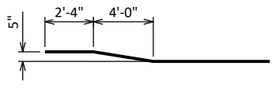
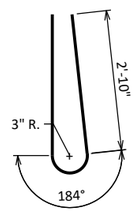


R511



R512 & R515



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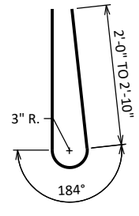

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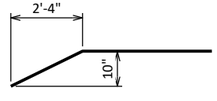


R818

BILL OF BARS

TOTAL COATED WEIGHT = 11,400 LBS.

	BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	BAR SERIES	LOCATION
	R401	150	6'-0"	X			ANCHOR SLAB - BOTTOM TRANS.
★	R402	90	29'-6"	X			ANCHOR SLAB - LONGIT.
	R403	75	5'-3"	X	X		ANCHOR SLAB - SOUTH SIDE VERT.
	R504	138	7'-11"	X	X		ANCHOR SLAB - SOUTH SIDE TRANS.
	R505	129	7'-6"	X	X		ANCHOR SLAB & PARAPET - SOUTH SIDE VERT.
	R406	75	5'-7"	X	X		ANCHOR SLAB - NORTH SIDE VERT.
	R507	138	7'-11"	X	X		ANCHOR SLAB - NORTH SIDE TRANS.
	R508	127	7'-11"	X	X		ANCHOR SLAB & PARAPET - NORTH SIDE VERT.
	R509	141	4'-10"	X	X		PARAPET - SOUTH SIDE VERT.
	R510	16	2'-4"	X	X		PARAPET - EACH SIDE VERT.
	R511	28	4'-7"	X	X		PARAPET - EACH SIDE VERT.
★	R512	1	29'-6"	X	X		PARAPET - SOUTH SIDE HORIZ.
★	R513	14	29'-6"	X			PARAPET - SOUTH SIDE HORIZ.
	R514	135	6'-6"	X	X		PARAPET - NORTH SIDE VERT.
★	R515	1	29'-6"	X	X		PARAPET - NORTH SIDE HORIZ.
★	R816	21	29'-6"	X			PARAPET - NORTH SIDE HORIZ.
	R517	6	5'-8"	X	X	✳	PARAPET - NORTH SIDE VERT.
★	R818	2	29'-6"	X	X		PARAPET - NORTH SIDE HORIZ.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.
ALL REINFORCEMENT BARS IN THIS BILL SHALL BE EPOXY COATED.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
R517	1 SERIES OF 6	4'-10" TO 6'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY

LEGEND

✳ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

★ BAR LENGTH SHOWN IS BASED ON 30'-0" SPACING BETWEEN EXPANSION JOINTS. CONTRACTOR TO ADJUST AS REQUIRED PER CONTRACTOR-DESIGNED EXPANSION JOINT SPACING. SEE GENERAL NOTES ON SHEET 2 FOR FURTHER INFORMATION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

DRAWN BY STD | PLANS CK'D SKH

BILL OF BARS

SHEET 11
457

8

8

STATE PROJECT NUMBER

1130-74-71

NOTES

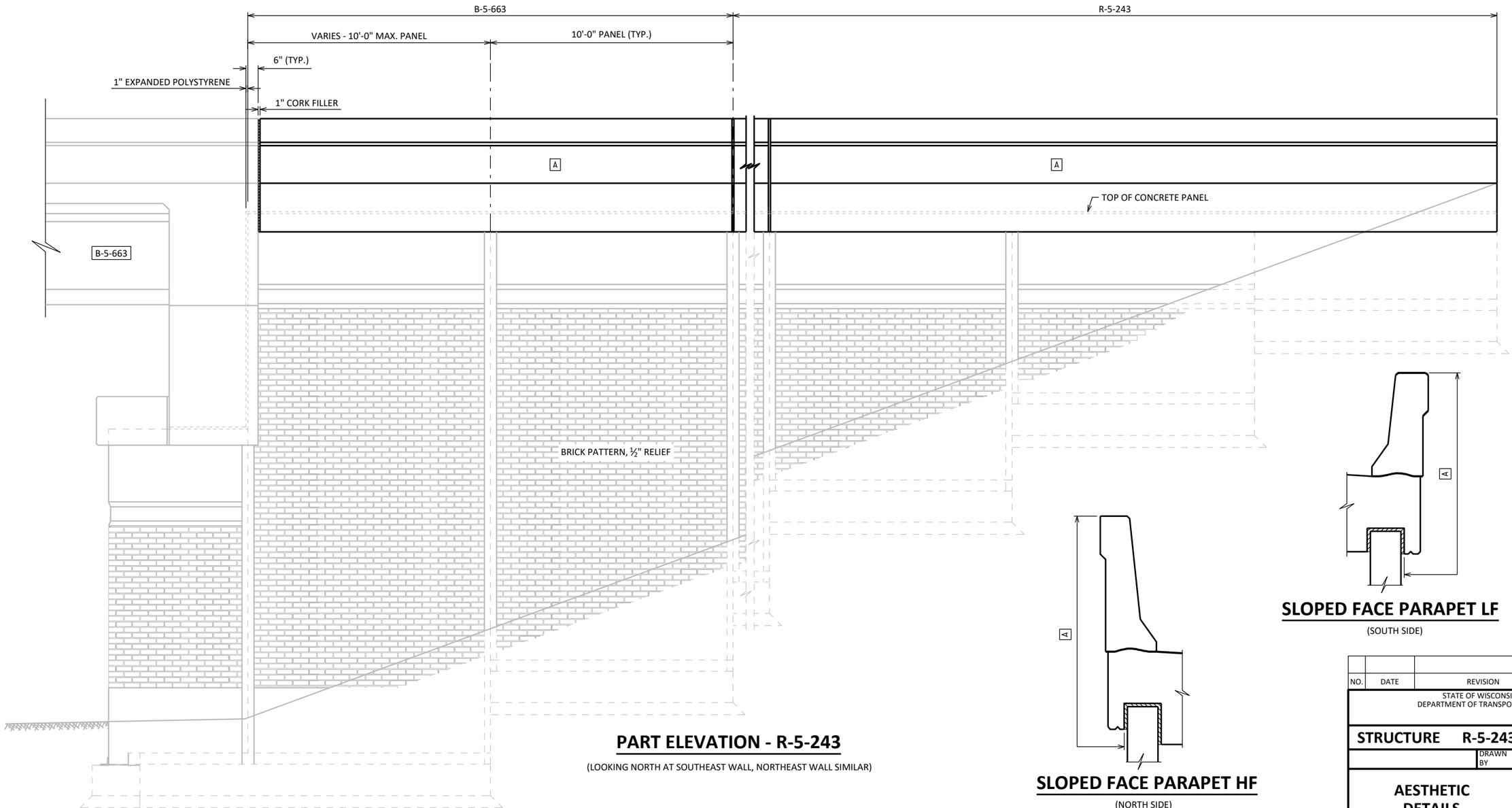
ALL JOINTS SHALL BE LOCATED AS SHOWN ON THE ELEVATION VIEW ON SHEET 1 AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

FILLERS AND EXPANDED POLYSTYRENE ARE INCLUDED IN WALL LENGTH. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF THESE FILLERS WITH NON-STAINING AND NON-BITUMINOUS SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. COLOR OF SEALER SHALL MATCH THE COLOR OF STAIN.

CONCRETE STAINING SCHEDULE

MARK	COLOR	AMS COLOR	LOCATION
A	BASE COLOR	33522	BRIDGES, PARAPETS, WALLS

NOTE:
1. ALL COLOR DESIGNATIONS ARE AMS STANDARD COLORS.
2. FINISH ON ALL COLORS IS FLAT (LUSTERNESS)



PART ELEVATION - R-5-243

(LOOKING NORTH AT SOUTHEAST WALL, NORTHEAST WALL SIMILAR)

SLOPED FACE PARAPET HF

(NORTH SIDE)

SLOPED FACE PARAPET LF

(SOUTH SIDE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-243

DRAWN BY STD | PLANS CK'D SKH

AESTHETIC DETAILS

SHEET 12
458

8

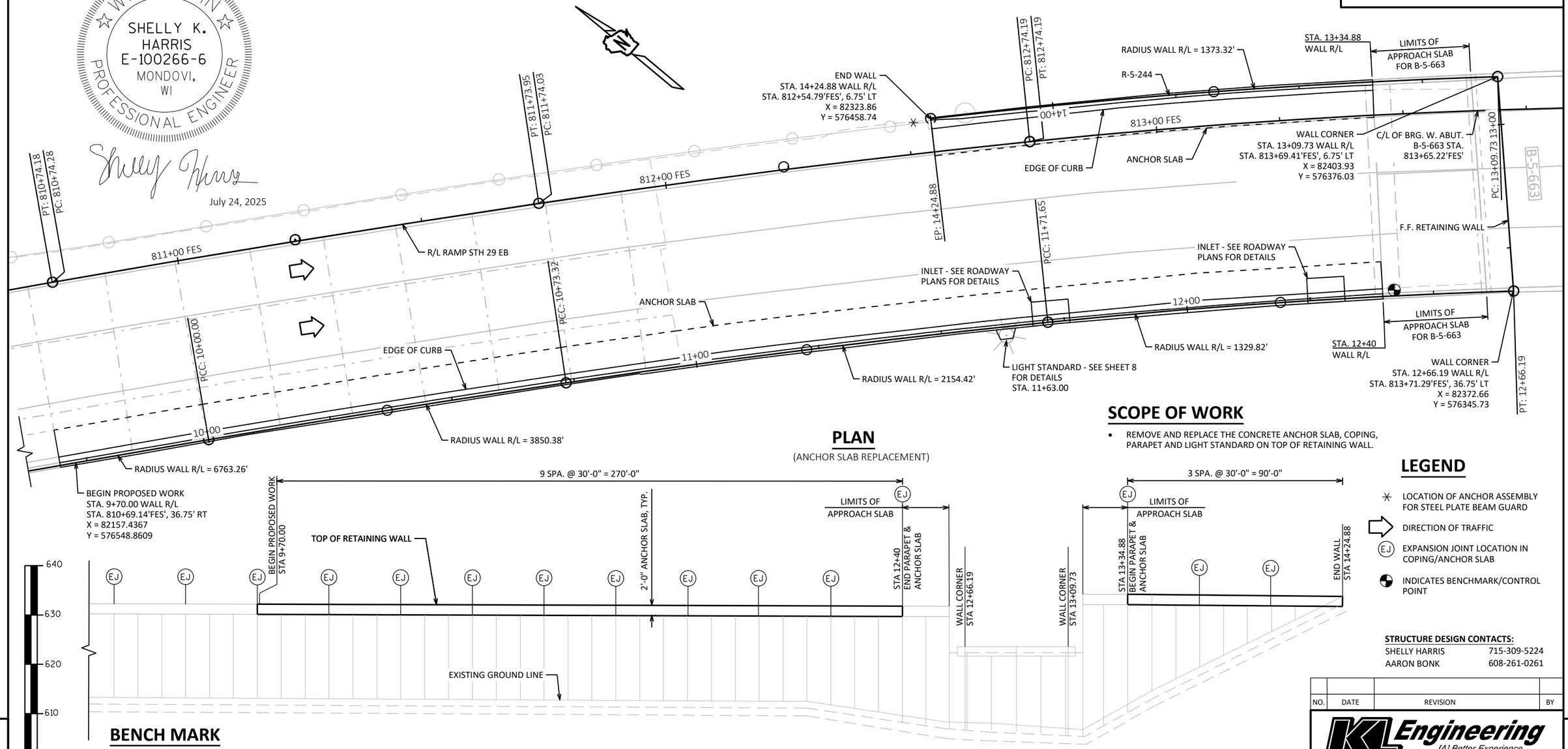
8

STATE PROJECT NUMBER

1130-74-71

WISCONSIN
SHELLY K. HARRIS
E-100266-6
MONDOVI, WI
PROFESSIONAL ENGINEER

July 24, 2025



PLAN

(ANCHOR SLAB REPLACEMENT)

SCOPE OF WORK

- REMOVE AND REPLACE THE CONCRETE ANCHOR SLAB, COPING, PARAPET AND LIGHT STANDARD ON TOP OF RETAINING WALL.

LEGEND

- LOCATION OF ANCHOR ASSEMBLY FOR STEEL PLATE BEAM GUARD
- DIRECTION OF TRAFFIC
- (EJ) EXPANSION JOINT LOCATION IN COPING/ANCHOR SLAB
- INDICATES BENCHMARK/CONTROL POINT

STRUCTURE DESIGN CONTACTS:

SHELLY HARRIS	715-309-5224
AARON BONK	608-261-0261

BENCH MARK

NO.	STATION STH 29 EB	OFFSET	DESCRIPTION	ELEV.
1003	813+70.78	36.995' RT	BM DISK	634.54

ELEVATION

(LOOKING AT F.F. OF WALL)

LIST OF DRAWINGS:

1. GENERAL PLAN
2. GENERAL NOTES & QUANTITIES
3. TYPICAL SECTIONS
4. WALL DETAILS
5. SECTIONS AND DETAILS (1 OF 2)
6. SECTIONS AND DETAILS (2 OF 2)
7. ANCHOR SLAB AT INLET DETAILS
8. SLOPED FACE PARAPET TYPE LF
9. LIGHT STANDARD BASE DETAILS
10. SLOPED FACE PARAPET TYPE HF
11. BILL OF BARS
12. AESTHETIC DETAILS

DESIGN DATA

MATERIAL PROPERTIES:

CONCRETE MASONRY:
ANCHOR SLAB & PARAPET — f'_c = 4,000 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

TRAFFIC DATA

STH 29 EB TO IH 41 SB RAMP

ADT (2026) = 9,570
ADT (2046) = 9,570
R.D.S. = 60 MPH

CURVE DATA

R/L STH 29 EB TO IH 41 SB RAMP:

CURVE 1	CURVE 2	CURVE 3
PI STA = 811+24.12 FES	PI STA = 812+24.12 FES	PI STA = 820+85.00 FES
Y = 576541.890	Y = 576475.360	Y = 575874.000
X = 82222.620	X = 82297.290	X = 82913.330
Δ = 1°28'11" RT	Δ = 2°36'31" RT	Δ = 61°22'02" RT
D = 1°28'29"	D = 2°36'16"	D = 4°11'35"
T = 49.84'	T = 50.09'	T = 810.80'
L = 99.67'	L = 100.16'	L = 1463.54'
R = 3885.00'	R = 2200.00'	R = 1366.44'
PC STA = 810+74.28 FES	PC STA = 811+74.03 FES	PC STA = 812+74.19 FES
Y = 576574.077	Y = 576508.681	Y = 576440.370
X = 82184.573	X = 82259.892	X = 82333.134
PT STA = 811+73.95 FES	PT STA = 812+74.19 FES	PT STA = 827+37.73 FES
Y = 576508.738	Y = 576440.372	Y = 575093.355
X = 82259.829	X = 82333.132	X = 82694.250
DB = S49°46'09"E	DB = S48°17'58"E	DB = S45°41'27"E
DA = S48°17'58"E	DA = S45°41'27"E	DA = S15°40'34"W

NO.	DATE	REVISION	BY

KL Engineering
[A] Better Experience

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED JLR 08/12/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE R-5-244

STH 29 EB TO IH 41 SB RAMP RETAINING WALL

COUNTY	VILLAGE
BROWN	HOWARD

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JBN	SKH	STD	SKH

GENERAL PLAN

SHEET 1 OF 12
459

I.D. DATE:

8

8

STATE PROJECT NUMBER

1130-74-71

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE AS-BUILT STRUCTURE PLANS.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY REFERENCE SYSTEM (WISCRS), BROWN COUNTY NAD 83 (2011). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL STATIONS AND DIMENSIONS ARE ALONG THE FRONT FACE OF WALL, UNLESS SHOWN OTHERWISE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT, UNLESS SPECIFIED OTHERWISE.

BAR STEEL REINFORCEMENT SHALL HAVE 2" CLEAR COVER, UNLESS SHOWN OTHERWISE.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE. BAR DIMENSIONS ARE OUT TO OUT OF THE BAR.

ALL BAR STEEL REINFORCEMENT IN CAST-IN-PLACE CONCRETE IS TO BE EPOXY COATED.

APPLY PROTECTIVE SURFACE TREATMENT TO THE EXPOSED TOP SURFACE OF THE ANCHOR SLAB.

APPLY PIGMENTED SURFACE SEALER TO THE TOP AND INSIDE FACES OF THE PARAPET.

THE COST OF ANY EXCAVATION REQUIRED FOR THE REMOVAL OF THE ANCHOR SLAB, COPING, AND PARAPET SHALL BE INCLUDED IN THE BID ITEM "REMOVING STRUCTURE R-5-244".

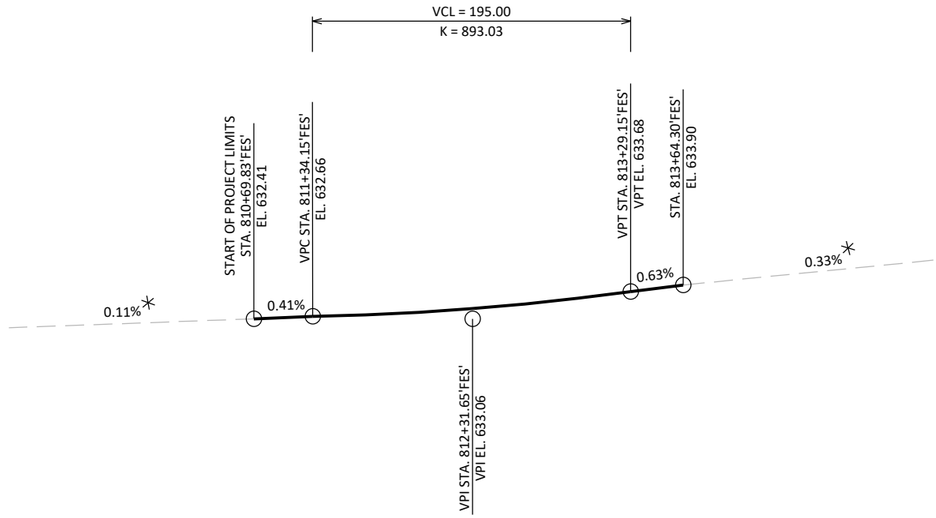
THE QUANTITIES FOR CONCRETE MASONRY AND BAR STEEL REINFORCEMENT FOR THE CAST-IN-PLACE ANCHOR SLAB, PARAPETS, AND LIGHT STANDARDS ARE PAID FOR UNDER THE BID ITEMS "CONCRETE MASONRY RETAINING WALLS" AND "BAR STEEL REINFORCEMENT HS COATED STRUCTURES", RESPECTIVELY.

REMOVAL OF EXISTING CONDUIT AND JUNCTION BOXES IS INCLUDED IN THE BID ITEM "REMOVING STRUCTURE R-5-244".

INLETS TO BE PLACED IN EXISTING LOCATIONS. SEE ROADWAY PLANS FOR DETAILS.

SEE ROADWAY PLANS FOR STAGING DETAILS.

EXPANSION JOINT SPACING SHOWN ON SHEET 1 IS BASED ON THE AS-BUILT PLANS. EXPANSION JOINTS SHALL BE LOCATED OVER WALL JOINTS AND SPACED AT A MINIMUM OF 20' AND A MAXIMUM OF 30'. ACTUAL JOINT LOCATIONS TO BE DETERMINED BY THE CONTRACTOR AND LONGITUDINAL REBAR LENGTHS MODIFIED AS NECESSARY.



PROFILE GRADE LINE STH 29 EB TO IH 41 SB RAMP

TOTAL ESTIMATED QUANITIES

ITEM NUMBER	ITEM DESCRIPTION	UNIT	TOTAL
203.0220.09	REMOVING STRUCTURE R-5-244	EACH	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	40
502.3210	PIGMENTED SURFACE SEALER	SY	154
504.0500	CONCRETE MASONRY RETAINING WALLS	CY	169
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	21,700
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	13
517.1010.09.S	CONCRETE STAINING R-5-244	SF	1,903
531.8990	ANCHOR ASSEMBLIES POLES ON STRUCTURES	EACH	1
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	1
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	77
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	1
	NON-BID ITEMS		
	PREFORMED FILLER	SIZE	3/4" & 1" & 1 1/2"
	NON-BITUMINOUS JOINT SEALER		
	EXPANDED POLYSTYRENE	SIZE	1"

ALL ITEMS SHOWN IN CATEGORY 0100

WALL STATION	TOP OF WALL / FLOW LINE ELEVATION
9+70.00	631.51
10+00.00	631.47
10+30.00	631.44
10+49.44	631.44
10+60.00	631.43
10+90.00	631.42
11+20.00	631.43
11+50.00	631.45
11+80.00	631.48
12+10.00	631.52
12+30.90	631.56
12+40.00	631.62
13+34.88	634.14
13+44.30	634.08
13+64.88	633.93
13+94.88	633.73
14+24.88	633.54

FLOW LINE ELEVATION

LEGEND

⚹ EXISTING GRADES ON B-5-663 BRIDGE DECK OR EXISTING GRADES OUTSIDE LIMITS OF PROJECT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

DRAWN BY STD | PLANS CK'D SKH

GENERAL NOTES & QUANITITIES

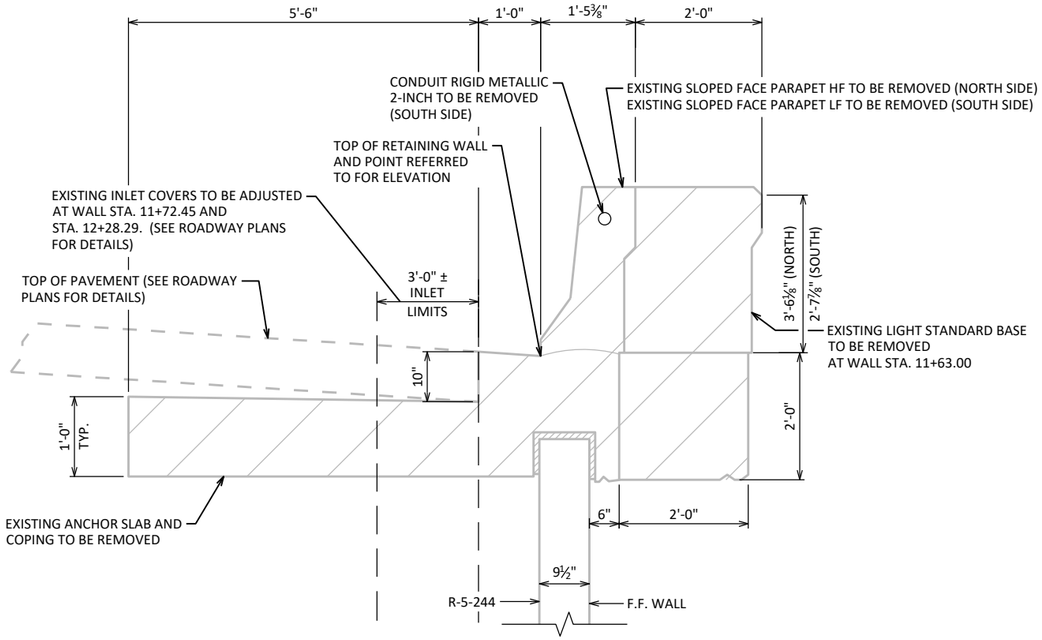
SHEET 2
460

8

8

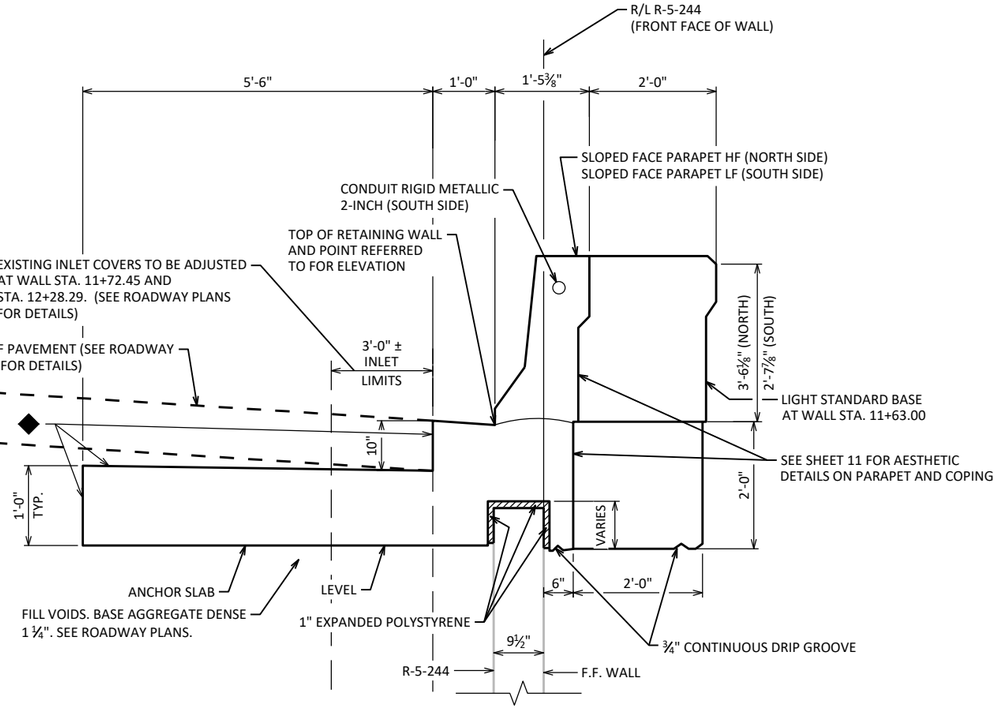
STATE PROJECT NUMBER

1130-74-71



REMOVAL LIMITS

(SOUTH SIDE SHOWN - NORTH SIDE SIMILAR)



PROPOSED TYPICAL SECTION

(SOUTH SIDE SHOWN - NORTH SIDE SIMILAR)

LEGEND

◆ 18" RUBBERIZED MEMBRANE WATERPROOFING - SEAL ALL HORIZONTAL AND VERTICAL JOINTS IN ANCHOR SLAB

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

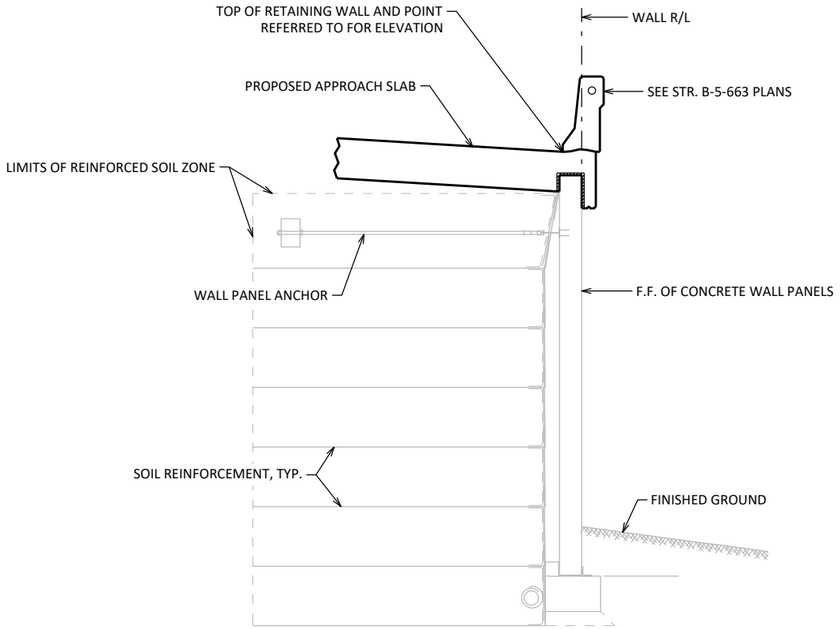
DRAWN BY STD | PLANS CK'D SKH

TYPICAL SECTIONS

SHEET 3

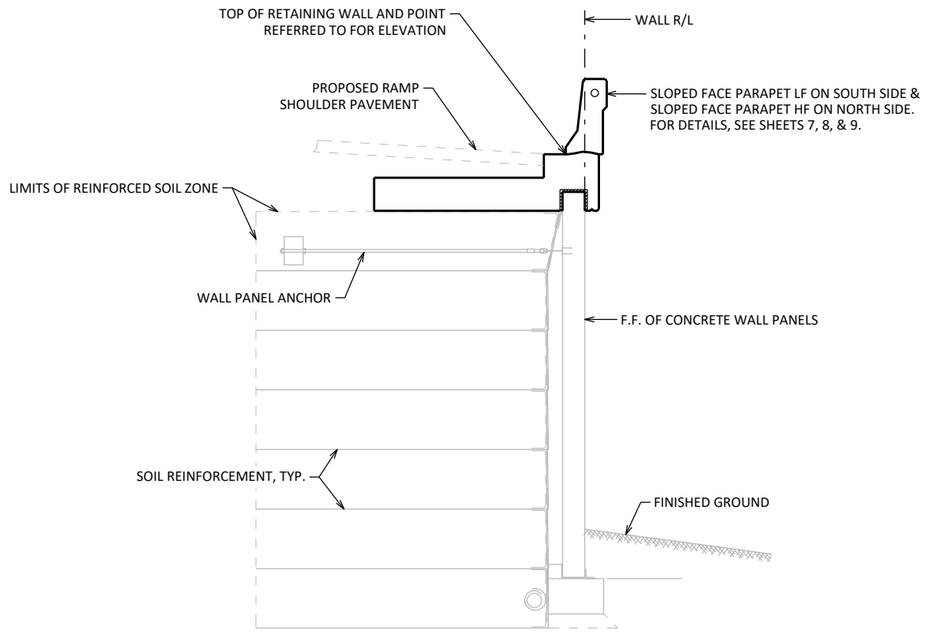
STATE PROJECT NUMBER

1130-74-71



SECTION THRU RETAINING WALL AT APPROACH SLAB

(LOOKING EAST THRU WALL ON SOUTH SIDE OF RAMP, NORTH SIDE SIMILAR)



SECTION THRU RETAINING WALL AT ANCHOR SLAB

(LOOKING EAST THRU WALL ON SOUTH SIDE OF RAMP, NORTH SIDE SIMILAR)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

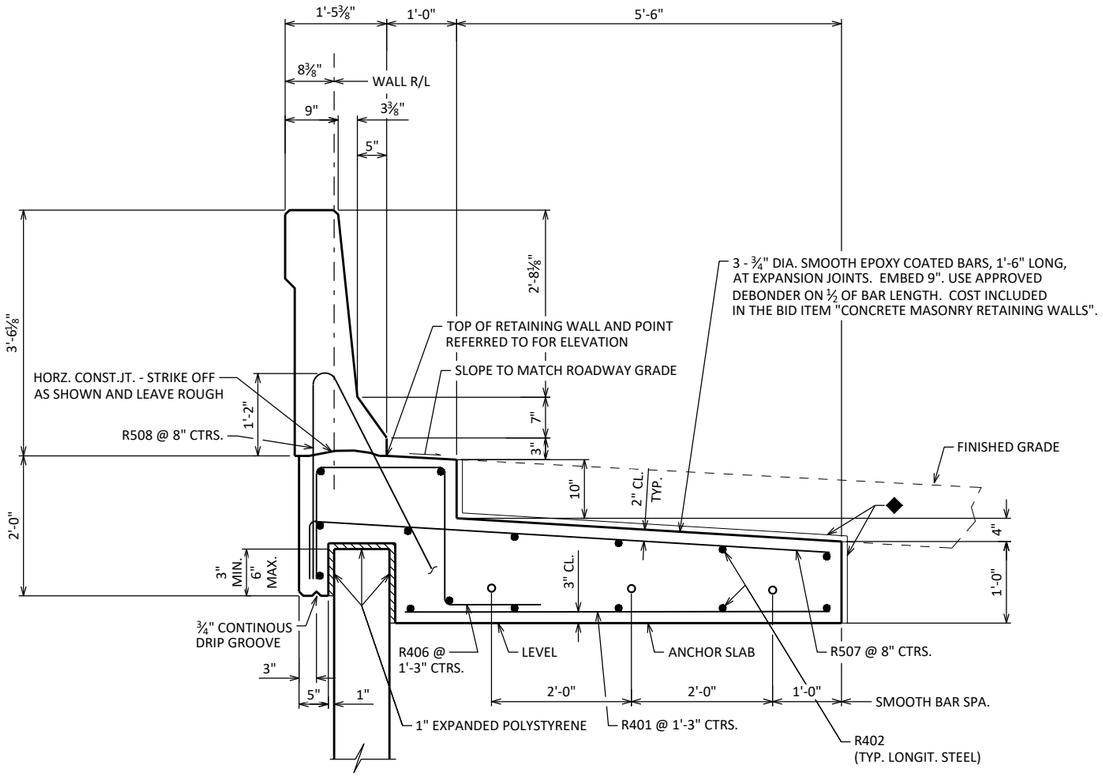
DRAWN BY STD | PLANS CK'D SKH

WALL DETAILS

SHEET 4
462

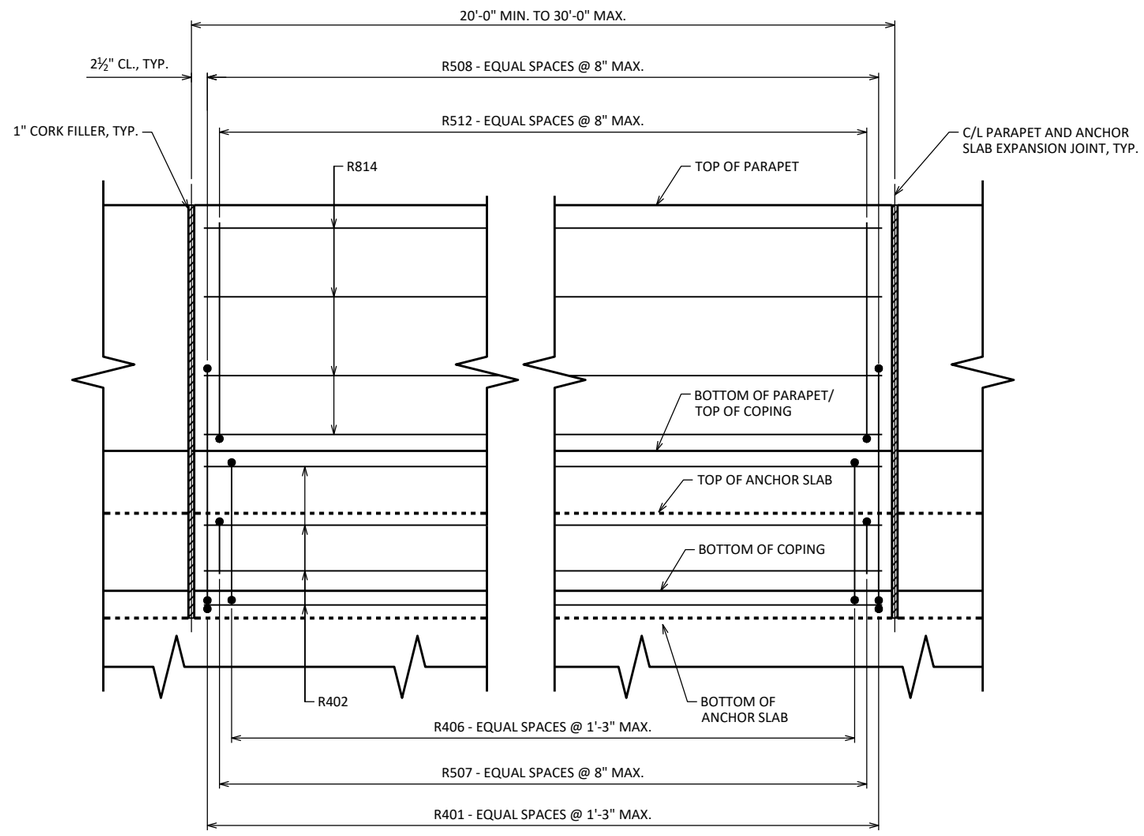
STATE PROJECT NUMBER

1130-74-71



PARAPET AND ANCHOR SLAB DETAIL - NORTH SIDE

(LOOKING EAST)
STA. 13+34.88 TO STA. 14+24.88 WALL R/L



TYP. OUTSIDE ELEVATION OF SLOPE FACE PARAPET HF/COPING/ANCHOR SLAB DETAIL FOR REINFORCEMENT

NOTES

SEE SHEET 6 FOR LEGEND.

NO.	DATE	REVISION	BY

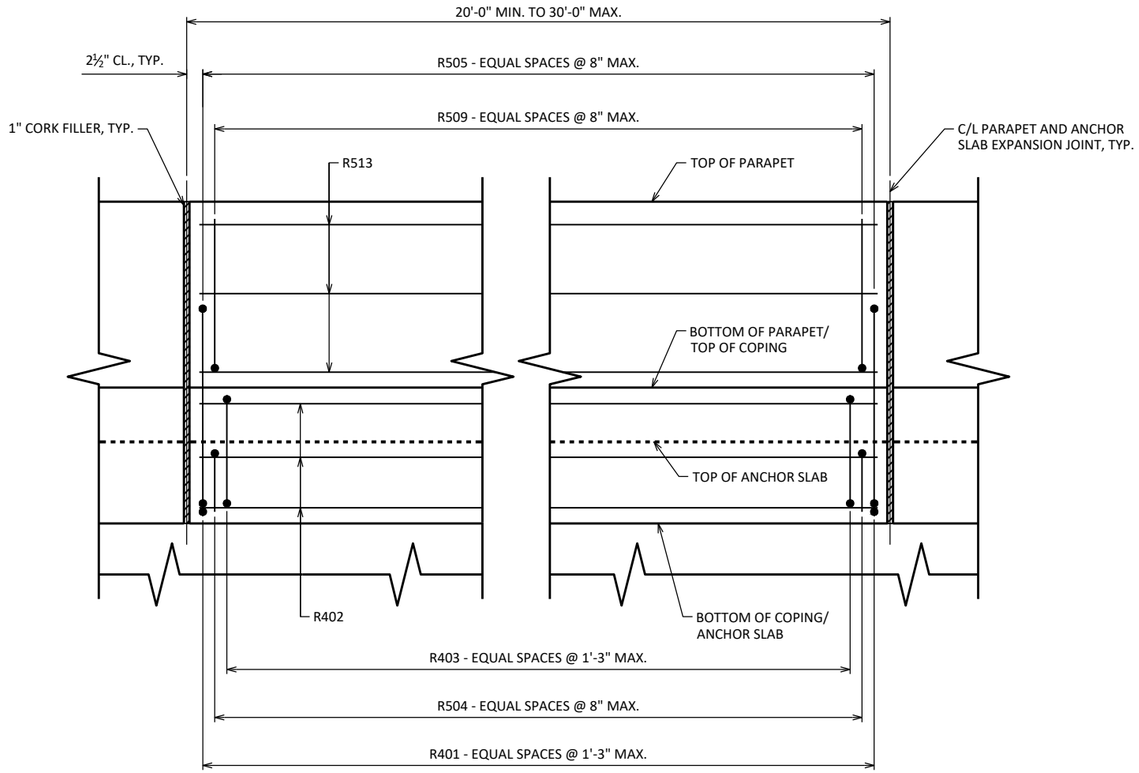
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

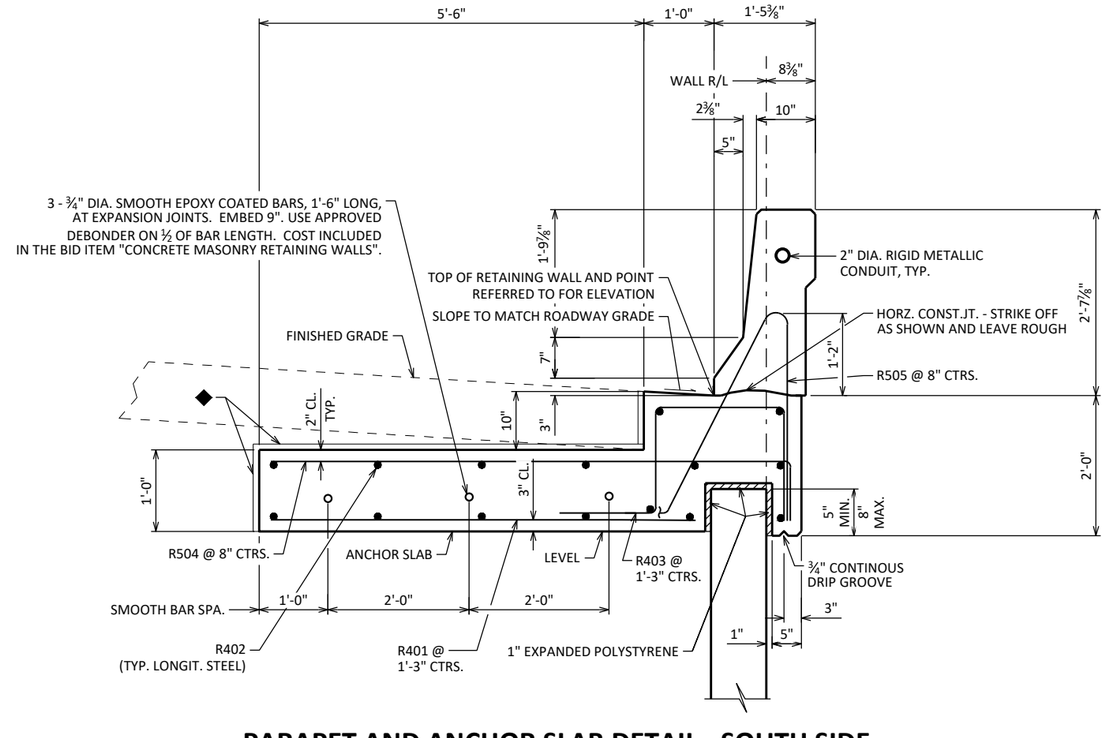
DRAWN BY STD | PLANS CK'D SKH

SECTIONS & DETAILS (1 OF 2)

SHEET 5
463

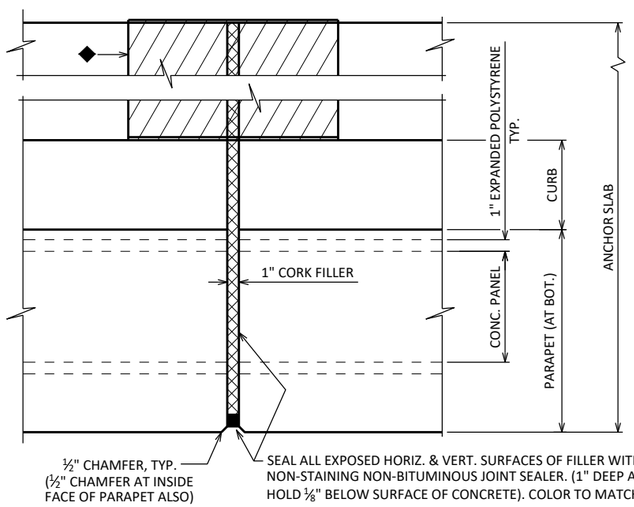


TYP. OUTSIDE ELEVATION OF SLOPE FACE PARAPET LF/COPING/ANCHOR SLAB DETAIL FOR REINFORCEMENT



PARAPET AND ANCHOR SLAB DETAIL - SOUTH SIDE

(LOOKING EAST)
STA. 9+70.00 TO STA. 12+40.00 WALL R/L



CONCRETE PARAPET/ANCHOR SLAB EXPANSION JOINT DETAIL

EXPANSION JOINTS TO BE SPACED AT A MINIMUM OF 20' AND A MAXIMUM OF 30'±.
LOCATE EXPANSION JOINTS OVER WALL JOINTS. DO NOT RUN BAR STEEL THRU JOINT.

LEGEND

◆ 18" RUBBERIZED MEMBRANE WATERPROOFING - SEAL ALL HORIZONTAL AND VERTICAL JOINTS IN FOOTING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

DRAWN BY STD | PLANS CK'D SKH

SECTIONS & DETAILS (2 OF 2)

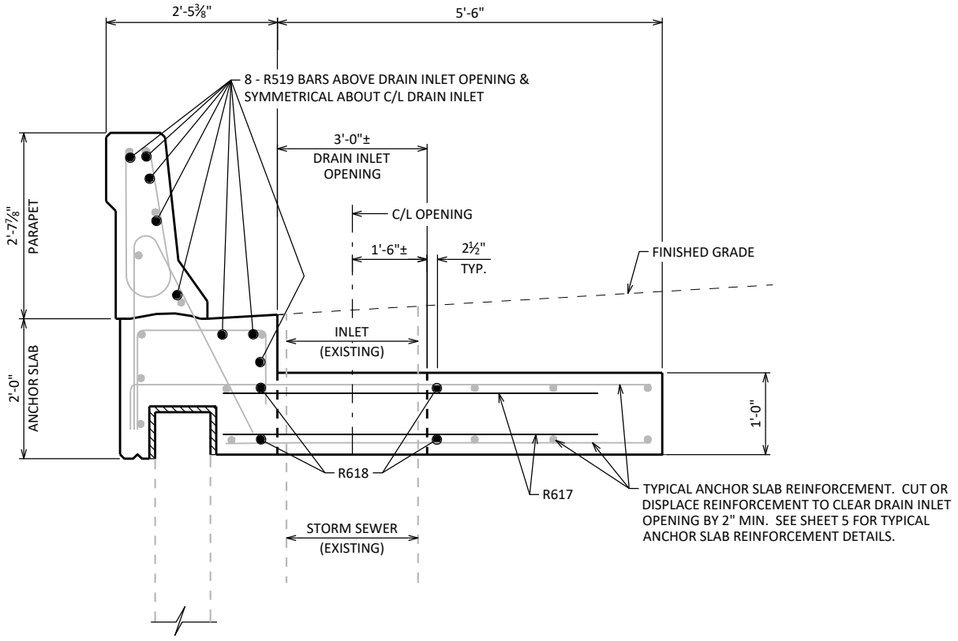
SHEET 6
464

8

8

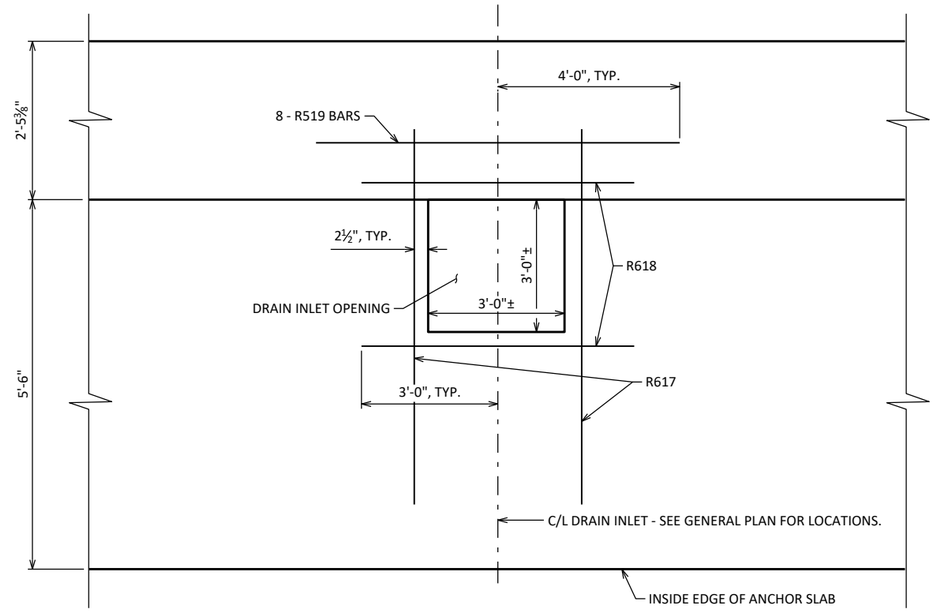
STATE PROJECT NUMBER

1130-74-71



PART SECTION THRU WALL AT INLET

(TYP. OF 2 LOCATIONS)



PART PLAN AT INLET

(TYP. OF 2 LOCATIONS)

NOTES

EXISTING STORM SEWER TO BE ADJUSTED (BY OTHERS). SEE ROADWAY PLANS FOR INLET DETAILS.

THE DRAIN INLET AND INLET COVER SHALL BE IN PLACE BEFORE THE ANCHOR SLAB CONCRETE IS POURED AROUND IT. WORK TO BE DONE AS DIRECTED BY THE FIELD ENGINEER.

SEE SHEET 10 FOR BILL OF BARS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

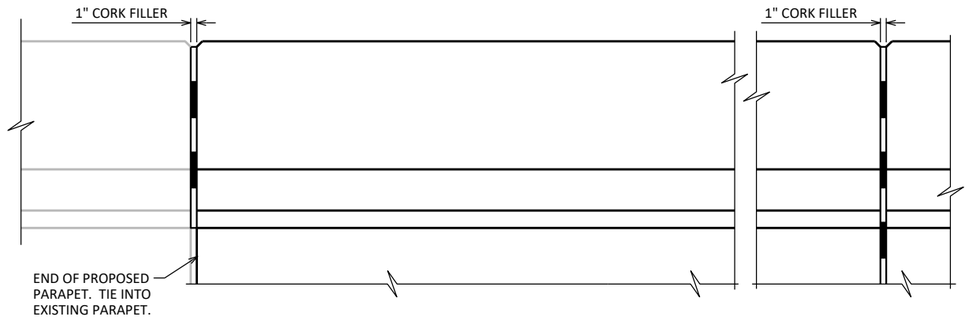
DRAWN BY STD | PLANS CK'D SKH

ANCHOR SLAB AT INLET DETAILS

SHEET 7
465

STATE PROJECT NUMBER

1130-74-71



INSIDE ELEVATION - END OF WALL

LEGEND

- ◆ R505 AND R511 BARS TO BE TIED TO ANCHOR SLAB STEEL BEFORE ANCHOR SLAB IS POURED.
- ◢ SPONGE RUBBER WRAP TO BE AASHTO M153, TYPE 1 OR EQUIVALENT - ¼" MINIMUM THICKNESS. PROVIDE WRAP FOR THE ENTIRE LENGTH OF THE FITTING OR AS SHOWN. SPONGE RUBBER WRAP INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".
- ** EXPANSION FITTING REQUIREMENTS:
  - UP TO ¾" CONDUIT CONTRACTION OR EXPANSION AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION WITH BONDING JUMPER
  - EXPANSION FITTING REQUIRED AT EACH EXPANSION JOINT IN PARAPET. EXPANSION FITTINGS TO BE INCIDENTAL TO BID ITEM "CONDUIT RIGID METALLIC 2-INCH". (APPROX. 3 FITTINGS REQUIRED)

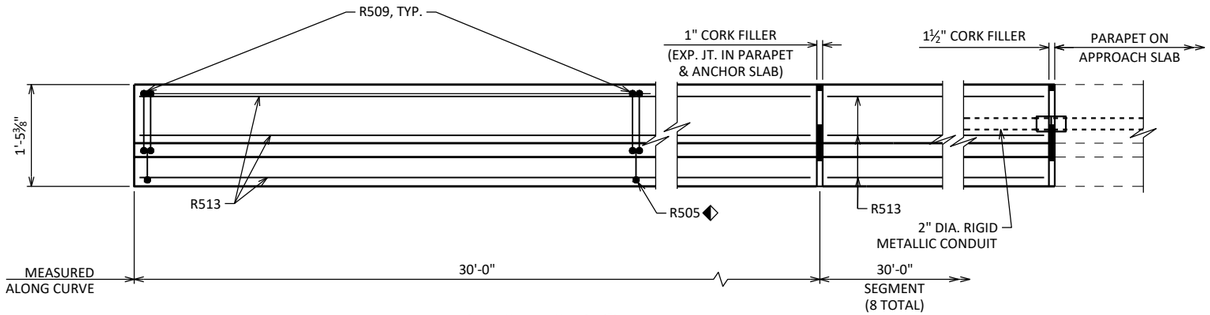
NOTES:

CONDUIT TO EXTEND FROM STA. 11+63.00 TO STA. 12+40.00

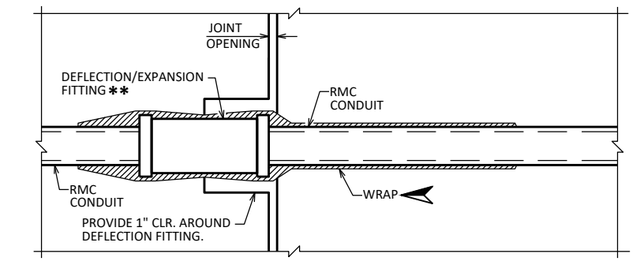
CONDUIT SHALL BE EMBEDDED 2" CLEAR.

CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.

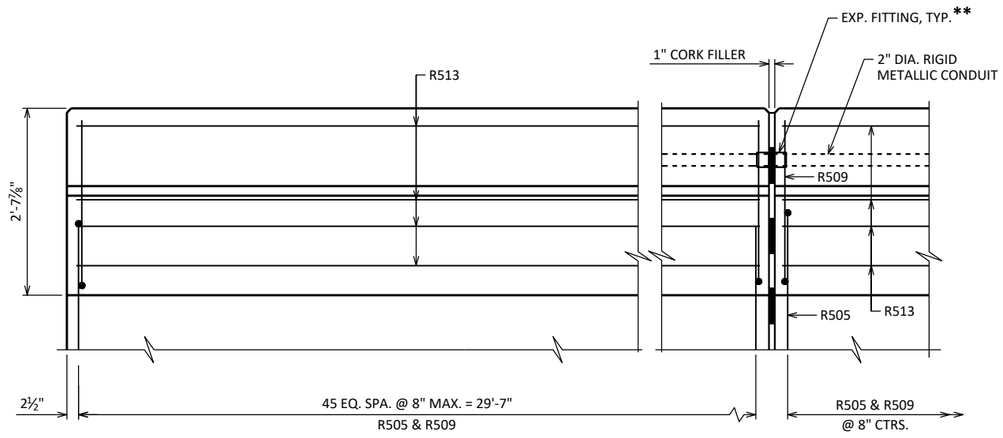


PLAN- END OF WALL

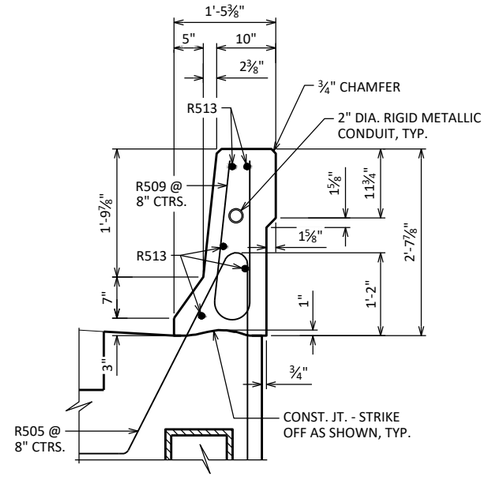


DEFLECTION/EXPANSION FITTING

THIS DETAIL ACCOMMODATES A MAXIMUM OF ¾" TOTAL MOVEMENT AND UP TO 30 DEGREES OF ANGULAR MISALIGNMENT IN ANY DIRECTION. BOND JUMPER NOT SHOWN FOR CLARITY (CONCRETE TO CONCRETE FITTING)



OUTSIDE ELEVATION - END OF WALL



SECTION THRU PARAPET ON WALL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

DRAWN BY STD | PLANS CK'D SKH

SLOPED FACE PARAPET LF

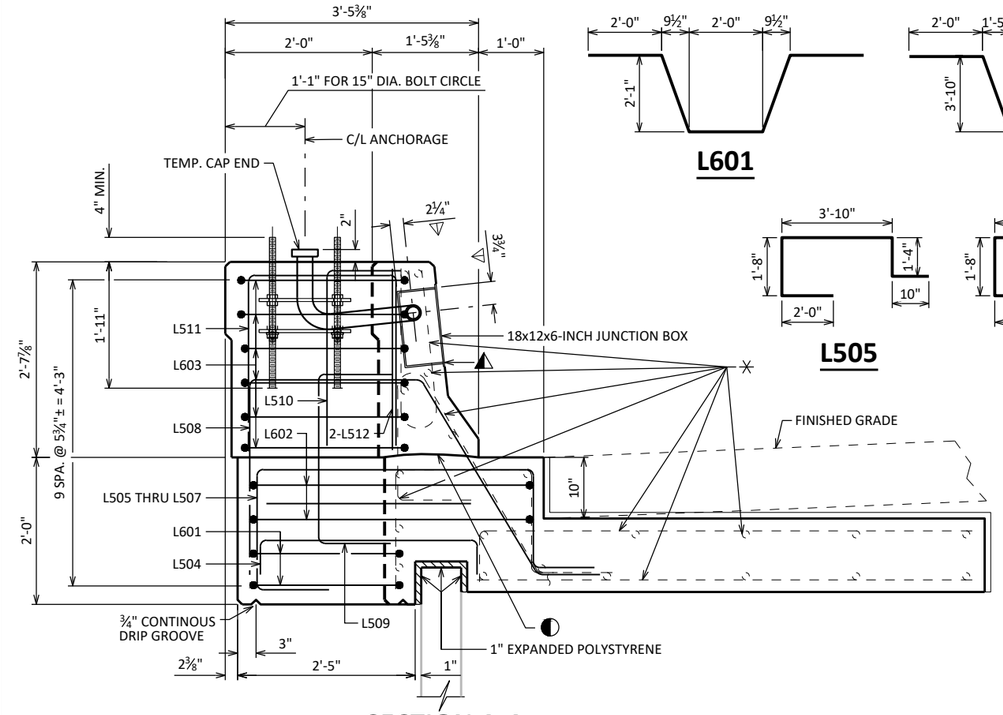
SHEET 8

8

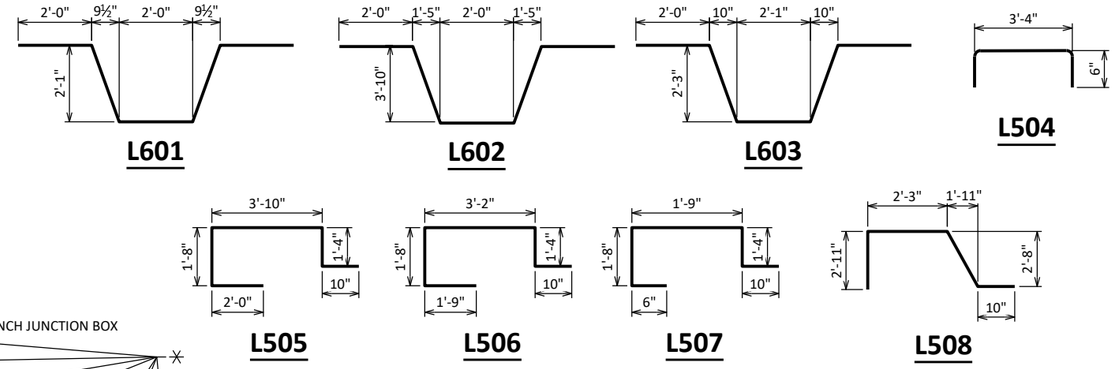
8

STATE PROJECT NUMBER

1130-74-71



SECTION A-A



BILL OF BARS

TOTAL WEIGHT = 390 LBS.

BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	LOCATION
L601	2	10'-0"	X	X	LIGHT STANDARD BASE - HORIZ.
L602	2	13'-8"	X	X	LIGHT STANDARD BASE - HORIZ.
L603	6	10'-5"	X	X	LIGHT STANDARD BASE - HORIZ.
L504	12	4'-1"	X	X	LIGHT STANDARD BASE - VERT.
L505	4	9'-2"	X	X	LIGHT STANDARD BASE - VERT.
L506	2	8'-3"	X	X	LIGHT STANDARD BASE - VERT.
L507	6	5'-7"	X	X	LIGHT STANDARD BASE - VERT.
L508	4	9'-0"	X	X	LIGHT STANDARD BASE - VERT.
L509	2	4'-1"	X	X	LIGHT STANDARD BASE - VERT.
L510	2	3'-2"	X	X	LIGHT STANDARD BASE - VERT.
L511	4	6'-3"	X	X	LIGHT STANDARD BASE - VERT.
L512	2	2'-3"	X		LIGHT STANDARD BASE - VERT.

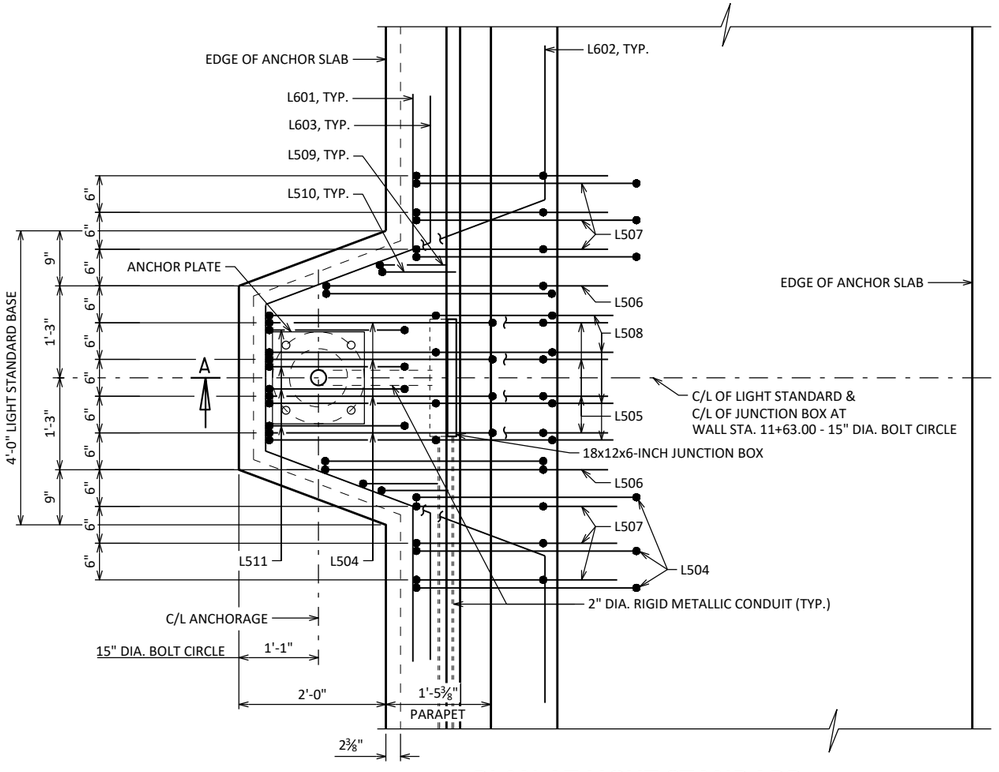
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

NOTES:

BID ITEMS SHALL BE:
"ANCHOR ASSEMBLIES POLES ON STRUCTURES", EACH.
"JUNCTION BOXES 18 x 12 x 6-INCH", EACH.
"CONDUIT RIGID METALLIC 2-INCH", LF.

EXPANSION FITTING REQUIRED AT EACH EXPANSION JOINT IN PARAPET. EXPANSION FITTINGS TO BE INCIDENTAL TO BID ITEM "CONDUIT RIGID METALLIC 2-INCH". SEE SHEET 8 FOR DETAILS.

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LIST.



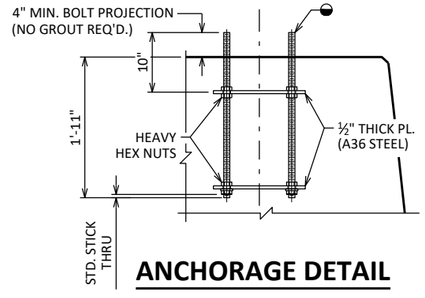
PLAN AT LIGHT STANDARD

INSIDE ELEVATION AT JUNCTION BOX AT SEMI-EXP. JOINT

(ANCHOR SLAB STEEL NOT SHOWN FOR CLARITY)

LEGEND

- CONST. JT. - STRIKE OFF AS SHOWN.
- CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.
- LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- 1" Ø THREADED ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.
- ✳ TYPICAL BARS STEEL REINFORCEMENT IN SLOPED FACE PARAPET & ANCHOR SLAB. FOR DETAILS SEE SHEET 6. (ALL BAR STEEL REINFORCEMENT SHOWN FOR THE LIGHT STD. IS IN ADDITION TO THE BAR STEEL REINFORCEMENT SHOWN ON SHEET 6. DISPLACE BAR STEEL AS NECESSARY TO CLEAR JUNCTION BOX BY 2" MIN.)



ANCHORAGE DETAIL

(1 REQ'D.)

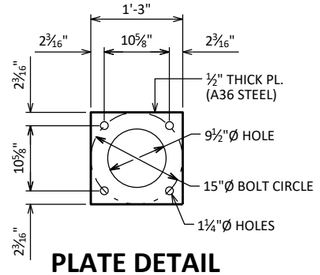


PLATE DETAIL

(1 REQ'D.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

DRAWN BY STD | PLANS CK'D SKH

LIGHT STANDARD BASE DETAILS

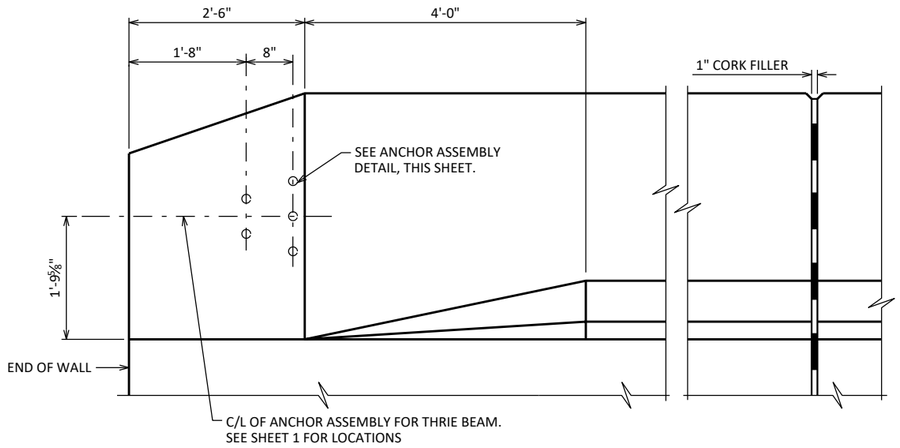
SHEET 9
467

8

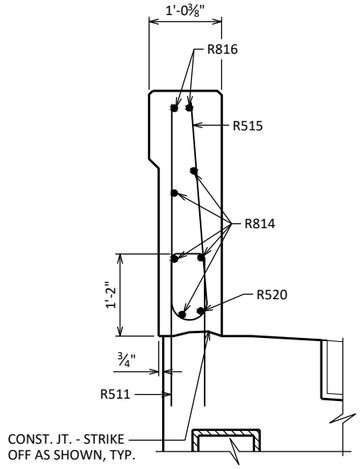
8

STATE PROJECT NUMBER

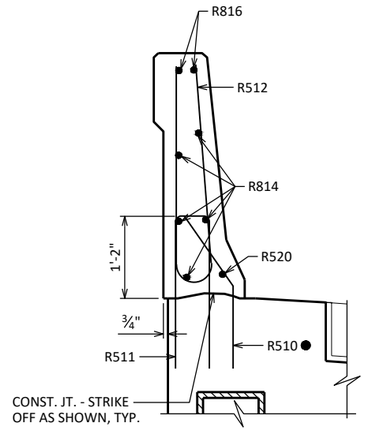
1130-74-71



INSIDE ELEVATION - END OF WALL



SECTION A-A



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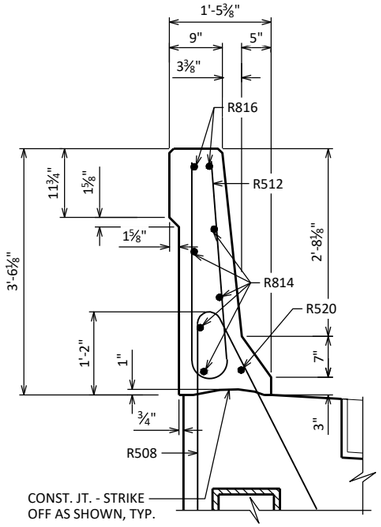

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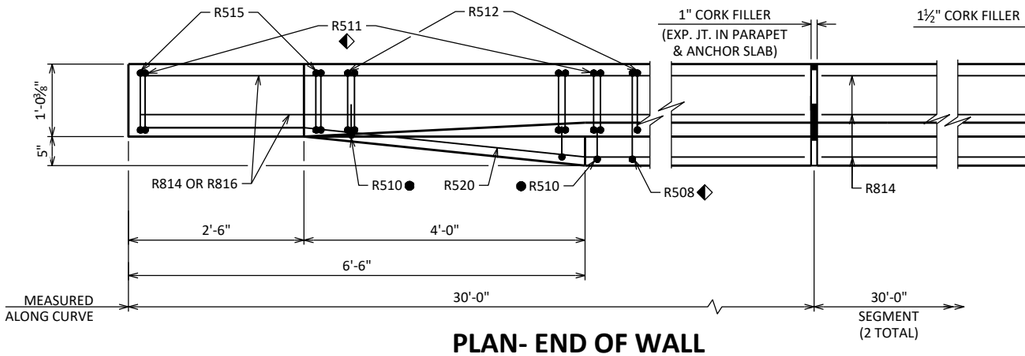
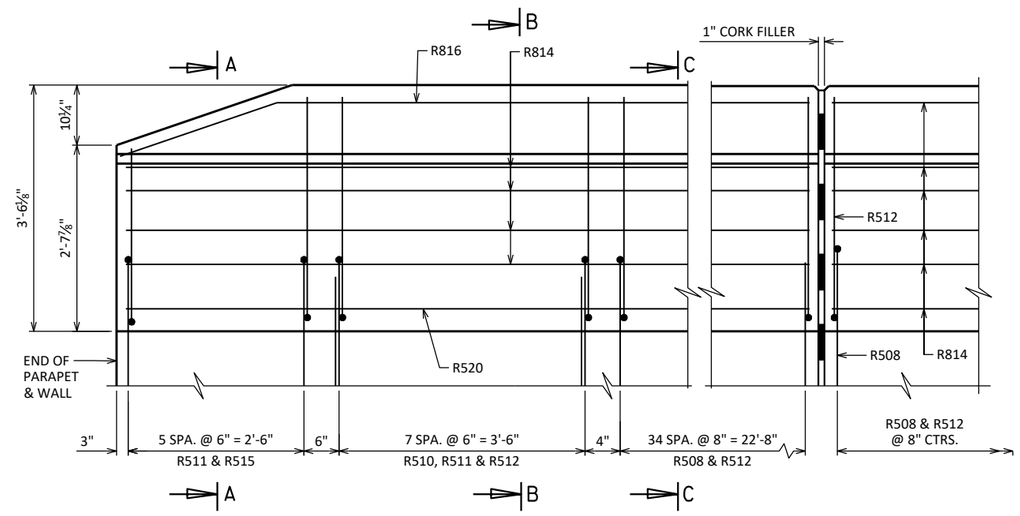


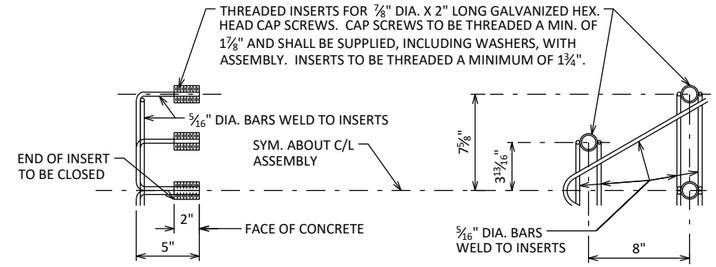
PLAN- END OF WALL



OUTSIDE ELEVATION - END OF WALL

LEGEND

- ● R510 BARS MAY BE PLACED AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R510 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ◆ R508 AND R511 BARS TO BE TIED TO ANCHOR SLAB STEEL BEFORE ANCHOR SLAB IS POURED.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

ASSEMBLY SHALL BE PAID FOR BY BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

DRAWN BY STD | PLANS CK'D SKH

SLOPED FACE PARAPET HF

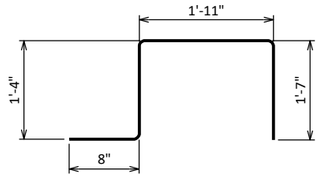
SHEET 10
468

8

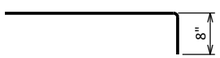
8

STATE PROJECT NUMBER

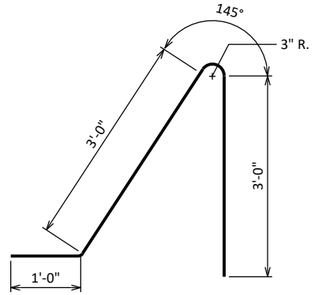
1130-74-71



R403



R504



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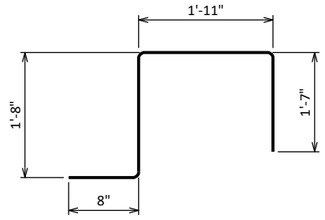
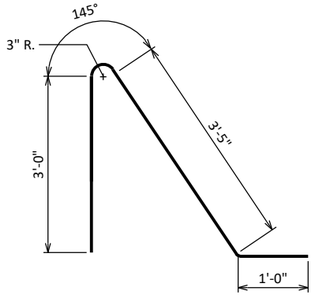


R406

R507



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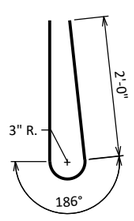

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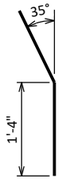

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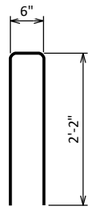

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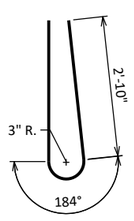
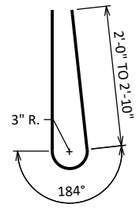
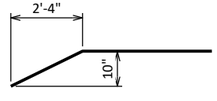


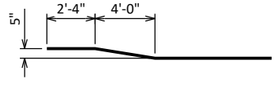
R512



R515



R816



R520

BILL OF BARS

TOTAL COATED WEIGHT = 21,310 LBS.

	BAR MARK	NO. REQ'D.	LENGTH	COAT	BENT	BAR SERIES	LOCATION
	R401	300	6'-0"	X			ANCHOR SLAB - BOTTOM TRANS.
★	R402	180	29'-6"	X			ANCHOR SLAB - LONGIT.
	R403	225	5'-3"	X	X		ANCHOR SLAB - SOUTH SIDE VERT.
	R504	414	7'-11"	X	X		ANCHOR SLAB - SOUTH SIDE TRANS.
	R505	416	7'-6"	X	X		ANCHOR SLAB & PARAPET - SOUTH SIDE VERT.
	R406	75	5'-7"	X	X		ANCHOR SLAB - NORTH SIDE VERT.
	R507	138	7'-11"	X	X		ANCHOR SLAB - NORTH SIDE TRANS.
	R508	127	7'-11"	X	X		ANCHOR SLAB & PARAPET - NORTH SIDE VERT.
	R509	414	4'-10"	X	X		PARAPET - SOUTH SIDE VERT.
	R510	8	2'-4"	X	X		PARAPET - NORTH SIDE VERT.
	R511	14	4'-7"	X	X		PARAPET - NORTH SIDE VERT.
	R512	135	6'-6"	X	X		PARAPET - NORTH SIDE VERT.
★	R513	45	29'-6"	X			PARAPET - SOUTH SIDE HORIZ.
★	R814	21	29'-6"	X			PARAPET - NORTH SIDE HORIZ.
	R515	6	5'-8"	X	X	◭	PARAPET - NORTH SIDE VERT.
★	R816	2	29'-6"	X	X		PARAPET - NORTH SIDE HORIZ.
	R617	8	5'-6"	X			ANCHOR SLAB - INLET HORIZ.
	R618	8	6'-0"	X			ANCHOR SLAB - INLET HORIZ.
	R519	16	8'-0"	X			PARAPET - INLET HORIZ.
	R520	1	29'-6"	X	X		PARAPET - NORTH SIDE HORIZ.

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF THE BAR.

BOTH STRUCTURAL APPROACH SLABS ARE INCLUDED IN THE BILL OF BARS.

BAR SERIES TABLE

BAR MARK	NO. REQ'D.	LENGTH
T515	1 SERIES OF 6	4'-10" TO 6'-6"

BUNDLE AND TAG EACH SERIES SEPARATELY

LEGEND

◭ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

★ BAR LENGTH SHOWN IS BASED ON 30'-0" SPACING BETWEEN EXPANSION JOINTS. CONTRACTOR TO ADJUST AS REQUIRED PER CONTRACTOR-DESIGNED EXPANSION JOINT SPACING. SEE GENERAL NOTES ON SHEET 2 FOR FURTHER INFORMATION.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

DRAWN BY STD | PLANS CK'D SKH

BILL OF BARS

SHEET 11

STATE PROJECT NUMBER

1130-74-71

NOTES:

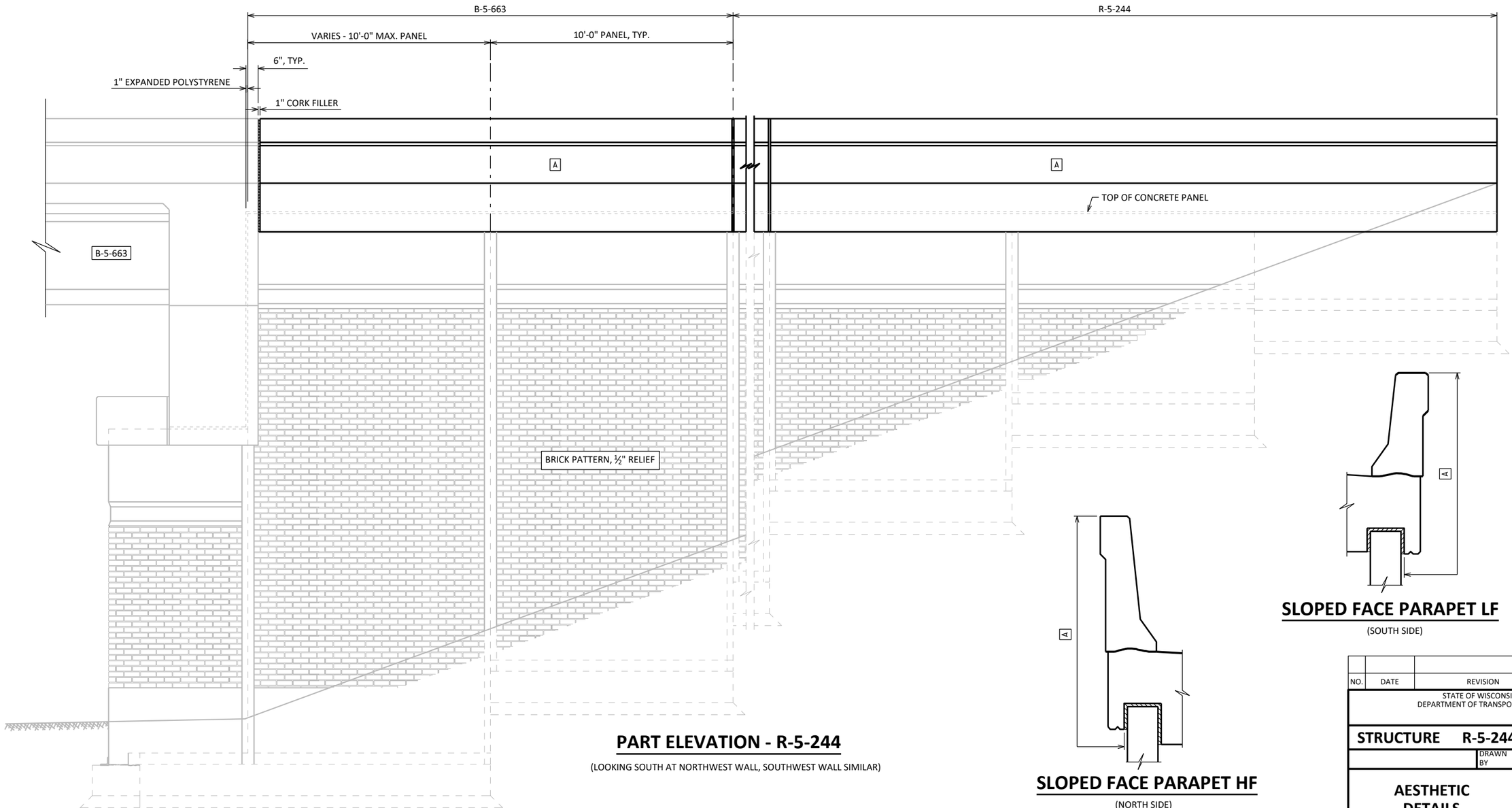
ALL JOINTS SHALL BE LOCATED AS SHOWN ON THE ELEVATION VIEW ON SHEET 1 AND MUST COINCIDE WITH PANEL JOINT ON FRONT FACE.

FILLERS AND EXPANDED POLYSTYRENE ARE INCLUDED IN WALL LENGTH. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF THESE FILLERS WITH NON-STAINING AND NON-BITUMINOUS SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE. COLOR OF SEALER SHALL MATCH THE COLOR OF STAIN.

CONCRETE STAINING SCHEDULE

MARK	COLOR	AMS COLOR	LOCATION
A	BASE COLOR	33522	BRIDGES, PARAPETS, WALLS

NOTE:
1. ALL COLOR DESIGNATIONS ARE AMS STANDARD COLORS.
2. FINISH ON ALL COLORS IS FLAT (LUSTERNESS)



PART ELEVATION - R-5-244

(LOOKING SOUTH AT NORTHWEST WALL, SOUTHWEST WALL SIMILAR)

SLOPED FACE PARAPET HF

(NORTH SIDE)

SLOPED FACE PARAPET LF

(SOUTH SIDE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE R-5-244

DRAWN BY STD | PLANS CK'D SKH

AESTHETIC DETAILS

SHEET 12
470

8

8

DIVISION 1 - STH 29 LANES AND SHOULDERS - ALIGNMENT: 29_41-RAMP - DESIGNATOR: FES - STAGE 2

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
										1.00	1.00	1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
810+69.14	0.00	23.02	21.25	0.00	0.46	0	0	0	0	0	0	0	0	0
811+00.00	30.88	23.00	21.25	0.00	0.46	26	24	0	1	26	0	1	1	2
811+50.00	50.00	23.00	21.25	0.00	0.46	43	39	0	1	69	0	2	2	6
812+00.00	50.00	23.00	21.25	0.00	0.46	43	39	0	1	112	0	3	3	10
812+50.00	50.00	23.00	21.25	0.00	0.46	43	39	0	1	155	0	4	4	14
813+00.00	50.00	23.00	21.25	0.00	0.46	43	39	0	1	198	0	5	5	18
813+44.14	44.14	23.00	21.25	0.00	0.46	38	35	0	1	236	0	6	6	21
814+87.88	143.74	23.00	21.25	0.00	0.46					236	0	6	6	21
815+00.00	12.12	23.00	21.25	0.00	0.46	10	10	0	0	246	0	6	6	21
815+50.00	50.00	23.00	21.25	0.00	0.46	43	39	0	1	289	0	7	7	25
816+00.00	50.00	30.32	14.75	0.00	0.61	49	33	0	1	338	0	8	8	41

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

DIVISION 2 - STH 29 LANES AND SHOULDERS ALIGNMENT: 29_41-RAMP - DESIGNATOR: FES - STAGE 3

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
										1.00	1.00	1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
809+94.95	0.00	13.10	0.00	0.00	0.26	0	0	0	0	0	0	0	0	0
810+14.94	19.99	13.40	0.00	0.00	0.27	10	0	0	0	10	0	0	0	10
810+39.90	24.96	12.35	0.00	0.00	0.25	12	0	0	0	22	0	0	0	22
810+64.90	25.00	16.82	0.00	0.00	0.34	14	0	0	0	36	0	0	0	36
810+69.14	4.24	17.15	12.75	0.00	0.34	3	1	0	0	39	0	0	0	38
811+00.00	30.86	25.25	12.75	0.04	0.51	24	15	0	0	63	0	0	0	47
811+50.00	50.00	24.12	12.75	0.42	0.48	46	24	0	1	109	0	1	1	69
812+00.00	50.00	22.66	12.75	0.66	0.45	43	24	1	1	152	1	2	2	88
812+50.00	50.00	19.63	12.75	3.60	0.39	39	24	4	1	191	5	3	3	103
813+00.00	50.00	16.98	15.75	0.00	0.34	34	26	3	1	225	8	4	4	111
813+44.14	44.14	17.00	15.75	0.00	0.34	28	26	0	1	253	8	5	5	113
814+88.15	144.01	17.00	15.75	0.00	0.34					253	8	5	5	113
815+00.00	11.85	17.00	15.75	0.00	0.34	7	7	0	0	260	8	5	5	113
815+50.00	50.00	17.00	15.75	0.00	0.34	31	29	0	1	291	8	6	6	115
816+00.00	50.00	27.29	12.75	0.00	0.55	41	26	0	1	332	8	7	7	130

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

DIVISION 3 - IH 41 NB LANES AND SHOULDERS - ALIGNMENT: 41NB - DESIGNATOR: NB - STAGE 2

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.00	EXPANDED EBS BACKFILL 1.00 NOTE 5	REDUCED EBS IN FILL 1.00 NOTE 7	MASS ORDINATE NOTE 8
819+26.53	0.00	7.26	6.66	0.00	0.15	0	0	0	0	0	0	0	0	0
819+51.77	25.24	7.59	6.66	0.00	0.15	7	6	0	0	7	0	1	1	1
819+52.77	1.00	36.84	35.91	0.00	0.74	1	1	0	0	8	0	0	0	1
820+00.00	47.23	36.84	35.91	0.00	0.74	64	63	0	1	72	0	1	1	2
820+50.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	140	0	2	2	4
820+85.26	35.26	36.84	35.91	0.00	0.74	48	47	0	1	188	0	3	3	5
822+42.42	157.16	36.84	35.91	0.00	0.74					188	0	3	3	5
822+50.00	7.58	36.84	35.91	0.00	0.74	10	10	0	0	198	0	3	3	5
823+00.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	266	0	4	4	7
823+50.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	334	0	5	5	9
824+00.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	402	0	6	6	11
824+02.78	2.78	36.46	35.91	0.00	0.73	4	4	0	0	406	0	6	6	11
824+03.78	1.00	7.59	6.66	0.00	0.15	1	1	0	0	407	0	6	6	11
824+50.00	47.12	7.59	6.66	0.00	0.15	13	12	0	0	420	0	6	6	12
825+00.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	434	0	6	6	14
825+50.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	448	0	6	6	16
826+00.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	462	0	6	6	18
826+50.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	476	0	6	6	20
827+00.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	490	0	6	6	22
827+50.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	504	0	6	6	24
828+00.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	518	0	6	6	26
828+50.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	532	0	6	6	28
829+00.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	546	0	6	6	30
829+50.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	560	0	6	6	32
830+00.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	574	0	6	6	34
830+50.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	588	0	6	6	36
831+00.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	602	0	6	6	38
831+19.79	19.79	7.73	6.66	0.00	0.15	6	5	0	0	608	0	6	6	39
831+50.00	30.21	7.59	6.66	0.00	0.15	9	7	0	0	617	0	6	6	41
832+00.00	50.00	7.59	6.66	0.00	0.15	14	12	0	0	631	0	6	6	43
832+18.23	18.23	7.59	6.66	0.00	0.15	5	4	0	0	636	0	6	6	44
832+19.23	1.00	36.84	35.91	0.00	0.74	1	1	0	0	637	0	6	6	44
832+50.00	30.77	36.84	35.91	0.00	0.74	42	41	0	1	679	0	7	7	45
833+00.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	747	0	8	8	47
833+50.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	815	0	9	9	49
834+00.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	883	0	10	10	51
834+50.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	951	0	11	11	53
835+00.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	1,019	0	12	12	55
835+50.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	1,087	0	13	13	57
836+00.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	1,155	0	14	14	59
836+50.00	50.00	27.86	35.91	0.00	0.56	60	66	0	1	1,215	0	15	15	53
836+64.37	14.37	4.50	35.91	0.00	0.09	9	19	0	0	1,224	0	15	15	43
839+21.22	256.85	32.34	35.91	0.00	0.65					1,224	0	15	15	43
839+50.00	28.78	36.84	35.91	0.00	0.74	37	38	0	1	1,261	0	16	16	42
840+00.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	1,329	0	17	17	44
840+50.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	1,397	0	18	18	46
841+00.00	50.00	36.84	35.91	0.00	0.74	68	66	0	1	1,465	0	19	19	48
841+23.00	23.00	36.84	35.91	0.00	0.74	31	31	0	1	1,496	0	20	20	48
841+24.00	1.00	7.64	6.66	0.00	0.15	1	1	0	0	1,497	0	20	20	48
841+33.19	9.19	7.59	6.66	0.00	0.15	3	2	0	0	1,500	0	20	20	49

DIVISION 3 - IH 41 SB LANES AND SHOULDERS - ALIGNMENT: 41SB - DESIGNATOR: SB - STAGE 2

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
										1.00	1.00	1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
819+27.28	0.00	49.22	46.66	0.00	0.98	0	0	0	0	0	0	0	0	0
819+50.00	22.72	49.22	46.66	0.00	0.98	41	39	0	1	41	0	1	1	2
820+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	132	0	3	3	7
820+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	223	0	5	5	12
820+85.18	35.18	49.22	46.66	0.00	0.98	64	61	0	1	287	0	6	6	15
822+42.44	157.26	49.22	46.66	0.00	0.98					287	0	6	6	15
822+50.00	7.56	49.22	46.66	0.00	0.98	14	13	0	0	301	0	6	6	16
823+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	392	0	8	8	21
823+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	483	0	10	10	26
824+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	574	0	12	12	31
824+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	665	0	14	14	36
825+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	756	0	16	16	41
825+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	847	0	18	18	46
826+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	938	0	20	20	51
826+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,029	0	22	22	56
827+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,120	0	24	24	61
827+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,211	0	26	26	66
828+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,302	0	28	28	71
828+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,393	0	30	30	76
829+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,484	0	32	32	81
829+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,575	0	34	34	86
830+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,666	0	36	36	91
830+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,757	0	38	38	96
831+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,848	0	40	40	101
831+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	1,939	0	42	42	106
832+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,030	0	44	44	111
832+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,121	0	46	46	116
833+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,212	0	48	48	121
833+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,303	0	50	50	126
834+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,394	0	52	52	131
834+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,485	0	54	54	136
835+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,576	0	56	56	141
835+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,667	0	58	58	146
836+00.00	50.00	40.07	37.09	0.00	0.80	83	78	0	2	2,750	0	60	60	151
836+02.72	2.72	35.72	33.16	0.00	0.71	4	4	0	0	2,754	0	60	60	151
836+17.55	14.83	11.86	10.38	0.00	0.24	13	12	0	0	2,767	0	60	60	152
838+60.99	243.44	13.51	46.66	0.00	0.27					2,767	0	60	60	152
839+00.00	39.01	49.22	46.66	0.00	0.98	45	67	0	1	2,812	0	61	61	130
839+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,903	0	63	63	135
840+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	2,994	0	65	65	140
840+50.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	3,085	0	67	67	145
841+00.00	50.00	49.22	46.66	0.00	0.98	91	86	0	2	3,176	0	69	69	150
841+05.28	5.28	49.22	46.66	0.00	0.98	10	9	0	0	3,186	0	69	69	151

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

DIVISION 3 - IH 41 CD LANES AND SHOULDERS - ALIGNMENT: CD-NB - DESIGNATOR: CD - STAGE 2

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT 1.00	EXPANDED FILL 1.00	EXPANDED EBS BACKFILL 1.00	REDUCED EBS IN FILL 1.00	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
819+09.07	0.00	45.11	35.63	0.00	0.90	0	0	0	0	0	0	0	0	0
819+50.00	40.93	48.86	35.63	0.00	0.98	71	54	0	1	71	0	1	1	17
820+00.00	50.00	36.59	35.63	2.30	0.73	79	66	2	2	150	2	3	3	30
820+50.00	50.00	36.39	35.63	5.90	0.73	68	66	8	1	218	10	4	4	32
820+86.50	36.50	35.77	35.63	23.17	0.72	49	48	20	1	267	30	5	5	33
822+43.41	156.91	35.22	35.63	3.94	0.70					267	30	5	5	33
822+50.00	6.59	35.58	35.63	0.11	0.71	9	9	0	0	276	30	5	5	33
823+00.00	50.00	35.79	35.63	1.69	0.72	66	66	2	1	342	32	6	6	33
823+50.00	50.00	34.67	35.63	0.62	0.69	65	66	2	1	407	34	7	7	32
823+51.00	1.00	5.62	5.63	0.00	0.11	1	1	0	0	408	34	7	7	32
824+00.00	49.72	5.62	5.63	0.00	0.11	10	10	0	0	418	34	7	7	32
824+50.00	50.00	9.00	9.00	0.00	0.18	14	14	0	0	432	34	7	7	32
825+00.00	50.00	9.00	9.00	0.00	0.18	17	17	0	0	449	34	7	7	32
825+02.25	2.25	9.27	9.00	0.00	0.19	1	1	0	0	450	34	7	7	32
831+29.16	626.91	43.08	9.75	0.00	0.86					450	34	7	7	32
831+30.32	1.16	50.73	9.75	0.00	1.01	2	0	0	0	452	34	7	7	34
831+49.02	18.70	35.29	9.75	0.00	0.71	30	7	0	1	482	34	8	8	57
831+50.00	0.98	35.46	9.75	0.00	0.71	1	0	0	0	483	34	8	8	58
831+73.84	23.84	33.69	9.75	0.00	0.67	31	9	0	1	514	34	9	9	80
831+98.69	24.85	30.88	9.75	0.00	0.62	30	9	0	1	544	34	10	10	101
832+00.00	1.31	30.70	9.75	0.00	0.61	1	0	0	0	545	34	10	10	102
832+50.00	50.00	26.23	9.75	0.18	0.52	53	18	0	1	598	34	11	11	137
833+00.00	50.00	23.44	9.75	2.25	0.47	46	18	2	1	644	36	12	12	165
833+50.00	50.00	21.13	9.75	0.63	0.42	41	18	3	1	685	39	13	13	188
834+00.00	50.00	20.19	9.75	9.64	0.40	38	18	10	1	723	49	14	14	208
834+50.00	50.00	19.54	9.75	2.23	0.39	37	18	11	1	760	60	15	15	227
835+00.00	50.00	19.01	9.75	4.08	0.38	36	18	6	1	796	66	16	16	245
835+50.00	50.00	18.46	9.75	11.88	0.37	35	18	15	1	831	81	17	17	262
836+00.00	50.00	15.34	9.75	12.05	0.31	31	18	22	1	862	103	18	18	275
836+50.00	50.00	14.20	9.75	7.08	0.28	27	18	18	1	889	121	19	19	284
837+00.00	50.00	22.42	9.75	2.46	0.45	34	18	9	1	923	130	20	20	300
837+17.37	17.37	22.52	9.75	2.03	0.45	14	6	1	0	937	131	20	20	308
837+26.79	9.42	22.55	9.75	2.42	0.45	8	3	1	0	945	132	20	20	313
839+73.07	246.28	0.00	9.75	0.00	0.00					945	132	20	20	313
839+92.91	19.84	29.08	9.75	0.00	0.58	11	7	0	0	956	132	20	20	317
840+00.00	7.09	24.71	9.75	14.24	0.49	7	3	2	0	963	134	20	20	321
840+50.00	50.00	25.42	9.75	1.83	0.51	46	18	15	1	1,009	149	21	21	349
841+00.00	50.00	23.50	9.75	0.40	0.47	45	18	2	1	1,054	151	22	22	376
841+50.00	50.00	26.32	9.75	0.00	0.53	46	18	0	1	1,100	151	23	23	404
842+00.00	50.00	26.65	9.75	0.05	0.53	49	18	0	1	1,149	151	24	24	435
842+50.00	50.00	26.60	9.75	1.44	0.53	49	18	1	1	1,198	152	25	25	466
843+00.00	50.00	29.76	9.75	0.00	0.60	52	18	1	1	1,250	153	26	26	500
843+34.33	34.33	30.08	9.75	0.00	0.60	38	12	0	1	1,288	153	27	27	526

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

DIVISION 3 - RAMP OWC - ALIGNMENT: O_41-RAMP_OWC - DESIGNATOR: OWC - STAGE 2

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
										1.00	1.00	1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
823+56.85	0.00	26.97	26.00	1.16	0.54	0	0	0	0	0	0	0	0	0
824+00.00	43.15	30.95	29.45	0.00	0.62	46	44	1	1	46	1	1	1	2
824+50.00	50.00	32.56	30.89	0.40	0.65	59	56	0	1	105	1	2	2	5
825+00.00	50.00	40.57	35.98	0.00	0.81	68	62	0	1	173	1	3	3	11
825+49.90	49.90	47.46	41.31	0.00	0.95	81	71	0	2	254	1	5	5	21

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

DIVISION 4 - IH 41 NB LANES AND SHOULDERS - ALIGNMENT: 41NB - DESIGNATOR: NB - STAGE 3

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT 1.00	EXPANDED FILL 1.00	EXPANDED EBS BACKFILL 1.00	REDUCED EBS IN FILL 1.00	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
819+52.77	0.00	36.81	36.56	0.00	0.74	0	0	0	0	0	0	0	0	0
820+00.00	47.23	37.76	36.56	0.00	0.76	65	64	0	1	65	0	1	1	1
820+50.00	50.00	36.34	36.56	0.00	0.73	69	68	0	1	134	0	2	2	2
820+85.26	35.26	36.24	36.56	0.00	0.72	47	48	0	1	181	0	3	3	1
822+42.42	157.16	36.28	35.19	0.00	0.73					181	0	3	3	1
822+50.00	7.58	36.28	35.19	0.00	0.73	10	10	0	0	191	0	3	3	1
823+00.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	258	0	4	4	3
823+50.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	325	0	5	5	5
824+00.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	392	0	6	6	7
824+02.78	2.78	36.28	35.19	0.00	0.73	4	4	0	0	396	0	6	6	7
824+03.78	1.00	11.40	9.72	0.00	0.23	1	1	0	0	397	0	6	6	7
824+50.00	46.22	11.30	9.72	0.00	0.23	19	17	0	0	416	0	6	6	9
825+00.00	50.00	11.30	9.72	0.00	0.23	21	18	0	0	437	0	6	6	12
831+19.79	619.79	11.39	9.72	0.00	0.23					437	0	6	6	12
831+50.00	30.21	11.35	9.72	0.00	0.23	13	11	0	0	450	0	6	6	14
832+00.00	50.00	11.22	9.72	0.00	0.22	21	18	0	0	471	0	6	6	17
832+18.23	18.23	11.37	9.72	0.00	0.23	8	7	0	0	479	0	6	6	18
832+19.23	1.00	36.28	35.19	0.00	0.73	1	1	0	0	480	0	6	6	18
832+50.00	30.77	36.28	35.19	0.00	0.73	41	40	0	1	521	0	7	7	19
833+00.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	588	0	8	8	21
833+50.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	655	0	9	9	23
834+00.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	722	0	10	10	25
834+50.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	789	0	11	11	27
835+00.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	856	0	12	12	29
835+50.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	923	0	13	13	31
836+00.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	990	0	14	14	33
836+50.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	1,057	0	15	15	35
836+64.37	14.37	36.28	35.19	0.00	0.73	19	19	0	0	1,076	0	15	15	35
836+82.00	17.63	11.70	9.72	0.00	0.23	16	15	0	0	1,092	0	15	15	36
839+21.22	239.22	0.00	0.00	0.00	0.00				1	1,092	0	16	16	36
839+36.53	15.31	24.75	24.75	0.00	0.50	7	7	0	0	1,099	0	16	16	36
839+50.00	13.47	36.28	35.19	0.00	0.73	15	15	0	0	1,114	0	16	16	36
840+00.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	1,181	0	17	17	38
840+50.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	1,248	0	18	18	40
841+00.00	50.00	36.28	35.19	0.00	0.73	67	65	0	1	1,315	0	19	19	42
841+23.00	23.00	36.28	35.19	0.00	0.73	31	30	0	1	1,346	0	20	20	43
841+24.00	1.00	11.45	9.72	0.00	0.23	1	1	0	0	1,347	0	20	20	43
841+50.00	26.00	11.32	9.72	0.00	0.23	11	9	0	0	1,358	0	20	20	45
842+00.00	50.00	11.36	9.72	0.00	0.23	21	18	0	0	1,379	0	20	20	48
842+50.00	50.00	11.43	9.72	0.00	0.23	21	18	0	0	1,400	0	20	20	51
843+00.00	50.00	11.40	9.72	0.00	0.23	21	18	0	0	1,421	0	20	20	54
843+07.91	7.91	11.36	9.72	0.00	0.23	3	3	0	0	1,424	0	20	20	54

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

DIVISION 4 - IH 41 SB LANES AND SHOULDERS - ALIGNMENT: 41SB - DESIGNATOR: SB - STAGE 3

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.00	EXPANDED EBS BACKFILL 1.00 NOTE 5	REDUCED EBS IN FILL 1.00 NOTE 7	MASS ORDINATE NOTE 8
						NOTE 1	NOTE 2	NOTE 3						
819+27.28	0.00	60.52	44.63	0.00	1.21	0	0	0	0	0	0	0	0	0
819+50.00	22.72	59.95	44.63	0.00	1.20	51	38	0	1	51	0	1	1	13
820+00.00	50.00	59.42	45.75	0.35	1.19	111	84	0	2	162	0	3	3	40
820+50.00	50.00	58.60	53.63	0.52	1.17	109	92	1	2	271	1	5	5	57
820+85.28	35.28	59.07	53.63	119.96	1.18	77	70	79	2	348	80	7	7	64
822+42.44	157.14	29.25	29.25	0.00	0.58					348	80	7	7	64
822+50.00	7.56	29.25	29.25	0.00	0.59	8	8	0	0	356	80	7	7	64
823+00.00	50.00	29.25	29.25	0.00	0.58	54	54	0	1	410	80	8	8	64
823+50.00	50.00	29.25	29.25	0.00	0.59	54	54	0	1	464	80	9	9	64
824+00.00	50.00	29.25	29.25	0.00	0.58	54	54	0	1	518	80	10	10	64
824+09.24	9.24	41.61	30.00	0.00	0.83	12	10	0	0	530	80	10	10	66
824+50.00	40.76	41.61	30.00	0.00	0.83	63	45	0	1	593	80	11	11	84
825+00.00	50.00	43.12	30.00	0.00	0.86	78	56	0	2	671	80	13	13	106
825+50.00	50.00	43.95	30.00	0.00	0.88	81	56	0	2	752	80	15	15	131
826+00.00	50.00	42.64	30.00	0.00	0.85	80	56	0	2	832	80	17	17	155
826+50.00	50.00	41.45	30.00	0.00	0.83	78	56	0	2	910	80	19	19	177
827+00.00	50.00	42.53	30.00	1.00	0.85	78	56	1	2	988	81	21	21	199
827+50.00	50.00	42.49	30.00	0.25	0.85	79	56	1	2	1,067	82	23	23	222
828+00.00	50.00	43.77	30.00	0.00	0.88	80	56	0	2	1,147	82	25	25	246
828+50.00	50.00	43.45	30.00	0.00	0.87	81	56	0	2	1,228	82	27	27	271
829+00.00	50.00	46.17	30.00	0.00	0.92	83	56	0	2	1,311	82	29	29	298
829+50.00	50.00	45.77	30.00	0.00	0.92	85	56	0	2	1,396	82	31	31	327
830+00.00	50.00	48.11	30.00	0.00	0.96	87	56	0	2	1,483	82	33	33	358
830+50.00	50.00	48.56	30.00	0.00	0.97	90	56	0	2	1,573	82	35	35	392
831+00.00	50.00	47.83	30.00	0.00	0.96	89	56	0	2	1,662	82	37	37	425
831+50.00	50.00	46.61	30.00	0.00	0.93	87	56	0	2	1,749	82	39	39	456
832+00.00	50.00	47.74	30.00	0.00	0.95	87	56	0	2	1,836	82	41	41	487
832+50.00	50.00	45.28	30.00	5.48	0.91	86	56	5	2	1,922	87	43	43	517
833+00.00	50.00	45.19	30.00	4.06	0.90	84	56	9	2	2,006	96	45	45	545
833+50.00	50.00	46.52	30.00	0.00	0.93	85	56	4	2	2,091	100	47	47	574
834+00.00	50.00	44.49	30.00	0.91	0.89	84	56	1	2	2,175	101	49	49	602
834+50.00	50.00	44.86	30.00	0.78	0.90	83	56	2	2	2,258	103	51	51	629
835+00.00	50.00	42.96	30.00	2.01	0.86	81	56	3	2	2,339	106	53	53	654
835+50.00	50.00	45.37	30.00	3.35	0.91	82	56	5	2	2,421	111	55	55	680
835+68.07	18.07	40.54	40.50	0.00	0.81	29	24	1	1	2,450	112	56	56	685
835+85.70	17.63	13.50	30.00	0.00	0.27	18	23	0	0	2,468	112	56	56	680
838+46.32	260.60	36.17	24.75	0.00	0.72					2,468	112	56	56	680
838+60.99	14.67	49.04	24.75	0.00	0.98	23	13	0	0	2,491	112	56	56	690
839+00.00	39.01	49.17	30.00	0.00	0.98	71	40	0	1	2,562	112	57	57	721
839+50.00	50.00	49.05	30.00	0.00	0.98	91	56	0	2	2,653	112	59	59	756
840+00.00	50.00	48.64	30.00	0.00	0.97	90	56	0	2	2,743	112	61	61	790
840+50.00	50.00	49.61	30.00	0.00	0.99	91	56	0	2	2,834	112	63	63	825
841+00.00	50.00	48.43	30.00	0.00	0.97	91	56	0	2	2,925	112	65	65	860
841+05.28	5.28	47.48	30.00	0.00	0.95	9	6	0	0	2,934	112	65	65	863

NOTES:

1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

DIVISION 4 - IH 41 CD LANES AND SHOULDERS - ALIGNMENT: CD-NB - DESIGNATOR: CD - STAGE 3

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
										1.00	1.00	1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
819+09.07	0.00	19.71	19.69	0.00	0.39	0	0	0	0	0	0	0	0	0
819+50.00	40.93	20.35	20.25	0.00	0.41	30	30	0	1	30	0	1	1	0
820+00.00	50.00	20.82	20.81	0.00	0.42	38	38	0	1	68	0	2	2	0
820+50.00	50.00	21.19	20.81	0.00	0.42	39	39	0	1	107	0	3	3	0
820+86.50	36.50	21.38	20.81	0.00	0.43	29	28	0	1	136	0	4	4	1
822+43.41	156.91	25.03	21.97	0.00	0.50					136	0	4	4	1
822+50.00	6.59	25.03	21.97	0.00	0.50	6	5	0	0	142	0	4	4	2
823+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	188	0	5	5	7
823+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	234	0	6	6	12
823+51.00	1.00	25.03	21.97	0.00	0.50	1	1	0	0	235	0	6	6	12
824+00.00	49.00	25.03	21.97	0.00	0.50	45	40	0	1	280	0	7	7	17
824+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	326	0	8	8	22
825+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	372	0	9	9	27
825+02.25	2.25	25.03	21.97	0.00	0.50	2	2	0	0	374	0	9	9	27
831+30.32	628.07	25.03	21.97	0.00	0.50					374	0	9	9	27
831+49.02	18.70	25.03	21.97	0.00	0.50	17	15	0	0	391	0	9	9	29
831+50.00	0.98	25.03	21.97	0.00	0.50	1	1	0	0	392	0	9	9	29
831+73.84	23.84	25.03	21.97	0.00	0.50	22	19	0	0	414	0	9	9	32
831+98.69	24.85	25.03	21.97	0.00	0.50	23	20	0	0	437	0	9	9	35
832+00.00	1.31	25.03	21.97	0.00	0.50	1	1	0	0	438	0	9	9	35
832+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	484	0	10	10	40
833+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	530	0	11	11	45
833+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	576	0	12	12	50
834+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	622	0	13	13	55
834+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	668	0	14	14	60
835+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	714	0	15	15	65
835+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	760	0	16	16	70
836+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	806	0	17	17	75
836+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	852	0	18	18	80
837+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	898	0	19	19	85
837+17.37	17.37	7.88	7.88	0.00	0.16	11	10	0	0	909	0	19	19	86
837+26.79	9.42	0.00	0.00	0.00	0.00	1	1	0	0	910	0	19	19	86
839+73.07	246.28	17.16	14.09	0.00	0.34					910	0	19	19	86
839+92.91	19.84	25.03	21.97	0.00	0.50	16	13	0	0	926	0	19	19	89
840+00.00	7.09	25.03	21.97	0.00	0.50	7	6	0	0	933	0	19	19	90
840+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	979	0	20	20	95
841+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	1,025	0	21	21	100
841+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	1,071	0	22	22	105
842+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	1,117	0	23	23	110
842+50.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	1,163	0	24	24	115
843+00.00	50.00	25.03	21.97	0.00	0.50	46	41	0	1	1,209	0	25	25	120
843+34.33	34.33	25.03	21.97	0.00	0.50	32	28	0	1	1,241	0	26	26	124

NOTES:

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2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

DIVISION 4 - RAMP OWB - ALIGNMENT: O_41-RAMP_OWB - DESIGNATOR: OWB - STAGE 3

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
										1.00	1.00	1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
822+43.52	0.00	37.11	32.60	82.45	0.74	0	0	0	0	0	0	0	0	0
822+50.00	6.48	38.06	33.00	35.18	0.76	9	8	14	0	9	14	0	0	1
823+00.00	50.00	40.53	29.75	1.19	0.81	73	58	34	1	82	48	1	1	16
823+50.00	50.00	45.56	32.75	2.95	0.91	80	58	4	2	162	52	3	3	38
824+00.00	50.00	50.42	37.75	6.02	1.01	89	65	8	2	251	60	5	5	62
824+09.25	9.25	30.75	15.75	6.28	0.62	14	9	2	0	265	62	5	5	67
824+50.00	40.75	33.09	17.05	5.06	0.66	48	25	9	1	313	71	6	6	90
825+00.00	50.00	34.90	18.85	34.56	0.70	63	33	37	1	376	108	7	7	120
825+50.00	50.00	41.17	24.75	20.18	0.82	70	40	51	1	446	159	8	8	150
826+00.00	50.00	42.83	26.95	0.06	0.86	78	48	19	2	524	178	10	10	180
826+50.00	50.00	47.23	28.75	0.23	0.94	83	52	0	2	607	178	12	12	211
827+00.00	50.00	56.51	28.75	0.07	1.13	96	53	0	2	703	178	14	14	254
827+50.00	50.00	50.66	28.75	0.16	1.01	99	53	0	2	802	178	16	16	300
828+00.00	50.00	51.70	28.75	0.00	1.03	95	53	0	2	897	178	18	18	342
828+50.00	50.00	53.25	28.75	0.00	1.06	97	53	0	2	994	178	20	20	386
828+68.36	18.36	54.43	28.75	0.00	1.09	37	20	0	1	1,031	178	21	21	403

NOTES:

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2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

STA 819+26.53 MATCH EXISTING SHOULDER

STAGE 2 STAGE 3

SB R/L

NB R/L

CD R/L

4.0%

629.13 -28.45

629.38 -21.70

819+27 NB

640 630 620 610 600 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

STAGE 2 STAGE 3

SB R/L

NB R/L

CD R/L

4.0%

629.47 -31.75

629.75 -21.71

819+52 NB

640 630 620 610

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

STA 819+52.77 MATCH EXISTING

STAGE 2 STAGE 3

SB R/L

NB R/L

CD R/L

4.0% 4.0% 2.0% 1.3% 1.3% 1.3% 3.3%

629.46 -31.75

629.75 -22.00

630.13 -12.00

630.36 0.00

630.31 4.00

630.22 12.00

630.04 26.00

629.66 36.65

819+53 NB

640 630 620 610 600 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

20 FT

20 FT

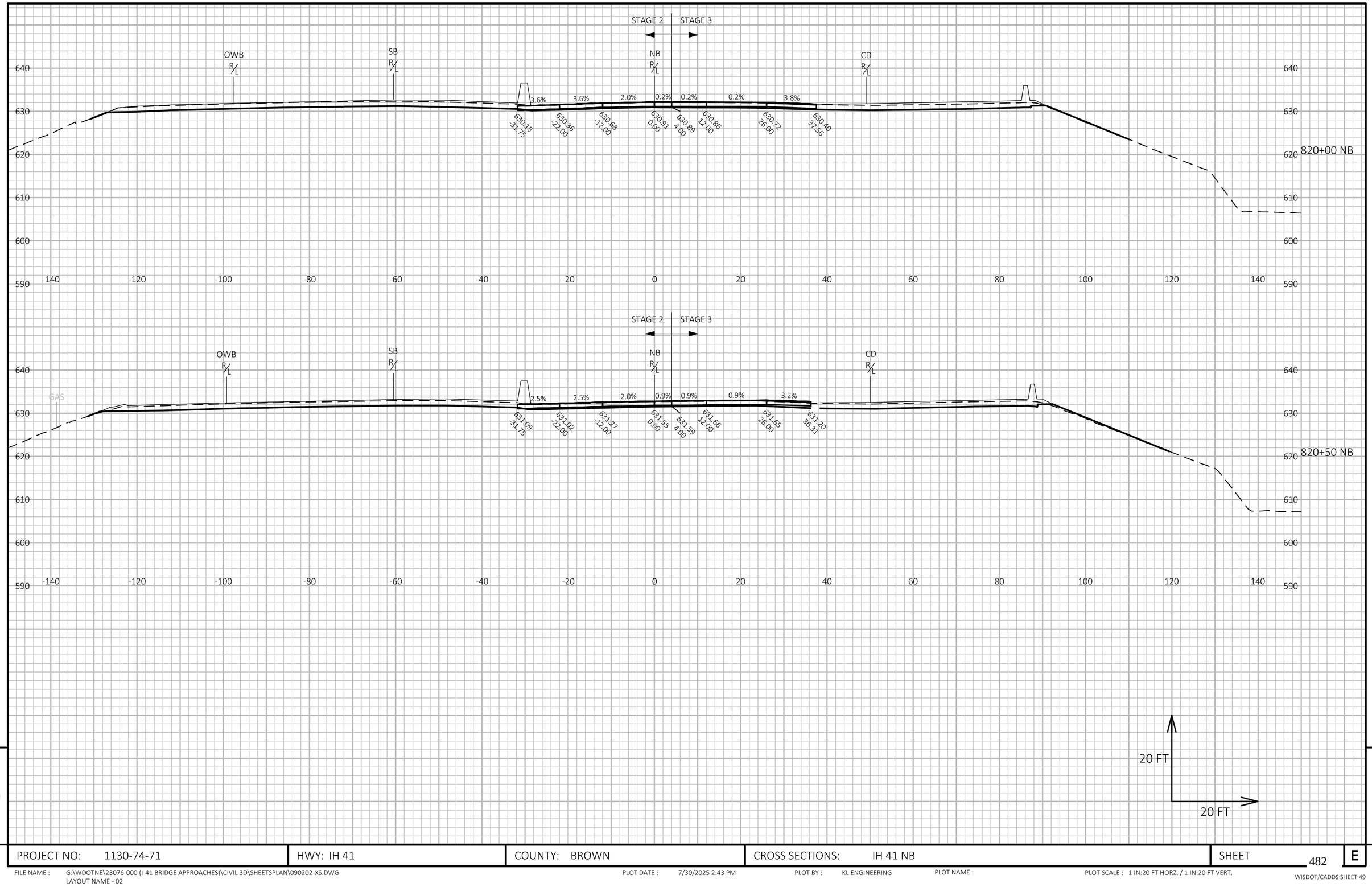
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 481	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/30/2025 2:43 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

9

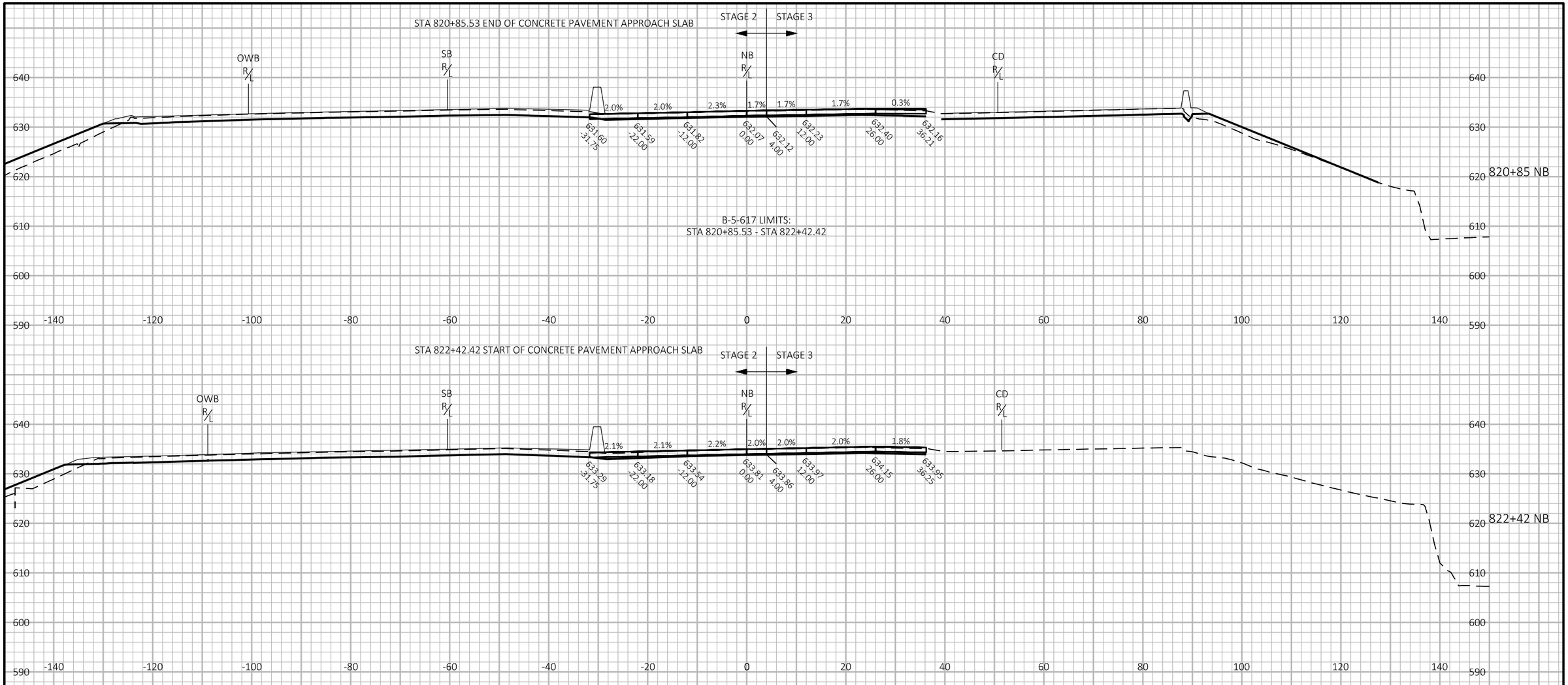
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 482	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/30/2025 2:43 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

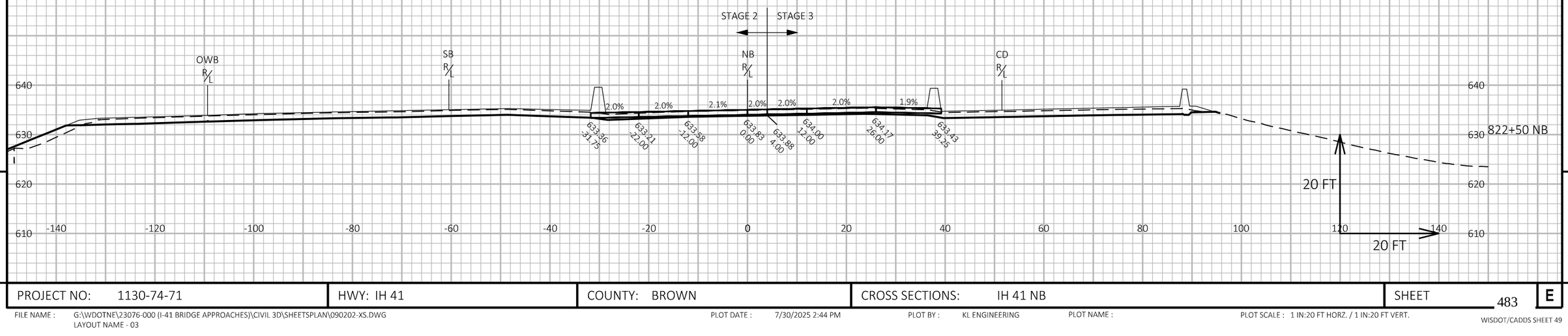
WISDOT/CADDS SHEET 49

STA 820+85.53 END OF CONCRETE PAVEMENT APPROACH SLAB



B-5-617 LIMITS:
STA 820+85.53 - STA 822+42.42

STA 822+42.42 START OF CONCRETE PAVEMENT APPROACH SLAB



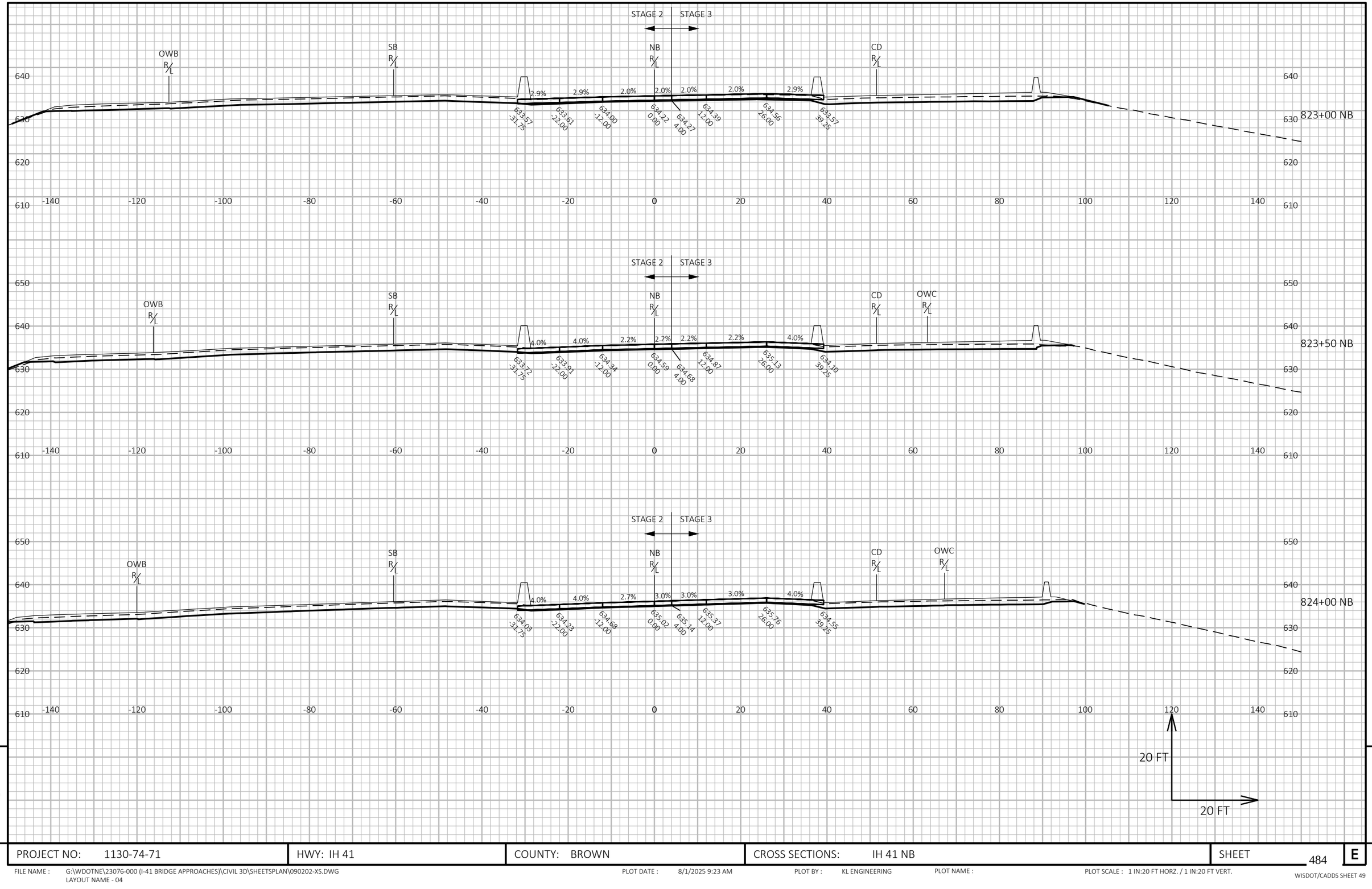
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 483	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/30/2025 2:44 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



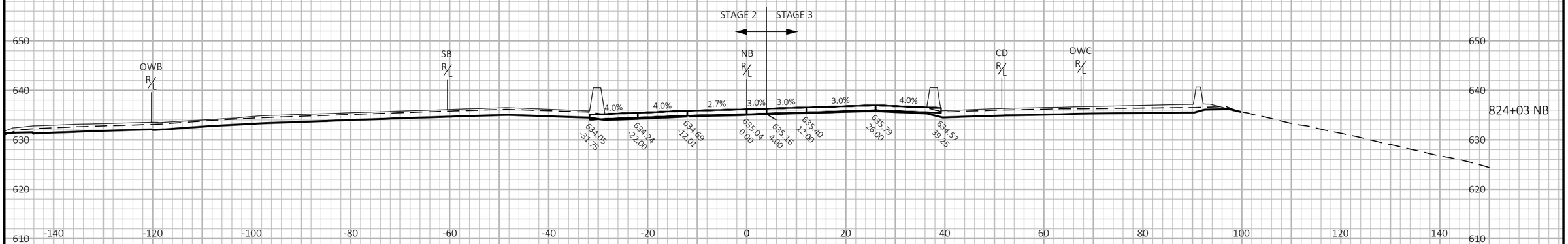
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 484 E

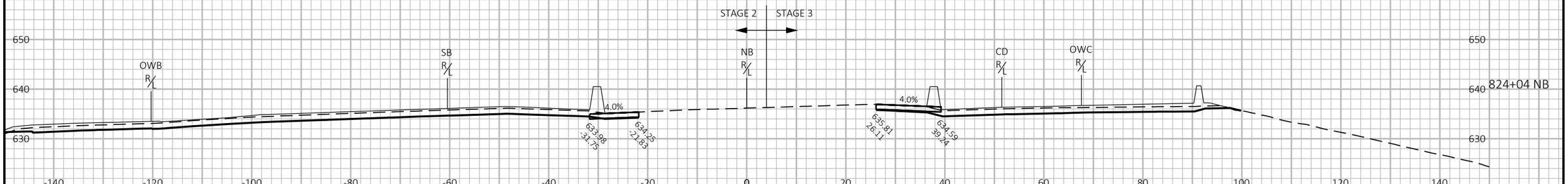
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 04

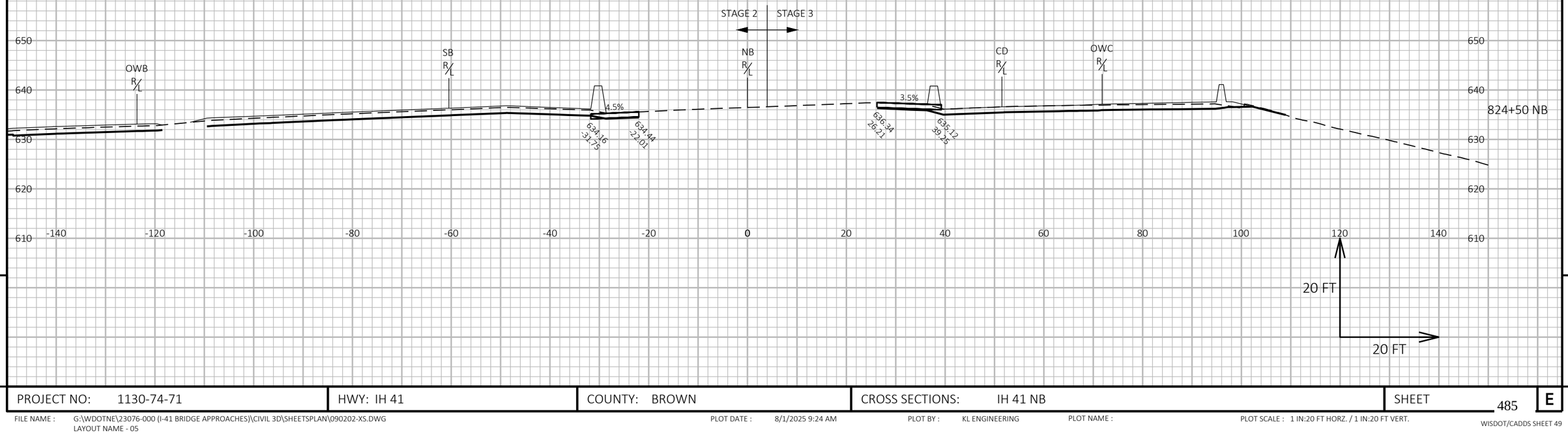
PLOT DATE : 8/1/2025 9:23 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STA 824+02.81 MATCH EXISTING







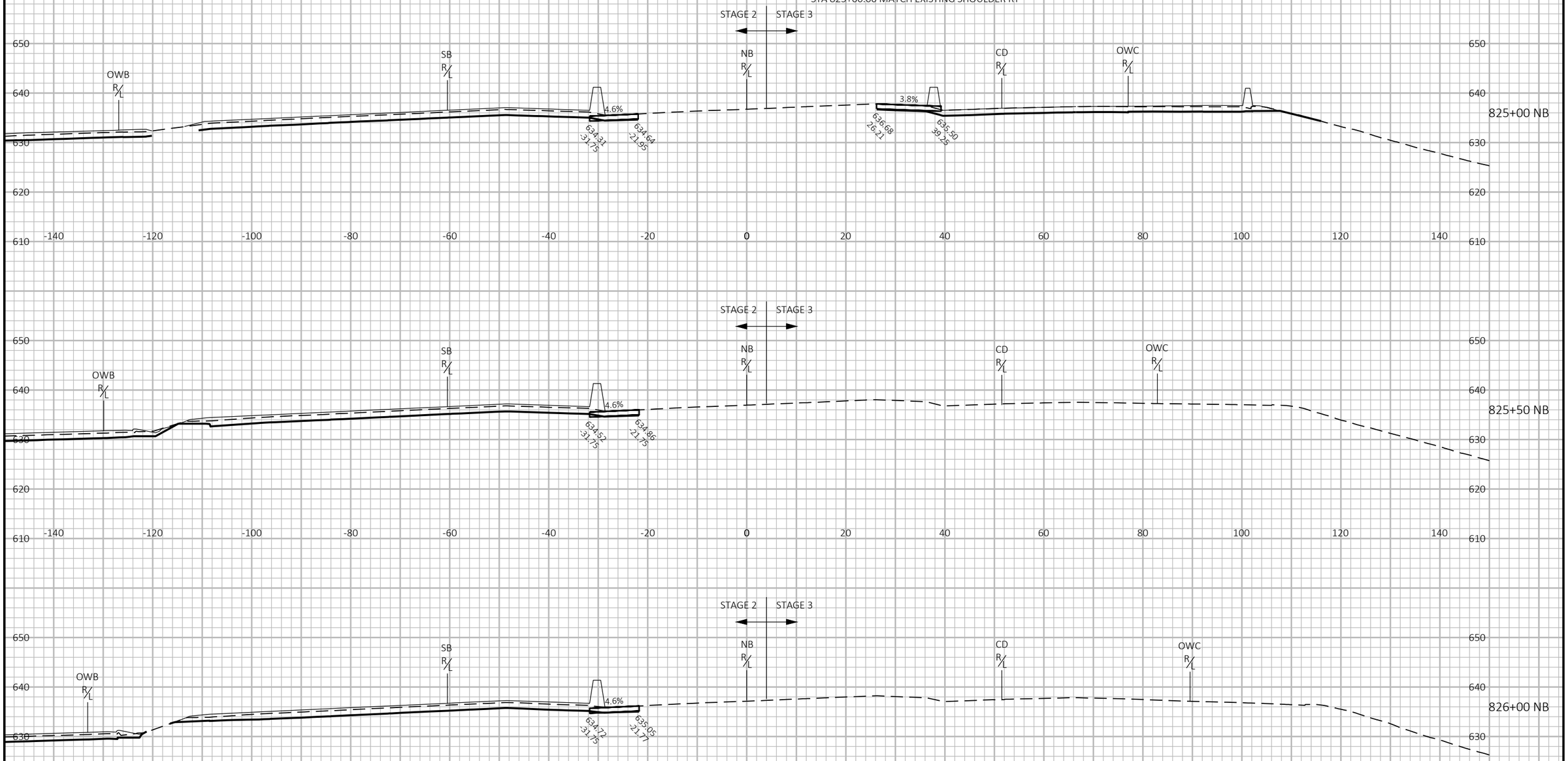
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 485	E

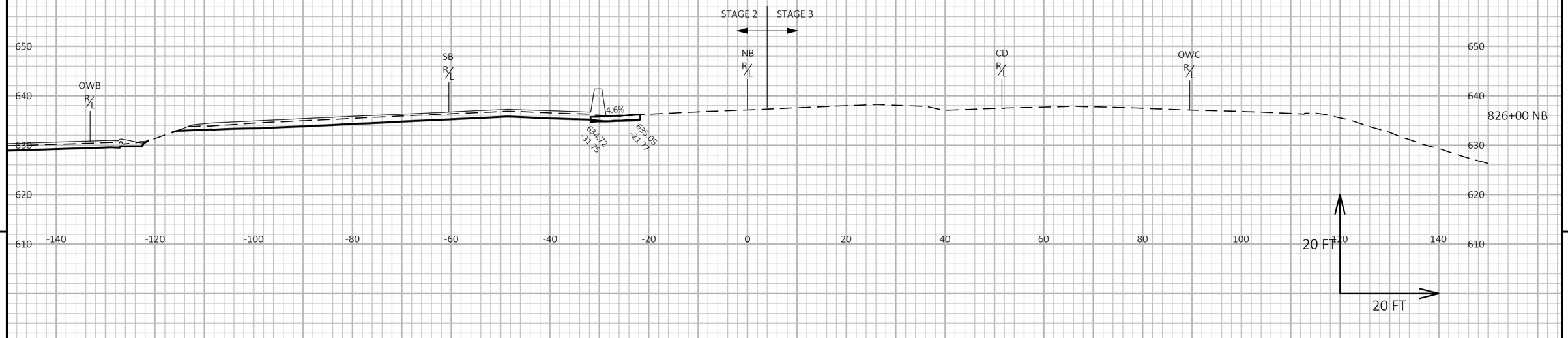
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 8/1/2025 9:24 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STA 825+00.00 MATCH EXISTING SHOULDER RT

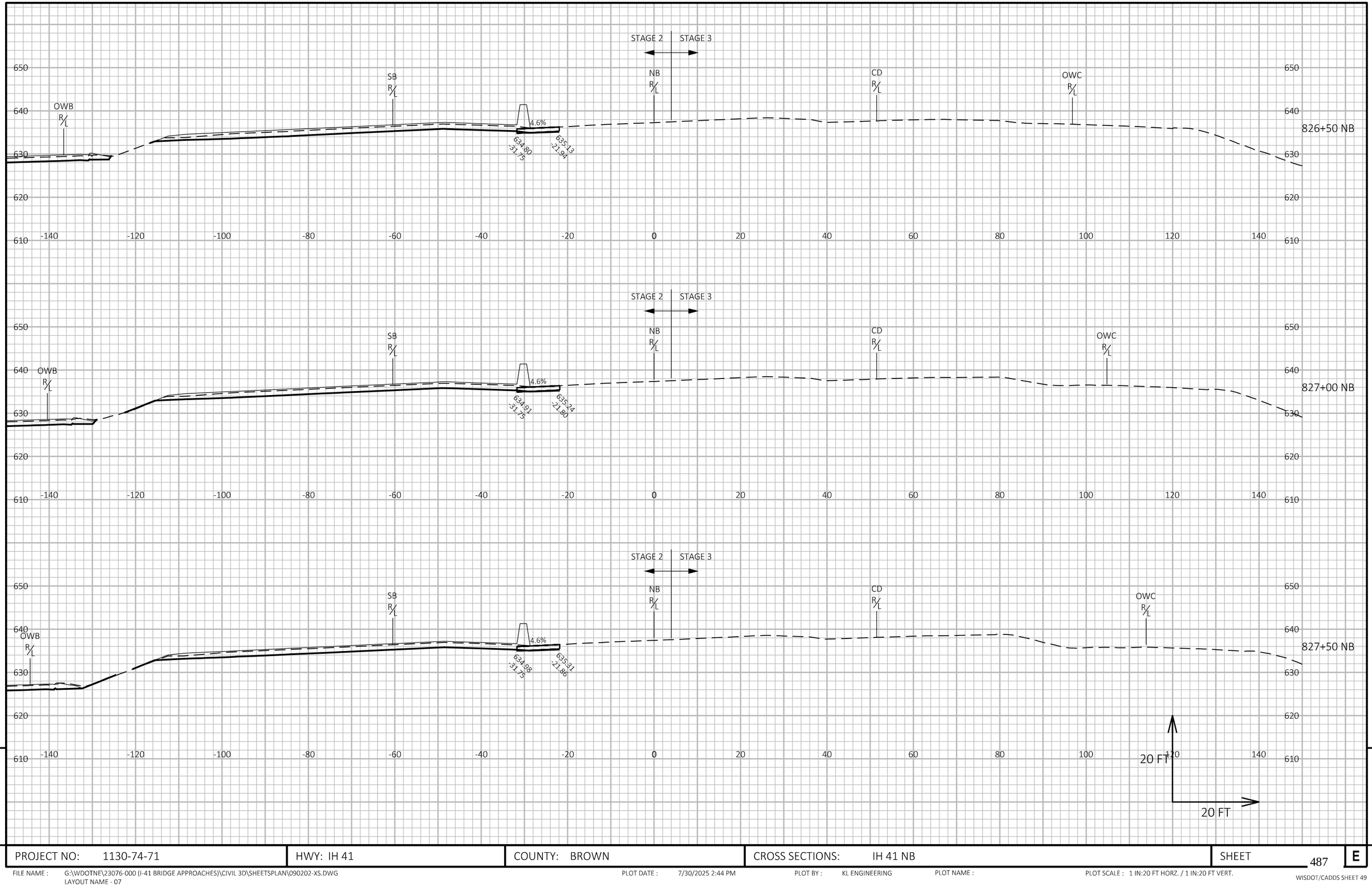




9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 486	E



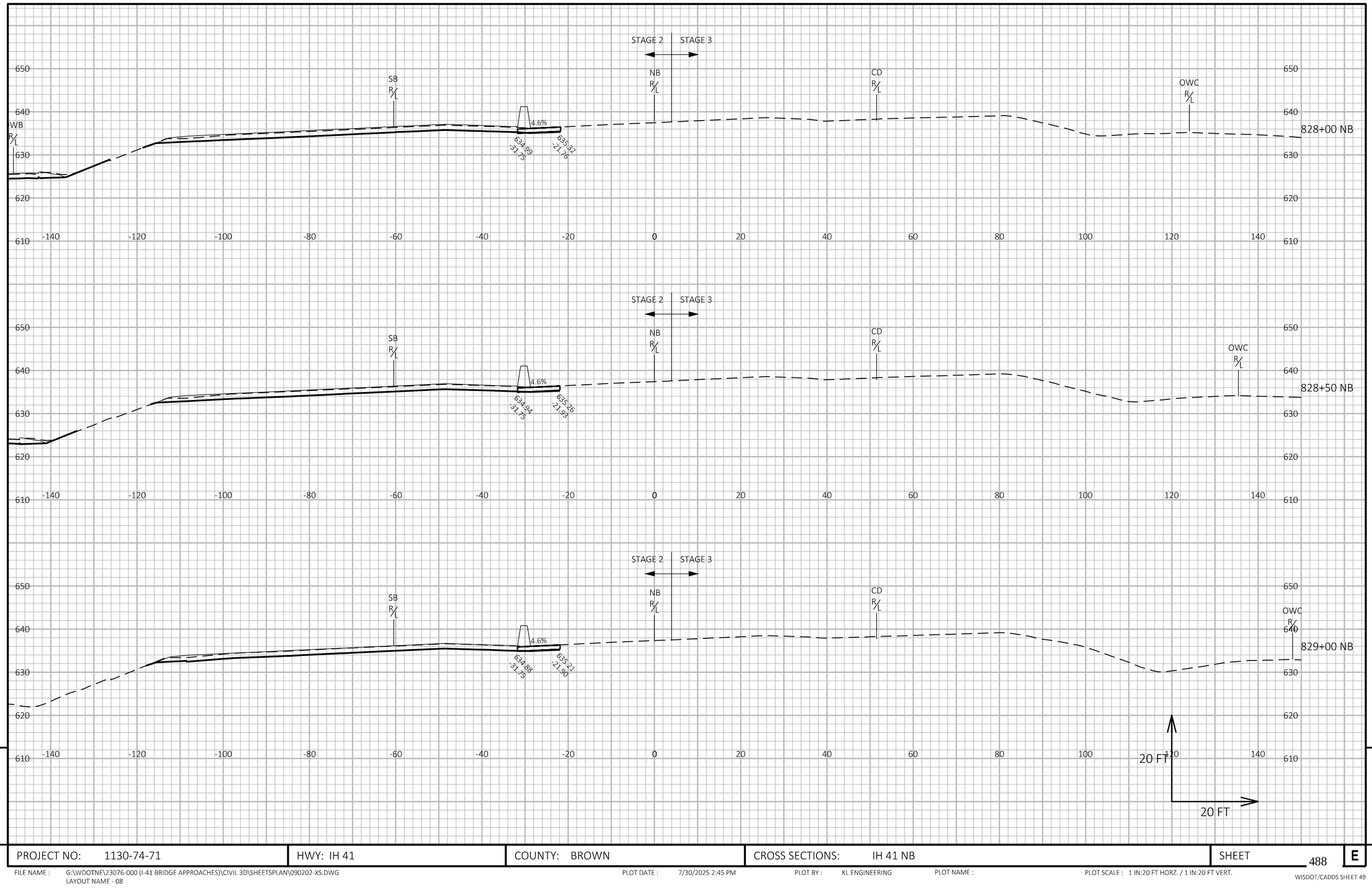
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 487	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/30/2025 2:44 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



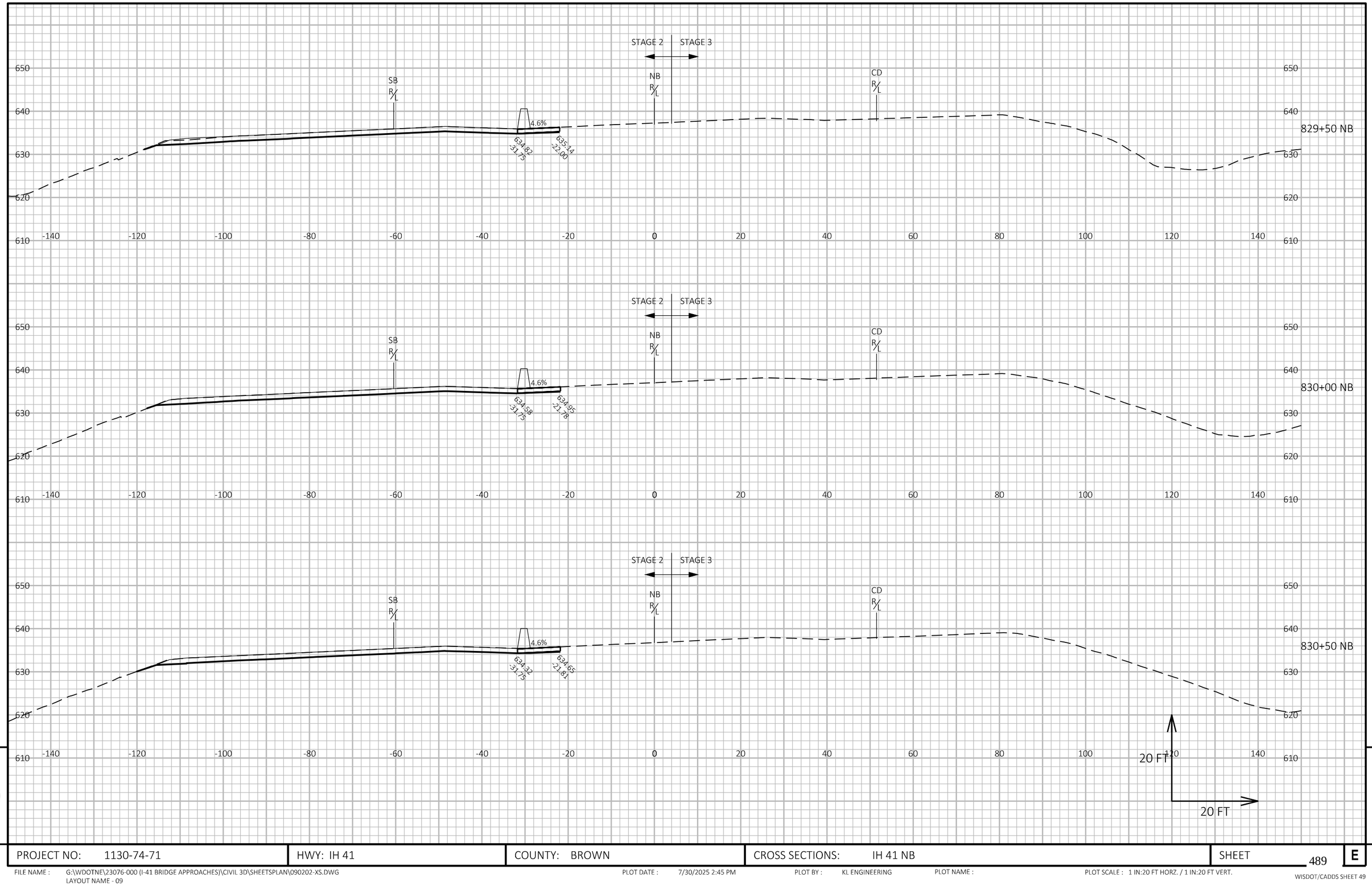
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 488	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 7/30/2025 2:45 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

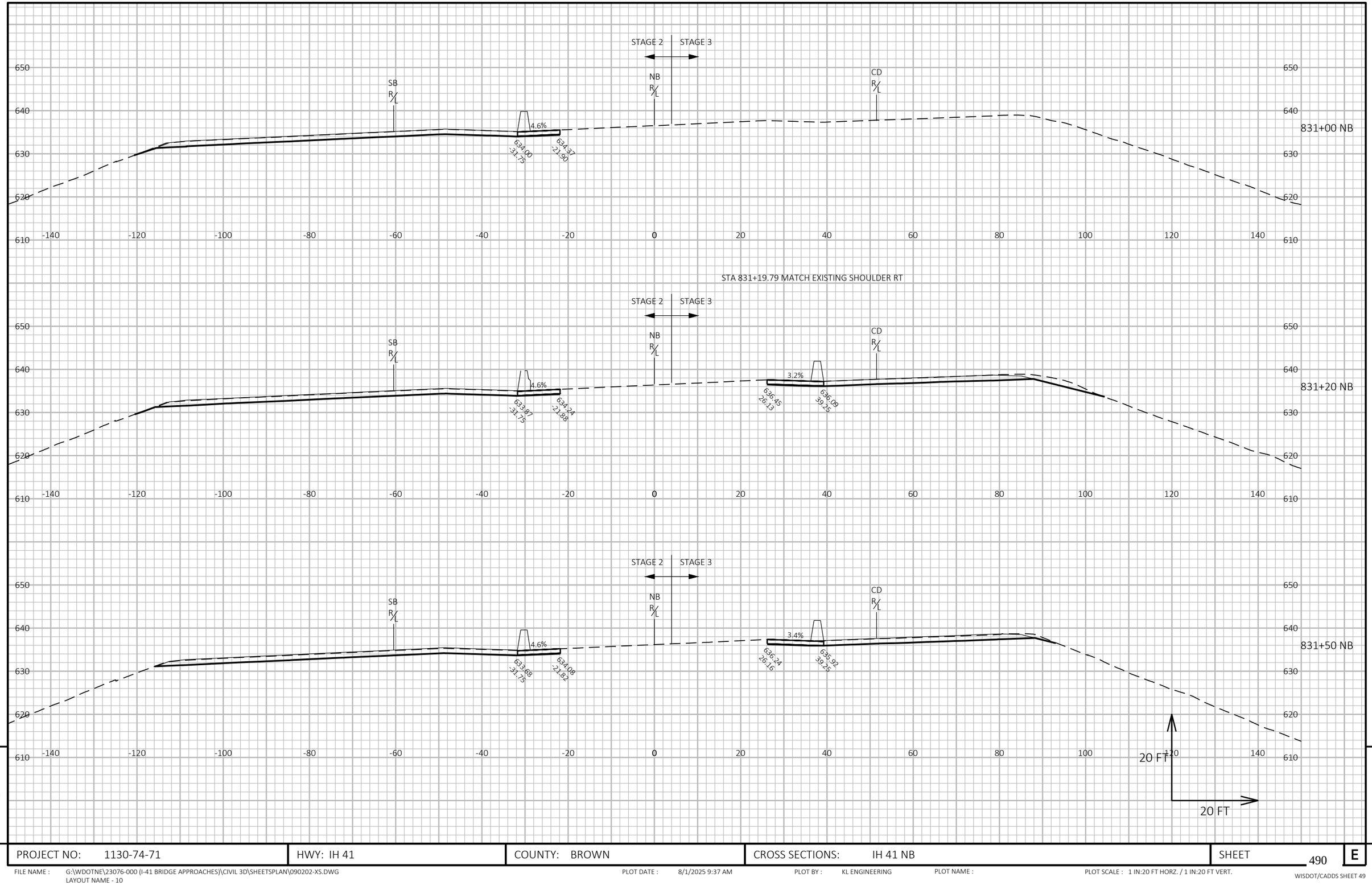
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 489	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 7/30/2025 2:45 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



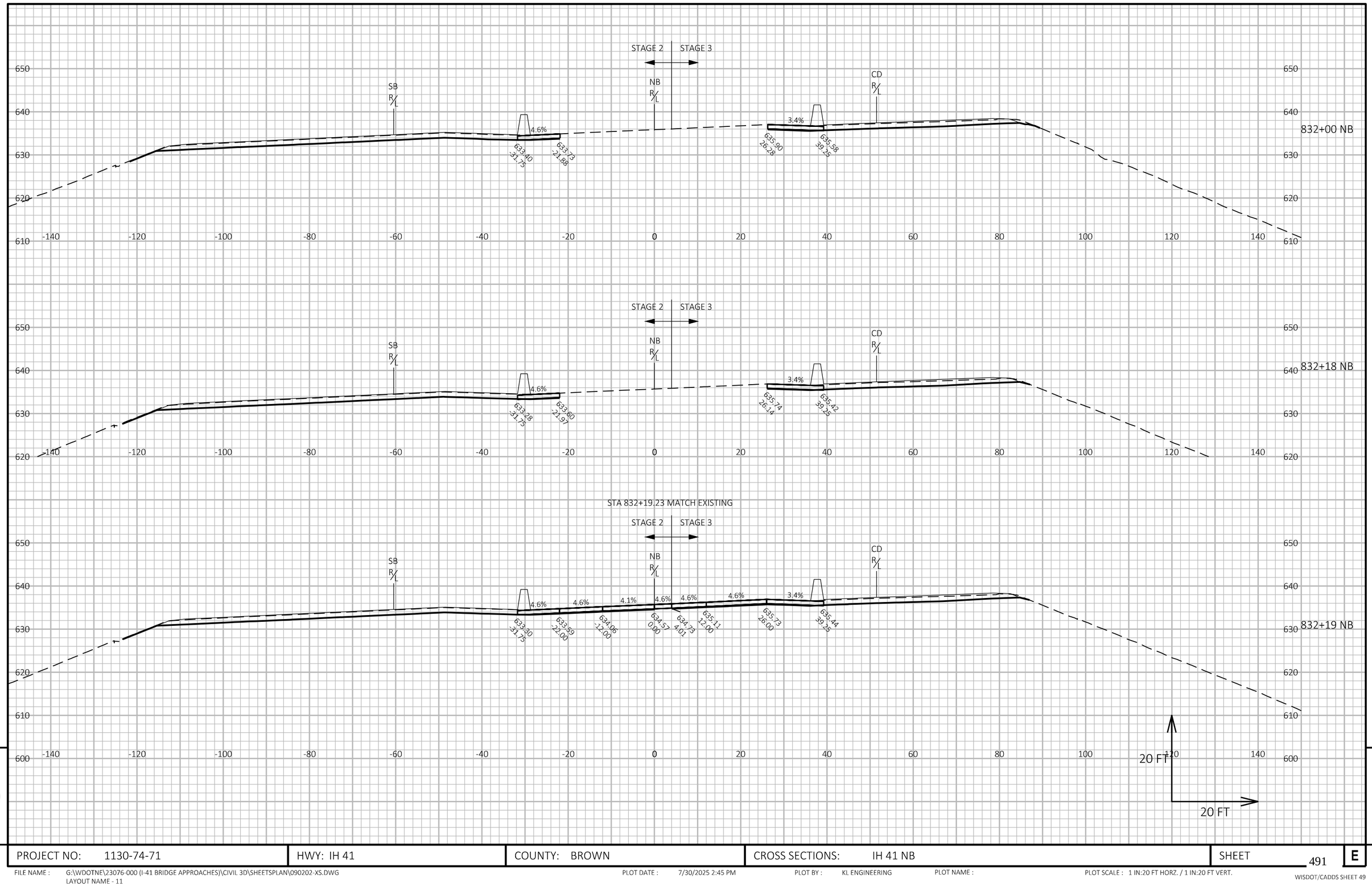
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 490	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 8/1/2025 9:37 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

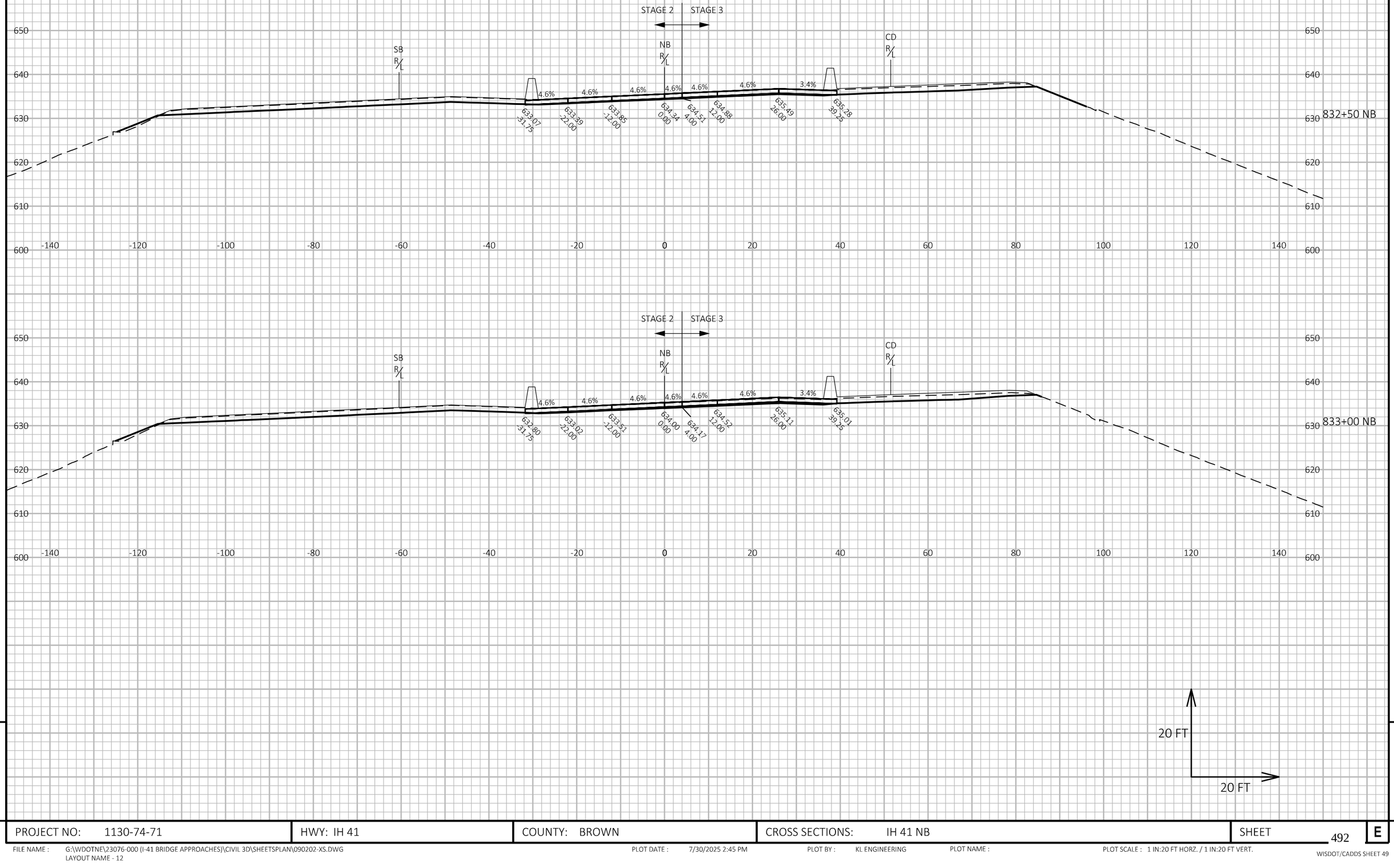


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 491	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 7/30/2025 2:45 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

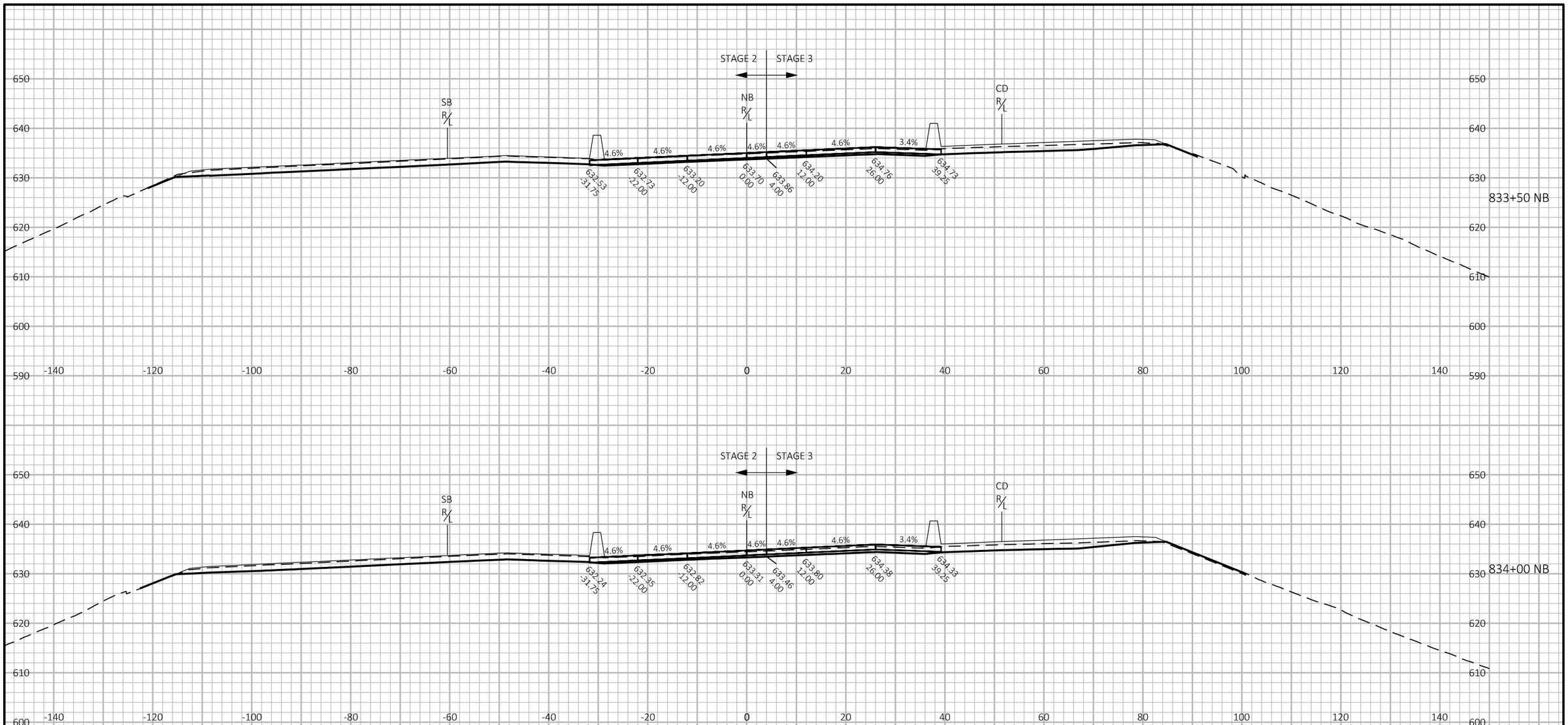


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 492 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 7/30/2025 2:45 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



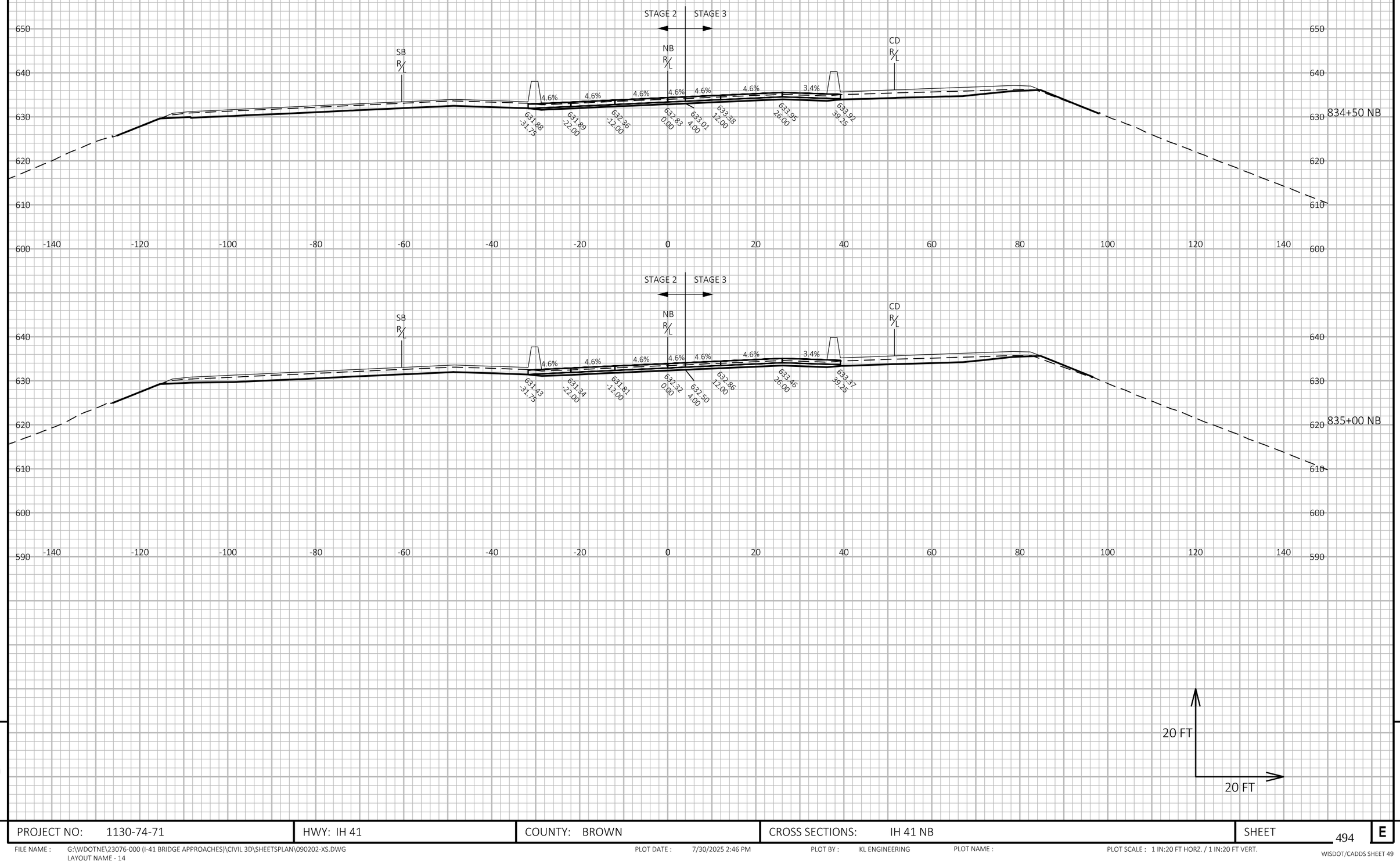
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 493	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 7/30/2025 2:46 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

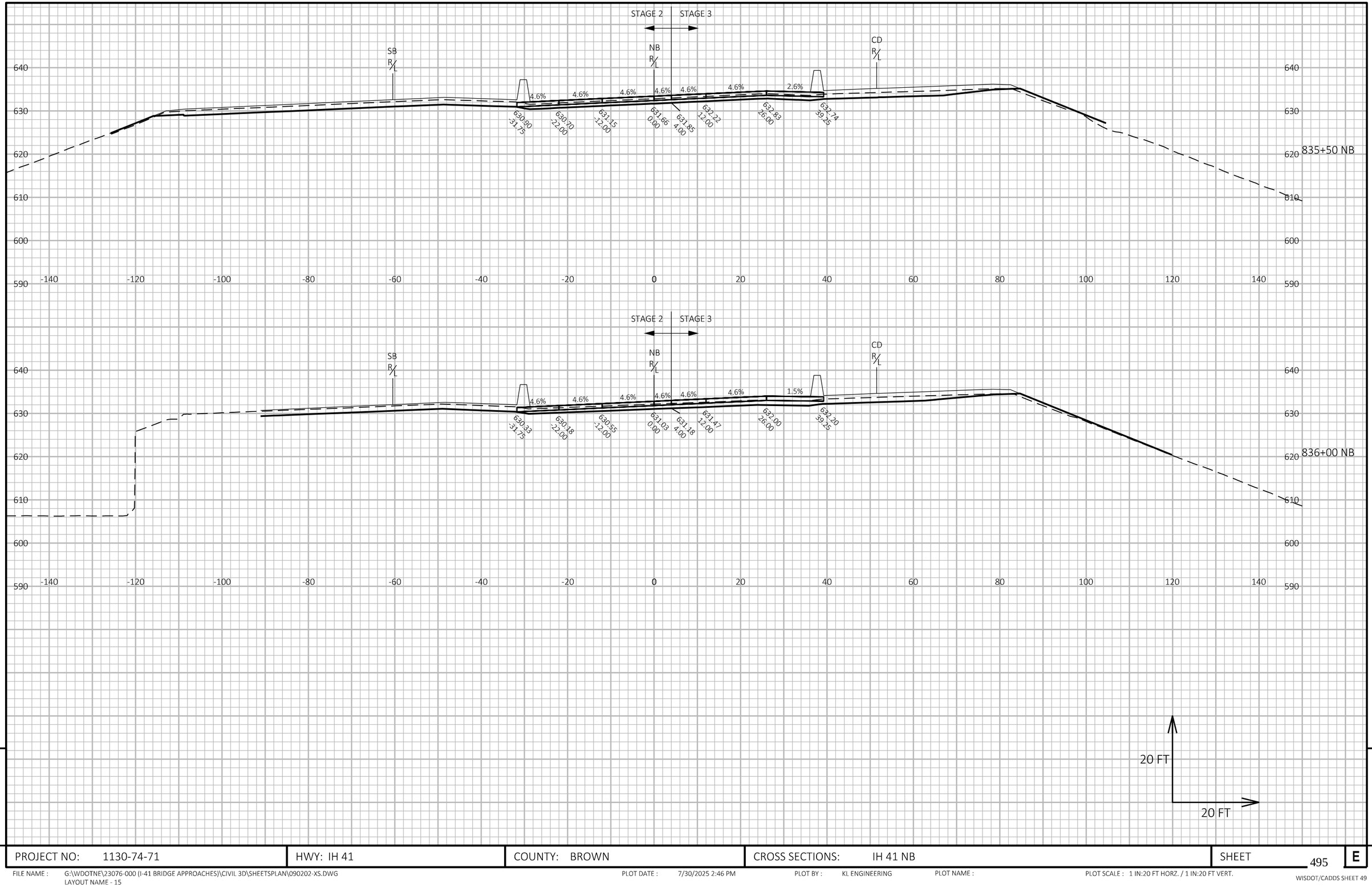


9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 494	E

9

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 14
PLOT DATE : 7/30/2025 2:46 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

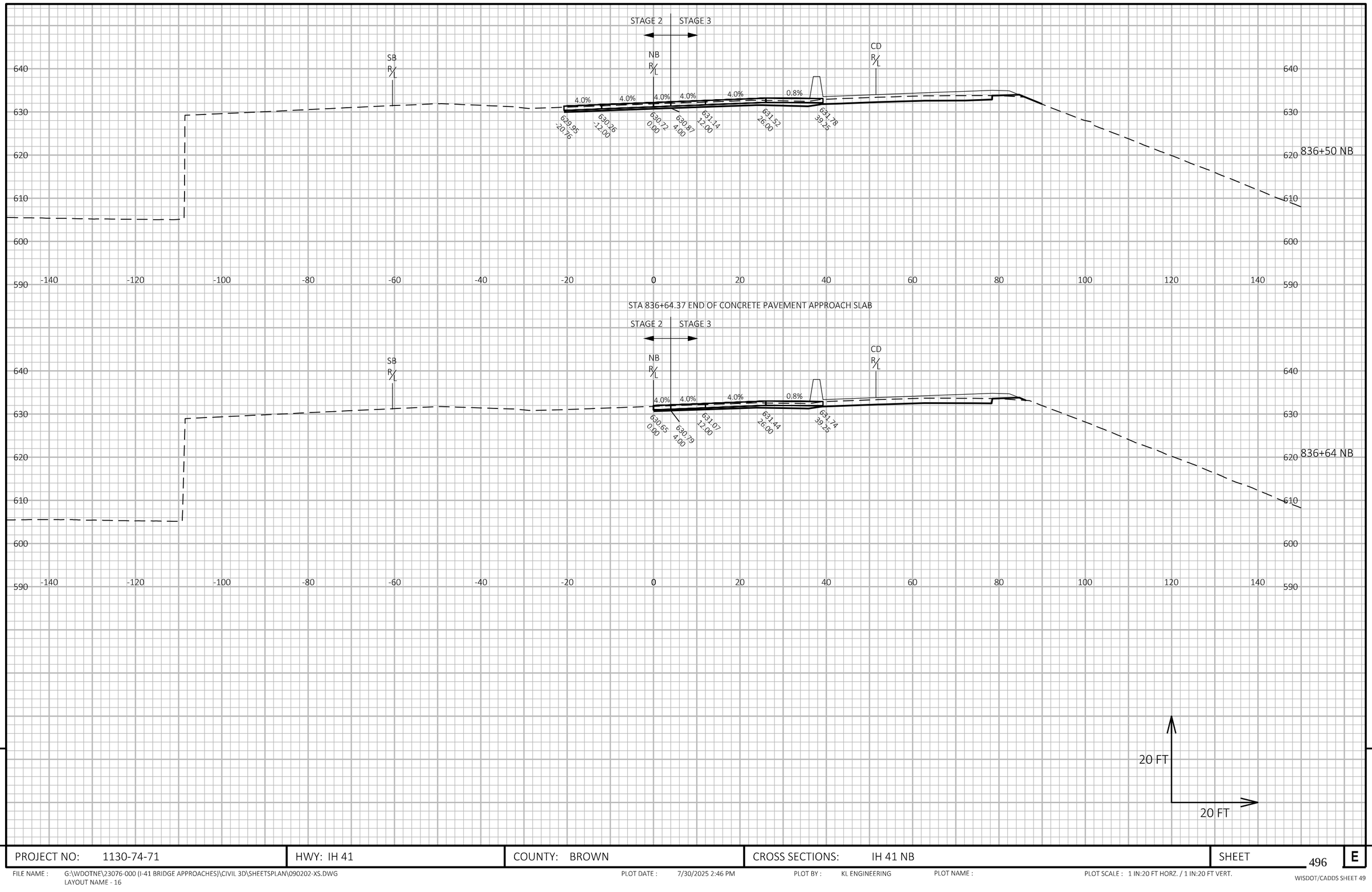
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 495	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 7/30/2025 2:46 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 496	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 7/30/2025 2:46 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STAGE 2 STAGE 3

SB R/L

NB R/L

CD R/L

4.0% 0.8%

631.35 26.00

634.64 39.25

836+82 NB

STA 839+21.22 START OF CONCRETE PAVEMENT APPROACH SLAB

4.5% 4.5% 4.6%

625.05 -31.75

625.40 -22.00

625.83 -12.00

626.39 0.00

839+21 NB

B-5-619 LIMITS:
STA 836+64.37 - STA 839+21.22

640 630 620 610 600 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

20 FT

20 FT

9

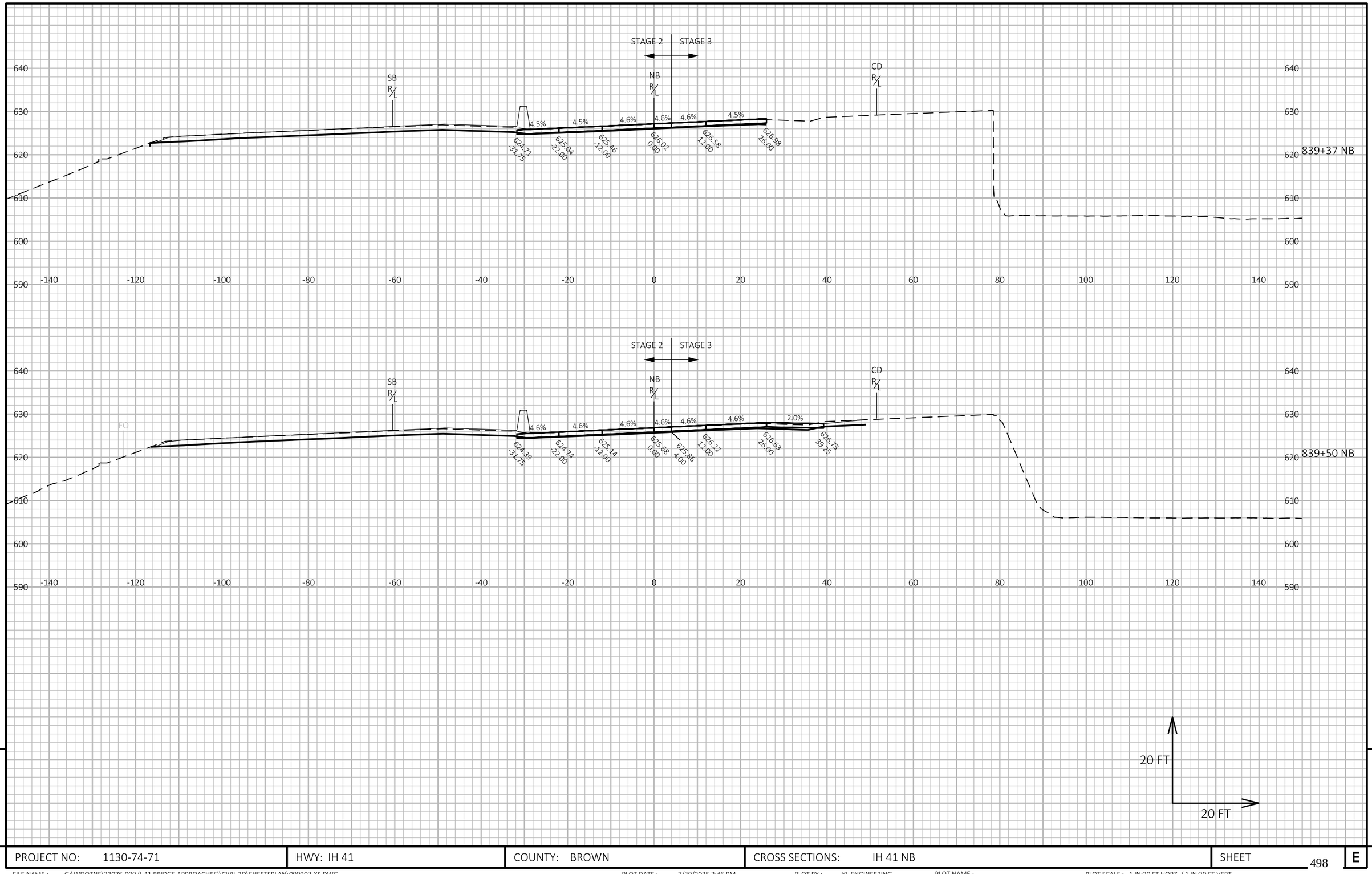
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 497	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 17

PLOT DATE : 7/30/2025 2:46 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

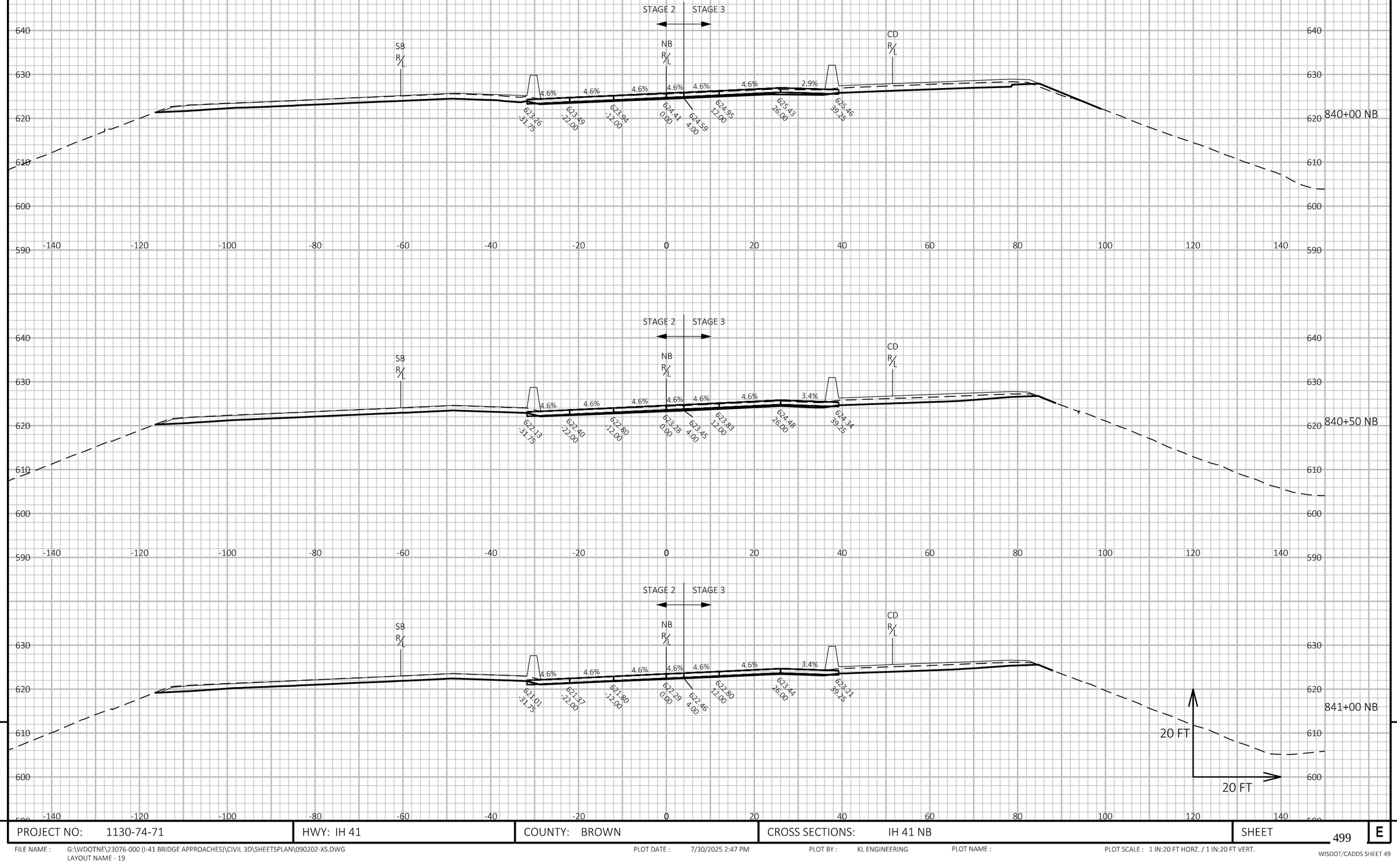
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 498	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 18

PLOT DATE : 7/30/2025 2:46 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

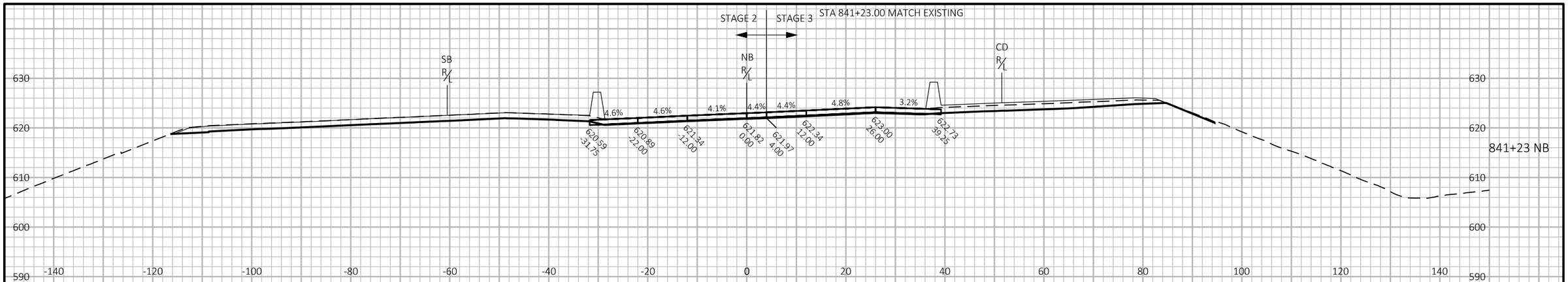
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 499	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 19

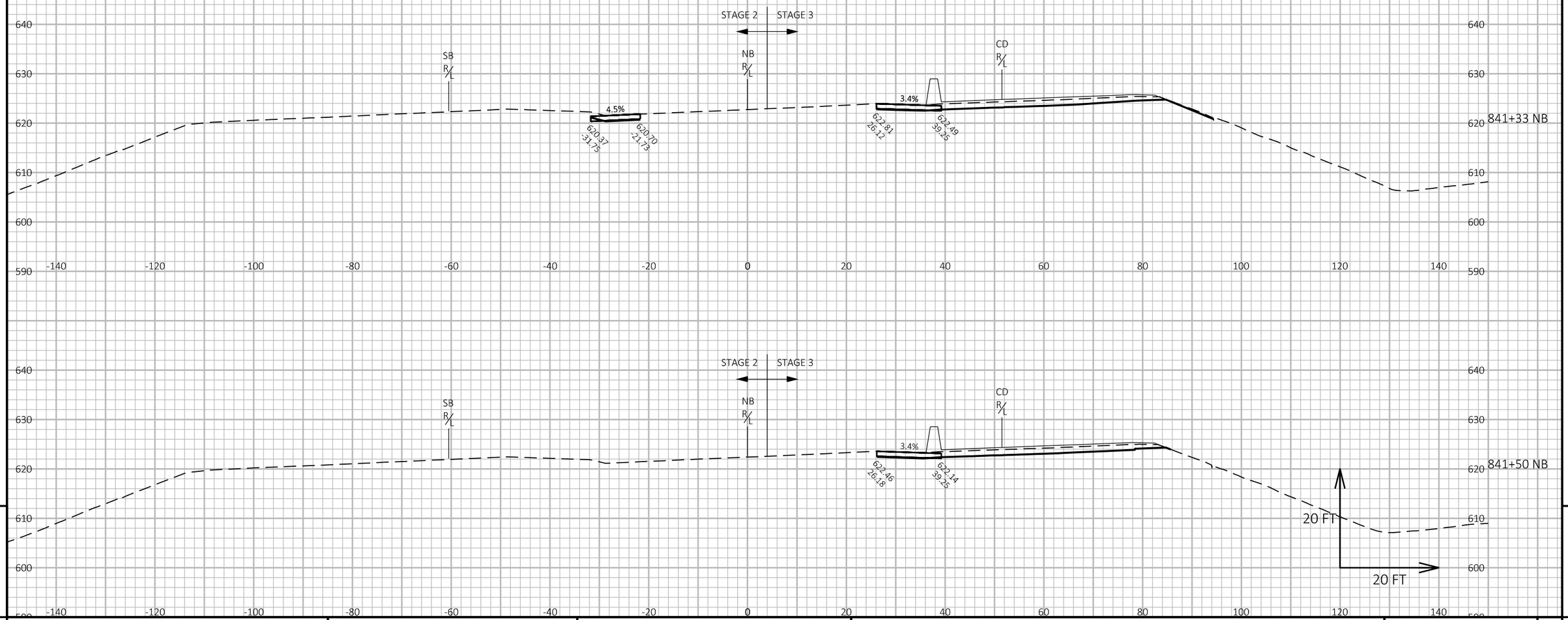
PLOT DATE : 7/30/2025 2:47 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STA 841+23.00 MATCH EXISTING



STA 841+33.19 MATCH EXISTING SHOULDER LT

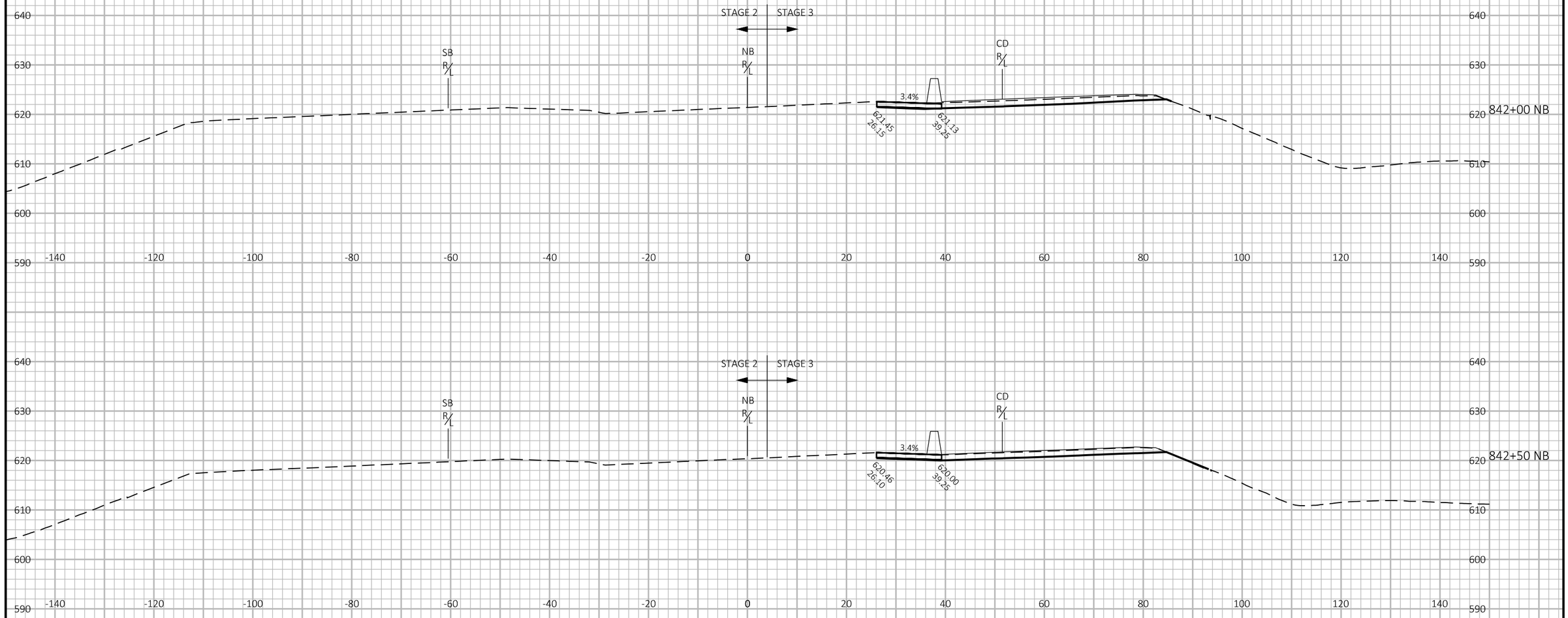


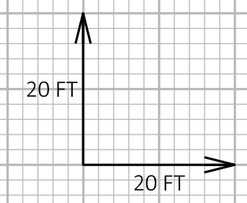
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 500	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 20

PLOT DATE : 7/30/2025 2:47 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





9

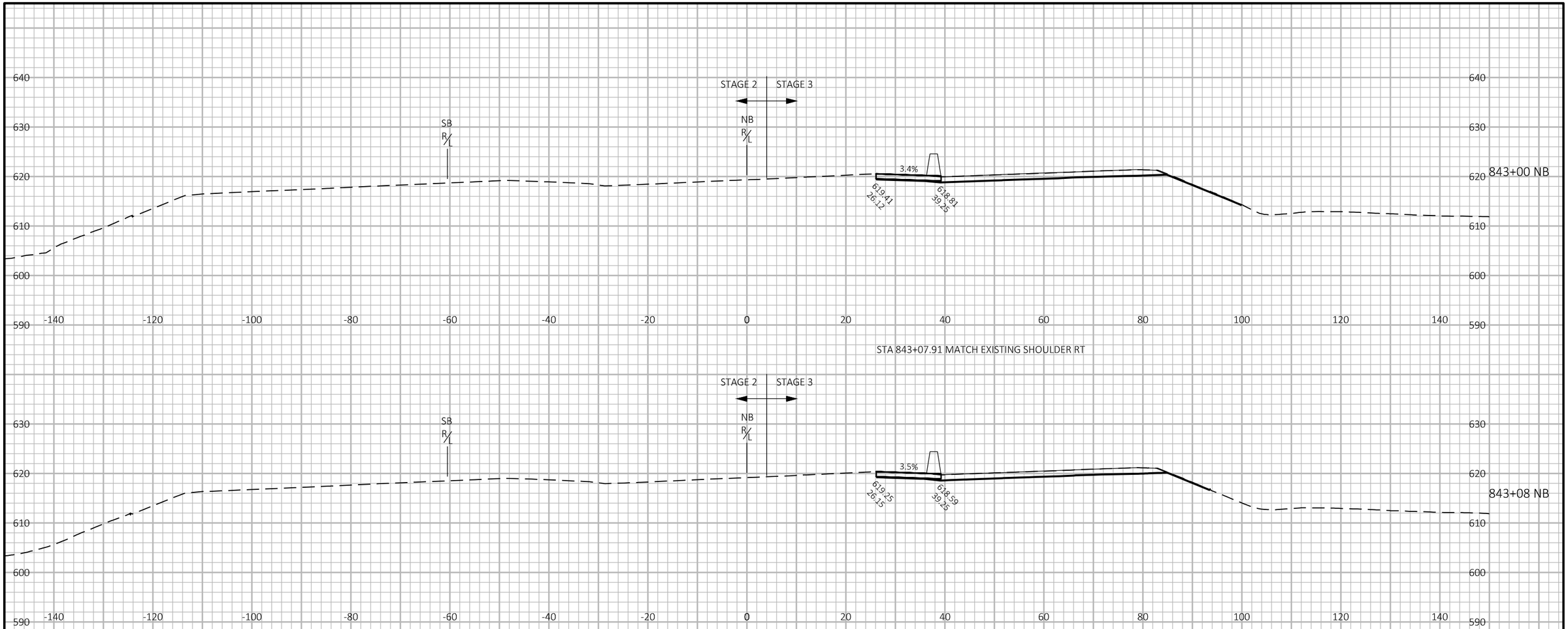
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 501	E

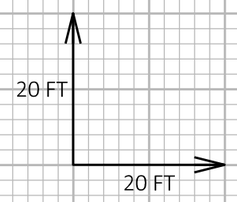
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 21

PLOT DATE : 7/30/2025 2:47 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



STA 843+07.91 MATCH EXISTING SHOULDER RT

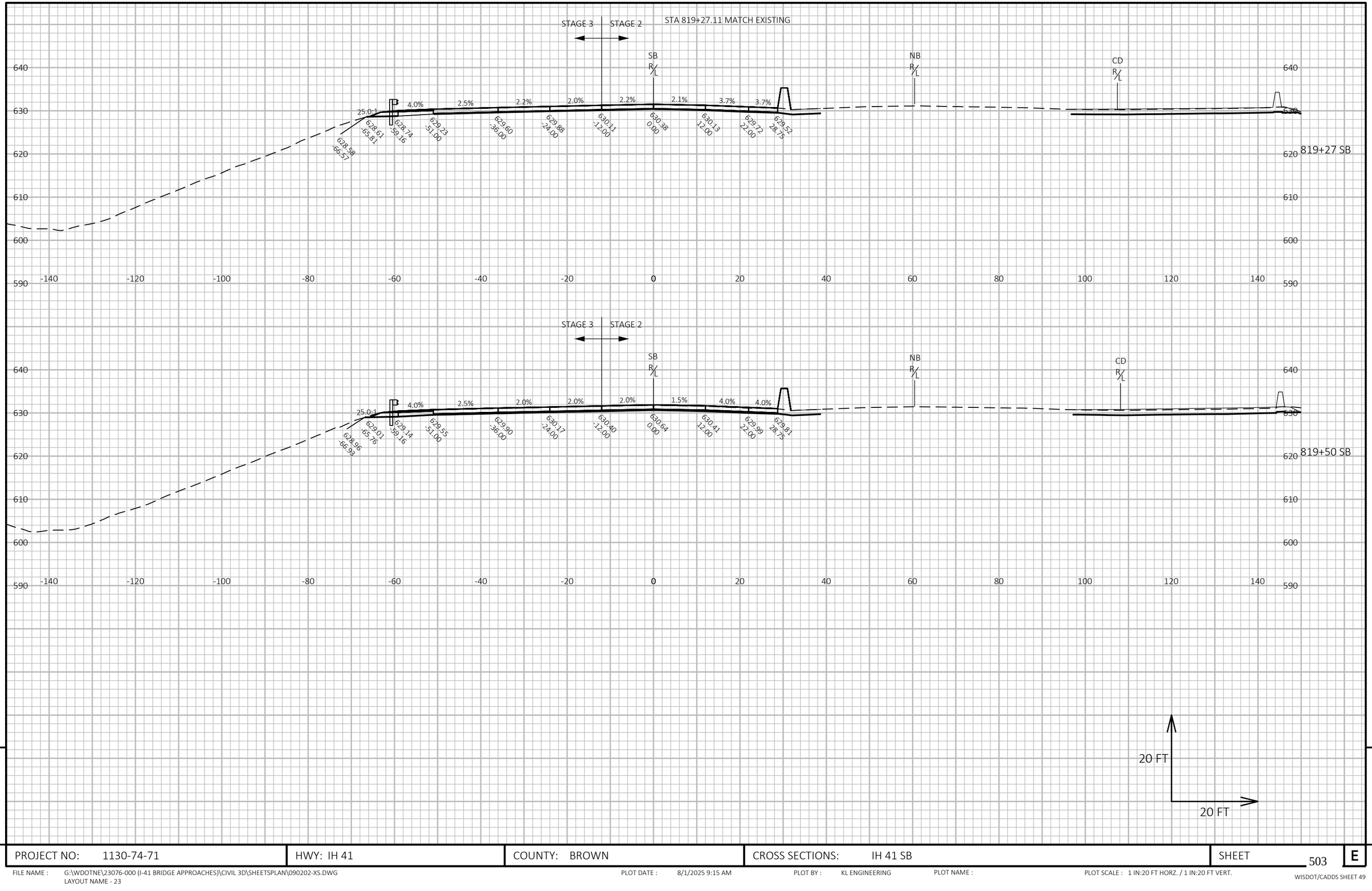


9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 NB	SHEET 502	E

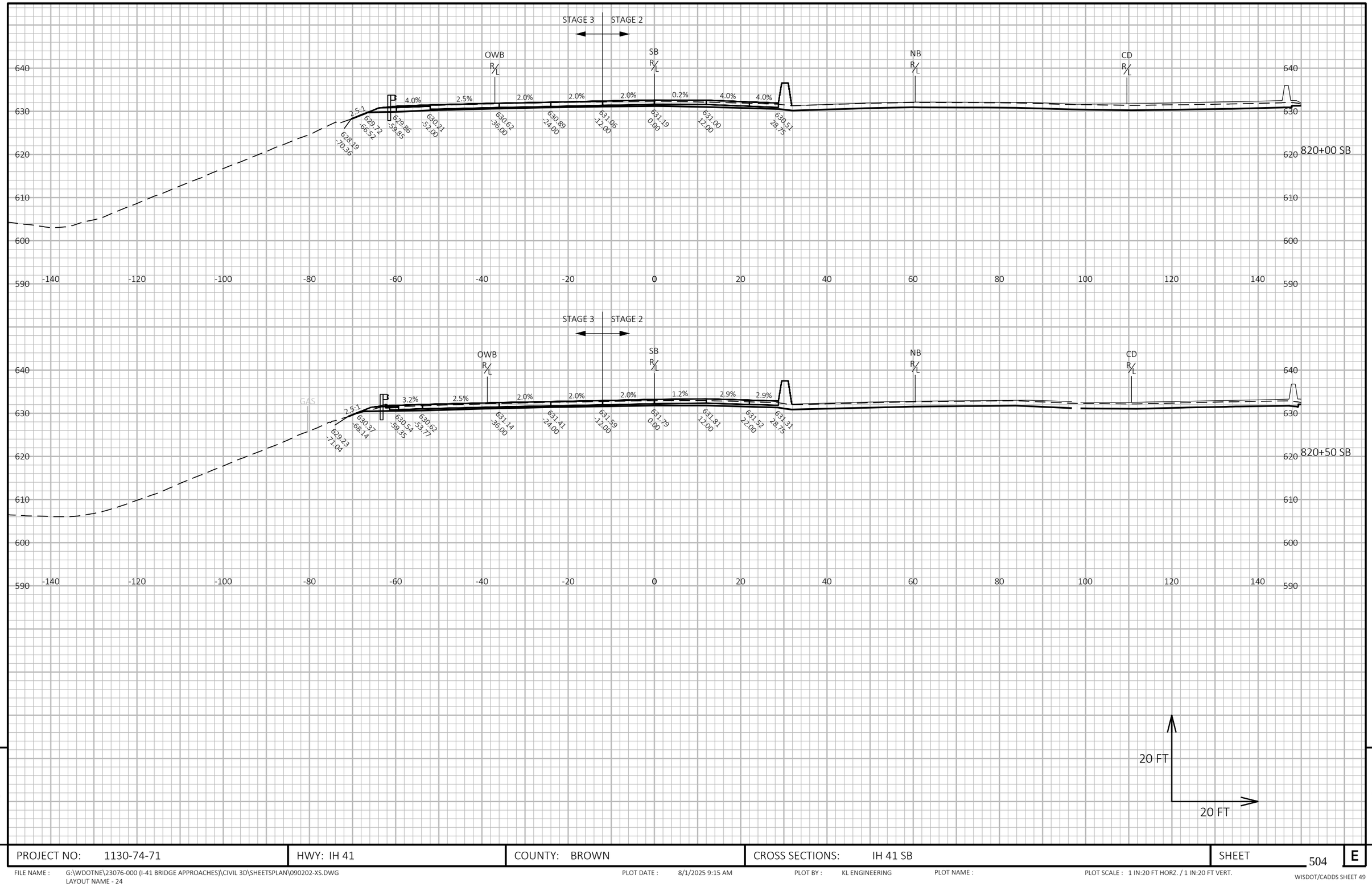
FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 22
PLOT DATE : 7/30/2025 2:47 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 503	E



9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 504	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 24

PLOT DATE : 8/1/2025 9:15 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STA 820+85.28 END OF CONCRETE PAVEMENT APPROACH SLAB

STAGE 3 | STAGE 2

OWB R/L | SB R/L | NB R/L | CD R/L

640 / 630 / 620 / 610 / 600 / 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

2.5% 2.7% 2.2% 2.0% 2.1% 2.1% 2.4% 2.4%

630.75 -69.05 | 630.70 -60.78 | 630.97 -55.20 | 631.58 -36.00 | 631.85 -24.00 | 632.05 -12.00 | 632.31 0.00 | 632.46 12.00 | 632.15 22.00 | 631.96 28.75

2.5%

607.78 -125.72

820+85 SB

B-5-616 LIMITS:
STA 820+85.28 - STA 822+42.14

STA 822+42.14 START OF CONCRETE PAVEMENT APPROACH SLAB

STAGE 3 | STAGE 2

OWB R/L | SB R/L | NB R/L | CD R/L

640 / 630 / 620 / 610 / 600 / 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

2.0% 2.0% 2.0% 2.0% 2.3% 2.3%

632.92 -38.00 | 633.25 -24.00 | 633.43 -12.00 | 633.72 0.00 | 633.98 12.00 | 633.60 22.00 | 633.35 28.75

822+42 SB

20 FT

20 FT

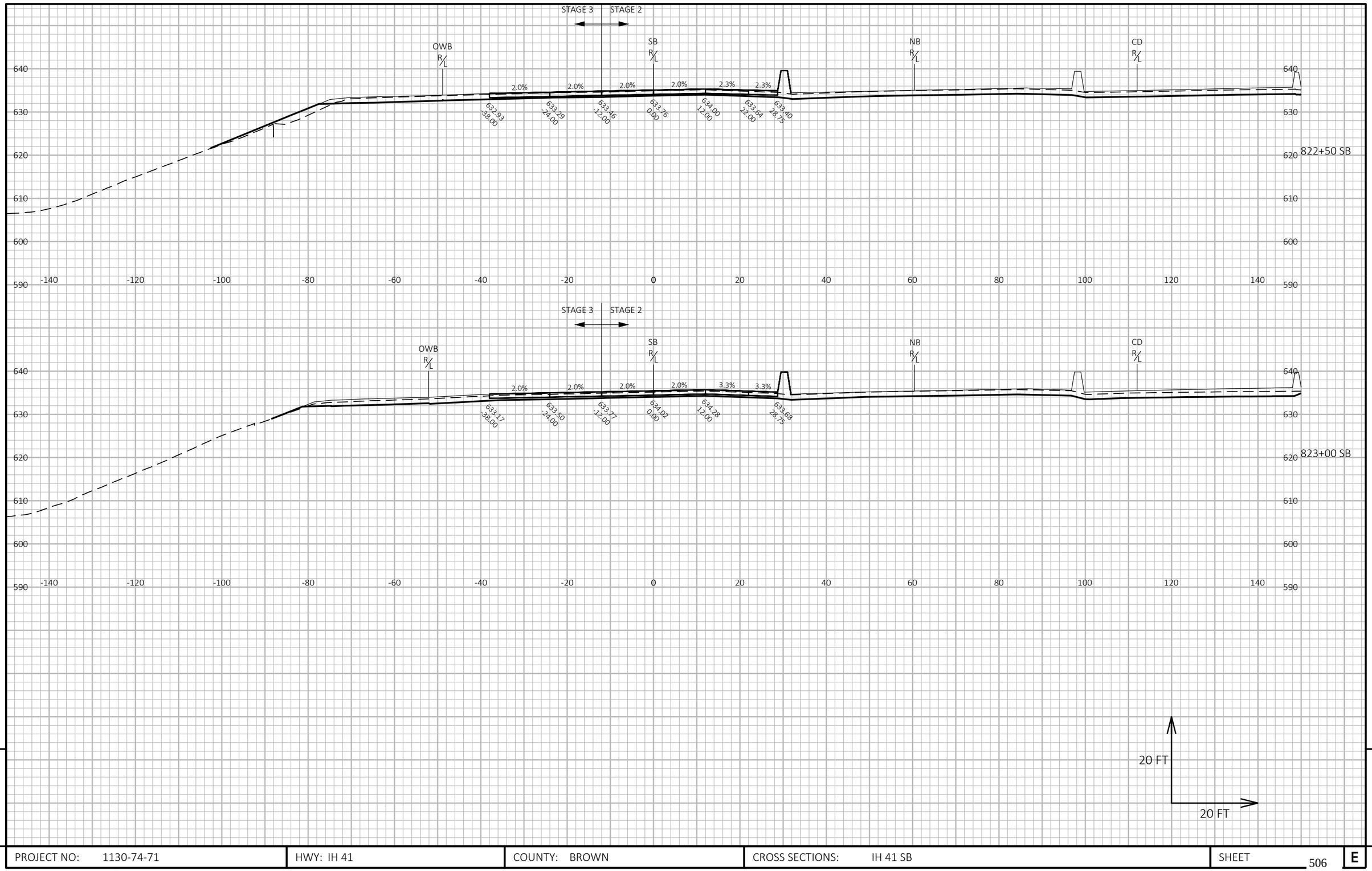
9 9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 505	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 25

PLOT DATE : 8/1/2025 9:15 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

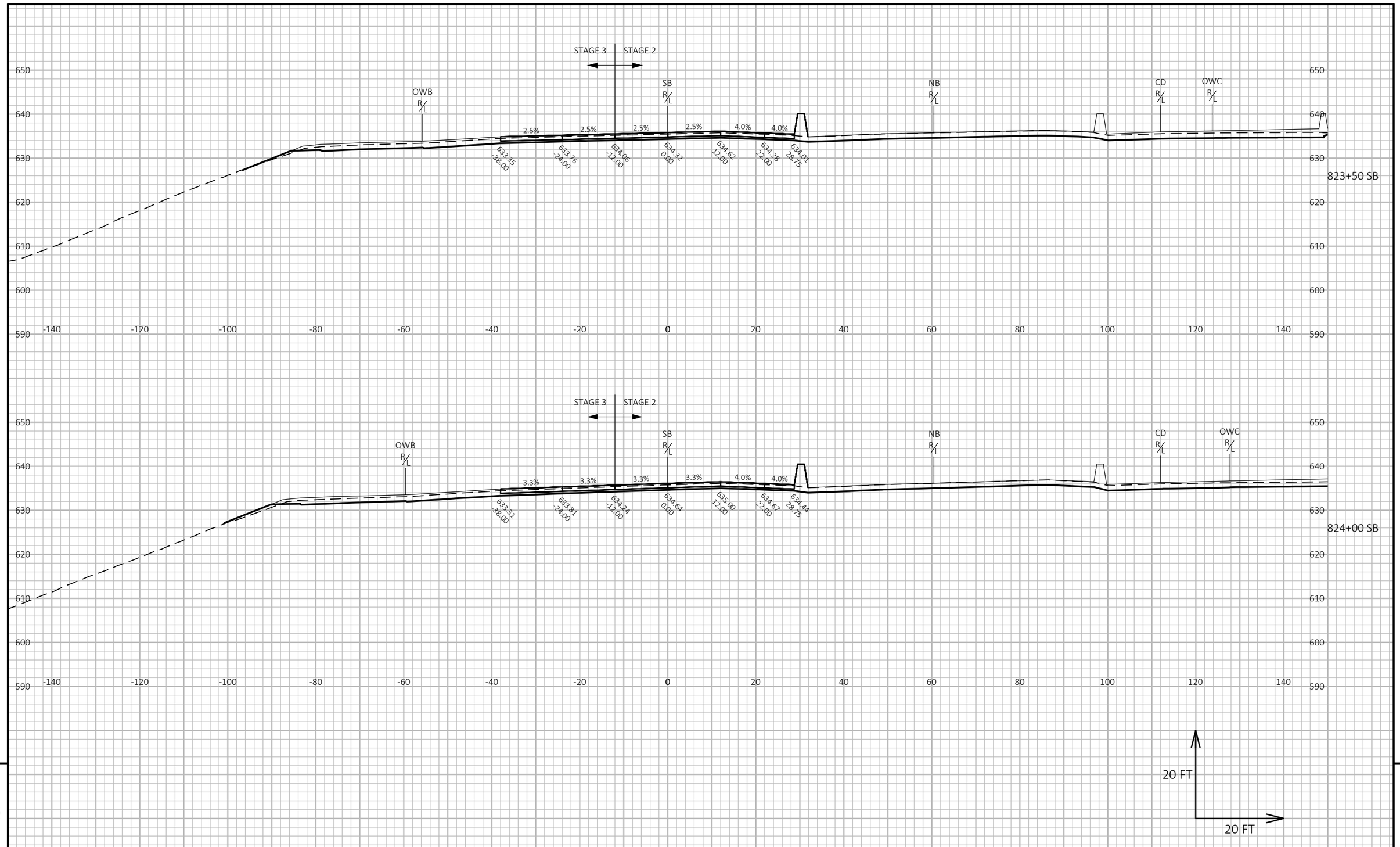


9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 506	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 26
PLOT DATE : 8/1/2025 9:15 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 507	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 27
PLOT DATE : 8/1/2025 9:15 AM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

9

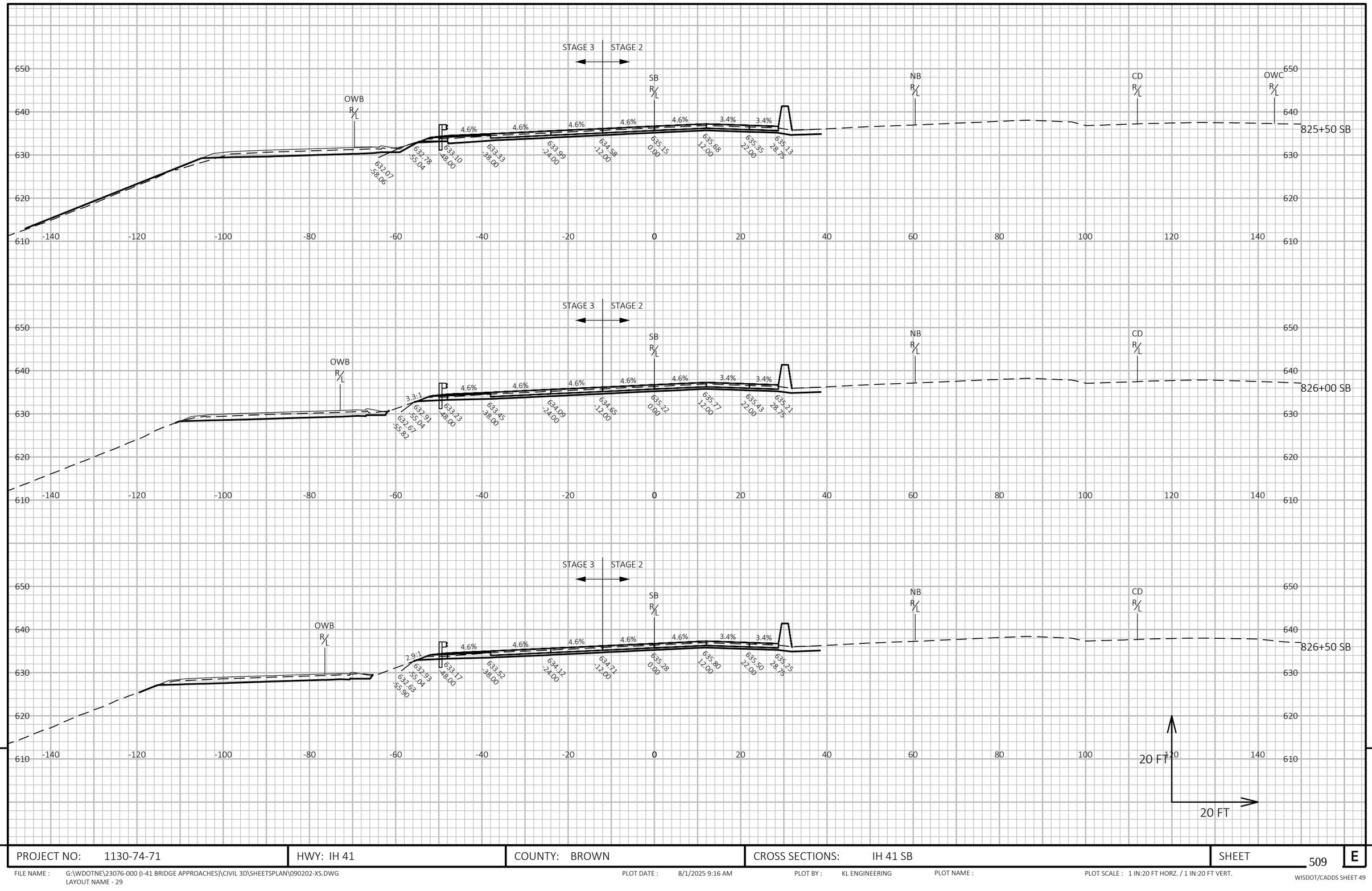
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 508	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 28

PLOT DATE : 8/1/2025 9:16 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

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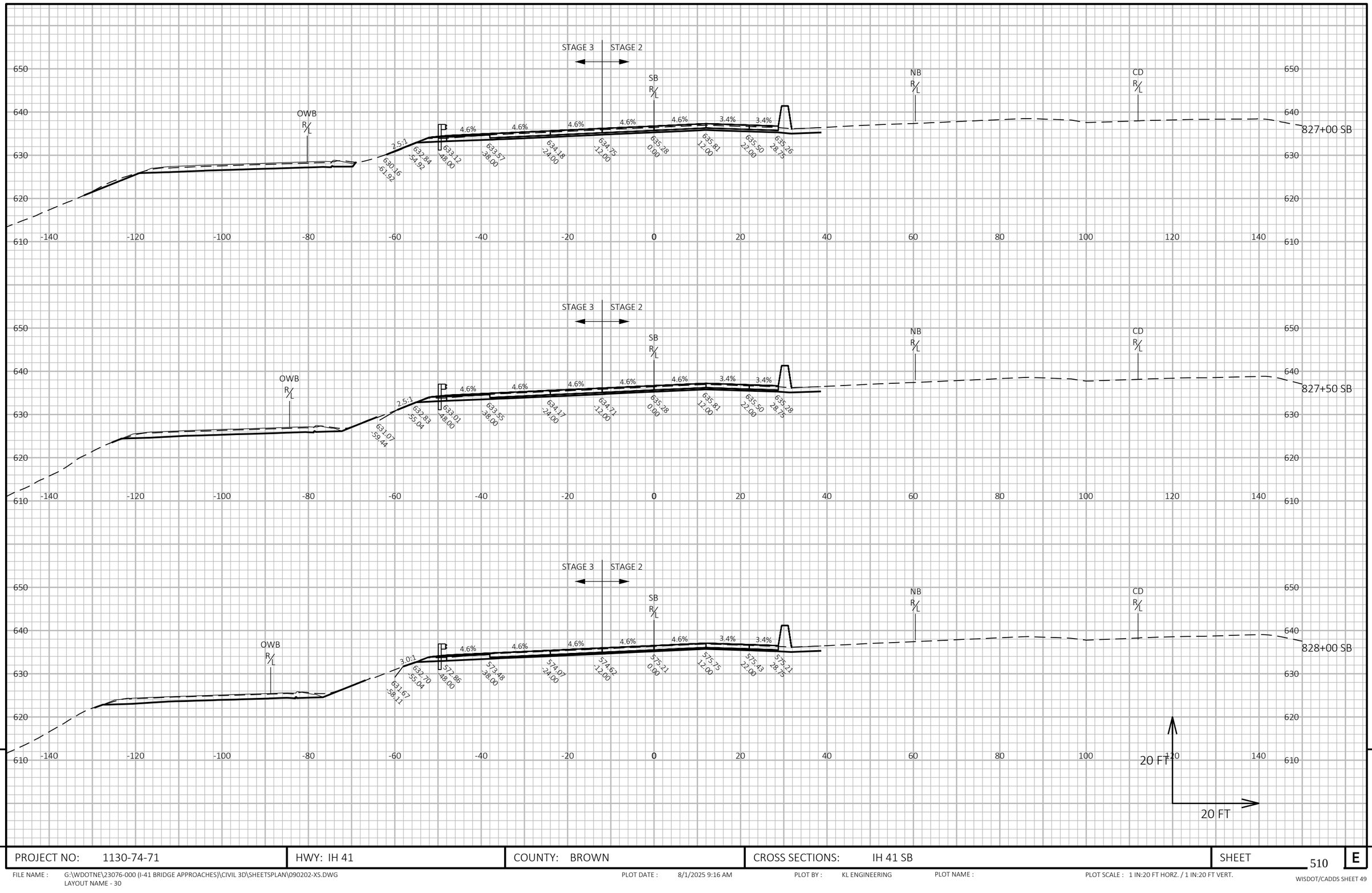
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 509	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 29

PLOT DATE : 8/1/2025 9:16 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

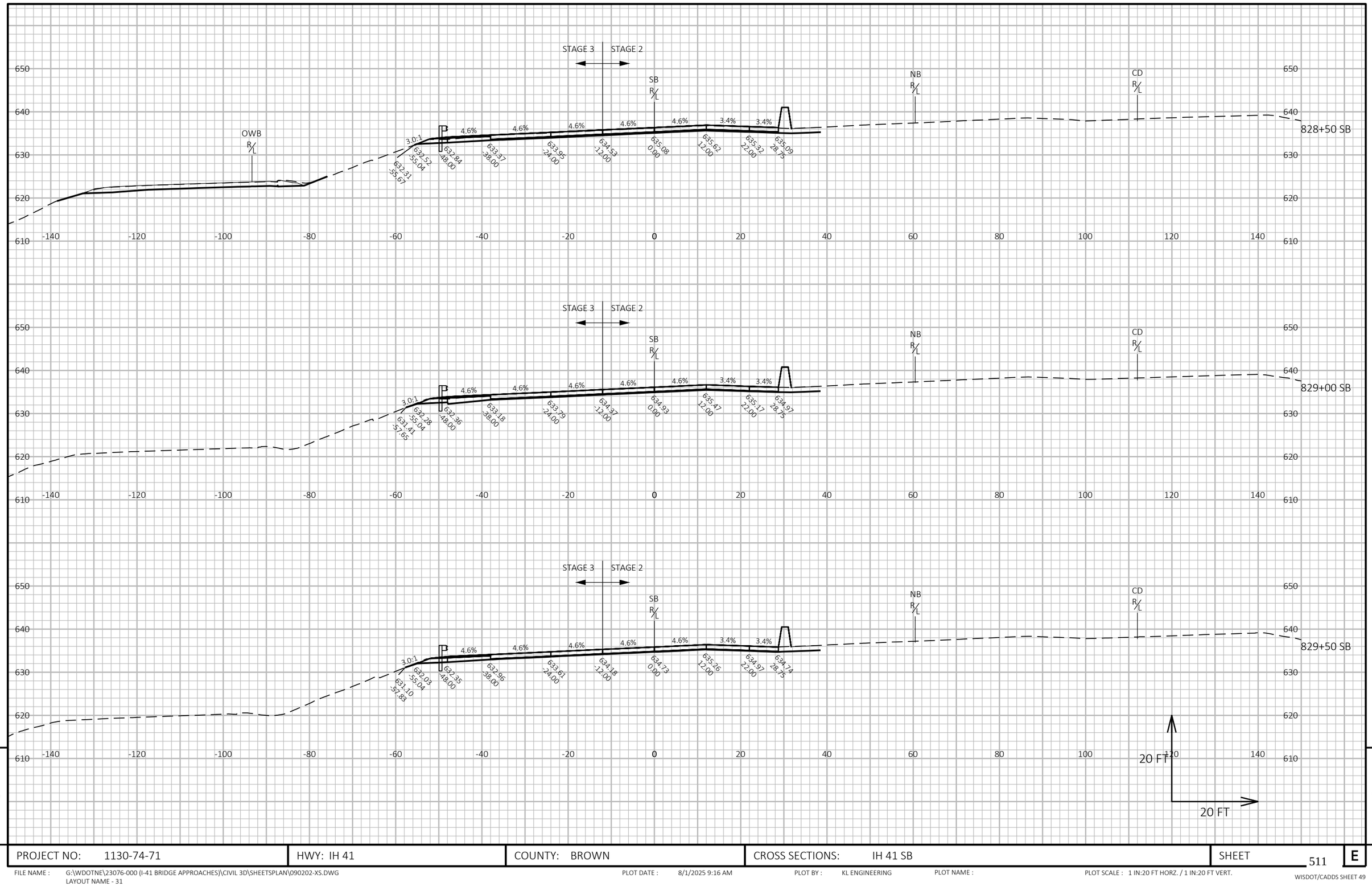
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 510	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 30

PLOT DATE : 8/1/2025 9:16 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

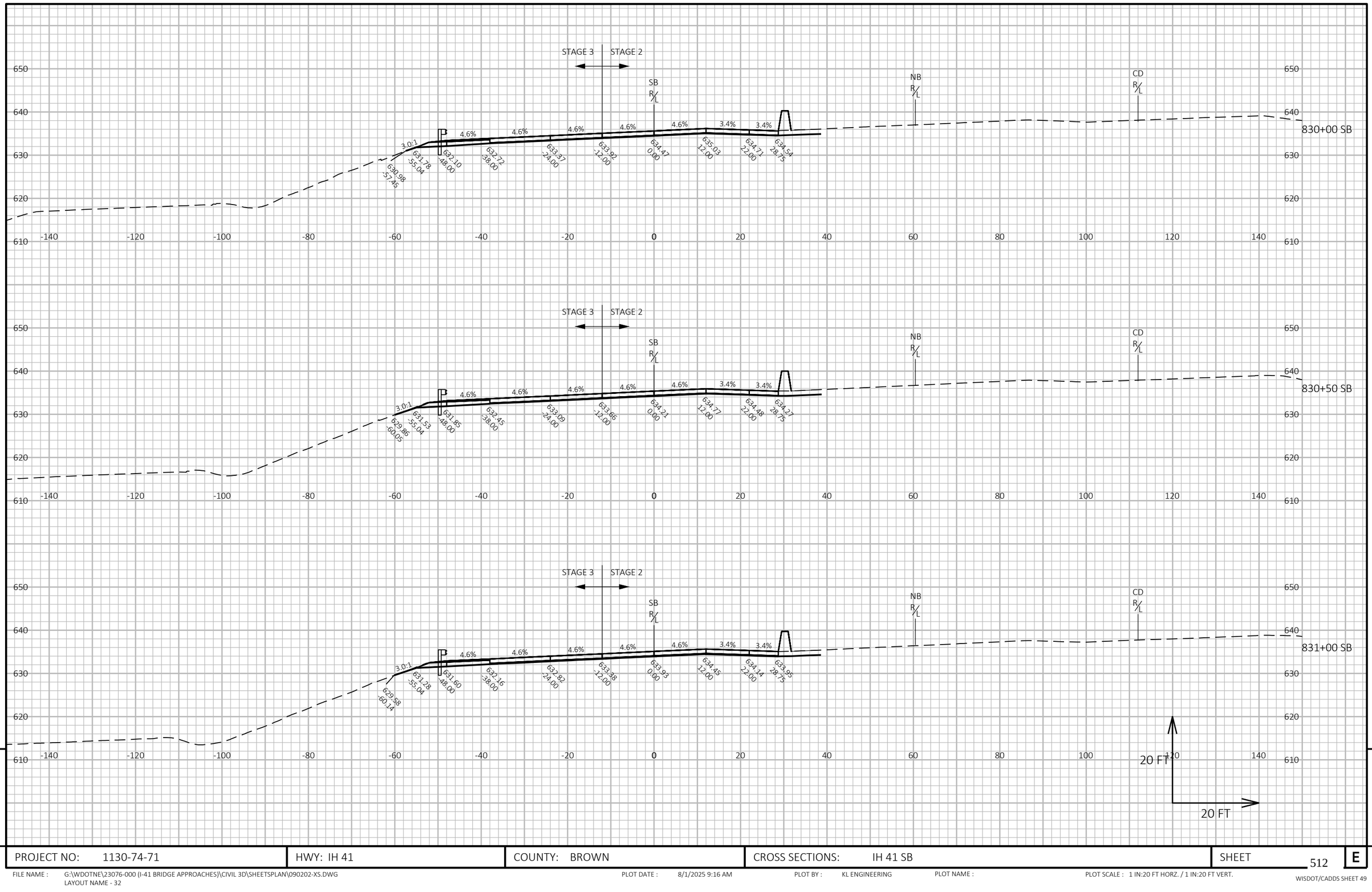
WISDOT/CADDS SHEET 49



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 511	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 31

PLOT DATE : 8/1/2025 9:16 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

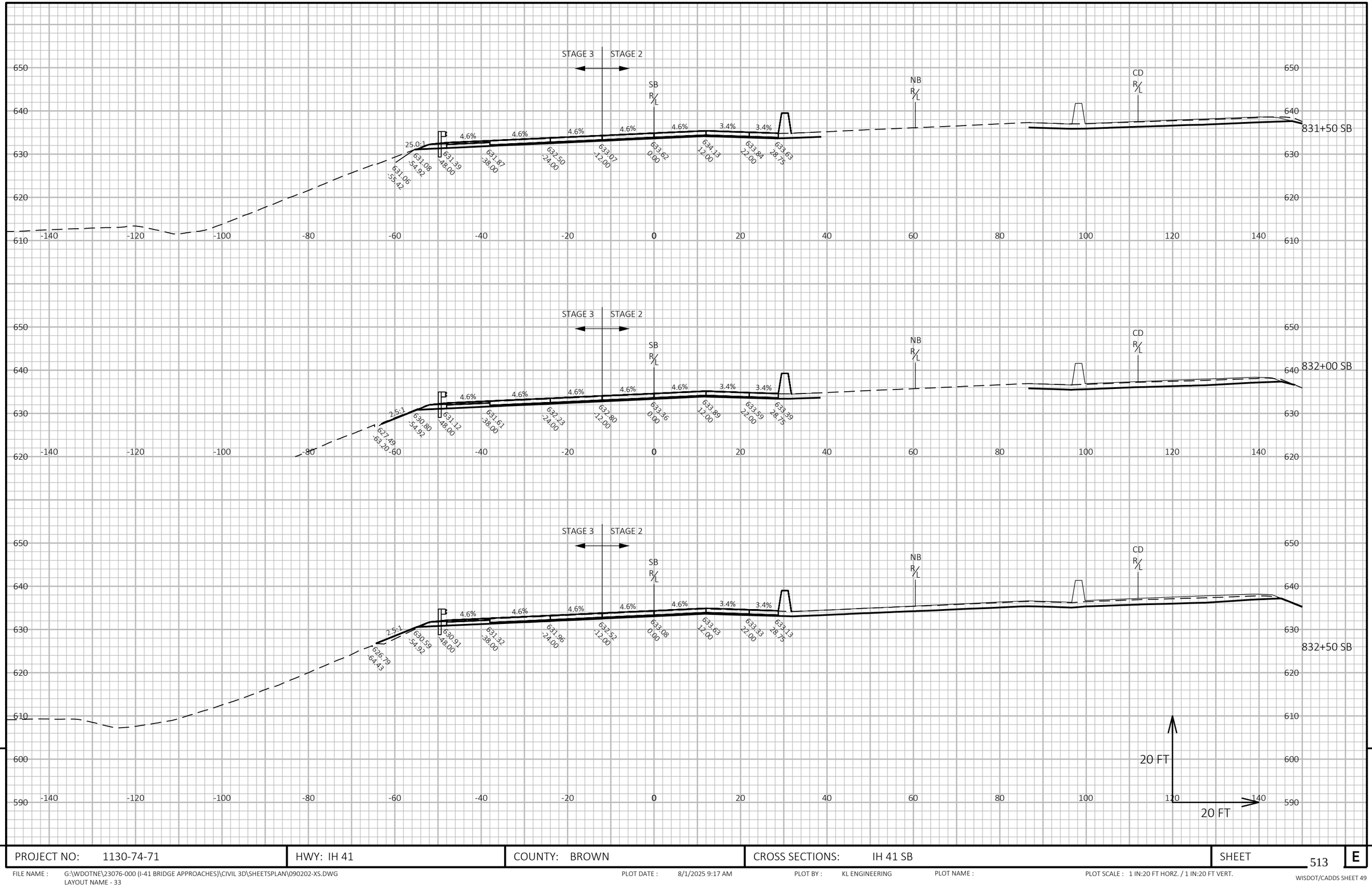


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 512	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 32

PLOT DATE : 8/1/2025 9:16 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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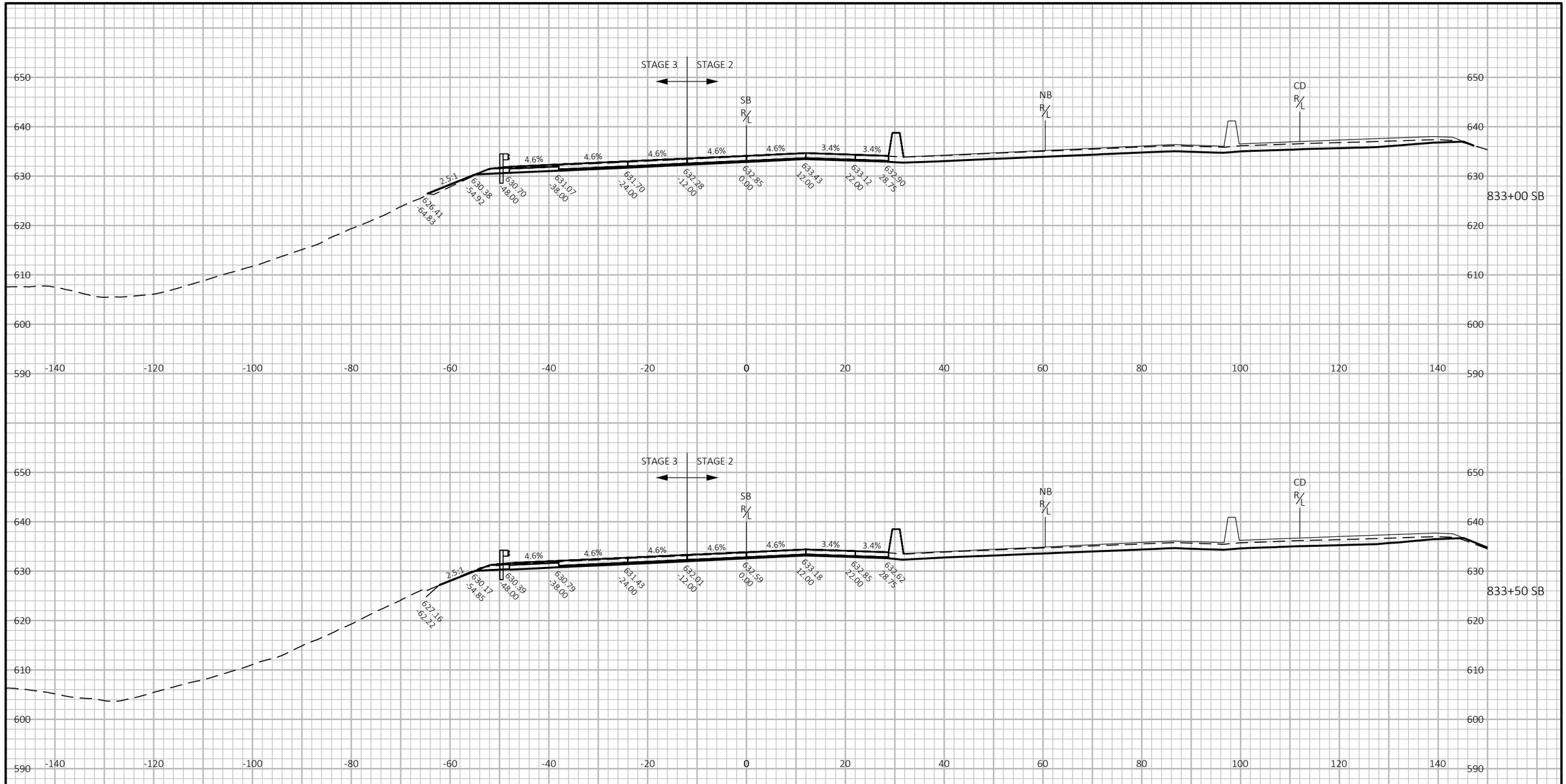
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 513	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 33

PLOT DATE : 8/1/2025 9:17 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

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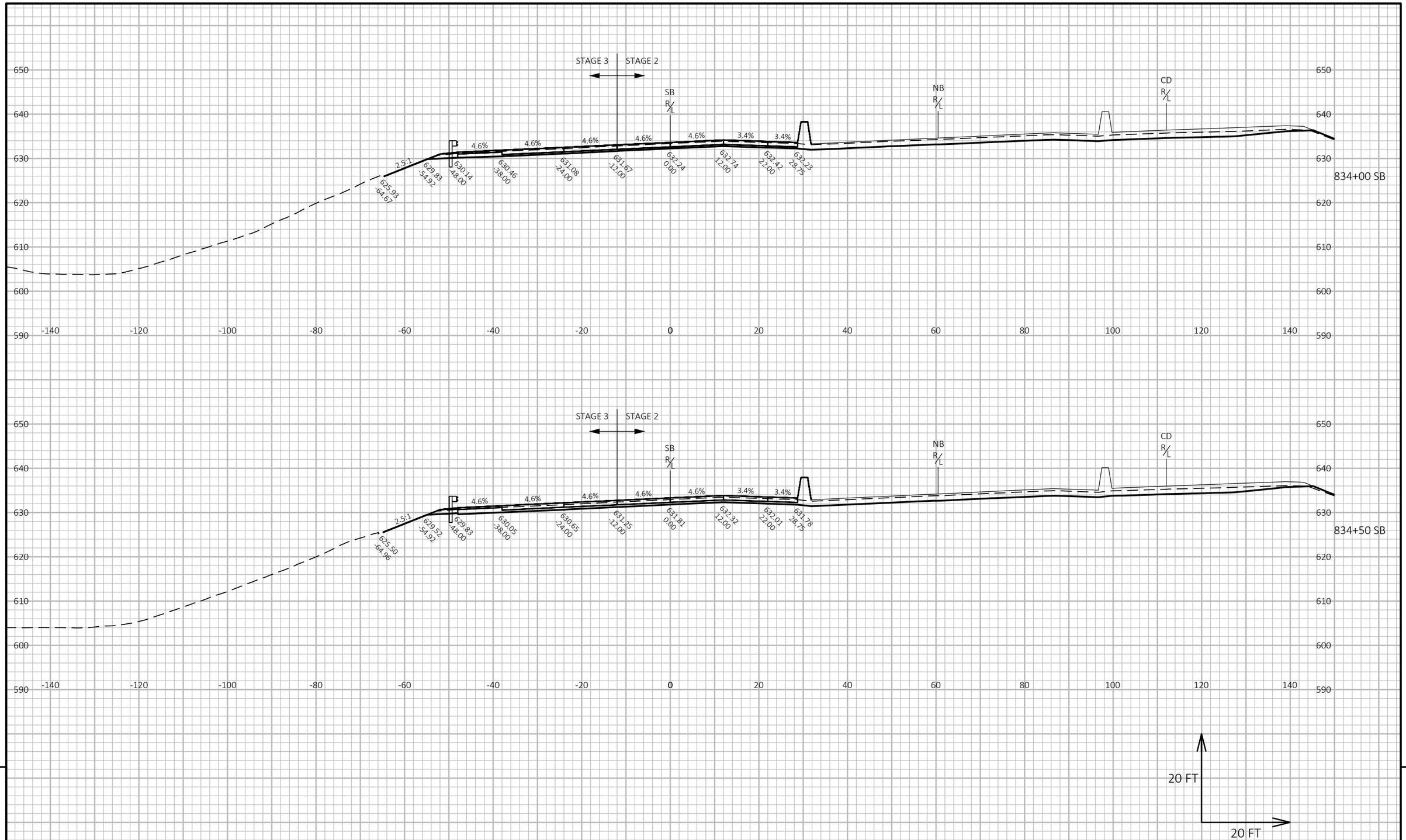
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 514	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 34

PLOT DATE : 8/1/2025 9:17 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

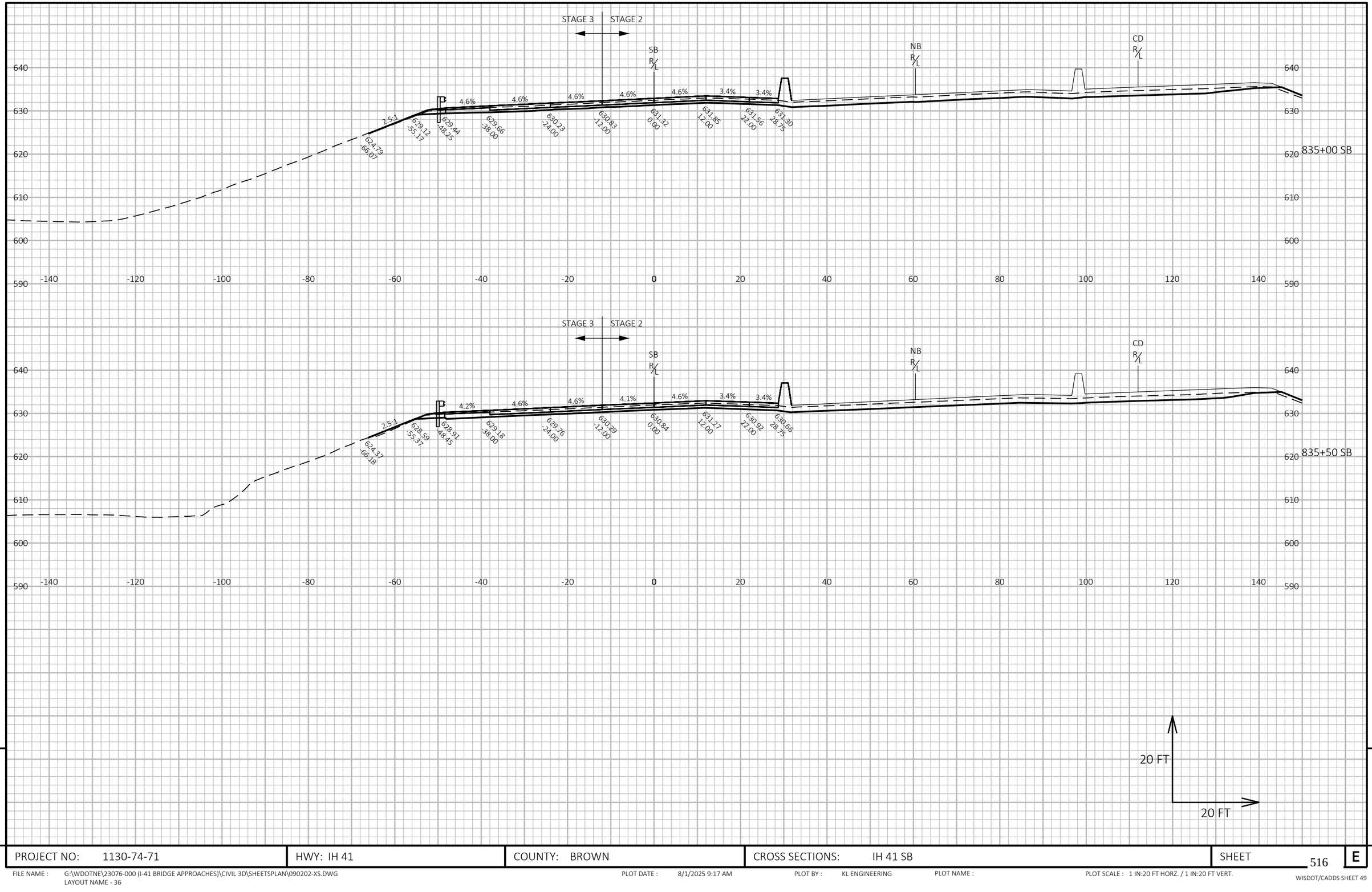


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 515	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 35

PLOT DATE : 8/1/2025 9:17 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

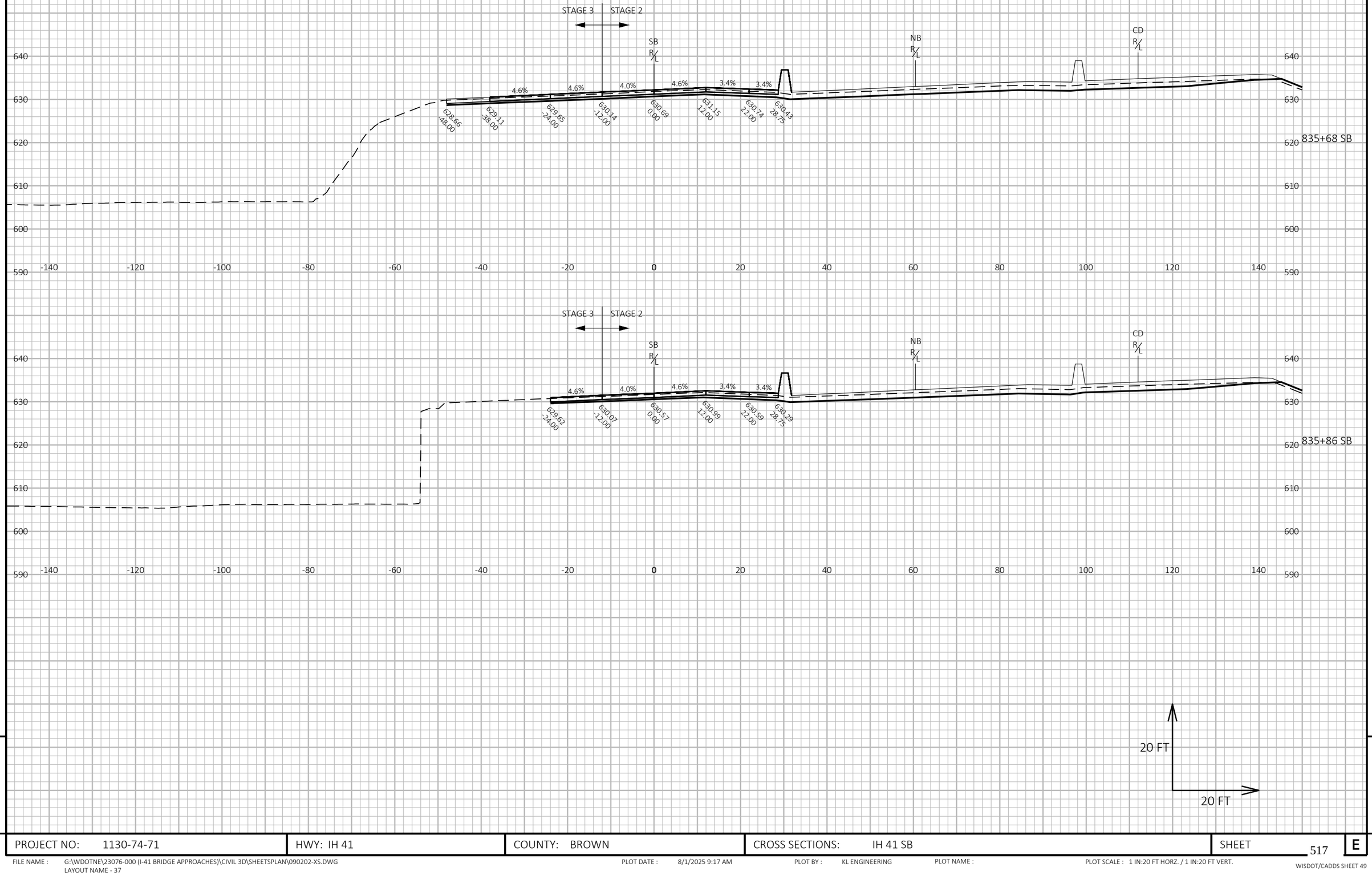
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 516	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 36

PLOT DATE : 8/1/2025 9:17 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

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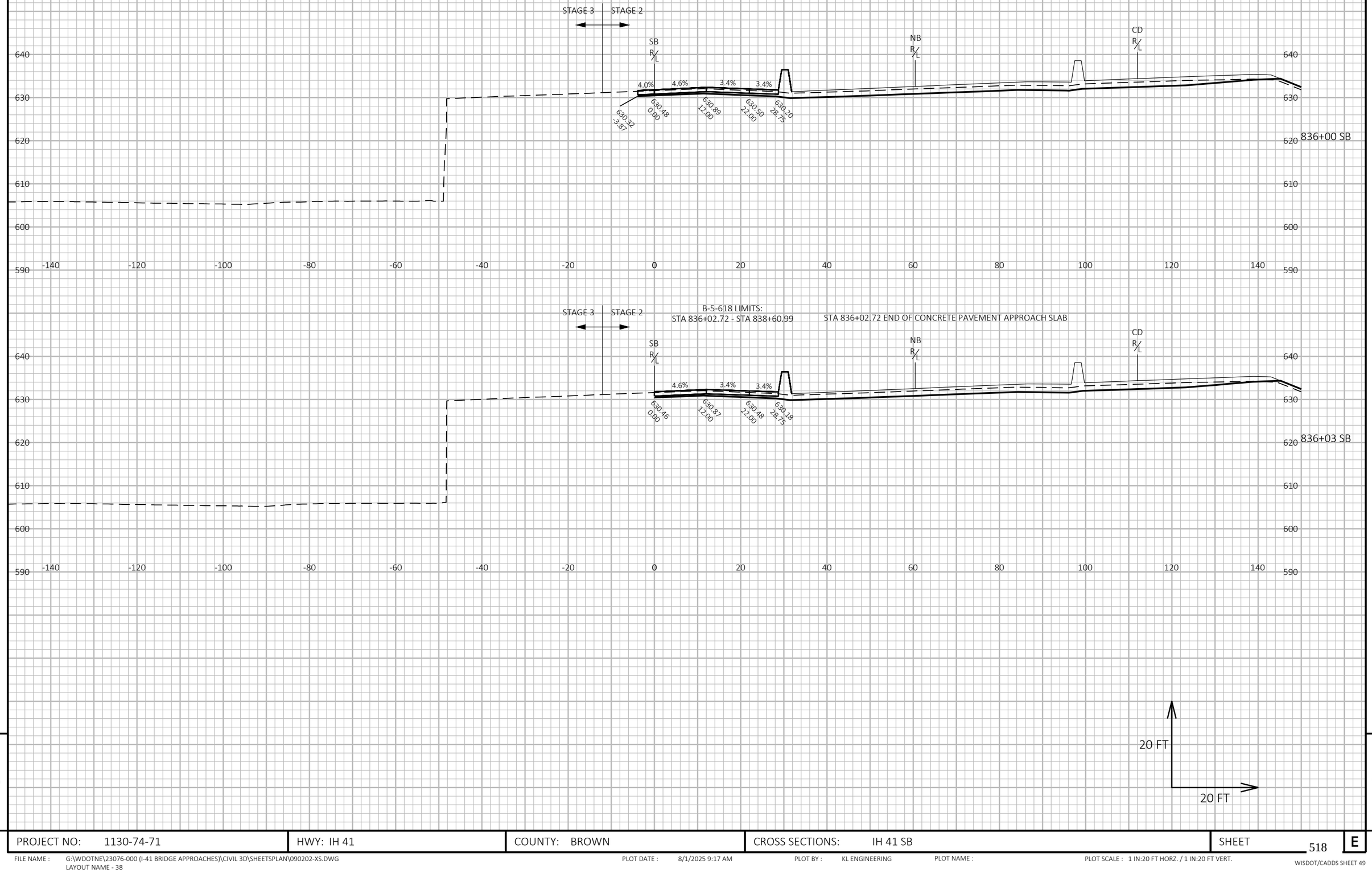
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 517	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 37

PLOT DATE : 8/1/2025 9:17 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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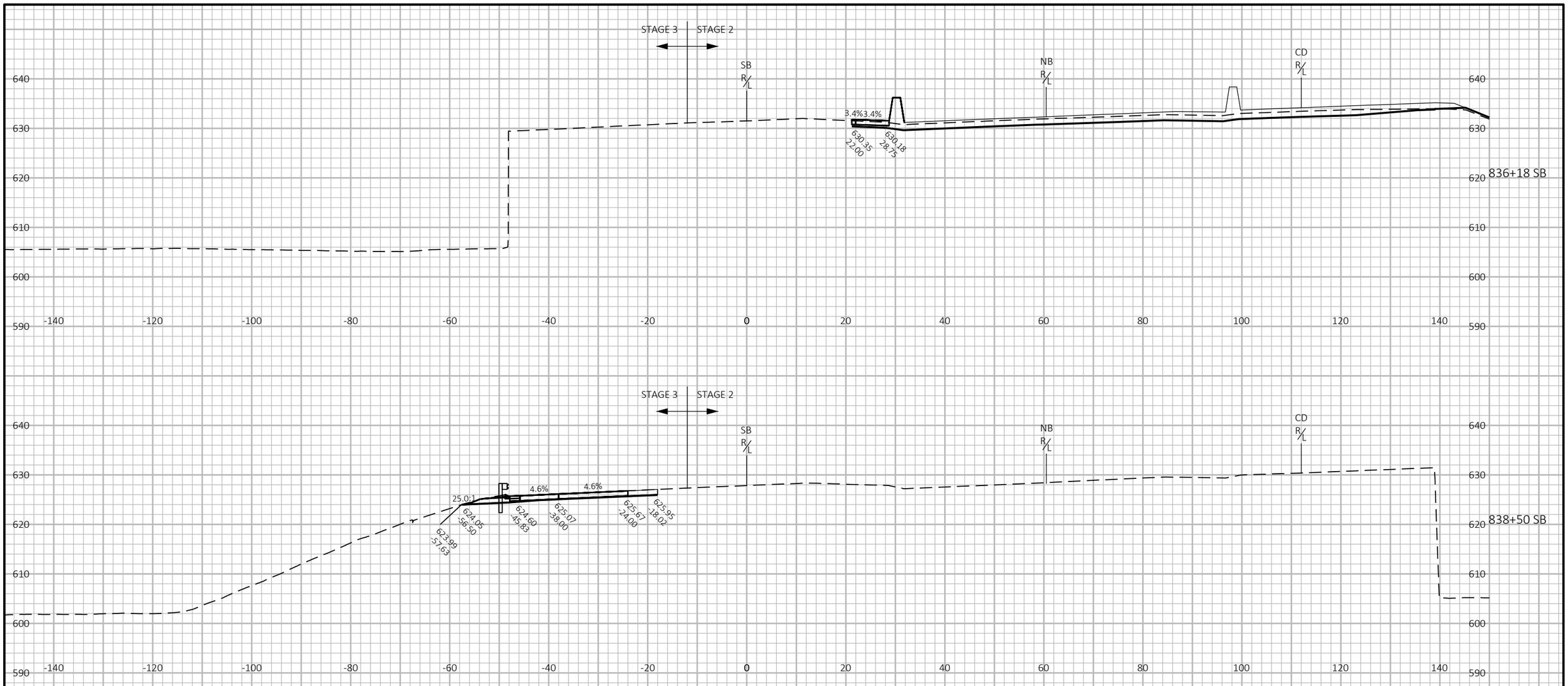
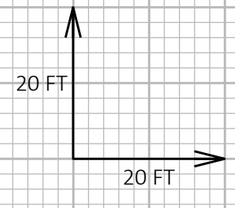
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 518	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 38

PLOT DATE : 8/1/2025 9:17 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 519	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 39

PLOT DATE : 2/24/2026 1:53 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STAGE 3 STAGE 2

STA 838+60.99 START OF CONCRETE PAVEMENT APPROACH SLAB

SB R/L

NB R/L

CD R/L

838+61 SB

25.0:1

4.6% 4.6% 4.6% 4.6%

623.82 -56.49

623.83 -56.52

624.38 -45.83

624.84 -39.00

625.45 -24.00

625.97 -12.00

626.45 0.00

640 630 620 610 600 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

STAGE 3 STAGE 2

SB R/L

NB R/L

CD R/L

839+00 SB

3.0:1

4.6% 4.6% 4.6% 4.6% 4.6% 3.4% 3.4%

622.95 -56.76

622.18 -59.11

623.51 -45.81

624.00 -38.00

624.59 -24.00

625.08 -12.00

625.58 0.00

626.02 12.00

625.68 22.00

625.40 28.75

640 630 620 610 600 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

20 FT

20 FT

9

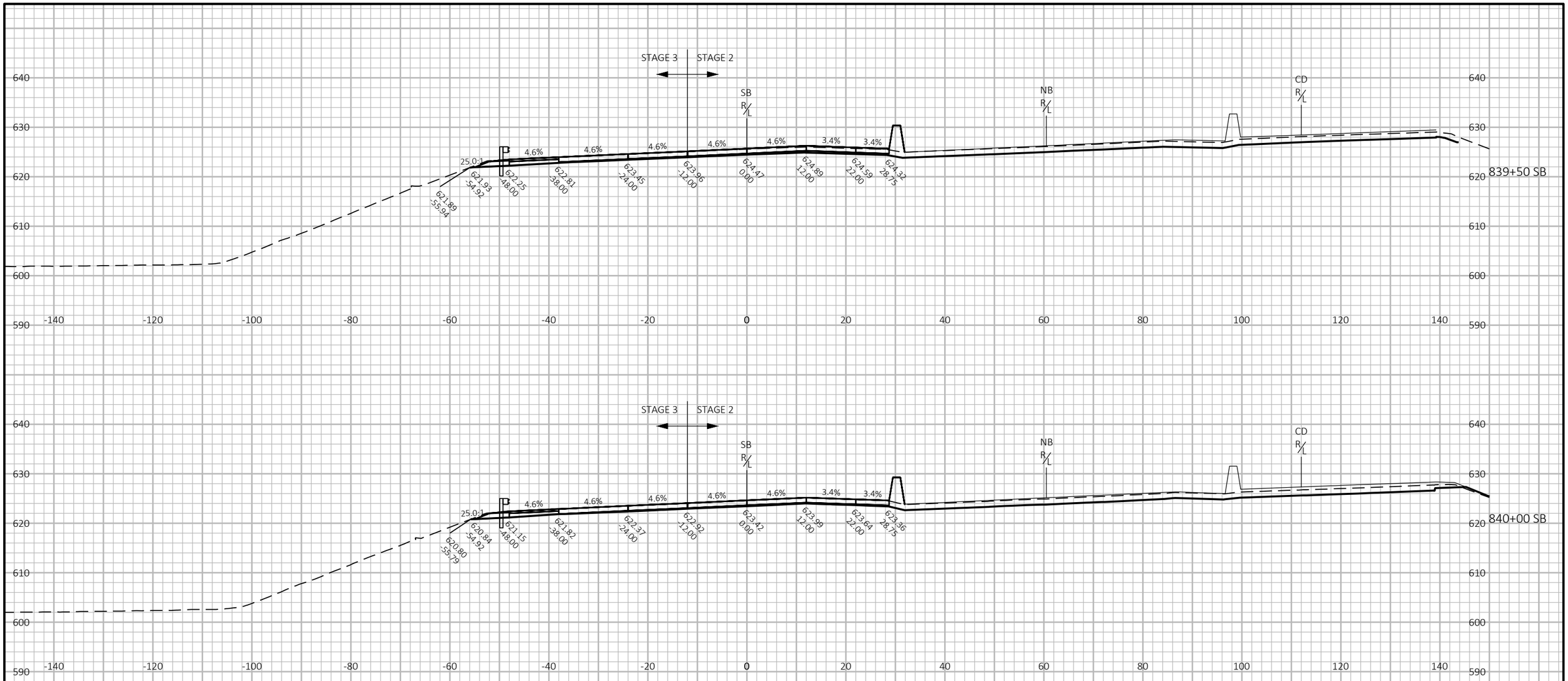
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 520	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 40

PLOT DATE : 8/1/2025 9:18 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

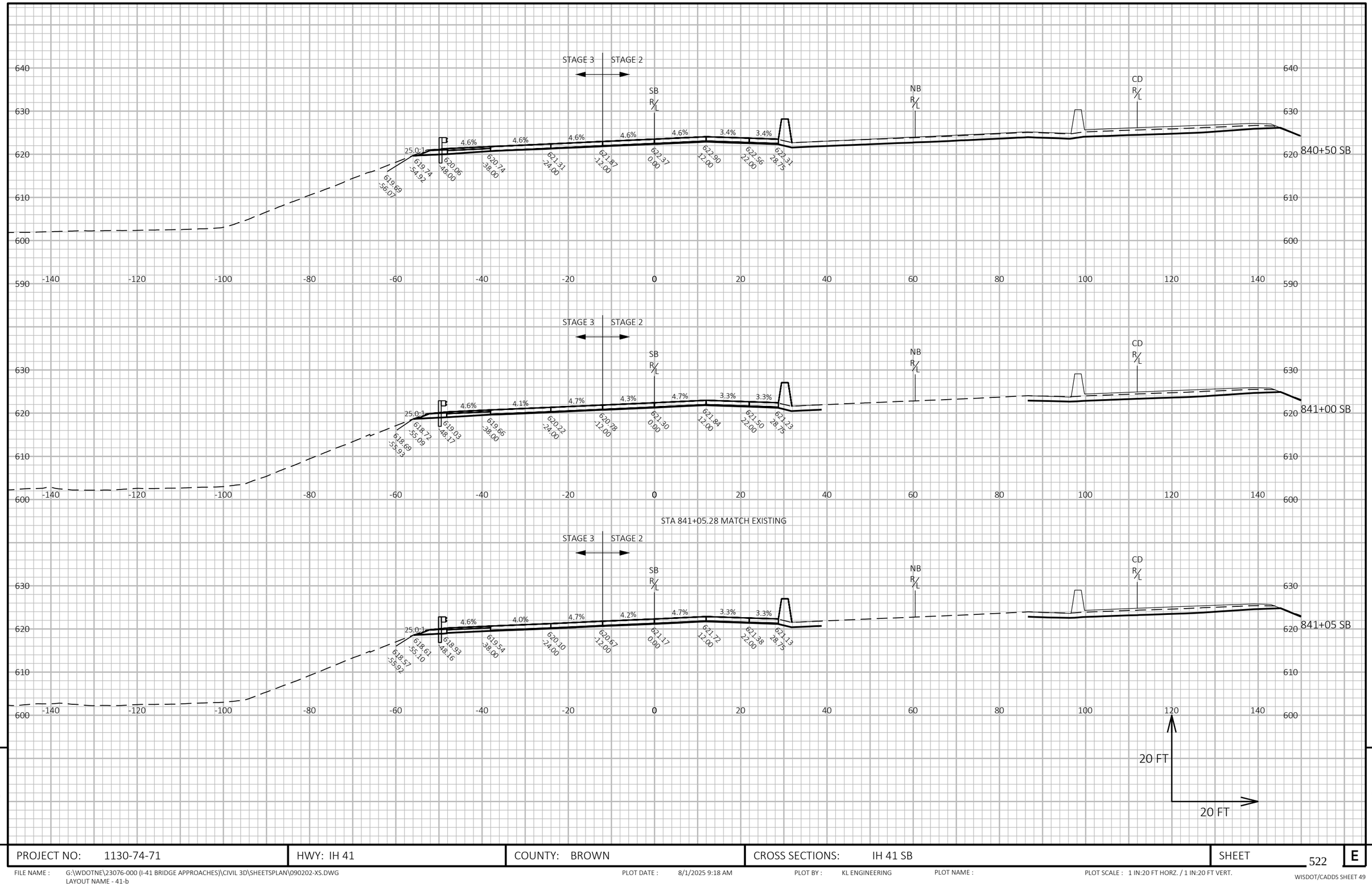
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 521	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 41

PLOT DATE : 8/1/2025 9:18 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

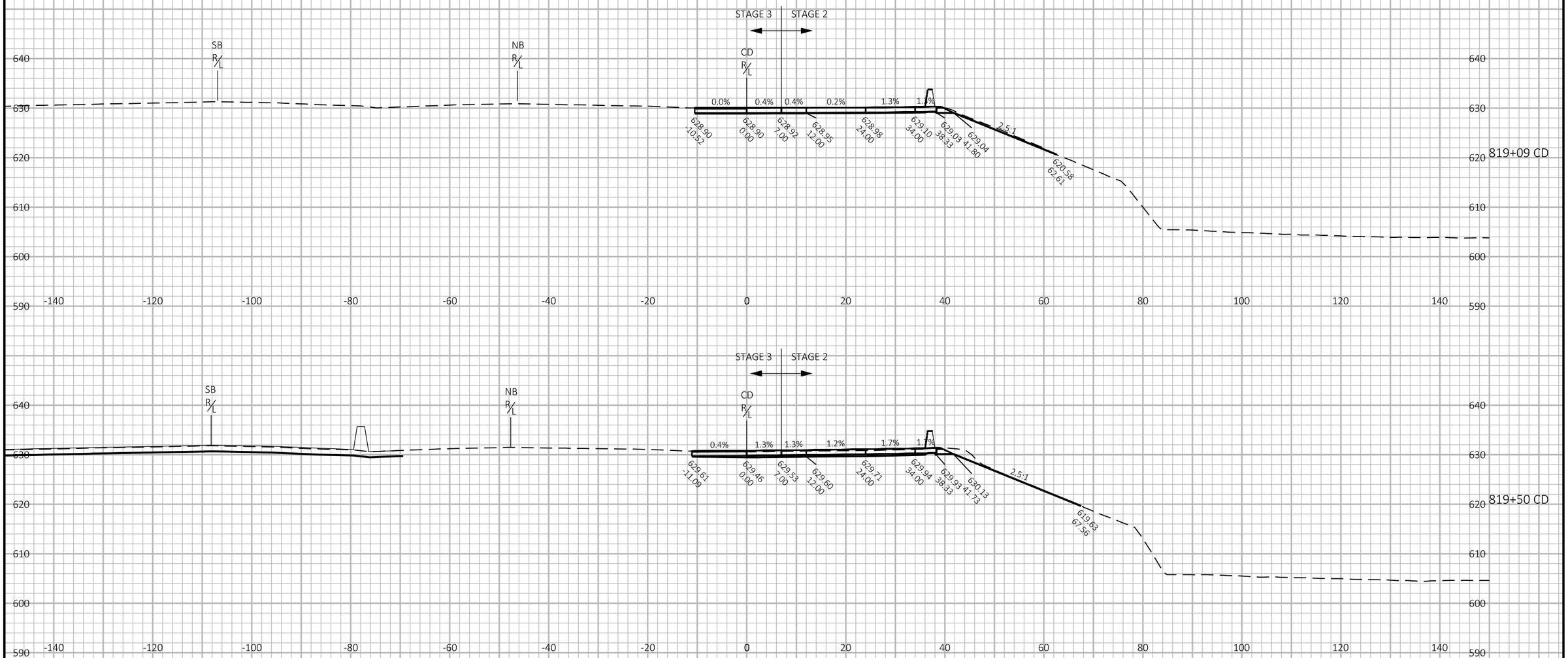


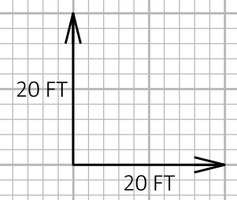
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 SB	SHEET 522	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 41-b

PLOT DATE : 8/1/2025 9:18 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

STA 819+09.07 MATCH EXISTING





9

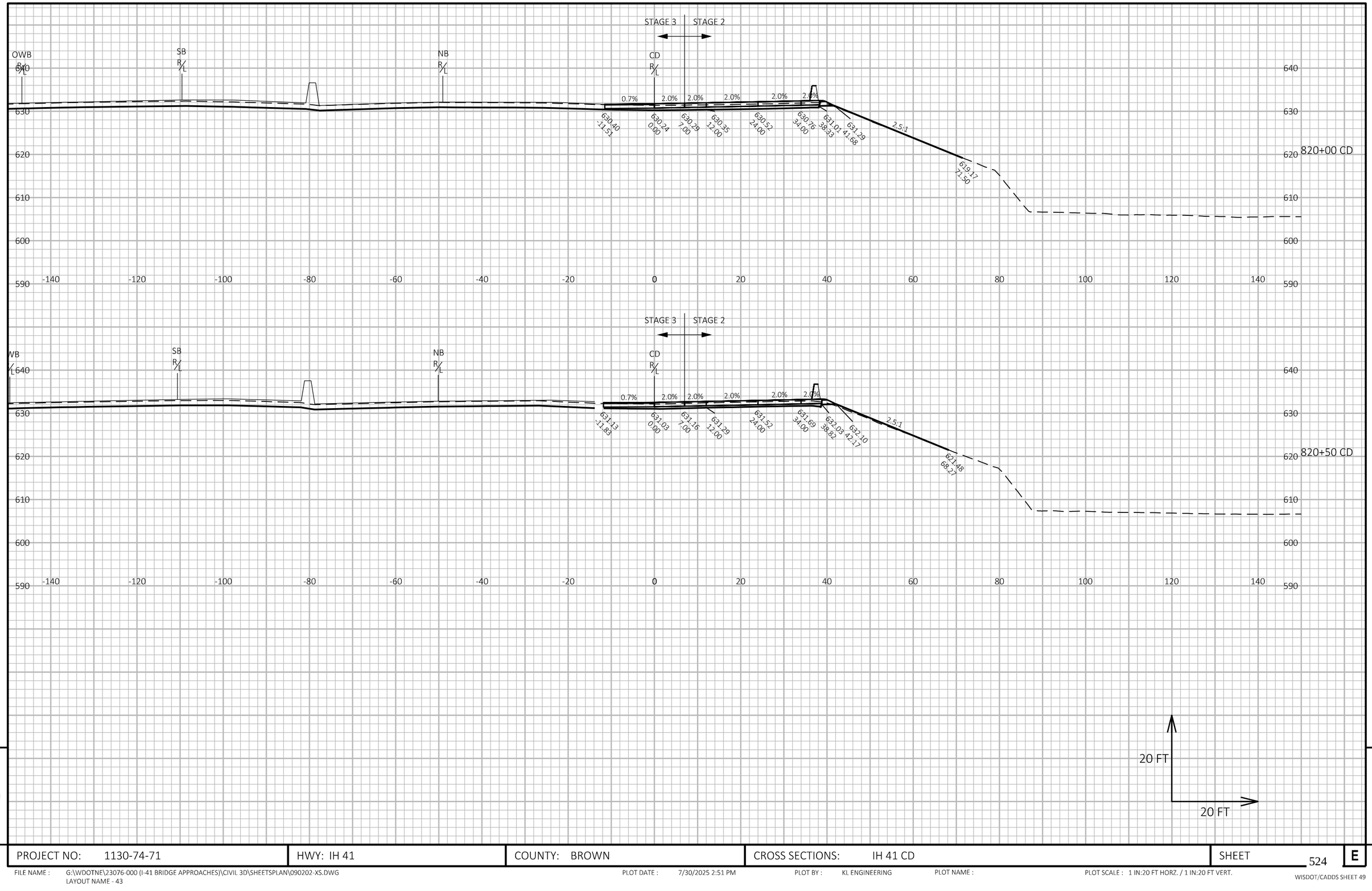
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 523	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 42

PLOT DATE : 7/30/2025 2:51 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 524	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 43

PLOT DATE : 7/30/2025 2:51 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STA 820+86.50 END OF CONCRETE PAVEMENT APPROACH SLAB

STAGE 3 | STAGE 2

SB R/L | NB R/L | CD R/L

2.2% | 2.1% | 2.1% | 2.3% | 2.2% | 2.2%

631.69 -12.00 | 631.80 0.00 | 631.96 7.00 | 632.08 12.00 | 632.37 24.00 | 632.63 34.00 | 632.62 39.33 | 632.70 42.66

2.5:1

618.71 77.07

820+86 CD

B-5-621 LIMITS:
STA 820+86.50 - STA 822+43.41

STA 822+43.41 START OF CONCRETE PAVEMENT APPROACH SLAB

STAGE 3 | STAGE 2

SB R/L | NB R/L | CD R/L

1.7% | 2.3% | 2.3% | 2.3% | 2.3% | 2.3% | 2.5:1

633.46 -12.25 | 633.50 0.00 | 633.65 7.00 | 633.76 12.00 | 634.01 26.00 | 634.15 34.00 | 634.49 38.33 | 634.58 42.12 | 632.95 46.21

822+43 CD

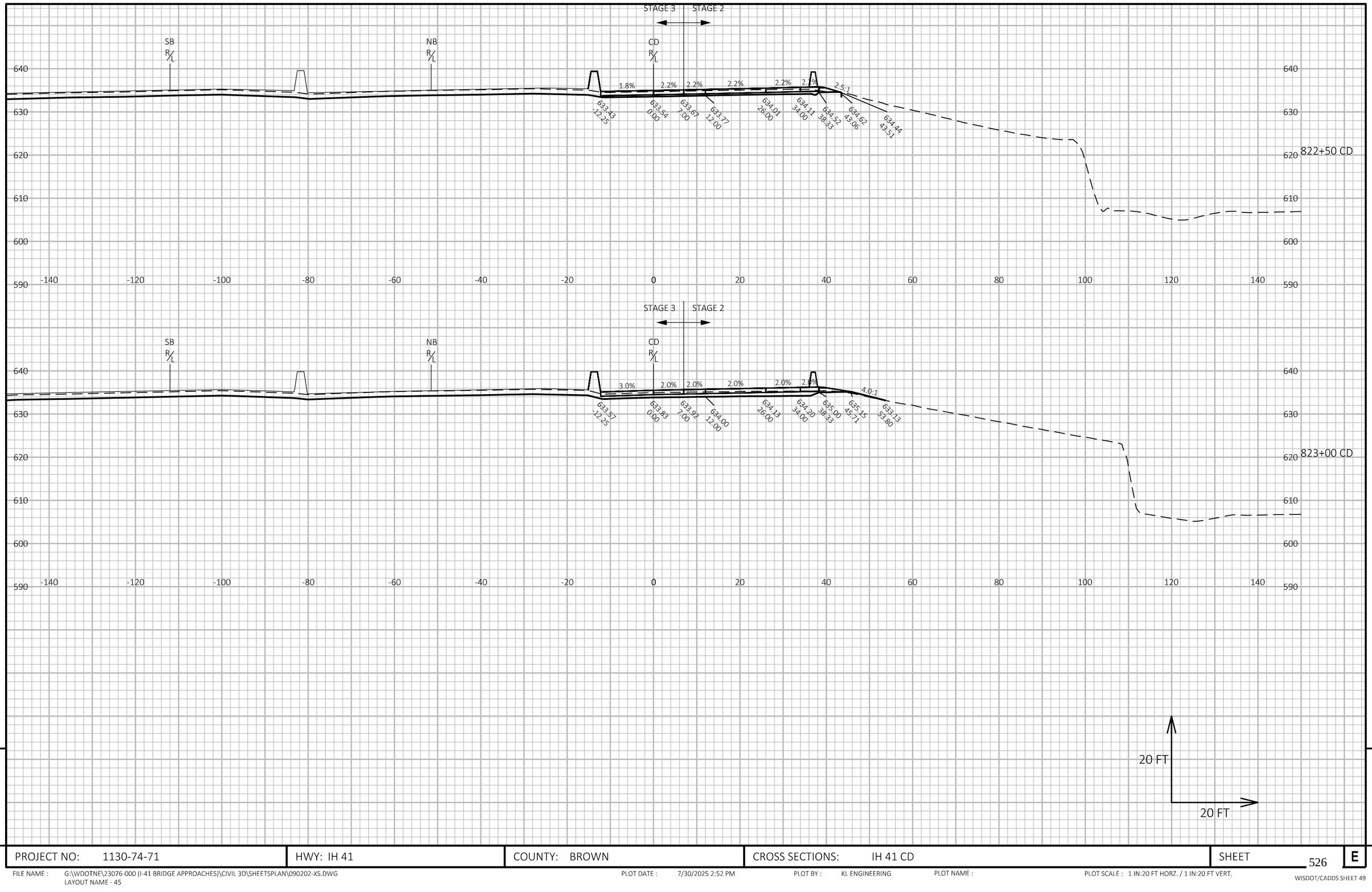
20 FT | 20 FT

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 525	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 44

PLOT DATE : 7/30/2025 2:51 PM | PLOT BY : KL ENGINEERING | PLOT NAME : | PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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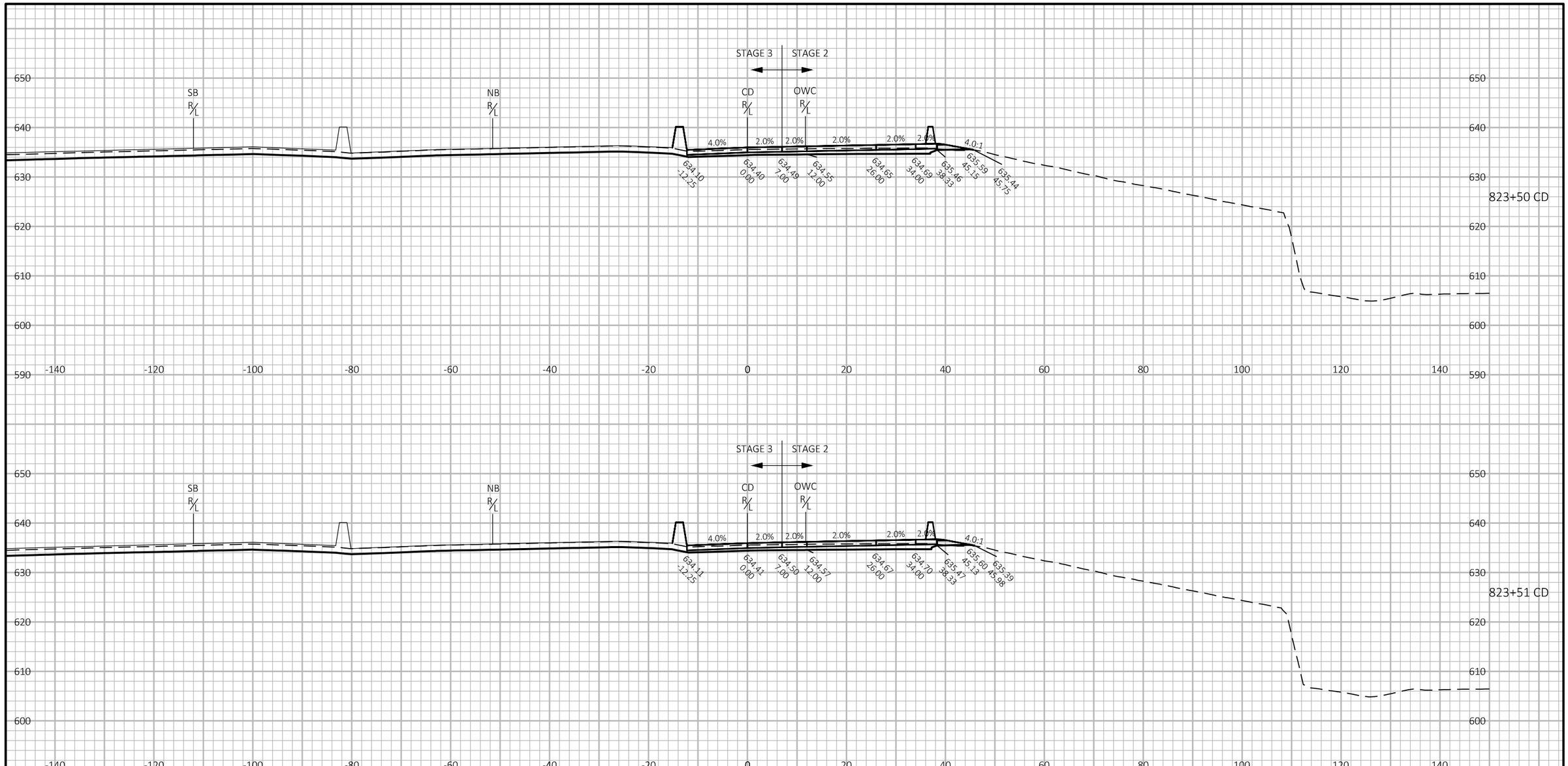
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 526	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 45

PLOT DATE : 7/30/2025 2:52 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

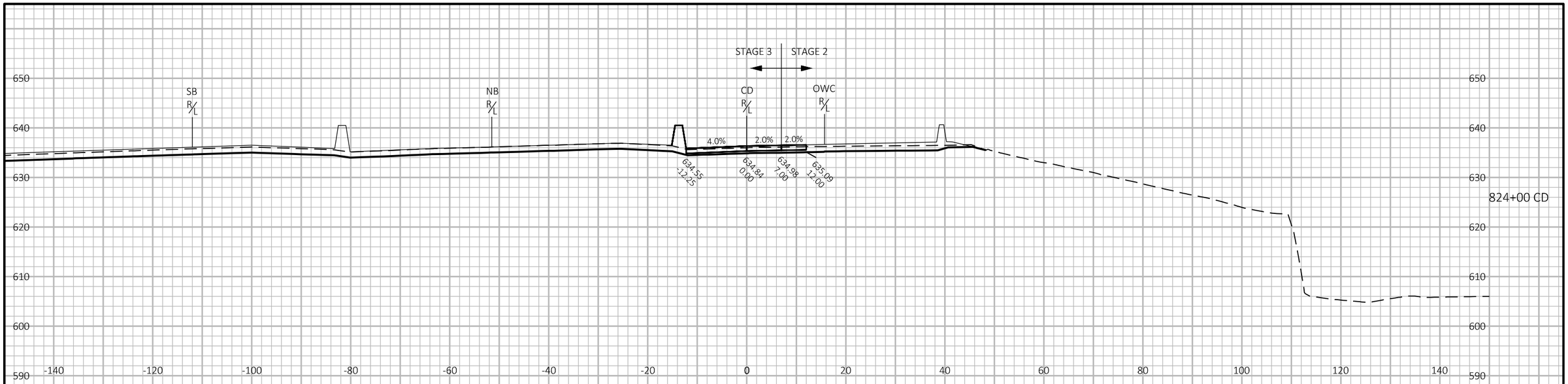
9

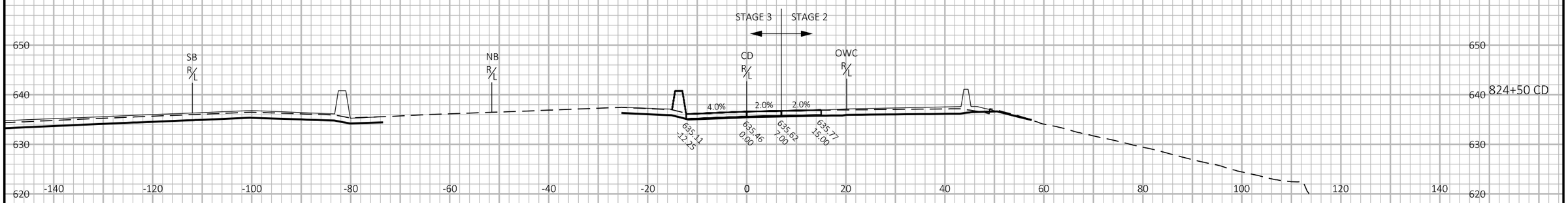
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 527	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 46

PLOT DATE : 7/30/2025 2:52 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





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9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 528	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 47

PLOT DATE : 7/30/2025 2:52 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STA 825+02.25 MATCH EXISTING

STAGE 3 | STAGE 2

SB R/L | NB R/L | CD R/L | OWC R/L

3.5% | 2.3% | 2.3%

635.48 -12.25 | 635.78 0.00 | 635.95 7.00 | 636.12 15.00

825+02 CD

STA 831+29.16 MATCH EXISTING ASPHALT

STAGE 3 | STAGE 2

SB R/L | NB R/L | CD R/L

3.7% | -4.0:1

637.10 15.03 | 637.41 27.00 | 637.76 36.35 | 633.41 53.65

831+29 CD

STA 831+30.13 MATCH EXISTING CONCRETE PAVEMENT & CONCRETE BARRIER TYPE S56

STAGE 3 | STAGE 2

EAT TAPER

SB R/L | NB R/L | CD R/L

4.0% | 3.7% | 3.7% | 3.7% | -4.0:1

636.09 -12.25 | 636.58 0.00 | 636.79 7.00 | 637.09 15.00 | 637.45 27.12 | 637.80 36.44 | 633.84 52.30

831+30 CD

20 FT

20 FT

9

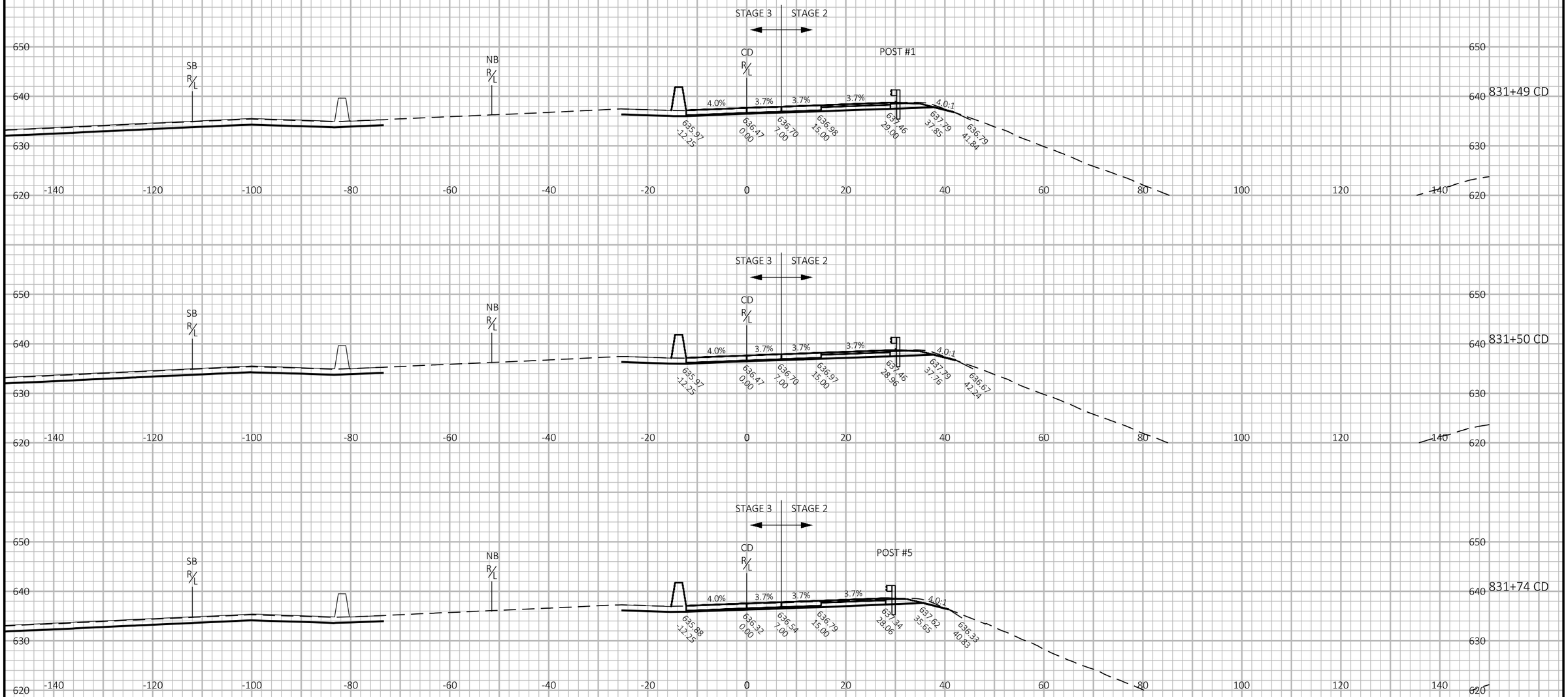
9

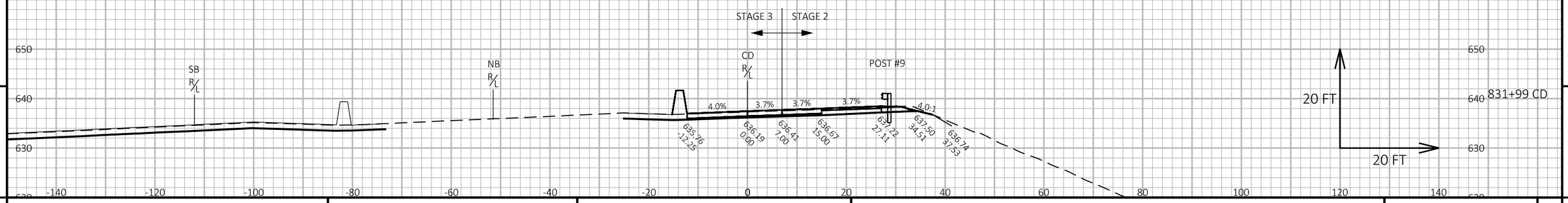
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 529	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 48

PLOT DATE : 7/30/2025 2:52 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





9

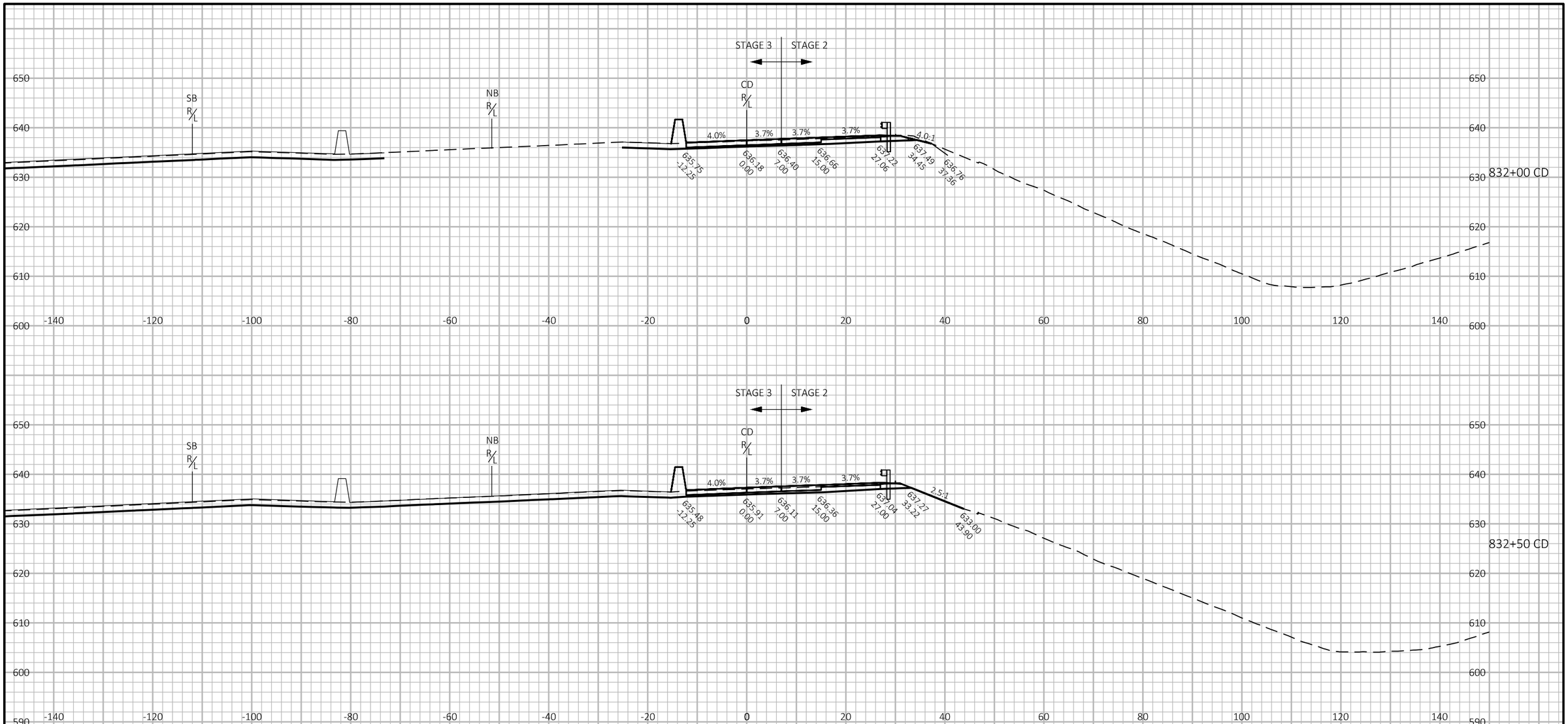
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 530	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 49

PLOT DATE : 7/30/2025 2:52 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



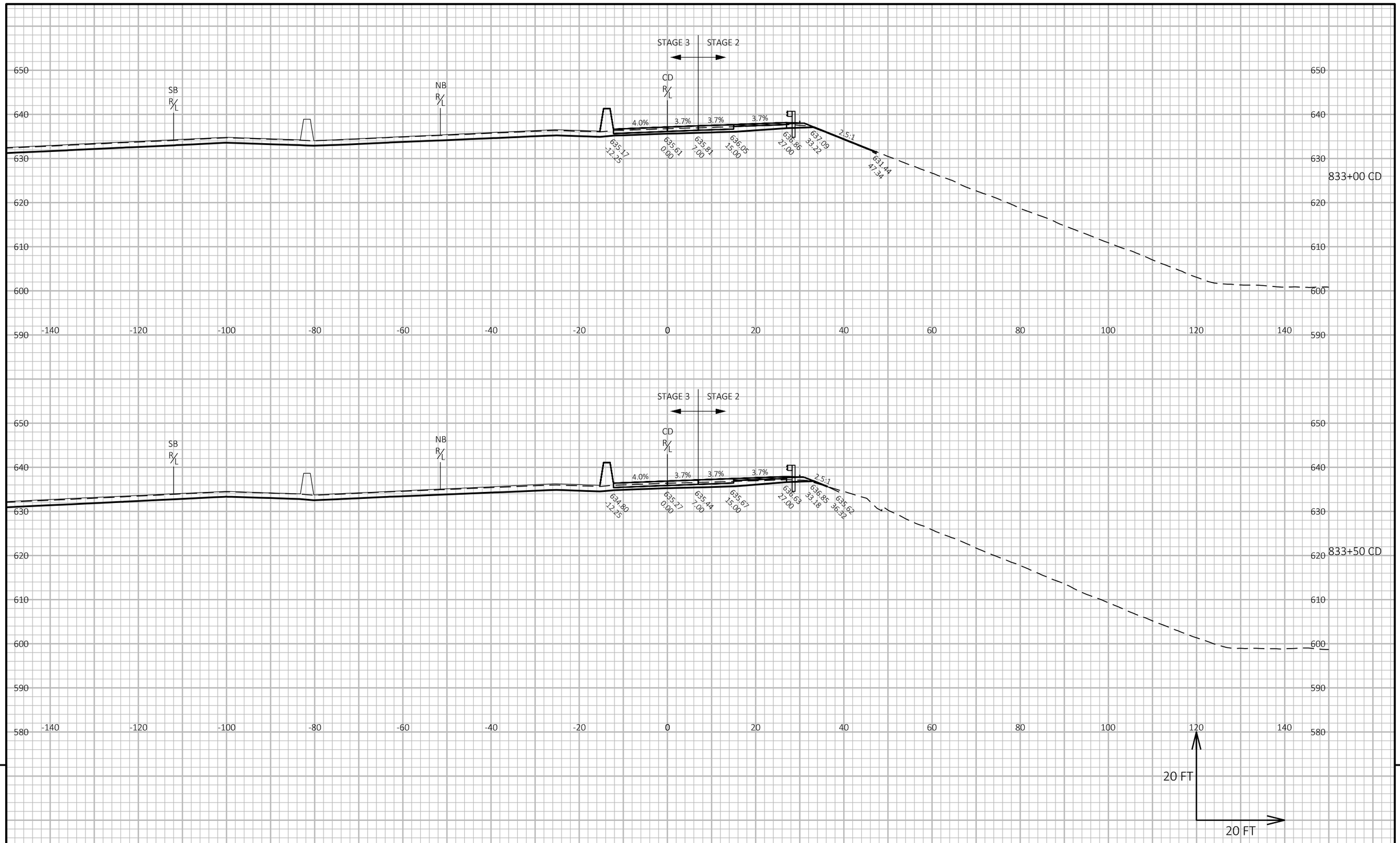
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 531	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 50

PLOT DATE : 7/30/2025 2:53 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

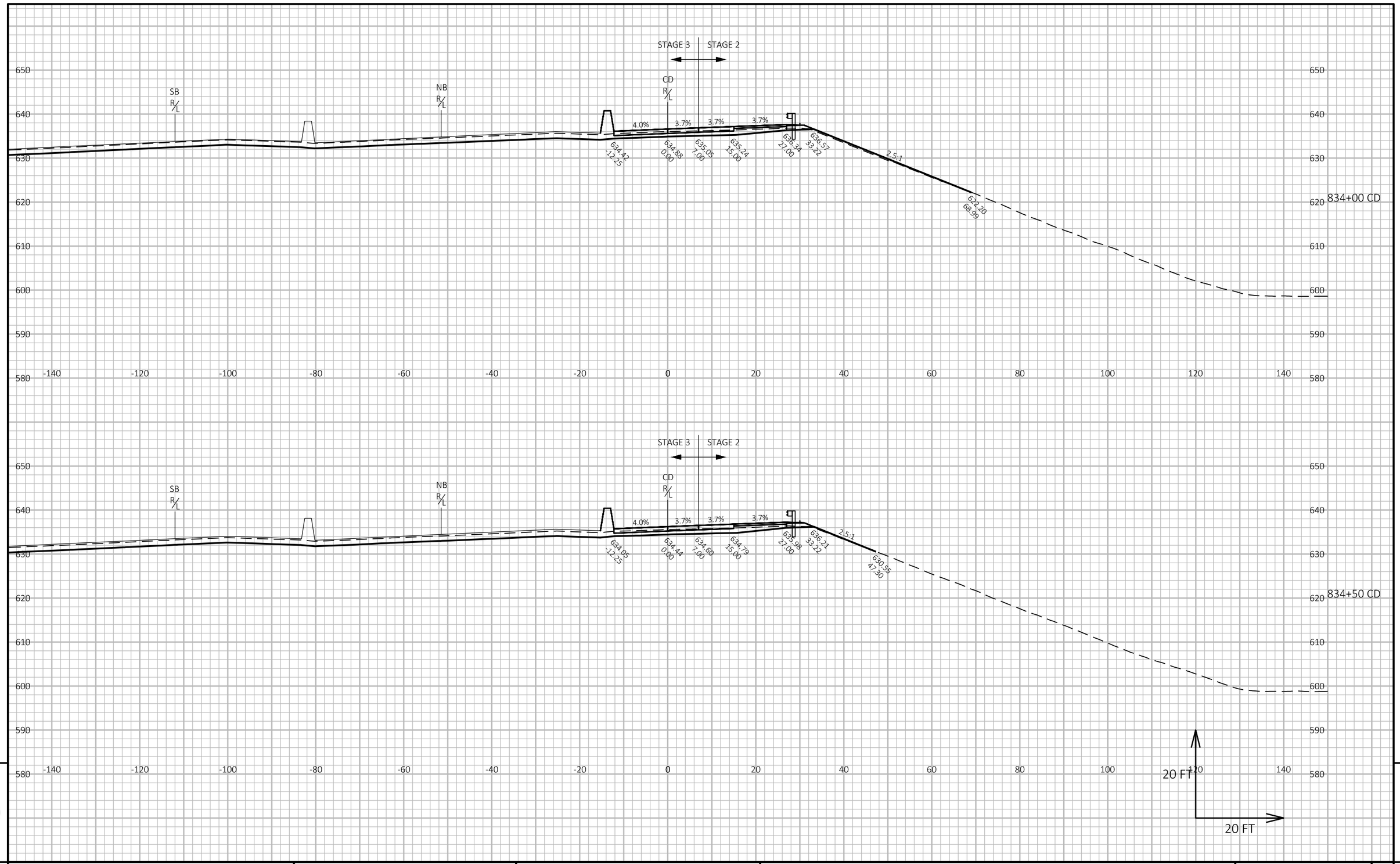
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 532	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 51

PLOT DATE : 7/30/2025 2:53 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

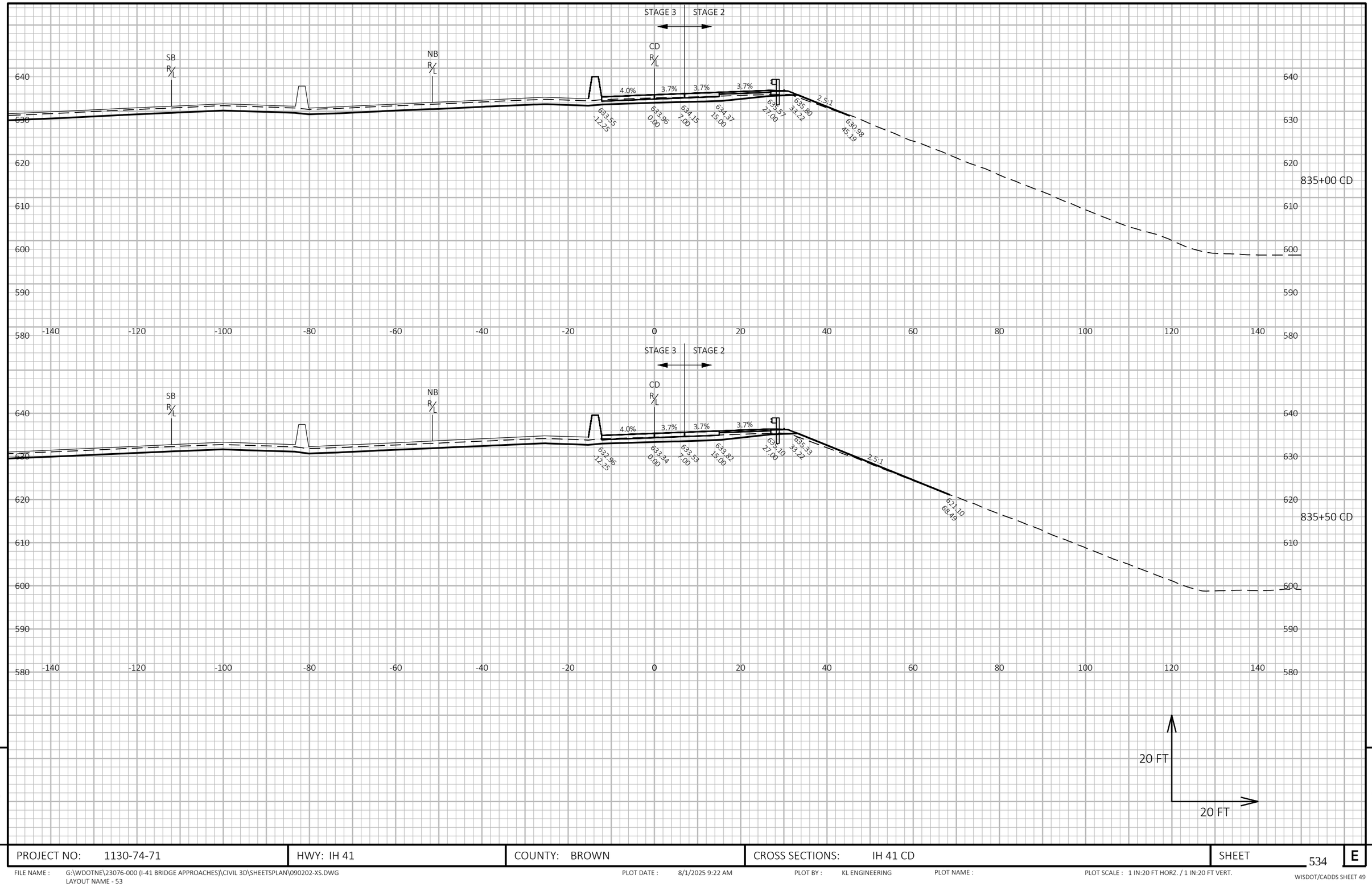


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 533 E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 52

PLOT DATE : 7/30/2025 2:53 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

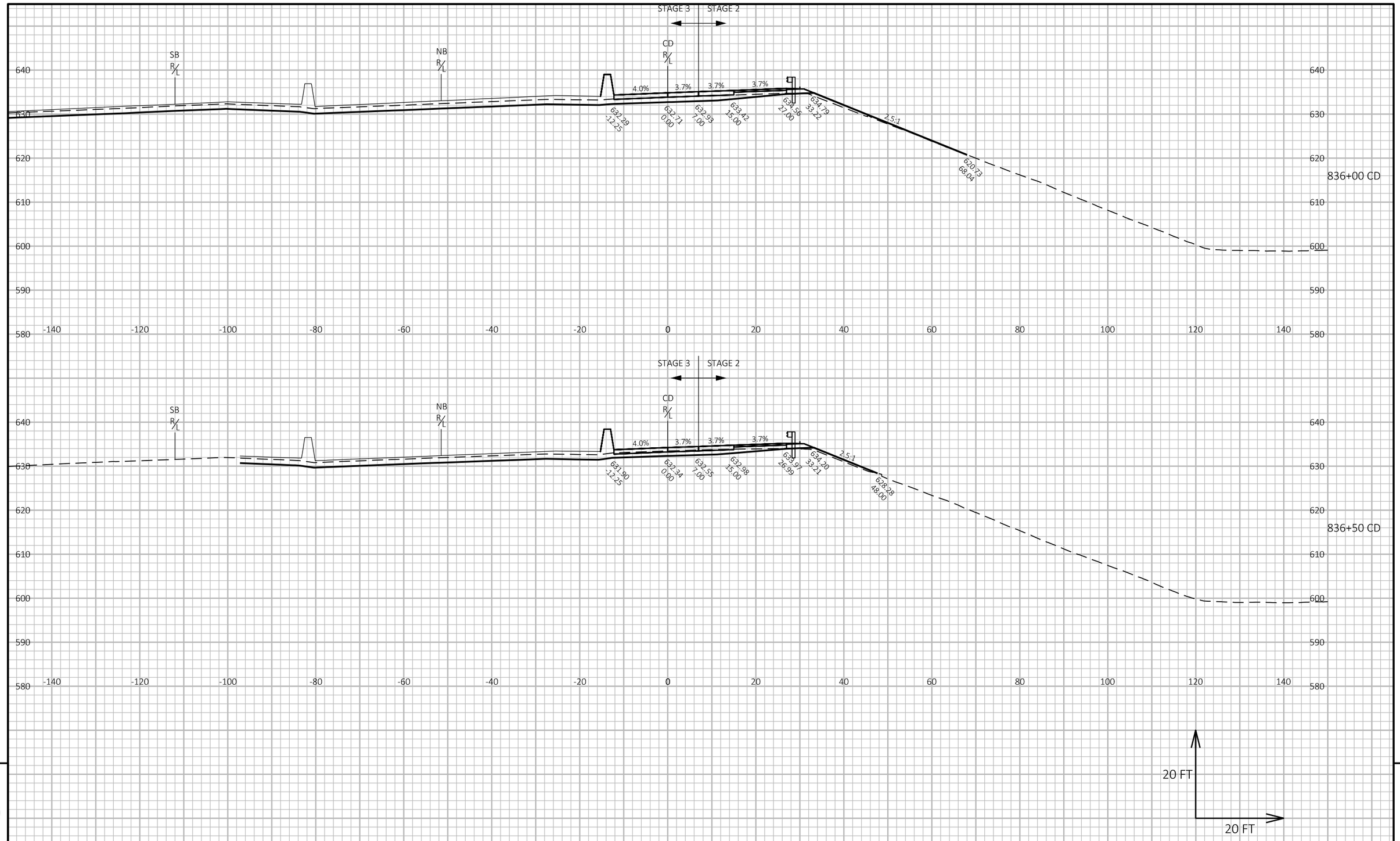
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 534	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 53

PLOT DATE : 8/1/2025 9:22 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 535	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 54

PLOT DATE : 7/30/2025 2:53 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

STAGE 3 | STAGE 2

SB R/L

NB R/L

CD R/L

3.5% 3.7% 3.7% 3.7% 2.5:1

631.64 -12.25 | 632.13 0.00 | 632.36 7.00 | 632.45 15.00 | 633.32 27.10 | 633.55 33.32 | 632.79 35.20

640 630 620 610 600 590 580

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

837+00 CD

STA 837+17.37 END OF CONCRETE PAVEMENT APPROACH SLAB

B-5-612 LIMITS:
STA 837+17.37 - STA 839+73.07

STAGE 3 | STAGE 2

SB R/L

NB R/L

CD R/L

3.7% 3.7% 3.7% 3.7% 2.5:1

632.03 0.00 | 632.21 7.00 | 632.27 15.00 | 633.07 27.10 | 633.30 35.32 | 632.55 35.20

640 630 620 610 600 590 580

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

837+17 CD

20 FT

20 FT

9 9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 536	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 55

PLOT DATE : 7/30/2025 2:54 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

STA 839+73.07 START OF CONCRETE PAVEMENT APPROACH SLAB

STAGE 3 STAGE 2

SB R/L

NB R/L

CD R/L

3.1%

627.08 -12.25

627.64 0.00

839+73 CD

640 630 620 610 600 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

STAGE 3 STAGE 2

SB R/L

NB R/L

CD R/L

3.2% 3.9% 3.9%

626.56 -12.25

627.11 0.00

627.37 7.00

627.64 15.00

839+93 CD

640 630 620 610 600 590

-140 -120 -100 -80 -60 -40 -20 0 20 40 60 80 100 120 140

20 FT

20 FT

9

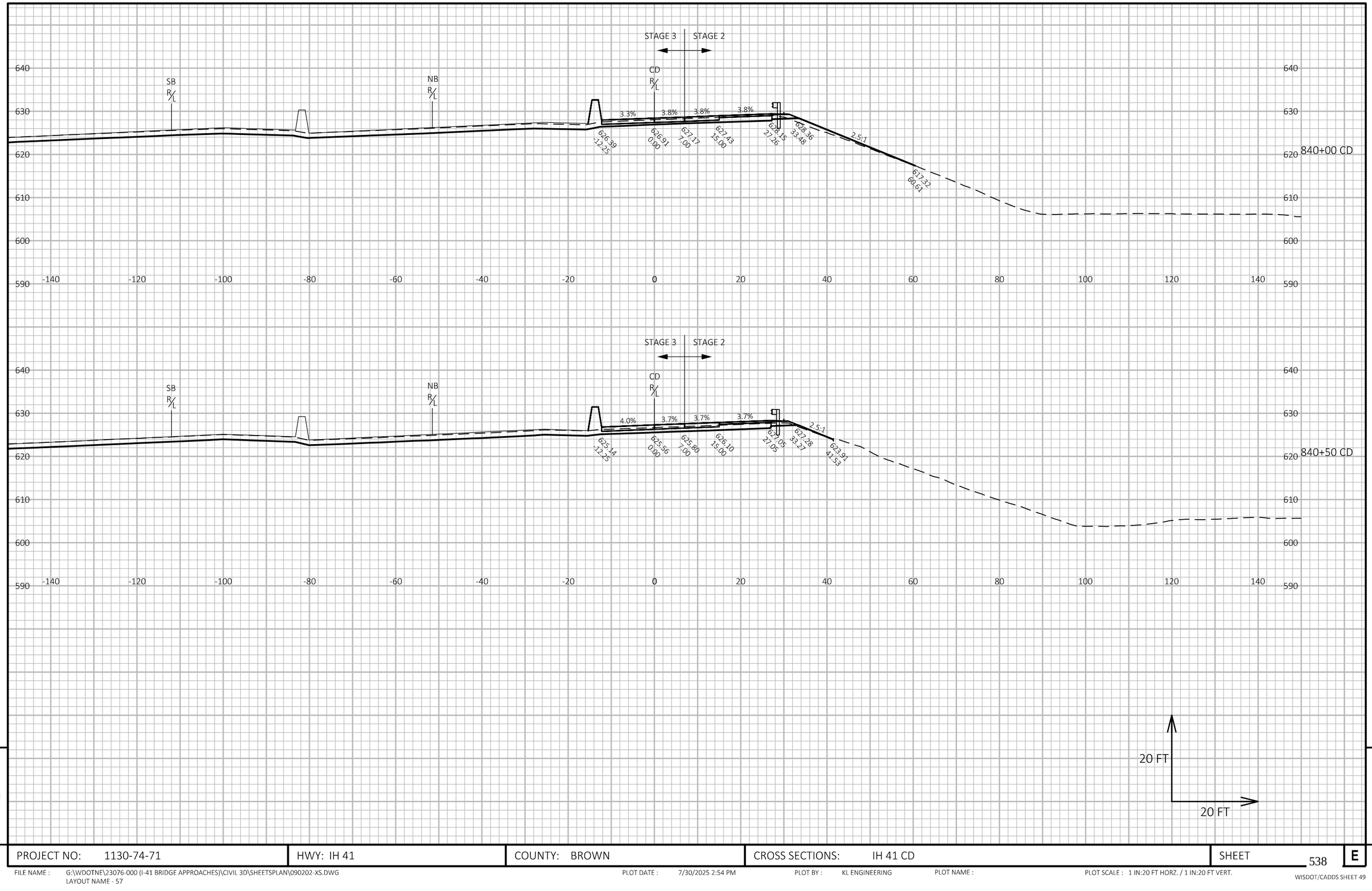
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 537	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 56

PLOT DATE : 7/30/2025 2:54 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

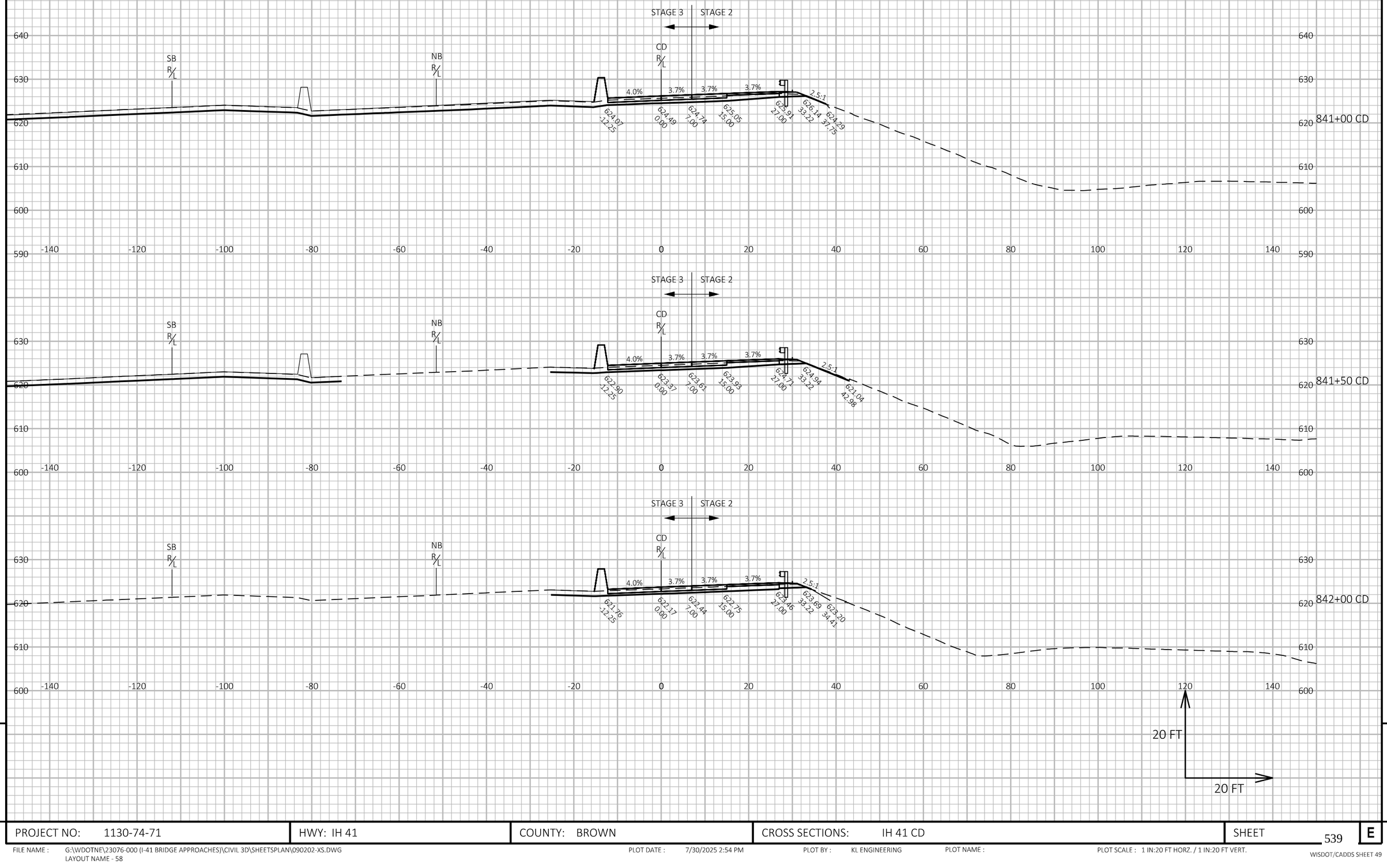
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 538	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 57

PLOT DATE : 7/30/2025 2:54 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

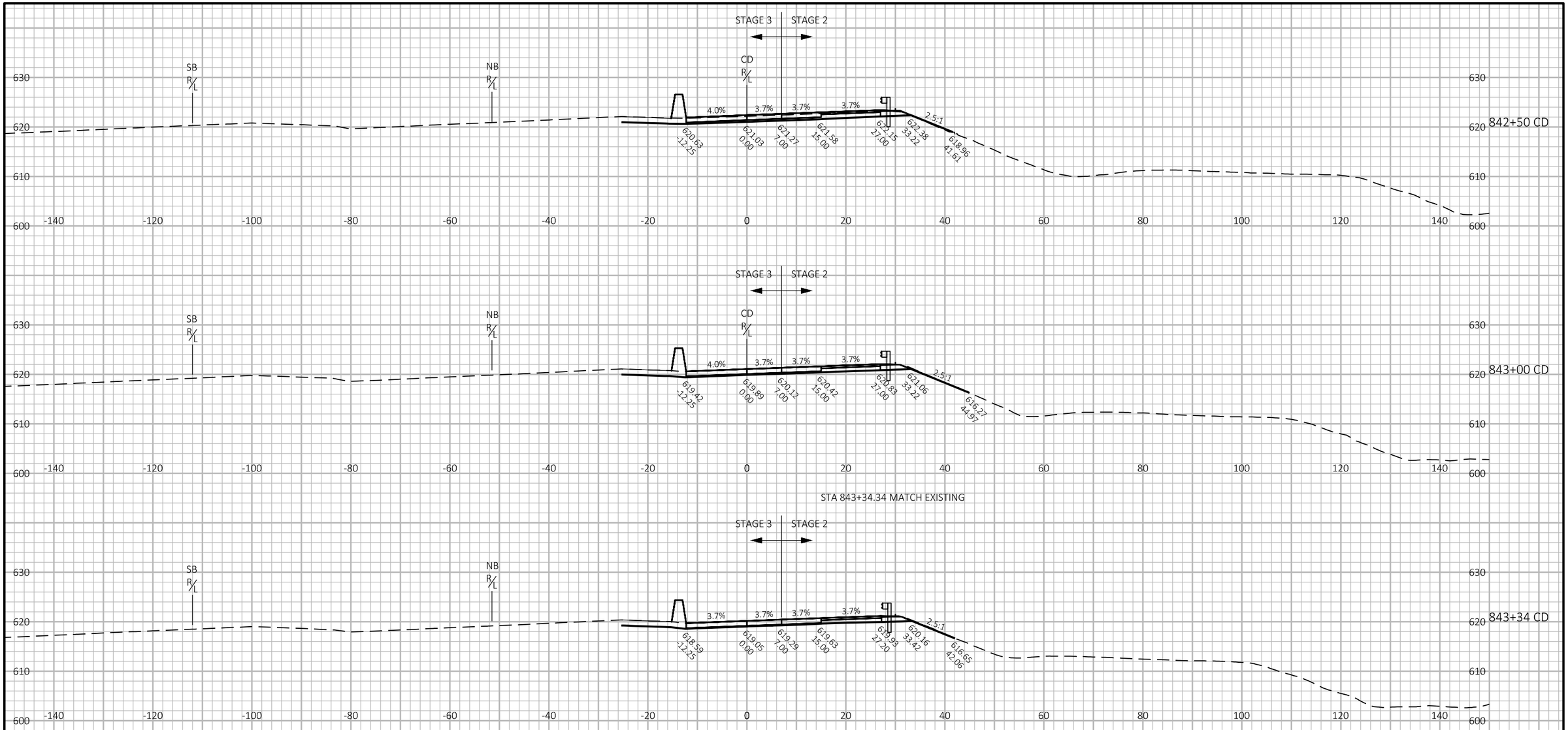
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 539	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 58

PLOT DATE : 7/30/2025 2:54 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

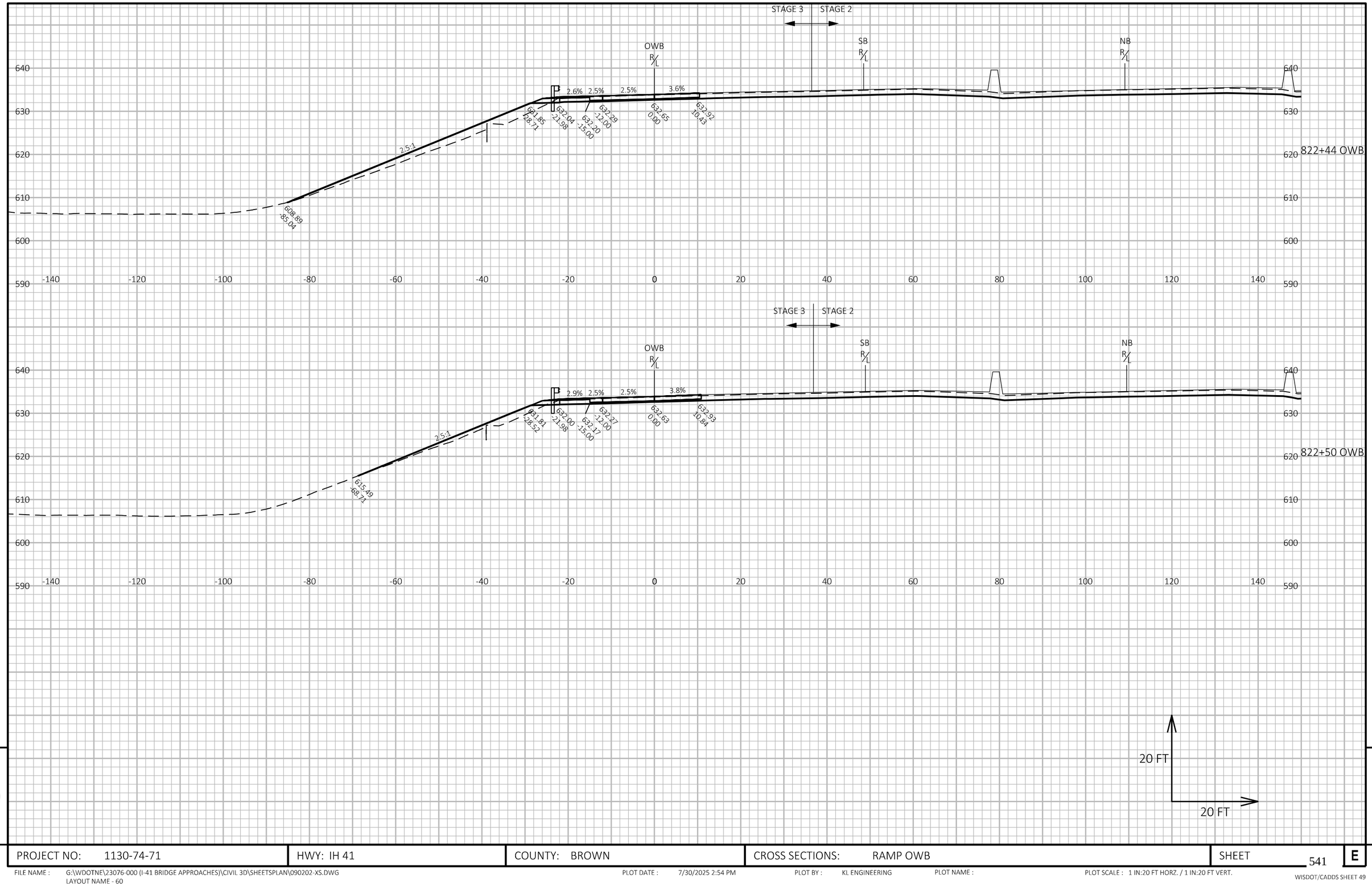


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: IH 41 CD	SHEET 540	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 59

PLOT DATE : 7/30/2025 2:54 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



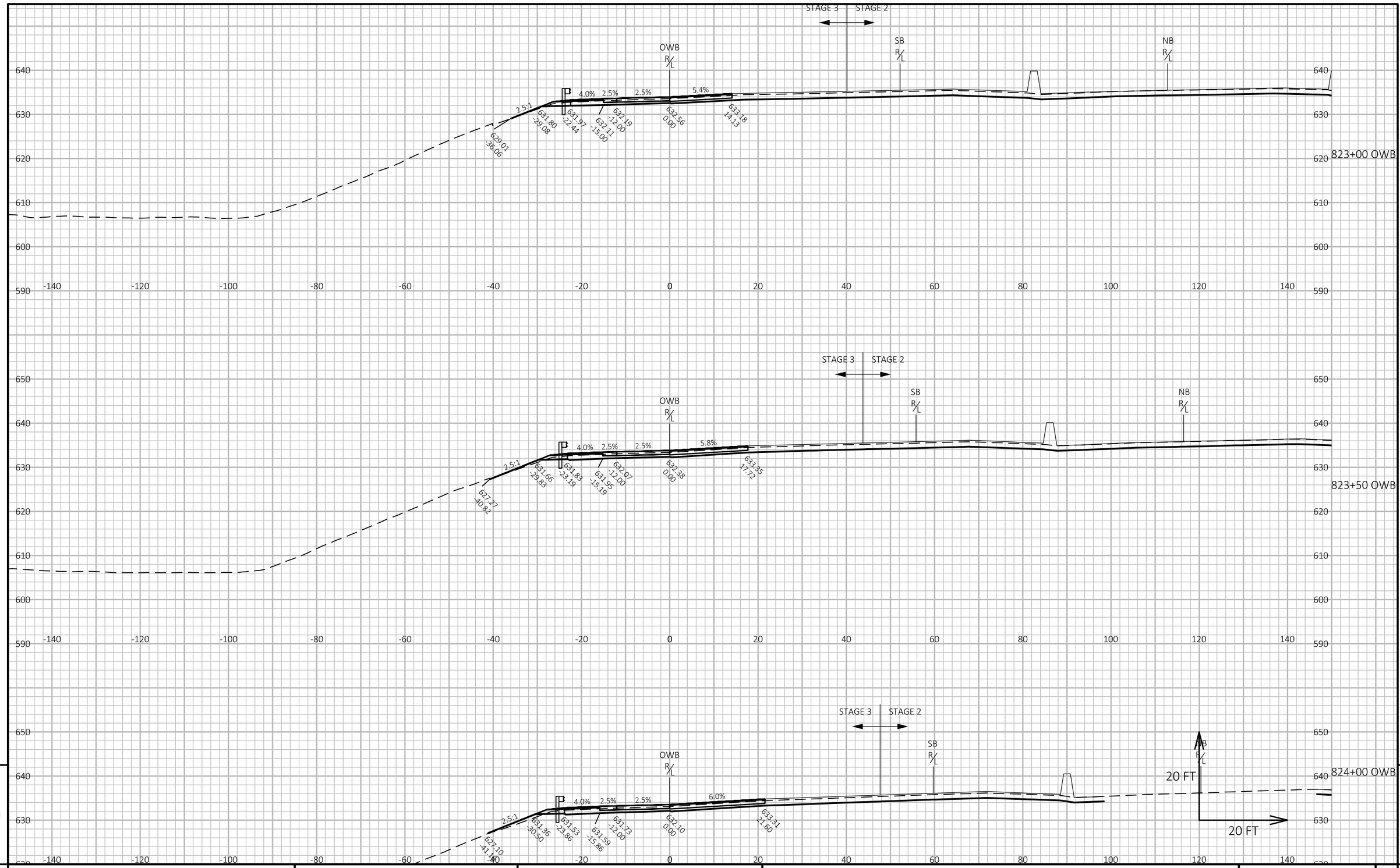
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: RAMP OWB	SHEET 541	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 60

PLOT DATE : 7/30/2025 2:54 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

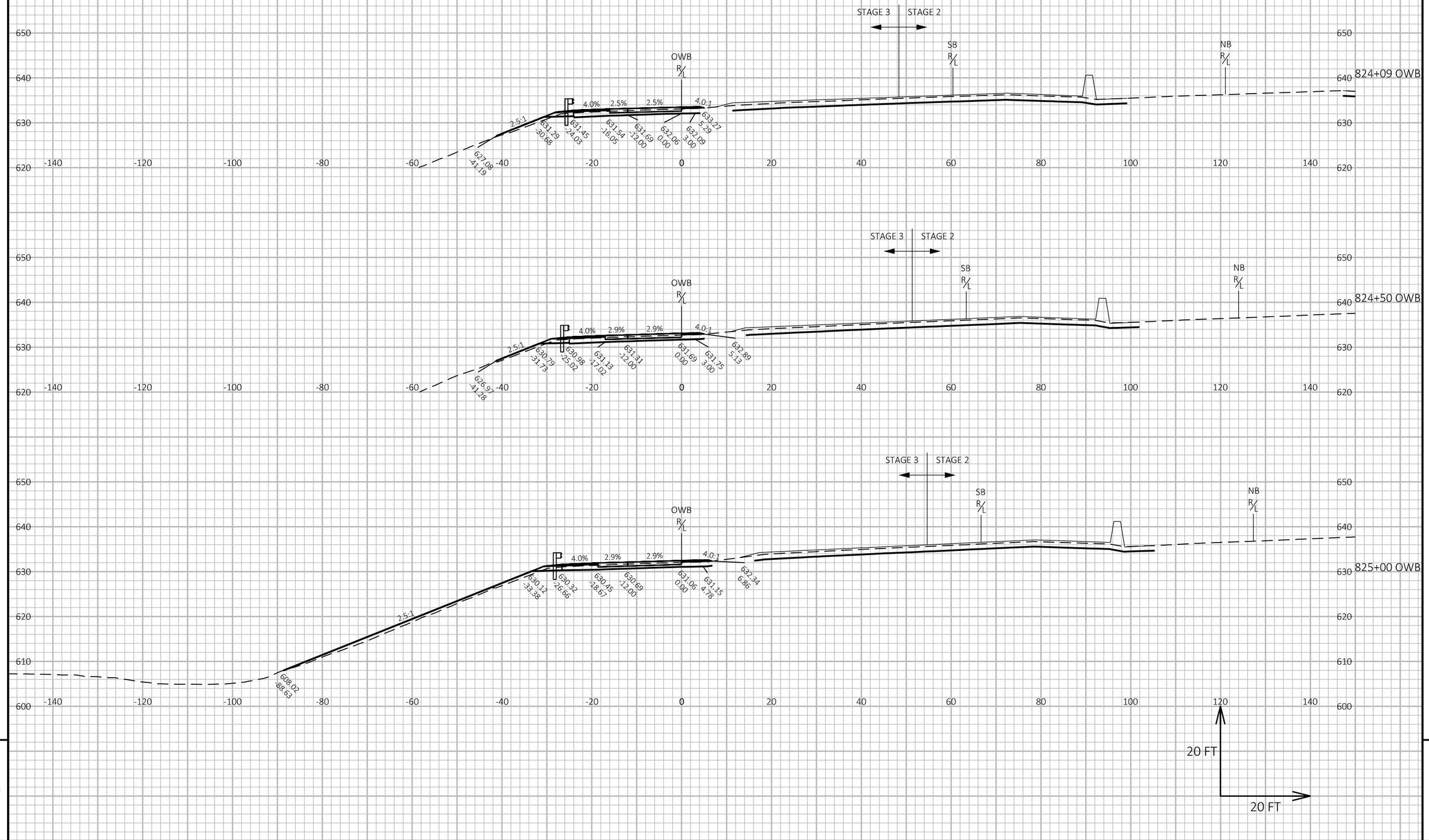
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: RAMP OWB	SHEET 542	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 61

PLOT DATE : 7/30/2025 2:55 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

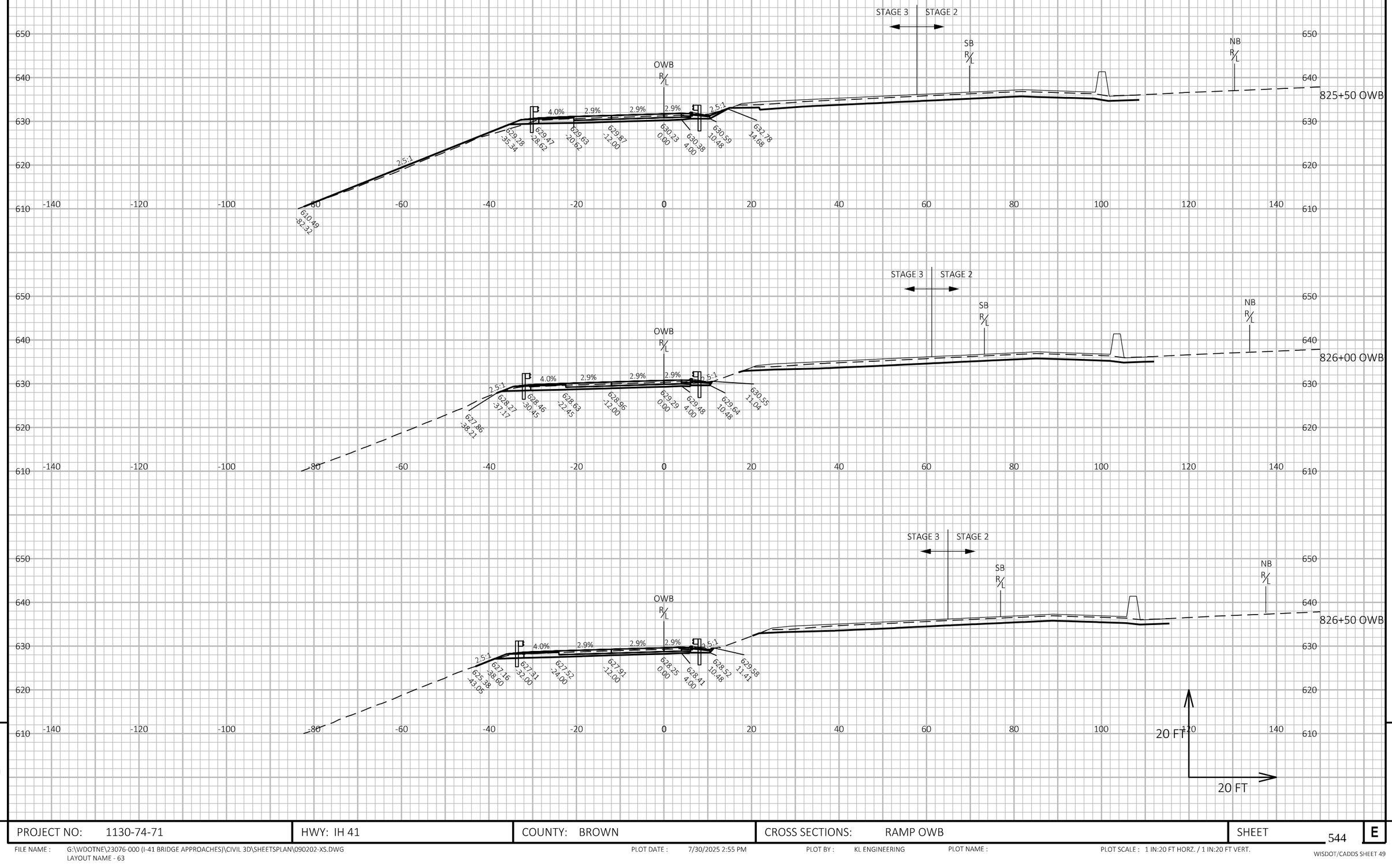
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: RAMP OWB	SHEET 543	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 62

PLOT DATE : 7/30/2025 2:55 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

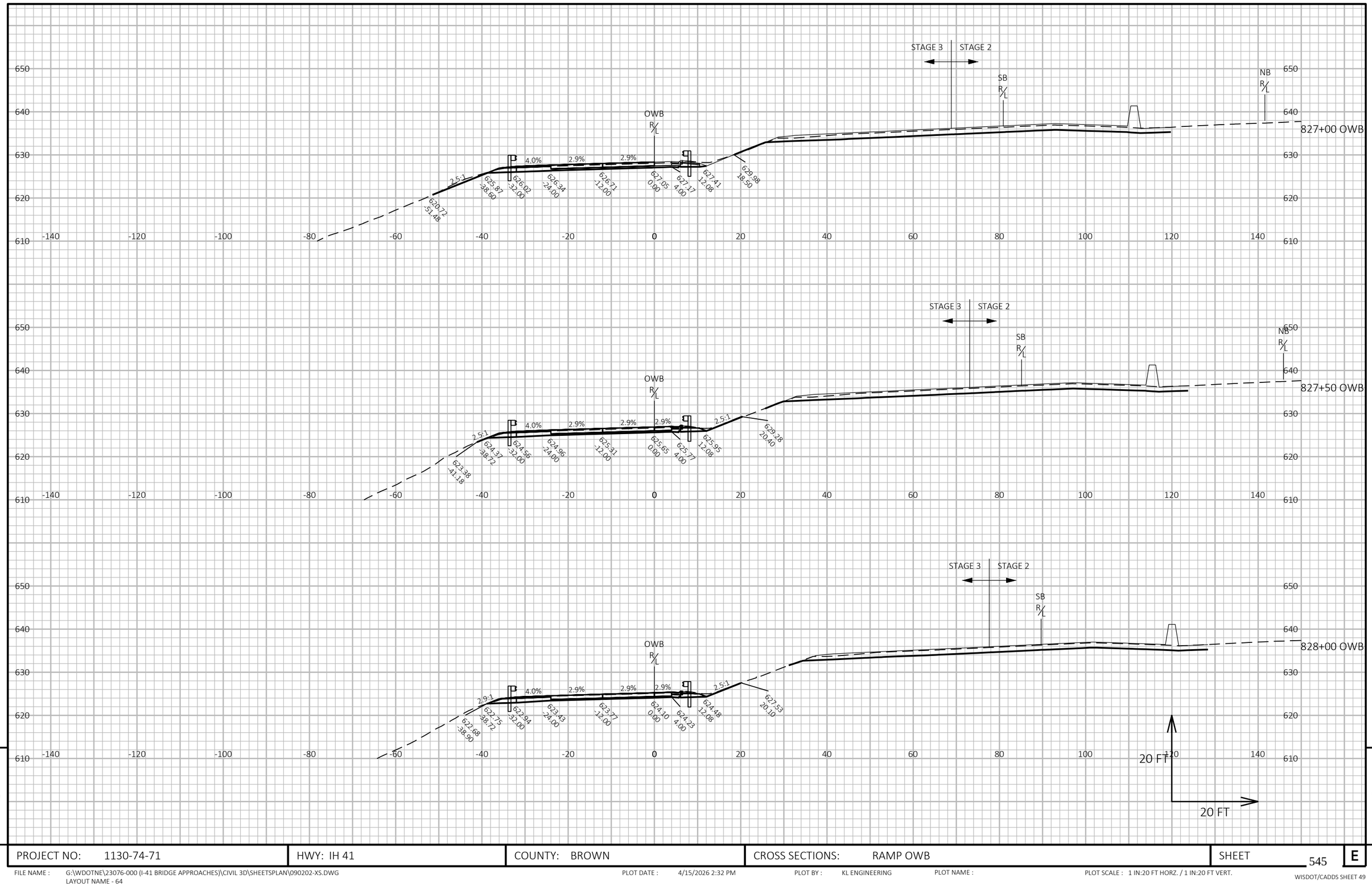


PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: RAMP OWB	SHEET 544	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 63

PLOT DATE : 7/30/2025 2:55 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

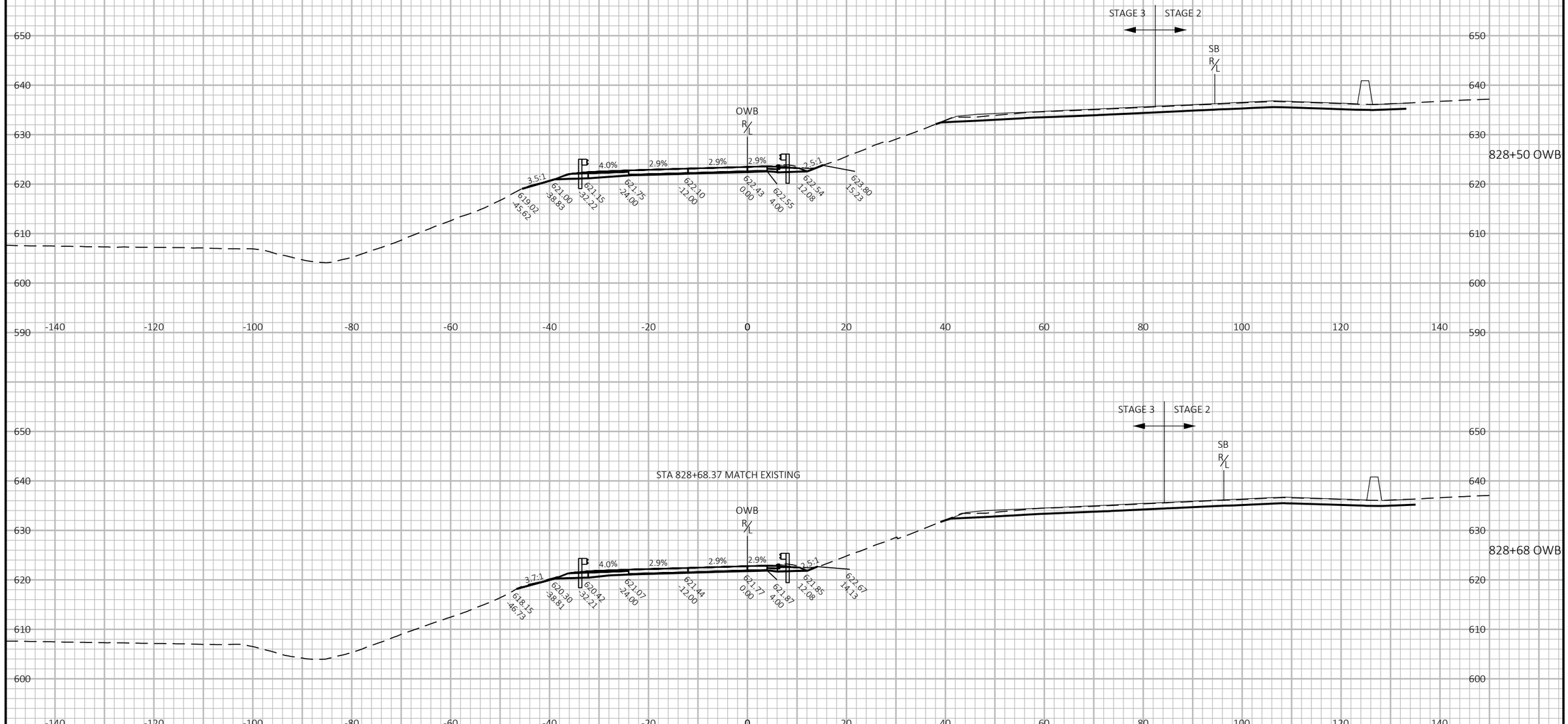
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: RAMP OWB	SHEET 545	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 64

PLOT DATE : 4/15/2026 2:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

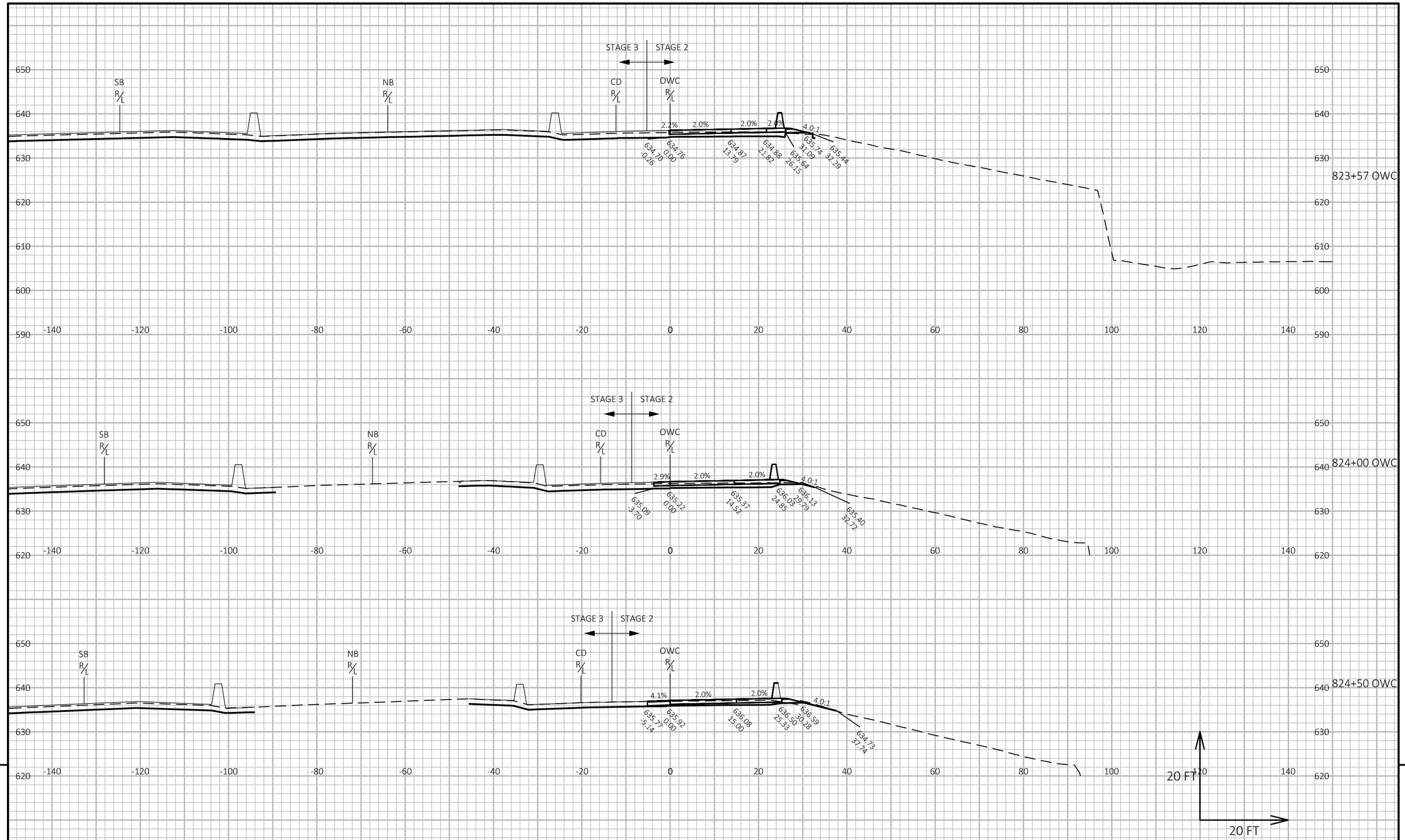
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: RAMP OWB	SHEET 546	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 65

PLOT DATE : 4/15/2026 2:32 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



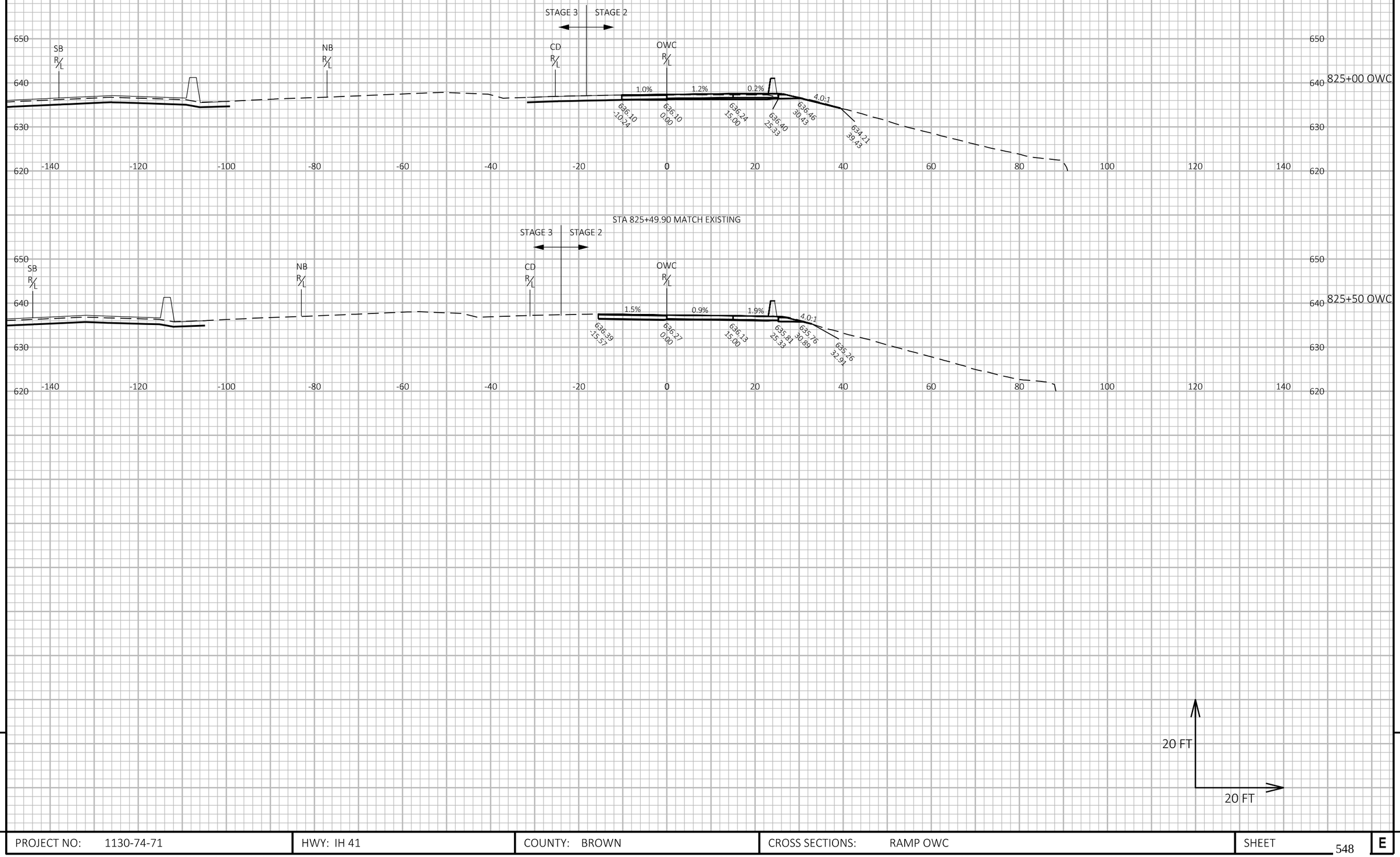
9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: RAMP OWC	SHEET 547	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 66

PLOT DATE : 7/30/2025 2:56 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: RAMP OWC	SHEET 548	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 67

PLOT DATE : 7/30/2025 2:56 PM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

EAT TAPER/MATCH EXISTING SHOULDER
STA 809+94.49

FES
R/L

STAGE 3 | STAGE 2

6.0:1

2.5%

632.05
-16.42

631.65
-12.60

631.10
-6.00

631.37
0.00

809+95 FES

640
630
620
610
600
595

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT
10 FT

9

9

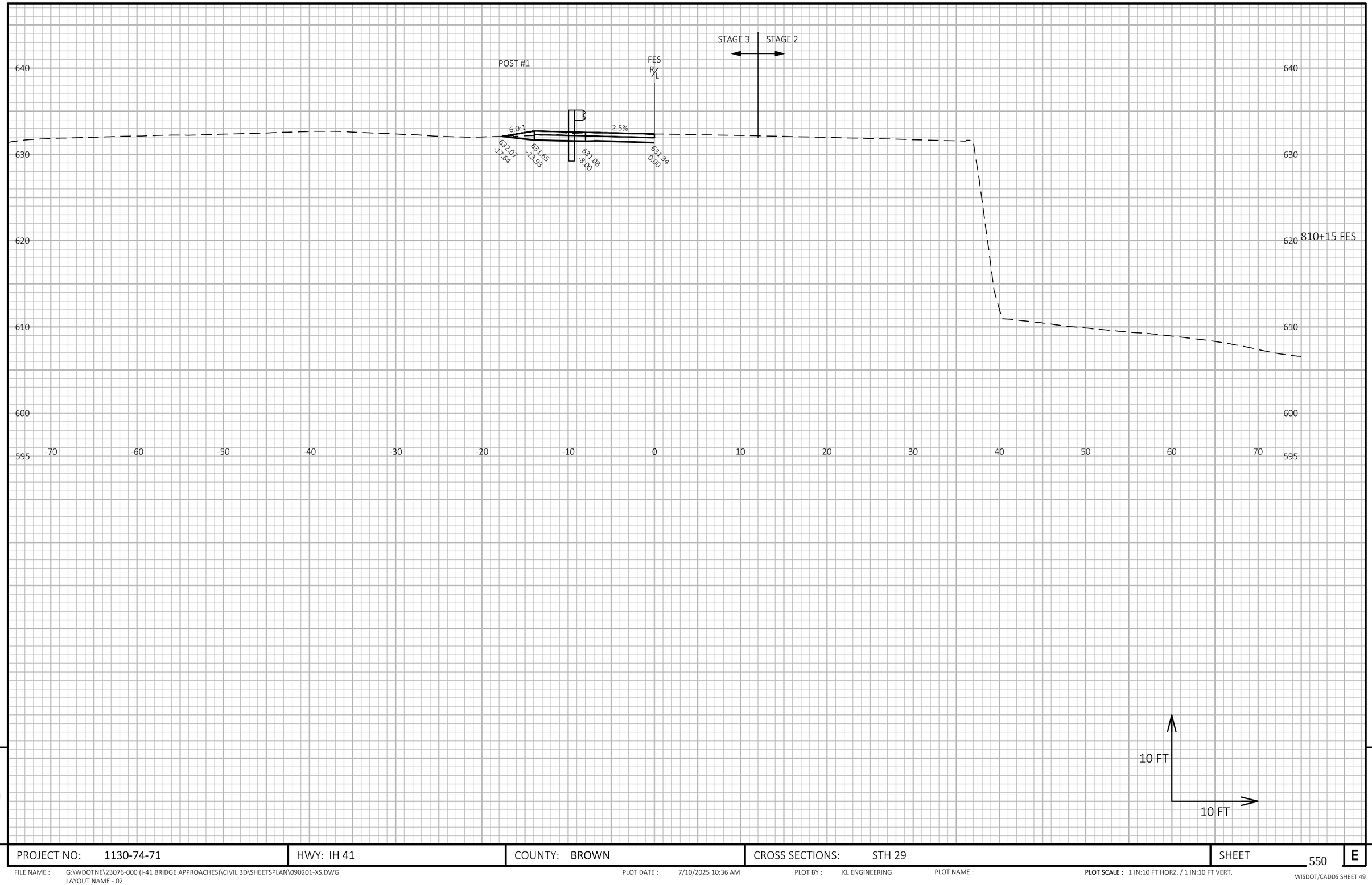
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 549	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/10/2025 10:36 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

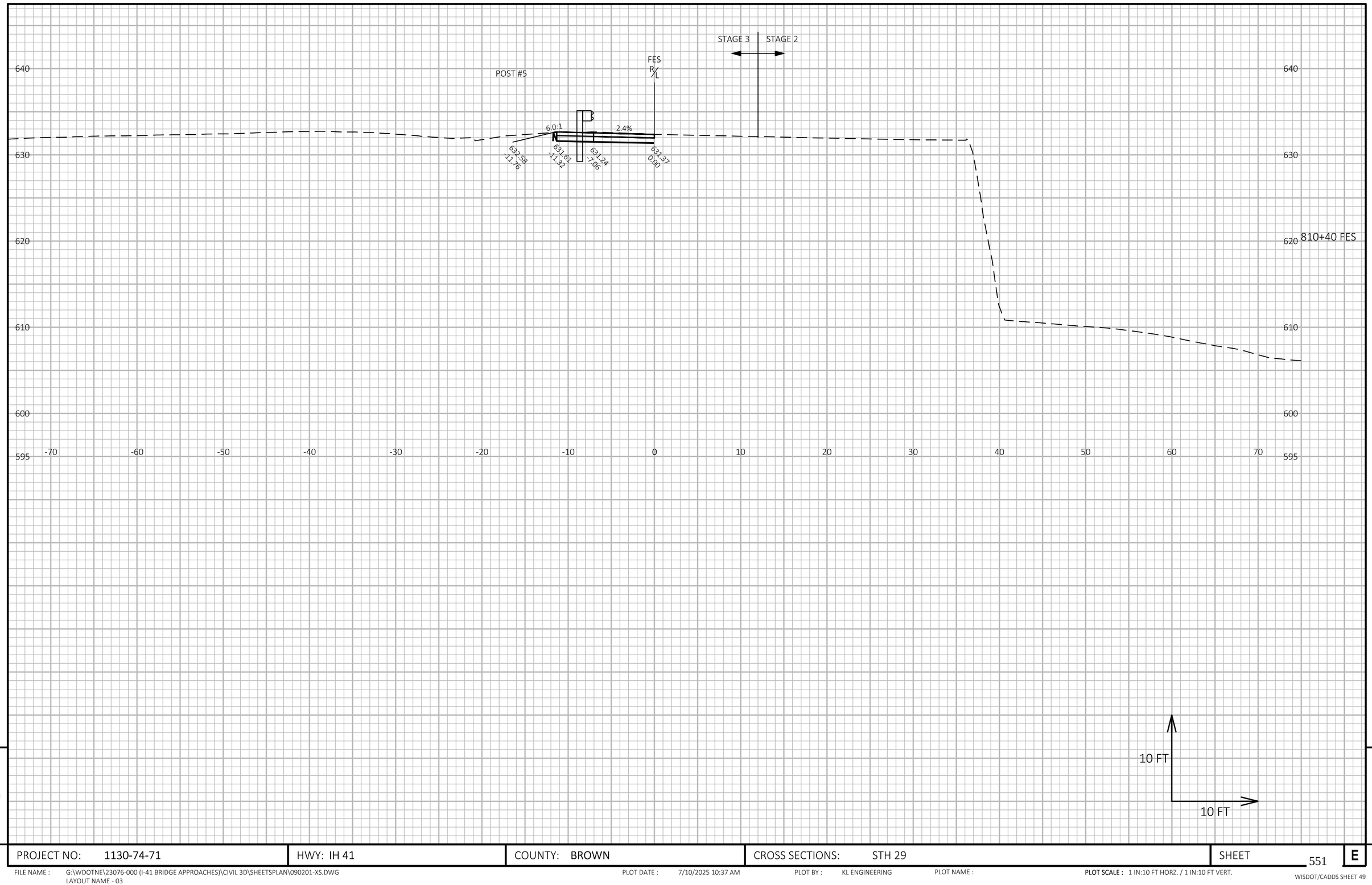
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 550	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/10/2025 10:36 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

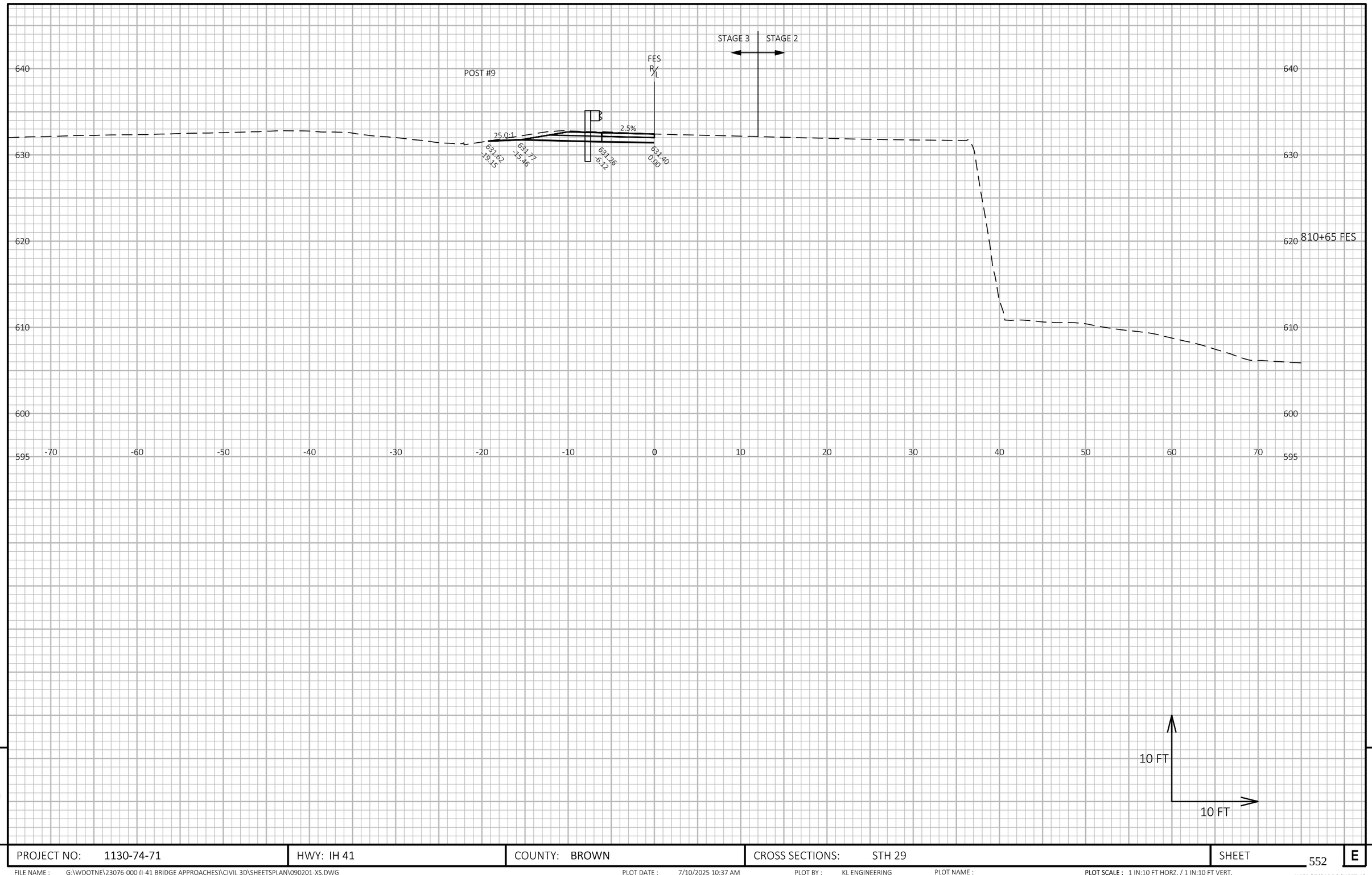
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 551	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

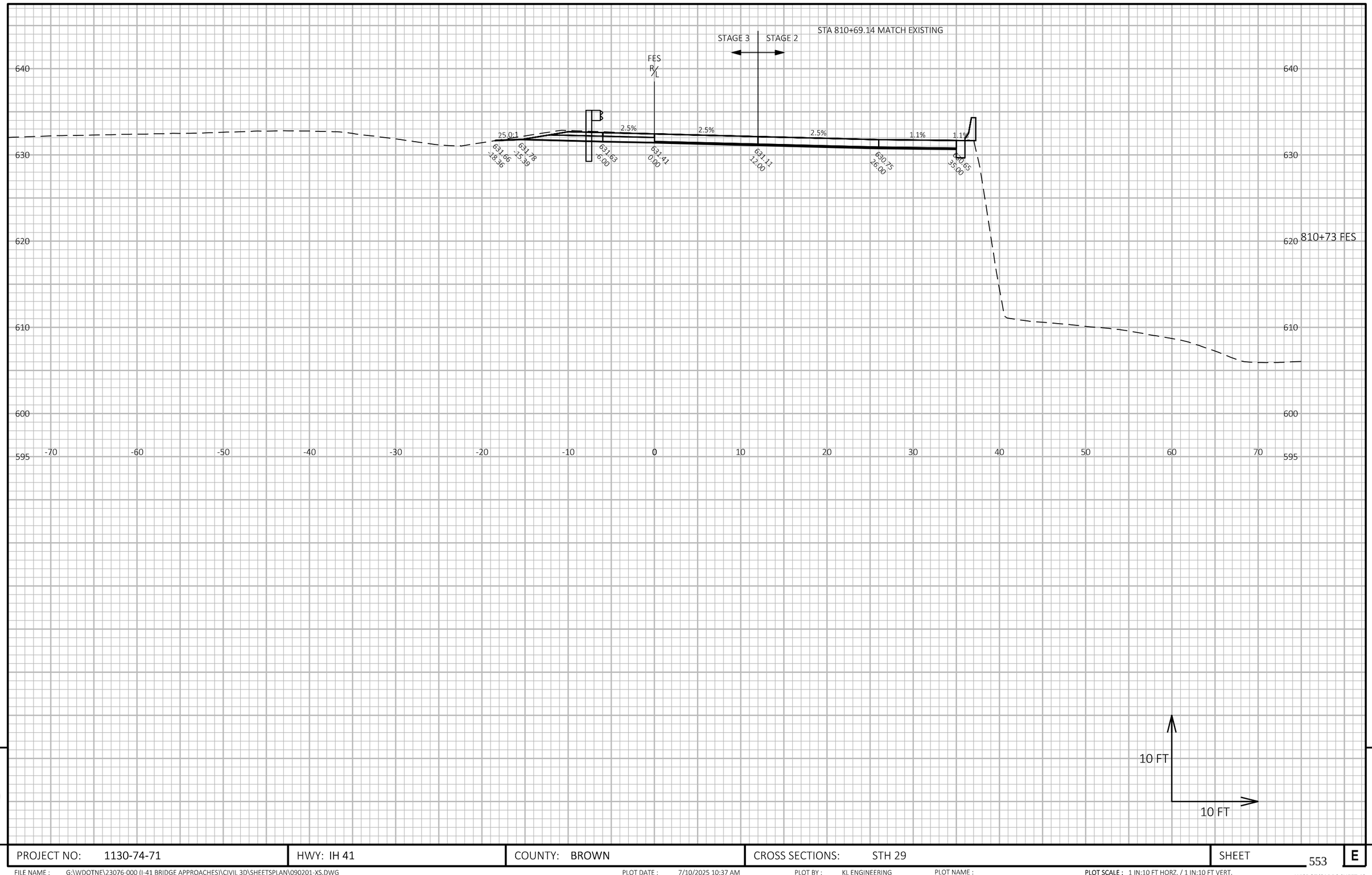
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 552	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

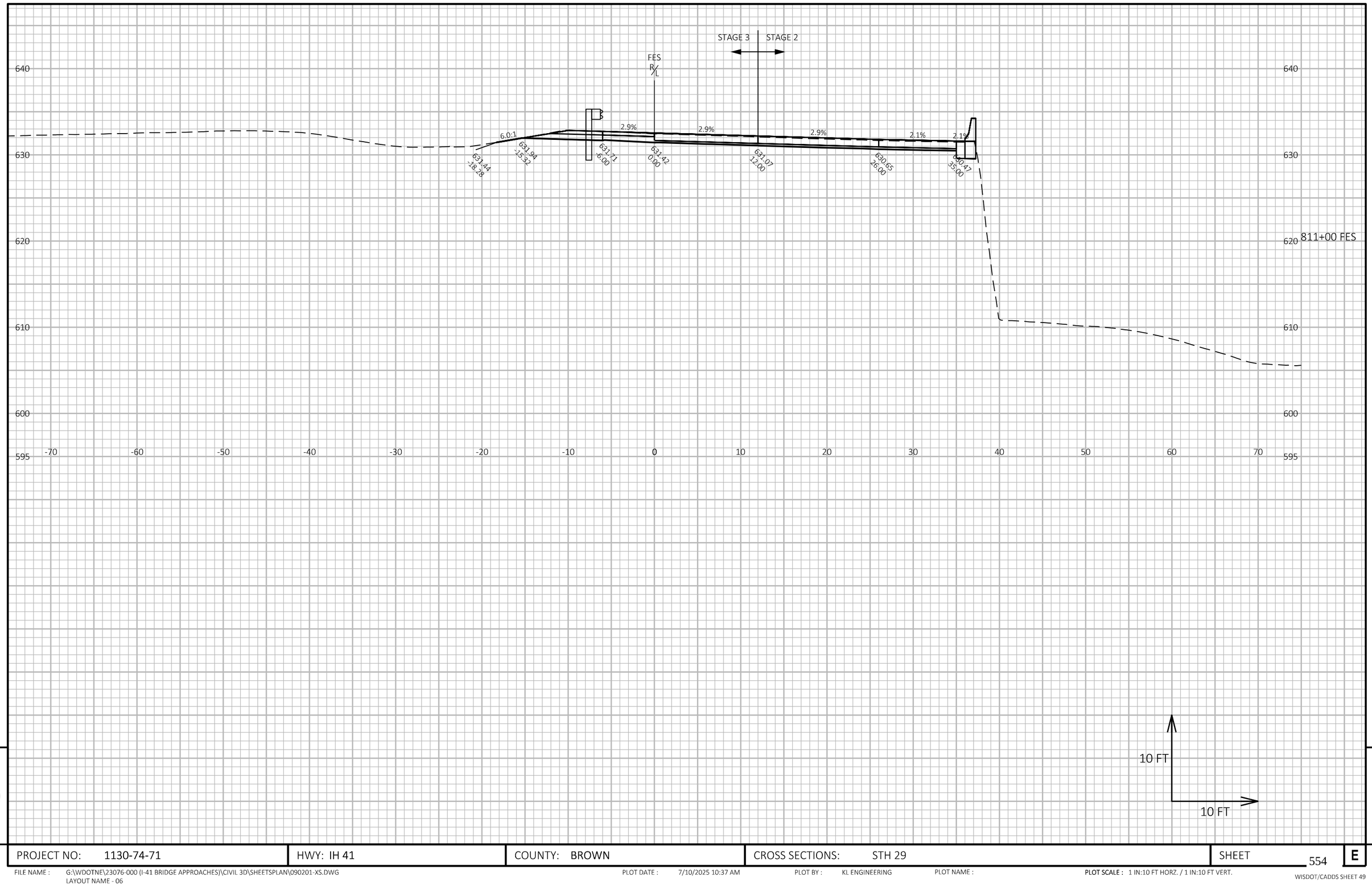
9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 553	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

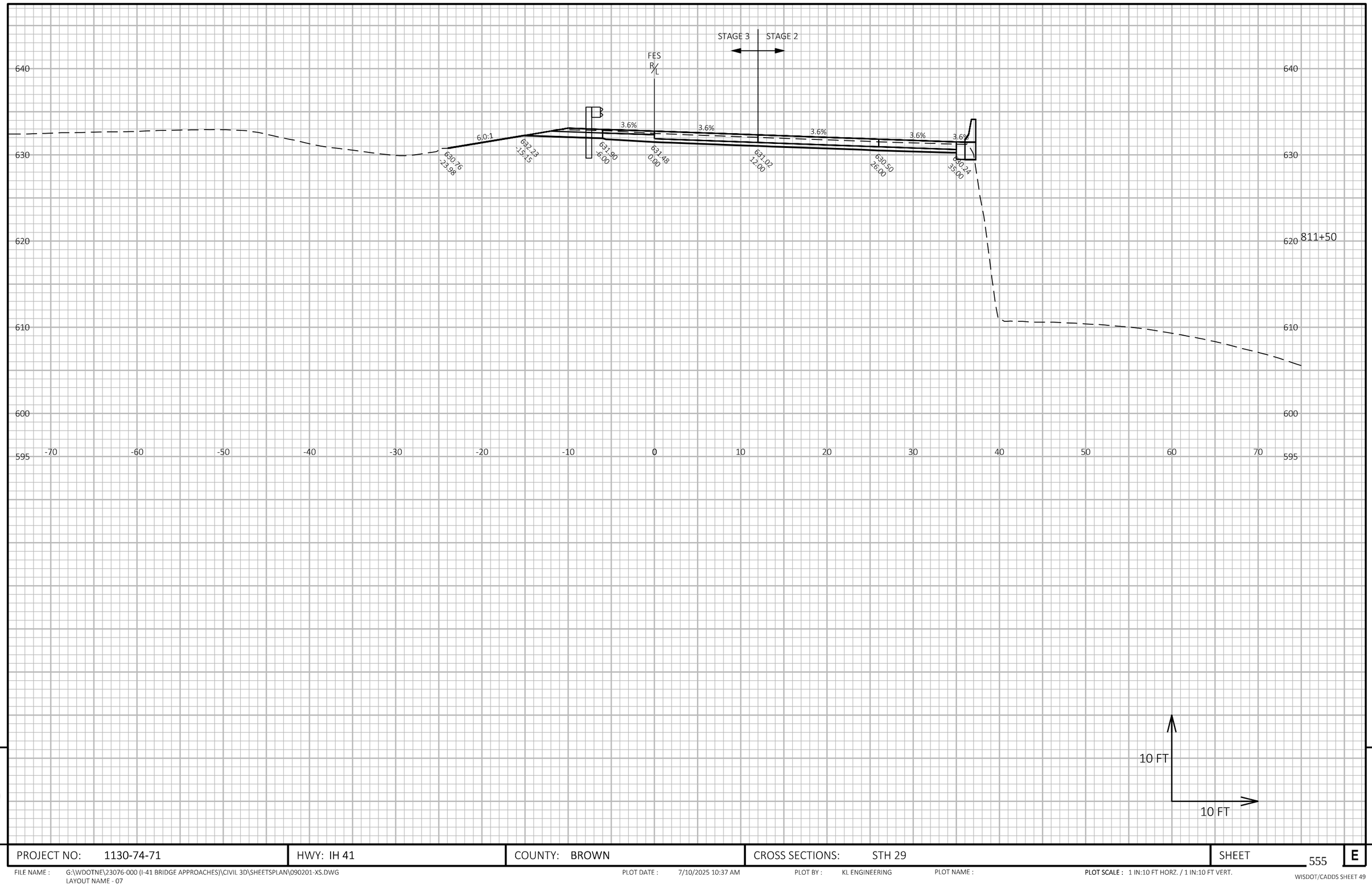
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 554	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

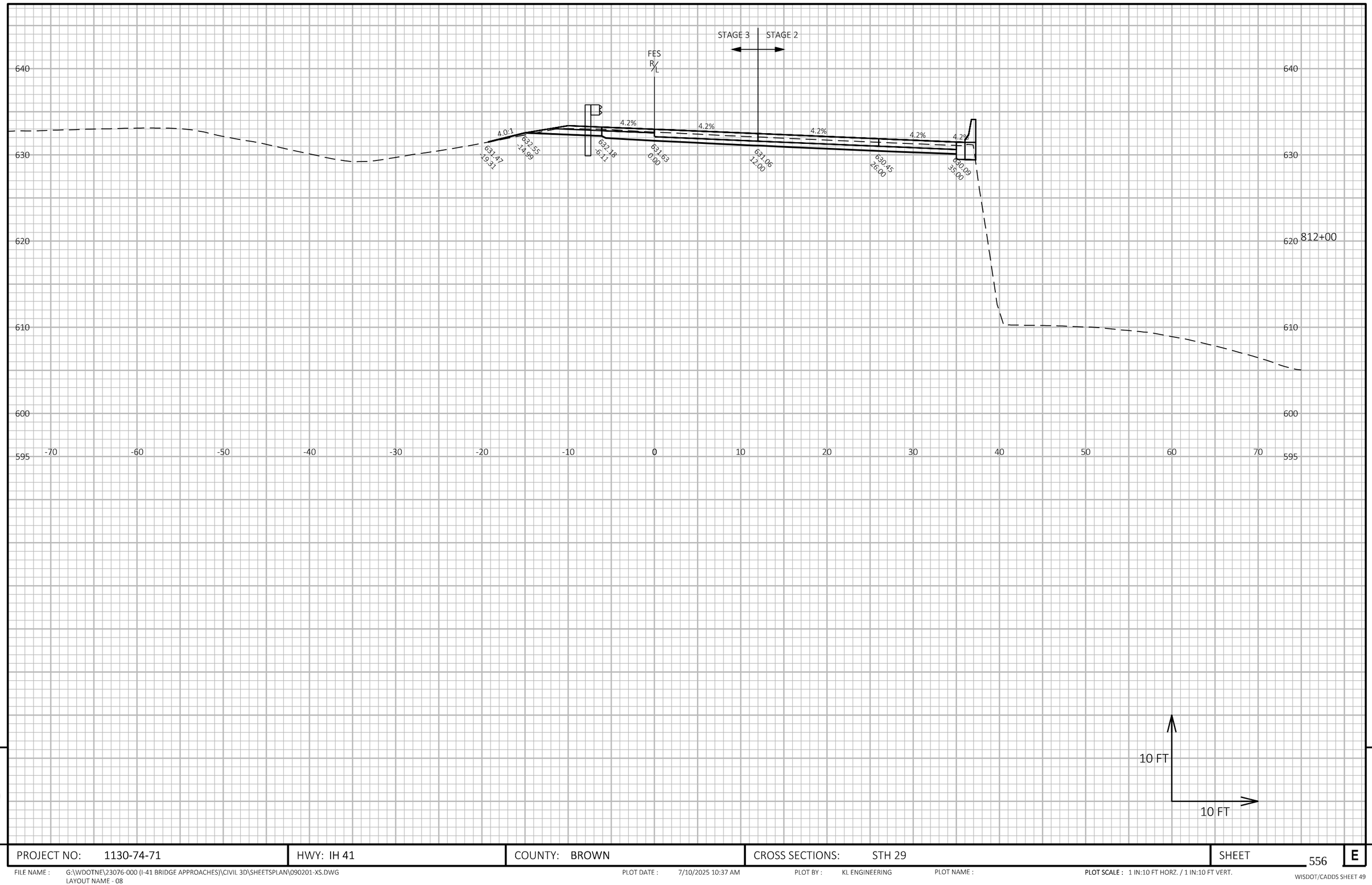
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 555	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

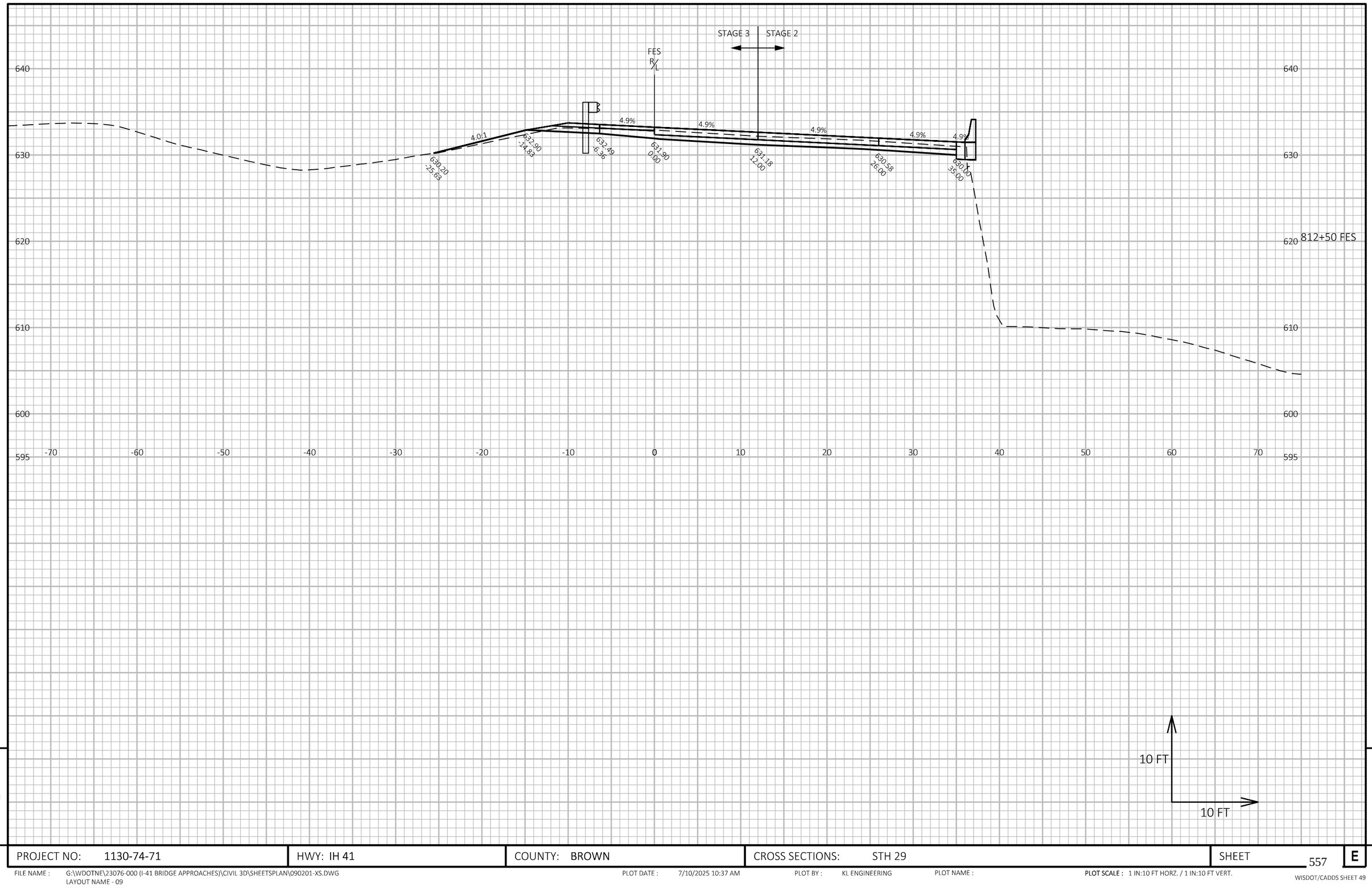
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 556	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 557	E

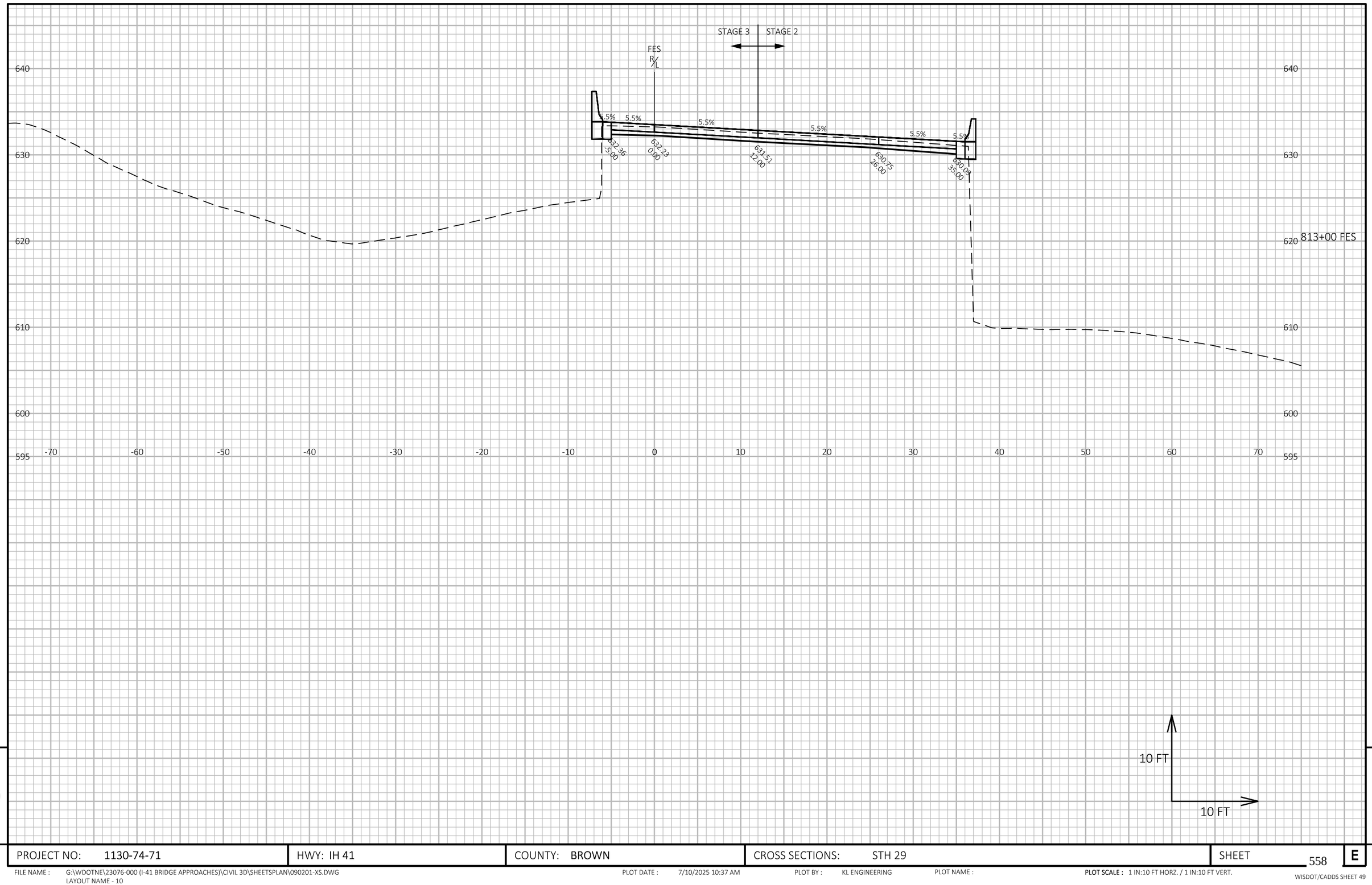
9

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 558	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

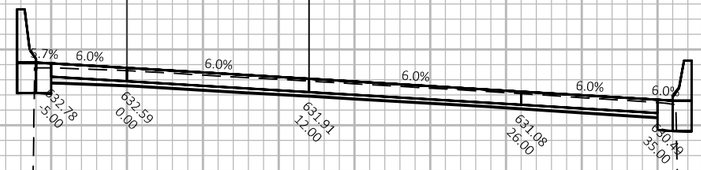
WISDOT/CADDS SHEET 49

STA 813+44.16 END OF CONCRETE PAVEMENT APPROACH SLAB

STAGE 3 | STAGE 2

B-5-663 LIMITS:
STA 813+44.16 - STA 814+88.15

FES
℄



813+44 FES

640
630
620
610
600
595

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT
10 FT

9

9

PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 559	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

STAGE 3 STAGE 2

STA 814+88.15 START OF CONCRETE PAVEMENT APPROACH SLAB

FES
℄

-1.1% 6.0% 6.0% 6.0% 6.0% 6.0%

633.49
-5.00

633.36
0.00

632.66
12.00

631.90
26.00

631.34
35.00

640 630 620 610 600 595

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

814+88 FES

10 FT

10 FT

9

9

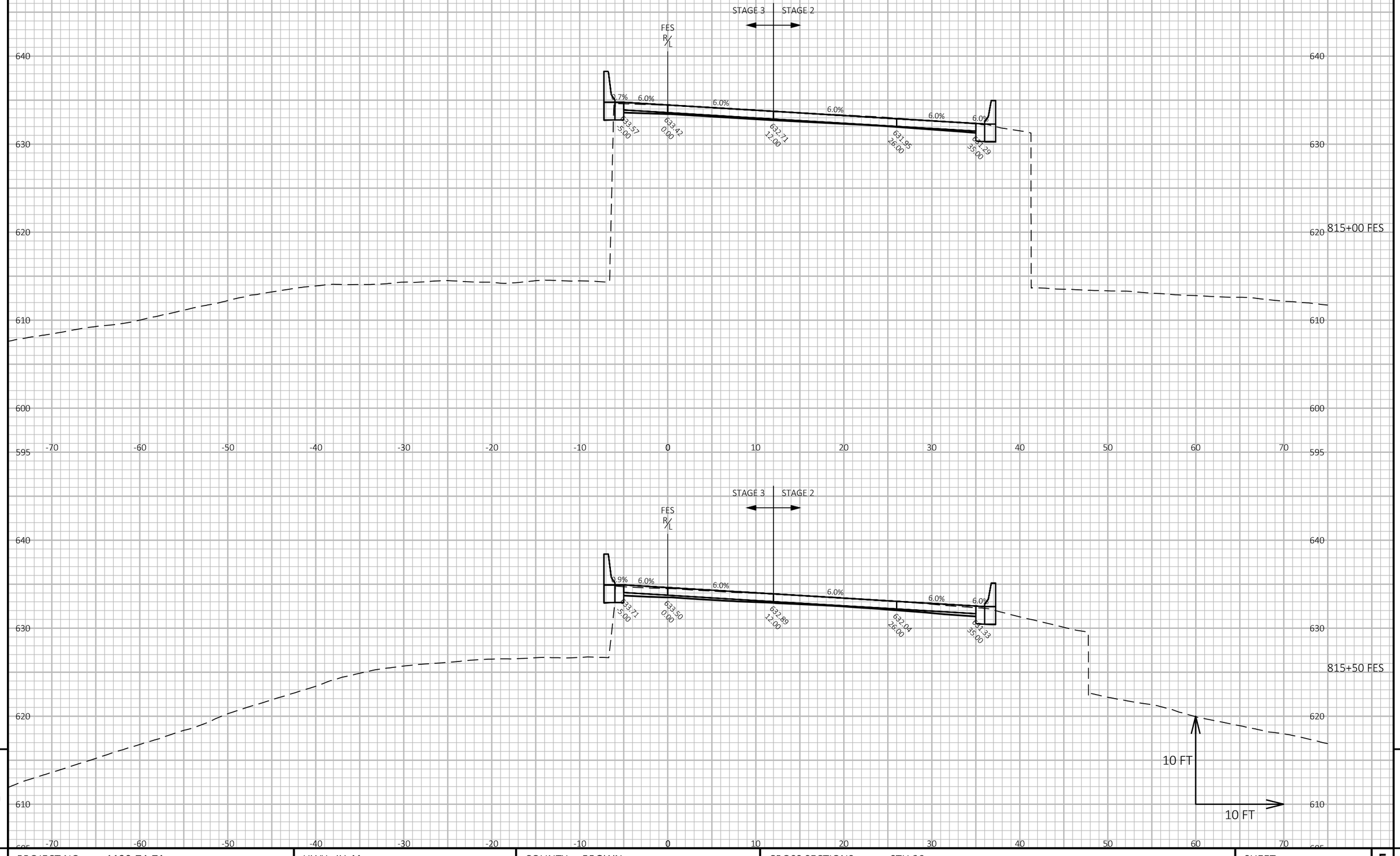
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 560	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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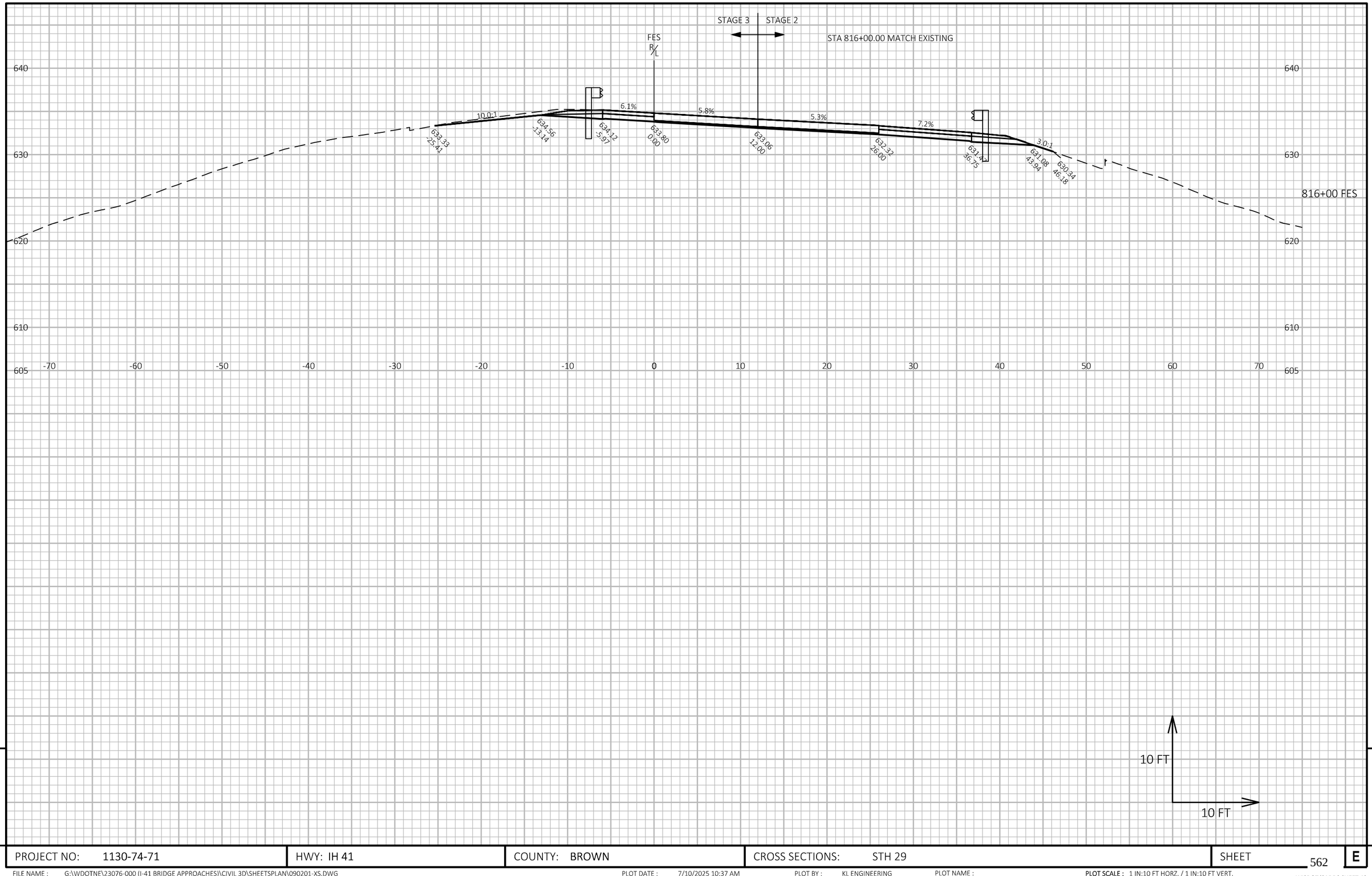
PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 561	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1130-74-71	HWY: IH 41	COUNTY: BROWN	CROSS SECTIONS: STH 29	SHEET 562	E

FILE NAME : G:\WDOTNE\23076-000 (I-41 BRIDGE APPROACHES)\CIVIL 3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 7/10/2025 10:37 AM PLOT BY : KL ENGINEERING PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov