02-27-2026 LETTING ITEM 135

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	1
	ILLINOIS	CONTRACT NO. 78B37		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAP ROUTE 857 (IL 14)
SECTION D9 BRIDGE OVERLAY 2026-3
PROJECT BR-T761(501)
BRIDGE OVERLAY, BRIDGE REPAIR
WHITE COUNTY

C-99-080-25

D-99-047-25

LOCATION OF SECTION INDICATED THUS: •

FOR INDEX OF SHEETS, SEE SHEET NO. 3

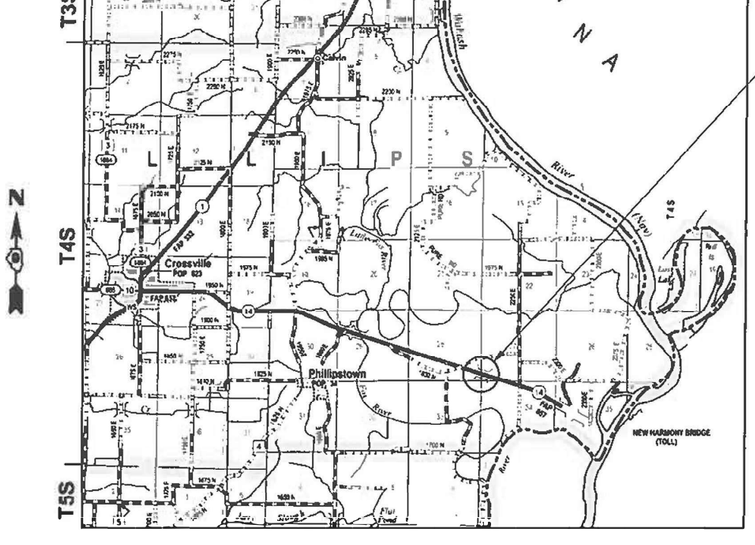
FOR SUMMARY OF QUANTITIES, SEE SHEET NOS. 4-6

TRAFFIC DATA

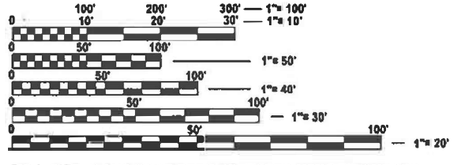
ROADWAY CLASSIFICATION: MINOR ARTERIAL
CURRENT ADT (2023) = 250
DESIGN YEAR ADT (2046) = 310
SU = 0%
MU = 0%

TOWNSHIP: PHILLIPS TOWNSHIP

POSTED SPEED: 55 MPH



PROJECT LOCATION
SN 097-0032
STA. 268+25.75
IL 14 OVER FOX RIVER SLOUGH



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: EHREN KIRBY, P.E.
PROJECT MANAGER: KUHN & TRELLO CONSULTING ENGINEERS, LLC

CONTRACT NO. 78B37

GROSS LENGTH = 510.00 FT. = 0.097 MILE
NET LENGTH = 510.00 FT. = 0.097 MILE

KEVIN L. KUHN
062-056866
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

EXPIRES: 11/30/2025

SIGNATURE:

DATE SIGNED: 10/15/2025

KUHN & TRELLO CONSULTING ENGINEERS, A Limited Liability Company
Professional Design Firm No. 184-002931

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Nov 17 20 25
Lora S. Parsons
REGIONAL ENGINEER
January 23 20 26
ENGINEER OF DESIGN AND ENVIRONMENT
January 23 20 26
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

Prepared By: Susan Pae

DISTRICT STUDIES & PLANS ENGINEER

Examined By: Nancy Heil HFP

DISTRICT LAND ACQUISITION ENGINEER

Examined By:

DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By:

DISTRICT OPERATIONS ENGINEER

Examined By:

DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By:

DISTRICT CONSTRUCTION ENGINEER

Examined By:

DISTRICT MATERIALS ENGINEER

GENERAL NOTES

1. FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

   ALL HOT-MIX ASPHALT 2.016 TONS/CU. YD.

2. THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION OVER THE HMA SURFACE COURSE.

3. EDGE LINE PAVEMENT MARKING SHALL BE REMOVED IF A 10 FT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHALL BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.

COMMITMENTS

NONE.

INDEX OF SHEETS

1	COVER SHEET
2	SIGNATURE SHEET
3	GENERAL NOTES, INDEX OF SHEETS AND STANDARDS
4 - 6	SUMMARY OF QUANTITIES
7 - 8	TYPICAL SECTIONS
9	SCHEDULE OF QUANTITIES
10	ROADWAY PLAN
11 - 13	STAGING PLANS
14	WIDTH RESTRICTIION SIGN DETAILS
15	BUTT JOINT DETAILS
16 - 27	STRUCTURE REPAIR PLANS
28 - 29	EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)

HMA MIXTURE REQUIREMENTS

LOCATION(S)	HOT-MIX ASPHALT SURFACE COURSE	HOT-MIX ASPHALT SHOULDERS	WATERPROOFING (SURFACE LIFT)	WATERPROOFING (BINDER LIFT)
MIXTURE USE(S)	POLYMERIZED STONE MATRIX ASPHALT, SURFACE, MIX D, N50	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N30	POLYMERIZED STONE MATRIX ASPHALT, SURFACE, MIX D, N50	HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50
AB/PG	SBS PG 76-22	PG 64-22	SBS PG 76-22	SBS PG 76-22
DESIGN AIR VOIDS	4.0%, 50 GYRATION DESIGN	4.0%, 30 GYRATION DESIGN	4.0%, 50 GYRATION DESIGN	4.0%, 50 GYRATION DESIGN
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL-9.5 MM	IL-9.5L	IL-9.5 MM	IL-4.75 MM
FRICTION AGGREGATE	MIX D	NONE	MIX D	NONE
MIXTURE WEIGHT	112 LBS/SY YD/INCH	112 LBS/SY YD/INCH	112 LBS/SY YD/INCH	112 LBS/SY YD/INCH
QUALITY MANAGEMENT PROGRAM	QC/QA	QC/QA	QC/QA	QC/QA
SUBLOT SIZE	3000 TONS	3000 TONS	3000 TONS	3000 TONS
MATERIAL TRANSFER DEVICE	NO	NO	NO	NO

STANDARDS

000001-09	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-11	PAVEMENT JOINTS
483001-06	PCC SHOULDER
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701321-19	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS ≥ 45 MPH
701901-11	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)

REV - MS

MODEL: Sheet
FILE NAME: \\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\D978B37-sht-GenNote.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-9044
Professional Design Firm No. 184-006516

USER NAME = msutheard	DESIGNED - JRS	REVISED -	
	DRAWN - MDS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 10/29/2025	DATE - 5/29/25	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS AND STANDARDS

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	3
		CONTRACT NO. 78B37		
		ILLINOIS FED. AID PROJECT		

			COUNTY:	WHITE
			ROUTE:	FAP 857 (IL 14)
			FUNDING:	80% FED / 20% STATE
			LOCATION:	RURAL
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0047 S.N. 097-0032
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	8	8
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	144	144
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	214	214
40600990	TEMPORARY RAMP	SQ YD	36	36
40605022	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "D", N50	TON	115	115
42001300	PROTECTIVE COAT	SQ YD	16	16
48203100	HOT-MIX ASPHALT SHOULDERS	TON	7	7
48300500	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SQ YD	260	260
50102400	CONCRETE REMOVAL	CU YD	4.5	4.5
50300255	CONCRETE SUPERSTRUCTURE	CU YD	5.6	5.6
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	610	610
50800515	BAR SPLICERS	EACH	16	16
52000110	PREFORMED JOINT STRIP SEAL	FOOT	34	34
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	15	15

* SPECIALTY ITEM

REV - MS

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006516

USER NAME = lsmalley	DESIGNED - JRS	REVISED -	
	DRAWN - LJS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 11/20/2025	DATE - 6/23/25	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	4
		CONTRACT NO. 78B37		
		ILLINOIS | FED. AID PROJECT		

MODEL: Sheet
FILE NAME: \2025\250024.01 CD\ - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\D978B37-sht-SOQ01.dgn

			COUNTY:	WHITE
			ROUTE:	FAP 857 (IL 14)
			FUNDING:	80% FED / 20% STATE
			LOCATION:	RURAL
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0047 S.N. 097-0032
52100520	ANCHOR BOLTS, 1"	EACH	4	4
53016000	DECK SLAB REPAIR (PARTIAL)	SQ YD	23	23
53016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	3.7	3.7
53212754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	65	65
58100210	FULL LANE SEALANT WATERPROOFING SYSTEM	SQ YD	1006	1006
59000200	EPOXY CRACK INJECTION	FOOT	76	76
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	2	2
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1

* SPECIALTY ITEM

REV - MS

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-9044
Professional Design Firm No. 184-006516

USER NAME = lsmalley	DESIGNED - JRS	REVISED -	
	DRAWN - LJS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 11/20/2025	DATE - 6/23/25	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	5
		CONTRACT NO. 78B37		
	ILLINOIS FED. AID PROJECT			

				COUNTY:	WHITE
				ROUTE:	FAP 857 (IL 14)
				FUNDING:	80% FED / 20% STATE
				LOCATION:	RURAL
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE 0047 S.N. 097-0032
	70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6
	70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	1027	1027
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	40	40
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	442	442
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	650	650
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	650	650
	70600251	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
	70600352	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE,NARROW), TEST LEVEL 3	EACH	2	2
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	846	846
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	43	43
*	86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1	1
	X6050182	PLUG EXISTING DECK DRAINS	EACH	44	44
	Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	15	15

* SPECIALTY ITEM

REV - MS

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CD\ - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\D978B37-eht-SOQ03.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
309 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184-006516

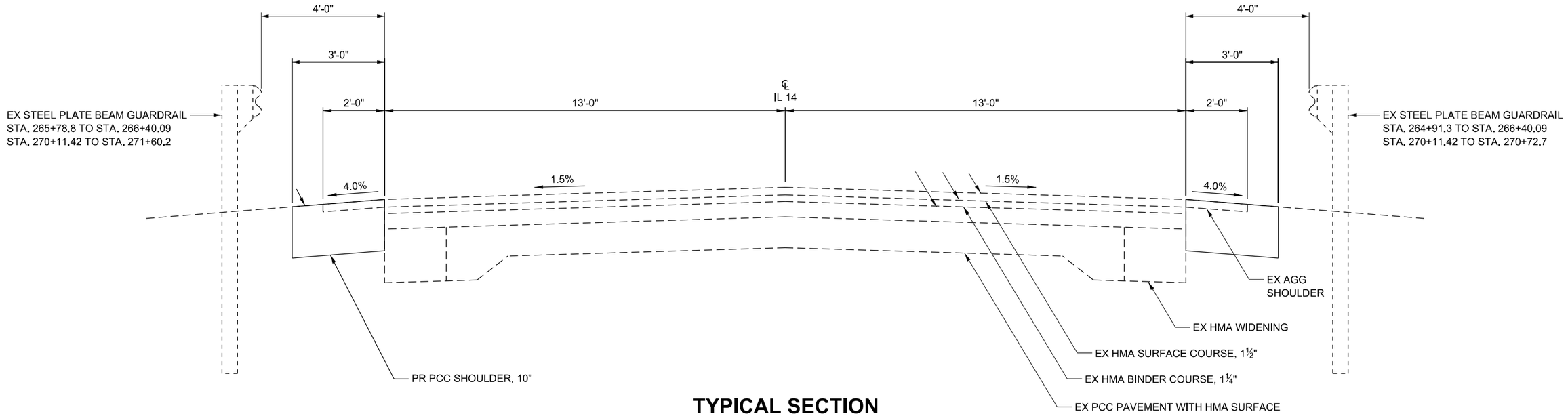
USER NAME = msutheard	DESIGNED - JRS	REVISED -	
	DRAWN - LJS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 11/24/2025	DATE - 6/23/25	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

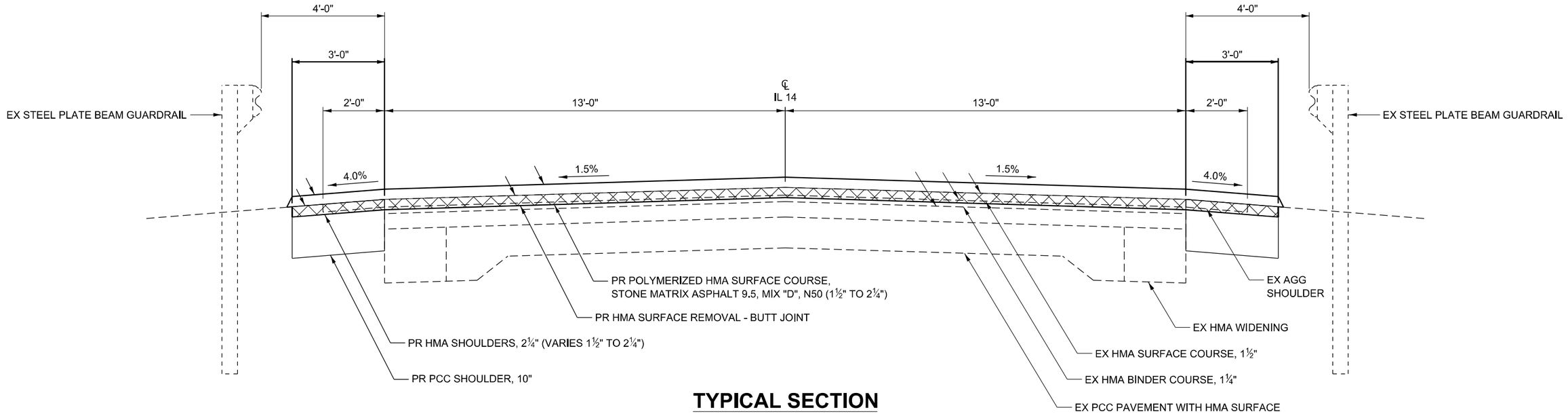
SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	6
		CONTRACT NO. 78B37		
	ILLINOIS FED. AID PROJECT			



TYPICAL SECTION

STA. 265+54.92 TO STA 267+04.92
STA. 270+77.75 TO STA. 272+27.75



TYPICAL SECTION

STA. 267+04.92 TO STA 267+49.92
STA. 270+32.75 TO STA. 270+77.75

MODEL: Typ Section Sheet
FILE NAME: I:\2025\25024.01 CD\ - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CAD\Data\CADSheets\D972B37-sht-Typical01.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006536

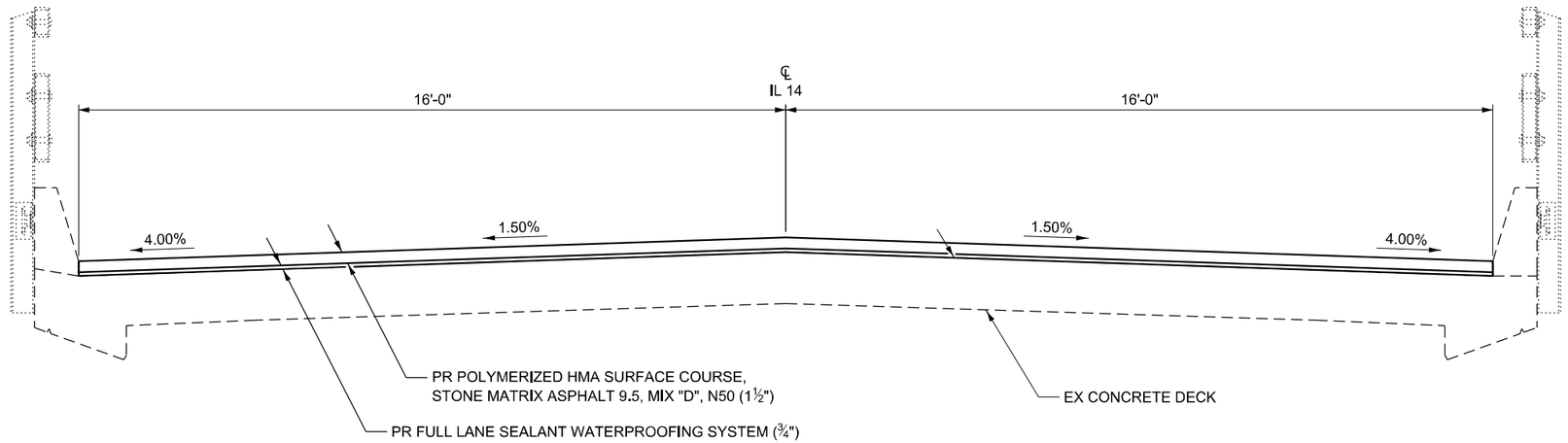
USER NAME = msutheard	DESIGNED - JRS	REVISED -
	DRAWN - MDS	REVISED -
	CHECKED - JRS	REVISED -
PLOT DATE = 11/5/2025	DATE - 8/07/25	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	7
		CONTRACT NO. 78B37		
		ILLINOIS	FED. AID PROJECT	



BRIDGE TYPICAL SECTION

STA. 267+49.92 TO STA. 270+32.75

MODEL: Typ Br Section Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\D978B37-sht-Typical02.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0644
Professional Design Firm No. 184.006326

USER NAME = msutheard	DESIGNED - JRS	REVISED -	
	DRAWN - MDS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 11/5/2025	DATE - 8/07/25	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	8
		CONTRACT NO. 78B37		
		ILLINOIS FED. AID PROJECT		

TEMPORARY CONCRETE BARRIER SCHEDULE

LOCATION			OFFSET	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE,NARROW), TEST LEVEL 3
STATION	TO	STATION	LT/RT	FOOT	FOOT	EACH	EACH
265+67.8			6.8 RT			1	
265+67.8			6.8 LT				1
265+67.8	TO	266+79.7	-	112.50	112.50		
266+79.7	TO	271+04.7	2.5 LT	425.00			
266+79.7	TO	271+04.7	1.5 RT		425.00		
271+04.7	TO	272+16.8	-	112.50	112.50		
272+16.8			6.8 RT			1	
272+16.8			6.8 LT				1
TOTAL				650	650	2	2

PAVEMENT MARKING SCHEDULE

LOCATION			PAVEMENT MARKING BLACKOUT TAPE, 5"	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	PAINT PAVEMENT MARKING - LINE 4"	
						EDGE (WHITE)	CENTERLINE (YELLOW SKIPDASH)
STATION	TO	STATION	FOOT	FOOT	SQ FT	FOOT	FOOT
263+54	TO	267+05	90		37.5		
265+88	TO	271+98	610		254.2		
265+88	TO	267+05	117		48.8		
267+05	TO	270+78		40	13.4	746	100
270+78	TO	271+98	120		50.0		
270+78	TO	274+33	90		37.5		
TOTAL			1,027	40	441.4	746	100
						846	

PAVING SCHEDULE

LOCATION			FULL LANE SEALANT WATERPROOFING SYSTEM	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	TEMPORARY RAMP	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "D", N50	PORTLAND CEMENT CONCRETE SHOULDERS 10"	HOT-MIX ASPHALT SHOULDERS
STATION	TO	STATION	SQ YD	POUND	SQ YD	SQ YD	TON	SQ YD	TON
265+55	TO	267+50						130.0	
267+05	TO	267+10				17.8			
267+05	TO	267+50			106.7				
267+05	TO	267+50		72.0			15.0		3.4
267+50	TO	270+33	1006.0				85.0		
270+33	TO	272+28						130.0	
270+33	TO	270+78		72.0	106.7		15.0		3.4
270+73	TO	270+78				17.8			
TOTAL			1,006.0	144.0	213.3	35.6	115.0	260.0	6.8

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006316

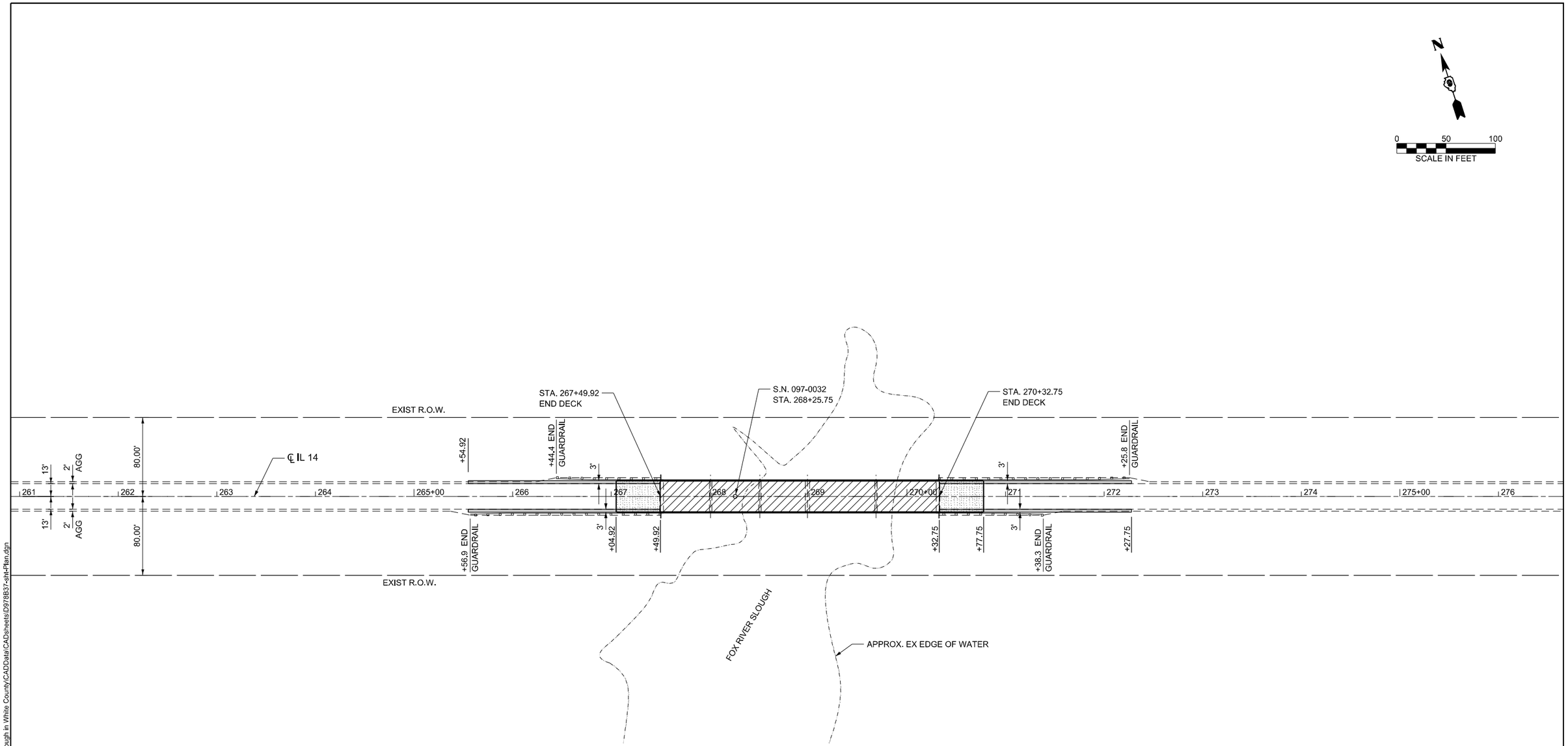
USER NAME = Ismalley	DESIGNED - JRS	REVISED -	
	DRAWN - MDS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 11/20/2025	DATE - 5/30/25	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	9
		CONTRACT NO. 78B37		
		ILLINOIS	FED. AID PROJECT	



LEGEND

- PR PCC SHOULDER, 10"
- PR HMA SURFACE REMOVAL - BUTT JOINT
- PR HMA SURFACE COURSE & FULL LANE SEALANT WATERPROOFING SYSTEM

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADsheets\D978B37-sht-Plan.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0644
Professional Design Firm No. 184.006326

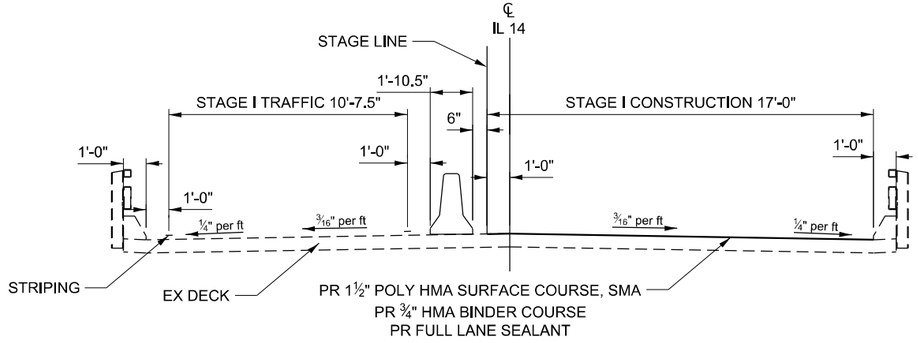
USER NAME = msutheard	DESIGNED - JRS	REVISED -	
	DRAWN - MDS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 9/22/2025	DATE - 5/30/25	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN

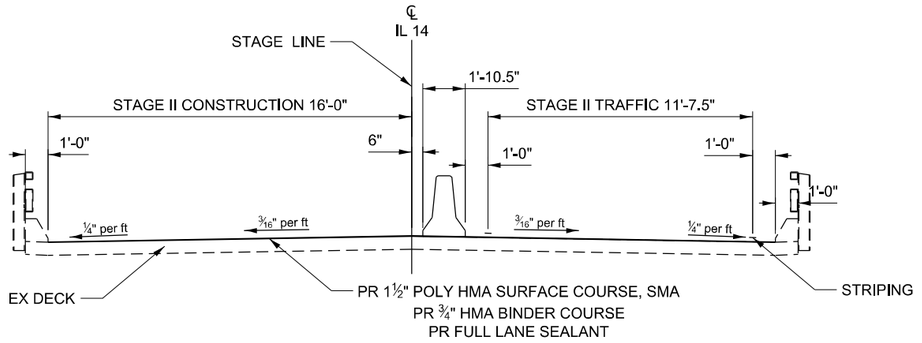
SCALE: | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	10
		CONTRACT NO. 78B37		
		ILLINOIS FED. AID PROJECT		



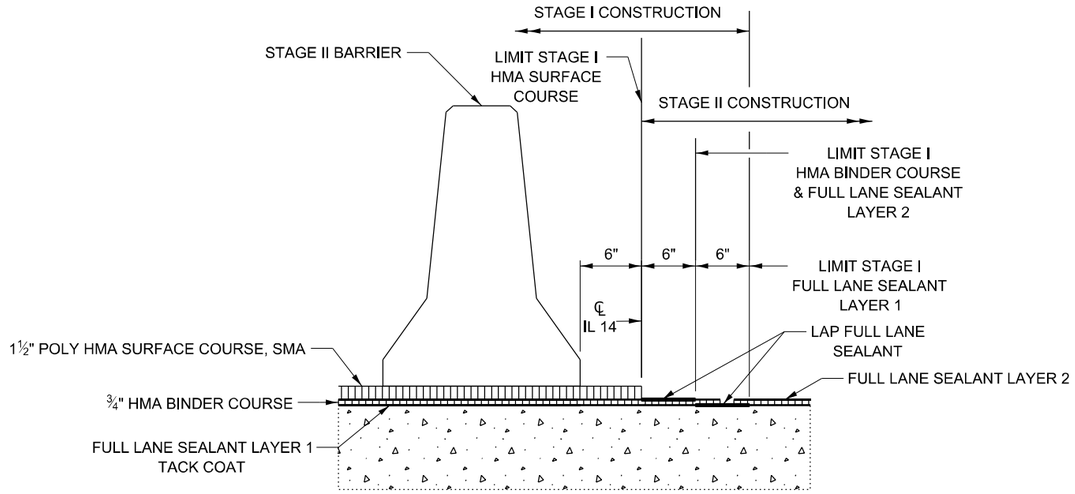
STAGE I CONSTRUCTION

(LOOKING EAST)

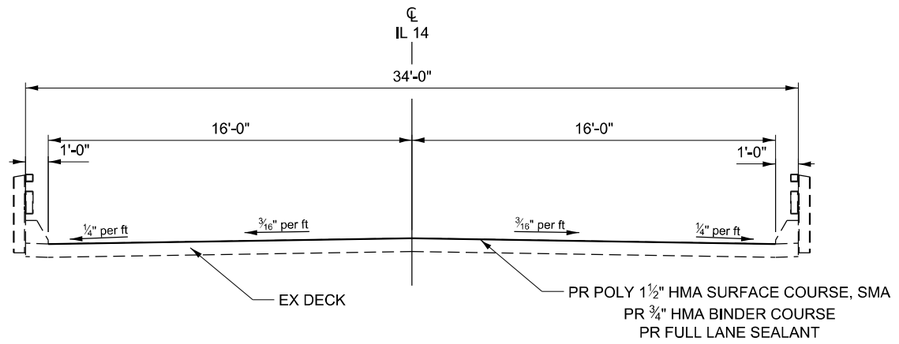


STAGE II CONSTRUCTION

(LOOKING EAST)



WATERPROOFING STAGING



TYPICAL SECTION

(LOOKING EAST)

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADsheets\D978B37-sht-TypicalStaging.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0644
Professional Design Firm No. 184.006326

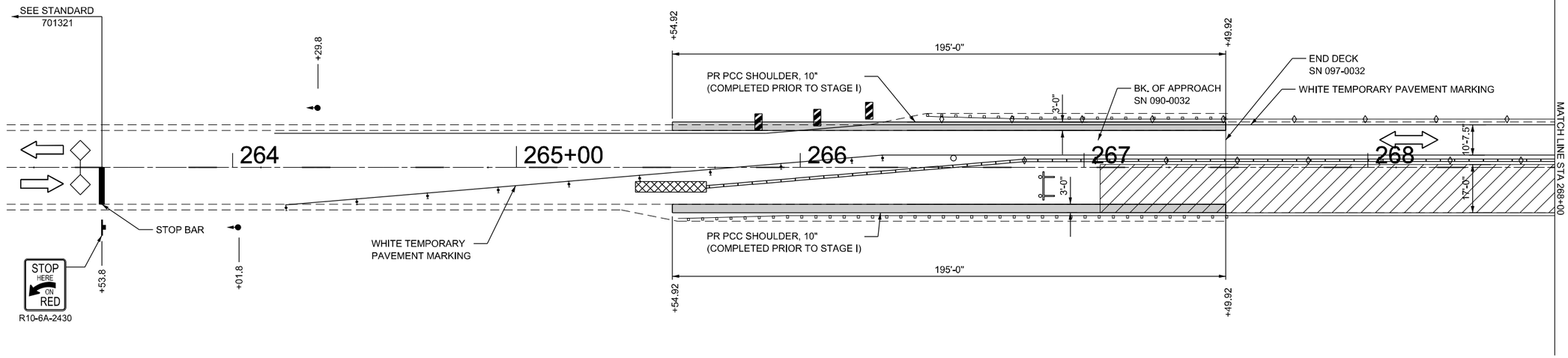
USER NAME = msutheard	DESIGNED - JRS	REVISED -	
	DRAWN - LJS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 11/5/2025	DATE - 6/16/25	REVISED -	

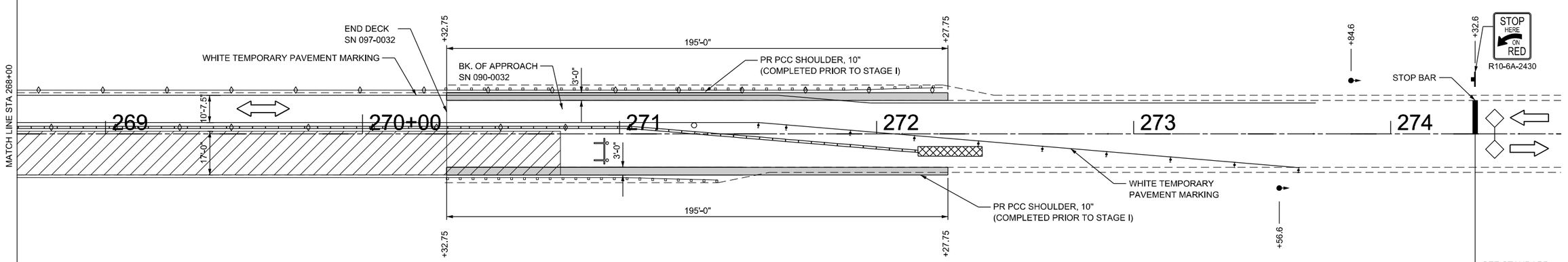
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING TYPICAL SECTIONS & STAGING

SCALE: | SHEET 1 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	11
		CONTRACT NO. 78B37		
		ILLINOIS FED. AID PROJECT		





LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC SIGNAL
- SIGN
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- DETECTOR LOOPS
- DOUBLE VERTICAL PANEL
- TEMPORARY CONCRETE BARRIER
- CRYSTAL, BI-DIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
- IMPACT ATTENUATOR
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- PCC SHOULDER, 10"

STAGE I TRAFFIC

0 20 40
SCALE IN FEET

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\D978B37-sht-StagingPlan01.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006516

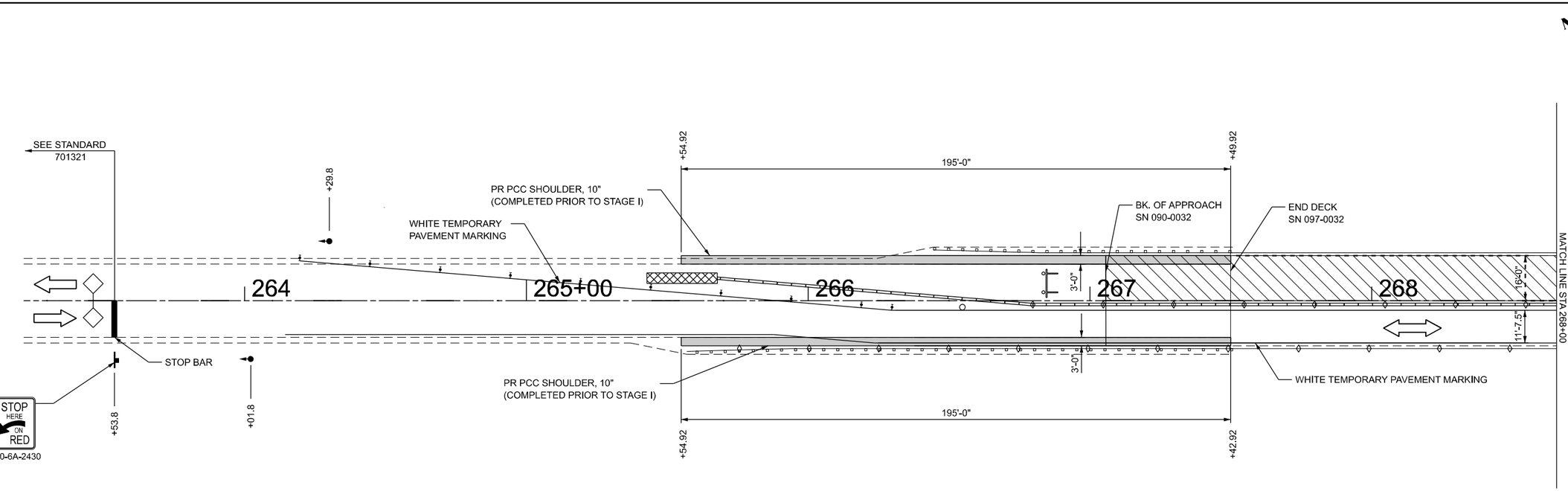
USER NAME = Ismalley	DESIGNED - JRS	REVISED -	
	DRAWN - LJS	REVISED -	
	CHECKED - JRS	REVISED -	
PLOT DATE = 10/15/2025	DATE - 6/20/25	REVISED -	

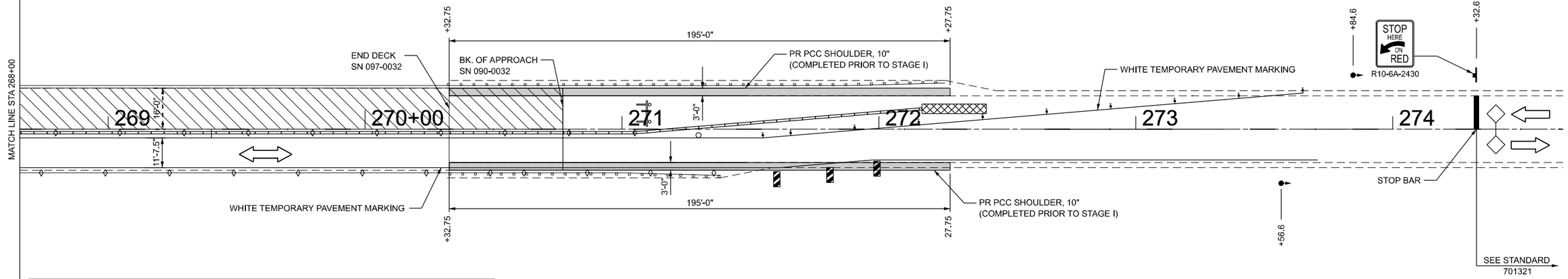
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STAGE I

SCALE: | SHEET 2 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	12
		CONTRACT NO. 78B37		
		ILLINOIS	FED. AID PROJECT	





LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC SIGNAL
- SIGN
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- DETECTOR LOOPS
- DOUBLE VERTICAL PANEL
- TEMPORARY CONCRETE BARRIER
- CRYSTAL, BI-DIRECTIONAL GUARDRAIL/BARRIER WALL REFLECTOR
- IMPACT ATTENUATOR
- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM
- PCC SHOULDER, 10"

STAGE II TRAFFIC

0 20 40
SCALE IN FEET

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\D978B37-sht-StagingPlan02.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006316

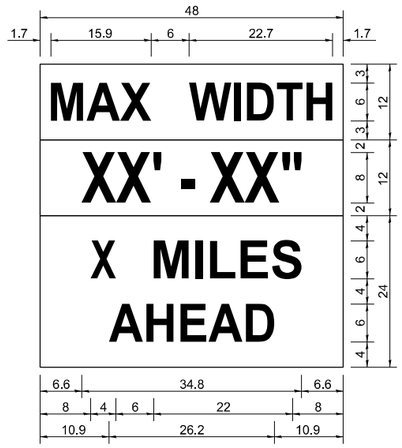
USER NAME = lsmalley	DESIGNED - JRS	REVISED -
	DRAWN - LJS	REVISED -
	CHECKED - JRS	REVISED -
PLOT DATE = 11/20/2025	DATE - 6/20/25	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STAGE II

SCALE: | SHEET 3 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	13
		CONTRACT NO. 78B37		
		ILLINOIS	FED. AID PROJECT	



W12-I103 (WIDTH IS 80)
NO BORDER, BLACK ON WHITE:
[MAX WIDTH] D:

NO BORDER, BLACK ON ORANGE:
[XX' - XX"] D:

NO BORDER, BLACK ON WHITE:
[X MILES] D: [AHEAD] D:

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

W12-I103

NOTES FOR MAX WIDTH SIGN:

1. INSTALL A MAX WIDTH SIGN EACH DIRECTION ON IL 14 TO GIVE TRAFFIC APPROACHING WORK ZONE ENOUGH ADVANCE NOTICE TO CHANGE ROUTES IF NEEDED. EXACT LOCATIONS AS DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT THE SIGNS AT THE LOCATION DIRECTED BY THE ENGINEER. ALL SIGNS SHALL BE POST MOUNTED.
3. THE NOTED WORK, INCLUDING SIGNS, POSTS, HARDWARE, AND LABOR SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE EACH FOR TRAFFIC CONTROL AND PROTECTION, STD. 701321. NO OTHER COMPENSATION WILL BE ALLOWED.
4. THE WIDTH SHOWN ON THE W12-I103 SIGN SHALL BE 11'-1" FOR STAGE I AND 12'-1" FOR STAGE II.
5. THE "X MILES AHEAD" WILL BE DETERMINED BY THE ENGINEER.

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0644
Professional Design Firm No. 184.006526

USER NAME = msutheard	DESIGNED - JRS	REVISED -
	DRAWN - MDS	REVISED -
	CHECKED - JRS	REVISED -
PLOT DATE = 10/6/2025	DATE - 6/02/25	REVISED -

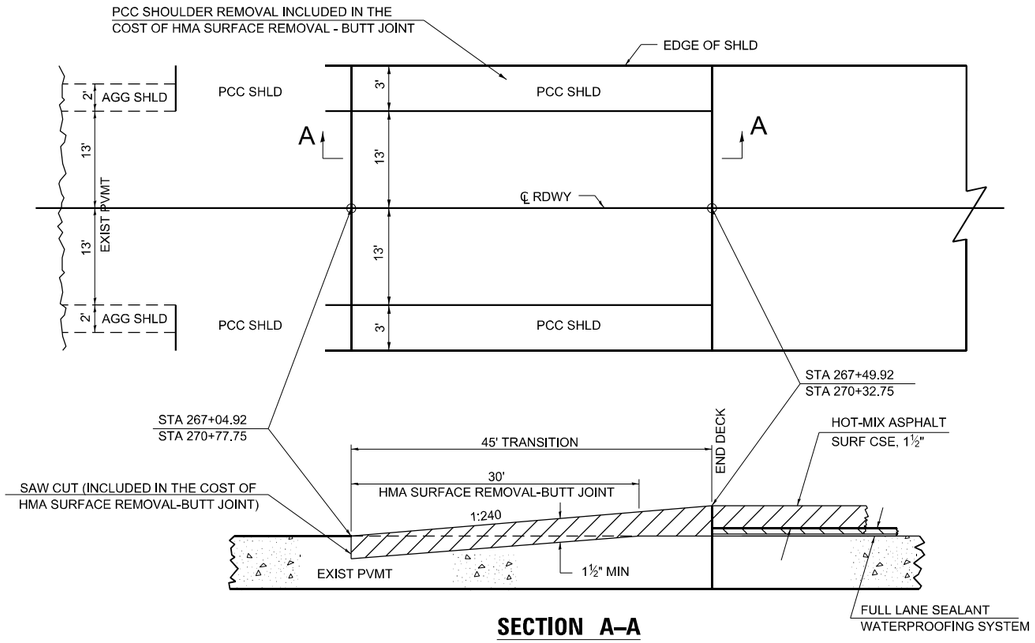
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAX WIDTH SIGNING DETAILS

SCALE: | SHEET 4 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	14
		CONTRACT NO. 78B37		
	ILLINOIS FED. AID PROJECT			

BUTT JOINT



SECTION A–A

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CD\ - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CAD\Data\CADsheets\D9 78B37-sht-Details02.dgn

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006316

USER NAME = msutheard	DESIGNED - JRS	REVISED -
	DRAWN - MDS	REVISED -
	CHECKED - JRS	REVISED -
PLOT DATE = 10/6/2025	DATE - 6/02/25	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS

SCALE: | SHEET 5 OF 5 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	15
		CONTRACT NO. 78B37		
	ILLINOIS FED. AID PROJECT			

Existing Structure:
SN 097-0032 Sta. 268+25.75
Originally constructed in 1932 as SBI Rt 139 under Section 101-B. The original structure was a 3 span, 7" RC deck on 28" Beth I-97# steel beams supported by concrete pile bents. In 1983 the structure was widened with new W27x114 steel exterior beams and deck removed and replaced. The structure was also extended two additional spans. The new two span structure was a 7" RC Deck on 7 - W33x130 steel beams supported by concrete pile bents. The out to out of structure is 34'-0" and back to back is 284'-4".

SCOPE OF WORK

1. Perform deck repairs as shown.
2. Replace Expansion Joint at Bent 4,
3. Replace Bearings at Bent 4.
4. Perform substructure repairs as shown.
5. Overlay deck with 1½" HMA overlay & ¾" waterproofing system.

DESIGN SPECIFICATIONS

NEW CONSTRUCTION
2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

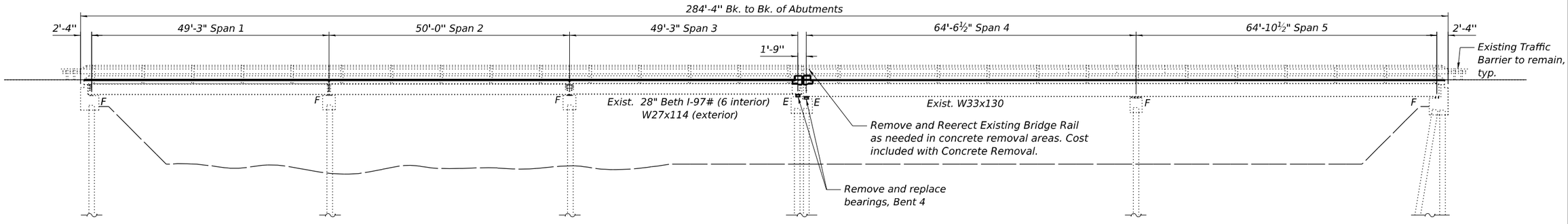
EXISTING
1977 Design Specifications & 1978 & 1979 Interim Specifications

LOADING H20-44 (EXISTING)

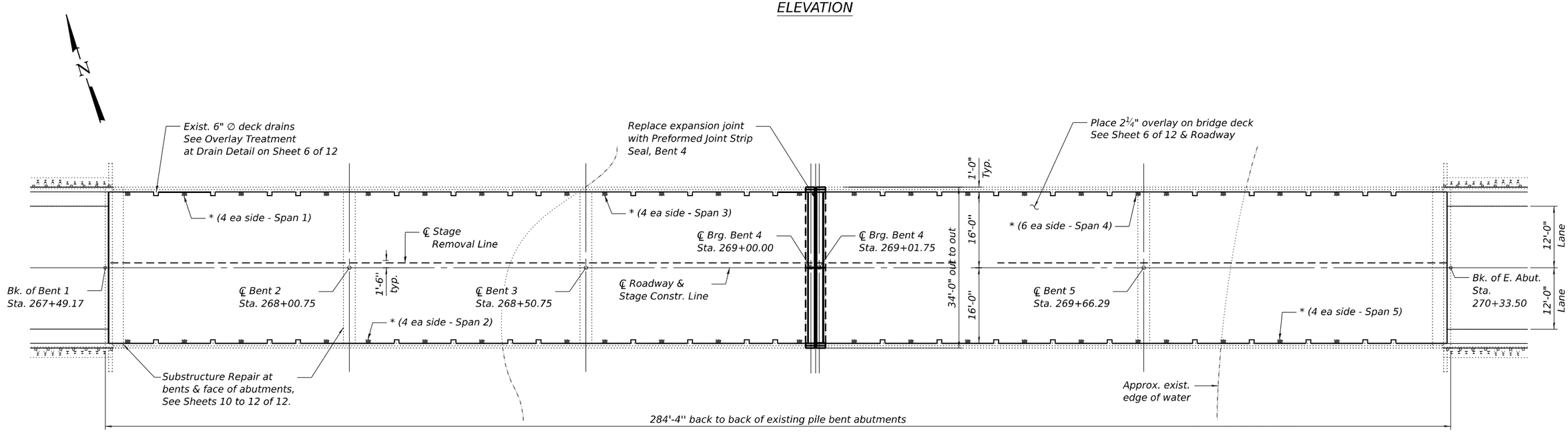
DESIGN STRESSES

FIELD UNITS

EXISTING CONSTRUCTION	NEW CONSTRUCTION
f'c = 3,500 psi	f'c = 4,000 psi
fy = 60,000 psi (Reinforcement)	fy = 60,000 psi (Reinf.)
fy = 36,000 psi (Structural Steel)	fy = 36,000 psi (M270 Gr. 36) (Str. Steel)



ELEVATION



PLAN

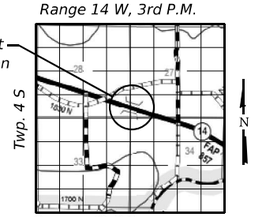
Note:

*Plug Existing Deck Drain. See detail sheet 5 of 12.

LICENSED STRUCTURAL ENGINEER
MICHAEL J. TRELLO
NUMBER 081-006334
STATE OF ILLINOIS

Date: November 17, 2025
Expires: November 30, 2026

Range 14 W, 3rd P.M.



LOCATION SKETCH

BRIDGE REPAIRS
F.A.P. 857 (IL 14)
OVER FOX RIVER SLOUGH
SECTION (101-BR-2)BRR
WHITE COUNTY
STATION 268+25.75
S.N. 097-0032

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\09703032-78837-001-GPE.dgn
11/20/2025 11:41:13 AM

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184-006516

USER NAME =	DESIGNED - PDA	REVISED -	
	CHECKED - PRR	REVISED -	
PLOT SCALE =	DRAWN - PDA	REVISED -	
PLOT DATE =	CHECKED - MJT	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 097-0032
SHEET 1 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	16
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

INDEX OF SHEETS

1	General Plan and Elevation
2	General Data
3	Deck Repair Details
4	Temporary Concrete Barrier
5	Joint Removal Details at Bent 4
6	Joint Replacement Details at Bent 4
7	Preformed Joint Strip Seal
8	Bar Splicer Assembly and Mechanical Splicer Details
9	Expansion Bearing Details - Bent 4
10 - 12	Substructure Repair Details

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All structural steel for expansion joints shall be AASHTO M 270 Grade 36, unless otherwise noted.

All new structural steel and bearing assemblies shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

Reinforcement bars designated (E) shall be epoxy coated.

Protective Coat shall be applied to all new concrete

Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

TOTAL BILL OF MATERIAL

	ITEM	UNIT	TOTAL
	Concrete Removal	Cu. Yd.	4.5
	Concrete Superstructure	Cu. Yd.	5.6
	Protective Coat	Sq. Yd.	15.6
	Reinforcement Bars, Epoxy Coated	Pound	610
	Bar Splicers	Each	16
	Preformed Joint Strip Seal	Foot	34
	Elastomeric Bearing Assembly, Type 1	Each	15
	Anchor Bolts, 1"	Each	4
	Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	65
	Epoxy Crack Injection	Foot	76
	Controlled Low Strength Material	Cu. Yd.	2
	Plug Existing Deck Drains	Each	44
*	Jack & Remove Existing Bearings	Each	15
*	Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	3.7
*	Deck Slab Repair (Partial Depth)	Sq. Yd.	23.0
	Polymerized Hot-Mix Asphalt Surface Course, Stone Matrix Asphalt, 9.5, Mix "D", N50	Ton	115
	Full Lane Surface Waterproofing System	Sq. Yd.	1006

* Special Provisions

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184, 006326

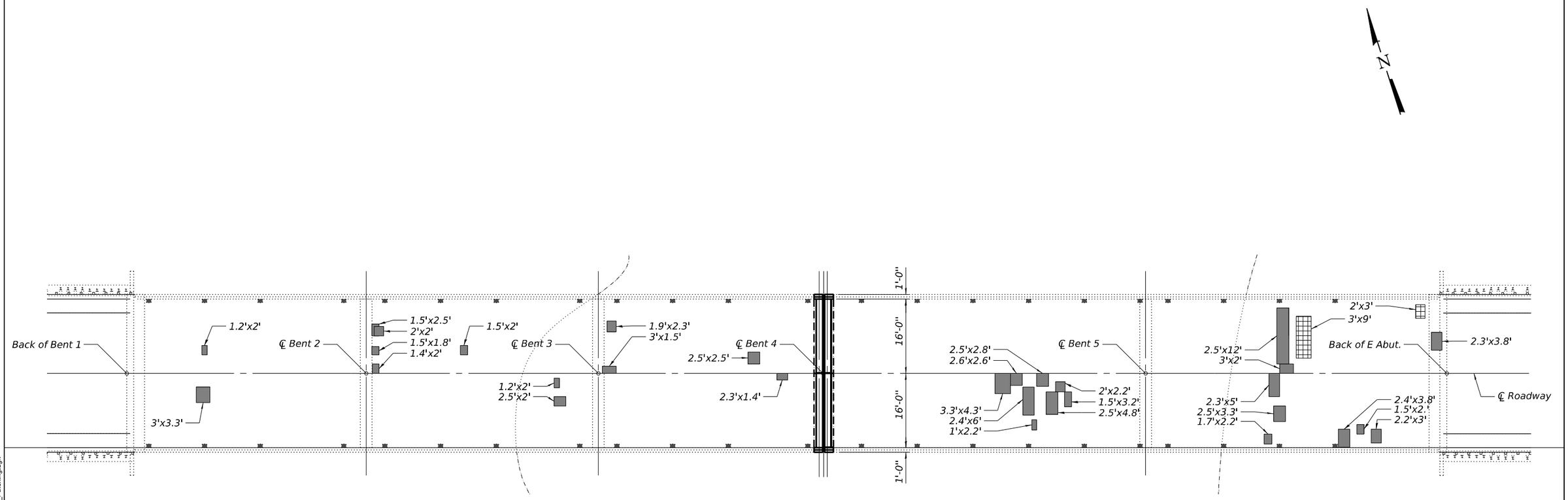
USER NAME =	DESIGNED - PDA	REVISED -
	CHECKED - PRR	REVISED -
PLOT SCALE =	DRAWN - PDA	REVISED -
PLOT DATE =	CHECKED - MJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 097-0032
SHEET 2 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	17
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WC4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\09700032-78B37-002-Gen_Data.dgn
11/20/2025 11:41:35 AM



PLAN

LEGEND

- Deck Slab Repair (Partial Depth)
- Deck Slab Repair (Full Depth, Type I)

BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Partial Depth)	Sq. Yd.	23.0
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	3.7
Protective Coat	Sq. Yd.	15.6

NOTES:

The Contractor must use extreme care during concrete removal so as not to damage the Steel Beam.

Quantities and limits of repairs shown are estimated only. The actual areas to be repaired shall be determined by the Engineer at the time of construction.

Concrete shall be Class PP-1, PP-2, or BS. For additional requirements of Deck Slab Repair, see Special Provisions.

For joint replacement details, see sheets 5 & 6 of 12.

Apply Protective Coat to all new surface areas of Concrete Superstructure.

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006316

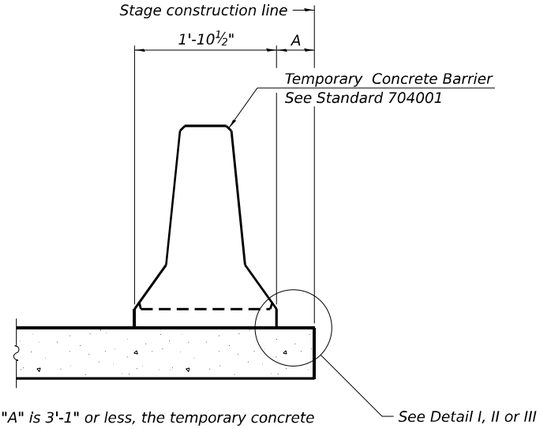
USER NAME =	DESIGNED - PDA	REVISED -	
	CHECKED - PRR	REVISED -	
PLOT SCALE =	DRAWN - PDA	REVISED -	
PLOT DATE =	CHECKED - MJT	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK REPAIR DETAILS
STRUCTURE NO. 097-0032
SHEET 3 OF 12 SHEETS

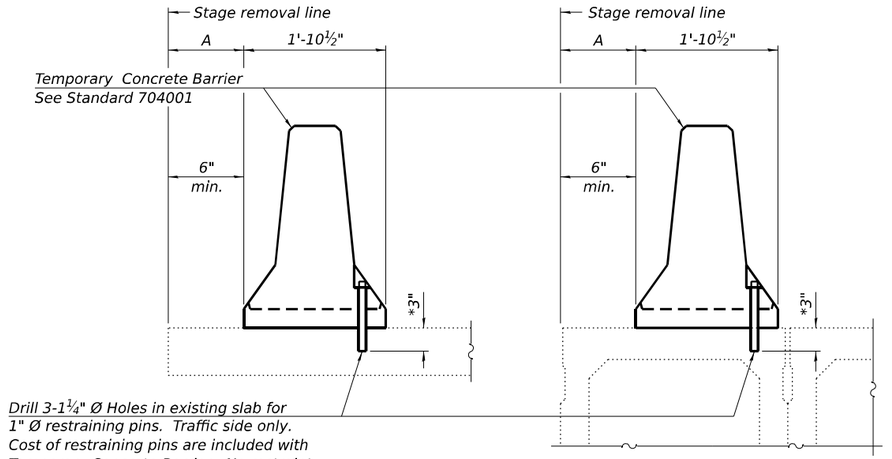
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	18
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADsheets\0970032-78B37-003-Deck_Patching.dgn
11/20/2025 12:12:17 PM



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

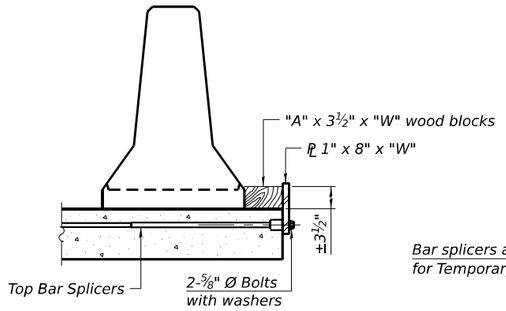


EXISTING SLAB

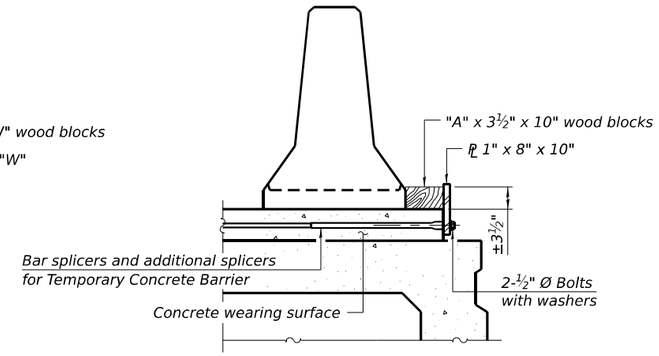
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

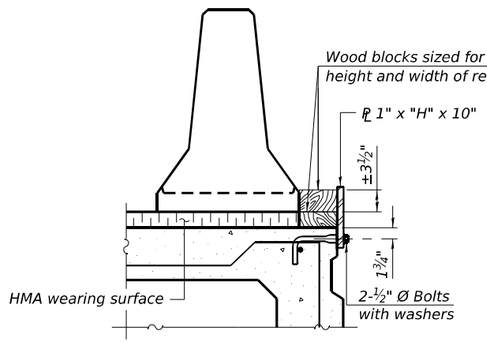
SECTIONS THRU SLAB OR DECK BEAM



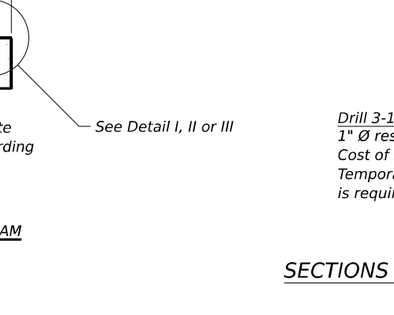
DETAIL I



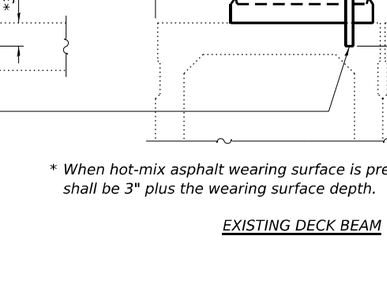
DETAIL II



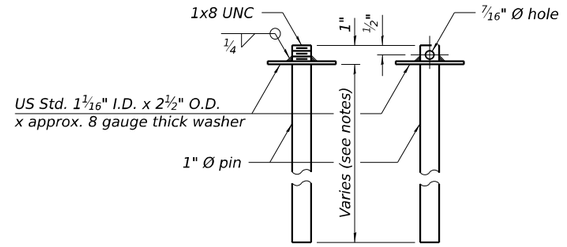
DETAIL III



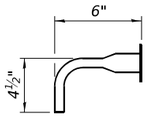
STEEL RETAINER ℄ 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER ℄ 1" x "H" x 10"
(Detail III)



RESTRAINING PIN



BAR SPLICER FOR #4 BAR - DETAIL III

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27

5-15-2023

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than 1½", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\09700032-78B37-0004Barrier.dgn
11/20/2025 11:42:10 AM

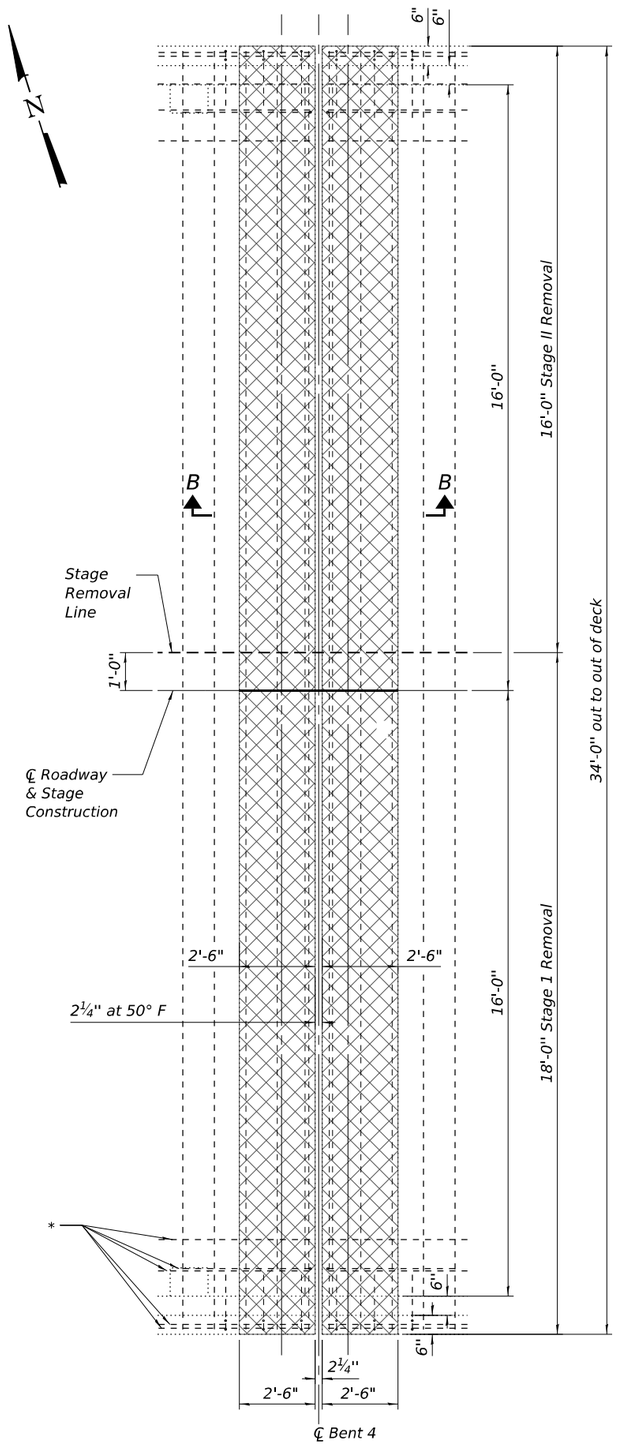
KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006326

USER NAME =	DESIGNED - PDA	REVISED -	
	CHECKED - PRR	REVISED -	
PLOT SCALE =	DRAWN - PDA	REVISED -	
PLOT DATE =	CHECKED - MJT	REVISED -	

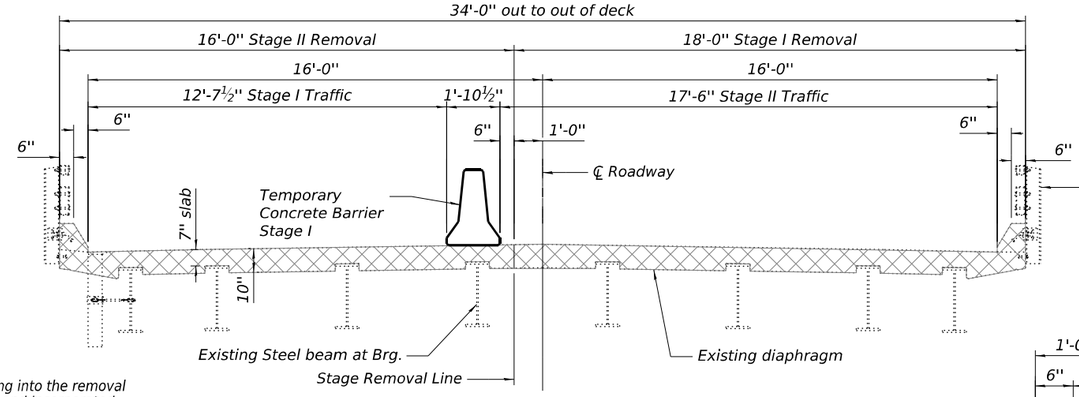
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 097-0032
SHEET 4 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	19
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		



CONCRETE REMOVAL PLAN



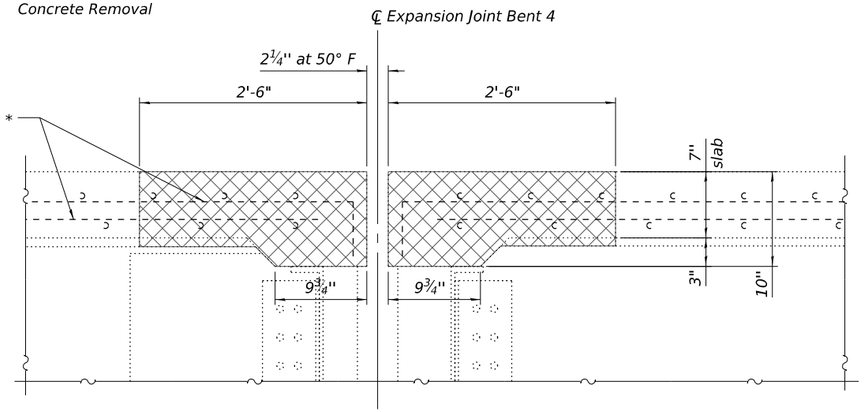
CROSS SECTION AT JOINT REPLACEMENT LOCATIONS AT BENT 4

(Span 3 shown, Span 4 similar except 7 beams)

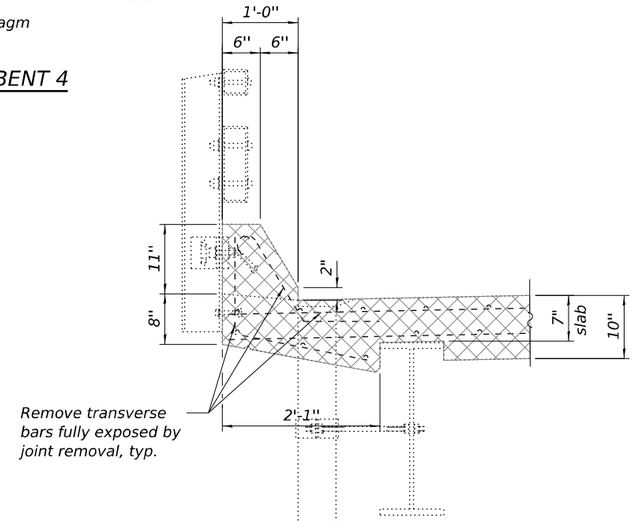
* *Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.*

LEGEND

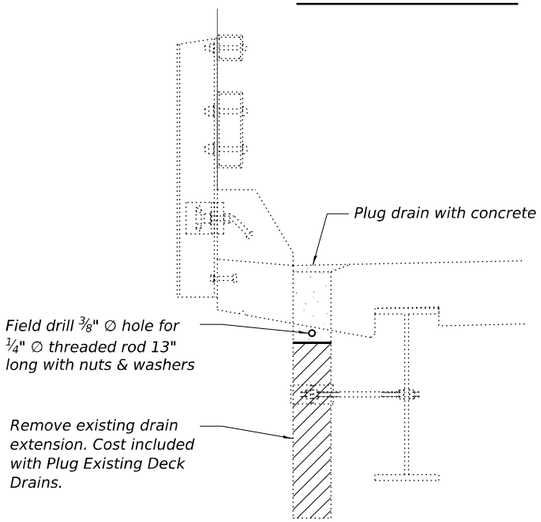
Concrete Removal



SECTION B-B THRU JOINT AT BENT 4



SECTION THRU DECK



SECTION AT DRAIN

(44 locations. See sheet 1 of 12 for drain locations to be plugged.)

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADsheets\09700032-78B37-005-JL_Rem.dgn
11/20/2025 12:09:02 PM

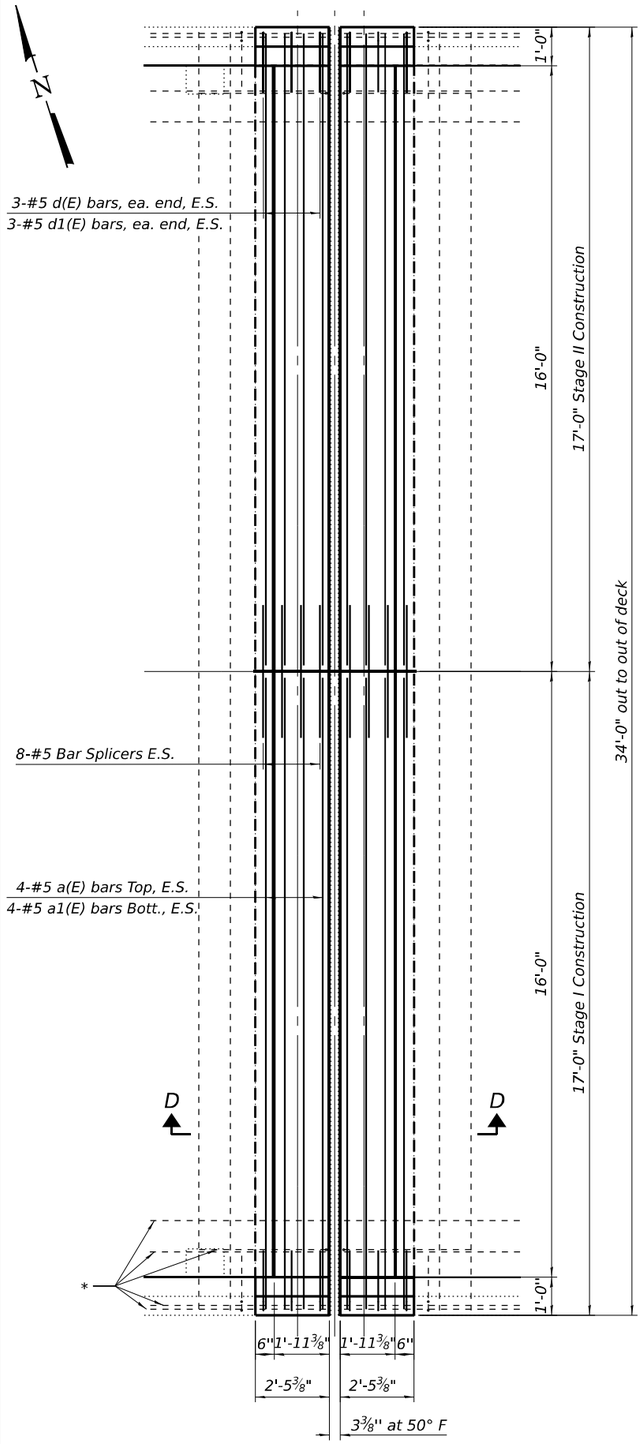
KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006526

USER NAME =	DESIGNED - PDA	REVISED -
	CHECKED - PRR	REVISED -
PLOT SCALE =	DRAWN - PDA	REVISED -
PLOT DATE =	CHECKED - MJT	REVISED -

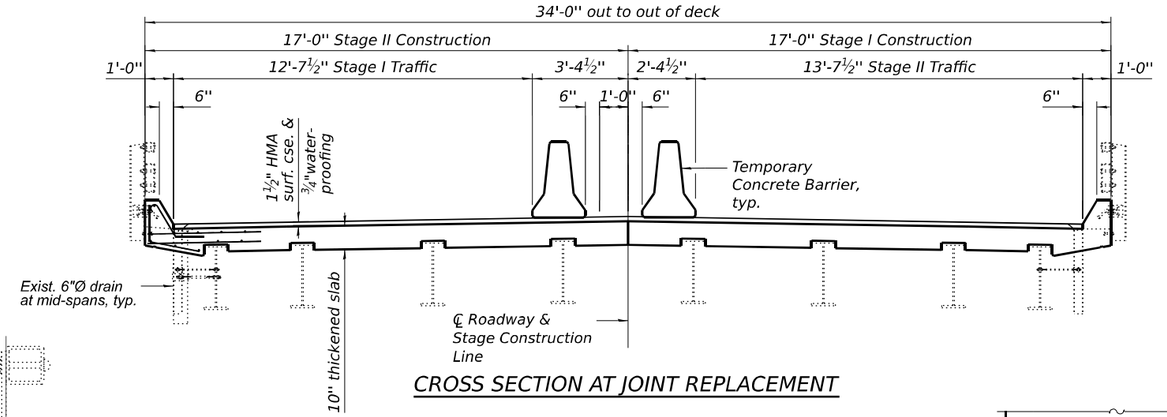
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REMOVAL DETAILS - BENT 4
STRUCTURE NO. 097-0032
SHEET 5 OF 12 SHEETS

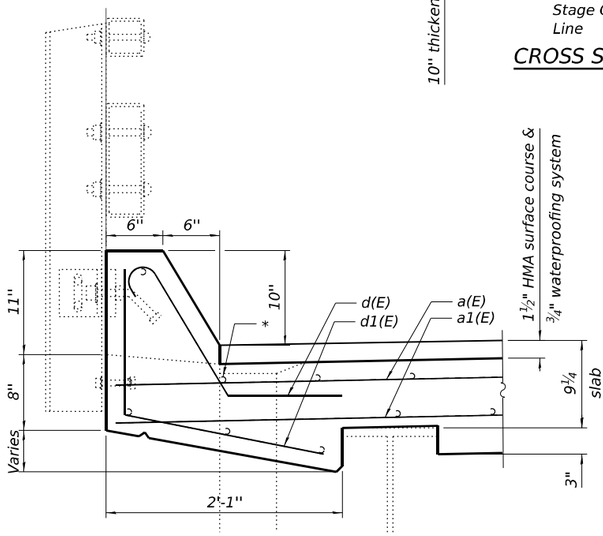
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	20
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		



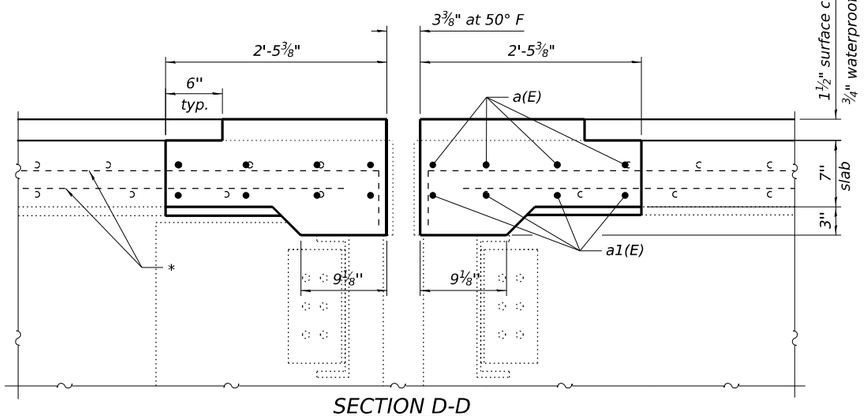
PROPOSED PLAN



CROSS SECTION AT JOINT REPLACEMENT



SECTION THRU DECK AT PIER
JOINT REPLACEMENT LOCATION

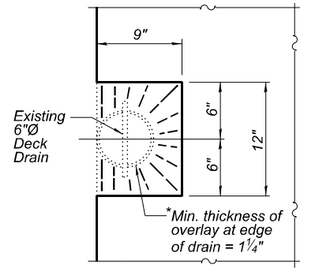


SECTION D-D

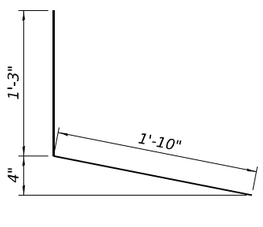
NOTES:

* Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction.

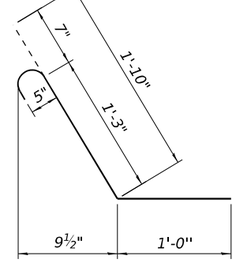
O.F. Outside Face
I.F. Inside Face
E.S. Each side of joint



OVERLAY TREATMENT AT DRAINS



BAR d1(E)



BAR d(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	16	#5	16'-8"	
a1(E)	16	#5	15'-8"	
d(E)	12	#5	2'-10"	
d1(E)	12	#5	3'-1"	
Concrete Removal		Cu. Yd.	4.5	
Concrete Superstructure		Cu. Yd.	5.6	
Reinforcement Bars, Epoxy Coated		Pound	610	
Bar Splicers		Each	16	

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\0970032-78B37-006-JI_Prop.dgn
11/20/2025 11:42:59 AM

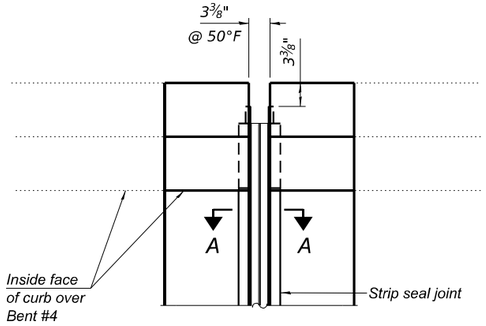
KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-9041
Professional Design Firm No. 184.006316

USER NAME =	DESIGNED - PDA	REVISED -	
	CHECKED - PRR	REVISED -	
PLOT SCALE =	DRAWN - PDA	REVISED -	
PLOT DATE =	CHECKED - MJT	REVISED -	

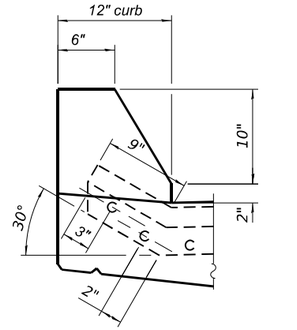
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT REPLACEMENT DETAILS - BENT 4
STRUCTURE NO. 097-0032
SHEET 6 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	21
		CONTRACT NO. 78B37		
		ILLINOIS	FED. AID PROJECT	



PLAN AT BENT #4



END TREATMENT AT CURB OVER BENT #4

SECTION AT CURB

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

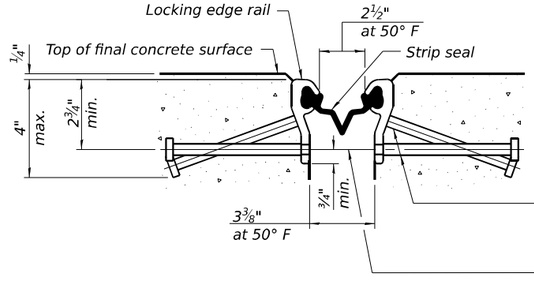
The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

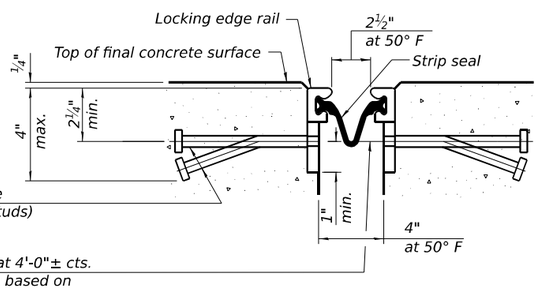
The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



SHOWING ROLLED RAIL JOINT



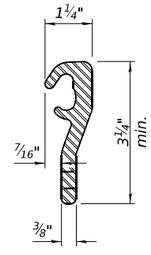
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

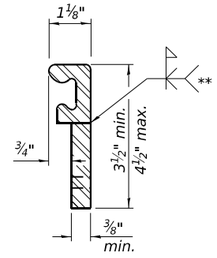
⅜" Ø threaded rods in 7/16" Ø holes at 4'-0"± cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

** Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.*



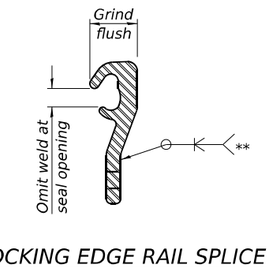
ROLLED
(EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

** *Back gouge not required if complete joint penetration is verified by mock-up.*



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	34

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\0970032-78B37-4007-P-3SS.dgn

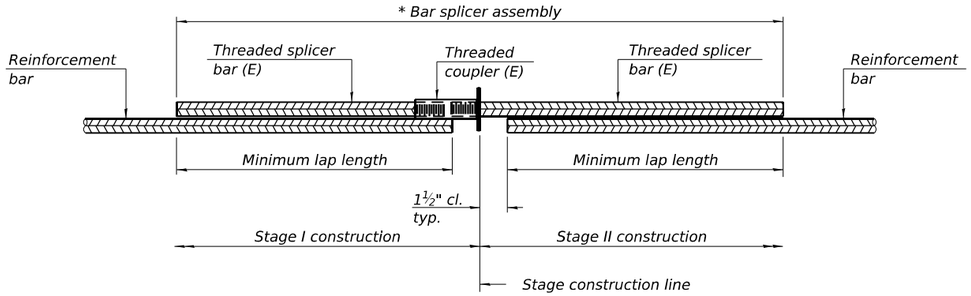
KUHN & TRELLO CONSULTING ENGINEERS, A Limited Liability Company, 109 N. 7th Street, 3rd Floor, Springfield, IL 62701, Phone 217-679-0044, Professional Design Firm No. 184.006326	USER NAME =	DESIGNED - PDA	REVISED -
		CHECKED - PRR	REVISED -
	PLOT SCALE =	DRAWN - PDA	REVISED -
	PLOT DATE =	CHECKED - MJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 097-0032
SHEET 7 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	22
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

11/20/2025 11:43:13 AM



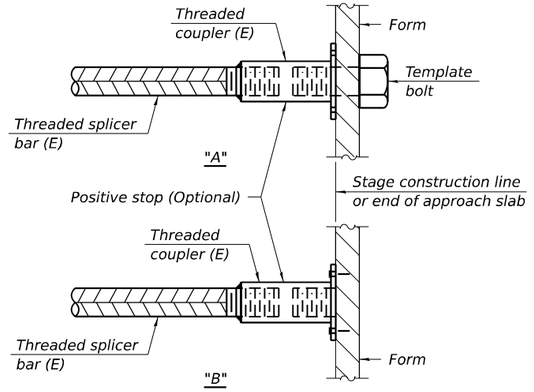
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

Threaded splicer bar length = min. lap length + 1½" + thread length

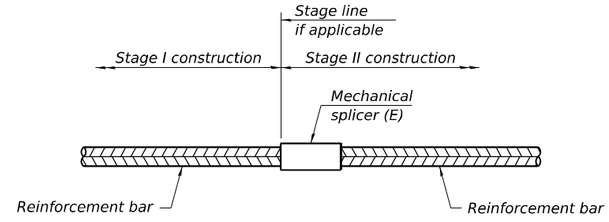
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Bent 4	#5	16	3'-6"



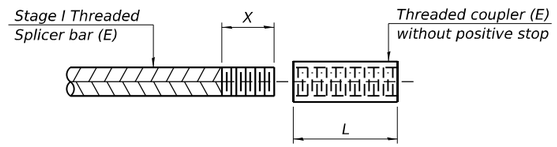
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



THREADING OF ASSEMBLIES

The threaded length "X" shall be no more than L/2. The bar should be tightened until 0-1 thread(s) is/are exposed.

Notes:
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 4-4-2025

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006516

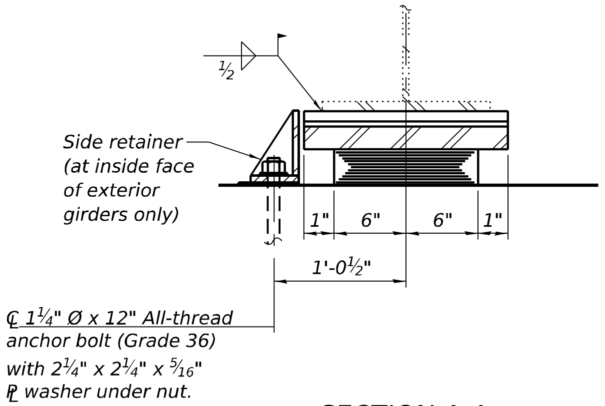
USER NAME =	DESIGNED - PDA	REVISED -
	CHECKED - PRR	REVISED -
PLOT SCALE =	DRAWN - PDA	REVISED -
PLOT DATE =	CHECKED - MJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

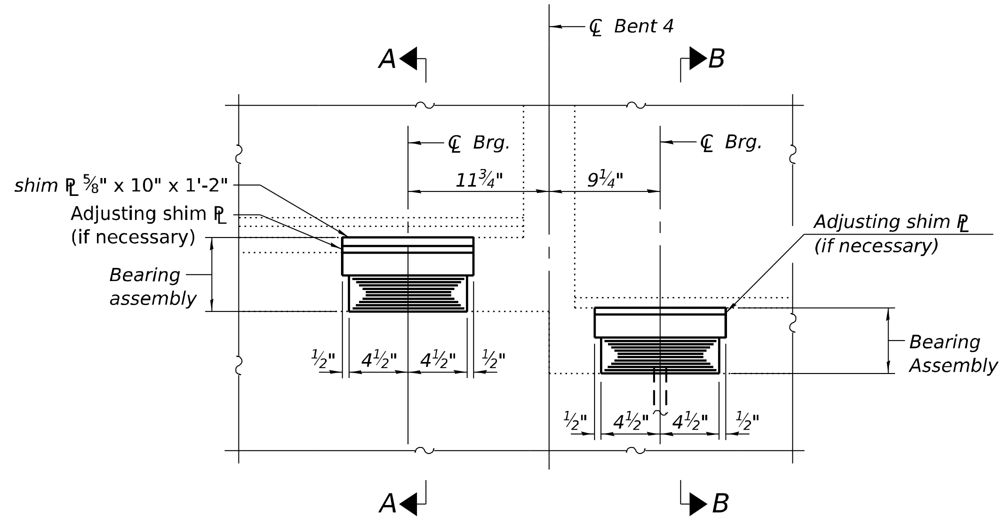
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 097-0032
SHEET 8 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	23
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

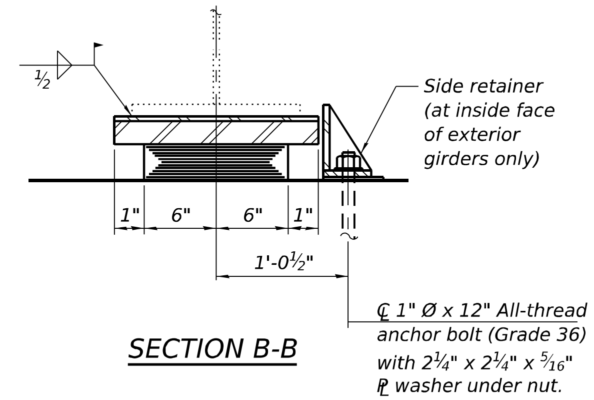
MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDi - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\0970032-78B37-008-Splicer.dgn
11/20/2025 11:43:31 AM



SECTION A-A



ELEVATION AT BENT 4



SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.

Notes:

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

Min. jack capacity = 44 Tons at Brg's of Bent 4.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

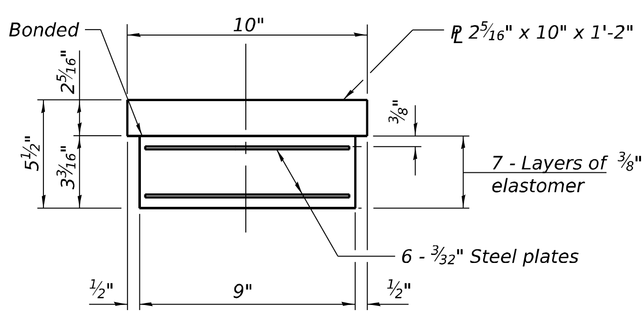
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers, stainless steel plates, and 5/8" shim plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.

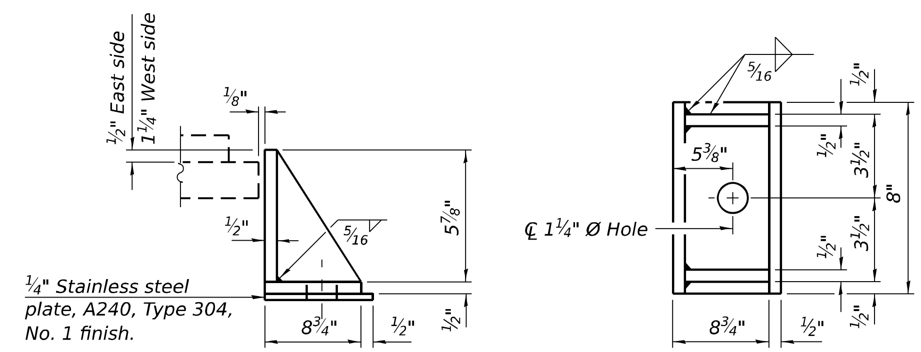
All exposed bearing plates and side retainers shall be hot dip galvanized according to AASHTO M111.

The structural steel plates of the Bearing Assembly for the abutments at both structures shall conform to the requirements of AASHTO M270 Grade 50.

The existing bearings contain lead plates. The Contractor shall take precautions to deal with the presence of lead on this project.



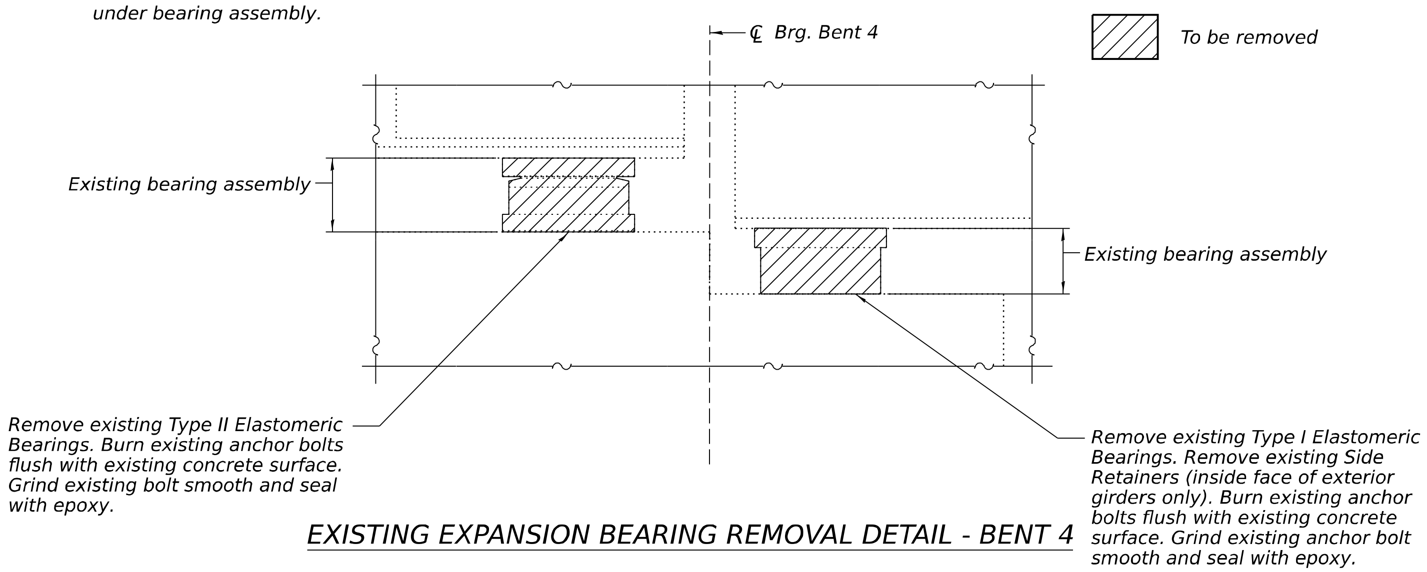
BEARING ASSEMBLY



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (Inside face of outside girders only)

Note:
Shim plates shall not be placed under bearing assembly.



EXISTING EXPANSION BEARING REMOVAL DETAIL - BENT 4

BEAM REACTIONS

		Bent 4 West Brg. (outside beams)	Bent 4 West Brg. (inside beams)	Bent 4 East Brg.
R DL	(k)	7.2	13.9	19.1
R LL	(k)	29.3	29.3	29.6
Imp.	(k)	9.7	9.7	9.8
R (Total)	(k)	46.2	52.9	58.5

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	15
Jack & Remove Existing Bearings	Each	15
Anchor Bolts, 1"	Each	4

NOTES

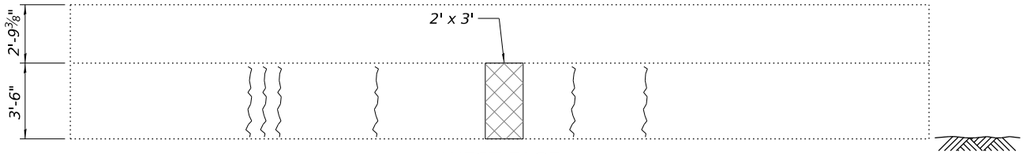
1. Repair of the existing substructure shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.

LEGEND

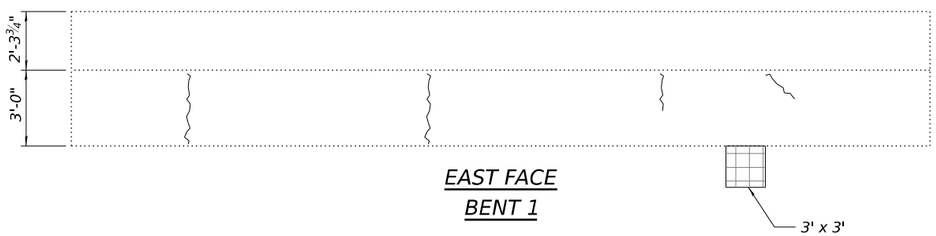
Epoxy Crack Injection

Structural Repair of Concrete (Depth Equal to or less than 5 Inches)

Controlled Low Strength Material



WEST FACE
EAST ABUTMENT



EAST FACE
BENT 1

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or less than 5 Inches)	Sq. Ft.	6.0
Epoxy Crack Injection	Foot	50
Controlled Low Strength Material	Cu. Yd.	2.0

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADsheets\09700032-78B37-010-Sub_Repair_Bent1_E_Abut.dgn

11/20/2025 11:44:05 AM

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006526

USER NAME =	DESIGNED - PDA	REVISED -	
	CHECKED - PRR	REVISED -	
PLOT SCALE =	DRAWN - PDA	REVISED -	
PLOT DATE =	CHECKED - MJT	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

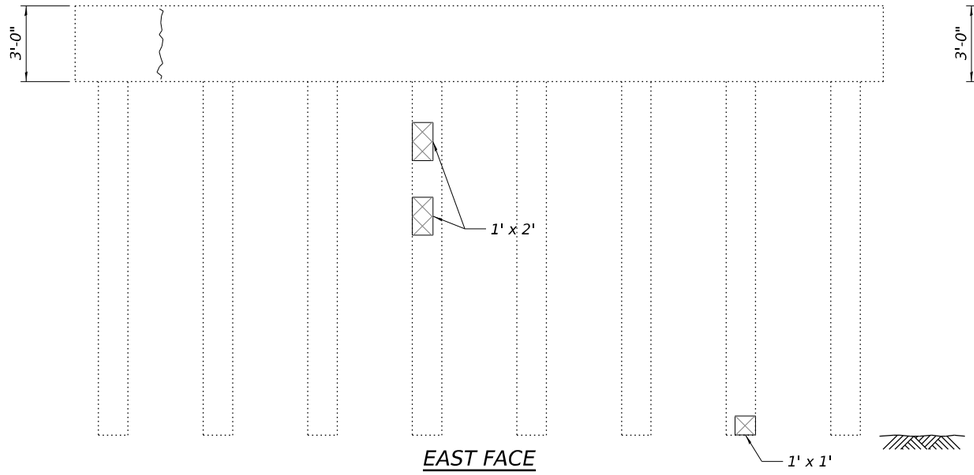
SUBSTRUCTURE REPAIR DETAILS - BENT 1 & EAST ABUTMENT
STRUCTURE NO. 097-0032

SHEET 10 OF 12 SHEETS

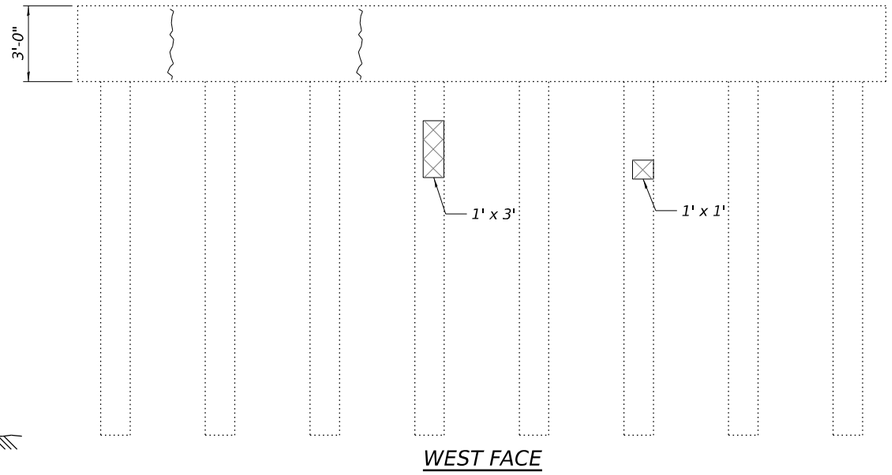
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	25
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

NOTES

1. Repair of the existing substructure shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.



EAST FACE
BENT 2

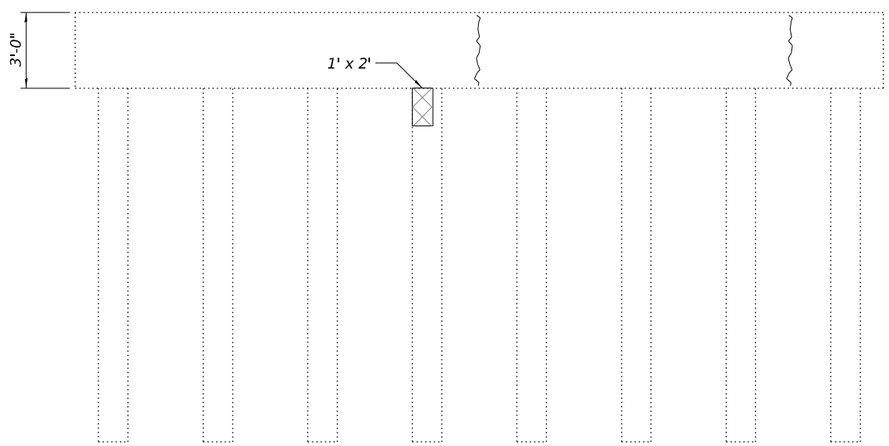


WEST FACE
BENT 2

LEGEND

Epoxy Crack Injection

Structural Repair of Concrete
(Depth Equal to or less than 5 Inches)



EAST FACE
BENT 3

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or less than 5 Inches)	Sq. Ft.	11.0
Epoxy Crack Injection	Foot	26

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006316

USER NAME =	DESIGNED - PDA	REVISED -	
	CHECKED - PRR	REVISED -	
PLOT SCALE =	DRAWN - PDA	REVISED -	
PLOT DATE =	CHECKED - MJT	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR DETAILS - BENT 2 & BENT 3
STRUCTURE NO. 097-0032
SHEET 11 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	26
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

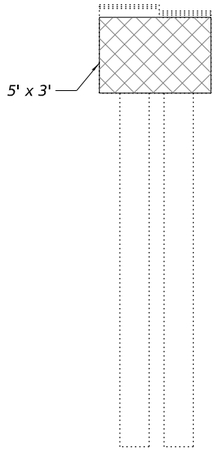
MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\097003278B37-011-Sub_Repair_Bent2&3.dgn
11/20/2025 11:44:26 AM

NOTES

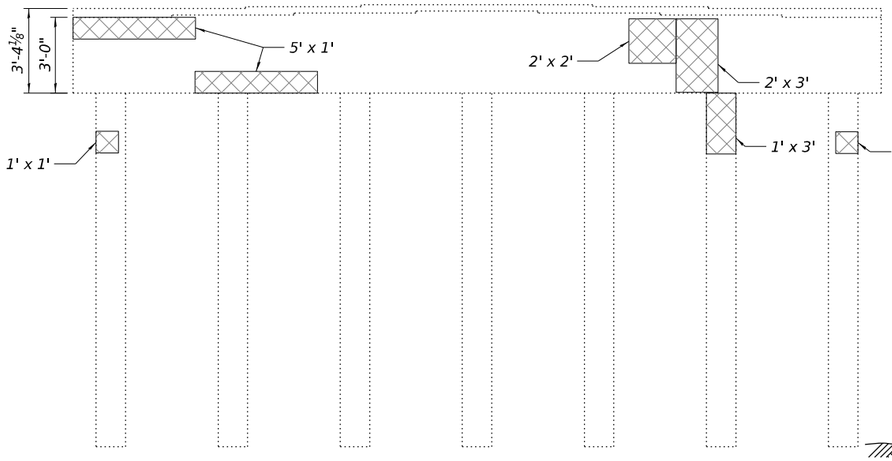
1. Repair of the existing substructure shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.

LEGEND

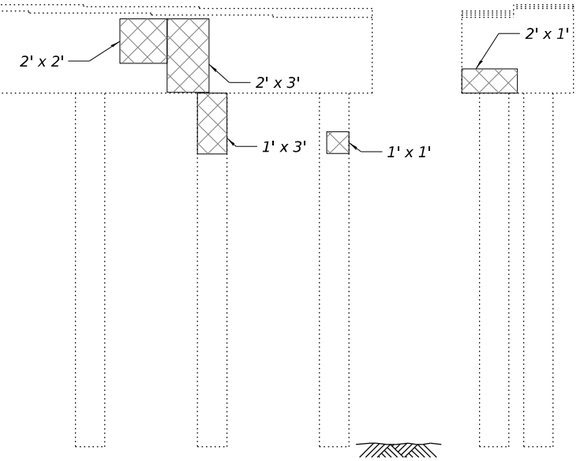
Structural Repair of Concrete
(Depth Equal to or less than 5 Inches)



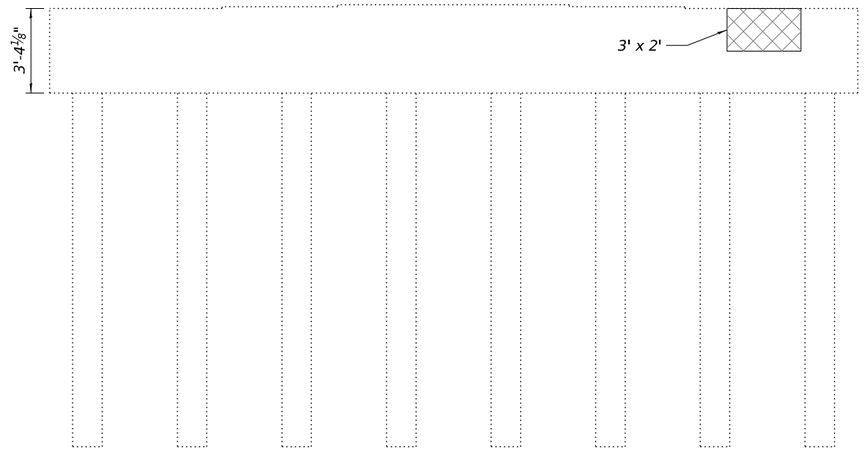
SOUTH FACE
BENT 4



EAST FACE
BENT 4



NORTH FACE
BENT 4



WEST FACE
BENT 4

BILL OF MATERIAL

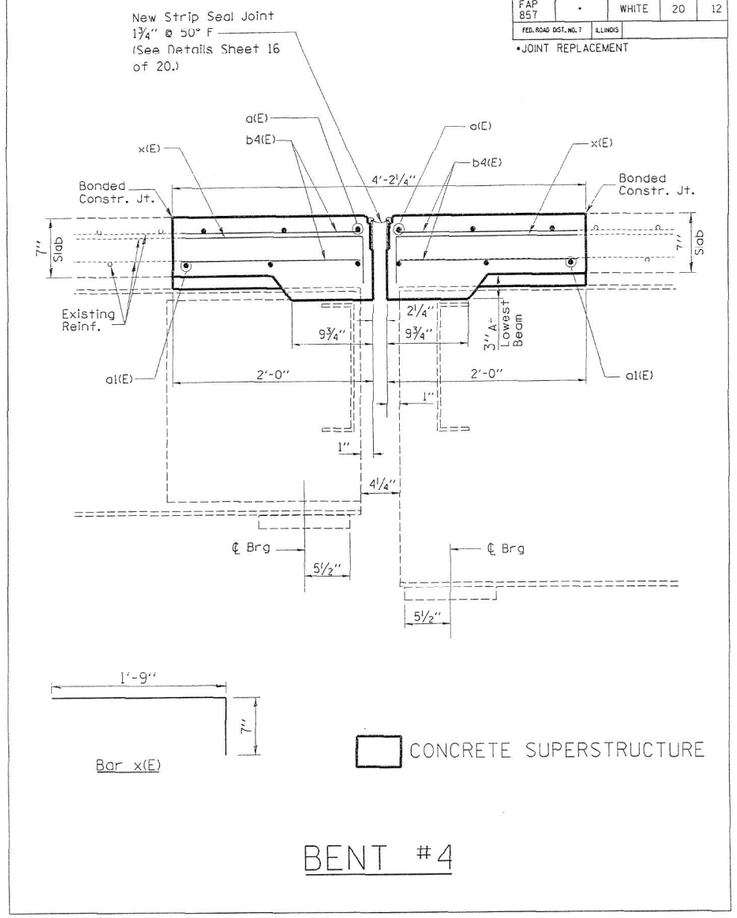
Item	Unit	Total
Structural Repair of Concrete (Depth Equal to or less than 5 Inches)	Sq. Ft.	48.0

FOR INFORMATION ONLY

CONTRACT NO. 07F908

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 857	-	WHITE	20	12
FED. ROAD DST. NO. 7	ILLINOIS			

•JOINT REPLACEMENT

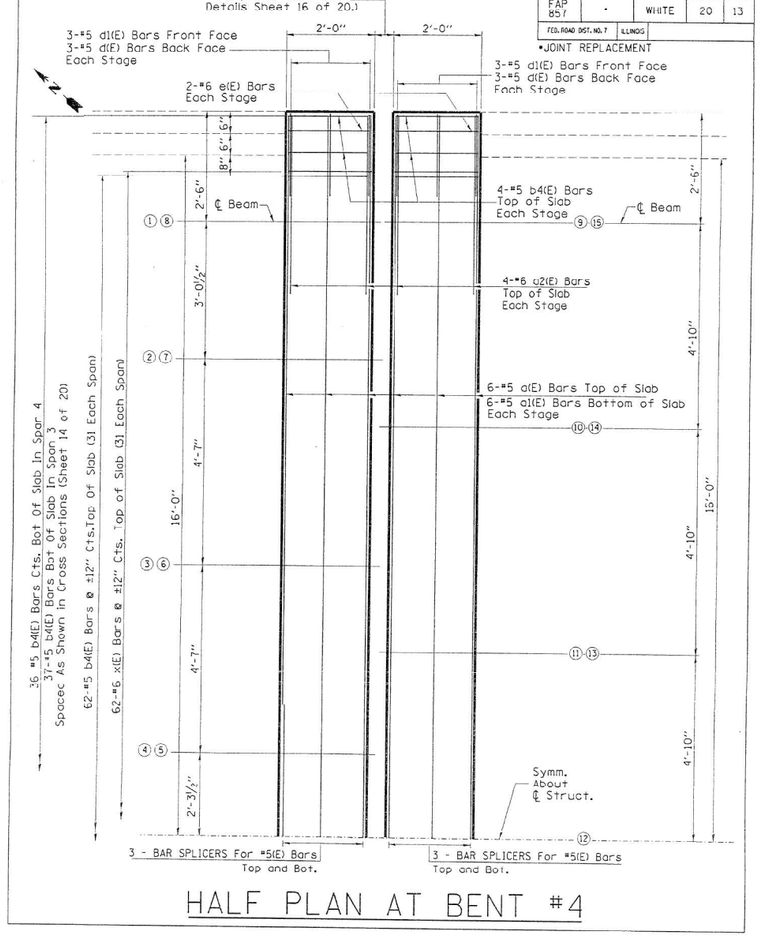


BENT #4

CONTRACT NO. 07F908

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 857	-	WHITE	20	13
FED. ROAD DST. NO. 7	ILLINOIS			

•JOINT REPLACEMENT

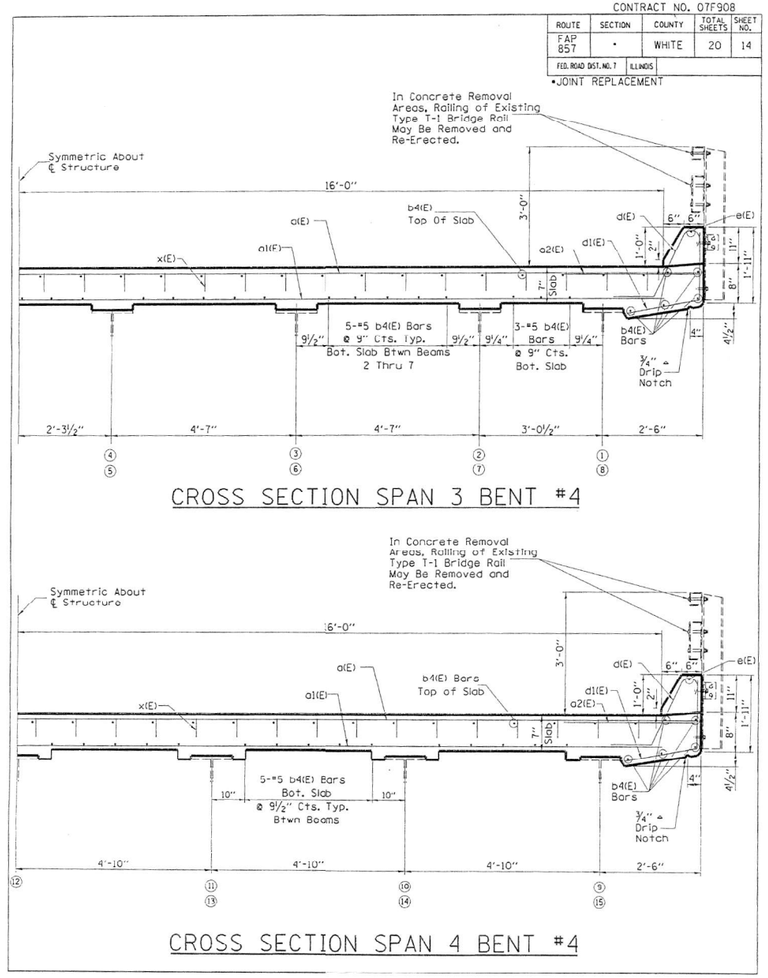


HALF PLAN AT BENT #4

CONTRACT NO. 07F908

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 857	-	WHITE	20	14
FED. ROAD DST. NO. 7	ILLINOIS			

•JOINT REPLACEMENT



CROSS SECTION SPAN 3 BENT #4

CROSS SECTION SPAN 4 BENT #4

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADD\data\CADsheets\07f0032-78B37-012A-FIO.dgn

11/18/2025 4:03:56 PM

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184-006516

USER NAME =	DESIGNED - PDA	REVISED -	
	CHECKED - PRR	REVISED -	
PLOT SCALE =	DRAWN - PDA	REVISED -	
PLOT DATE =	CHECKED - MJT	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

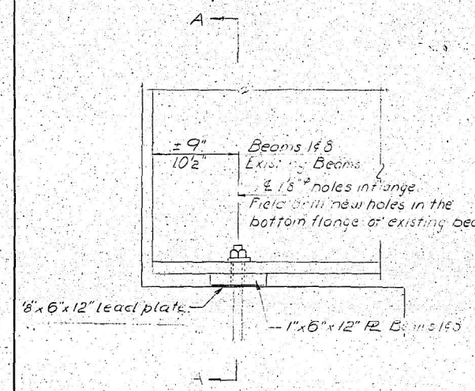
EXISTING - FOR INFORMATION ONLY
STRUCTURE NO. 097-0032
SHEET 1 OF 2 SHEETS

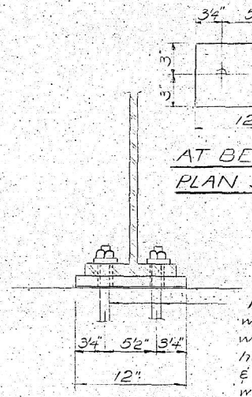
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	28
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. F. A. 857	101 BR-2	WHITE	31	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

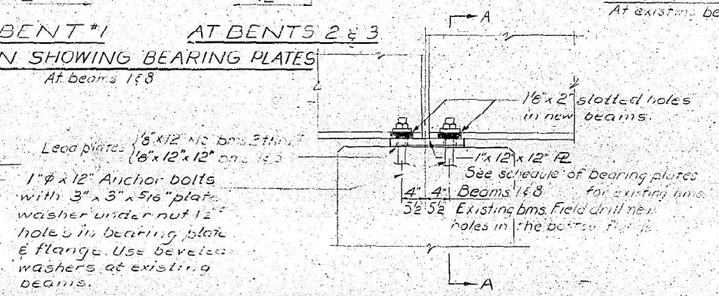
SHEET No. 11
20 SHEETS





AT BENT #1

PLAN SHOWING BEARING PLATES
At beams 1 & 8

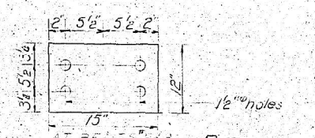


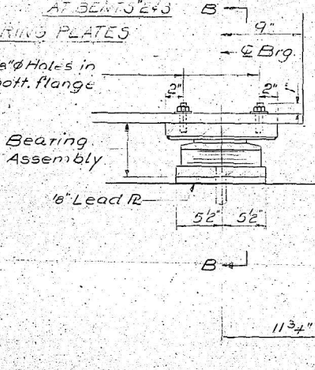
AT BENTS 2 & 3

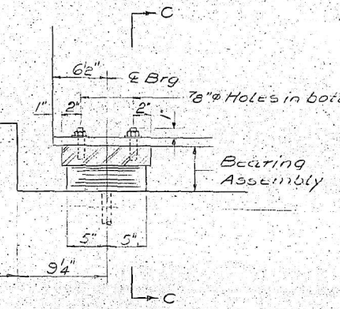
SECTION A-A

BENTS # 2 & #3

PLAN SHOWING BEARING PLATES
At existing beams





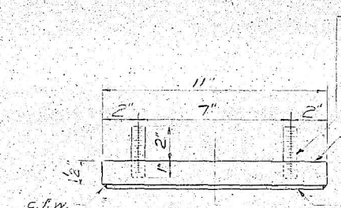


BENT # 4
(Looking North)

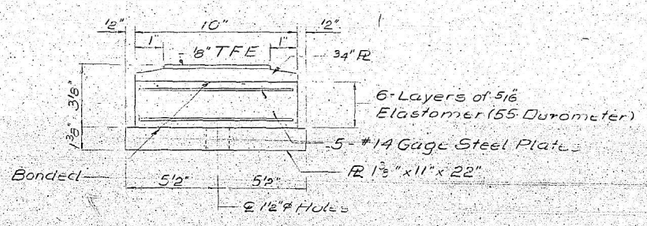
FOR INFORMATION ONLY

BENT # 1

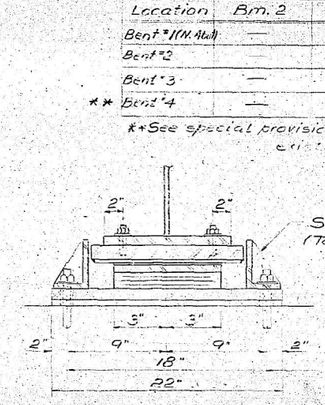
See schedule for location & size of new bearing plates under existing Beams



TOP BEARING ASSEMBLY



BOTTOM BEARING ASSEMBLY
(8 - Required)



SECTION B-B

* ℄ 1"ø x 12" Anchor bolts with 2½" x 2½" x 5/16" PL washer under nut. 1½" Holes in bottom PL.

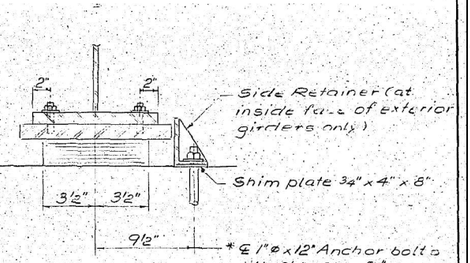
SCHEDULE OF BEARING PLATE REPLACEMENT UNDER EXIST. BEAMS

Location	Bm. 2	Bm. 3	Bm. 4	Bm. 5	Bm. 6	Bm. 7
Bent #1 (N. Abut)	—	—	PL 24 x 6 x 12	—	—	PL ¾ x 6 x 12
Bent #2	—	—	—	PL 24 x 12 x 15	—	—
Bent #3	—	—	PL 24 x 12 x 15	PL 24 x 12 x 15	PL ¾ x 12 x 15	—
** Bent #4	—	—	—	—	—	—

**See special provisions for "Jack and replace existing bearings".

BEARING ASSEMBLY
(7 - Required)

Note: Shim plates shall not be placed under Type I Bearing Assembly



SECTION C-C

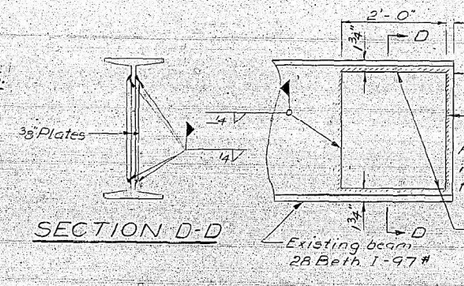
TYPE II TFE ELASTOMERIC EXP. BRG.
(WEST SIDE BENT #1)
Note: See sheet #12 for TFE Details

SCHEDULE OF WEB REPAIR

Location	Beams to be repaired
Bent #1 (West Abut)	Beams 2 and 7 - span 1
Bent #2	Beams 2 and 7 - spans 1 & 2
Bent #3	No web repair anticipated
Bent #4	Beams 2, 3, 4, 5, 6 & 7 Span 3

See special provisions for web repair.

TYPE I ELASTOMERIC EXP. BRG.
(East Side Bent #4)



SECTION D-D

WEB REPAIRS OF EXISTING BEAMS
(See special provisions)

BEARINGS
F.A. RTE. 857 - SECTION 101 BR-2
WHITE COUNTY
STA. 268 + 25.75

DESIGNED	Steve A. Meyer	
CHECKED	Dennis P. Brown	
DRAWN	V.H.	
CHECKED	DJK	

EXAMINED — Jan 13 1981 — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — DIRECTOR OF HIGHWAYS

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
109 N. 7th Street, 3rd Floor
Springfield, IL 62701
Phone: 217-679-0044
Professional Design Firm No. 184.006516

USER NAME =	DESIGNED - PDA	REVISED -	
	CHECKED - PRR	REVISED -	
PLOT SCALE =	DRAWN - PDA	REVISED -	
PLOT DATE =	CHECKED - MJT	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BEARING DETAILS - FOR INFORMATION ONLY
STRUCTURE NO. 097-0032
SHEET 2 OF 2 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
857	D9 BRIDGE OVERLAY 2026-3	WHITE	29	29
		CONTRACT NO. 78B37		
	ILLINOIS	FED. AID PROJECT		

MODEL: Sheet
FILE NAME: I:\2025\25024.01 CDI - IDOT D9 - PTB 214-046 - WO4 - IL 14 over Fox River Slough in White County\CADData\CADSheets\097O032-78B37-012B-FIO.dgn
11/18/2025 4:04:16 PM