04-24-2026 LETTING ITEM 199

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			31	1
	ILLINOIS	CONTRACT NO. 78B48		

IL 37, IL 169 D9 Bridge Overlay 2026-9 Pulaski, Massac

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

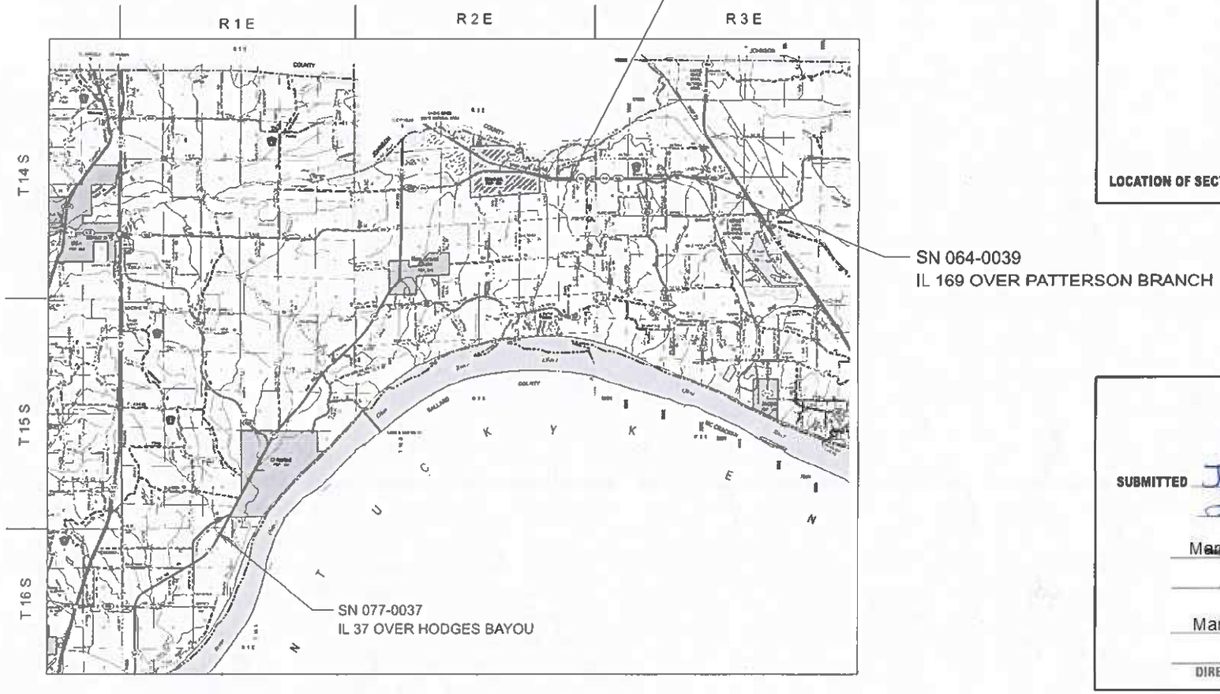
PROPOSED
HIGHWAY PLANS

FAP 726/FAS 2937 ROUTE (IL 37/IL 169)
SECTION D9 BRIDGE OVERLAY 2026-9
PROJECT STP-7MVY(636)
BRIDGE DECK OVERLAY
PULASKI AND MASSAC COUNTY

C-99-090-25

D-99-057-25

LOCATION OF SECTION INDICATED THUS: -



TRAFFIC DATA

TRAFFIC DATA							
IL 37 (FAP 726) SN 077-0037				IL 169 (FAS 2937) SN 077-0036 & SN 064-0039			
	2023	2026	2036		2023	2026	2036
PV =	920	940	1,050	PV =	1,140	1,175	1,300
SU =	90	95	100	SU =	90	95	100
MU =	140	145	160	MU =	70	70	80
ADT =	1,150	1,180	1,310	ADT =	1,300	1,340	3,460

TOWNSHIPS

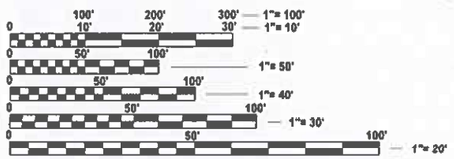
AMERICA
KARNAK
LOGAN

FOR INDEX OF SHEETS, SEE SHEET NO. 3

DESIGN DESIGNATION : N/A

COORDINATE SYSTEM : N/A

POSTED SPEED : 55 MPH



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
PROJECT MANAGER: ELISE KNOP

CONTRACT NO. 78B48

NET/GROSS LENGTH = 326.00 FT. = 0.062 MILE(SN 077-0037)
NET/GROSS LENGTH = 242.00 FT. = 0.046 MILE(SN 077-0036)
NET/GROSS LENGTH = 227.00 FT. = 0.043 MILE(SN 064-0039)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Jan 14 20 26
Ava S. Reynolds
REGIONAL ENGINEER
March 20 26
ENGINEER OF DESIGN AND ENVIRONMENT
March 20 26
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV - MS

Prepared By: _____
DISTRICT STUDIES & PLANS ENGINEER

Examined By: _____
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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNATURE SHEET

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			31	2

CONTRACT NO. 78B48
ILLINOIS | FED. AID PROJECT

IL 37, IL 169 D9 Bridge Overlay 2026-9 Pulaski, Massac

GENERAL NOTES

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.

THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION

COMMITMENTS: NONE

HMA MIXTURE REQUIREMENTS TABLES

The following HMA mixture requirements are applicable for this project

Locations	Water Proofing (Surface Lift)
Mixture Use(s):	Poly Hot-Mix Asphalt Surface Course, 9.5 mm-SMA Mix D N50
PG64-22:	SBS PG 76-22
Design Air Voids:	4.0%, 50 Gyration Design
Mixture Composition:	IL-9.5 mm
(Gradation Mixture)	
Friction Aggregate:	Mix D
Mixture Weight:	112 lbs/sq yd/in
Quality Management Program:	QC/QA
Sublot Size:	3,000 tons
Material Transfer Device (Required?)	No

Locations	Water Proofing (Binder Lift)
Mixture Use(s):	Poly Hot-Mix Asphalt Binder Course, 4.75 mm N50
PG:	SBS PG 76-22
Design Air Voids:	4.0%, 50 Gyration Design
Mixture Composition:	IL-4.75 mm
(Gradation Mixture)	
Friction Aggregate:	None
Mixture Weight:	112 lbs/sq yd/in
Quality Management Program:	QC/QA
Sublot Size:	3,000 tons
Material Transfer Device (Required?)	No

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-09 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02 AREAS OF REINFORCEMENT BARS
001006 DECIMAL OF AN INCH AND OF A FOOT
701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24'' FROM PAVEMENT EDGE
701201-05 LANE CLOSURE, 2L 2W, DAY ONLY, FOR SPEED GREATER THAN 45 MPH
701316-14 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR
701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS GREAT THAN 45 MPH
701901-11 TRAFFIC CONTROL DEVICES
704001-08 TEMPORARY CONCRETE BARRIER
780001-05 TYPICAL PAVEMENT MARKINGS
781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
862001-01 UNINTERRURTABLE POWER SUPPLY (UPS)

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PLOT DATE = 3/11/2026	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, GENERAL NOTES, MIX DESIGN STANDARDS, & COMMITMENTS

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	3
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

SUMMARY OF QUANTITIES

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	PULASKI	PULASKI	MASSAC
			COUNTY:	PULASKI	PULASKI	MASSAC
			ROUTE:	IL 37	IL 169	IL 169
			FUNDING:	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
			LOCATION:	RURAL	RURAL	RURAL
				077-0037	077-0036	064-0039
				0059	0059	0059
35400500	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 10"	SQ YD	810	306	246	258
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	686	216	226	244
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	644	214	214	216
40600990	TEMPORARY RAMP	SQ YD	108	36	36	36
40603200	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-4.75, N50	TON	28	8	10	10
40605022	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "D", N50	TON	247	99	74	74
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	11.6	5.8	5.8	
44004250	PAVED SHOULDER REMOVAL	SQ YD	810	306	246	258
50102400	CONCRETE REMOVAL	CU YD	3.2	1.6	1.6	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	620	310	310	
50800515	BAR SPLICERS	EACH	16	8	8	
53016000	DECK SLAB REPAIR (PARTIAL)	SQ YD	6.5	6.5		
53212754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	18			18
58100210	FULL LANE SEALANT WATERPROOFING SYSTEM	SQ YD	1,208	626	306	276

REV - MS

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PLOT DATE = 1/6/2026	DATE -	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.
			31	4
		CONTRACT NO. 78B48		
		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES - CONT

	CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	COUNTY: PULASKI ROUTE: IL 37 FUNDING: 80% FEDERAL 20% STATE LOCATION: RURAL 077-0037 0059	COUNTY: PULASKI ROUTE: IL 169 FUNDING: 80% FEDERAL 20% STATE LOCATION: RURAL 077-0036 0059	COUNTY: MASSAC ROUTE: IL 169 FUNDING: 80% FEDERAL 20% STATE LOCATION: RURAL 064-0039 0059
	60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	1			1
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	2	1	1
	67100100	MOBILIZATION	L SUM	1	0.33	0.33	0.34
	70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	EACH	3	1	1	1
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.33	0.33	0.34
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	0.33	0.33	0.34
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	18	6	6	6
	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	3	1	1	1
	70106700	TEMPORARY RUMBLE STRIPS	EACH	18	6	6	6
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	84	28	28	28
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	212	79	66	67
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	72	27	22	23
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	5,251	2,269	1,485	1,497

* SPECIALTY ITEM

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PLOT DATE = 1/8/2026	DATE -	REVISED -	

SUMMARY OF QUANTITIES

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			31	5
		CONTRACT NO. 78B48		
		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES - CONT

	CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	COUNTY: PULASKI	PULASKI	MASSAC
					ROUTE: IL 37	IL 169	IL 169
					FUNDING: 80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
					LOCATION: RURAL	RURAL	RURAL
					077-0037	077-0036	064-0039
					0059	0059	0059
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	4	3	3
	78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	1,751	757	495	499
*	86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	3	1	1	1
	X1300003	CLEAN APPROACH SLAB DRAIN	EACH	1			1
	X5060601	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1		
	Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	53.6	14.7	24.7	14.2
	Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1		
	Z0041895	POLYMER CONCRETE	CU FT	13	6.5	6.5	

* SPECIALTY ITEM

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SUMMARY OF QUANTITIES

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			25	6
			CONTRACT NO. 78B48	
		ILLINOIS	FED. AID PROJECT	

OVERLAY SCHEDULE

STATION	TO	STATION	FULL LANE SEALANT WATERPROOFING SYSTEM	POLY HMA SURFACE COURSE	POLY HMA BINDER COURSE	BIT MATERIALS (TACK COAT)	HMA SURFACE REMOVAL-BUTT JOINT	TEMP RAMP	PCC BASE COURSE WIDENING 10"	PAVED SHLD REMOVAL	NOTES
			SQ YD	TON	TON	POUND	SQ YD	SQ YD	SQ YD	SQ YD	
SN 077-0037											
352+79.00		354+59.00							80	80	PROP. SHLDS LEFT
353+00.00		354+60.00							72	72	PROP. SHLDS RIGHT
353+88.00		354+38.00		15		48	107	18			BUTT JOINT
354+38.00		354+63.00		8	4	60					APPROACH PAVEMENT
354+63.00		356+39.00	626	53							BRIDGE DECK
356+39.00		356+64.00		8	4	60					APPROACH PAVEMENT
356+64.00		357+14.00		15		48	107	18			BUTT JOINT
356+43.00		358+08.00							74	74	PROP. SHLDS LEFT
356+36.00		358+16.00							80	80	PROP. SHLDS RIGHT
SN 077-0037 TOTALS=			**626**	**99**	**8**	**216**	**214**	**36**	**306**	**306**	
SN 077-0036											
80+94.00		82+44.00							67	67	PROP. SHLDS LEFT
81+05.70		82+30.70							56	56	PROP. SHLDS RIGHT
81+73.50		82+23.50		15		48	107	18			BUTT JOINT
82+23.50		82+50.50		9	5	65					APPROACH PAVEMENT
82+52.50		83+38.50	306	26							BRIDGE DECK
83+38.50		83+65.50		9	5	65					APPROACH PAVEMENT
83+65.50		84+15.50		15		48	107	18			BUTT JOINT
83+60.00		84+90.00							58	58	PROP. SHLDS LEFT
83+45.50		84+90.50							65	65	PROP. SHLDS RIGHT
SN 077-0036 TOTALS=			**306**	**74**	**10**	**226**	**214**	**36**	**246**	**246**	
SN 064-0039											
259+80.61		261+45.61							74	74	PROP. SHLDS LEFT
259+99.61		261+19.61							54	54	PROP. SHLDS RIGHT
260+70.61		261+15.61		15		49	108	18			BUTT JOINT
261+15.61		261+45.61		10	5	73					APPROACH PAVEMENT
261+45.61		262+22.61	276	24							BRIDGE DECK
262+22.61		262+52.61		10	5	73					APPROACH PAVEMENT
262+52.61		262+97.61		15		49	108	18			BUTT JOINT
262+48.61		263+78.61							58	58	PROP. SHLDS LEFT
262+22.61		263+82.61							72	72	PROP. SHLDS RIGHT
SN 064-0039 TOTALS=			**276**	**74**	**10**	**244**	**216**	**36**	**258**	**258**	
GRAND TOTAL=			**1208**	**247**	**28**	**686**	**644**	**108**	**810**	**810**	

PAVEMENT MARKING SCHEDULE

STATION	PAINT PAVEMENT MARKING - LINE 4"			PVT MARKING REMOVAL-GRINDING	SHORT TERM PVT MARKING	SHORT TERM PVT MARKING REMOVAL
	SOLID WHITE	SOLID YELLOW	YELLOW SKIP DASH			
	FOOT	FOOT	FOOT	SQ FT	FOOT	SQ FT
SN 064-0039						
261+45.61 TO 262+22.61	1330		167	499	67	23
SN 077-0036						
82+52.50 TO 83+38.50	1320		165	495	66	22
SN 077-0037						
354+63.00 TO 356+39.00	1570	502	197	757	79	27
SUBTOTAL	**4220**	**502**	**529**	**1751**	**212**	**72**
TOTAL=	**5251**			**1751**	**212**	**72**

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PLOT DATE = 3/11/2026	DATE -	REVISED -	

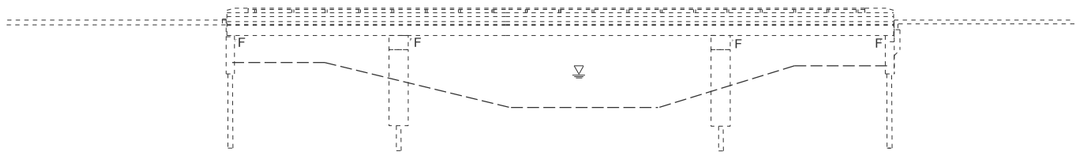
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES

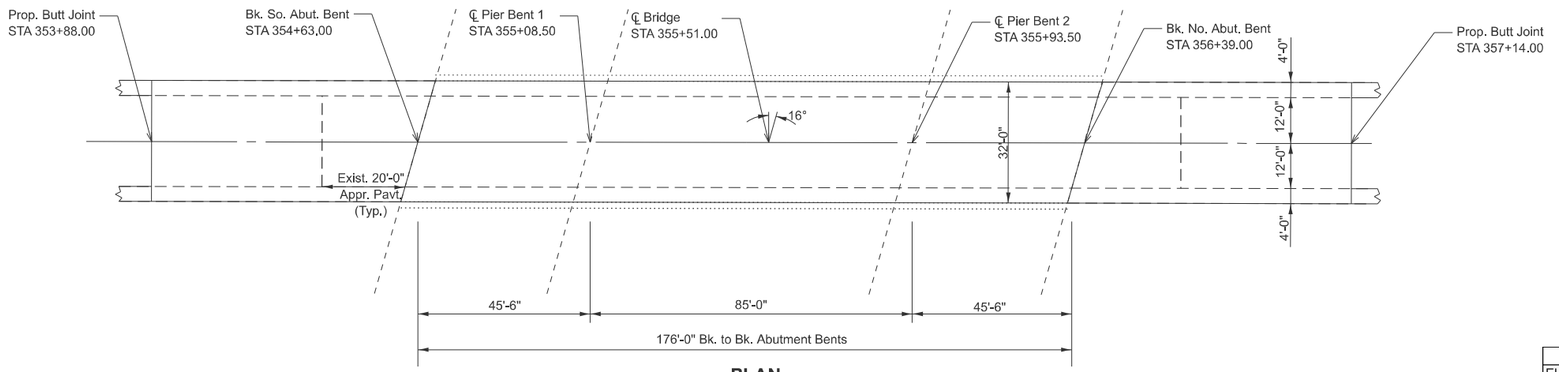
SCALE: | SHEET SCHEDULE OF 1 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	7
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac



ELEVATION



PLAN

ANTICIPATED CONSTRUCTION SEQUENCE

1. Install Base Course Widening 10"
2. Setup TC&P 701316
3. Perform Approach Slab Repair(Partial Depth)
4. Perform Deck Slap Repair(Partial)
5. Install Proposed HMA Bridge Deck Overlay with FLS
6. Switch TC&P 701316 from Stage I to Stage II and Repeat Work
7. Cleaning and Painting Steel Beams
8. Remove TC&P 701316

SCOPE OF WORK

Approach Slab Repair(Partial Depth)
Deck Slab Repair(Partial)
HMA Overlay-FLS
Cleaning and Painting Steel Beams
Pavement Connector PCC for Bridge Appr Slab
Polymer Nosing

DESIGN STRESSES

f'c = 4,000 psi
fy = 60,000 psi (reinf.)

GENERAL NOTES

1. Plan dimensions and details relative to existing structure have been taken from 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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

2. Reinforcement bars designated (E) shall be epoxy coated.

3. Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during the concrete removal operations shall be replaced using an approved bar splicer or anchor system at the Contractor's expense.

4. 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.

5. Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures".
All beam ends at the abutments to 1'-0" (measured along the beam) shall be cleaned per Near White Blast Cleaning.

6. The designated areas cleaned per Near White Blast Cleaning (SSPC-SP10) shall be painted according to the requirements of Paint System 1 - OZ/E/U (Organic Zinc-Rich Primer/Epoxy Intermediate Coat/Urethane Topcoat system). The color of the final finish coat for all interior steel surfaces shall be GREEN, MUNSELL NO. 7.5G 4/8. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be GREEN, MUNSELL NO. 7.5G 4/8.

7. SSPC QP1 Certification is required for this Contract.

TOTAL BILL OF MATERIALS

	ITEM	UNIT	QUANTITY
	FULL LANE SURFACE WATERPROOFING SYSTEM	SQ. YD	626
*	POLY HMA SURFACE COURSE SMA, 9.5, MIX "D", N50	TON	53
	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD	14.7
	DECK SLAB REPAIR (PARTIAL)	SQ. YD	6.5
	REINFORCEMENT BARS, EPOXY COATED	POUND	310.0
	BAR SPLICER	EACH	8.0
	POLYMER CONCRETE	CU. FT.	6.5
	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ. YD.	5.8
	CONCRETE REMOVAL	CU. YD.	1.6
	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L. SUM	1
	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 1	L. SUM	1

* SEE ROADWAY SCHEDULES FOR APPROACH AND ROADWAY RESURFACING QUANTITIES

LICENSED STRUCTURAL ENGINEER
JUSTAN W. MANN
081-005947
STATE OF ILLINOIS

Expires November 30, 2026

Justan W. Mann

BRIDGE DECK OVERLAY
IL 37 OVER HODGES BAYOU
F.A.P. 726-D9 BRIDGE OVERLAY 2026-9
PULASKI COUNTY
STATION 355+51.00
STRUCTURE NO. 077-0037

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	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

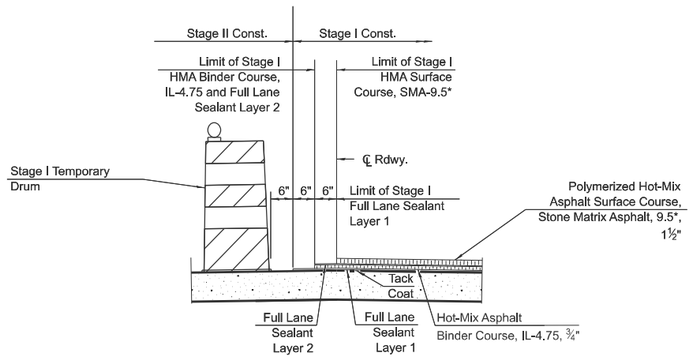
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
SN 077-0037

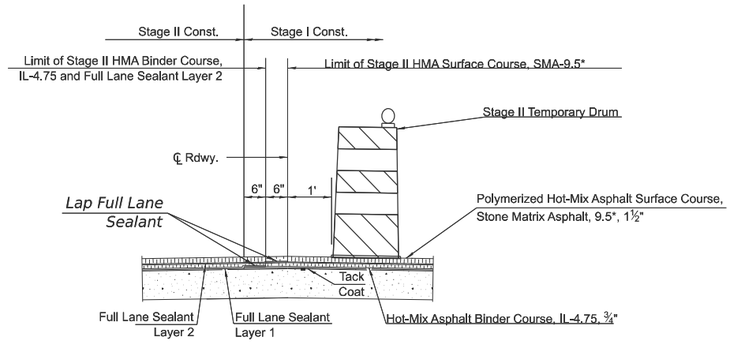
SCALE: | SHEET A001 OF 6 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	8
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

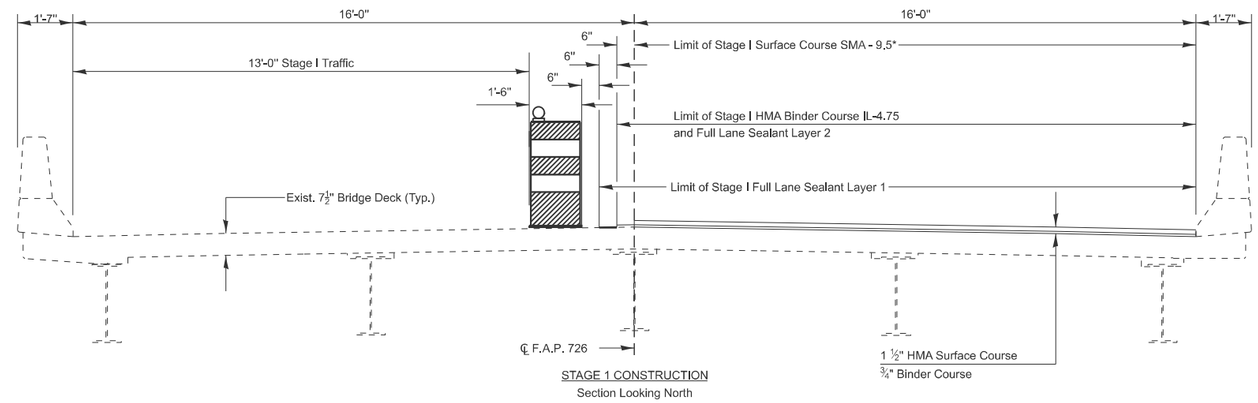


WATERPROOFING STAGE I

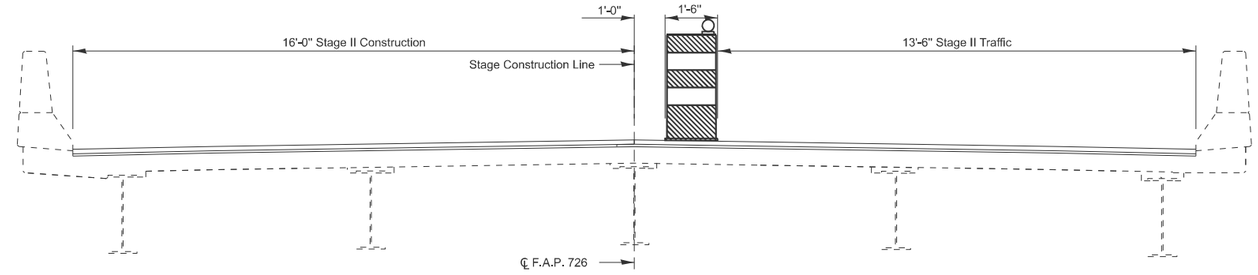


WATERPROOFING STAGE II

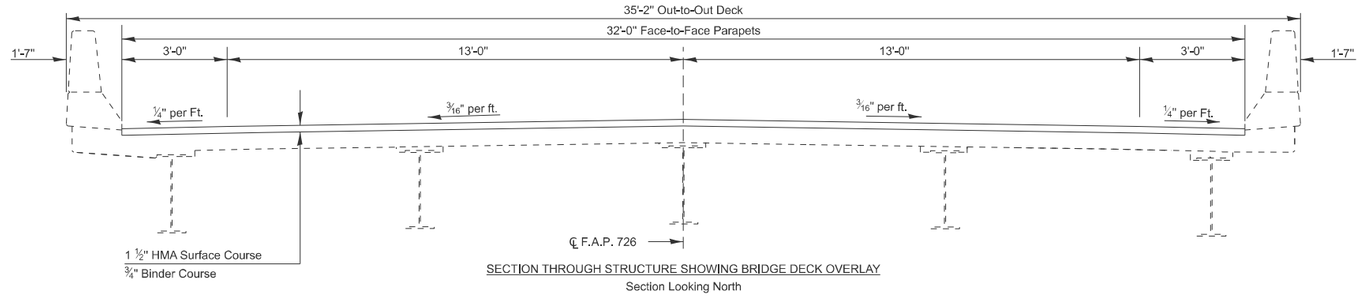
Note: Full Lane Sealant Waterproofing System consists of an initial tack coat to promote bonding, Layer 1 of Full Lane Sealant, a layer of Hot-Mix Binder Course, IL-4.75, and Layer 2 of Full Lane Sealant.



STAGE 1 CONSTRUCTION
Section Looking North



STAGE 2 CONSTRUCTION
Section Looking North



SECTION THROUGH STRUCTURE SHOWING BRIDGE DECK OVERLAY
Section Looking North

MODEL: Staging-1 [Sheet]
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USER NAME = elise.knop	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

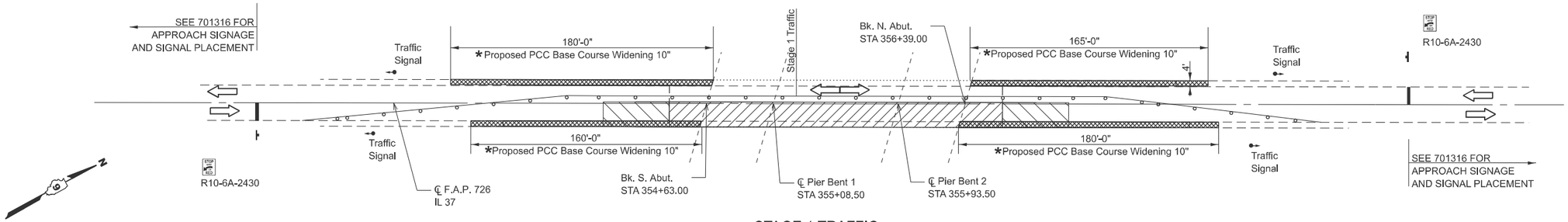
TRAFFIC CONTROL STAGING
SN 077-0037

SCALE: | SHEET A002 OF 6 SHEETS | STA. | TO STA.

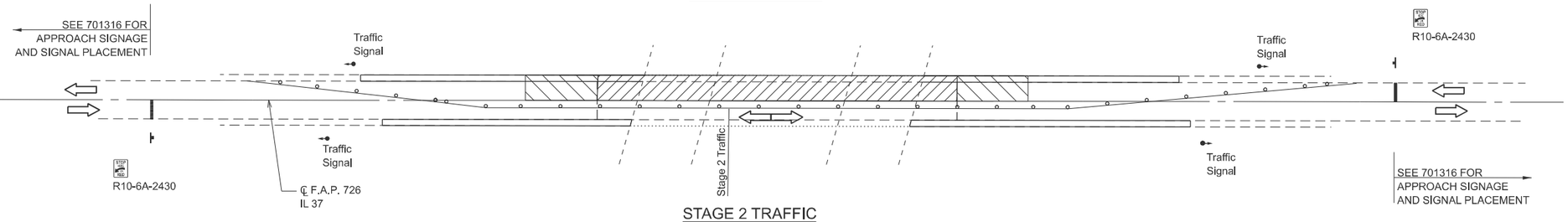
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	9
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

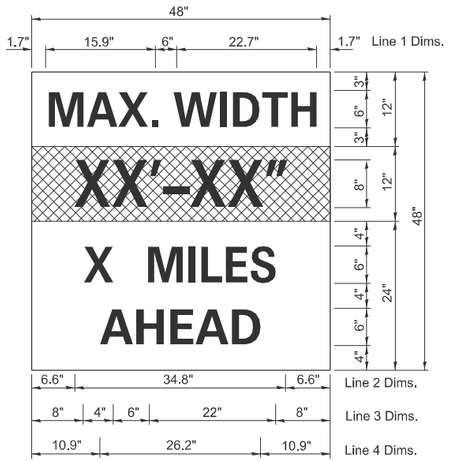
*Must be installed pre stage 1 under traffic standard 701326.



STAGE 1 TRAFFIC



STAGE 2 TRAFFIC



W12-I103

W12-I103, No Border
"MAX WIDTH" 6D, No Border, Black on White
"XX'-XX"" 8D, No Border, Black on Orange
"X MILES" 6D, No Border, Black on White
"AHEAD" 6D, No Border, Black on White

Notes for Max Width Sign:

1. Install a Max Width Sign each direction on IL 37 to give traffic approaching work zone enough advance notice to change routes if needed. Exact locations as directed by engineer.

2. The contractor shall furnish the posts and erect the signs at the locations 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. 701316, no other compensation will be allowed.

4. The width shown on the W12-I103 sign shall be 18" less than what is shown in the staged lane widths or as directed by the Engineer.

5. The "X" MILES AHEAD will be determined by the engineer.

Legend

OVERLAY

BUTT JOINT

PCC BASE COURSE WIDENING 10"

Notes for Traffic Control & Protection Standard 701316

(All items below shall be included in the contract unit price, each for Traffic Control and Protection , Std. 701316, no other compensation will be allowed.)

1. All signage as shown on the Highway Standard and additional signage shown on the detail above. The noted work shall include signs, post, hardware and labor. The contractor shall erect the signs at the locations detailed above and at the locations directed by the engineer.

2. Per Article 703.07, when temporary pavement marking is shown on the Standard and Detail above, the cost of temporary pavement marking and its removal will be included in the cost of the Standard.

MODEL: Traffic Control [Sheet]
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USER NAME = elise.knop	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

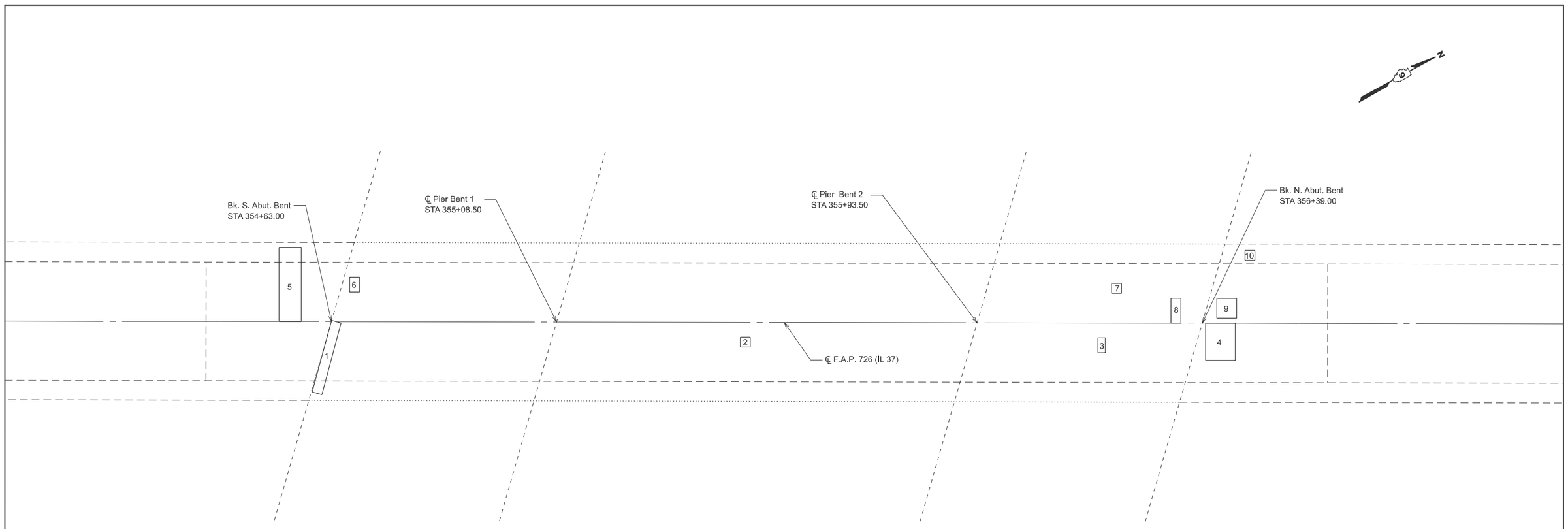
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING PLAN
SN 077-0037

SCALE: | SHEET A003 OF 6 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	10
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac



NOTE: Areas of deck repairs shown are an estimate. The Resident Engineer shall determine final patch locations and quantities in the field before bridge deck patching operations begin and mark on AS-BUILT plans.

APPROACH SLAB REPAIR (PARTIAL DEPTH)

PATCH #	LANE	DIST. FROM ℄	WIDTH	LENGTH	AREA(SQ YD)
4	NBDL	0'	7.5	6.0	5.0
5	SBDL	0'	15.0	4.5	7.5
9	SBDL	1'	4.0	4.0	1.8
10	SBDL	13'	2.0	2.0	0.4
				TOTAL=	**14.7**

DECK SLAB REPAIR (PARTIAL)

PATCH #	LANE	DIST. FROM ℄	WIDTH	LENGTH	AREA(SQ YD)
1	NBDL	0'	15.0	2.0	3.3
2	NBDL	3'	2.0	2.0	0.4
3	NBDL	3'	3.0	1.5	0.5
6	SBDL	6'	3.0	2.0	0.7
7	SBDL	6'	2.0	2.0	0.4
8	SBDL	0'	5.0	2.0	1.1
				TOTAL=	**6.5**

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD	14.7
DECK SLAB REPAIR (PARTIAL)	SQ. YD	6.5

BRIDGE REPAIRS
IL 37 OVER HODGES BAYOU
F.A.P. 726- D9 BRIDGE OVERLAY 2026-9
PULASKI COUNTY
STATION 355+51.00
STRUCTURE NO. 077-0037

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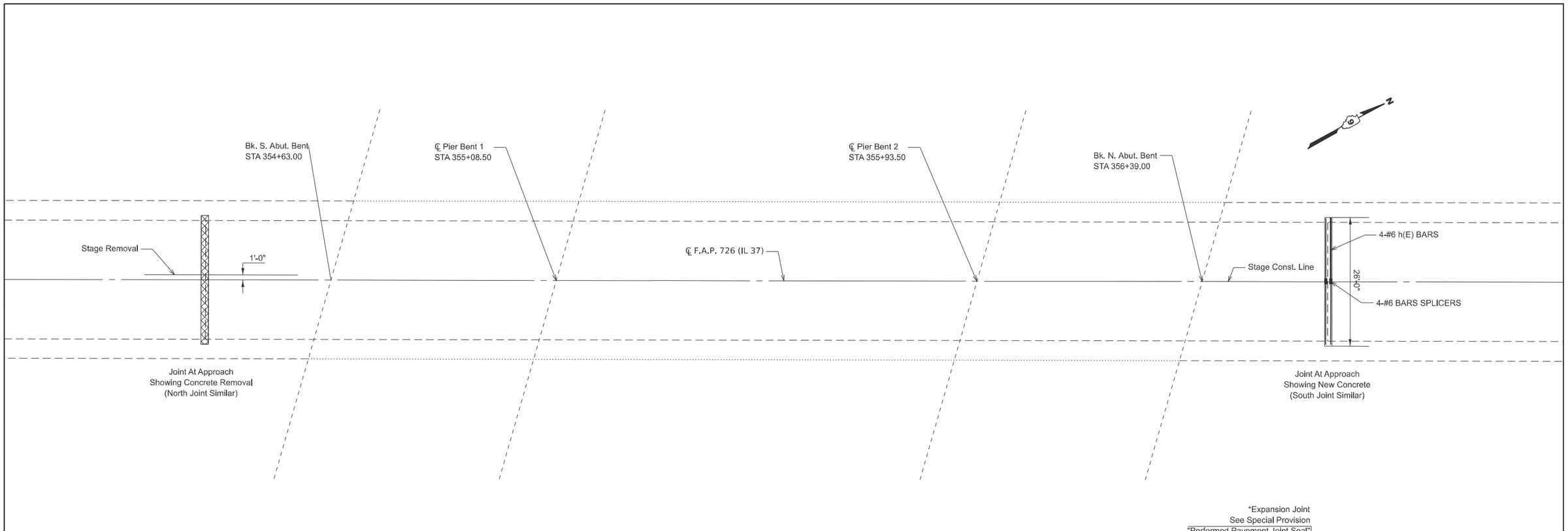
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

BRIDGE PATCHING
SN 077-0037

SCALE: | SHEET A004 OF 6 SHEETS | STA. | TO STA.

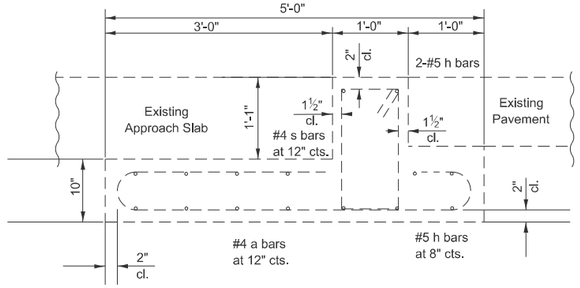
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	11
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

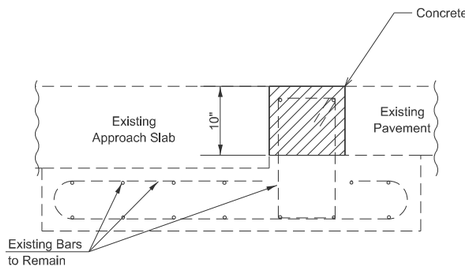


Joint At Approach
Showing Concrete Removal
(North Joint Similar)

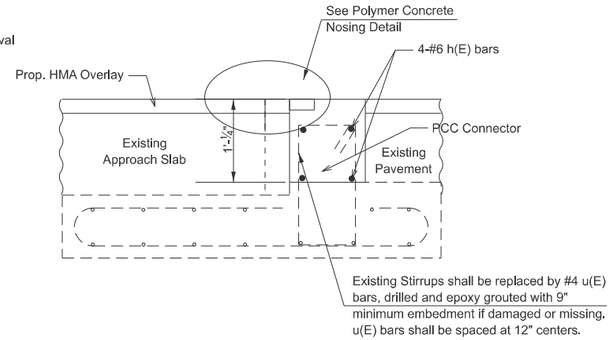
Joint At Approach
Showing New Concrete
(South Joint Similar)



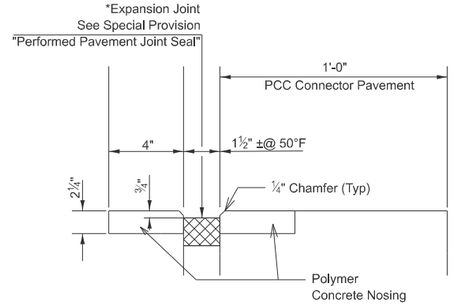
EXISTING TRANSVERSE BASE PAD



TRANSVERSE BASE PAD REMOVAL



PROPOSED TRANSVERSE BASE PAD



* 26 feet of Preformed Pavement Joint Sealer is required at each PCC Connector.
Cost Included With Pavement Connector (PCC) For Bridge Approach Slab.

PROPOSED POLYMER CONCRETE NOSING

BILL OF MATERIAL (TWO APPROACH JOINTS)

BAR	NO	SIZE	LENGTH	SHAPE
h (E)	16	#6	12'-10"	

ITEM	UNIT	QUANTITY
REINFORCEMENT BARS, EPOXY COATED	POUND	310
POLYMER CONCRETE	CU. FT.	6.5
PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ. YD.	5.8
CONCRETE REMOVAL	CU. YD.	1.6
BAR SPLICER	EACH	8

MODEL: Approach [Sheet]
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USER NAME = elise.knop	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

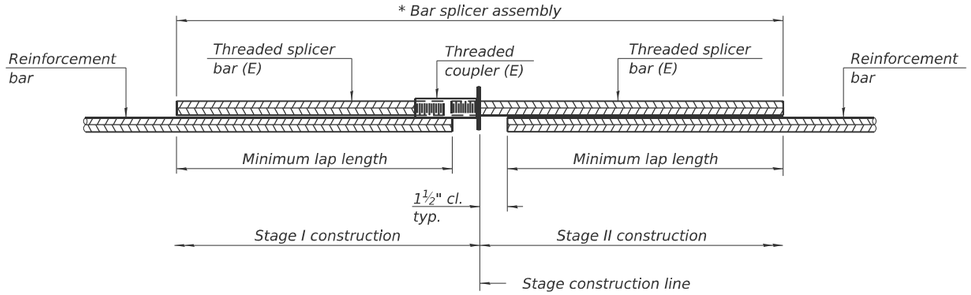
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH PAVEMENT DETAILS
SN 077-0037

SCALE: | SHEET A005 OF 6 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	12
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac



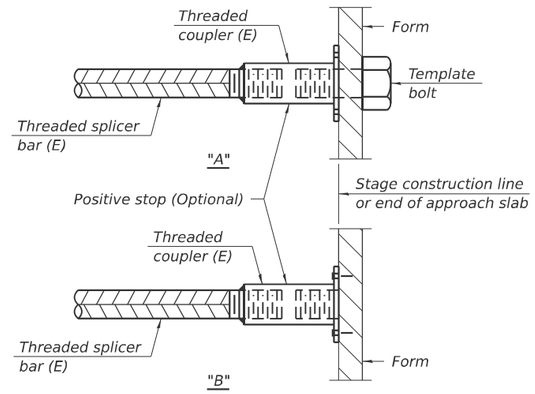
STANDARD BAR SPLICER ASSEMBLY PLAN

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

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

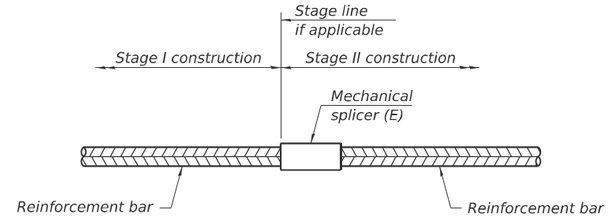
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Connector/Transverse Pad	#6	8	3'-3"



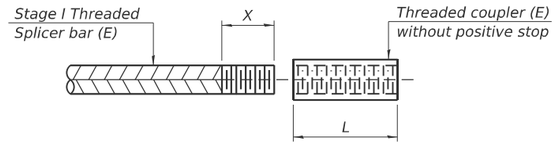
INSTALLATION AND SETTING METHODS

"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

USER NAME = elise.knop	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/11/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 077-0037

SCALE: | SHEET A006 OF 6 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	13
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

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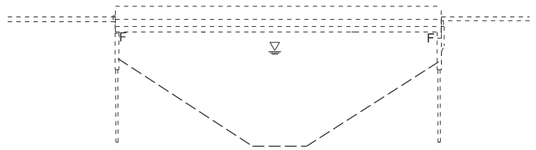
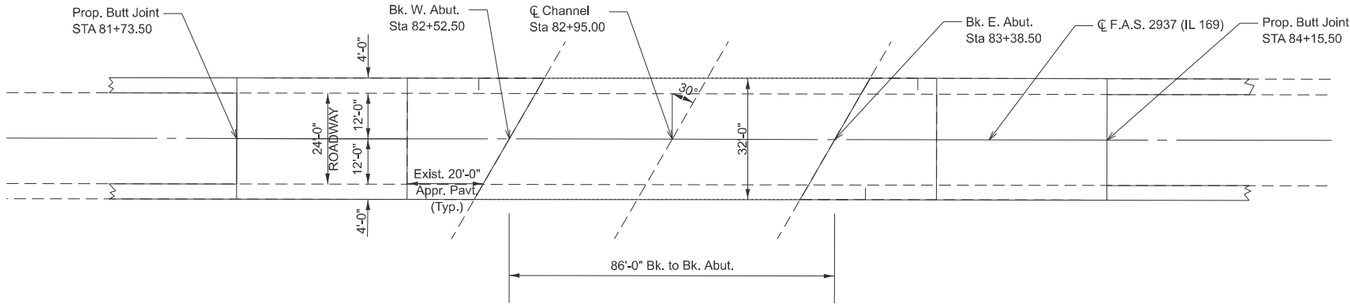


ELEVATION



PLAN

GENERAL NOTES

1. Plan dimensions and details relative to existing structure have been taken from 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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

2. Reinforcement bars designated (E) shall be epoxy coated.

3. Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any existing reinforcement bars intended for reuse and damaged during the concrete removal operations shall be replaced using an approved bar splicer or anchor system at the Contractor's expense.

4. 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 MATERIALS

	ITEM	UNIT	QUANTITY
	FULL LANE SURFACE WATERPROOFING SYSTEM	SQ. YD	306
*	POLY HMA SURFACE COURSE SMA, 9.5, MIX "D", N50	TON	26
	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD	24.7
	REINFORCEMENT BARS, EPOXY COATED	POUND	310
	BAR SPLICER	EACH	8
	POLYMER CONCRETE	CU. FT.	6.5
	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ. YD.	5.8
	CONCRETE REMOVAL	CU. YD.	1.6

* SEE ROADWAY SCHEDULES FOR APPROACH AND ROADWAY RESURFACING QUANTITIES

ANTICIPATED CONSTRUCTION SEQUENCE

1. Install Base Course Widening 10"
2. Setup TC&P 701316
3. Perform Approach Slab Repair(Partial Depth)
4. Install Proposed HMA Bridge Deck Overlay with FLS
5. Switch TC&P 701316 from Stage I to Stage II and Repeat Work
6. Remove TC&P 701316

SCOPE OF WORK

Approach Slab Repair(Partial Depth)
HMA Overlay-FLS
Pavement Connector PCC for Bridge Appr Slab
Polymer Nosing

DESIGN STRESSES

f'c = 4,000 psi
fy = 60,000 psi (reinf.)

LICENSED STRUCTURAL ENGINEER
JUSTAN W. MANN
081-005947
STATE OF ILLINOIS

Expires November 30, 2026

Justan W. Mann

BRIDGE DECK OVERLAY
IL 169 OVER TRIBUTARY OF POST CREEK
F.A.S. 2937- D9 BRIDGE OVERLAY 2026-9
PULASKI COUNTY
STATION 82+95.00
STRUCTURE NO. 077-0036

MODEL: GPE [Sheet]
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PLOT DATE = 3/11/2026	DATE -	REVISED -	

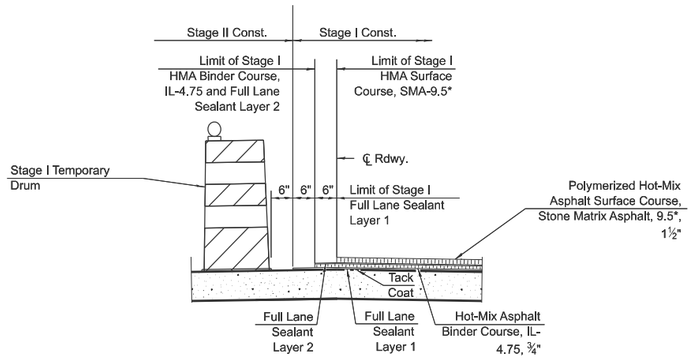
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
SN 077-0036

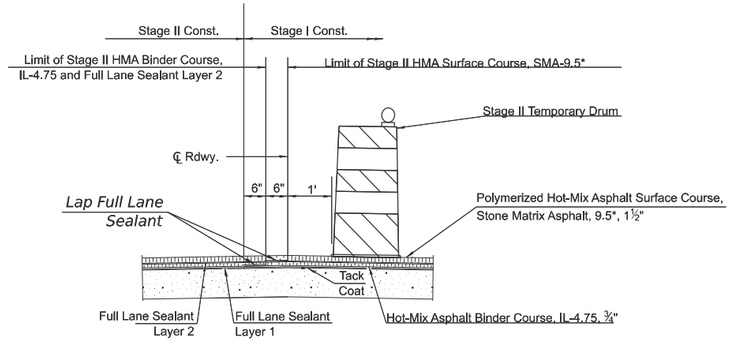
SCALE: | SHEET A001 OF 6 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	14
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

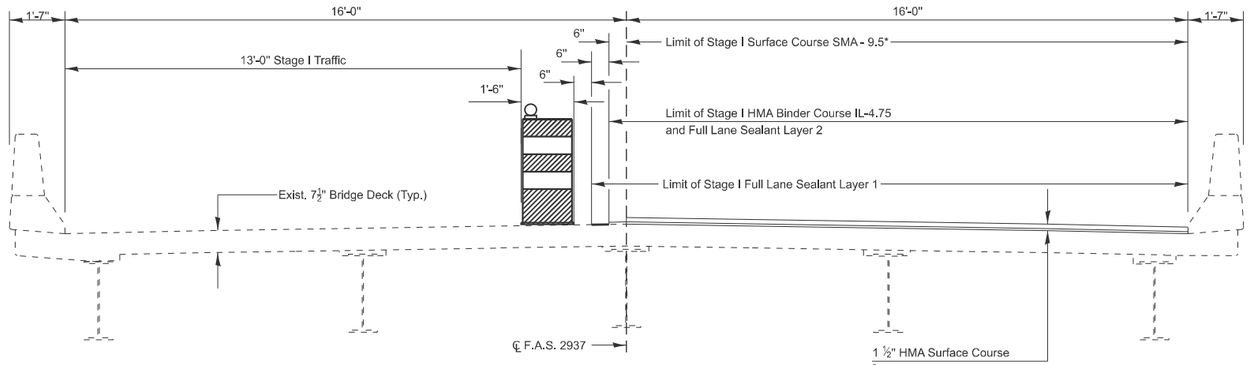


WATERPROOFING STAGE I

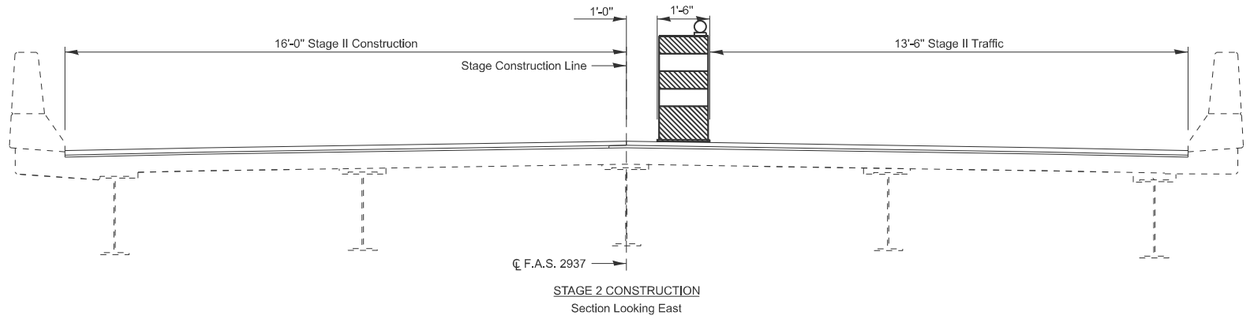


WATERPROOFING STAGE II

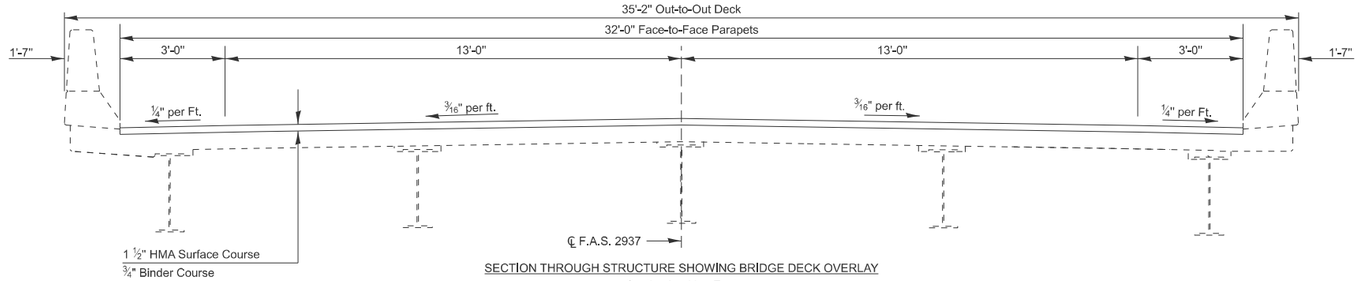
Note:Full Lane Sealant Waterproofing System consists of an initial tack coat to promote bonding, Layer 1 of Full Lane Sealant, a layer of Hot-Mix Asphalt Binder Course, IL-4.75, and Layer 2 of Full Lane Sealant.



STAGE 1 CONSTRUCTION
Section Looking East



STAGE 2 CONSTRUCTION
Section Looking East



SECTION THROUGH STRUCTURE SHOWING BRIDGE DECK OVERLAY
Section Looking East

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USER NAME = elise.knop	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

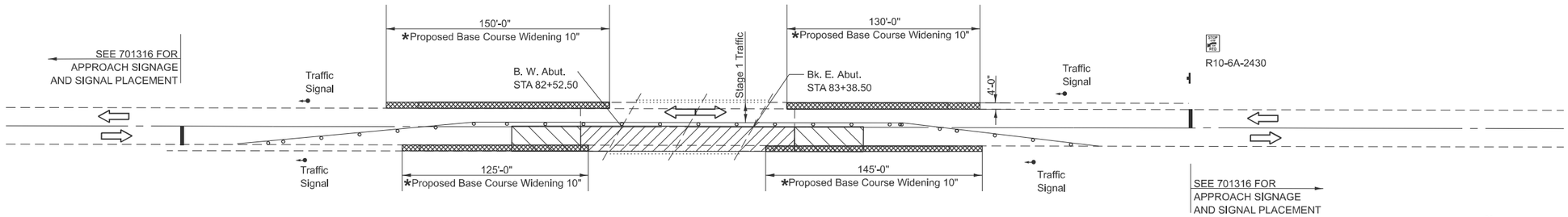
TRAFFIC CONTROL STAGING
SN 077-0036

SCALE: | SHEET A002 OF 6 SHEETS | STA. | TO STA.

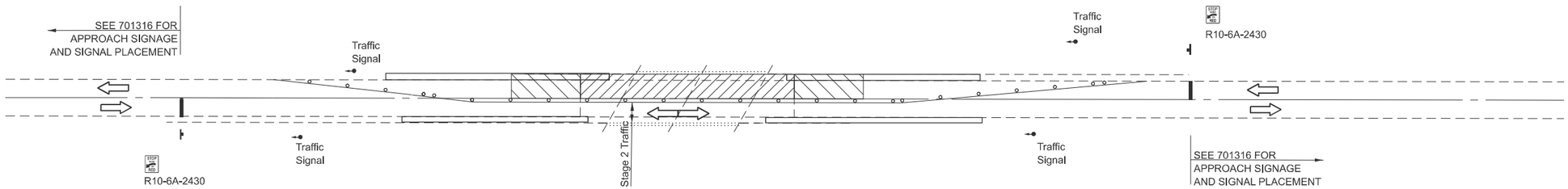
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	15
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

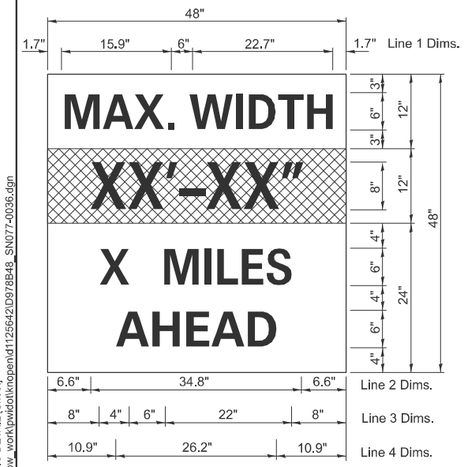
*Must be installed pre stage 1 under traffic standard 701326.



STAGE 1 TRAFFIC



STAGE 2 TRAFFIC



W12-I103

W12-I103, No Border
"MAX WIDTH" 6D, No Border, Black on White
"XX'-XX"" 8D, No Border, Black on Orange
"X MILES" 6D, No Border, Black on White
"AHEAD" 6D, No Border, Black on White

Notes for Max Width Sign:

1. Install a Max Width Sign each direction on IL 169 to give traffic approaching work zone enough advance notice to change routes if needed. Exact locations as directed by engineer.

2. The contractor shall furnish the posts and erect the signs at the locations 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. 701316, no other compensation will be allowed.

4. The width shown on the W12-I103 sign shall be 18" less than what is shown in the staged lane widths or as directed by the Engineer.

5. The "X" MILES AHEAD will be determined by the engineer.

Legend

OVERLAY

BUTT JOINT

PCC BASE COURSE WIDENING 10"

Notes for Traffic Control & Protection Standard 701316

(All items below shall be included in the contract unit price, each for Traffic Control and Protection , Std. 701316, no other compensation will be allowed.)

1. All signage as shown on the Highway Standard and additional signage shown on the detail above. The noted work shall include signs, post, hardware and labor. The contractor shall erect the signs at the locations detailed above and at the locations directed by the engineer.

2. Per Article 703.07, when temporary pavement marking is shown on the Standard and Detail above, the cost of temporary pavement marking and its removal will be included in the cost of the Standard.

MODEL: TRAFFIC DETAIL [Sheet]
FILE NAME: c:\dw_work\pwdot\knopen\d1125642\D978B48_SN077-0036.dgn

USER NAME = elise.knop	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/11/2026	DATE -	REVISED -

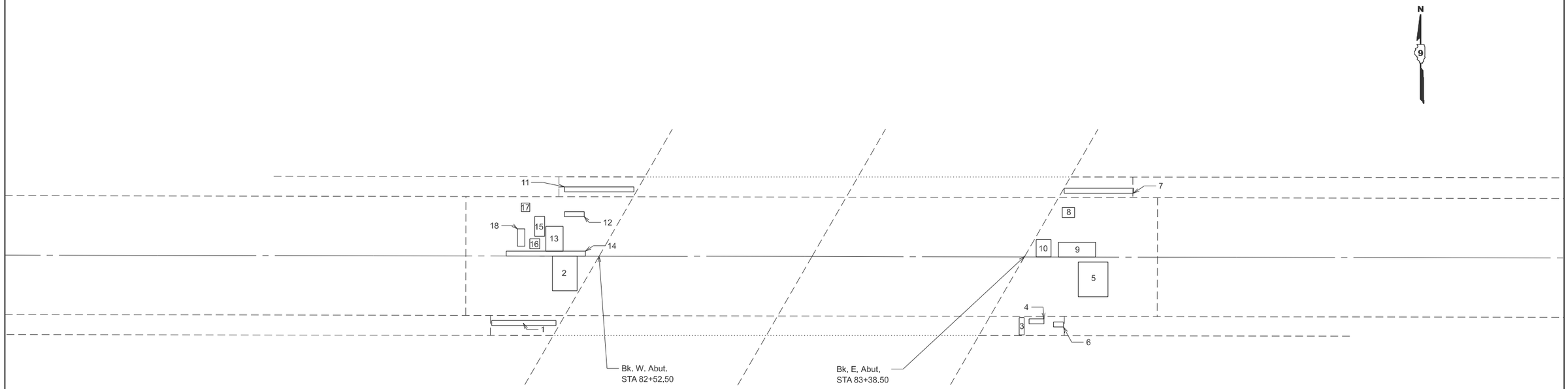
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING PLAN
SN 077-0036

SCALE: | SHEET A003 OF 6 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	16
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac



APPROACH SLAB REPAIR (PARTIAL DEPTH)

PATCH #	LANE	DIST. FROM ℄	WIDTH	LENGTH	AREA(SQ YD)
1	EBDL	13	1.0	13.0	1.4
2	EBDL	0	7.0	5.0	3.9
3	EBDL	14	3.5	1	0.4
4	EBDL	13	1	3	0.3
5	EBDL	1	7	6	4.7
6	EBDL	13	1	2	0.2
7	WBDL	13	1	14	1.6
8	WBDL	8	2	2.5	0.6
9	WBDL	0	3	7.5	2.5
10	WBDL	0	3.5	3	1.2
11	WBDL	13	1	14	1.6
12	WBDL	8	1	4	0.4
13	WBDL	0	5	3.5	1.9
14	WBDL	0	1	16	1.8
15	WBDL	4	4	2	0.9
16	WBDL	3	2	2	0.4
17	WBDL	9	1.7	1.7	0.3
18	WBDL	2	3.5	1.5	0.6
				TOTAL=	**24.7**

NCTE: Areas of deck repairs shown are an estimate. The Resident Engineer shall determine final patch locations and quantities in the field before bridge deck patching operations begin and mark on AS-BUILT plans.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD	24.7

BRIDGE REPAIRS
IL 169 OVER TRIBUTARY OF POST CREEK
F.A.S. 2937- D9 BRIDGE OVERLAY 2026-9
PULASKI COUNTY
STATION 82+95.00
STRUCTURE NO. 077-0036

MODEL: Patching [Sheet]
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	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

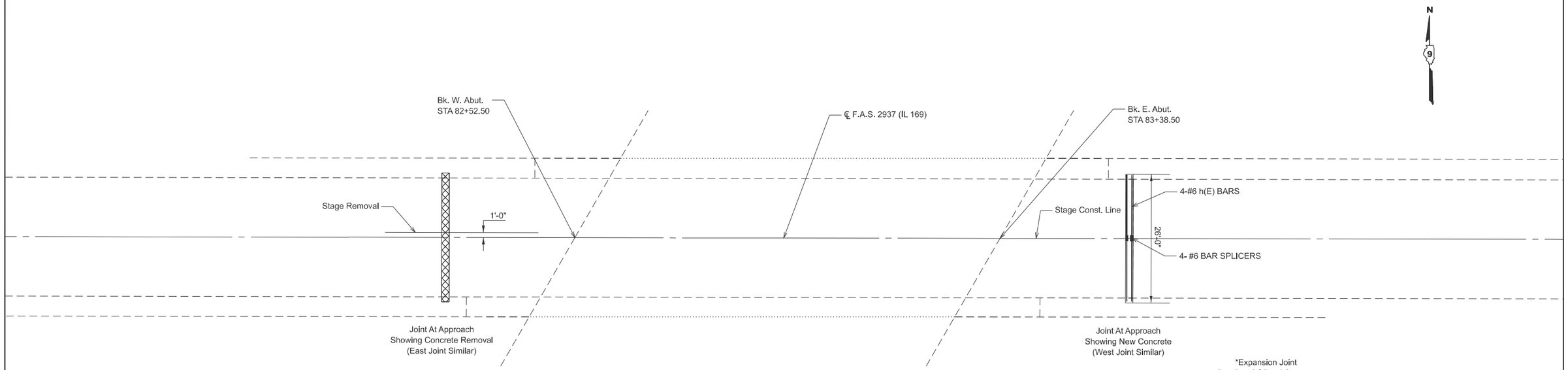
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

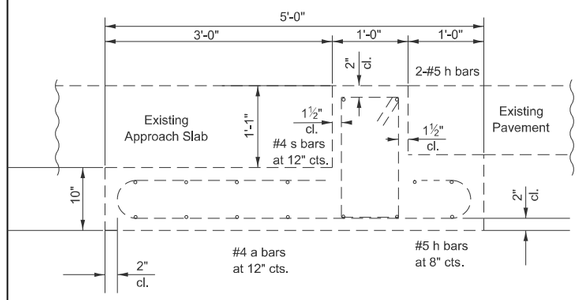
BRIDGE APPROACH PATCHING
SN 077-0036

SCALE: | SHEET A004 OF 6 SHEETS | STA. | TO STA.

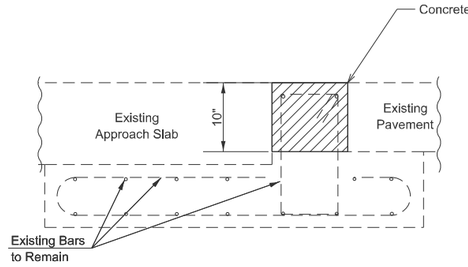
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	17
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

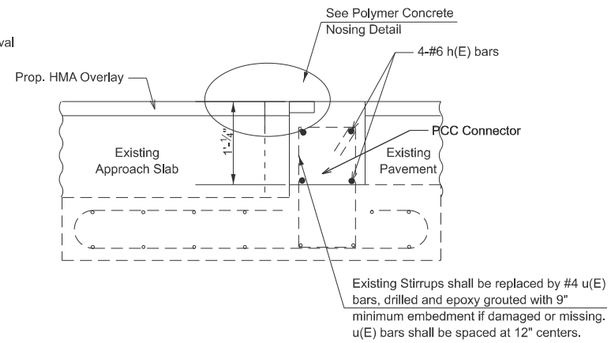




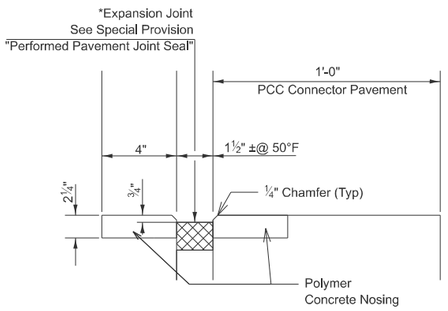
EXISTING TRANSVERSE BASE PAD



TRANSVERSE BASE PAD REMOVAL



PROPOSED TRANSVERSE BASE PAD



* 26 feet of Preformed Pavement Joint Sealer is required at each PCC Connector.
Cost Included With Pavement Connector (PCC) For Bridge Approach Slab.

PROPOSED POLYMER CONCRETE NOSING

BILL OF MATERIAL (TWO APPROACH JOINTS)

BAR	NO	SIZE	LENGTH	SHAPE
h (E)	16	#6	12'-10"	

ITEM	UNIT	QUANTITY
REINFORCEMENT BARS, EPOXY COATED	POUND	310
POLYMER CONCRETE	CU. FT.	6.5
PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ. YD.	5.8
CONCRETE REMOVAL	CU. YD.	1.6
BAR SPLICER	EACH	8

MODEL: Approach [Sheet]
FILE NAME: c:\pw_work\pwidot\knopen\d1125642\D978B48_SN077-0036.dgn

USER NAME = elise.knop	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

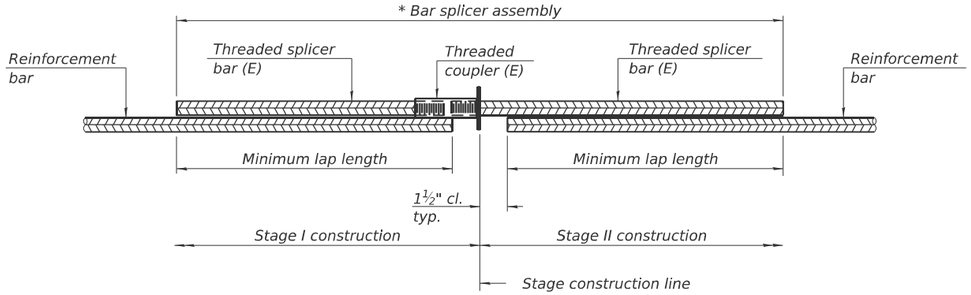
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH PAVEMENT DETAIL
SN 077-0036

SCALE: | SHEET A005 OF 6 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	18
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac



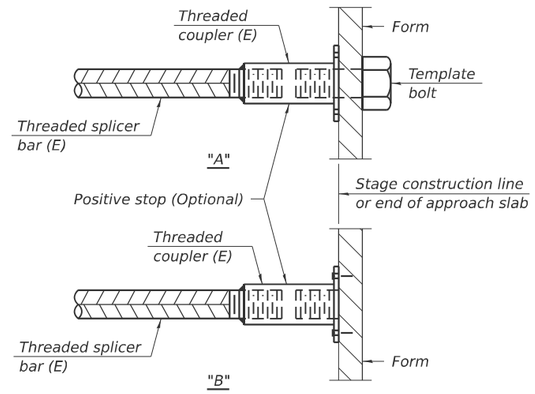
STANDARD BAR SPLICER ASSEMBLY PLAN

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

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

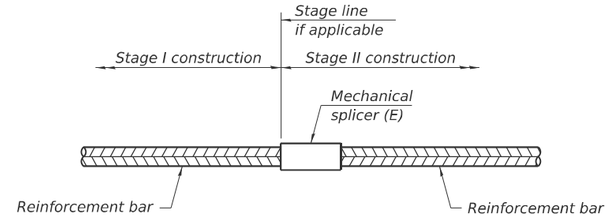
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Connector/Transverse Pad	#6	8	3'-3"



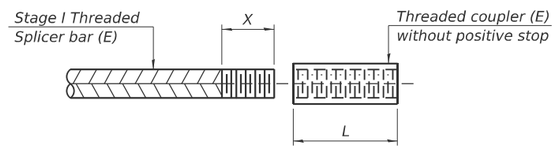
INSTALLATION AND SETTING METHODS

"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

USER NAME = elise.knop	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/11/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 077-0036

SCALE: | SHEET A006 OF 6 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	19
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

MODEL: Bar Splicer [Sheet]
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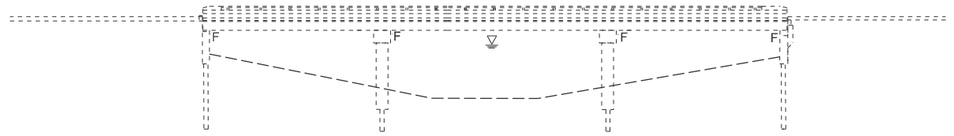
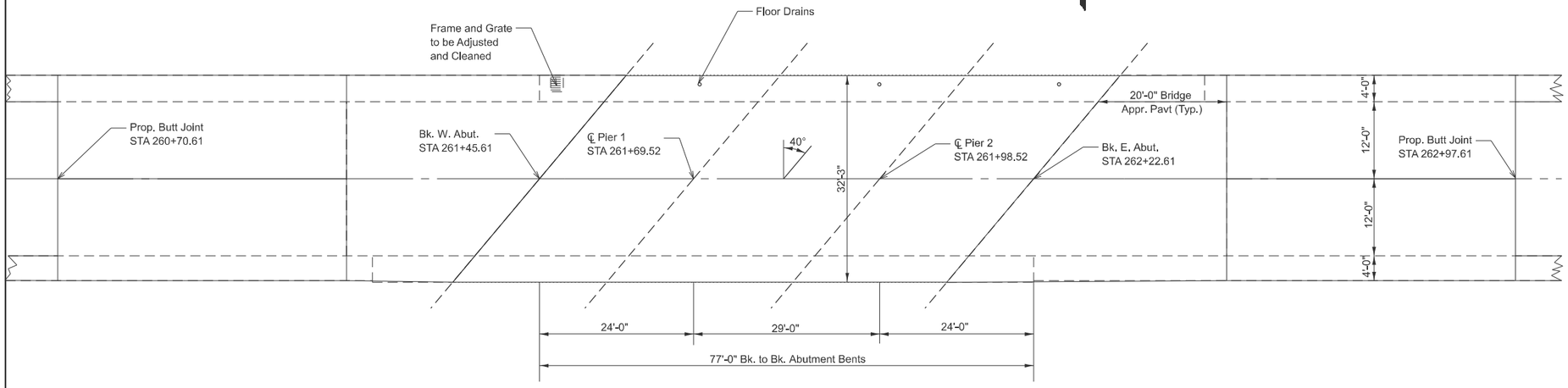


ELEVATION



PLAN

GENERAL NOTES

1. Plan dimensions and details relative to existing structures have been taken from 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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

ANTICIPATED CONSTRUCTION SEQUENCE

1. Install Base Course Widening 10"
2. Setup TC&P 701316
3. Perform Approach Slab Repair(Partial Depth)
4. Install Proposed HMA Bridge Deck Overlay with FLS
5. Repair Bridge Drains and Adjust and Clean Frame and Grate
6. Switch TC&P 701316 from Stage I to Stage II and Repeat Work
7. Remove TC&P 701316

SCOPE OF WORK

Approach Slab Repair(Partial Depth)
HMA Overlay-FLS
Frame and Grate to be Adjusted and Cleaned
Structural Repair of Drains

DESIGN STRESSES

f'c = 4,000 psi
fy = 60,000 psi (reinf.)

TOTAL BILL OF MATERIALS

	ITEM	UNIT	QUANTITY
	FULL LANE SURFACE WATERPROOFING SYSTEM	SQ. YD	276
*	POLY HMA SURFACE COURSE SMA, 9.5, MIX "D", N50	TON	24
	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD	14.2
	STRUCTURAL REPAIR OF CONCRETE(DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ. FT.	18.0
	FRAME AND GRATES TO BE ADJUSTED	EACH	1
	CLEAN APPROACH SLAB DRAIN	EACH	1

* SEE ROADWAY SCHEDULES FOR APPROACH AND ROADWAY RESURFACING QUANTITIES

LICENSED STRUCTURAL ENGINEER
JUSTAN W. MANN
081-005947
STATE OF ILLINOIS

Expires November 30, 2026

Justan W. Mann

BRIDGE DECK OVERLAY
IL 169 OVER PATTERSON BRANCH
F.A.S. 2937- D9 BRIDGE OVERLAY 2026-9
MASSAC COUNTY
STATION 261+84.00
STRUCTURE NO. 064-0039

MODEL: GPE [Sheet]
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USER NAME = elise.knop	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

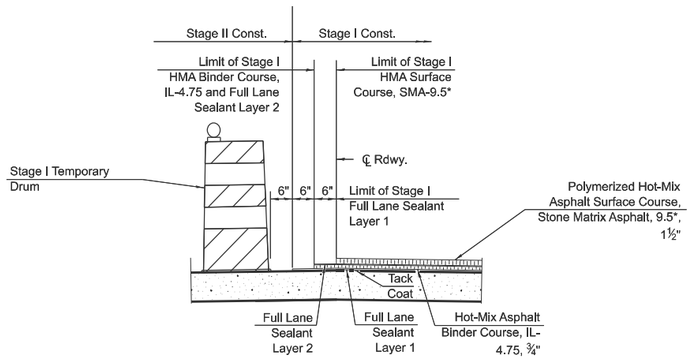
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
SN 064-0039

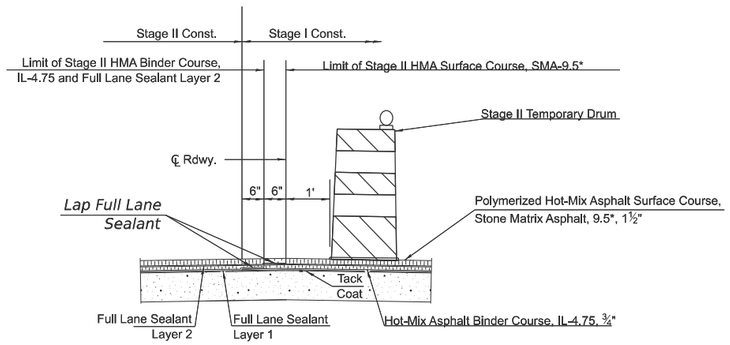
SCALE: | SHEET A001 OF 4 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	20
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

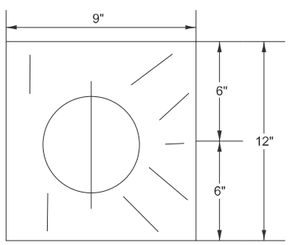


WATERPROOFING STAGE I



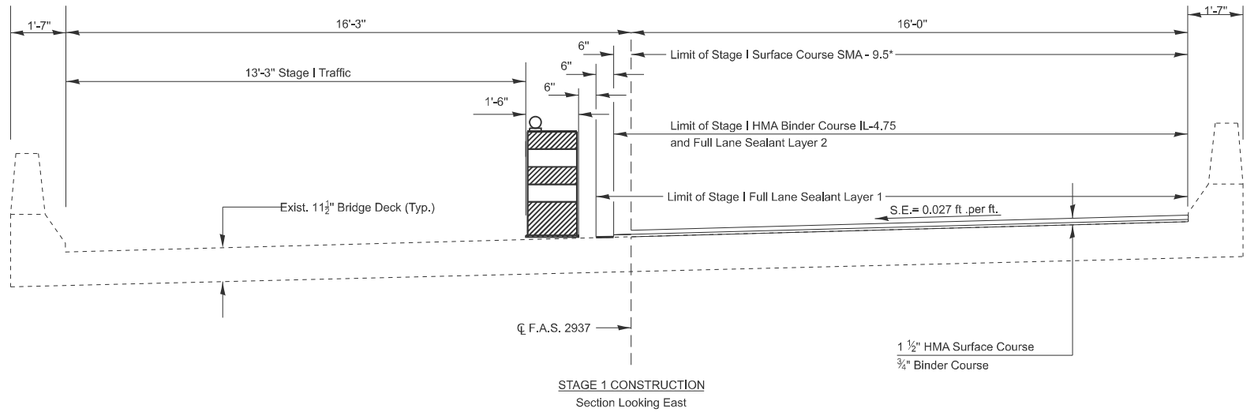
WATERPROOFING STAGE II

Note:Full Lane Sealant Waterproofing System consists of an initial tack coat to promote bonding, Layer 1 of Full Lane Sealant, a layer of Hot-Mix Asphalt Binder Course, IL-4.75, and Layer 2 of Full Lane Sealant.

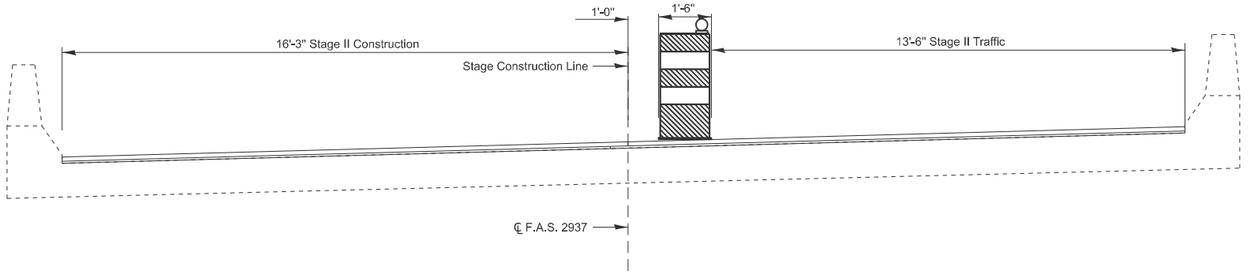


OVERLAY TREATMENT AT FLOOR DRAIN

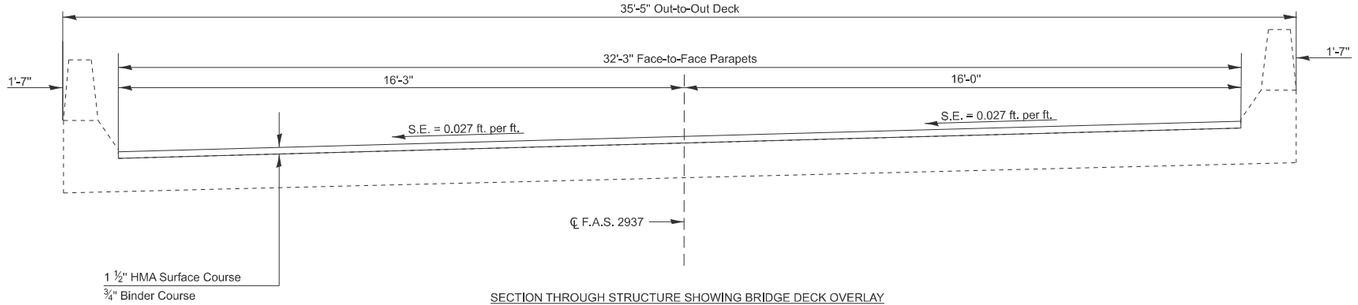
*Slope Overlay at Drains
1" MIN Thickness at Edge of Drain



STAGE 1 CONSTRUCTION
Section Looking East



STAGE 2 CONSTRUCTION
Section Looking East



SECTION THROUGH STRUCTURE SHOWING BRIDGE DECK OVERLAY
Section Looking East

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USER NAME = elise.knop	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

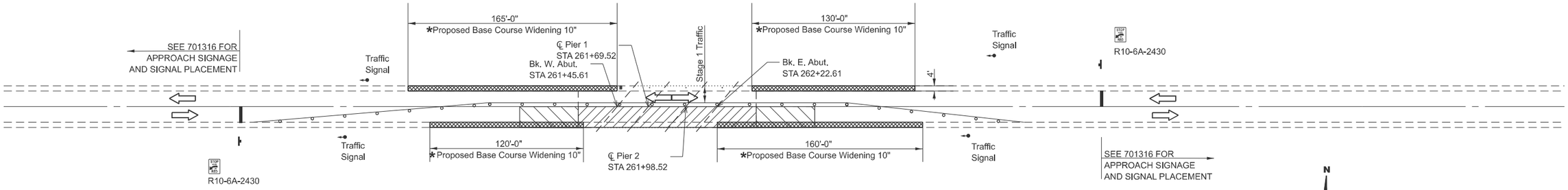
TRAFFIC CONTROL STAGING
SN 064-0039

SCALE: | SHEET A002 OF 4 SHEETS | STA. | TO STA.

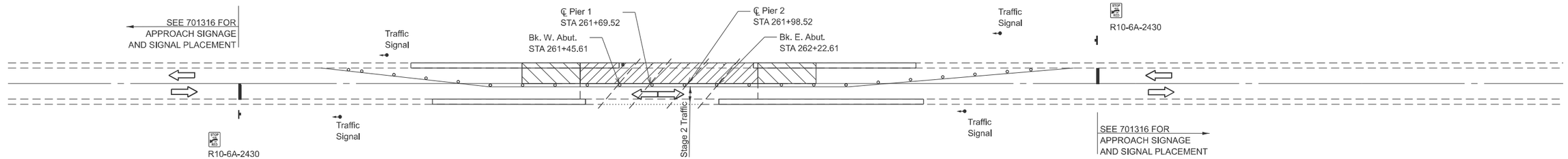
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	21
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

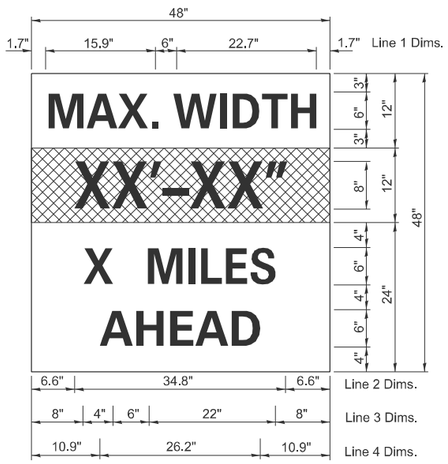
*Must be installed pre stage 1 under traffic standard 701326.



STAGE 1 TRAFFIC



STAGE 2 TRAFFIC



W12-I103

W12-I103, No Border
"MAX WIDTH" 6D, No Border, Black on White
"XX'-XX"" 8D, No Border, Black on Orange
"X MILES" 6D, No Border, Black on White
"AHEAD" 6D, No Border, Black on White

Notes for Max Width Sign:

1. Install a Max Width Sign each direction on IL 169 to give traffic approaching work zone enough advance notice to change routes if needed. Exact locations as directed by engineer.

2. The contractor shall furnish the posts and erect the signs at the locations 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. 701316, no other compensation will be allowed.

4. The width shown on the W12-I103 sign shall be 18" less than what is shown in the staged lane widths or as directed by the Engineer.

5. The "X" MILES AHEAD will be determined by the engineer.

Legend

OVERLAY

BUTT JOINT

PCC BASE COURSE WIDENING 10"

Notes for Traffic Control & Protection Standard 701316

(All items below shall be included in the contract unit price, each for Traffic Control and Protection , Std. 701316, no other compensation will be allowed.)

1. All signage as shown on the Highway Standard and additional signage shown on the detail above. The noted work shall include signs, post, hardware and labor. The contractor shall erect the signs at the locations detailed above and at the locations directed by the engineer.

2. Per Article 703.07, when temporary pavement marking is shown on the Standard and Detail above, the cost of temporary pavement marking and its removal will be included in the cost of the Standard.

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PLOT DATE = 3/11/2026	DATE -	REVISED -	

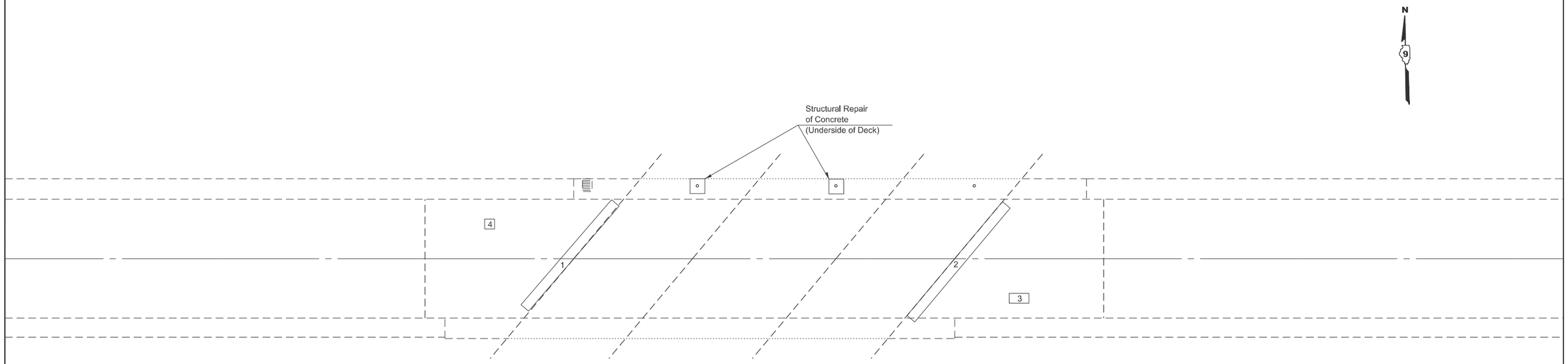
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING PLAN
SN 064-0039

SCALE: | SHEET A003 OF 4 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	22
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

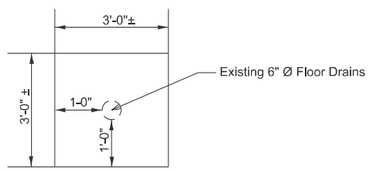
*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac



NOTE: Areas of deck repairs shown are an estimate. The Resident Engineer shall determine final patch locations and quantities in the field before bridge deck patching operations begin and mark on AS-BUILT plans.

APPROACH SLAB REPAIR (PARTIAL DEPTH)

PATCH #	LANE	DIST. FROM ℄	WIDTH	LENGTH	AREA(SQ YD)
1	EBDL	0'	28'	2'	6.2
2	EBDL	0'	30'	2'	6.7
3	EDBL	7'	2'	4'	0.9
4	WBDL	6'	2'	2'	0.4
				TOTAL=	**14.2**



STRUCTURAL REPAIR OF CONCRETE @ DRAIN EXTENSIONS

All Locations on Underside of Deck

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ. YD	14.2
STRUCTURAL REPAIR OF CONCRETE(DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ. FT.	18.0

BRIDGE REPAIRS
IL 169 OVER PATTERSON BRANCH
F.A.S. 2937-D9 BRIDGE OVERLAY 2026-9
MASSAC COUNTY
STATION 261+84.00
STRUCTURE NO. 064-0039

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	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 3/11/2026	DATE -	REVISED -	

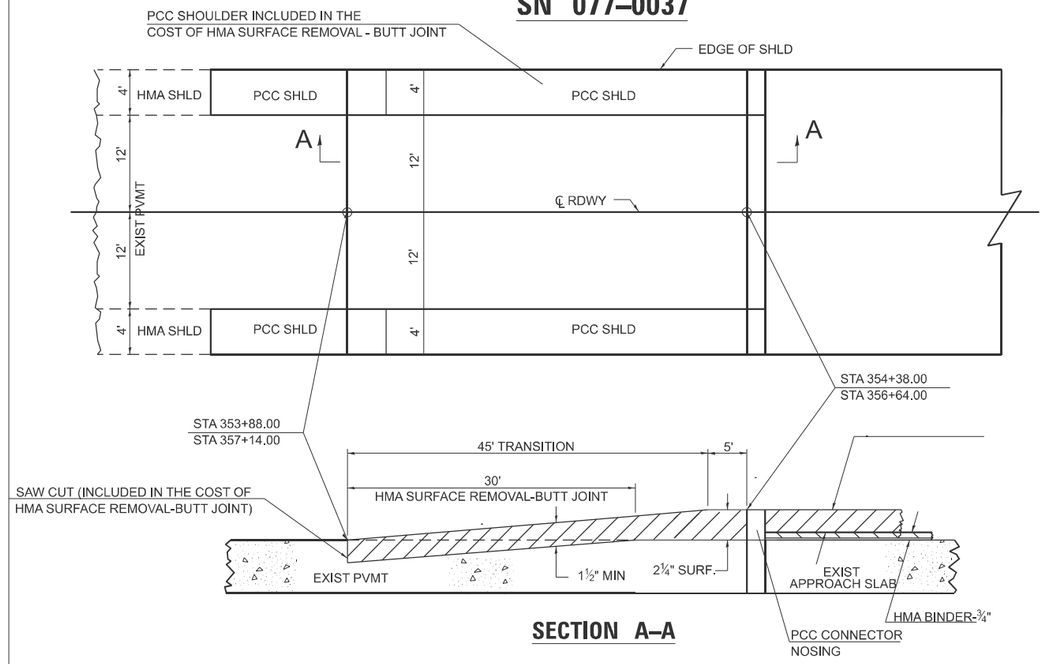
PATCHING
SN 064-0039

SCALE: | SHEET A004 OF 4 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	23
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

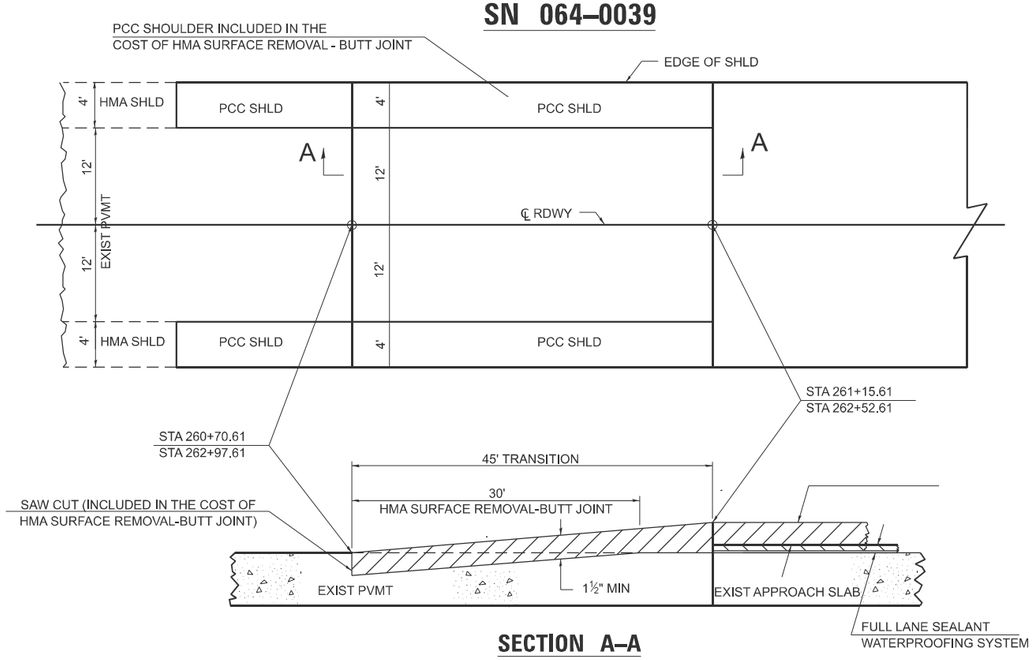
*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

BUTT JOINT
SN 077–0037



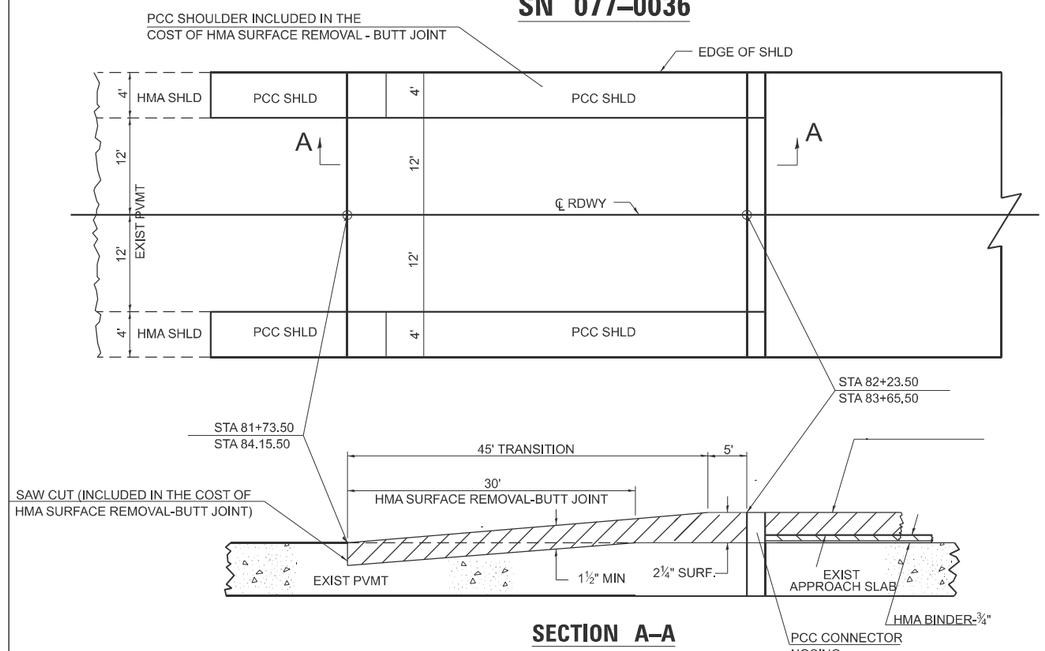
SECTION A–A

BUTT JOINT
SN 064–0039



SECTION A–A

BUTT JOINT
SN 077–0036



SECTION A–A

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USER NAME = elise.knop	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/11/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT DETAIL
SN 077-0037, SN 077-0036, & SN 064-0039

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	24
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

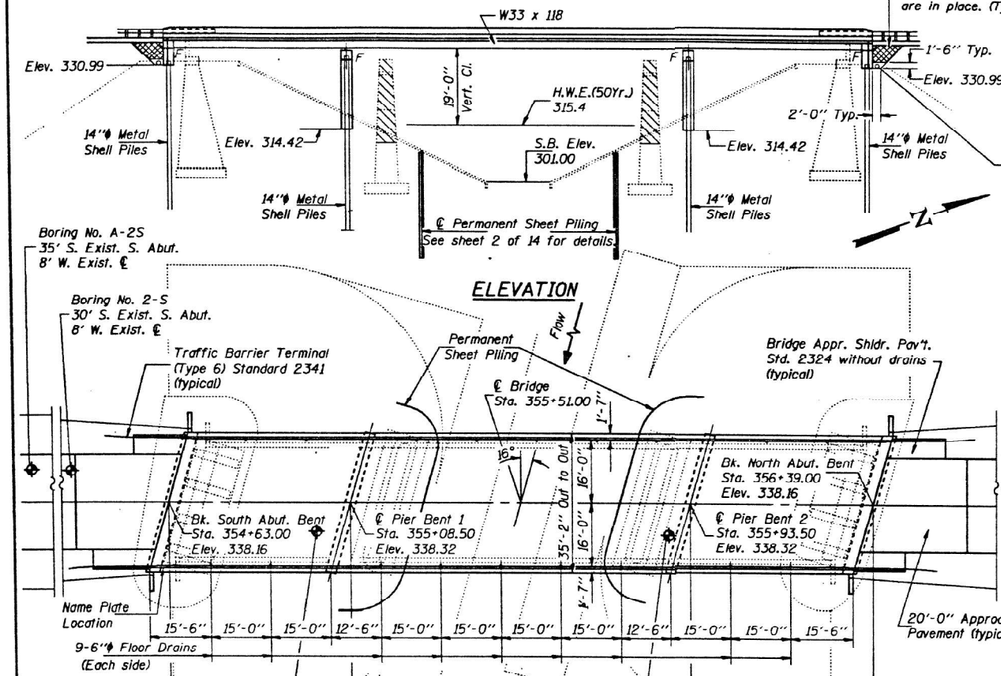
Bench Mark: "o" cut in S.E. corner of S.E. wingwall, 16' Rt. Sta. 354+65 Elev. 338.51

Existing Structure: S.N. 077-0022, built as S.B.I. Rte. 147, Sec. 120R-B at Sta. 355+51 in 1947 is 164'-11" long by 30'-4" wide. The existing structure shall be removed and a new three span continuous beam structure with integral abutments and fixed piers will be built. Traffic to be detoured to other routes during construction. No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 726	120R-B)DR	PULASKI	28	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
14 SHEETS



ELEVATION

PLAN

This portion of uncompacted Porous Granular Embankment by Bridge Contractor after abutment and superstructure are in place. (Typ.)

1'-6" Typ.

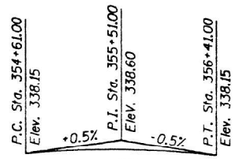
Elev. 330.99

2'-0" Typ.

14"ϕ Metal Shell Piles

Elev. 314.42

A 6" perforated pipe drain in accordance with Section 607 of the Standard Specifications shall be encased with Porous Granular Embankment with gradation of CA-5 or CA-7 and shall be wrapped with filter fabric for use with riprap. See Roadway Plans for quantity of pipe drain. An 18" minimum lap shall be used where the fabric must be lapped. The pipe drain and the aggregate shall extend parallel with the cap until intersecting with the downstream sideslope. Cost of filter fabric for use with riprap is incidental to "Porous Granular Embankment." (Typ.)



PROFILE GRADE
F.A. Route 726

STATION 355+51.00
BUILT BY
STATE OF ILLINOIS
F.A. RT. 726 SEC. (120R-B)DR
LOADING HS20
STR. NO. 077-0037

PROJECT F-726(40)

NAME PLATE
See Std. 2113

GENERAL NOTES

Notes: See Proposal for Boring Data.
Fasteners shall be high strength bolts. Bolts $\frac{7}{8}$"ϕ, open holes $\frac{15}{16}$"ϕ, unless otherwise noted.
Calculated weight of Structural Steel = 108770 lbs. (AASHTO M223 Grade 50).
Calculated weight of Structural Steel = 13290 lbs. (AASHTO M183).
All structural steel shall be given one shop coat of Carbo Zinc 11 HS Alkyl Silicate zinc rich primer, and one intermediate field coat water-base acrylics (Carboline D3358), and one final field top coat water-base acrylics (Carboline D3359). See Special Provisions. The color of the final field top coat shall be Munsell No. 7.5 G 4/8 Interstate Green.
Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
Anchor bolts shall be set before bolting diaphragms over supports.

Notes: The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These Components are the wide flange beams and all splice plate material of the wide flange beams.
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
The contractor shall drive one 14"ϕ Metal Shell test pile in a permanent location at the South Abutment and Pier 2 as directed by the Engineer before ordering the remainder of piles.
The 14"ϕ Metal Shell Piles shall be ASTM A252, Grade 2 steel.
For excavation behind the existing abutments and pavement removal see Roadway Plans.

SEQUENCE OF CONSTRUCTION

1.) Remove existing structure.
2.) Remove only the designated areas of slopewall as shown on sheet 2 of 14.
3.) Install permanent sheet piling wall.
4.) Proceed with construction of the bridge and slopewall.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Porous Granular Embankment	Cu. Yd.		84	84
Removal of Existing Structures	Each		*	1
Structure Excavation	Cu. Yd.		140	140
Floor Drains	Each	18		18
Class X Concrete Superstructure	Cu. Yd.	218.4		218.4
* Protective Coat	Sq. Yd.	769		769
Class X Concrete	Cu. Yd.		132.5	132.5
Structural Steel	L.S.	1		1
Stud Shear Connectors	Each	870		870
Reinforcement Bars, Epoxy Coated	Pound	49320	12990	62310
Furnishing Metal Pile Shells (14"ϕ)	Lin. Ft.		1980	1980
Driving and Filling Shells	Lin. Ft.		1980	1980
Test Pile Metal Shell (14"ϕ)	Each		2	2
Steel Sheet Piling	Sq. Ft.		6245	6245
Name Plates	Each	1		1
Slopewall Removal	Sq. Yd.		104	104
Slopewall 6"	Sq. Yd.		123	123

* Quantity is for top surface of deck and parapets.

INFORMATION ONLY-SN 077-0037

DESIGNED Jonathan M. Jablonski
CHECKED Michael D. Cline JRS
DRAWN jas
CHECKED HMZ, MJC

FEBRUARY 15 1991
EXAMINED Raj L. Kanpaty ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES
APPROVED DIRECTOR OF HIGHWAYS

WATERWAY INFORMATION

Drainage Area = 8.0 Sq. Mi. Low Grade Elev. 337.51 ○ Sta. 351+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	3190	515	530	315.4	1.6	1.6	317.0	317.0
Base	100	3640	535	550	315.7	1.9	1.9	317.6	317.6
Overtopping									
Max. Calc.	500	4715	595	620	316.5	2.6	2.6	319.1	319.1

DESIGN SPECIFICATIONS

AASHTO 1989 and Interims (1990) and 1983 Seismic Guide Specifications

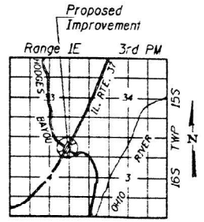
LOADING HS20-44

Allow 25#/sq.ft. for future wearing surface

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (reinf.)
fy = 50,000 psi (M223 Grade 50)



LOCATION SKETCH

GENERAL PLAN
IL. RTE. 37 OVER
HODGES BAYOU
F.A. RTE. 726 SEC. (120R-B)DR
PULASKI COUNTY
STATION 355+51.00
STRUCTURE NUMBER 077-0037

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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/11/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 077-0037
INFORMATION ONLY

SCALE: | SHEET A001 OF 7 SHEETS | STA. | TO STA.

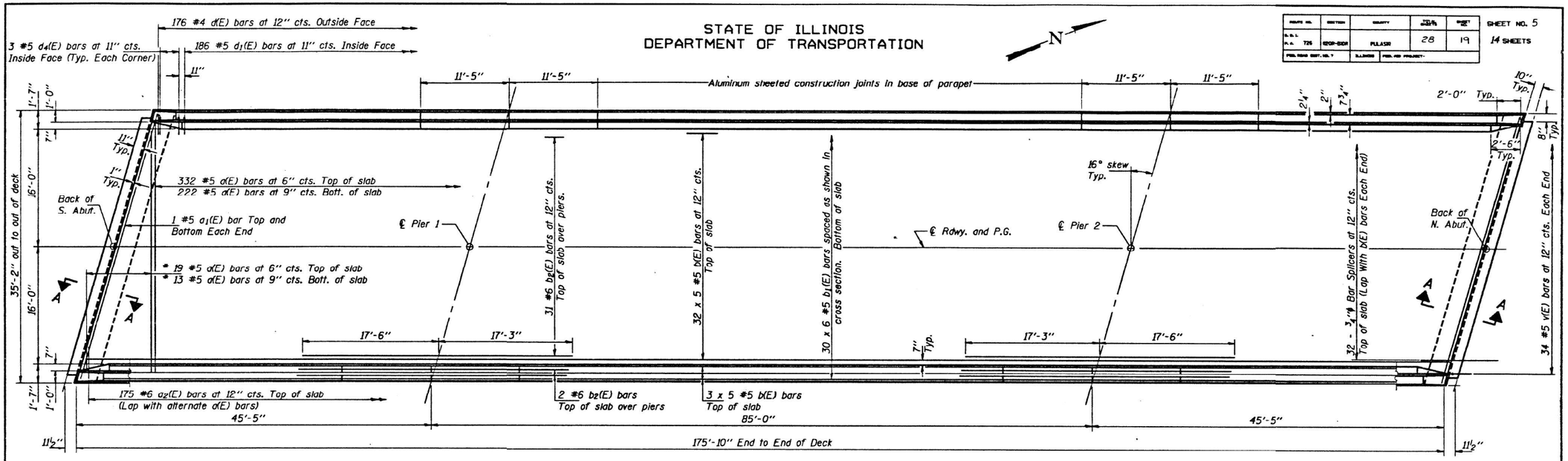
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	25
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

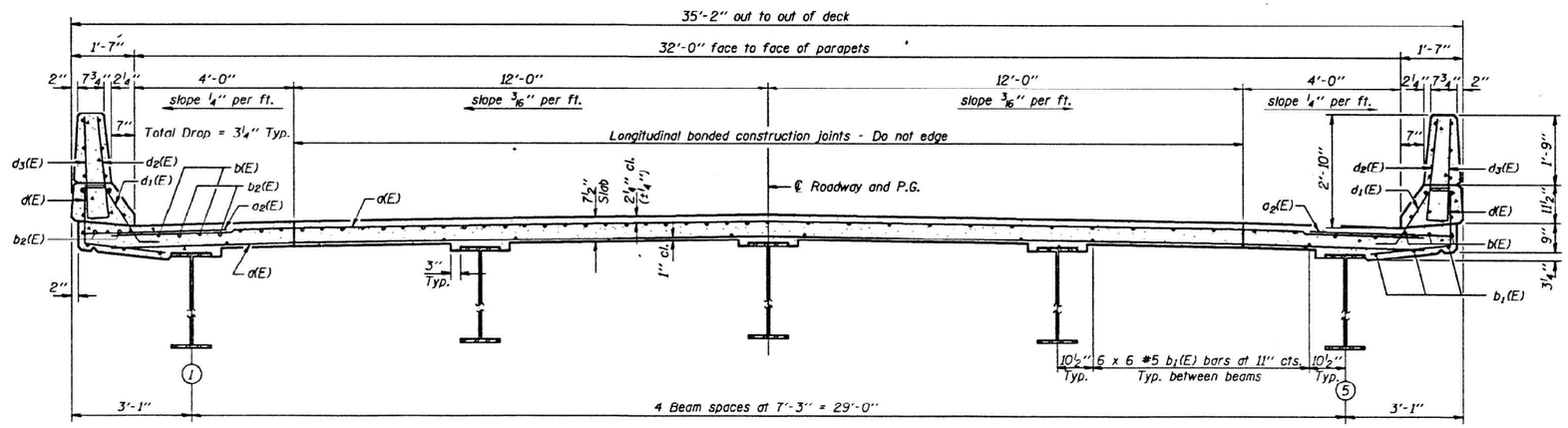
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. RTE. 726	120R-B)DR	PULASKI	28	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 5
14 SHEETS



* Order a(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PLAN



NEAR PIER NEAR MIDSPAN

CROSS SECTION
(Looking North)

Notes: See Sheet 6 of 14 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 31 x 5-#5 etc. indicates 31 lines of bars with 5 lengths per line.
See Sheet 6 of 14 for parapet reinforcement.
See sheet 7 of 14 for diaphragm details and Section A-A.

MIN. BAR LAP
#5 Bar = 1'-8"

DESIGNED	Stephen M. Sciacca	Feb 15 1991
CHECKED	Michael D. Cima	EXAMINED Greg D. Kaspar, ENGINEER OF BRIDGE DESIGN
DRAWN	Joe Sutherland	PASSED Ralph E. Anderson, ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	HMZ, MDC	APPROVED DIRECTOR OF HIGHWAYS

INFORMATION ONLY-SN 077-0037

SUPERSTRUCTURE
F.A. RT. 726 SEC. (120R-B)DR
PULASKI COUNTY
STATION 355+51.00

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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/11/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 077-0037
INFORMATION ONLY

SCALE: | SHEET A002 OF 7 SHEETS | STA. | TO STA.

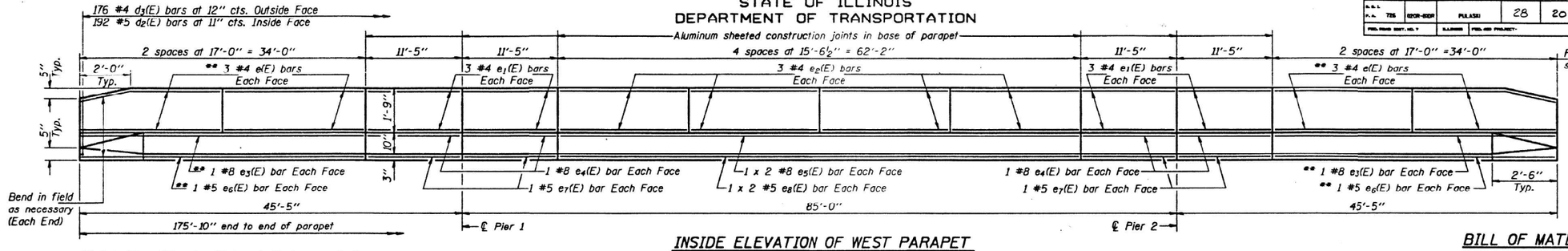
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	26
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. RTE. 726	(120R-B)DR	PULASKI	28	20
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

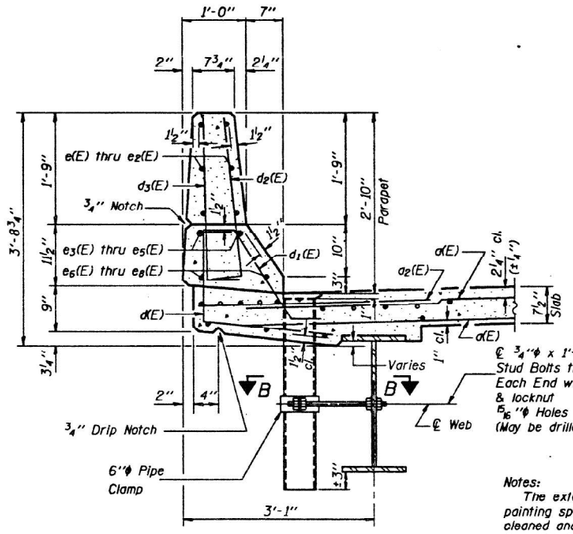
SHEET NO. 6
14 SHEETS



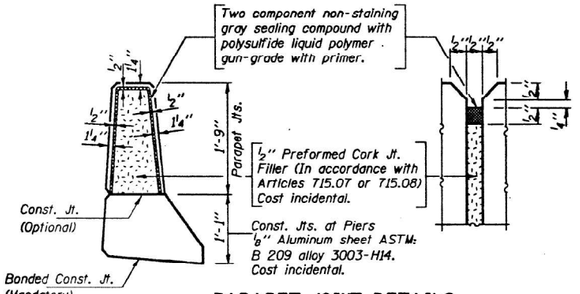
** Cut e(E), e3(E) and e6(E) bars in field as required.

INSIDE ELEVATION OF WEST PARAPET

Dimensions are along outside face of parapet.
East parapet is typical.



SECTION THRU PARAPET

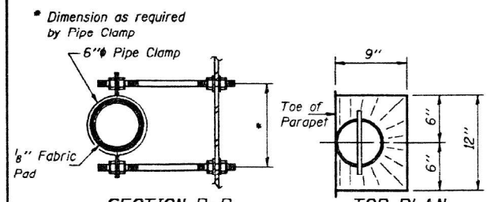


PARAPET JOINT DETAILS

BILL OF MATERIAL

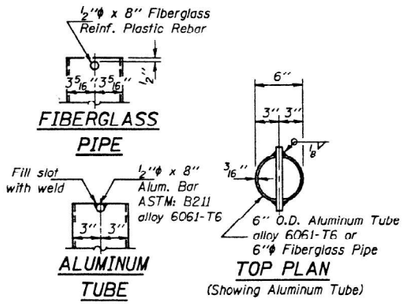
Bar	No.	Size	Length	Shape
e(E)	586	#5	33'-2"	
e1(E)	4	#5	36'-0"	
e2(E)	350	#6	4'-0"	
b(E)	190	#5	36'-6"	
b1(E)	180	#5	30'-8"	
b2(E)	70	#6	34'-9"	
d(E)	352	#4	4'-0"	
d1(E)	372	#5	2'-7"	
d2(E)	384	#5	3'-0"	
d3(E)	352	#4	3'-0"	
d4(E)	12	#5	2'-5"	
e(E)	48	#4	16'-9"	
e1(E)	48	#4	11'-2"	
e2(E)	48	#4	15'-3"	
e3(E)	8	#8	33'-9"	
e4(E)	16	#8	11'-2"	
e5(E)	8	#8	32'-11"	
e6(E)	8	#5	33'-9"	
e7(E)	16	#5	11'-2"	
e8(E)	8	#5	31'-11"	
m(E)	14	#6	36'-4"	
m1(E)	4	#6	2'-11"	
m2(E)	8	#6	7'-3"	
s(E)	68	#5	6'-10"	
s1(E)	68	#5	8'-7"	
w(E)	68	#5	4'-0"	
Reinforcement Bars (Epoxy Coated)		Pound	49320	
Class X Concrete Superstructure		Cu. Yd.	218.4	

Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 1 x 2 #5 etc. indicates 1 line of bars with 2 lengths per line.



SECTION B-B

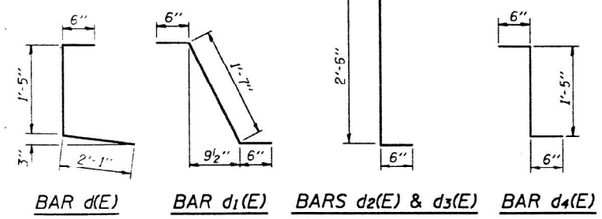
TOP PLAN



FIBERGLASS PIPE

ALUMINUM TUBE

TOP PLAN (Showing Aluminum Tube)



DESIGNED	Heather M. Sadalla	
CHECKED	Michael D. Cline	
DRAWN	Joe Sutherland	
CHECKED	HMZ, MDC	

EXAMINED Feb 15 1991
Engineer of Bridge Design
PASSED
Engineer of Bridges and Structures
APPROVED
Director of Highways

S-1-D 12-31-87

SUPERSTRUCTURE DETAILS
F.A. RT. 726 SEC. (120R-B)DR
PULASKI COUNTY
STATION 355+51.00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 077-0037
INFORMATION ONLY

SCALE: | SHEET A003 OF 7 SHEETS | STA. | TO STA.

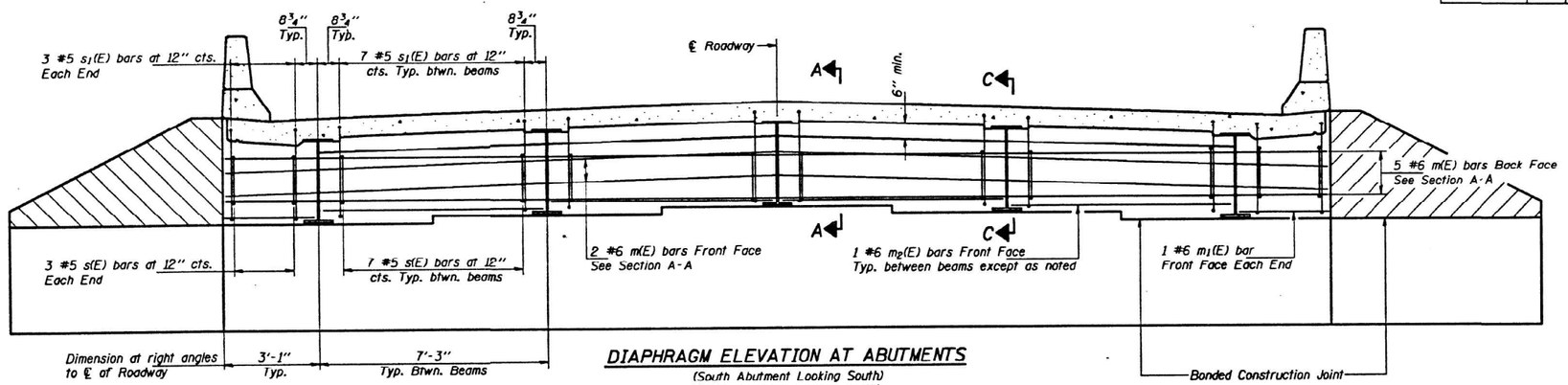
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	27
		CONTRACT NO. 78B48		
	ILLINOIS	FED. AID PROJECT		

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

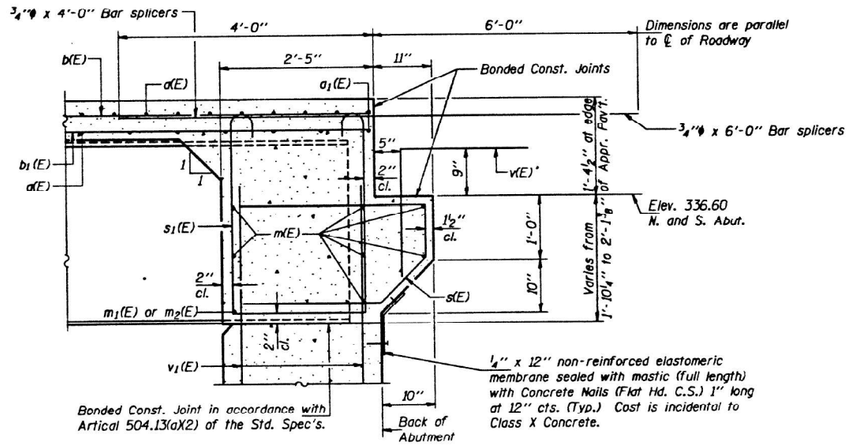
			TOTAL SHEETS	SHEET NO.
F.A.P. RTE.	SECTION	COUNTY	28	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 7
14 SHEETS



DIAPHRAGM ELEVATION AT ABUTMENTS

(South Abutment Looking South)
(North Abutment Looking North)

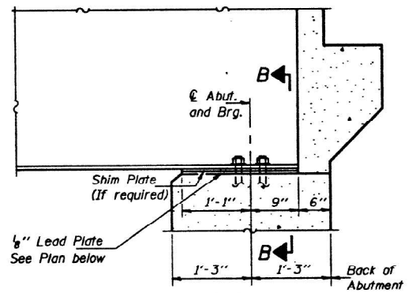


Bonded Const. Joint in accordance with Artical 504.13(a)(2) of the Std. Spec's.

SECTION A-A

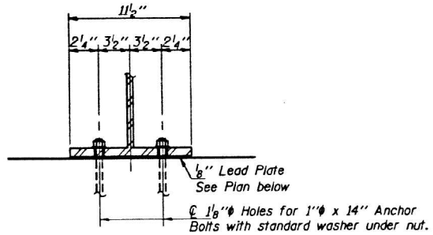
All dimensions are at right angles to abutment, except as shown.

Notes: Reinforcement bars and concrete in diaphragm are billed with "Class X Concrete Superstructure" on sheet 6 of 14.

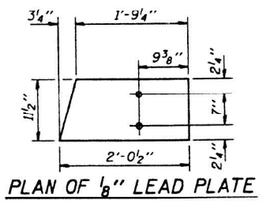


SECTION C-C

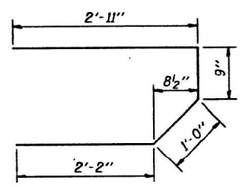
Dimensions are at right angles to Abut. from ℄ Beam



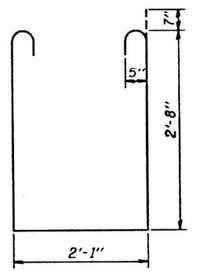
SECTION B-B



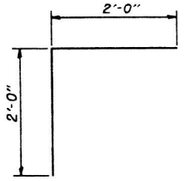
PLAN OF ⅛" LEAD PLATE



BAR s(E)



BAR s1(E)



BAR v(E)

DESIGNED	Wesley M. Zatorski	
CHECKED	Michael D. Cisa	
DRAWN	Joe Sutherland	
CHECKED	MDC	

Feb 15 1991

EXAMINED Raj D. Kapur, ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson, ENGINEER OF BRIDGES AND STRUCTURES
APPROVED, DIRECTOR OF HIGHWAYS

SUPERSTRUCTURE DETAILS
F.A. RT. 726 SEC. (12OR-B)DR
PULASKI COUNTY
STATION 355+51.00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 077-0037
INFORMATION ONLY

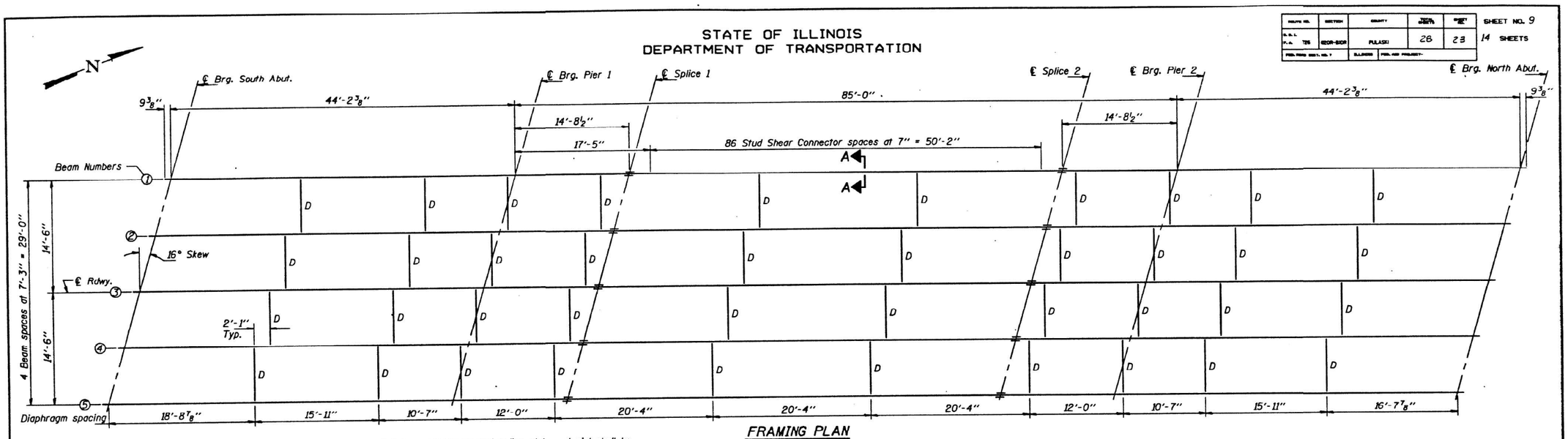
SCALE: | SHEET A004 OF 7 SHEETS | STA. | TO STA.

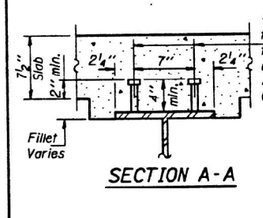
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	28
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

				SHEET NO. 9
F.A.P. RTE. 726	SECTION 62OR-B)DR	PULASKI	28	23
				14 SHEETS
	ILLINOIS	FED. AID PROJECT		

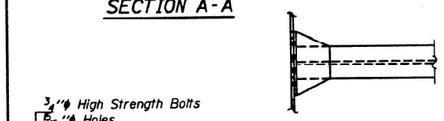




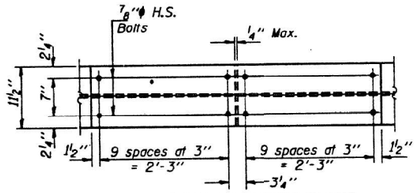
SECTION A-A

3/4"ϕ Granular or solid flux filled headed studs, conforming to the requirements of Art. 710.38 of the Std. Specs. Automatically end welded to flange. (870 Req'd.)

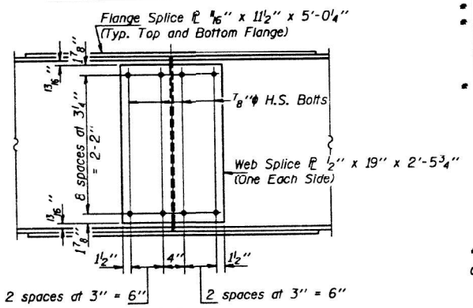
Notes: All beams and splice plate material shall be AASHTO M223 Grade 50 and shall meet Notch Toughness Requirements.
Two hardened washers shall be required over all bolt holes in diaphragms.



DIAPHRAGM D
(40 Required)



PLAN OF TOP AND BOTTOM FLANGE



WEB ELEVATION

SPLICE DETAILS
Typ. both splices.

DESIGNED	Northern Illinois Toll Authority
CHECKED	Michael D. Cline
DRAWN	Joe Sutherland
CHECKED	[illegible]

Feb 15 1991

EXAMINED Engineer of Bridge Design
PASSED Engineer of Bridges and Structures
APPROVED Director of Highways

FRAMING PLAN

All Beams are W33 x 118

INTERIOR BEAM MOMENT TABLE				
		0.4 Span 1 or 0.6 Span 3	** 0.5 Span 2	Pier 1 or 2
Is	(in⁴)	5900	5900	5900
Ic	(in⁴)	——	16277	——
Ss	(in³)	359	359	359
Sc	(in³)	——	535	——
Z	(in³)	415	——	415
℄	(K/ft.)	0.845	0.845	0.845
* MℓL	('K)	53	332	566
* sℓ	(K/ft.)	0.346	0.346	0.346
* MsℓL	('K)	——	178	——
* MℓL	('K)	275	603	288
* M (Imp)	('K)	81	144	76
5/3(MℓL + I)	('K)	594	1244	607
Ma	('K)	841	2280	1525
Mu	('K)	1729	2712	1729
* fsℓ non-comp	(k.s.i.)	1.77	11.1	18.9
* fsℓ (comp)	(k.s.i.)	——	4.0	——
fs 5/3(Mℓ + I)	(k.s.i.)	19.9	27.9	20.3
fs (Overload)	(k.s.i.)	21.7	43.0	39.2
fs (Total)	(k.s.i.)	——	——	——
* VR	(K)	52.9	56	52.9

* INTERIOR BEAM REACTION TABLE			
		Abuts.	Pier 1 or 2
RℓL	(K)	13.5	89.7
Rℓ	(K)	35.4	49.0
Imp.	(K)	10.5	11.7
R (Total)	(K)	59.4	150.4

* Service Load Values.
** Composite in positive moment areas of span 2 only.

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs (Total & Overload).

VR is the maximum Live Load + Impact shear range in span.

Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.

Ma (Applied Moment)=1.3[MℓL + Msℓ + 5/3(Mℓ + I)].

Mu is the Full Plastic Moment Capacity for Compact. Braced section.

fs (Overload) is the sum of the stresses due to MℓL + Msℓ + 5/3(Mℓ + I).

fs (Total) is the sum of the stresses due to 1.3[MℓL + Msℓ + 5/3(Mℓ + I)].

I = Live Load Impact

Mℓ is moment due to live load on non-composite or composite section.

Msℓ is moment due to dead load on composite section.

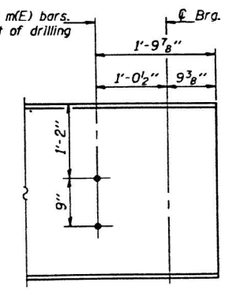
MℓL is moment due to dead load on non-composite section.

*** TOP OF BEAM ELEVATIONS

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5
℄ Brg. S. Abut.	337.28	337.39	337.50	337.37	337.24
℄ Brg. Pier 1	337.41	337.53	337.64	337.52	337.39
℄ Splice 1	337.45	337.57	337.68	337.56	337.43
℄ Splice 2	337.43	337.56	337.68	337.57	337.45
℄ Brg. Pier 2	337.39	337.52	337.64	337.53	337.41
℄ Brg. N. Abut.	337.24	337.37	337.50	337.39	337.28

*** For Fabrication only.

℄ 1"ϕ Holes in beam for m(E) bars. See sheet 7 of 14. Cost of drilling holes is incidental.



TYP. END OF BEAM ELEVATION

STRUCTURAL STEEL DETAILS
F.A. RT. 726 SEC. (12OR-B)DR
PULASKI COUNTY
STATION 355+51.00

USER NAME = elise.knop	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 077-0037 INFORMATION ONLY			
	DRAWN -	REVISED -					
	CHECKED -	REVISED -					
PLOT DATE = 3/11/2026	DATE -	REVISED -		SCALE:	SHEET A005 OF 7 SHEETS	STA.	TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	29
			CONTRACT NO. 78B48	
		ILLINOIS	FED. AID PROJECT	

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

MODEL: SN 077-0037-S [Sheet]
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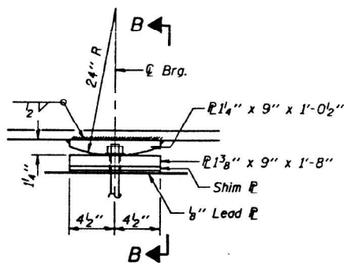
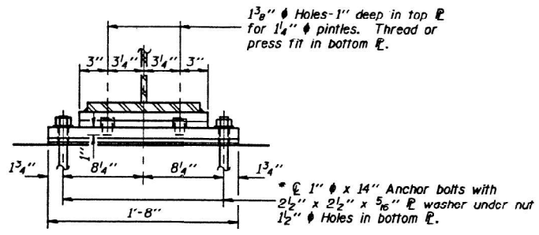
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 726	120R-B)DR	PULASKI	28	24
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 10
14 SHEETS



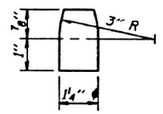
ELEVATION AT PIER



SECTION B-B

FIXED BEARING

* Anchor bolts at fixed bearings may be built into the masonry.
See sheet 13 of 14 for Anchor Bolt installation.



PINTLE

DESIGNED Matthew Zadorlick
CHECKED Michael D. Cova
DRAWN Joe Sutherland
CHECKED MMC MDC

Feb 15 1991
EXAMINED Joseph D. Kaspar
ENGINEER OF BRIDGE DESIGN
PASSED Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

BEARING DETAILS
F.A. RT. 726 SEC. (120R-B)DR
PULASKI COUNTY
STATION 355+51.00

USER NAME = elise.knop	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/11/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 077-0037
INFORMATION ONLY

SCALE: | SHEET A006 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	30
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac

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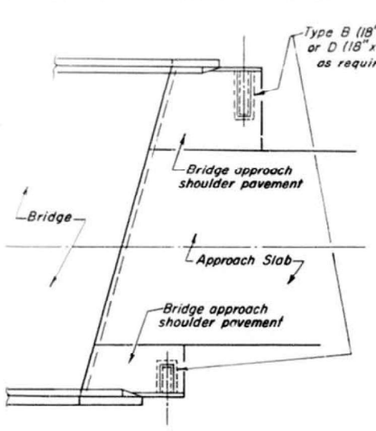
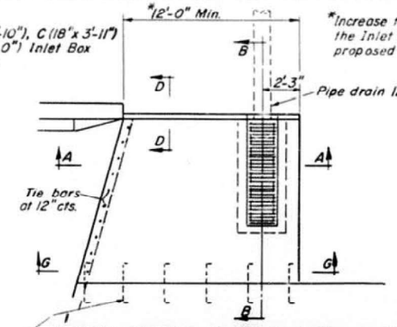


GENERAL PLAN

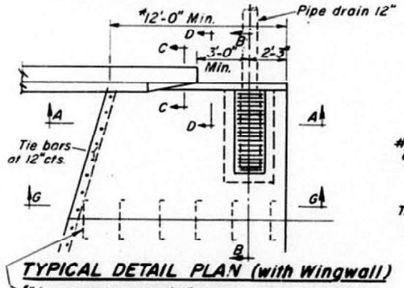
SEC. C-C SEC. D-D



TYPICAL DETAIL PLAN (w/o Wingwall)

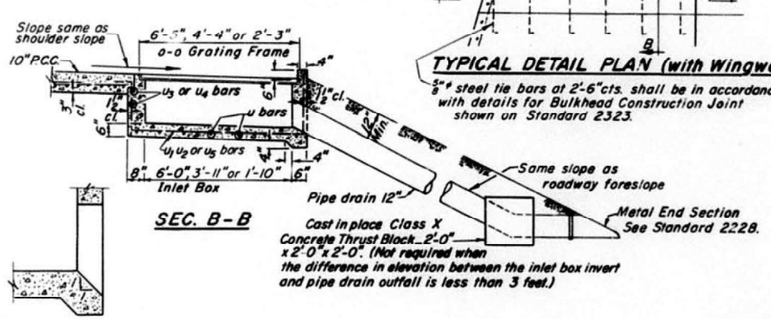
5/8" ϕ steel tie bars at 2'-6" cts. shall be in accordance with details for Bulkhead Construction Joint shown on Standard 2323.

*Increase this dimension as needed to position the Inlet Box and Pipe Drain between the proposed approach guardrail posts.

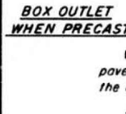


TYPICAL DETAIL PLAN (with Wingwall)

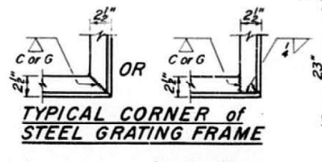
5/8" ϕ steel tie bars at 2'-6" cts. shall be in accordance with details for Bulkhead Construction Joint shown on Standard 2323.



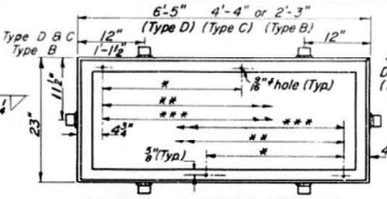
SEC. B-B



BOX OUTLET WHEN PRECAST

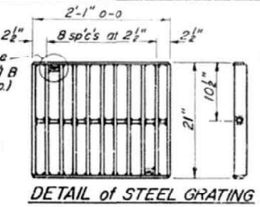


TYPICAL CORNER of STEEL GRATING FRAME



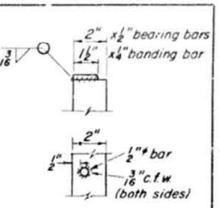
DETAIL of STEEL FRAME

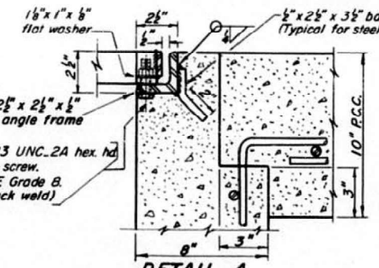
Cast frame to have same basic dimensions.
* 1 space at 2'-1" for Type C
** 2 spaces at 2'-1" for Type D
*** 0 space for Type B



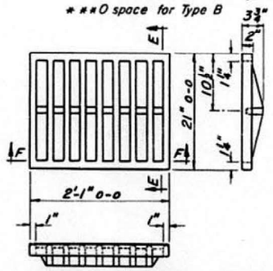
DETAIL of STEEL GRATING

Type B requires 1 grate
Type C requires 2 grates
Type D requires 3 grates



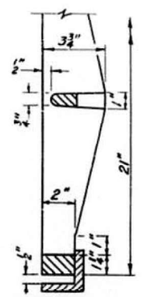


DETAIL A

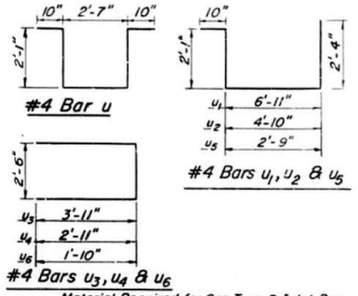


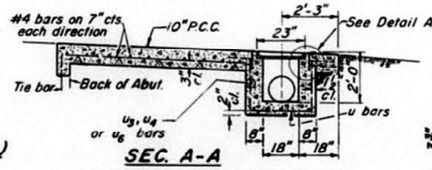
DETAIL of CAST GRATING

Type B requires 1 grate
Type C requires 2 grates
Type D requires 3 grates

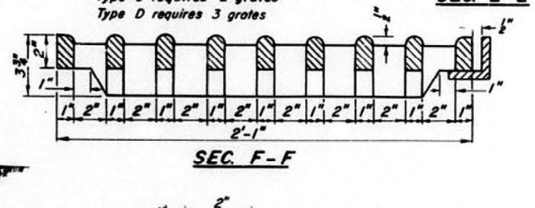


SEC. E-E

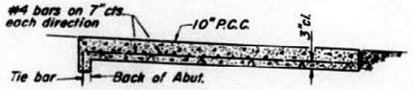




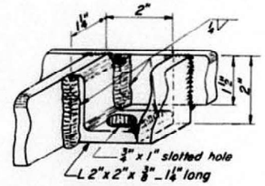
SEC. A-A



SEC. F-F



SEC. G-G



DETAIL B

Material Required for One Type B Inlet Box

Bar	No.	Size	Length
u	4	#4	8'-5"
u3	3	#4	8'-0"
u6	4	#4	6'-2"
Concrete-Class X or Precast	Cu. Yds.		0.4
Reinf. Bars	Lbs.		60
Grating	Sq. Ft.		3.7

Material Required for One Type C Inlet Box

Bar	No.	Size	Length
u	6	#4	8'-5"
u2	3	#4	10'-1"
u4	4	#4	8'-4"
Concrete-Class X or Precast	Cu. Yds.		0.9
Reinf. Bars	Lbs.		80
Grating	Sq. Ft.		7.3

Material Required for One Type D Inlet Box

Bar	No.	Size	Length
u	8	#4	8'-5"
u1	3	#4	12'-2"
u3	4	#4	10'-4"
Concrete-Class X or Precast	Cu. Yds.		1.2
Reinf. Bars	Lbs.		100
Grating	Sq. Ft.		11.0

GENERAL NOTES

When Inlet Box or Boxes are not required, surface of the shoulder pavement shall be finished to provide a smooth transition from back of the abutment to normal approach roadway shoulder.

See plans for location of bridge approach shoulder pavement.

Use Type C Inlet Box for 5' and 6' shoulder widths, use Type D Inlet Box for 7' and wider shoulder widths, use Type B Inlet Box for shoulders less than 5' wide.

For placement of approach shoulder pavement on existing construction substitute expansion anchor ties for tie bars. For non-rigid approaches, shoulder pavement will be as shown except omit tie bars in approach pavement.

The material for 12" ϕ Pipe Drains shall be either corrugated steel, aluminum alloy or polyethlene (PE) pipe with UV protection.

Corrugated steel and aluminum alloy pipe shall have 2' coupling bands. All pipe connections shall be water tight.

The P.C. Concrete used in the shoulder slab shall meet the requirements of Section 408 of the Standard Specifications.

The lengths of #4 bars used in the approach shoulder pavement shall be as required to accommodate the length, width and skew of the slab.

Class X concrete or precast concrete shall be used for the inlet.

Precast concrete shall be in accordance with Sections 505.01 thru 505.05 of the Standard Specifications except that the concrete strength shall be 4000 p.s.i. after 28 days.

All exposed edges of the inlet, except the upper perimeter, shall be beveled ¾".

Shop drawings will not be required for precast Inlet Boxes.

A 3" deep CA-12 bedding conforming to Article 704.01,D Quality or better shall be provided under full length and width of precast units, and all voids around the pipe drain entrance, both inside and outside, shall be sealed with mortar.

The grating shall seat firmly in the frame and steel grates shall be secured to the frame with a locking device as shown. Cast grates will not require the locking device.

Steel grating and frames shall conform to Article 710.04 of the Standard Specifications and shall be galvanized to AASHTO Specification M111 after fabrication.

Cast grating and frames shall conform to Article 710.17 of the Standard Specifications. Cast grating and frames shall not be galvanized.

Pipe drains shall be installed, measured and paid for in accordance with Section 607 of the Standard Specifications, except sand bedding will not be required.

Metal End Sections shall be installed, measured and paid for in accordance with Section 511 of the Standard Specifications.

Bridge approach shoulder pavement will be measured in place and paid for in square yards as P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT which shall include the cost of subgrade preparation, expansion anchor ties, reinforcement and joint fillers. In computing the area for payment, a deduction will be made for the area displaced by the inlet. (1.2 Sq. Yds. Type C; 1.7 Sq. Yds. Type D, 0.6 Sq. Yds. Type B)

The contract unit price "Each" for TYPE (B, C or D) INLET BOX STANDARD 2324, in place, shall include the frame and grating, class X or precast concrete, reinforcement bars, excavation, bedding when required, and compacted backfill.

The contract unit price "Each" for CONCRETE THRUST BLOCKS, in place, shall include excavation and compacted backfilling.

Illinois Department of Transportation

PASSED July 18, 1984
Engineer of Bridge and Traffic Structures

APPROVED July 18, 1984
Engineer of Design

ISSUED 12-1-69

BRIDGE APPROACH SHOULDER PAVEMENT

STANDARD 2324-6
(Full Size)

H-1.25

MODEL: Bridge App Standard [Sheet]
FILE NAME: c:\pw_work\pwdot\knopen\d1125642\D978B48_SN064-0039.dgn

USER NAME = elise.knop	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/11/2026	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SHOULDER PAVEMENT STANDARD DETAIL

SCALE: | SHEET A007 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	**	***	31	31
		CONTRACT NO. 78B48		
	ILLINOIS FED. AID PROJECT			

*IL 37, IL 169 **D9 Bridge Overlay 2026-9 ***Pulaski, Massac