

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	1
		ILLINOIS	CONTRACT NO. 74B39	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT (2024) = 750

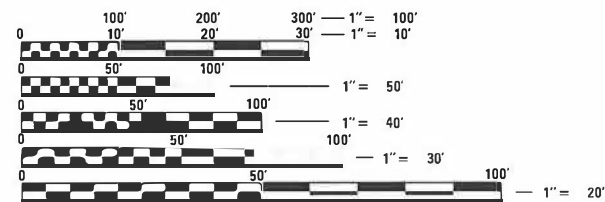
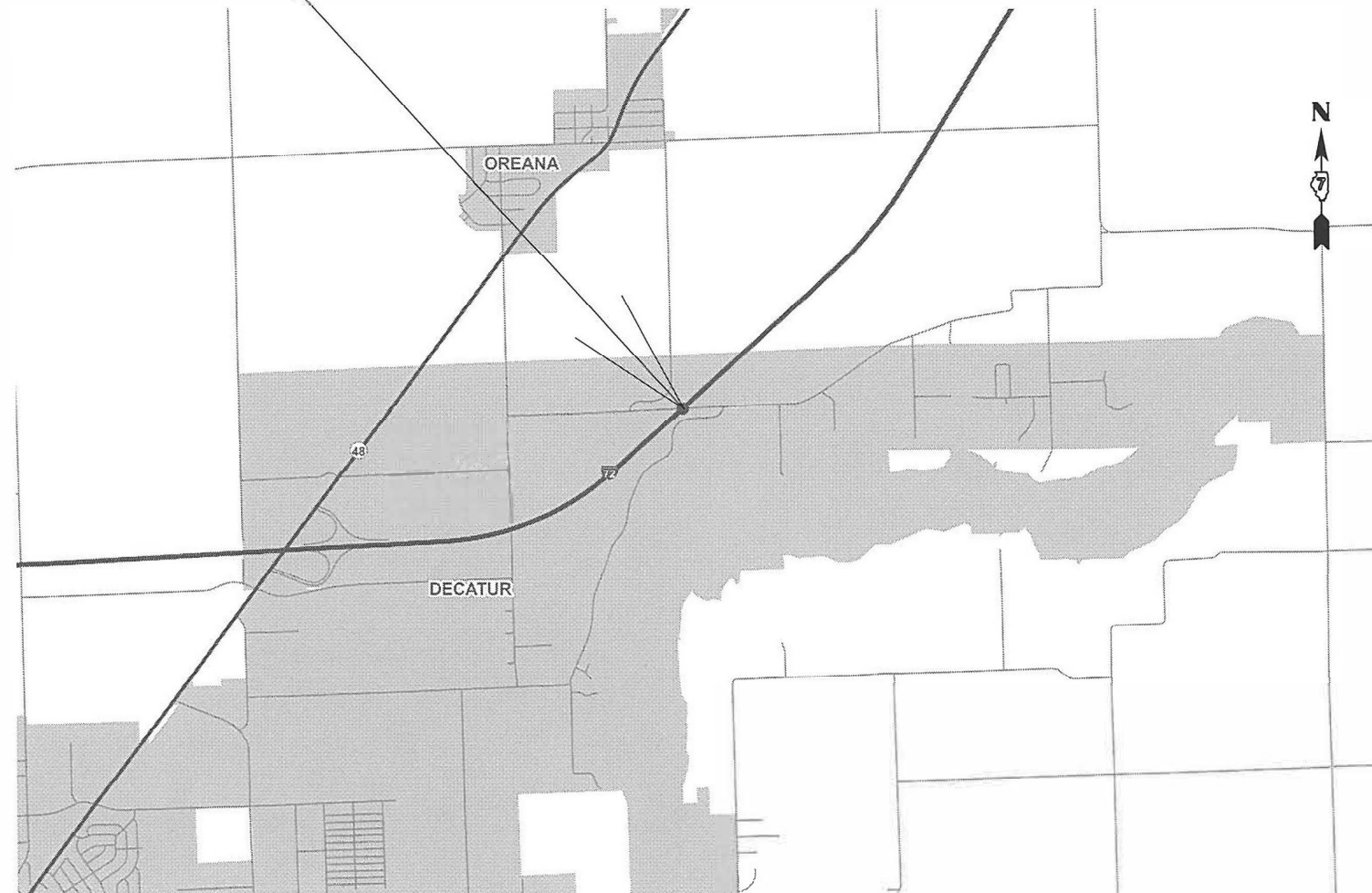
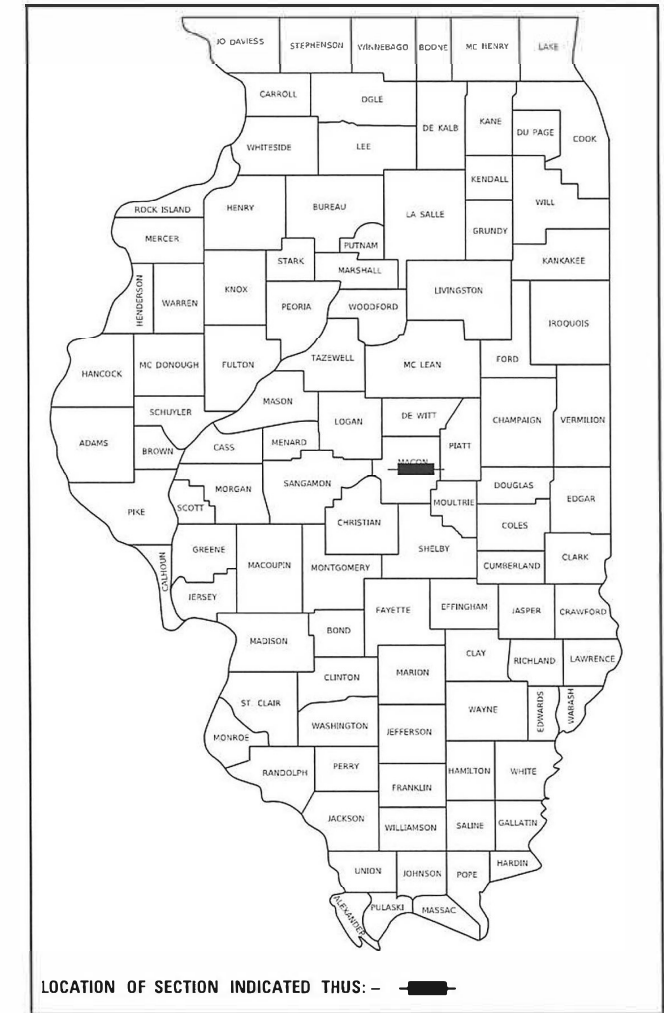
D-97-060-22

PROPOSED HIGHWAY PLANS

FAI ROUTE 72 (I-72)
SECTION D7 BRIDGE REPAIRS 2024-10
PROJECT NHPP-GQ7I(397)
BRIDGE DECK OVERLAY, JOINT REPLACE/REPAIR
MACON COUNTY

C-97-108-22

LOCATION OF PROPOSED
IMPROVEMENT
SN 058-0087



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 EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER MATT BOWER
PROJECT MANAGER JACQUELYN SEALS

GROSS LENGTH = 422 FT. = 0.080 MILE
NET LENGTH = 422 FT. = 0.080 MILE

CONTRACT NO. 74B39

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 22 2023
Jeffrey P. Myer
REGIONAL ENGINEER

October 13, 2023
Scott A. Etkin
ENGINEER OF DESIGN AND ENVIRONMENT

October 13, 2023
Stephen M. Smith
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

GENERAL NOTES

THIS PROJECT IS LOCATED ON KIRBY ROAD OVER INTERSTATE 72 IN WHITMORE TOWNSHIP IN MACON COUNTY. THE WORK INCLUDED IN THIS SECTION, D7 BRIDGE REPAIRS 2024-10, CONSISTS OF BRIDGE DECK OVERLAY, FULL DEPTH DECK PATCHING, HMA REMOVAL, STRUCTURAL CONCRETE REPAIR, CRASHWALL EXTENSIONS, TRAFFIC CONTROL, AND ANY OTHER WORK NECESSARY TO COMPLETE THIS PROJECT.

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS & LIST OF STANDARDS
3	SUMMARY OF QUANTITIES
4-15	PLAN SHEETS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER PLAN SHEETS:

STANDARD NO.	DESCRIPTION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-10	PAVEMENT JOINTS
701400-11	APPROACH TO LANE CLOSURE, EXPRESSWAY /
701401-13	FREEWAY LANE CLOSURE, EXPRESSWAY / FREEWAY
701901-08	TRAFFIC CONTROL DEVICES
B.L.R. 21-09	TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

LOCATION(S)	MIXTURE USE(S)	PG	DESIGN AIR VOIDS	MIXTURE COMPOSITION	FRICTION AGGREGATE	MIXTURE WEIGHT	QUALITY MANAGEMENT PROGRAM	SUBLOT SIZE	MATERIAL TRANSFER DEVICE (REQUIRED?)
MAINLINE	HMA SURFACE COURSE, IL-9.5, MIX "C", N70 (2")	PG 64-22	4.0% @ N=70	1L - 9.5	MIXTURE C	N70	QCQA	1000	N/A

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																	
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	2																	
ILLINOIS FED. AID PROJECT																					

90% FED
10% STATE

90% FED
10% STATE

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0047 URBAN		
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	46	46		
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	11.5	11.5		
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SO YD	103	103		
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	1150	1150		
50102400	CONCRETE REMOVAL	CU YD	15.6	15.6		
50157300	PROTECTIVE SHIELD	SO YD	470	470		
50300225	CONCRETE STRUCTURES	CU YD	6.6	6.6		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	15.3	15.3		
50300260	BRIDGE DECK GROOVING	SO YD	1110	1110		
50300300	PROTECTIVE COAT	SO YD	1245	1245		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2840	2840		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	94	94		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3		
67100100	MOBILIZATION	L SUM	1	1		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0047 URBAN		
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1		
	701401					
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR	L SUM	1	1		
	21					
Z0012114	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 3 1/4"	SO YD	1150	1150		
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SO YD	1150	1150		
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	199	199		
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SO YD	7	7		
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SO YD	3	3		

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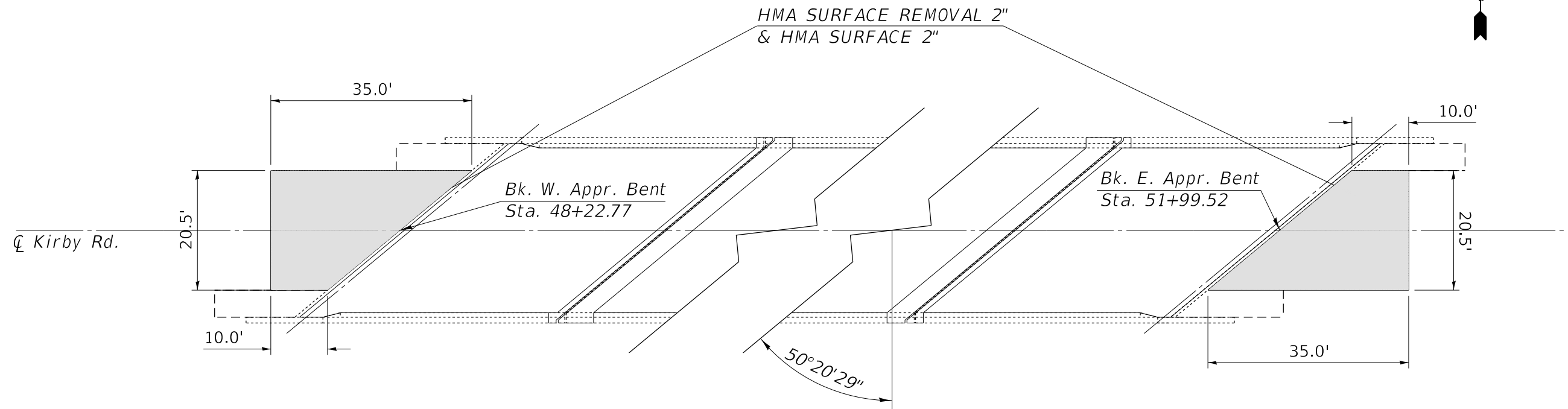
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	3
			CONTRACT NO. 74B39	
ILLINOIS FED. AID PROJECT				



PAVEMENT SCHEDULE				HMA SURFACE REMOVAL, 2"	HMA SURFACE COURSE, IL-9.5, MIX "C", N70	BITUMINOUS MATERIAL (TACK COAT)
SECTION	WIDTH FT	LENGHT FT	AREA SQFT	SQ YD	TON	POUND
WEST ABT	20.5	22.5	461.3	51.3	5.7	23.1
EAST ABT	20.5	22.5	461.3	51.3	5.7	23.1
TOTAL QUANTITY				102.5	11.5	46.1

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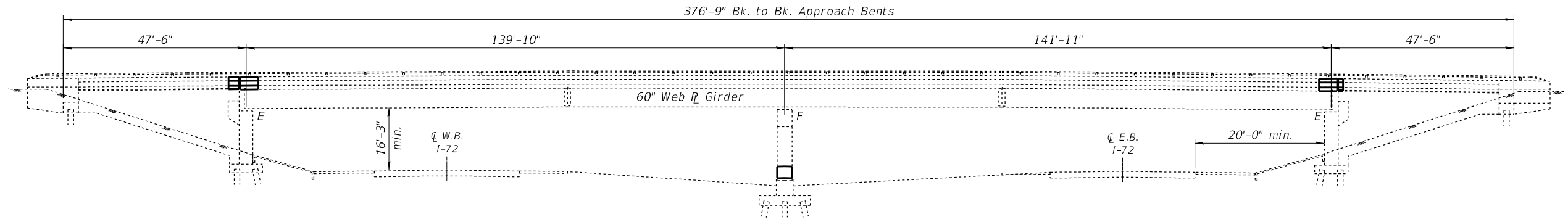
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PAVEMENT PLAN

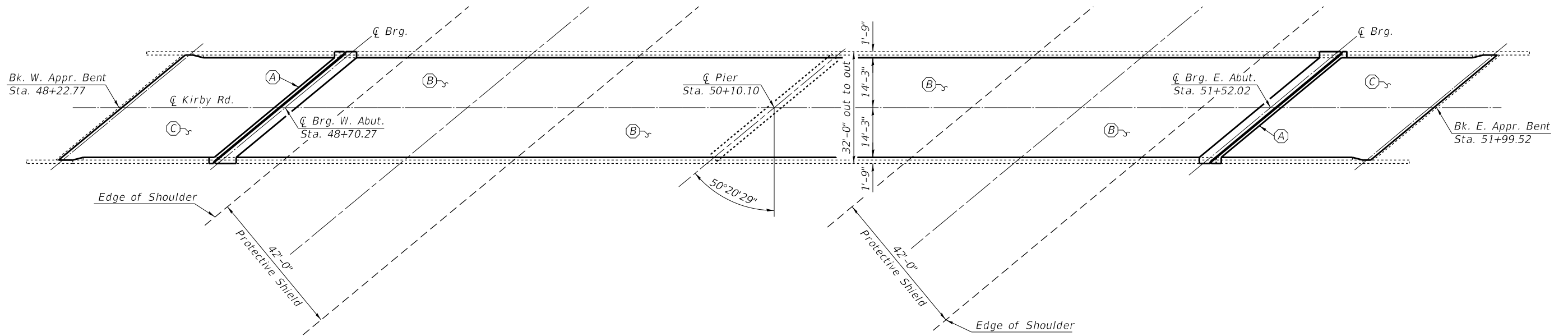
SCALE: SHEET 1 OF 11 SHEETS STA. TO STA.

F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B39	

Existing Structure: SN 058-0087 carries Kirby Rd. (TR-45) over I-72.
 The existing two span, steel girder superstructure with vaulted abutments was constructed in 1975.
 The proposed project consists of replacement of the expansion joints with new strip seals, full depth deck patching, HMA removal, scarification, & concrete overlay, structural concrete repair, and crashwall extensions.



ELEVATION



PLAN

- Ⓐ - Remove Existing Expansion Joints and Replace with Strip Seal Expansion Joint
- Ⓑ - HMA Surface Removal 2½", Bridge Deck Scarification ¾", Deck Patching, Bridge Deck Fly Ash or GGBF Slag Concrete Overlay 3¼"
- Ⓒ - HMA Surface Removal 2½", Bridge Deck Scarification ¾", Bridge Deck Fly Ash or GGBF Slag Concrete Overlay 3¼"

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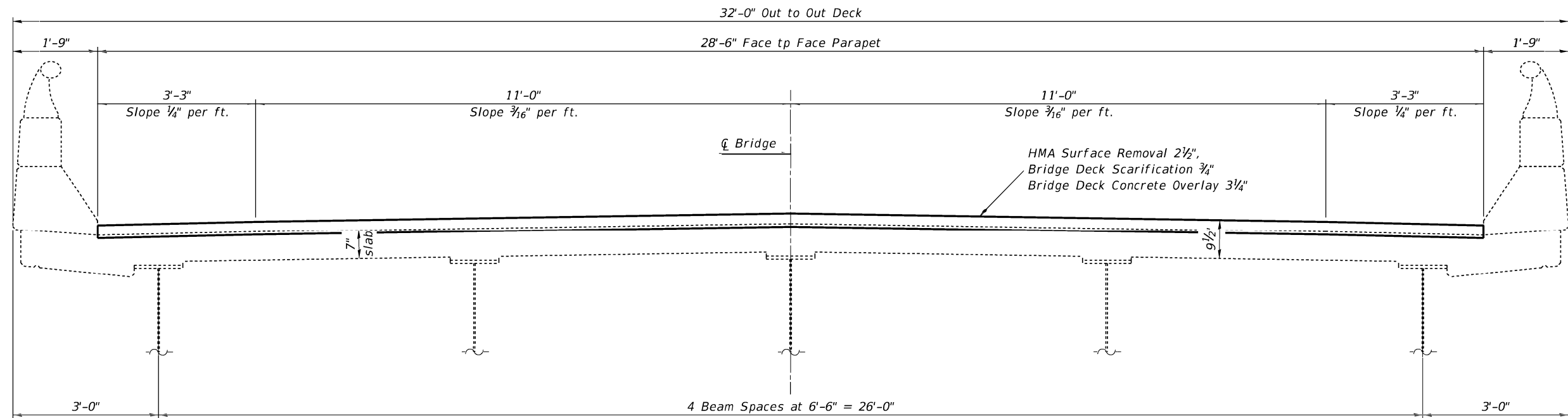
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION
 S.N. 058-0087**

SCALE: SHEET 1 OF 11 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	5
				CONTRACT NO. 74839
ILLINOIS FED. AID PROJECT				



CROSS SECTION DETAIL

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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement Bars designated (E) shall be epoxy coated.

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 operations 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.

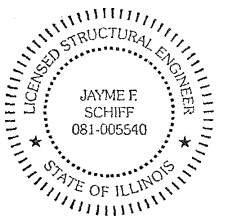
Removal and reinstallation of the handrail sections and support posts at both abutments will be necessary for construction of the expansion joints. The existing handrail sections and support posts shall be reused. New bolts, shim plates and post support anchor assemblies, as detailed in the plans, are to be provided and installed for the replacement of the handrail sections. This work and all materials shall be included in the contract unit price for CONCRETE SUPERSTRUCTURE

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Protective Coat to be applied to areas of new concrete only, including concrete overlay, crashwall extensions, & structural repair of abutments.

Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on as-built plans.

Full depth deck slab repairs performed in the exterior bays of the bridge deck (between the parapet walls and the first interior beams) shall be limited to individual lengths no greater than 10'. In these portions of the deck, repair areas longer than 10' shall be divided into segments not greater than 10' in length, and the segments shall be poured in alternating sequence. Subsequent segments repaired in sequence shall not be removed until 72 hours shall have elapsed from the end of the previous, adjacent pour, and the adjacent pour shall have attained a minimum modulus of rupture of 650psi.



Expires 11-30-2024

Jayme F. Schiff

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	15.6
Concrete Superstructure	Cu. Yd.	15.3
Concrete Structures	Cu. Yd.	6.6
Reinforcement Bars, Epoxy Coated	Pound	2,840
Preformed Joint Strip Seal	Foot	94
Hot-Mix Asphalt Surface Removal, 2 1/2"	Sq. Yd.	1,150
Bridge Deck Scarification, 3/4"	Sq. Yd.	1,150
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 3 1/4"	Sq. Yd.	1,150
Bridge Deck Grooving	Sq. Yd.	1,110
Protective Coat	Sq. Yd.	1,245
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	7.0
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	3.0
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	199
Protective Shield	Sq. Yd.	470

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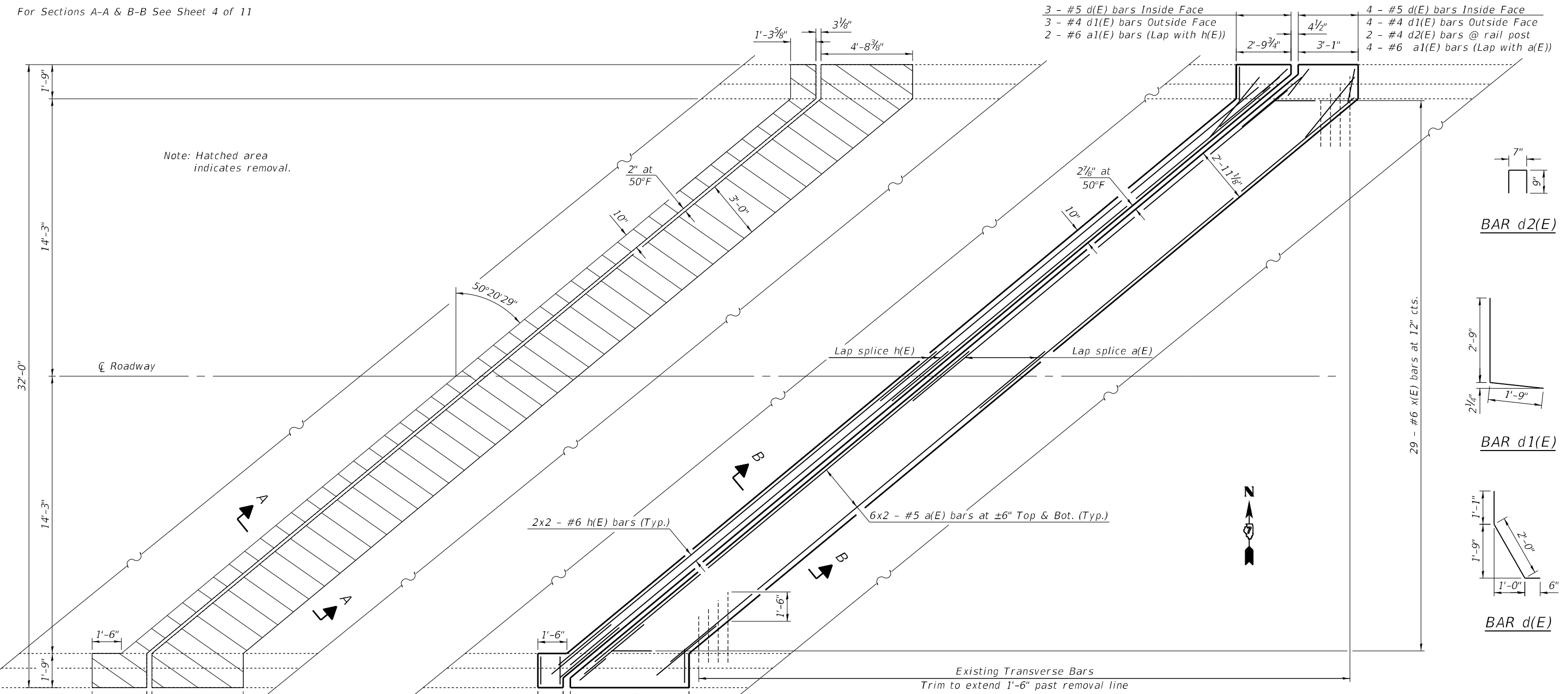
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTION, GENERAL NOTES, &
BILL OF MATERIALS S.N. 058-0087**

SCALE: SHEET 2 OF 11 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B39	

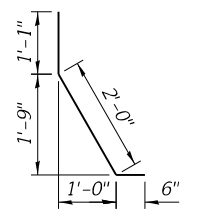
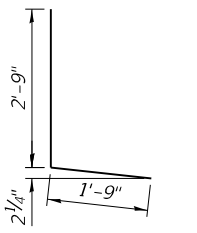
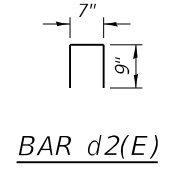
For Sections A-A & B-B See Sheet 4 of 11



Note: Hatched area indicates removal.

3 - #5 d(E) bars Inside Face
3 - #4 d1(E) bars Outside Face
2 - #6 a1(E) bars (Lap with h(E))

4 - #5 d(E) bars Inside Face
4 - #4 d1(E) bars Outside Face
2 - #4 d2(E) bars @ rail post
4 - #6 a1(E) bars (Lap with a(E))



29 - #6 x(E) bars at 12" cts.

Lap splice h(E) Lap splice a(E)

2x2 - #6 h(E) bars (Typ.) 6x2 - #5 a(E) bars at ±6" Top & Bot. (Typ.)

Existing Transverse Bars
Trim to extend 1'-6" past removal line

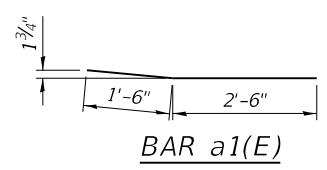
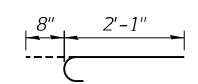
REMOVAL PLAN
West Abutment Shown
East Abutment Similar by Rotation

3 - #5 d(E) bars Inside Face
3 - #4 d1(E) bars Outside Face
2 - #6 a1(E) bars (Lap with h(E))

REINFORCEMENT PLAN
West Abutment Shown
East Abutment Similar by Rotation

6 - #5 d(E) bars Inside Face
6 - #4 d1(E) bars Outside Face
2 - #4 d2(E) bars @ rail post
4 - #6 a1(E) bars (Lap with a(E))

MINIMUM BAR LAP
#5 bar = 3'-6"
#6 bar = 4'-0"



Bars indicated thus "6x2 - #5 etc." indicates 6 lines with 2 lengths per line.

BILL OF MATERIAL - TWO ABUTMENTS

Bar	No.	Size	Length	Shape		
a(E)	48	#5	25'-0"	—		
a1(E)	24	#6	4'-0"	—		
h(E)	8	#6	25'-3"	—		
d(E)	32	#5	3'-7"	J		
d1(E)	32	#4	4'-6"	J		
d2(E)	8	#4	2'-1"	n		
x(E)	58	#6	2'-9"	C		
				ITEM	UNIT	QUANTITY
Concrete Removal				Cu. Yd.	15.6	
Concrete Superstructure				Cu. Yd.	15.3	
Reinforcement Bars, Epoxy Coated				Pound	2,165	

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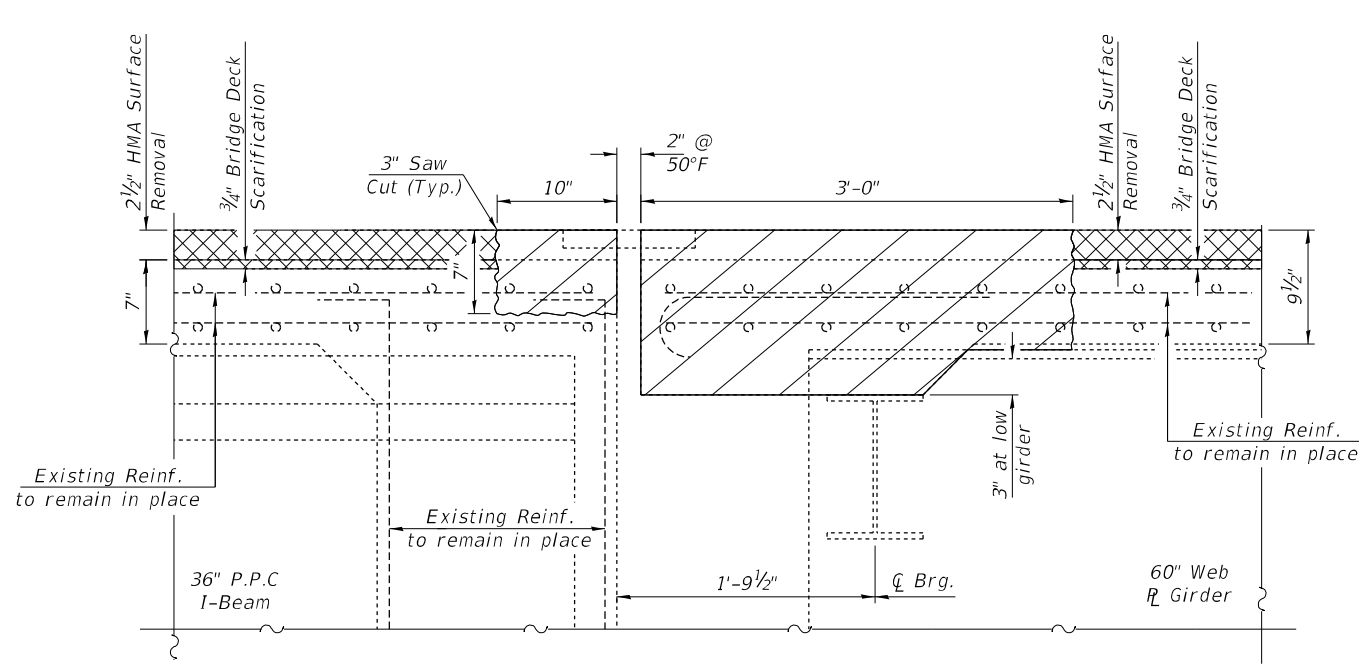
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT REPLACEMENT DETAILS
S.N. 058-0087**

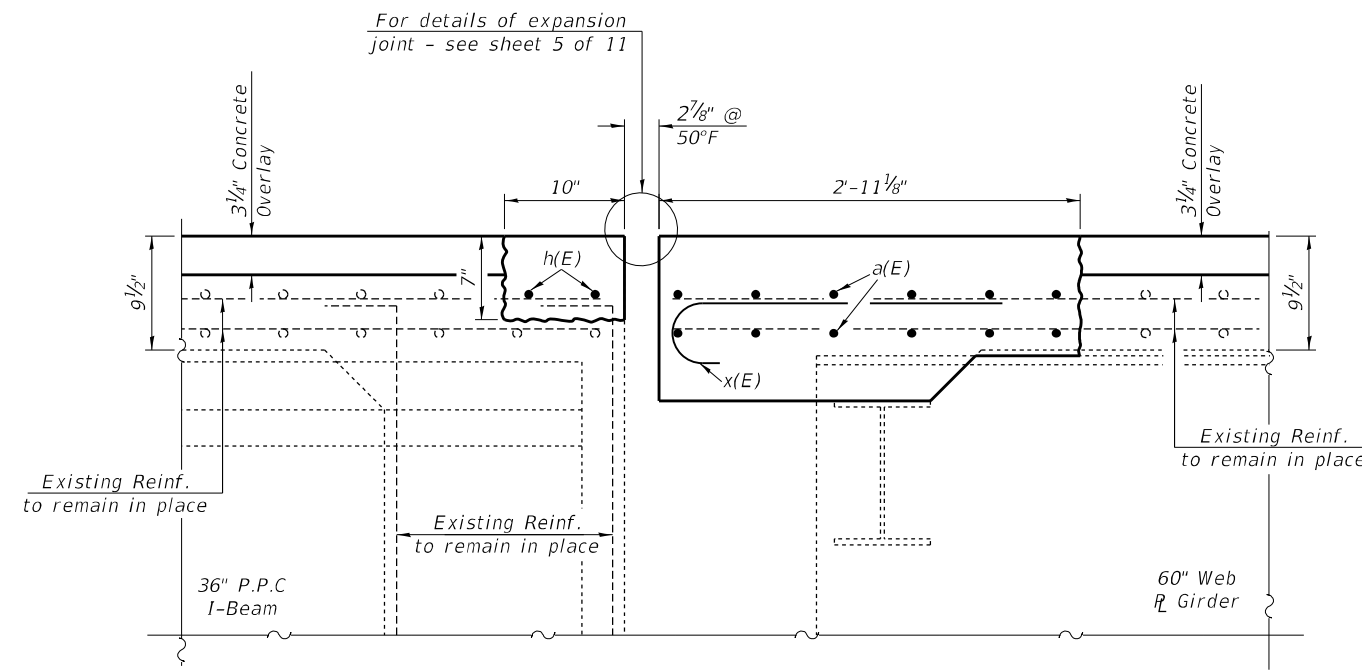
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 74839	

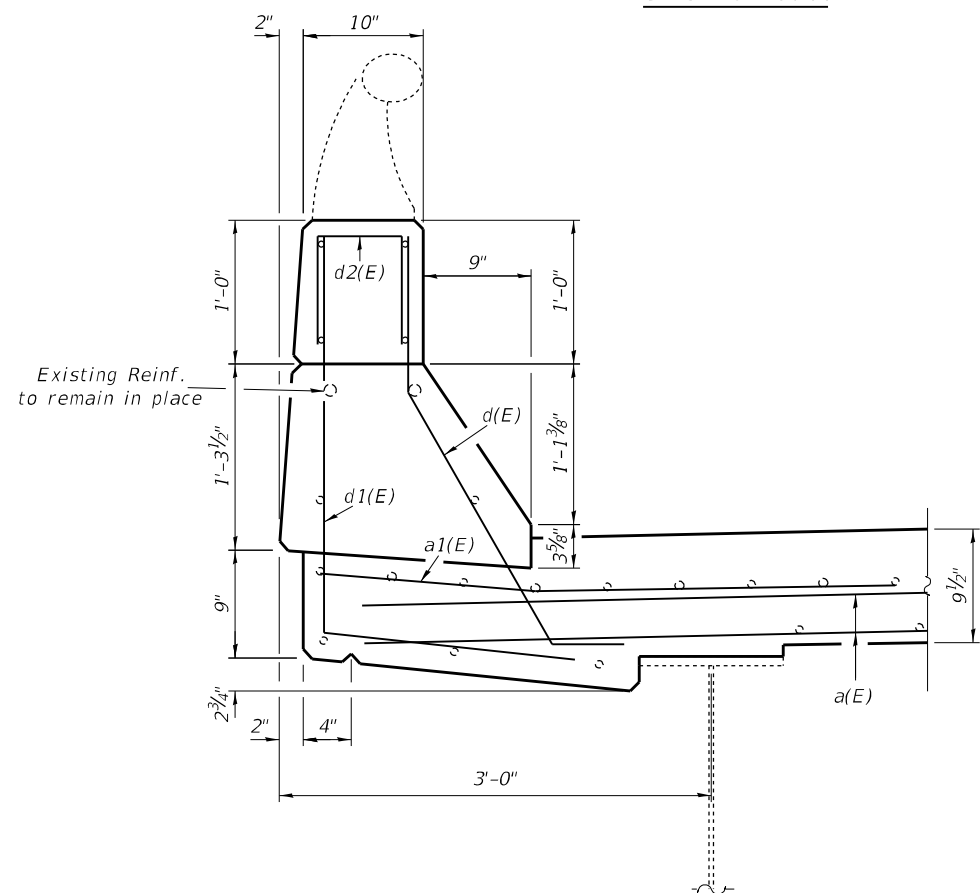
Note: Hatched areas indicates Concrete removal
Cross Hatched areas indicates HMA Removal & Scarification



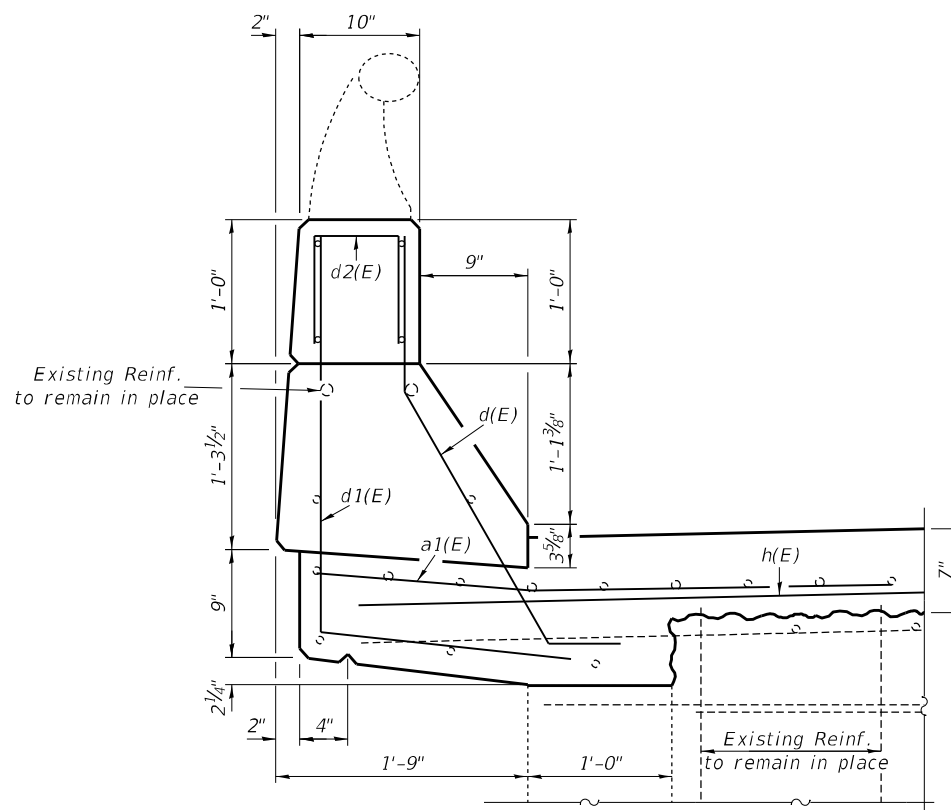
SECTION A-A



SECTION B-B



SECTION THRU DECK PARAPET



SECTION THRU VAULTED ABUT. PARAPET

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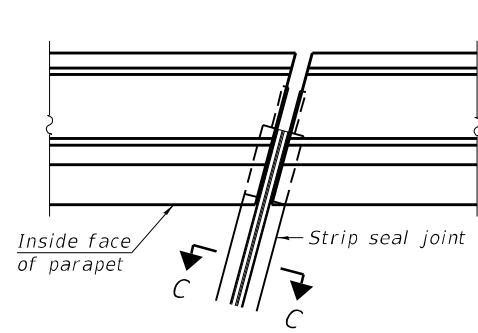
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PLOT DATE = 8/23/2023	DATE - April 2022	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT REPLACEMENT DETAILS
S.N. 058-0087**

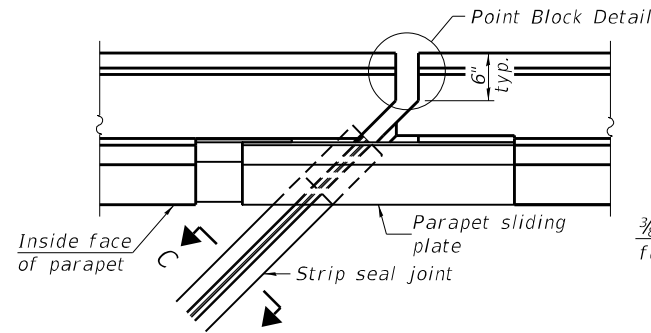
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F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 74839			ILLINOIS FED. AID PROJECT	

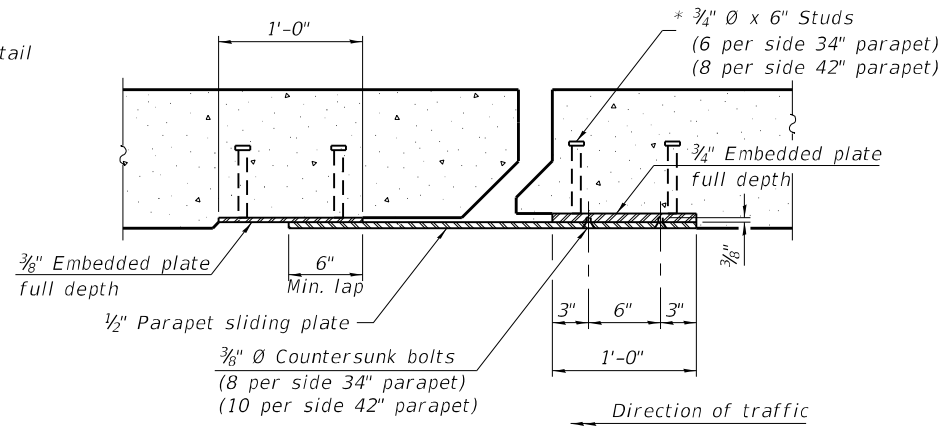


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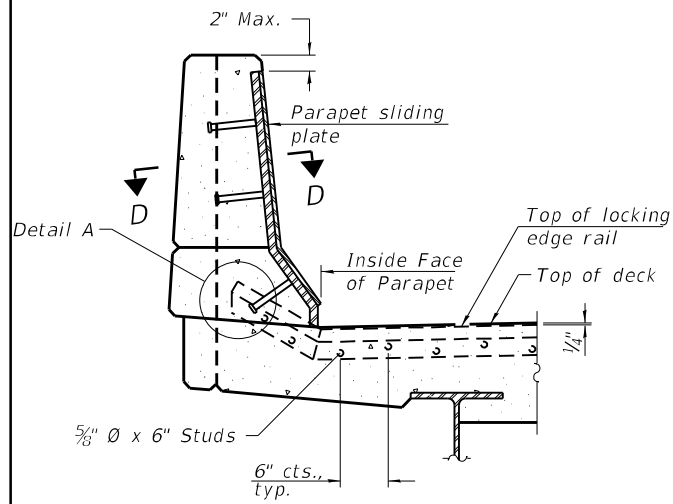
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

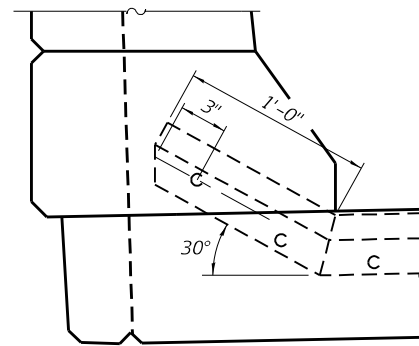


SECTION D-D

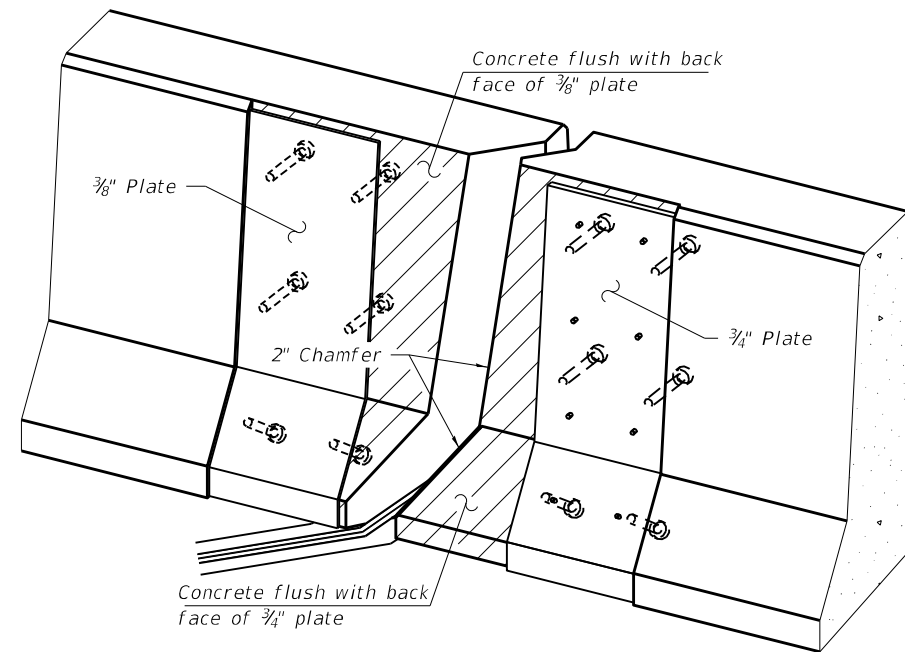


ELEVATION AT PARAPET

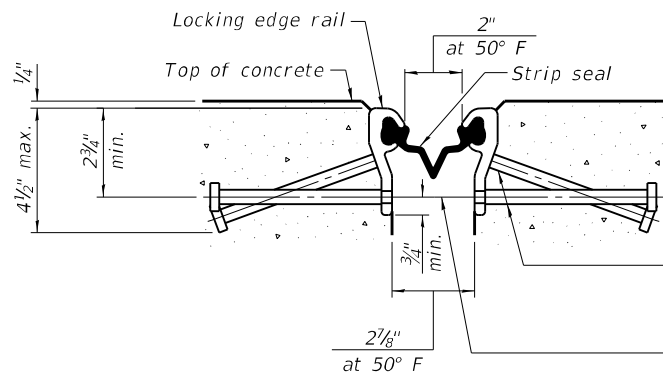
(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)



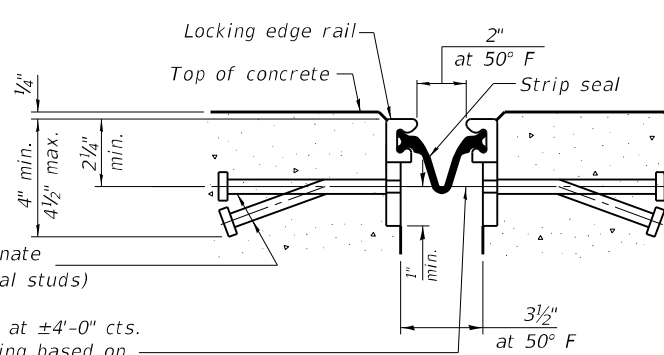
SHOWING ROLLED RAIL JOINT

* $5/8$ " ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

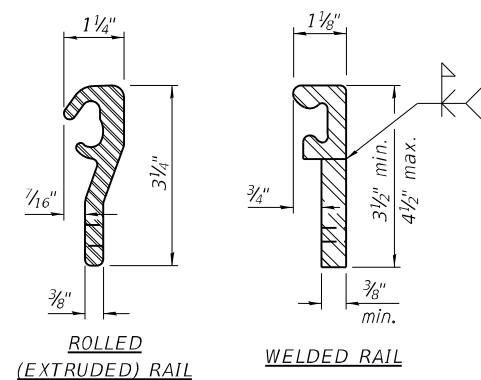
$3/8$ " ϕ threaded rods in $7/16$ " ϕ holes at ± 4 "-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION C-C

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

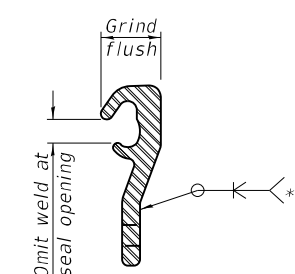


SHOWING WELDED RAIL JOINT



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	94

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of $1/4$ ". 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 $4 1/2$ " 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 parapet sliding plates, 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.

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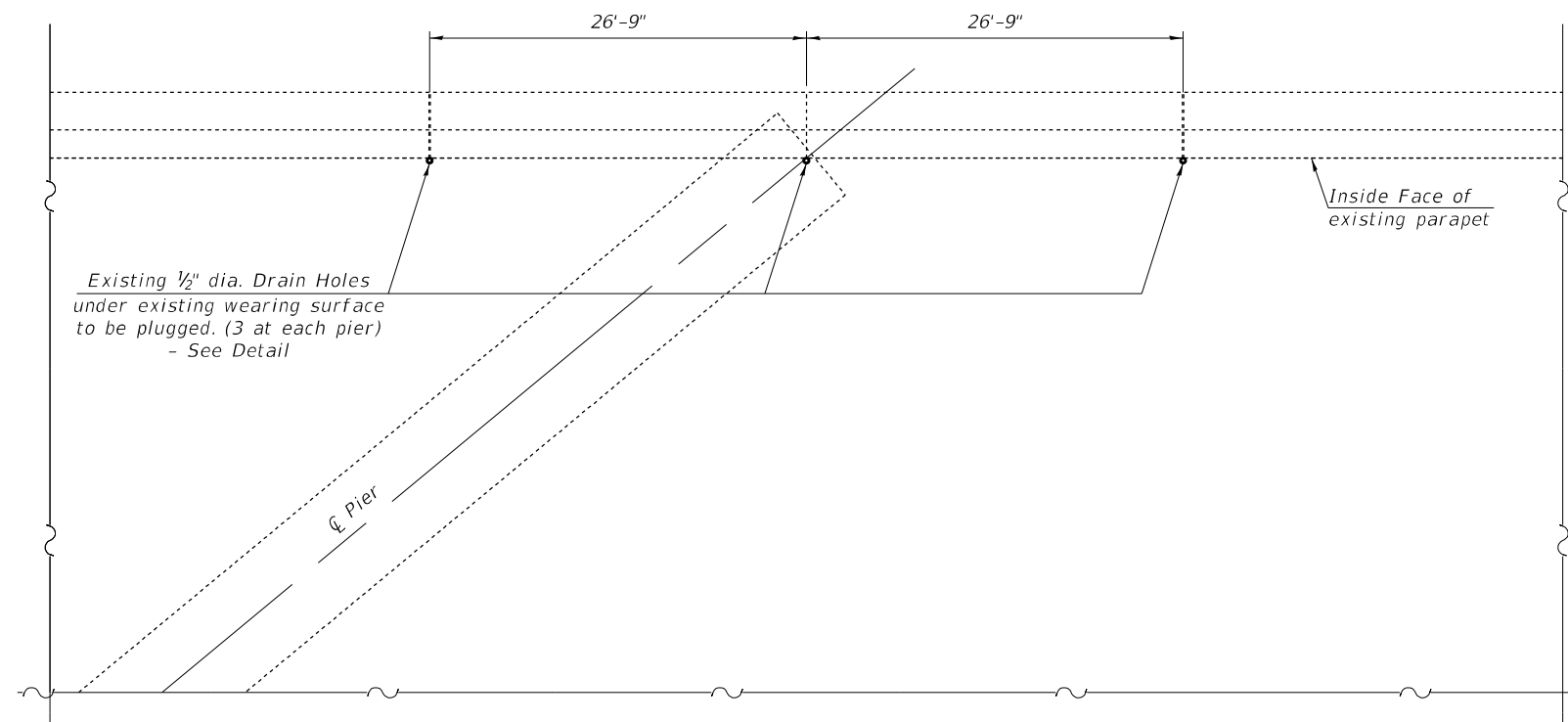
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PLOT DATE = 8/23/2023	CHECKED - D. Macklin	REVISED -
	DATE - April 2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL
S.N. 058-0087**

SCALE: SHEET 5 OF 11 SHEETS STA. TO STA.

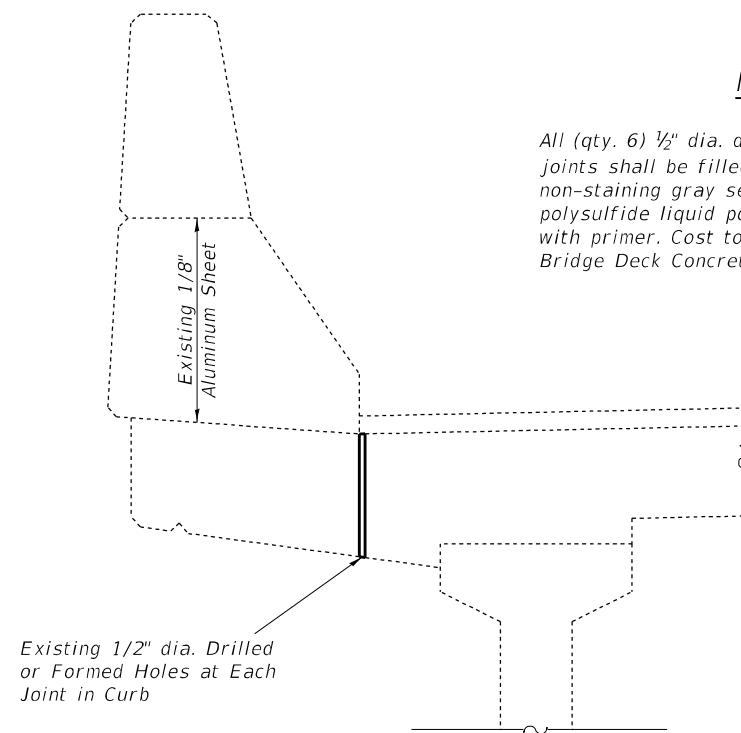
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72	D7 BRIDGE REPAIRS 2024-10	MACON	15	9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74839	



PARAPET DRAIN HOLE LOCATIONS
(Each side of Pier)

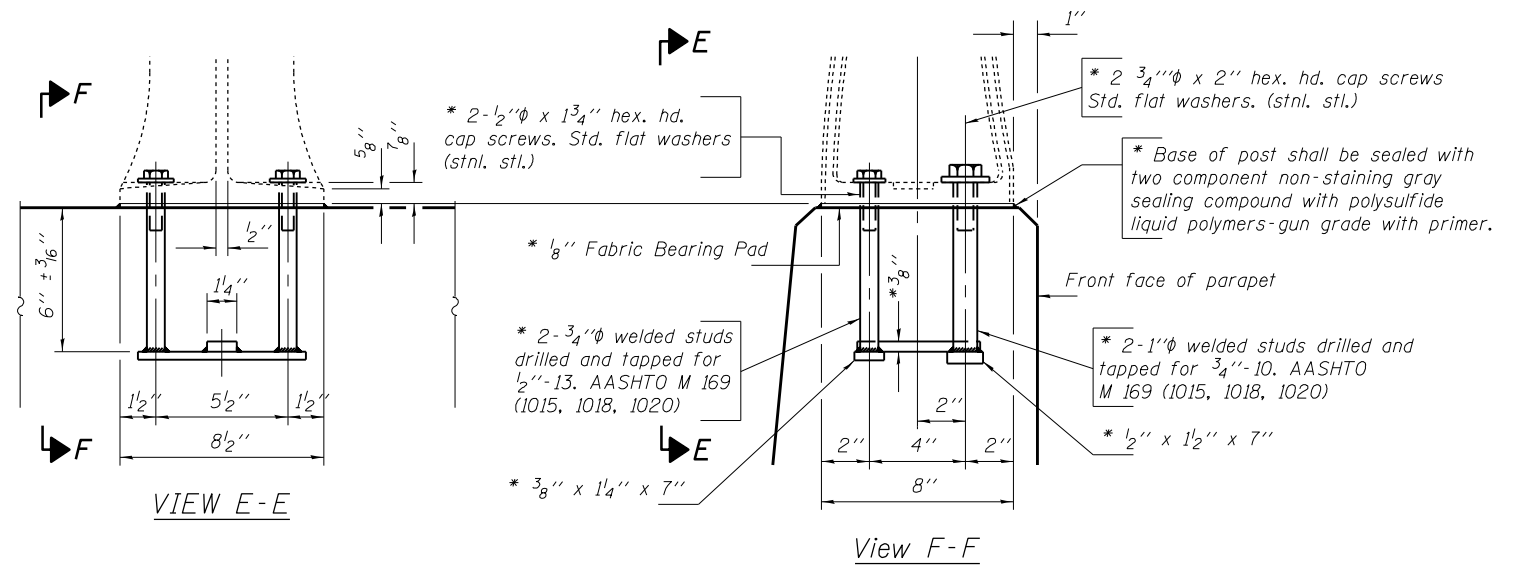
Notes

All (qty. 6) 1/2" dia. drain holes at curb joints shall be filled with a two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer. Cost to be included with Bridge Deck Concrete Overlay.



DETAIL OF DRAIN HOLES AT CURB JOINTS

(To be plugged) - See notes this sheet



RAIL POST DETAILS
(4 Locations Required per Bridge)

* New Rail Post anchorage devices will be required at each location where posts are connected to new construction. Cost shall be included with Concrete Superstructure. In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

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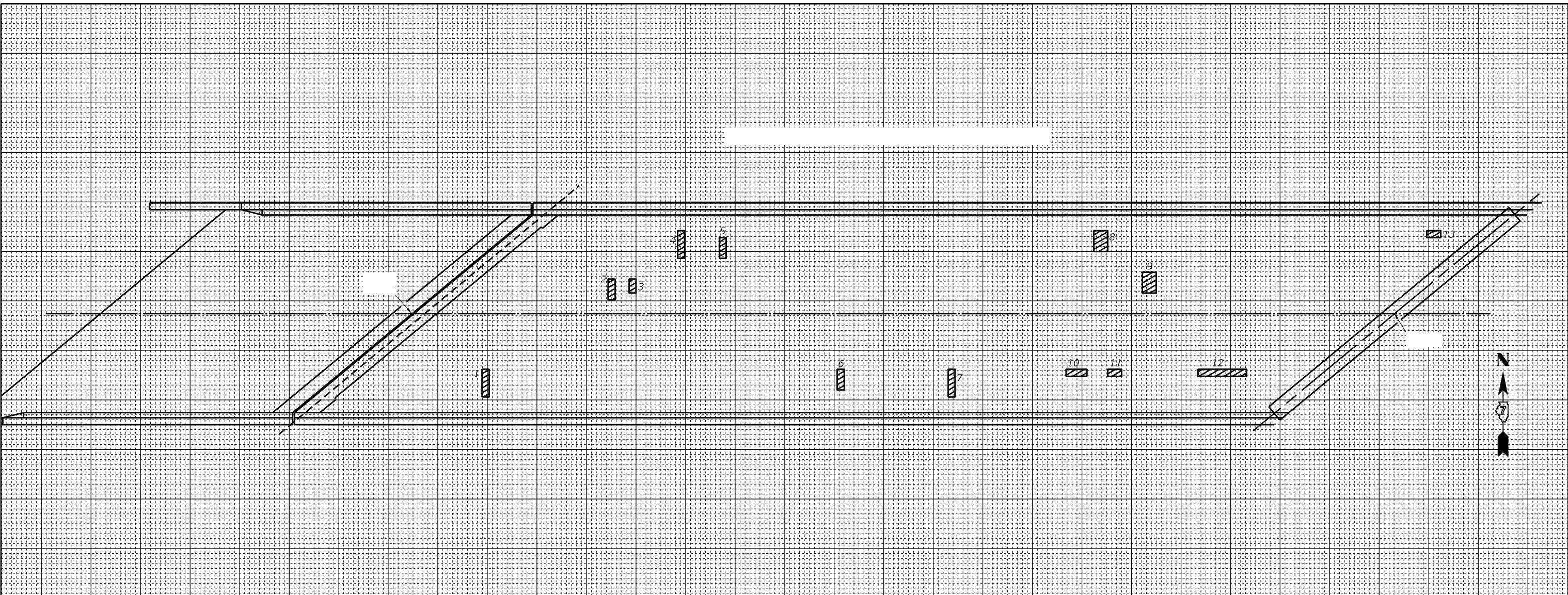
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLUGGING PARAPET DRAIN & RAIL POST DETAILS
S.N. 058-0087

SCALE: SHEET 6 OF 11 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74839	

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PATCH NO.	SIZE		DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
	LENGTH	WIDTH	SQ YD	SQ YD
1	1.0	4.0	0.4	
2	1.0	3.0	0.3	
3	1.0	2.0	0.2	
4	1.0	4.0	0.4	
5	1.0	3.0	0.3	
6	1.0	3.0	0.3	
7	1.0	4.0	0.4	
8	2.0	3.0		0.7
9	2.0	3.0		0.7
10	3.0	1.0	0.3	
11	2.0	1.0	0.2	
12	7.0	1.0		0.8
13	2.0	1.0	0.2	
TOTAL ROUNDS TO:			4.0	3.0

THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.



DATE OF SURVEY: 11-08-2021
 SURVEY BY: DPM & TMW
 METHOD OF SURVEY: VISUAL

ESTIMATED PAY QUANTITIES:
 DECK SLAB REPAIR (FULL DEPTH TYPE I)
 4.0 SQ YD
 DECK SLAB REPAIR (FULL DEPTH TYPE II)
 3.0 SQ YD

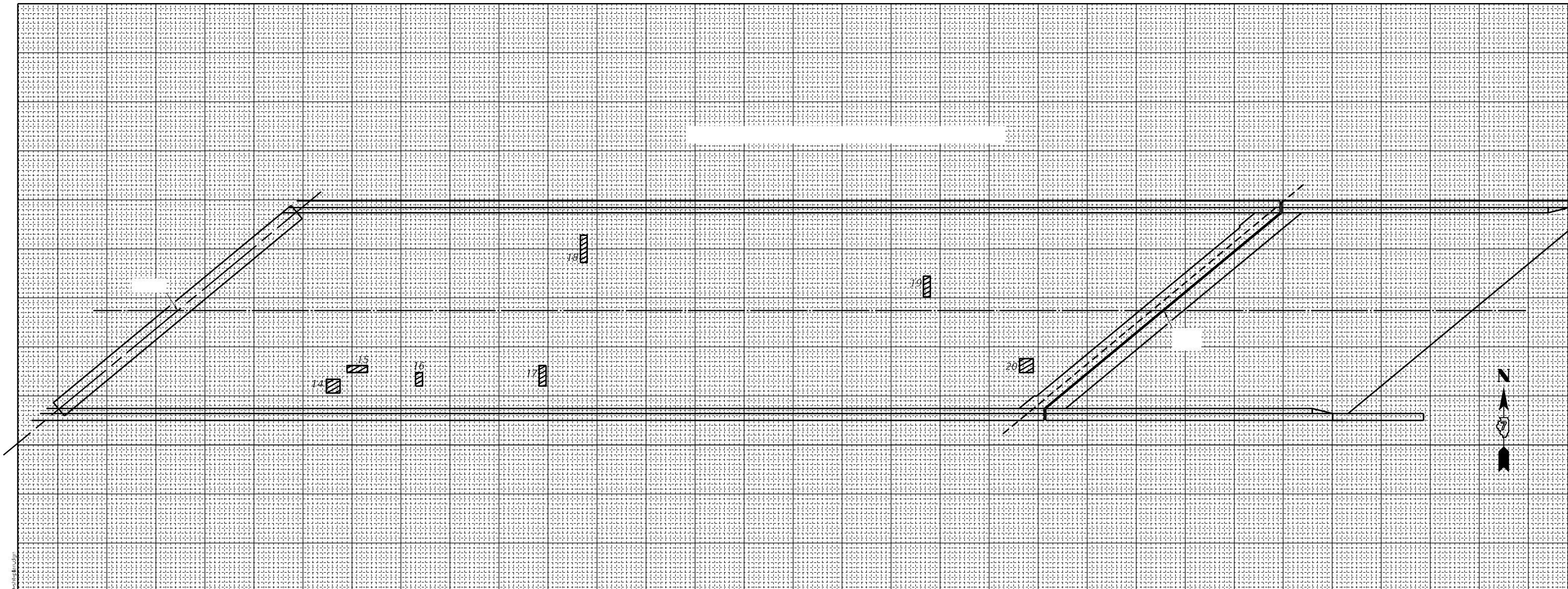
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PLOT DATE = 8/23/2023	DATE - April 2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK PATCHING
 WEST SPAN S.N. 058-0087**

SCALE: SHEET 7 OF 11 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	11
CONTRACT NO. 74839				
ILLINOIS FED. AID PROJECT				



PATCH NO.	SIZE		DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
	LENGTH	WIDTH	SQ YD	SQ YD
14	2.0	2.0	0.4	
15	3.0	1.0	0.3	
16	1.0	2.0	0.2	
17	1.0	3.0	0.3	
18	1.0	4.0	0.4	
19	1.0	3.0	0.3	
20	2.0	2.0	0.4	
TOTAL ROUNDS TO:			3.0	0

THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.



DATE OF SURVEY: 11-08-2021
 SURVEY BY: DPM & TMW
 METHOD OF SURVEY: VISUAL

ESTIMATED PAY QUANTITIES:
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 3.0 SQ YD
 DECK SLAB REPAIR (FULL DEPTH TYPE II)
 0 SQ YD

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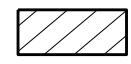
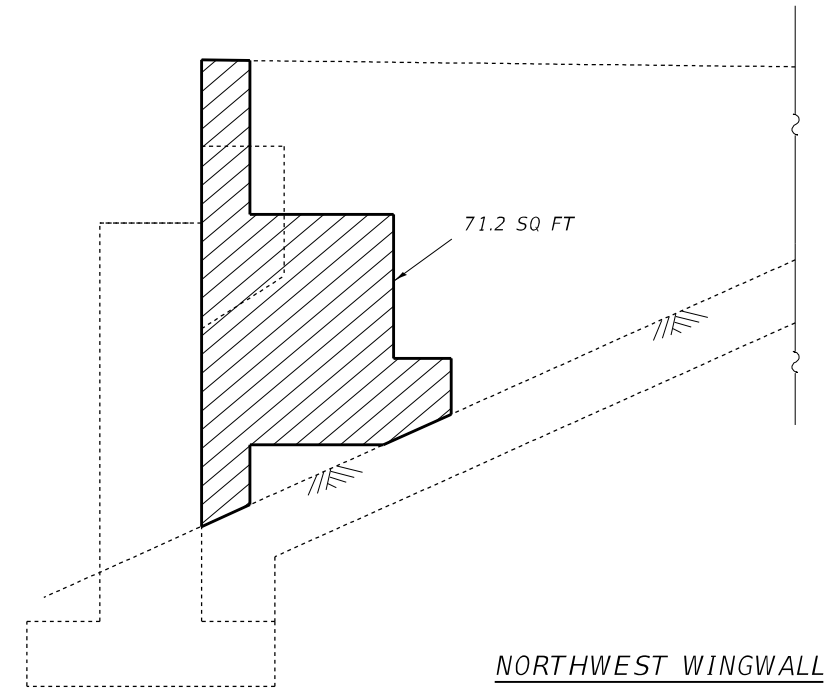
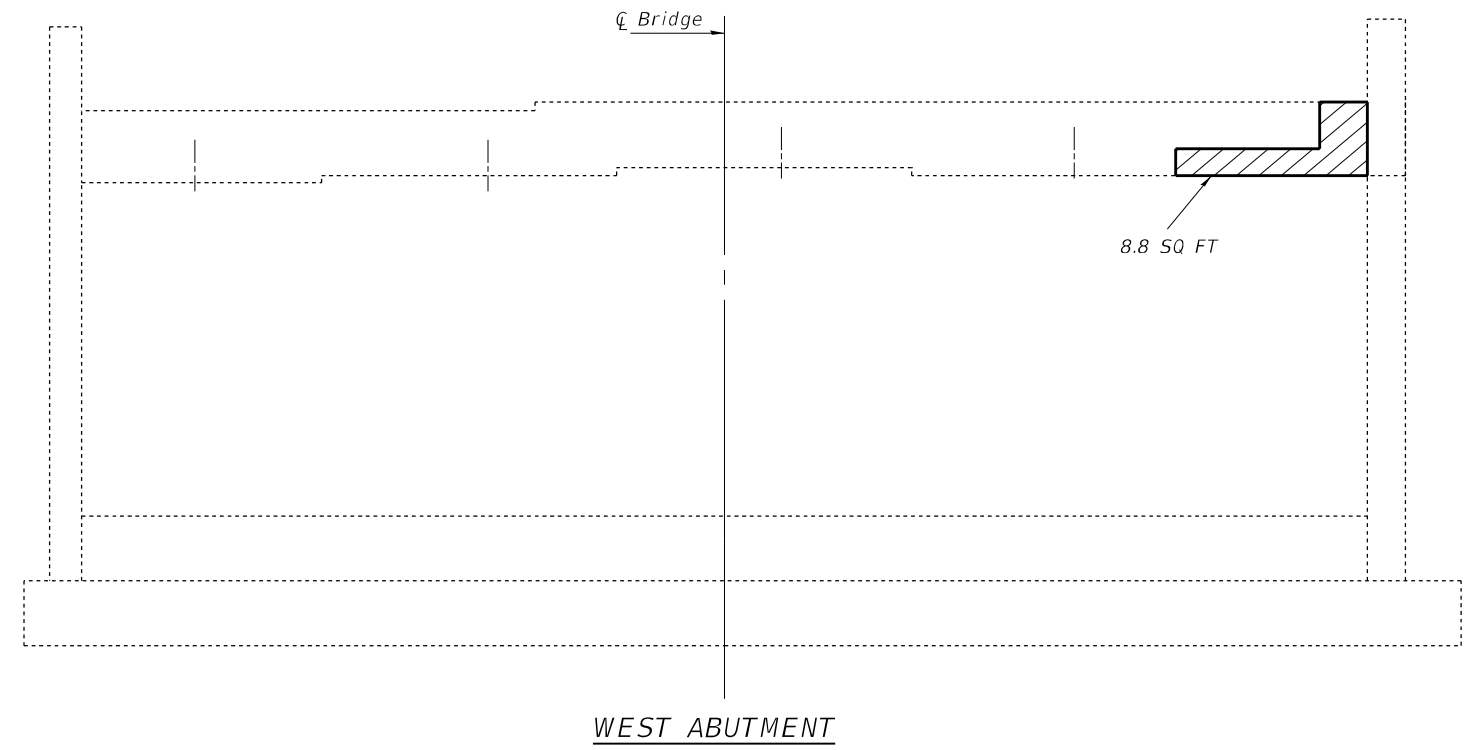
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	DATE - April 2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK PATCHING
 EAST SPAN S.N. 058-0087**

SCALE: SHEET 8 OF 11 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	12
CONTRACT NO. 74839				
ILLINOIS FED. AID PROJECT				



Structural Repair of Concrete (Depth ≤ 5")

Notes: Quantities and locations are approximated. Actual quantities and locations to be determined in the field by the Engineer.

This work is intended to repair only areas of severe deterioration. Some minor deteriorated areas may be left unrepaired.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	80

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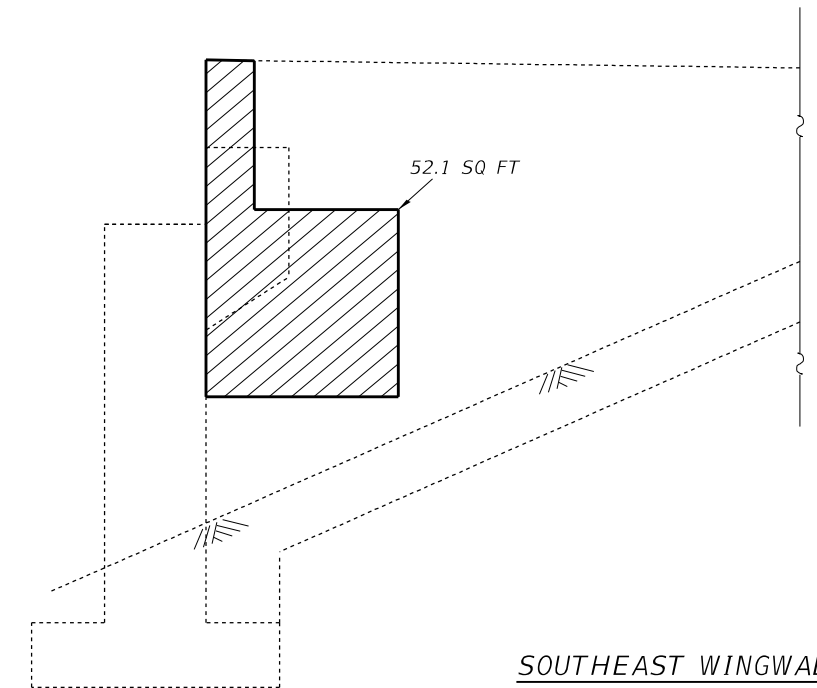
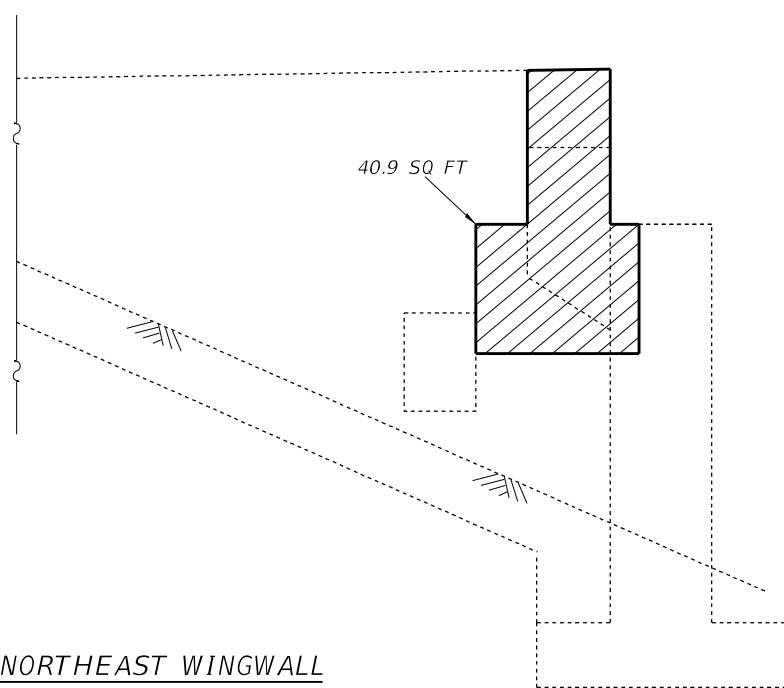
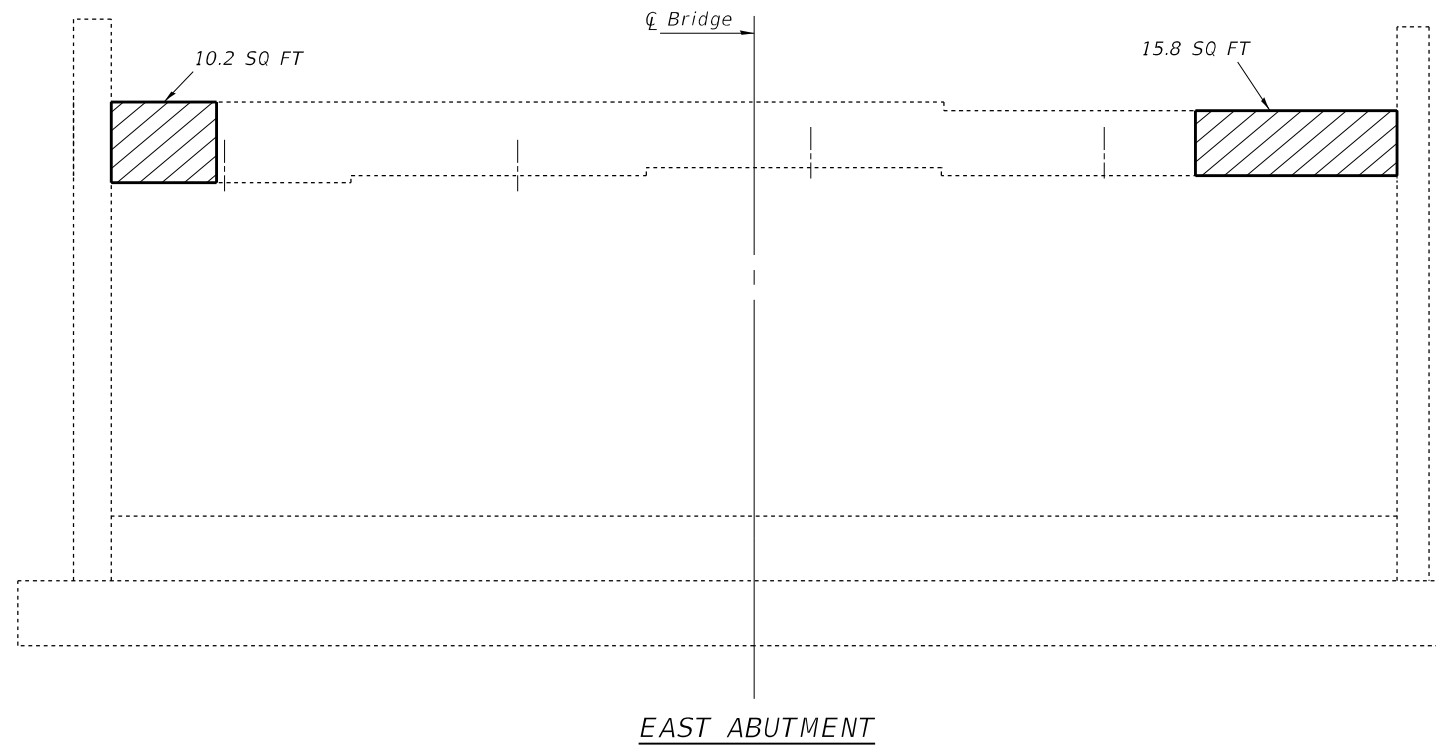
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PLOT DATE = 8/23/2023	DATE - April 2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL REPAIR OF CONCRETE WEST ABUTMENT
S.N. 058-0087**

SCALE: SHEET 9 OF 11 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	13
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B39	



Notes: Quantities and locations are approximated. Actual quantities and locations to be determined in the field by the Engineer.

This work is intended to repair only areas of severe deterioration. Some minor deteriorated areas may be left unrepaired.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	119

 Structural Repair of Concrete (Depth ≤ 5")

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

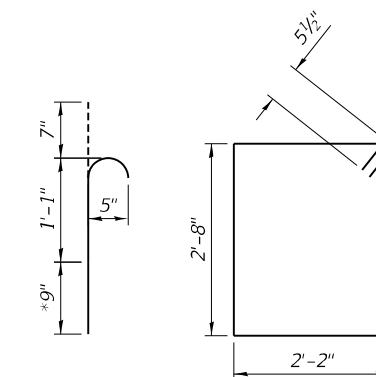
**STRUCTURAL REPAIR OF CONCRETE EAST ABUTMENT
S.N. 058-0087**

SCALE: SHEET 10 OF 11 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	14
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B39	

Notes

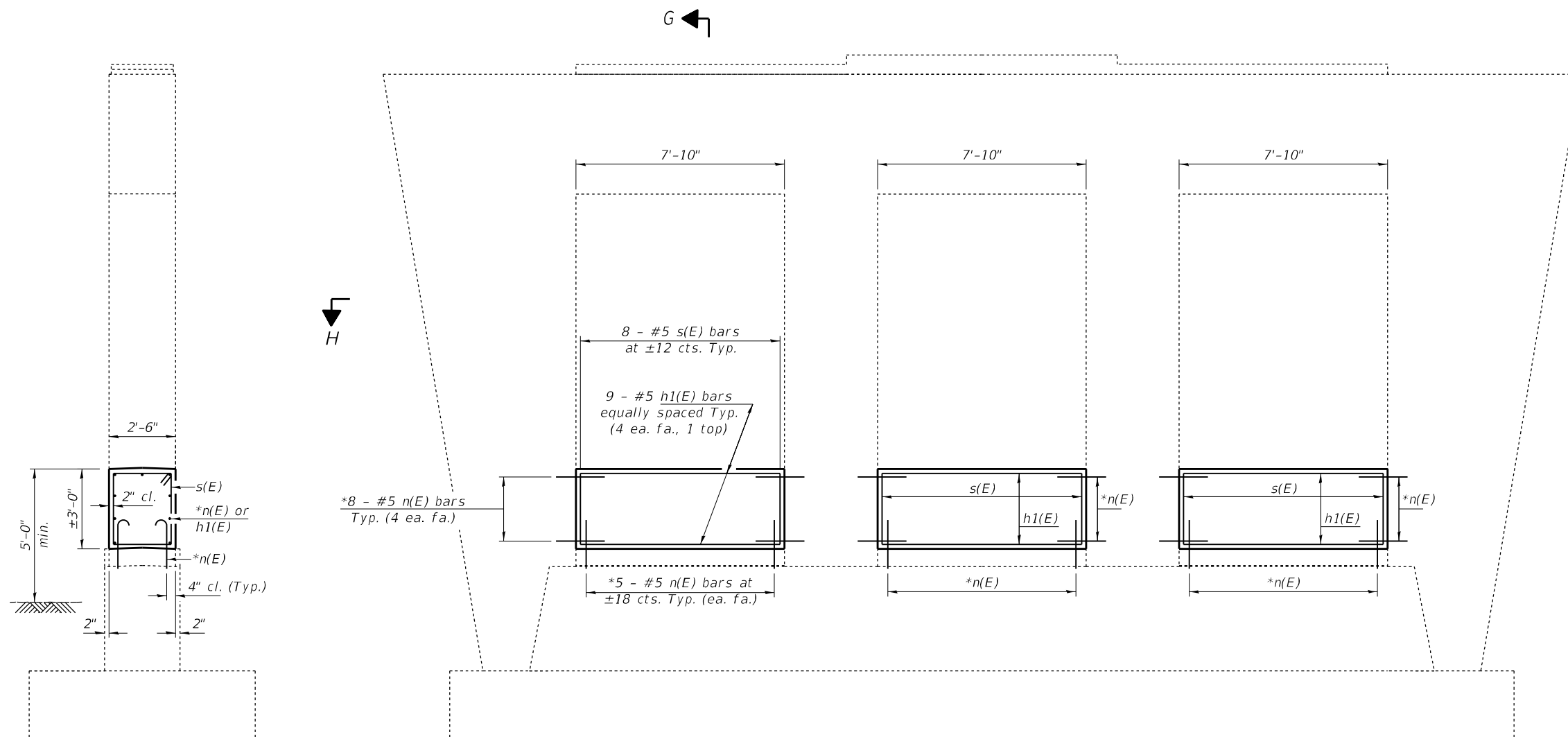
The cost of epoxy grouting threaded rods shall be included with Reinforcement Bars, Epoxy Coated.



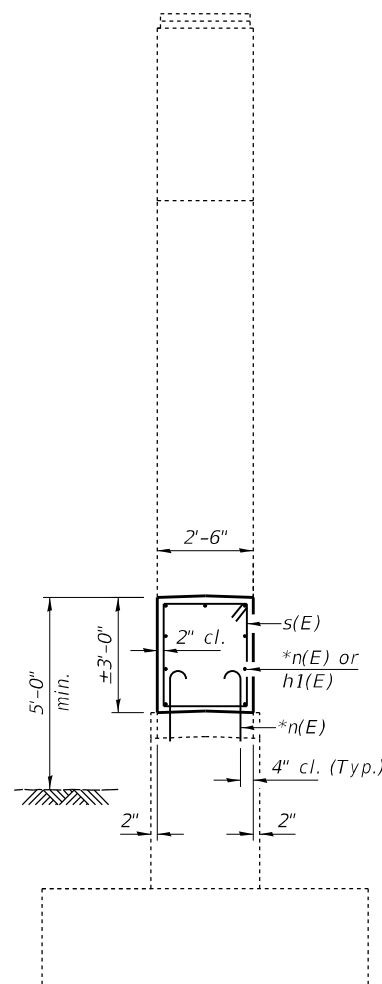
BAR n(E)

BAR s(E)

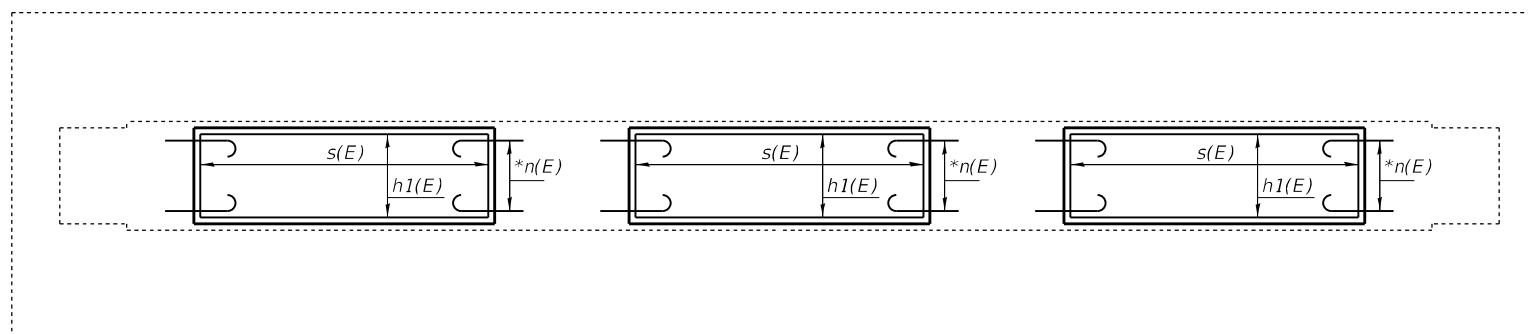
* Epoxy grout n(E) bars in 9" min. holes according to Article 584 of the Standard Specifications



ELEVATION



SECTION G-G



SECTION H-H

BILL OF MATERIAL FOR CRASHWALL EXTENSTIONS

Bar	No.	Size	Length	Shape
h1(E)	27	#5	7'-6"	—
n(E)	78	#5	2'-5"	⌒
s(E)	24	#5	10'-7"	□
ITEM		UNIT	QUANTITY	
Concrete Structures		Cu. Yd.	6.6	
Reinforcement Bars, Epoxy Coated		Pound	675	

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER CRASHWALL EXTENSION
S.N. 058-0087**

SCALE: SHEET 11 OF 11 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-10	MACON	15	15
CONTRACT NO. 74839				
ILLINOIS FED. AID PROJECT				