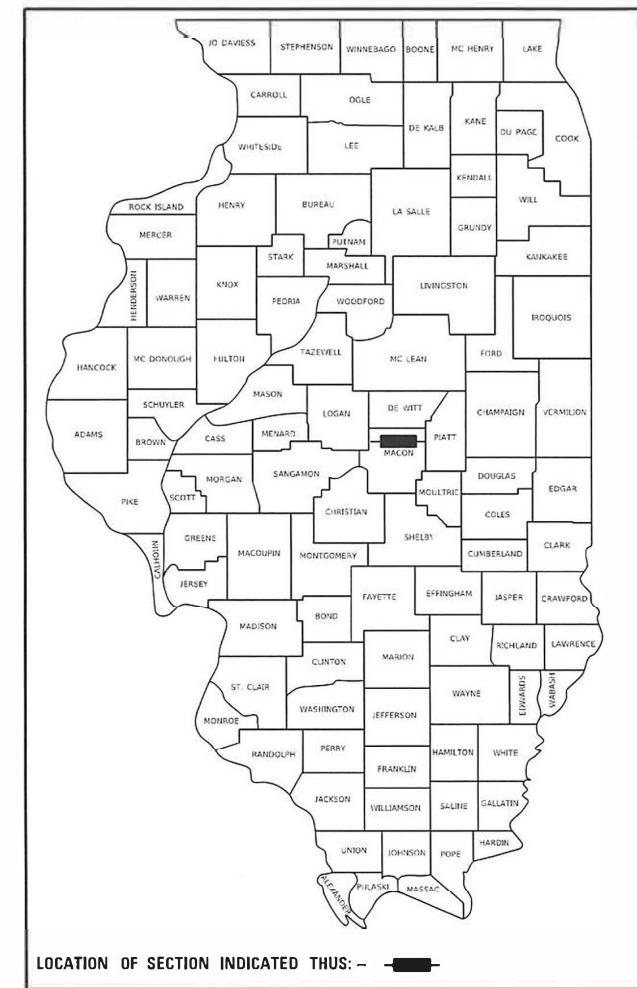


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	1
		ILLINOIS	CONTRACT NO. 74B30	

D-97-051-22



FOR INDEX OF SHEETS, SEE SHEET NO. 2

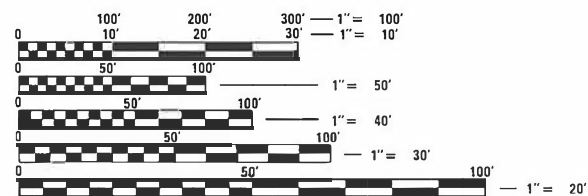
PROPOSED
HIGHWAY PLANS

ADT 5,900 (2021) WESTBOUND
ADT 6,100 (2021) EASTBOUND

FAI 72 (I-72)
SECTION D7 BRIDGE REPAIRS 2024-4
PROJECT NHPP-H7E3(889)
JOINT REPAIR, DECK OVERLAY
MACON COUNTY

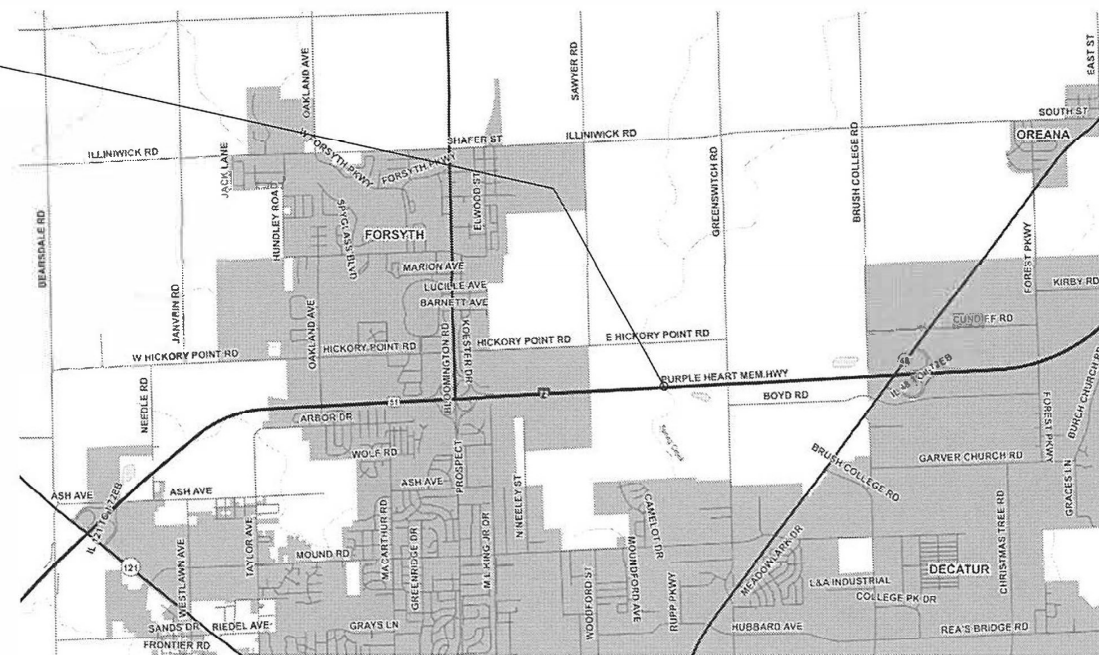
C-97-098-22

S.N. 058-0082 EASTBOUND
S.N. 058-0083 WESTBOUND
STATION 234 + 69.49



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 BRIAN LEWIS
PROJECT MANAGER JACKIE WILLENBURG

GROSS LENGTH = 107.75 FT. = 0.02 MILE
NET LENGTH = 107.75 FT. = 0.02 MILE

CONTRACT NO. 74B30

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED August 22 2023
Jeffrey P. Myrberg
REGIONAL ENGINEER
October 13, 2023
Scott A. Etk
ENGINEER OF DESIGN AND ENVIRONMENT
October 13, 2023
Stephen M. Smith
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

THE PROPOSED PROJECT IS LOCATED ON I-72 AT SPRING CREEK 1.3 MILES EAST OF FORSYTH.

THE WORK IN THIS SECTION CONSISTS OF BRIDGE DECK SCARIFICATION, BRIDGE DECK CONCRETE OVERLAY, DECK REPAIR, EXPANSION JOINTS, NEW APPROACH PAVEMENT AND PAVEMENT CONNECTORS, REMOVE AND RE-ERECT TYPE 6 TRAFFIC BARRIER TERMINALS, SHOULDER REMOVAL, PCC SHOULDER, PAVEMENT MARKING, AND ANY OTHER WORK NEEDED TO COMPLETE THIS SECTION.

FINAL PAVEMENT MARKINGS ON PAVEMENT SURFACES SHALL BE AS FOLLOWS:

PAVEMENT MARKINGS ON HOT-MIX ASPHALT SURFACE, PCC APPROACH PAVEMENTS AND BRIDGE DECK OVERLAY SHALL BE PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 6".

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

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 PAVEMENT CONNECTOR	PG 64-22	4.0% @ N=90	IL - 19.0	N/A	N90	QC/QA	N/A	N/A

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5	TYPICAL SECTIONS
6	SCHEDULE OF QUANTITIES
7	PAVEMENT REMOVAL
8	STRUCTURE PROFILE TRANSITION DETAIL
9-11	STAGING PLAN SHEETS
12-28	BRIDGE REPAIR PLANS
29-30	DISTRICT 7 DETAIL NO. 78000002 -TYPICAL APPLICATION OF FREEWAY/EXPRESSWAY PAVEMENT MARKING

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLLOWING THE LAST NUMBERED SHEET OF THE PLANS:

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
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
420406	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
483001-06	PCC SHOULDER
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
642001-03	SHOULDER RUMBLE STRIPS, 16 INCH
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT
701106-02	EDGE OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-11	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-12	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701406-13	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS

REV. - MS

MODEL: Default
 FILE NAME: P:\Public\sw_bentley.com\pwwd\DOT\Documents\DOT_Offices\District_7\Project\74830\CADD\data\CAD\sheet\074830-sh-genote.dgn

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, INDEX OF SHEETS
AND HIGHWAY STANDARDS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	2
			CONTRACT NO. 74830	
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0047 90% FED / 10% STATE		
31101900	SUBBASE GRANULAR MATERIAL, TYPE C	TON	489	489		
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SO YD	251	251		
44000100	PAVEMENT REMOVAL	SO YD	118	118		
44004250	PAVED SHOULDER REMOVAL	SO YD	2721	2721		
44200050	WELDED WIRE REINFORCEMENT	SO YD	2860	2860		
48300500	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SO YD	2860	2860		
50102400	CONCRETE REMOVAL	CU YD	23.7	23.7		
50300100	FLOOR DRAINS	EACH	24	24		
50300225	CONCRETE STRUCTURES	CU YD	62	62		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	23.6	23.6		
50300300	PROTECTIVE COAT	SO YD	1585	1585		
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	245	245		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	102120	102120		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0047 90% FED / 10% STATE		
50800515	BAR SPLICERS	EACH	612	612		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	190	190		
* 63302700	REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 6	EACH	4	4		
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	3217	3217		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4		
67100100	MOBILIZATION	L SUM	1	1		
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	2	2		
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2	2		
70100701	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	EACH	2	2		
70107007	PAVEMENT MARKING BLACKOUT TAPE, 7"	FOOT	961	961		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	168	168		

* SPECIALTY ITEM

REV. - MS

MODEL: Default
FILE: M:\MSA_P\11482-cw_bentley.com\PROJECTS\74B30\CADD\DATA\CAD\sheet\74B30-4-300.dgn

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0047 90% FED / 10% STATE		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	620	620		
70300241	TEMPORARY PAVEMENT MARKING - LINE 6"- PAINT	FOOT	3888	3888		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1175	1175		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1175	1175		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
* 78003131	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - STANDARD - LINE 6"	FOOT	1143	1143		
* 78011035	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	1143	1143		
78300201	PAVEMENT MARKING REMOVAL - GRINDING	SO FT	1699	1699		
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SO FT	168	168		
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SO YD	890	890		
Z0001495	BRIDGE APPROACH SHOULDER REMOVAL	SO YD	149	149		

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		0047 90% FED / 10% STATE		
Z0004552	APPROACH SLAB REMOVAL	SO YD	488	488		
Z0012115	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 3 1/2"	SO YD	918	918		
Z0012150	BRIDGE DECK SCARIFICATION 3 1/4"	SO YD	918	918		
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	192	192		
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SO FT	106	106		
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SO YD	26	26		
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SO YD	35	35		
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SO YD	1373	1373		

* SPECIALTY ITEM

REV. - MS

MODEL: Default
 FILE: Maize_Pavement-aw_bentley.com:PNIDOT\Documents\DOT Offices\District 7\Projects\74B30\CADD\data\CAD\sheet\74B30-4-500.dgn

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

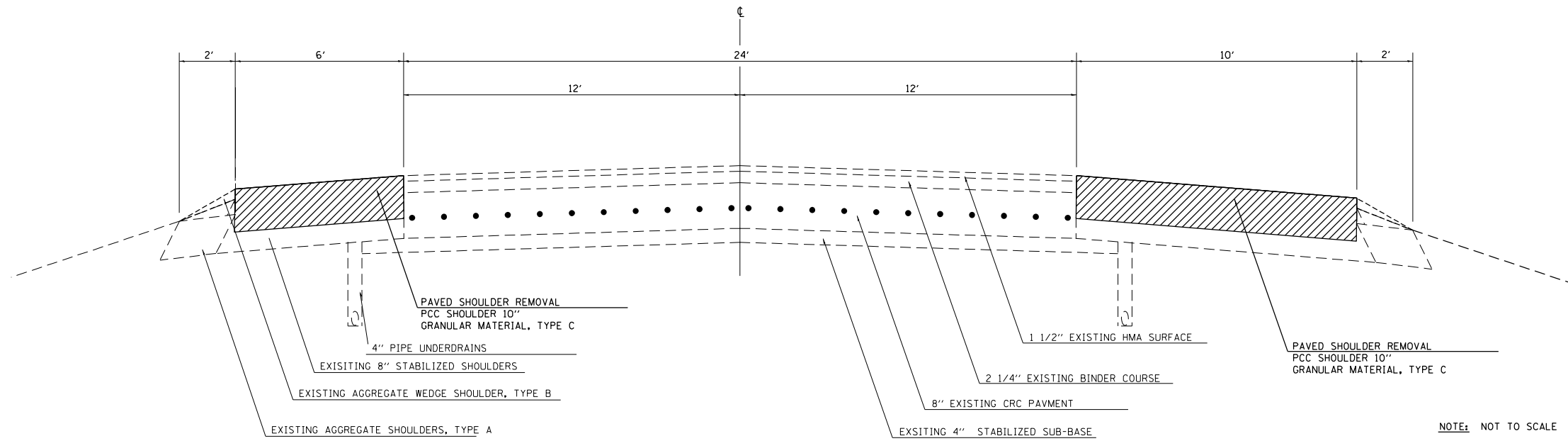
SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	

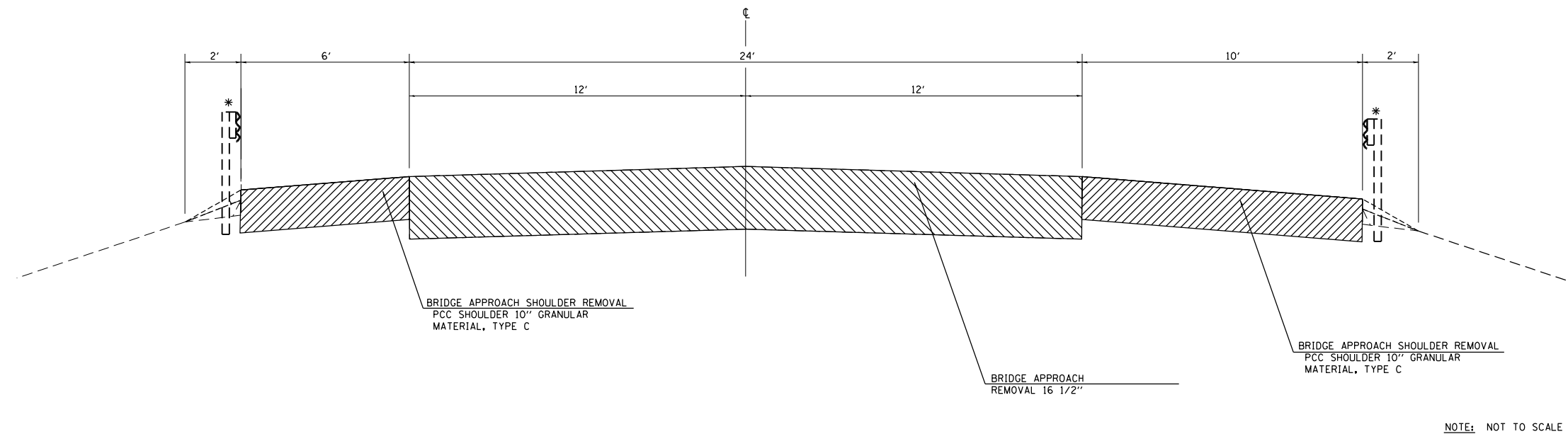
PROPOSED TYPICAL CROSS SECTION

STA. 224+99 TO STA. 233+70 EB
 STA. 235+69 TO STA. 238+13 EB
 STA. 230+86 TO STA. 233+29 WB
 STA. 234+82 TO STA. 240+00 WB



PROPOSED TYPICAL CROSS SECTION

STA. 233+70 TO STA. 234+16 EB
 STA. 235+24 TO STA. 235+69 EB
 STA. 233+29 TO STA. 233+75 WB
 STA. 234+82 TO STA. 235+28 WB



NOTE: NOT TO SCALE

* REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL TYPE 6 ON ONE END OF EACH STRUCTURE

MODEL: Default
 FILE NAME: p:\ultra\paw_bentley.com\PIV\DOT\Documents\DOT Office\Director_7\Projects\74B30\CADD\DATA\CAD\Sheets\74B30\Sheets\typical.dgn

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	5
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	

PAVED SHOULDER SCHEDULE											
BRIDGE NO.	DL/PL	STATION	TO	STATION	LENGTH	WIDTH (FT)	AREA (SQ FT)	WELDED WIRE REINFORCEMENT SQ YD	SUBBASE GRANULAR MATERIAL, TYPE C TON	PORTLAND CEMENT CONCRETE SHOULDERS 10" SQ YD	SHOULDER RUMBLE STRIPS, 16 INCH FOOT
PRE-STAGE CONSTRUCTION											
058-0083	DL	230+86	TO	233+75	289	10	2890	321	55	321	289
	DL	234+83	TO	240+00	517	10	5170	574	98	574	517
STAGE 1 CONSTRUCTION											
058-0083	PL	230+86	TO	233+75	289	6	1734	193	33	193	289
	PL	234+83	TO	240+00	512	6	3072	341	58	341	512
PRE-STAGE CONSTRUCTION											
058-0082	DL	228+99	TO	234+16	516	10	5160	573	98	573	516
	DL	235+34	TO	238+13	289	10	2890	321	55	321	289
STAGE 1 CONSTRUCTION											
058-0082	PL	228+99	TO	234+16	516	6	3096	344	59	344	516
	PL	235+34	TO	238+13	289	6	1734	193	33	193	289
TOTAL								2860	489	2860	3217

PAVEMENT MARKING SCHEDULE												
BRIDGE NO.	DL/PL/CL	STATION	TO	STATION	FOOT	FOOT	FOOT	SQ FT	FOOT	SQ FT	FOOT	SQ FT
058-0083	CL	230+86	TO	232+47					161			
	DL	230+86	TO	233+75	72	72	12	145		3	289	
	DL	233+45	TO	235+13								84
	DL	233+75	TO	234+83	27	27	4			4	108	
	DL	234+83	TO	240+00	129	129	21	259		2	517	
	CL	233+75	TO	234+83	27	27	11	54		8	27	
	PL	230+86	TO	233+75	72	72	12	145		2	289	
	PL	233+75	TO	234+83	27	27	4			4	108	
	PL	234+83	TO	239+50	117	117	21			2	517	
	CL	236+30	TO	239+50	80	80		259	320	7	80	
058-0082	CL	229+49	TO	232+69	80	80			320		80	
	DL	228+99	TO	234+16	129	129	21	259		7	517	
	DL	233+86	TO	235+54								84
	DL	234+16	TO	235+24	27	27	4			2	108	
	DL	235+24	TO	238+13	72	72	12	145		4	289	
	CL	234+16	TO	235+24	27	27	11	54		2	27	
	PL	229+49	TO	234+16	117	117	19	234		7	467	
	PL	234+16	TO	235+24	27	27	4			2	108	
	PL	235+24	TO	238+13	72	72	12	145		4	289	
	CL	236+52	TO	238+13	40	40			160		68	
TOTAL					1143	1143	168	1699	961	60	3888	168

STAGE CONSTRUCTION SCHEDULE						
BRIDGE NO.	FOOT	EACH	FOOT	EACH	EACH	EACH
058-0083	587.5	1	587.5	1	1	1
058-0082	587.5	1	587.5	1	1	1
TOTAL	1175	2	1175	2	2	2

REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 6		
BRIDGE NO.	STATION	EACH
058-0083	NE	1
058-0083	SE	1
058-0082	NW	1
058-0082	SW	1
TOTAL		4

PAVEMENT REMOVAL						
BRIDGE NO.	STATION	TO	STATION	LENGTH	WIDTH	SQ YD
058-0083	233+07	TO	233+29	22	24	60
058-0083	235+28	TO	235+35	7	24	18
058-0082	233+64	TO	233+70	6	24	18
058-0082	235+69	TO	235+77	8	24	21
TOTAL						118

PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB						
BRIDGE NO.	STATION	TO	STATION	LENGTH	WIDTH	AREA SQ YD
058-0083	233+07	TO	233+42	35	24	94
	235+16	TO	235+35	19	24	51
058-0082	233+64	TO	233+83	19	24	51
	235+57	TO	235+77	20	24	55
TOTAL						251

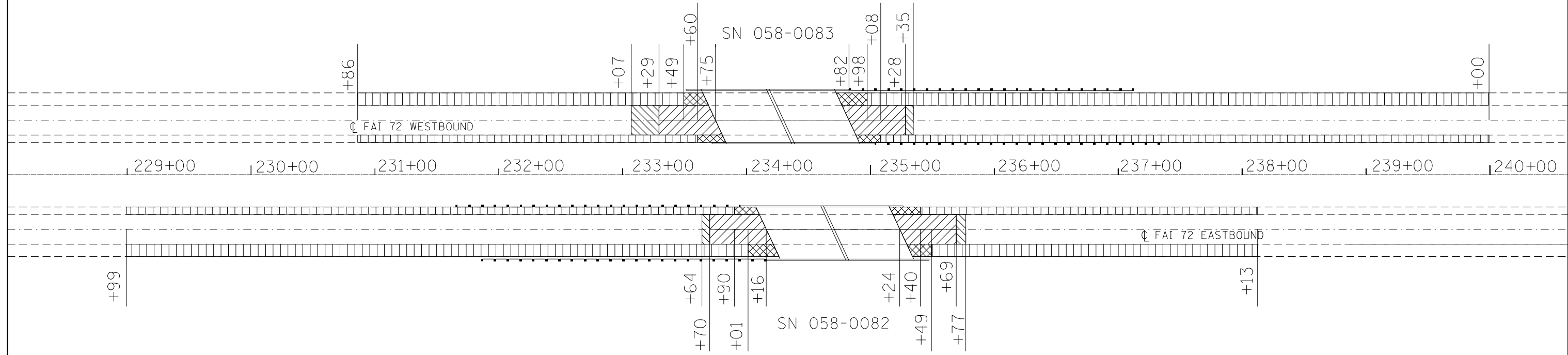
MODEL: Default
 FILE: \\blmfc-pw-bentley.com\FW\DOT\Documents\DOT Office\Dir\dir_7\Project\74B30\CAD\DATA\CAD\Sheet\074B30-PS-Schedule.cgn

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE:	SHEET	OF	SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	6
CONTRACT NO. 74B30			ILLINOIS FED. AID PROJECT	



	APPROACH SLAB REMOVAL
	BRIDGE APPROACH SHOULDER REMOVAL
	PAVEMENT REMOVAL
	PAVED SHOULDER REMOVAL

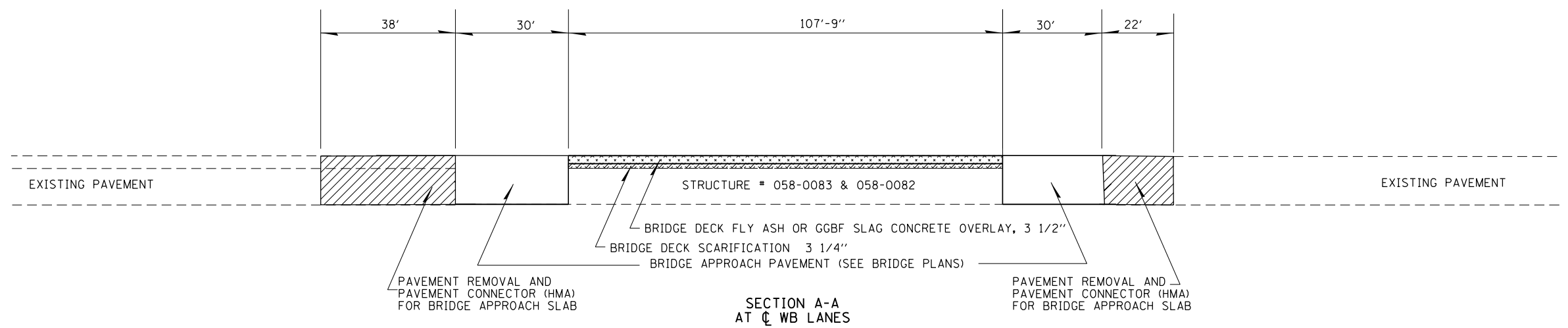
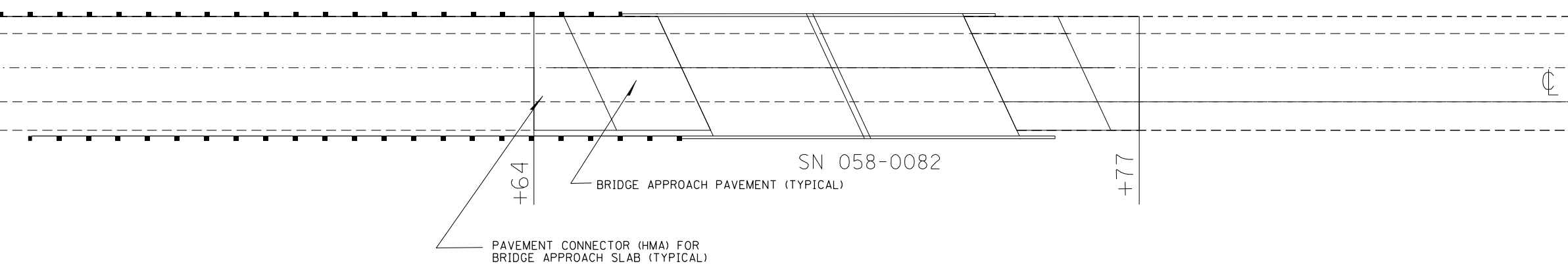
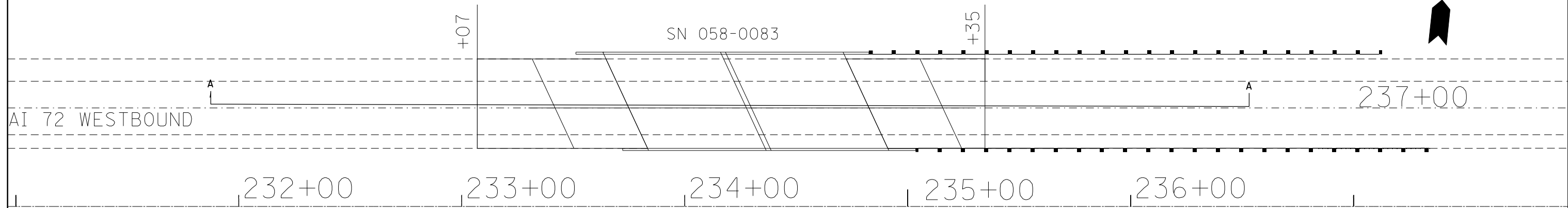
MODEL: Default
 FILE: \\mafc-pw-bentley.com\P\DOT\Documents\DOT Office\Director_7\Projects\74B30\CADD\DATA\CAD\Sheets\74B30-4-17-23-1.dwg

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVAL ITEMS	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	7
CONTRACT NO. 74B30				
ILLINOIS FED. AID PROJECT				



SECTION A-A
AT CL WB LANES

MODEL: Default
 FILE: \\mailepaw.bentley.com\P\I\DOT\Documents\DOT Office\Director_7\Projects\74B30\CADD\DATA\CAD\Sheets\74B30\Sheet\74B30-8.dgn

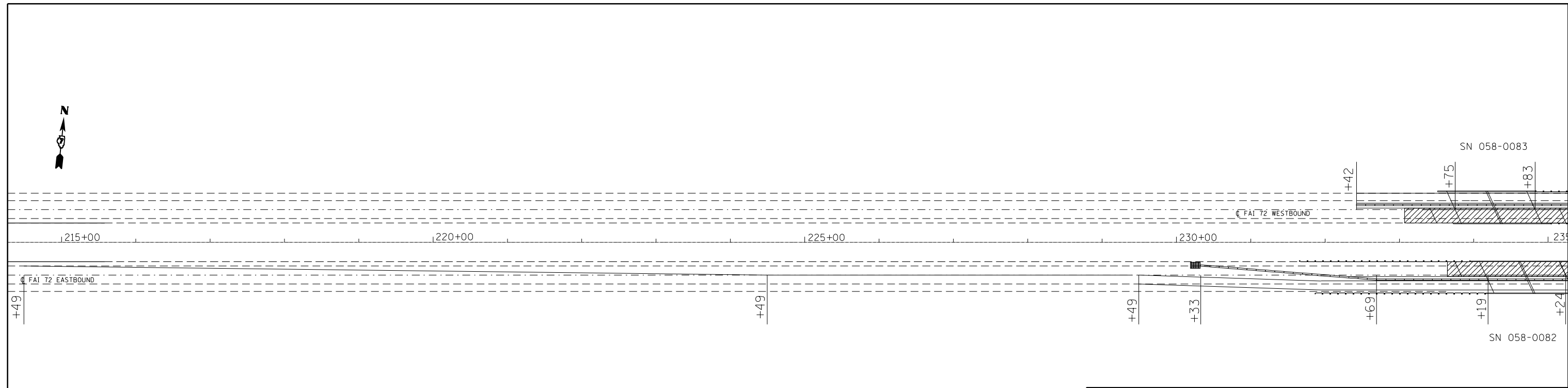
USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE PROFILE TRANSITION DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	



PRE-STAGE 1 SEQUENCE OF OPERATIONS

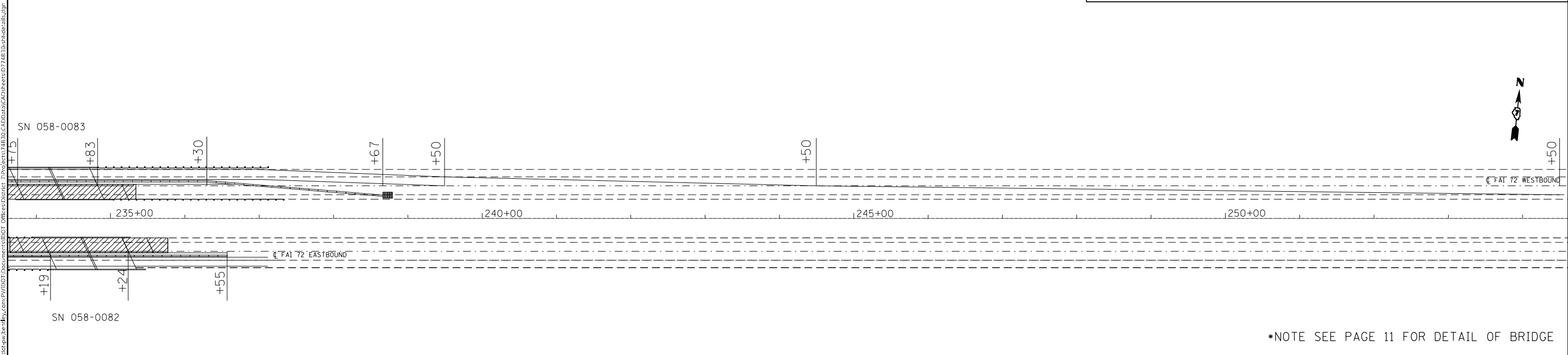
1. ERECT TRAFFIC CONTROL STANDARD 701400 & AND 701401
2. REMOVE THE STAGE 1 PORTION OF THE EXISTING SHOULDERS AND CONSTRUCT THE PROPOSED STAGE 1 PORTION OF THE PROPOSED PCC SHOULDERS.

STAGE 1 SEQUENCE OF OPERATIONS

1. ERECT SIGNS, TEMPORARY CONCRETE BARRIERS, ETC. ACCORDING TO TRAFFIC CONTROL STANDARDS 701400, AND 701402 AS WELL AS THE DETAILS IN THE PLANS
2. CONSTRUCT THE STAGE 1 BRIDGE ITEMS IN THE PLANS, BRIDGE APPROACH PAVEMENT AND HMA CONNECTOR.
3. CONSTRUCT THE PROPOSED PCC SHOULDERS FOR STAGE 2 TRAFFIC

TEMPORARY CONCRETE BARRIER
 IMPACT ATTENUATOR
 LIMITS OF CONSTRUCTION

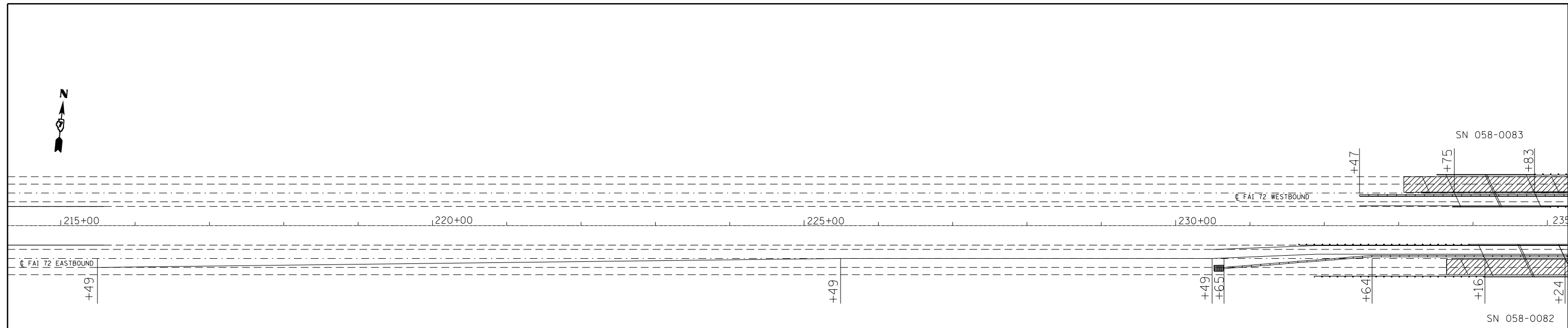
NOTE: FOR REMOVAL ITEMS SEE PAGE 7



*NOTE SEE PAGE 11 FOR DETAIL OF BRIDGE

MODEL: Default
 FILE NAME: p:\projects\74B30\CADD\Drawings\DOT\Office\Drawings\Project\Drawings\74B30\Sheet\74B30-11-1.dwg

	USER NAME = jessica.hille	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRE-STAGE CONSTRUCTION STAGE 1 CONSTRUCTION				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -		72	D7 BRIDGE REPAIRS 2024-4	MACON	30	9				
	PLOT DATE = 8/22/2023	CHECKED -	REVISED -		CONTRACT NO. 74B30				ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		



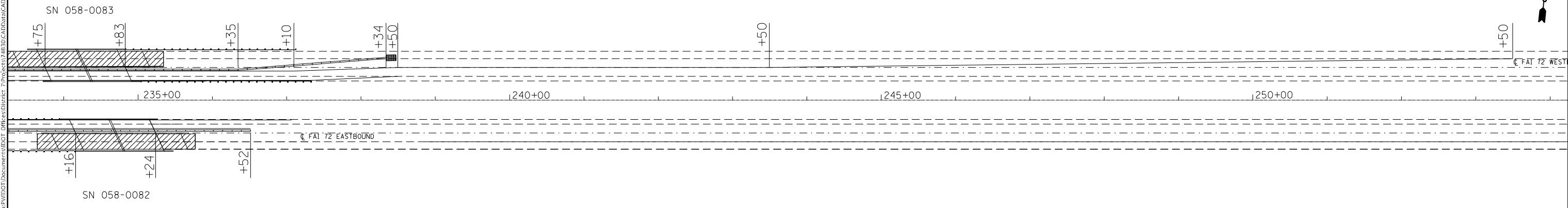
STAGE 2 SEQUENCE OF OPERATIONS

1. RELOCATE TEMPORARY CONCRETE BARRIERS, ACCORDING TO TRAFFIC CONTROL STANDARDS 701400, 701401 AND 701402 AS WELL AS THE DETAILS IN THE PLANS
2. CONSTRUCT THE BRIDGE ITEMS IN THE PLANS, BRIDGE APPROACH PAVEMENT, HMA CONNECTOR AND PAVED SHOULDERS.

TEMPORARY CONCRETE BARRIER
 IMPACT ATTENUATOR
 LIMITS OF CONSTRUCTION

NOTE: FOR REMOVAL ITEMS SEE PAGE 7

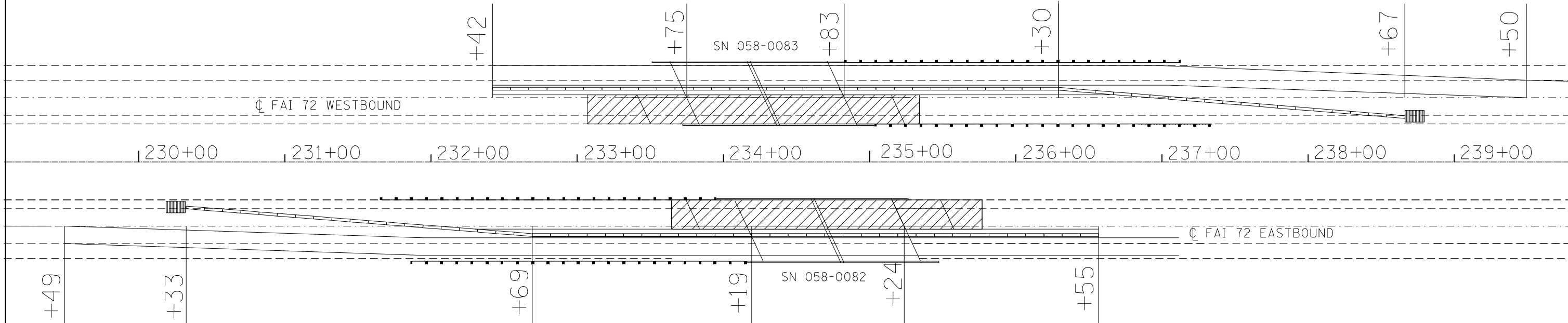
MODEL: Default
 FILE: 74430.ctb
 PROJECT: 74430.ctb
 USER: jessica.wille
 PLOT DATE: 8/22/2023



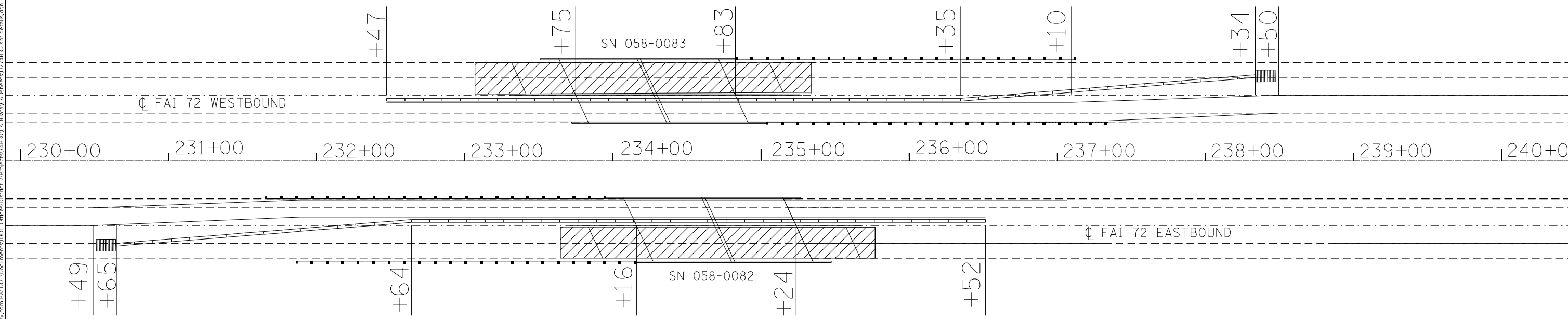
*NOTE SEE PAGE 11 FOR DETAIL OF BRIDGE




	USER NAME = jessica.wille PLOT SCALE = 100,0000' / in. PLOT DATE = 8/22/2023	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE 2 CONSTRUCTION POST-STAGE CONSTRUCTION	SCALE:	SHEET OF SHEETS STA. TO STA.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>F.A.I. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>72</td> <td>D7 BRIDGE REPAIRS 2024-4</td> <td>MACON</td> <td>30</td> <td>10</td> </tr> <tr> <td colspan="5" style="text-align: center;">CONTRACT NO. 74B30</td> </tr> </table>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	72	D7 BRIDGE REPAIRS 2024-4	MACON	30	10	CONTRACT NO. 74B30				
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																			
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	10																			
CONTRACT NO. 74B30																							
								ILLINOIS FED. AID PROJECT															

STAGE 1



STAGE 2



 TEMPORARY CONCRETE BARRIER
 IMPACT ATTENUATOR
 LIMITS OF CONSTRUCTION

NOTE: FOR REMOVAL ITEMS SEE PAGE 7

MODEL: Default
 FILE: \\na11c-pw-beadley.com\P\DOT\Documents\DOT_Offices\Director_T\Projects\74B30\CADD\Drawings\CD\Sheet\74B30-D7-Details.dwg

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

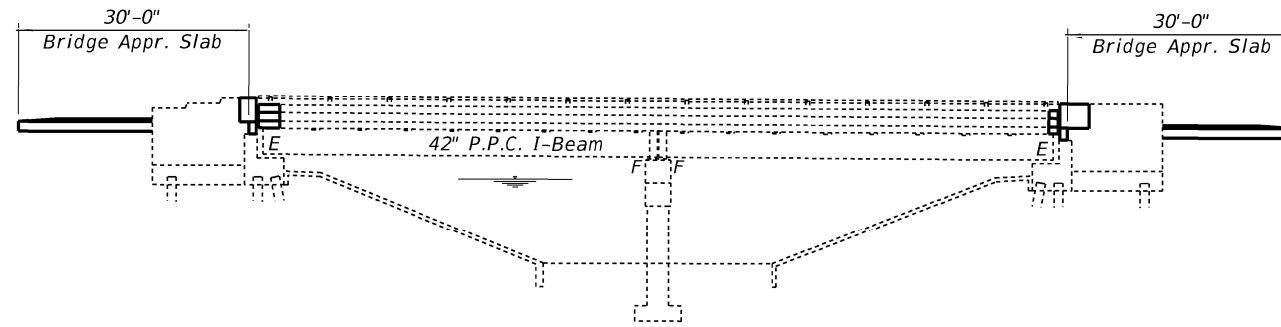
**DETAILS OF BRIDGE
TRAFFIC CONTROL**

SCALE: SHEET OF SHEETS STA. TO STA.

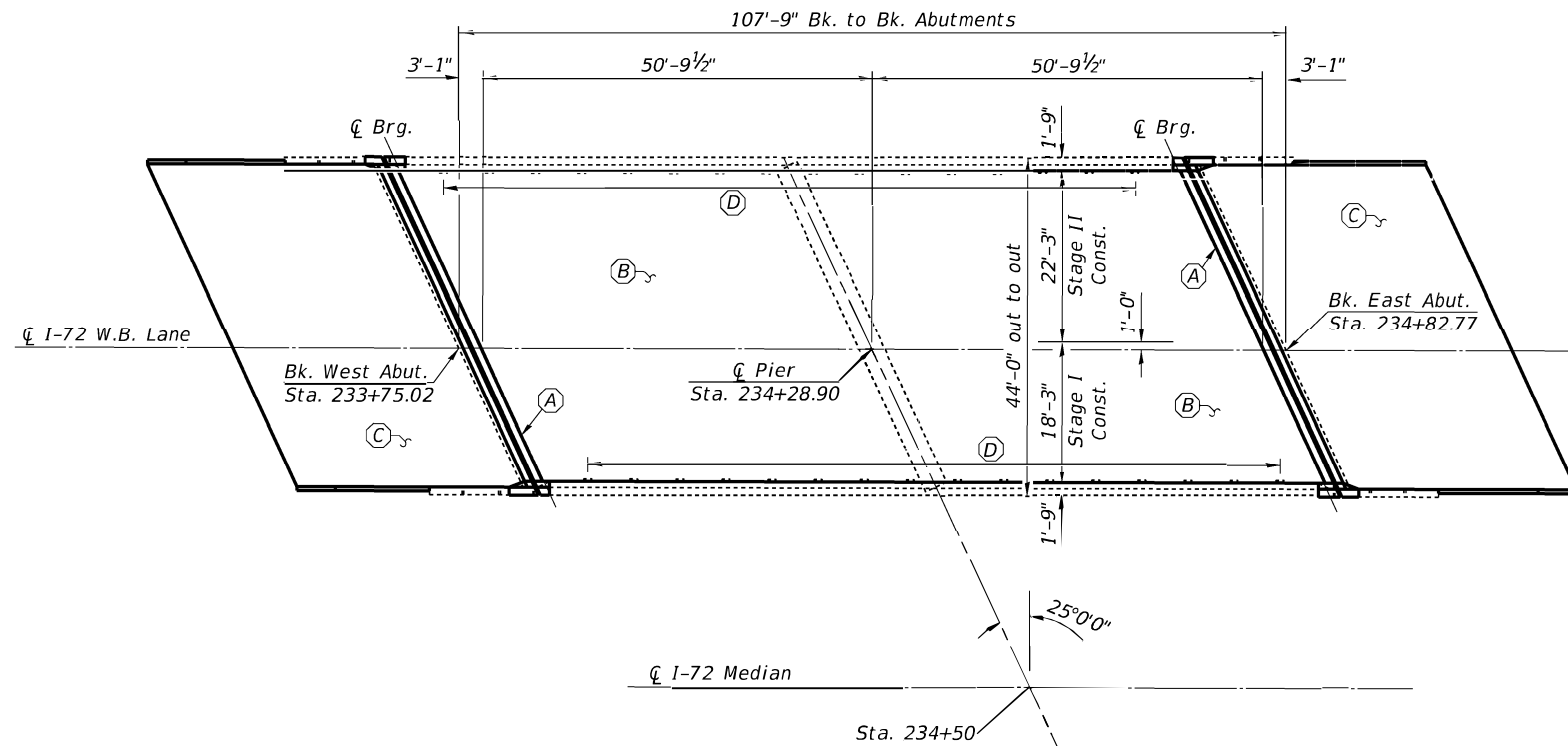
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	11
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	

Existing Structures: SN. 058-0082 (EBL) & 058-0083 (WBL) carry I-72 over Spring Creek. The existing two span, P.P.C I-beam structures were constructed in 1975.

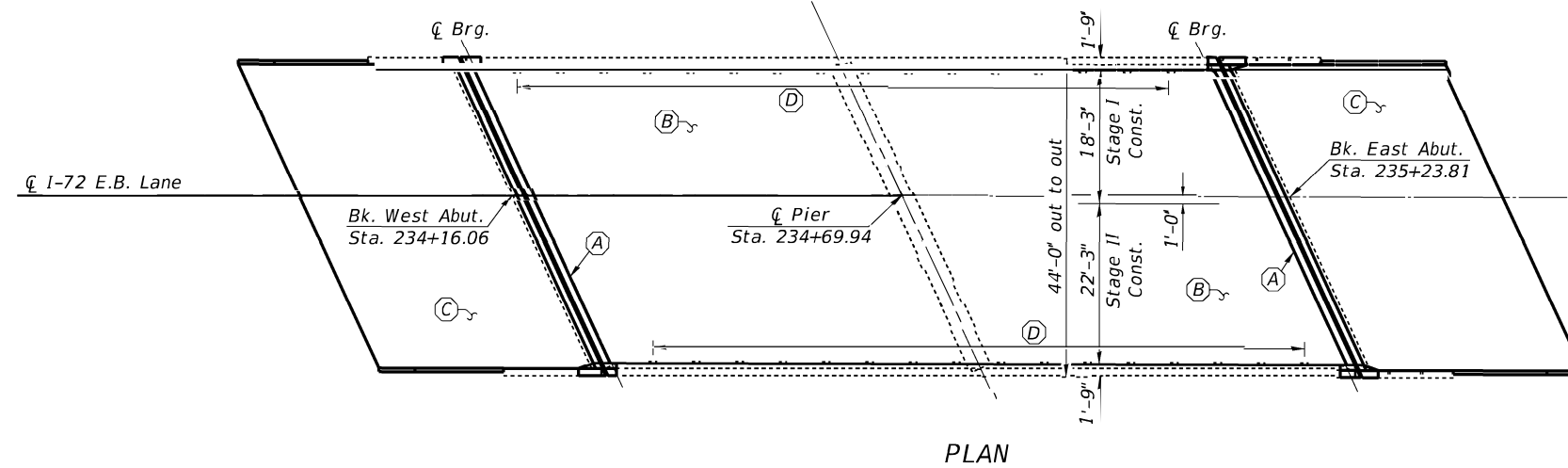
The proposed project consists of replacement of the expansion joints with new strip seals, bridge deck scarification, full depth deck patching, bridge deck overlay, diamond grinding, deck drain replacement, new approaches, and structural concrete repair.



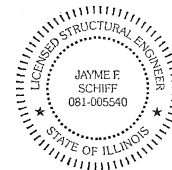
ELEVATION



- (A) - Remove Existing Expansion Joints and Replace with Strip Seal Expansion Joint
- (B) - Bridge Deck Scarification 3/4", Deck Patching, Bridge Deck Fly Ash or GGBF Slag Concrete Overlay 3 1/2", Diamond Grinding (Bridge Section), & Bridge Deck Grooving (Longitudinal)
- (C) - Remove Existing Approaches & Construct New Bridge Approach Slabs, Diamond Grinding (Bridge Section), & Bridge Deck Grooving (Longitudinal)
- (D) - Remove and Replace Existing Floor Drains



PLAN



Expires 11-30-2024

Jayme F. Schiff

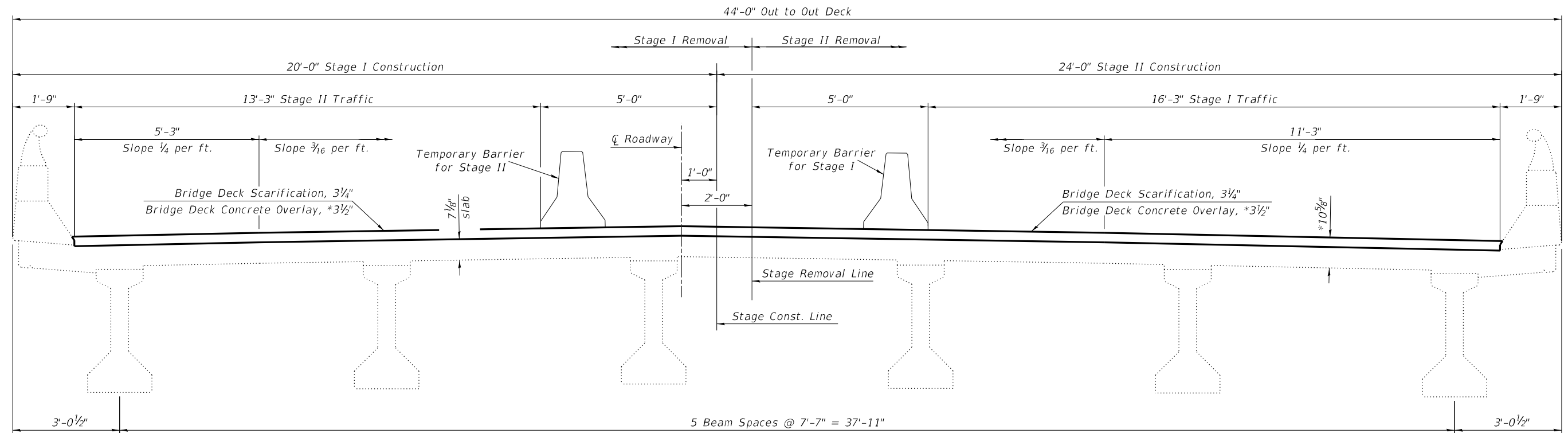
USER NAME = jessica.hille	DESIGNED - T. Walk	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - T. Walk	REVISED -
PLOT DATE = 8/22/2023	CHECKED - D. MacKlin	REVISED -
	DATE - March 2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
S.N. 058-0082 EBL & 058-0083 WBL

SCALE: SHEET 1 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	12
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	



* Overlay thickness prior to grinding

STAGE CONSTRUCTION DETAIL
EBL Looking East & WBL Looking West

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.

Protective Coat to be applied to areas of new concrete only, including bridge deck concrete overlay, approach slabs, and 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.

It is anticipated that a full depth deck slab repair will be necessary at each existing floor drains location. Removal and disposal of the existing floor drains shall be included in the contract unit price for Deck Slab Repair (Full Depth, Type I).

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Superstructure (Approach Slab)	Cu. Yd.	245
Concrete Structures	Cu. Yd.	62
Concrete Removal	Cu. Yd.	23.7
Concrete Superstructure	Cu. Yd.	23.6
Reinforcement Bars, Epoxy Coated	Pound	102,120
Bar Splicers	Each	612
Preformed Joint Strip Seal	Foot	190
Bridge Deck Scarification, 3/4"	Sq. Yd.	918
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 3 1/2"	Sq. Yd.	918
Diamond Grinding (Bridge Section)	Sq. Yd.	1,373
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	890
Protective Coat	Sq. Yd.	1,585
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	26
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	35
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	192
Structural Repair of Concrete (Depth > 5")	Sq. Ft.	106
Floor Drains	Each	24

MODEL: 3400E/BLN/MTS
FILE NAME: STBL03

USER NAME = \$USERS	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - D. Macklin	REVISED -
PLOT DATE = \$DATE\$	DATE - March 2022	REVISED -

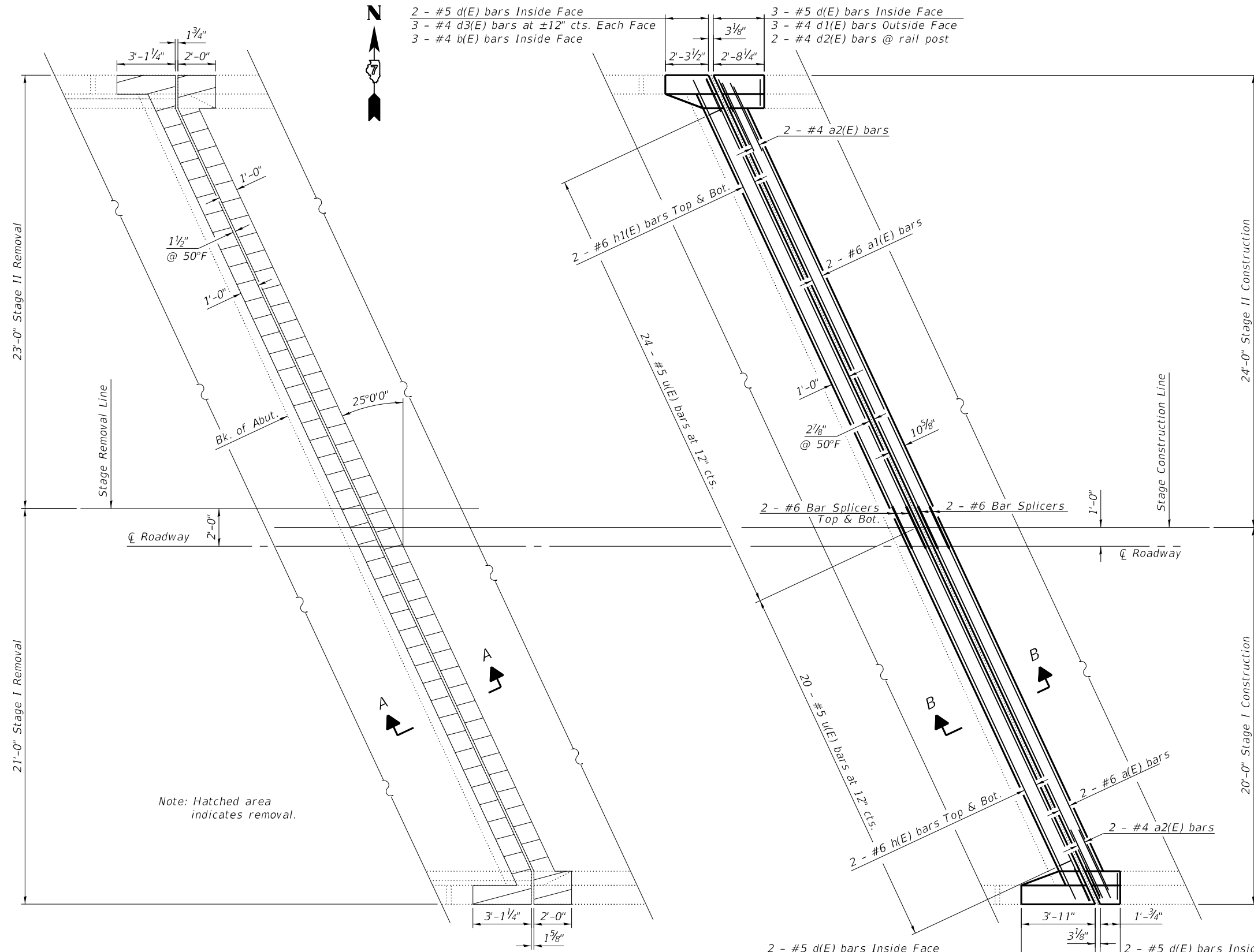
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION, GENERAL NOTES, &
BILL OF MATERIALS S.N. 058-0082 EBL & 058-0083 WBL

SCALE: SHEET 2 OF 17 SHEETS STA. TO STA.

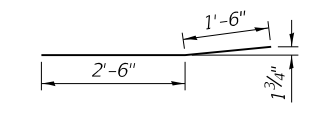
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	13
CONTRACT NO. 74B30			ILLINOIS FED. AID PROJECT	

For Sections A-A & B-B See Sheet 4 of 17

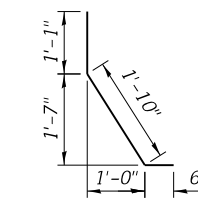


2 - #5 d(E) bars Inside Face
 3 - #4 d3(E) bars at ±12" cts. Each Face
 3 - #4 b(E) bars Inside Face

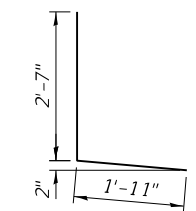
3 - #5 d(E) bars Inside Face
 3 - #4 d1(E) bars Outside Face
 2 - #4 d2(E) bars @ rail post



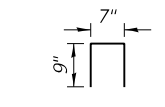
BAR a2(E)



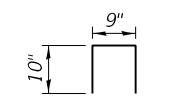
BAR d(E)



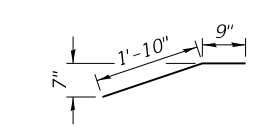
BAR d1(E)



BAR d2(E)



BAR u(E)



BAR b(E)

Note: Hatched area indicates removal.

REMOVAL PLAN

058-0083 West Abutment Shown
 058-0083 East Abutment Similar by Rotation
 058-0082 Joints Similar

REINFORCEMENT PLAN

058-0083 West Abutment Shown
 058-0083 East Abutment Similar by Rotation
 058-0082 Joints Similar

BILL OF MATERIAL - FOUR ABUTMENTS

Bar	No.	Size	Length	Shape
a(E)	8	#6	20'-9"	—
a1(E)	8	#6	25'-3"	—
a2(E)	16	#4	4'-0"	—
h(E)	16	#6	21'-8"	—
h1(E)	16	#6	26'-0"	—
d(E)	36	#5	3'-5"	J
d1(E)	20	#4	4'-6"	J
d2(E)	16	#4	2'-1"	n
d3(E)	56	#4	4'-2"	—
b(E)	24	#4	2'-7"	—
u(E)	176	#5	2'-5"	n
ITEM		UNIT	QUANTITY	
Concrete Removal		Cu. Yd.	23.7	
Concrete Superstructure		Cu. Yd.	23.6	
Reinforcement Bars, Epoxy Coated		Pound	2,600	
Bar Splicers		Each	24	

MODEL: 3/30/2022
FILE NAME: STBL05

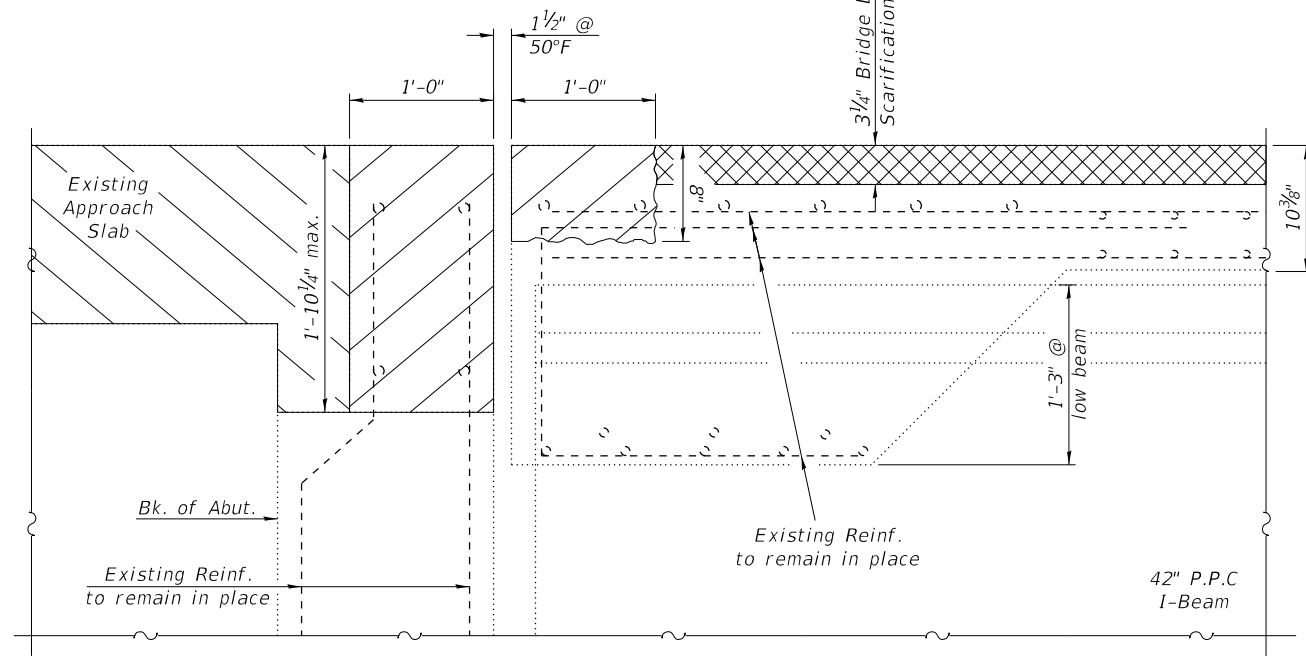
USER NAME = \$USERS	DESIGNED - T. Walk	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - T. Walk	REVISED -
PLOT DATE = \$DATE\$	CHECKED - D. Macklin	REVISED -
	DATE - March 2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

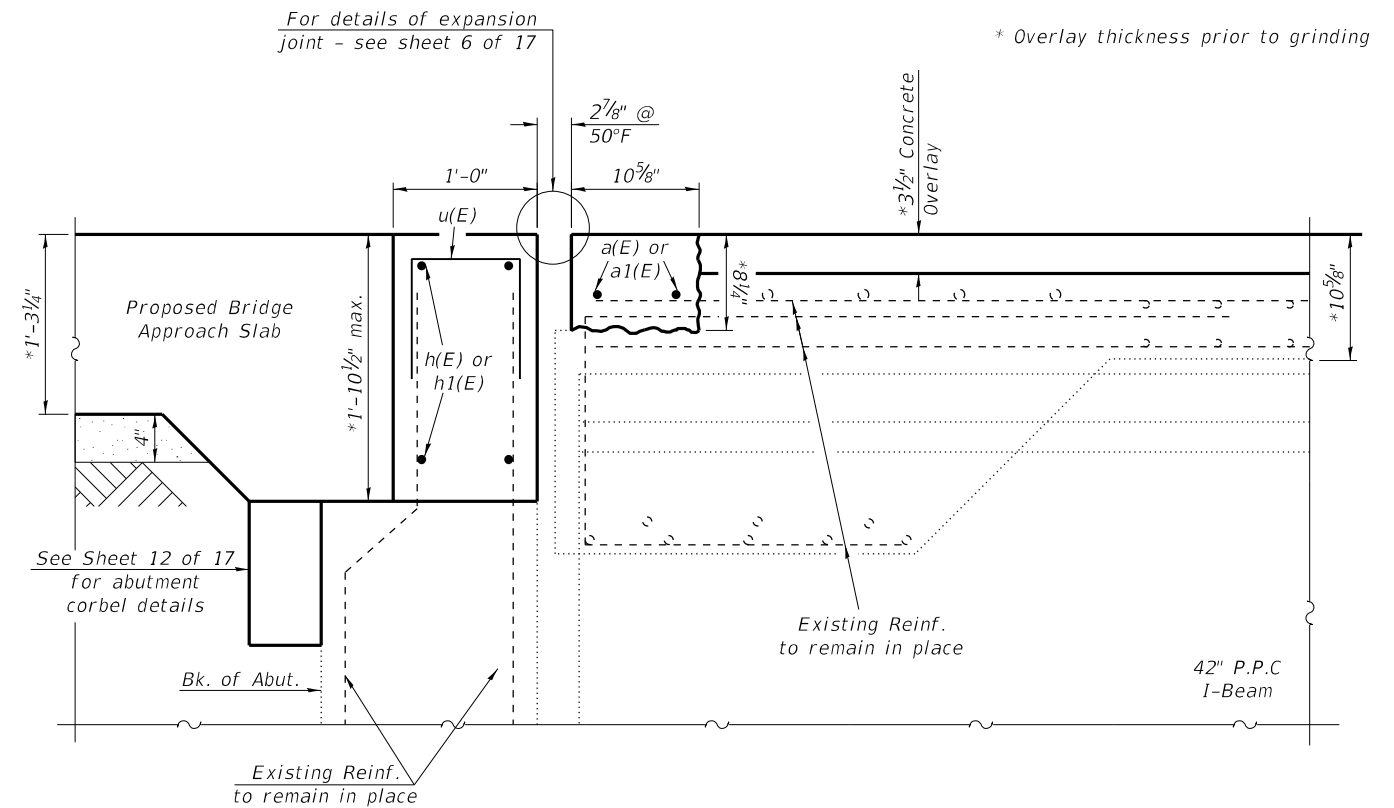
EXPANSION JOINT REPLACEMENT DETAILS
S.N. 058-0082 EBL & 058-0083 WBL
 SCALE: SHEET 3 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	14
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	

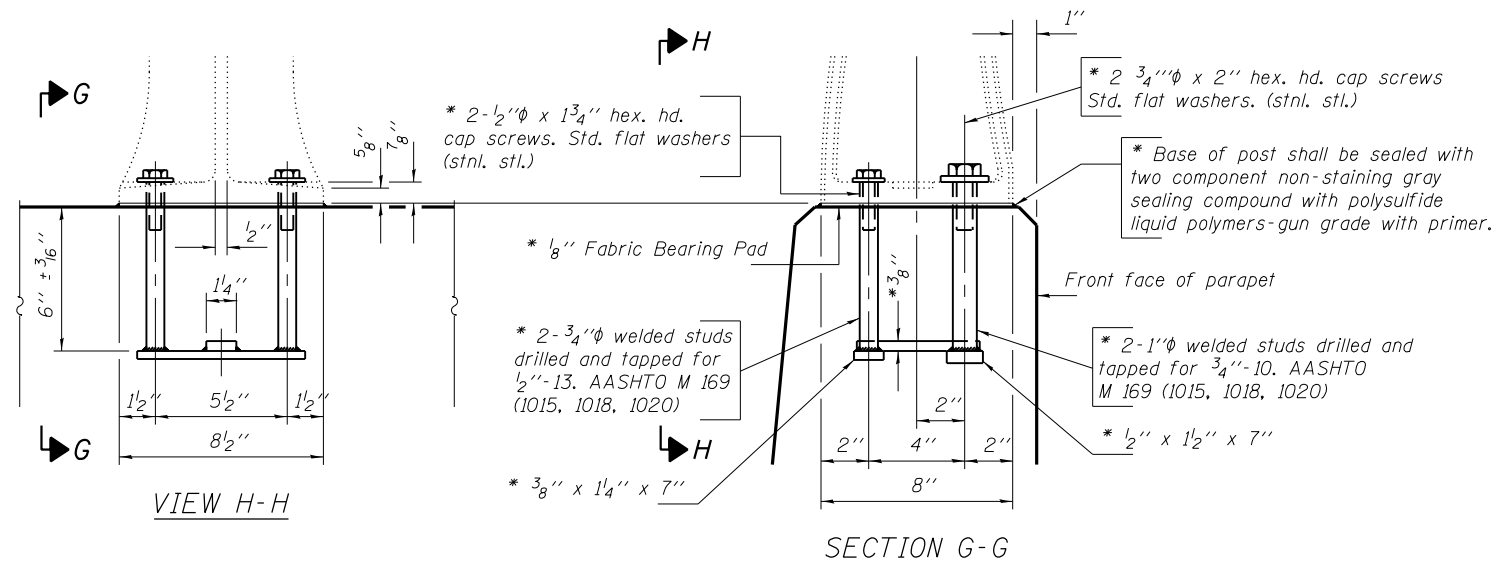
Note: Hatched areas indicates Concrete removal
Cross Hatched areas indicates Scarification



SECTION A-A

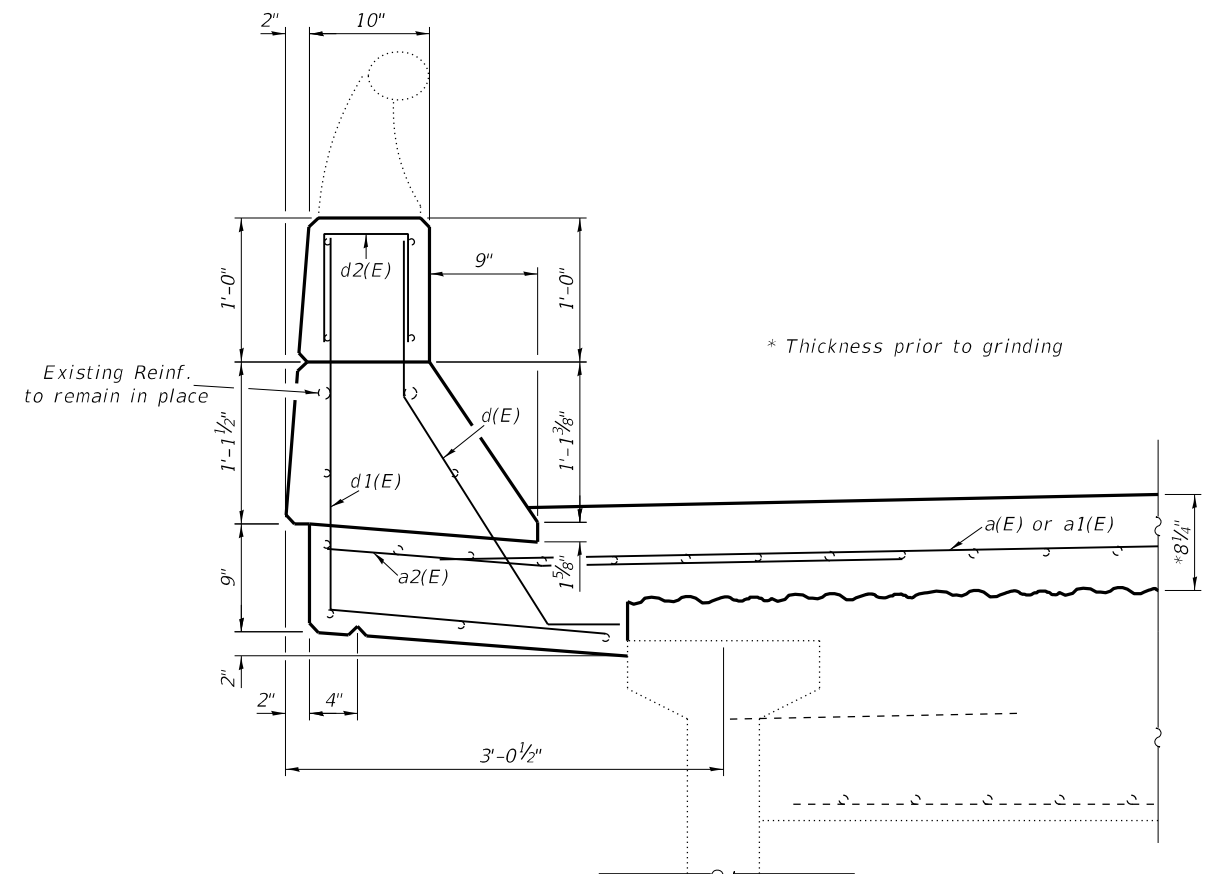


SECTION B-B



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.



SECTION THRU DECK PARAPET

MODEL: 34002ELNAMES
FILE NAME: STEEL

USER NAME = \$USERS	DESIGNED - T. Walk	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - T. Walk	REVISED -
PLOT DATE = \$DATE\$	CHECKED - D. Macklin	REVISED -
	DATE - March 2022	REVISED -

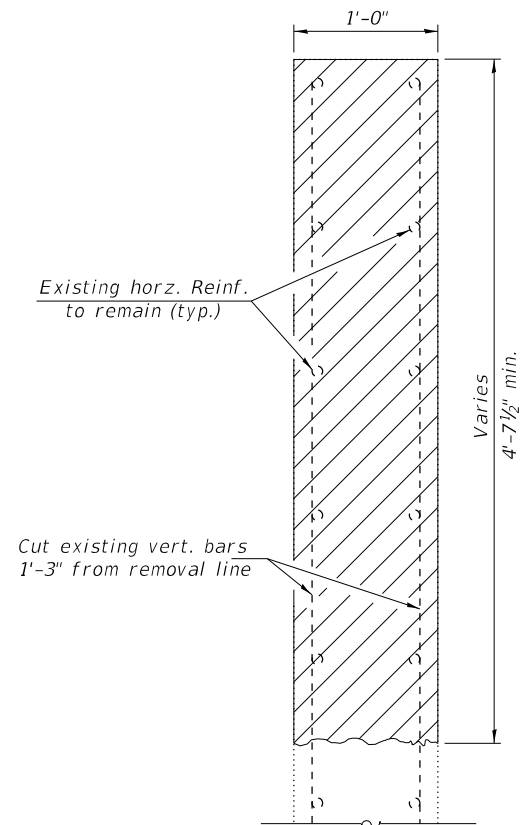
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS
S.N. 058-0082 EBL & 058-0083 WBL

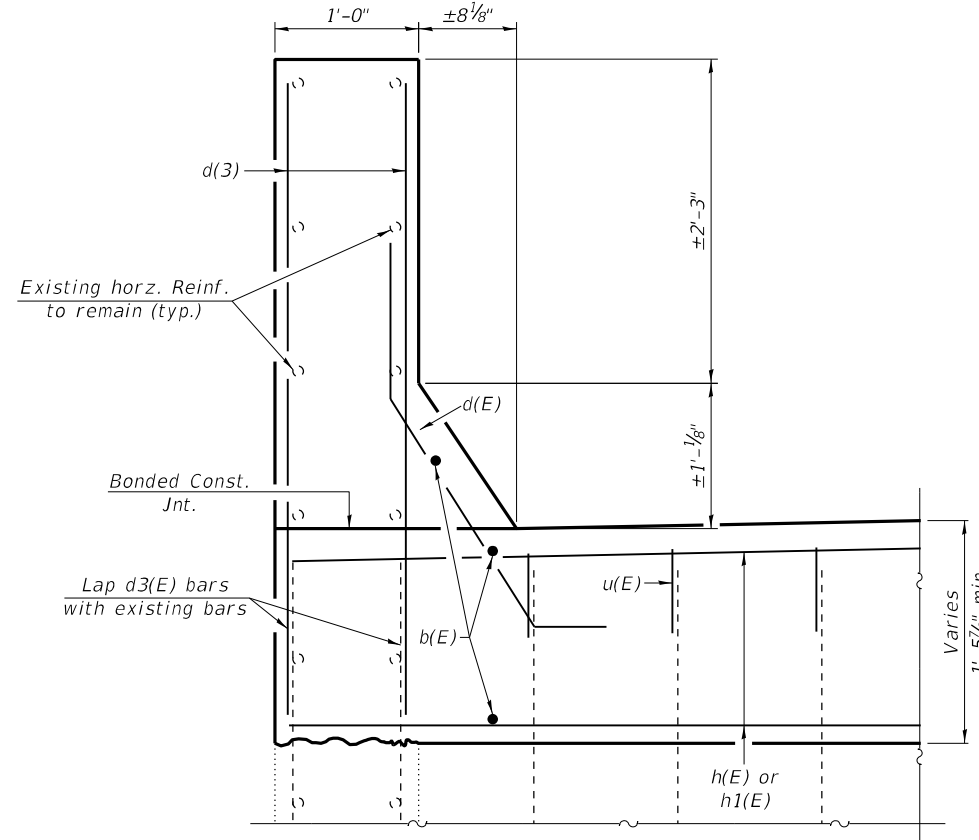
SCALE: SHEET 4 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	15
CONTRACT NO. 74B30				
ILLINOIS FED. AID PROJECT				

Note: Hatched area indicates removal.

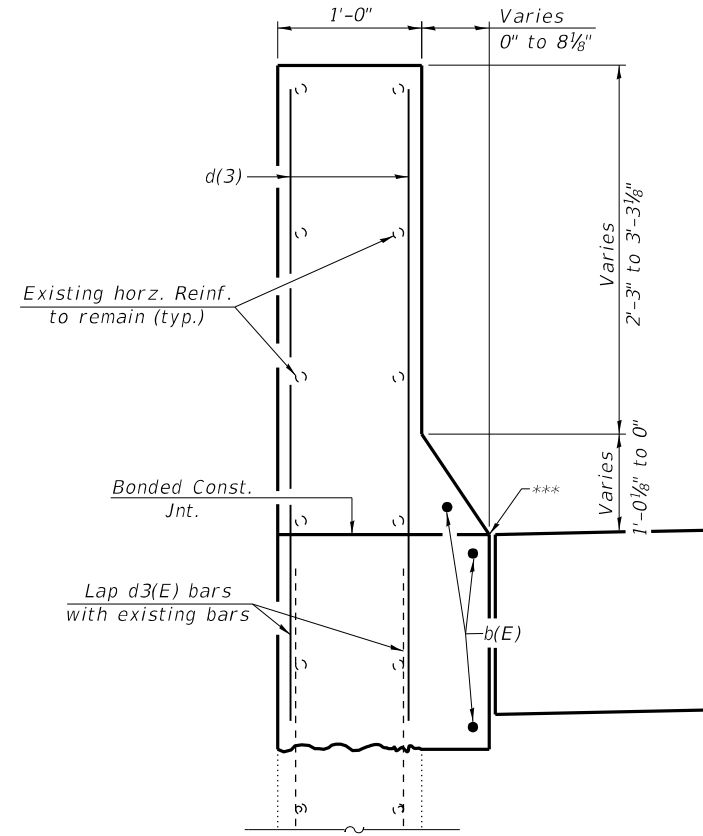


SECTION C-C
Removal section at wing wall

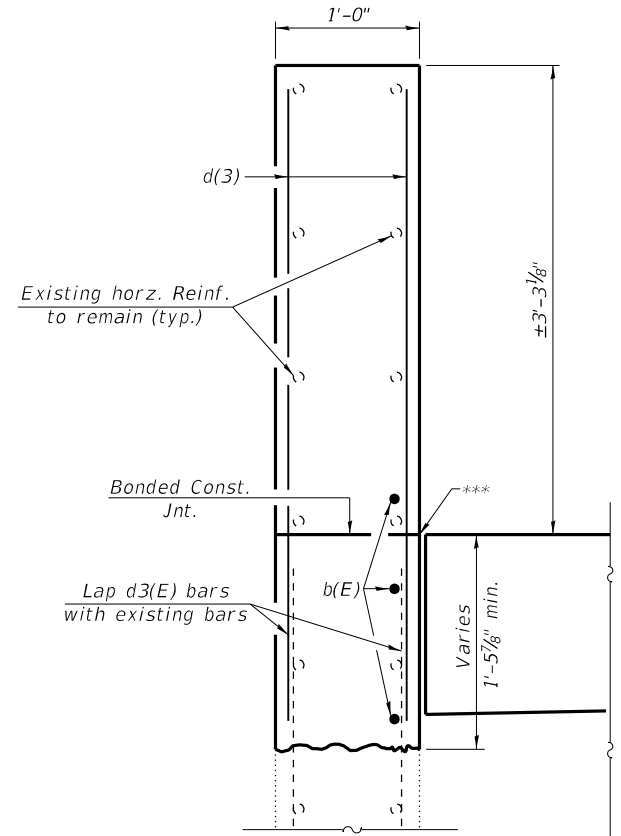


SECTION D-D
Proposed section thru wing wall at expansion joint

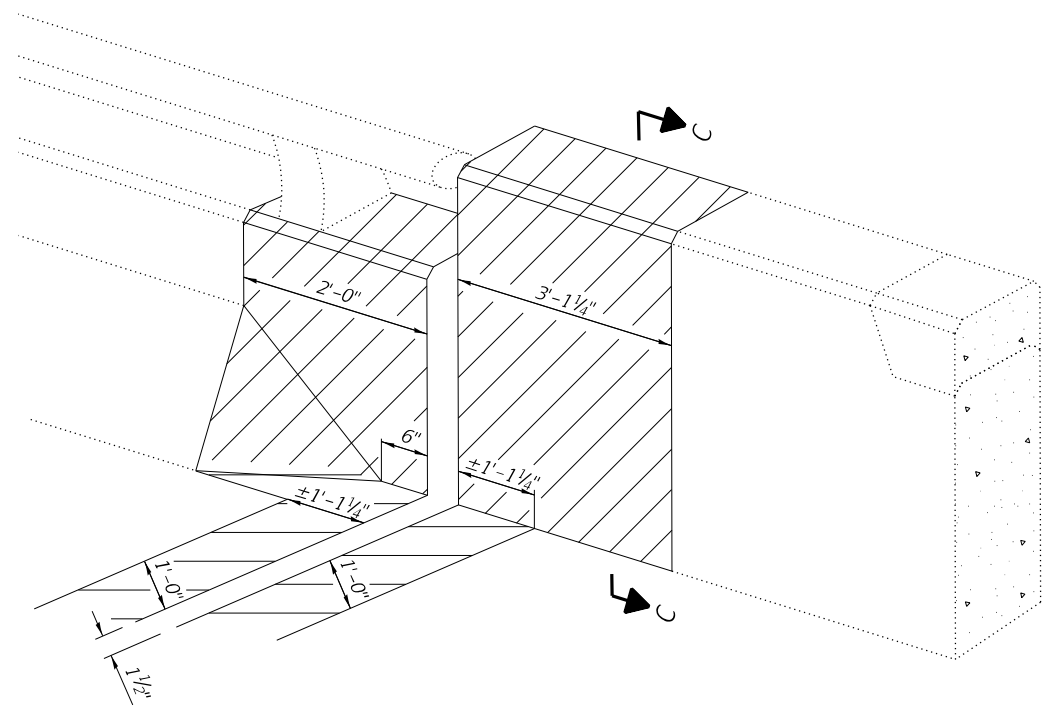
*** 1/2" Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of Wingwall.



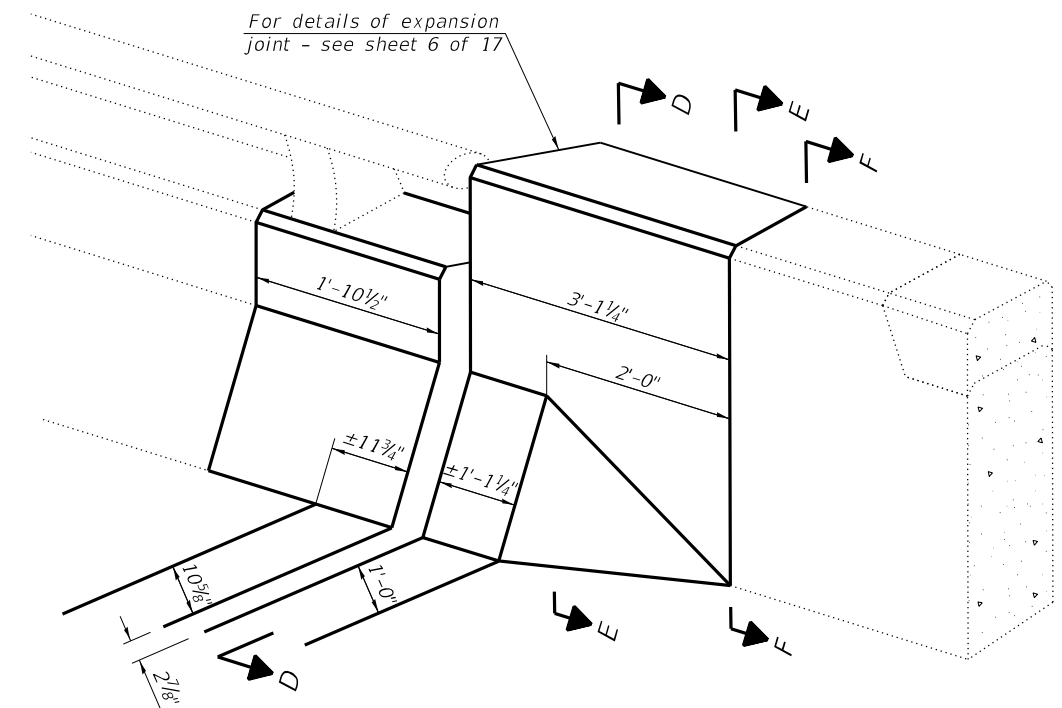
SECTION E-E
Section thru proposed wing wall transition



SECTION F-F
Section thru end of proposed wing wall



TYPICAL CONCRETE REMOVAL AT EACH ABUTMENT CORNER



TYPICAL PROPOSED WING WALL AT EACH ABUTMENT CORNER

MODEL: 3400ELNAMES
FILE NAME: STEEL5

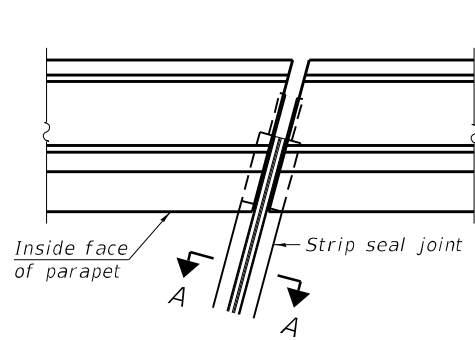
USER NAME = \$USERS	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - D. Macklin	REVISED -
PLOT DATE = \$DATE\$	DATE - March 2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS
S.N. 058-0082 EBL & 058-0083 WBL

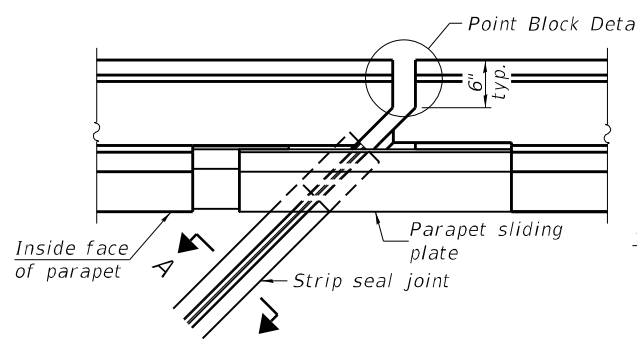
SCALE: SHEET 5 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	16
CONTRACT NO. 74B30				
ILLINOIS FED. AID PROJECT				

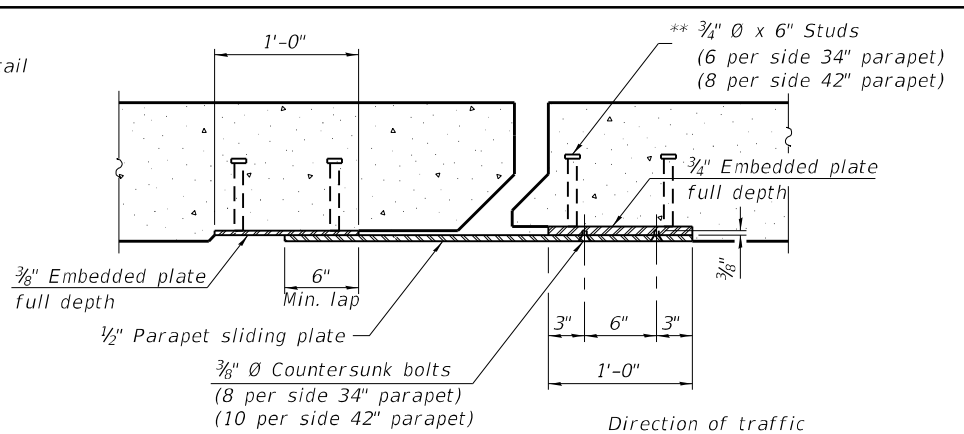


FOR SKEWS $\leq 30^\circ$

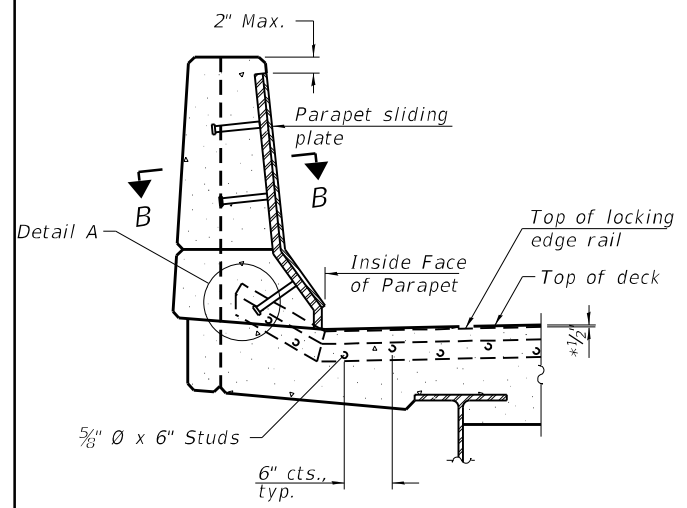
PLAN AT PARAPET



FOR SKEWS $> 30^\circ$

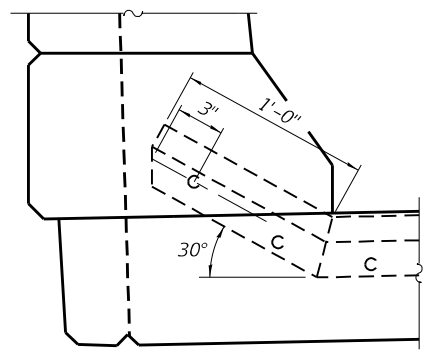


SECTION B-B

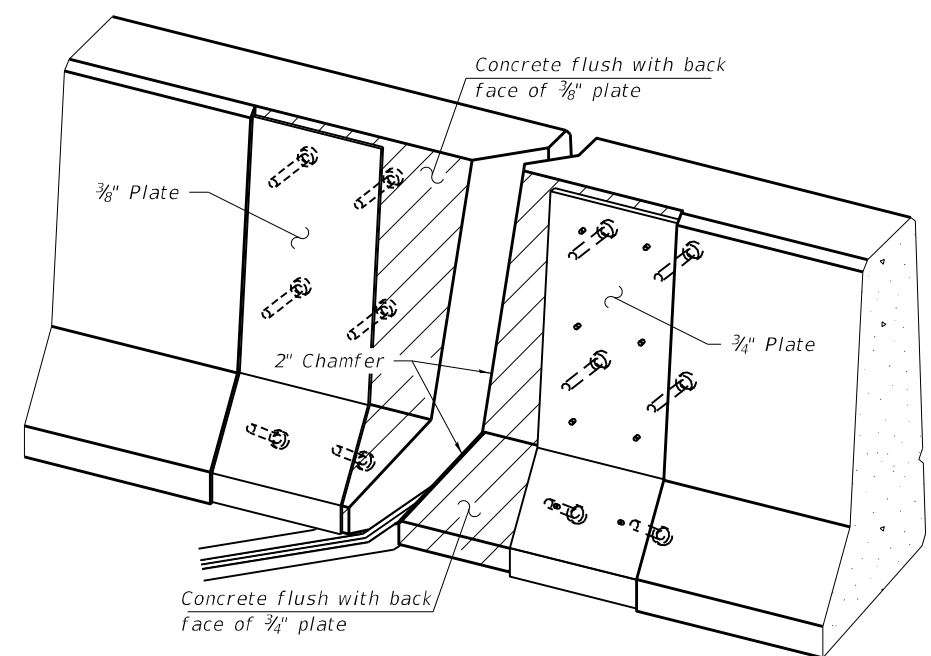


ELEVATION AT PARAPET

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

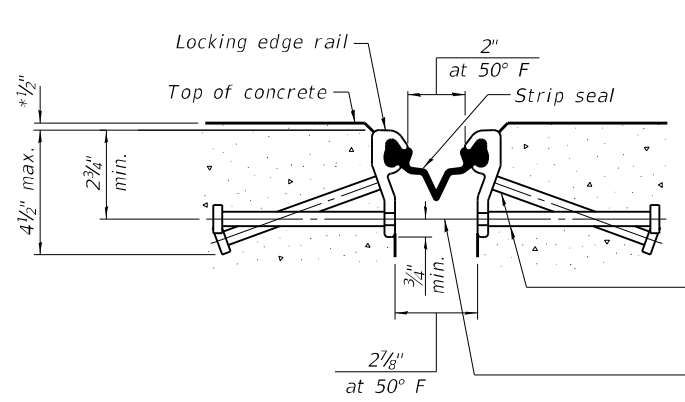


DETAIL A



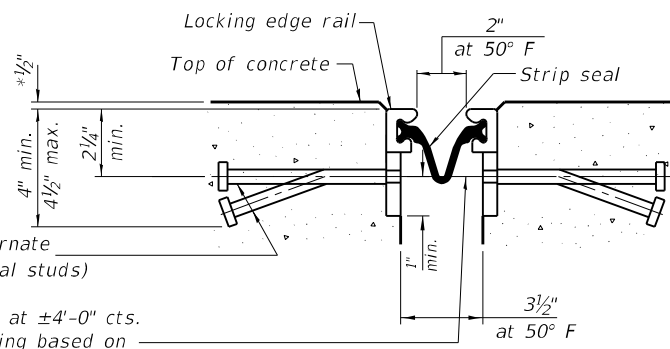
TRIMETRIC VIEW
(Showing embedded plates only)

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.



SHOWING ROLLED RAIL JOINT

* Overlay thickness prior to grinding



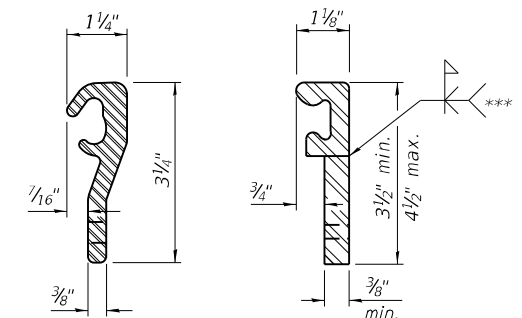
SHOWING WELDED RAIL JOINT

** 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 A-A

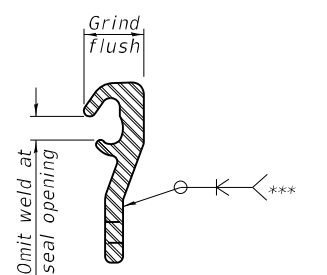
** Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED (EXTRUDED) RAIL **WELDED RAIL**

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	190

MODEL: Default; FILE: 041116; PROJECT: 74B30; CADD: DataCAD; PLOT: 05/24/2023; 5:00:33; Bridge Repair

USER NAME = jessica.hille	DESIGNED - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - T. Walk	REVISED -
PLOT DATE = 8/22/2023	CHECKED - D. Macklin	REVISED -
	DATE - March 2022	REVISED -

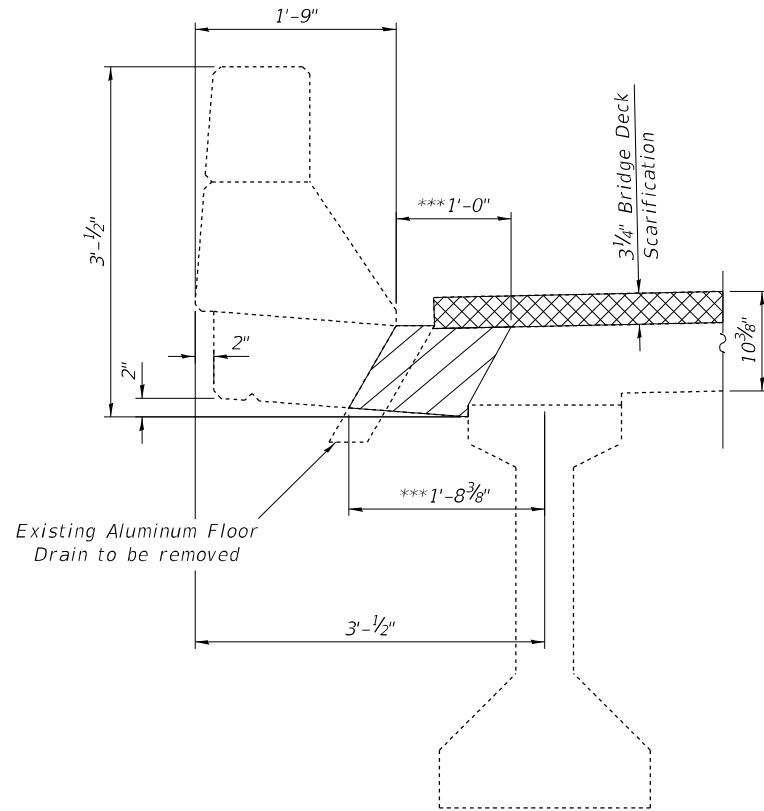
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
S.N. 058-0082 EBL & 058-0083 WBL

SCALE: SHEET 6 OF 17 SHEETS STA. TO STA.

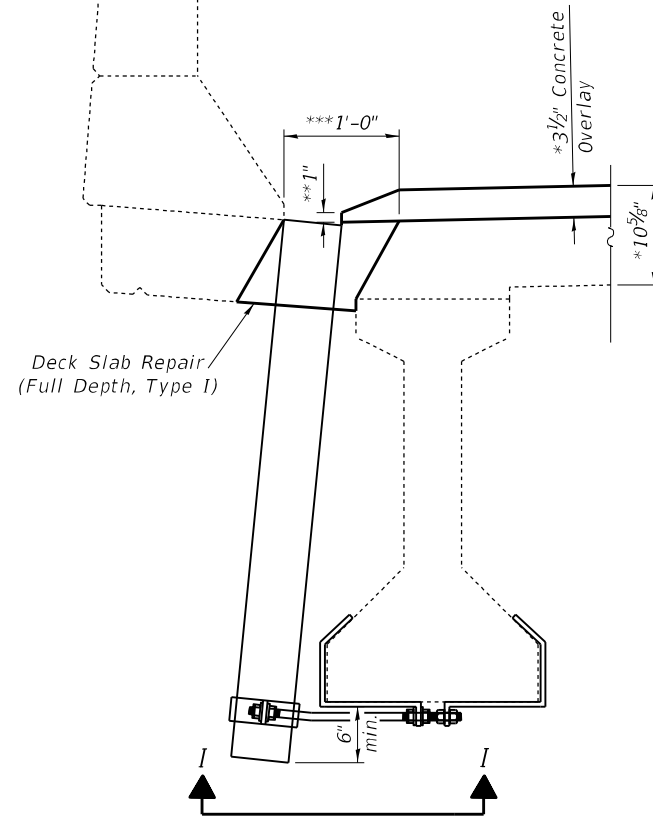
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	17
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	

Note: Hatched areas indicates Concrete removal
Cross Hatched areas indicates Scarification

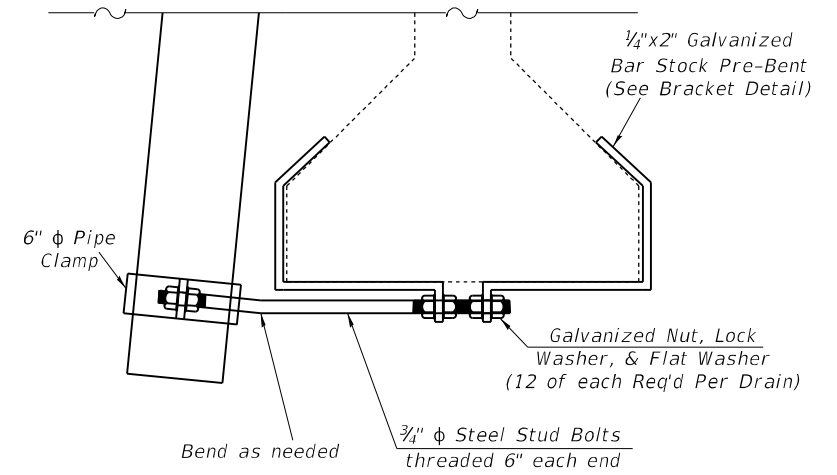


SECTION AT EXISTING FLOOR DRAIN

* Overlay thickness prior to grinding
** Minimum thickness of overlay at edge of drain = 1"
*** Actual dimensions of Deck Slab Repair shall be determined by the Engineer



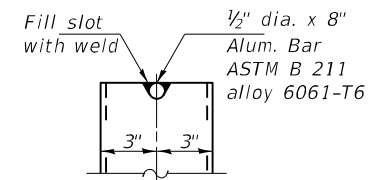
SECTION AT PROPOSED FLOOR DRAIN



SHOWING BRACKET CONFIGURATION

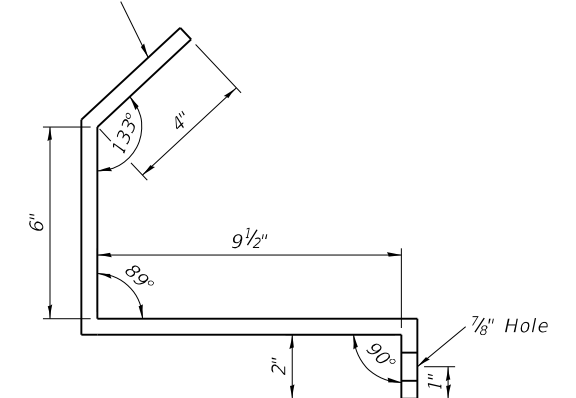
DRAIN DETAIL

(12 Required per Bridge)



ALUMINUM TUBE

1/4"x2" Bar Galvanized & Pre-Bent
(4 Each Required Per Drain)



BRACKET DETAIL

NOTES

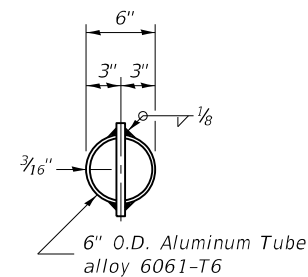
Actual dimensions of the Deck Slab Repair (Full Depth, Type 1) shall be determined by the Engineer based on the extent of deck deterioration at the drain.

Extreme care must be used when removing concrete near the top flange of the Precast Concrete I-Beams. The contractor is responsible for any damage to the beams.

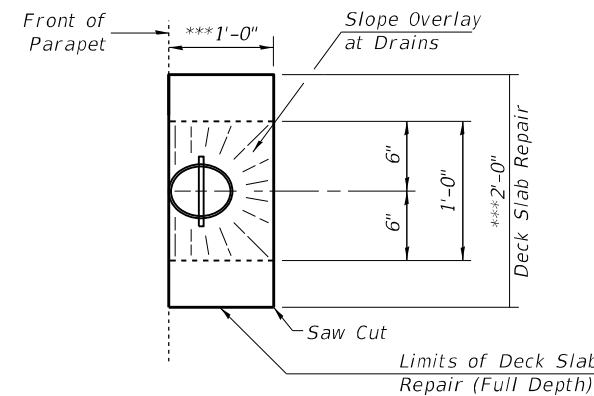
Fiberglass pipe drain option not allowed.

Galvanize clamping device, bracket and threaded rods according to AASHTO M232. Cost of clamping devices, bolts and galvanizing is included with Floor Drains.

Concrete removal and replacement quantities and locations for drains are included in Deck Slab Repair (Full Depth, Type 1) as shown on "Bridge Deck Patching" see sheets 8 & 9 of 17

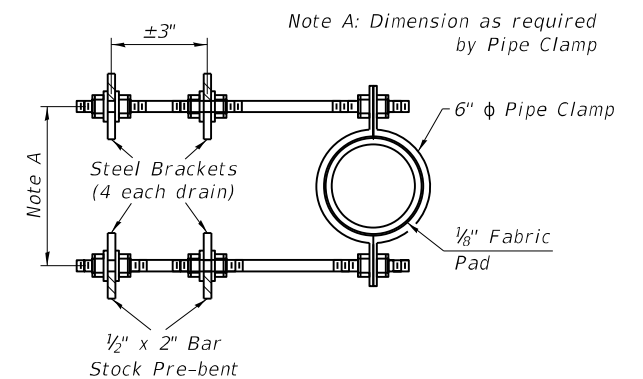


TOP PLAN



TOP PLAN DECK REPAIR AT PROPOSED DRAINS

*** Actual dimensions of Deck Slab Repair shall be determined by the Engineer



SECTION I-I

MODEL: Default
FILE: A:\MISC_Plan\Subcontract\Documents\DOT Office\Drawings\744B30\CADD\Drawings\058-0082 & 058-0083 Bridge Repair

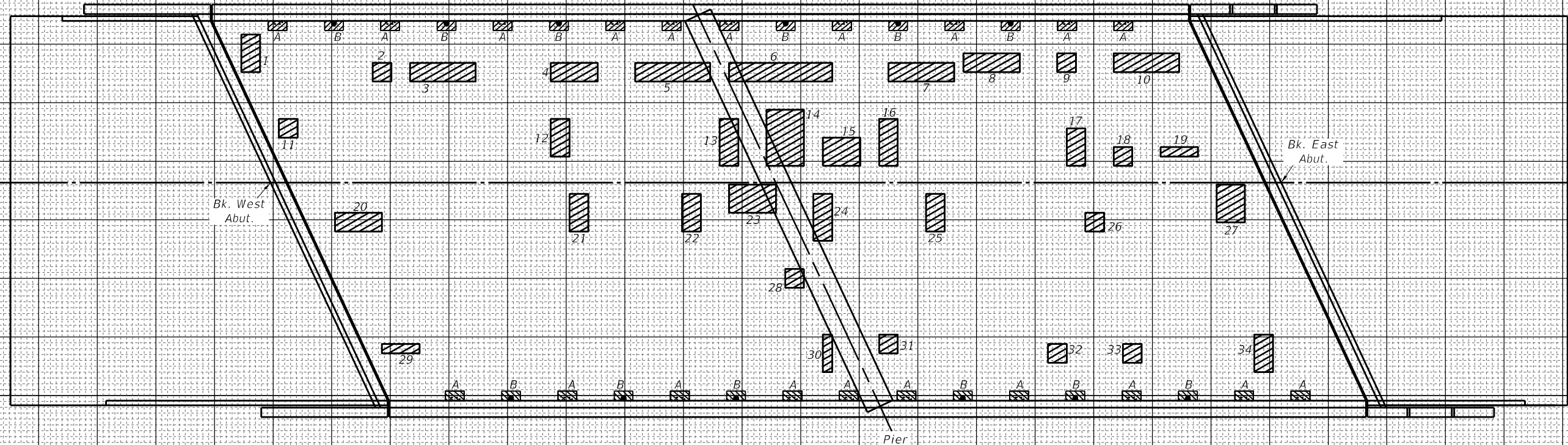
USER NAME = jessica.wille	DESIGNED - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - T. Walk	REVISED -
PLOT DATE = 8/22/2023	CHECKED - D. Macklin	REVISED -
	DATE - March 2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DECK DRAIN DETAILS			
S.N. 058-0082 EBL & 058-0083 WBL			
SCALE:	SHEET 7 OF 17 SHEETS	STA.	TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	18
CONTRACT NO. 74B30				
ILLINOIS FED. AID PROJECT				

058-0082 EBL Bridge Deck Patching



PATCH NO.	LENGTH	WIDTH	DECK SLAB REPAIR (FD TY I) SQ YD	DECK SLAB REPAIR (FD TY II) SQ YD
1	2.0	4.0		0.9
2	2.0	2.0	0.4	
3	7.0	2.0		1.6
4	5.0	2.0		1.1
5	8.0	2.0		1.8
6	11.0	2.0		2.4
7	7.0	2.0		1.6
8	6.0	2.0		1.3
9	2.0	2.0	0.4	
10	7.0	2.0		1.6
11	2.0	2.0	0.4	
12	2.0	4.0		0.9
13	2.0	5.0		1.1
14	4.0	6.0		2.7
15	4.0	3.0		1.3
16	2.0	5.0		1.1

PATCH NO.	LENGTH	WIDTH	DECK SLAB REPAIR (FD TY I) SQ YD	DECK SLAB REPAIR (FD TY II) SQ YD
17	2.0	4.0		0.9
18	2.0	2.0	0.4	
19	4.0	1.0	0.4	
20	5.0	2.0		1.1
21	2.0	4.0		0.9
22	2.0	4.0		0.9
23	5.0	3.0		1.7
24	2.0	5.0		1.1
25	2.0	4.0		0.9
26	2.0	2.0	0.4	
27	3.0	4.0		1.3
28	2.0	2.0	0.4	
29	4.0	1.0	0.4	
30	1.0	4.0	0.4	
31	2.0	2.0	0.4	
32	2.0	2.0	0.4	

PATCH NO.	LENGTH	WIDTH	DECK SLAB REPAIR (FD TY I) SQ YD	DECK SLAB REPAIR (FD TY II) SQ YD
33	2.0	2.0	0.4	
34	2.0	4.0		0.9
A - Remove Drain, 20 ea			4.4	
B - Replace Drain, 12 ea			2.7	
TOTAL ROUNDS TO:			13.0	29.0

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



DATE OF SURVEY: 3-2-2022
 SURVEY BY: DPM & TMW
 METHOD OF SURVEY: VISUAL

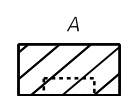
ESTIMATED PAY QUANTITIES:

DECK SLAB REPAIR (FULL DEPTH TYPE I)
 13.0 SQ YD

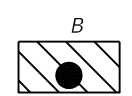
DECK SLAB REPAIR (FULL DEPTH TYPE II)
 29.0 SQ YD

DECK DRAINS
 12 EACH

A & B = Deck Slab Repair (Full Depth, Type I)
 2ft² = .22yd² Each



REMOVE DECK DRAIN



REMOVE & REPLACE DECK DRAIN

MODEL: Default
 FILE NAME: p:\w\p\w\benley.com\FV\DOT\Documents\DOT - Offices\District 7\Projects\74830\CAD\Drawings\DOT-058-0082 & 0083 Bridge Repair

USER NAME = jessica.hille	DESIGNED - T. Walk	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - T. Walk	REVISED -
PLOT DATE = 8/22/2023	CHECKED - D. Macklin	REVISED -
	DATE - March 2022	REVISED -

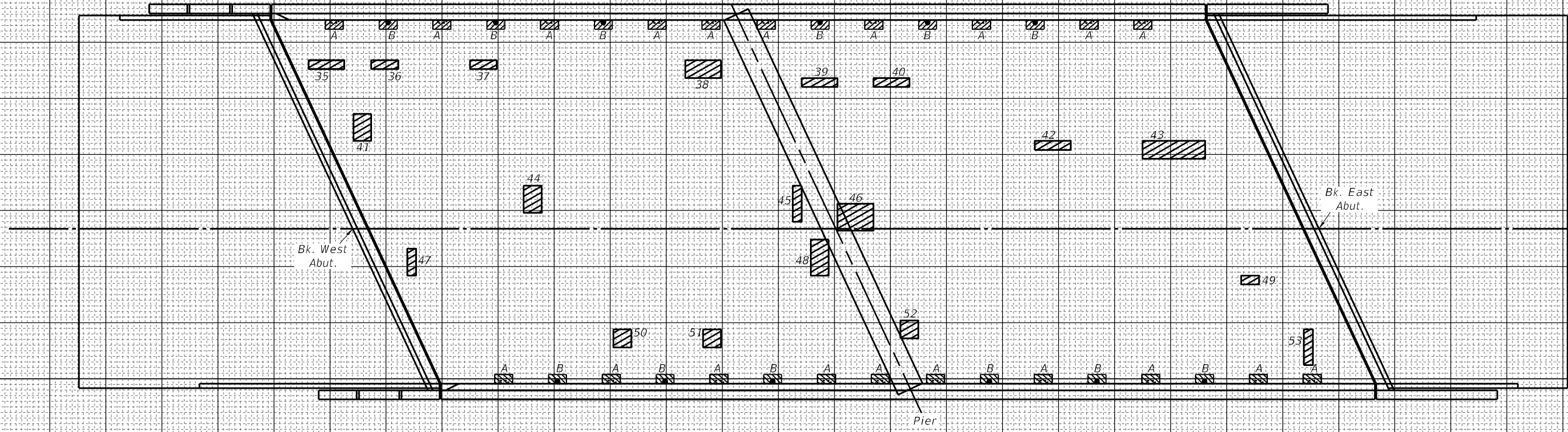
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BRIDGE DECK PATCHING
 SN. 058-0082 EBL

SCALE: SHEET 8 OF 17 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	19
CONTRACT NO. 74B30				
ILLINOIS FED. AID PROJECT				

058-0083 WBL Bridge Deck Patching



PATCH NO.	SIZE		DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
	LENGTH	WIDTH	SQ YD	SQ YD
35	4.0	1.0	0.4	
36	3.0	1.0	0.3	
37	3.0	1.0	0.3	
38	4.0	2.0		0.9
39	4.0	1.0	0.4	
40	4.0	1.0	0.4	
41	2.0	3.0		0.7
42	4.0	1.0	0.4	
43	7.0	2.0		1.6
44	2.0	3.0		0.7
45	1.0	4.0	0.4	
46	4.0	3.0		1.3
47	4.0	3.0	0.3	
48	2.0	4.0		0.9
49	2.0	1.0	0.2	
50	2.0	2.0	0.4	

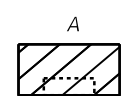
PATCH NO.	SIZE		DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
	LENGTH	WIDTH	SQ YD	SQ YD
51	2.0	2.0	0.4	
52	2.0	2.0	0.4	
53	1.0	4.0	0.4	
A - Remove Drain, 20 ea			4.4	
B - Replace Drain, 12 ea			2.7	
TOTAL ROUNDS TO:			13.0	6.0

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

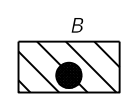


DATE OF SURVEY: 3-2-2022
SURVEY BY: DPM & TMW
METHOD OF SURVEY: VISUAL

A & B = Deck Slab Repair (Full Depth, Type I)
2ft² = .22yd² Each



REMOVE DECK DRAIN



REMOVE & REPLACE DECK DRAIN

ESTIMATED PAY QUANTITIES:

DECK SLAB REPAIR (FULL DEPTH TYPE I)
13.0 SQ YD

DECK SLAB REPAIR (FULL DEPTH TYPE II)
6.0 SQ YD

DECK DRAINS
12 EACH

MODEL: Default
FILE NAME: p:\wbl\p-w-bentley.com\FW\DOT\Documents\DOT\Offices\District 7\Projects\74830\CAD\Drawings\DOT\058-0083 & 0083 Bridge Repair

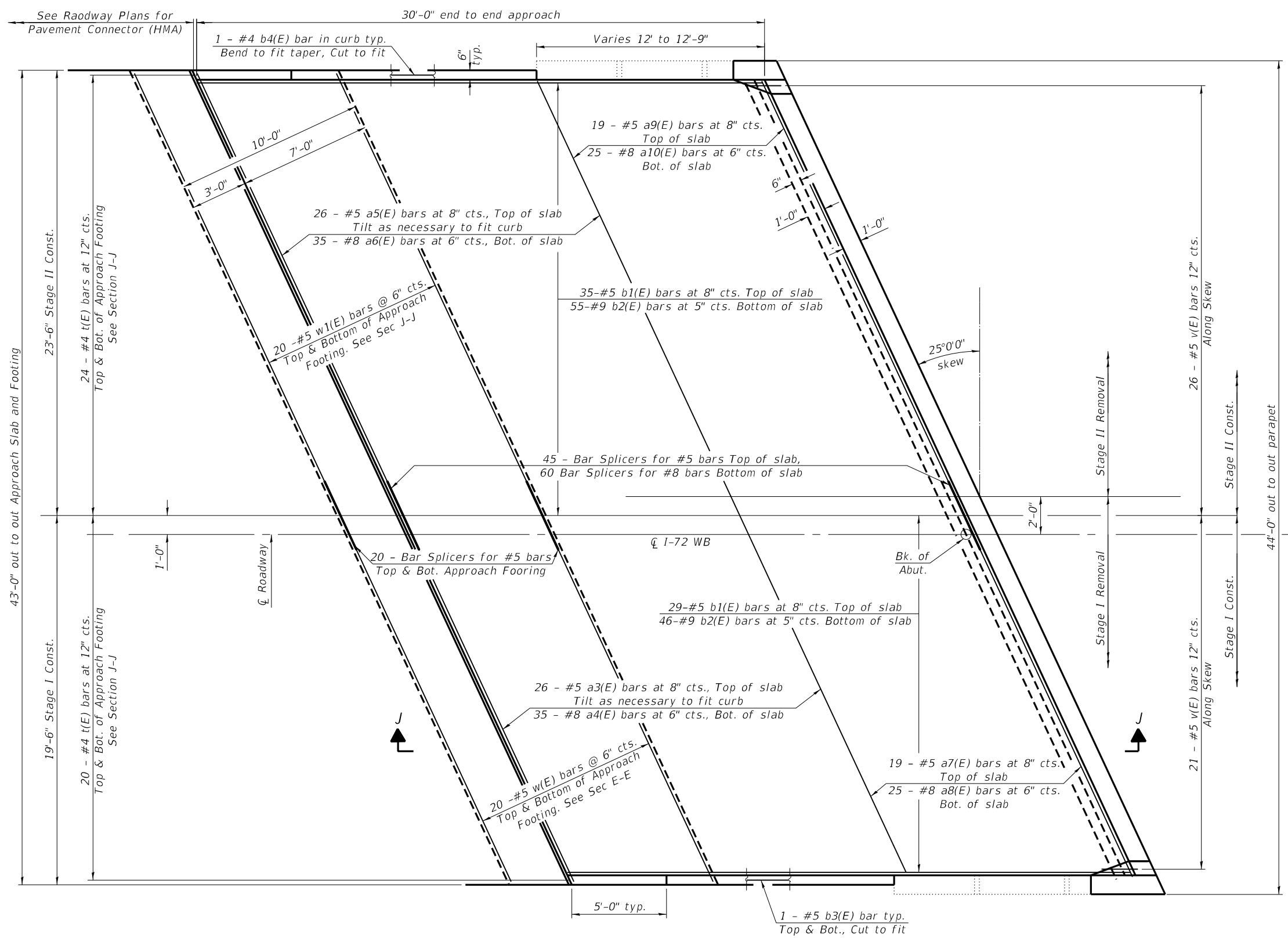
USER NAME = jessica.hille	DESIGNED - T. Walk	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - T. Walk	REVISED -
PLOT DATE = 8/22/2023	CHECKED - D. Macklin	REVISED -
	DATE - March 2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK PATCHING
SN. 058-0083 WBL

SCALE: SHEET 9 OF 17 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	20
CONTRACT NO. 74B30				
ILLINOIS FED. AID PROJECT				



APPROACH PLAN
 West Approach of WBL Shown
 East Approach of WBL Similar
 EBL Approaches Similar by Rotation

MODEL: 3/30/2024 10:15 AM
 FILE NAME: STS15

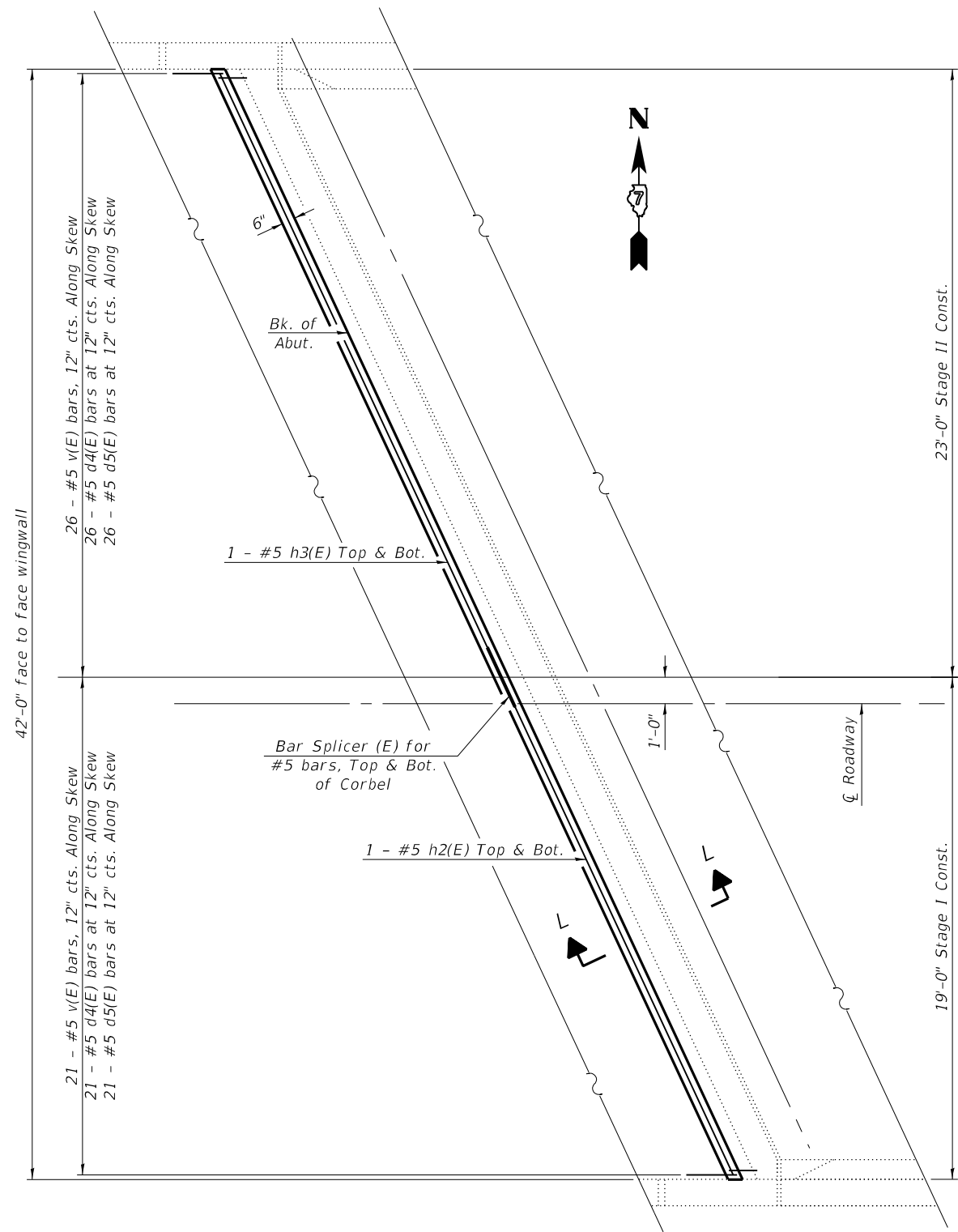
USER NAME = \$USERS	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - D. Macklin	REVISED -
PLOT DATE = \$DATE\$	DATE - March 2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

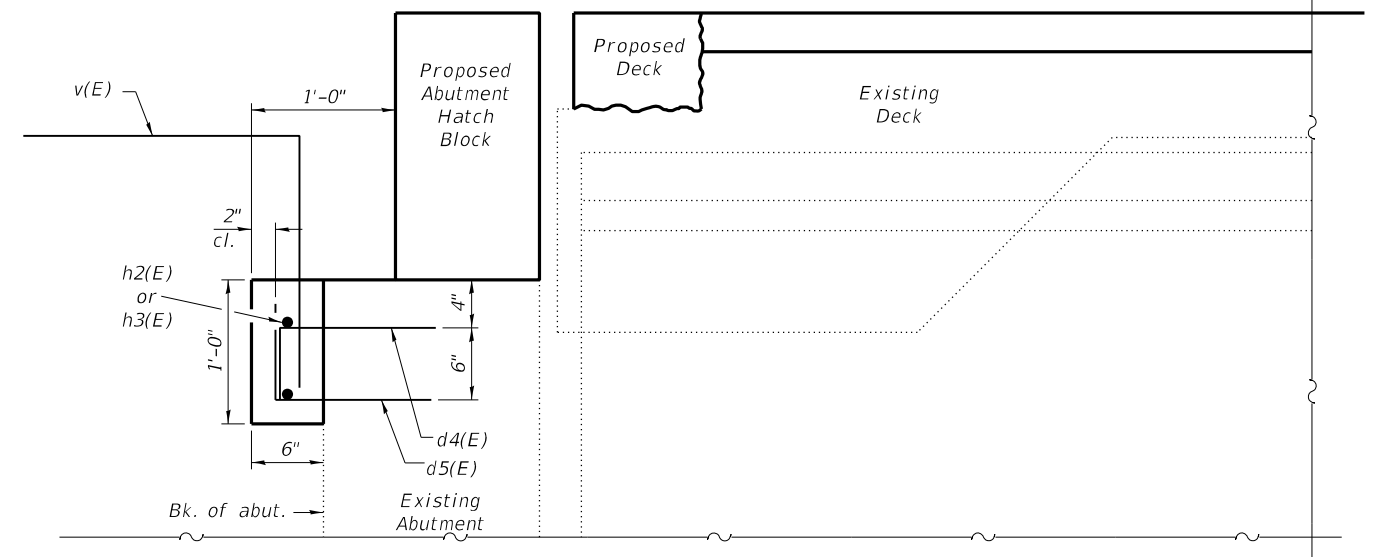
BRIDGE APPROACH SLAB DETAILS - SHEET 1 OF 2
S.N. 058-0082 EBL & 058-0083 WBL

SCALE: SHEET 10 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	21
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	



PROPOSED CORBEL PLAN
West Approach of WB Rdwy Shown
Other Approaches Similar

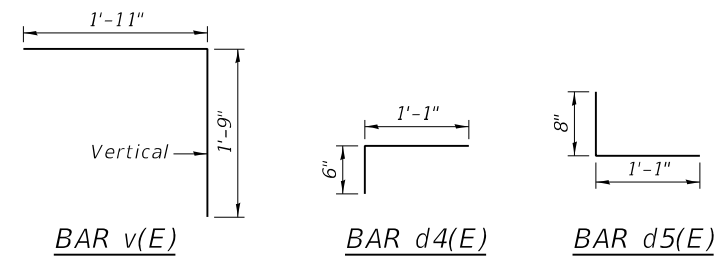


SECTION L-L

Notes:
Epoxy grout d4(E) & d5(E) bars in 9" min. holes according to Article 584 of the Standard Specifications.
Abutment corbel concrete shall be paid for as Concrete Structures.
Cost of excavation for approach footing and abutment corbel included with Concrete Structures.

BILL OF MATERIAL - FOUR ABUTMENTS

Bar	No.	Size	Length	Shape
d4(E)	188	#5	1'-7"	┌
d5(E)	188	#5	1'-9"	└
h2(E)	8	#5	20'-7"	—
h3(E)	8	#5	25'-0"	—
v(E)	188	#5	3'-8"	┌
Concrete Structures			Cu. Yd.	4.0
Reinforcement Bars, Epoxy Coated			Pound	1,760
Bar Splicers			Each	8



MODEL: 34002ELNAMES
FILE NAME: STEEL3

USER NAME = \$USERS	DESIGNED - T. Walk	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - T. Walk	REVISED -
PLOT DATE = \$DATE\$	CHECKED - D. Macklin	REVISED -
	DATE - March 2022	REVISED -

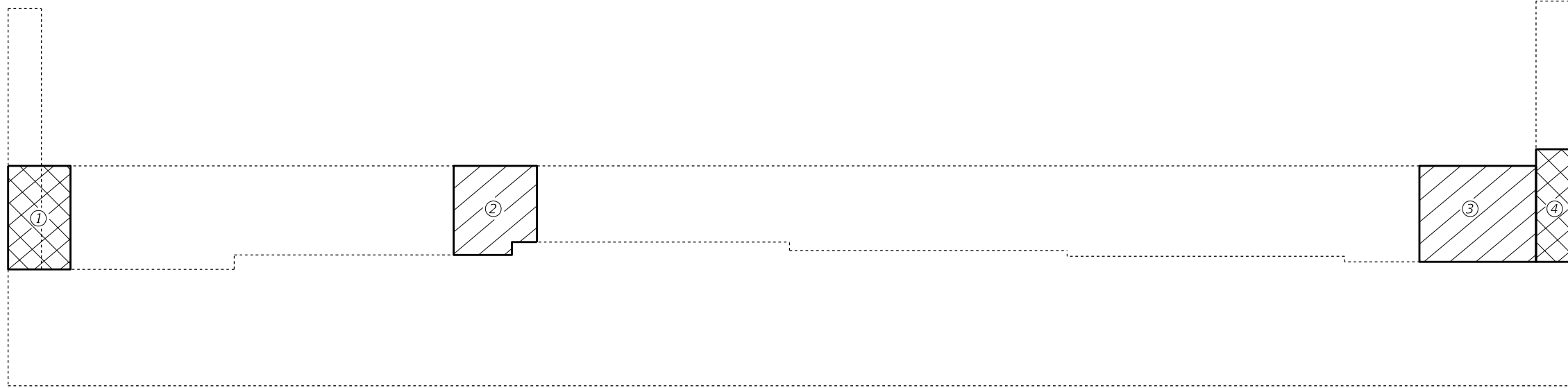
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT MODIFICATIONS
S.N. 058-0082 EBL & 058-0083 WBL**

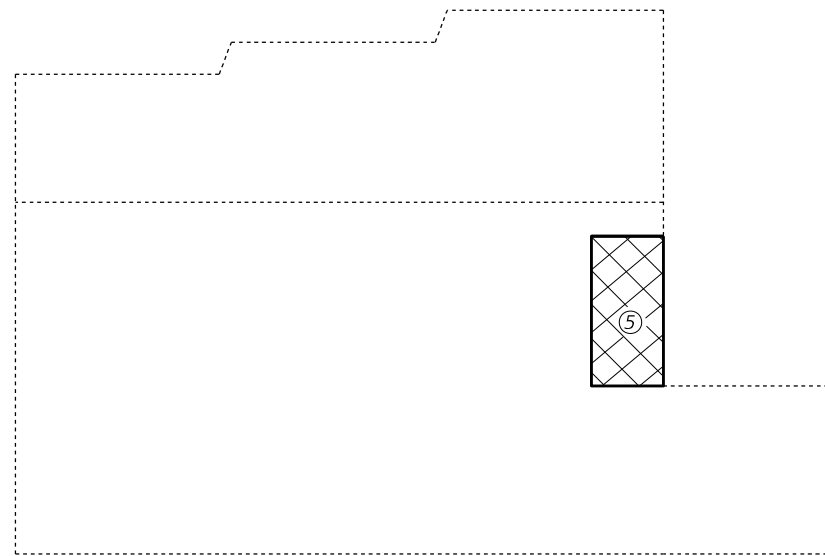
SCALE: SHEET 12 OF 17 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	23
ILLINOIS			FED. AID PROJECT	

CONTRACT NO. 74B30



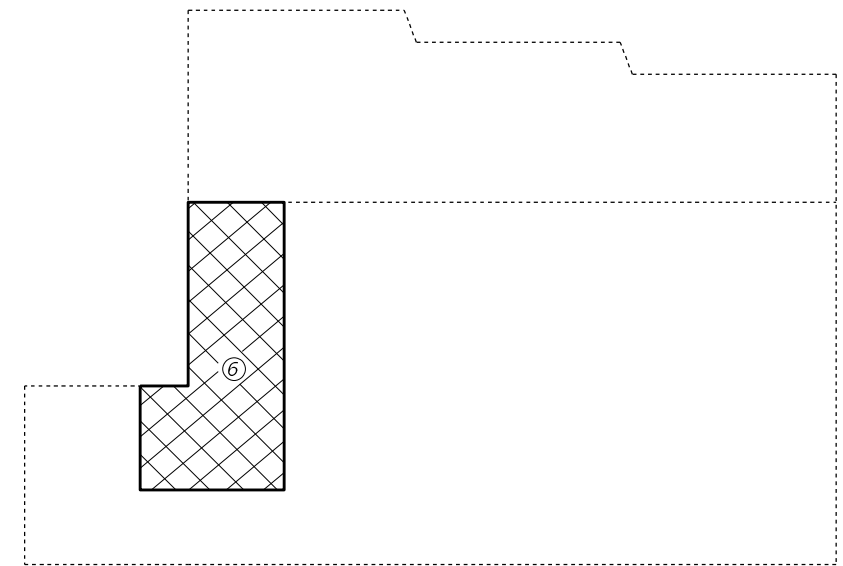
WEST ABUTMENT



SOUTHWEST WINGWALL

STRUCTURAL REPAIR OF CONCRETE

Patch No.	Depth ≤ 5"	Depth > 5"
	SqFt	SqFt
1		6.0
2	7.5	
3	10.5	
4		4.0
5		5.0
6		14.0
Total	18.0	29.0



NORTHWEST WINGWALL



Structural Repair of Concrete (Depth ≤ 5")



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.

MODEL: Default
 FILE NAME: p:\project-aw-bee\paw.com\p\INDOT\Documents\INDOT\Office\Director_7\Project\74B30\CADD\DATA\CAD\Sheet\05B-0082_6_0083_Bridge Repair

USER NAME = jessica.ville	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. MacKlin	REVISED -
PLOT DATE = 8/22/2023	DATE - March 2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

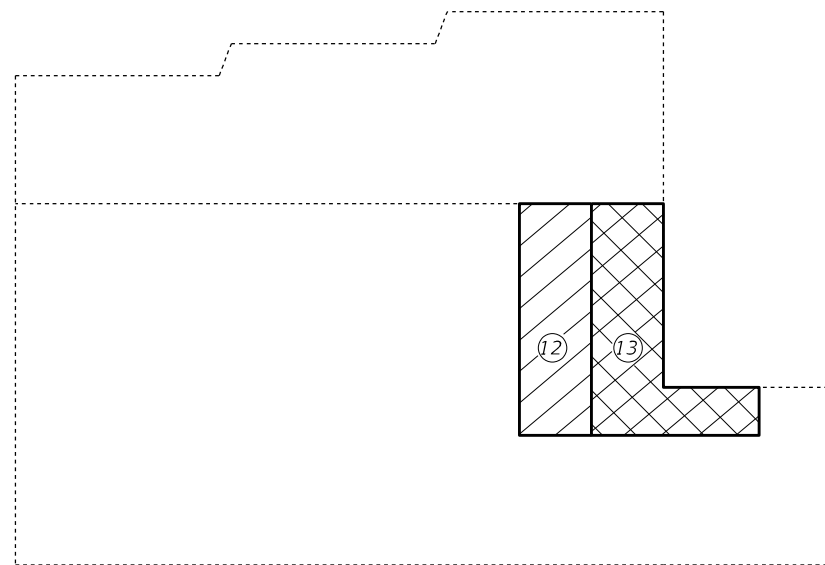
**STRUCTURAL REPAIR OF CONCRETE WEST ABUTMENT
S.N. 058-0082**

SCALE: SHEET 13 OF 17 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	24
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	



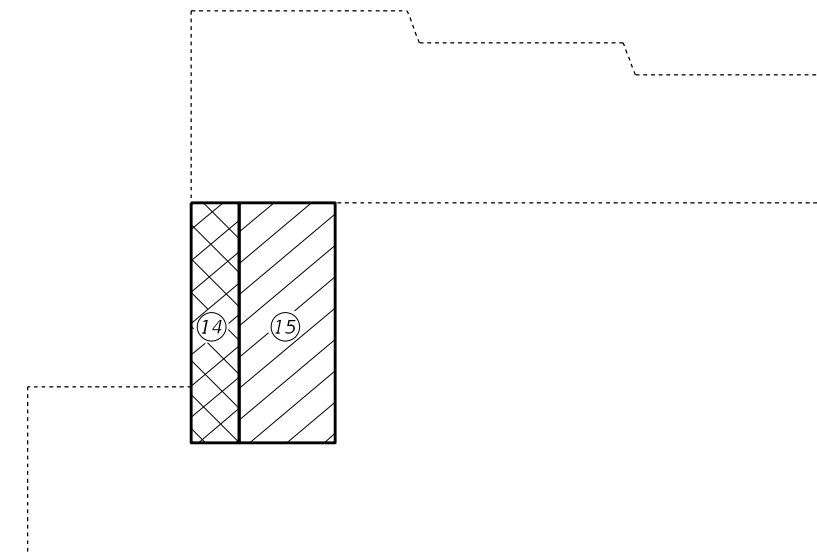
EAST ABUTMENT



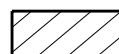
NORTHEAST WINGWALL

STRUCTURAL REPAIR OF CONCRETE

Patch No.	Depth ≤ 5"	Depth > 5"
	SqFt	SqFt
7		4.0
8	9.0	
9	15.0	
10	9.0	
11		4.0
12	7.0	
13		8.0
14	7.5	
15		7.5
Total	48.0	24.0



SOUTHEAST WINGWALL



Structural Repair of Concrete (Depth ≤ 5")



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.

MODEL: Default
 FILE: \\maimc-pw-bufile.com\P\DOT\Documents\DOT Offices\District 7\Projects\74B30\CADD\Drawings\CAD\Sheet\05B-0082 & 0083 Bridge Repair

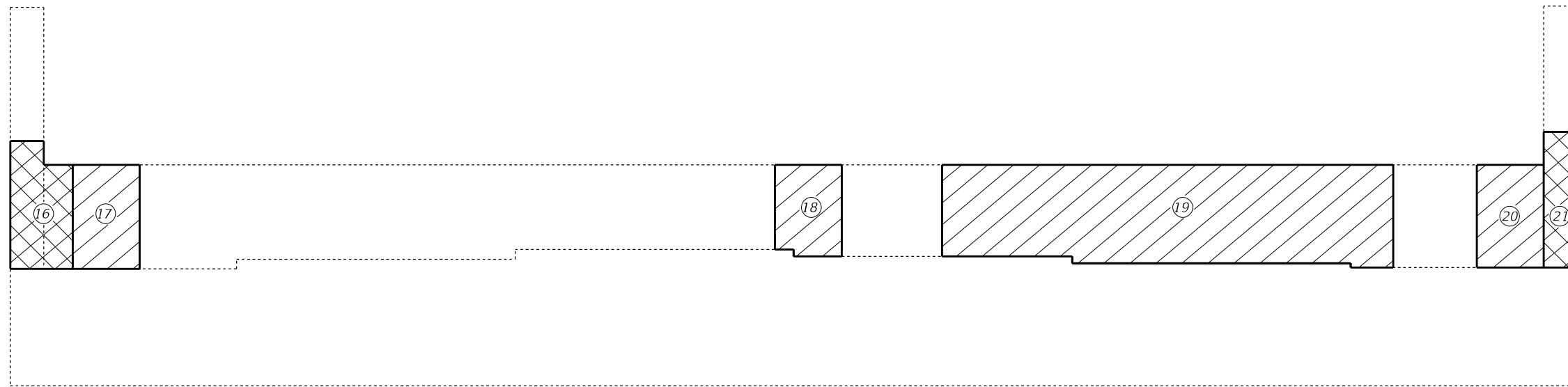
USER NAME = jessica.hille	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. Macklin	REVISED -
PLOT DATE = 8/22/2023	DATE - March 2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

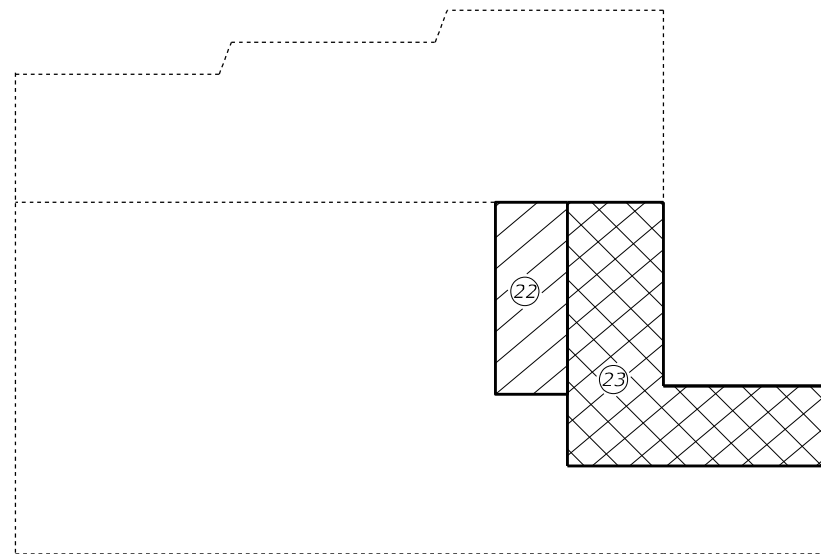
**STRUCTURAL REPAIR OF CONCRETE EAST ABUTMENT
S.N. 058-0082**

SCALE: SHEET 14 OF 17 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	25
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	



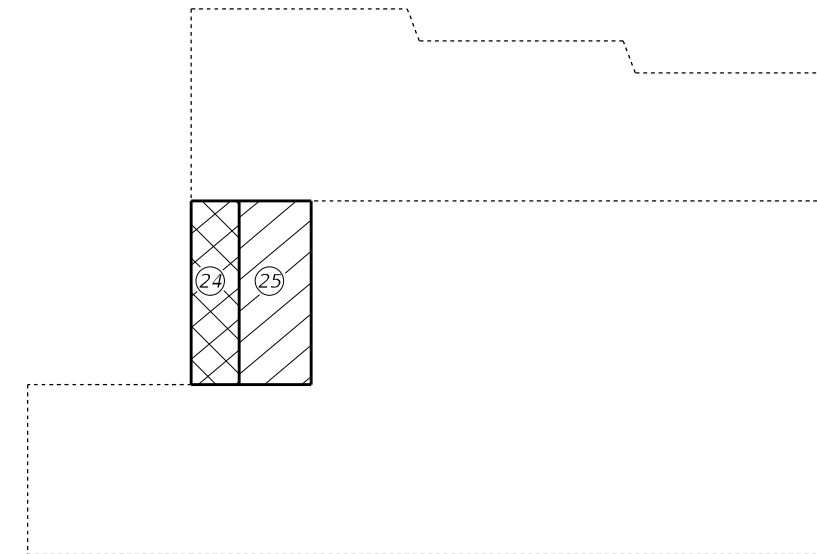
WEST ABUTMENT



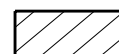
SOUTHWEST WINGWALL

STRUCTURAL REPAIR OF CONCRETE

Patch No.	Depth ≤ 5"	Depth > 5"
	SqFt	SqFt
16		7.0
17	6.0	
18	5.0	
19	40.5	
20	6.0	
21		4.0
22	5.5	
23		16
24		4
25	6	
Total	70.0	31.0



NORTHWEST WINGWALL



Structural Repair of Concrete (Depth ≤ 5'')



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.

MODEL: Default
 FILE NAME: p:\project-aw-bee\paw.com\p\DOT\Documents\DOT Offices\Dir\et 7\Project\74B30\CADD\DATA\CAD\Sheet\05B-0083 & 0083 Bridge Repair

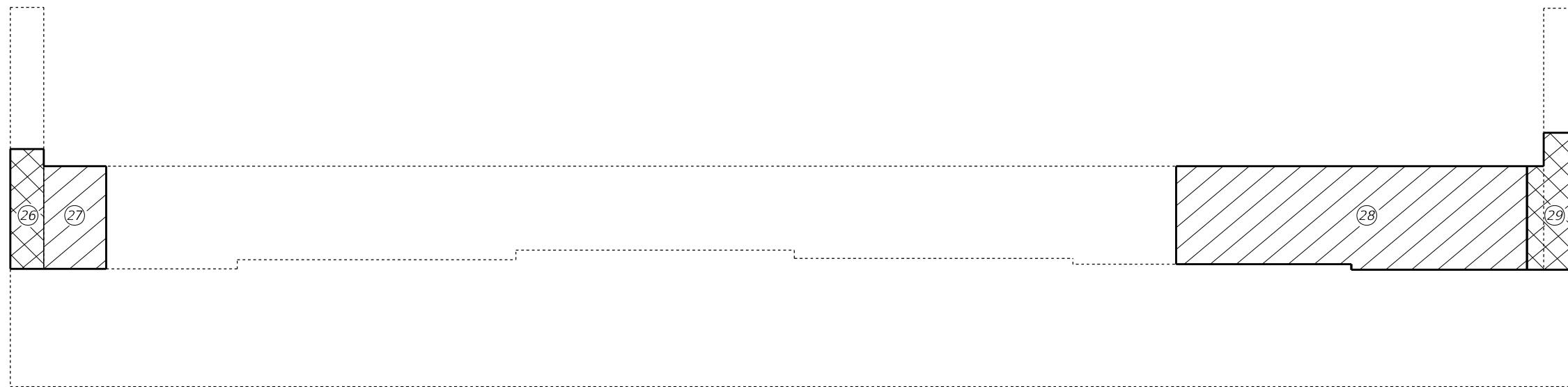
USER NAME = jessica.ville	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. Macklin	REVISED -
PLOT DATE = 8/22/2023	DATE - March 2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

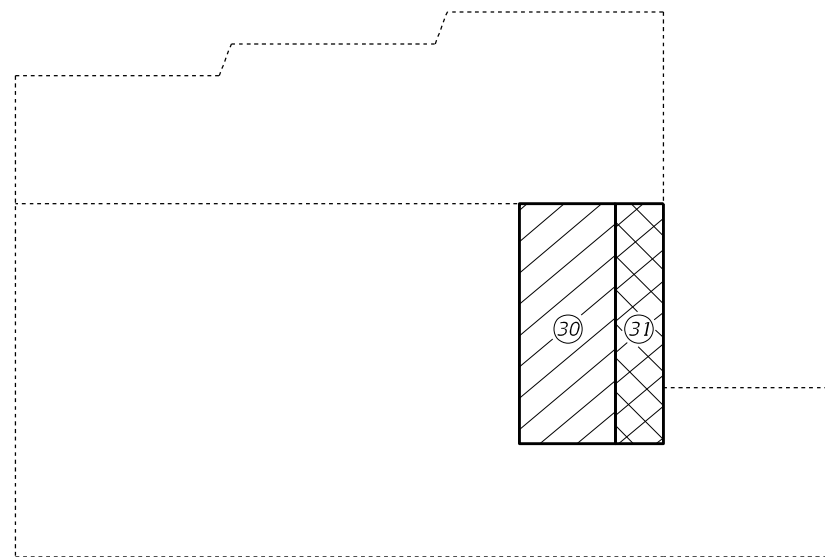
**STRUCTURAL REPAIR OF CONCRETE WEST ABUTMENT
S.N. 058-0083**

SCALE: SHEET 15 OF 17 SHEETS STA. TO STA.

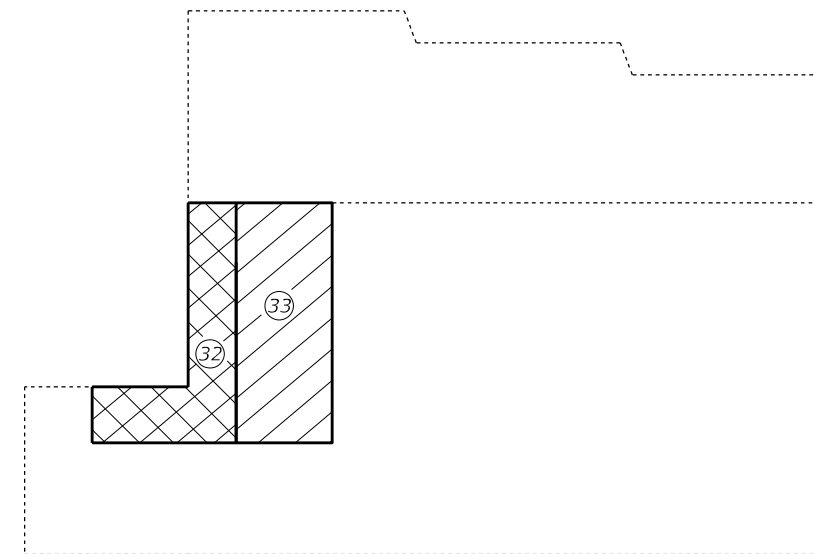
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	26
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	



EAST ABUTMENT



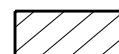
NORTHEAST WINGWALL



SOUTHEAST WINGWALL

STRUCTURAL REPAIR OF CONCRETE

Patch No.	Depth ≤ 5"	Depth > 5"
	SqFt	SqFt
26		3.5
27	4.5	
28	31.5	
29		5.6
30	10.0	
31		5.0
32		7.5
33	10.0	
Total	56.0	22.0



Structural Repair of Concrete (Depth ≤ 5")



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.

MODEL: Default
FILE NAME: p:\project-aw-bee\paw.com\p\INDOT\Documents\DOT Offices\Director_7\Project\74B30\CADD\DATA\CAD\Sheet\05B-0083_6_0083_Bridge Repair

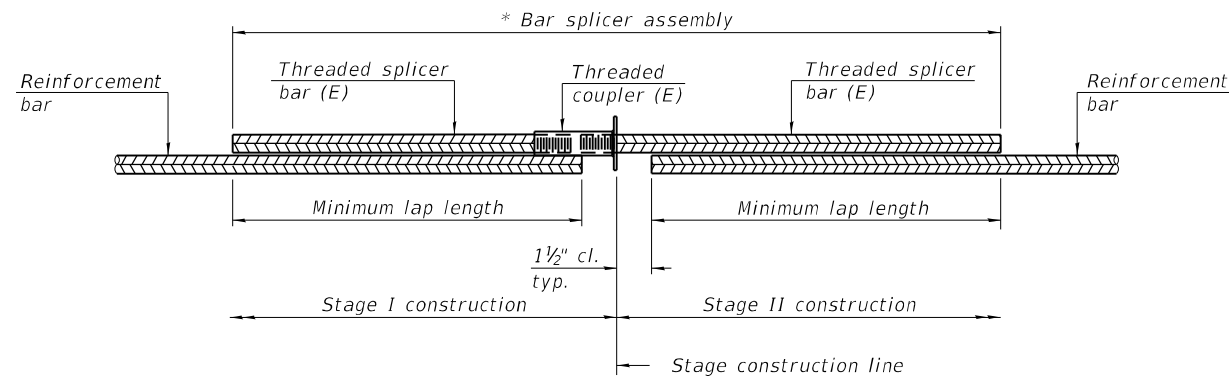
USER NAME = jessica.wille	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. MacKlin	REVISED -
PLOT DATE = 8/22/2023	DATE - March 2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL REPAIR OF CONCRETE EAST ABUTMENT
S.N. 058-0083**

SCALE: SHEET 16 OF 17 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	27
			CONTRACT NO. 74B30	
ILLINOIS FED. AID PROJECT				

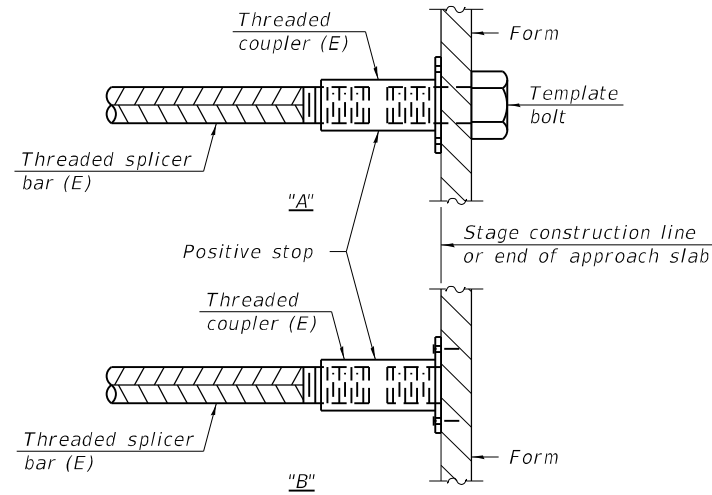


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + 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
Deck	#6	8	4'-0"
Abutment	#6	16	4'-0"
Abutment Corbel	#5	8	3'-2"
Approach	#5	180	3'-2"
Approach	#8	240	4'-9"
Approach Footing	#5	160	3'-4"

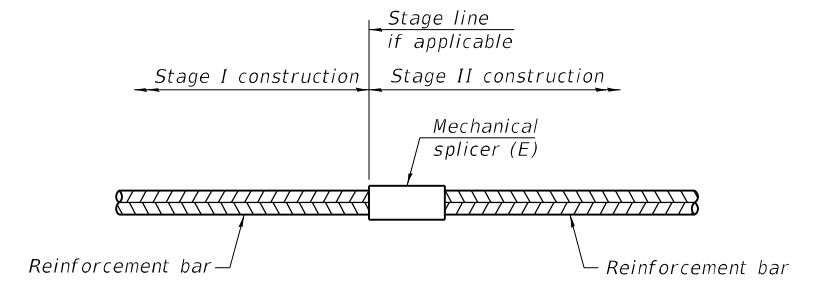


INSTALLATION AND SETTING METHODS

"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

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.

MODEL: Default
 FILE: \\blmfc-pw-bentley.com\P\INDOT\Documents\DOT Office\Dir\dr. T\Project\174B30\CADD\DATA\CAD\Sheets\05B-0082 & 0083 Bridge Repair

BSD-1

1-1-2020

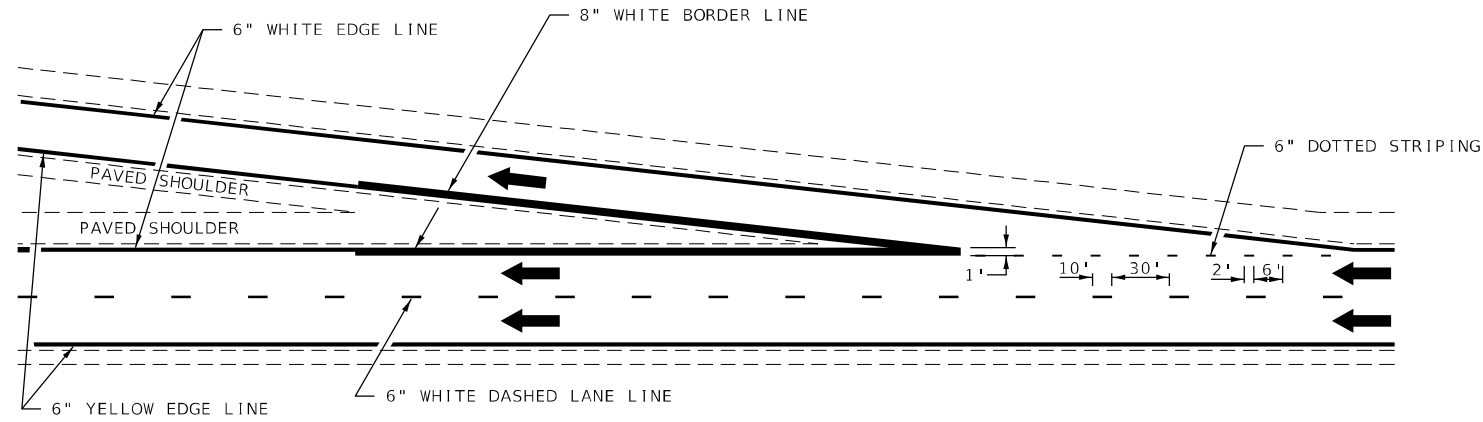
USER NAME = jessica.hille	DESIGNED - T. Walk	REVISED -
	DRAWN - T. Walk	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - D. Macklin	REVISED -
PLOT DATE = 8/22/2023	DATE - March 2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

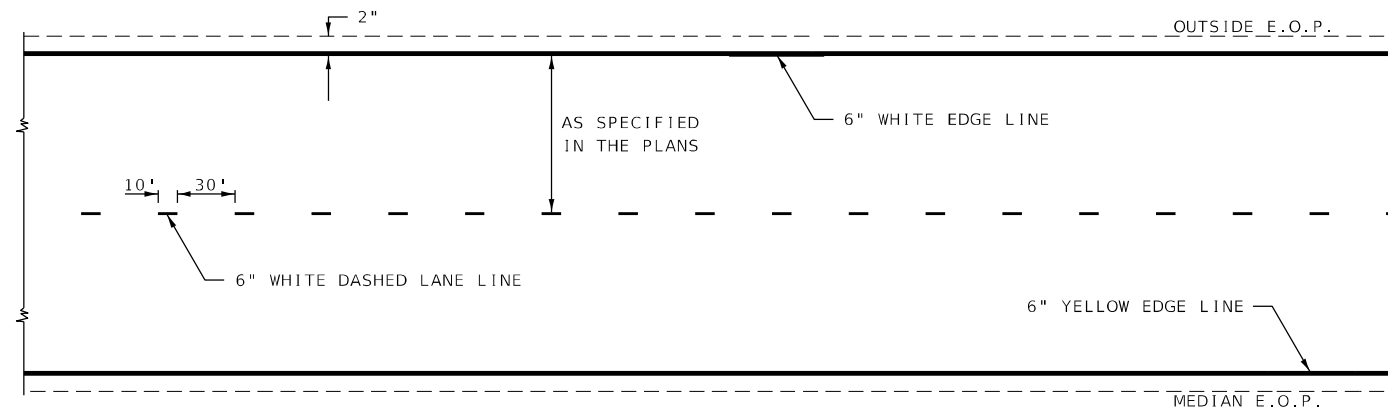
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
S.N. 058-0082 EBL & 058-0083 WBL

SCALE: SHEET 17 OF 17 SHEETS STA. TO STA.

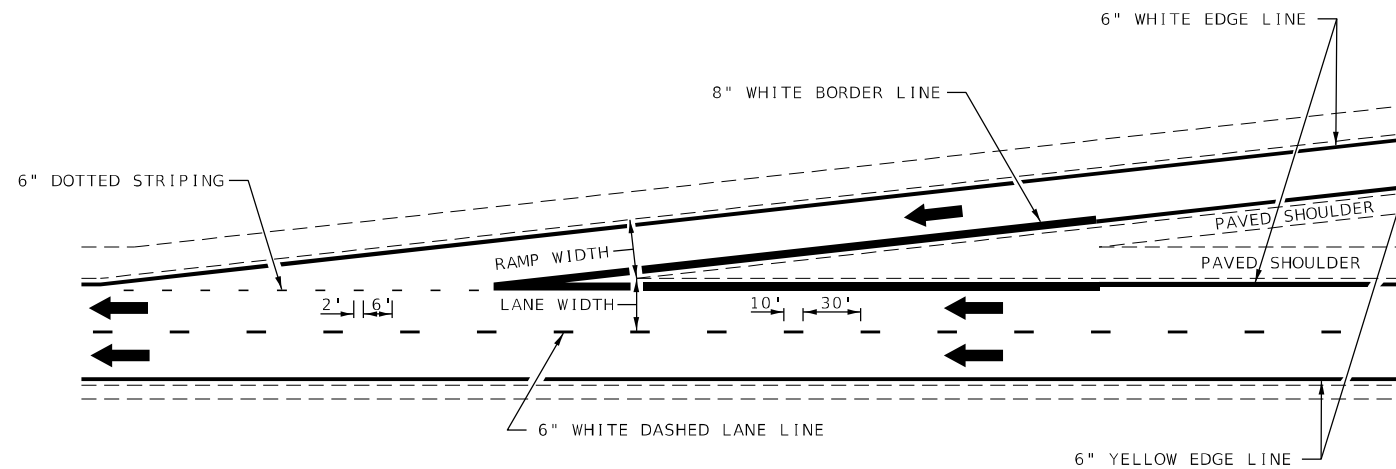
F.A.J RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	28
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	



TYPICAL EXIT RAMP MARKING



TYPICAL CENTERLINE & EDGELINE MARKINGS



TYPICAL ENTRANCE RAMP MARKING

NOT TO SCALE

DISTRICT 7 DETAIL NO. 7800002

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

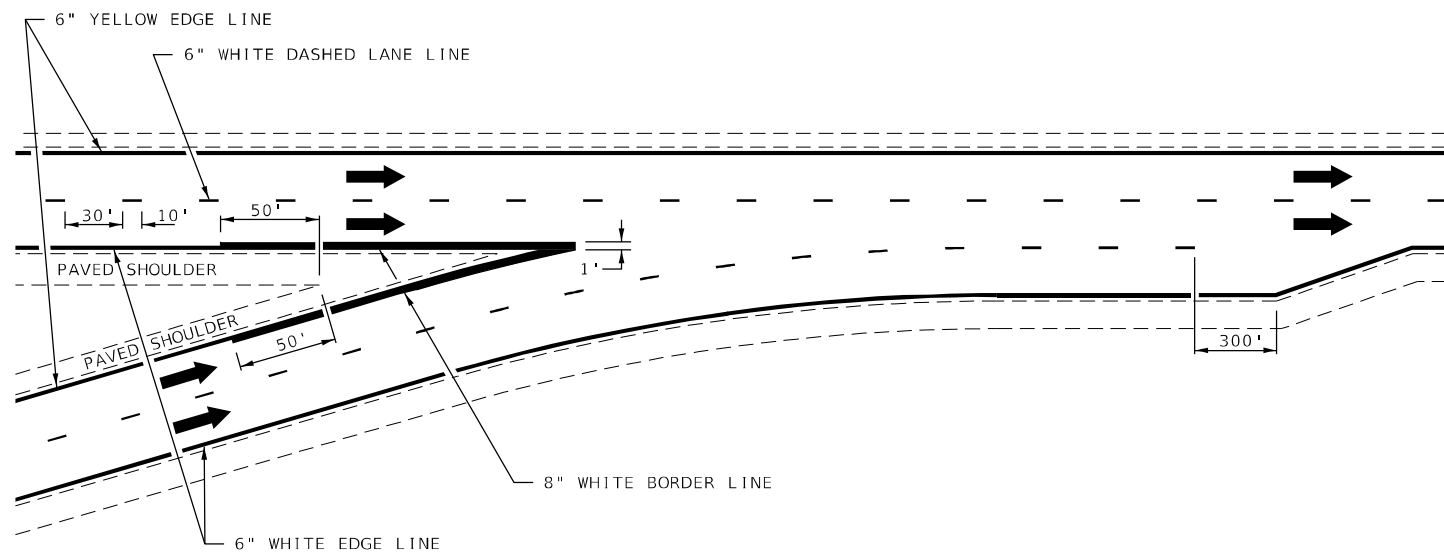
TYPICAL APPLICATIONS OF FREEWAY/EXPRESSWAY
PAVEMENT MARKING

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	29
			CONTRACT NO. 74B30	

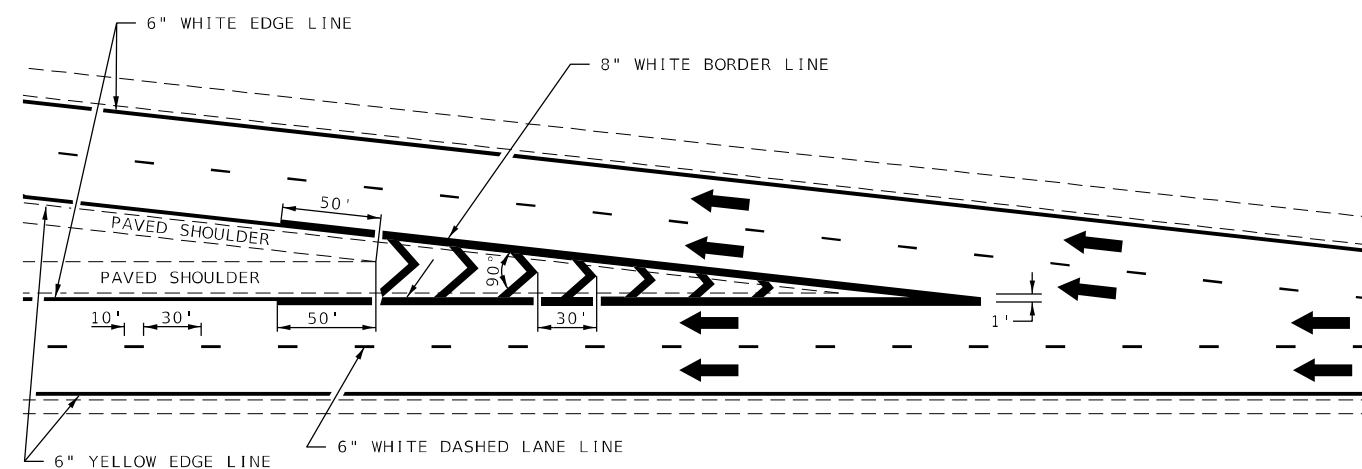
SCALE: SHEET OF SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT

USER NAME = jessica.wille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

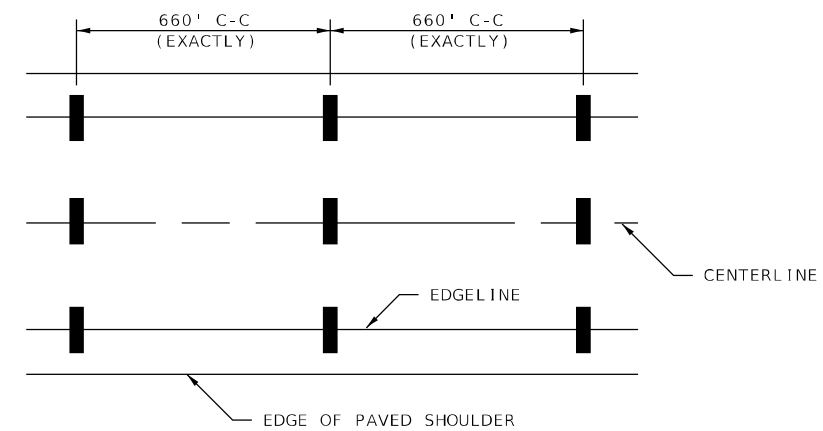


TYPICAL CONVERGENCE MARKING

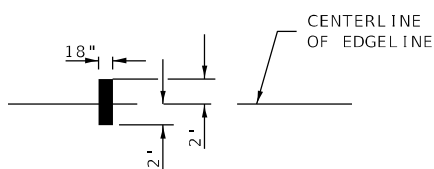


TYPICAL DIVERGENCE MARKING

AERIAL SPEED CHECK ZONES



IT WILL BE NECESSARY TO HAVE A REPRESENTATIVE OF THE STATE POLICE PRESENT SO THAT THE ACCURACY OF MEASUREMENT CAN BE ATTESTED TO IN COURT.



NOT TO SCALE

DISTRICT 7 DETAIL NO. 7800002

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 8/22/2023	DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS OF FREEWAY/EXPRESSWAY
 PAVEMENT MARKING

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2024-4	MACON	30	30
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74B30	

MODEL: Default
 FILE: M:\MS_E_Plan\Subsect-cw-bead-fwy.com\PIV\DOT\Documents\DOT Office\District 7\Project\74B30\CADD\DATA\CAD\Sheet\74B30-Subsect-cw.dgn