# 09-20-2024 LETTING ITEM 044

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT (2021) = 5350

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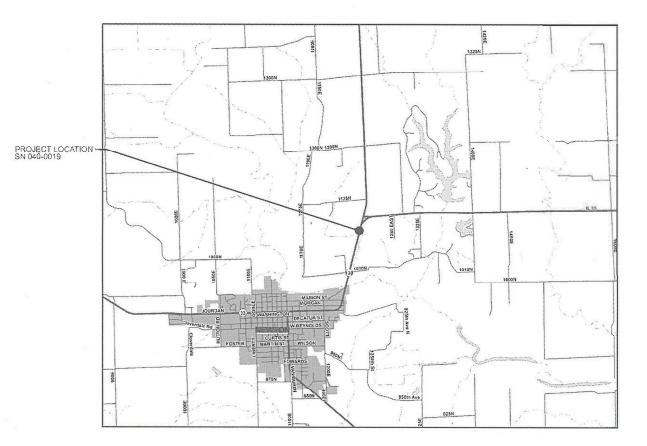
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# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

# PROPOSED HIGHWAY PLANS

FAP ROUTE 116 (IL 130, IL 33) SECTION D7 BRIDGE REPAIRS 2025-8 PROJECT STP-HUNK(181) BRIDGE DECK OVERLAY, JOINT REPLACE/REPAIR JASPER COUNTY

C-97-134-23

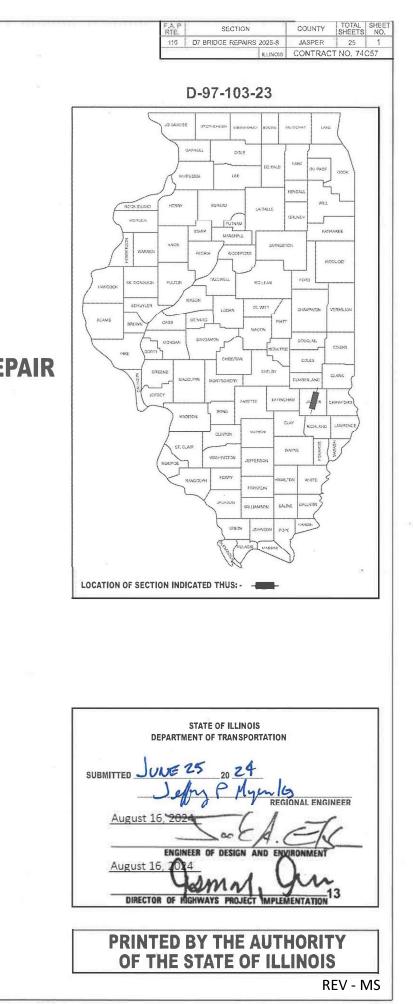


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS. THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: JACQUELYN SEALS PROJECT MANAGER: LEAH HILLE

**CONTRACT NO. 74C57** 



# **GENERAL NOTES**

THE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGE I & II OF STANDARD 701321 SHALL BE COVERED WITH PAVEMENT MARKING BLACKOUT TAPE, 5".

# SHEET NO. ITEM

3-4 5 6 7-8

9-14

1

2

15-21

22-25

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 25:

000001-08 001001-02 001006 701001-02

701006-05

701201-05

701301-04 701311-03

701321-18 701326-04

701901-09

704001-08 780001-05

782006-01

420001-10

# **APPLICATION RATES**

THE FOLLOWING APPLICATION RATES WERE USED IN CALCULATING PLAN QUANTITIES AND HAVE BEEN INCLUDED FOR REFERENCE:

BITUMINOUS MATERIALS (TACK COAT)	0.05 LB/SQ FT (ON MILLED SURFACES)
BITOWINGOS WATERIAES (TACK COAT)	0.025 LB/SQ FT (ON HMA LIFTS)
HMA SURFACE COURSE	112 LB/SY/IN

# MIXTURE REQUIREMENTS

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 DEV (REQUIRED?)
MAINLINE	HMA SURFACE COURSE, IL-9.5, MIX "C", N70	PG 64-22	4.0% @ N=70	IL - 9.5	MIXTURE C	N70	QC/QA	3000	N/A

# **INDEX OF SHEETS**

COVER SHEET GENERAL NOTES, INDEX OF SHEETS & LIST OF STANDARDS SUMMARY OF QUANTITIES SCHEDULE OF QUANTITIES TRANSITION DETAIL TYPICAL SECTIONS STAGE CONSTRUCTION DETAILS BRIDGE REPAIR PLANS DISTRICT 7 PAVEMENT MARKING DETAILS

### STANDARD NO. DESCRIPTION

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS AREAS OF REINFORCEMENT BARS DECIMAL OF AN INCH AND OF A FOOT OFF-ROAD OPERATIONS, 2L, 2W MORE THAN 15' (4.5 M) AWAY FROM PAVEMENT EDGE OFF-ROAD OPERATIONS, 2L, 2W 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS GREATER THAN 45 MPH LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER LAND CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS GREATER THAN 45 MPH TRAFFIC CONTROL DEVICES TEMPORARY CONCRETE BARRIER TYPICAL PAVEMENT MARKINGS GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

PAVEMENT JOINTS



# REV - MS

DEX OF SHEETS,		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.				
NDARDS		116	D7 BRIDGE REPAIRS 2025-8	JASPER	25	2				
				CONTRACT	NO. 740	257				
TS STA.	TO STA.	ILLINOIS   FED. AID PROJECT								

	SUMMARY OF QUANTITIES		80% FED 20% STATE	CONSTR. CODE		SUMMARY OF QUANTITIES		80% FED 20% STATE	CONSTR. COD
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0059 JASPER 040-0019	CODE NO.	ITEM		TOTAL QUANTITY	0059 JASPER 040-0019
20200500	D500     EARTH EXCAVATION (WIDENING)     CU YD     135     135     52000110     PREFORMED JOINT STRIP SEAL		PREFORMED JOINT STRIP SEAL	FOOT	42	42			
35400500	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 10"	SQ YD	488	488	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	296	296	67100100	MOBILIZATION	L SUM	1	1
10600370	LONGITUDINAL JOINT SEALANT	FOOT	151	151	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT		278	278	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
0600990	TEMPORARY RAMP	SQ YD	28	28	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
40604002	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, MIX "C", N70	TON	56	56	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
44004250	PAVED SHOULDER REMOVAL	SQ YD	87	87	70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6
48102100	AGGREGATE SHOULDERS, TYPE B	SQ YD	14	14	70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	894	894
50102400	CONCRETE REMOVAL	CUYD	3.4	3.4	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28
50300255	CONCRETE SUPERSTRUCTURE	CUYD	3.3	3.3	70300100	SHORT TERM PAVEMENT MARKING	FOOT	34	34
50300300	PROTECTIVE COAT	SQ YD	805	805	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	310	310
0800205	REINFORCEMENT BARS, EPOXY COATED	POUND	600	600         70300221         TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT		TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	1163	1163
50800515	BAR SPLICERS	EACH	6	6	70400100	TEMPORARY CONCRETE BARRIER	FOOT	562.5	562.5

MODEL: SOQ [Sheet] FILE NAME: c'tow\_worktpwidothillelmid0910944\D774C57-s

USER NAME = chase.blackerby DESIGNED -REVISED -SUMMARY OF QU STATE OF ILLINOIS DRAWN -REVISED -DEPARTMENT OF TRANSPORTATION PLOT SCALE = \$SCALE\$ CHECKED -REVISED -SCALE: SHEET 1 OF 2 SHEETS PLOT DATE = 6/14/2024 DATE -REVISED -

# REV - MS

UANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
UANTITIES		D7 BRIDGE REPAIRS 2025-8	JASPER	25	3			
	CONTRACT NO. 74C57							
TS STA. TO STA.	ILLINOIS FED. AID PROJECT							

	SUMMARY OF QUANTITIES		80% FED 20% STATE	CONSTR. COD
CODE NO.	ITEM	UNIT	TOTAL	0059 JASPER 040-0019
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	487.5	487.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1163	1163
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	2	2
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	2	2
Z0012111	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 2 1/2"	SQ YD	795	795
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	795	795
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	724	724
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	478	478

# \* SPECIALTY ITEM

		1													
USER NAME = leah.hille	DESIGNED	REVISED -		SUMMARY OF QUANTITIES							F.A.P.	SECTION	COUNTY	TOTAL S	SHEET
	DRAWN -	REVISED _	STATE OF ILLINOIS			SUMM	ARY (	of Qua	NTITIES		116	D7 BRIDGE REPAIRS 2025-8	JASPER	25	4
PLOT SCALE = \$SCALE\$	CHECKED _	REVISED _	DEPARTMENT OF TRANSPORTATION									<u> </u>	CONTRACT	NO. 74C	257
 PLOT DATE = 6/26/2024	DATE -	REVISED -		SCALE:	SHEET	2 0	F 2	SHEETS	STA.	TO STA.	ILLINOIS   FED. AID PROJECT		PROJECT		

# REV - MS

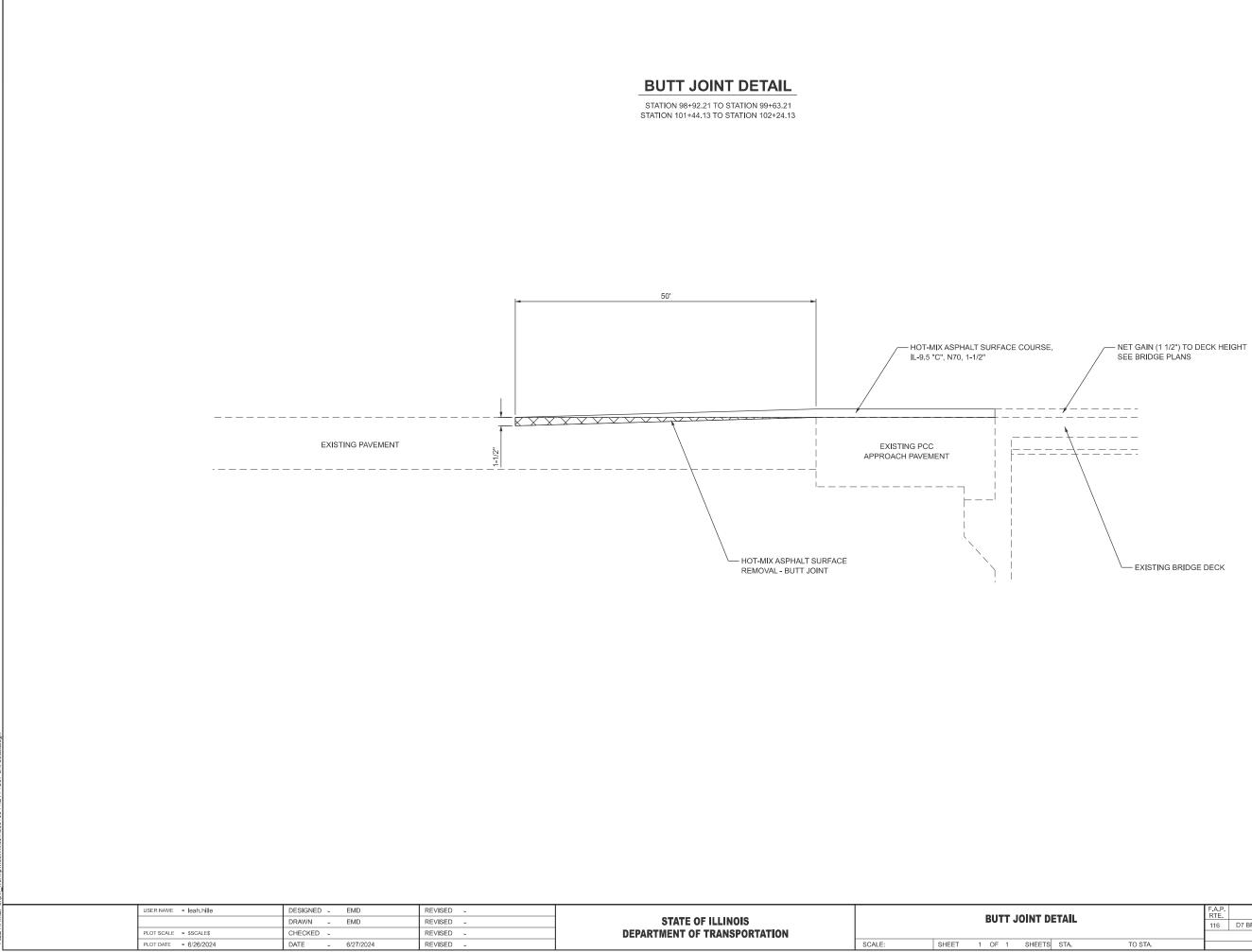
TRAFFIC CONTROL SCHEDULE	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3
	70100405	70100500	70106500	70106700	70400100	70400200	70600250	70600350
STAGE	EACH	LSUM	EACH	EACH	FT	FT	EACH	EACH
STRUCTURE 040-0019	1	1	1	6	-	-	-	-
STAGE I	-	-	-	-	562.50	=	2	-
STAGE II	-	-	-	-	-	487.50	-	2
TOTALS	1	1	1	6	562.5	487.5	2	2

RESUI SCF		ACING ULE	BITUMINOUS MATERIALS (TACK COAT)	LONGITUDINAL JOINT SEALANT	TEMPORARY RAMP	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	AGGREGATE WEDGE SHOULDER, TYPE B
			40600290	40600370	40600990	40604002	40600982	48102100
STATION	TO	STATION	POUND	FT	SQ YD	TON	SQ YD	SQ YD
97+95.75	TO	98+92.21	-	-	-	-	-	2.7
98+92.21	TO	99+42.21	97.5	50.0	13.9	18.2	138.9	1.4
99+42.21	TO	99+51.21	17.6	9.0	-	3.3	-	0.3
99+51.21	TO	99+63.21	24.0	12.0	-	4.5	-	-
99+63.21	TO	101+44.13		•	BRIDGE	OMISSION		
101+44.13	TO	101+56.13	24.0	12.0	-	4.5	-	-
101+56.13	TO	101+74.13	35.1	18.0	=	6.6	-	0.5
101+74.13	TO	102+24.13	97.5	50.0	13.9	18.2	138.9	2.4
102+24.13	TO	103+12.13	-	-	-		-	5.9
		TOTALS:	296	151	28	56	278	14

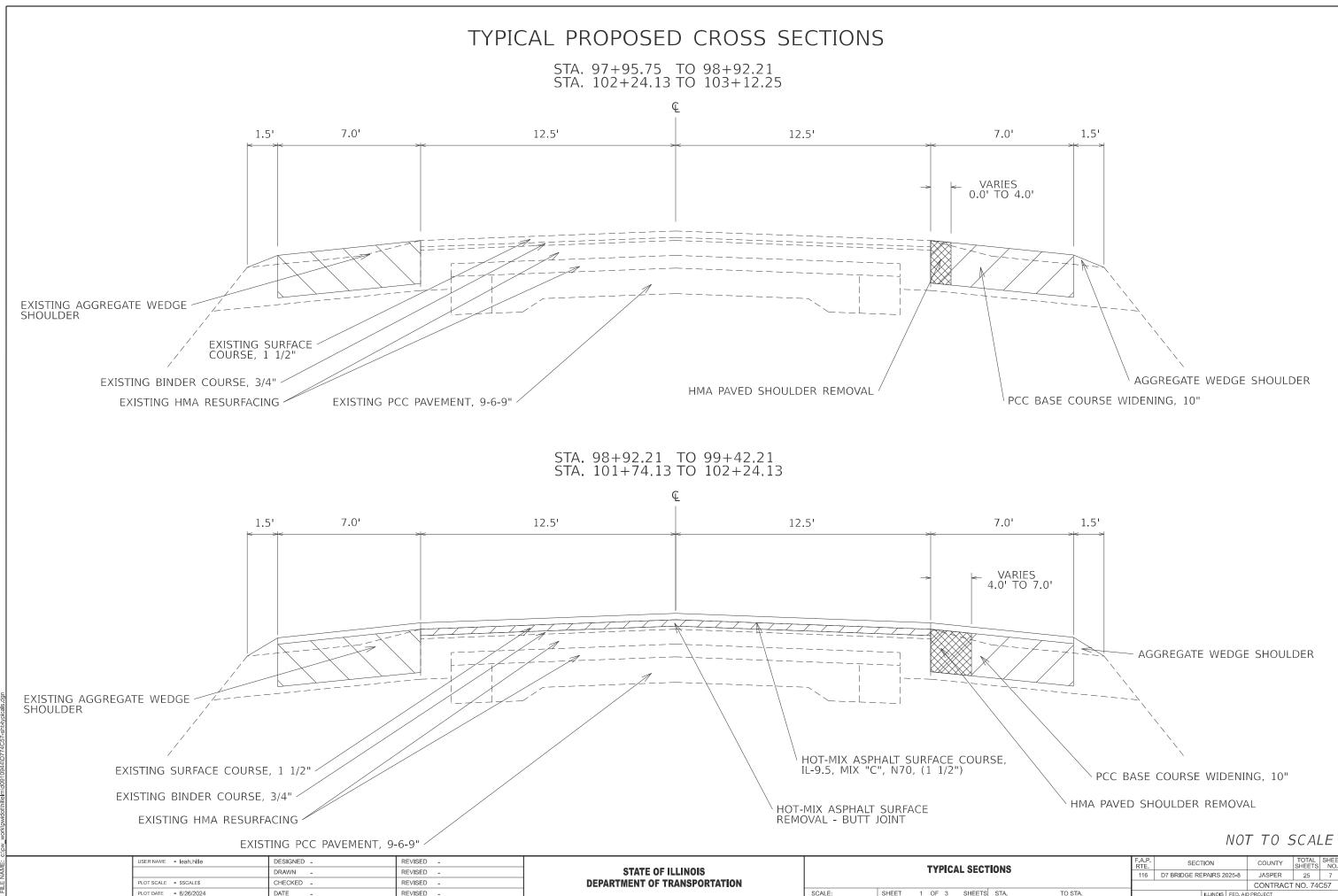
MA	TO         103+12.2           TO         98+35.75           TO         103+02.2           TO         104+68.2           TO         99+51.2           TO         103+08.2	NG	PAVEMENT MARKING BLACKOUT TAPE, 5"	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	PAINT PAVEMENT MARKING - LINE 4"	В
			70107005	70300100	70300150	70300221	78001110	
STATION	TO	STATION	FT	FT	SQ FT	FT	FT	STA
97+95.75	TO	103+12.25	=	-	-	1163	1163	97+
96+35.58	TO	98+35.75	50.0	-	16.7	-	-	99+
98+05.75	TO	103+02.25	496.5	-	165.5	-		99+
102+72.25	TO	104+68.25	49.0	-	16.3	-	-	101-
98+05.75	TO	99+51.21	145.5	-	48.5	-	-	101-
101+56.13	TO	103+08.25	152.1	-	50.7	-	-	
98+92.21	TO	99+42.21	-	5	1.7	-	-	
99+42.21	TO	99+51.21	-	0.9	0.3	-	-	
99+51.21	TO	99+63.21	-	1.2	0.4	-	-	
99+63.21	TO	101+44.13	-	18.1	6.0	-	-	
101+44.13	TO	101+56.13	-	1.2	0.4	-	-	
101+56.13	TO	101+74.13	-	1.8	0.6	-	-	
101+74.13	TO	102+24.13	-	5	1.7	-	-	
		TOTALS:	894	34	310	1163	1163	

BASE COURSE WIDENING SCHEDULE			EARTH EXCAVATION (WIDENING)	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10"	PAVED SHOULDER REMOVAL
			20200500	35400500	44004250
STATION	TO	STATION	CU YD	SQ YD	SQ YD
97+95.75	TO	99+42.21	63.0	227.8	31.89
99+42.21	TO	99+51.21	4.2	15.0	7.50
99+51.21	TO	101+56.13			
101+56.13	TO	101+74.13	8.3	30.0	15.00
101+74.13	TO	103+12.13	59.4	214.9	31.89
		TOTALS:	135	488	87

USER NAME = leah.hille	DESIGNED -	REVISED -		SCHEDULE OF QUANTITIES							F.A.P. RTF	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS								116	D7 BRIDGE REPAIRS 2025	-8 JASPER	25	5
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION										CONTRAC	CT NO. 74	LC57
PLOT DATE = 8/6/2024	DATE -	REVISED -		SCALE:	SHEET	1 OF	1 SHE	EETS S	STA.	TO STA.		ILLINOIS FEI	D. AID PROJECT	JECT	

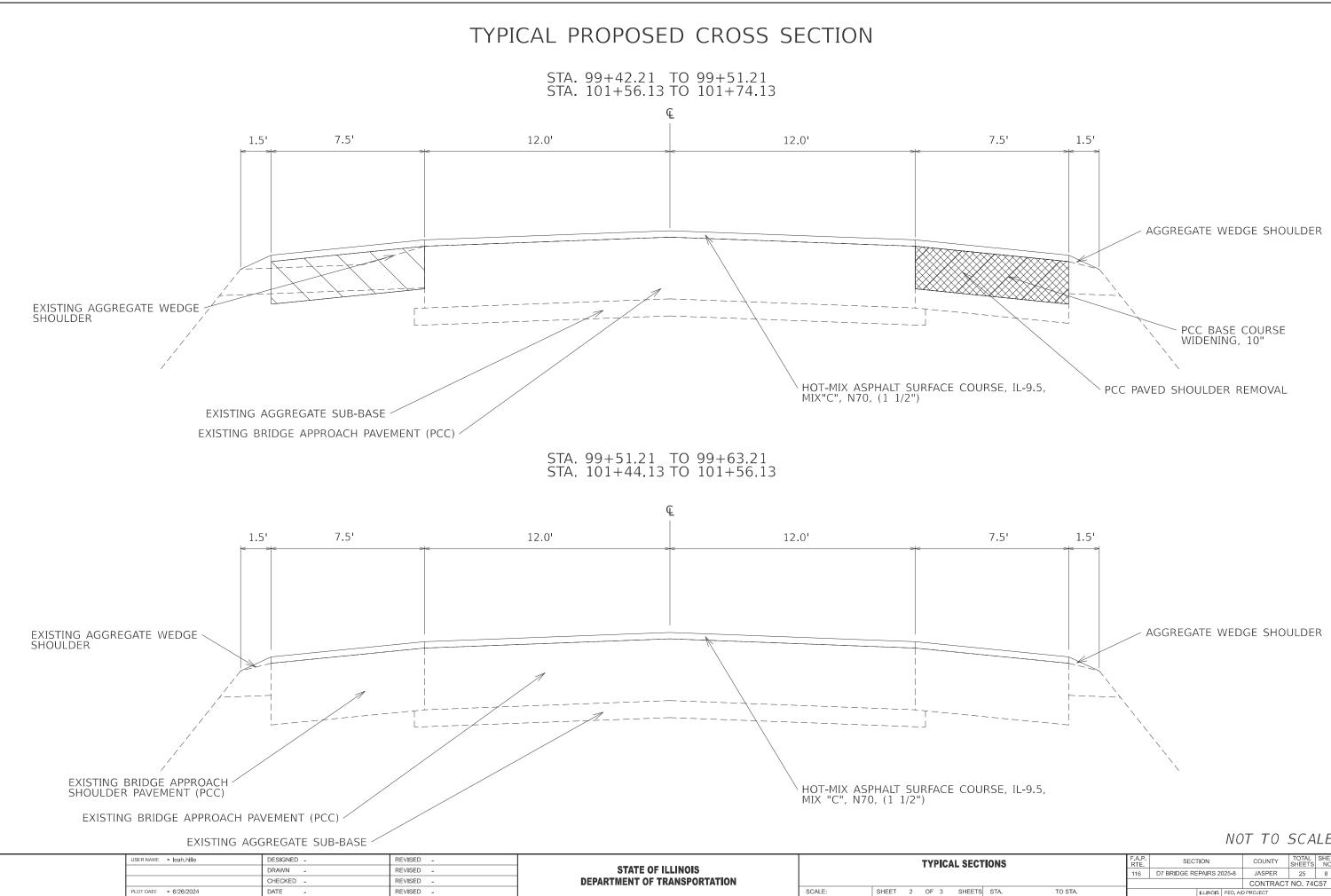


DETAIL		F.A.P. SECTION				TOTAL SHEETS	SHEET NO.
DETAIL	116 D7 BRIDGE REPAIRS 2025-8 JASPER 25				25	6	
	_				CONTRAC	ΓNO. 74	C57
TS STA. TO STA.			ILLINOIS	FED. AI	D PROJECT		



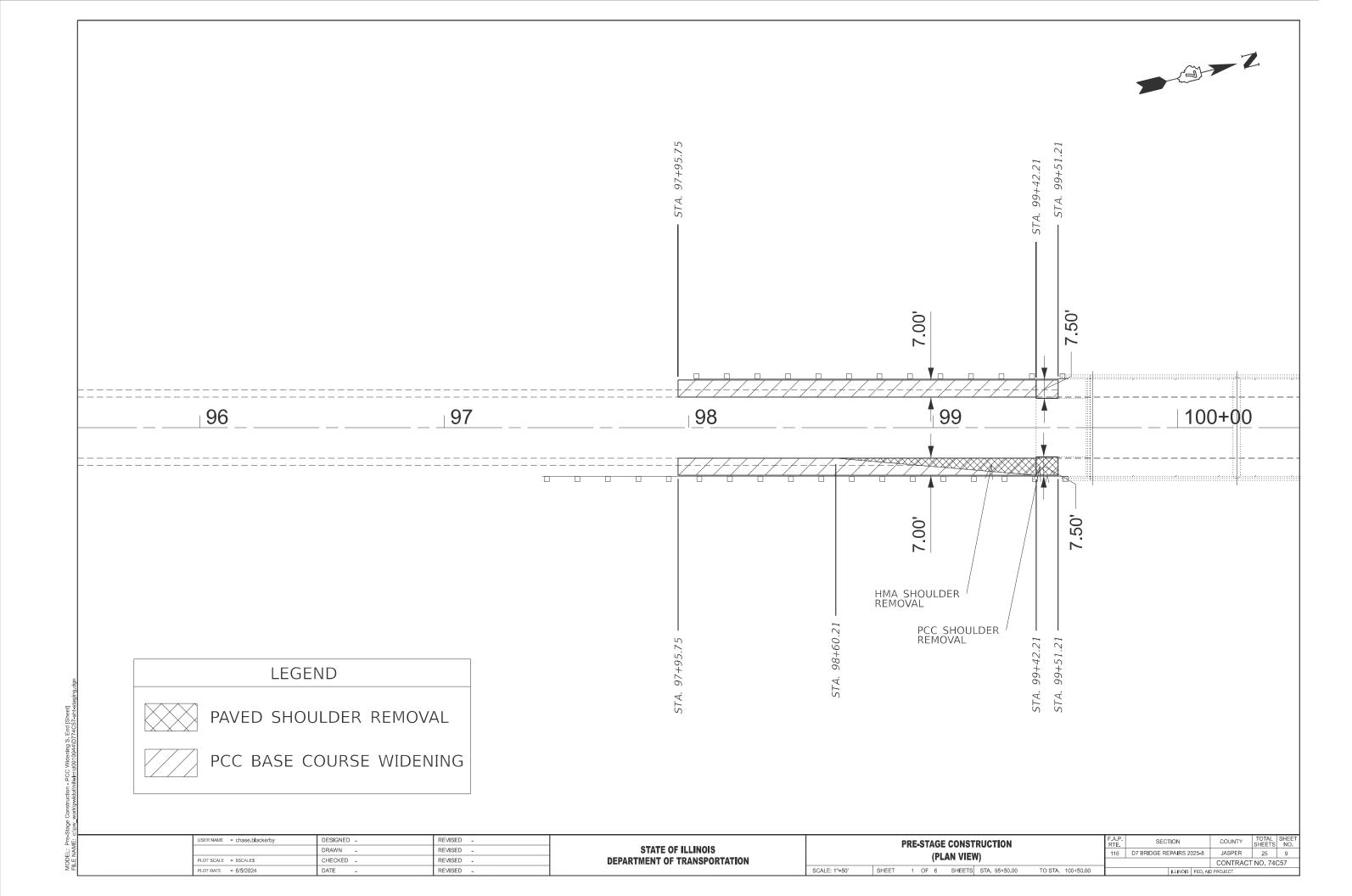
SCALE: SHEET 1 OF 3 SHEETS

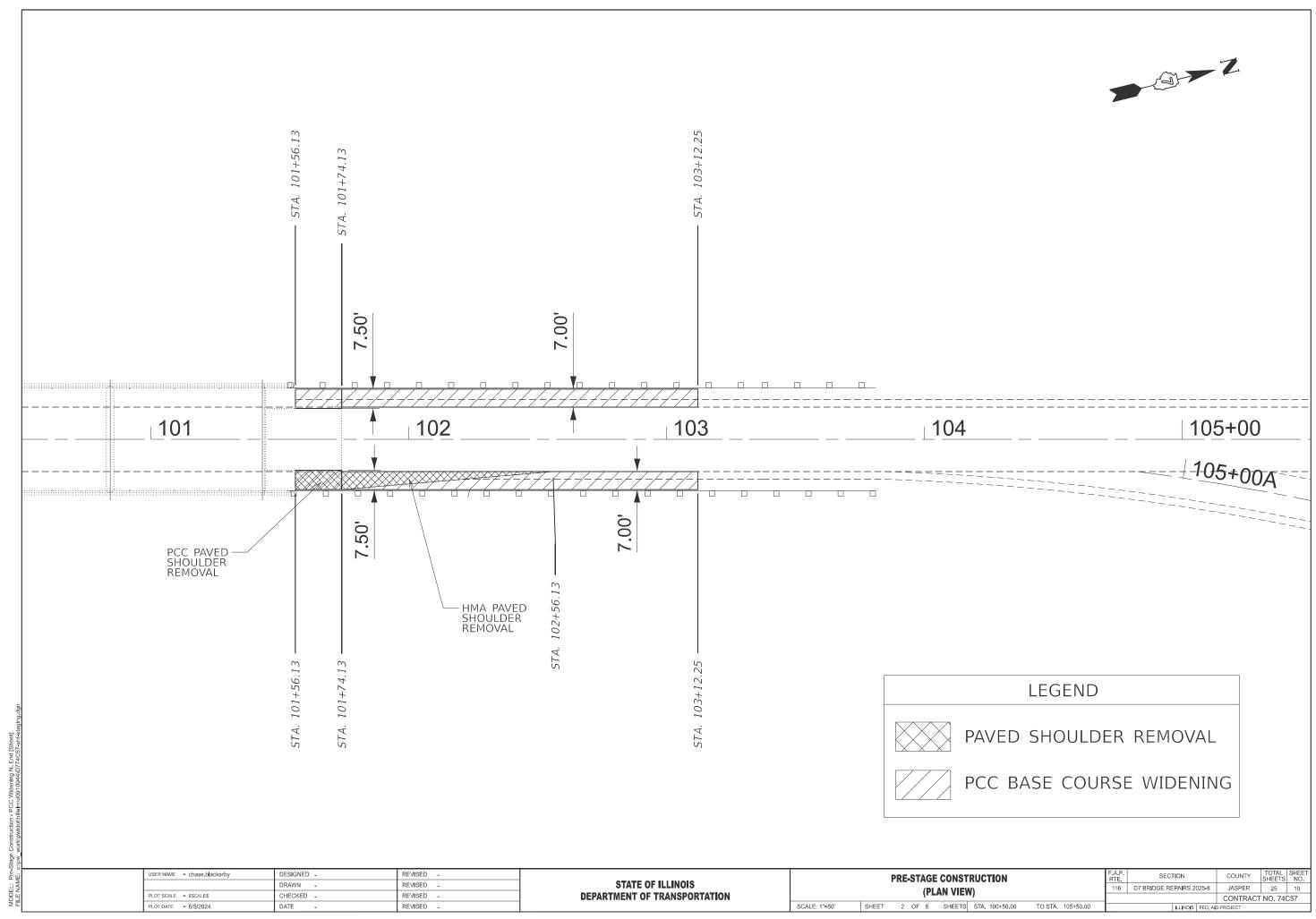
CTIONS		F.A.P. RTE. SECTION				TOTAL SHEETS	SHEET NO.
		D7 BRIDGE RE	PAIRS 2	025 <b>-</b> 8	JASPER	25	7
					CONTRACT	NO. 740	C57
TS STA. TO STA.			ILLINOIS	FED. AI	D PROJECT		



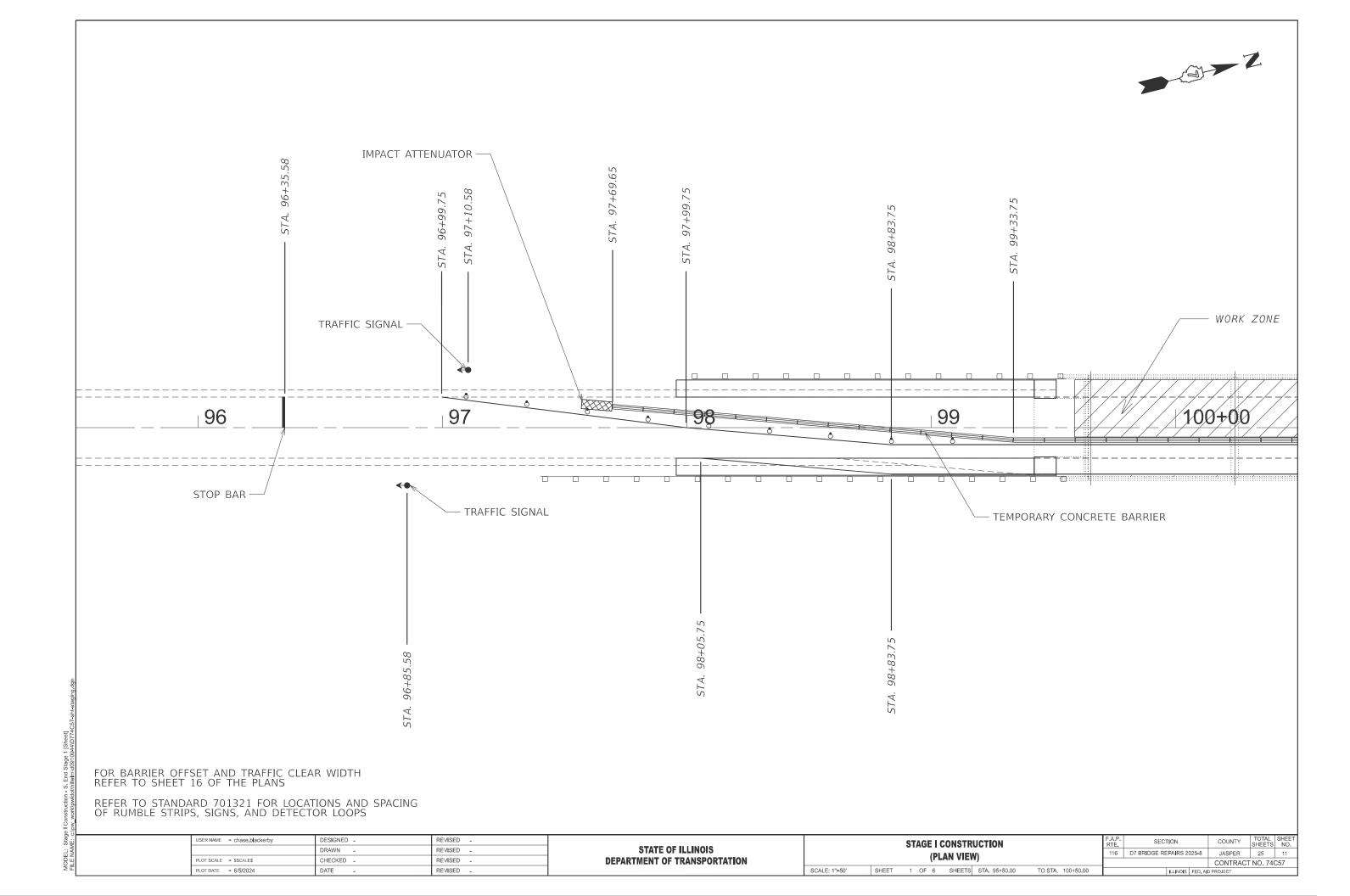
# NOT TO SCALE

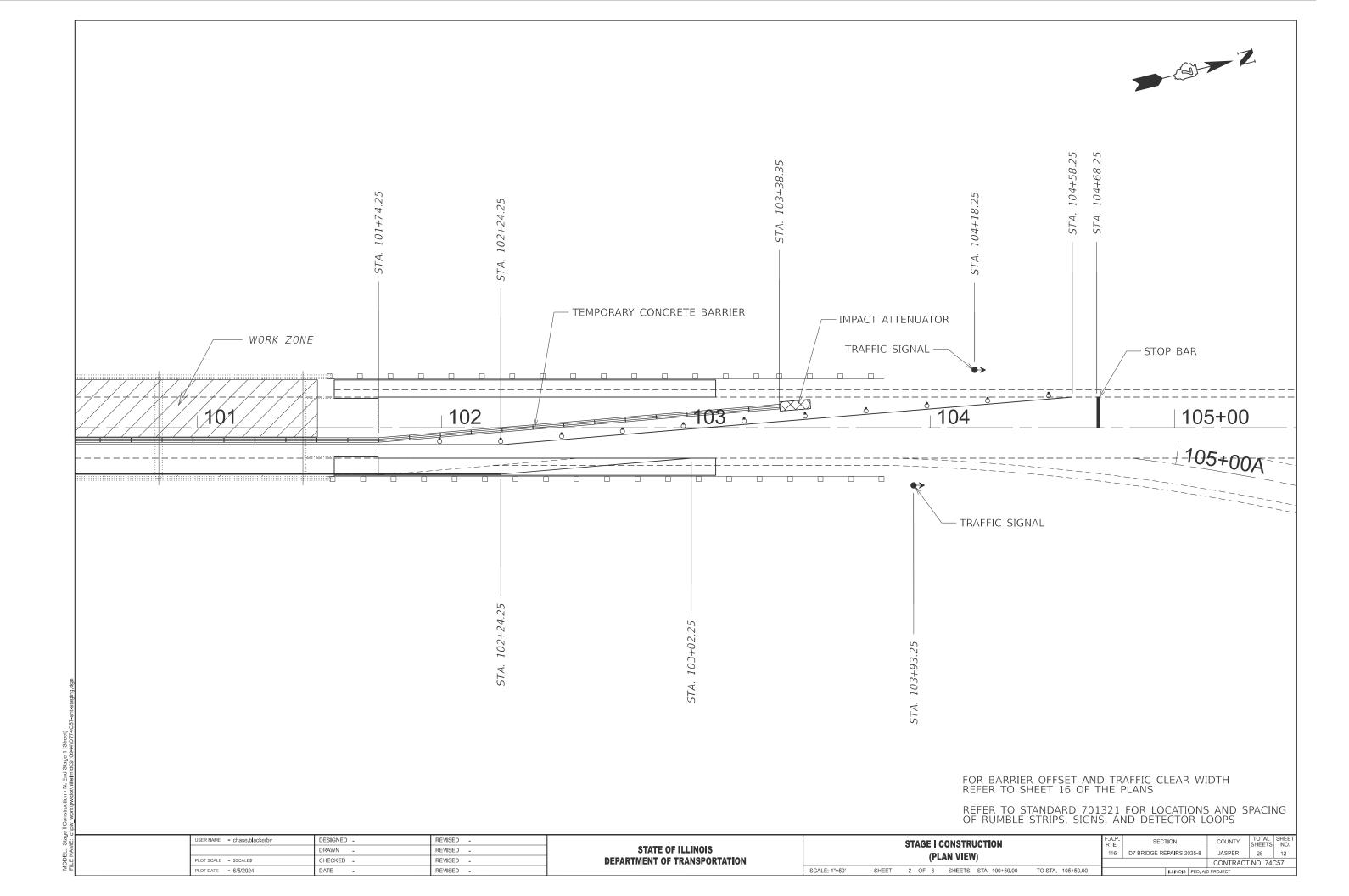
CTIONS		F.A.P. RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
		116	D7 BRIDGE REPAIRS 2025-8			JASPER	25	8
						CONTRACT	NO. 740	C57
TS STA.	TO STA.			ILLINOIS	FED. AID	PROJECT		

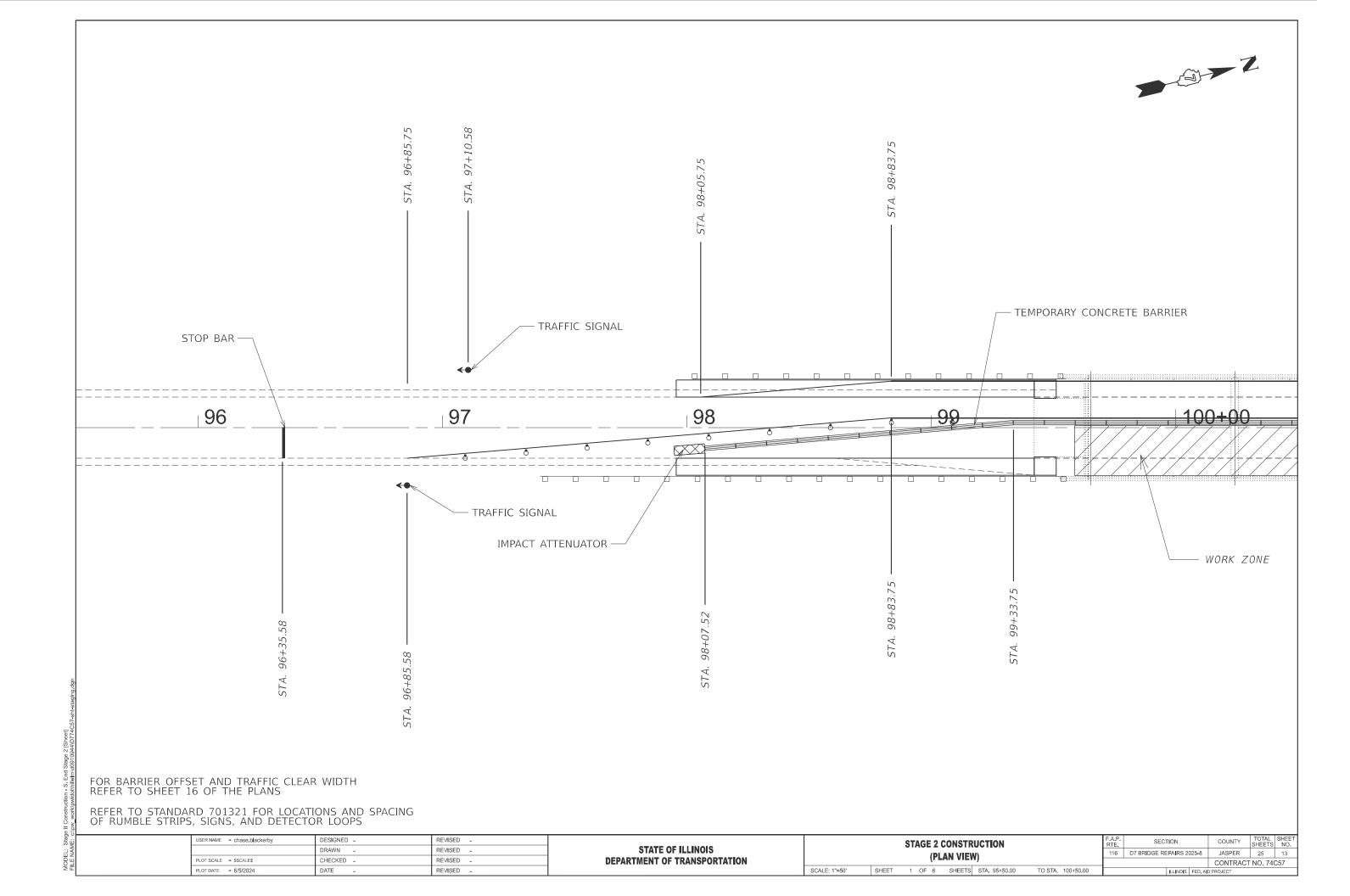


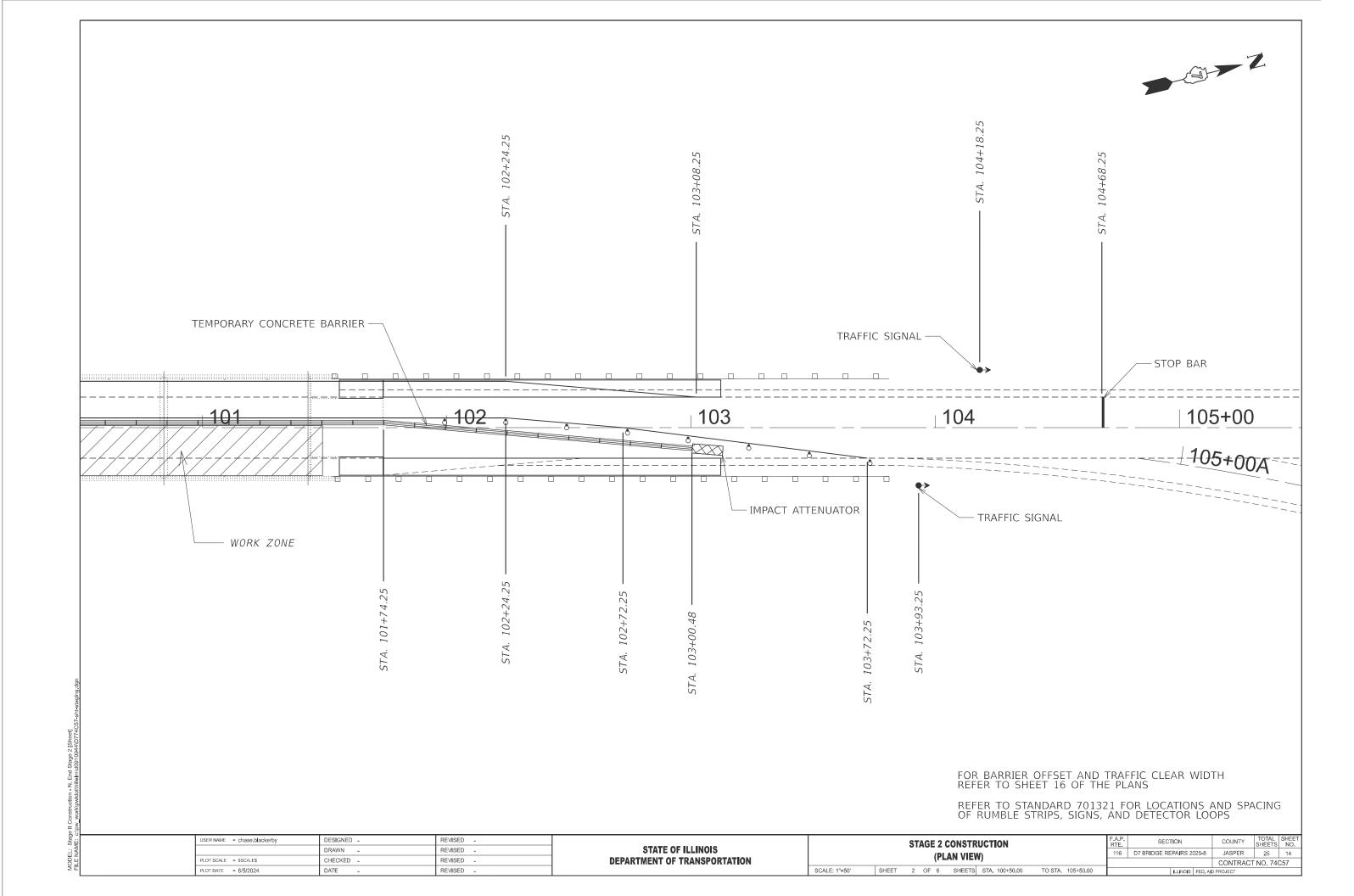


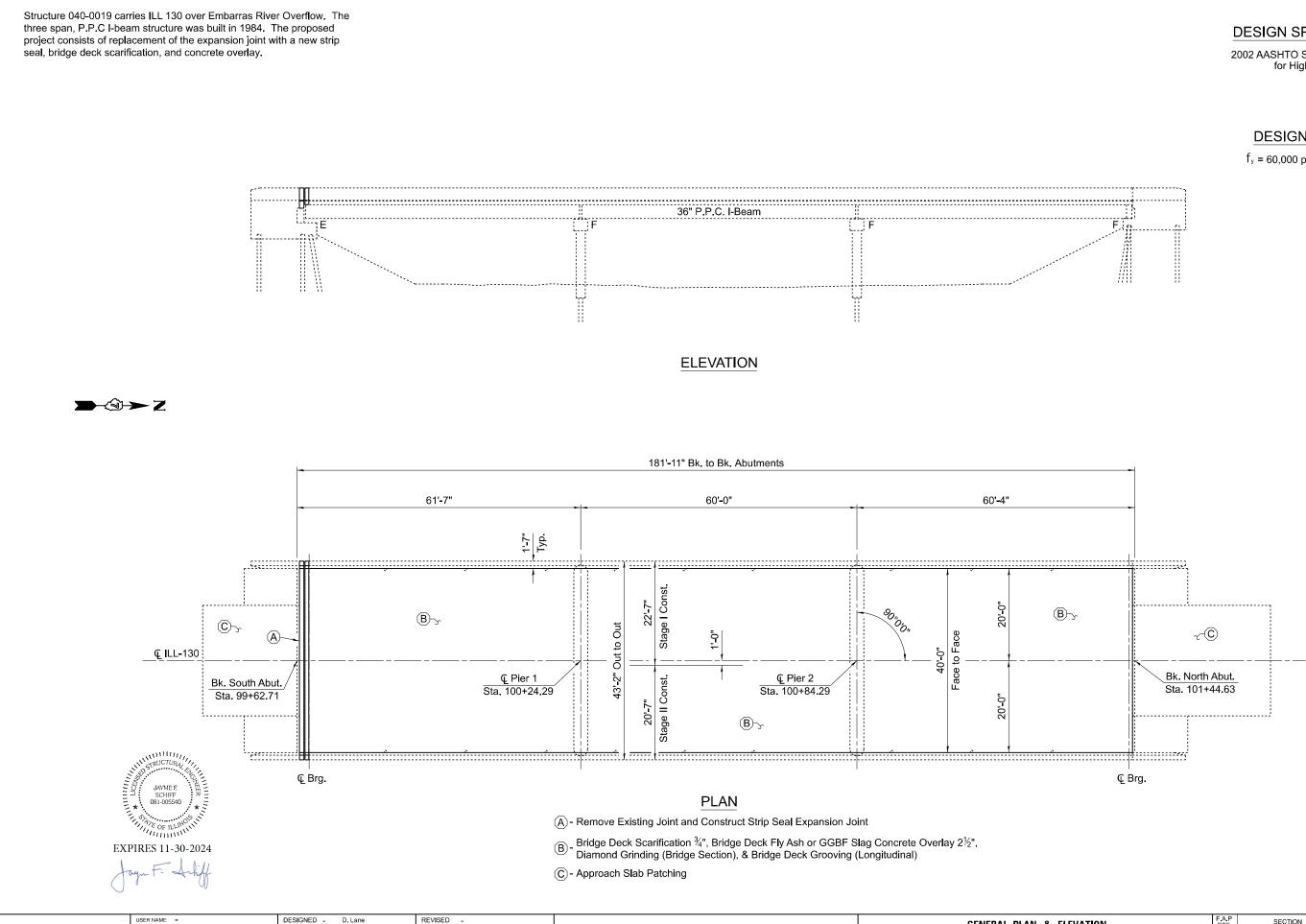
					CONTRACT NO
TA. 100+50.00	TO STA. 105+50.00		ILLINOIS	FED. AL	PROJECT









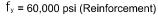


 USER NAME
 DESIGNED
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 REVISED
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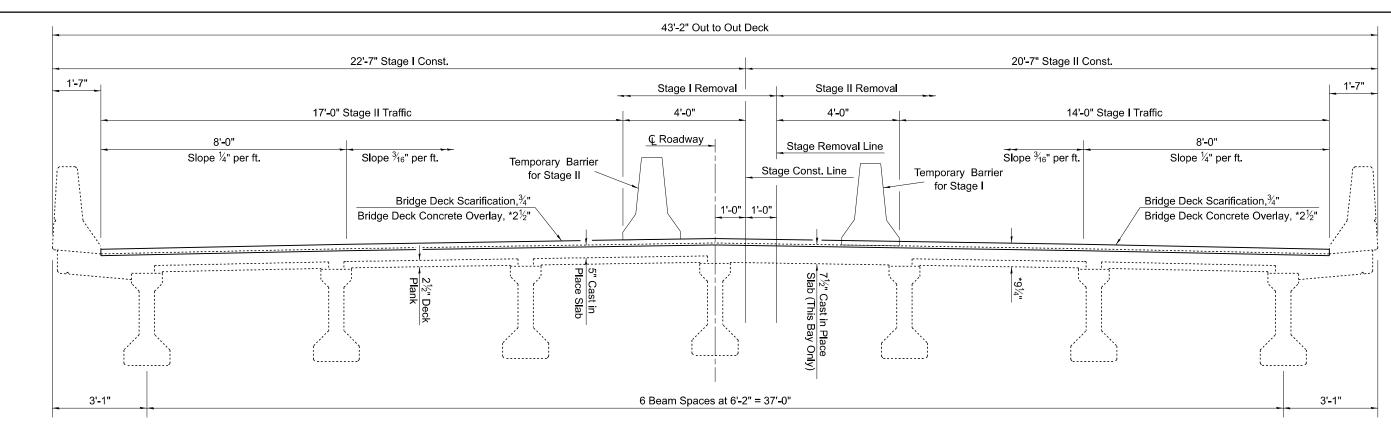
# DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

# **DESIGN STRESSES**



ELEVATION		F.A.P RTE	SEC	ΓΙΟΝ		COUNTY	TOTAL SHEETS	SHEET NO.
0019		116	D7 BRIDGE RE	PAIRS 20	025-8	JASPER	25	15
19		CONTRACT NO. 740				257		
STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		
	19	19	ELEVATION RTE. 19	ELEVATION RTE. SEC 19 116 D7 BRIDGE RE	ELEVATION RTE. SECTION 110 D7 BRIDGE REPAIRS 20 111 D7 BRIDGE REPAIRS 20 112 D7 BRIDGE REPAIRS 20 113 D7 BRIDGE REPAIRS 20 114 D7 BRIDGE REPAIRS 20 115 D7 BRIDGE REPAIRS 20 115 D7 BRIDGE REPAIRS 20 116 D7 BRIDGE REPAIRS 20 117 D7 BRIDGE REPAIR	ELEVATION     RTE.     SECTION       19     116     D7 BRIDGE REPAIRS 2025-8	RTE.         Section         County           19         116         D7 BRIDGE REPAIRS 2025-8         JASPER	ELEVATION         RTE         SECTION         COUNTY         SHEETS           19         116         D7 BRIDGE REPAIRS 2025-8         JASPER         25           CONTRACT NO. 740



# **GENERAL NOTES**

Plan dimensions and details relative to existing structure have been taken from existing plans and 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.

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

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.

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

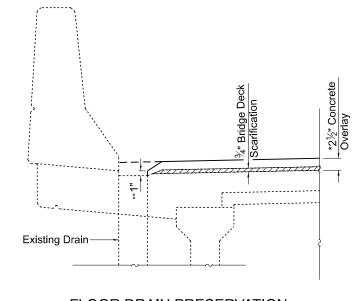
The majority of the existing bridge deck is constructed as a 5" thick cast-in-place reinforced slab overlaying 2½" precast deck planks. Full depth deck slab repair shall be prohibited in portions of the deck with existing precast deck planks. If unsound concrete is found after bridge deck scarification and cleaning, these areas shall be repaired partial depth as specified in the Special Provision for Bridge Deck Fly Ash or GGBF Slag Concrete Overlay and paid for according to Article 109.04. The Contractor shall exercise extreme caution when removing concrete near existing precast deck planks. Any damage to the precast deck planks shall be repaired to the satisfaction of the Engineer at the Contractor's expense.

The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beam.

# CROSS SECTION

Looking North

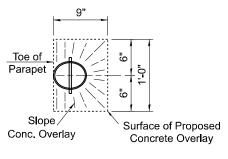
\*Overlay thickness prior to  $\frac{1}{4}$ " grinding (Typ.)



# FLOOR DRAIN PRESERVATION

\*\* Minimum thickness of overlay at edge of drain = 1"

USER NAME =	DESIGNED - D. Lane DRAWN - D. Lane	REVISED - REVISED -	STATE OF ILLINOIS			ISTRUCT	•	
PLOT SCALE = 100.000 '/ in.	CHECKED - D. Macklin	REVISED -	DEPARTMENT OF TRANSPORTATION		BILL OF	F MATE	RIALS S	.N. 0
PLOT DATE = 6/14/2024	DATE - January 202	24 REVISED -		SCALE:	SHEET 2	OF 7	SHEETS	STA.

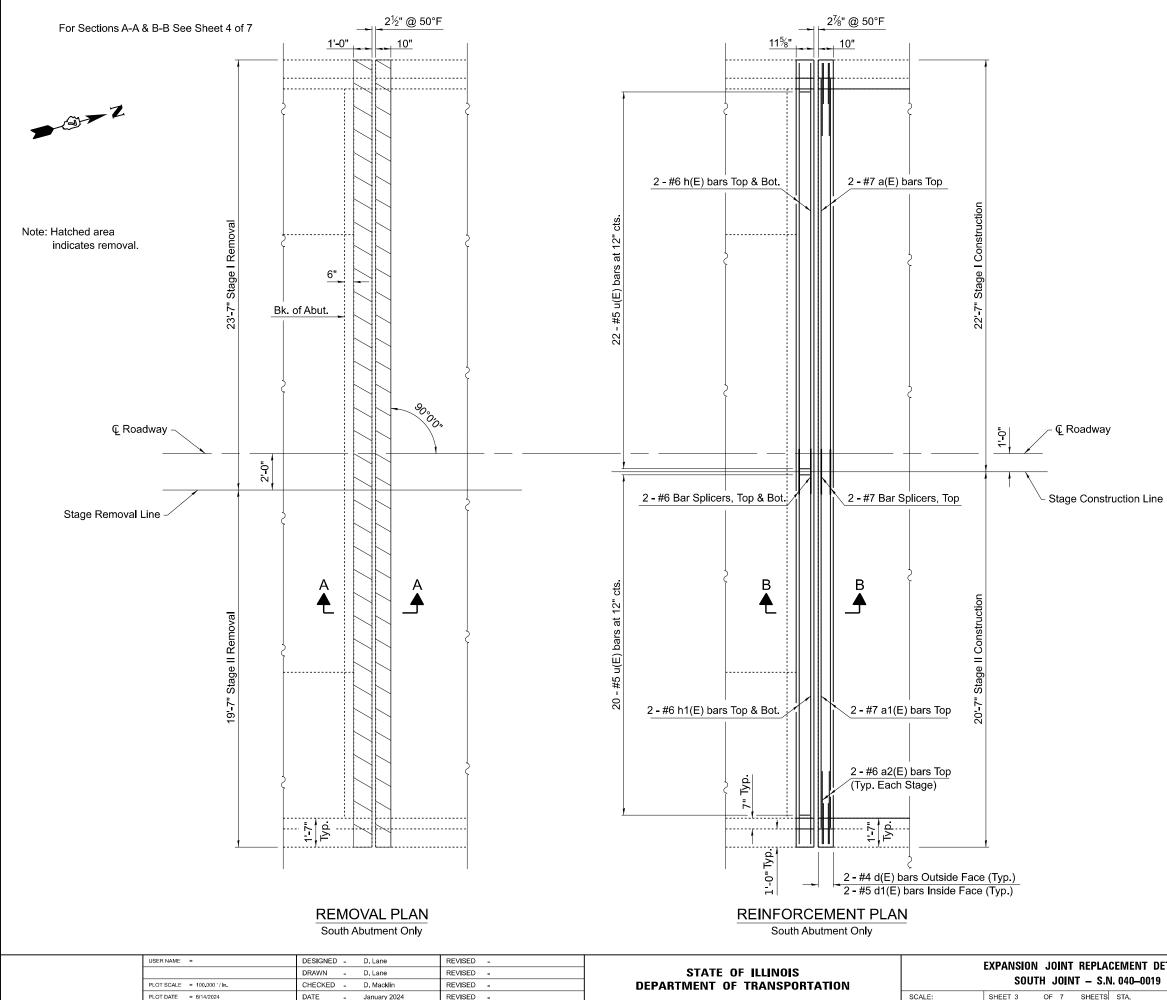


# TOP PLAN OF FLOOR DRAIN

# TOTAL BILL OF MATERIAL

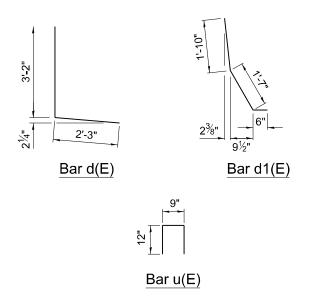
ITEM	UNIT	QUANTITY
Removal	Cu. Yd.	3.4
Superstructure	Cu. Yd.	3.3
ement Bars, Epoxy Coated	Pound	600
ers	Each	6
eck Scarification, ¾"	Sq. Yd.	795
eck Fly Ash or GGBF Slag Concrete Overlay, $2\frac{1}{2}$ "	Sq. Yd.	795
Grinding (Bridge Section)	Sq. Yd.	724
eck Grooving (Longitudinal)	Sq. Yd.	478
ed Joint Strip Seal	Foot	42
e Coat	Sq. Yd.	805
n Slab Repair (Partial Depth)	Sq. Yd.	2.0

ENERAL NOTES, &		F.A.P RTE	SECT	TION		COUNTY	TOTAL SHEETS	SHEET NO.	
S.N. 040-0019		116	D7 BRIDGE RE	PAIRS 20	025-8	JASPER	25	16	
3.N. 040-0019		1				CONTRACT	NO. 740	257	
S STA. TO STA.				ILLINOIS	FED. A	D PROJECT			



PLOT DATE = 6/14/2024

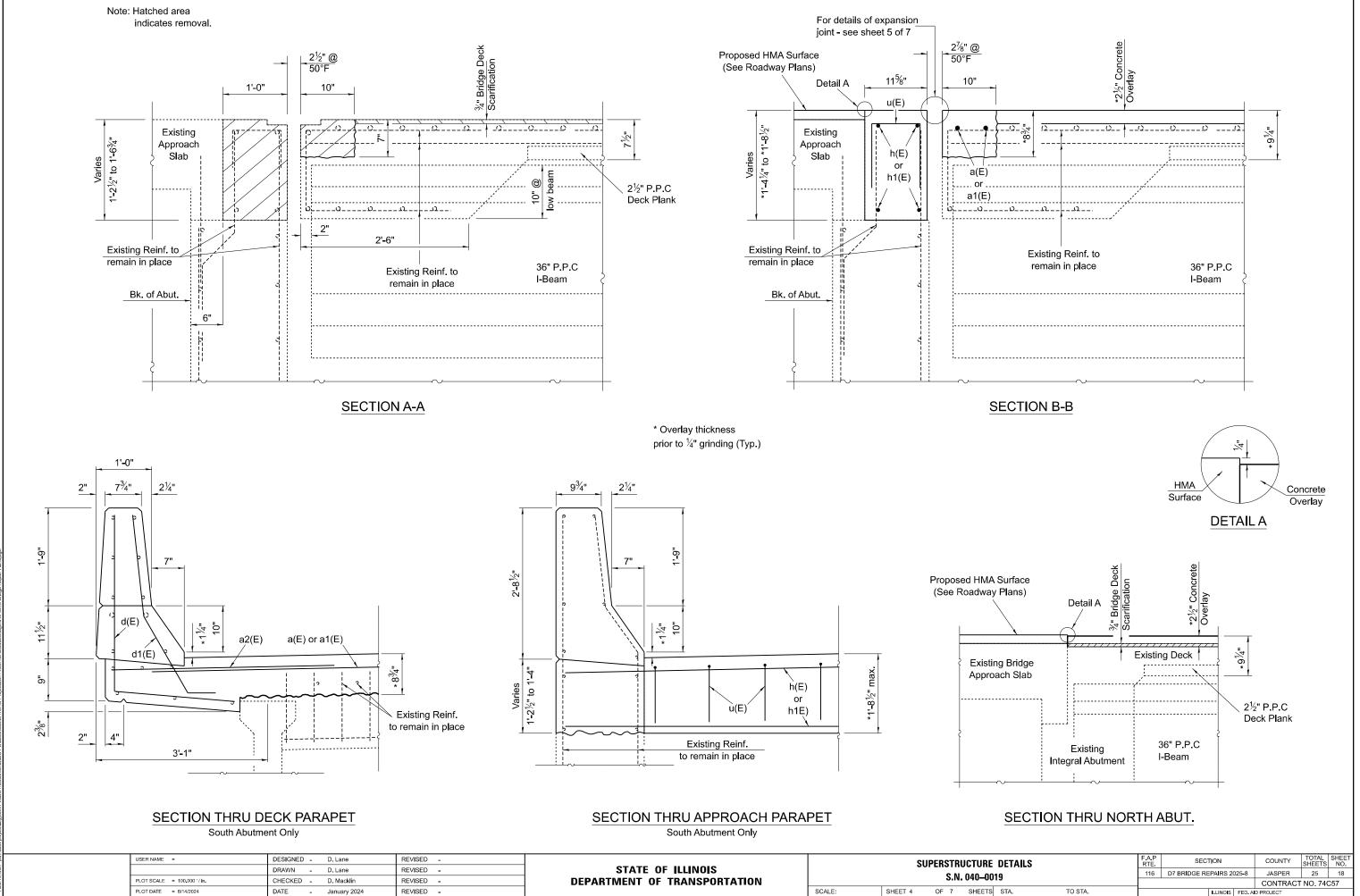
SHEET 3 OF 7 SHEETS



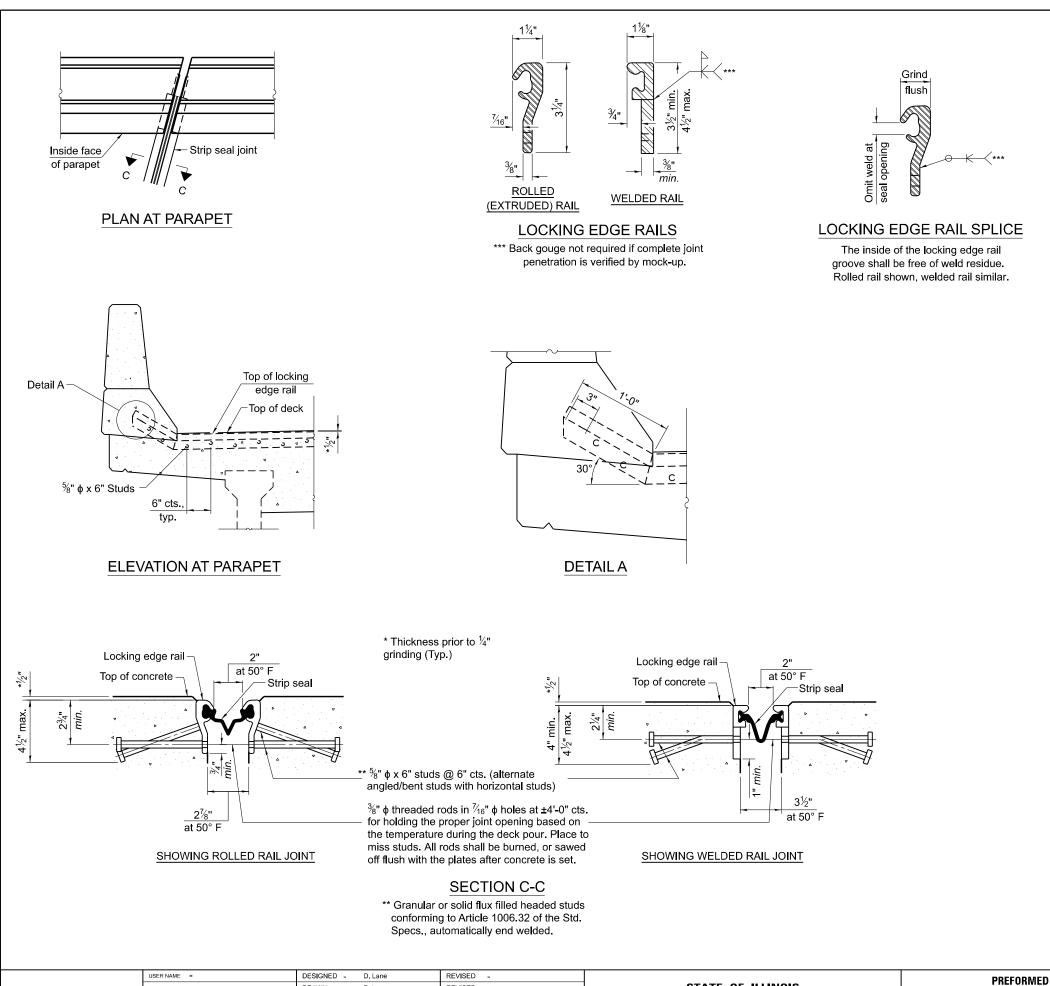
# **BILL OF MATERIAL - SOUTH ABUTMENT**

Bar	No.	Size	Length	Shape
a(E)	2	#7	21'-3"	
a1(E)	2	#7	19'-3"	
a2(E)	4	#6	4'-0"	
d(E) 4 #4		#4	5'-5"	L
d1(E)	4	#5	3'-11"	l
h(E)	4	#6	22'-3"	
h1(E)	4	#6	20'-3"	
u(E)	42	#5	2'-9"	
	ITEM		UNIT	QUANTITY
Concrete	Remova	I	Cu. Yd.	3.4
Concrete Superstructure			Cu. Yd.	3.3
Reinforcement Bars, Epoxy Coated			Pound	600
Bar Splice	ers		Each	6

ACEMENT DETAILS		F A P RTE	SEC <sup>-</sup>	COUNTY	TOTAL SHEETS	SHEET NO.			
SN 040-0019		116	D7 BRIDGE RE	PAIRS 20	025-8	JASPER	25	17	
	. 040-0013	CONTRACT NO. 7			NO. 740	257			
TS	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		



USER NAME =	DESIGNED - D. Lane	REVISED -			5111	PERSTRU	ICTURE	
	DRAWN - D. Lane	REVISED -	STATE OF ILLINOIS		501			
PLOT SCALE = 100.000 '/ in.	CHECKED - D. Macklin	REVISED -	DEPARTMENT OF TRANSPORTATION			S.N.	040-00	/19
PLOT DATE = 6/14/2024	DATE - January 2024	REVISED -		SCALE:	SHEET 4	OF 7	SHEETS	; ST



USER NAME =	DESIGNED - D. Lane	REVISED -			PREFORMED JOINT STRIP SEAL DETAIL	F.A.P SECTION	COUNTY TOTAL SHEET SHEETS NO.
	DRAWN - D.Lane	REVISED -	STATE OF ILLINOIS		S.N. 040–0019	116 D7 BRIDGE REPAIRS 202	25-8 JASPER 25 19
PLOT SCALE = 100.000 '/ in.	CHECKED - D. Macklin	REVISED -	DEPARTMENT OF TRANSPORTATION		5.11. 040-0019		CONTRACT NO. 74C57
PLOT DATE = 5/3/2024	DATE - January 2024	REVISED -		SCALE:	SHEET 5 OF 7 SHEETS STA. TO STA.	ILLINOIS	FED. AID PROJECT

# **GENERAL NOTES**

The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". 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  $4\frac{1}{2}$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

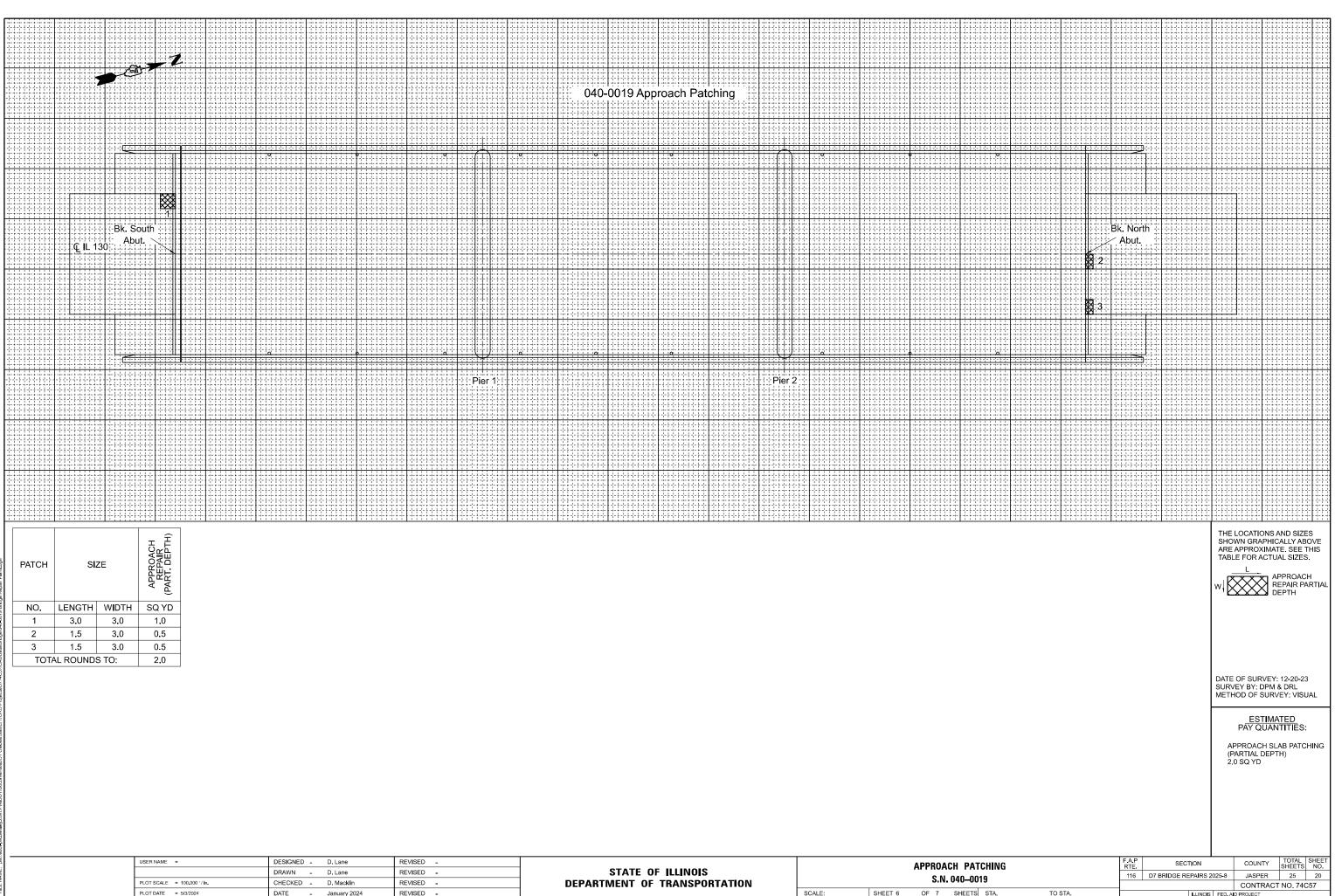
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " 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.

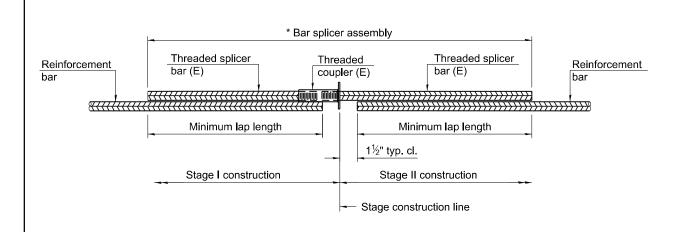
The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to 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.

# **BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	42



SHEET 6 OF 7 SHEETS STA.



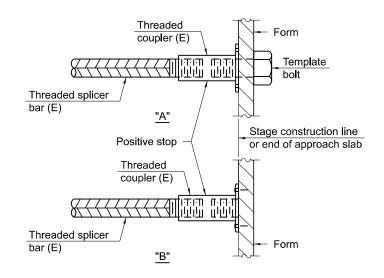
# STANDARD BAR SPLICER ASSEMBLY PLAN

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

Threaded splicer bar length = min. lap length +  $1\frac{1}{2}$ " + thread length

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

Location	Bar Size	No. assemblies required	Minimum Iap length
Deck	#7	2	5'-2"
Approach	#6	4	4'-0"



### **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.

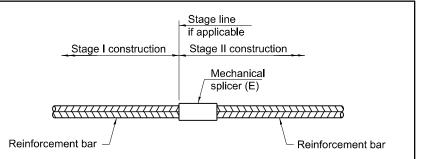
(E) : Indicates epoxy coating.

Notes:

MODEL: FILE NA?

5-15-2023

	USER NAME =	DESIGNED - D. Lane	REVISED -		BAR SPI	LICER ASSEMBLY AND MECHANICAL SPLICER DETAILS	F.A.P RTE	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
		DRAWN - D. Lane	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	S.N. 040–0019			D7 BRIDGE REPAIRS 2025-8	JASPER	25 21
2	PLOT SCALE = 100.000 '/ in.	CHECKED - D. Macklin	REVISED -					•	CONTRACT	T NO. 74C57
	PLOT DATE = 6/14/2024	DATE - January 2024	REVISED -		SCALE:	SHEET 7 OF 7 SHEETS STA. TO STA.		ILLINOIS FED. A		



# STANDARD MECHANICAL SPLICER

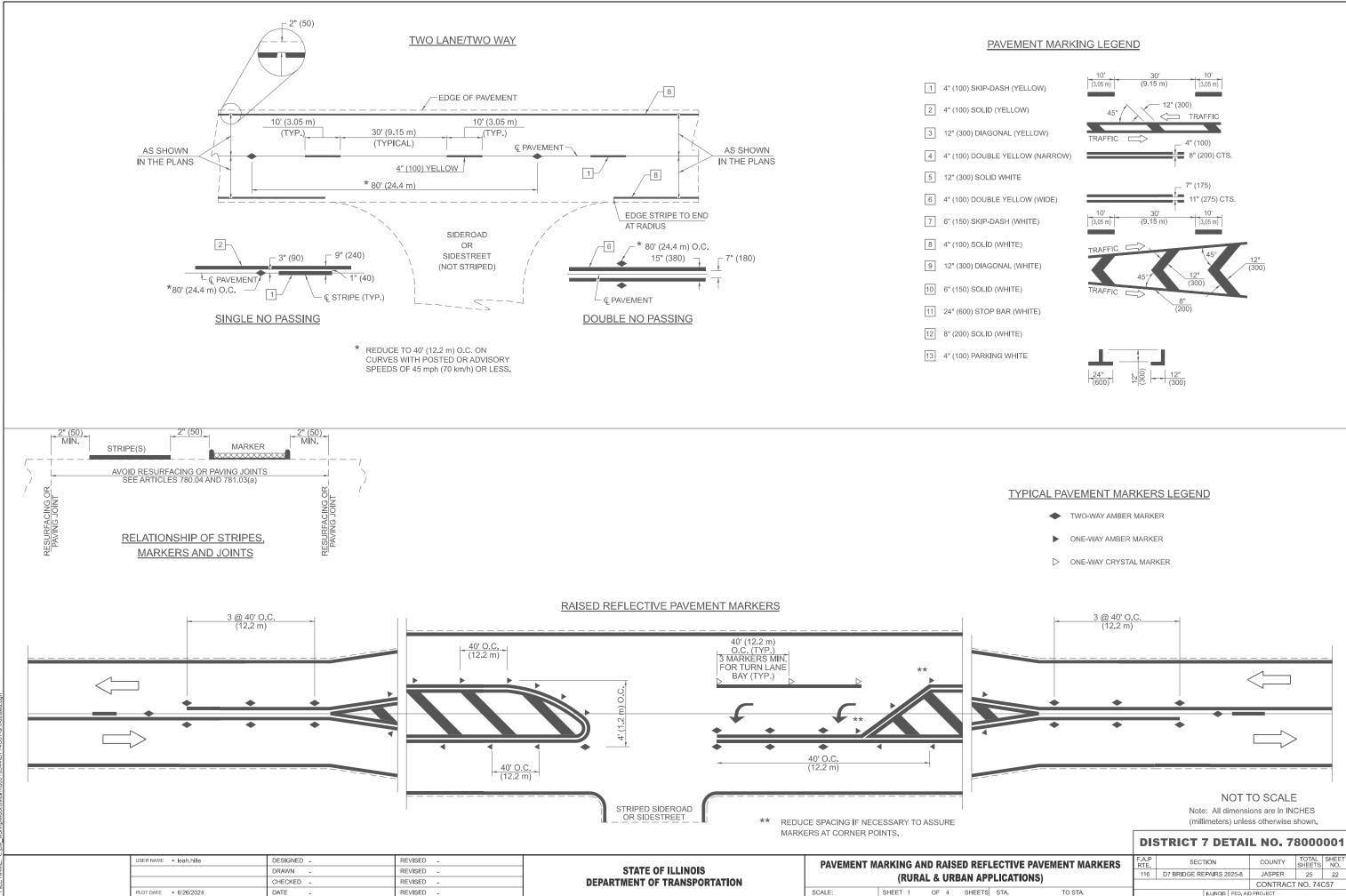
Location	Bar Size	No. assemblies required

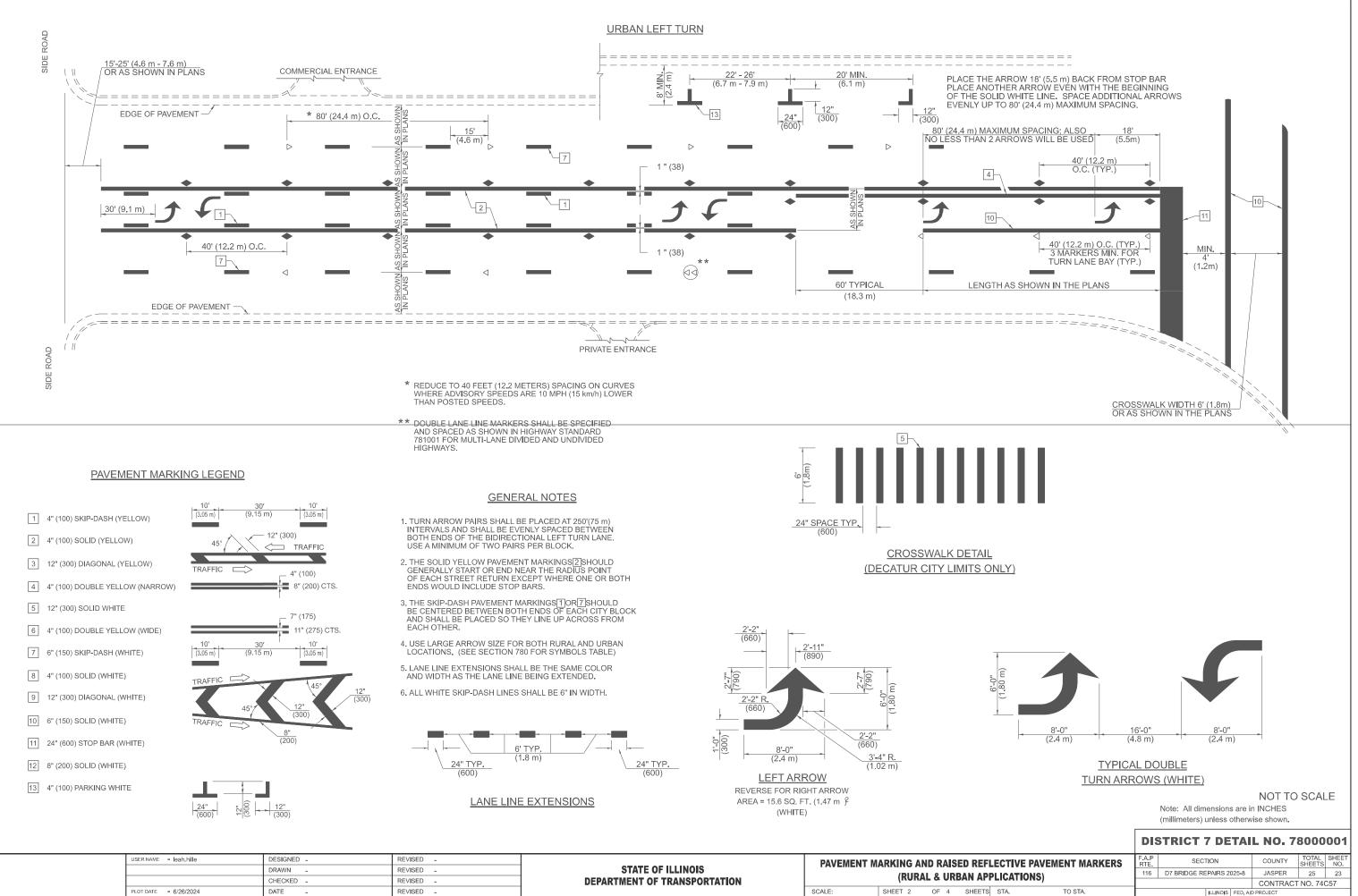
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

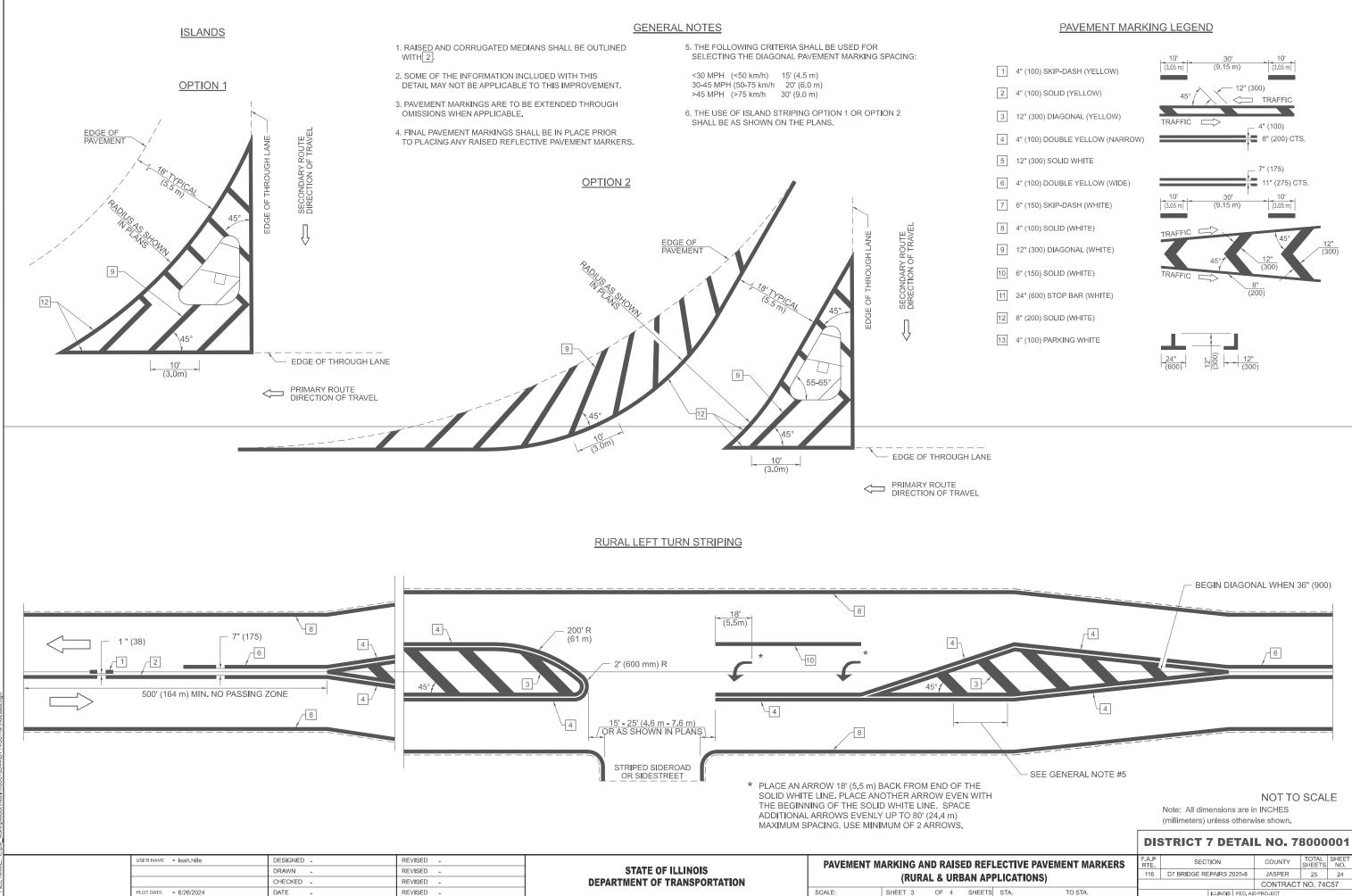
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for

alternatives



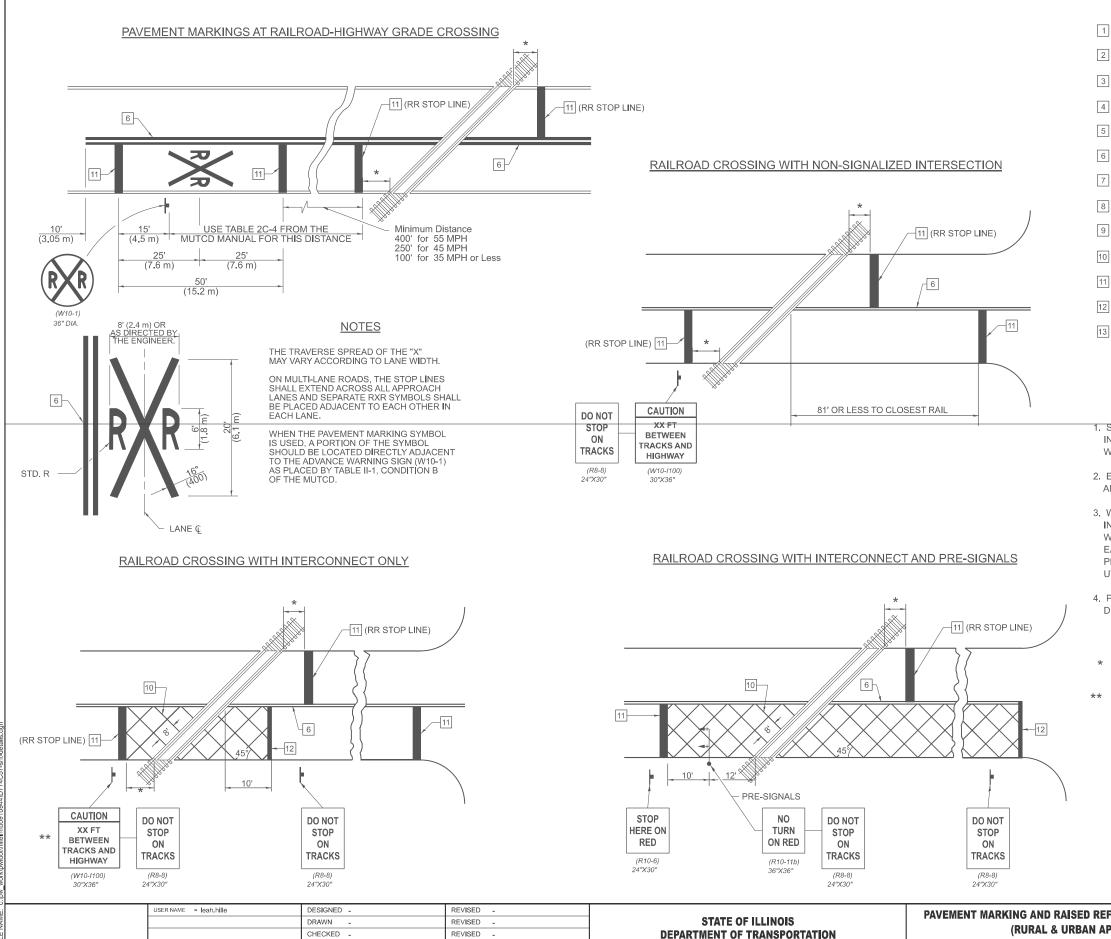


	USER NAME = leah.hille	DESIGNED -	REVISED -		PAVEMENT MARKING AND RAISED (RURAL & URBA				
		DRAWN -	REVISED -	STATE OF ILLINOIS					
		CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	(RURAL				
	PLOT DATE = 6/26/2024	DATE -	REVISED -	5	SCALE:	SHEET 2	OF 4	5	



TO STA. ILLINOIS FED. AID PROJEC

# SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING



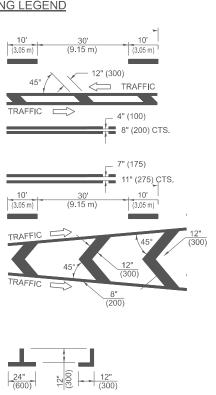
PLOT DATE = 6/26/2024

DATE

REVISED

# PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4" (100) DOUBLE YELLOW (NARROW)
- 5 12" (300) SOLID WHITE
- 6 4" (100) DOUBLE YELLOW (WIDE)
- 7 6" (150) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) PARKING WHITE



## **GENERAL NOTES**

 SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.

2. EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE PRE-SIGNALS ARE USED.

3. WHEN PEDESTRIAN SIGNALS ARE PRESENT WITH INTERCONNECTED SIGNALS, WARNING SIGN W10-I101 (18"X24") SHALL BE PLACED NEAR EACH PEDESTRIAN SIGNAL HEAD. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL NOT BE UTILIZED ALONG WITH INTERCONNECTED SIGNALS.

CAUTION
WALK TIME
SHORTENED
WHEN TRAIN
APPROACHES

(W10-l101) 18"X24"

4. PLEASE REFER TO THE IDOT BUREAU OF OPERATION MEMO OPS T-06 DATED DECEMBER 1, 2020 FOR ADDITIONAL INFORMATION

15' FROM NEAR RAIL OR 8' FROM AND PARALLEL TO GATE IF PRESENT

SCALE:

WARNING SIGN W10-I100 SHALL BE USED AS AN INTERIM MEASURE AT INTERCONNECTED SIGNAL LOCATIONS WHERE PRE-SIGNALS ARE TO BE INSTALLED IN THE FUTURE. THIS SIGN SHALL BE REMOVED WHEN THE PRE-SIGNALS ARE INSTALLED AND THE PAVEMENT MARKINGS ARE EXTENDED TO THE INTERSECTION.

### NOT TO SCALE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown

"X30"								DIS	STRICT 7 DETA	IL NO. 7	8000	001
M	ARKIN	G /	AND F	RAI	SED REFI	.ECTIV	VE PAVEMENT MARKERS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	(6	2116	2 1 1 2	116				116	D7 BRIDGE REPAIRS 2025-8	JASPER	25	25
	(RURAL & URBAN APPLICATIONS)									CONTRAC	T NO. 740	C57
	SHEET	4	OF	4	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		
	SHEET	4	OF	4	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		_