STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT = 1,550 (2021)

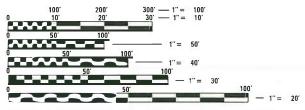
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GROSS LENGTH = 1602.00 FT. = 0.303 MILES NET LENGTH = 1602.00 FT. = 0.303 MILES



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

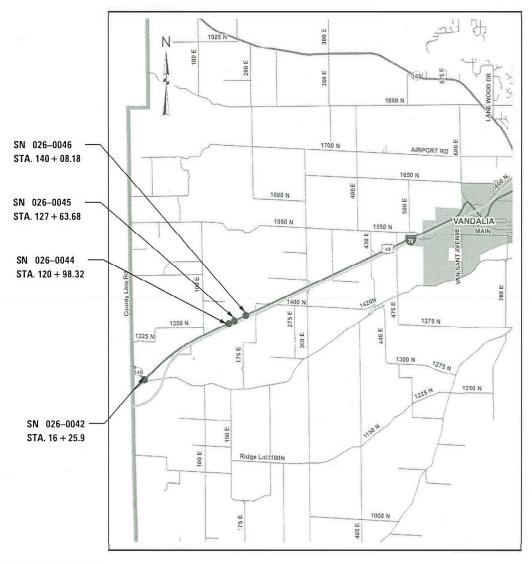
PROJECT ENGINEER: BRIAN LEWIS PROJECT MANAGER: MARIA BLOEMER

PHONE: (217)342–8360 CONTRACT NO. 74A92

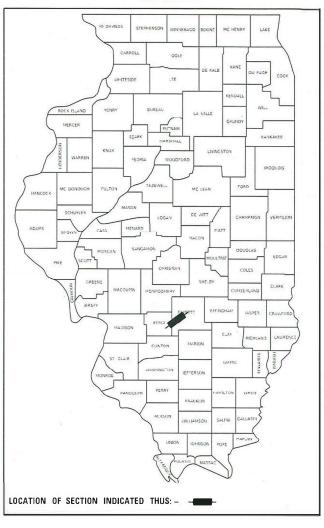
PROPOSED HIGHWAY PLANS

FAS ROUTE 1751 (US 40)
SECTION D7 BRIDGE REPAIRS 2023-6
PROJECT HBFP-ADTM(131)
BRIDGE DECK OVERLAY, BRIDGE JOINT
REPLACEMENT, BRIDGE REPAIRS
FAYETTE COUNTY

C-97-021-22



D-97-006-22





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV SEP

GENERAL NOTES

THE PROPOSED PROJECT IS LOCATED FROM 0.3 MILES TO 2.6 MILES EAST OF THE BOND/FAYETTE COUNTY LINE FROM CSXT RAILROAD TO HURRICANE CREEK FOR VARIOUS STRUCTURES. THIS LOCATION IS BETWEEN MULBERRY GROVE AND VANDALIA. THESE STRUCTURES ARE 026-0042, 026-0044, 026-0045, AND 026-0046.

THE WORK INCLUDES BRIDGE DECK OVERLAY, BRIDGE DECK EXPANSION JOINT REPLACEMENT, AND BRIDGE DECK REPAIRS.

THE WORK WILL CONSIST OF CONCRETE REMOVAL, CONCRETE SUPERSTRUCTURE, REINFORCEMENT BARS, BRIDGE DECK GROOVING, BRIDGE DECK SCARIFICATION, BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, PREFORMED JOINT STRIP SEAL, PROTECTIVE COAT, DECK SLAB REPAIR, APPROACH SLAB REPAIR, STRUCTURAL REPAIR OF CONCRETE, PROTECTIVE SHIELD, RAISED REFLECTIVE PAVEMENT MARKER REMOVAL, AND FURNISHING AND ERECTING STRUCTURAL STEEL. ALSO, THERE WILL BE HMA SURFACE REMOVAL AND RESURFACING.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FIELD, PRIVATE, AND COMMERCIAL ENTRANCES AND PROPERTY AT LOCATED WITHIN THE ROAD CLOSURE AT ALL TIMES.

SEE ROAD CLOSURE SPECIAL PROVISION FOR DETAILS ON ROAD CLOSURES AND DETOUR DETAILS.

HMA SHOULDERS ARE TO BE PAVED IN CONJUNCTION WITH HMA SURFACE COURSE FOR MAINLINE PAVING, A PAVER IS TO BE USED INSTEAD OF A ROAD WIDENER FOR ALL HMA PAVING WORK WITH MAINLINE AND SHOULDER OF THE APPROACH PAVEMENT AND THE ROADWAY PAVEMENT AS LISTED ACCORDING TO THE SCHEDULE OF QUANTITIES.

MATERIAL FOR AGGREGATE WEDGE SHOULDER, TYPE B SHALL BE CRUSHED STONE OR CRUSHED CONCRETE.

PAVEMENT MARKING TAPE SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON HMA SURFACE COURSE. PAINT PAVEMENT MARKINGS SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON MILLED SURFACES.

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

APPLICATION RATES

AGGREGATE WEDGE SHOULDER: 2.05 TON/CU YD 0.050 LB/SQ FT - MILLED SURFACE

HOT-MIX ASPHALT SURFACE COURSE: 112 LB/SQ YD/INCH

THE QUANTITIES FOR PAINT PAVEMENT MARKING - LINE 4" ARE AS FOLLOWS: 1069' OF YELLOW AND 3204' OF WHITE.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:

LOCATION	APPLICATION	COURSE	PG	DESIGN AIR VOIDS	MIXTURE COMPOSITION	FRICTION AGGREGATE	QUALITY MANAGEMENT
US ROUTE 40	HMA SURFACE COURSE, MIX "C", N70 (1 1/2")	SURFACE	PG 64-22	4.0% @ N=70	IL - 9.5	MIXTURE C	QC/QA

INDEX OF SHEETS

TITLE SHEET NO

COVER SHEET GENERAL NOTES, INDEX OF SHEETS 3-4 SUMMARY OF QUANTITIES 5-10 TYPICAL SECTIONS SCHEDULE OF QUANTITIES BRIDGE PLAN SHEETS 43-45 DETOUR SIGNING PROJECT DETAIL DRAWINGS & PAVING DETAILS PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKER APPLICATIONS 47-50

HIGHWAY STANDARDS

SCALE:

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

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS - DAY ONLY
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS \geq 45 $^{\text{N}}$
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION
BLR 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION
420001-10	DAVEMENT IOINTS

REV. - MS

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Ĵ	PLOT DATE = 8/17/2022	DATE	REVISED +	

SHMMARY OF CHANTITIES				STRUCTION TYPE CODE	$\dashv 1$	SLIMMARY OF OLIANITITIES				STRUCTION TYPE CODE
ITEM	UNIT	TOTAL OUANTITIES	0047 80% FED 20% STATE		CODE NO	ITEM ITEM	UNIT	TOTAL QUANTITIES	0047 80% FED 20% STATE	
BITUMINOUS MATERIALS (TACK COAT)	POUND	1268	1268		67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	7	7	
HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	1953	1953		67100100	MOBILIZATION	L SUM	1	1	
TEMPORARY RAMP	SO YD	119	119		70100460		L SUM	1	1	
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX	TON	237	237			701306				
"C", N70					70106800	CHANGEABLE MESSAGE SIGN	CAL MO	14	14	
AGGREGATE WEDGE SHOULDER, TYPE B	TON	156	156		70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28	
CONCRETE REMOVAL	CU YD	65.3	65.3		70300100	SHORT TERM PAVEMENT MARKING	FOOT	321	321	
PROTECTIVE SHIELD	SQ YD	300	300		70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	54	54	
CONCRETE SUPERSTRUCTURE	CU YD	69.8	69.8		70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	4273	4273	
BRIDGE DECK GROOVING	SQ YD	2121	2121		* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	4273	4273	
PROTECTIVE COAT	SQ YD	2430	2430		78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	3	3	
REINFORCEMENT BARS, EPOXY COATED	POUND	10160	10160		78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1425	1425	
PREFORMED JOINT STRIP SEAL	FOOT	356	356		X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR	L SUM	1	1	
FRAMES AND GRATES TO BE ADJUSTED	EACH	10	10			21				
					X7011801	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR	L SUM	1	1	
	BITUMINOUS MATERIALS (TACK COAT) HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT TEMPORARY RAMP HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70 AGGREGATE WEDGE SHOULDER, TYPE B CONCRETE REMOVAL PROTECTIVE SHIELD CONCRETE SUPERSTRUCTURE BRIDGE DECK GROOVING PROTECTIVE COAT REINFORCEMENT BARS, EPOXY COATED	BITUMINOUS MATERIALS (TACK COAT) POUND HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT SO YD TEMPORARY RAMP SO YD HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX TON "C", N70 AGGREGATE WEDGE SHOULDER, TYPE B TON CONCRETE REMOVAL CU YD PROTECTIVE SHIELD SO YD BRIDGE DECK GROOVING SO YD PROTECTIVE COAT SO YD REINFORCEMENT BARS, EPOXY COATED POUND PREFORMED JOINT STRIP SEAL FOOT	TITEM UNIT OUANTITIES BITUMINOUS MATERIALS (TACK COAT) POUND 1268 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT SO YD 1953 TEMPORARY RAMP SO YD 119 HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX TON 237 "C", N70 AGGREGATE WEDGE SHOULDER, TYPE B TON 156 CONCRETE REMOVAL CU YD 65.3 PROTECTIVE SHIELD SO YD 300 CONCRETE SUPERSTRUCTURE CU YD 69.8 BRIDGE DECK GROOVING SO YD 2121 PROTECTIVE COAT SO YD 2430 REINFORCEMENT BARS, EPOXY COATED POUND 10160 PREFORMED JOINT STRIP SEAL FOOT 356	TOTAL OLANTITIES	107A 20047 2004	SUMMARY OF QUANTITIES TOTAL TOTA	TIDM	TIEN	SUMMARY OF QUANTITIES Triangle Summary OF QUANTITIES Summary OF QUANT	SUMMARY OF QUANTITIES 1914 2007

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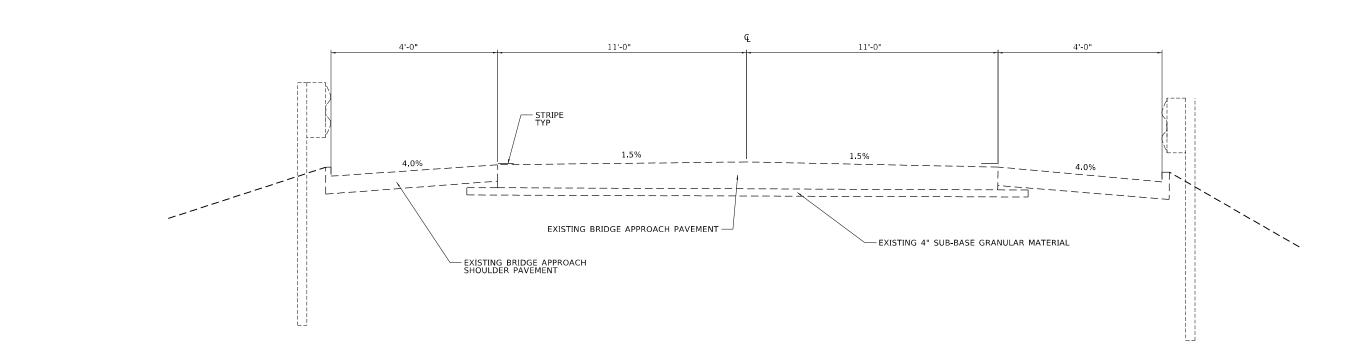
* SPECIALTY ITEM

USER NAME = Mona.Steffen	DESIGNED -	REVISED -								F.A.S.	SECTION	COUNTY	TOTAL SHEET SHEETS NO
	DRAWN -	REVISED -	STATE OF ILLINOIS	SUMMARY OF QUANTITIES				1751 D7 BI	RIDGE REPAIRS 2023-	6 FAYETTE	50 3		
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	ļ						_!		CONTRAC	CT NO. 74A92
PLOT DATE = 8/17/2022	DATE -	REVISED -	1	SCALE:	SHEET 1	OF 2	SHEETS	ΤΔ	TO STA		II LINOIS L FED	AID BROIECT	

	C. W. M. A. D. C.		<u> </u>	CONS	TRUCTION TYPE CODE		6.000					CON	STRUCTION TYPE	E CODE
	SUMMARY OF QUANTITIES		TOTAL	0047			SUMMARY	OF.	QUANTITIES		TOTAL	0047		
CODE NO	ITEM	UNIT	QUANTITIES	80% FED 20% STATE		CODE NO		ITEM		UNIT	QUANTITIES	80% FED 20% STATE		
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SO YD	22	22										
														1
70004000		50.45	_	_										<u> </u>
20001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	7	7										
														ļ
Z0001905	STRUCTURAL STEEL REPAIR	POUND	770	770										
Z0012110	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE	SQ YD	2260	2260										1
	OVERLAY, 2 1/4"													
														1
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	2260	2260										
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO	SQ FT	20	20										
	OR LESS THAN 5 INCHES)													
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER	SQ FT	20	20										
	THAN 5 INCHES)												1	1
	THAN 5 INCHES?						<u> </u>							1
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SO YD	10	10										
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	2	2										
														1
70016702	DETOUR SIGNING	L SUM	1	1										1
20010102	SE TOUR STORTING	1	•	<u>.</u> 									<u> </u>	<u> </u>
										<u> </u>				
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1										
Z0076600	TRAINEES	HOUR	500	500										
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500										1
	The state of the s		L	300			<u> </u>							

Ø 0042

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



S.N. 026-0042

NOT TO SCALE

NOT TO SCALE

STA. 14+35 to STA. 15+20.40

STA. 17+31.40 to STA. 18+17.00

4-0° 11'-0° Q 11'-0° 4'-0°

STRIPE
TYP

4.0%

1.5%

1.5%

4.0%

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT HOT-MIX ASPHALT SURFACE COURSE, III-9.5, MIX "C", N70 (1-1)/2")

PROPOSED ROADWAY TYPICAL SECTION

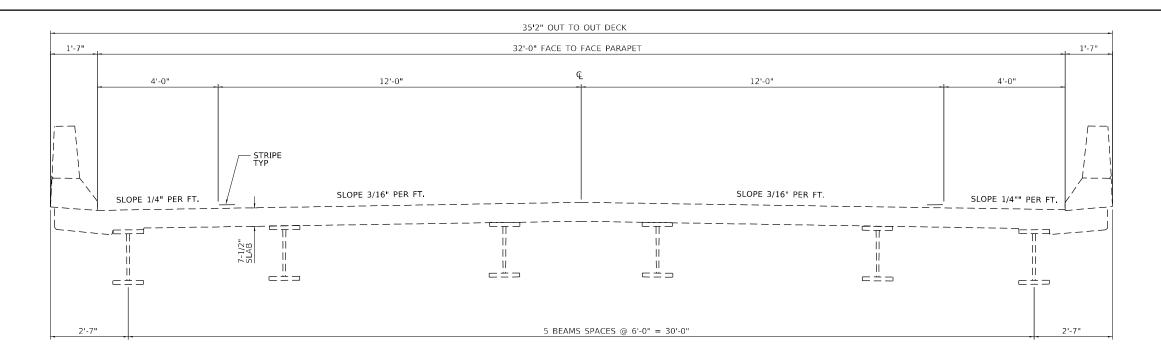
S.N. 026-0042

STA. 14+35 to STA. 15+20.40

STA. 17+31.40 to STA. 18+17.00

SHEET 1 OF 6 SHEETS STA.

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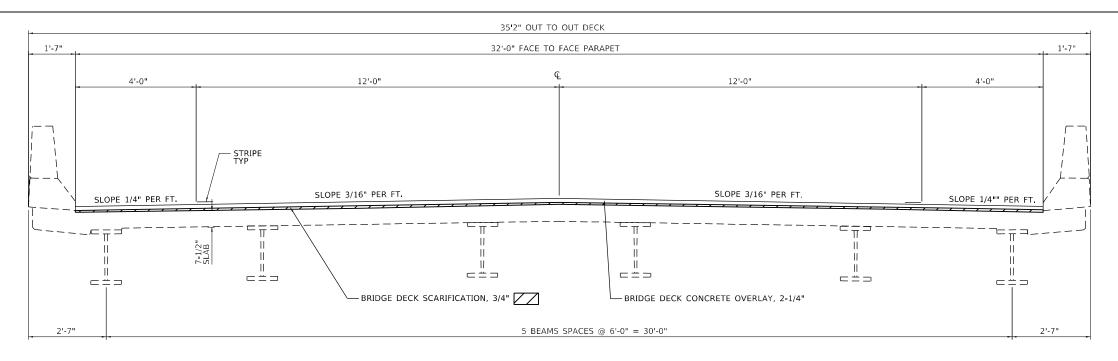


S.N. 026-0042

STA. 15+20.40 to STA. 17+31.40

BK. WEST ABUT. TO BK. EAST ABUT.

NOT TO SCALE



PROPOSED ROADWAY TYPICAL SECTION

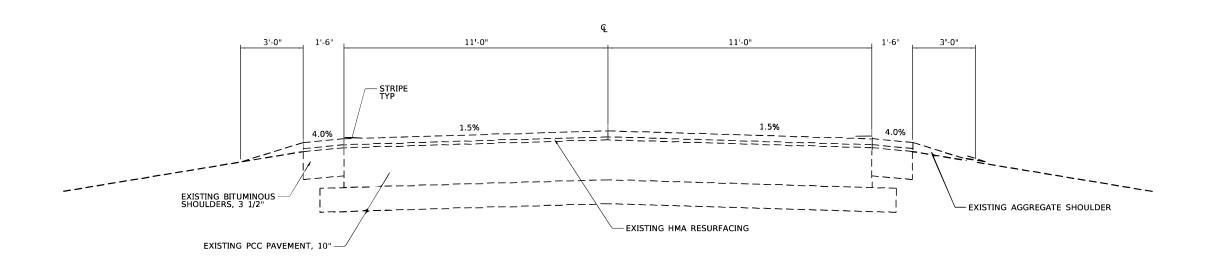
S.N. 026-0042

STA. 15+20.40 to STA. 17+31.40

BK. WEST ABUT. TO BK. EAST ABUT.

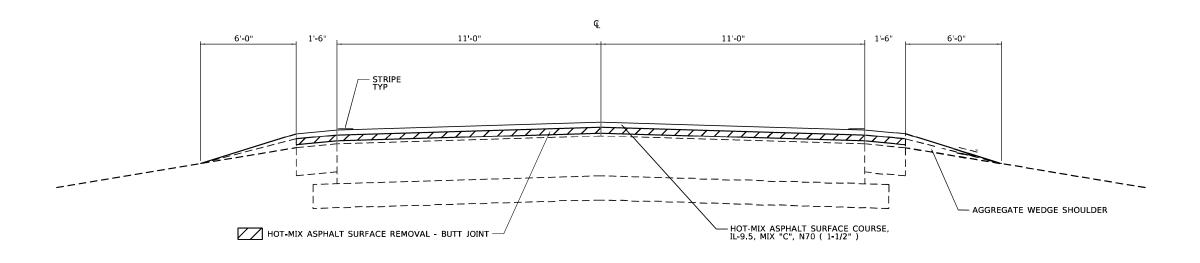
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USER NAME = Mona.Steffen	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL CROSS SECTIONS						F.A.S BTE	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	REVISED -								1751	D7 BRIDGE REPAIRS 2023-6	FAYETTE	50	6
PLOT SCALE = 100,0000 / in.	CHECKED -	REVISED -										CONTRAC	T NO. 7	4A92
PLOT DATE = 8/17/2022	DATE -	REVISED -		SCALE:	SHEET 2	OF 6	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		



S.N. 026-0044 STA. 118+68.00 to STA. 120+43.49 STA. 121+53.16 to STA. 123+30.00 US ROUTE 40 S.N. 026-0045 STA. 125+77.00 to STA. 126+77.77 STA. 128+49.60 to STA. 129+50.00 US ROUTE 40 S.N. 026-0046 STA. 138+15.00 to STA. 139+15.85 STA. 141+00.51 to STA. 142+00.00 US ROUTE 40

NOT TO SCALE



PROPOSED ROADWAY TYPICAL SECTION

S.N. 026-0044 STA. 118+68.00 to STA. 120+43.49 STA. 121+53.16 to STA. 123+30.00 US ROUTE 40 S.N. 026-0045 STA. 125+77.00 to STA. 126+77.77 STA. 128+49.60 to STA. 129+50.00 US ROUTE 40 S.N. 026-0046 STA. 138+15.00 to STA. 139+15.85 STA. 141+00.51 to STA. 142+00.00 US ROUTE 40

NOT TO SCALE

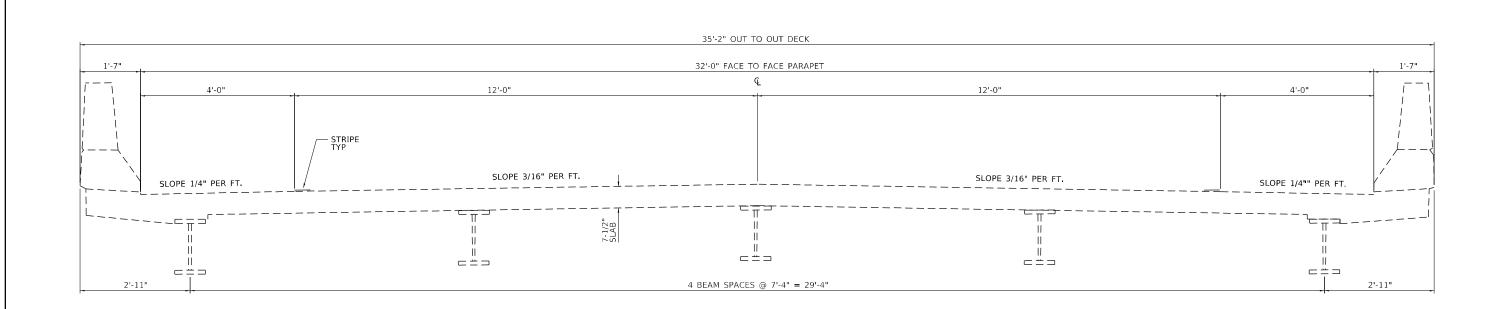
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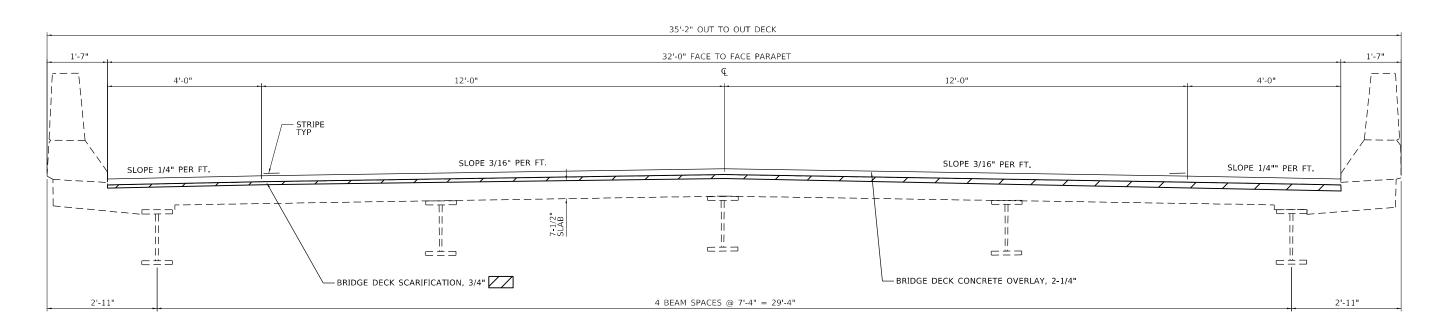
 PLOT DATE
 = 8/17/2022
 DATE
 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



S.N. 026-0044 STA. 120+43.49 to STA. 121+53.16 BK. WEST ABUT. TO BK. EAST ABUT.

NOT TO SCALE



PROPOSED ROADWAY TYPICAL SECTION

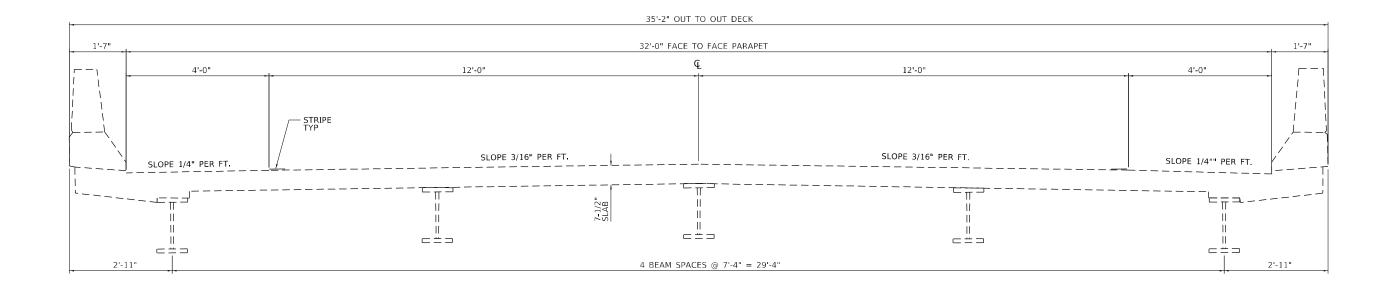
S.N. 026-0044

STA. 120+43.49 to STA. 121+53.16

BK. WEST ABUT. TO BK. EAST ABUT.

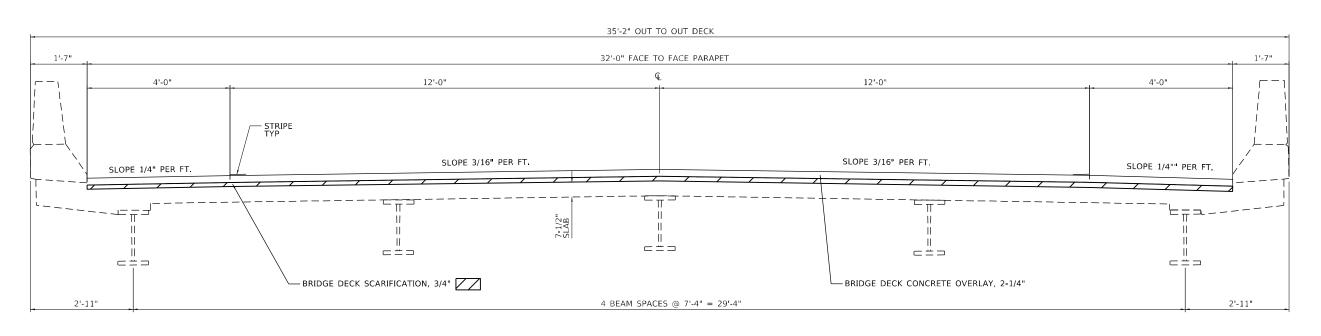
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USER NAME = Mona.Steffen	DESIGNED -	REVISED -								F.A.S BTE	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
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PLOT DATE = 8/17/2022	DATE -	REVISED -		SCALE:	SHEET 4	OF 6	SHEETS	STA.	TO STA.		ILLINOIS FED. AII	D PROJECT	



S.N. 026-0045 STA. 126+77.77 to STA. 128+49.60 BK. WEST ABUT. TO BK. EAST ABUT.

NOT TO SCALE



PROPOSED ROADWAY TYPICAL SECTION

S.N. 026-0045

STA. 126+77.77 to STA. 128+49.60

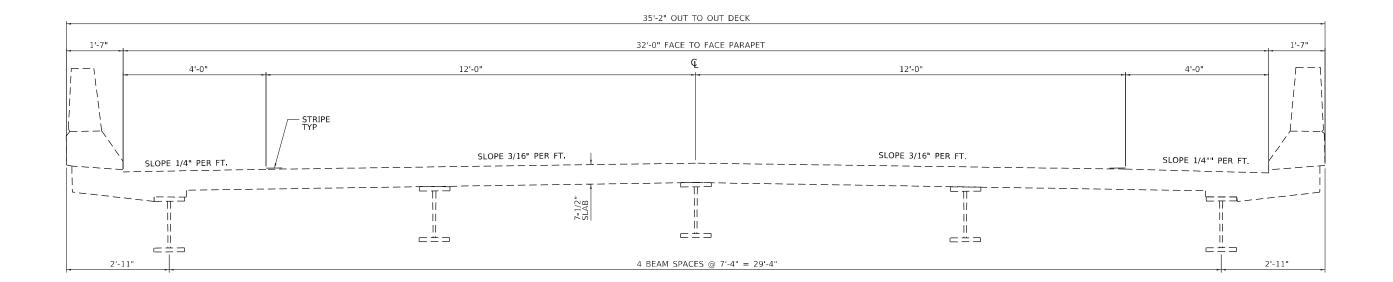
BK. WEST ABUT. TO BK. EAST ABUT.

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USER NAME = Mona Steffen	DESIGNED -	REVISED -	
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DEPARTMENT	OF	TRANSPORTATION

	TYPICAL CROSS SECTIONS								COUNTY	SHEETS	
TYPICAL CROSS SECTIONS							D7 BRIDGE REPAIRS 2	2023-6	FAYETTE	50	
									CONTRACT	NO. 74	ŧΑ
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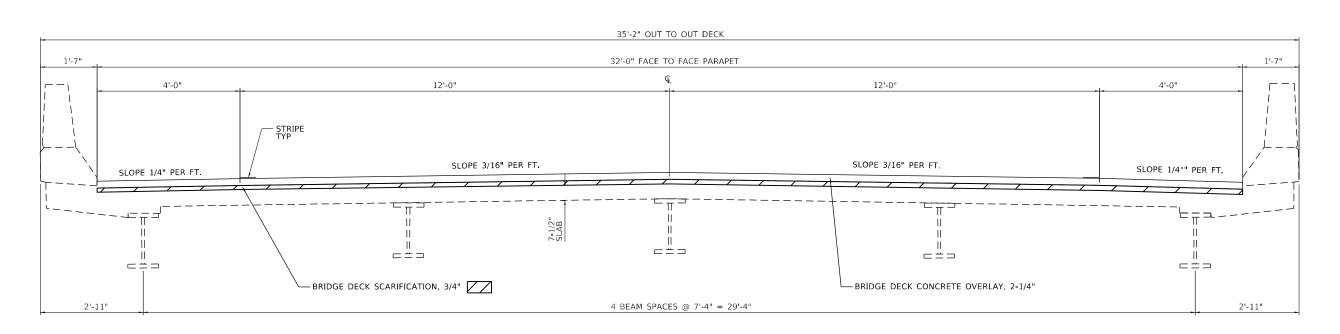


S.N. 026-0046

STA. 139+15.85 to STA. 141+00.51

BK. WEST ABUT. TO BK. EAST ABUT.

NOT TO SCALE



PROPOSED ROADWAY TYPICAL SECTION

S.N. 026-0046

STA. 139+15.85 to STA. 141+00.51

BK. WEST ABUT. TO BK. EAST ABUT.

NOT TO SCALE

USER NAME = Mona Steffen	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	
PLOT DATE = 8/17/2022	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

								RTE.	SECTION	COUNTY	SHEETS		l
		IYE	'ICA	AL C	KOSS S	ECTIONS		1751	D7 BRIDGE REPAIRS 2023-6	FAYETTE	50	10	l
										CONTRACT	NO. 74	1A92	ı
SCALE:	SHEET	6	OF	6	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT			l

PAVEMENT MARKING SCHEDULE

CTRUCTURE NUMBER	STA	TIONING	LENGTH	# OF	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	TEMPOR		EMENT MAI - PAINT	RKING -	PAVEN	MENT MAI	RKING REMOVA	L - WATER BL	ASTING	PAINT P	AVEMENT 4	MARKING	G - LINE
STRUCTURE NUMBER					70300100	70300150		7030	00221				78300202	2			7800	1110	
	STATION	TO STATION	FOOT	APPS.	FOOT	SQ FT		FC	OT				SQ FT				FO	OT	
	STATION	TO STATION	1001		1001	3011	WHITE	YELLOW	TOTAL	TYPE	WHITE	YELLOW	TOTAL PAINT	THICKNESS	TOTAL	WHITE	YELLOW	TOTAL	TYPE
8	14+35.00	14+85.40	50.40	2	10.1	1.7	100.80	100.80	201.6	NPZ	100.80	100.80	201.6	0.33	67.20	100.80	100.80	201.6	NPZ
.40	14+85.40	15+20.40	35.00	2	7.0	1.2	70.00	70.00	140.0	NPZ	70.00	70.00	140.0	0.33	46.67	70.00	70.00	140.0	NPZ
Ō	15+20.40	17+31.40	211.00	2	42.2	7.0	422.00	422.00	844.0	NPZ	422.00	422.00	844.0	0.33	281.33	422.00	422.00	844.0	NPZ
026	17+31.40	17+66.40	35.00	2	7.0	1.2	70.00	70.00	140.0	NPZ	70.00	70.00	140.0	0.33	46.67	70.00	70.00	140.0	NPZ
	17+66.40	18+17.00	50.60	2	10.1	1.7	101.20	101.20	202.4	NPZ	101.20	101.20	202.4	0.33	67.47	101.20	101.20	202.4	NPZ
-	118+68.00	120+15.50	147.50	2	29.5	4.9	295.00	36.88	331.9	SKIP	295.00	36.88	331.9	0.33	110.63	295.00	36.88	331.9	SKIP
047	120+15.50	120+43.49	27.99	2	5.6	0.9	55.98	7.00	63.0	SKIP	55.98	7.00	63.0	0.33	20.99	55.98	7.00	63.0	SKIP
Ō	120+43.49	121+53.16	109.67	2	21.9	3.7	219.34	27.42	246.8	SKIP	219.34	27.42	246.8	0.33	82.25	219.34	27.42	246.8	SKIP
026	121+53.16	121+81.16	28.00	2	5.6	0.9	56.00	7.00	63.0	SKIP	56.00	7.00	63.0	0.33	21.00	56.00	7.00	63.0	SKIP
	121+81.16	123+30.00	148.84	2	29.8	5.0	297.68	37.21	334.9	SKIP	297.68	37.21	334.9	0.33	111.63	297.68	37.21	334.9	SKIP
2	125+77.00	126+45.77	68.77	2	13.8	2.3	137.54	17.19	154.7	SKIP	137.54	17.19	154.7	0.33	51.58	137.54	17.19	154.7	SKIP
045	126+45.77	126+77.77	32.00	2	6.4	1.1	64.00	8.00	72.0	SKIP	64.00	8.00	72.0	0.33	24.00	64.00	8.00	72.0	SKIP
00-0	126+77.77	128+49.60	171.83	2	34.4	5.7	343.66	42.96	386.6	SKIP	343.66	42.96	386.6	0.33	128.87	343.66	42.96	386.6	SKIP
)26	128+49.60	128+81.60	32.00	2	6.4	1.1	64.00	8.00	72.0	SKIP	64.00	8.00	72.0	0.33	24.00	64.00	8.00	72.0	SKIP
	128+81.60	129+50.00	68.40	2	13.7	2.3	136.80	17.10	153.9	SKIP	136.80	17.10	153.9	0.33	51.30	136.80	17.10	153.9	SKIP
9	138+15.00	138+83.85	68.85	2	13.8	2.3	137.70	17.21	154.9	SKIP	137.70	17.21	154.9	0.33	51.64	137.70	17.21	154.9	SKIP
046	138+83.85	139+15.85	32.00	2	6.4	1.1	64.00	8.00	72.0	SKIP	64.00	8.00	72.0	0.33	24.00	64.00	8.00	72.0	SKIP
0-0	139+15.85	141+00.51	184.66	2	36.9	6.2	369.32	46.17	415.5	SKIP	369.32	46.17	415.5	0.33	138.50	369.32	46.17	415.5	SKIP
026	141+00.51	141+32.51	32.00	2	6.4	1.1	64.00	8.00	72.0	SKIP	64.00	8.00	72.0	0.33	24.00	64.00	8.00	72.0	SKIP
	141+32.51	142+00.00	67.49	2	13.5	2.2	134.98	16.87	151.9	SKIP	134.98	16.87	151.9	0.33	50.62	134.98	16.87	151.9	SKIP
			SUB	TOTAL:	320.4	53.4			4273.00					10000	1424.33	10000		4273.0	
			2.	TOTAL:	321	54		42	73				14	25			42	73	

SHOULDER DRAIN SCHEDULE

STRUCTURE NUMBER		GRATES TO BE STED
STRUCTURE NUMBER		0105
	EA	CH
	EASTBOUND	WESTBOUND
026-0042	2	2
026-0044	1	1
026-0045	1	1
026-0046	1	1
SUBTOTAL	5	5
TOTAL	1	0

PAVING SCHEDULE

STRUCTURE NUMBER	STATION	то	STATION	LOCATION	HMA/APPROACH	LENGTH FOOT	WIDTH	# OF	THICKNESS	BITUMINOUS MATERIALS (TACK COAT) 40600290 POUND	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70 40604052 TON
	14+35.00		14+65.00		HMA	30.00	30	1	1.5	45.00	8.40
	14+65.00		14+86.40	WEST SIDE BRIDGE	HMA	21.40	32	1	1.5	34.24	6.39
026-0042	14+86.40		15+20.40		APPROACH	34.00	32	1	1.5	48.00	8.96
026-0042	17+31.40		17+64.40		APPROACH	33.00	32	1	1.5	53.20	9.93
	17+64.40		17+86.40	EAST SIDE BRIDGE	HMA	22.00	32	1	1.5	35.20	6.57
	17+86.40		18+17.00		HMA	30.60	30	1	1.5	45.90	8.57
	118+68.00		120+15.49	WEST SIDE BRIDGE	НМА	147.49	25	1	1.5	184.36	34.41
026-0044	120+15.49		120+43.49	WEST SIDE BRIDGE	APPROACH	28.00	32	1	1.5	45.20	8.44
020-0044	121+53.16		121+81.16	EAST SIDE BRIDGE	APPROACH	28.00	32	1	1.5	44.80	8.36
	121+81.16		123+30.00	EAST SIDE BRIDGE	HMA	148.84	25	1	1.5	186.05	34.73
	125+77.00		126+46.77	WEST SIDE BRIDGE	HMA	69.77	25	1	1.5	87.21	16.28
026-0045	126+46.77		126+77.77	WEST SIDE BRIDGE	APPROACH	31.00	32	1	1.5	50.00	9.33
020-0043	128+49.60		128+80.60	EAST SIDE BRIDGE	APPROACH	31.00	32	1	1.5	49.60	9.26
	128+80.60		129+50.00	LAST SIDE BRIDGE	HMA	69.40	25	1	1.5	86.75	16.19
	138+15.00		138+84.85	WEST SIDE BRIDGE	HMA	69.85	25	1	1.5	87.31	16.30
026-0046	138+84.85		139+15.85	MEST SIDE DRIDGE	APPROACH	31.00	32	1	1.5	50.00	9.33
020-0040	141+00.51		141+31.51	EAST SIDE BRIDGE	APPROACH	31.00	32	1	1.5	49.20	9.18
	141+31.51		142+00.00	LAST SIDE BRIDGE	HMA	68.49	25	1	1.5	85.61	15.98
*				ži.				9	SUBTOTAL:	1267.64	236.63
									TOTAL:	1268	237

TEMPORARY RAMP SCHEDULE

			•				
STRUCTURE NUMBER	STATION	ТО	STATION	LENGTH	WIDTH	AREA	LOCATION
STRUCTURE NUMBER	STATION	10	STATION	FOOT	FOOT	SQ YD	LOCATION
026-0042	14+35.00		14+40.00	5.00	32	17.78	WEST SIDE (BEG. BRIDGE HMA)
020-0042	18+12.00		18 + 17.00	5.00	32	17.78	EAST SIDE (END BRIDGE HMA)
026 0044	118+68.00		118+73.00	5.00	25	13.89	WEST SIDE (BEG. BRIDGE HMA)
020 0044	123+25.00		123+30.00	5.00	25	13.89	EAST SIDE (END BRIDGE HMA)
026-0045	125 + 77.00		125+82.00	5.00	25	13.89	WEST SIDE (BEG. BRIDGE HMA)
020-0043	129+45.00		129+50.00	5.00	25	13.89	EAST SIDE (END BRIDGE HMA)
026-0046	138 + 15.00		138+20.00	5.00	25	13.89	WEST SIDE (BEG. BRIDGE HMA)
020-0040	141+95.00		142+00.00	5.00	25	13.89	EAST SIDE (END BRIDGE HMA)
				SUBT	OTAL:	118.89	
				7	OTAL:	119	

USER NAME = Mona.Steffen	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 8/17/2022	DATE -	REVISED -

STATE	OF	ILLINOIS	
DEPARTMENT	0F	TRANSPORTATION	d

							F.A.S RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		SCHE	DULE	OF QU	ANTITIES		1751	D7 BRIDGE REPAIRS 2023-6	FAYETTE	50	11
									CONTRACT	NO. 74	1A92
LE:	SHEET 1	0	F 2	SHEETS	STA.	TO STA.		ILLINOIS FED. A	AID PROJECT		$\overline{}$

HMA REMOVAL SCHEDULE

STRUCTURE NUMBER	STATION	то	STATION	LOCATION	LENGTH	WIDTH	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
					FOOT	FOOT	40600982 SO YD
026 0042	14+35.00		14+86.40	WEST SIDE (BEG BRIDGE HMA)	51.40	30.00	171.33
026-0042	17+64.40		18+17.00	EAST SIDE (END BRIDGE HMA)	52.60	32.00	187.02
026-0044	118+68.00		120+15.49	WEST SIDE (BEG BRIDGE HMA)	147.49	25.00	409.69
020-0044	121+81.16		123+30.00	EAST SIDE (END BRIDGE HMA)	148.84	25.00	413.44
026-0045	125+77.00		126+46.77	WEST SIDE (BEG BRIDGE HMA)	69.77	25.00	193.81
026-0043	128+80.60		129+50.00	EAST SIDE (END BRIDGE HMA)	69.40	25.00	192.78
026-0046	138+15.00		138+84.85	WEST SIDE (BEG BRIDGE HMA)	69.85	25.00	194.03
026-0046	141+31.51		142+00.00	EAST SIDE (END BRIDGE HMA)	68.49	25.00	190.25
					SUBT	OTAL:	1952.36
					'n	TOTAL:	1953

AGGREGATE SHOULDER SCHEDULE

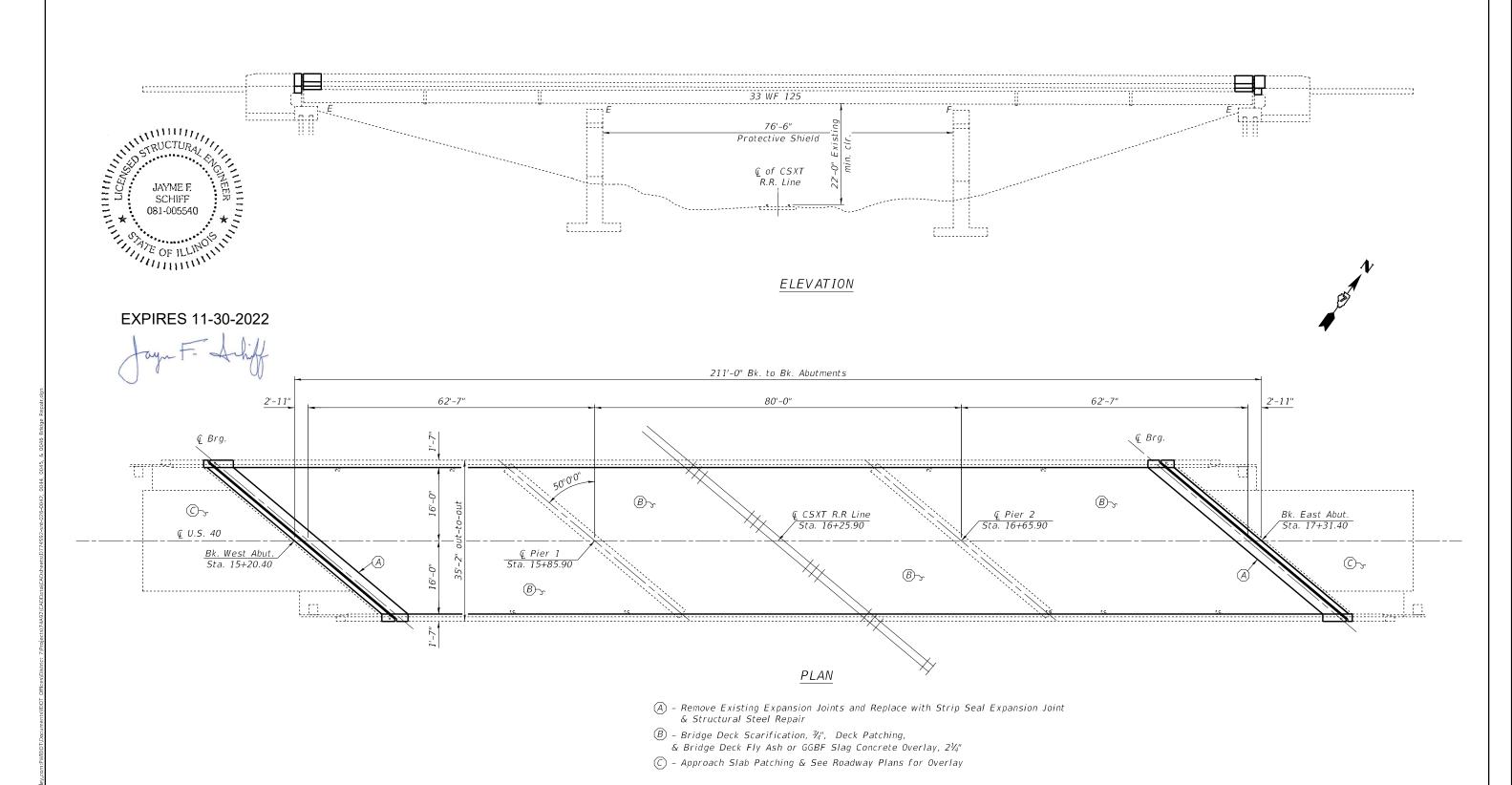
			, 1001120,	112 311002321					
STRUCTURE NUMBER	STATION	то	STATION	LOCATION	LENGTH	WIDTH	THICKNESS	AGGREGAT SHOULDEF 4810 TO	R, TYPE B 2100
					FOOT	FOOT	INCH	WESTBOUND	EASTBOUND
	14+35.00		15+20.40	WEST SIDE BRIDGE	85.4	6.0	0.00	0.00	
026-0042	14+35.00		15+20.40	WEST SIDE BRIDGE	85.4	6.0	0.00		0.00
020-0042	17+64.40		18+17.00	EAST SIDE BRIDGE	52.6	6.0	3.00	5.99	2222
	17+64.40		18+17.00	EAST SIDE BRIDGE	52.6	6.0	3.00	()	5.99
	118+68.00		120+27.49	WEST SIDE BRIDGE	159.5	6.0	3.00	18.16	
026-0044	118+68.00		120+11.49	WEST SIDE BRIDGE	143.5	6.0	3.00		16.34
020-0044	121+81.16		123+30.00	EAST SIDE BRIDGE	148.8	6.0	3.00	16.95	
	121+68.66		123+30.00	EAST SIDE BRIDGE	161.3	6.0	3.00		18.37
	125+77.00		126+66.27	WEST SIDE BRIDGE	89.3	6.0	3.00	10.17	
026-0045	125+77.00		126+38.77	WEST SIDE BRIDGE	61.8	6.0	3.00	:====:	7.03
020-0043	128+80.60		129+50.00	EAST SIDE BRIDGE	69.4	6.0	3.00	7.90	
	128+60.60		129+50.00	EAST SIDE BRIDGE	89.4	6.0	3.00	()	10.18
	138+15.00		139+15.85	WEST SIDE BRIDGE	100.9	6.0	3.00	11.49	
026-0046	138+15.00		138+77.35	WEST SIDE BRIDGE	62.4	6.0	3.00		7.10
020-0040	141+31.51		142+00.00	EAST SIDE BRIDGE	68.5	6.0	3.00	7.80	
	140+91.51		142+00.00	EAST SIDE BRIDGE	108.5	6.0	3.00	(12.36
						S	UBTOTAL:	78.46	77.38
						S	UBTOTAL:	155	.84
							TOTAL:	15	6

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

		┚
	F.A.S RTE. SECTION COUNTY TOTAL SHEETS NO.]
SCHEDULE OF QUANTITIES	1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 12	1
	CONTRACT NO. 74A92	1
SHEET 2 OF 2 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT	1

Existing Structure: SN. 026-0042 carries U.S. Rte 40 (FAS 1751) over CSXT Railroad. The existing three span steel beam structure was constructed in 1943 and reconstructed in 1991. The proposed project consists of replacement of existing expansion joints with strip seals, bridge deck scarification, deck & approach patching, bridge deck overlay, & structural steel repair. Construction shall be completed using full road closure.



JSER NAME = Mona Steffen

DESIGNED - T. Walk

T. Walk

DRAWN -

REVISED -

REVISED -

REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RTE. SECTION SHEETS NO.

1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 13

CONTRACT NO. 74A92

ILLINOIS FED. AID PROJECT

DECK CROSS SECTION

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.

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

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

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

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	18.8
Concrete Superstructure	Cu. Yd.	20.0
Reinforcement Bars, Epoxy Coated	Pound	2,570
Bridge Deck Grooving	Sq. Yd.	670
Bridge Deck Scarification, ¾"	Sq. Yd.	710
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 21/4"	Sq. Yd.	710
Preformed Joint Strip Seal	Foot	104
Protective Coat	Sq. Yd.	755
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	6.0
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	2.0
Approach Slab Repair (Full Depth)	Sq. Yd.	5.0
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	20.0
Structural Repair of Concrete (Depth > 5")	Sq. Ft.	20.0
Protective Shield	Sq. Yd.	300
Raised Reflective Pavement Marker Removal	Each	3
Structural Steel Repair	Pound	580

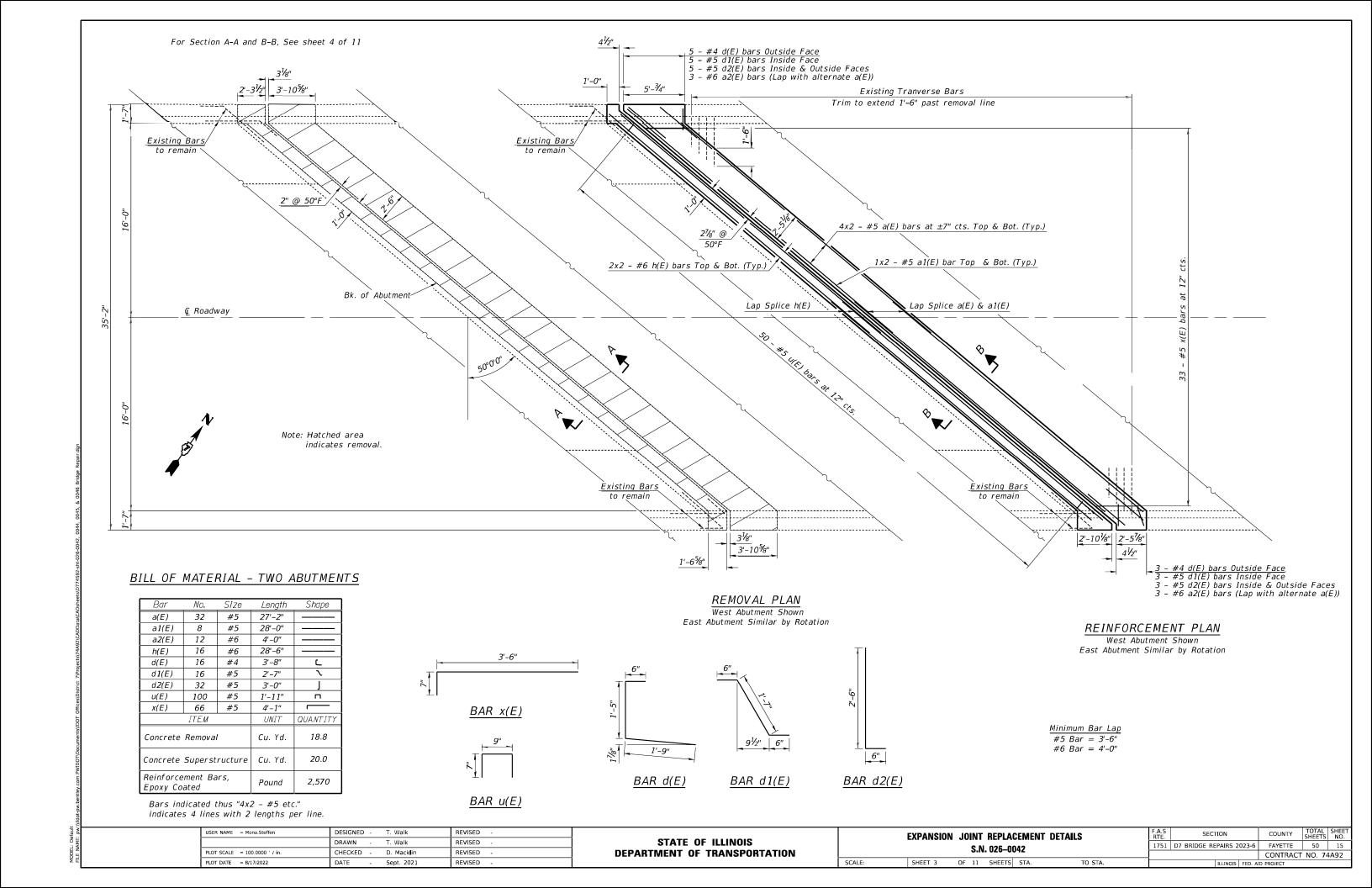
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

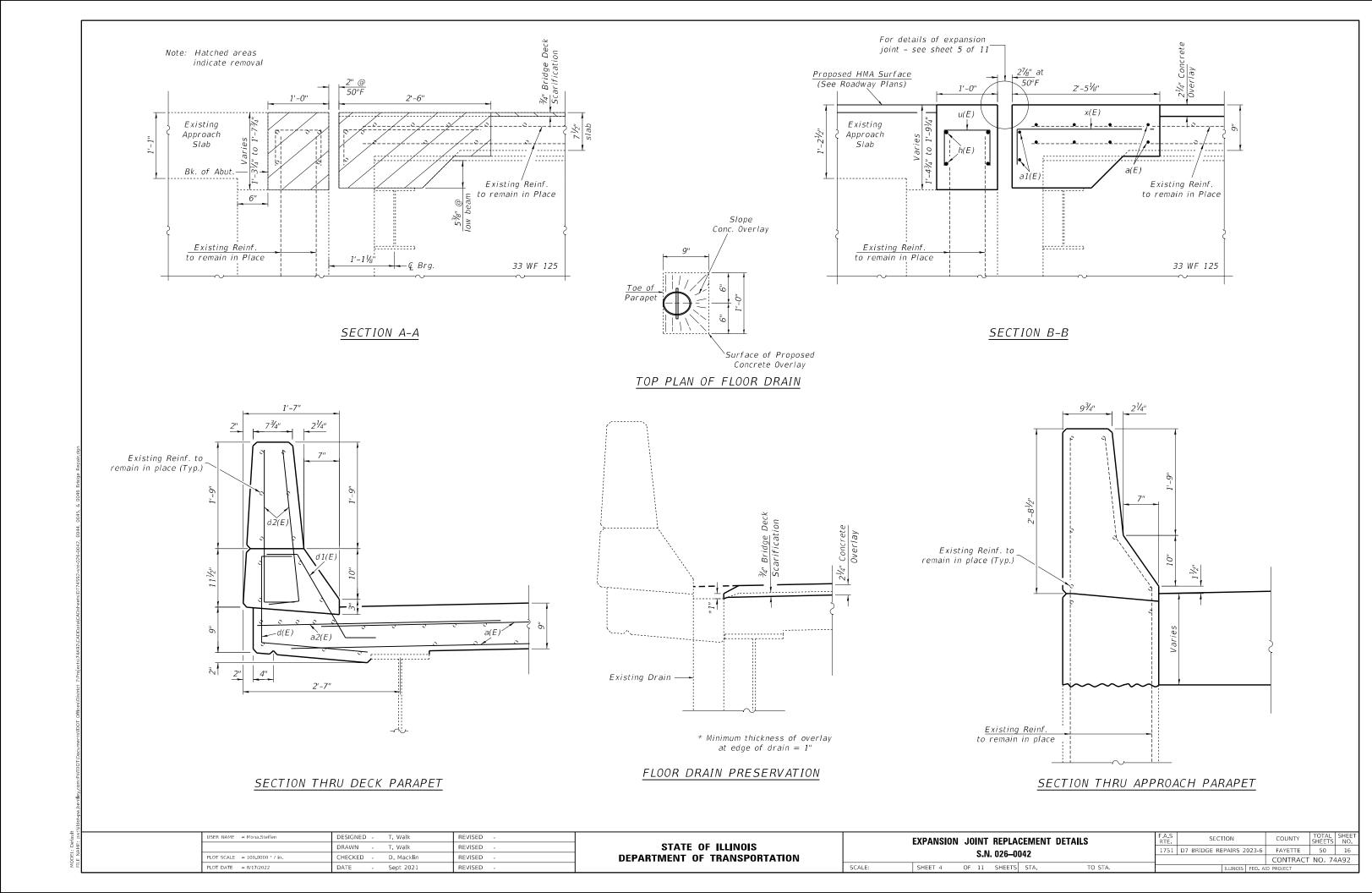
DECK CROSS SECTION, GENERAL NOTES &
BILL OF MATERIALS S.N. 026–0042

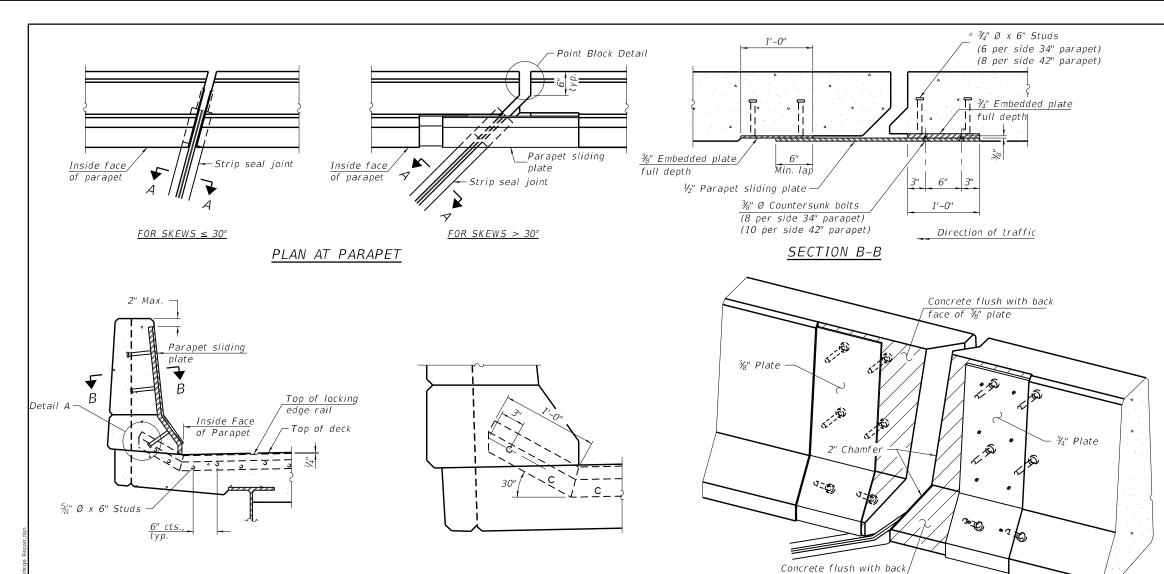
SHEET 2 OF 11 SHEETS STA. TO STA.

F.A.S. RTE. SECTION COUNTY TOTAL SHEETS NO. 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 14

| ILLINOIS | FED. ALD PROJECT NO. 74A92







4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation. The manufacturer's recommended installation methods shall be followed.

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

The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}$ ". The configuration of the strip

are not permitted. The gland shall be sized for a maximum

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

however, will not be allowed. Locking edge rails may exceed the

and meet the minimum anchorage shown. Flanged edge rails,

seal shall match the configuration of the locking edge

rated movement of 4 inches.

rails. Open or "webbed" strip seal gland configurations

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.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal. 34" F-shape barrier shown, 42" F-shape similar as noted.

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.

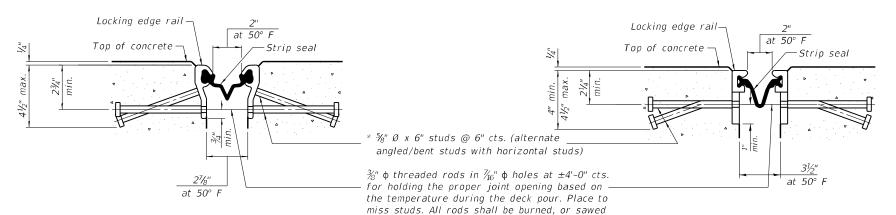
ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

SHOWING ROLLED RAIL JOINT

DETAIL A

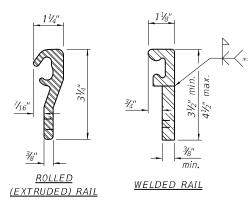
face of ¾" plate TRIMETRIC VIEW (Showing embedded plates only)



SECTION A-A

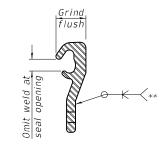
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

off flush with the plates after concrete is set.



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	104

JSER NAME = Mona, Steffen DESIGNED -T. Walk REVISED DRAWN T. Walk REVISED HECKED D. Mackli REVISED PLOT DATE = 8/17/2022 REVISED April 2021

STATE OF ILLINOIS

SHOWING WELDED RAIL JOINT

PREFORMED JOINT STRIP SEAL S.N. 026-0042

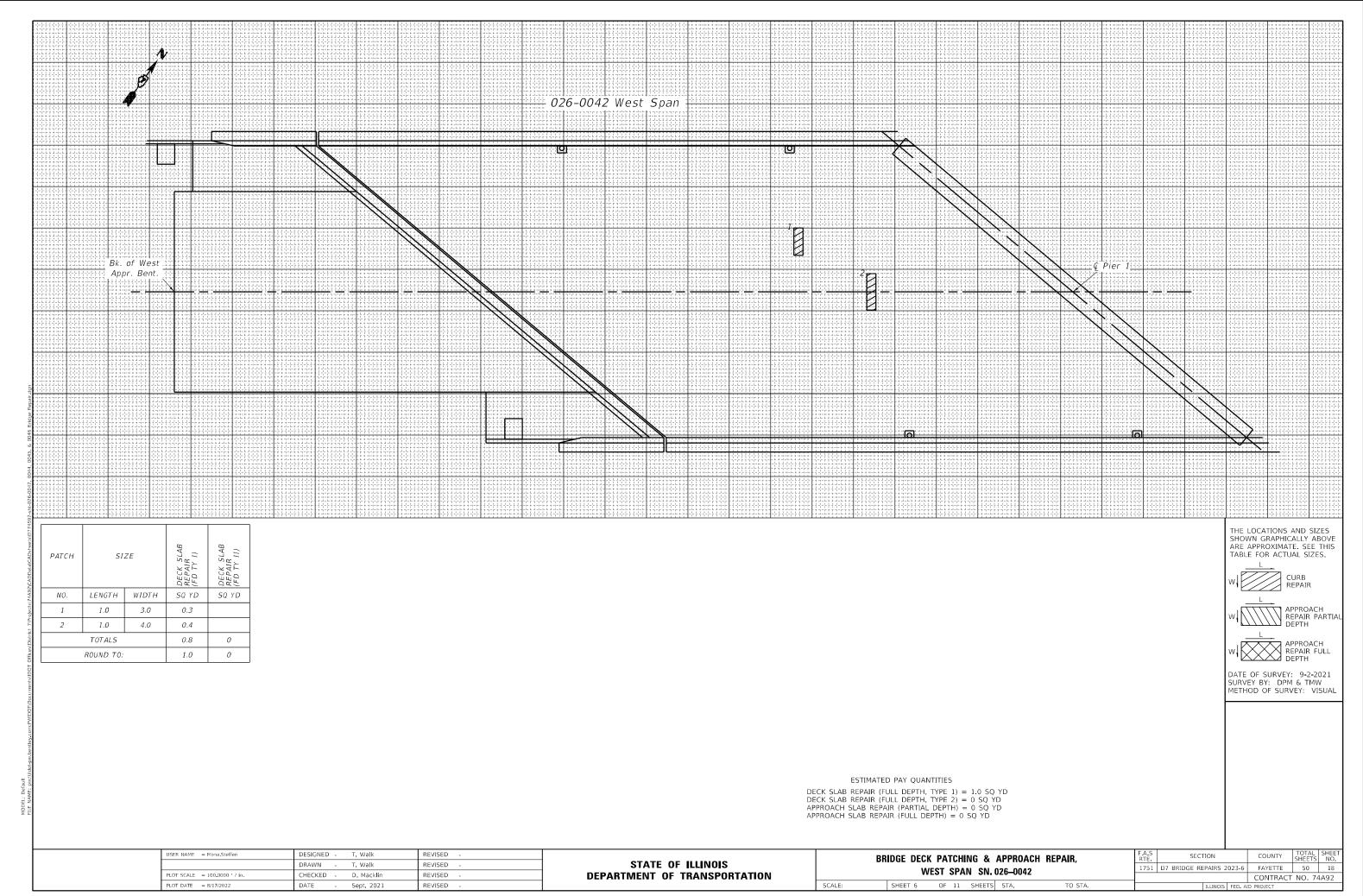
OF 11 SHEETS STA

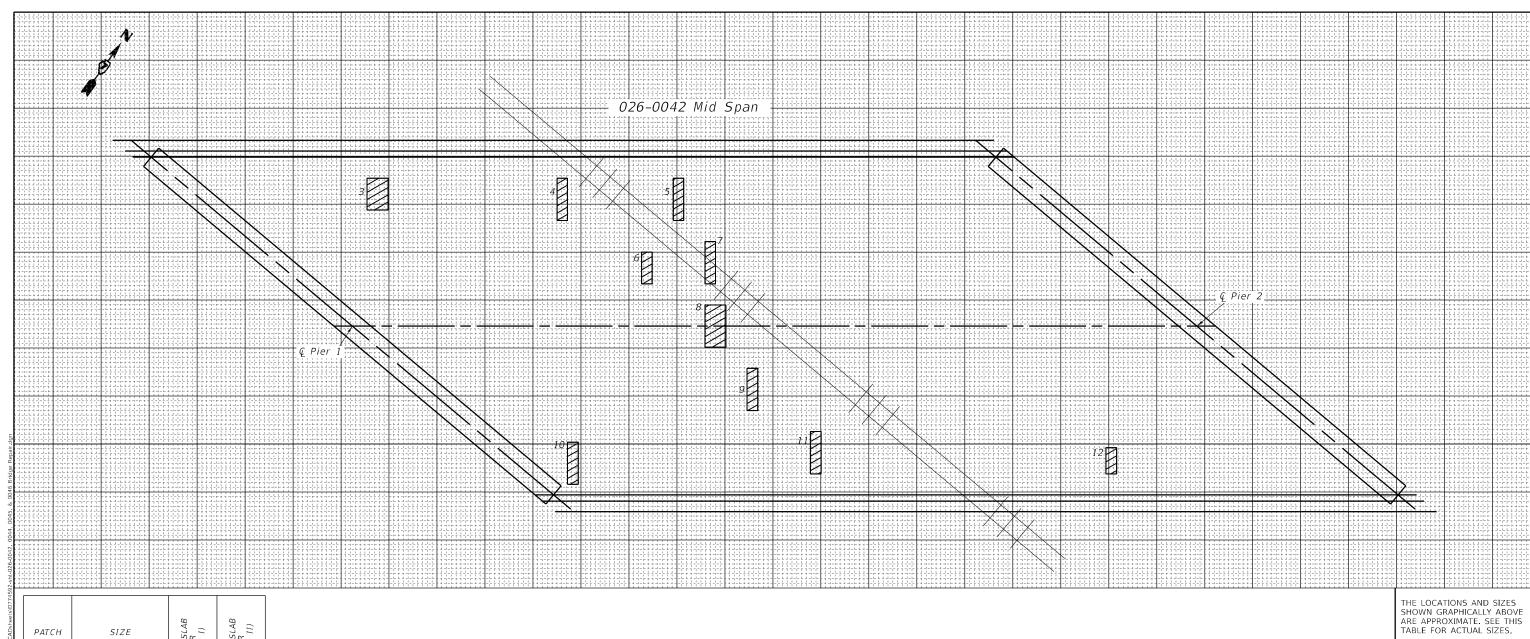
SHEET 5

TO STA.

SECTION 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 17 CONTRACT NO. 74A92

DEPARTMENT OF TRANSPORTATION





PATCH	SI.	ZE	DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
3	2.0	3.0		0.7
4	1.0	4.0	0.4	
5	1.0	1.0 4.0		
6	1.0	3.0	0.3	
7	1.0	4.0	0.4	
8	2.0	2.0 4.0		0.9
9	1.0	4.0	0.4	
10	1.0	4.0	0.4	
11	1.0	4.0	0.4	
12	1.0	2.5	0.3	
	TOTALS		3.3	1.6
	ROUND TO:	4.0	2.0	

ESTIMATED PAY QUANTITIES

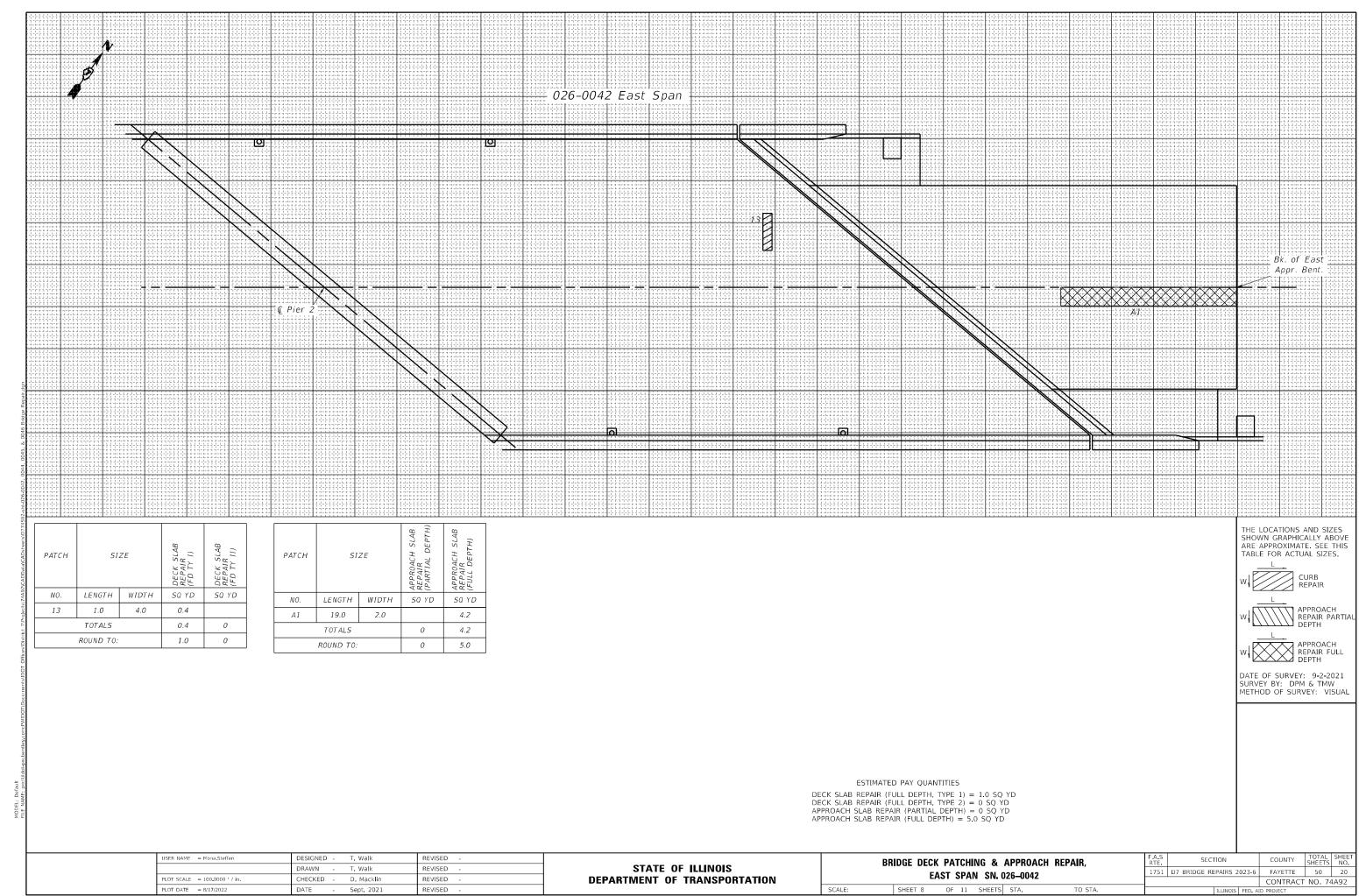
DECK SLAB REPAIR (FULL DEPTH, TYPE 1) = 4.0 SQ YD DECK SLAB REPAIR (FULL DEPTH, TYPE 2) = 2.0 SQ YD APPROACH SLAB REPAIR (PARTIAL DEPTH) = 0 SQ YD APPROACH SLAB REPAIR (FULL DEPTH) = 0 SQ YD

USER NAME = Mona.Steffen	DESIGNED -	T. Walk	REVISED -		RF	RIDGE DECK	(PATCE	IING &	APPROAC	H REPAIR	F.A.S RTF	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	T. Walk	REVISED -	STATE OF ILLINOIS						ii iici Aiii,	1751	D7 BRIDGE REPAIRS 2023-6	FAYETTE	50	19
PLOT SCALE = 100.0000 / in	CHECKED -	D. Macklin	REVISED -	DEPARTMENT OF TRANSPORTATION		IV	1110 24 <i>b</i>	W 2M.C	26-0042				CONTRAC	T NO. 74	∔A92
PLOT DATE = 8/17/2022	DATE -	Sept. 2021	REVISED -		SCALE:	SHEET 7	OF 11	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		

APPROACH REPAIR PARTIAL DEPTH

W APPROACH REPAIR FULL DEPTH

DATE OF SURVEY: 9-2-2021 SURVEY BY: DPM & TMW METHOD OF SURVEY: VISUAL



⊈ Brg. E. Abut. ∉ Brg. W. Abut. ├— Ç Pier 2 −¢ Pier 1 62'-7" 62'-7" 80'-0" (Span 1) (Span 2) (Span 3) 211'-0" Bk. - Bk. Abuts. PARTIAL PLAN $\langle A \rangle$ - Beam End Repair A $\langle B \rangle$ - Beam End Repair B Β ◀η 9 Spa. at 3" = 2'-3" Bent P 1/2" x 2'-6" W12x40 Side of Beam looo ∠ 6x4x½" Typ. Ea. Side of Bean $6x4x\frac{1}{2}$ " x 3'-0" long 10" We<u>ld</u> _5 Spa. at 3' 7 Spa. at 3" Typ. Ea. Side of Beam Grind to match Length radius, Typ. $D \blacktriangleleft$ SECTION B-B $B \blacktriangleleft$ REPAIR B REPAIR A * Existing studs shall be cut and ground (2 Location's) smooth to the top of the bottom flange. BOLT HOLE LEGEND O - Field drill using Existing steel as template. Field drill using new steel as template. **-----**10" Weld 7 Spa. at 3' 5 Spa. at 3" 10" <u>Weld</u> = 1'-9Length 3'-0" SECTION A-A SECTION C-C DESIGNED - Jeffrey Burke OCTOBER 03, 2022

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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.

Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ "0, open holes $\frac{1}{1}$ 6"0, unless otherwise noted.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the special provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

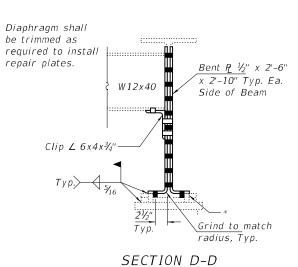
All new structural steel shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel."

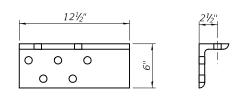
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and specified in the Special Provisions shall be included with Structural Steel Repair.

Diaphragm connection holes shall be $^{1}/_{16}$ "0 for $\frac{1}{4}$ "0 bolts. Two hardened washers shall be required at diaphragm connections.

Trim diaphragms as required for proper fit.





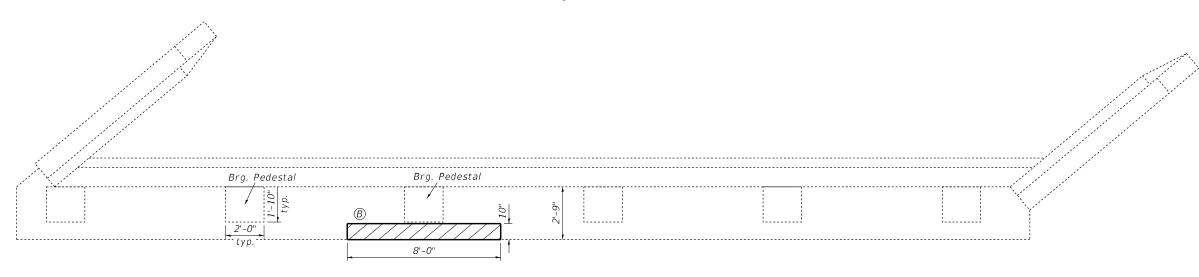
CLIP ANGLE DETAILS ∠ 6×4×¾" x 12½" long (1 Required)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
		500
Structural Steel Repair	Pound	580
or accurat scoot tropati		

DATE OF ORTHONIS OR ORTHONIS OF ORTHONIS OF ORTHONIS ORTHONIS OR ORTHONIS O

ELEVATION OF EAST ABUTMENT Looking East



TOP VIEW OF EAST ABUTMENT

<u>Notes</u>

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.

Do not disturb Bearing Pedestals.



Structural Repair of Concrete (Depth ≤ 5 ")



Structural Repair of Concrete (Depth > 5")

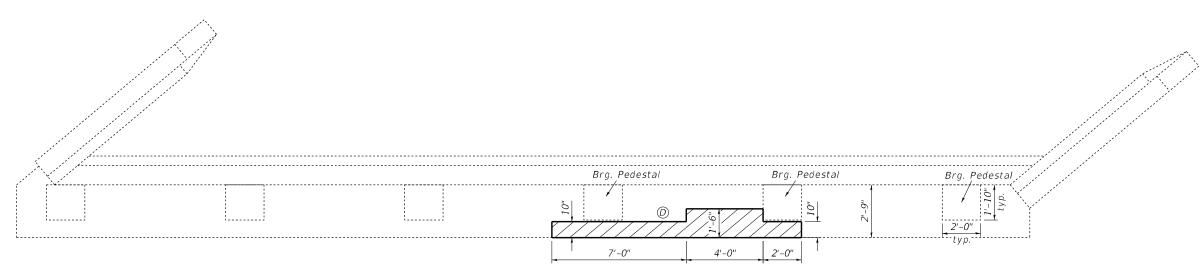
STRUCTURAL REPAIR OF CONCRETE

Patch No.	Depth ≤ 5"	Depth > 5"
	SqFt	SqFt
А		8.0
В	6.7	
Total	7.0	8.0

USER NAME = Mona.Steffen	DESIGNED -	-	T. Walk	REVISED -
	DRAWN -	-	T. Walk	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	-	D. Macklin	REVISED -
PLOT DATE = 8/17/2022	DATE -		Sept. 2021	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** STRUCTURAL REPAIR OF CONCRETE EAST ABUTMENT 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 22 S.N. 026-0042 CONTRACT NO. 74A92 SHEET 10 OF 11 SHEETS STA.

ELEVATION OF WEST ABUTMENT Looking West



TOP VIEW OF WEST ABUTMENT

<u>Notes</u>

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.

Do not disturb Bearing Pedestals.



Structural Repair of Concrete (Depth ≤ 5 ")



Structural Repair of Concrete (Depth > 5")

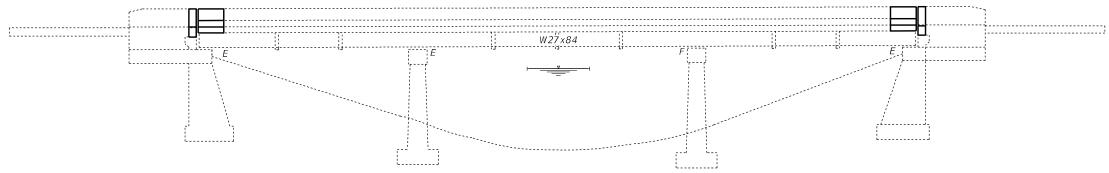
STRUCTURAL REPAIR OF CONCRETE

Patch No.	Depth ≤ 5"	Depth > 5"
	SqFt	SqFt
С		12.0
D	12.8	
Total	13.0	12.0

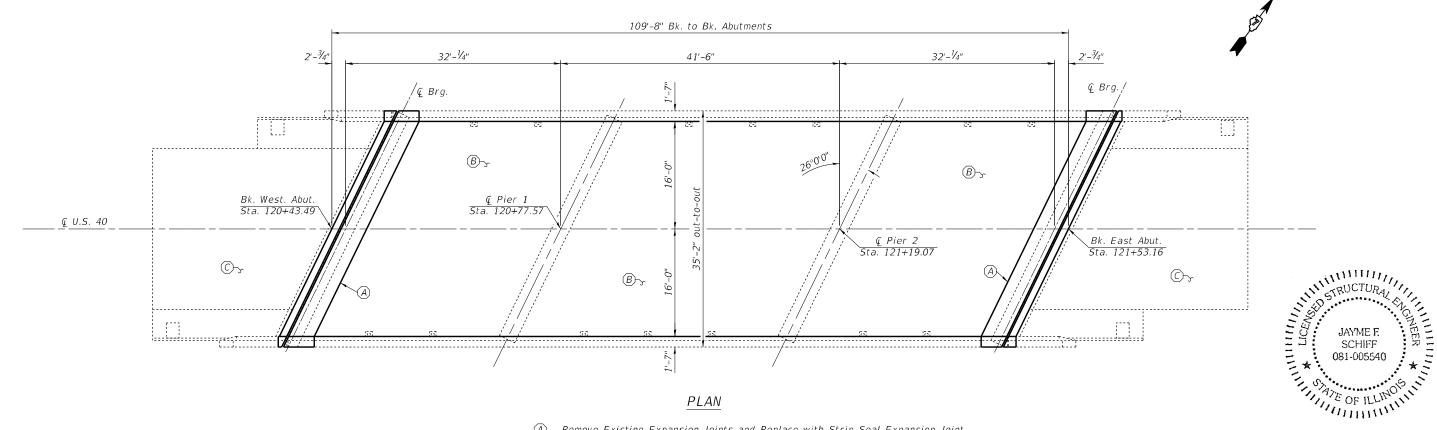
USER NAME = Mona.Steffen	DESIGNED	-	T. Walk	REVISED -
	DRAWN	-	T. Walk	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Mack l in	REVISED -
PLOT DATE = 8/17/2022	DATE	-	Sept. 2021	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** STRUCTURAL REPAIR OF CONCRETE WEST ABUTMENT 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 23 S.N. 026-0042 CONTRACT NO. 74A92 SHEET 11 OF 11 SHEETS STA.

Existing Structure: SN. 026-0044 carries U.S. Rte 40 (FAS 1751) over Hurricane Creek Overflow. The existing three span steel beam superstructure was constructed in 1991 and substructure was constructed in 1943. The proposed project consists of replacement of existing expansion joints with strip seals, bridge deck scarification, deck & approach patching, & bridge deck overlay. Construction shall be completed using full road closure.



ELEVATION



PLAN

- (A) Remove Existing Expansion Joints and Replace with Strip Seal Expansion Joint & Structural Steel Repair
- B Bridge Deck Scarification, $\frac{3}{4}$ ", Deck Patching, & Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 21/4"
- (C) Approach Slab Patching & See Roadway Plans for Overlay

EXPIRES 11-30-2022

1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE CONTRACT NO. 74A92

USER NAME = Mona.Steffen	DESIGNED	-	T. Wa l k	REVISED -
	DRAWN	-	T. Wa l k	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Macklin	REVISED -
PLOT DATE = 8/17/2022	DATE	-	Sept. 2021	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** **GENERAL PLAN & ELEVATION** S.N. 026-0044

SHEET 1 OF 7 SHEETS STA. TO STA.

DECK CROSS SECTION

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 $^{\circ}$ F.

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

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

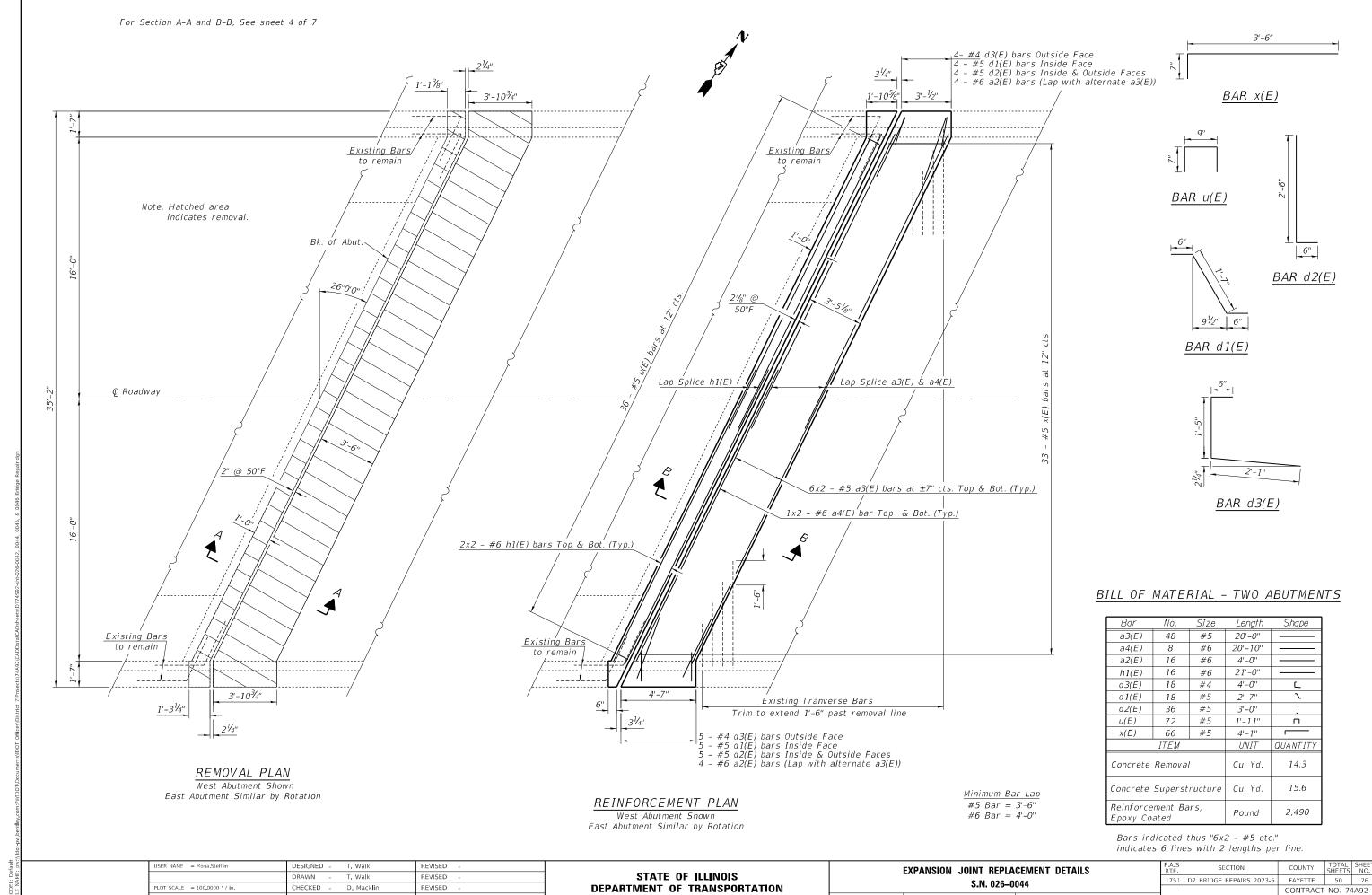
Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on as-built plans.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	14.3
Concrete Superstructure	Cu. Yd.	15.6
Reinforcement Bars, Epoxy Coated	Pound	2,490
Bridge Deck Grooving	Sq. Yd.	331
Bridge Deck Scarification, ¾"	Sq. Yd.	355
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 21/4"	Sq. Yd.	355
Preformed Joint Strip Seal	Foot	76
Protective Coat	Sq. Yd.	395
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	2.0
Approach Slab Repair (Partial Depth)	Sq. Yd.	7.0
Structural Steel Repair	Pound	190

USER NAME = Mona,Steffen	DESIGNED	-	T. Walk	REVISED -	
	DRAWN	-	T. Walk	REVISED -	
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Macklin	REVISED -	
PLOT DATE = 8/17/2022	DATE	-	Sept. 2021	REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



SCALE:

OF 7 SHEETS STA

SHEET 3

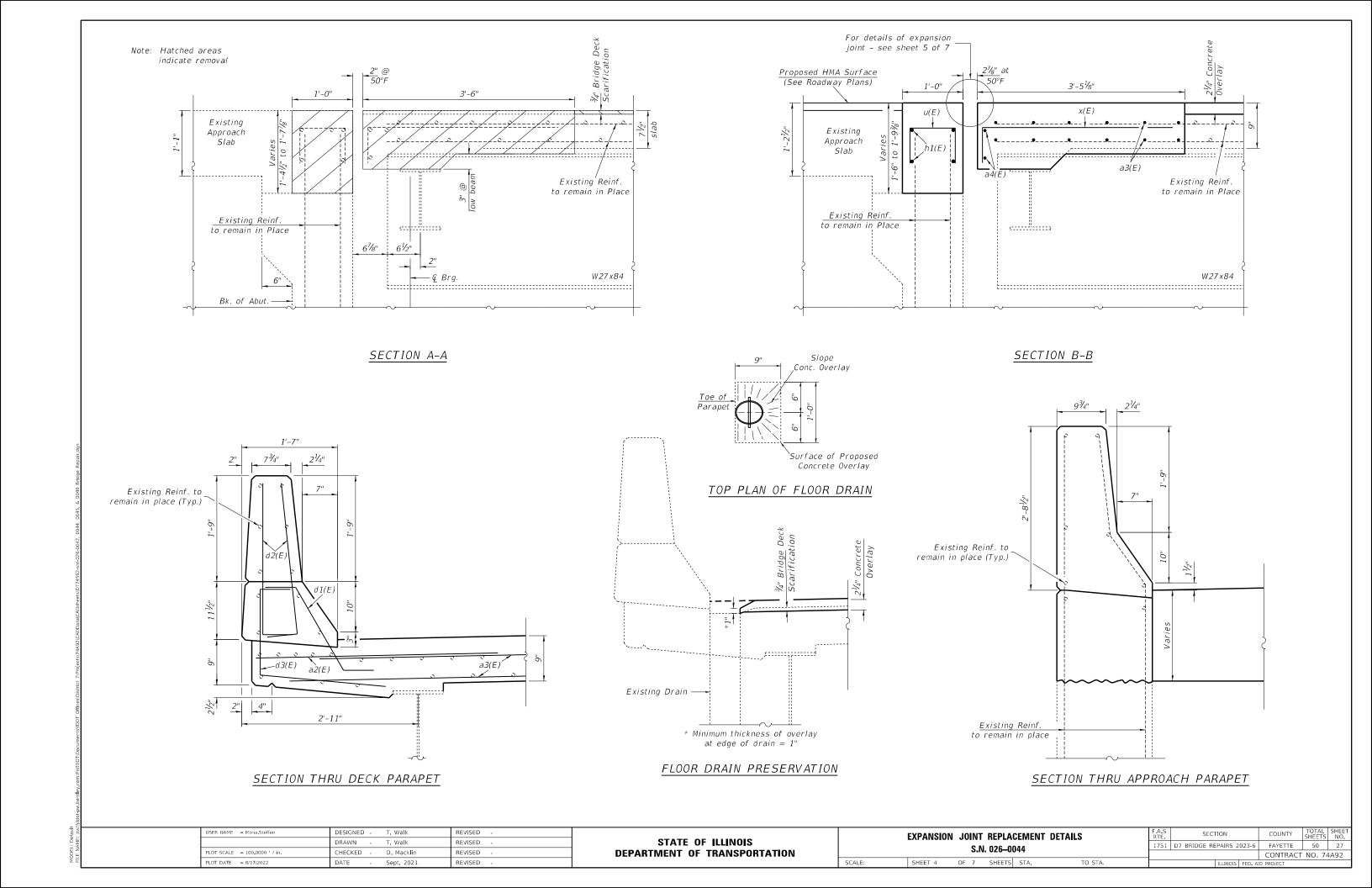
TO STA.

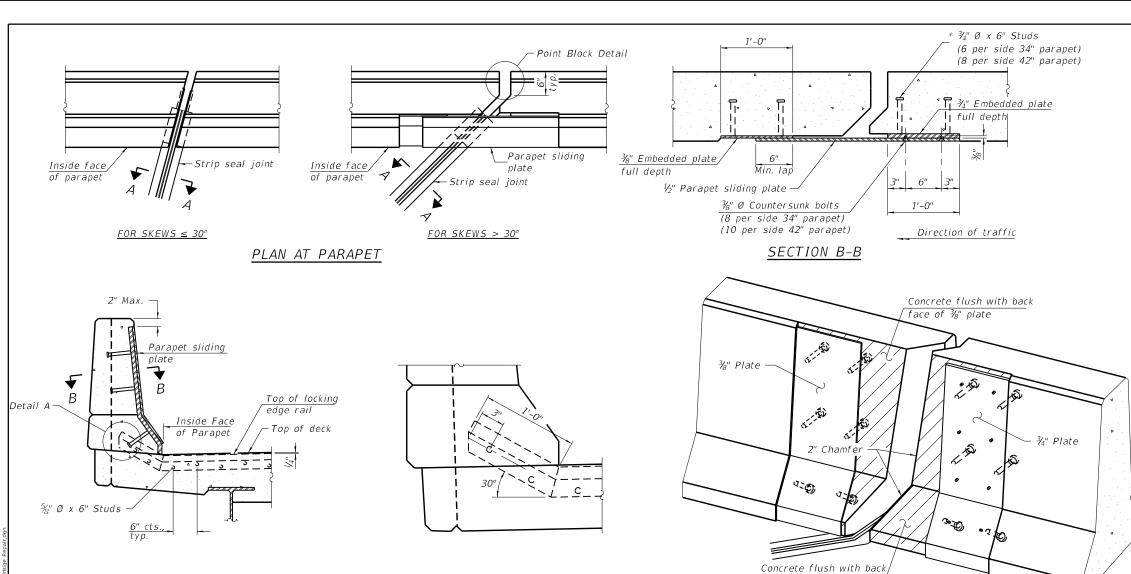
PLOT DATE = 8/17/2022

DATE

Sept. 2021

REVISED





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 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

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

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

34" F-shape barrier shown, 42" F-shape similar as noted. 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.

ELEVATION AT PARAPET

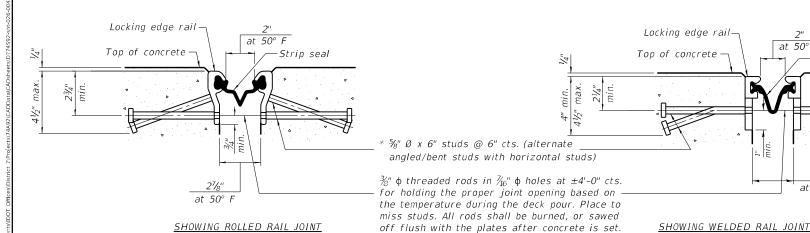
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

DETAIL A

face of ¾" plate TRIMETRIC VIEW (Showing embedded plates only)

at 50° F

at 50°



— Strip seal

WELDED RAIL

LOCKING EDGE RAIL SPLICE

TO STA.

Omit weld a seal openir

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

SECTION A-A

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

LOCKING EDGE RAILS

<u>ROLLED</u>

(EXTRUDED) RAIL

SHEET 5

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

BILL OF MATERIAL

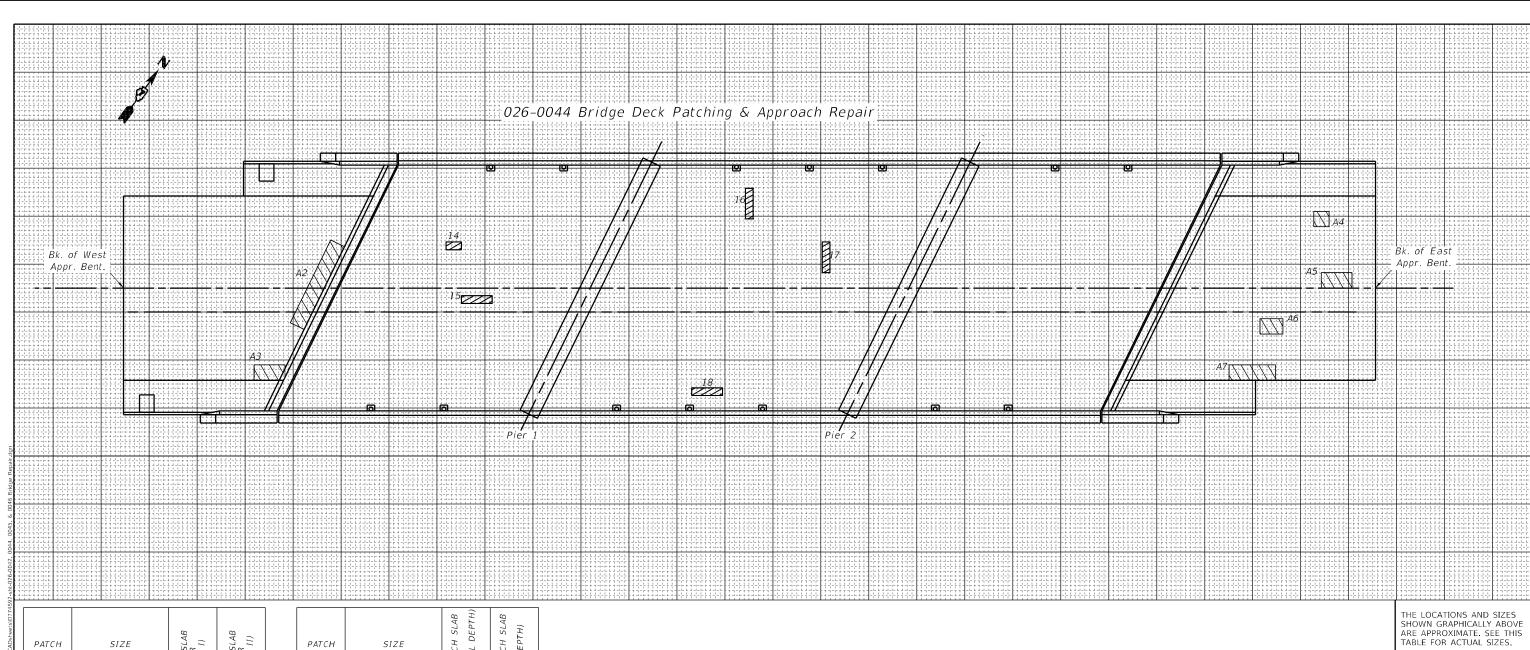
Item	Unit	Total
Preformed Joint Strip Seal	Foot	76

JSER NAME = Mona, Steffen DESIGNED -T. Walk REVISED DRAWN T. Walk REVISED HECKED REVISED PLOT DATE = 8/17/2022 REVISED Sept. 2021

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** PREFORMED JOINT STRIP SEAL S.N. 026-0044

OF 7 SHEETS STA

SECTION 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 28 CONTRACT NO. 74A92



PATCH	SI.	ZE	DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
14	2.0	1.0	0.2	
15	4.0	1.0	0.4	
16	1.0	4.0	0.4	
17	1.0	4.0	0.4	
18	4.0	1.0	0.4	
	TOTALS	2.0	0	
	ROUND TO:	2.0	0	

			_	1
PATCH	SI	ZE	APPROACH SLAB REPAIR (PARTIAL DEPTH)	APPROACH SLAB REPAIR (FULL DEPTH)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
A2	2.0	12.0	2.7	
A3	4.0	2.0	0.9	
A4	2.0	2.0	0.4	
A5	4.0	2.0	0.9	
A6	3.0	2.0	0.7	
A7	6.0	2.0	1.3	
	TOTALS	6.9	0	
	ROUND TO:	7.0	0	



APPROACH REPAIR PARTIAL DEPTH

W APPROACH REPAIR FULL DEPTH

DATE OF SURVEY: 9-2-2021 SURVEY BY: DPM & TMW METHOD OF SURVEY: VISUAL

ESTIMATED PAY QUANTITIES

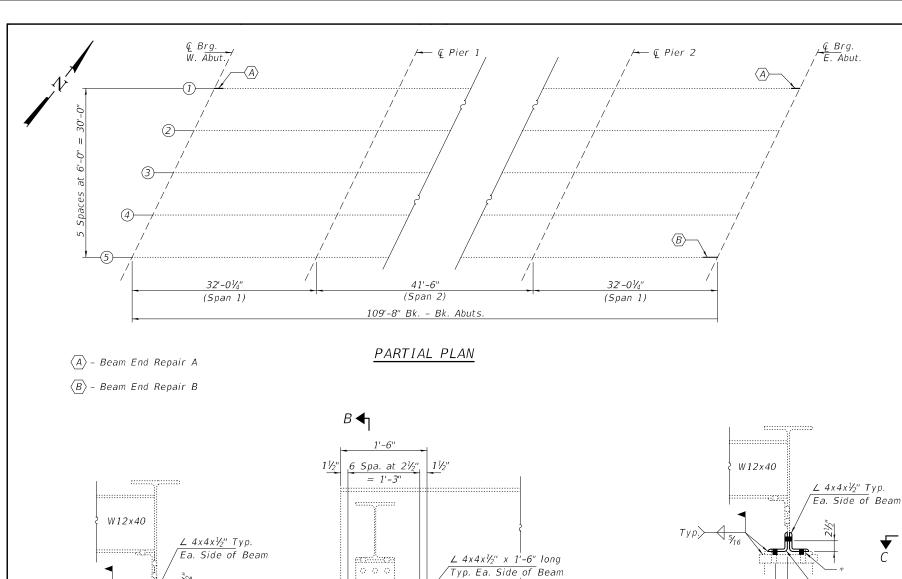
DECK SLAB REPAIR (FULL DEPTH, TYPE 1) = 2.0 SQ YD DECK SLAB REPAIR (FULL DEPTH, TYPE 2) = 0 SQ YD APPROACH SLAB REPAIR (PARTIAL DEPTH) = 7.0 SQ YD APPROACH SLAB REPAIR (FULL DEPTH) = 0 SQ YD

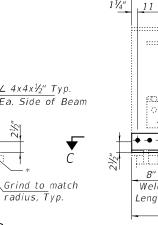
SCALE:

USER NAME = Mona.Steffen	DESIGNED -	T. Walk	REVISED -
	DRAWN -	T. Walk	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	D. Macklin	REVISED -
PLOT DATE = 8/17/2022	DATE -	Sent 2021	REVISED -

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

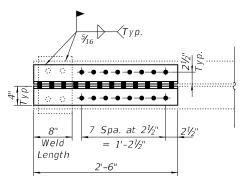
BR	BRIDGE DECK PATCHING & APPROACH REPAIR SN. 026–0044							F.A.S RTE. SECTION			TOTAL SHEETS	SHEET NO.
								D7 BRIDGE REPAIRS 2	023-6	FAYETTE	50	29
								CONTRACT NO. 74A				
	SHEET 6	OF	7	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT					





8" Weld Length

$D \blacktriangleleft_1$ 11 Spa. at $2\frac{1}{2}$ " = $2^{1}-3\frac{1}{2}$ " | $1\frac{1}{4}$ " Spa. at 21/2" $\angle 4x4x\frac{1}{2}$ " x 2'-6" long $= 1'-2\frac{1}{2}''$ Typ. Ea. Side of Beam $D \blacktriangleleft$ REPAIR B (1 Location)

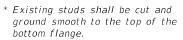


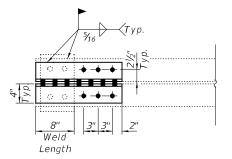
SECTION C-C

SECTION B-B

Grind to match

radius, Typ.





REPAIR A

(2 Location's)

+ - - - - - - -

3" 3"

8"

Weld

Length

SECTION A-A

BOLT HOLE LEGEND

- O Field drill using Existing steel as template.
- Field drill using new steel as template.

BILL OF MATERIAL

GENERAL NOTES All structural steel shall conform to AASHTO Classification M-270 Gr. 36,

Fasteners shall be high strength bolts. Bolts $\frac{3}{4}$ "Ø, open holes $\frac{13}{16}$ "Ø,

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.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the special provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures". All new structural steel shall be hot-dip galvanized. See Special Provisions

unless otherwise noted.

unless otherwise noted.

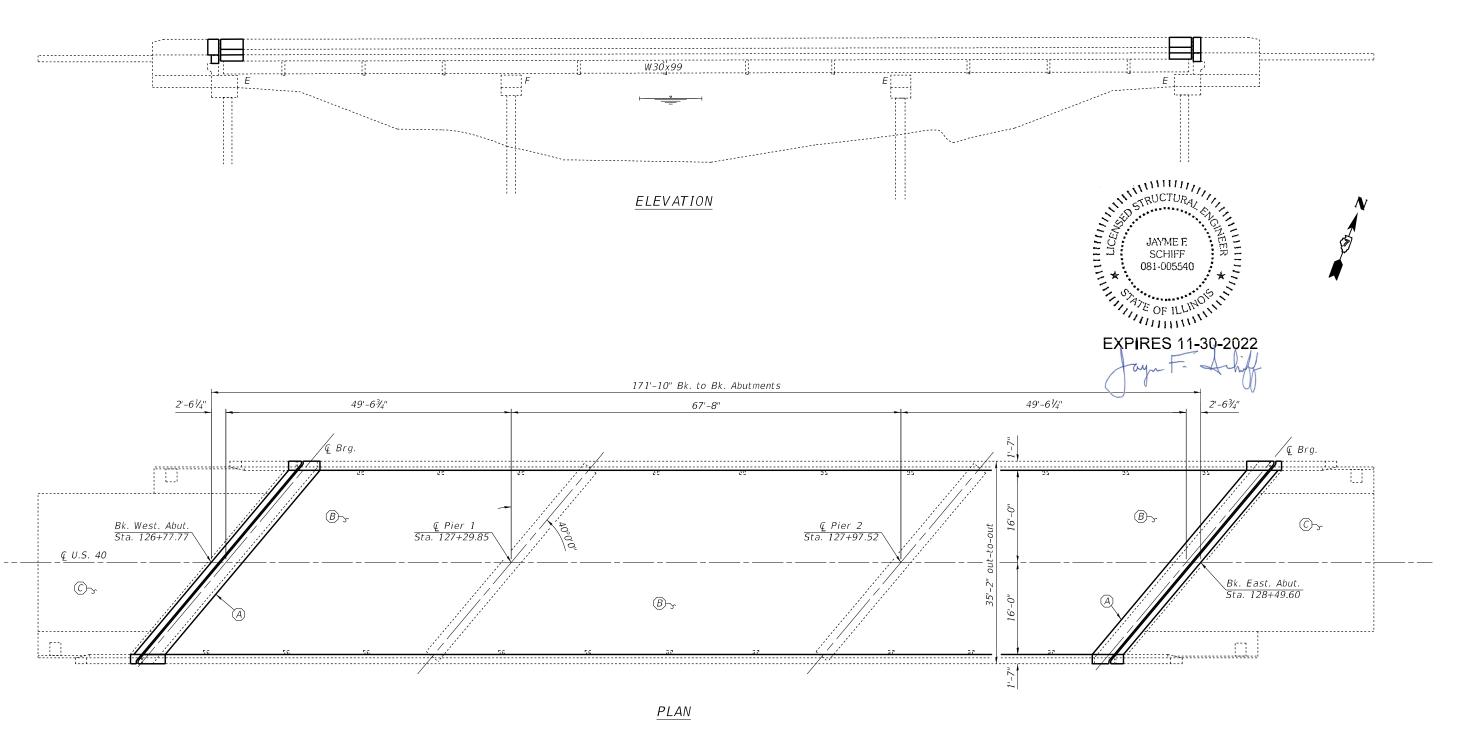
for "Hot Dip Galvanizing for Structural Steel."

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	190
,		

DESIGNED - Jeffrey Burke		DATE - OCTOBER 03, 2022	OTATE OF ULBIODO	BEAM END REPAIR DETAILS	RTE	SECTION	COUNTY	SHEETS NO.
CHECKED - Steven M. Ryan			STATE OF ILLINOIS	SN 026-0044	1751	D7 Bridge Repairs 2023-6	FAYETTE	50 30
DRAWN - Venkat Ramana Reddy V	PASSED	REVISED -	DEPARTMENT OF TRANSPORTATION	3N 020-0044		-	CONTRAC	CT NO. 74A92
CHECKED - JSB SMR	ENGINEER OF BRIDGES AND STRUCTURES	REVISED -		SHEET NO. 1 OF 1 SHEETS		ILLINOIS FED. A	ND PROJECT	

SECTION D-D

Existing Structure: SN. 026-0045 carries U.S. Rte 40 (FAS 1751) over Hurricane Creek Branch. The existing three span steel beam superstructure was constructed in 1991 and substructure was constructed in 1943. The proposed project consists of replacement of existing expansion joints with strip seals, bridge deck scarification, deck & approach patching, & bridge deck overlay. Construction shall be completed using full road closure.



- (A) Remove Existing Expansion Joints and Replace with Strip Seal Expansion Joint
- B Bridge Deck Scarification, ¾", Deck Patching,
 & Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 2½"
- (C) Approach Slab Patching & See Roadway Plans for Overlay

USER NAME = Mona.Steffen	DESIGNED	-	T. Walk	REVISED	-
	DRAWN	-	T. Walk	REVISED	-
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Macklin	REVISED	-
PLOT DATE = 8/17/2022	DATE	-	Sent 2021	REVISED	_

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION					F.A.S RTE. SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
S.N. 026-0045				1751	D7 BRIDGE REPAIRS 2	023-6	FAYETTE	50	31	
5,11, 020-0045								CONTRACT	NO. 74	IA92
EET 1	OF 6	SHEETS	STA.	TO STA.		ILLINOIS	FED. AI	D PROJECT		

DECK CROSS SECTION

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.

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

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

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

TOTAL BILL OF MATERIAL

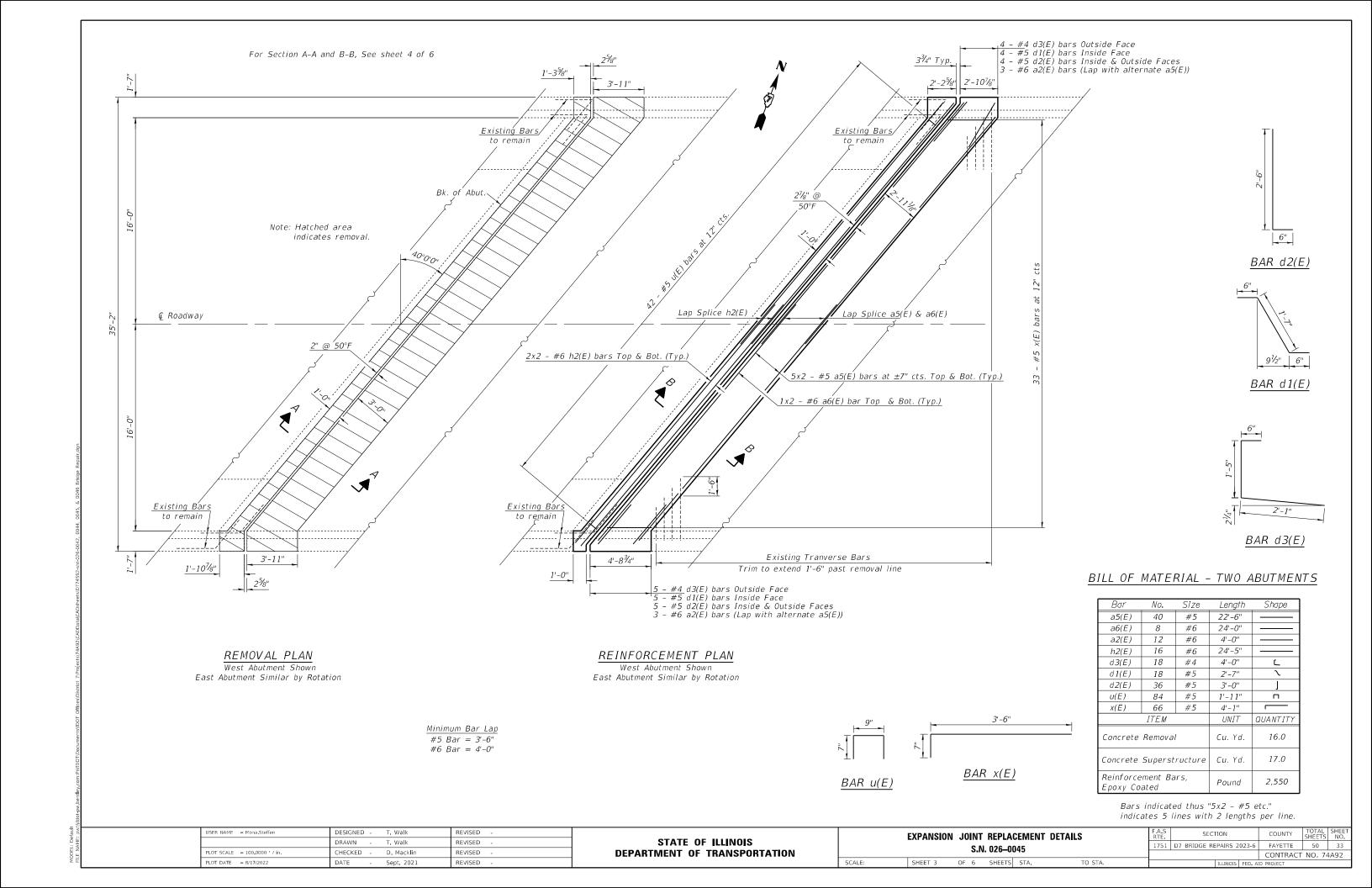
ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	16.0
Concrete Superstructure	Cu. Yd.	17.0
Reinforcement Bars, Epoxy Coated	Pound	2,550
Bridge Deck Grooving	Sq. Yd.	540
Bridge Deck Scarification, ¾"	Sq. Yd.	575
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 21/4"	Sq. Yd.	575
Preformed Joint Strip Seal	Foot	88
Protective Coat	Sq. Yd.	615
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	2.0
Approach Slab Repair (Full Depth)	Sq. Yd.	11.0

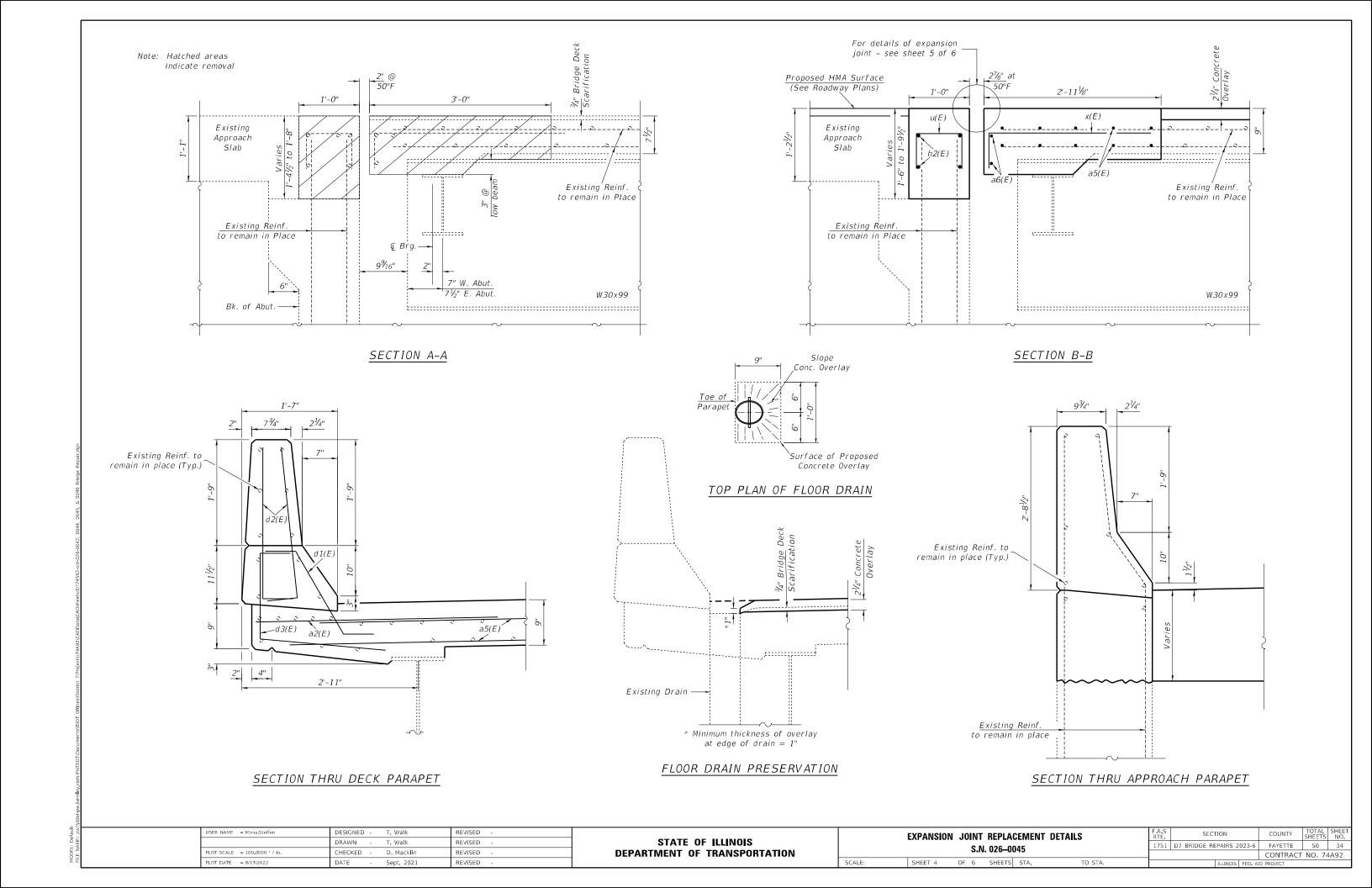
USER NAME = Mona,Steffen	DESIGNED	-	T. Walk	REVISED	-	
	DRAWN	-	T. Walk	REVISED	-	
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Macklin	REVISED	-	
PLOT DATE = 8/17/2022	DATE	-	Sept. 2021	REVISED	-	

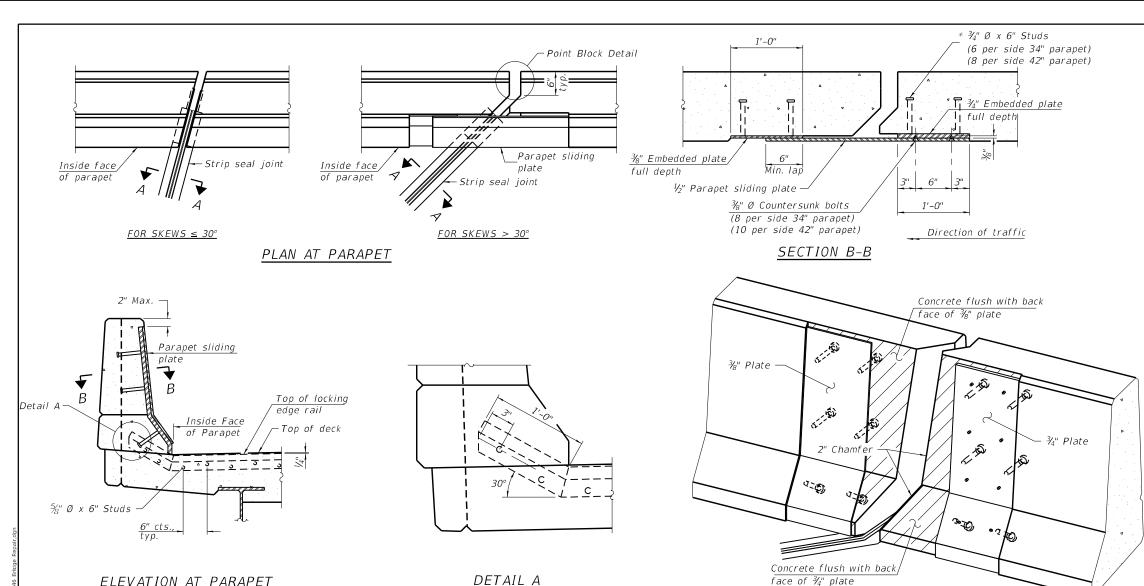
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

DECK CROS	SS SEC	ΓΙΟΝ, GE	NERAL NO	TES &	F.A.S RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
BILL OF MATERIALS S.N. 026-0045				1751	D7 BRIDGE REPAIRS 2023-6	FAYETTE	50	32	
DILL O	IVIAIL	IIIALO O	7.14. UZU—U	,-J			CONTRACT	NO. 74	1A92
SHEET 2	OF 6	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		







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 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

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

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal. 34" F-shape barrier shown, 42" F-shape similar as noted.

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.

ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

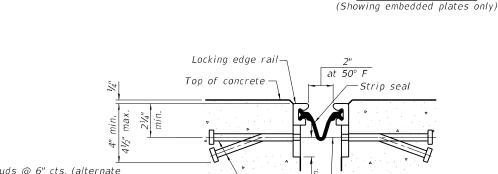
at 50° F

SHOWING ROLLED RAIL JOINT

at 50° F

Locking edge rail -

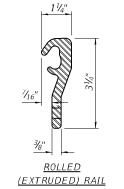
Top of concrete



* $\frac{5}{6}$ " Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

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.



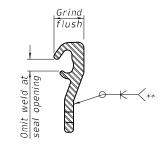
TRIMETRIC VIEW

at 50°

LOCKING EDGE RAILS

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

WELDED RAIL



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	88

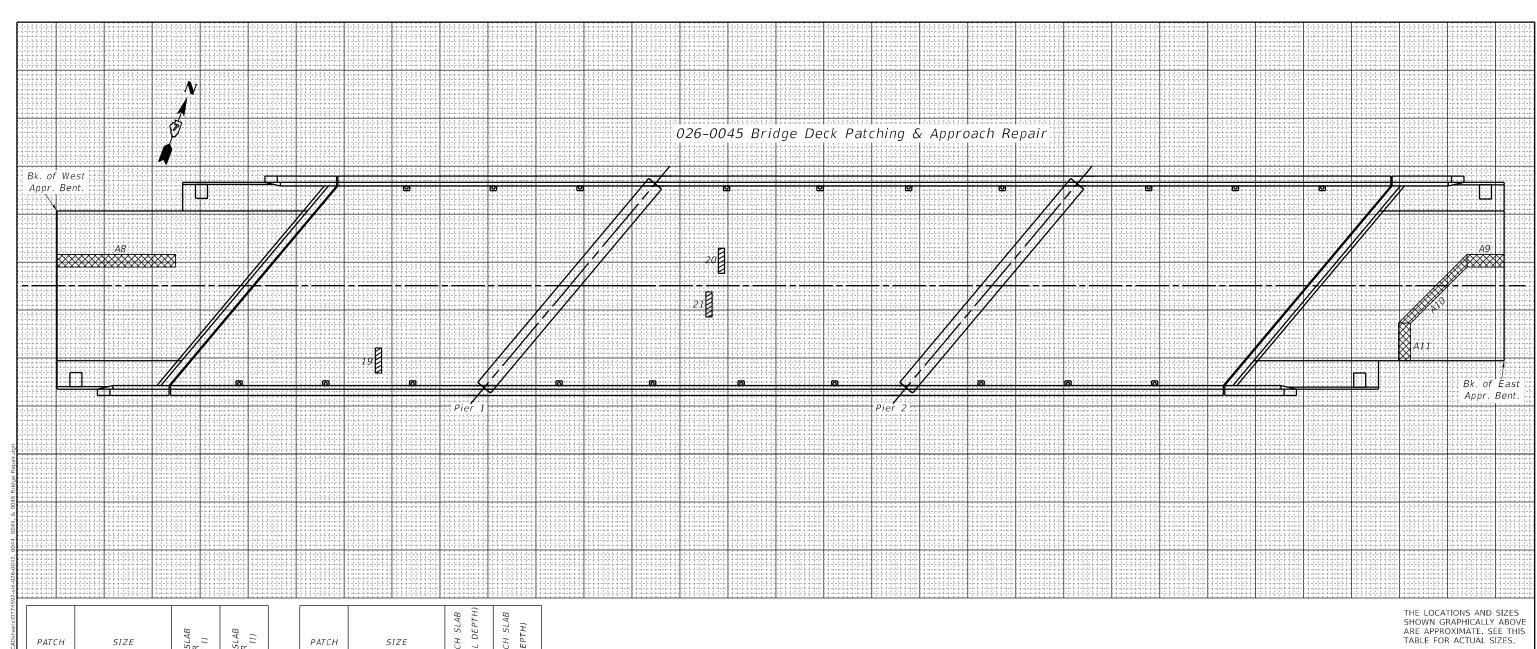
JSER NAME = Mona, Steffen DESIGNED -T. Walk REVISED DRAWN T. Walk REVISED HECKED REVISED PLOT DATE = 8/17/2022 REVISED Sept. 2021

STATE OF ILLINOIS

SHOWING WELDED RAIL JOINT

SECTION PREFORMED JOINT STRIP SEAL 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 35 S.N. 026-0045 CONTRACT NO. 74A92 OF 6 SHEETS STA TO STA. SHEET 5

DEPARTMENT OF TRANSPORTATION



PATCH	SI	ZE	DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
19	1.0	4.0	0.4	
20	1.0	4.0	0.4	
21	1.0	4.0	0.4	
	TOTALS	1.3	0	
	ROUND TO:	2.0	0	

_	erancerance <u>(</u> :				
	PATCH	SI	ZE	APPROACH SLAB REPAIR (PARTIAL DEPTH)	APPROACH SLAB REPAIR (FULL DEPTH)
	NO.	LENGTH	WIDTH	SQ YD	SQ YD
	A8	19.0	2.0		2.7
	A9	6.0	2.0		1.3
	A10	2.0	14.5		3.2
	A11	2.0	6.0		1.3
		TOTALS	0	10.1	
		ROUND TO:	0	11.0	



W APPROACH REPAIR PARTIAL DEPTH

W APPROACH REPAIR FULL DEPTH

DATE OF SURVEY: 9-2-2021 SURVEY BY: DPM & TMW METHOD OF SURVEY: VISUAL

ESTIMATED PAY QUANTITIES

DECK SLAB REPAIR (FULL DEPTH, TYPE 1) = 2.0 SQ YD DECK SLAB REPAIR (FULL DEPTH, TYPE 2) = 0 SQ YD APPROACH SLAB REPAIR (PARTIAL DEPTH) = 0 SQ YD APPROACH SLAB REPAIR (FULL DEPTH) = 11.0 SQ YD

SCALE:

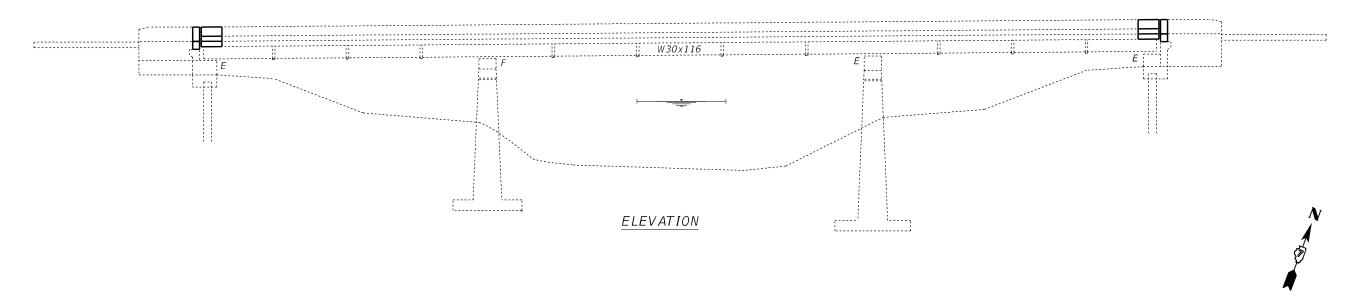
USER NAME = Mona,Steffen	DESIGNED	-	T. Walk	REVISED	-
	DRAWN	-	T. Walk	REVISED	-
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Mack l in	REVISED	-
PLOT DATE = 8/17/2022	DATE	-	Sent 2021	REVISED	_

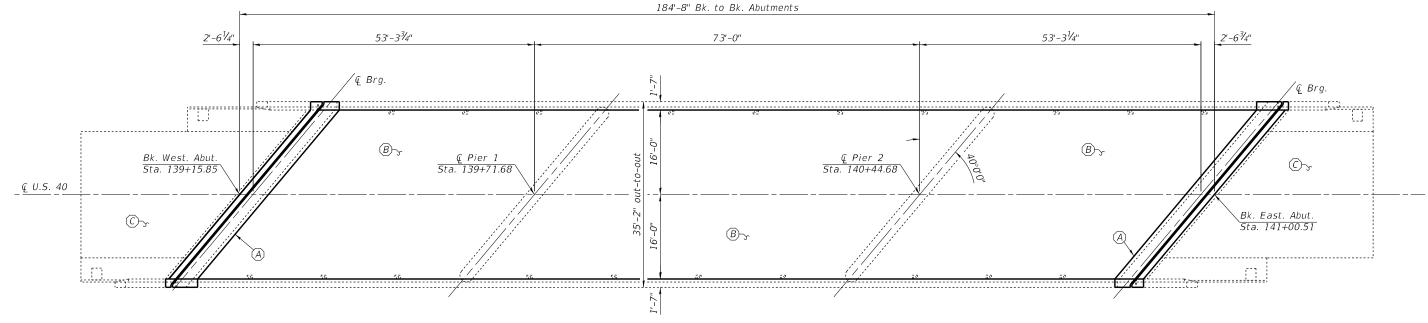
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

E	RIDGE DECK	PATO	HING &	APPROAG	CH REPAIR	F.A.S RTE	
	SN. 026-0045						
	SHEET 6	OF 6	SHEETS	STA.	TO STA.		

F.A.S RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1751	D7 BRIDGE REPAIRS 2023-6	FAYETTE	50	36
		CONTRACT	NO. 74	1A92
	ILLINOIS FED. A	ID PROJECT		

Existing Structure: SN. 026-0046 carries U.S. Rte 40 (FAS 1751) over Hurricane Creek. The existing three span steel beam superstructure was constructed in 1991 and substructure was constructed in 1943. The proposed project consists of replacement of existing expansion joints with strip seals, bridge deck scarification, deck & approach patching, & bridge deck overlay. Construction shall be completed using full road closure.







PLAN

- (A) Remove Existing Expansion Joints and Replace with Strip Seal Expansion Joint
- B Bridge Deck Scarification, $rac{3}{4}$ ", Deck Patching, & Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, $2rac{1}{4}$ "
- (C) Approach Slab Patching & See Roadway Plans for Overlay

EXPIRES 11-30-2022

_	USER NAME = Mona.Steffen	DESIGNED	-	T. Walk	REVISED -
		DRAWN	-	T. Walk	REVISED -
	PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Macklin	REVISED -
	PLOT DATE = 8/17/2022	DATE	-	Sept. 2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION					ELEVATION		F.A.S RTE	SECTION	COUNTY	TOTAL SHEE SHEETS NO			
S.N. 026-0046				1751	D7 BRIDGE REPAIRS 2023-6	FAYETTE	50	37					
3.14. 020-0040					TU		CONTRACT NO. 74A92						
EET 1 OF 6 SHEETS STA. TO STA.					STA.		ILLINOIS FED. A	ID PROJECT					

DECK CROSS SECTION

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.

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

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

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

TOTAL BILL OF MATERIAL

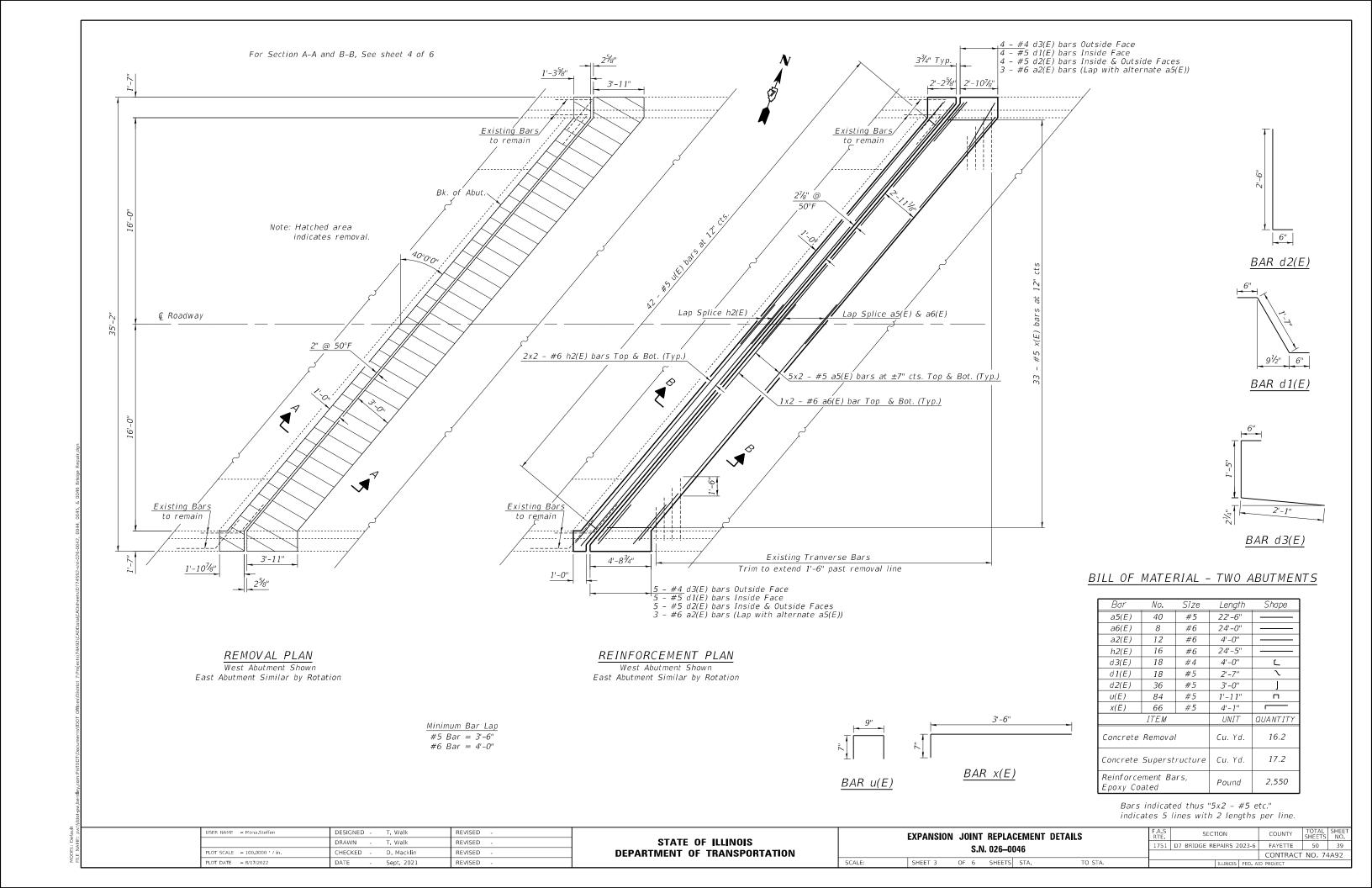
ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	16.2
Concrete Superstructure	Cu. Yd.	17.2
Reinforcement Bars, Epoxy Coated	Pound	2,550
Bridge Deck Grooving	Sq. Yd.	580
Bridge Deck Scarification, ¾"	Sq. Yd.	620
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 21/4"	Sq. Yd.	620
Preformed Joint Strip Seal	Foot	88
Protective Coat	Sq. Yd.	665
Approach Slab Repair (Full Depth)	Sq. Yd.	6.0

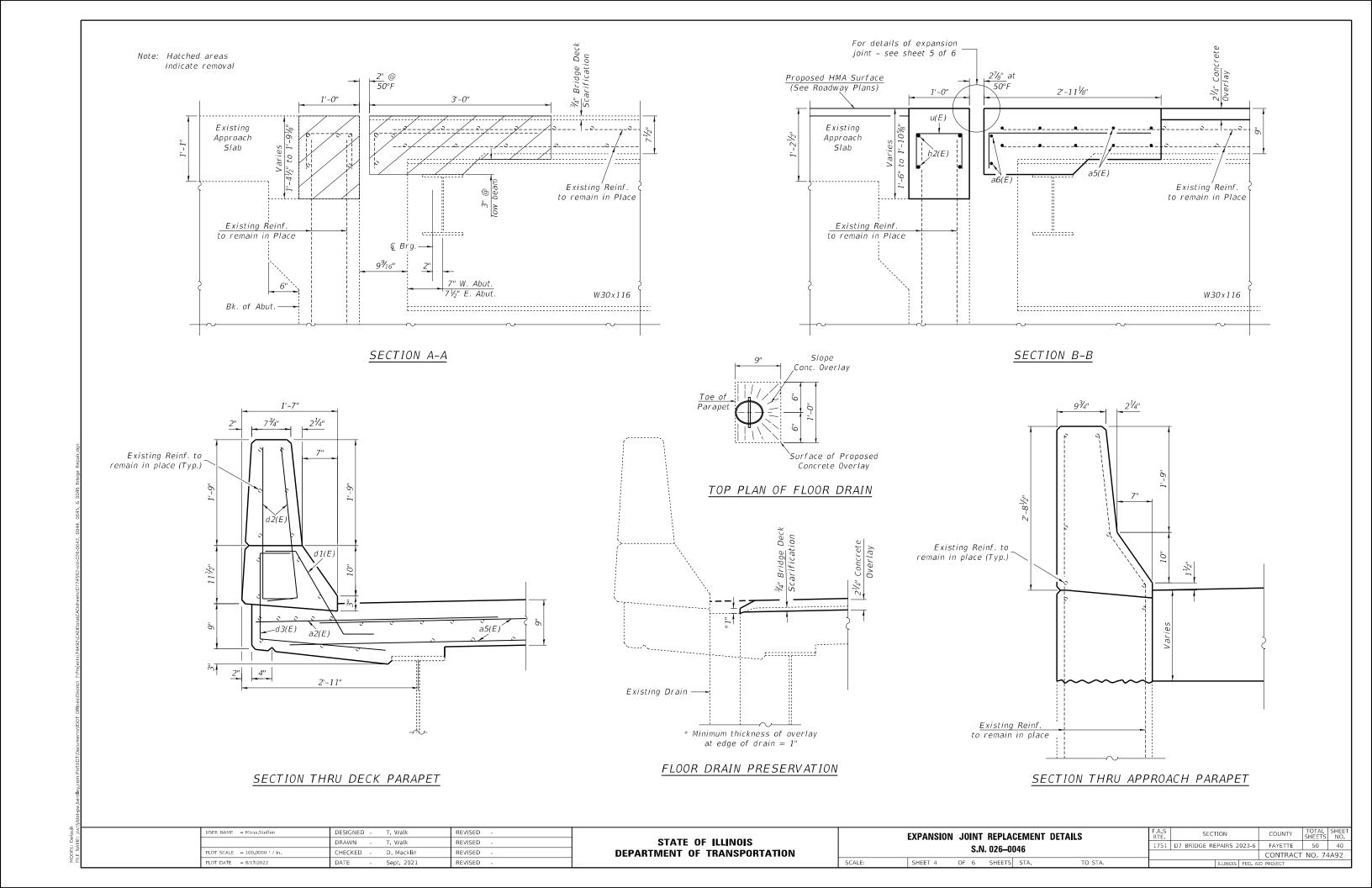
USER NAME = Mona.Steffen	DESIGNED	-	T. Walk	REVISED -	Г
	DRAWN	-	T. Walk	REVISED -	
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Macklin	REVISED -	
PLOT DATE = 8/17/2022	DATE	-	Sept. 2021	REVISED -	

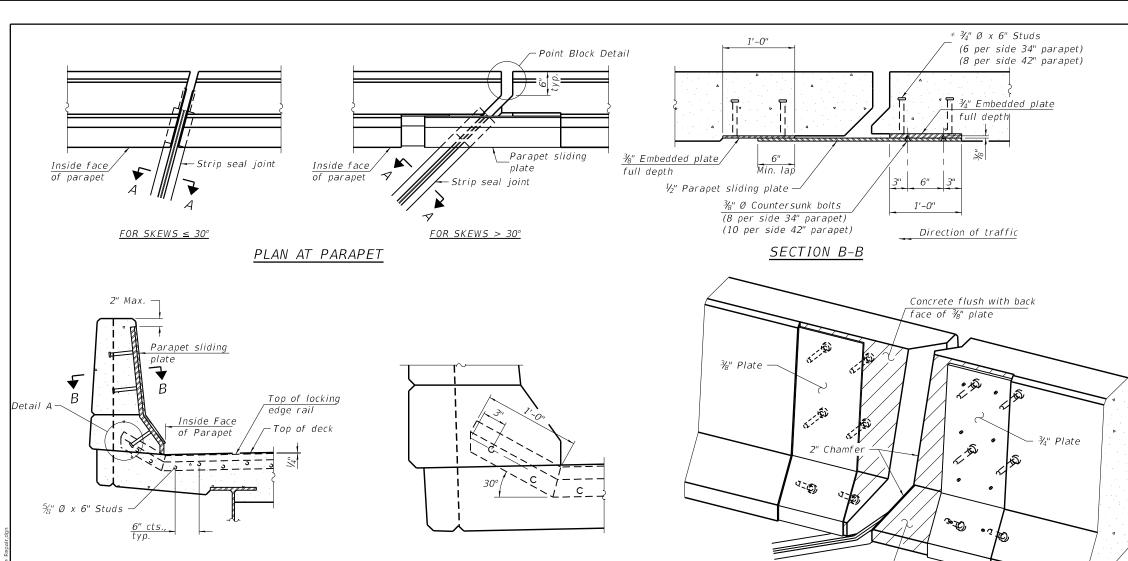
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

DECK CROSS SECTION, GENERAL NOTES &	F.A.S RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
BILL OF MATERIALS S.N. 026-0046	1751	D7 BRIDGE REPAIRS 202	3-6	FAYETTE	50	38
DILL OF WATERIALS SAV. 020-0040				CONTRACT	NO. 74	1A92
SHEET 2 OF 6 SHEETS STA. TO STA.		ILLINOIS FE	D. Al	D PROJECT		







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 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

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

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal. 34" F-shape barrier shown, 42" F-shape similar as noted.

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.

ELEVATION AT PARAPET

at 50° F

SHOWING ROLLED RAIL JOINT

at 50° F

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

Locking edge rail -

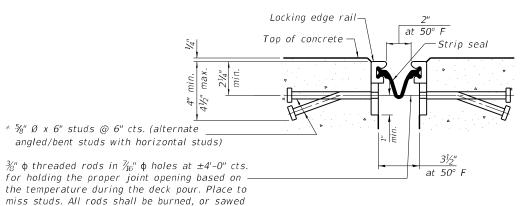
Top of concrete



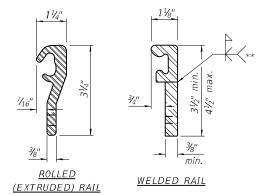
off flush with the plates after concrete is set.

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



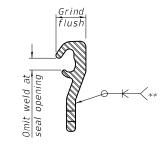


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

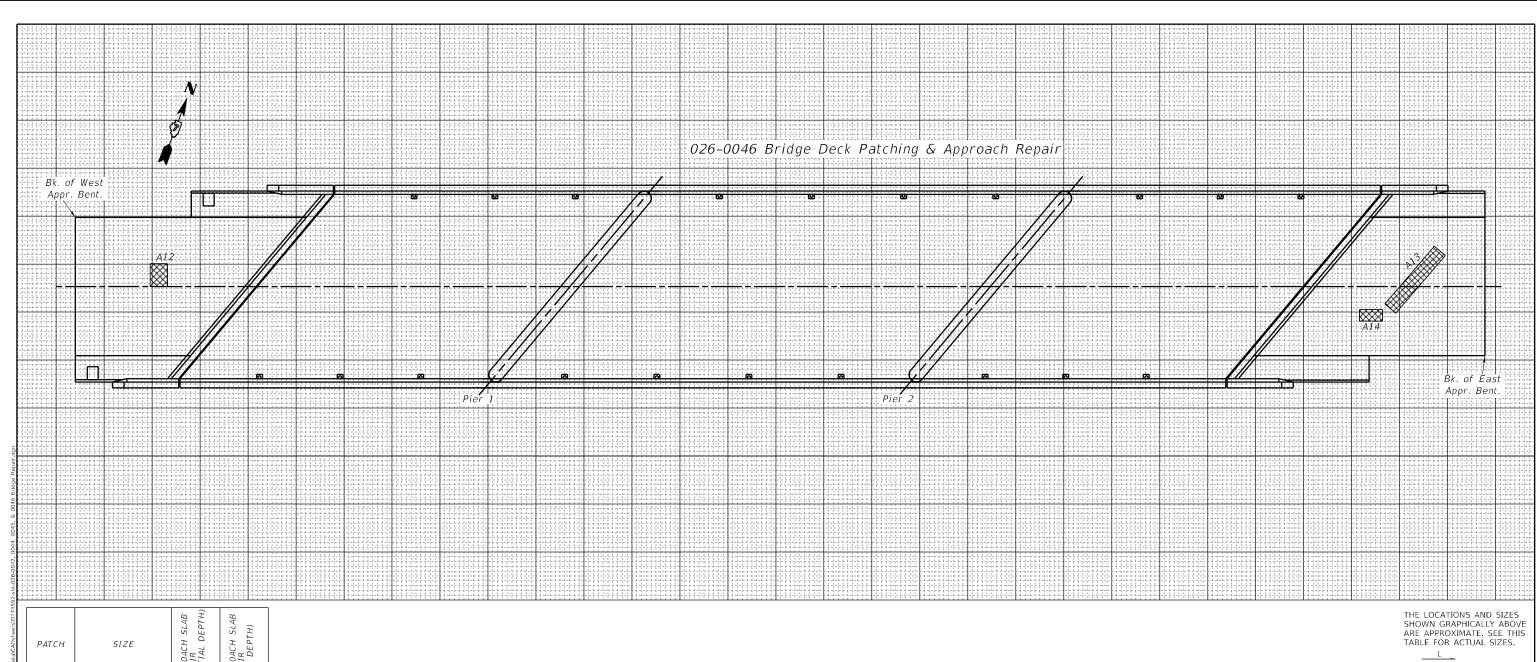
50 41

Item	Unit	Total
Preformed Joint Strip Seal	Foot	88

JSER NAME = Mona, Steffen DESIGNED -T. Walk REVISED DRAWN T. Walk REVISED HECKED REVISED PLOT DATE = 8/17/2022 REVISED Sept. 2021

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION PREFORMED JOINT STRIP SEAL 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE S.N. 026-0046 CONTRACT NO. 74A92 OF 6 SHEETS STA TO STA. SHEET 5



APPROACH SLAB REPAIR (PARTIAL DEPTH) APPROACH SLAB REPAIR (FULL DEPTH) NO. LENGTH WIDTH SQ YD SQ YD A12 3.0 4.0 1.3 A13 2.5 13.0 3.6 4.0 2.0 0.9 5.8 ROUND TO: 6.0

ESTIMATED PAY QUANTITIES

DECK SLAB REPAIR (FULL DEPTH, TYPE 1) = 0 SQ YD DECK SLAB REPAIR (FULL DEPTH, TYPE 2) = 0 SQ YD APPROACH SLAB REPAIR (PARTIAL DEPTH) = 0 SQ YD APPROACH SLAB REPAIR (FULL DEPTH) = 6.0 SQ YD

USER NAME = Mona Steffen	DESIGNED - T. Walk	REVISED -			BRIDGE DECK PATCHING & APPROACH REPAIL	R	F.A.S BTF	SECTION	COUNTY	TOTAL SHEET
	DRAWN - T. Walk	REVISED -	STATE OF ILLINOIS	•		••	1751	D7 BRIDGE REPAIRS 2023-6	FAYETTE	50 42
PLOT SCALE = 100.0000 / in	CHECKED - D. Macklin	REVISED -	DEPARTMENT OF TRANSPORTATION		SN. 026–0046				CONTRAC	T NO. 74A92
PLOT DATE = 8/17/2022	DATE - Sept. 2021	REVISED -		SCALE:	SHEET 6 OF 6 SHEETS STA. TO	O STA.		ILLINOIS FED. AI	D PROJECT	

W APPROACH REPAIR PARTIAL DEPTH

APPROACH REPAIR FULL DEPTH

DATE OF SURVEY: 9-2-2021 SURVEY BY: DPM & TMW METHOD OF SURVEY: VISUAL

200 E 350 www.invarion.co PAYNE DR 1700 N AIRPORT RD IMCO JANETTE DR 1650 N ROAD CLOSED AHEAD 1600 N FILMORE VANDALIA 200 JEFFERSON ST 1550 N RANDOLPH ST GRÖVE RD 1550 N MAIN ST LOUIS AVE MULBERRY VAN **EXHIBI** ROAD CLOSED AHEAD EAST 4 026-0045 1375 N 026-0046 1350 N 440 E 026-0044 ROAD CLOSED AHEAD ROAD CLOSED AHEAD 026-0042 1250 N N **EXHIBIT A** MULBERRY GR Ridge Ln\1100N OCO ROAD

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SECTION

DETOUR SIGNING

US 40

OF 3 SHEETS STA.

TO STA.

SCALE:

SHEET 1

COUNTY

CONTRACT NO. 74A92

1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 43

JSER NAME = Mona,Steffen

PLOT SCALE = 100.0000 ' / in.

PLOT DATE = 8/17/2022

DESIGNED -

DRAWN

DATE

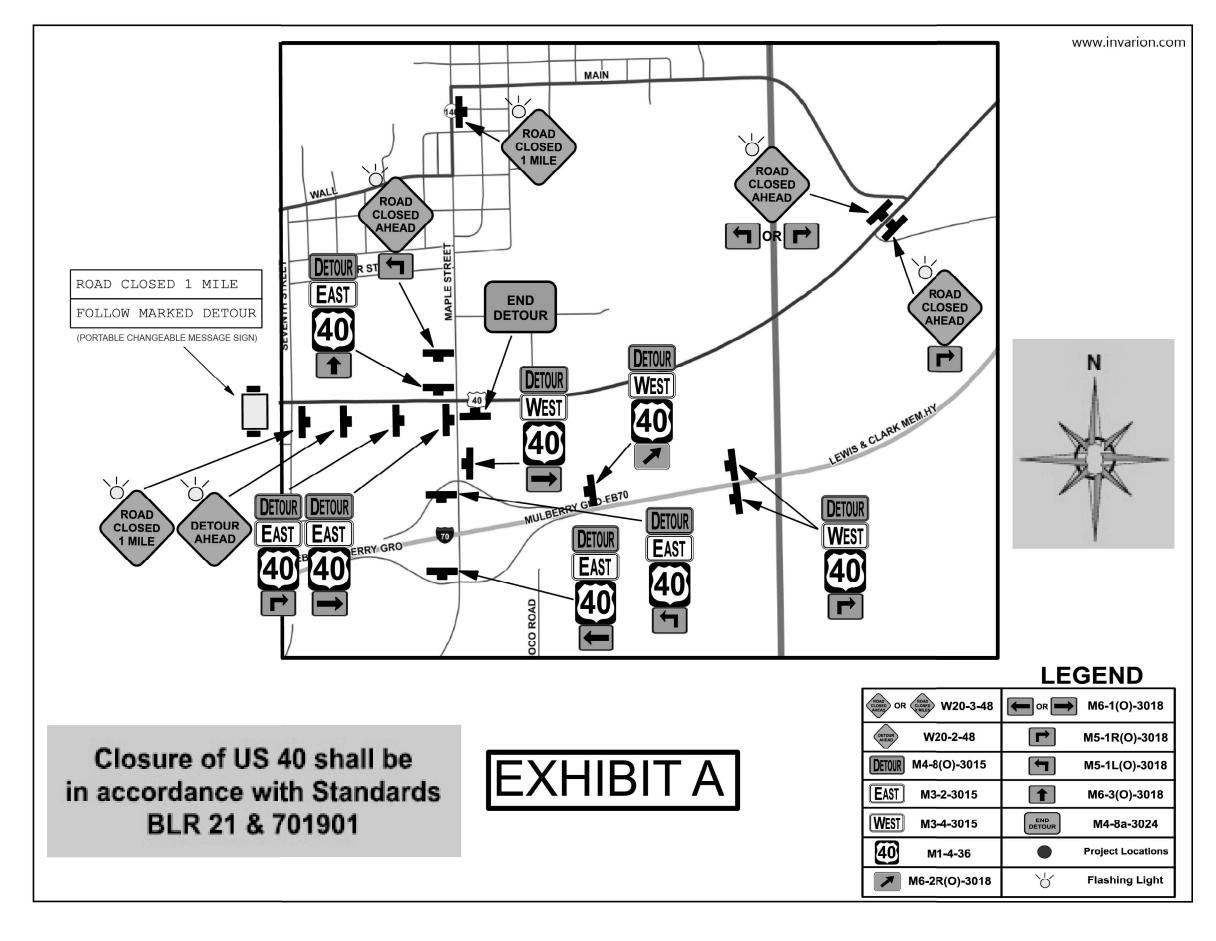
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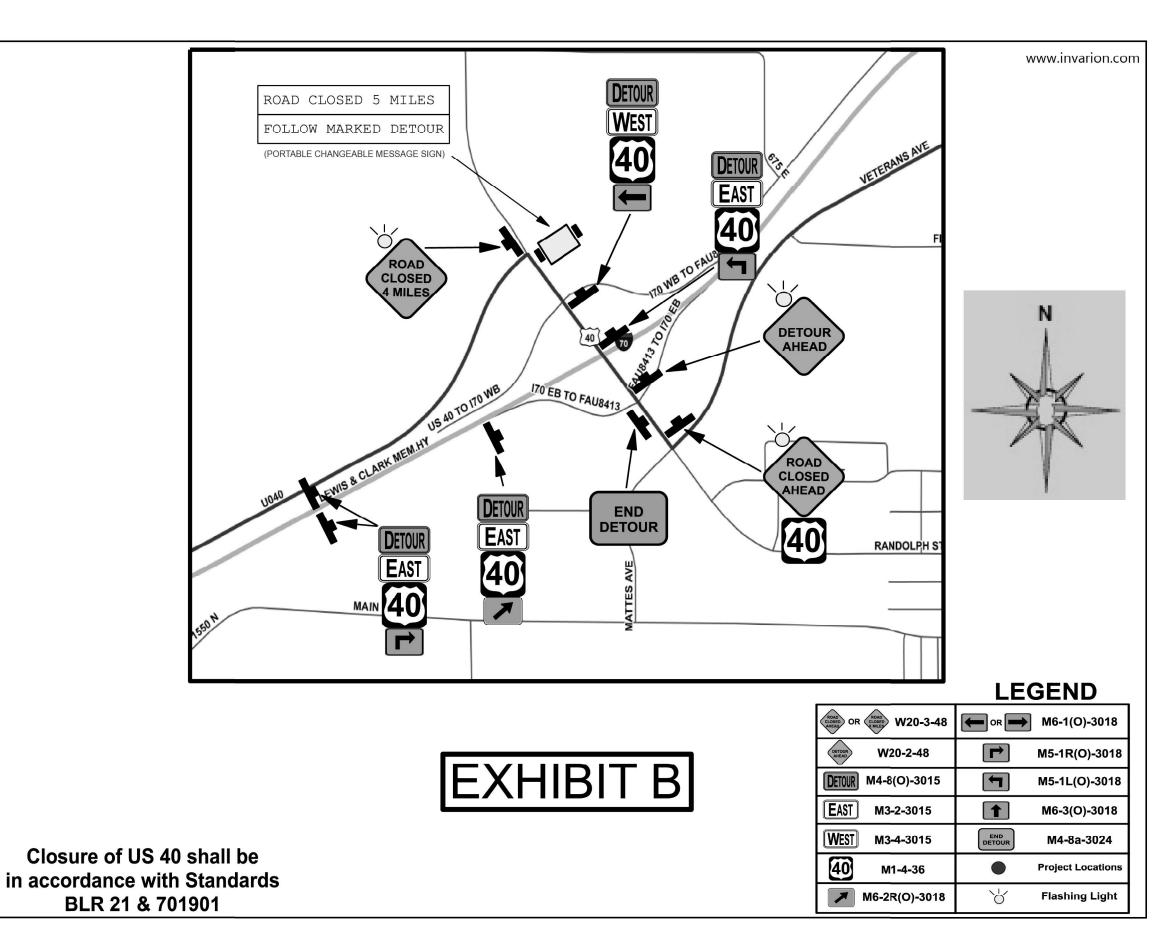
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MODEL: Default

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



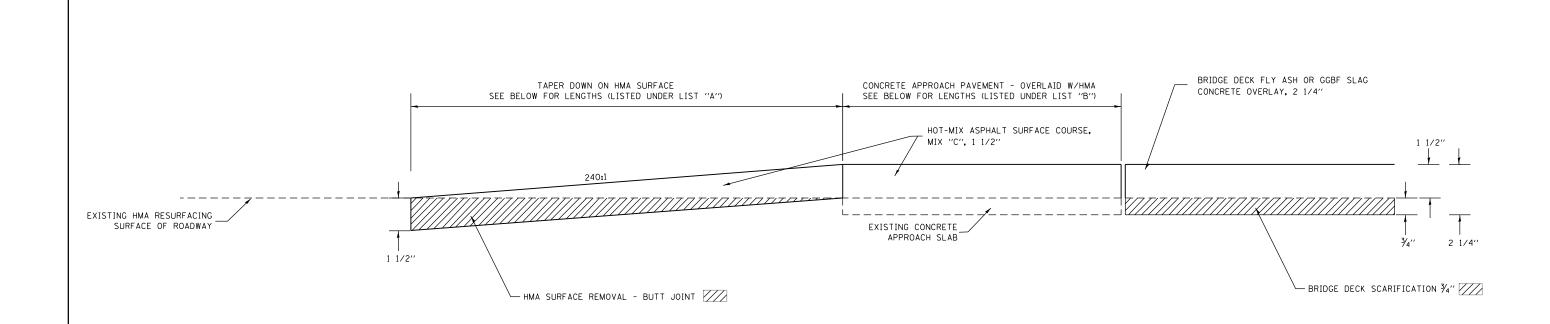
 USER NAME
 = Mona Steffen
 DESIGNED
 REVISED

 DRAWN
 REVISED

 PLOT SCALE
 = 100,0000 ' / in.
 CHECKED
 REVISED

 PLOT DATE
 = 8/17/2022
 DATE
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXISTING SURFACE HMA SURFACE REMOVAL - BUTT JOINT TEMPORARY RAMP

TEMPORARY RAMP

STA 14+35 TO STA 14+40 (WEST SIDE 026-0042 BEGINNING HMA) STA 18+12 TO STA 18+17 (EAST SIDE 026-0042 END HMA)

STA 118+68 TO STA 118+73 (WEST SIDE 026-0044 BEGINNING HMA) STA 123+25 TO STA 123+30 (EAST SIDE 026-0044 END HMA)

STA 125+77 TO STA 125+82 (WEST SIDE 026-0045 BEGINNING HMA) STA 129+45 TO STA. 129+50 (EAST SIDE 026-0045 END HMA)

STA 138+15 TO STA 138+20 (WEST SIDE 026-0046 BEGINNING HMA) STA 141+95 TO STA 142+00 (EAST SIDE 026-0046 END HMA)

LIST "A"

026-0042:

STA 14+35.00 TO STA 14+86.40 (WEST) - 51.40 FT STA 17+64.40 TO STA 18+17.00 (EAST) - 52.6 FT

026-0044: STA 118+68.00 TO STA 120+15.49 (WEST) - 147.49 FT STA 121+81.16 TO STA 123+30.00 (EAST) - 148.84 FT

026-0045: STA 125+77.00 TO STA 126+46.77 (WEST) - 69.77 FT STA 128+80.60 TO STA. 129+50.00 (EAST) - 69.40 FT

STA 138+15.00 TO STA 138+84.85 (WEST) - 69.85 FT STA 141+31.51 TO STA 142+00.00 (EAST) - 68.49 FT

LIST "B"

026-0042:

STA 14+86.40 TO STA 15+20.40 (WEST) - 34 FT STA 17+31.40 TO STA 17+64.40 (EAST) - 33 FT

026-0044:

STA 120+15.49 TO STA 120+43.49 (WEST) - 28 FT STA 121+53.16 TO STA 121+81.16 (EAST) - 28 FT

026-0045:

STA 126+46.77 TO STA 126+77.77 (WEST) - 31 FT STA 128+49.60 TO STA. 128+80.60 (EAST) - 31 FT

026-0046:

STA 138+84.85 TO STA 139+15.85 (WEST) - 31 FT STA 141+00.51 TO STA 141+31.51 (EAST) - 31 FT

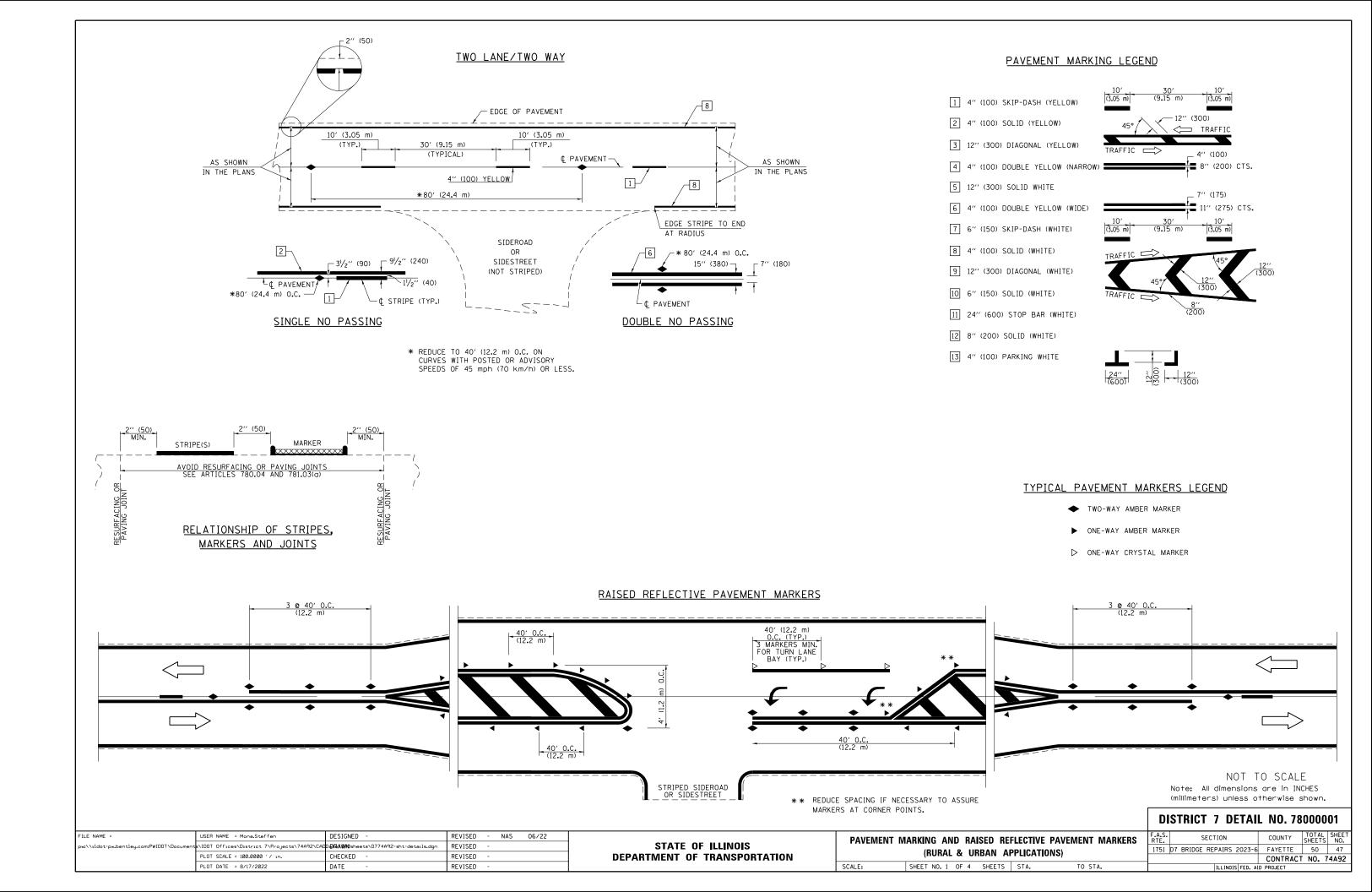
NOT TO SCALE SECTION **PAVING DETAILS**

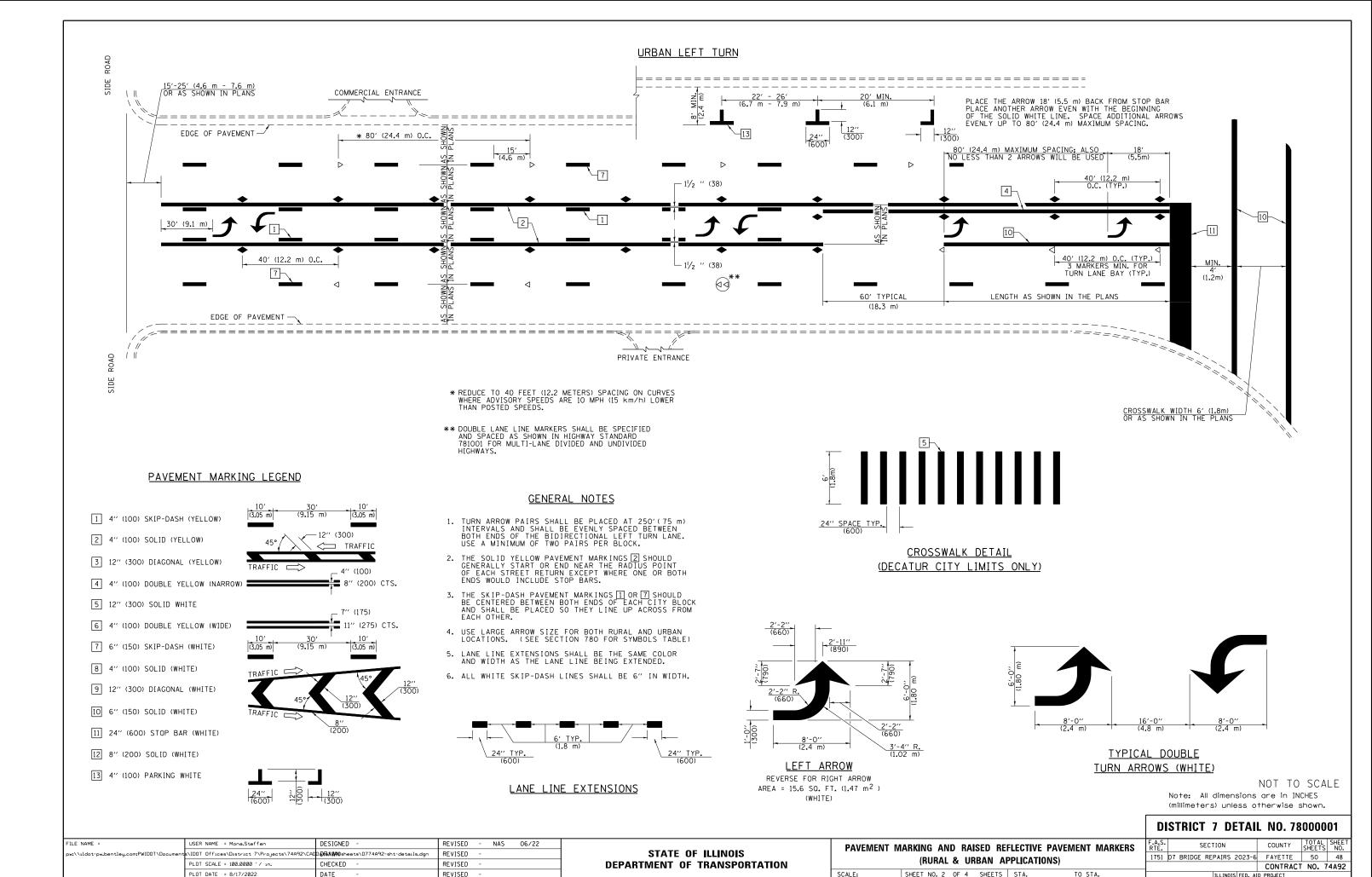
JSER NAME = Mona,Steffen DESIGNED REVISED DRAWN REVISED LOT SCALE = 100.0000 / in. HECKED REVISED PLOT DATE = 8/17/2022

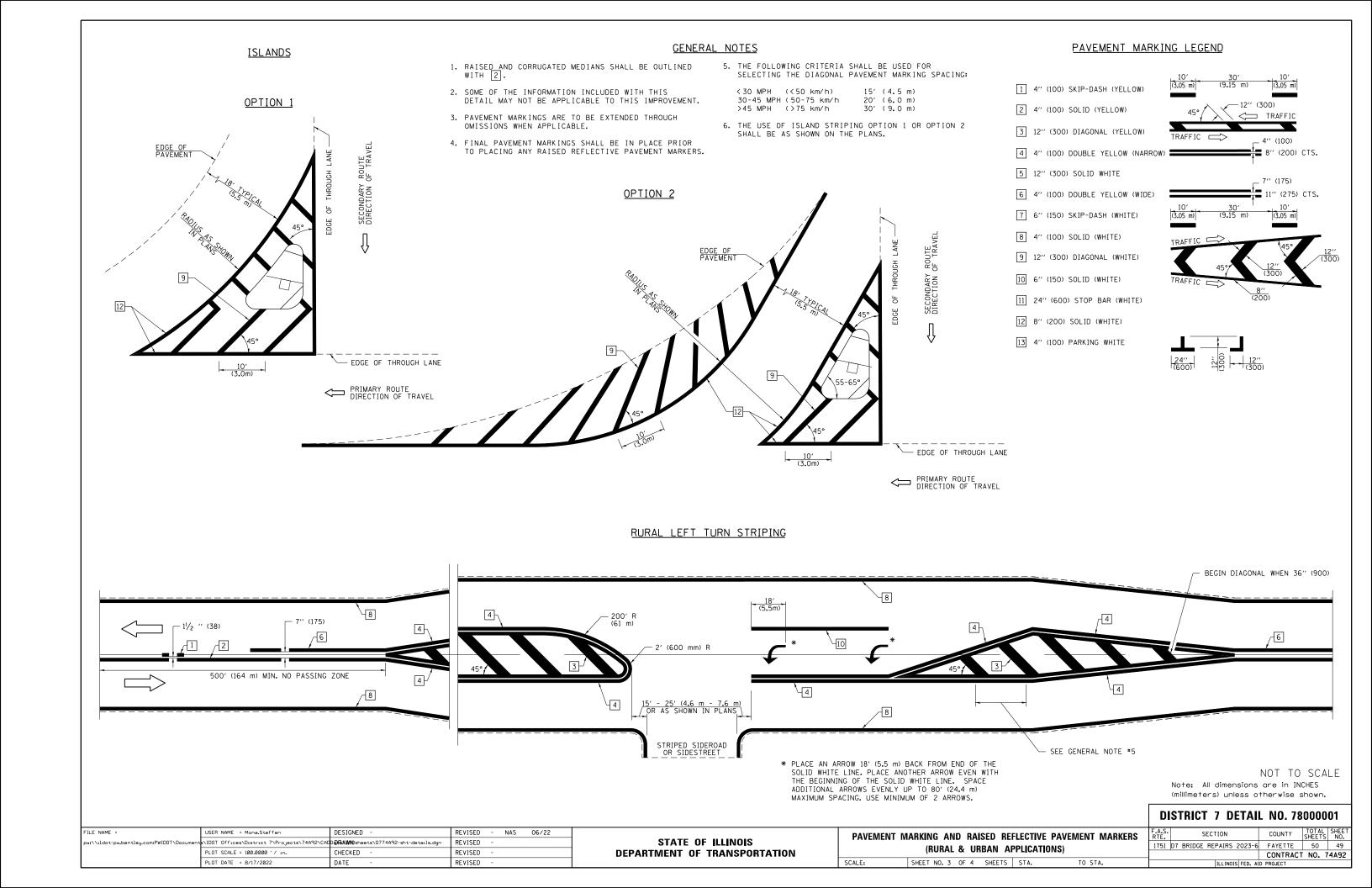
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SHEET 1 OF 1 SHEETS STA. TO STA. 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 46

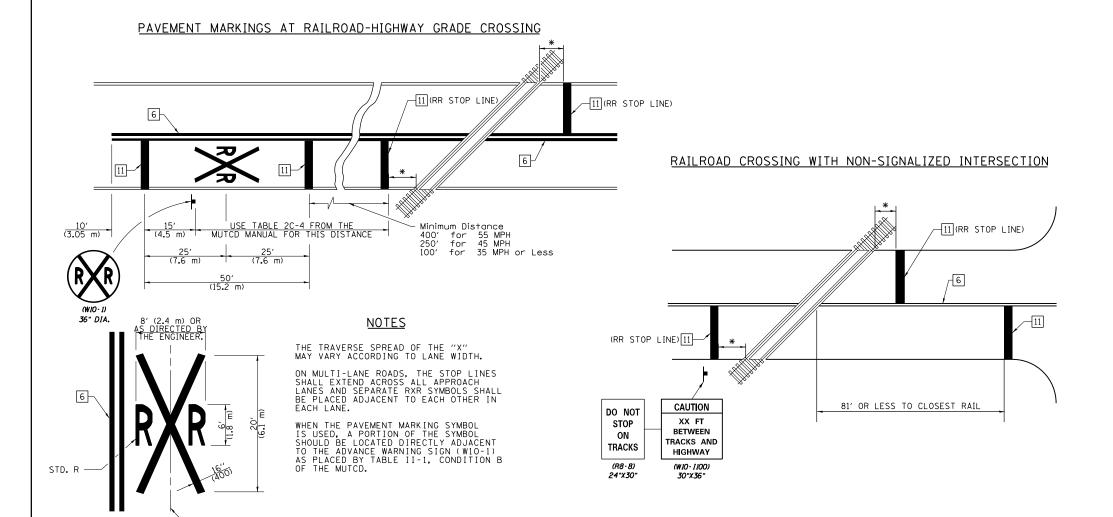
CONTRACT NO. 74A92







SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING



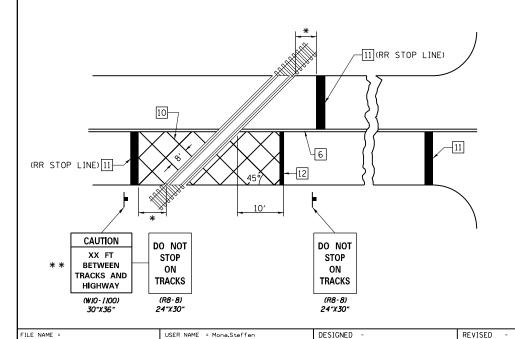
NAS 06/22

REVISED

REVISED

REVISED

RAILROAD CROSSING WITH INTERCONNECT ONLY



PLOT SCALE = 100.0000 '/ 10.

PLOT DATE = 8/17/2022

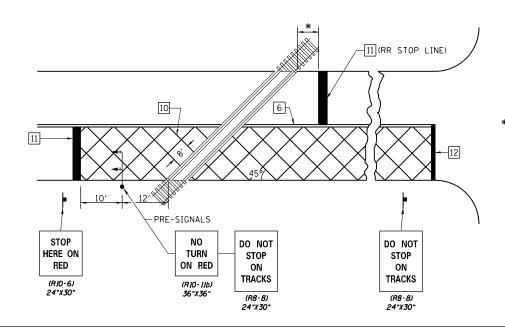
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CHECKED

DATE

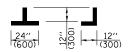
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PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW) 2 4" (100) SOLID (YELLOW) TRAFFI'S 3 12" (300) DIAGONAL (YELLOW 4" (100) 4 4" (100) DOUBLE YELLOW (NARROW) **3** 8" (200) CTS. 7" (175)
- 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.



(W10-1101)

- 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
- ** 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.

COUNTY 1751 D7 BRIDGE REPAIRS 2023-6 FAYETTE 50 50 CONTRACT NO. 74A92

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL & URBAN APPLICATIONS) SHEET NO. 4 OF 4 SHEETS STA. TO STA.