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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

INDEX OF SHEETS

- **COVER SHEET**
- 2 GENERAL NOTES, COMMITMENTS, AND LIST OF STANDARDS
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- 11 WIDTH RESTRICTION SIGNING DETAIL
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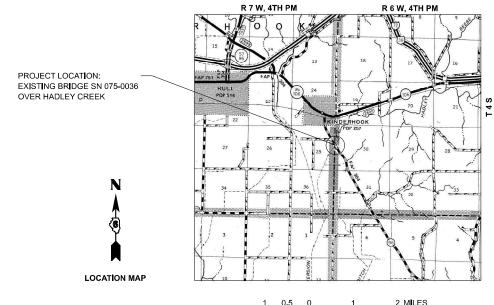
MINOR ARTERIAL

- APPROACH SLABS GUARDRAIL / INLET PLAN
- 22 23 ENTRANCE AND MAILBOX TURNOUT DETAILS

PROPOSED HIGHWAY PLANS

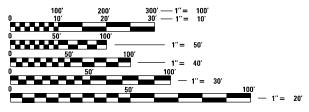
FAP ROUTE 304 (IL 96) SECTION (1BR)BDR,BRR,BJR,I **PROJECT** HBFP-NSTQ(006) **BRIDGE DECK OVERLAY PIKE COUNTY**

C-96-030-23



FUNCTIONAL CLASSIFICATION

ADT (2021) = 1,250S.U. = 4.80% M.U. = 3.20%



ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

PROJECT ENGINEER **PROJECT MANAGER** **JONATHAN KELLEY 217–785–2739 ED KERN** 217-524-7547

GROSS LENGTH = 758.00 FT. = 0.144 MILE NET LENGTH = 758.00 FT. = 0.144 MILE

PROFESSIC ENGINEER OF FEBRUARY 8 20 24

NOVEMBER 30 20 25





D-96-088-22



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

February 13 SUBMITTED_ March 22,

March 22, 2024

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV. - MS

CONTRACT NO. 72223

GENERAL NOTES

- ALL SAW CUTS NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED
- 2. THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE PLAN QUANTITIES:

BITUMINOUS MATERIALS (TACK COAT)

0.05 LBS/SQ FT (ON EXISTING HMA, MILLED SURFACE, CONCRETE, MILLED/TINED CONCRETE)

BITUMINOUS MATERIALS (PRIME COAT) BITUMINOUS MATERIALS (TACK COAT)

0.25 LBS/SQ FT (ON AGGREGATE)

HOT-MIX ASPHALT MATERIAL

0.025 LBS/SQ FT (BETWEEN HMA LIFTS, IL-4.75, BRICK) 0.056 TON/SQ YD PER 1"

AGGREGATE MATERIAL

1.60 TONS/CU YD

- AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK
- THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION FOR APPROVAL TO THE RESIDENT ENGINEER BEFORE THIS PROJECT IS STARTED.
- 5. IDOT DISTRICT 6 OPERATIONS TRAFFIC SIGNAL SECTION SHALL BE CONTACTED AT (217) 558-6718 FOR CONTROLLER PROGRAMMING AND TIMING APPROVAL PRIOR TO ACTIVATING THE TEMPORARY BRIDGE TRAFFIC SIGNALS.
- 6. SYNTHETIC FIBERS ARE NOT REQUIRED FOR THE BRIDGE DECK MICROSILICA CONCRETE OVERLAY.
- ALL GUARDRAIL SHALL HAVE A PRELIMINARY LAYOUT. GUARDRAIL POSTS SHALL BE ADJUSTED TO MISS ANY SHOULDER DRAINS, INLETS, PIPE CULVERTS, STORM SEWER OR ANY OTHER HAZARD THAT MAY INTERFERRE WITH GUARDRAIL
- ALL TEMPORARY PAVEMENT MARKING TAPE THAT IS TO REMAIN IN PLACE LONGER THAN 14 DAYS SHALL BE TYPE IV TAPE.
- FOR HORIZONTAL CONTROLAND CENTERLINE ALIGNMENT METADATA, PLEASE CONTACT IDOT DISTRICT 6 CHIEF OF SURVEYS AT 217-782-8707.
- THE CONTRACTOR MUST CONTACT IDOT DISTRICT 6 BUREAU OF OPERATIONS (217-785-5306) 21 DAYS IN ADVANCE OF IMPLEMENTING ANY WIDTH RESTRICTION SIGNING AND 3 WEEKS IN ADVANCE OF PLACING ANY TRAFFIC CONTROL.

LIST OF STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001 - 10	PAVEMENT JOINTS
542401-04	METAL FLARED END SECTION FOR PIPE
610001-09	SHOULDER INLET WITH CURB
630001-13	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701321-18	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-09	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

COMMITMENTS

THERE ARE NO COMMITMENTS.

THE FOLLOWING MIXTURE REQUIREMENTS FOR THIS PROJECT:

MIXTURE USE(S)	HMA SURFACE CSE	HMA SHOULDERS	HMA SHOULDERS LOWER LIFTS
AC/PG	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIX COMPOSITION (GRADATION MIXTURE)	IL-9.5	IL-19.0	IL-19.0
FRICTION AGGREGATE	MIX "C"	N/A	N/A
QUALITY MANAGEMENT	QC/QA	QC/QA	QC/QA
SUBLOT SIZE	N/A	N/A	N/A

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS** DISTRICT 6 January, 24 20 24 **ENGINEER OF OPERATIONS** January, 19 20 24 ENGINEER OF PROJECT IMPLEMENTATION January, 26 20 24 FIGURER OF PROGRAM DEVELOPMENT

TO STA.

REV. - MS

KUHN & TRELLO	USE
CONSULTING ENGINEERS A Limited Liability Company	
109 N. 7th Street, 3rd Floor Springfield, iL 62701 Phone: 227-679-0044	PLO
Phone: 217-679-0044 Professional Design Firm No. 184-006516	PLO

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	PLOT DATE = 2/9/2024	DATE -	REVISED -

SCALE:

		T	1	6-01069-0000 BFP 80% FED. 20% STATE BRIDGE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0047 075-0036
50800515	BAR SPLICERS	EACH	16	16
52000110	PREFORMED JOINT STRIP SEAL	FOOT	88	88
			470	470
542D0217	PIPE CULVERTS, CLASS D, TYPE 1 12"	FOOT	170	170
54262712	METAL FLARED END SECTIONS 12"	EACH	4	4
60500060	REMOVING INLETS	EACH	4	4
61000335	TYPE G INLET BOX, STANDARD 610001	EACH	4	4
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	100	100
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4
03100003	TIMITE DANIALITE INTERVE, THE U	EACH		
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4
63200310	GUARDRAIL REMOVAL	FOOT	500	500
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1

* SPECIALTY ITEM

KUHN & TRELLO	USER
CONSULTING ENGINEERS A Limited Liability Company	
109 N. 7th Street, 3rd Floor Springfield, IL 62701 Phone: 217-679-0044	PLOT
Professional Design Firm No. 184-006516	PLOT

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CONSTRUCTION CODE 6-01069-0000 BFP 80% FED. 20% STATE

					F.A.P RTE.			TOTAL SHEETS	SHEET NO.	
SUMMARY OF QUANTITIES				304	(1BR)BDR,BRR,BJR,I	PIKE	23	3		
								CONTRACT	NO. 72	223
	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		

				6-01069-0000 BFP 80% FED. 20% STATE
		ľ		BRIDGE
CODE			TOTAL	0047
NO.	[TEM	UNIT	QUANTITY	075-0036
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	300	300
70300100	CHORT TERM DAVEMENT MARKING	FOOT	116	116
70300100	SHORT TERM PAVEMENT MARKING	1001	116	116
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	39	39
70400100	TEMPORARY CONCRETE BARRIER	FOOT	538	538
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	538	538
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
	·			_
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4
78009005	MODIFIED URETHANE PAVEMENT MARKING - LINE 5"	FOOT	1766	1766
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	16	16
		i.		
78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	10	10
7020222	DAVENENT MARKING DENOVAL, WATER DI 15TWG	66.7	550	550
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	560	560
		Ţ.		ļ

				CONSTRUCTION CODE
				6 - 01069 - 0000
				BFP 80% FED. 20% STATE
				BRIDGE
CODE			TOTAL	0047
NO .	ITEM	UNIT	QUANTITY	075-0036
X1200030	FILLING INLETS, TEMPORARY	EACH	2	2
				-
X2020060	EXCAVATING AND GRADING EXISTING SHOULDER, (SPECIAL)	UNIT	8	8
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1
				*
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	13	13
				2
Z0001905	STRUCTURAL STEEL REPAIR	POUND	310	310
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1261	1261
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2"	SQ YD	1261	1261
				S
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1
Z0076600	TRAINEES	HOUR	500	500
Z0015500	DEBRIS REMOVAL	L SUM	1	1
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	80	80

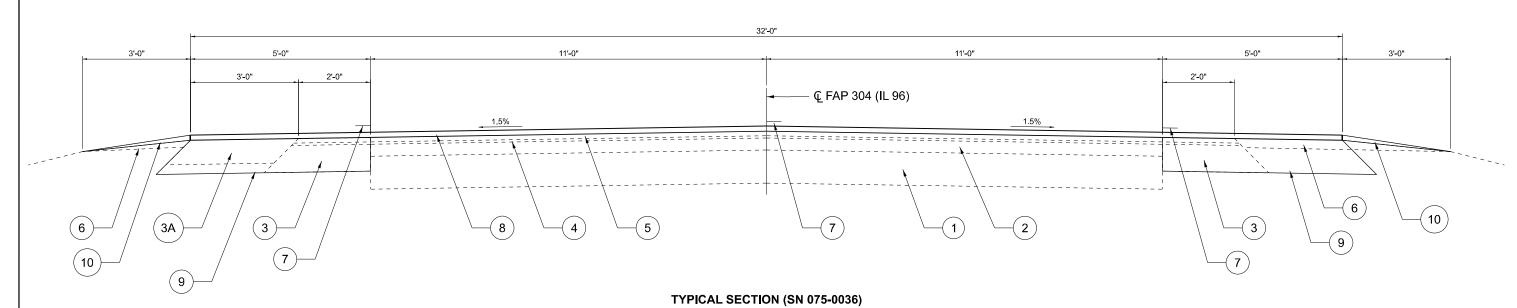
* SPECIALTY ITEM

Ø 0042

CONSTRUCTION CODE 6-01069-0000

SCALE:

REV. - MS



STA. 34+00 TO STA. 41+48

BRIDGE & APPROACH PAVEMENT STA. 35+67 TO STA. 39+91

- 1 EXISTING AGGREGATE BASE COURSE 11"
- 2 EXISTING BITUMINOUS RESURFACING 4"
- (3) EXISTING BITUMINOUS CONCRETE BASE COURSE WIDENING, 9"
- (3A) EXISTING BITUMINOUS SHOULDER 8"
- 4 EXISTING BITUMINOUS LEVELING BINDER 3/4"
- (5) EXISTING BITUMINOUS SURFACE COURSE, MIXTURE C. 1 1/2"
- (6) EXISTING AGGREGATE SHOULDER
- $\left(egin{array}{c} 7 \end{array}
 ight)$ PROPOSED MODIFIED URETHANE PAVEMENT MARKING LINE 5"
- (8) PROPOSED HMA SURF. COURSE, IL 9.5, MIX "C", N50 (1 3/4")
- $ig(egin{array}{c} ig)$ proposed HMA shoulders, 11 $rac{1}{4}$ "
- (10) PROPOSED AGGREGATE WEDGE SHOULDER

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

SHEET

TYPICAL SECTIONS		F.A.P RTE			COUNTY	TOTAL SHEETS	SHEET NO.		
TYPIC	AL SEC	IONS		304	(1BR)BDR,BRR,BJR,	J	PIKE	23	5
							CONTRACT	NO. 72	223
OF	SHEETS	STA.	TO STA.		ILLINOIS	FED AL	D PROJECT		

PAVEMENT MARKING SCHEDULE

LOC	CATION	COMMENT	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL		MARKING - E 5"	PAVEMENT MARKING REMOVAL WATER BLASTING	
					WHITE	YELLOW	78300202	
			70300100	70300150	7800	78009005		
			FOOT	SQ FT	FOOT	FOOT	SQ FT	
STATION	TO STATION							
34+97	35+67	MILLED BUTT JOINT	8	3				
32+73	42+84	FINAL SURFACE	100	33	1516	250		
39+91	40+61	MILLED BUTT JOINT	8	3				
32+73	42+84	CENTERLINE					104	
34+00	35+67	LT EDGE LINE					70	
39+91	41+58	LT EDGE LINE					70	
34+00	41+58	RT EDGE LINE					316	
SUBTOTAL					1516	250		
TOTAL			116	39	17	560		

GUARDRAIL SCHEDULE

LOCATION		COMMENT	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	GUARDRAIL REMOVAL	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL REFLECTORS, TYPE A
			63000001	63100085	63100167	63200310	72501000	78200005
			FOOT	EACH	EACH	FOOT	EACH	EACH
STATION	TO STATION							
34+77	36+02	NE	25	1	1	125.0	1	4
34+90	36+27	NW	37.5	1	1	137.5	1	4
39+30	40+43	SE	12.5	1	1	112.5	1	4
39+66	40+91	SW	25	1	1	125.0	1	4
TOTAL			100	4	4	500.0	4	16

SHOULDER SCHEDULE

LOCATION		LENGTH	SHLDR WIDTH	AREA	BITUMINOUS MATERIALS (TACK COAT)	AGGREGATE WEDGE SHOULDER, TYPE B	HOT-MIX ASPHALT SHOULDERS, 11 1/4"	HOT-MIX ASPHALT SHOULDERS	EXCAVATING AND GRADING EXISTING SHOULDER (SPECIAL)
		FT	FT	SQ FT	40600290	48102100	48203042	48203100	X2020060
STATION TO	STATION				POUND	TON	SQ YD	TON	UNIT
34+00	35+70 LT	170	5	850	44		95	10	2
34+00	35+84 LT					6			
34+00	35+96 RT	196	5	980	50		109	11	2
34+00	36+11 RT					6			
39+48	41+58 RT					6			
39+62	41+58 LT	196	5	784	58		127	13	2
39+75	41+58 RT					6			
39+88	41+58 RT	170	5	850	44		95	10	2
TOTAL	·				196	24	426	44	8

INLET SCHEDULE

LOCATION	TRENCH BACKFILL	PIPE CULVERT REMOVAL	PIPE CULVERTS, CLASS D, TYPE 1 12"	METAL FLARED END SECTIONS 12"	REMOVING INLETS	TYPE G INLET BOX, STANDARD 610001	FILLING INLETS, TEMPORARY
	20800150	50105220	542D0217	54262712	60500060	61000335	X1200030
STATION	CU YD	FOOT	FOOT	EACH	EACH	EACH	EACH
35+75 LT	1.5	42.0	42.0	1	1	1	
36+02 RT	1.5	26.0	26.0	1	1	1	1
39+55 LT	1.5	47.0	47.0	1	1	1	
39+81 RT	1.5	55.0	55.0	1	1	1	1
TOTAL	6	170	170	4	4	4	2

PAVING SCHEDULE

			100 30000 3 00000	The state of the s			
LOCATION		WIDTH	LENGTH	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	TEMPORARY RAMP	HOT-MIX ASPHALT SURFACE COURSE, IL- 9.5, MIX "C", N50
		FT	FT	40600290	40600982	40600990	40604050
STATION	TO STATION			POUND	SQ YD	SQ YD	TON
34+97	35+67	32.00	70.00		249.0		
34+97	35+97.5	32.00	100.50	160.0			
34+97	35+97.5	22.00	100.50				24.0
34+97	35+97.5	32.00	2 @ 5.83			42.0	
39+61.3	40+61	32.00	99.70	160.0			
39+61.3	40+61	22.00	99.70				24.0
39+91	40+61	32.00	70.00		249.0		
39+61.3	40+61	32.00	2 @ 5.83			42.0	
TOTAL				320	498	84	48

BARRIER WALL SCHEDULE

LOCATION		TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	
		70400100	70400200	70600260	70600332	
	STAGE	FOOT	FOOT	EACH	EACH	
SN 075-0036	1	537.5		2		
2			537.5		2	
TOTAL	TOTAL		538	2	2	

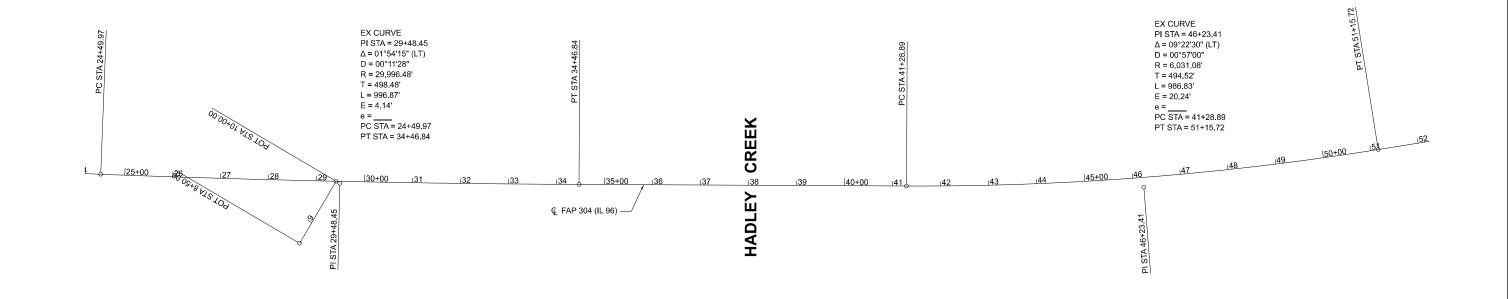
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	2011			F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	SCHEDULES OF QUANTITIES						(1BR)BDR,BRR,BJR,I	PIKE	23	6
							•	CONTRACT	NO. 72	223
SCALE:	SCALE: SHEET OF SHEETS STA. TO STA.						ILLINOIS FED. A	ID PROJECT		





ŀ	HORIZONTAL COORDINATES										
POINT	NORTHING	EASTING	STATION								
PC	1104529.146	2019528.246	24+49.97								
PI	1104088.295	2019760.910	29+48.45								
PT	1103655.418	2020008.094	34+46.84								
PC	1103063.130	2020346.305	41+28.89								
PI	1102633.692	2020591.526	46+23.41								
PT	1102249.935	2020903.424	51+15.72								

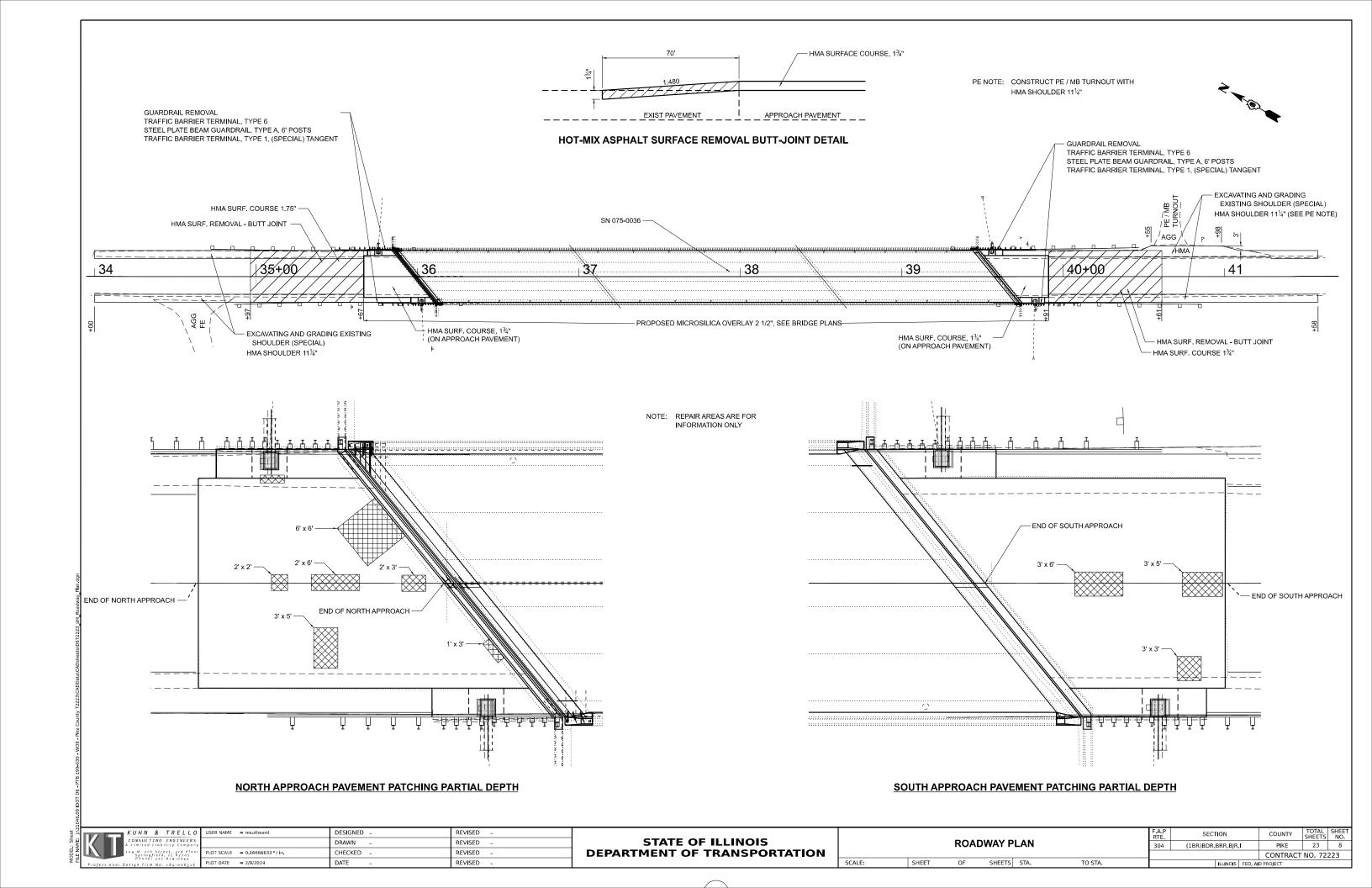
KUHN & TRELLO	
CONSULTING ENGINEERS A Limited Liability Company	Γ
109 N. 7th Street, 3rd Floor Springfield, IL 62701	l
Phone: 217-679-0044 Professional Design Firm No. 184-006516	
	CONSULTING ENGINEERS A Limited Liability Company 109 N. 7th Street, 3rd Floor 5 pringfield, iL 62701 Phone: 217-679-0044

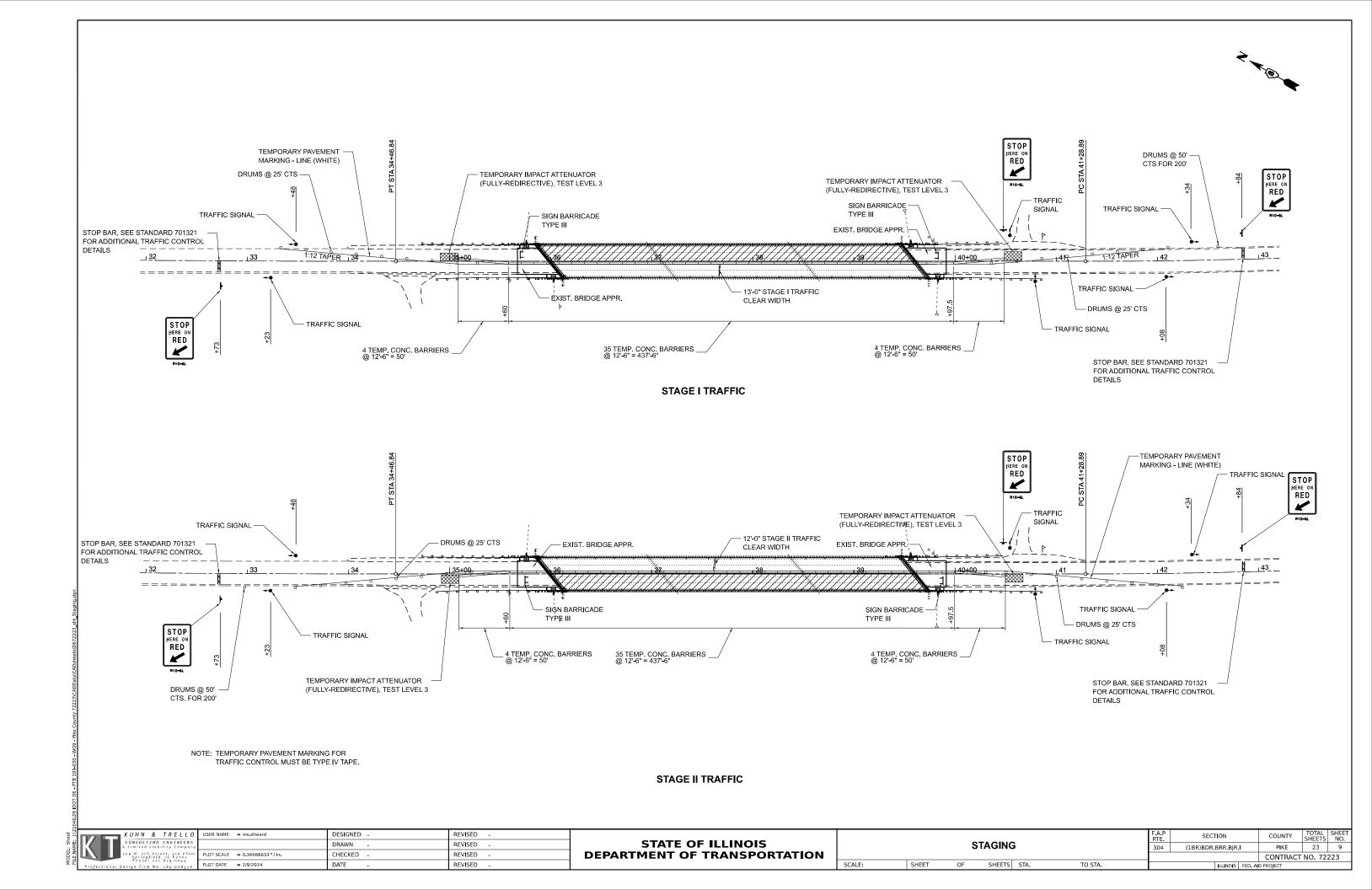
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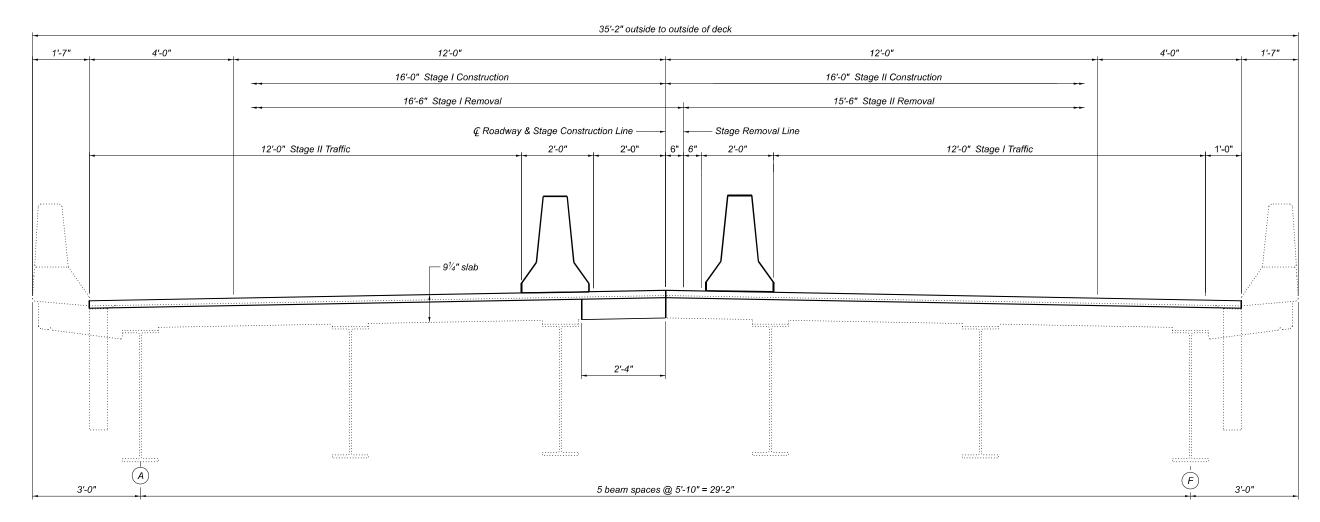
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

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	HORIZON	IIAL AL	IGNINE!	N I	304	(1BR)BDR,	BRR,BJR,	J	PIKE	23	7
									CONTRACT	NO. 72	223
SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	D PROJECT		







STAGING CROSS SECTION (Looking South)

KUHN & TRELLO CONSULTING ENGINEERS A Limited Liability Company Professional Design Firm No. 184.065516 Professional Design Fir

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STATE OF ILLINOIS				
DEPARTMENT OF TRANSPORTATION				

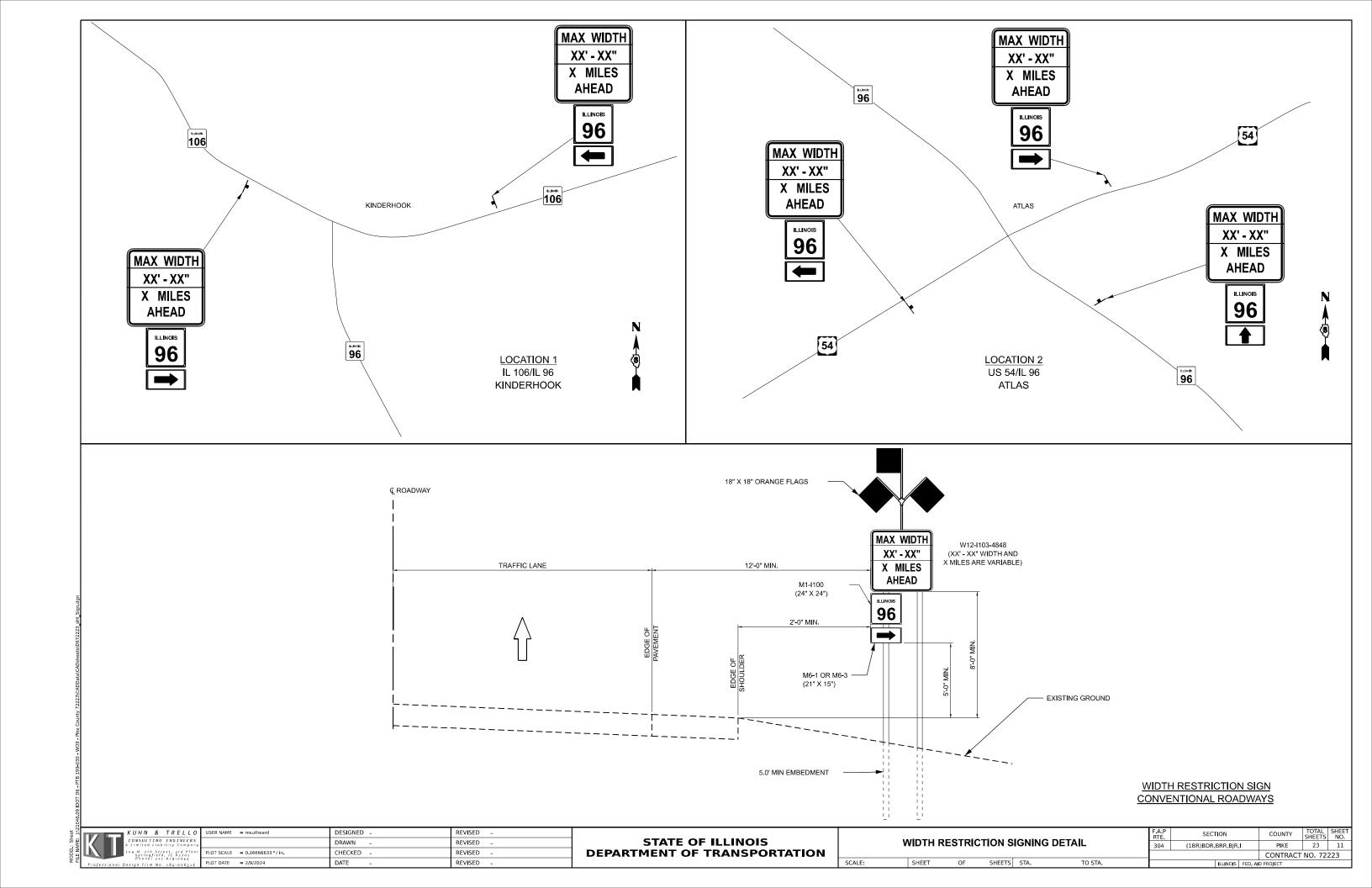
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			SECTIO 075-003		F.A.P RTE. 304	SECTION (1BR)BDR,BRR,BJR,I	COUNTY PIKE CONTRACT	TOTAL SHEETS 22	SHEET NO. 10
SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			1101 72	223

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DESIGN SPECIFICATIONS

New Construction:

2002 AASHTO Standard Specifications

for Highway Bridges, 17th Edition

Existing Construction:

1989 AASHTO 1984 thru 1988 Interims

LOADING HS-20-44 (EXISTING)

No future wearing surface

DESIGN STRESSES

FIELD UNITS

New Construction

fc = 4,000 psi (Superstructure)

fc = 3,500 psi (Substructure)

fy = 60,000 psi (Reinforcement) fy = 50,000 psi (M270 Grade 50)

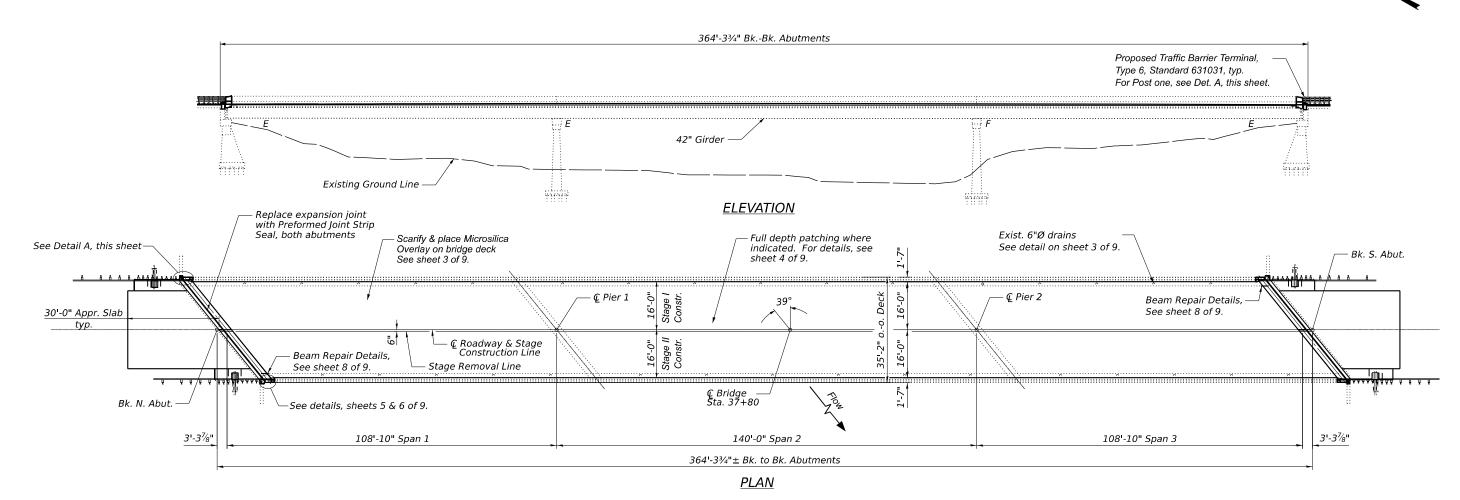
Existing Construction

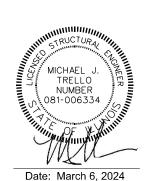
 $f^{*}c = 3,500 \ psi$

fy = 60,000 psi (Reinf.)

 $fy = 50,000 \ psi \ (Struct.) \ M \ 223 \ Gr. \ 50$

 $fy = 36,000 \ psi \ (Struct.) \ M \ 183$

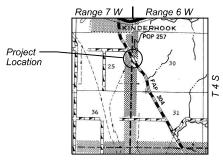




Expires: November 30, 2024

Remove and replace 1'-6" x 9" tall section of curb at wingwall, each side, Post 1 of Traffic Barrier, Type 6 both abutments. See sheets 5 & 6 of 9 for Weld Post 1 of Traffic Barrier Type 6 post curb details. See Sheet 7 of 9 for to baseplate, then anchor to top of wingwall. Preformed Joint Strip Seal attachment Work included in Traffic Barrier Terminal, Type 6, to curb. see roadway plans. See details on sheet 6 of 9. - Existing wingwall (level) Exist. 4" x 5" tall – end of parapet approach curb to remain & Brg. N. Abut. DETAIL A (East end of N. Abut. shown. West end of S. Abut. similar.

For other ends see details on sheets 5 & 6 of 9.)



LOCATION SKETCH STRU

<u>STA. 37+80.00</u> <u>STRUCTURE NUMBER 075-0036</u>

BRIDGE REPAIRS

ILLINOIS ROUTE 96 OVER

HADLEY CREEK

F.A.P. RTE. 304 SECTION (1BR)BDR,BRR,BJR,I

PIKE COUNTY

	KUHN	&	TRELLO	
			ENGINEERS ility Company	
\mathcal{N}	109 N. 7ti Spring	field	eet, 3rd Floor l, IL 62701 -679-0044	
Professional				Г

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i y		DRAWN -	KTCE	REVISED	-
r	PLOT SCALE = 0.16666633 / in.	CHECKED -	JS	REVISED	-
	PLOT DATE = 3/6/2024	DATE -	11-01-2023	REVISED	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION STRUCTURE NO. 075-0036

LP. E.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
)4	(1BR)BDR,BRR,BJR,	PIKE	23	12	
			CONTRACT	NO. 722	223
	ILLINOIS	FED AL	D PROJECT		

SHEET INDEX

- 1 General Plan & Elevation
- ? General Data
- 3 Staging Details & Cross Sections
- 4 Deck Patching Plan
- Joint Removal & Replacement Plan
- Joint Removal & Replacement Details
- 7 Preformed Joint Strip Seal
- Steel Repair Details
- 9 Bar Splicers

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.

Areas of deck slab repair and concrete curb removal shown are estimated. The Engineer shall show actual locations of deck repairs on As-Built plans.

The Contractor shall use extreme care during concrete removal so as not to damage the steel beam.

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 concrete overlay.

SCOPE OF WORK

- 1. Perform bridge scarification.
- Perform Deck Slab Repair, removal of deck ends at abutments, parapets, hatch blocks and top of wingwall (curb) at abutments.
- 3. Repair steel girder ends.
- 4. Cast deck ends, parapet ends and hatch blocks.
- 5. Place preformed joint strip seal at joints at abutments.
- 6. Adjust drains.
- 7. Place bridge deck microsilica concrete overlay 2½".
- 8. Perform bridge deck grooving.
- 9. Apply Protective Coat.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	11.8
Concrete Superstructure	Cu. Yd.	14.2
Bridge Deck Grooving	Sq. Yd.	1214
Protective Coat	Sq. Yd.	1300
Structural Steel Repair	Pound	310
Reinforcement Bars, Epoxy Coated	Pound	1380
Bar Splicers	Each	16
Preformed Joint Strip Seal	Foot	88
Bridge Deck Scarification, ¾"	Sq. Yd.	1261
Bridge Deck Microsilica Concrete Overlay, $2\frac{1}{2}$ "	Sq. Yd.	1261
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	80

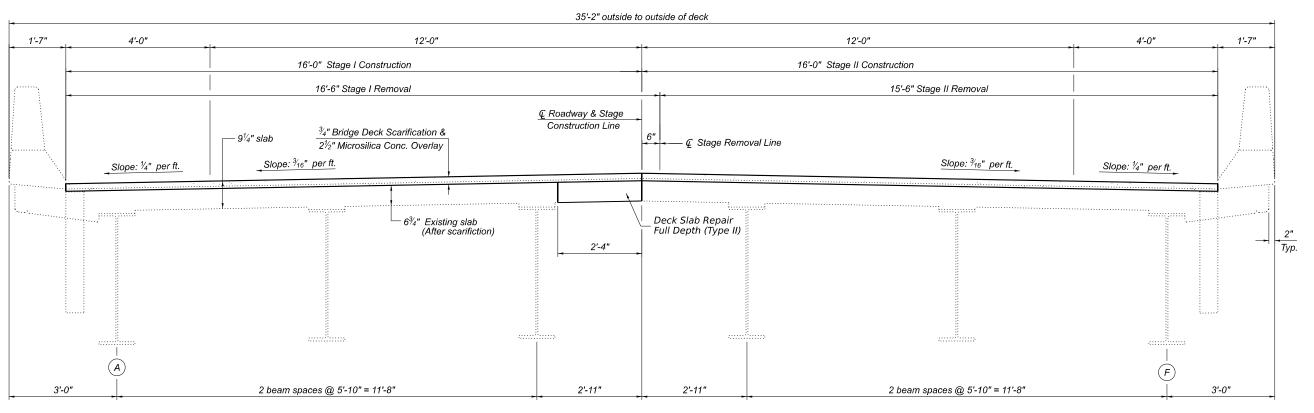
KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company
19 M. 7th Street 3rd Floor
Professional Design Firm No. 184-006516

USER NAME = myoung	DESIGNED	-	MJT	REVISED	-
	DRAWN	-	KTCE	REVISED	-
PLOT SCALE = 0.16666633 / in.	CHECKED	-	JS	REVISED	-
PLOT DATE = 3/7/2024	DATE	-	11-01-2023	REVISED	-

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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SHEET	2	OF	9	SHEETS	

٠.	SECTION	COUNTY	TOTAL SHEETS	SHE
	(1BR)BDR,BRR,BJR,I	PIKE	23	13
		CONTRACT	NO. 72	223
	ILLINOIS FED. A	ID PROJECT		



CROSS SECTION AT MID SPANS (Looking South)

KUHN & TRELLO

PLOT DATE = 2/28/2024

DESIGNED -

CHECKED -

KTCE

- 11-01-2023

JS

DRAWN

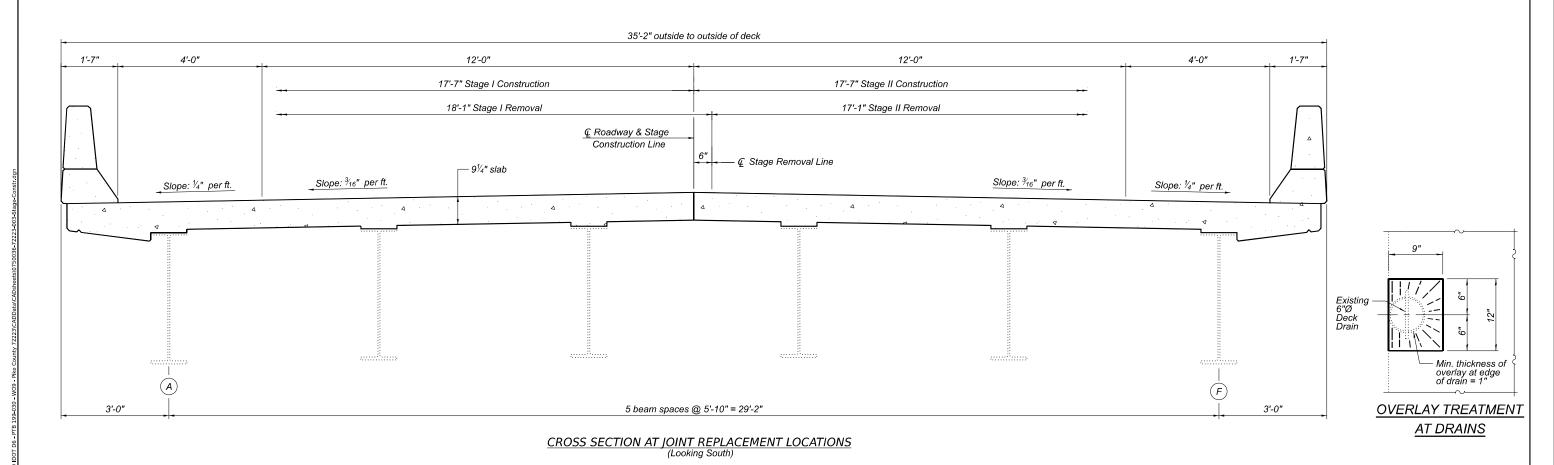
DATE

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STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SECTION

(1BR)BDR,BRR,BJR,I

COUNTY

COUNTY SHEETS NO.

PIKE 23 14

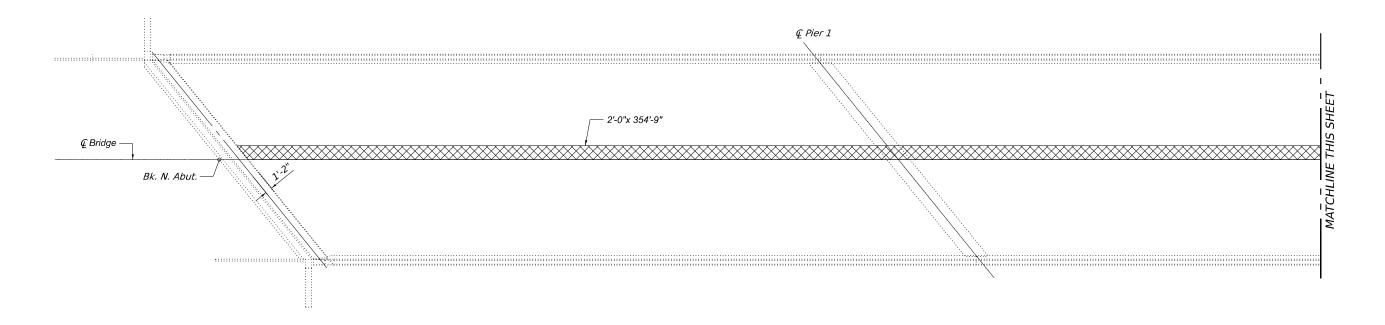
CONTRACT NO. 72223

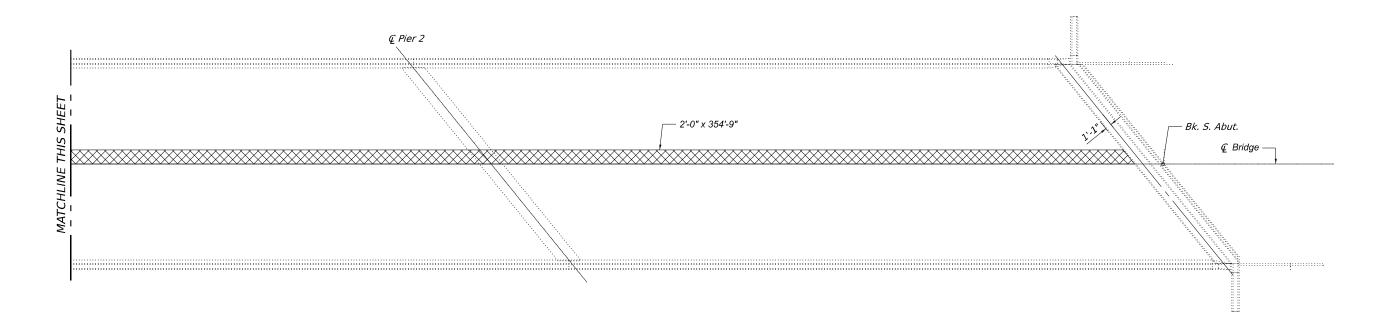
STAGING DETAILS & CROSS SECTION

STRUCTURE NO. 075-0036

SHEET 3 OF 9 SHEETS







DECK PATCHING REPAIR PLAN



Deck Slab Repair (Full Depth, Type II)

SUPERSTRUCTURE BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair Full Depth (Type II)	Sq. Yd.	80

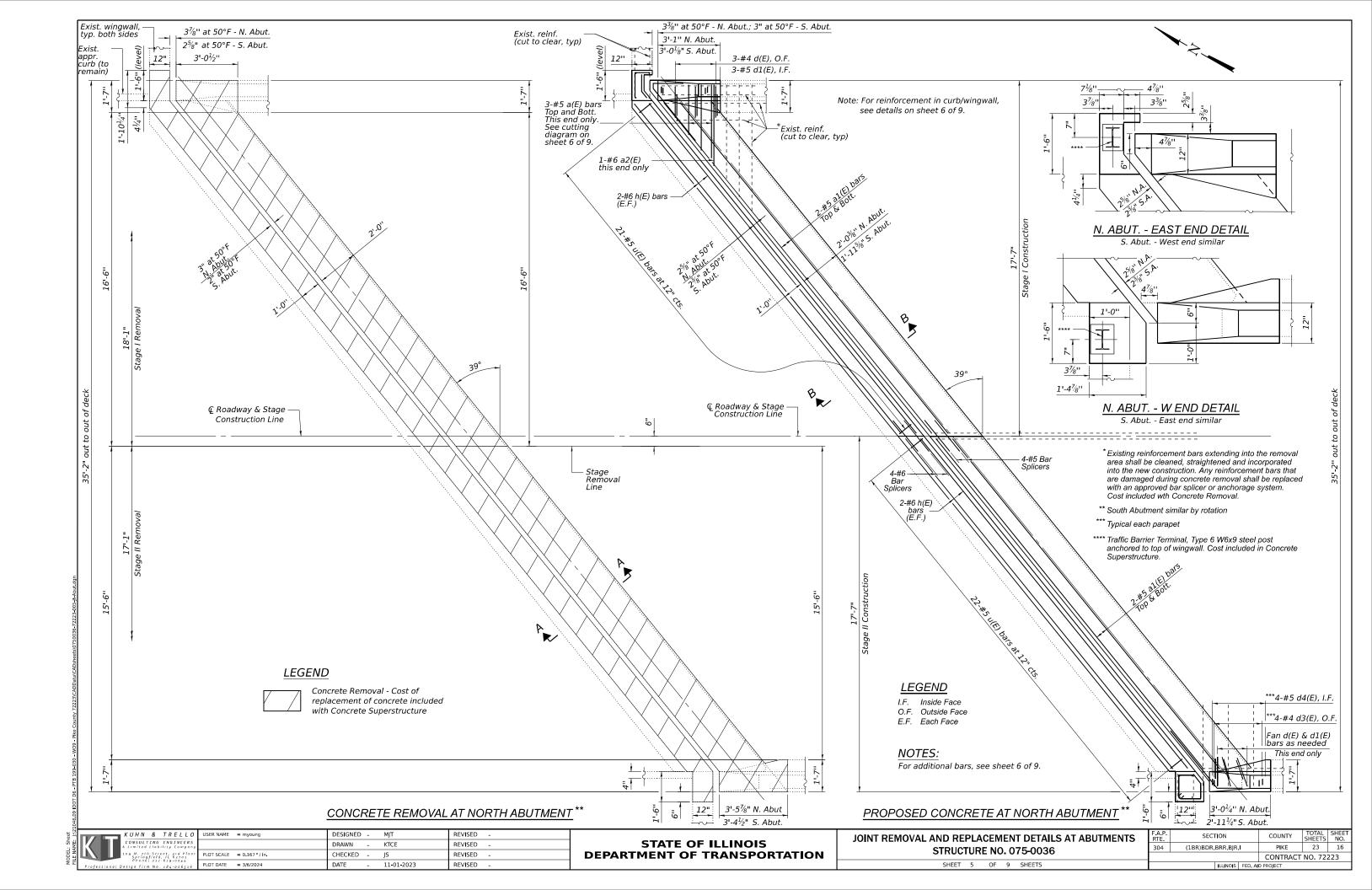
?	KUHN & TRELLO	u
VAME:	CONSULTING ENGINEERS A Limited Liability Campany	
ž	109 N. 7th Street, 3rd Floor Springfield, IL 62701 Phone: 217-679-0044	Р
≣	Phone: 217-679-0044 Professional Design Firm No. 184-006516	Р

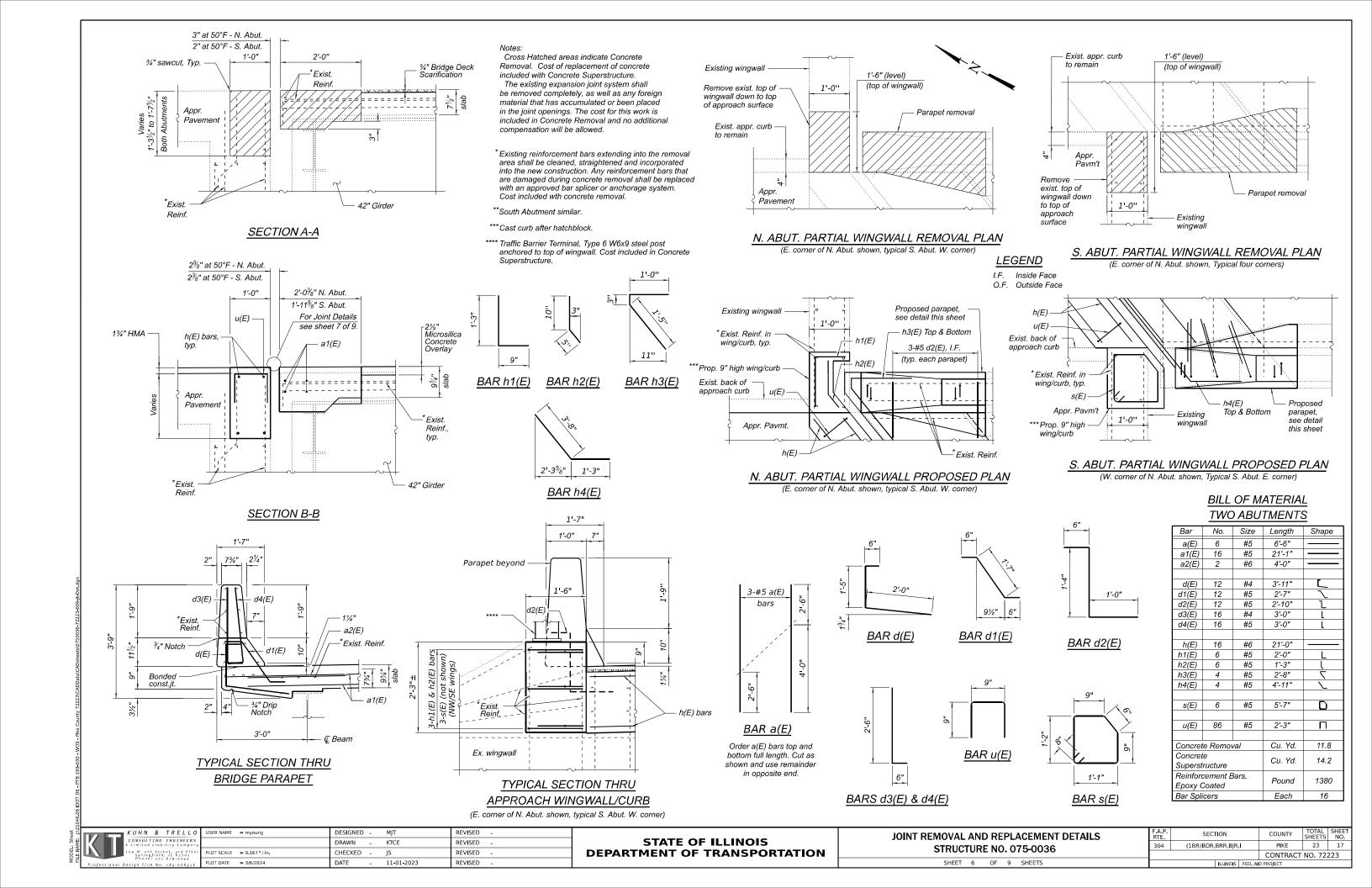
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PLOT DATE = 3/6/2024	DATE	-	11-01-2023	REVISED -

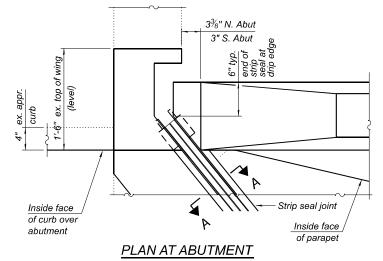
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PATCHING PLAN						
STRUCT	UR	E NC	0. 0	75-0036		
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F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHE
304	(1BR)BDR,BRR,BJR,	(1BR)BDR,BRR,BJR,I		23	15
			CONTRACT	NO. 72	223
	ILLINOIS	FED, A	D PROJECT		



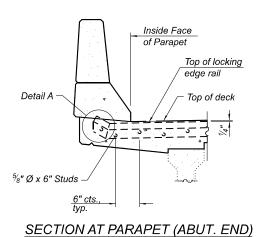


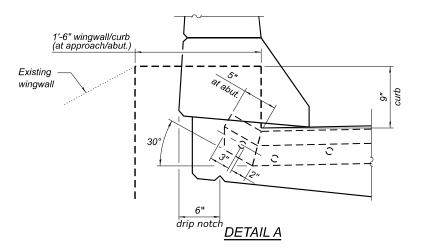


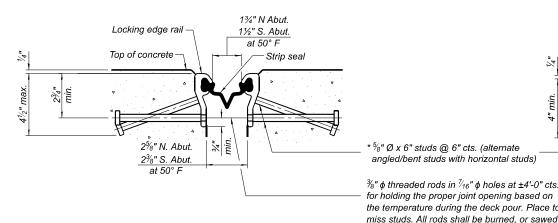
Ex. 4" appr. curb Existina wingwall END TREATMENT AT ABUTMENT WINGWALL

SECTION AT WINGWALL

(East end of N. Abut shown. S. Abut. similar by opposite hand) (For detail of NW and SE corners, see sheet 5 of 9)







Locking edge rail at 50° F Top of concrete -Strip seal * 5/8" Ø x 6" studs @, 6" cts. (alternate 31/4" N. Abut. angled/bent studs with horizontal studs) 3" S. Abut. at 50° F $rac{3}{8}$ " ϕ threaded rods in $rac{7}{16}$ " ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to

SHOWING ROLLED RAIL JOINT 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

1¾" N Abut.

1½" S. Abut.

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.

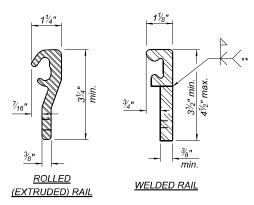
The manufacturer's recommended installation methods shall be followed.

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 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

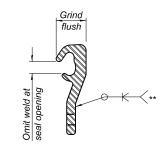
Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



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

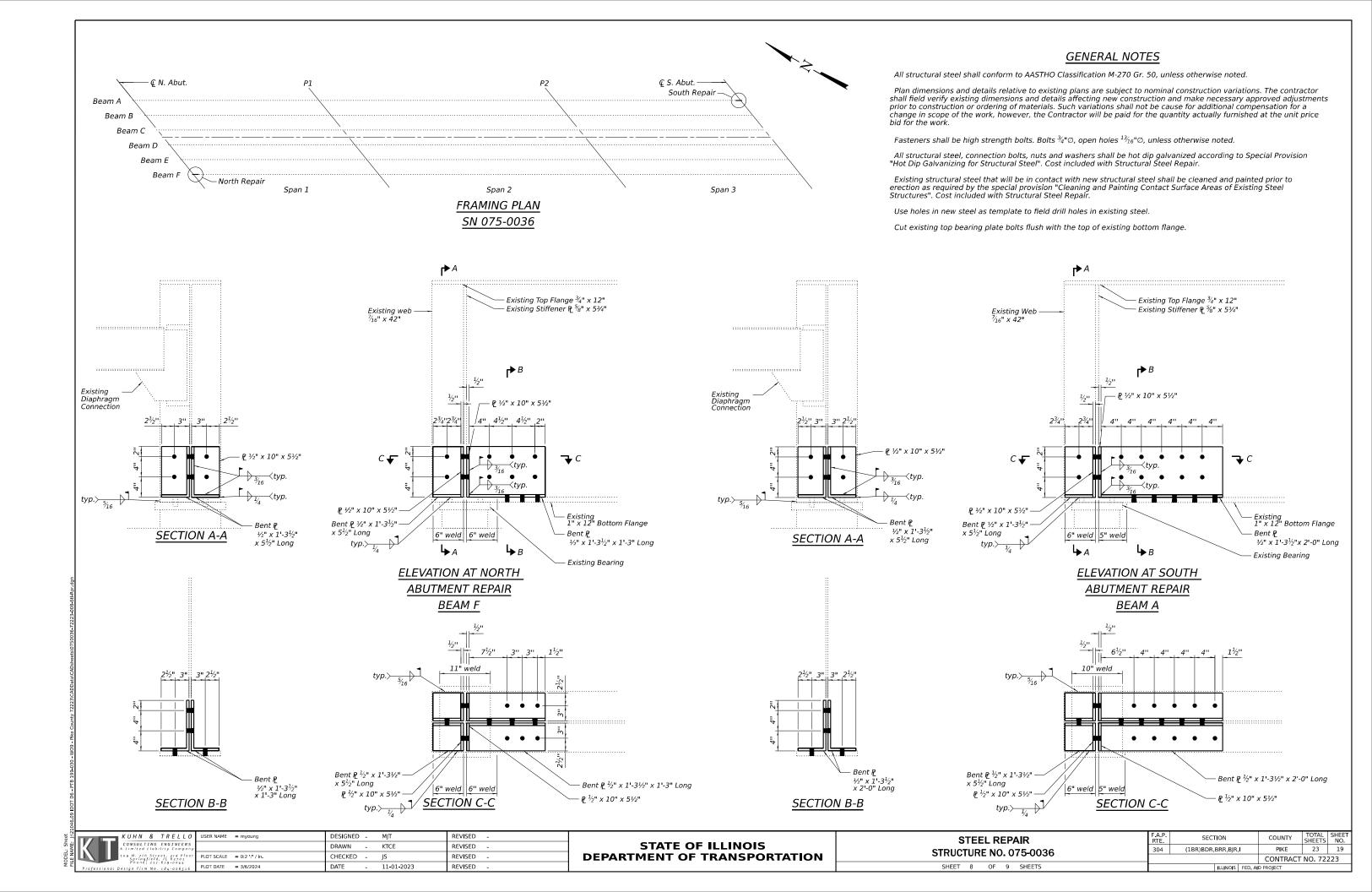
<i>Item</i>	Unit	Total
Preformed Joint Strip Seal	Foot	88

KUHN & TRELLO

DESIGNED -REVISED JSER NAME = myoung DRAWN KTCE REVISED CHECKED -REVISED JS REVISED LOT DATE = 3/7/2024 11-01-2023

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PREFORMED JOINT STRIP SEAL **STRUCTURE NO. 075-0036** SHEET 7 OF 9 SHEETS

SECTION COUNTY (1BR)BDR,BRR,BJR,I PIKE 23 18 CONTRACT NO. 72223



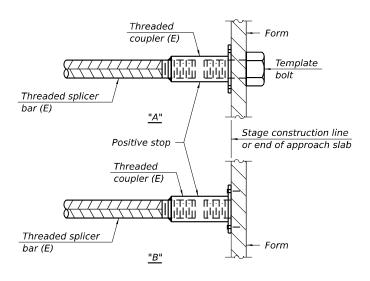
STANDARD BAR SPLICER ASSEMBLY PLAN

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 lap length
N. & S. Abut Deck	#5	8	3'-6"
N. & S. Abut (Block out)	#6	8	4'-0"

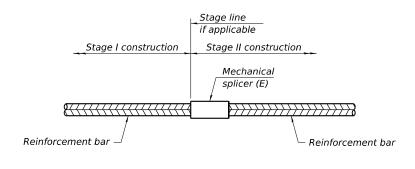


INSTALLATION AND SETTING METHODS

"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.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

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

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

BSD-1

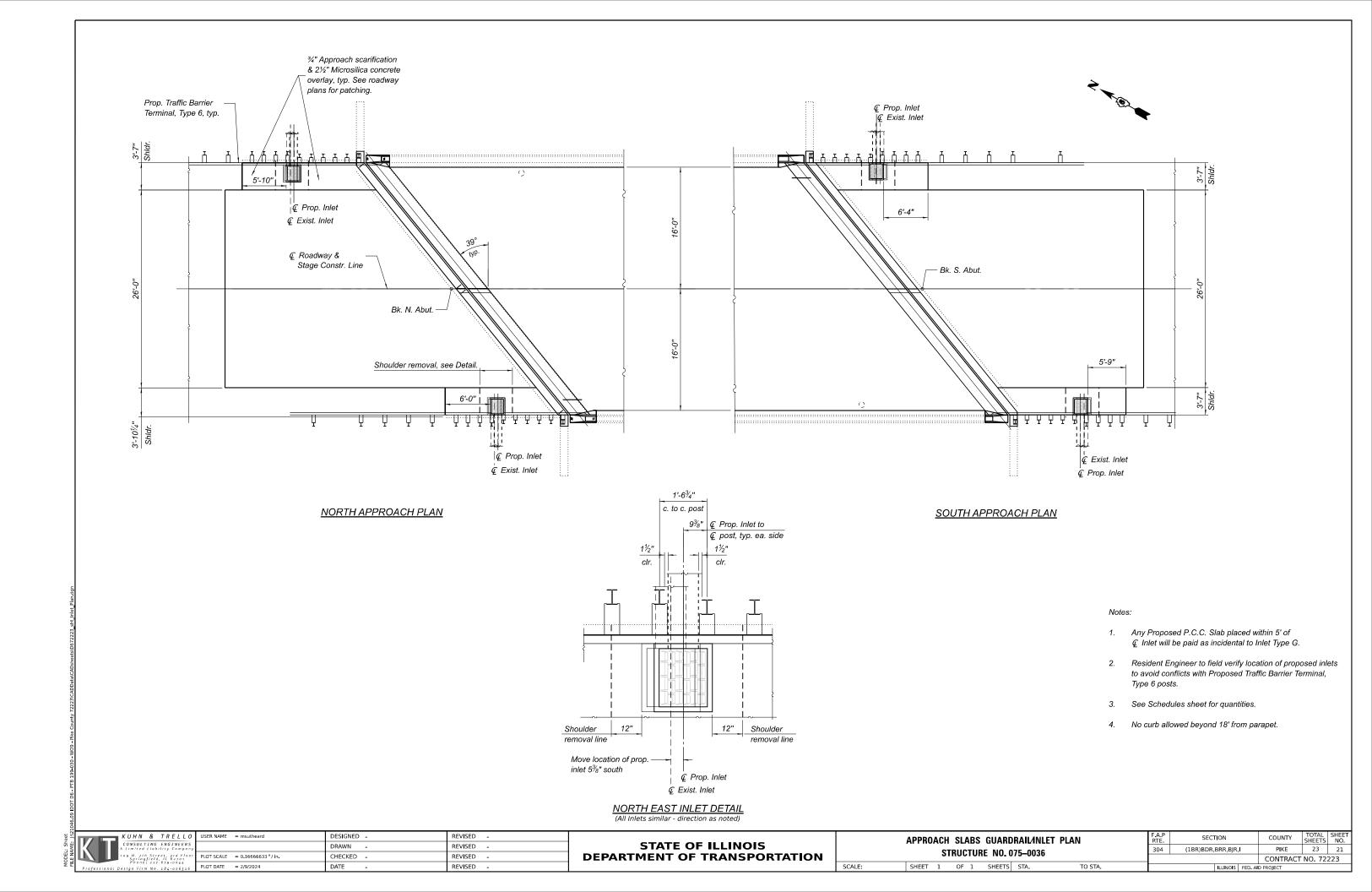
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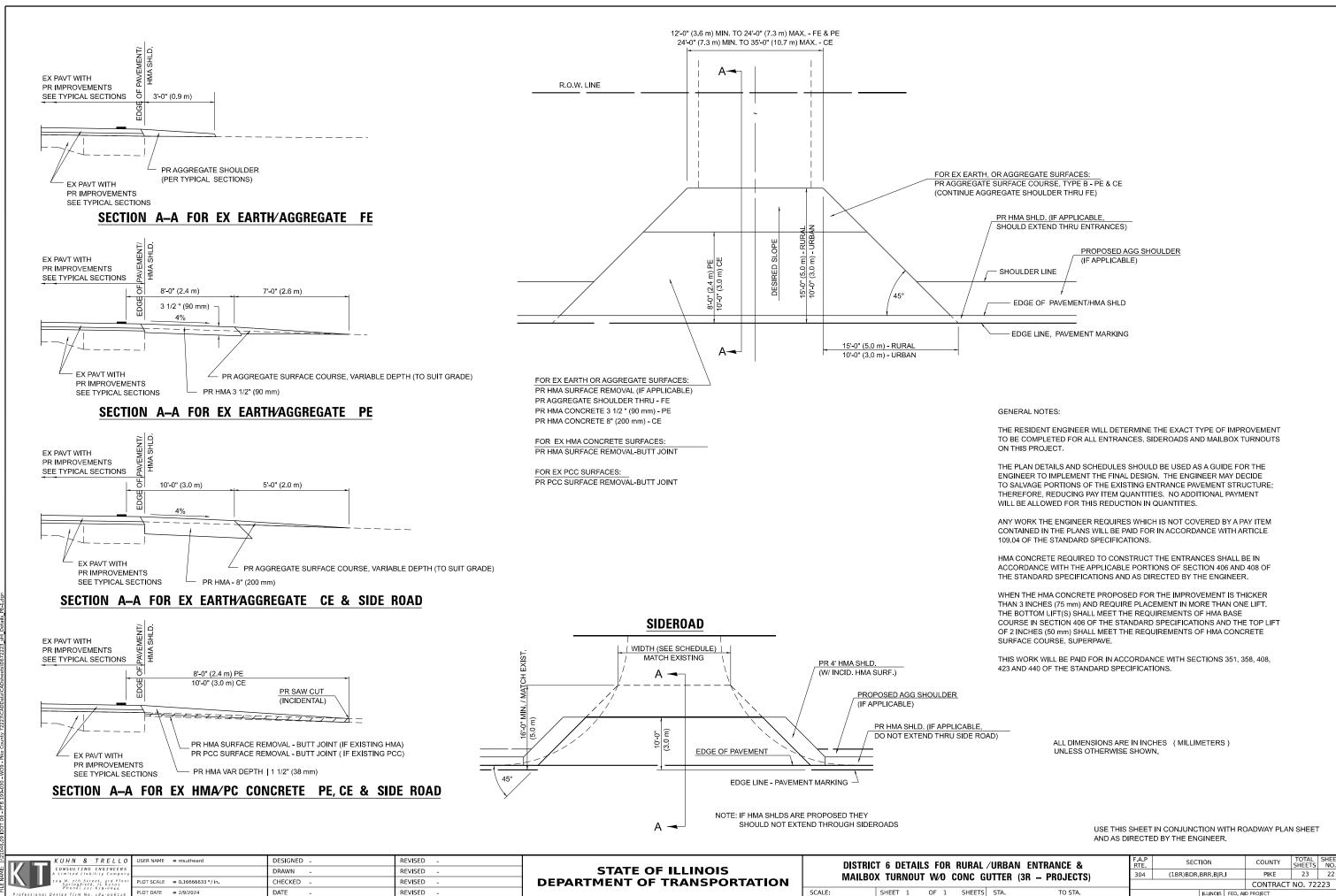
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	Phoné: 217-679-0044 Professional Design Firm No. 184-006516	PLOT DATE = 2/9/2024	DATE - 11-01-2023	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS **STRUCTURE NO. 075-0036**

SHEET 9 OF 9 SHEETS

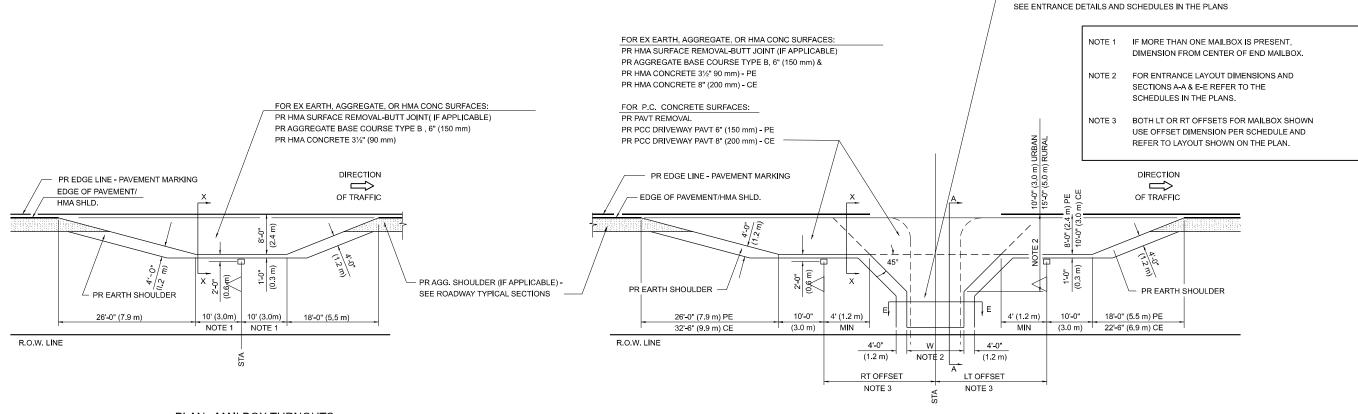
SECTION COUNTY (1BR)BDR,BRR,BJR,I PIKE 23 20 CONTRACT NO. 72223





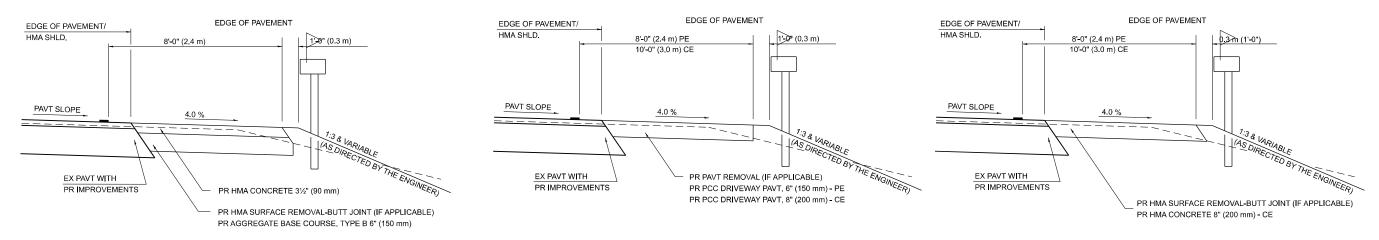
MODEL: Sheet

DETAILS OF MAILBOX TURNOUTS



PLAN - MAILBOX TURNOUTS





SECTION X-X THRU MAILBOX TURNOUT

ALSO APPLIES TO MAILBOX TURNOUTS COMBINED WITH
EX EARTH, AGGREGATE, OR HMA PE & FE

SECTION X-X THRU MAILBOX TURNOUT COMBINED WITH EX CONC PE OR CE

SECTION X-X THRU MAILBOX TURNOUT COMBINED WITH EX EARTH, AGGREGATE, OR HMA CE

MATCH EX SURFACE TYPE (AGGREGATE OR BETTER)

USE THIS SHEET IN CONJUNCTION WITH ROADWAY PLAN SHEET AND AS DIRECTED BY THE ENGINEER.



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	PLOT DATE = 2/9/2024	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ISTRICT 6 DETAILS FOR RURAL /URBAN ENTRANCE & IAILBOX TURNOUT W/O CONC GUTTER (3R - PROJECTS)							
	SHEET	1	OF	1	SHEETS	STA.	TO STA.

F.A.P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEE	
304	(1BR)BDR,BRR,BJR,	PIKE	23	23	
		CONTRACT NO. 72223			
	ILLINOIS	FED. AI	D PROIECT		