STATE OF ILLINOIS

D-96-018-21

DEPARTMENT OF TRANSPORTATION

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET 2

PROPOSED HIGHWAY PLANS

FAP ROUTE 562 (IL 100) SECTION (116) BDR, BRR, BJR PROJECT STP-IEFF(595) **BRIDGE DECK OVERLAY SCOTT COUNTY**

C-96-033-21

INDEX OF SHEETS

COVER SHEET

GENERAL NOTES, COMMITMENTS AND LIST OF STANDARDS

SUMMARY OF QUANTITIES TYPICAL SECTIONS

SCHEDULES OF QUANTITIES

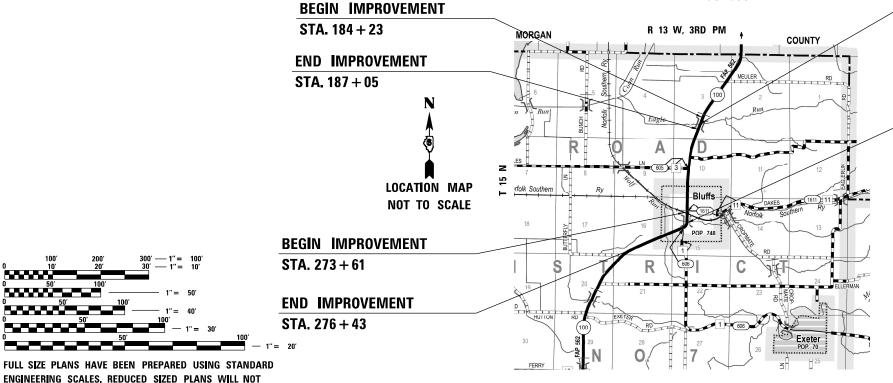
PLAN SHEETS 9-10

STAGING PLANS STRUCTURE PLANS (086-0006) 15-26

STRUCTURE PLANS (086-0046)

APPROACH SLABS GUARDRAIL/INLET PLAN (086-0046) 30

31 INLET BOX ADJUSTMENT



EXISTING SN 086-0046 1-SPAN 93'-0" BK-BK ABUTS **W36 STEEL BEAM STRUCTURE OVER EAGLE RUN**

EXISTING SN 086-0006 2-SPAN 102'-8" BK-BK ABUTS W21 STEEL BEAM STRUCTURE **OVER WOLF RUN**



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION SUBMITTED October 21 REGIONAL ENGINEER

LOCATION OF SECTION INDICATED THUS: -

PROJECT ENGINEER BRIAN LANINGHAM 217-782-6990 PROJECT MANAGER VICTOR YOUNG 217-524-0472

CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS

GROSS LENGTH = 564 FT. = 0.107 MILE NET LENGTH = 564 FT. = 0,107 MILE



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 72M65

1-800-892-0123

 \circ

CONSTRUC	TION CODE
6-0060	06-0000
80% FED,	20% STATE

				BRIDGE	BRIDGE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0059 086 - 0006	0059 086-0046
	BITUMINOUS MATERIALS (TACK COAT)	POUND	480	270	210
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	879	405	474
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	62	62	
40600990	TEMPORARY RAMP	SQ YD	156	78	78
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	110	60	50
44004250	PAVED SHOULDER REMOVAL	SQ YD	20		20
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	4		4
48300500	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SQ YD	12		12
50102400	CONCRETE REMOVAL	CU YD	16.2	16.2	
50105220	PIPE CULVERT REMOVAL	FOOT	32		32
50200100	STRUCTURE EXCAVATION	CU YD	3	3	
50300225	CONCRETE STRUCTURES	CU YD	2.3	2.3	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14.8	14.8	
50300260	BRIDGE DECK GROOVING	SQ YD	783	316	467
50300300	PROTECTIVE COAT	SQ YD	839	344	495

^{*} DENOTES SPECIALTY ITEM

12.	KUHN & TRELLO	U
AME	CONSULTING ENGINEERS A Limited Liability Company	
E N	209 N. 7th Street, 3rd Floor Springfield, JL 62702	PI
Ē	Phone: 217-679-0044 Professional Desian Firm No. 184-006516	Pl

,	USER NAME = myoung	DESIGNED	-	CDI/KTCE	REVISED	-
y		DRAWN	-	CDI/MMY	REVISED	-
,	PLOT SCALE = 0.1667 / in	CHECKED	-	JS	REVISED	-
	PLOT DATE = 10/14/2021	DATE	-	10/14/2021	REVISED	-

							F.A.P. RTE	SEC	TION	COUNTY	TOTAL SHEETS	SHEET NO.
	,	SUMM	AKY	OF QU	ANTITIES		562	(116) BDR	, BRR, BJR	SCOTT	31	3
										CONTRACT	Γ NO. 7	2M65
SCALE: 0.1667 / in.	SHEET 1	OF	4	SHEETS	STA.	TO STA.			ILLINOIS FEE	AID PROJECT		

CON:	STRUC	NOIT	CODE
6	5-0060	06-00	000
80%	FED,	20%	STATE

				BRIDGE	BRIDGE
CODE			TOTAL	0059	0059
NO.	ITEM	UNIT	QUANTITY	086-0006	086-0046
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1470	1470	
50800105	REINFORCEMENT BARS	POUND	330		330
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2160	2160	
50800515	BAR SPLICERS	EACH	40	40	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	75	75	
542D0217	PIPE CULVERT, CLASS D, TYPE 1 12"	FOOT	32		32
54262712	METAL FLARED END SECTION 12"	EACH	2		2
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	2.4	2.4	
60500060	REMOVING INLETS	EACH	2		2
61000335	TYPE G INLET BOX, STANDARD 610001	EACH	2		2
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	500		500
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	5	1	4
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	5	1	4
63200310	GUARDRAIL REMOVAL	FOOT	860		860
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	4	4

* DENOTES SPECIALTY ITEM

2 5	KUHN & TRELLO	USER NAME = myoung	DESIGNED CDI/KTCE	REVISED =
EL: Def	CONSULTING ENGINEERS A Limited Liability Company		DRAWN CDI/MMY	REVISED =
F N	Springfield, IL 62701	PLOT SCALE = 0.1667 / in.	CHECKED JS	REVISED -
ž II	Phone: 217-679-0044 Professional Design Firm No. 184-006516	PLOT DATE = 10/14/2021	DATE = 10/14/2021	REVISED -

STATE OF	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

7							F.A.P. RTE.	SECTION	COUNTY	TOTAL	
		S	UMMAKY	OF QU	ANTITIES		562	(116) BDR, BRR, BJR	SCOTT	31	4
		,			9			W. W.	CONTRACT	NO. 72	2M65
	SCALE: 0.1667 ' / in.	SHEET 2	OF 4	SHEETS	STA.	TO STA.		[ILLINOIS FED. A	D PROJECT		

SOURCE DO 1 DO 1 FID 10 FID 1 STORE COURTY / ZWOOLCHIDGE CALOUR COURTY IN THE COURTY I

CON:	STRUC	NOIT	CODE
6	5-0060	06-00	000
80%	FED,	20%	STATE

				BRIDGE	BRIDGE
CODE			TOTAL	0059	0059
NO.	ITEM	UNIT	QUANTITY	086-0006	086-0046
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	EACH	1		1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.5	0.5
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	6		6
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	120	60	60
70300100	SHORT TERM PAVEMENT MARKING	FOOT	88	44	44
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	30	15	15
70400100	TEMPORARY CONCRETE BARRIER	FOOT	312.5	312.5	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	312.5	312.5	
		. 551	31213	31213	
70600241	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2	
70600341	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2	
	TERMINAL MARKER - DIRECT APPLIED	EACH	5	1	4

* DENOTES SPECIALTY ITEM

KUHN & TRELLO USER NAME =

CONSULTING ENGINEERS
A Limited Liability Company
109 W. 7th Street, 3rd floor
Phone: 337 679 3044

Professional Design Engine No. 88 4006 cs. 6

PLOT SCALE =
Professional Design Engine No. 88 4006 cs. 6

PLOT DATE =

USER NAME = myoung	DESIGNED	-	CDI/KTCE	REVISED	-
	DRAWN	-	CDI/MMY	REVISED	2
PLOT SCALE = 0.1667 / in.	CHECKED		JS	REVISED	†)
PLOT DATE = 10/14/2021	DATE	~	10/14/2021	REVISED	<u>-</u> 8
	PLOT SCALE = 0.1667 1/ in.	PLOT SCALE = 0.1667 / in. CHECKED	DRAWN	DRAWN	DRAWN

ì								F.A.P. RTE.	SECTION	COUNTY	TOTAL	
			SUMM	AKY	OF QUA	ANTITIES		562	(116) BDR, BRR, BJR	SCOTT	31	5
					,			1	W. W.	CONTRACT	NO. 72	2M65
	SCALE: 0.1667 ' / in.	SHEET 3	OF	4	SHEETS	STA.	TO STA.	1	ILLINOIS FED. A	D PROJECT		

						20% STATE
					BRIDGE	BRIDGE
	CODE			TOTAL	0059	0059
	NO.	ITEM	UNIT	QUANTITY	086-0006	086-0046
*	78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	1258	634	624
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	20	4	16
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	4	2	2
	78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	710	290	420
	X6024503	INLETS TO BE ADJUSTED WITH NEW FRAME AND GRATE (SPECIAL)	EACH	1	1	
	V7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1	
	X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BER 21	L SUM	1	1	
	X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	0.5	0.5
3	Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	29	29	
	70001903	STRUCTURAL STEEL REMOVAL	POUND	1170	1170	
					1175	
	Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	812	317	495
	Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2"	SQ YD	812	317	495
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	17	17	
	Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	28	10	18
ø	Z0041895 Z0076600	POLYMER CONCRETE TRAINEES	CU FT HOUR	2.9 500	500	2.9
ø	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500	

REV. - MS

KUHN & TRELLO USER NAME = myoung

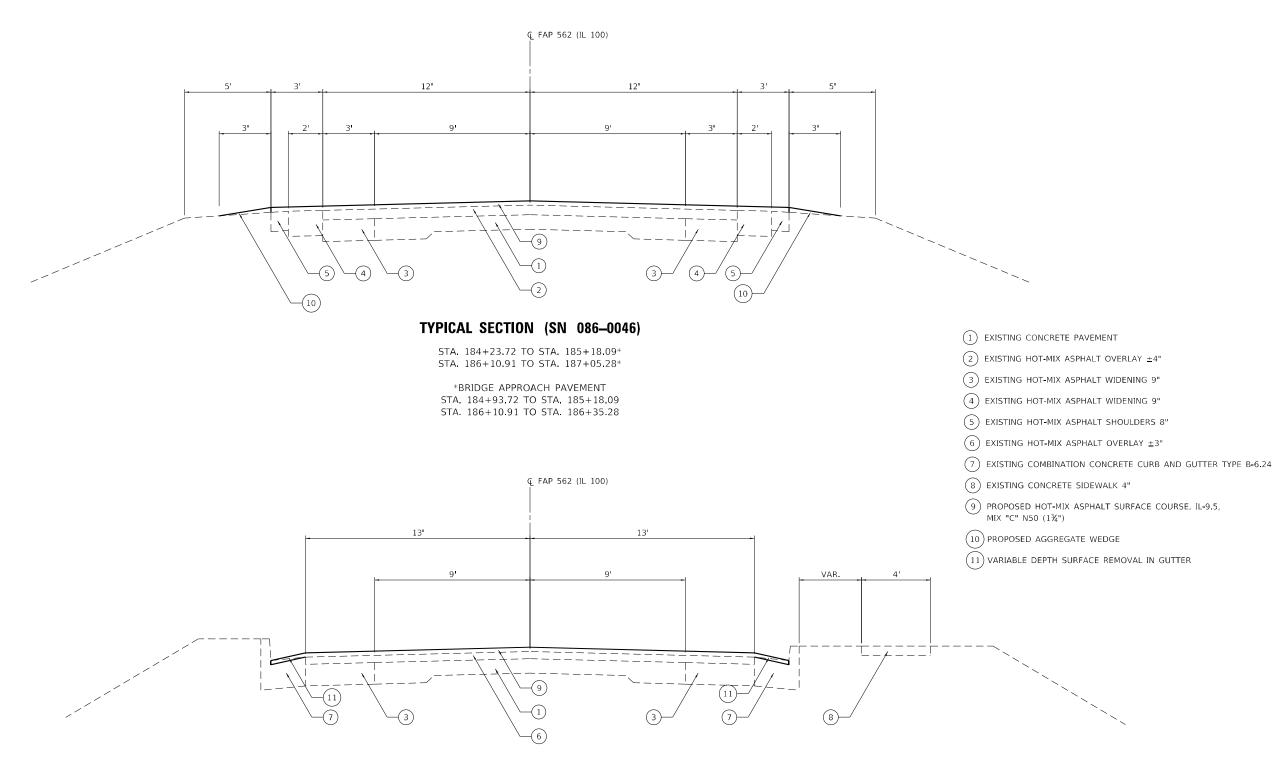
CONSULTING ENGINEERS
A Limited Liability Company 20 N. 715 Street, 37d Floor \$20 N. 915 Street, 37d Floor \$20 N.

DESIGNED CDI/KTCE REVISED DRAWN CDI/MMY REVISED CHECKED JS REVISED DATE = 10/14/2021 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

1							F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO:
		S	UMMARY	UF QU	ANTITIES		562	(116) BDR, BRR, BJR	SCOTT	31	6
					1			9	CONTRACT	NO. 72	2M65
	SCALE: 0.1667 ' / in.	SHEET 4	OF 4	SHEETS	STA.	TO STA.		[ILLINOIS [FED. A	D PROJECT		

CONSTRUCTION CODE 6-00606-0000



TYPICAL SECTION (SN 086-0006)

STA. 273+61.46 TO STA. 274+51.46* STA. 275+53.13 TO STA. 276+43.13*

*BRIDGE APPROACH PAVEMENT STA, 274+31.46 TO STA, 274+51.46 STA, 275+53.13 TO STA, 275+73.13

fault 1:11	KUHN & TRELLO	Ų
- PA	CONSULTING ENGINEERS A Limited Liability Company	Г
DDEI E N	209 N. 7th Street, 3rd Floor Springfield, JL 62702	F
ΣĒ	Phone: 217-679-0044 Professional Design Firm No. 184-006516	P

USER N	AME = myoung	DESIGNED	-	CDI/KTCE	REVISED	-
,		DRAWN	-	CDI/MMY	REVISED	-
PLOT S	CALE = 0.1667 / in.	CHECKED	-	JS	REVISED	-
PLOT D.	ATE = 10/14/2021	DATE	-	10/14/2021	REVISED	-

STATE OF	ILLINOIS
DEPARTMENT OF	TRANSPORTATION

						F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
		TYPICA	L SECT	IONS		562	(116) BDR, BRR, BJ	IR	SCOTT	31	7
									CONTRACT	NO. 72	2M65
SCALE: 0.1667 / in.	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS	FED. AID	PROJECT		

				Р	AVING SCHEDULE			
			40600290	40600982	40600985	40600990	40604050	48102100
			BITUMINOUS	HMA SURFACE	PCC SURFACE	TEMPORARY	HMA SURFACE	AGGREGATE
STATION	то	STATION	MATERIALS	REMOVAL -	REMOVAL -	RAMP	COURSE, IL-9.5	WEDGE SHOULDER,
			(TACK COAT)	BUTT JOINT	BUTT JOINT		MIX "C", N50	TYPE B
			POUND	SQ YD	SQ YD	SQ YD	TON	TON
SN 086-0006								
273+61	1-1	274+31	135	202.5	31	39	30	
275+73	-	276+43	135	202.5	31	39	30	
SN 086-0046								
184+23		184+93	105	237		39	25	2
186+35		187+05	105	237		39	25	2
		TOTAL	480	879	62	156	110	4

			DAMENT	NT MARKING COUEDING		
			PAVEME	NT MARKING SCHEDULE		
				78001120	78300200	
				PAINT PAVEMENT	RAISED REFLECTIVE	
STATION	TO	STATION	COLOR	MARKING-LINE 5"	PAVEMENT MARKER	COMMENT
					REMOVAL	
				FOOT	EACH	
SN 086-0006		j,				
273+61	1-1	276+43	WHITE	564		
273+61	-	276+43	YELLOW	70	2	
SN 086-0046						
184+23	-	187+05	WHITE	564		
184+23	-	187+05	YELLOW	60	2	
TOTAL	25 50			1258	4	

		SHOR	RT TERM PAVEMENT	MARKING SCHEDULE	
				70300100	70300150
				SHORT TERM	SHORT TERM
STATION	TO	STATION	NUMBER OF	PAVEMENT MARKING	PAVEMENT MARKING
			APPLICATIONS		REMOVAL
			1	FOOT	SQ FT
SN 086-0006	31.32				
273+61	T-I	274+31	2	16	5.3
274+31	-	275+73	1	12	4
275+73	*	276+43	2	16	5.3
SN 086-0046			I i		
184+23	-	184+93	2	16	5.3
184+93	-	186+35	1	12	4
186+35	3	187+05	2	16	5.3
ТОТ	AL		10	88	30

					GUARDR	AIL SCHEDULE			
				63000001	63100085	63100167	63200310	72501000	78200005
				STEEL PLATE	TRAFFIC BARRIER	TRAFFIC BARRIER	GUARDRA I L	TERMINAL MARKER	GUARDRA I L
STATION	TO	STATION	SIDE	BEAM GUARDRAIL	TERMINAL	TERMINAL, TYPE 1	REMOVAL	DIRECT APPLIED	REFLECTORS,
				TYPE A, 6' POSTS	TYPE 6	(SPECIAL) TANGENT			TYPE A
				FOOT	EACH	EACH	FOOT	EACH	EACH
N 086-0006									
275+51	-	276+38	LT		1	1		1	4
N 086-0046	20 30								
182+65	18	185+26	RT	175	1	1	265	1	4
183+53		185+14	LT	75	1	1	165	1	4
186+15	-	187+76	RT	75	1	1	165	1	4
186+02		188+63	LT	175	1	1	265	1	4
	100 900		TOTAL	500	5	5	860	5	20

			PCC SHOULD	DER/INLET PLAN SCH	IEDULE			
	44004250	48300500	50105220	50800105	542D0217	54262712	60500060	61000335
	PAVED SHOULDER	PCC SHOULDERS	PIPE CULVERT	REINFORCEMENT	PIPE CULVERT,	METAL FLARED	R EMOV I NG	TYPE G INLET
LOCATION	REMOVAL	10"	REMOVAL	BARS	CLASS D,	END SECTION	INLETS	BOX, STANDARD
					TYPE 1 12"	12"		610001
	SQ YD	SQ YD	FOOT	POUND	FOOT	EACH	EACH	EACH
SN 086-0046								
NORTH APPROACH								
LT. (EAST SIDE)								
RT. (WEST SIDE)	6.7	6.7		220				
SOUTH APPROACH								
LT. (EAST SIDE)	9.2	5.3	16	110	16	1	1	1 *
RT. (WEST SIDE)	3.9		16		16	1	1	1 **
TOTAL	19.8	12.0	32	330	32	2	2	2

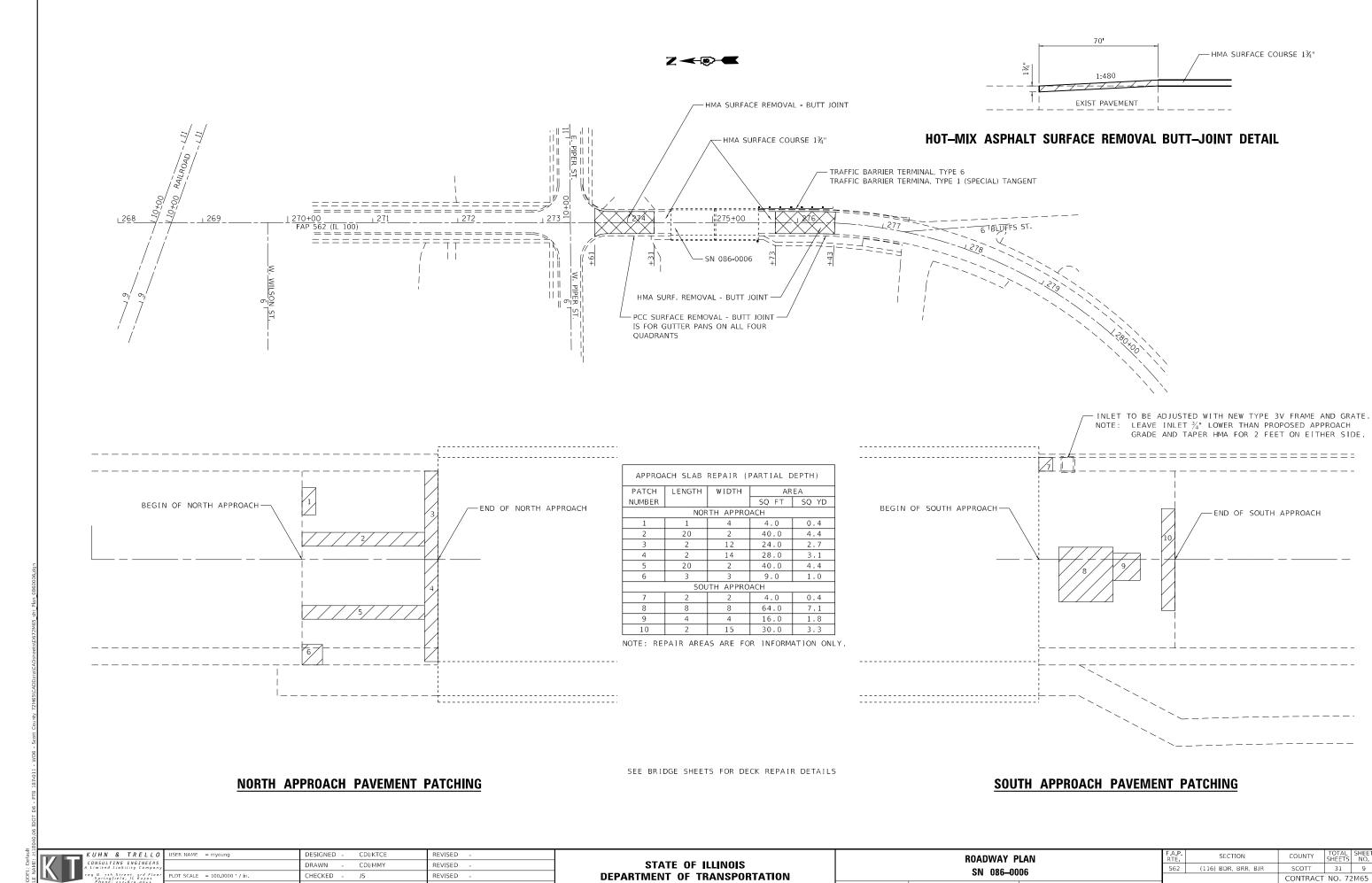
(TYPE G INLET INCLUDES PCC SLAB)
*(INCLUDES 100 POUNDS REBAR)
**(INCLUDES 90 POUNDS REBAR)

REV. - MS

3	KUHN & TRELLO	USER NAME = myoung	DESIGNED CDI/KTCE	REVISED =
AME	CONSULTING ENGINEERS A Limited Liability Company		DRAWN CDI/MMY	REVISED =
Z H	KUHN & TRELLO CONSULTING ENGINEERS A Limited Liability Company 109 N. 7th Street, 3rd Floor Springfield, 11 52701 Phone: 217-673-0044	PLOT SCALE = 0.1667 / in.	CHECKED JS	REVISED -
Ē	Phone: 217-679-0044 Professional Design Firm No. 184-006516	PLOT DATE = 10/14/2021	DATE 10/14/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

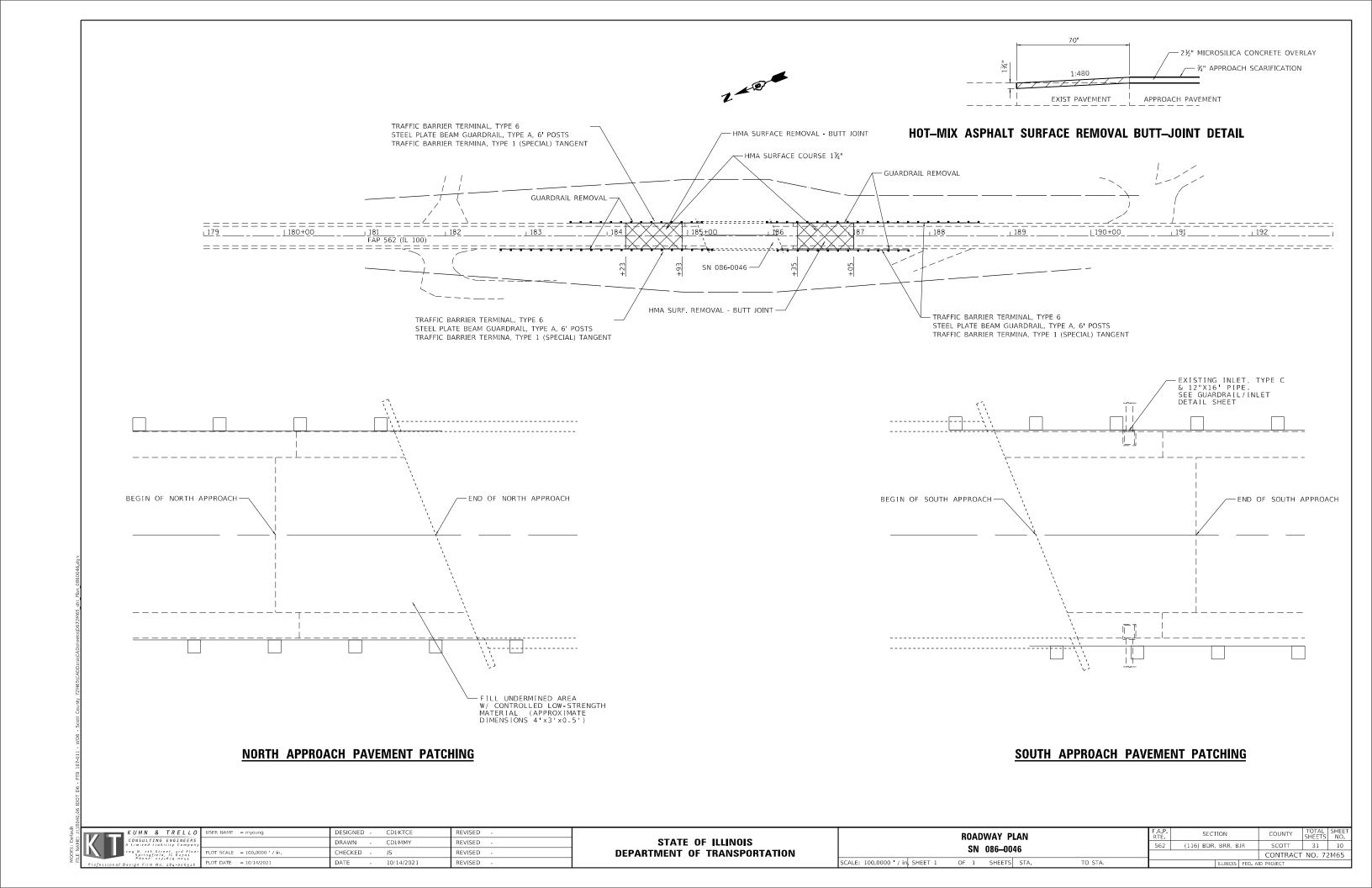
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	SCHEDULES OF QUANTITIE	S	562	(116) BDR, BRR, BJR	SCOTT	31	8
			1		CONTRAC	T NO. 72	2M65
i	SCALE: 0.1667 ' / in. SHEET 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

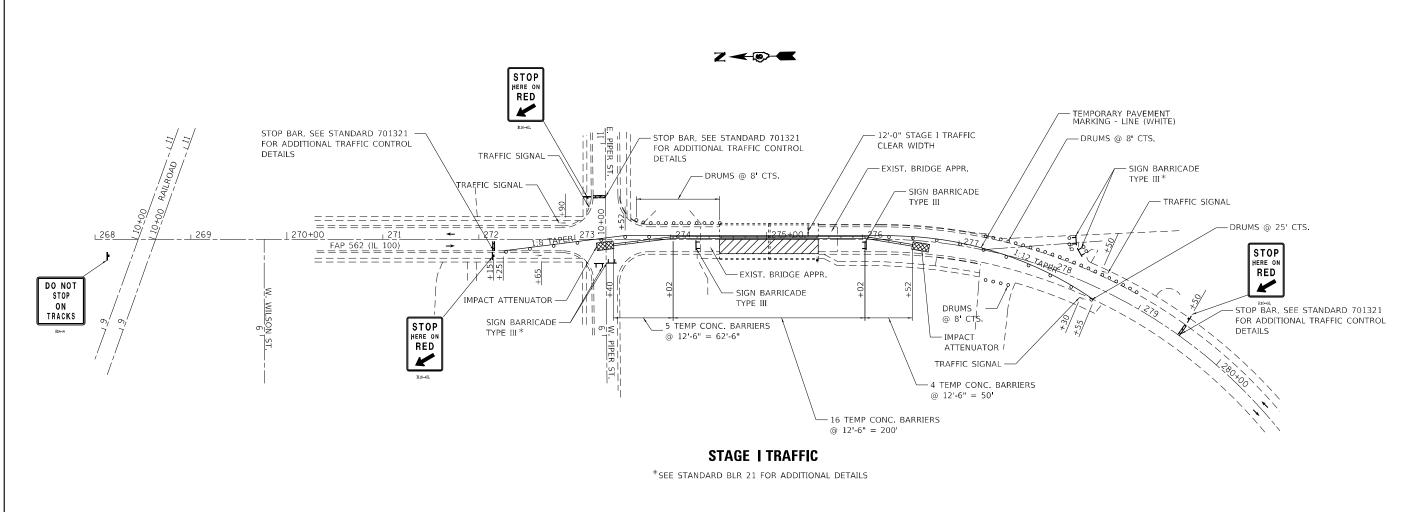


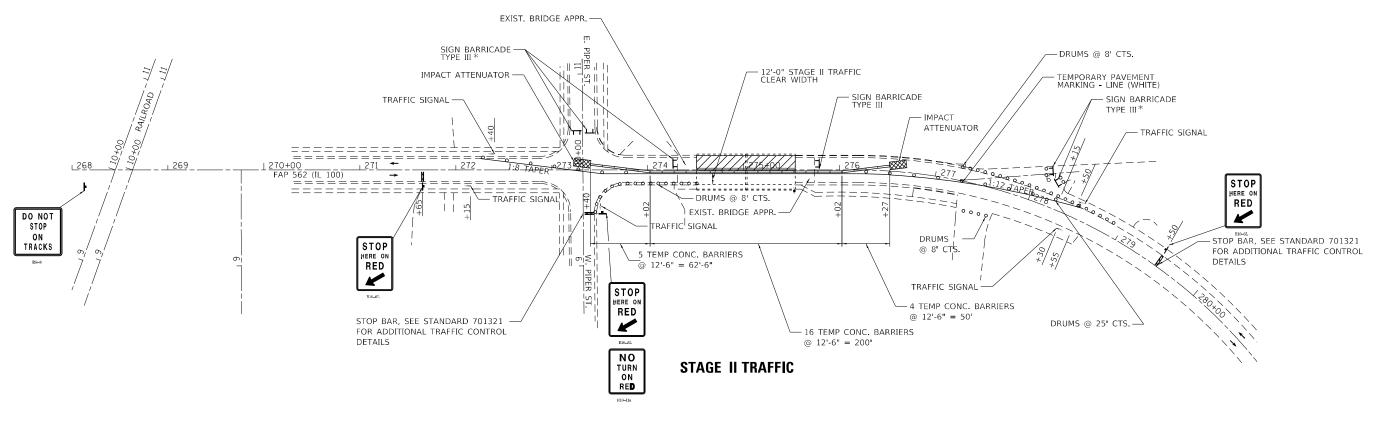
CHECKED REVISED

DEPARTMENT OF TRANSPORTATION

SCALE: 100.0000 / in SHEET 1







STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SECTION

(116) BDR, BRR, BJR

SCOTT 31 11

CONTRACT NO. 72M65

STAGING PLAN

SN 086-0006

TO STA.

SCALE: 100.0000 / in SHEET 1 OF 1 SHEETS STA.

KUHN & TRELLO

OT SCALE = 100.0000 / in.

CDI/KTCE

CDI/MMY

10/14/2021

REVISED

REVISED

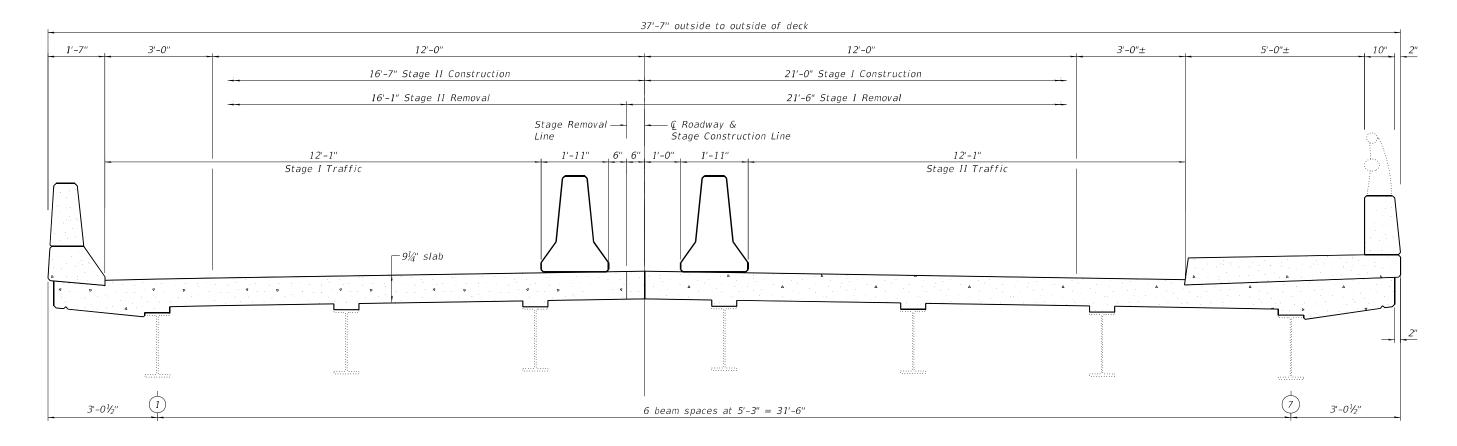
REVISED

REVISED

DESIGNED -

HECKED

DRAWN



CROSS SECTION AT JOINT REPLACEMENT LOCATIONS

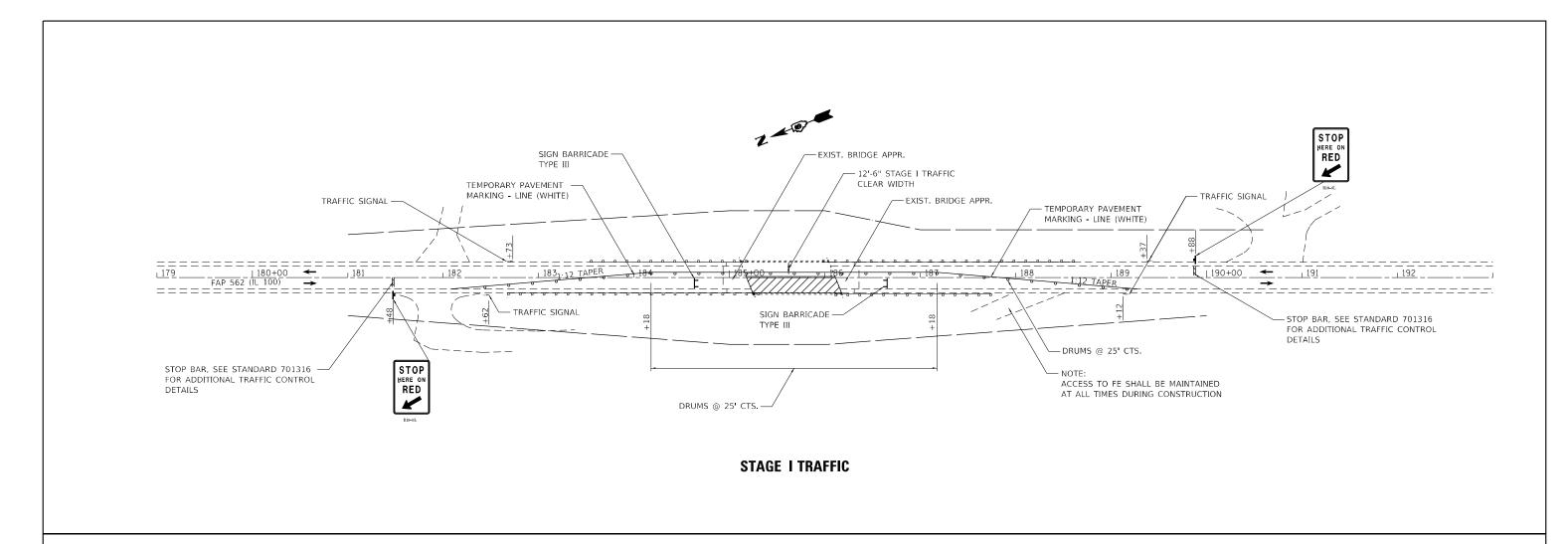
(Looking South)

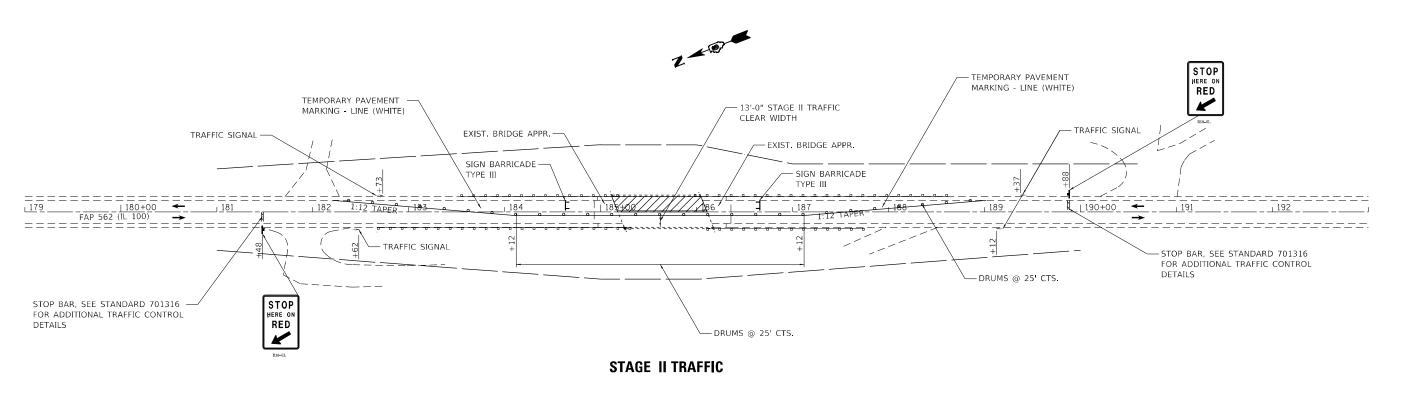
J:V1	KUHN & TRELLO	U!
NAME	CONSULTING ENGINEERS A Limited Liability Company	
H	209 N. 7th Street, 3rd Floor Springfield, IL 62702	Ρl
Ξ	Phone: 217 679 0044 Professional Desian Firm No. 184 006 16	PL

)	USER NAME = myoung	DESIGNED	-	SPN	REVISED -
y		DRAWN	-	MJT	REVISED -
, ,	PLOT SCALE = 0:2.0002 ':" / in.	CHECKED	-	MMY	REVISED -
	PLOT DATE = 10/14/2021	DATE	-	SPN/MJT/21	REVISED -

STAT	OF ILLINOIS	
DEPARTMENT	OF TRANSPORT	TATION

	ST	FAGING	CROSS	SECTION		F.A.P. RTE	SEC	ΓΙΟΝ		COUNTY	TOTAL SHEETS	SHEET NO.
		912	1 086-00	ne		562	(116) BDR	, BRR, B	JR	SCOTT	31	12
		31	1 000-00	00						CONTRACT	NO. 72	2M65
SCALE: 0:2.0002 ':" / ih.:	SHEET 1	OF 1	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	ID PROJECT		





STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SECTION

(116) BDR, BRR, BJR

SCOTT 31 13

CONTRACT NO. 72M65

STAGING PLAN

SN 086-0046

TO STA.

SCALE: 100.0000 / in SHEET 1 OF 1 SHEETS STA.

KUHN & TRELLO

CDIRKTACE

CDRMMY

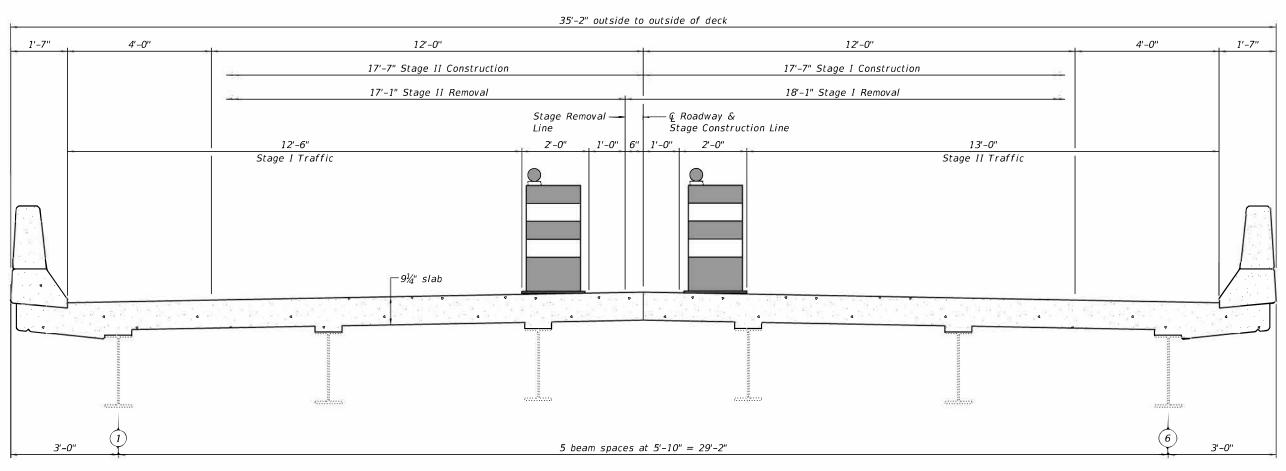
DRAWN

HECKED

REVISED

REVISED

REVISED



STAGING CROSS SECTION (Looking South)

KUHN & TRELLO

CONSULTING ENGINEERS

A Limited Liability Campany
109 M. yith Street, 124 Floor
Phone: 227-673-0044

Professional Design from No. 184-006516

PLOT SCALE = 0:2.0002
PLOT DATE = 10/14/202

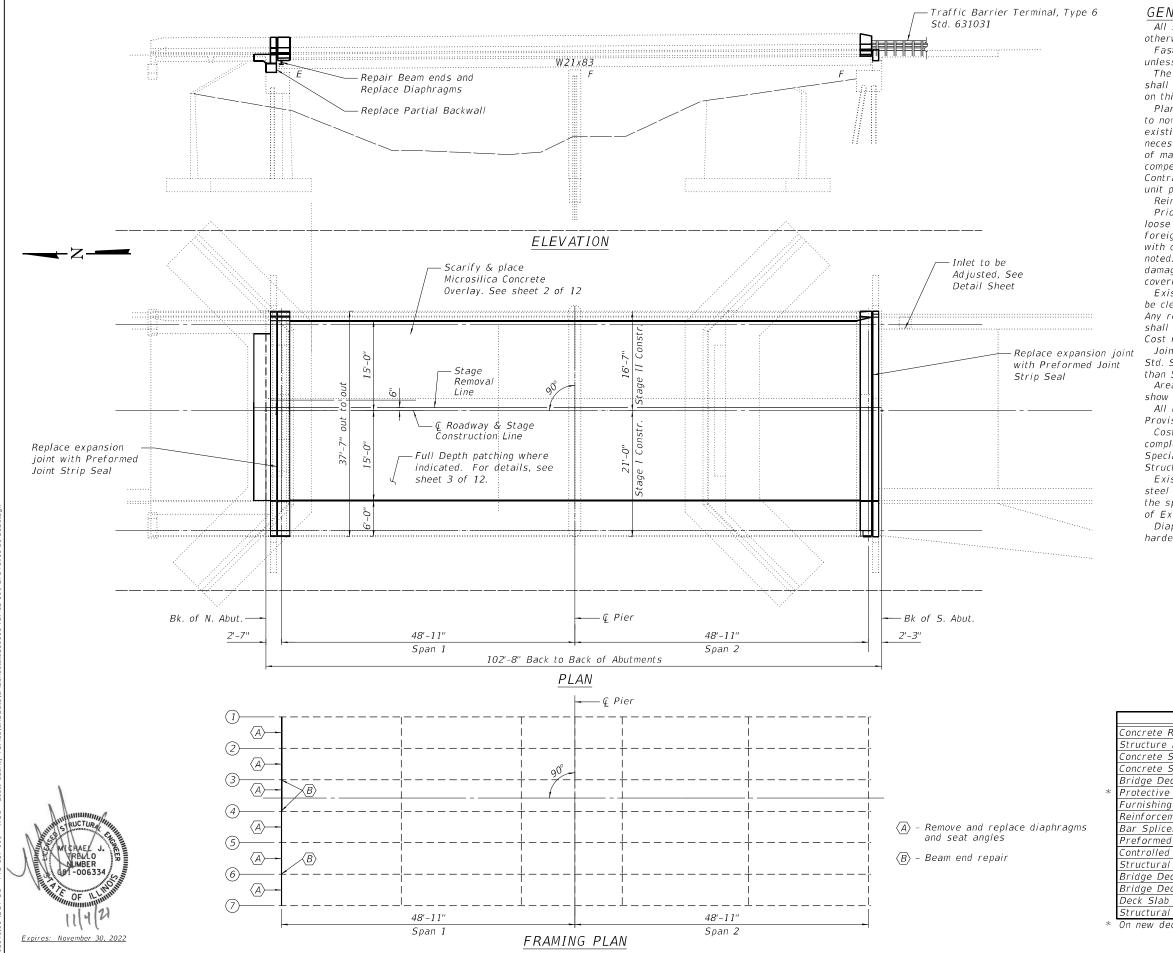
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

REV. - MS

COUNTY TOTAL SHEET NO.

SCOTT 31 14

CONTRACT NO. 72M65



DESIGNED - SPN

CHECKED - MJT

CHECKED - SPN/MJT

DRAWN

GENERAL NOTES

All structural steel shall be AASHTO M 270 Grade 50, unless otherwise noted.

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

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

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.
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.

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 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 Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

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

All new structural steel shall be hot-dip galvanized. See Special

Provisions for "Hot Dip Galvanizing for Structural Steel".

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

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".

Diaphragm connection holes shall be $^{15}\!\!/_{6}$ " dia. for $^{3}\!\!/_{4}$ " dia. bolts. Two hardened washers shall be required at diaphragm connections.

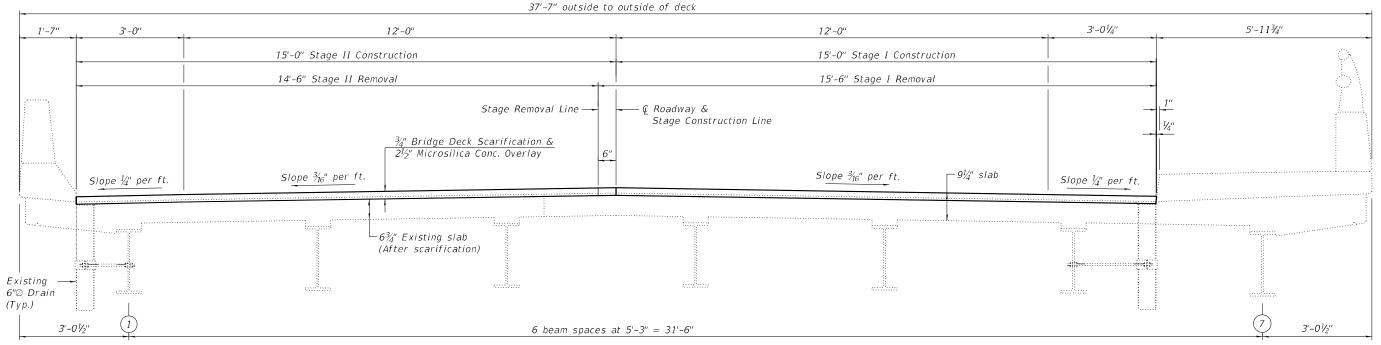
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	16.2
Structure Excavation	Cu. Yd.	2.4
Concrete Structures	Cu. Yd.	2.3
Concrete Superstructure	Cu. Yd.	14.8
Bridge Deck Grooving	Sq. Yd.	316
Protective Coat	Sq. Yd.	344
Furnishing and Erecting Structural Steel	Pound	1470
Reinforcement Bars, Epoxy Coated	Pound	2160
Bar Splicers	Each	40
Preformed Joint Strip Seal	Foot	75
Controlled Low-Strength Material	Cu. Yd.	2.4
Structural Steel Removal	Pound	1170
Bridge Deck Scarification, ¾"	Sq. Yd.	317
Bridge Deck Microsilica Concrete Overlay, 2½"	Sq. Yd.	317
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	10
Structural Repair of Concrete, Depth ≤5"	Sq. Ft.	17

* On new deck surface & top & inside face of new parapet concrete only

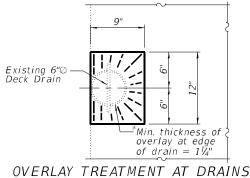
REVISED REVISE

(Looking South)

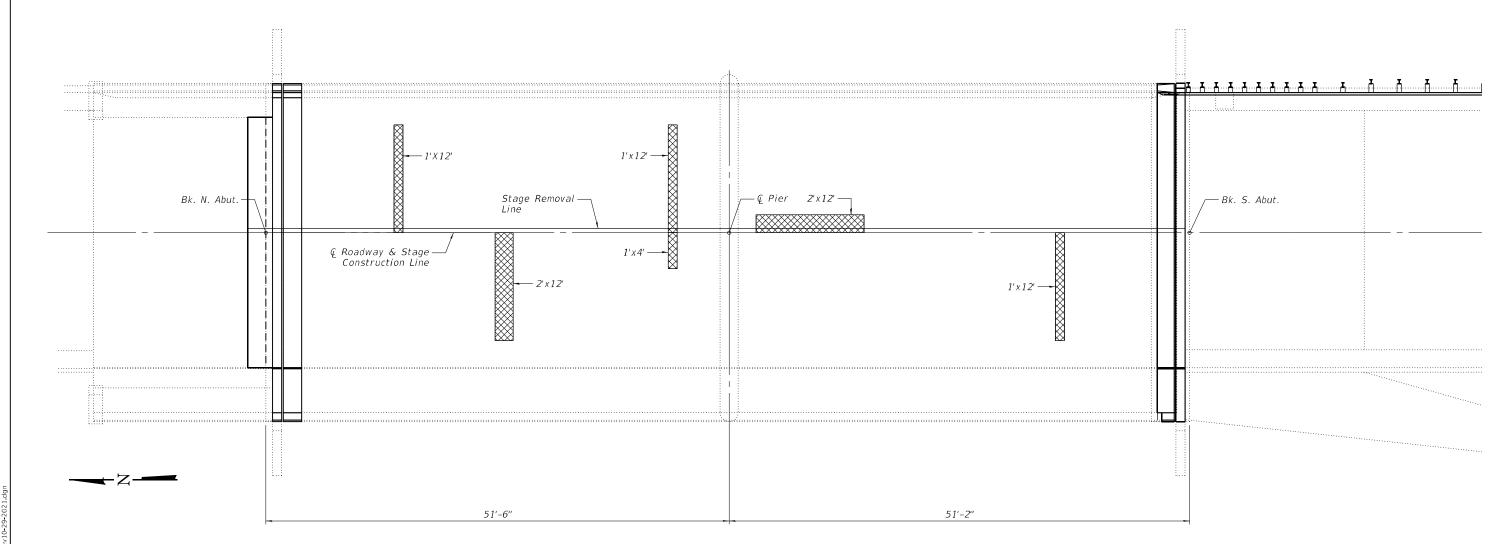


CROSS SECTION AT MID SPANS

(Looking South)



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	CONSULTING ENGINEERS A Limited Liability Company	
Ż	209 N. 7th Street 3rd Floor Springfield, JL 62702	P
١	Phone: 217-679-0044 Professional Design Firm No. 184-006516	Р



DECK PATCHING PLAN

Deck Slab Repair (Full Depth, Type II)

BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	10
(Tur Depen, Type 11)		

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CONSULTING ENGINEERS
A Limited Liability Company
109 N. 715 Street, 3rd Floor
Floor Configuration of PLC
Professional Design Firm No. 184, e06515

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

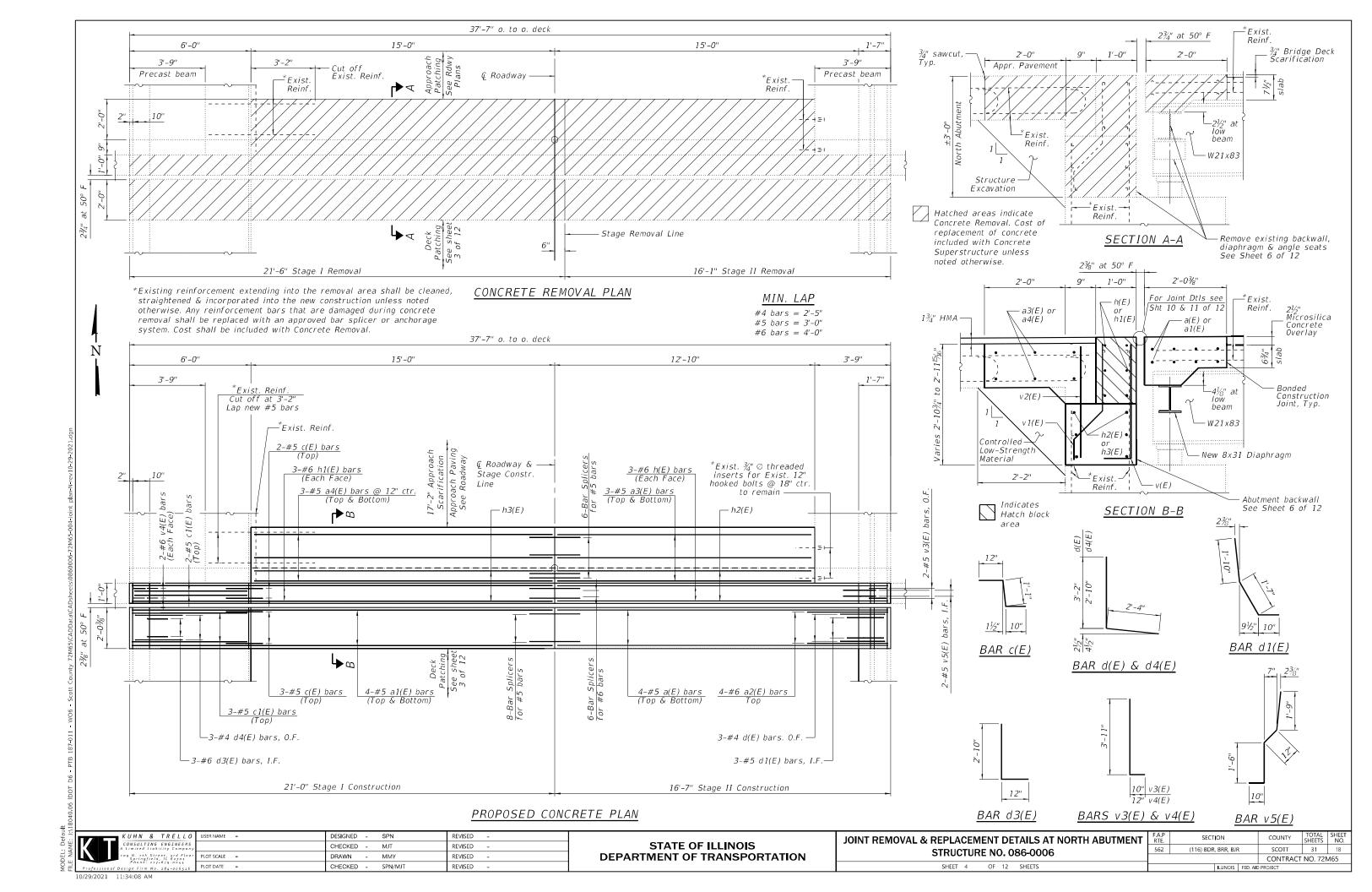
DECK PATCHING DETAILS
STRUCTURE NO. 086-0006

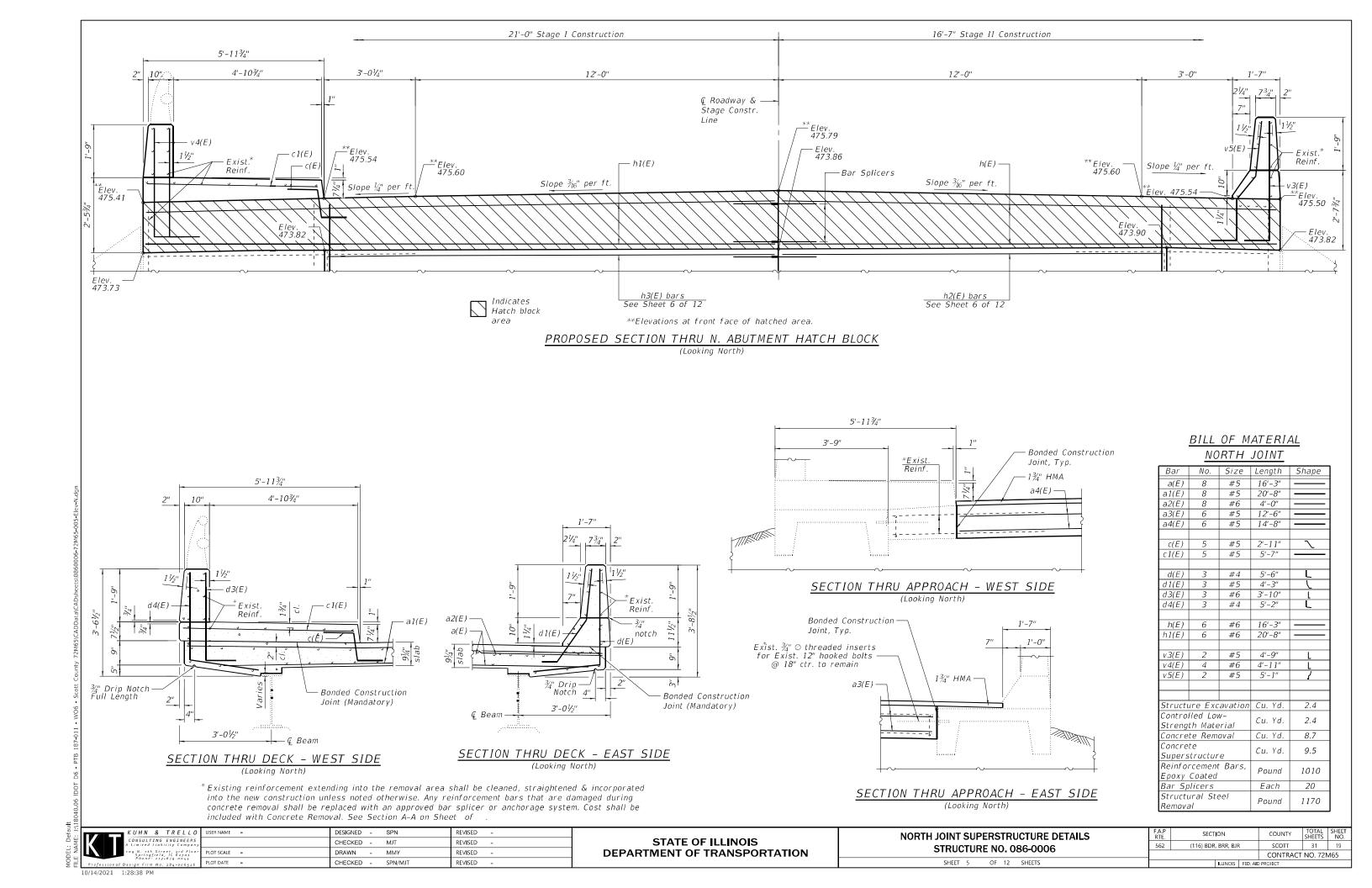
SHEET 3 OF 12 SHEETS

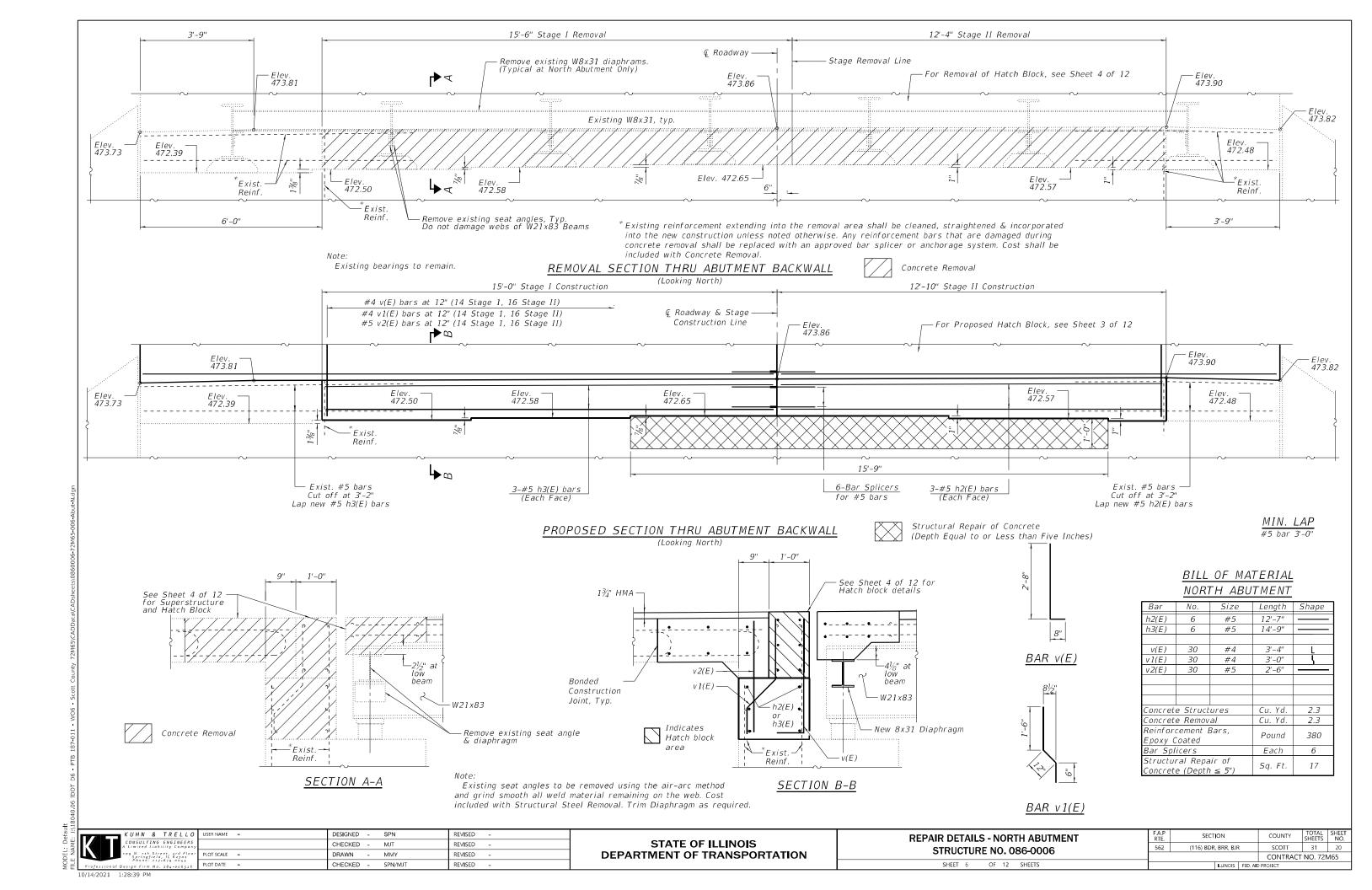
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 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

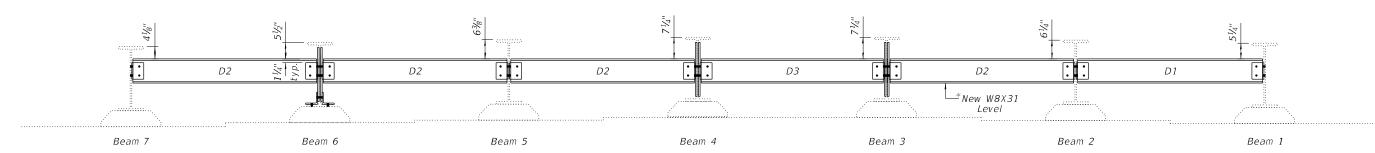
 562
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 CONTRACT NO. 72M65



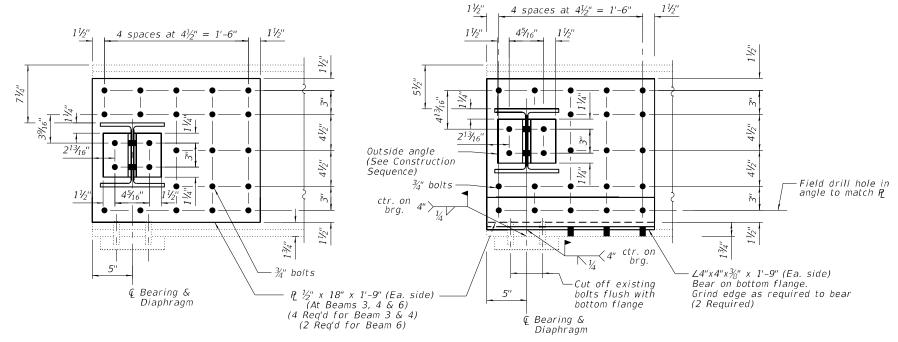






NORTH ABUTMENT ELEVATION (Looking North)

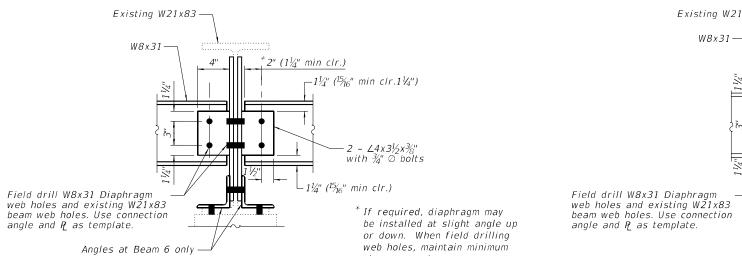




BEAMS 3 & 4

<u>BEAM 6</u>

CONNECTION PLATE DETAILS



clearances shown.

SECTION - BEAMS 3, 4 & 6

web holes, maintain minimum clearances shown.

SECTION - BEAMS 2 & 5

(Beam 1 & 7 similar - one side)

CONSTRUCTION SEQUENCE

- 1. Install repair plates field drilling existing webs using plates as template.
- 2. Install inside diaphragm connection angles, field drilling existing webs using angles as template.
- Install diaphragms and ouside connection angles, field drilling diaphragm webs using inside angle as template.
- Field drill holes in existing beams using outside angles as template and connect outside connection angles.

Note

Contractor required to field check existing conditions before fabrication.

All holes in new plates and angles to be shop drilled except bottom flange angles at bearing, as noted.

<u>BILL OF MATERIAL</u> STRUCTURAL STEEL

L	ITEM	UNIT	QUANTITY		
	Furnishing and Erecting Structural Steel	Pound	1470		

KUHN & TRELLO
CONSULTING ENGINEERS
A Limited Liability Company

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Sylvath Siren 1 xd Floor
Fhone: 337-673-0044
Professional Design Firm No. 284-00515
PLOT DATE = DESIGNED - SPN REVISED
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

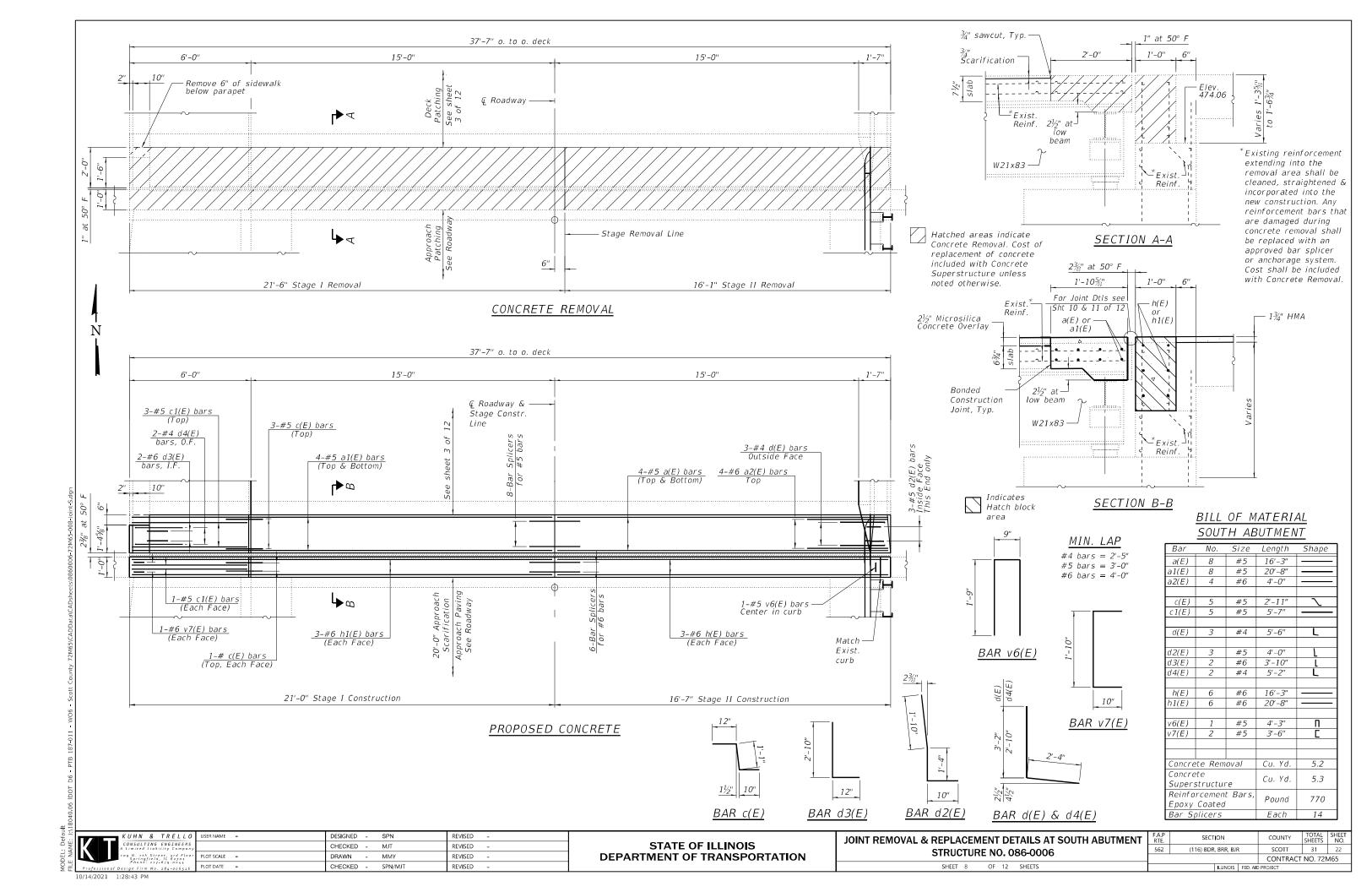
REPAIR DETAILS - NORTH ABUTMENT
STRUCTURE NO. 086-0006

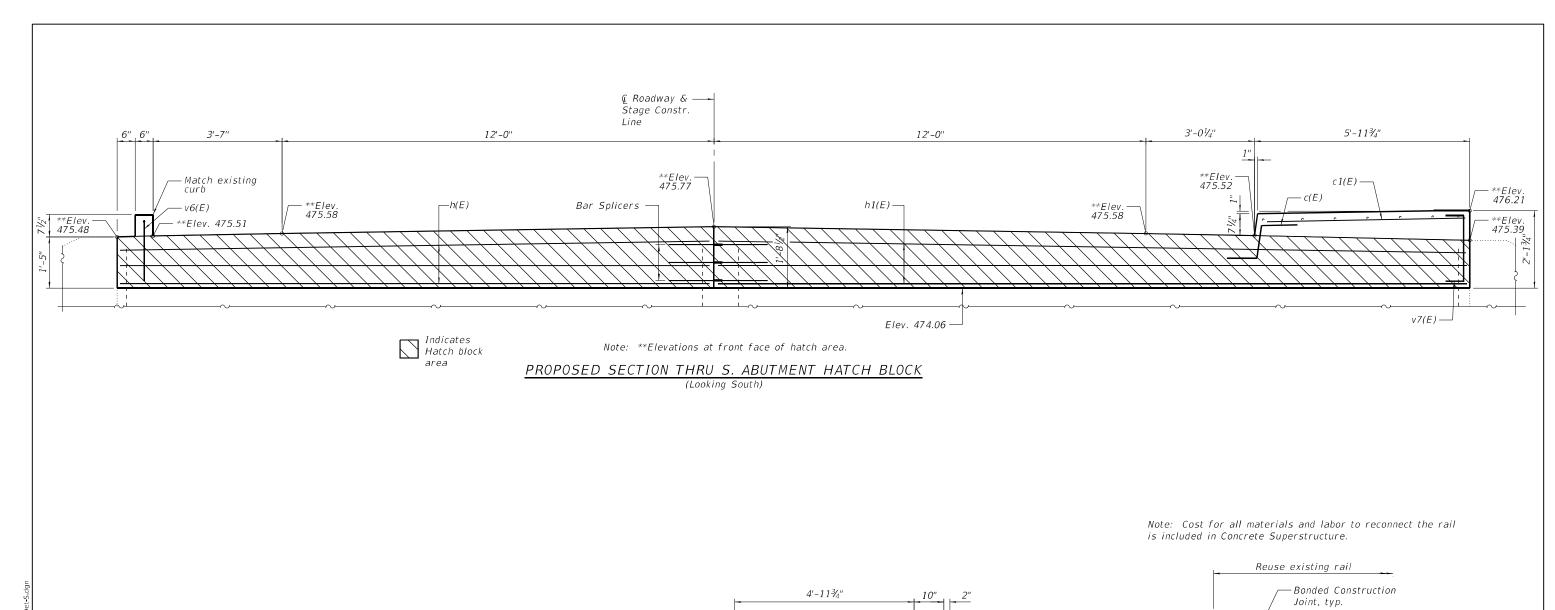
SHEET 7 OF 12 SHEETS

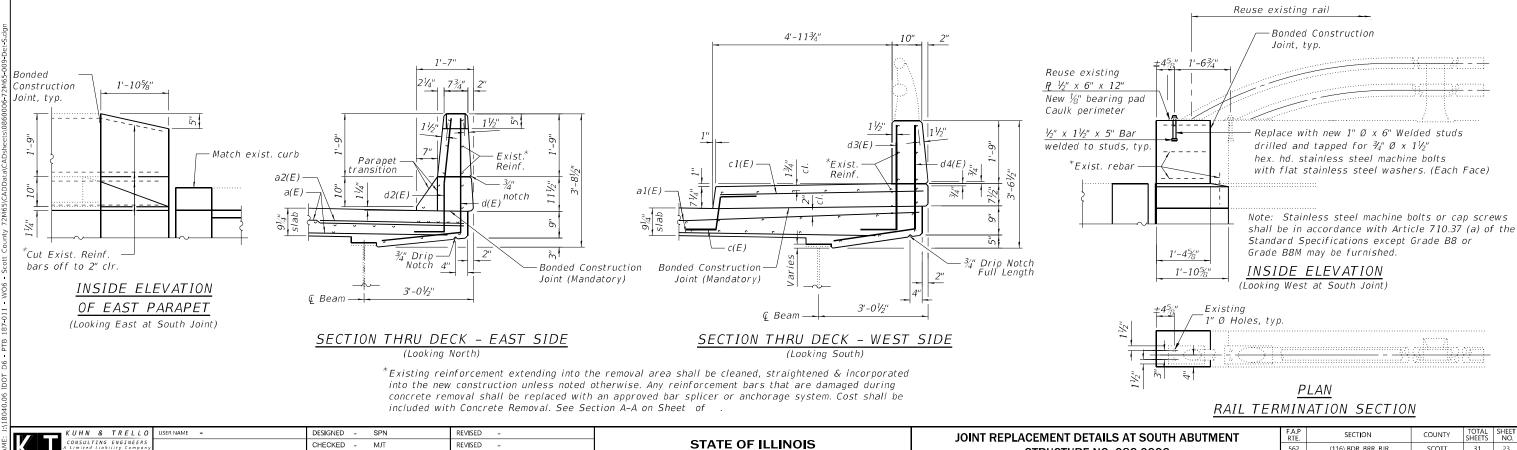
or down. When field drilling

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DEPARTMENT OF TRANSPORTATION

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STRUCTURE NO. 086-0006

SHEET 9 OF 12 SHEETS

(116) BDR, BRR, BJR

SCOTT 31 23

CONTRACT NO. 72M65

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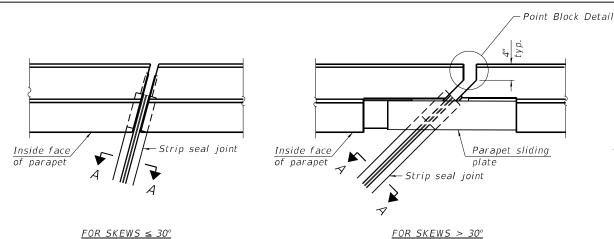
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FOR SKEWS > 30°

* ¾" Ø x 6" Studs 1'-0" (8 per side 39" parapet) (10 per side 44" parapet) ီ 🎵 ¾" Embedded plate full depth ¾" Embedded plate, Min. lap full depth 6" 1/2" Parapet sliding plate ¾" Ø Countersunk bolts 1'-0" (10 per side 39" parapet) (12 per side 44" parapet) <u>Direction</u> of traffic

SECTION B-B



Notes:

rated movement of 4 inches.

shall be followed.

39" constant slope barrier shown, 44" constant slope barrier 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

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

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 4½" maximum depth provided the anchorage system is revised

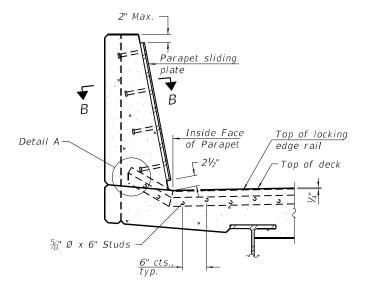
and meet the minimum anchorage shown. Flanged edge rails,

The manufacturer's recommended installation methods

according to the manufacturer's recommendation.

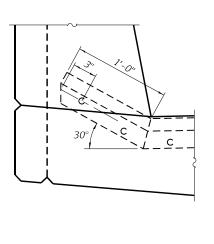
on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

PLAN AT PARAPET

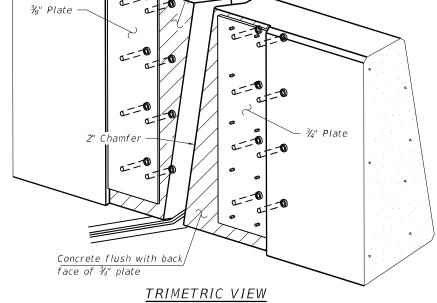


SECTION AT PARAPET

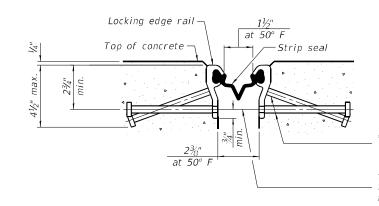
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A

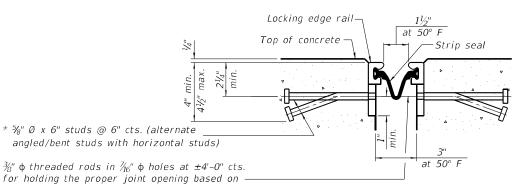


(Showing embedded plates only)

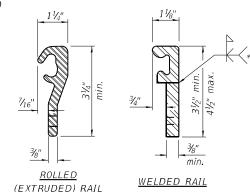


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SHOWING ROLLED RAIL JOINT

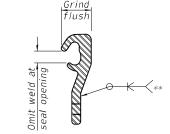


the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed



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.

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.

EJ-SS-S

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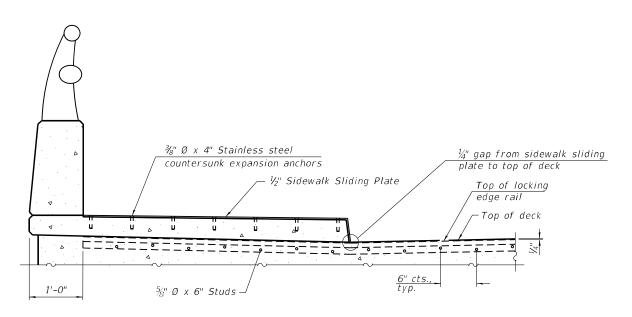
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SHOWING WELDED RAIL JOINT

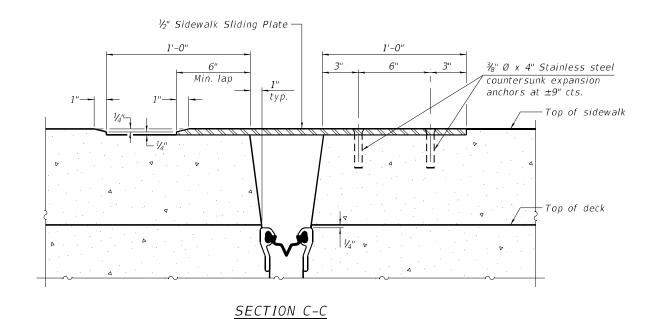
(Sheet 1 of 2) PREFORMED JOINT STRIP SEAL - SIDEWALK **STRUCTURE NO. 086-0006**

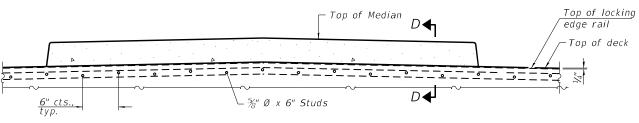
SECTION COUNTY 562 (116) BDR, BRR, BJR SCOTT 31 24 CONTRACT NO. 72M65

SHEET 10 OF 12 SHEETS



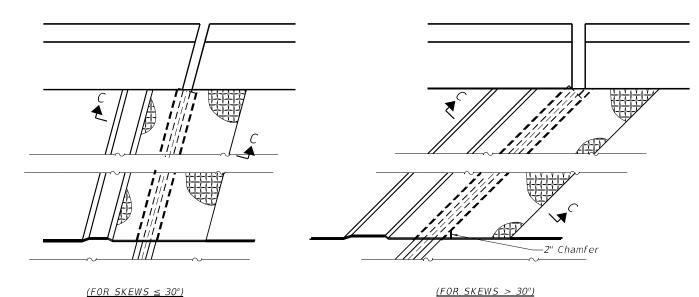
SECTION AT RAISED SIDEWALK





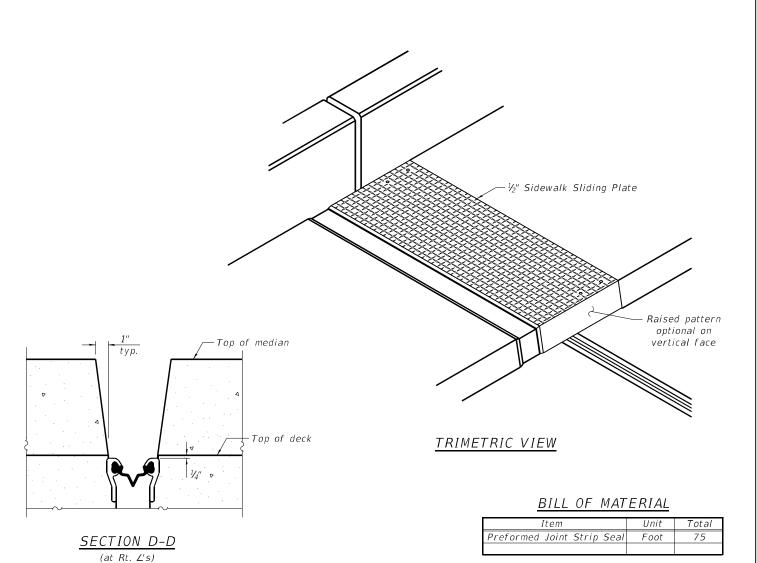
SECTION AT MEDIAN

For skews > 30°, chamfer acute corners 2" similar to sidewalk.



(FOR SKEWS ≤ 30°)

PLAN AT RAISED SIDEWALK



EJ-SS-S

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STATE OF ILLINOIS

(Sheet 2 of 2) PREFORMED JOINT STRIP SEAL - SIDEWALK **STRUCTURE NO. 086-0006** SHEET 11 OF 12 SHEETS

SECTION SCOTT 31 25 (116) BDR, BRR, BJR CONTRACT NO. 72M65

1-1-2020

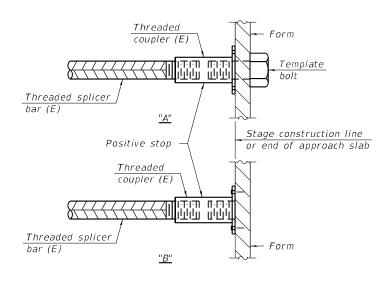
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

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.

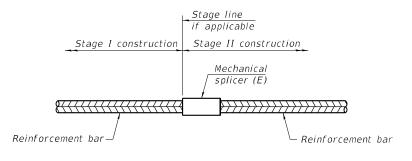
Location	Bar size	No. assemblies required	Minimum lap length
N. End Appr. Pavement	#5	6	3'-6"
N. Abut. – Hatch Block	#6	6	4'-0"
N. Abut. – Backwall	#5	6	3'-6"
N. End Bridge Deck	#5	8	3'-6"
S. End Bridge Deck	#5	8	3'-6"
S. Abut. – Hatch Block	#6	6	4'-0"



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.

COUNTY

SCOTT

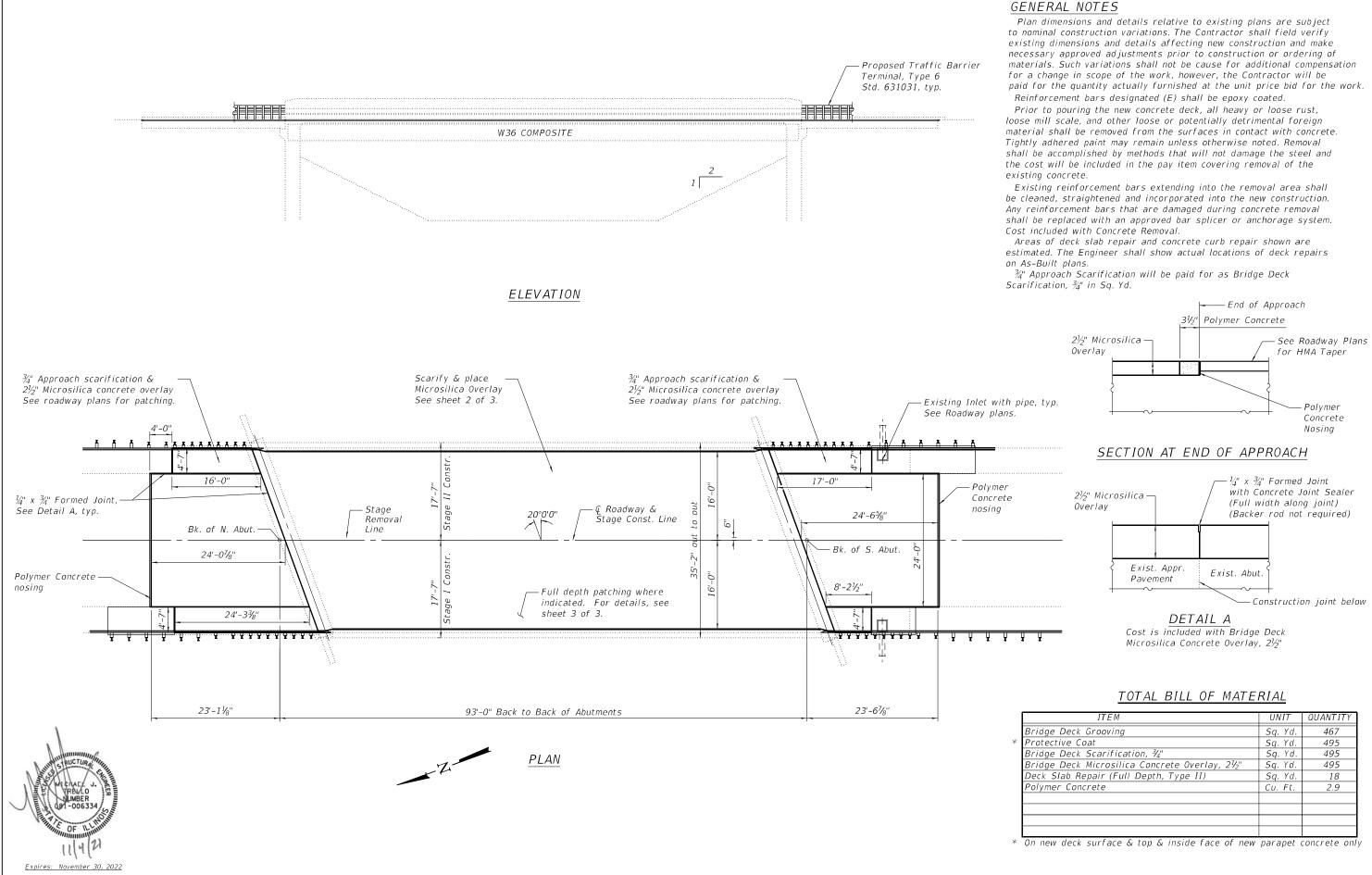
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See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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DEPARTMENT OF TRANSPORTATION

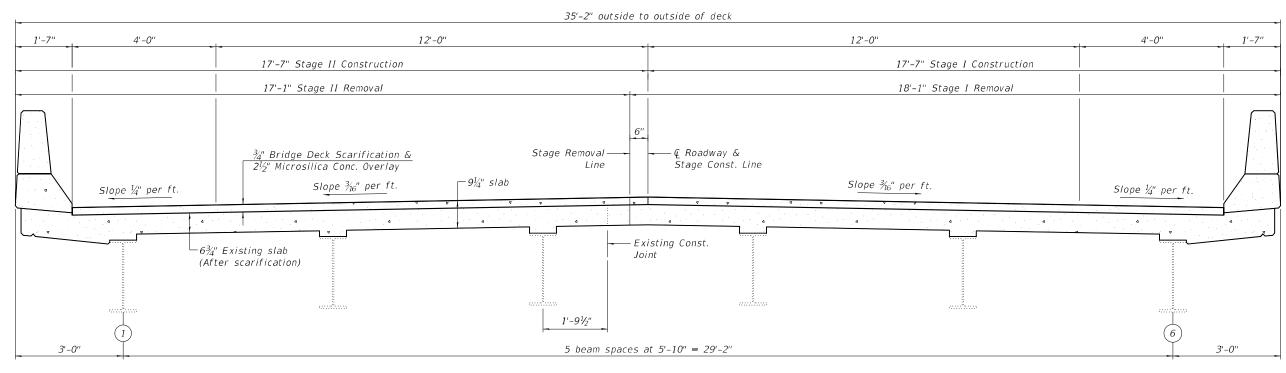
GENERAL PLAN & ELEVATION
STRUCTURE NO. 086-0046

SHEET 1 OF 3 SHEETS

 FA.P RTE.
 SECTION
 COUNTY COUNTY
 TOTAL SHEETS NO.
 SHEE NO.

 562
 (116) BDR, BRR, BJR
 SCOTT
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 CONTRACT NO. 72M65



CROSS SECTION AT MID SPANS (Looking South)

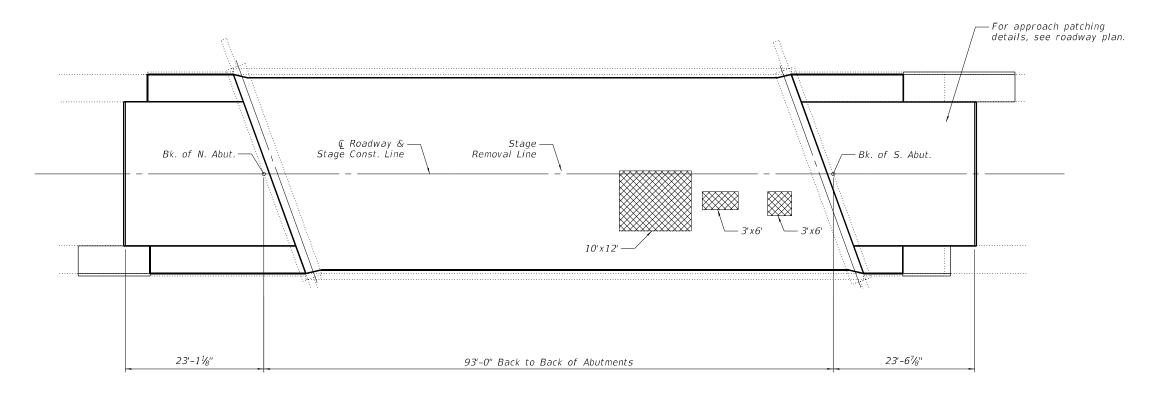
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGING DETAILS & CROSS SECTION **STRUCTURE NO. 086-0046** SHEET 2 OF 3 SHEETS

SECTION COUNTY 562 (116) BDR, BRR, BJR SCOTT 31 28 CONTRACT NO. 72M65



DECK PATCHING REPAIR PLAN



Deck Slab Repair (Full Depth, Type II)

<u>SUPERSTRUCTURE</u> BILL OF MATERIAL

rtem	Unit	rotai
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	18

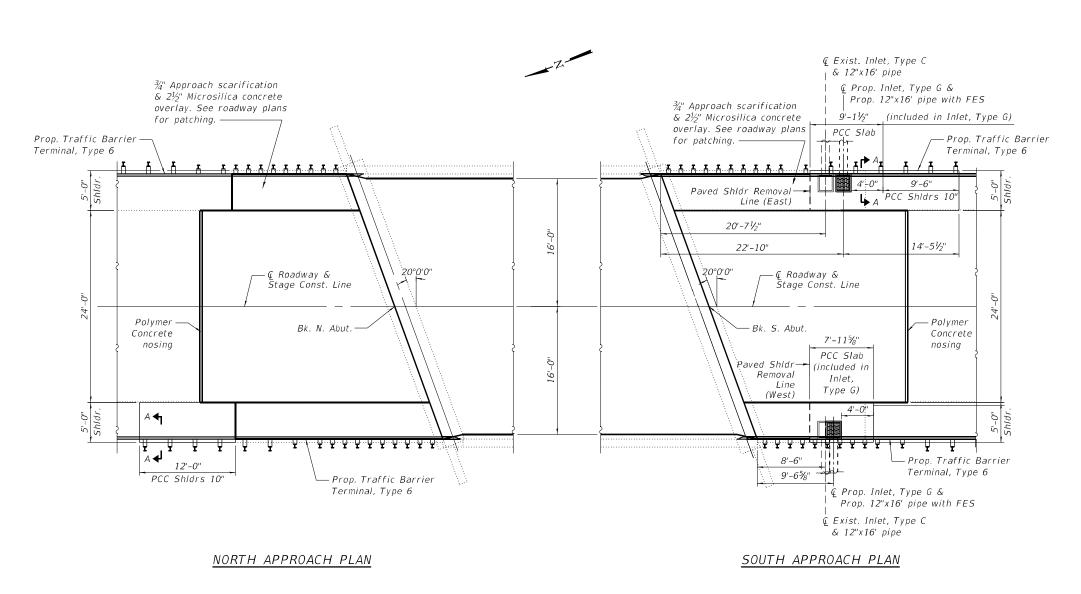
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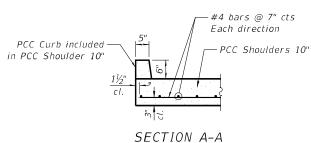
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

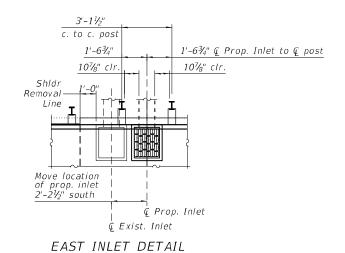
DECK SLAB REPAIR DETAILS STRUCTURE NO. 086-0046 SHEET 3 OF 3 SHEETS

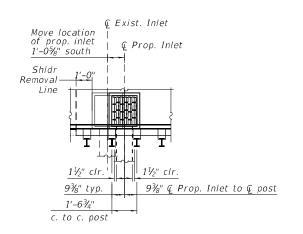
COUNTY TOTAL SHEET NO.

SCOTT 31 29 SECTION 562 (116) BDR, BRR, BJR CONTRACT NO. 72M65









WEST INLET DETAIL

Notes:

- Any Proposed P.C.C. Slab placed within 5' of Q Inlet will be paid as incidental to Inlet Type G. Any work beyond 5' will be paid for as P.C.C Shoulder 10".
- Resident Engineer to field verify location of proposed inlets to avoid conflicts with Proposed Traffice Barrier Terminal, Type 6 posts.
- 3. See Schedules sheet for quantities.

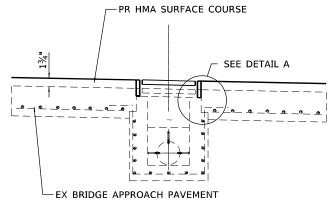
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: TS	CONSULTING ENGINEERS A Limited Liability Company	
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M II	Phone: 217-679-0044 Professional Design Firm No. 184-006516	PLO

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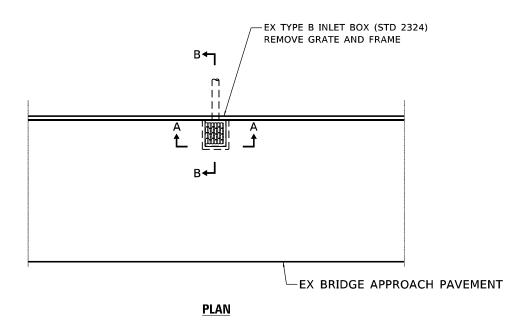
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

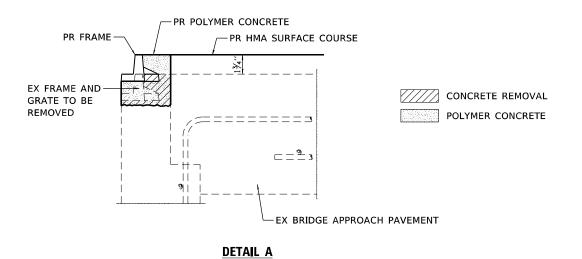
APPROACH SLABS GUARDRAIMNLET PLAN	F.A.P. RTE		
STRUCTURE NO. 086-0046	562	(116) BDR, BRR, BJ	
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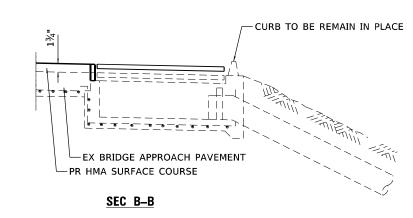
SEC A-A





GENERAL NOTES

THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW CAST FRAME AND CAST GRATE AS SPECIFIED ON STANDARD 610001 FOR THE TYPE G INLET BOX



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À.	CONSULTING ENGINEERS A Limited Liability Company	
Z H	209 N. 7th Street, 3rd Floor Springfield, JL 62702	
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	INLET BOX ADJUSTMENT DETAIL STRUCTURE NO. 086-0006					F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.	
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	STRUCTURE NO. 000-0000								CONTRACT	Γ NO. 72	2M65	
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