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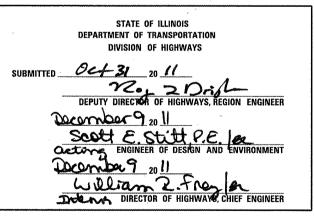
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F.A.I. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
72	(84-10-1)BDR	SANGAMON .	35	1
	ILLINO	s CONTRAC	T NO.	72F01

D-96-009-12





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL NOTES

- 1. THE STANDARDS INCLUDED IN THE BACK OF THESE PLANS SHALL APPLY TO THIS PROJECT.
- THESE PLANS HAVE BEEN PREPARED USING STANDARD SYMBOLS AS INDICATED IN THESE PLANS, AND THEY SHALL TAKE PRECEDENCE OVER THOSE SHOWN ON STARNDARD 000001-06 IF THERE IS A CONFLICT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 4. THE CONTRACTOR SHALL PROTECT UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

J.U.L.I.E. 1-800-892-0123

ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, BY CONTACTING THE UTILITY COMPANY DIRECTLY.

IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS TAKEN THE FOREGOING INTO CONSIDERATION IN SUBMITTING HIS BID. AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS OR INCONVENIENCES CAUSED BY THE SAME.

THE INFORMATION AND DATA SHOWN OR INDICATED ON THESE IMPROVEMENT PLANS WITH RESPECT TO EXISTING UNDERGROUND FACILITIES AND UTILITIES AT OR CONTIGUOUS TO THE SITE IS BASED ON INFORMATION AND DATA FURNISHED BY THE OWNERS OF SUCH UNDERGROUND FACILITIES AND UTILITIES OR BY OTHERS, FIELD MARKINGS OF HOURS ADVANCE NOTICE. TO THE RESIDENT ENGINEER SO THAT UTILITIES CAN BE GIVEN NOTICE. NO GUARANTEE IS IMPLIED AS TO THE ACCURACY OR COMPLETENESS OF ANY SUCH INFORMATION OR DATA; AND CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR ID REVIEWING AND CHECKING ALL SUCH INFORMATION AND DATA, (II) VERIFYING IF ANY CONFLICTS EXIST WITH THE PROPOSED WORKED AND UNDERGROUND FACILITIES AND UTILITIES SHOWN OR INDICATED ON THE IMPROVEMENT PLANS, (III) COORDINATION OF THE WORK WITH THE OWNERS OF SUCH UNDERGROUND FACILITIES AND UTILITIES DURING CONSTRUCTION, AND (IV) THE SAFETY AND PROTECTION OF ALL SUCH UNDERGROUND FACILITIES AND UTILITIES AND REPAIR ANY DAMAGE THERETO RESULTING FROM THE WORK AT HIS EXPENSE.

- 5. ALL UTILITIES TO BE RELOCATED BY OTHERS.
- 6. FULL DEPTH SAW CUTTING ON ALL EDGES FOR REMOVAL ITEMS SHALL BE INCLUDED IN THE COST OF THE REMOVAL ITEM AS INDICATED AND IN ACCORDANCE WITH SECTION 440 OF THE STANDARD SPECIFICATIONS.
- FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.
- 8. THE CONTRACTOR SHALL MAINTAIN ACCESS CONTROL AT ALL TIMES DURING CONSTRUCTION.
- 9. ALL SIGNS AND DELINEATORS CONFLICTING WITH TRAFFIC CONTROL OR CONSTRUCTION SHALL BE REMOVED AND REPLACED BY THE CONTRACTORS. THIS WORK WILL BE INCLUDED WITH THE COST FOR TRAFFIC CONTROL ON THE PROJECT. IN ADDITION, THE COST TO RELOCATE SIGNS DESIGNATED ON THE PLAN SHEETS WILL ALSO BE INCIDENTAL TO THE TRAFFIC CONTROL FOR THOSE AREAS.

COMMITMENTS

1. THE RESIDENT ENGINEER SHALL CONTACT STUDIES & PLANS CONCERNING ANY MAJOR PLAN CHANGES.

DISTRICT SIX	
EXAMINED DEC 20	20 👪
OPERATIONS ENGINEER	
EXAMINED OCT 28	20 <u> </u>
PROJECT IMPLEMENTATION ENGIN	EER
EXAMINED October 12	20]
PROGRAM DEVELOPMENT ENGINE	ER

USER NAME = whitlingme	DESIGNED	~		REVISED	-
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SCALE:

				CONSTR. CO 90% FED. 10% STATE
			URBAN	BRIDGE
CODE			TOTAL	0014
NO.	ITEM	UNIT	QUANTITY	RURAL
				NO.
28100709	STONE DUMPED RIPRAP, CLASS A5	SO YD	278.0	278.0
31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	60.0	60.0
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	267.0	267.0
44000100	DAVEMENT DEMOVAL	50 VD	747.0	7.17.0
44000100	PAVEMENT REMOVAL	SQ YD	347.0	347.0
44004250	PAVED SHOULDER REMOVAL	SO YD	231.0	231.0
48203042	HOT-MIX ASPHALT SHOULDERS, 11 1/4"	SQ YD	178.0	178.0
48203047	HOT-MIX ASPHALT SHOULDERS, 12 1/2"	SO YD	178.0	178.0
50102400	CONCRETE REMOVAL	CU YD	62.6	62.6
50200100	STRUCTURE EXCAVATION	CU YD	191.0	191.0
		00 75	13170	13120
50300225	CONCRETE STRUCTURES	CU YD	58. 0	58. 0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	159.1	159.1
50300260	BRIDGE DECK GROOVING	SO YD	6885.0	6885.0
50300300	PROTECTIVE COAT	SO YD	383.0	383.0

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STATE	E 01	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

		Summa	ry of Qua	ntities		F.A. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
			•			72	(84-10-1)BDR	SANGAMON	35	3
-								CONTRACT	NO.	72F01
SCALE:	SHEET	0F	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		-

				CONSTR. COD 90% FED. 10% STATE
			URBAN	BRIDGE
CODE			TOTAL	0014
NO.	ITEM	UNIT	QUANTITY	RURAL
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	39820.0	39820.0
50800515	BAR SPLICERS	EACH	80.0	80.0
52000110	PREFORMED JOINT STRIP SEAL	FOOT	248.0	248.0
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24.0	24.0
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	24.0	24.0
52100520	ANCHOR BOLTS, 1"	EACH	48.0	48.0
58700300	CONCRETE SEALER	SO FT	865.0	865.0
59100100	GEOCOMPOSITE WALL DRAIN	SO YD	84.0	84.0
Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE NARROW) TEST LEVEL 3	EACH	1.0	1.0
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6. 0	6. 0
67100100	MOBILIZATION	L SUM	1.0	1.0
70100410	TRAFFIC CONTROL AND PROTECTION, STANDARD 701416	EACH	1.0	1.0
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1.0	1.0
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	6.0	6.0

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		PLOT DATE - Nov-01-2011 H:48:57AM	DATE -	REVISED -	Ĺ

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

							F.A. RTE.	SECT
		;	Summary o	f Quantit	ies		72	(84-10
SCALE:	SHEET	OF	SHEETS	STA.	TO S	TA.		

	DI INOIC CCD AL	D DDO IECT		
		CONTRACT	NO.	72F01
72	(84-10-1)BDR	SANGAMON	35	4
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

				CONSTR. CODE 90% FED. 10% STATE
			URBAN	BRIDGE
CODE			TOTAL	0014
NO.	ITEM	UNIT	QUANTITY	RURAL
70300100	SHORT TERM PAVEMENT MARKING	FOOT	4037.0	4037.0
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	1332.0	1332.0
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1825.0	1825.0
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	3562.5	3562.5
78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	22579.0	22579.0
78004220	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 5"	FOOT	1491.0	1491.0
78200100	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	132.0	132.0
78200200	BIDIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	145.0	145.0
78300100	PAVEMENT MARKING REMOVAL	SO FT	9818.0	9818.0
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	12.0	12.0
Z0001905	STRUCTURAL STEEL REPAIR	POUND	3600.0	3600.0
Z0004552	APPROACH SLAB REMOVAL	SQ YD	270.0	270.0
70000014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SO YD	6901.0	6901.0

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

				CONSTR. CODE 90% FED 10% STATE
CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	BRIDGE 0014 RURAL
	BRIDGE DECK SCARIFICATION 2 1/4"	SO YD	6901.0	6901.0
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	80.0	80.0
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SO YD	5.0	5.0
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SO YD	322.0	322.0
Z0019300	DRY GROUT SOLIDS	CU FT	300.0	300.0
Z0019307	HOLES DRILLED	EACH	4.0	4.0
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SO YD	7158.0	7158.0
Z0030332	IMPACT ATTENUATORS, RELOCATE (FULLYREDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1.0	1.0
Z0031200	JACKING AND CRIBBING	EACH	12.0	12.0
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	95.0	95.0
Z0049100	RAISED PAVEMENT MARKER REFLECTOR REPLACEMENT	EACH	108.0	108.0
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	191.0	191.0
X7800620	URETHANE PAVEMENT MARKING - LINE 5"	FOOT	11829.0	11829.0

* SPECIALTY ITEM

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		PLOT SCALE : 100.0000 1/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						''-	104 10 17001	CONTRACT	NO. 72F01	ĺ
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PAVMENT MARKING SCHEDULE

(FT) WHITE (FT) YELLOW (FT) (FT) (SQ FT)

LENGTH URETHANE PVT MKG- LINE 5"

LOCATION

EB REMOVAL

WB REMOVAL

I-72 STAGE I

I-72 STAGE II

EB REMOVAL

WB REMOVAL

STATION

TO STATION

187+97.0 68' RT TO 208+97.00 68' RT 2.100

180+21.0 56' RT TO 208+97.00 56' RT 2,876

180+21.0 44' RT TO 209+96.00 44' RT 2.975

183+76.0 68' LT TO 193+40.00 68' LT 964

183+76.0 56' LT TO 193+38.00 56' LT 962

183+76.0 44' LT TO 193+36.00 44' LT 960

202+59.0 68' LT TO 213+65.00 68' LT 1,106 202+59.0 56' LT TO 213+65.00 56' LT 1,106

202+59. O 44' LT TO 209+96. OO 44' LT 737

187+97. 0 68' RT TO 189+97. 00 72' RT 200

189+97.0 72' RT TO 205+97.00 72' RT 1,600

205+97. 0 72' RT TO 208+97. 00 68' RT 300

180+21.0 44' RT TO 182+50.00 56' RT 229

182+50.0 56' RT TO 187+97.00 56' RT 547

187+97.0 56' RT TO 189+97.00 60' RT 200

189+97.0 60' RT TO 205+97.00 60' RT 1,600

205+97.0 60' RT TO 208+97.00 56' RT 300

183+76.0 56' LT TO 192+31.00 44' RT 862

202+54.0 44' RT TO 209+96.00 56' LT 752

209+96.0 56' LT TO 211+37.00 56' LT 141

211+37.0 56' LT TO 213+65.00 68' LT 228

183+76.0 44' LT TO 192+31.00 56' RT 862

192+31.0 56' RT TO 202+54.00 56' RT 1,023

202+54.0 56' RT TO 209+96.00 44' LT 752

180+21. 0 68' RT TO 189+97. 00 72' RT 976 189+97. 0 72' RT TO 193+20. 00 72' RT 323

202+44.0 72' RT TO 205+97.00 72' RT 353

205+97.0 72' RT TO 208+97.00 68' RT 300

180+21. 0 44' RT TO 182+50. 00 56' RT 229 182+50. 0 56' RT TO 187+97. 00 56' RT 547

187+97.0 56' RT TO 189+97.00 60' RT 200

187+97.0 60' RT TO 193+22.00 60' RT 525

202+44.0 60' RT TO 205+97.00 60' RT 353

205+97.0 60' RT TO 208+97.00 56' RT 300

208+97. 0 56' RT TO 209+96. 00 56' RT 99

183+76.0 44' LT TO 185+24.00 38' LT 148

187+75.0 O' RT TO 188+03.00 6' RT 29

189+74.0 38' RT TO 193+31.00 56' RT 357

192+31.0 56' RT TO 193+22.00 56' RT 91

202+44.0 56' RT TO 202+54.00 56' RT 10 202+54.0 56' RT TO 204+77.00 38' RT 223

206+25.0 6' RT TO 206+53.00 0' RT 29

208+68.0 38' LT TO 209+96.00 44' LT 128

209+96.0 44' LT TO 213+65.00 44' LT 369

190+83.0 38' RT TO 192+31.00 44' RT 148

192+31.0 44' RT TO 202+54.00 44' RT 1,023

PREF. PLASTIC
PVT. MKG, TY.
B INLAID-LINE
5"
PVT. MARKING
REMOVAL

882

302

1,250

405

101

403

465 116

310

107

116

99

181

66

173

116

99

8

49

10

118

30

74

10

42

122

10

49

200

1.600

300

862

1,023

141

228

RAISED REFL PVT MKR, REFLECTOR REM REPLACEMENT

(EACH)

PAINT PVT MARKING- LINE 5"

WHITE (FT) YELLOW (FT) (EACH)

229

547

200

1,600

300

862

1,023

752

WORK ZONE PVT. MARKING REM.

(SQ FT)

53

10

18

53

10

28

34

25

5

8

28

25

SHORT-TERM PVT MKG

(FT)

20

160

30

23

55

20

160

30

86

102

75

14

23

86

102

75

	1		10311010 30 E1	10 1193+38.00 36 LT	962								24							
			201+57.0 56' LT	TO 213+65.00 56' LT	1,208	,						30	30							
	Γ			TOTALS =		5, 865	5, 964	1,491	9,818	11,086	11,493	108	108	4, 0	37	1,332				
	_						•			•			•							
	VEED MAKE	T prejevro															le a t			TOTAL ISHE
⊢	USER NAME = sparksgw	DESIGNED -	REVISE						_				SCHED	OULES			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHE
⊢		DESIGNED - DRAWN -	RE VISE RE VISE				STATE	OF ILLINOI	s				SCHED	DULES			F.A.I. RTE. 72			TOTAL SH SHEETS N
c:\pw_work\pwidot\sparksgw\d0282050\D67				ED -	\equiv			OF ILLINOI OF TRANSP					SCHED	DULES				SECTION (84-10-1)BDR	COUNTY SANGAMON CONTRACT	35

			<u> </u>		PAVMENT	MARKING S	CHEDULE			1			
LOCATION	STATION	TO STATION	LENGTH	URETHANE PVI	MKG- LINE 5"	PREF. PLASTIC PVT. MKG, TY. B INLAID-LINE 5"	PVT. MARKING REMOVAL	PAINT PVT MAR	RKING- LINE 5"	RAISED REFL PVT MKR, REFLECTOR REM	RAISED REFL PVT MKR REFLECTOR REPLACEMENT	SHORT-TERM PVT MKG	WORK ZONE PVT. MARKIN REM.
			(FT)	WHITE (FT)	YELLOW (FT)	(FT)	(SQ FT)	WHITE (FT)	YELLOW (FT)	(EACH)	(EACH)	(FT)	(SQ FT)
	202+52.0 44' LT	TO 209+96.00 56' RT	752					752				75	25
	180+21.0 44' RT	TO 183+76.00 44' RT	355						355			36	12
	183+76. O 44' RT	TO 192+30.00 56' LT	862						862			86	28
	192+30. 0 56' LT 202+52. 0 56' LT	TO 202+52.00 56' LT	752						1,022 752			102 75	34
	WB	TO 209+96.00 44' RT	132						152			75	25
	183+76.0 68' LT	TO 185+47.00 68' LT	171					171				17	6
	185+47.0 68' LT	TO 188+47.00 72' LT	300					300				30	10
	188+47.0 72' LT	TO 204+85.00 72' LT	1,638					1,638				164	54
	204+85.0 72' LT	TO 206+85.00 68' LT	200					200				20	7
	206+85.0 68' LT	TO 213+65.00 68' LT	680					680				68	22
	107.75 0 551.17	70 405 47 00 564 47											
	183+76. 0 56' LT 185+47. 0 56' LT	TO 185+47.00 56' LT TO 188+47.00 60' LT	171 300						171 300			1 7 30	10
	188+47.0 60' LT	TO 204+85.00 60' RT	1,638	1					1,638	 		164	54
	204+85. 0 60' LT	TO 206+85.00 56' LT	200						200			20	7
	206+85.0 56' LT	TO 211+37.00 56' LT	452						452			45	15
	211+37.0 56' LT	TO 213+65.00 44' LT	228						228			23	8
72 STAGE III													
EB REMOV													
	180+21.0 68' RT	TO 182+50.00 56' RT	229				76						
	183+76. O 56' RT	TO 183+76.00 56' RT TO 186+32.00 38' RT	126 256				42 84						
	188+03.0 6' RT	TO 188+31.00 O' RT	29				10						
	190+82. O 38' LT	TO 192+30.00 44' LT	148				49						
	192+30.0 44' LT	TO 202+52.00 44' LT	1,022				337						
	202+52.0 44' LT	TO 203+81.00 38' LT	129				43						
	205+97.0 O' RT	TO 206+25.00 6' RT	29				10						
	207+73.0 38' RT	TO 209+96.00 56' RT	223				74						
	100,01 0 44,07	TO 107176 00 444 DT	755				117						
	180+21. 0 44' RT 183+76. 0 44' RT	TO 183+76.00 44' RT TO 185+23.00 38' RT	355 147				117 49						
	187+75.0 0' LT	TO 188+03.00 6' LT	29				10						
	189+73. O 38' LT	TO 192+30.00 56' LT	257				85						
	192+30.0 56' LT	TO 202+52.00 56' LT	1,022				337						
	202+52.0 56' LT	TO 206+53.00 38' LT	401				132						
	206+22.0 0' RT	TO 206+50.00 6' RT	29				10						
	208+67.0 38' RT	TO 209+96.00 44' RT	129				43						
WB REMOV		TO 105:47 00 00/17					F.C.						
	183+76. 0 68' LT 185+47. 0 68' LT	TO 185+47.00 68' LT TO 188+47.00 70' LT	171				56 10						
	188+47. 0 70' LT	TO 204+85.00 70' LT	1,638				541						
	204+85. 0 70' LT	TO 206+85.00 68' LT	200				66						
		TO 213+65.00 68' LT					224						
		TO 185+47.00 56' LT	29				10						
	185+47. 0 56' LT	TO 188+47.00 60' LT	300				99						
	188+47.0 60' LT	TO 204+85.00 60' LT	1,638				541						
	204+85.0 60' LT 206+85.0 56' LT	TO 206+85.00 56' LT TO 211+37.00 56' LT	200 452				66 149						
	211+37. 0 56' LT	TO 213+65.00 56' LT	228				75						
	EB												
	180+21.0 68' RT	TO 208+97.00 68' RT	2,876	2,876								288	95
	180+21.0 56' RT	TO 209+96.00 56' RT	2, 975			744						298	98
	180+21.0 44' RT	TO 209+96.00 44' RT	2, 975		2, 975					μ		298	98
	WB	TO 217105 00 001 : T	2 000	3 000								200	- 00
	183+76. 0 68' LT 183+76. 0 56' LT	TO 213+65.00 68' LT TO 213+65.00 56' LT	2,989	2, 989		747						299 299	99
	183+76. 0 44' LT	TO 213+65.00 44' LT	2, 989		2, 989	131				+		299	99
	122 131 11 11		1										<u> </u>
	EB												
		TO 193+23.00 56' RT	1,302							33	33		
	201+41.0 56' RT	TO 209+96.00 56' RT	855							21	21		
	WB	TO 107170 00 FG/:T	000							24	24		
	183+76. 0 56' LT 201+57. 0 56' LT	TO 193+38.00 56' LT TO 213+65.00 56' LT	962							24 30	24 30		
						1	i e		i .	, ,, ,,	J.		1

LOCATION	STATION	то	STATION	LENGTH	TEMP CONC BARRIER	RELOCATE TEMP CONC BARRIER	IMP ATTEN TEMP (FULL RE-DIRECT, NARROW) TEST LVL 3	IMP ATTEN RELOCATE (FULL RE-DIRECT, NARROW) TEST LVL 3	MONO-DIRECTI ONAL PRISMATIC BAR REFL	BI-DIRECTION AL PRISMAT BAR REFL
				(FT)	(F00T)	(F00T)	(EACH)	(EACH)	(EACH)	(EACH)
I-72 STAGE I	'					•				
	188+04.043.4RT	TO	188+10.00 43.4RT	6				1		
	188+10.043.4RT	TO	189+97.00 59' LT	187	187.5	187.5				7
	189+97.0 59' LT	ТО	205+97.00 59' LT	1,600	1,600	1,600				65
	193+25.0 39' RT	ТО	201+44.00 39' RT	819					33	
	193+19.0 77' RT	ТО	201+38.00 77' RT	819					33	
I-72 STAGE II	•		•			•	•	•	•	•
	188+47.0 59' LT	ТО	204+85.00 59' LT	1,638	37.5	1,600.0				66
	204+85.0 59' LT	TO	206+60.0044.5LT	175		175.0				7
	206+60.044.5LT	TO	206+66.0044.5LT	6			1			
	193+41.0 77' LT	TO	201+60.00 77' LT	819					33	
	193+35.0 39' LT	TO	201+54.00 39' LT	819					33	
			TOTALS =		1.825.0	3, 562, 5	1	1	132	145

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

FILE NAME =

USER NAME = sparksgw

PLOT DATE = Nov-01-2011 11:51:41AM

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DESIGNED -

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DATE

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F.A.I. RTE. 72

TO STA.

SCHEDULES

OF SHEETS STA.

SCALE:

SHEET

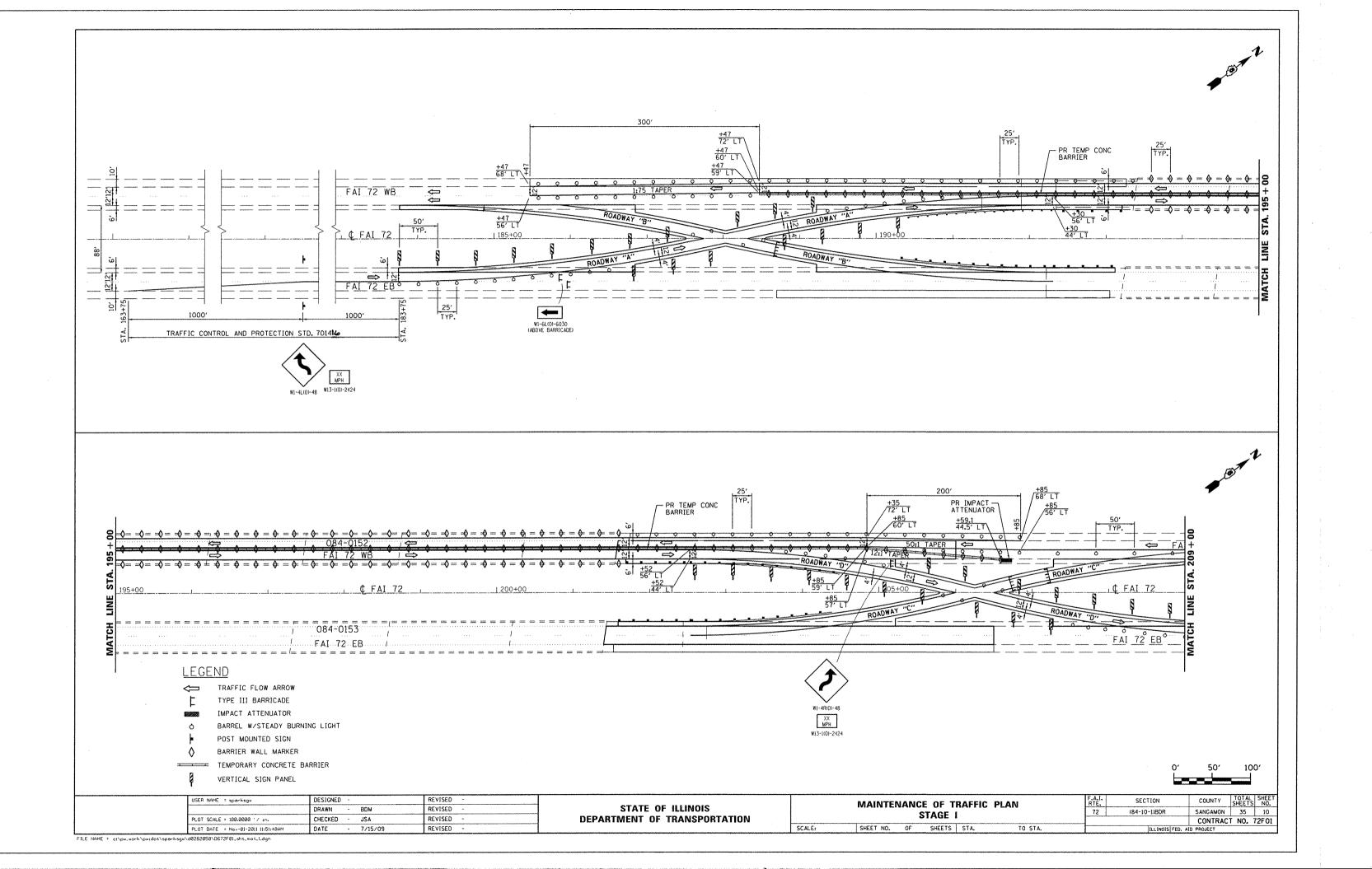
SECTION

(84-10-1)BDR

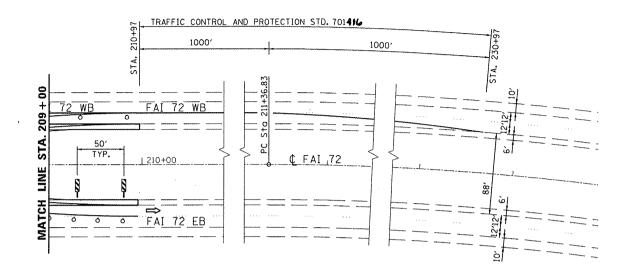
COUNTY TOTAL SHEET NO.
SANGAMON 35 9

CONTRACT NO. 72F01

TRAFFIC CONTROL SCHEDULE







LEGEND

TRAFFIC FLOW ARROW

TYPE III BARRICADE

IMPACT ATTENUATOR

O BARREL W/STEADY BURNING LIGHT

POST MOUNTED SIGN

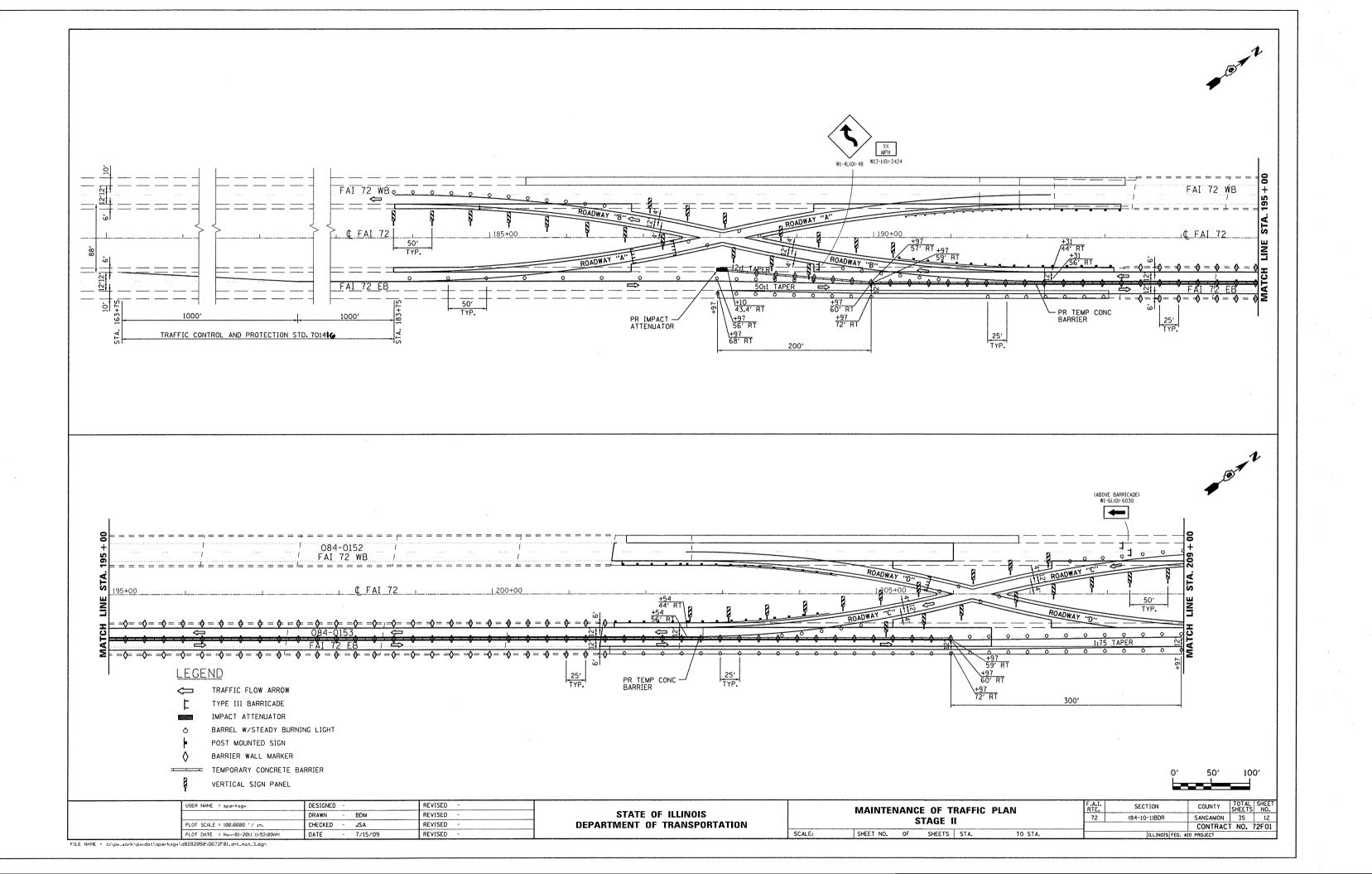
♦ BARRIER WALL MARKER

TEMPORARY CONCRETE BARRIER

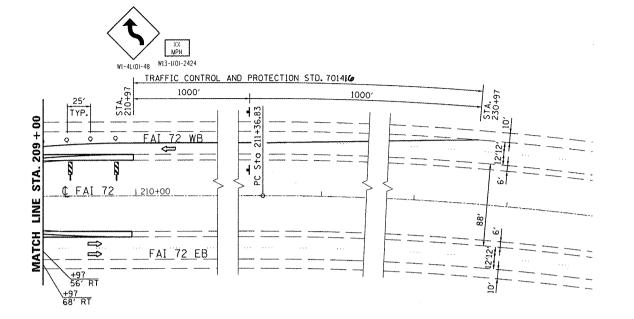
VERTICAL SIGN PANEL

0′	501	100′
i	1	

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	DRAWN - BDM	REVISED -	STATE OF ILLINOIS		72 (84-10-1)BDR	SANGAMON 35 11
PLOT SCALE = 100.0000 ' / in.	CHECKED - JSA	REVISED ~	DEPARTMENT OF TRANSPORTATION	STAGE I		CONTRACT NO. 72F01
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LEGEND

TRAFFIC FLOW ARROW

TYPE III BARRICADE

IMPACT ATTENUATOR

BARREL W/STEADY BURNING LIGHT

POST MOUNTED SIGN

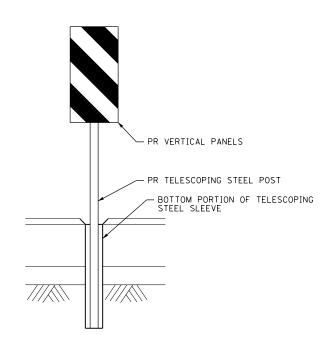
BARRIER WALL MARKER

TEMPORARY CONCRETE BARRIER

VERTICAL SIGN PANEL

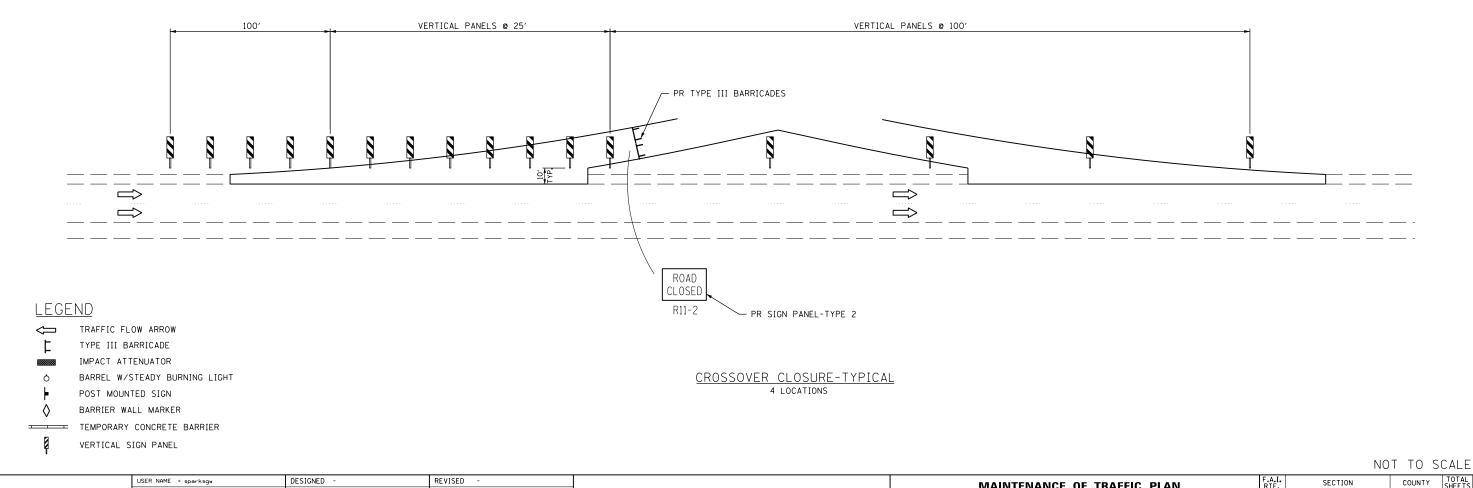
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		DRAWN - BDM	REVISED -	STATE OF ILLINOIS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION STAGE II					LAN	72	(84-10-1)BDR	SANGAMON
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NOTE: FOR INSTALLATION OF VERTICAL PANELS IN AREAS OF CROSSOVER PAVEMENT, 3" Ø HOLES WILL BE CORED THROUGH PAVEMENT FOR PLACEMENT. TELESCOPING STEEL POLES WILL BE PLACED I" BELOW SURFACE AS SHOWN, AND WORK SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER. WHEN OPENING CROSSOVER, PANELS WILL BE REMOVED AND HOLES WILL BE LEFT IN PLACE. COST OF PANELS, POSTS, SLEEVES, TYPE III BARRICADES, SIGNS, AND CORING SHALL BE INCLUDED IN TRAFFIC CONTROL AND PROTECTION (SPECIAL).

7	ΓRA	FFIC CON	TROL AND PR	OTECTION (SF	PECIAL) SCHEI	DULE
LO	CATIO	ON	VERTICAL SIGN PANELS	TELESCOPING STEEL SIGN SUPPORTS	TYPE III BARRICADES	SIGN PANEL, TYPE 2
STA.		STA.	(EACH)	(EACH)	(EACH)	(SQ FT)
E	B I-7	2				
184+13	to	185+88	12	12		
185+88	to	190+88	4	4		
187+10					2	10
202+72	to	205+47	12	12		
205+47	to	209+47	4	4		
205+47					2	10
V	VB I-7	72				
185+17	to	189+17	4	4		
189+17	to	191+92	12	12		
188+97					2	10
203+03	to	207+03	4	4		
207+03	to	209+78	12	12		
207+03					2	10
TOTALS=			64	64	8	40



COUNTY TOTAL SHEET NO. SANGAMON 35 14

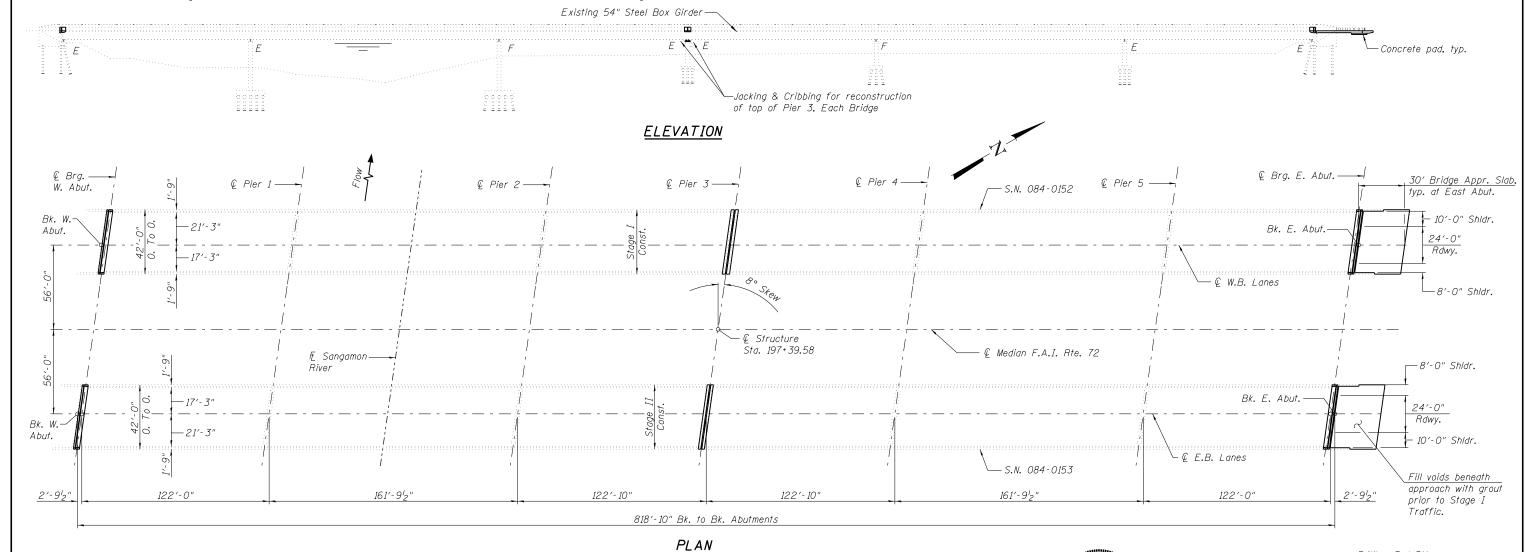
MAINTENANCE OF TRAFFIC PLAN STATE OF ILLINOIS DRAWN BDM REVISED CROSSOVER CLOSURE DETAIL 72 (84-10-1)BDR PLOT SCALE = 60.0000 '/ in. CHECKED JSA REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 72F01 REVISED SCALE: SHEET NO. OF SHEETS STA. TO STA. DATE 7/15/09 PLOT DATE = Nov-01-2011 11:52:14AM

Renchmark

Chiseled "□" on top of south wingwall of west abutment of S.N. 084-0152, Elev. 548.408 (NAVD88)

Existing Structures:

Structure Nos. 084-0152 and 084-0153, constructed in 1974 as F.A.I. Rte. 72, Section 84-10-1B-2, are dual six span continuous steel box girder superstructures with a 7^{l}_{2} " reinforced concrete deck supported by solid wall piers and stub abutments. In 1995, the decks were patched, overlay was placed, the expansion joints at abutments and pier 3 were reconstructed, the west backwalls and approaches were replaced, half at the floor drains were plugged, and the bearing plates were replaced. The structures are 8!8'-10" bk. to bk. abutments, 42'-0" out to out and have a left ahead skew angle of 8° . A crossover shall be utilized to maintain one lane of traffic in each direction during construction.



DESIGN SPECIFICATIONS

(New Construction) 2002 AASHTO "Standard Specifications for Highway Bridges"

LOADING HS20-44 & ALT.

(Original Construction)

DESIGN STRESSES

<u>FIELD UNITS</u> New Construction

f'c = 3,500 psi

fy = 60,000 psi (Reinforcement)

fy = 36,000 psi (M270, Gr. 36, Structural Steel)

Existing Construction

- fc = 1,200 psi (Deck Slab)
- fc = 1,400 psi (Parapet, Curb & Sub.)
- fs = 20,000 psi (Reinforcement)
- fs = 20,000 psi (A-36) (Structural Steel) 27,000 psi (A-572) (Structural Steel)

SCOPE OF WORK

- 1. Remove and replace backwall and approach slab at east abutments.
- 2. Repair steel at girder ends.
- 3. Jack and remove existing expansion bearings and replace with elastomeric bearings at Pier 3 and abutments.
- 4. Reconstruct top of Pier 3 and replace bearings utilizing Jacking and Cribbing and perform Structural Repair of Concrete at Pier 3.
- 5. Remove and replace concrete deck and parapets adjacent to expansion joints at abutments and pier 3 in order to install preformed joint strip seal expansion joints.
- 6. Remove existing overlay by scarifying deck $2\frac{1}{4}$ ".
- 7. Repair deck slab.
- Place 2'2" latex concrete overlay on bridge deck and diamond grind ¹/₄".
- Apply Protective Coat to top of new deck and top and inside faces of parapet concrete at joints and on top of new approach slab.
- 10. Perform Bridge Deck Grooving to top of bridge deck overlay and new concrete at joints and on new approach slab.
- 11. Provide scour protection upstream of Pier 2 (S.N. 084-0153).

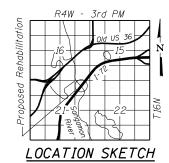
INDEX OF SHEETS

- 1. General Plan and Elevation
- 2. General Data
- 3. Stage Construction Details
- 4. Temporary Concrete Barrier for Stage Construction
- 5-6. Deck Repair
- 7. Joint Replacement Details at West Abutments
- 8. Joint Replacement Details at East Abutments
- 9. Joint Replacement Details at Pier 3
- 10. Preformed Joint Strip Seal
- 11. Bearing Details at Abutments
- 12. Bearing Details at Pier 3
- 13. Bearing Details
- 14. Pier 3 Reconstruction Details
- 15-16. East Bridge Approach Slab Details
- 17. Scour Protection Details
- 18. Bar Splicer Assembly and Mechanical Splicer Details
- 19-20. Existing Steel Support Details



Date

Michael T. Haley Licensed Structural Engineer State of Illinois No. 81-5991 Expires 11/30/2012



GENERAL PLAN AND ELEVATION

I-72/US 36 OVER SANGAMON RIVER

FAI RTE 72 - SECTION (84-10-1,2)RS-3

<u>SANGAMON COUNTY</u> STATION 197+39.58

STRUCTURES NOS. 084-0152 & 084-0153

LIN ENGINEERING,LTD.
Consulting Engineers
Springfield, Illinois

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION STRUCTURE NOS. 084-0152 & 084-0153
SHEET NO. 1 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-10-1)BDR	SANGAMON		15
		CONTRACT	NO.	72F01
	ILLINOIS FED. A	ID PROJECT		

GENERAL NOTES

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

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.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 'a inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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.

Concrete Sealer shall be applied to the front and side faces of the proposed backwall at the East Abutment and all exposed faces of the new concrete at Pier 3. The existing structural steel coating contains lead. The Contractor shall take

appropriate precautions to deal with the presence of lead on this project.

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.

All new structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type I. Cost included with Structural Steel Repair.

Fasteners shall be high strength bolts. Bolts $^78''$ ϕ , open holes $^{15}_{15}''$ ϕ , unless otherwise noted.

Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

New structural steel shall be painted according to Section 506 of the Standard Specifications.

Cleaning and field painting of structural steel shall be done under a separate painting contract.

The Contractor shall satisfy requirements for working in a confined space while working inside the box girder.

Overlay shall not be placed until after the jacking procedures are complete.

The Contractor is responsible for clearing debris from inside the box girder after repairs are completed.

Work is to be completed using cross-over for traffic.

The Contractor may choose to use the existing steel supports at abutments and Pier 3 shown on Sheets 19 and 20 of 20 for the jacking process. However, the Contractor is responsible for submitting Jacking Plans for approval per special provisions Jacking & Cribbing and Jack and Remove Existing Bearings.

SEAT HEIGHT ADJUSTMENT

Due to substantial differential settlement of the structures' substructure units, the net bearing heights have been adjusted in an attempt to bring the girders back to their original shape. The existing seat elevations provided by the District survey are shown below. The Contractor shall verify these elevations and contact the Engineer if they are not within an acceptable tolerance.

EXISTING SEAT ELEVATIONS FROM SURVEY

	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	E. Abut.
WB Bridge **	539.62	539.84	539.97	539.71	539.77	539.48	539.11
EB Bridge ***	539.55	539.80	539.77	539.52	539.64	539.50	539.15

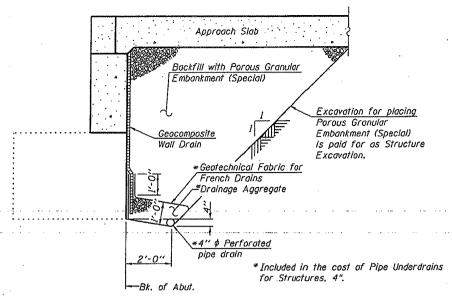
- ** North end of pier or abutment
- *** South end of pier or abutment

CALCULATED GIRDER RAISE

	***************************************	····					
	W. Abut.	Pier I	Pier 2	Pier 3	Pier 4	Pier 5	E. Abut.
WB Bridge	296"	0	0	478"	0	0	278"
EB Bridge	438"	0	0	31316 "	0	0	4"

TOTAL BILL OF MATERIAL

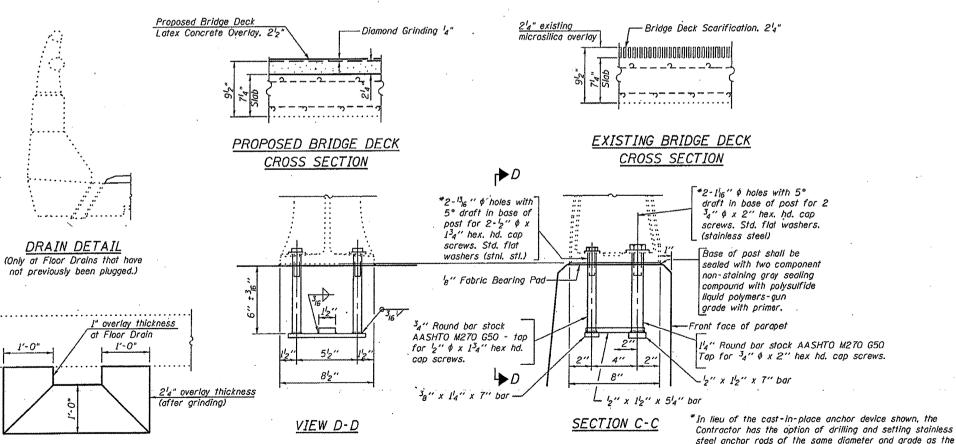
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Dumped Riprap, Class A5	Sq. Yd.	-	278	278
Concrete Removal	Cu. Yd.	28.5	34.1	62.6
Structure Excavation	Cu. Yd.		191	191
Concrete Structures	Cu. Yd.	•	58.3	58.3
Concrete Superstructure	Cu. Yd.	159.1	-	159.1
Bridge Deck Grooving	Sq. Yd.	6885	-	6885
Protective Coat	Sq. Yd.	383	•	383
Reinforcement Bars, Epoxy Coated	Pound	32600	7140	39740
Bar Splicers	Each	80	-	80
Preformed Joint Strip Seal	Foot	248	•	248
Elastomeric Bearing Assembly, Type I	Each	24	-	24
Elastomeric Bearing Assembly, Type II	Each	24	-	24
Anchor Bolts, I"	Each		48	48 -
Concrete Sealer	Sq. Ft.	-	865	865
Geocomposite Wall Drain	Sq. Yd.		···84	-84
Porous Granular Embankment, Special	Cu. Yd.	-	191	191
Jack and Remove Existing Bearings	Each	•	12	12
Structural Steel Repair	Pound	3600	-	3600
Approach Slab Removal	Sq. Yd.	270.0	-	270.0
Bridge Deck Latex Concrete Overlay 2½"	Sq. Yd.	6901		6901
Bridge Deck Scarification 2 ¹ 4"	Sq. Yd.	6901	-	6901
Structural Repair of Concrete (Depth equal to or less than 5 in.)	Sq. Ft.	-	80	80
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	5	-	5
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	322	-	322
Dry Grout Solids	Cu. Ft.	300	-	300
Holes Drilled	Each	4	-	4
Diamond Grinding (Bridge Section)	Sq. Yd.	7158	-	7158
Jacking and Cribbing	Each	-	12	12
Pipe Underdrains for Structures, 4"	Foot	-	95	95



DRAINAGE TREATMENT DETAILS AT EAST ABUTMENT

Note:

All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601.01).



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERLAY AT DRAIN

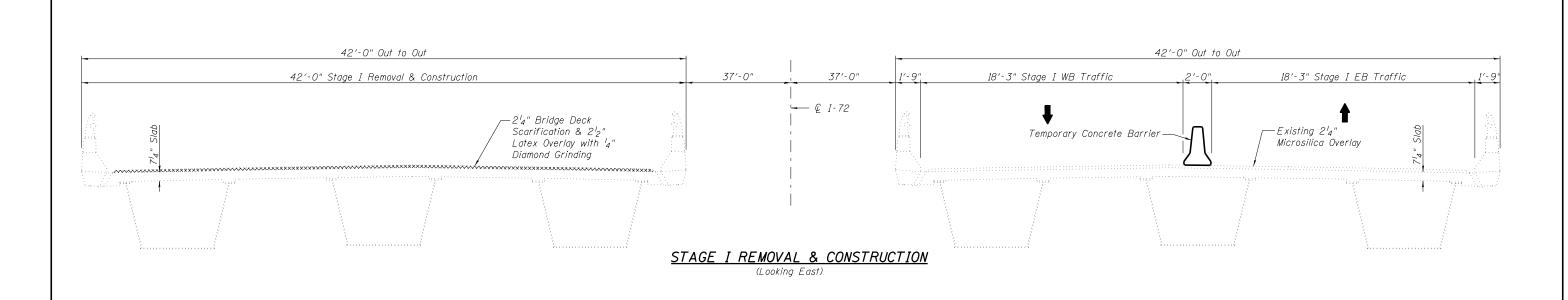
GENERAL DATA
STRUCTURE NOS. 084-0152 & 084-0153
SHEET NO. 2 OF 20 SHEETS

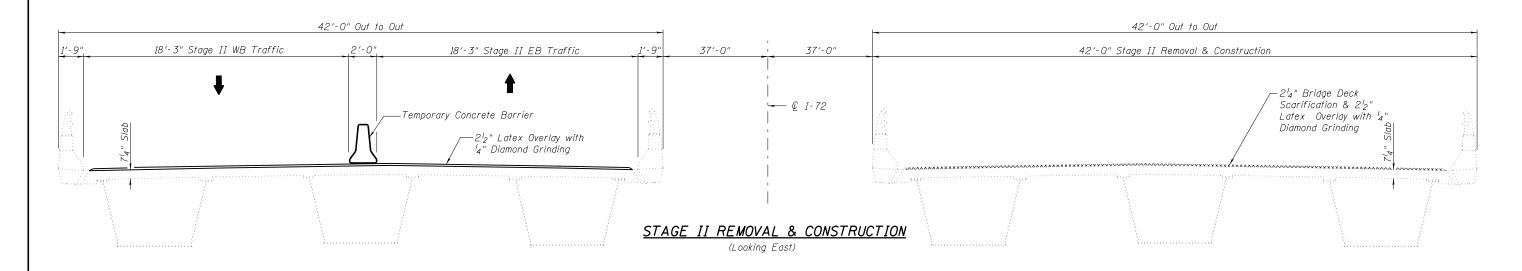
EXISTING RAIL POST DETAILS

(Work with Sheet 7 of 20)

specified cap screws according to Article 509.06 of the

Standard Specifications, Embedment shall be according





STAGING SEQUENCE

Pre-Stage I:

1. Provide grout under the east approach of the EB Structure to

stabilize the approach pavement and shoulder slabs during Stage I Traffic. Stage I:

1. Shift all traffic to EB Structure.

2. Perform all construction work related to WB Structure.

Stage II:

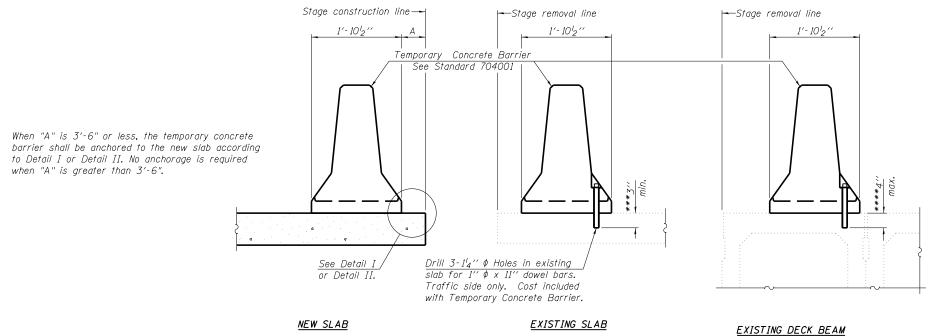
1. Shift all traffic to WB Structure.

2. Perform all construction work related to EB Structure.

Notes:

See sheet 4 of 20 for details of Temporary Concrete Barrier. See Roadway plans for quantities of Temporary Concrete Barrier.

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LIN ENGINEERING,LTD.	FILE NAME =	CHECKED - MTH	REVISED -	STATE OF ILLINOIS	STRUCTURE NOS. 084-0152 & 084-0153	72 (84-10-1)BDR	SANGAMON 35 17
Consulting Engineers Springfield, Illinois	PLOT SCALE =	DRAWN - ESH	REVISED -	DEPARTMENT OF TRANSPORTATION	31NUCIUNE NU3. 004-0132 & 004-0133		CONTRACT NO. 72F01
Springrield, Illinois	PLOT DATE =	CHECKED - MTH	REVISED -		SHEET NO. 3 OF 20 SHEETS	ILLINOIS FED. A	AID PROJECT



NOTES

Detail I - With Bar Splicer or Couplers:

Connect one (1) 1" x 7" 'x "W" steel P to the top layer of couplers with $2^{-5}{}_8$ " ϕ bolts screwed to coupler at approximate Q of each barrier panel.

Detail II - With Extended Reinforcement Bars:

Connect one (1) I'' x 7'' x ''W'' steel P to the concrete slab or concrete wearing surface with 2-58'' \$\phi\$

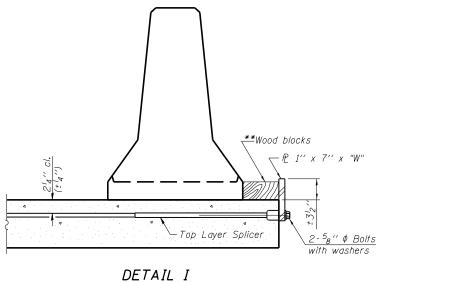
Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \$\mathbb{C}\$ of each barrier panel.

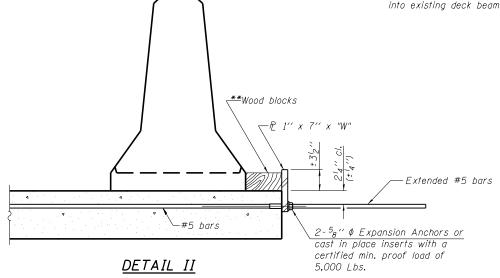
Cost of anchorage is included with Temporary Concrete Barrier. The $I^{\prime\prime}$ x $7^{\prime\prime}$ x $^{\prime\prime}$ W $^{\prime\prime}$ plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

SECTIONS THRU SLAB OR DECK BEAM

- *** Dimension shown is minimum required embedment into concrete.

 If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.
- **** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.





Top bars
spacing
3" 3" Detail II

\$\int_{\int_{\infty}}^{\int_{\infty}} \phi \text{Holes}
\$\int_{\int_{\infty}}^{\int_{\infty}} \phi \text{Holes}
\$\int_{\int_{\infty}}^{\int_{\infty}} \phi \text{Holes}
\$\int_{\infty}^{\int_{\infty}} \phi \text{Holes}

STEEL RETAINER P 1" x 7" x "W"

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

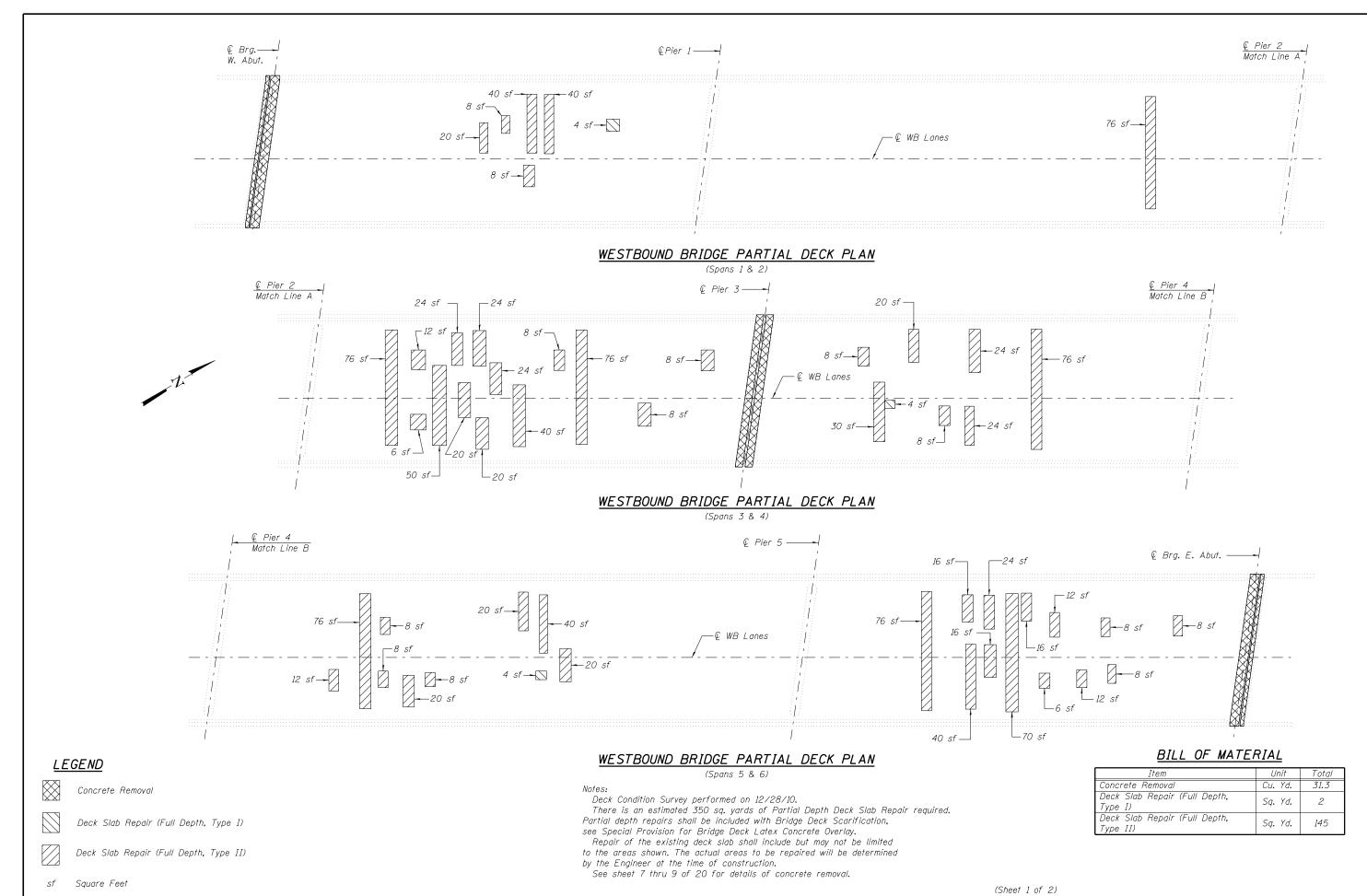
* Required only with Detail II

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Consulting Engineers

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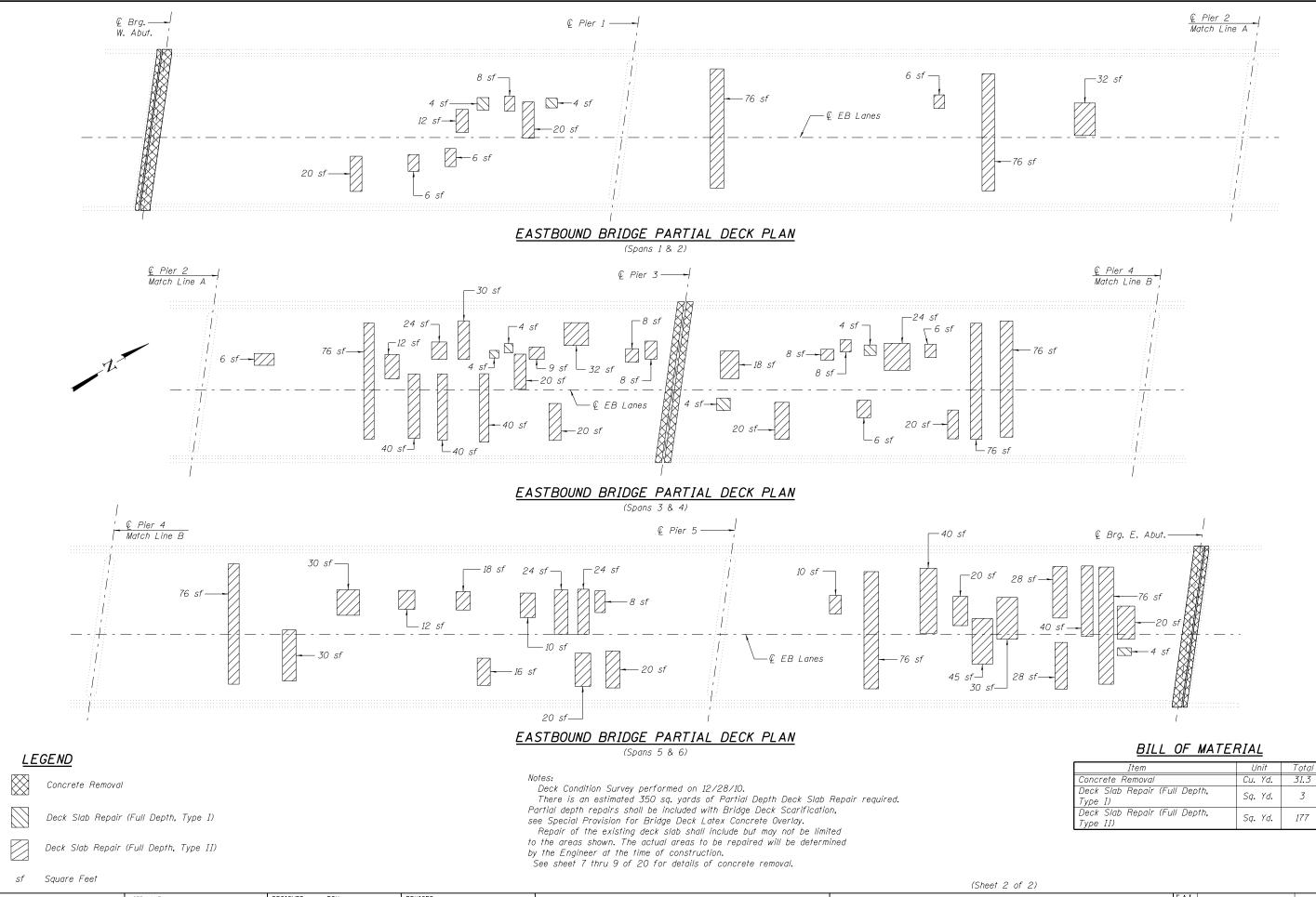
Consulting Engineers

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DECK REPAIR STRUCTURE NOS. 084-0152 & 084-0153 SHEET NO. 5 OF 20 SHEETS

COUNTY TOTAL SHEETS NO.

SANGAMON 35 19 SECTION 72 (84-10-1)BDR CONTRACT NO. 72F01

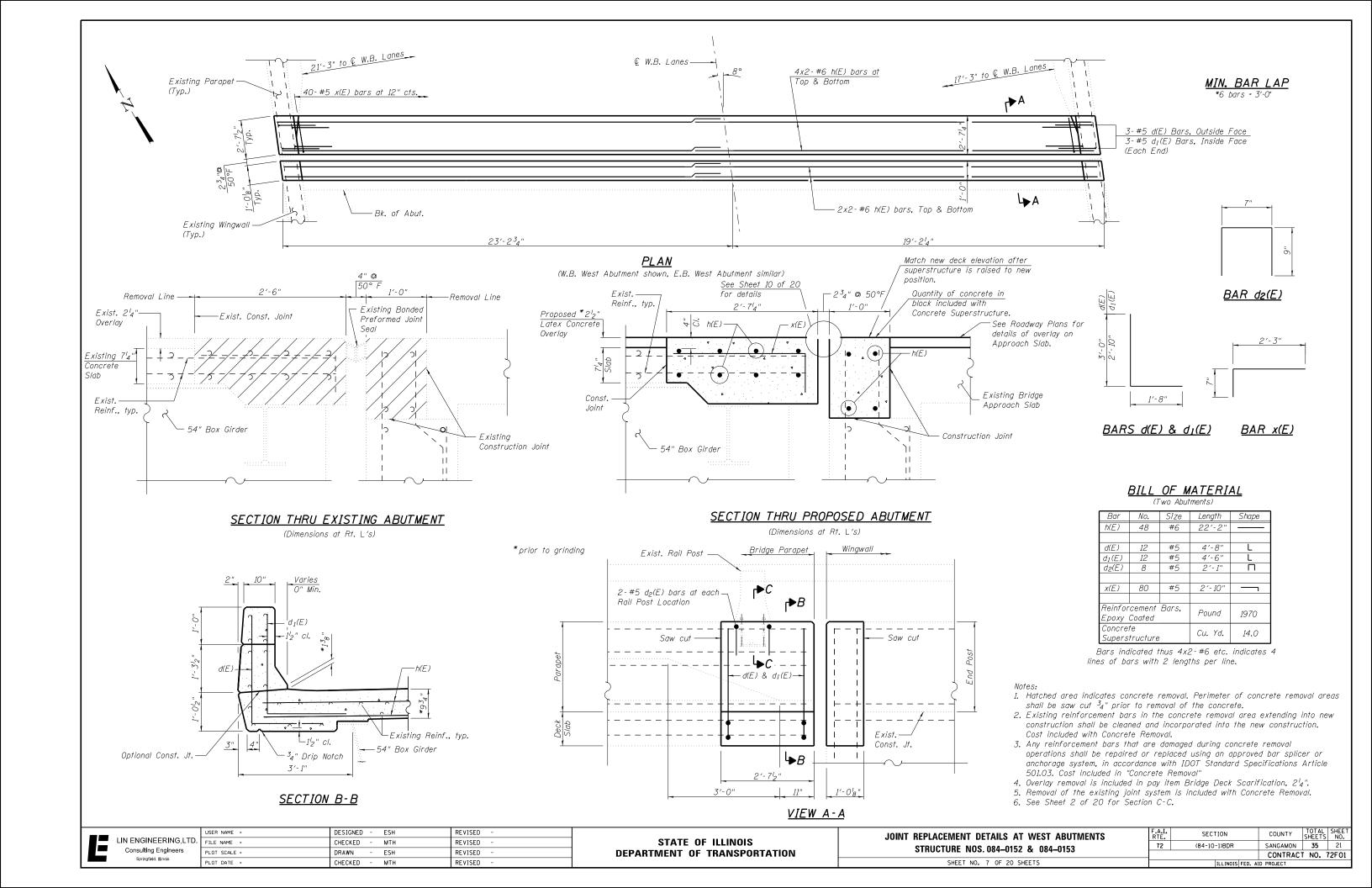


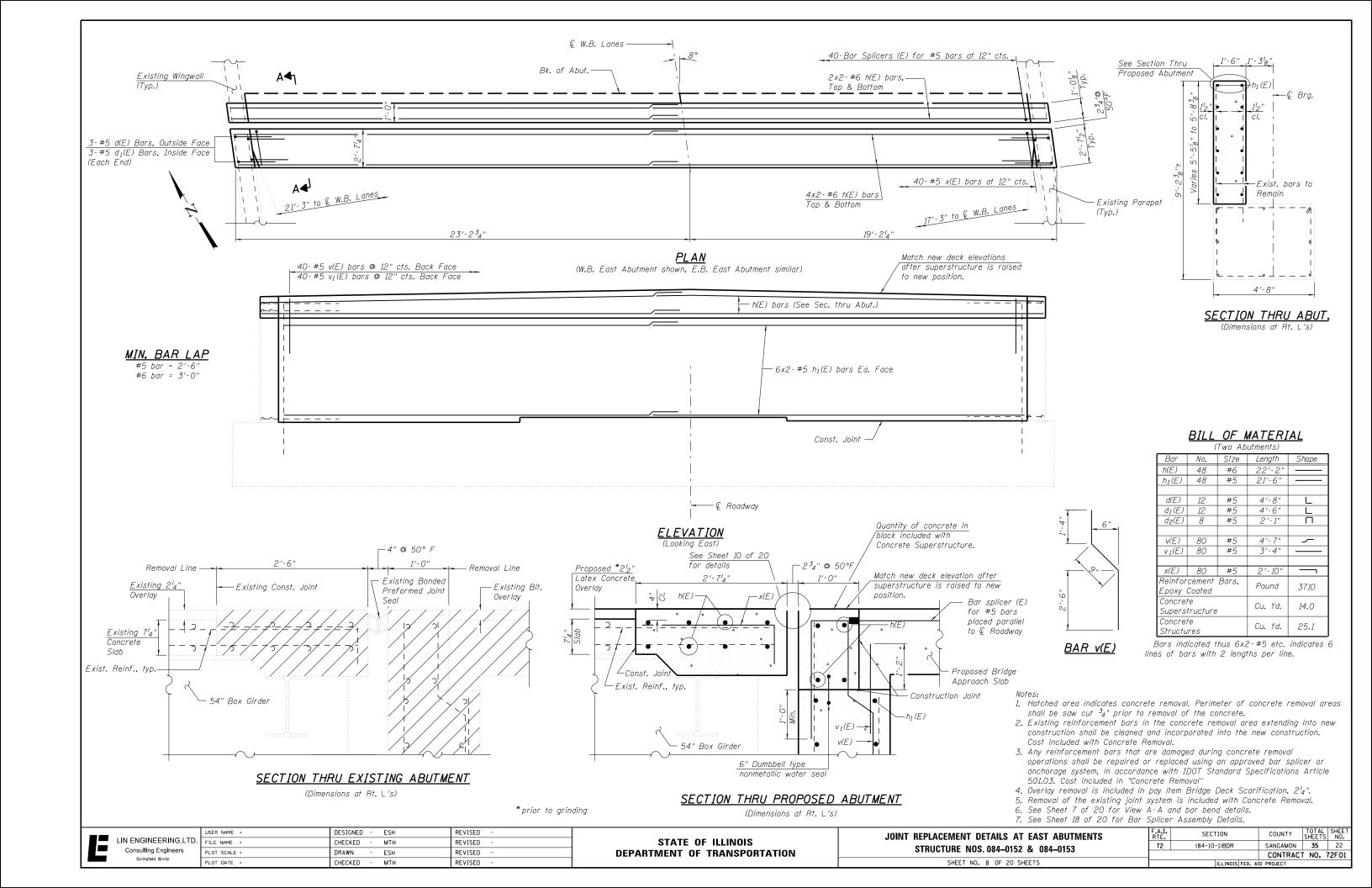
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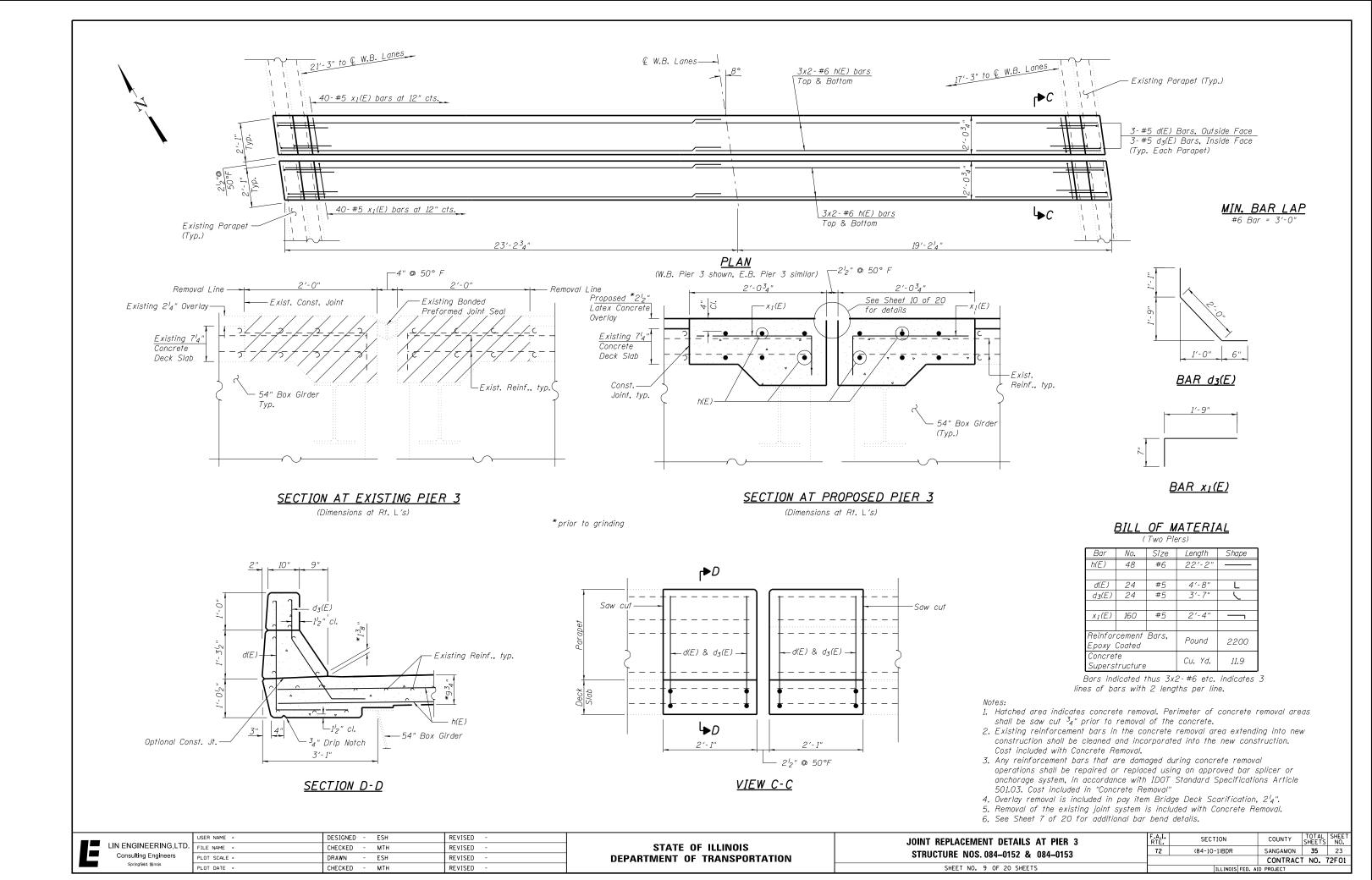
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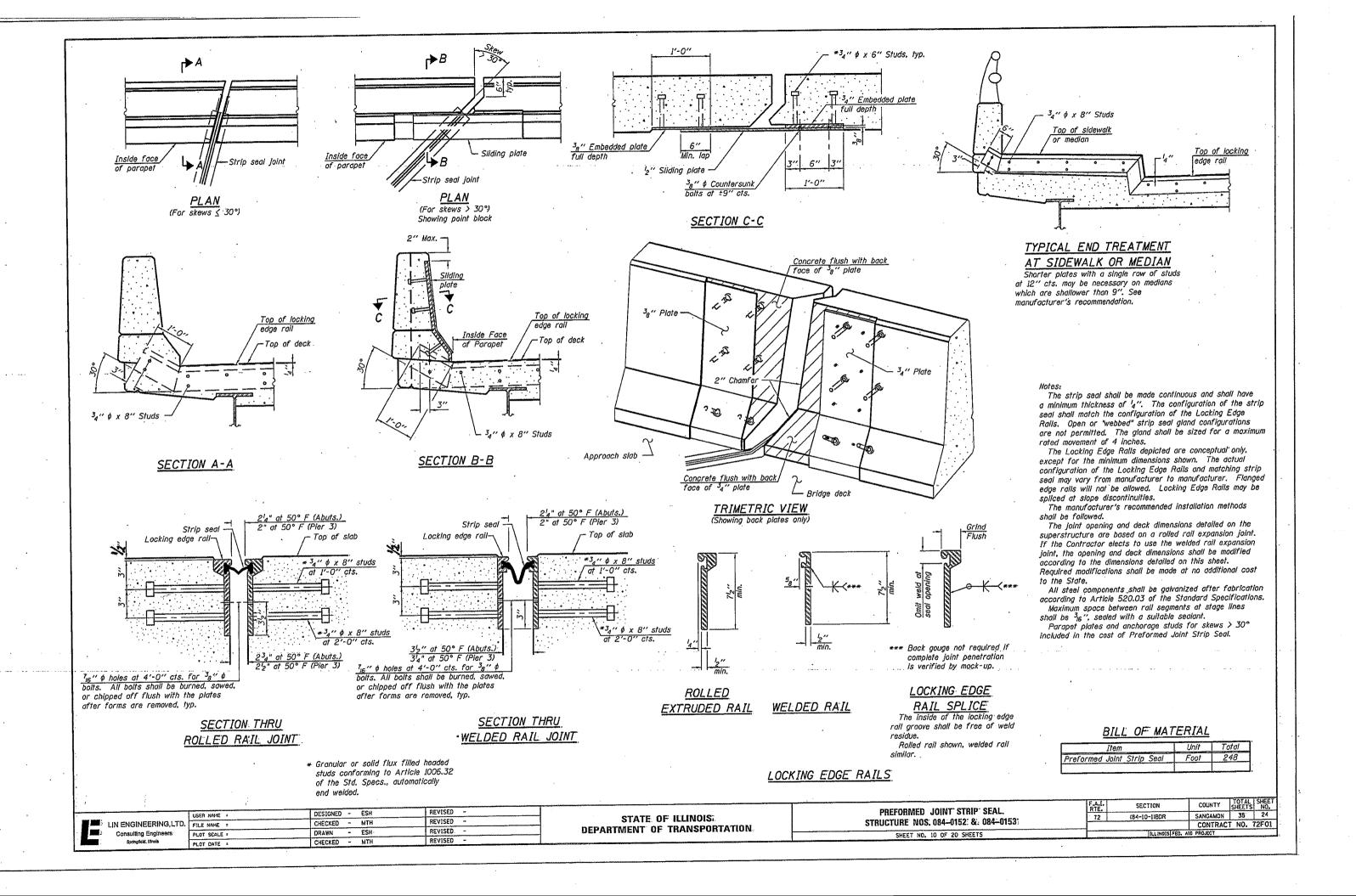
COUNTY TOTAL SHEET NO.
SANGAMON 35 20 SECTION 72 (84-10-1)BDR CONTRACT NO. 72F01

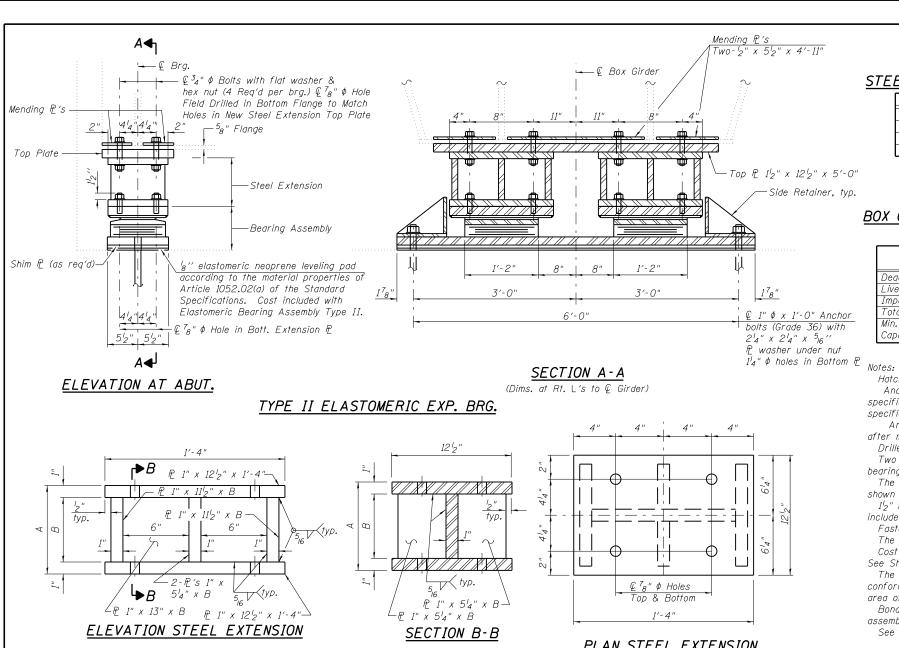
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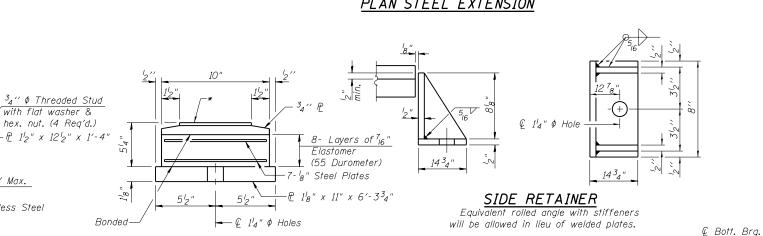


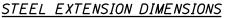












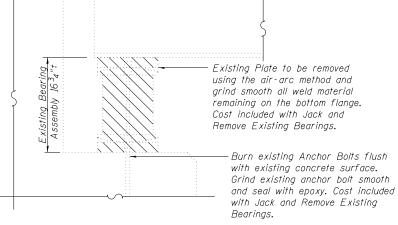
	Α	В
WB W. Abut.	934"	734"
EB W. Abut.	11 ⁹ 16"	9916"
WB E. Abut.	1016"	816"
EB E. Abut.	11 ³ 16"	93,6"

BOX GIRDER REACTION TABLE

(From Existing Plans)

	Per	Per
	Girder	Bearing
Dead Load (k)	120	60
Live Load (k)	68	34
Impact (k)	14	7
Total (k)	202	101
Min. Jack Capacity (Tons)	120	60

No Live Load during jacking.



EXISTING BEARING REMOVAL DETAIL

Hatched area indicates Bearing removal. See Special Provision for Jack and Remove Existing Bearings.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Two l_{g} in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The Contractor is to verify the existing dimensions prior to fabricating the steel extensions. Existing bearing dimensions shown are taken from the original plans.

 I_2''' top plate, side retainers, Steel Extensions, Fasteners and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts.

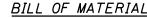
The bearings shall be in place and the jacks lowered before the new concrete deck is poured.

Cost of $\frac{1}{2}$ " mending plates and fasteners required for beam end repairs is included in the cost of Structural Steel Repair. See Sheet 13 of 20 for details.

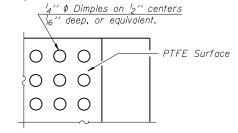
The 'a" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

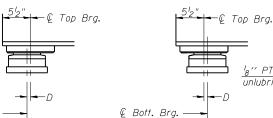
Bonding of 'g" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

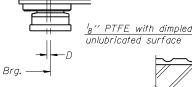
See Sheet 13 of 20 for details of l_2 " Top Plate, l_2 " Mending Plates and Anchor Bolt Layout.



Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	24
Anchor Bolts, 1"	Each	24
Jack and Remove Existing Bearings	Each	12

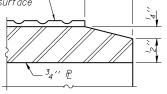






PLAN-PTFE SURFACE

BELOW 50°F. ABOVE 50°F. (Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)



SETTING ANCHOR BOLTS AT EXP. BRG.

 $D='_8$ " per each 100' of expansion for every 15° temp. change from the normal temp, of 50°F.

SECTION THRU PTFE

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Consulting Engineers	Ρ
Springfield, Illinois	P

TOP BEARING ASSEMBLY

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BOTTOM BEARING ASSEMBLY

*18" PTFE dimpled. unlubricated

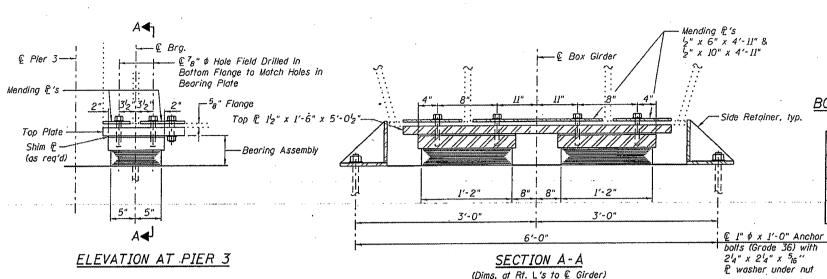
Max.

' Stainless Steel

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

BEARING DETAILS AT ABUTMENTS STRUCTURE NOS. 084-0152 & 084-0153
SHEET NO. 11 OF 20 SHEETS

.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
72	(84-10-1)BDR	SANGAMON	35	25			
CONTRACT NO. 72F01							
ILLINOIS FED. AID PROJECT							

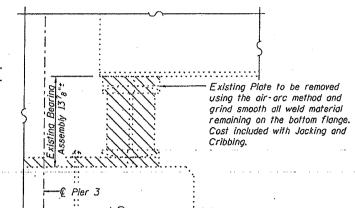


BOX GIRDER REACTION TABLE

(From Existing Plans)

	Per Girder	Per Bearing
Dead Load (k)	120	60
Live Load (k)	68	34
Impact (k)	14	7
Total (k)	202	101
Min. Jack Capacity (Tons)	120	60

No Live Load during jacking.



EXISTING BEARING REMOVAL DETAIL

TYPE I ELASTOMERIC EXP. BRG.

Hatched area indicates Bearing removal. Cost included with Jacking and Cribbing. See Special Provision for Jacking and Cribbina.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for side retainers may be cast in place or installed in holes drilled after members are in place.

Drilled and set anchor boits shall be installed according to Article 521.06 of the Standard Specifications.

Two In adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Existing bearing dimensions shown are taken from the original plans.

Cost of $l_2^{\prime\prime}$ top plate, side retainers. Fasteners and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

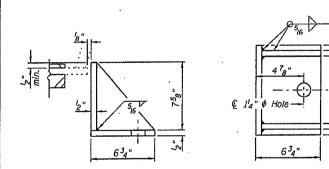
The cost of Elostonian Beating Assembly, type 1.

Fasteners shall be AASHTO MI64 Type 1. mechanically galvanized bolts.

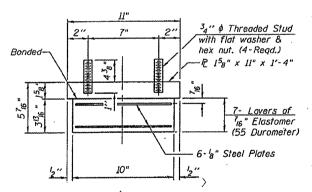
The bearings shall be in place and the jacks lowered before the new concrete deck is poured.

Cost of 'z' mending plates and fasteners required for beam end repairs is included in the cost of Structural Steel Repair.

See Sheet 13 of 20 for details. See Sheet 14 of 20 for Pier 3 reconstruction details. See Sheet 13 of 20 for details of 1^l_2 " Top Plate, l_2 " Mending Plates and Anchor Bolt Layout.



SIDE RETAINER Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



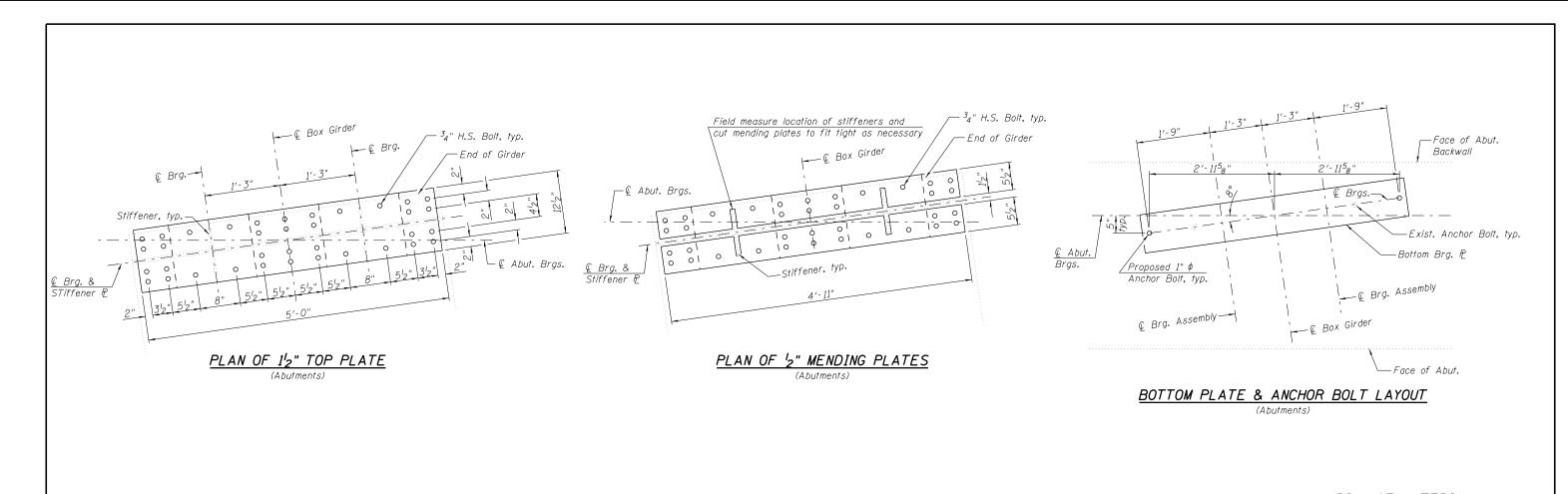
BEARING ASSEMBLY

Shim plates shall not be placed under Bearing Assembly.

BILL OF MATERIAL

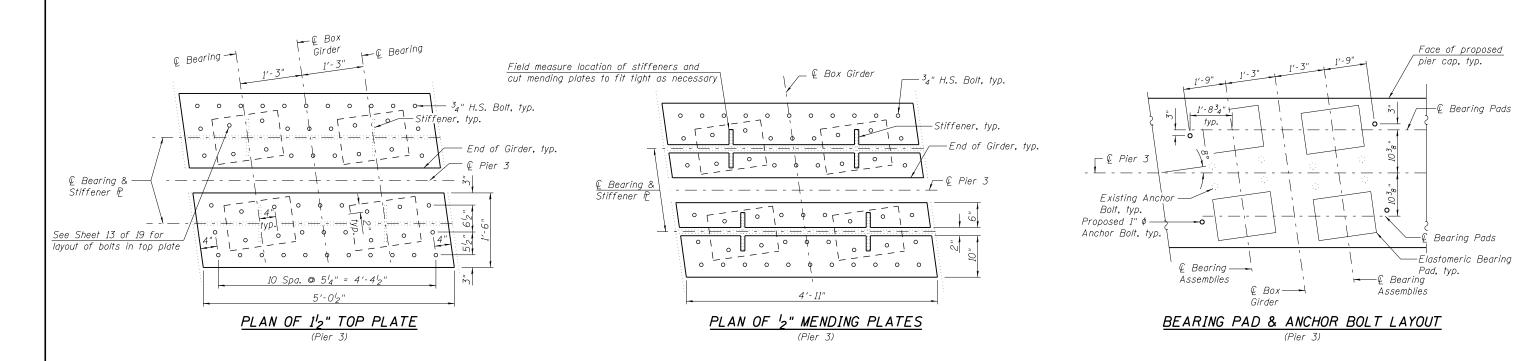
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	24
Anchor Bolts, I"	Each	24
Jacking and Cribbing	Each	12

		USER NAME .	DESIGNED -	ESH	REVISED -		BEARING DETAILS AT PIER 3		SECTION	COUNTY TOTAL SHEET NO.
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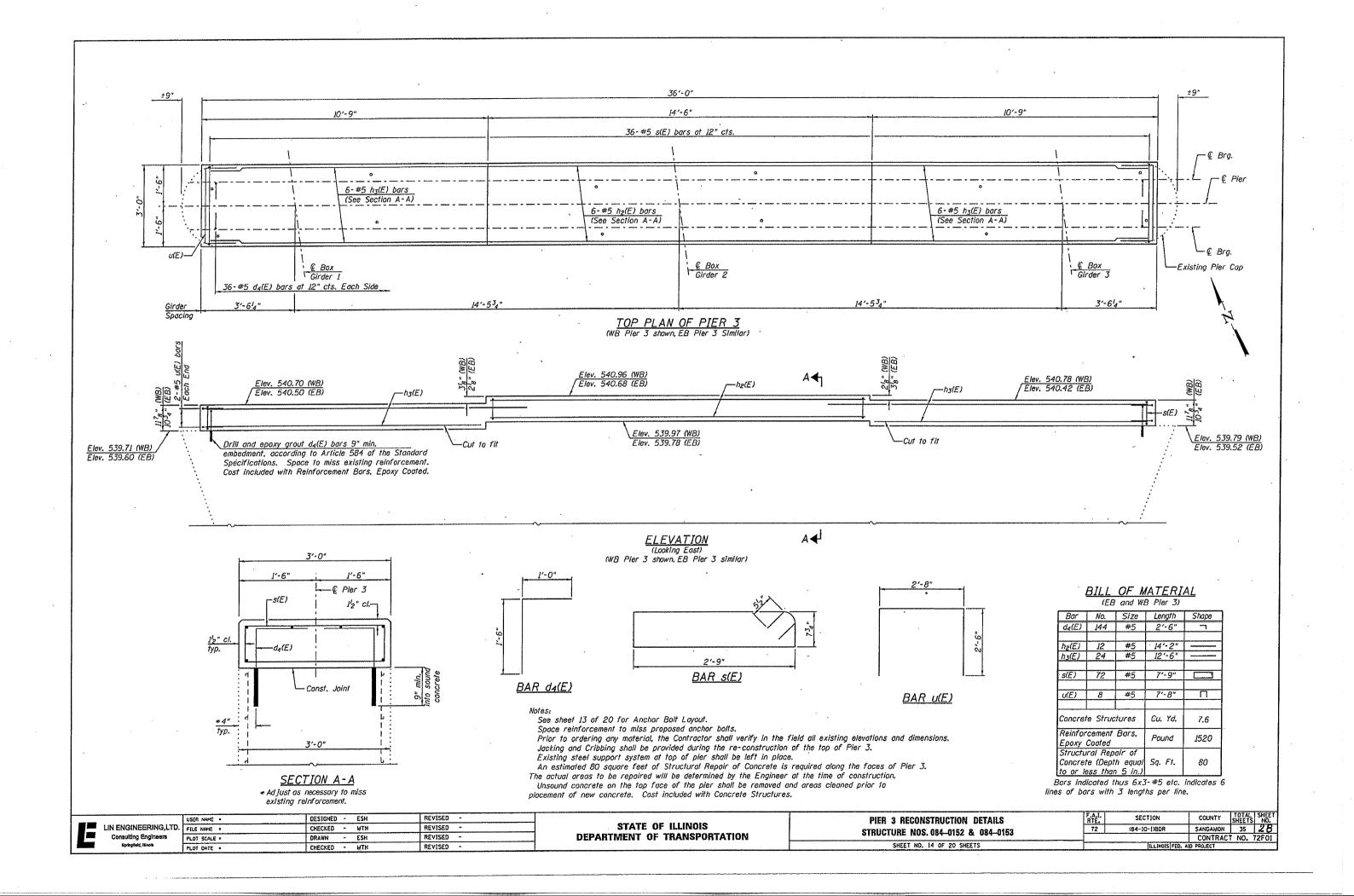


<u>BILL OF MATERIAL</u>

Item	Unit	Total
Structural Steel Repair	Pound	3600



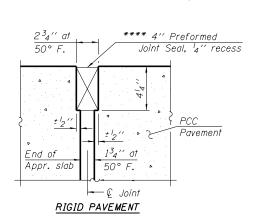
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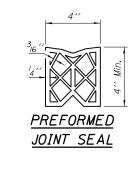




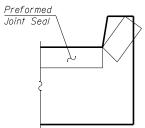
See sheet 16 of 20 for Sections C-C & D-D and View E-E. a(E) and $a_1(E)$ bar spacings measured along \cite{L} Rdwy. See sheet 16 of 20 for location of Detail A.

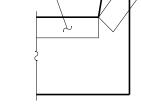
**** Cost included with Concrete Superstructure.





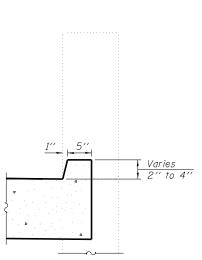
DETAIL A





VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



VIEW B-B

PLAN

30'-0"

25'-0"

Skew

13'-57_{8"}

(W.B. Bridge Approach Slab shown, E.B. Bridge Approach Slab similar)

- € W.B. Lanes

*25-#4 a(E) bars at 15" cts. (Top of slab)
*46-#5 a_I(E) bars at 8" cts. (Bottom of slab)

20-#5 w(E) bars at 6" cts. Top and bottom of Approach

Footing. See Sec. C-C

Sta. 201+56.36 (W.B.) Sta. 201+40.62 (E.B.)

* Cut to fit as necessary. ** Tilt #9 $b_1(E)$ bars as required to maintain clearance.

1- #4 b2(E) bar in curb.

— € Joint

Typ. each end.

*** Closed cell joint filler according to article 1051.08 of the Std. Specifications: full depth of slab, full length of wingwall. Typ. each wingwall.

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 $B \blacktriangleleft$

r**▶** D

See Hwy. Std. 420401 for pavement connector

Joint Sta. 201+86.36 (W.B.)

Joint Sta. 201+70.62 (E.B.)

DEPARTMENT OF TRANSPORTATION

(Sheet 1 of 2) EAST BRIDGE APPROACH SLAB DETAILS 72 STRUCTURE NOS. 084-0152 & 084-0153 SHEET NO. 15 OF 20 SHEETS

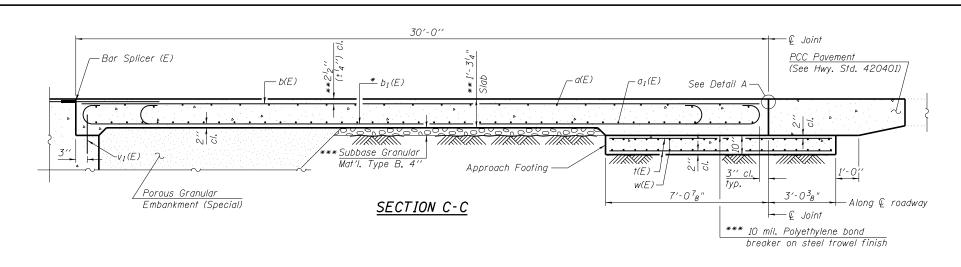
COUNTY SHEETS NO. SANGAMON 35 29 SECTION (84-10-1)BDR CONTRACT NO. 72F01

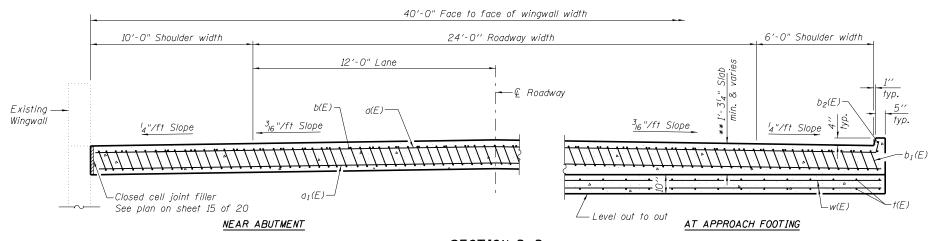
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SECTION D-D
(See Plan for dimensions not shown)

- * Tilt #9 $b_1(E)$ bars as required to maintain clearance.
- ** Prior to grinding
- *** Cost included with Concrete Superstructure.

Notes:

See sheet 15 of 20 for Detail A and View B-B.

Approach slab shall be paid for as Concrete Superstructure.

Approach footing concrete shall be paid for as Concrete Structures.

Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.

For $v_I(E)$ bar details, see sheet 8 of 20.

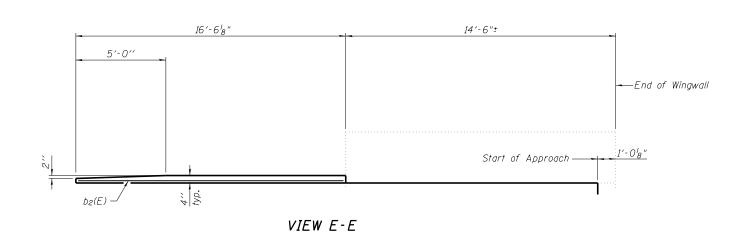
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf. For bar splicer details, see sheet 18 of 20.

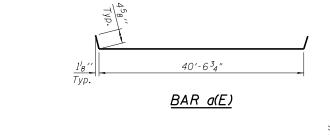
Cost of excavation for approach footing included with Concrete Structures. For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 20.

BILL OF MATERIAL

(Two Approach Slabs)

Bar	No.	Size	Length	Shape
a(E)	50	#4	41'-4"	
a1(E)	92	#5	40'-1"	
b(E)	66	#4	29'-8''	
b1(E)	190	#9	29'-9''	ر ا
b ₂ (E)	4	#4	16′-2"	
t(E)	168	#4	9'-10"	
w(E)	80	#5	41'-1"	
Concrete	Superstru	Cu, Yd,	119.2	
Concrete	Structure	Cu, Yd,	25.6	
Reinforce Epoxy Co		5,	Pound	30340







BAR b₁(E)

(Sheet 2 of 2)

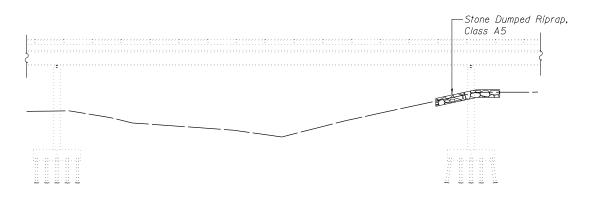
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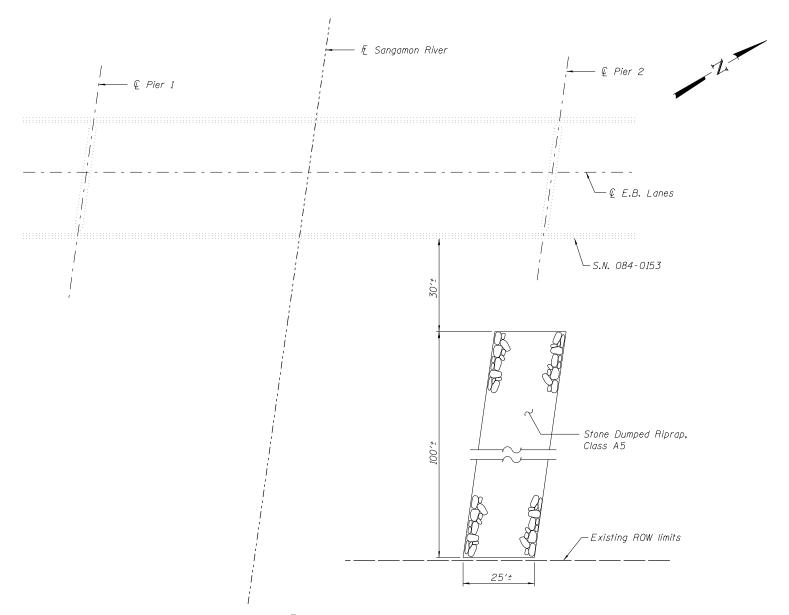
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

EAST BRIDGE APPROACH SLAB DETAILS	
STRUCTURE NOS. 084-0152 & 084-0153	
CHEET NO. 16 OF 20 CHEETS	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-10-1)BDR	SANGAMON	35	30
		CONTRAC	T NO.	72F01
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ELEVATION



BILL OF MATERIAL

Item	Unit	Total
Stone Dumped Riprap, Class A5	Sq. Yd.	278

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

PLAN

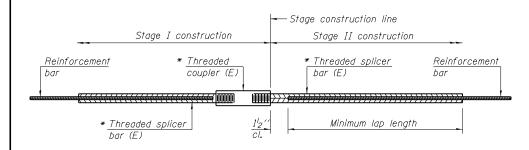
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DEPARTMENT OF	TRANSPORTATION

					DETAILS 52 & 084-0153	
SHEET	NO.	17	OF	20	SHEETS	

A.I. TE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
72	(84-10-1)BDR	SANGAMON	35	31	
		CONTRACT	NO.	72F01	
	ILLINOIS FED. AID PROJECT				



STANDARD BAR SPLICER ASSEMBLY

Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5''	1'-11''	2'-1''	2'-4"	2'-3"
5	1'-9''	2'-5''	2'-7"	2'-11''	2'-10''
6	2'-1''	2'-11''	3'-1''	3'-6''	3'-4''
7	2'-9''	3′-10′′	4'-2"	4'-8''	4'-6''
8	3′-8′′	5′-1′′	5′-5′′	6'-2''	5′-10′′
9	4'-7''	6′-5′′	6′-10′′	7'-9''	7′-5′′

Table 1: Black bar, 0.8 Class C

Table 2: Black bar, Top bar lap, 0.8 Class C

Table 3: Epoxy bar, 0.8 Class C

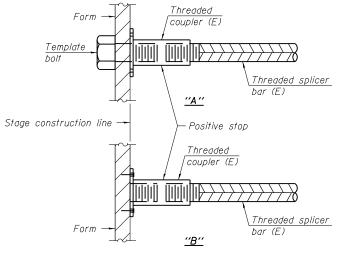
Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + $1_2^{\prime\prime}$ + thread length

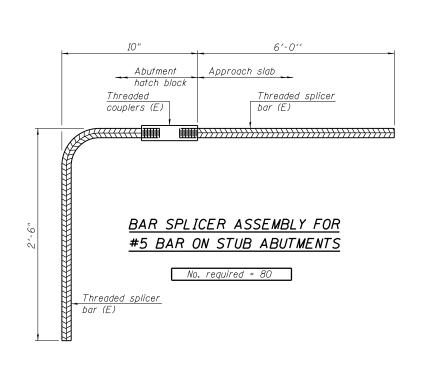
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

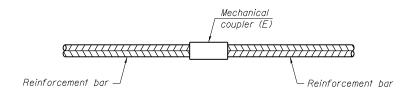
Location	Bar size	No. assemblies required	Table for minimum lap length



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 $\overline{\text{with threaded}}$ 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 special provision for Mechanical Splicers.

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

Reinforcement Threaded Threaded splicer bar (E) Threaded splicer bar (E) Threaded splicer bar (E) Threaded splicer bar (E) Threaded splicer bar (E)

BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =

BSD-1

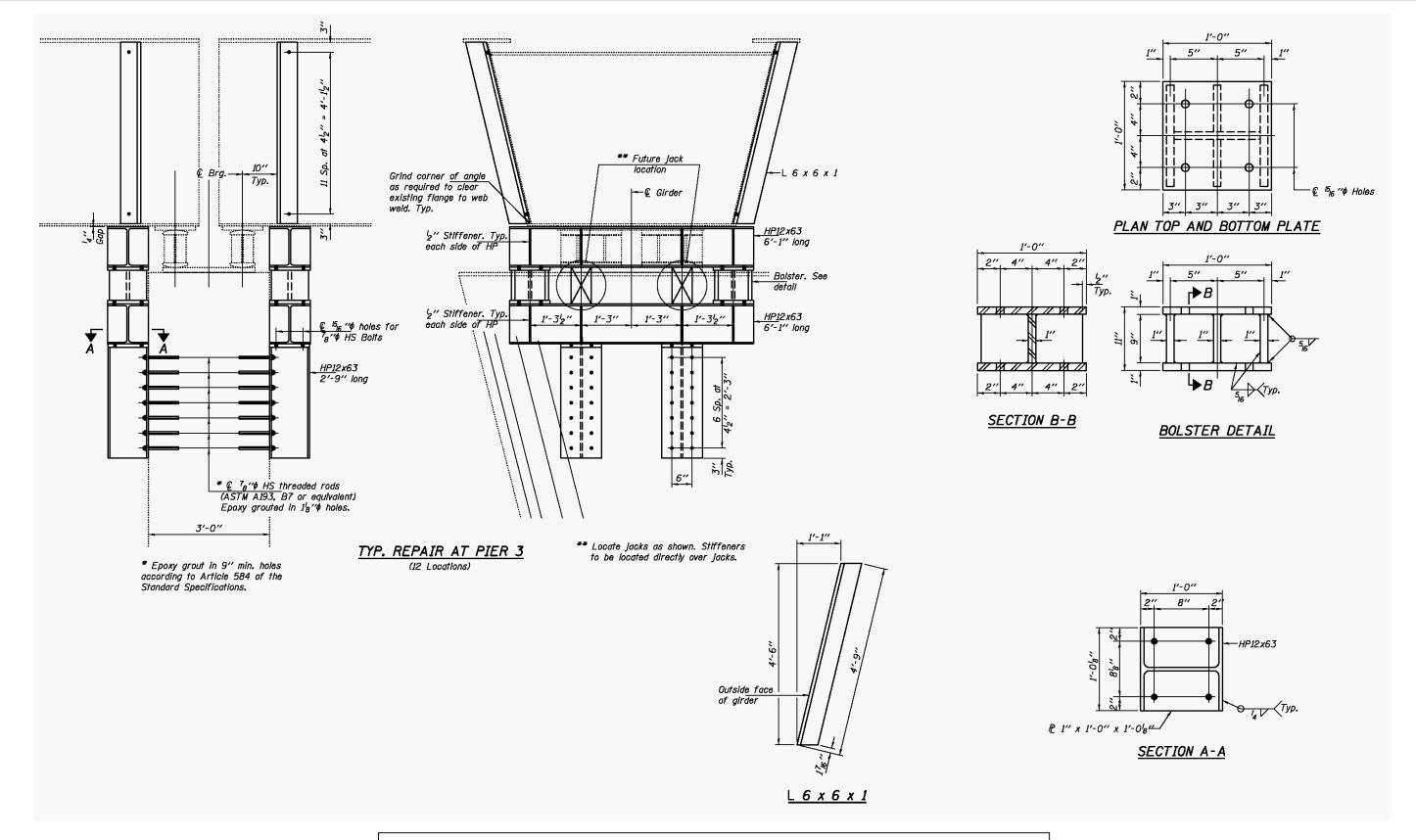
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DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NOS. 084-0152 & 084-0153

SHEET NO. 18 OF 20 SHEETS



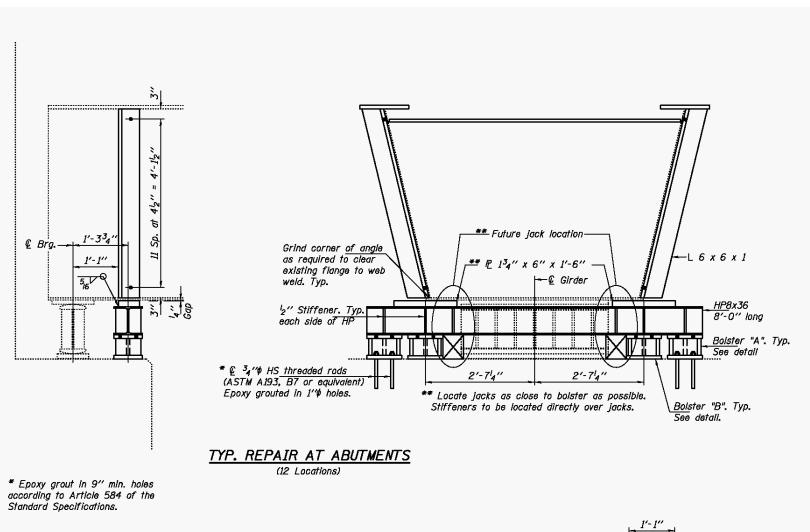
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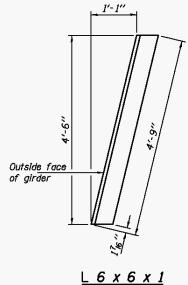


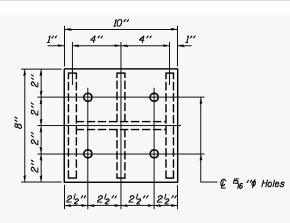
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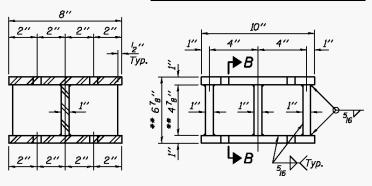
EXISTING STEEL SUPPORT DETAILS		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
STRUCTURE NOS. 084-0152 & 084-0153	72	(84-10-1)BDR	SANGAMON	35	33		
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SHEET NO. 19 OF 20 SHEETS	ILLINOIS FED. AID PROJECT						







PLAN TOP AND BOTTOM PLATE



SECTION B-B

BOLSTER DETAIL

** Adjust as required to maintain '4'' gap.

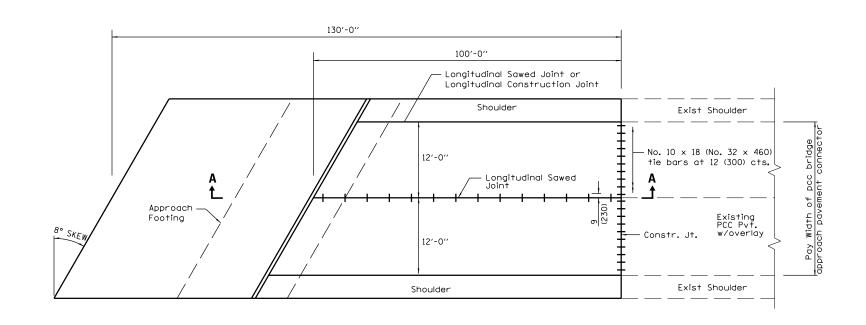
Bolster "A" & "B" are identical except there are no holes in the bottom plate of Bolster "B".



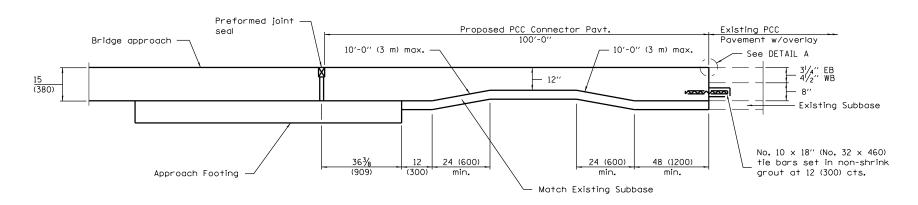
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DEPARTMENT	OF	TRANSPORTATION

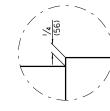
EXISTING STEEL SUPPORT DETAILS		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STRUCTURE NOS. 084-0152 & 084-0153	72	(84-10-1)BDR	SANGAMON	35	34
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SHEET NO. 20 OF 20 SHEETS		ILLINOIS FED. AI	D PROJECT		



BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)



SECTION A-A



DETAIL A

GENERAL NOTES

See Standard 421001 for reinforcement details not shown.

See Standard 420001 for joint details not shown.

See structural plans for additional details of the approach pavement.

See plans for details of bridge approach, approach footing, and preformed joint seal.

All dimensions are in inches unless otherwise indicated.

Reinforcement and tie bars will not be paid for separately, but shall be included in the cost for Bridge Approach Pavement Connector (PCC).

Reinforcement bars shall be epoxy coated.

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