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(FOR
INFORMATION
ONLY)

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029I	COOK	344	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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REVISIONS	
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ADDENDUM	06/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
INDEX OF SHEETS
SCALE: = NTS
DATE: 5/25/2006
DRAWN BY: RA
CHECKED BY: RS

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URBAN
100% STATE

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITIES	ROADWAY J000-2A	BRIDGE X971-2A	SIGNING Y002-1C	SAFETY SFTY-3N
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	875	875			
31101860	SUB-BASE GRANULAR MATERIAL, TYPE B 2 1/4"	SQ YD	875	875			
△ 44000108	BITUMINOUS REMOVAL OVER PATCHES 2"	SQ YD	242	242			
44004250	PAVED SHOULDER REMOVAL	SQ YD	779	779			
△ 40602000	BITUMINOUS REPLACEMENT OVER PATCHES, SUPERPAVE	TON	13.6	13.6			
50102400	CONCRETE REMOVAL	CU YD	1101		1101		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1211.1		1211.1		△
50300260	BRIDGE DECK GROOVING	SQ YD	101,406		101,406		
50300300	PROTECTIVE COAT	SQ YD	3114		3114		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1		
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	5		5		
50501110	STRUCTURAL STEEL REMOVAL	POUND	40,030		40,030		△
50501130	STRUCTURAL STEEL REPAIR	POUND	3,955		3,955		△
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	175,860		175,860		
60250400	CATCH BASIN TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	1	1			
60255410	CATCH BASIN TO BE CLEANED	EACH	177		177		△
60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSE LID	EACH	4	4			
60260300	INLETS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	1	1			
60261510	INLETS TO BE ADJUSTED WITH NEW TYPE 20 FRAME AND GRATE	EACH	6	6			
60404910	FRAMES AND GRATES, TYPE 20	EACH	8	8			
63801200	MODULAR GLARE SCREEN SYSTEM	FOOT	9,974	9,974			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MG	10	10			
66400530	CHAIN LINK FENCE, 4' (BRIDGE)	FOOT	300		300		
67000600	ENGINEER'S FIELD LABORATORY	CAL MG	10	10			
67100100	MOBILIZATION	L SUM	1	1			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	29,041	29,041			

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* SPECIALTY ITEMS

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
SUMMARY OF QUANTITIES

SCALE: = NTS
DATE: 4/14/2006

DRAWN BY: RA
CHECKED BY: RS

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4/14/2006

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0295-I	COOK	344	6
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62581

CODE NO.	ITEM DESCRIPTION	UNIT	URBAN 100% STATE		SIGNING Y002-1C	SAFETY SFTY-3N
			TOTAL QUANTITIES	ROADWAY J000-2A		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	1,098	1,098		
X0320622	FIELD MEASUREMENTS	L. SUM	1		1	
X0321472	REMOVE TEMPORARY CONCRETE BARRIER	FOOT	720	720		
X0321781	MECHANICAL SPLICE	EACH	1,124		1,124	△
X0321866	REMOVE, STORE AND RE-ERECT SIGN PANEL	SQ FT	885		885	
X0322215	CLEANING BRIDGE SCUPPERS AND DOWNSPOUTS	EACH	276		276	△
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	3297		3297	
X0323574	MAINTENANCE OF EXISTING LIGHTING SYSTEM COMPLETE	CAL MO	9		9	
X0323557	BRIDGE JOINT SYSTEM (EXPANSION), 1"	FOOT	325		325	
X0323558	BRIDGE JOINT SYSTEM (EXPANSION), 1-5/8"	FOOT	1137		1137	
X0323559	BRIDGE JOINT SYSTEM (FIXED),	FOOT	395		395	
X0324112	BARRIER BASE	FOOT	362	362		
X0324292	MAINTENANCE OF EXISTING TRAFFIC SURVEILLANCE	CAL MO	9		9	
X0919000	TEMPORARY PAVEMENT REMOVAL	SQ YD	621	621		
X4834090	PORTLAND CEMENT CONCRETE SHOULDERS 14"	SQ YD	875	875		
X6370930	CONCRETE BARRIER DOUBLE FACE, 32" HEIGHT	FOOT	362	362		
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1		
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	240	240		
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	84	84		
X7040600	FURNISH TEMPORARY CONCRETE BARRIER	FOOT	360	360		
XX001854	STABILIZED SUB BASE, 6"	SQ YD	875	875		
XX005128	STRIP SEAL EXPANSION JOINT ASSEMBLY	FOOT	3558		3558	
Z0002600	BAR SPLICERS	EACH	1,524		1,524	
XZ193500	BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2 1/4"	SQ YD	103,742		103,742	△
Z0006204	BRIDGE DECK HYDRO-SCARIFICATION, 1/2"	SQ YD	103,742		103,742	
X0321743	SILICONE JOINT SEALER 1"	FOOT	10,486		10,486	
X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	10	10		
X6700600	ENGINEER'S FIELD LABORATORY (SPECIAL)	CAL MO	10	10		

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 SB DAN RYAN ELEVATED BRIDGE
 REPAIR FROM 15TH TO 28TH STREETS
 SUMMARY OF QUANTITIES

SCALE: = NTS
 DATE: 4/14/2006

DRAWN BY: RA
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029861	COOK	344	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

62581

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CODE NO.	ITEM DESCRIPTION	UNIT	URBAN 100% STATE		SIGNING Y002-1C	SAFETY SFTY-3N
			TOTAL QUANTITIES	ROADWAY J000-2A		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	200		200	
Z0022400	FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	447		447	
Z0029999	IMPACT ATTENUATOR REMOVAL	EACH	4			4
Z0030150	IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3	EACH	4			4
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	11			11
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1			1
Z0047300	PROTECTIVE SHIELD	SQ YD	32,783		32,783	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1		1	
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	5		5	
X0325436	TEMPORARY PAVEMENT (VARIABLE DEPTH)	SQ YD	324	324		
X0325085	TEMPORARY PAVEMENT (INTERSTATE)	SQ YD	297	297		
X0325122	TRAFFIC CONTROL AND PROTECTION FOR DETOUR ROUTE SIGNING 1	CAL MO	2.5		2.5	
X0325123	TRAFFIC CONTROL AND PROTECTION FOR DETOUR ROUTE SIGNING 2	CAL MO	1.3		1.3	
X0325124	TRAFFIC CONTROL AND PROTECTION FOR DETOUR ROUTE SIGNING 3	CAL MO	1.3		1.3	
X0325125	TRAFFIC CONTROL AND PROTECTION FOR DETOUR ROUTE SIGNING 4	CAL MO	1.3		1.3	
X0325434	TRAFFIC CONTROL AND PROTECTION FOR DETOUR ROUTE SIGNING 5	CAL MO	1.5		1.5	
X0325435	TRAFFIC CONTROL AND PROTECTION FOR DETOUR ROUTE SIGNING 6	CAL MO	1.5		1.5	
X0325126	TRAFFIC CONTROL AND PROTECTION FOR SURFACE STREETS	L SUM	1		1	
X0325438	DECK SILICONE JOINT SEALER, 1"	FOOT	117		117	
X0325439	PARAPET SILICONE JOINT SEALER, 1"	FOOT	10,486		10,486	
X0325114	ADJUSTING DRAINAGE SCUPPERS, TYPE A	EACH	110		110	
X0325115	ADJUSTING DRAINAGE SCUPPERS, TYPE B	EACH	72		72	
X0325116	ADJUSTING DRAINAGE SCUPPERS, TYPE C	EACH	94		94	
X0325437	MODULAR EXPANSION JOINT REPAIR	L SUM	1		1	
XX005213	CLASS D PATCHES, SUPERPAVE, TYPE III, 12"	SQ YD	87	87		

S00-04

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 SB DAN RYAN ELEVATED BRIDGE
 REPAIR FROM 15TH TO 28TH STREETS
 SUMMARY OF QUANTITIES

SCALE: = NTS
 DATE: 4/14/2006

DRAWN BY: RA
 CHECKED BY: RS

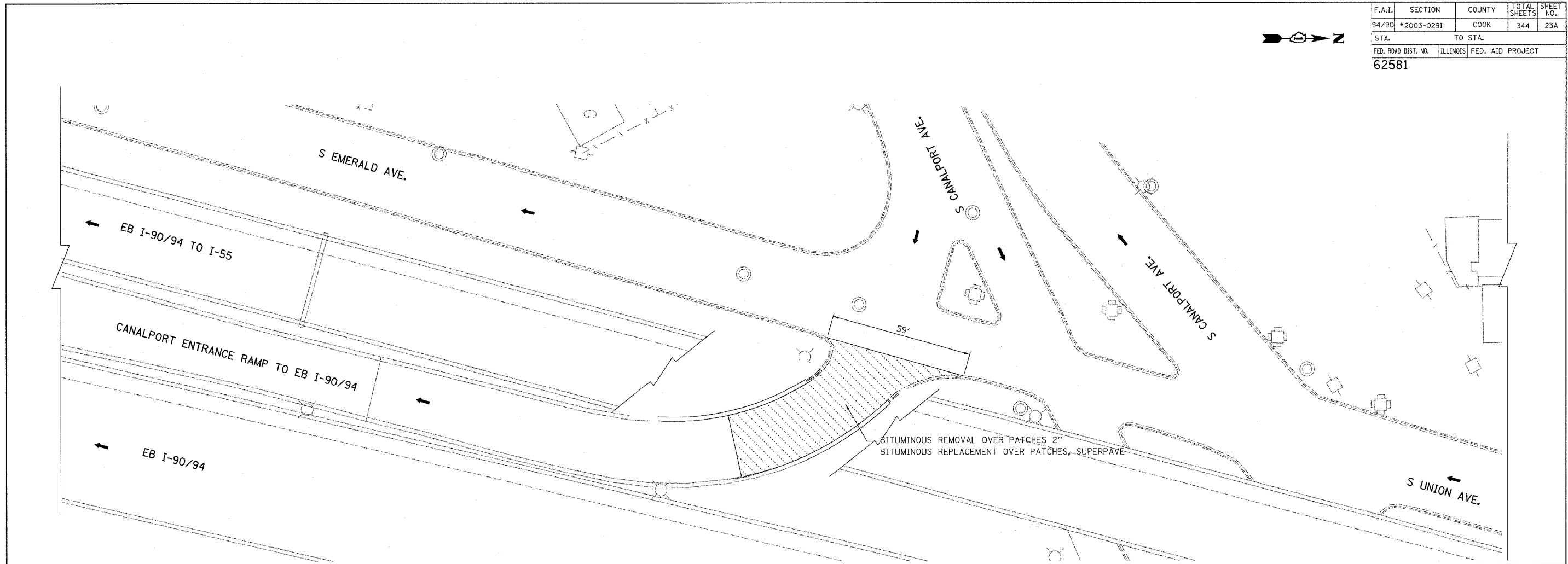
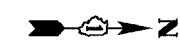
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*2003-0291	COOK	344	23A
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				



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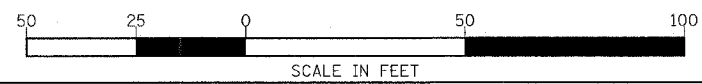
PAY ITEM	UNIT
CLASS D PATCHES, SUPERPAVE, TYPE III, 12"	87 SY
BITUMINOUS REPLACEMENT OVER PATCHES, SUPERPAVE	13.6 TON
BITUMINOUS REMOVAL OVER PATCHES 2"	242 SY

MIX DESIGN

PAY ITEM	AC TYPE	VOIDS	RAP %
CLASS D PATCHES, SUPERPAVE, TYPE III, 12" IL-19MM	PG 64-22	4% @ 70 GYR	15% RAP
BITUMINOUS REPLACEMENT OVER PATCHES, SUPERPAVE IL-19MM	PG 64-22	4% @ 70 GYR	15% RAP

CPL-02A

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
EXISTING AND PROPOSED PLAN

SCALE: 1"=20'
DATE: 5/25/2006

DRAWN BY: RA
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029I	COOK	344	159
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	62581	

STRUCTURAL GENERAL NOTES

Plan dimensions and details relative to existing structures have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Joint lengths provided in these plans are based on existing plans and have not been field verified. It is the Contractor's responsibility to provide joints that fit the actual field conditions.

As built plan information is provided For Information Only. Key dimensions have been clarified. Inclusion of these sheets does not relieve the contractor of any responsibility for verifying such dimensions as indicated in the note above. These plans are available from the Department as specified in the Special Provisions for Examination of Existing Plans.

Traffic is to be maintained during construction, see Roadway Plans for Stage Construction Details.

All new fasteners shall be high strength bolts. Holes shall be $\frac{13}{16}$ " dia. for $\frac{3}{4}$ " dia. bolts, unless otherwise noted, holes shall be $\frac{15}{16}$ " dia. for $\frac{7}{8}$ " dia. bolts, unless otherwise noted.

All new structural steel shall conform to AASHTO Classification M-270 Gr. 50.

Roadway expansion guards shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

The roadway expansion plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.

Field welding of construction accessories will not be permitted to beams or girders.

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Concrete Removal".

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

Calculated weight of Structural Steel used for item "Furnishing & Erecting Structural Steel" = 238,470 Lbs. and itemized as follows:

S.N. 016-1117	=	36,690 Lbs
S.N. 016-1116	=	2,800 Lbs
S.N. 016-1114	=	2,840 Lbs
S.N. 016-1066	=	2,200 Lbs
S.N. 016-1113	=	55,600 Lbs
S.N. 016-1111	=	65,830 Lbs
S.N. 016-1110	=	72,510 Lbs

The Contractor shall exercise care during concrete removal operations not to create spalling beyond the limits of the specified removal. Damage to remaining concrete caused by the Contractor's removal operation shall be repaired, as directed by the Engineer, at no additional cost to the Department.

The Contractor shall use caution when removing concrete joints not to damage items attached to the parapets. Attached items may be removed and re-attached to facilitate concrete removal at Contractor's own expense.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

All construction joints shall be bonded.

The joints are to be removed in stages. Before starting the removal, the Contractor is required to submit to the Engineer for approval his staging plans and method of removal.

The Contractor shall exercise care during the removal of the existing joints to ensure that the slab, beams & diaphragms integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams & diaphragms caused by his operation as directed by the Engineer at no additional cost to the Department.

The Contractor shall exercise extra care during the cleaning of the existing downspouts not to damage the pipes. The contractor shall repair any damage(s) caused by his operation as directed by the Engineer at no additional cost to the Department.

The Contractor shall provide a Protective Shield under the deck for the Full Deck Slab repairs as per direction of the Engineer and as shown on the plans.

The Contractor is required to reconnect new FPJ Troughs to the existing drainage system. It has been estimated that 5 feet of drain pipe will require removal and replacement. This includes any required connections. The cost to connect the FPJ troughs to the Drainage System shall be included in the cost for "Cleaning Bridge Scuppers and Downspouts".

The Contractor may have to remove the Name Plate(s) that interfere with the parapet removal for the joint reconstruction. The Contractor shall reinstall the Name Plate(s) as directed by the Engineer. The cost of removal and reinstallation of the Name Plate(s) shall be included in the cost for "Concrete Removal" and "Concrete Superstructure".

Protective coat shall be applied to only the new concrete provided for the reconstruction of the joints (top of deck slab, top and traffic face of parapets).

The organic zinc rich primer/epoxy/urethane paint system shall be used for painting of new structural steel except finger plate expansion joints. The entire system shall be shop applied, with the exception that masked off connections surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for Cleaning and Painting New Metal Structures.

At concrete removal locations for joints, the Contractor shall provide a $\frac{3}{4}$ " saw cut along the removal line at the top of deck, inside, top and outside face of outside parapets and inside and top of median parapets. Cost of saw cuts shall be included in "Concrete Removal." See sheet 194.

The Contractor shall establish the grades to which the expansion devices are to be set and must receive approval from the Engineer of joint grades prior to pouring concrete.

DESIGN DATA

Design Specifications: 2002 AASHTO
Design Loading: HS20

DESIGN STRESSES

f'_c = 3500 psi
 f_y = 60,000 psi (Reinforcement)
 f_y = 50,000 psi (Structural Steel AASHTO M270 Gr. 50)

MIN BAR LAPS

#5 = 2'-2"
#6 = 2'-7"
#7 = 3'-6"

LEGEND

	Overlay Transition Limits
	Protective Shield Limits
	Limits of Stage IC (Stage IA or IB not hatched)
	Limits of Stage II
	Pier Number
	Concrete Removal / Joint Reconstruction
	Deck Slab Repair Partial Depth
	Deck Slab Repair Full Depth
	Scupper - Type A
	Scupper - Type B
	Scupper - Type C
	Scupper - Special

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REVISIONS	
NAME	DATE
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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
STRUCTURAL
GENERAL NOTES
SCALE: N/A
DATE: 5/25/2006
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TOTAL BILL OF MATERIALS

ITEM DESCRIPTION	UNIT	QUANTITY	SN 016-1117	SN 016-1067	SN 016-1116	SN 016-1115	SN 016-1046	SN 016-1050	SN 016-1062	SN 016-1114	SN 016-1066	SN 016-1113	SN 016-1112	SN 016-1111	SN 016-1110	SN 016-0137
CONCRETE REMOVAL	CU YD	1,101	190	89	13	161	19	49	37	-	-	131	208	47	57	100
CONCRETE SUPERSTRUCTURE	CU YD	1,211.1	214.4	97.7	14.0	165.1	17.6	53.4	38.9	-	-	149.8	234.4	52.4	63.8	109.6
BRIDGE DECK GROOVING	SQ YD	101,406	10,582	4,830	4,040	14,095	1,311	3,510	1,760	3,055	2,186	13,038	19,038	7,474	6,165	10,322
PROTECTIVE COAT	SQ YD	3,114	532	269	39	574	53	138	112	-	-	337	652	57	67	284
FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	0.15	-	0.01	-	-	-	-	0.01	0.01	0.23	-	0.28	0.31	-
JACK AND REMOVE EXISTING BEARINGS	EACH	5	-	5	-	-	-	-	-	-	-	-	-	-	-	-
STRUCTURAL STEEL REMOVAL	POUND	40,030	2,630	2,210	2,820	-	-	-	-	2,590	1,810	3,880	-	14,030	10,060	-
STRUCTURAL STEEL REPAIR	POUND	3,955	-	3,955	-	-	-	-	-	-	-	-	-	-	-	-
REINFORCEMENT BARS, EPOXY COATED	POUND	175,860	30,800	16,450	1,700	25,870	2,310	7,060	8,540	-	-	21,500	28,300	7,540	8,440	17,350
CHAIN LINK FENCE, 4' (BRIDGE)	FOOT	300	150	150	-	-	-	-	-	-	-	-	-	-	-	-
FIELD MEASUREMENTS	L SUM	1	0.15	-	0.01	-	-	-	-	0.01	0.01	0.23	-	0.28	0.31	-
SILICONE JOINT SEALER, 1"	FOOT	10,486	2,041	-	575	1,816	-	-	517	-	-	996	1,707	942	678	1,214
MECHANICAL SPLICE	EACH	1,124	142	90	-	-	-	16	-	-	-	260	-	258	324	34
CLEANING BRIDGE SCUPPERS AND DOWNSPOUTS	EACH	276	31	14	16	45	4	4	7	10	12	28	43	22	19	21
BRIDGE JOINT SYSTEM (EXPANSION), 1"	FOOT	325	35	134	-	-	-	28	40	-	-	-	-	-	-	88
BRIDGE JOINT SYSTEM (EXPANSION), 1-5/8"	FOOT	1,137	547	118	-	347	-	42	-	-	-	-	59	-	24	-
BRIDGE JOINT SYSTEM (FIXED)	FOOT	395	34	-	-	-	-	-	-	-	-	159	108	70	24	-
ADJUSTING DRAINAGE SCUPPERS, TYPE A	EACH	110	-	1	-	28	4	1	1	-	-	12	20	11	11	21
ADJUSTING DRAINAGE SCUPPERS, TYPE B	EACH	72	17	-	8	12	-	-	1	10	11	10	-	3	-	-
ADJUSTING DRAINAGE SCUPPERS, TYPE C	EACH	94	14	13	8	5	-	3	5	-	1	6	23	8	8	-
STRIP SEAL EXPANSION JOINT ASSEMBLY	FOOT	3,588	240	193	79	509	84	176	256	-	-	560	1043	27	24	397
BAR SPLICERS	EACH	1,524	179	172	-	295	-	-	36	-	-	246	382	48	48	118
BRIDGE DECK MICROSILICA CONCRETE OVERLAY, 2 1/4"	SQ YD	103,742	10,702	5,166	4,151	14,044	1,385	3,724	2,107	2,335	3,125	13,304	19,239	7,729	6,298	10,433
BRIDGE DECK HYDRO-SCARIFICATION, 1/2"	SQ YD	103,742	10,702	5,166	4,151	14,044	1,385	3,724	2,107	2,335	3,125	13,304	19,239	7,729	6,298	10,433
DECK SLAB REPAIR (FULL DEPTH, TYPE 1)	SQ YD	200	30	30	10	25	5	5	5	10	5	15	15	15	15	15
FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	447	68	-	-	-	-	-	-	-	-	98	-	128	153	-
PROTECTIVE SHIELD	SQ YD	32,783	6,471	1,520	4,648	6,257	36	1,529	-	1,425	1,014	2,397	2,757	2,302	1,637	790
TEMPORARY SHORING AND BRACING	EACH	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DECK SILICONE JOINT SEALER, 1"	FOOT	117	-	-	-	-	-	-	-	-	-	92	-	-	25	-
MODULAR EXPANSION JOINT REPAIR	L SUM	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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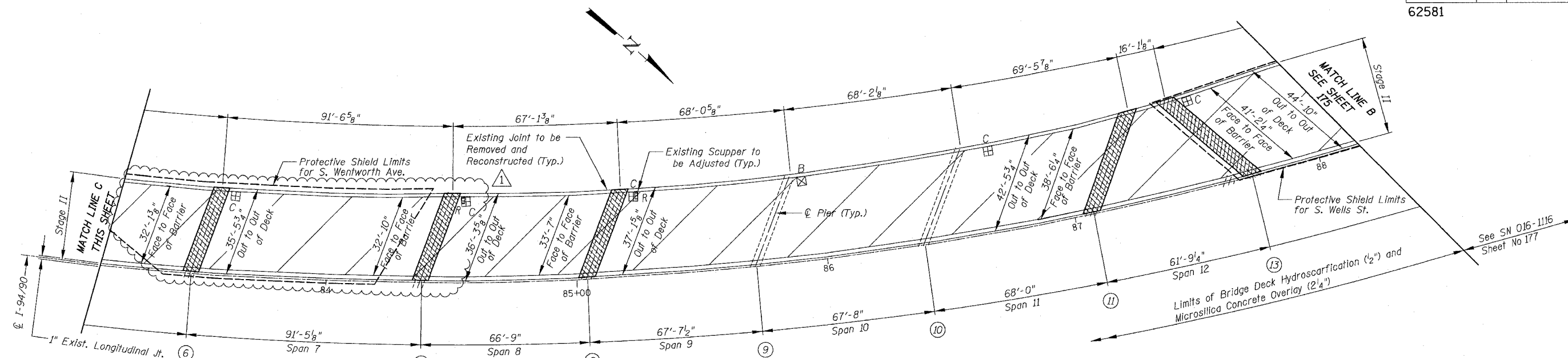
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NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
STRUCTURAL
TOTAL BILL OF MATERIALS
SCALE: N/A
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: BLU

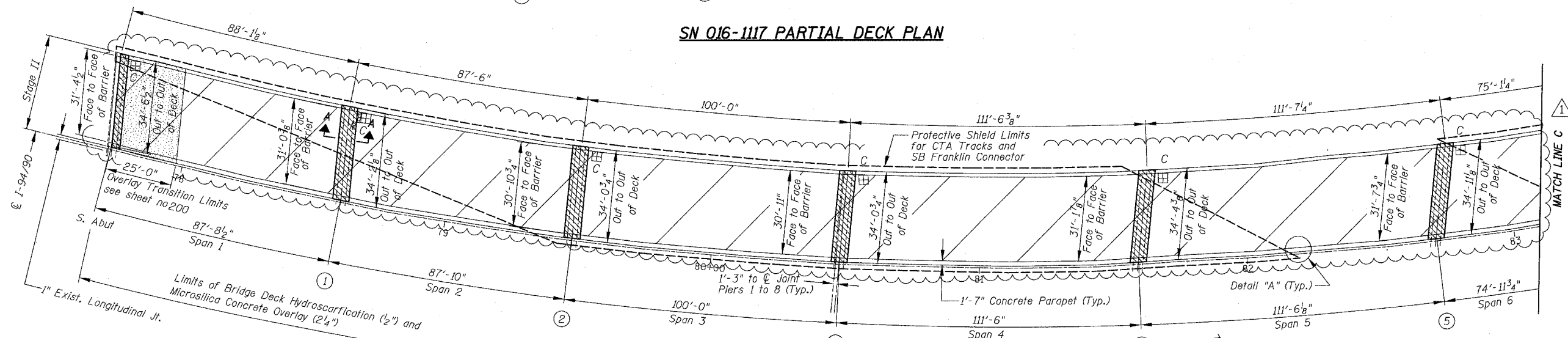
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

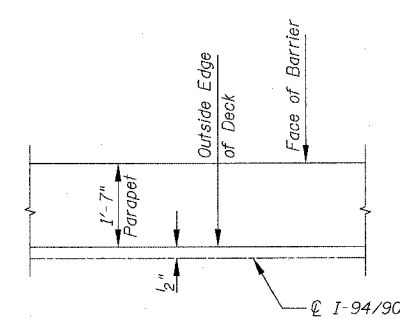
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SN 016-1117 PARTIAL DECK PLAN



SN 016-1117 PARTIAL DECK PLAN



DETAIL "A" (TYP)

Notes:

The limits of the deck slab repair partial depth are shown for information only as per special provision. The additional volume of Overlay required to fill all depressions below the specified thickness will be paid for at the contractor's actual material cost for Microsilica Concrete per square yard plus 15 percent.

An estimated quantity of 200 sy is shown in the table of "Total Bill of Material" for "Deck Slab Repair (Full Depth Type 1)". The exact quantity will be measured in the field as directed by the Engineer after Hydroscarification has been completed.

The limits of Hydroscarification and Microsilica Concrete Overlay does not include the concrete removal area (shown as hatched on the plans), nor 4" on each side of the Finger Plate joint locations.

Parapet repairs are shown at approximate locations with approximate LxH dimensions. The Contractor and Engineer, shall visually inspect and determine the exact location(s) and extent of the parapet damages to be repaired. The cost for the repairs shall be included in the cost of "Concrete Removal" and "Concrete Superstructure".

All dimensions are given along ϕ of Pier unless noted otherwise.

Limits of Protective Shield shown graphically for clarity. Shielding shall be provided from ϕ pier to ϕ pier over spans shown out to out of deck, unless noted otherwise. Full shielding shall be provided over streets, railroads and waterways for Hydroscarification operations. Protective Shield shall be provided for any full depth slab repairs.

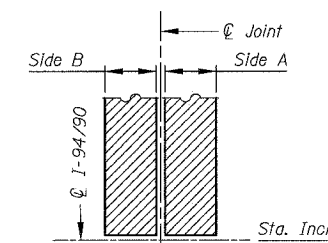
The Contractor shall exercise care during the removal of the concrete parapet for the joint reconstruction not to damage any parapet mounted junction boxes that may interfere with the removal. The Contractor shall repair any damages at no additional cost to the Department.

Scuppers and deck repair areas are shown out of proportion. Repair areas shown within scupper limits shall be interpreted to be in the vicinity of the scupper.

For stages of work, plan, cross sections and TCB, see MOT plans. Alignment shown was derived from as built plans for contractors reference and should not be used for dimensional purposes.

For existing and proposed joint details see sheets 192 & 193. For existing joint sections see Sheet 194. For proposed joint sections see Sheet 195.

For existing and proposed joint plans See sheets 196 to 198. For Scupper adjustment details see Sheet 279 & 280. For Hydroscarification and Microsilica Concrete Overlay details see Sheet 200. For Finger Plate Joint details see sheets 212 to 216. For Pier and Abutment Skew Angles see Sheets 192 & 193. For Silicone Joint Sealer details see Sheet 201. For Closure Wall details See Sheet 202. For Parapet Concrete repair, see Detail "B" Sheet 202. For Legend See Sheet 159.



SECTION A-A (TYP.)

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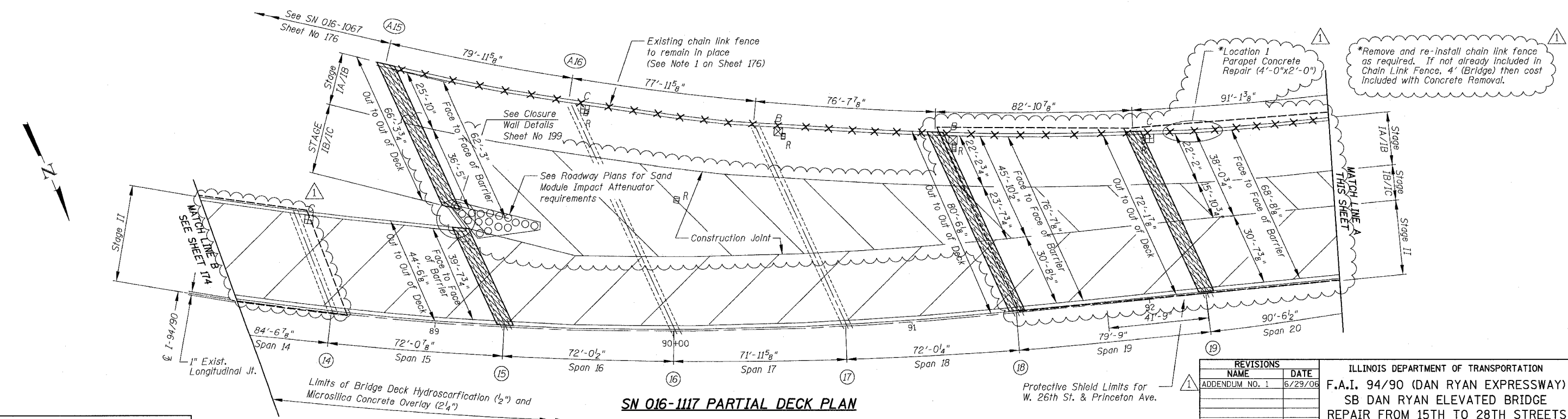
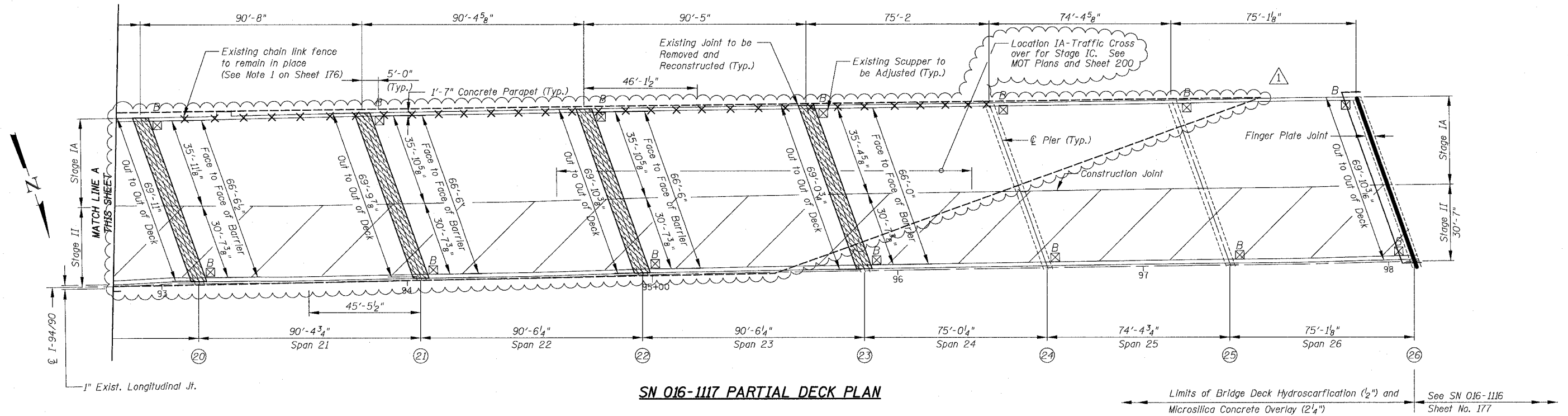
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 REPAIR FROM 15TH TO 28TH STREETS
 PARTIAL DECK PLAN
 SN 016-1117

SCALE: 1"=20'
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	175
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ADDENDUM NO. 1	6/29/06

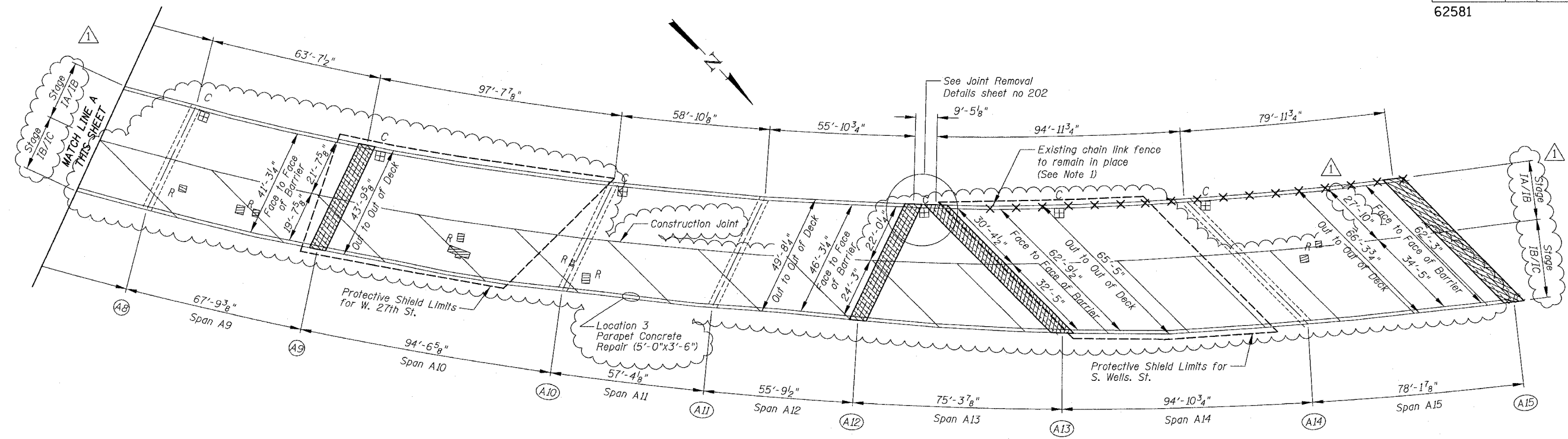
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PARTIAL DECK PLAN
SN 016-1117

SCALE: 1"=20'
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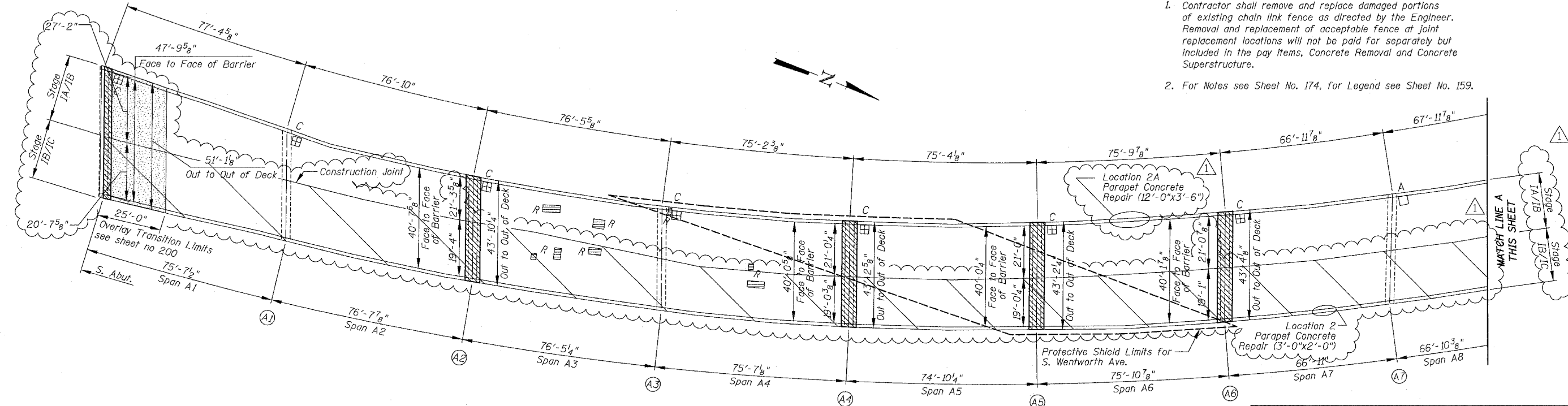
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	176
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
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SN 016-1067 PARTIAL DECK PLAN

- Notes:
- Contractor shall remove and replace damaged portions of existing chain link fence as directed by the Engineer. Removal and replacement of acceptable fence at joint replacement locations will not be paid for separately but included in the pay items, Concrete Removal and Concrete Superstructure.
 - For Notes see Sheet No. 174, for Legend see Sheet No. 159.



SN 016-1067 PARTIAL DECK PLAN

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REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1067

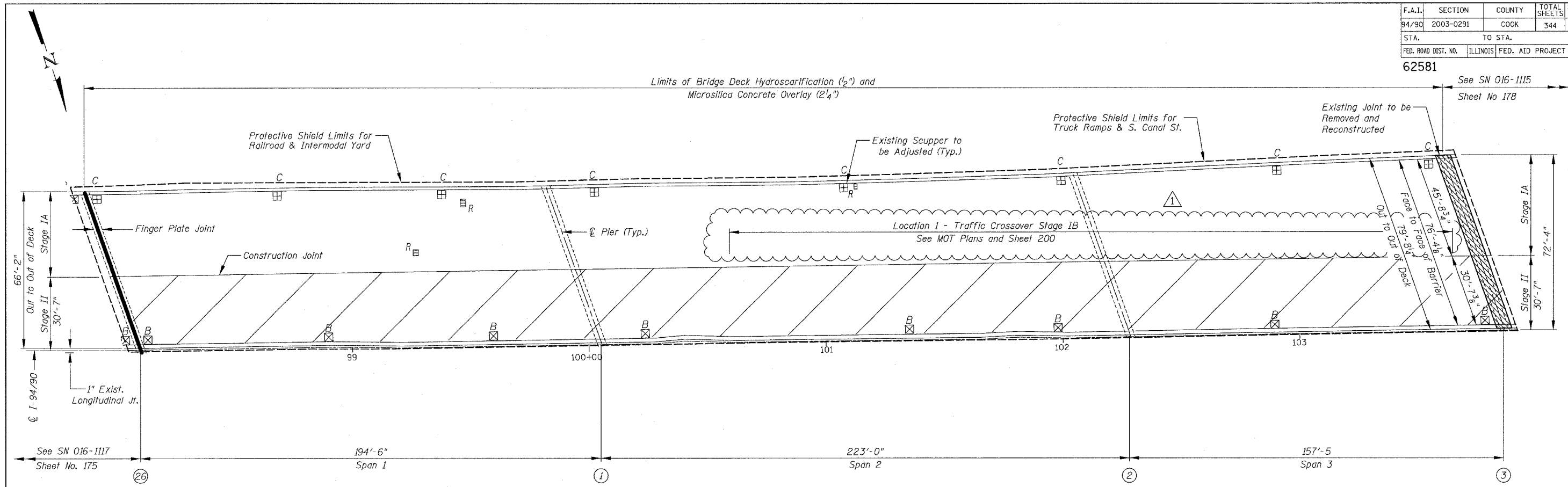
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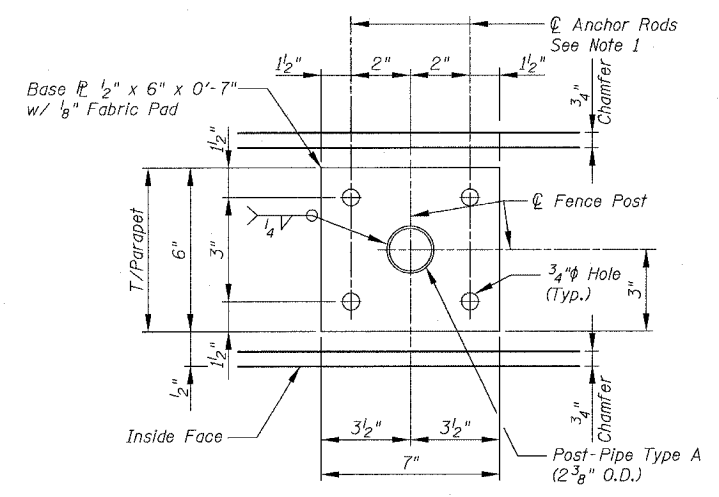
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 REPAIR FROM 15TH TO 28TH STREETS
 PARTIAL DECK PLAN
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94/90	2003-0291	COOK	344	177
STA.	TO STA.			
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See SN 016-1115
Sheet No 178



SN 016-1116 PARTIAL DECK PLAN



BASE PLATE PLAN

- Notes:
1. Drill and Grout $\frac{3}{8}$ " diameter Anchor Rods with Hex Nuts and $\frac{1}{4}$ " diameter washers. Embedment shall be according to Manufacturer's specifications using HVA Adhesive Anchor as manufactured by Hilti, Inc. or approved equal. Weld Nuts to Anchor Bolt after installation. Cost included with "Chain Link Fence 4' (Bridge)
 2. For additional Chain Link Fence Details see Std. 664001.
 3. See Sheets 175 & 176 for location of Chain Link Fence on Parapet.

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For Notes see Sheet 174, for Legend see Sheet 159

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SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1116

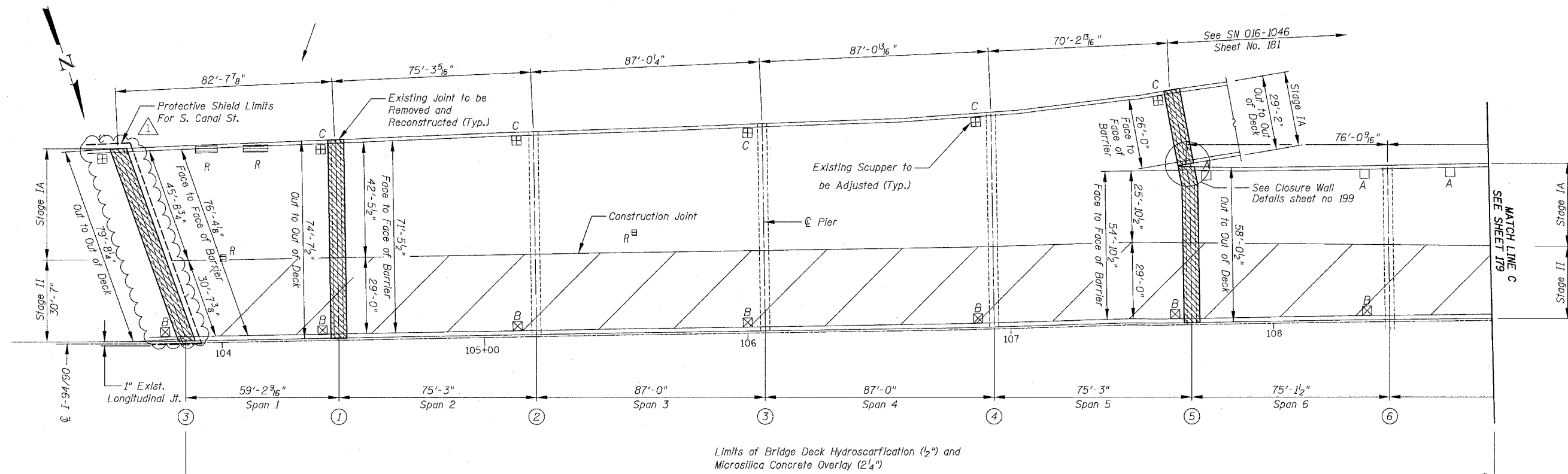
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	178
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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SN 016-1115 PARTIAL DECK PLAN

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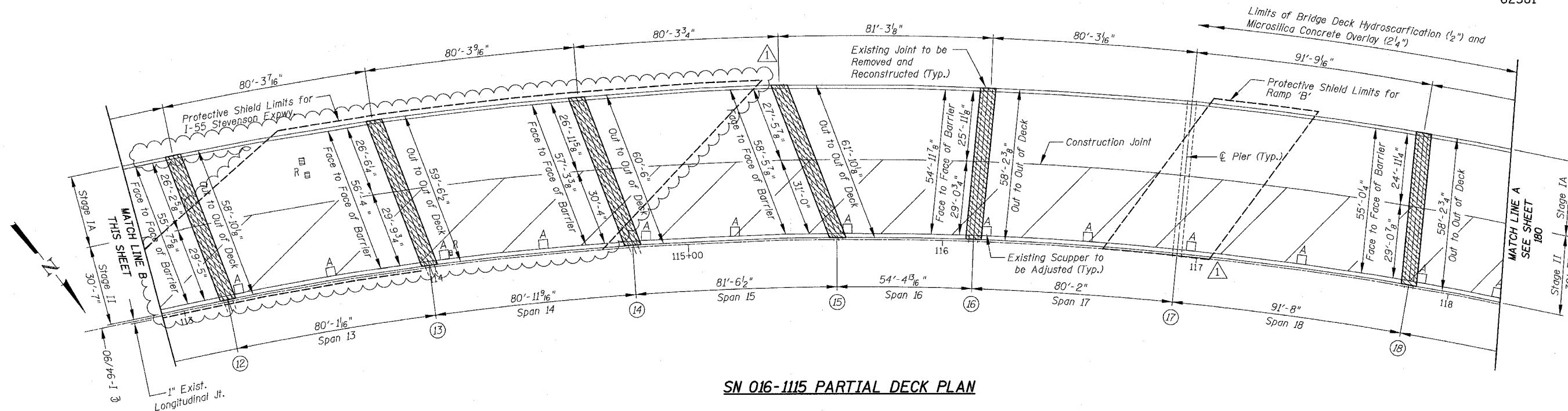
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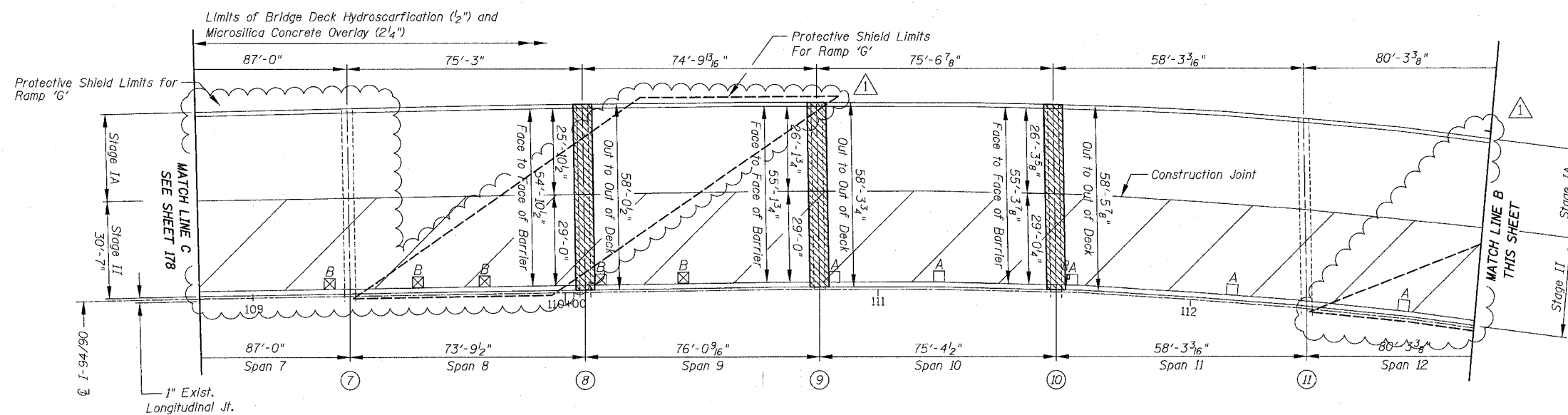
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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SN 016-1115 PARTIAL DECK PLAN



SN 016-1115 PARTIAL DECK PLAN

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 PARTIAL DECK PLAN
 SN 016-1115

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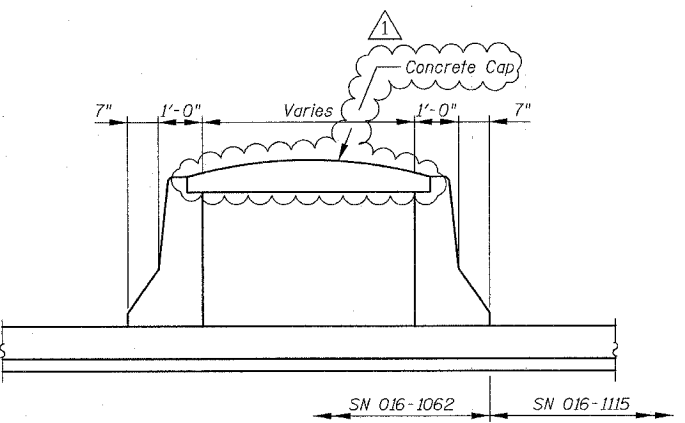
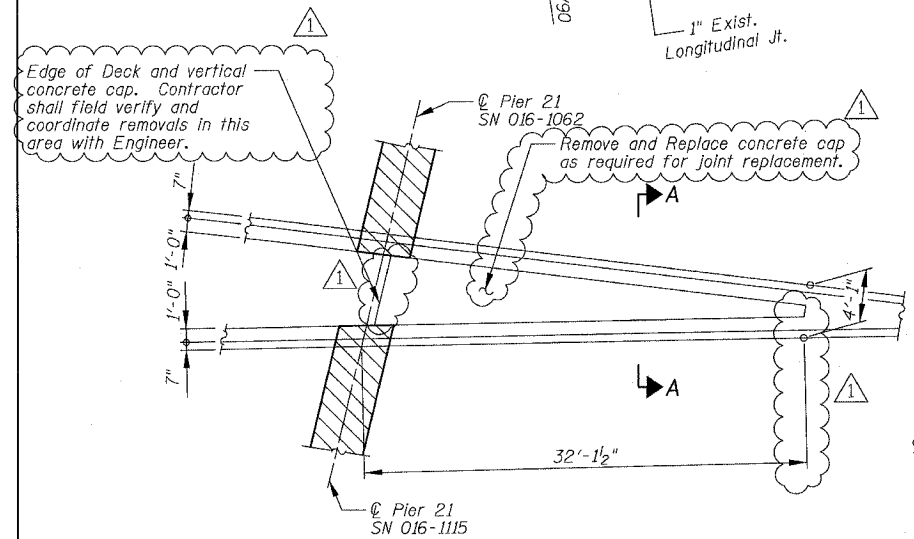
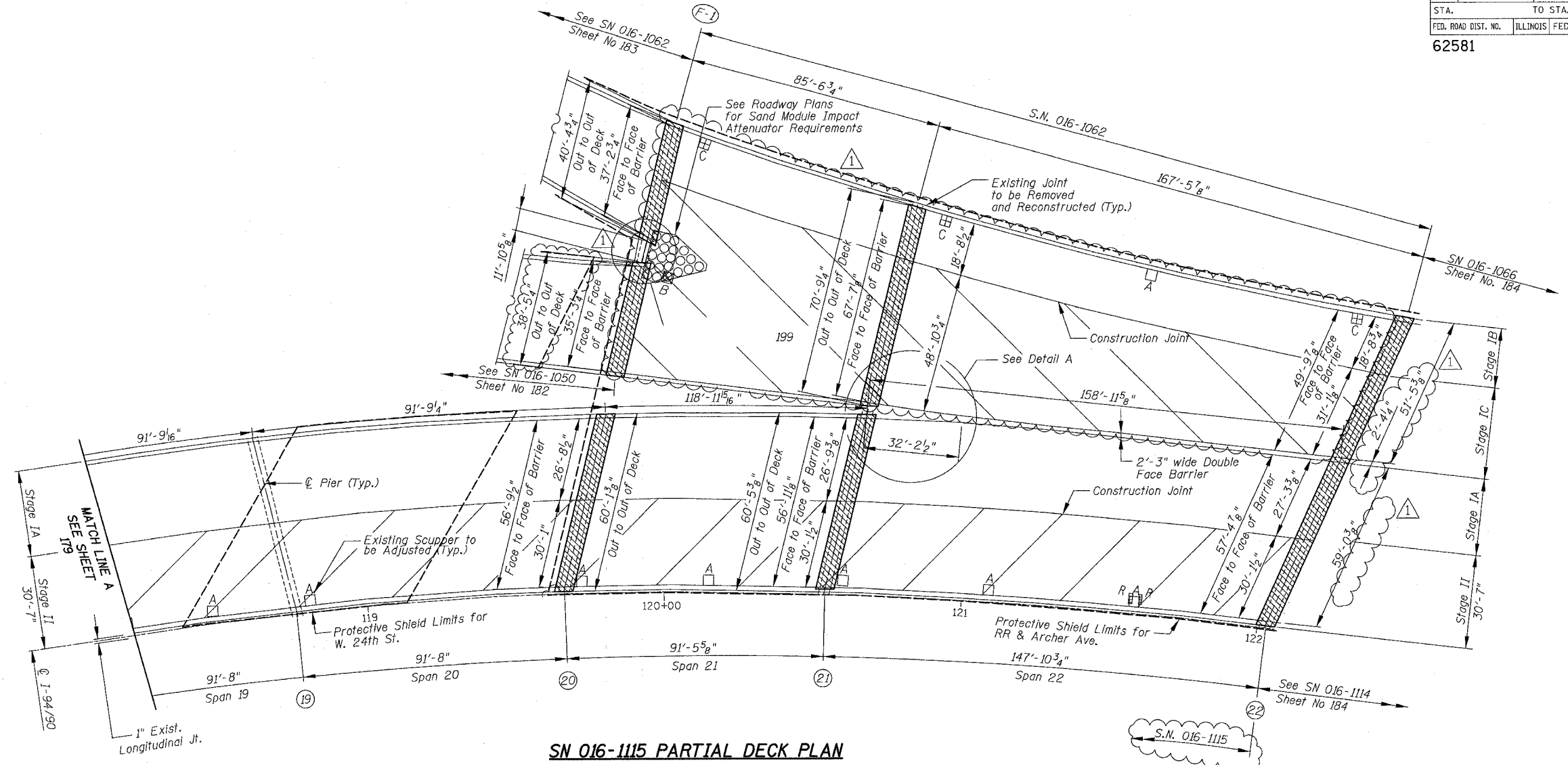
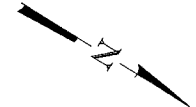
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	180
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
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DETAIL A

SECTION A-A

REVISIONS	
NAME	DATE
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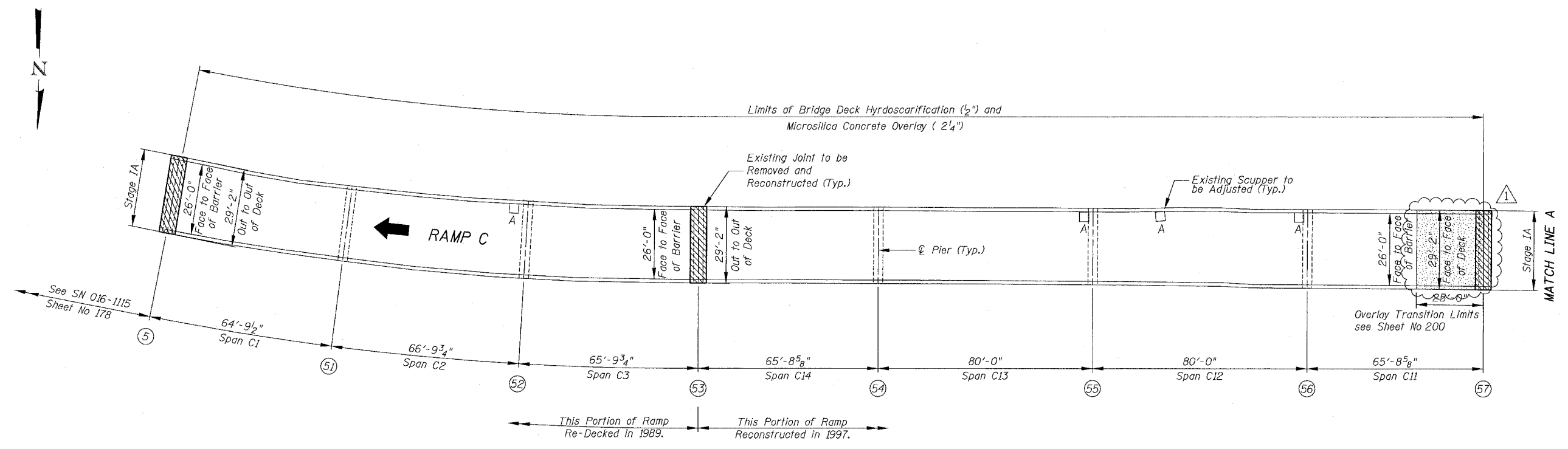
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 PARTIAL DECK PLAN
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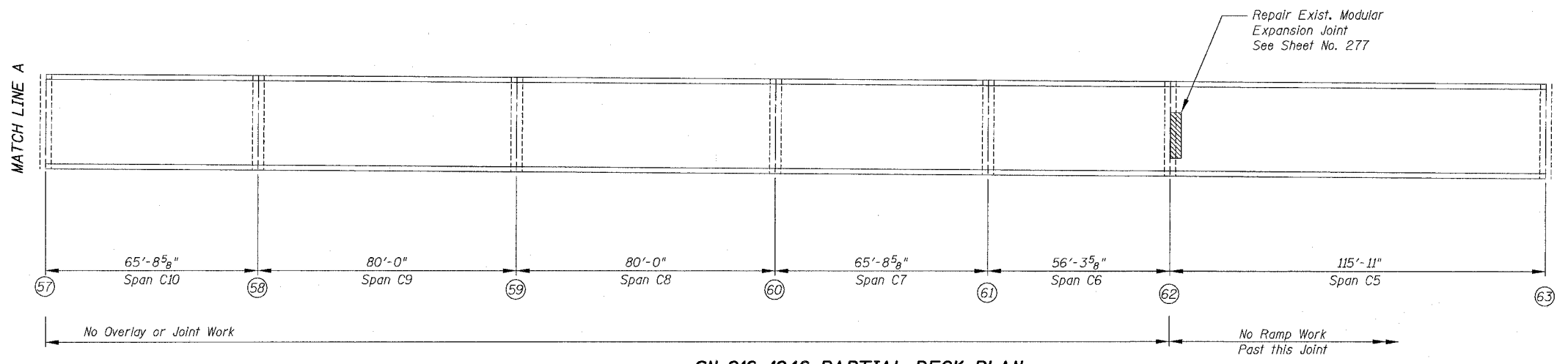
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94/90	2003-0291	COOK	344	181
STA.		TO STA.		
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SN 016-1046 PARTIAL DECK PLAN



SN 016-1046 PARTIAL DECK PLAN

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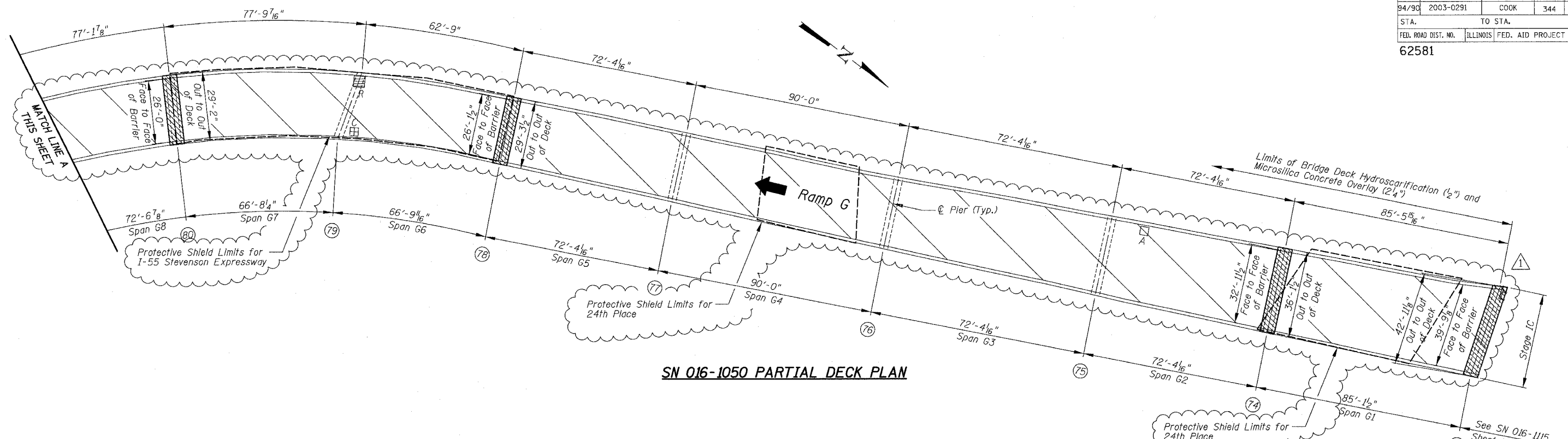
ILLINOIS DEPARTMENT OF TRANSPORTATION
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SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1046

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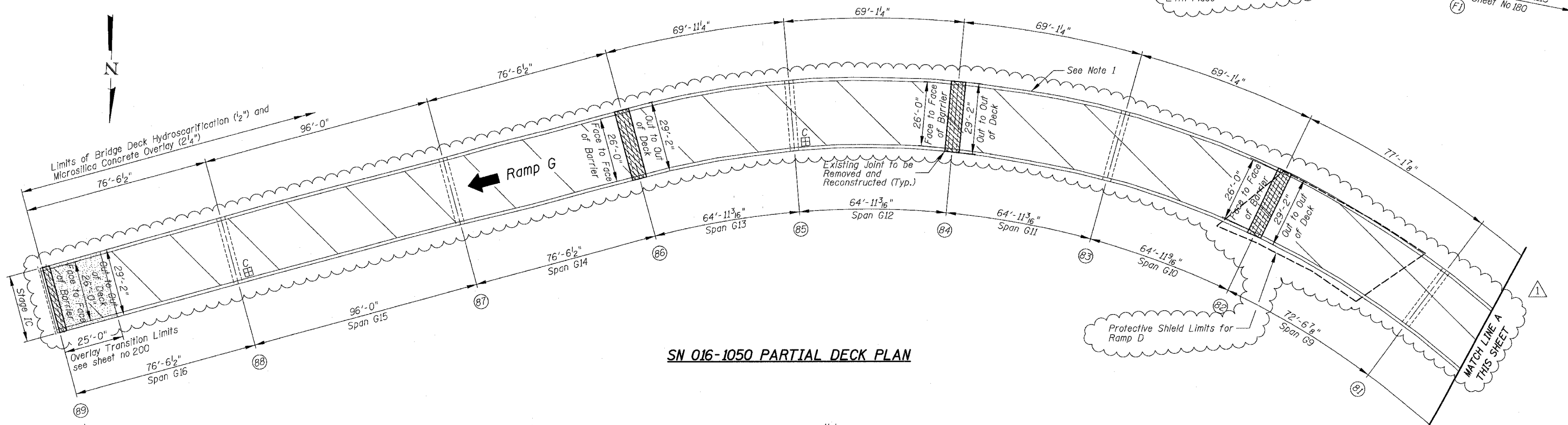
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FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
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SN 016-1050 PARTIAL DECK PLAN



SN 016-1050 PARTIAL DECK PLAN

Notes:

1. Existing "light tube" is attached to outside parapet wall. The Contractor shall exercise extreme care when removing parapet concrete not to damage tube or components. The Contractor may remove and re-install if approved by the Engineer. Cost of removal and replacement will be included with Concrete Removal and Concrete Superstructure. Damage shall be repaired by the Contractor, as approved by the Engineer, at no additional cost to the Department. Coordinate with the Engineer regarding de-energizing lighting as required.

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REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1050

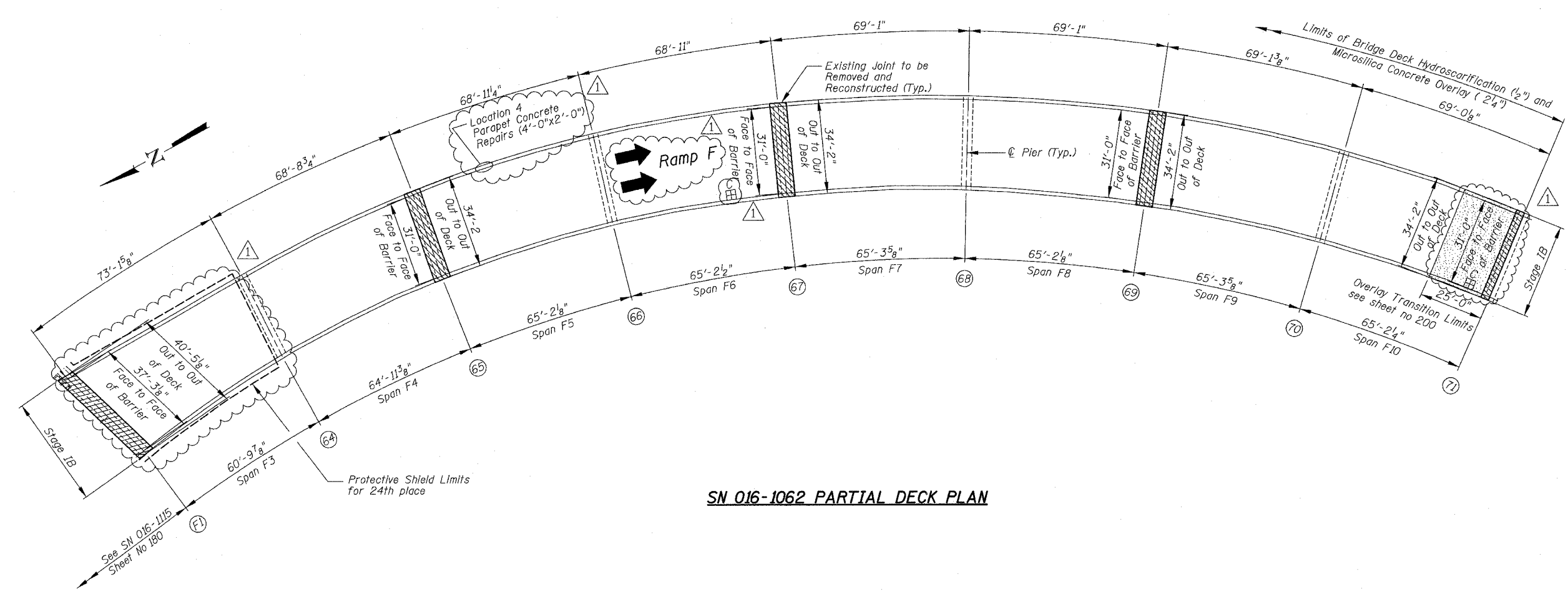
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 CHECKED BY: BLU

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For additional Notes see Sheet 174, for Legend see Sheet 159

6/29/2006 3:50:41 PM

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COCK	344	183
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				



SN 016-1062 PARTIAL DECK PLAN

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For Notes see Sheet 174, for Legend see Sheet 159

REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

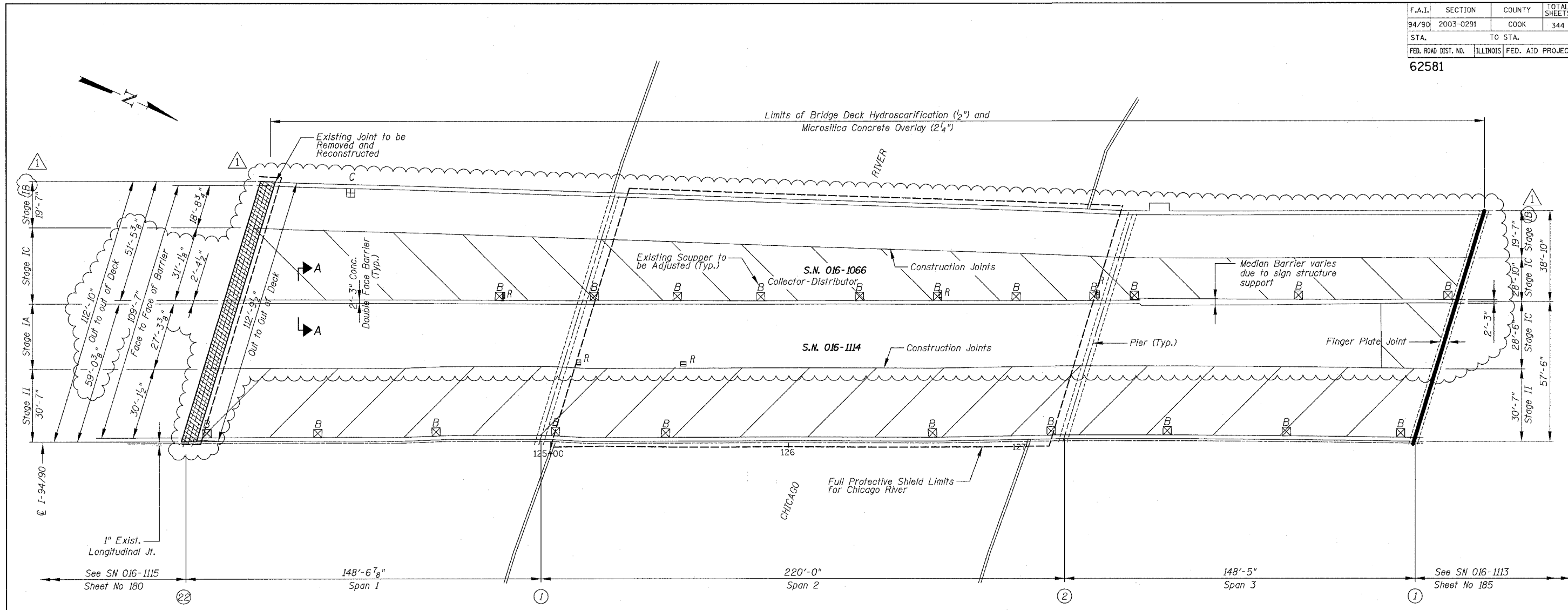
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1062

SCALE: 1"=20'
DATE: 5/25/2006

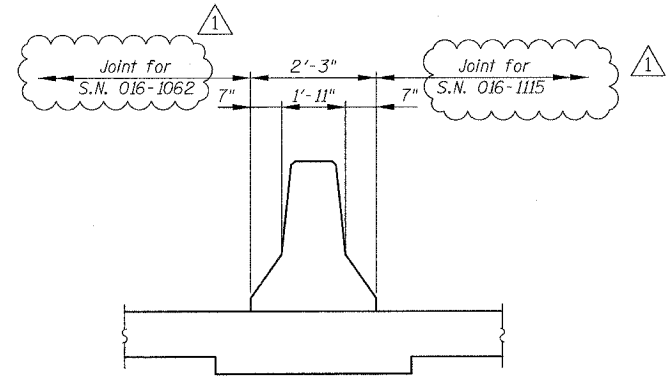
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	184
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				



SN 016-1114 & SN 016-1066 PARTIAL DECK PLAN



SECTION A-A

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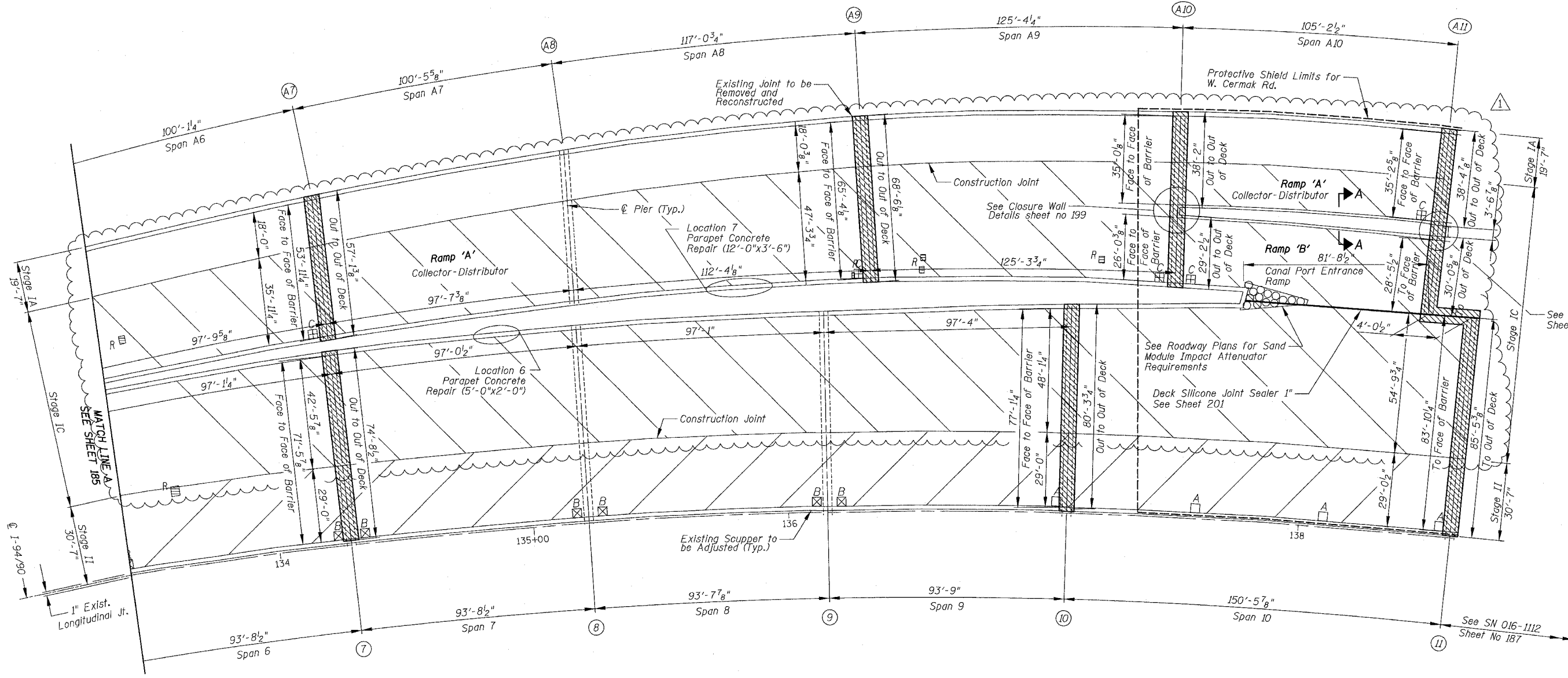
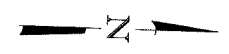
For Notes see sheet 174, for Legend see sheet 159

REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

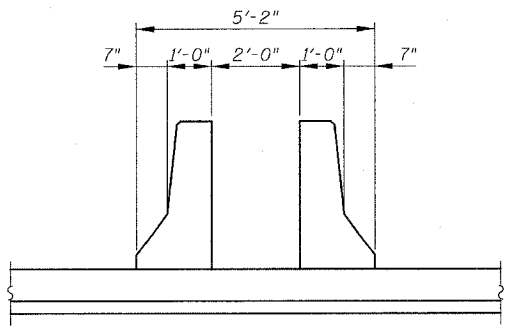
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1114 & SN 016-1066
SCALE: 1"=20'
DATE: 5/25/2006
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	186
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62581				



SN 016-1113 PARTIAL DECK PLAN



SECTION A-A

For Notes see Sheet 174, for Legend see Sheet 159

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REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/08

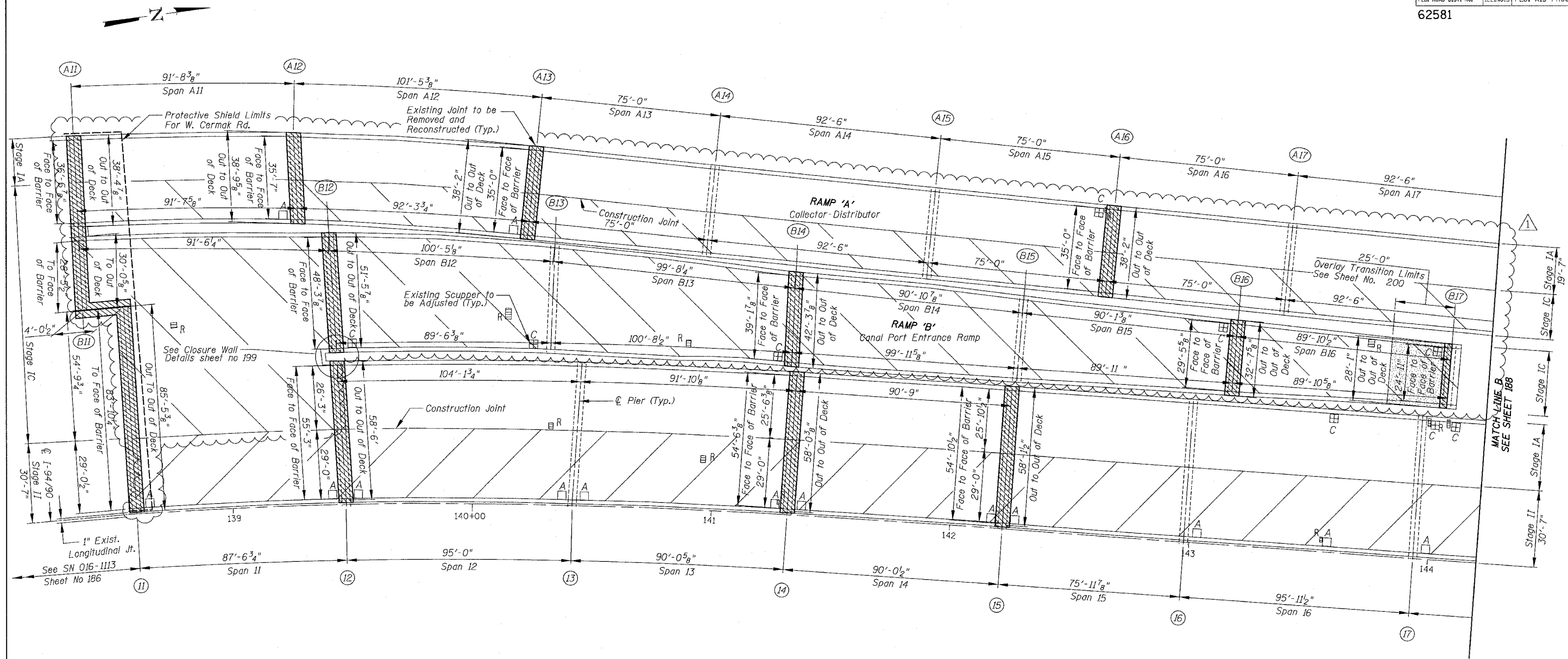
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F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1113

SCALE: 1"=20'
DATE: 5/25/2006

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	187
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62581				



SN 016-1112 PARTIAL DECK PLAN

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REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

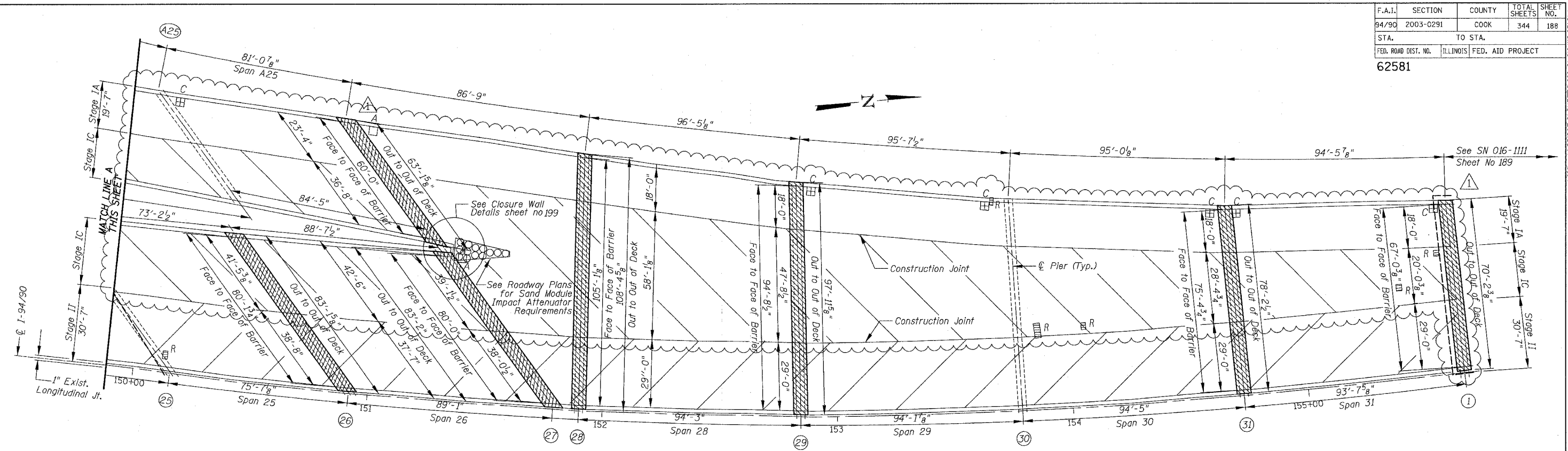
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1112

SCALE: 1"=20'
DATE: 5/25/2006

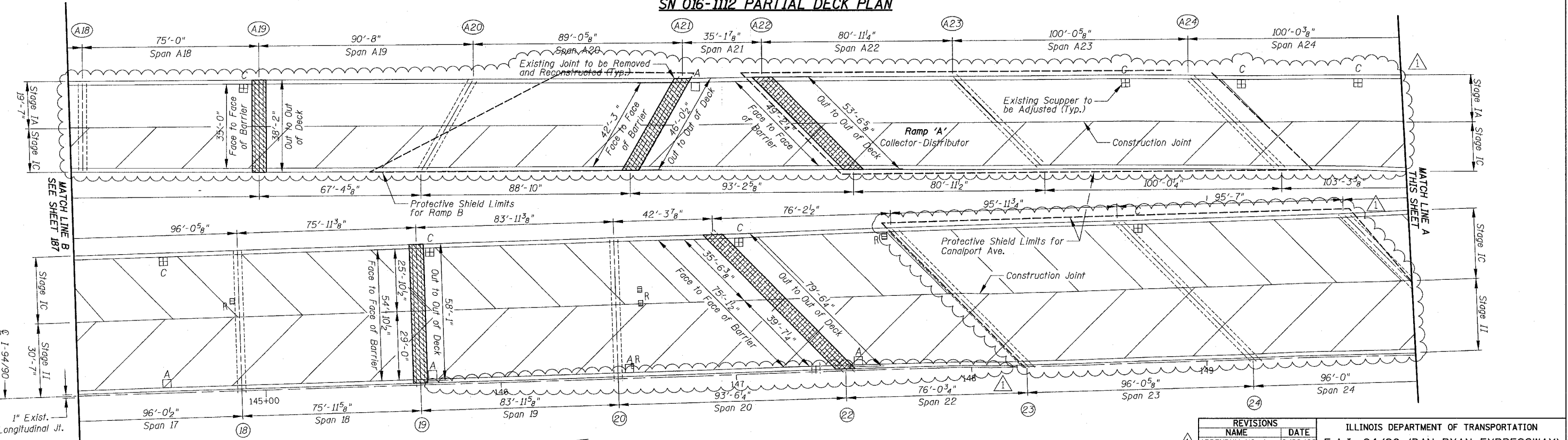
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	188
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				



SN 016-1112 PARTIAL DECK PLAN



SN 016-1112 PARTIAL DECK PLAN

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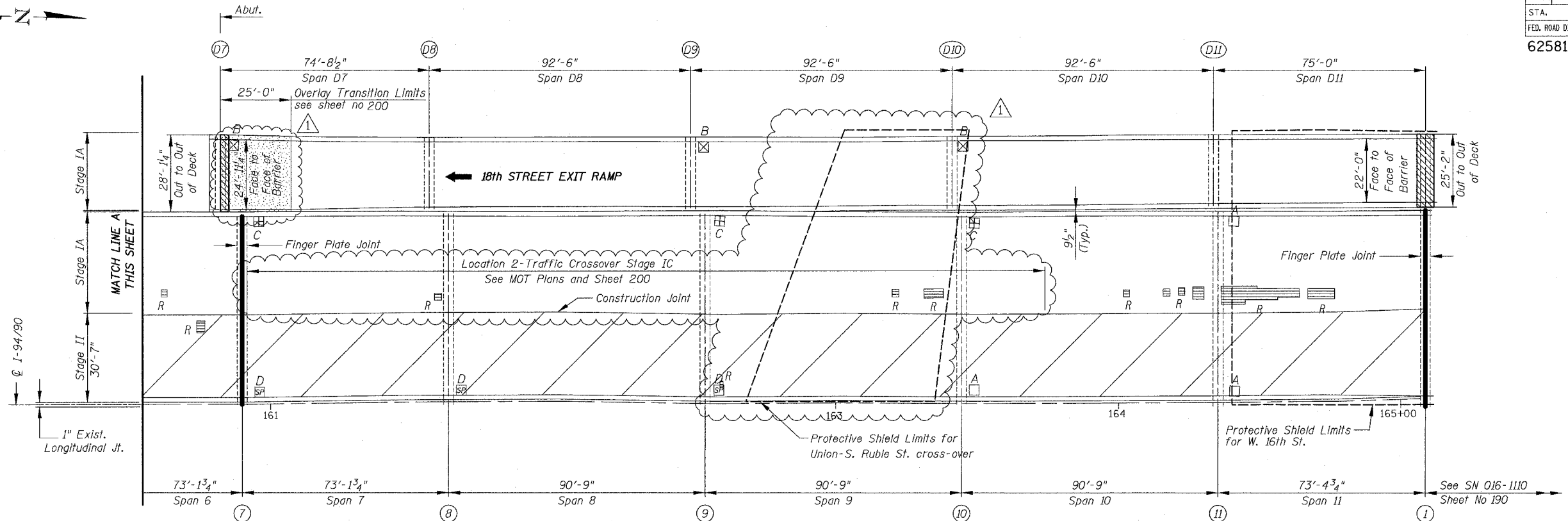
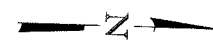
For Notes see sheet 174, for Legend see sheet 159

REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

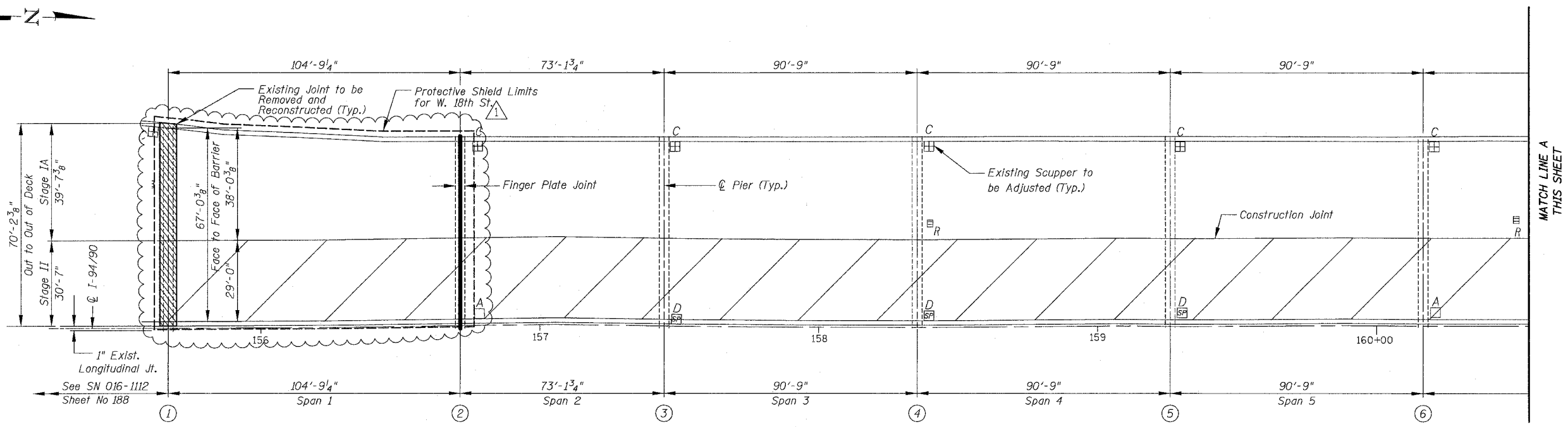
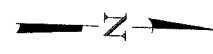
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1112
SCALE: 1"=20'
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: BLU

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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029I	COOK	344	189
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				



SN 016-1111 PARTIAL DECK PLAN



SN 016-1111 PARTIAL DECK PLAN

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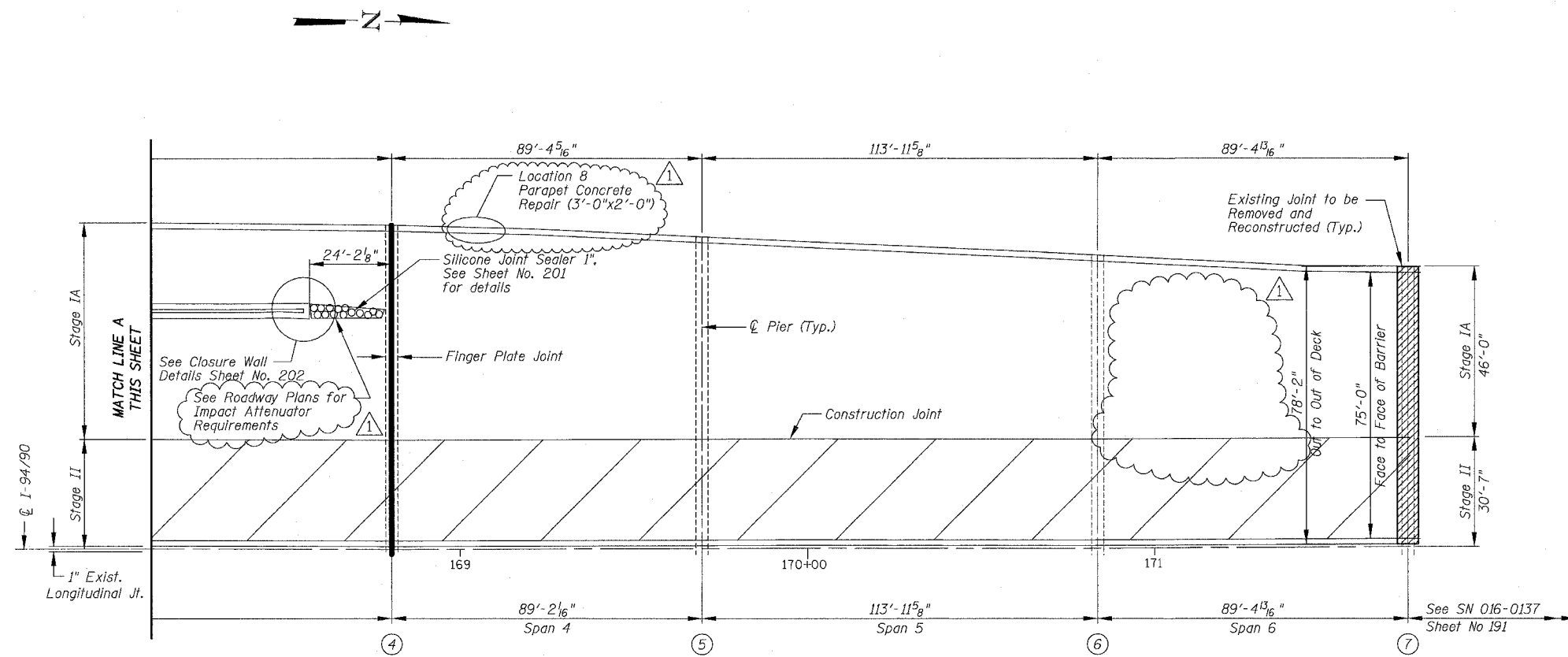
REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1111
SCALE: 1"=20'
DATE: 5/25/2006
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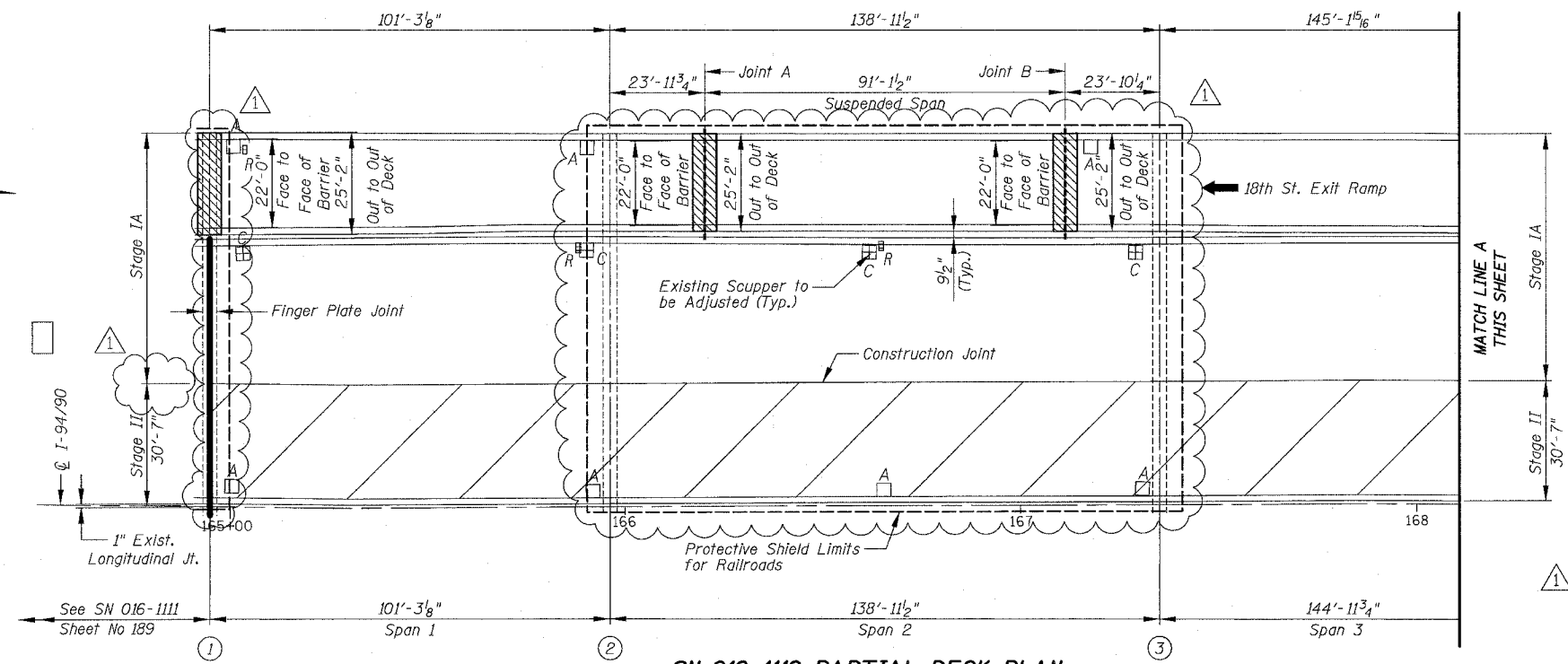
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	190
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62581



SN 016-1110 PARTIAL DECK PLAN



SN 016-1110 PARTIAL DECK PLAN

For Notes, see Sheet No. 174 and for Legend see Sheet No. 159.

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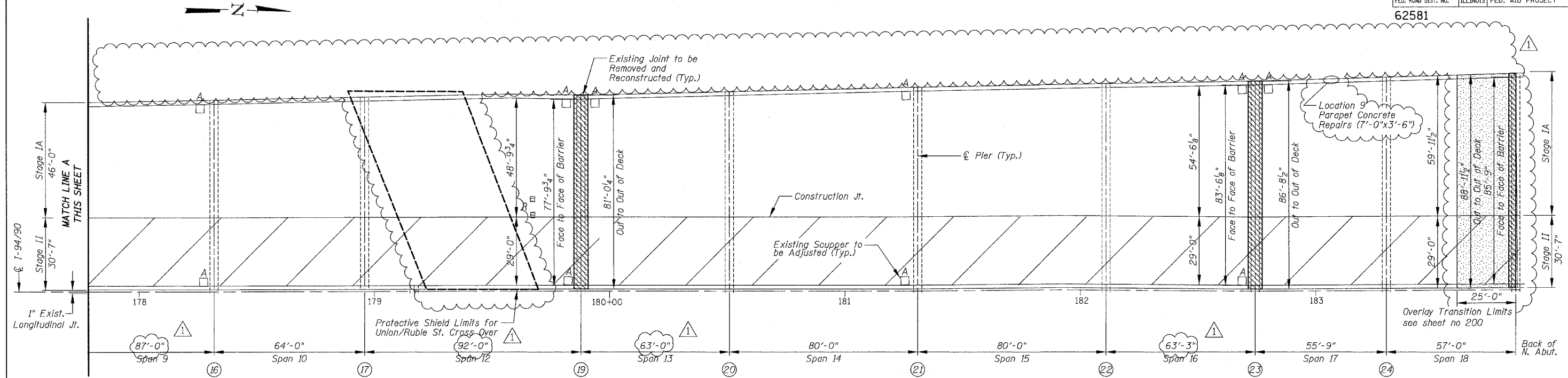
REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-1110
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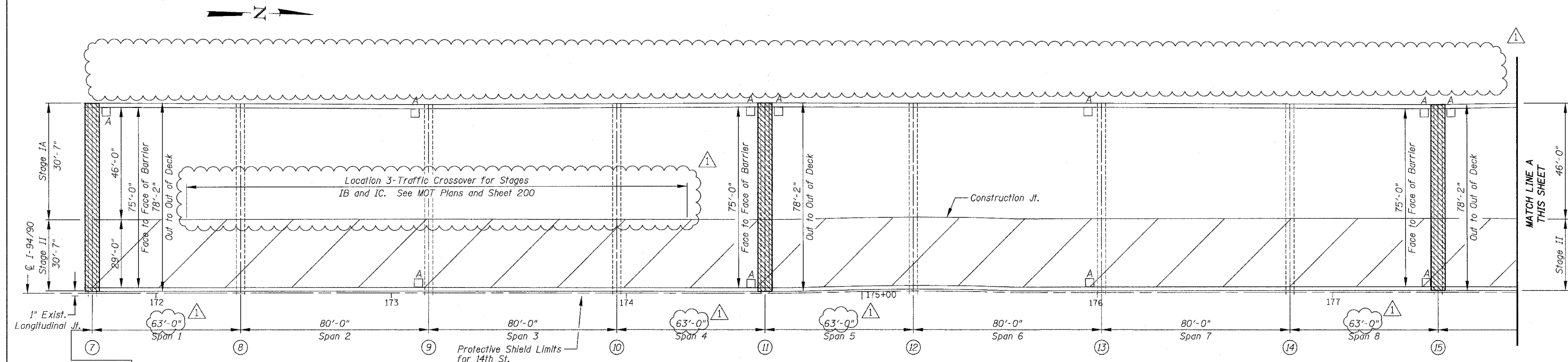
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	191
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62581



SN 016-0137 PARTIAL DECK PLAN



SN 016-0137 PARTIAL DECK PLAN

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REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARTIAL DECK PLAN
SN 016-0137

SCALE: 1"=20'
DATE: 5/25/2006
DRAWN BY: BDC
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LOCATION & DESIGNATION OF JOINTS

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	192
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62581

STRUCTURE NUMBER (SN)	PIER	DESIGNATION 1 CROSS SECTIONS THRU JOINTS		EXISTING JOINT		LENGTH CONTR. TO EXP. (ft)	SKEW ANGLE (°)	PROPOSED JOINT		LENGTH ALONG C OF JOINT FACE TO FACE OF PARAPET	DESIGNATION 2	
		EXISTING	PROPOSED	TYPE	SIZE			TYPE	"A"		STAGED AND NON STAGED CONSTRUCTION	
016-1117	S. Abut.	2a	3	PJS	4"	88'-0"	9°39'0"	Ⓞ	2 3/4 "	31'-4 1/2"	B	
	1	4a	2	PJS	2 1/2 "	Fixed	5°43'12"	Ⓞ	1"	31'-0 3/8"	B	
	2	4b	4	PJS	4"	88'-0"	1°46'12"	Ⓞ	2 3/4 "	30'-10 3/4"	B	
	3	4b	4	PJS	4"	100'-0"	2°43'48"	Ⓞ	2 3/4 "	30'-11"	A	
	4	4b	4	PJS	4"	111'-6"	7°45'0"	Ⓞ	2 3/4 "	31'-1 1/8"	A	
	5	4b	4	PJS	4"	111'-6"	18°46'12"	Ⓞ	2 3/4 "	31'-7 3/4"	A	
	6	7	4	Neoprene	2"	75'-0"	16°8'60"	Ⓞ	1 3/4 "	32'-1 3/8"	A	
	7	7	4	Neoprene	2"	92'-0"	20°16'12"	Ⓞ	2 3/4 "	32'-10"	A	
	8	6	1	Neoprene	2"	168'-0"	23°16'12"	Ⓞ	2 1/2 "	33'-7"	A	
	11	1	1	PJS	2 1/2 "	107'-0"	31°18'0"	Ⓞ	2 1/2 "	38'-6 1/4"	A	
	13	6	1	Neoprene	2"	64'-0"	34°55'12"	Ⓞ	2 1/2 "	41'-2 1/4"	B	
	15	1	1	PJS	2 1/2 "	180'-0"	27°46'48"	Ⓞ	2 1/2 "	39'-7 3/4"	B	
	18	6	1	Neoprene	2"	188'-0"	19°10'12"	Ⓞ	2 1/2 "	76'-7 1/8"	B	
	19	7	4	Neoprene	2"	97'-0"	18°42'0"	Ⓞ	2 3/4 "	68'-8 1/8"	B	
	20	7	4	Neoprene	2"	97'-0"	18°42'0"	Ⓞ	2 3/4 "	66'-6 1/2"	B	
	21	7	4	Neoprene	2"	97'-0"	18°42'0"	Ⓞ	2 3/4 "	66'-6"	B	
	22	7	4	Neoprene	2"	97'-0"	18°42'0"	Ⓞ	2 3/4 "	66'-6"	B	
	23	7	4	Neoprene	2"	75'-0"	18°42'0"	Ⓞ	2 3/4 "	66'-0"	B	
	26	-	-	FPJ	4 1/2 "	646'-0"	18°42'0"	FPJ	-	SEE NOTES	-	
	016-1067	S. Abut.	2a	3	PJS	2 1/2 "	76'-0"	17°42'0"	Ⓞ	1 3/4 "	47'-9 3/8"	B
		A2	6	1	Neoprene	2"	153'-0"	9°52'12"	Ⓞ	2 1/2 "	40'-7 3/8"	B
		A4	4b	4	PJS	2 1/2 "	76'-0"	2°10'12"	Ⓞ	1 3/4 "	40'-0 5/8"	B
		A5	4b	4	PJS	2 1/2 "	75'-0"	0°49'48"	Ⓞ	1 3/4 "	40'-0 1/4"	A
		A6	1	1	PJS	2 1/2 "	143'-0"	4°49'12"	Ⓞ	2 1/2 "	40'-1 1/8"	A
A9		1	1	PJS	2 1/2 "	286'-0"	13°52'48"	Ⓞ	2 1/2 "	41'-3 1/4"	A	
A12		6	1	Neoprene	2"	92'-0"	17°38'0"	Ⓞ	2 3/4 "	46'-3 1/4"	A	
A13		1	1	PJS	2 1/2 "	94'-0"	46°15'0"	Ⓞ	2 3/4 "	65'-5"	B	
A15		1	1	PJS	2 1/2 "	186'-0"	35°34'12"	Ⓞ	2 1/2 "	62'-3"	B	
016-1116		3	6	1	Neoprene	4"	116'-0"	18°42'20"	Ⓞ	2 1/2 "	76'-4 1/8"	E
016-1115		1	6	1	Neoprene	4"	162'-0"	0°0'0"	Ⓞ	2 1/2 "	71'-5 1/2"	F
	5	6	1	Neoprene	4"	281'-0"	0°0'0"	Ⓞ	2 1/2 "	85'-2 1/2"	F	
	8	4b	4	PJS	2 1/2 "	119'-0"	0°0'0"	Ⓞ	2 3/4 "	52'-10 1/2"	F	
	9	6	1	Neoprene	2"	150'-0"	0°42'0"	Ⓞ	2 1/2 "	55'-1 3/4"	F	
	10	1	1	PJS	4"	80'-0"	2°48'0"	Ⓞ	2 3/4 "	55'-3 1/8"	E	
	12	4b	4	PJS	4"	80'-0"	9°40'12"	Ⓞ	2 3/4 "	55'-7 5/8"	E	
	13	7	4	Neoprene	2"	80'-0"	13°22'12"	Ⓞ	2 3/4 "	56'-4"	E	
	14	7	4	Neoprene	2"	80'-0"	16°58'12"	Ⓞ	2 3/4 "	57'-3 3/8"	E	
	15	6	1	Neoprene	2"	80'-0"	20°38'50"	Ⓞ	2 3/4 "	58'-5 1/8"	E	
	16	6	1	Neoprene	2 1/2 "	134'-0"	3°37'12"	Ⓞ	2 1/2 "	54'-11 1/8"	D	
	18	6	1	Neoprene	2 1/2 "	184'-0"	4°7'12"	Ⓞ	2 1/2 "	55'-0 1/4"	E	
	20	6	1	Neoprene	2 1/2 "	178'-0"	15°27'0"	Ⓞ	2 1/2 "	56'-9 1/2"	D	
	21	1	1	PJS	2 1/2 "	159'-0"	15°45'0"	Ⓞ	2 1/2 "	56'-11 1/8"	B	
	22	6	1	Neoprene	4"	149'-0"	15°49'12"	Ⓞ	2 1/2 "	57'-4 1/8"	C	
	016-1046 (Ramp C)	5	6	1	Neoprene	4"	132'-0"	2°10'48"	Ⓞ	2 1/2 "	26'-0"	C
		53	6	1	Neoprene	2"	212'-0"	0°0'0"	Ⓞ	2 1/2 "	26'-0"	A
57		6	1	Neoprene	4"	331'-0"	0°0'0"	Ⓞ	2 1/2 "	26'-0"	C	
016-1050 (Ramp G)	F1	6	1	Neoprene	4"	89'-0"	6°5'60"	Ⓞ	2 3/4 "	39'-9 1/2"	C	
	74	6	1	Neoprene	2 1/2 "	163'-0"	0°0'0"	Ⓞ	2 1/2 "	32'-11"	C	
	78	6	1	Neoprene	4"	223'-0"	0°0'0"	Ⓞ	2 1/2 "	26'-1 1/2"	C	
	80	6	1	Neoprene	2"	156'-0"	0°0'0"	Ⓞ	2 1/2 "	26'-0"	C	
	82	6	1	Neoprene	2"	148'-0"	0°0'0"	Ⓞ	2 1/2 "	26'-0"	C	
	84	6	1	Neoprene	2"	140'-0"	0°0'0"	Ⓞ	2 1/2 "	26'-0"	C	
	86	6	1	Neoprene	4"	243'-0"	0°0'0"	Ⓞ	2 1/2 "	26'-0"	D	
	Abut. / 89	2a	3	PJS	2 1/2 "	77'-0"	0°0'0"	Ⓞ	1 3/4 "	26'-0"	D	
016-1062 (Ramp F)	21	1	1	PJS	2 1/2 "	167'-3"	15°45'0"	Ⓞ	2 1/2 "	67'-7 1/8"	D	
	22	6	1	Neoprene	4"	149'-0"	15°49'12"	Ⓞ	2 1/2 "	49'-9 1/8" ⚠	D	
	F1	6	1	Neoprene	4"	62'-0"	4°45'0"	Ⓞ	1 3/4 "	37'-3 1/8"	B	
	65	6	1	Neoprene	2"	131'-0"	2°27'0"	Ⓞ	2 1/2 "	31'-0"	A	
	67	6	1	Neoprene	2"	131'-0"	0°0'0"	Ⓞ	2 1/2 "	31'-0"	C	
	69	6	1	Neoprene	2"	131'-0"	0°0'0"	Ⓞ	2 1/2 "	31'-0"	C	
	71	5a	7	PJS	4"	132'-0"	0°0'0"	Ⓞ	2 1/2 "	31'-0"	C	

Notes:
 Dimension "A" indicates joint opening at 50°F
 Joints indicated as "Strip Seal Expansion Joint Assembly" shall be strip seal only.
 For existing and proposed sections thru joints for Designation 1, see sheets 194 and 195.
 For existing and proposed plans for Designation 2, staged and non-staged construction, see sheets 196 to 198.
 The dimensions for the length of the joints are given from face to face of parapet.
 For approximate dimensions of the joints per stage see Partial Plan Sheets 174 to 191.
 For dimensions of Finger Plate Joints see Plan Detail Sheets 212 to 260.

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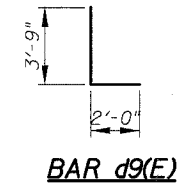
- FPJ- Finger Plate Joint
- ① Strip Seal Expansion Joint Assembly
 - ② Bridge Joint System (Fixed)
 - ③ Bridge Joint System (Expansion), 1"
 - ④ Bridge Joint System (Expansion), 1 5/8"

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) SB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS LOCATION AND DESIGNATION OF JOINTS 1
NAME	DATE	
ADDENDUM NO. 1	6/29/06	SCALE: N/A DATE: 5/25/2006
		DRAWN BY: BDC CHECKED BY: BLU

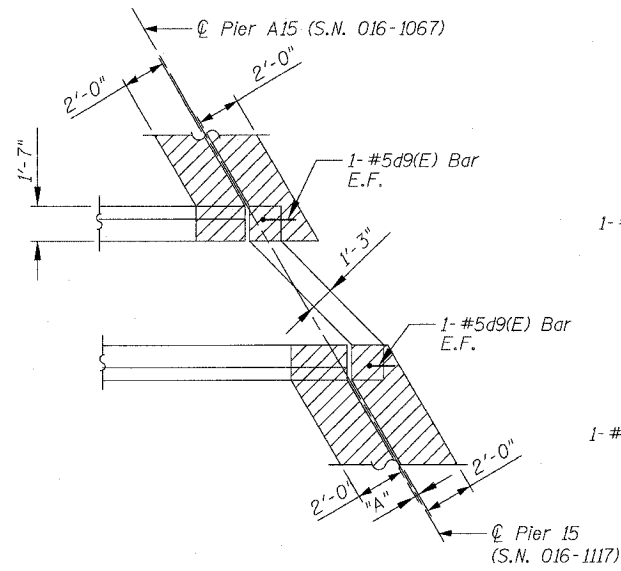
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	199
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
62581				

**CLOSURE WALL REINFORCEMENT
BAR SCHEDULE**

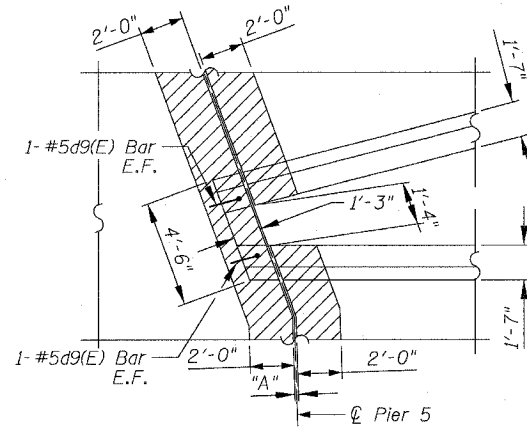
STRUCTURE	PIER	BAR	NO.	SIZE	LENGTH	SHAPE
016-1117	15	d9(E)	2	#5	5'-9"	L
016-1067	A15	d9(E)	2	#5	5'-9"	L
016-1115	5	d9(E)	4	#5	5'-9"	L
016-1050	F1	d9(E)	2	#5	5'-9"	L
016-1062	F1	d9(E)	2	#5	5'-9"	L
016-1113	A10	d9(E)	4	#5	5'-9"	L
016-1112	12	d9(E)	4	#5	5'-9"	L



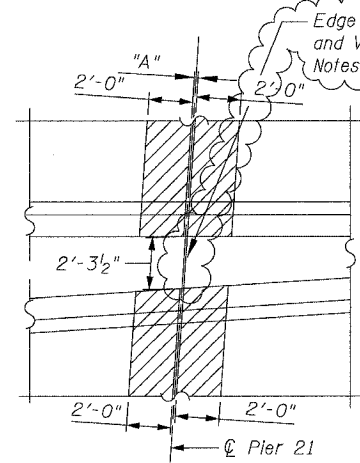
Cut #5d9(E) Bar in the field to fit the Closure Wall



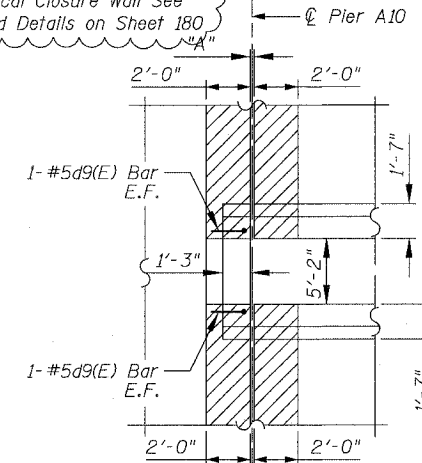
**CLOSURE WALL DETAIL
SN 016-1117 PIER 15
SN 016-1067 PIER A15**
(NTS)



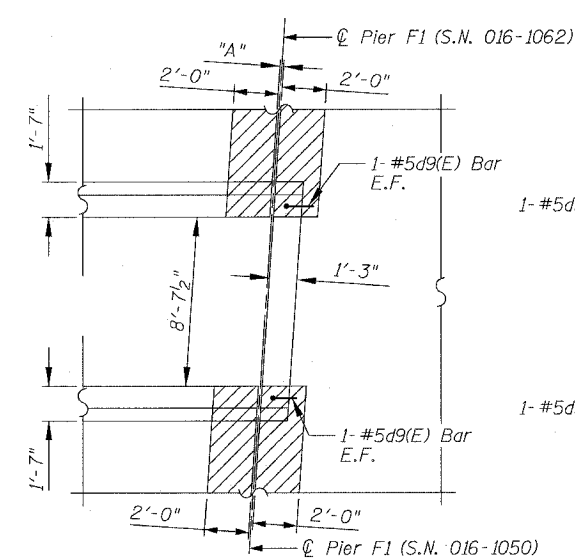
**CLOSURE WALL DETAIL
SN 016-1115 PIER 5**
(NTS)



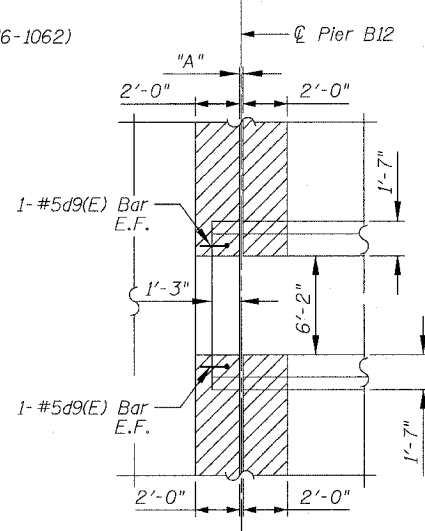
**CLOSURE WALL DETAIL
SN 016-1115 PIER 21**
(NTS)



**CLOSURE WALL DETAIL
SN 016-1113 PIER A10**
(NTS)



**CLOSURE WALL DETAIL
SN 016-1050 PIER F1 &
SN 016-1062 PIER F1**
(NTS)



**CLOSURE WALL DETAIL
SN 016-1112 PIER 12 & B12**
(NTS)

**CLOSURE WALL
BILL OF MATERIALS**

ITEM DESCRIPTION	UNIT	QUANTITY	016-1117	016-1067	016-1115	016-1050	016-1062	016-1113	016-1112
Reinforcement Bars, Epoxy Coated	Pound	120	12	12	24	12	12	24	24

REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
CLOSURE WALL
GENERAL DETAILS

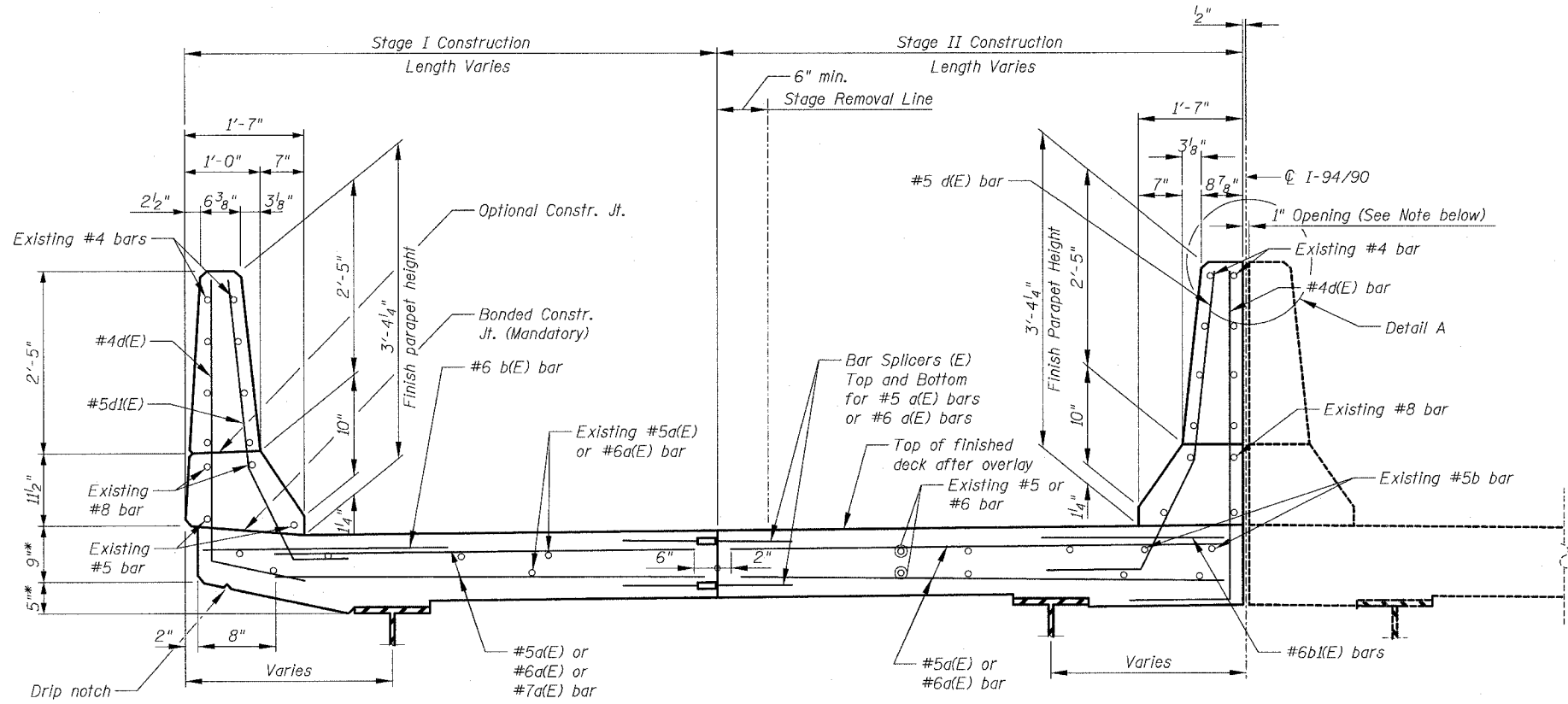
SCALE: NTS
DATE: 5/25/2006

DRAWN BY: BDC
CHECKED BY: BLU

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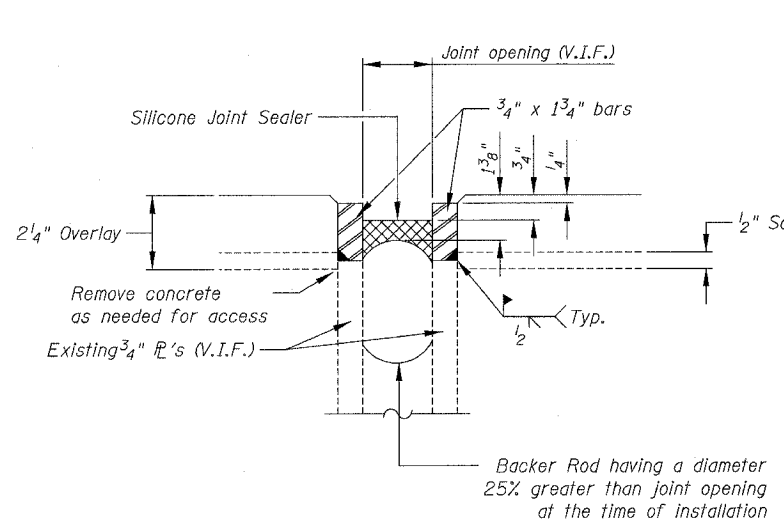
NA6600001BRIDGE 21 SHEETS 660-21-199 4004E PM 6/29/2006

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	201
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				



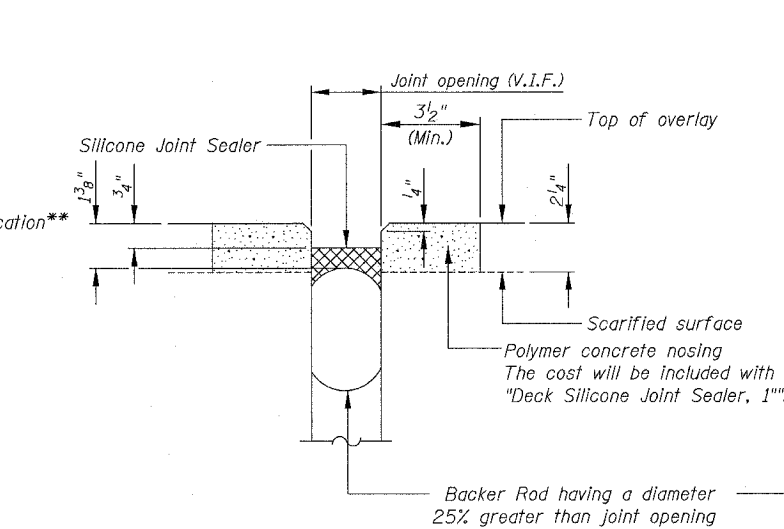
TYPICAL CROSS SECTION ALONG JOINT RECONSTRUCTION

* Match Existing

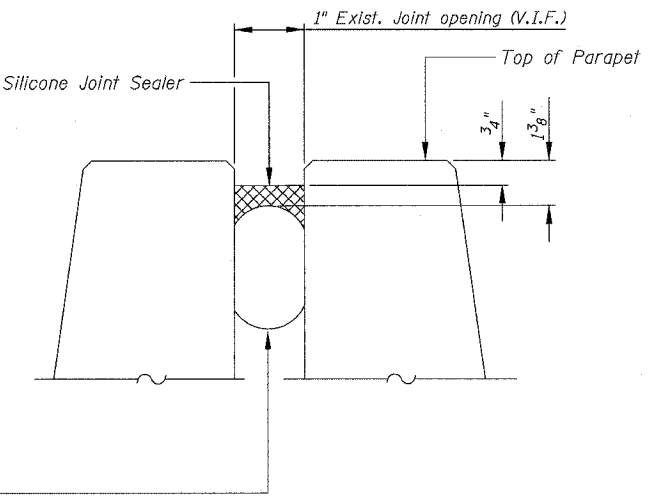


DECK SILICONE JOINT SEALER, 1" DETAIL

**Care shall be taken not to damage existing R's during Hydroscarification.
 V.I.F. = Verify In Field
 If existing joint does not have steel plates see alternate Deck Silicone Joint Sealer, 1" Detail.
 Cost of existing joint removal included with "Bridge Deck Hydro-Scarification, 1/2".



ALTERNATE DECK SILICONE JOINT SEALER, 1" DETAIL



SILICONE JOINT SEALER, 1" - PARAPET DETAIL A

Existing longitudinal joint between concrete parapets shall be removed and replaced with Silicone Joint Sealer. The cost of the existing longitudinal joint removal will be included in the cost of "Silicone Joint Sealer, 1".

Notes:
 Existing longitudinal reinforcement in slab and barriers shall be cleaned, straightened and incorporated into new construction.
 Bend #4 vertical parapet bars in field to clear the top flange of fascia girders as needed.
 Remove existing rails, posts, anchors or other attachments as required for the partial removal of barriers for the joint reconstruction. Reinstall removed components as required to restore original condition. Cost included with "Concrete Removal" and "Concrete Superstructure".
 Place bars in parapet to maintain 1/2" cl.
 Care should be exercised during concrete removal not to damage existing shear studs.

BILL OF MATERIAL

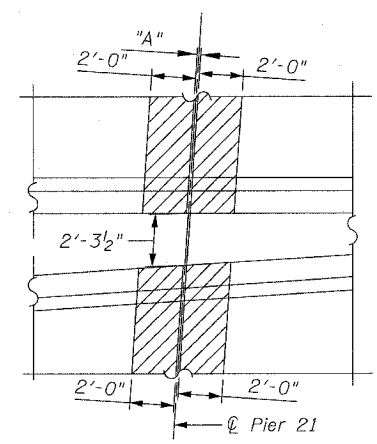
Item	Unit	Total
Deck Silicone Joint Sealer, 1"	Foot	117
Silicone Joint Sealer, 1"	Foot	10,486

REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

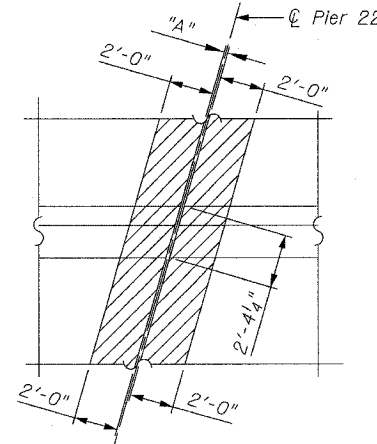
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 SB DAN RYAN ELEVATED BRIDGE
 REPAIR FROM 15TH TO 28TH STREETS
 TYPICAL DECK SLAB CROSS SECTIONS
 AND SILICONE JOINT SEALER DETAILS
 SCALE: NTS
 DATE: 5/25/2006
 DRAWN BY: BDC
 CHECKED BY: BLU

BOWMAN, BARRETT & ASSOCIATES INC.
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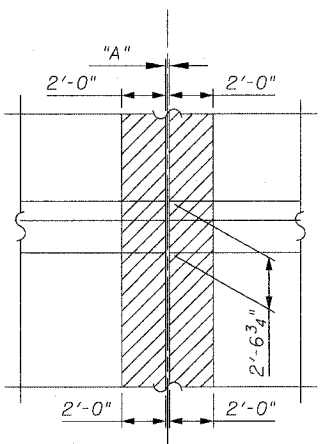
40105 FM 6/29/2006



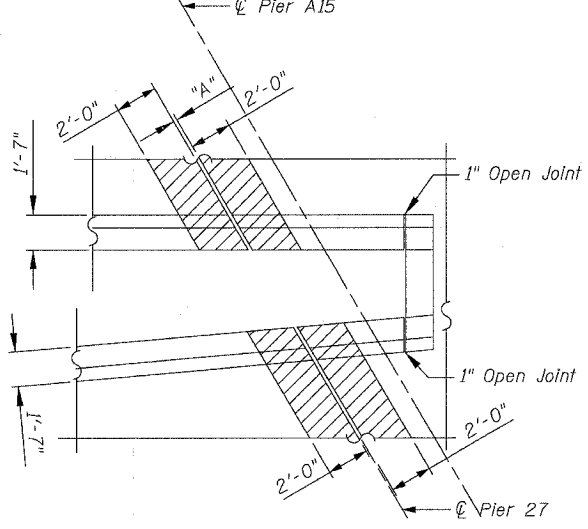
CLOSURE WALL DETAIL
SN 016-1115 PIER 21
(NTS)



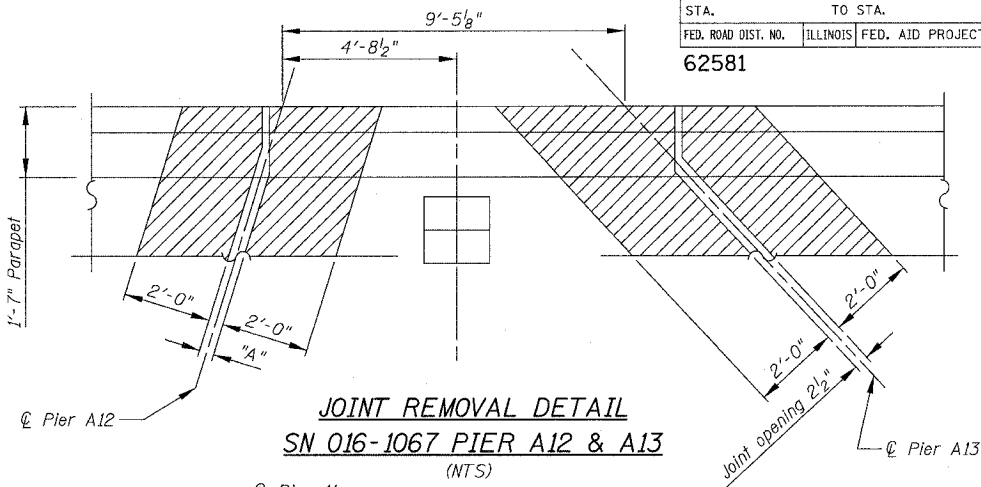
MEDIAN DETAIL
SN 016-1115 PIER 22
(NTS)



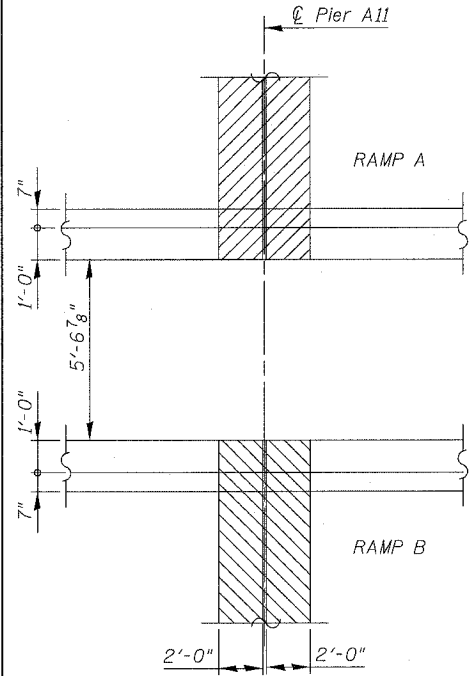
MEDIAN DETAIL
SN 016-1113 PIER 3
(NTS)



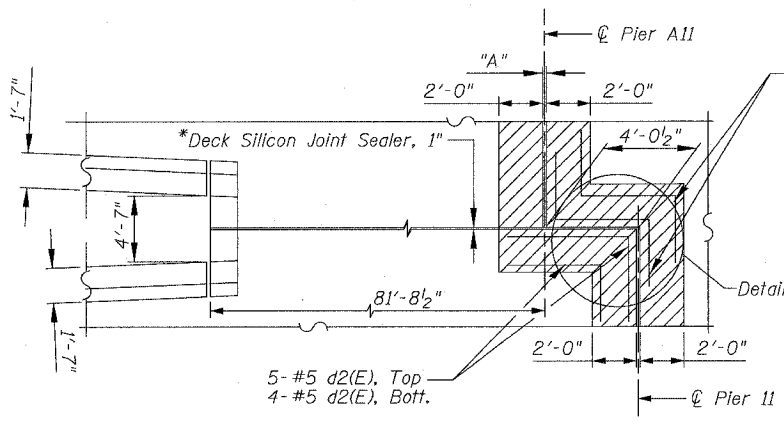
CLOSURE WALL DETAIL
SN 016-1112 PIER 27
(NTS)



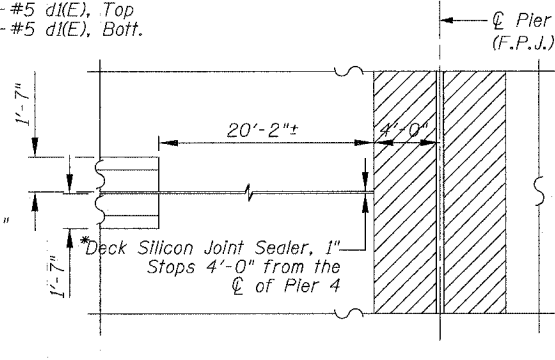
JOINT REMOVAL DETAIL
SN 016-1067 PIER A12 & A13
(NTS)



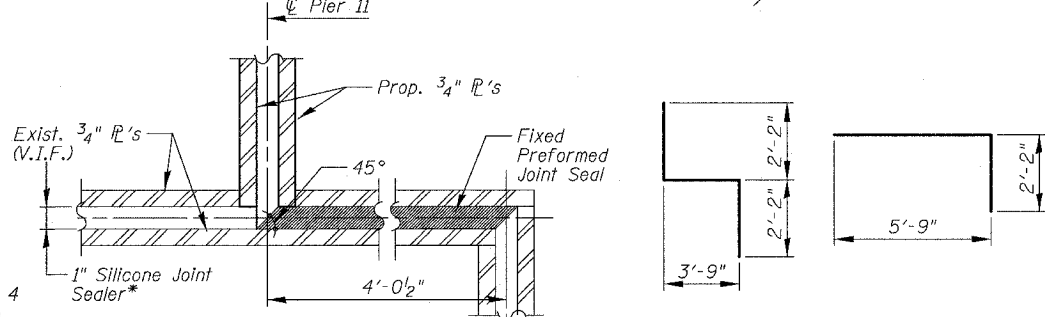
MEDIAN DETAIL
SN 016-1113 (RAMP A)
PIER A10
(NTS)



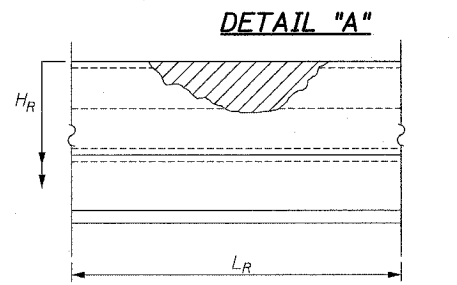
JOINT DETAIL
SN 016-1113 PIERS 11 & A11
(NTS)



JOINT REMOVAL DETAIL
SN 016-1110 PIER 4
(NTS)



DETAIL "A"



PARAPET REPAIRS - DETAIL "B"
(Front face of Parapet)

PARAPET REPAIR DIMENSIONS AND BILL OF MATERIALS

S/N & Location	016-1117		016-1067		016-1062		016-1113		016-1110		016-0137
	Location 1	Location 2	Location 2A	Location 3	Location 4	Location 5	Location 6	Location 7	Location 8	Location 9	
Lr	4'-0"	3'-0"	12'-0"	5'-0"	4'-0"	6'-0"	5'-0"	12'-0"	3'-0"	7'-0"	
Hr	2'-0"	2'-0"	3'-6"	3'-6"	2'-0"	2'-0"	2'-0"	3'-6"	2'-0"	3'-6"	
Concrete Removal (Cu. Yd.)	0.1	0.1	1.0	0.5	0.1	0.2	0.2	1.0	0.1	0.6	
Concrete Superstructure (Cu. Yd.)	0.2	0.2	1.3	0.6	0.2	0.3	0.3	1.3	0.2	0.8	
Reinforcement Bars Epoxy Coated (Pound)	20	20	250	110	20	30	30	250	20	160	
Mechanical Splice (Each)	16	16	44	30	16	16	16	44	16	34	

PIERS 11 & A11 (SN 016-1113) BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
d1(E)	9	#5	8'-1"	L
d2(E)	9	#5	7'-11"	L
Item			Unit	Qty.
Reinforcement Bars, Epoxy Coated			Pound	150

Notes for Parapet Concrete Repair:

- H_R and L_R indicate dimensions for concrete removal. Perimeters of concrete removal areas (both front and back) shall be saw cut 3/4" prior to removal of concrete.
- Concrete removal shall extend a minimum of 6" past damage or to joint if within 2'-0".
- The cost of saw cuts shall be included in the cost of "Concrete Removal."
- Existing bars to be cleaned, straightened, and incorporated in new construction as directed by Engineer, see Note 6.
- Removal of any temporary guardrail attached to parapet will be included in Concrete Removal.
- Contractor shall provide new reinforcement bars as shown on Typical Cross Section on Sheet 201 to replace damaged bars as directed by Engineer. Utilize bars d₁(E) and d₃(E) as shown on sheet 211 for verticals. Quantity shown in table is based on full replacement over removal area.
- Existing bars to be replaced shall be cut-off and an approved mechanical splice used to connect to new bars. New vertical bars shall be either drilled and grouted in 9" deep holes in accordance with Art. 584 of the Standard Specifications or a mechanical splice provided to existing verticals, modify bars d₁(E) and d₃(E) as required for either approach.
- Cut bars in field to fit as required.

- Notes:
- At the 4'-0 1/2" section cut the Preformed Joint Seal at 45° and vulcanize in the field.
 - The cost for the 4'-0 1/2" section shall be incidental with the total cost of the fixed joints.
 - The joints manufacturer should be consulted to ensure that a proper bond will be provided between the Silicone Joint and Fixed Joint.

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REVISIONS	NAME	DATE
1	ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
PARAPET REPAIR AND
JOINT REMOVAL DETAILS
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: BLU

1/1660/0400 BRIDGE 20 SHEETS 6602.2.DWG 4/20/06 PM

REINFORCEMENT BAR SCHEDULES
SN 016-1117

62581

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA/IB	Stage II		Stage IA/IB	Stage II	Stage IA/IB		Stage II	
						Side A	Side B	Side A	Side B
S. Abut	a1		#6	33'-6"			5	6	
	a2		#7	33'-6"			5		
	b1		#6	4'-0"			10		
	u1		#5	2'-8"				35	
1	a3		#7	33'-0"			5	5	
	a4		#5	33'-0"			4	4	
	b1		#6	4'-0"			10	10	
2	a4		#5	33'-0"			14	9	
	b1		#6	4'-0"			16	10	
	x2		#5	4'-2"			34		
3	a4		#5	33'-0"			14	9	
	b1		#6	4'-0"			16	10	
	x2		#5	4'-2"			34		
4	a4		#5	33'-0"			14	9	
	b1		#6	4'-0"			16	10	
	x2		#5	4'-2"			34		
5	a5		#6	33'-11"			8		
	a6		#5	33'-11"			6	9	
	b1		#6	4'-0"			16	10	
	x2		#5	4'-2"			34		
6	a7		#6	34'-5"			8	5	
	a8		#5	34'-5"			6	4	
	b1		#6	4'-0"			16	10	
	x2		#5	4'-2"			35		
7	a9		#6	35'-3"			8	5	
	a10		#5	35'-3"			6	4	
	b1		#6	4'-0"			16	10	
	x2		#5	4'-2"			36		
8	a11		#6	36'-1"			5	5	
	a12		#5	36'-1"			5	4	
	b1		#6	4'-0"			10	10	
11	a13		#6	22'-1"			2x5	2x5	
	a14		#5	21'-9"			2x4	2x4	
	b1		#6	4'-0"			10	10	
13	x1		#5	2'-3"			23	23	
	a15		#6	23'-3"			2x9		
	a16		#5	23'-0"				2x9	
	b1		#6	4'-0"			10	10	
	x1		#5	2'-3"				44	
15	a17		#7	23'-6"			2x9		
	a18		#5	22'-10"				2x9	
	b1		#6	4'-0"			10	10	
18	a20		#5	31'-7"			9	9	
	b1		#6	4'-0"			5	5	
19	a20		#5	31'-7"			9	14	
	b1		#6	4'-0"			5	8	
	x2		#5	4'-2"				32	
20	a22	a20	#5	36'-7"	31'-7"	9	14	9	14
	b1	b1	#6	4'-0"	4'-0"	5	8	5	8
	x2	x2	#5	4'-2"	4'-2"		37		32
21	a22	a20	#5	36'-7"	31'-7"	9	14	9	14
	b1	b1	#6	4'-0"	4'-0"	5	8	5	8
	x2	x2	#5	4'-2"	4'-2"		37		32
22	a22	a20	#5	36'-7"	31'-7"	9	14	9	14
	b1	b1	#6	4'-0"	4'-0"	5	8	5	8
	x2	x2	#5	4'-2"	4'-2"		37		37
23	a22	a20	#5	36'-7"	31'-7"	9	14	9	14
	b1	b1	#6	4'-0"	4'-0"	5	8	5	8
	x2	x2	#5	4'-2"	4'-2"		37		31

Parapet Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA/IB	Stage II		Stage IA/IB	Stage II	Stage IA/IB		Stage II	
						Side A	Side B	Side A	Side B
S. Abut	d1		#5	4'-7"			6	4	
	d3		#4	4'-10"			3	2	
	d5		#4	6'-7"			3	2	
1	d1		#5	4'-7"			6	6	
	d3		#4	4'-10"			3	3	
	d5		#4	6'-7"				3	
2	d1		#5	4'-7"			5	6	
	d3		#4	4'-10"			5	3	
	d6		#4	6'-4"			3		
3	d2		#4	5'-10"			5		
	d1		#5	4'-7"			5	6	
	d3		#4	4'-10"			5	3	
	d6		#4	6'-4"				3	
4	d2		#4	5'-10"			5	3	
	d1		#5	4'-7"			5	6	
5	d3		#4	4'-10"			5	3	
	d2		#4	5'-10"				3	
	d1		#5	4'-7"			5	6	
	d3		#4	4'-10"			5	3	
6	d6		#4	6'-4"			5		
	d2		#4	5'-10"			5		
	d1		#5	4'-7"			5	6	
	d3		#4	4'-10"			5	3	
7	d6		#4	6'-4"				3	
	d2		#4	5'-10"			5	3	
	d1		#5	4'-7"			5	6	
	d3		#4	4'-10"			5	3	
8	d2		#4	5'-10"			3	3	
	d1		#5	4'-7"			6	6	
11	d3		#4	4'-10"			3	3	
	d2		#4	5'-10"			3	3	
	d1		#5	4'-7"			6	6	
13	d3		#4	4'-10"			3	3	
	d1		#5	4'-7"			6	6	
	d3		#4	4'-10"			3	3	
15	d2		#4	5'-10"				3	
	d1		#5	4'-7"			6	6	
	d3		#4	4'-10"			3	3	
	d4		#4	7'-10"			3		
18	d2		#4	5'-10"			3		
	d1		#5	4'-7"			3	3	
	d4		#4	7'-10"			3	3	
19	d1		#5	4'-7"			3	4	
	d10		#4	4'-6"			3	3	
20	d1	d1	#5	4'-7"	4'-7"		4	3	4
	d10	d10	#4	4'-6"	4'-6"		4		4
	d3		#4	4'-10"					
	d2		#4	5'-10"				3	1
	d7		#5	6'-0"				3	1
21	d1		#5	4'-7"			3	4	
	d3		#4	4'-10"					4
	d7		#5	6'-0"					4
	d8		#5	2'-10"			3		
	d9		#4	2'-6"			3		
22	d1		#5	4'-7"			3	4	
	d3		#4	4'-10"			3	4	
	d9		#4	2'-6"				3	4
	d8		#5	2'-10"				3	4
23	d1		#5	4'-7"			3	4	
	d3		#4	4'-10"			3	4	
	d9		#4	2'-6"				3	4
	d8		#5	2'-10"				3	4

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA/IB	Stage IB/IC		Stage IA/IB	Stage IB/IC	Stage IA/IB		Stage IB/IC	
						Side A	Side B	Side A	Side B
18	a21	a16	#5	23'-11"	23'-0"	9	14	9	14
	b1		#6	4'-0"		9	14		
19	a23	a24	#5	23'-2"	15'-4"	9	9	9	9
	b1		#6	4'-0"		5	5		

Parapet Reinforcement Schedule

Location	Bar	Size	Length	Number			
				Side A	Side B	Side A	Side B
18	d1	#5	4'-7"	3	3		
	d3	#4	4'-10"	3	3		
19	d1	#5	4'-7"	3	4		
	d2	#4	5'-10"		4		
	d5	#4	4'-9"	3			

REVISIONS		DATE
NAME	DATE	
ADDENDUM NO. 1	6/29/06	

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
REINFORCEMENT BAR SCHEDULE
SN 016-1117

REINFORCEMENT BAR SCHEDULES

SN 016-1067

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029BR	COOK	344	204
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62581				

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA/IB	Stage IB/IC		Stage IA/IB	Stage IB/IC	Stage IA/IB		Stage IB/IC	
						Side A	Side B	Side A	Side B
S. Abut.	a1	a17	#7	28'-2"	22'-0"	5	2	5	2
	a2	a18	#5	27'-8"	21'-4"	4	2	4	2
	b1	b1	#6	4'-0"	4'-0"	5	-	5	-
	u1	u1	#5	2'-8"	2'-8"	-	23	-	22
A2	a3	a19	#7	22'-2"	21'-3"	5	5	5	5
	a4	a20	#5	22'-6"	20'-7"	4	4	4	4
	b1	b1	#6	4'-0"	4'-0"	10	10	10	10
A4	a5	a21	#7	21'-10"	19'-8"	8	5	8	5
	a6	a22	#5	21'-2"	19'-0"	6	4	6	4
	b1	b1	#5	4'-0"	4'-0"	8	5	8	5
	x2	x2	#5	4'-2"	4'-2"	-	20	-	20
A5	a5	a21	#7	21'-10"	19'-8"	5	5	5	5
	a6	a22	#5	21'-2"	19'-0"	4	4	4	4
	b1	b1	#6	4'-0"	4'-0"	8	5	8	5
	x2	x2	#5	4'-2"	4'-2"	20	-	20	-
A6	a7	a23	#6	22'-0"	20'-4"	5	5	5	5
	a8	a24	#5	21'-4"	19'-8"	4	4	4	4
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
A9	a9	a9	#7	22'-6"	22'-6"	5	-	5	-
	a25	a25	#6	21'-0"	21'-0"	-	5	-	5
	a26	a27	#5	21'-10"	20'-4"	4	4	4	4
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
A12	a10	a28	#6	23'-0"	25'-6"	5	8	5	8
	a11	a29	#5	22'-4"	24'-8"	4	6	4	6
	b1	b1	#6	4'-0"	4'-0"	8	5	8	5
	x2	x2	#5	4'-2"	4'-2"	26	-	25	-
A13	a12	a12	#7	32'-0"	32'-0"	8	-	8	-
	a13	a13	#6	34'-6"	34'-6"	-	5	-	5
	a14	a30	#5	31'-4"	33'-10"	6	4	6	4
	b1	b1	#6	4'-0"	4'-0"	8	5	8	5
	x2	x2	#5	4'-2"	4'-2"	36	-	34	-
A15	a15	a31	#7	29'-1"	36'-1"	5	5	5	5
	a16	a32	#5	31'-4"	33'-10"	4	4	4	4
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5

Parapet Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA/IB	Stage IB/IC		Stage IA/IB	Stage IB/IC	Stage IA/IB		Stage IB/IC	
						Side A	Side B	Side A	Side B
S. Abut.	d1	d1	#5	4'-7"	4'-7"	3	2	3	2
	d11	d11	#4	6'-10"	6'-10"	3	2	3	2
A2	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d11	d11	#4	6'-10"	6'-10"	3	3	3	3
A4	d1	d1	#5	4'-7"	4'-7"	4	3	4	3
	d5	d5	#4	6'-7"	6'-7"	4	-	4	-
A5	d5	d5	#4	6'-7"	6'-7"	4	-	4	-
	d1	d1	#5	4'-7"	4'-7"	4	3	4	3
	d5	d5	#4	6'-7"	6'-7"	-	3	-	3
A6	d11	d11	#4	6'-10"	6'-10"	3	-	3	-
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d6	d6	#4	6'-4"	6'-4"	-	3	-	3
A9	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d5	d5	#4	6'-7"	6'-7"	3	-	3	-
	d11	d11	#4	6'-10"	6'-10"	-	3	-	3
A12	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d11	d11	#4	6'-10"	6'-10"	-	3	-	3
	d5	d5	#4	6'-7"	6'-7"	3	-	3	-
A13	d1	d1	#5	4'-7"	4'-7"	5	3	5	3
	d11	d11	#4	6'-10"	6'-10"	5	3	5	3
A15	d1	d1	#5	4'-7"	4'-7"	5	3	5	3
	d11	d11	#4	6'-10"	6'-10"	3	3	3	3

SN 016-1116

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage II		Stage IA	Stage II	Stage IA		Stage II	
						Side A	Side B	Side A	Side B
3	a1	a2	#5	23'-5"	31'-4"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5

Parapet Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage II		Stage IA	Stage II	Stage IA		Stage II	
						Side A	Side B	Side A	Side B
3	d2	d2	#4	5'-10"	5'-10"	3	-	3	-
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d15	#4	-	5'-7"	-	-	-	-	3
	d19	-	#4	6'-1"	-	-	3	-	-

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
REINFORCEMENT BAR SCHEDULE
SN 016-1067 & 016-1116
SCALE: N/A
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: BLU

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6/29/2006

REINFORCEMENT BAR SCHEDULES
SN 016-1115

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0298R	COOK	344	205
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62581

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage II		Stage IA	Stage II	Stage IA		Stage II	
						Side A	Side B	Side A	Side B
1	a1	a2	#5	22'-8"	29'-11"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
5	a3	a2	#5	26'-5"	29'-11"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
8	a3	a2	#5	26'-5"	29'-11"	14	9	14	9
	b1	b1	#6	4'-0"	4'-0"	8	5	8	5
	x1	x1	#5	2'-3"	2'-3"	-	27	-	30
	x2	x2	#5	4'-2"	4'-2"	27	-	30	-
9	a4	a5	#5	26'-7"	30'-0"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
10	a4	a6	#5	26'-7"	30'-2"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	27	-	31	-
	x2	x2	#5	4'-2"	4'-2"	-	27	-	31
12	a7	a6	#5	26'-11"	30'-2"	14	9	14	9
	b1	b1	#6	4'-0"	4'-0"	8	5	8	5
	x1	x1	#5	2'-3"	2'-3"	-	28	-	31
	x2	x2	#5	4'-2"	4'-2"	28	-	31	-
13	a8	a6	#5	27'-8"	30'-2"	14	9	14	9
	b1	b1	#6	4'-0"	4'-0"	8	5	8	5
	x2	x2	#5	4'-2"	4'-2"	28	-	31	-
14	a8	a9	#5	27'-8"	31'-2"	14	9	14	9
	b1	b1	#6	4'-0"	4'-0"	8	5	8	5
	x2	x2	#5	4'-2"	4'-2"	28	-	32	-
15	a10	a11	#5	28'-6"	31'-8"	14	9	14	9
	b1	b1	#6	4'-0"	4'-0"	8	5	8	5
	x2	x2	#5	4'-2"	4'-2"	28	-	32	-
16	a4	a5	#5	26'-7"	30'-0"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
18	a12	a13	#5	27'-1"	29'-6"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
20	a14	a15	#5	27'-3"	30'-5"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
21	a16	a17	#5	25'-8"	31'-7"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	28	28	32	32
22	a18	a2	#5	27'-5"	29'-11"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	28	-	30	-

Parapet Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage II		Stage IA	Stage II	Stage IA		Stage II	
						Side A	Side B	Side A	Side B
1	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
5	d2	d2	#4	5'-10"	5'-10"	3	2	3	3
	d1	d1	#5	4'-7"	4'-7"	3	2	3	3
8	d2	d2	#4	5'-10"	5'-10"	4	3	-	4
	d1	d1	#5	4'-7"	4'-7"	4	3	4	4
		d16	#4		5'-1"			4	-
9	d2	d2	#4	5'-10"		3	3	-	-
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
		d16	#4		5'-1"			3	3
10	d2	d2	#4	5'-10"		3	4		
	d1	d1	#5	4'-7"	4'-7"	3	4	3	4
		d16	#4		5'-1"			3	4
12	d2	d2	#4	5'-10"	5'-10"	4	3	4	3
	d1	d1	#5	4'-7"	4'-7"	4	3	4	3
13	d2	d2	#4	5'-10"	5'-10"	4	3	4	3
	d1	d1	#5	4'-7"	4'-7"	4	3	4	3
14	d2	d2	#4	5'-10"	5'-10"	4	3	4	3
	d1	d1	#5	4'-7"	4'-7"	4	3	4	3
15	d2	d2	#4	5'-10"	5'-10"	4	3	4	3
	d1	d1	#5	4'-7"	4'-7"	4	3	4	3
16	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
18	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
20	d2	d2	#4	5'-10"	5'-10"	3	3	-	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
		d16	#4		5'-1"			3	-
21	d2	d2	#4	5'-10"	5'-10"	-	3	3	-
	d1	d1	#5	4'-7"	4'-7"	-	3	3	3
		d16	#4		5'-1"			-	3
22		d1	#5		4'-7"			3	3
		d2	#4		5'-4"			3	-
		d2	#4		5'-10"			-	3

Location	Bar		Size	Length		Number			
	Stage IB	Stage IC		Stage IB	Stage IC	Stage IB		Stage IC	
						Side A	Side B	Side A	Side B
21	a19	a20	#5	18'-7"	27'-5"	9	9	2x9	2x9
(016-1062)	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	19	19	56	56
22	a21	a22	#5	19'-0"	35'-0"	9	9	9	9
(016-1062)	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	-	20	-	36

Location	Bar		Size	Length		Number			
	Stage IB	Stage IC		Stage IB	Stage IC	Stage IB		Stage IC	
						Side A	Side B	Side A	Side B
21	d2		#4	5'-10"		3	3		
(016-1062)	d1		#5	4'-7"		3	3		
22	d1		#5	4'-7"		3	3		
(016-1062)	d2		#4	5'-10"		3	3		

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
REINFORCEMENT BAR SCHEDULE
SN 016-1115
SCALE: N/A
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: BLU

6/29/2006 5:33:08 PM

REINFORCEMENT BAR SCHEDULES

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029BR	COOK	344	206
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SN 016-1046

Deck Reinforcement Schedule

Location	Bar	Size	Length	Number	
				Stage IA	
				Side A	Side B
5	a1	#5	28'-2"	9	9
	b1	#6	4'-0"	10	10
	x1	#5	2'-3"	-	24
53	a1	#5	28'-2"	9	9
	b1	#6	4'-0"	10	10
57	a1	#5	28'-2"	9	9
	b1	#6	4'-0"	10	10

Parapet Reinforcement Schedule

Location	Bar	Size	Length	Number	
				Stage IA	
				Side A	Side B
5	d1	#5	4'-7"	6	5
	d14	#4	7'-4"	3	2
	d2	#4	5'-10"	3	-
53	d16	#4	5'-1"	-	3
	d1	#5	4'-7"	6	6
57	d2	#4	5'-10"	6	6
	d1	#5	4'-7"	6	6

SN 016-1062

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IB	Stage IC		Stage IB	Stage IC	Stage IB		Stage IC	
						Side A	Side B	Side A	Side B
20	a19	a20	#5	18'-7"	27'-5"	9	9	2x9	2x9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	19	19	56	56
21	a21	a22	#5	19'-0"	35'-4"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	-	20	-	36
F1	a1		#5	39'-5"		9	9		
	b1		#6	4'-0"		5	10		
	x1		#5	2'-3"		38	-		
69	a2		#5	33'-2"		9	9		
	b1		#6	4'-0"		10	10		
65	a2		#5	33'-2"		9	9		
	b1		#6	4'-0"		10	10		
67	a2		#5	33'-2"		9	9		
	b1		#6	4'-0"		10	10		
71	a2		#5	33'-2"		14	-		
	a3		#7	33'-2"		-	8		
	a4		#6	33'-2"		-	6		
x2	b1		#6	4'-0"		16	16		
	x2		#5	4'-2"		32	32		

SN 016-1050

Deck Reinforcement Schedule

Location	Bar	Size	Length	Number	
				Stage IC	
				Side A	Side B
F1	a2	#5	21'-10"	2 x 14	2 x 9
	b1	#6	4'-0"	16	10
	x2	#5	4'-2"	35	-
74	a3	#5	35'-1"	9	9
	b1	#6	4'-0"	10	10
78	a4	#5	28'-2"	9	9
	b1	#6	4'-0"	10	10
80	a4	#5	28'-2"	9	9
	b1	#6	4'-0"	10	10
82	a4	#5	28'-2"	9	9
	b1	#6	4'-0"	10	10
84	a4	#5	28'-2"	9	9
	b1	#6	4'-0"	10	10
86	a4	#5	28'-2"	9	9
	b1	#6	4'-0"	10	10
Abut. 89	a1	#6	28'-2"	9	4
	b1	#6	4'-0"	10	10
	u3	#5	3'-4"	-	36
x1		#5	2'-3"	36	-

Parapet Reinforcement Schedule

Location	Bar	Size	Length	Number	
				Stage IC	
				Side A	Side B
F1	d1	#5	4'-7"	6	6
	d2	#4	5'-10"	6	6
74	d1	#5	4'-7"	6	6
	d2	#4	5'-10"	6	6
78	d1	#5	4'-7"	6	6
	d2	#4	5'-10"	6	6
80	d1	#5	4'-7"	6	6
	d2	#4	5'-10"	6	6
82	d1	#5	4'-7"	6	6
	d2	#4	5'-10"	6	6
84	d1	#5	4'-7"	6	6
	d2	#4	5'-10"	6	6
86	d1	#5	4'-7"	6	6
	d2	#4	5'-10"	6	6
Abut. 89	d1	#5	4'-7"	6	-
	d2	#4	5'-10"	6	-

Parapet Reinforcement Schedule

Location	Bar	Size	Length	Number	
				Stage IB	
				Side A	Side B
21	d2	#4	5'-10"	3	3
(016-1062)	d1	#5	4'-7"	3	3
(016-1062)	d1	#5	4'-7"	3	3
F1	d2	#4	5'-10"	3	3
	d1	#5	4'-7"	5	6
69	d2	#4	5'-10"	5	6
	d1	#5	4'-7"	6	6
65	d2	#4	5'-10"	6	6
	d1	#5	4'-7"	6	6
67	d2	#4	5'-10"	6	6
	d1	#5	4'-7"	6	6
71	d2	#4	5'-10"	8	8
	d1	#5	4'-7"	8	8

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
REINFORCEMENT BAR SCHEDULE
SN 016-1046, 016-1050, 016-1062, 016-1114
SCALE: N/A
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: BLU

6/29/2006 5:33:41 PM

REINFORCEMENT BAR SCHEDULES

SN 016-1113

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029BR	COOK	344	207
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62581

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IC	Stage II		Stage IC	Stage II	Stage IC		Stage II	
						Side A	Side B	Side A	Side B
3	a1	a2	#5	31'-6"	29'-10"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
5	a3	a4	#5	35'-0"	29'-7"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
7	a5	a6	#5	22'-7"	30'-0"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
10	a7	a8	#5	25'-3"	30'-0"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
11	a9	a10	#5	27'-5"	31'-1"	2 x 9	2 x 4	9	9
	a11		#6	27'-8"			2 x 5		
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	53		32	
B11	a12		#5	29'-0"		9	4		
(Ramp B)	a13		#6	29'-0"			5		
	b1		#6	4'-0"		10	10		
	x1		#5	2'-3"		30	30		

Parapet Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IC	Stage II		Stage IC	Stage II	Stage IC		Stage II	
						Side A	Side B	Side A	Side B
3	d1	d1	#5	4'-7"	4'-7"	6	6	3	3
		d2	#4		5'-10"			3	3
5	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3		3	3
	d14		#4	7'-4"			3		
7	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
10	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
11		d1	#5		4'-7"			3	3
		d2	#4		5'-10"			3	3
B11	d1		#5	4'-7"		3	3		
(Ramp B)	d6		#4	6'-4"		3	3		

Location	Bar		Size	Length		Number			
	Stage IA	Stage IC		Stage IA	Stage IC	Stage IA		Stage IC	
						Side A	Side B	Side A	Side B
A3	a21	a22	#5	18'-8"	28'-11"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
A5	a21	a22	#5	18'-8"	28'-11"	9	4	9	4
	a23	a24	#6	28'-8"	28'-11"		5		5
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
A7	a16	a20	#5	18'-7"	36'-11"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
A9	a16	a19	#5	18'-7"	22'-8"	9	9	2 x 9	2 x 9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	19	19	44	44
A10	a16	a18	#5	18'-7"	21'-2"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
B10		a14	#5		30'-1"			4	9
(Ramp B)		a15	#6		30'-1"			5	
	b1		#6		4'-0"			10	10
A11	a16	a17	#5	18'-7"	21'-3"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	19	19	19	19

Location	Bar		Size	Length		Number			
	Stage IA	Stage IC		Stage IA	Stage IC	Stage IA		Stage IC	
						Side A	Side B	Side A	Side B
A3	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A5	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A7	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
	d11	d11	#4	6'-4"	6'-4"	3		3	
A9	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A10	d1	d1	#5	4'-7"	4'-7"	3	3	3	2
	d2	d2	#4	5'-10"	5'-10"	3	3	3	2
B10	d1		#5	4'-7"		6	5		
(Ramp B)	d2		#4	5'-10"		6	5		
A11	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3		3	
	d15	d15	#4	5'-7"	5'-7"		3		3

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ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
REINFORCEMENT BAR SCHEDULE
SN 016-1113

SCALE: N/A
DATE: 5/25/2006

DRAWN BY: BDC
CHECKED BY: BLU

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REINFORCEMENT BAR SCHEDULES

SN 016-1112

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029BR	COOK	344	208
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

62581

Deck Reinforcement Schedule

Location	Bar			Size	Length			Number					
	Stage IA	Stage IC	Stage II		Stage IA	Stage IC	Stage II	Stage IA		Stage IC		Stage II	
								Side A	Side B	Side A	Side B	Side A	Side B
12	a13		a3	#5	26'-8"		29'-7"	9	9	-	-	9	9
	b1		b1	#6	4'-0"		4'-0"	5	5	-	-	5	5
14	a13		a3	#5	26'-8"		29'-7"	9	9	-	-	9	9
	b1		b1	#6	4'-0"		4'-0"	5	5	-	-	5	5
15	a12		a3	#5	26'-5"		29'-7"	9	9	-	-	9	9
	b1		b1	#6	4'-0"		4'-0"	5	5	-	-	5	5
19	a12		a3	#5	26'-5"		29'-7"	9	9	-	-	9	9
	b1		b1	#6	4'-0"		4'-0"	5	5	-	-	5	5
22	a10		a11	#5	36'-6"		21'-9"	9	9	-	-	2x9	2x9
	b1		b1	#6	4'-0"		4'-0"	5	5	-	-	5	5
26	a8		a9	#5	36'-8"		23'-5"	9	9	-	-	2x9	2x9
	b1		b1	#6	4'-0"		4'-0"	5	5	-	-	5	5
27	a6		a7	#5	37'-3"		24'-3"	9	9	-	-	2x9	2x9
	b1		b1	#6	4'-0"		4'-0"	5	5	-	-	5	5
28	a1	a5	a3	#5	18'-9"	29'-8"	29'-7"	9	9	2x9	2x9	9	9
	b1	b1	b1	#6	4'-0"	4'-0"	4'-0"	5	5	5	5	5	5
	x1	x1	x1	#5	2'-3"	2'-3"	2'-3"	19	19	55	55	34	34
29	a1	a4	a3	#5	18'-9"	24'-5"	29'-7"	9	9	2x9	2x9	9	9
	b1	b1	b1	#6	4'-0"	4'-0"	4'-0"	5	5	5	5	5	5
31	a1	a2	a3	#5	18'-9"	29'-2"	29'-7"	9	9	9	9	9	9
	b1	b1	b1	#6	4'-0"	4'-0"	4'-0"	5	5	5	5	5	5

Parapet Reinforcement Schedule

Location	Bar			Size	Length			Number					
	Stage IA	Stage IC	Stage II		Stage IA	Stage IC	Stage II	Stage IA		Stage IC		Stage II	
								Side A	Side B	Side A	Side B	Side A	Side B
12	d1		d1	#5	4'-7"	-	4'-7"		3	-	-	3	3
	d2		d2	#4	5'-10"	-	5'-10"		3	-	-	3	3
14	d1		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
	d2		d2	#4	5'-10"	-	5'-10"	3	3	-	-	3	3
15	d1		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
	d2		d2	#4	5'-10"	-	5'-10"	3	3	-	-	3	3
19	d1		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
	d2		d2	#4	5'-10"	-	5'-10"	3	3	-	-	3	3
22	d1		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
	d2		d2	#4	5'-10"	-	5'-10"	3	3	-	-	3	3
26	d1		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
	d2		d2	#4	5'-10"	-	5'-10"	3	3	-	-	3	3
27	d1		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
	d2		d2	#4	5'-10"	-	5'-10"	3	3	-	-	3	3
28	d1		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
	d2		d2	#4	5'-10"	-	5'-10"	3	3	-	-	3	3
29	d14		d2	#4	7'-4"	-	5'-10"	3	-	-	-	3	3
	d1		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
31	d2		d1	#5	4'-7"	-	4'-7"	3	3	-	-	3	3
	d1		d18	#4	6'-4"	-	6'-4"	-	3	-	-	-	-
	d14		d17	#4	5'-10"	-	2'-5"	3	-	-	-	3	3
			d18	#5	4'-7"	-	2'-5"	3	3	-	-	3	3
				#4	7'-4"	-	-	-	3	-	-	-	-

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
REINFORCEMENT BAR SCHEDULE
SN 016-1112

SCALE: N/A
DATE: 5/25/2006

DRAWN BY: BDC
CHECKED BY: BLU

5/29/2006 5:34:33 PM

REINFORCEMENT BAR SCHEDULES

SN 016-1112 (RAMP A)

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029BR	COOK	344	209
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage IC		Stage IA	Stage IC	Stage IA		Stage IC	
						Side A	Side B	Side A	Side B
A12	a14	a16	#5	18'-7"	15'-3"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	19	19	19	19
A13	a14	a15	#5	18'-7"	18'-1"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	19	19	19	19
A16	a14	a15	#5	18'-7"	18'-1"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	19	19	19	19
A19	a14	a17	#5	18'-7"	20'-0"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
	x1	x1	#5	2'-3"	2'-3"	19	19	38	38
A21	a18	a19	#5	21'-8"	22'-9"	4	9	4	9
	a20	a21	#6	21'-8"	22'-9"	5	-	5	-
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
A22	a22	a23	#5	26'-6"	25'-4"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
A27	a22	a24	#5	26'-6"	35'-0"	9	9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5

Parapet Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage IC		Stage IA	Stage IC	Stage IA		Stage IC	
						Side A	Side B	Side A	Side B
A12	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A13	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A16	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A19	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A21	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A22	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3
A27	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
	d2	d2	#4	5'-10"	5'-10"	3	3	3	3

SN 016-1112 (RAMP B)

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage IC		Stage IA	Stage IC	Stage IA		Stage IC	
						Side A	Side B	Side A	Side B
B12	a25	a25	#5	26'-4"	-	2 x 9	2 x 9	-	-
	b1	b1	#6	4'-0"	-	-	-	10	10
B14	a18	a18	#5	21'-8"	-	2 x 9	2 x 9	-	-
	b1	b1	#6	4'-0"	-	-	-	10	10
B16	a26	a26	#5	31'-7"	-	-	-	14	9
	b1	b1	#6	4'-0"	-	-	-	16	10
	x2	x2	#5	4'-2"	-	-	-	30	-
	x1	x1	#5	2'-3"	-	-	-	-	30
Abut. B17	a27	a27	#6	27'-1"	-	-	-	4	9
	b1	b1	#6	4'-0"	-	-	-	-	10
	u1	u1	#5	2'-8"	-	-	-	26	-
	x1	x1	#5	2'-3"	-	-	-	-	26

Parapet Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage IC		Stage IA	Stage IC	Stage IA		Stage IC	
						Side A	Side B	Side A	Side B
B12	d1	d1	#5	4'-7"	-	-	-	6	6
	d2	d2	#4	5'-10"	-	-	-	6	-
	d6	d6	#4	6'-4"	-	-	-	-	3
B14	d1	d1	#5	4'-7"	-	-	-	6	6
	d2	d2	#4	5'-10"	-	-	-	6	6
B16	d1	d1	#5	4'-7"	-	-	-	10	6
	d2	d2	#4	5'-10"	-	-	-	10	6
Abut. B17	d1	d1	#5	4'-7"	-	-	-	4	6
	d2	d2	#4	5'-10"	-	-	-	4	6

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
REINFORCEMENT BAR SCHEDULE
SN 016-1112 RAMPS A & B
SCALE: N/A
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: BLU

19:00:00/BRIDGE/21/SHEET/060/21/1000491

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REINFORCEMENT BAR SCHEDULES

SN 016-1111

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	210
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

62581

Location	Bar			Size	Length			Number					
	Stage IA	Stage IC	Stage II		Stage IA	Stage IC	Stage II	Stage IA		Stage IC		Stage II	
								Side A	Side B	Side A	Side B	Side A	Side B
1	a1	a2	a3	#5	18'-9"	15'-8"	33'-6"	9	9	9	9	9	9
	b1	b1	b1	#6	4'-0"	4'-0"	4'-0"	5	5	5	5	5	5
	x1	x1	x1	#5	2'-3"	2'-8"	2'-8"	19	19	16	16	34	34
D7	a4			#6	27'-1"			9	4				
	b1			#6	4'-0"			10	4				
	u1			#5	2'-8"			-	28				

Location	Bar		Size	Length		Number			
	Stage IA	Stage II		Stage IA	Stage II	Stage IA		Stage II	
						Side A	Side B	Side A	Side B
1	d1	d1	#4	5'-10"	5'-10"	3	3	3	3
	d2	d2	#5	4'-7"	4'-7"	3	3	3	3
	d1	d1	#4	5'-10"	5'-10"	6	6	6	6
D7	d1	d1	#5	4'-7"	4'-7"	6	6		

SN 016-1110

Deck Reinforcement Schedule

Location	Bar	Size	Length	Number	
				Stage IA	
				Side A	Side B
D1	a1	#6	24'-2"	5	5
	a2	#5	24'-2"	4	4
	b1	#6	4'-0"	10	10
Susp. Span A	a1	#6	24'-2"	5	5
	a2	#5	24'-2"	4	4
	b1	#6	4'-0"	10	10
	x1	#5	2'-3"	25	25
	a1	#6	24'-2"	-	5
Susp. Span B	a2	#5	24'-2"	10	5
	b1	#6	4'-0"	10	10

Parapet Reinforcement Schedule

Location	Bar	Size	Length	Number	
				Stage IA	
				Side A	Side B
D1	d2	#4	5'-10"	6	6
	d1	#5	4'-7"	6	6
Susp. Span A	d2	#4	5'-10"	6	6
	d1	#5	4'-7"	6	6
Susp. Span B	d2	#4	5'-10"	6	6
	d1	#5	4'-7"	6	6

SN 016-0137

Deck Reinforcement Schedule

Location	Bar		Size	Length		Number			
	Stage IA	Stage IB		Stage IA	Stage IB	Stage IA		Stage IB	
						Side A	Side B	Side A	Side B
7	a1	a2	#5	24'-5"	29'-7"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
11	a1	a2	#5	24'-5"	29'-7"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
15	a1	a2	#5	24'-5"	29'-7"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
19	a3	a2	#5	25'-9"	29'-7"	2 x 9	2 x 9	9	9
	b1	b1	#6	4'-0"	4'-0"	5	5	5	5
23	a5	a2	#5	28'-8"	29'-7"	-	2 x 14	-	14
	a7	a4	#6	28'-10"	29'-7"	2 x 6	-	6	-
	a8	a6	#7	29'-5"	29'-7"	2 x 8	-	8	-
1	b1	b1	#6	4'-0"	4'-0"	8	8	8	8
	x3	x3	#5	8'-3"	8'-3"	56	56	30	30
	a9	a4	#6	29'-9"	29'-7"	2 x 4	-	2 x 4	-
N.Abut	a9	a4	#6	29'-9"	29'-7"	-	2 x 6	-	2 x 6
	a10	a6	#7	30'-5"	29'-7"	-	2 x 8	-	2 x 8
	b1	b1	#6	4'-0"	4'-0"	-	5	-	5
	u2	u2	#5	2'-7"	2'-7"	58	-	58	-

Parapet Reinforcement Schedule

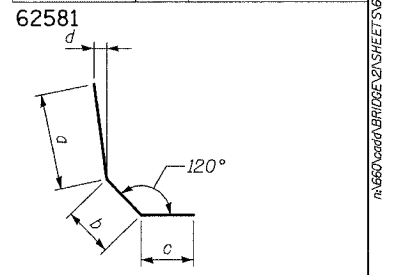
Location	Bar		Size	Length		Number			
	Stage IA	Stage IB		Stage IA	Stage IB	Stage IA		Stage IB	
						Side A	Side B	Side A	Side B
7	d2	d1	#4	5'-10"	4'-7"	3	3	3	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
11	d2	d1	#4	5'-10"	5'-1"	3	3	3	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
15	d2	d1	#4	5'-10"	5'-1"	3	3	3	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
19	d2	d1	#4	5'-10"	5'-1"	3	3	3	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3
23	d2	d1	#4	5'-10"	5'-1"	4	4	4	4
	d1	d1	#5	4'-7"	4'-7"	4	4	4	4
N. Abut.	d2	d1	#4	5'-10"	5'-10"	3	3	3	3
	d1	d1	#5	4'-7"	4'-7"	3	3	3	3

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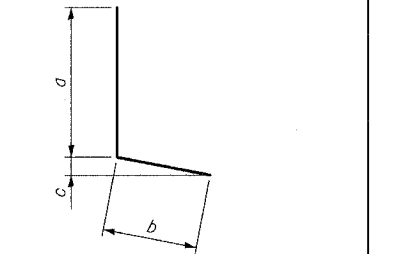
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
REINFORCEMENT BAR SCHEDULE
SN 016-1111, 016-1110 & 016-0137
SCALE: N/A
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: BLU

5/25/2006 5:56:25 PM



BARS d1(E) & d7(E)

BAR	a	b	c	d
d1(E)	2'-6"	1'-7"	6"	3'-4"
d7(E)	2'-6"	1'-4"	2'-2"	3'-4"



BARS d2(E) thru d6(E) & d8(E) thru d16(E)

BAR	a	b	c
d2(E)	3'-10"	2'-0"	2"
d3(E)	3'-10"	1'-0"	-
d4(E)	3'-10"	4'-0"	2"
d5(E)	3'-10"	2'-9"	2"
d6(E)	3'-10"	2'-6"	2"
d7(E)	3'-10"	2'-0"	2"
d8(E)	2'-2"	8"	4"
d9(E)	6"	2'-0"	2"
d10(E)	3'-10"	8"	2"
d11(E)	3'-10"	2'-6"	2"
d12(E)	3'-10"	1'-6"	2"
d13(E)	3'-10"	3'-8"	-
d14(E)	3'-10"	3'-6"	2"
d15(E)	3'-10"	1'-9"	-
d16(E)	3'-10"	1'-3"	2"
d17(E)	5"	2'-0"	2"
d18(E)	5"	2'-0"	2"
d19(E)	3'-10"	2'-3"	2"

SN 016-1117

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	11	#6	33'-6"	—
a2(E)	5	#7	33'-6"	—
a3(E)	10	#7	33'-0"	—
a4(E)	77	#5	33'-0"	—
a5(E)	8	#6	33'-11"	—
a6(E)	15	#5	33'-11"	—
a7(E)	13	#6	34'-5"	—
a8(E)	10	#5	34'-5"	—
a9(E)	13	#6	35'-3"	—
a10(E)	10	#5	35'-3"	—
a11(E)	10	#6	36'-1"	—
a12(E)	9	#5	36'-1"	—
a13(E)	20	#6	22'-1"	—
a14(E)	16	#5	21'-9"	—
a15(E)	18	#6	23'-3"	—
a16(E)	41	#5	23'-0"	—
a17(E)	18	#7	23'-6"	—
a18(E)	18	#5	22'-10"	—
a20(E)	133	#5	31'-7"	—
a21(E)	23	#5	23'-11"	—
a22(E)	92	#5	36'-7"	—
a23(E)	18	#5	23'-2"	—
a24(E)	18	#5	15'-4"	—
b1(E)	426	#6	4'-0"	—
d1(E)	194	#5	4'-7"	⌒
d2(E)	64	#4	5'-10"	⌒
d3(E)	113	#4	4'-10"	⌒
d4(E)	9	#4	7'-10"	⌒
d5(E)	11	#4	6'-7"	⌒
d6(E)	22	#4	6'-4"	⌒
d7(E)	7	#5	6'-0"	⌒
d8(E)	17	#5	2'-10"	⌒
d9(E)	17	#4	2'-6"	⌒
d10(E)	14	#4	4'-6"	⌒
u1(E)	35	#5	2'-8"	⌒
x1(E)	90	#5	2'-3"	⌒
x2(E)	519	#5	4'-2"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	175		
Concrete Superstructure	Cu. Yd.	196.7		
Reinforcement Bars, Epoxy Coated	Pound	28,270		

SN 016-1110

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	25	#6	24'-2"	—
a2(E)	31	#5	24'-2"	—
b1(E)	60	#6	4'-0"	—
d1(E)	36	#5	4'-7"	⌒
d2(E)	36	#4	5'-10"	⌒
x1(E)	50	#5	5'-10"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	15		
Concrete Superstructure	Cu. Yd.	16.7		
Reinforcement Bars, Epoxy Coated	Pound	2,670		

SN 016-1067

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	7	#7	28'-2"	—
a2(E)	6	#5	27'-8"	—
a3(E)	10	#7	22'-2"	—
a4(E)	8	#5	22'-6"	—
a5(E)	23	#7	21'-10"	—
a6(E)	18	#5	21'-2"	—
a7(E)	10	#6	22'-0"	—
a8(E)	8	#5	21'-4"	—
a9(E)	10	#7	22'-6"	—
a10(E)	13	#6	23'-0"	—
a11(E)	10	#5	22'-4"	—
a12(E)	16	#7	32'-0"	—
a13(E)	10	#6	34'-6"	—
a14(E)	10	#5	31'-4"	—
a15(E)	10	#7	29'-1"	—
a16(E)	8	#5	31'-4"	—
a17(E)	7	#7	22'-0"	—
a18(E)	6	#5	21'-4"	—
a19(E)	10	#7	21'-3"	—
a20(E)	8	#5	20'-7"	—
a21(E)	23	#7	19'-8"	—
a22(E)	18	#5	19'-0"	—
a23(E)	10	#6	20'-4"	—
a24(E)	8	#5	19'-8"	—
a25(E)	10	#6	21'-0"	—
a26(E)	8	#5	21'-10"	—
a27(E)	8	#5	20'-4"	—
a28(E)	13	#6	25'-6"	—
a29(E)	10	#5	24'-8"	—
a30(E)	10	#5	33'-10"	—
a31(E)	10	#7	36'-1"	—
a32(E)	8	#5	33'-10"	—
b1(E)	214	#6	4'-0"	—
d1(E)	118	#5	4'-7"	⌒
d5(E)	34	#4	6'-7"	⌒
d6(E)	6	#4	6'-4"	⌒
d11(E)	80	#4	6'-10"	⌒
u1(E)	45	#5	2'-8"	⌒
x2(E)	201	#5	4'-2"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	86		
Concrete Superstructure	Cu. Yd.	95.4		
Reinforcement Bars, Epoxy Coated	Pound	16,030		

SN 016-1111

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	18	#5	18'-9"	—
a2(E)	18	#5	15'-8"	—
a3(E)	18	#5	33'-6"	—
a4(E)	13	#6	27'-1"	—
d1(E)	24	#5	4'-7"	⌒
d2(E)	28	#4	5'-10"	⌒
b1(E)	44	#6	4'-0"	—
x1(E)	138	#5	2'-3"	⌒
u1(E)	28	#5	2'-8"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	16		
Concrete Superstructure	Cu. Yd.	17.1		
Reinforcement Bars, Epoxy Coated	Pound	2,700		

SN 016-1115

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	36	#5	22'-8"	—
a2(E)	77	#5	29'-11"	—
a3(E)	41	#5	26'-5"	—
a4(E)	54	#5	26'-7"	—
a5(E)	36	#5	30'-0"	—
a6(E)	64	#5	30'-2"	—
a7(E)	23	#5	26'-11"	—
a8(E)	46	#5	27'-8"	—
a9(E)	23	#5	31'-2"	—
a10(E)	23	#5	27'-6"	—
a11(E)	23	#5	31'-8"	—
a12(E)	18	#5	27'-1"	—
a13(E)	18	#5	29'-6"	—
a14(E)	18	#5	27'-3"	—
a15(E)	18	#5	30'-5"	—
a16(E)	18	#5	25'-8"	—
a17(E)	18	#5	31'-7"	—
a18(E)	18	#5	27'-5"	—
a19(E)	18	#5	18'-7"	—
a20(E)	18	#5	35'-7"	—
a21(E)	18	#5	19'-0"	—
a22(E)	18	#5	35'-0"	—
b1(E)	350	#6	4'-0"	—
d1(E)	183	#5	4'-7"	⌒
d2(E)	157	#4	5'-10"	⌒
d12(E)	3	#4	5'-4"	⌒
d16(E)	23	#4	5'-1"	⌒
x1(E)	558	#5	2'-3"	⌒
x2(E)	353	#5	4'-2"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	161		
Concrete Superstructure	Cu. Yd.	185.1		
Reinforcement Bars, Epoxy Coated	Pound	25,840		

SN 016-0137

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	108	#5	24'-5"	—
a2(E)	86	#5	29'-7"	—
a3(E)	26	#5	25'-9"	—
a4(E)	36	#6	29'-7"	—
a5(E)	28	#5	28'-8"	—
a6(E)	24	#7	29'-1"	—
a7(E)	12	#6	28'-10"	—
a8(E)	16	#7	29'-5"	—
a9(E)	20	#6	29'-9"	—
a10(E)	16	#7	30'-5"	—
b1(E)	122	#6	4'-0"	—
d1(E)	76	#5	4'-7"	⌒
d2(E)	44	#4	5'-10"	⌒
d16(E)	32	#4	5'-1"	⌒
u2(E)	116	#5	2'-7"	⌒
x3(E)	172	#6	8'-3"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	99		
Concrete Superstructure	Cu. Yd.	108.8		
Reinforcement Bars, Epoxy Coated	Pound	17,190		

SN 016-1062

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	18	#5	39'-5"	—
a2(E)	68	#5	33'-2"	—
a3(E)	8	#7	33'-2"	—
a4(E)	6	#6	33'-2"	—
a19(E)	18	#5	18'-7"	—
a20(E)	18	#5	35'-1"	—
a21(E)	18	#5	19'-0"	—
a22(E)	18	#5	35'-4"	—
b1(E)	147	#6	4'-0"	—
d1(E)	75	#5	4'-7"	⌒
d2(E)	75	#4	5'-10"	⌒
x1(E)	244	#5	2'-3"	⌒
x2(E)	164	#5	4'-2"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	36		
Concrete Superstructure	Cu. Yd.	38.3		
Reinforcement Bars, Epoxy Coated	Pound	8,350		

SN 016-1046

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	54	#5	28'-2"	—
b1(E)	60	#6	4'-0"	—
d1(E)	35	#5	4'-7"	⌒
d2(E)	27	#4	5'-10"	⌒
d14(E)	5	#4	7'-4"	⌒
d16(E)	3	#4	5'-1"	⌒
x1(E)	24	#5	2'-3"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	18		
Concrete Superstructure	Cu. Yd.	17.6		
Reinforcement Bars, Epoxy Coated	Pound	2,310		

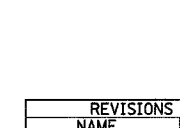
SN 016-1050

BAR	NO.	SIZE	LENGTH	SHAPE
a1(E)	13	#6	28'-2"	—
a2(E)	46	#5	21'-10"	—
a3(E)	18	#5	35'-1"	—
a4(E)	90	#5	28'-2"	—
b1(E)	166	#6	4'-0"	—
d1(E)	90	#5	4'-7"	⌒
d2(E)	90	#4	5'-10"	⌒
u3(E)	36	#5	3'-4"	⌒
x1(E)	36	#5	2'-3"	⌒
x2(E)	35	#5	4'-2"	⌒
Item	Unit	Qty.		
Concrete Removal	Cu. Yd.	49		
Concrete Superstructure	Cu. Yd.	53.4		
Reinforcement Bars, Epoxy Coated	Pound	7,040		

BARS u1(E) thru u3(E)

BAR	a	b	c
u1(E)	12"	10"	10"
u2(E)	9"	10"	10"
u3(E)	12"	1'-2"	1'-2"

BAR x3(E)



BARS x1(E) & x2(E)

BAR	a	b
x1(E)	1'-8"	7"
x2(E)	3'-2"	1'-0"

BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbainc.com

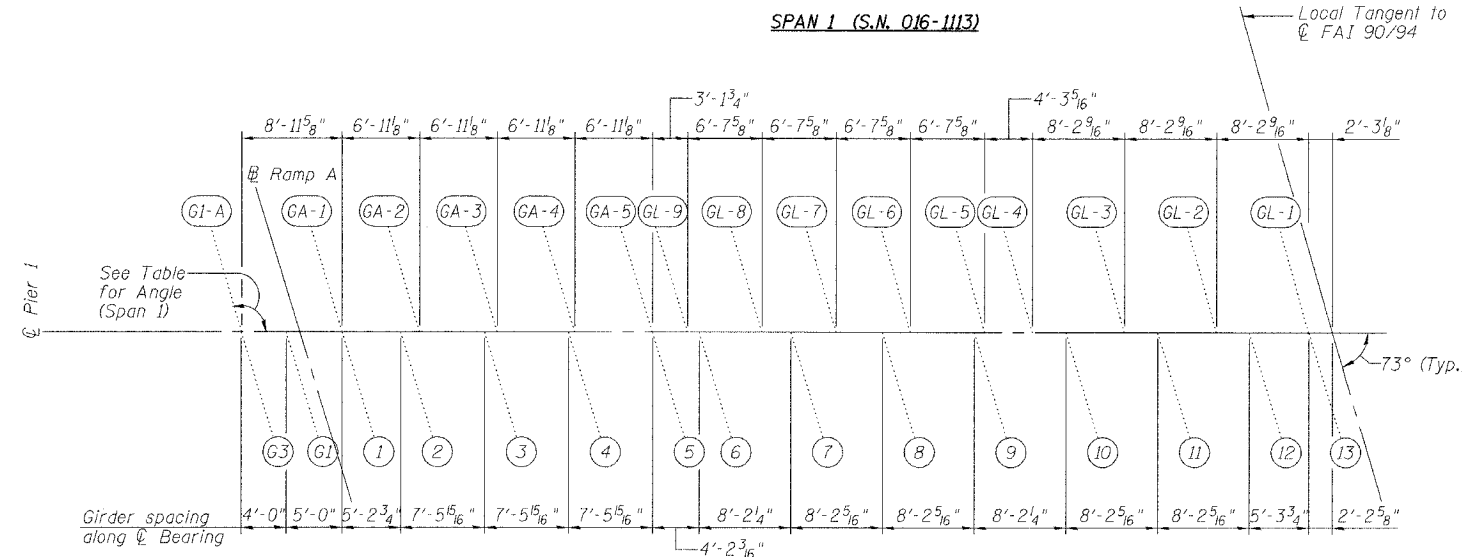
REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
SUMMARY OF BILL OF MATERIAL
& BAR SCHEDULE

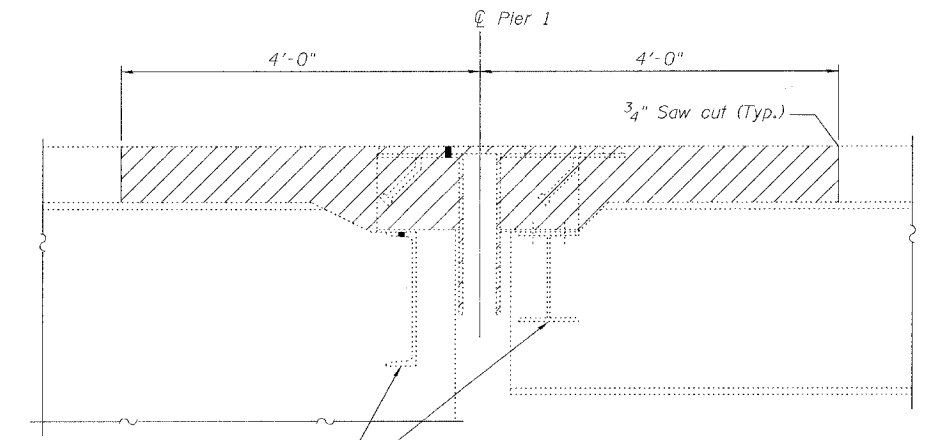
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DATE: 5/25/2006 CHECKED BY: BLU

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FAI 90/94	*	COOK	344	245
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* 2003-0298R Contract #62581				



Girder	Angle
GI-A	106°26'36"
GA-1	106°36'42"
GA-2	106°42'57"
GA-3	106°48'55"
GA-4	106°54'37"
GA-5	107°00'04"
GL-9	106°59'29"
GL-8	106°35'22"
GL-7	106°12'11"
GL-6	105°49'53"
GL-5	105°28'24"
GL-4	105°33'08"
GL-3	105°33'08"
GL-2	105°33'08"
GL-1	105°33'08"



Existing diaphragms to be replaced. See sheet of for details.

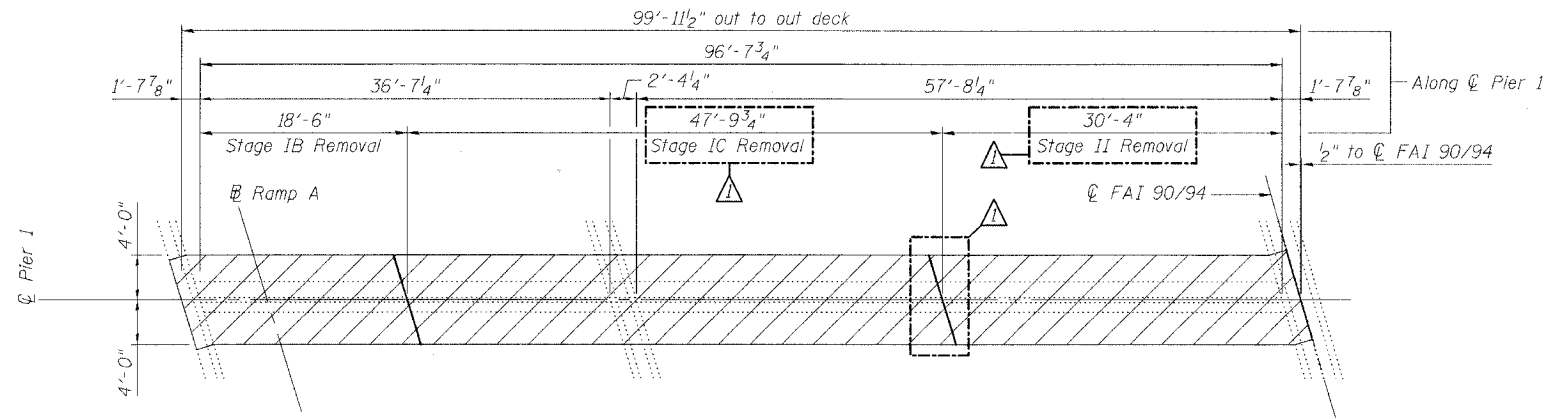
Note:
Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Concrete Removal".

Existing finger plates, stools, drainage trough and hardware shall be removed. Cost included with "Concrete Removal".

SECTION AT
EXISTING FINGER PLATE

(Dimensions at Rt. L's)

SPAN 3 (S.N. 016-1114)
GIRDER LAYOUT AT PIER 1

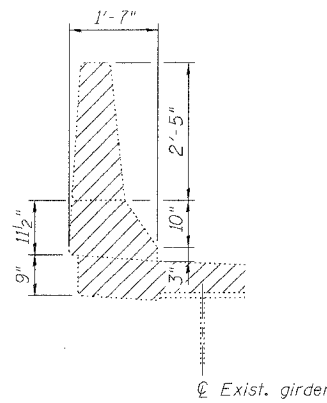


JOINT REMOVAL PLAN AT PIER 1

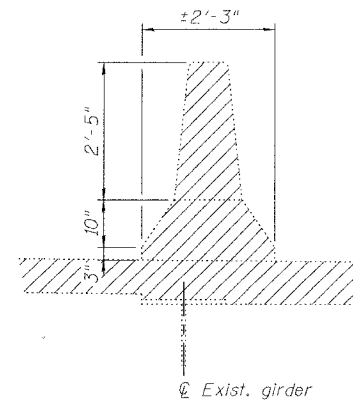
Notes:

Hatched Area indicates "Concrete Removal".
Existing transverse bars in the deck are placed at right angles to Q Roadway. Existing transverse bars extending into removal areas shall be cut to miss the new finger joint, cleaned and incorporated into the new construction.

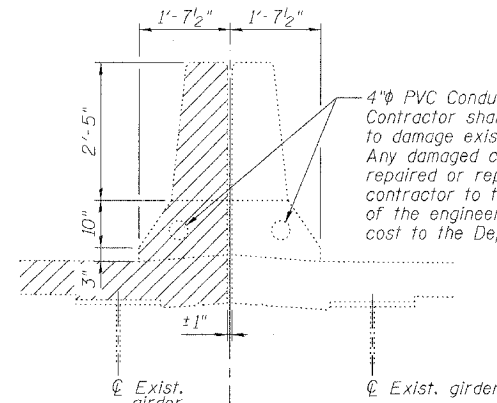
Longitudinal reinforcement extending into removal areas shall be cleaned, straightened and incorporated into the new construction except as noted on Section A-A on Sheet 5.



DETAIL AT EXISTING
OUTSIDE PARAPET
(Dimensions at Rt. L's)



DETAIL AT EXISTING FAI 90/94
& RAMP A PARAPET
(Dimensions at Rt. L's)



DETAIL AT EXISTING Q FAI 90/94
MEDIAN PARAPET
(Dimensions at Rt. L's)

REVISIONS	
NAME	DATE
MATHUR	6/28/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER 1 JOINT REMOVAL DETAILS
F.A.I. ROUTE 90/94 SOUTHBOUND (DAN RYAN EXPRESSWAY)
OVER SOUTH BRANCH - CHICAGO RIVER
COOK COUNTY
S.N. 016-1113 - PIER 1

SCALE: VERT. 1"=4'-0"
HORIZ. 1"=40'-0"
DATE: 4/7/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: MATHUR

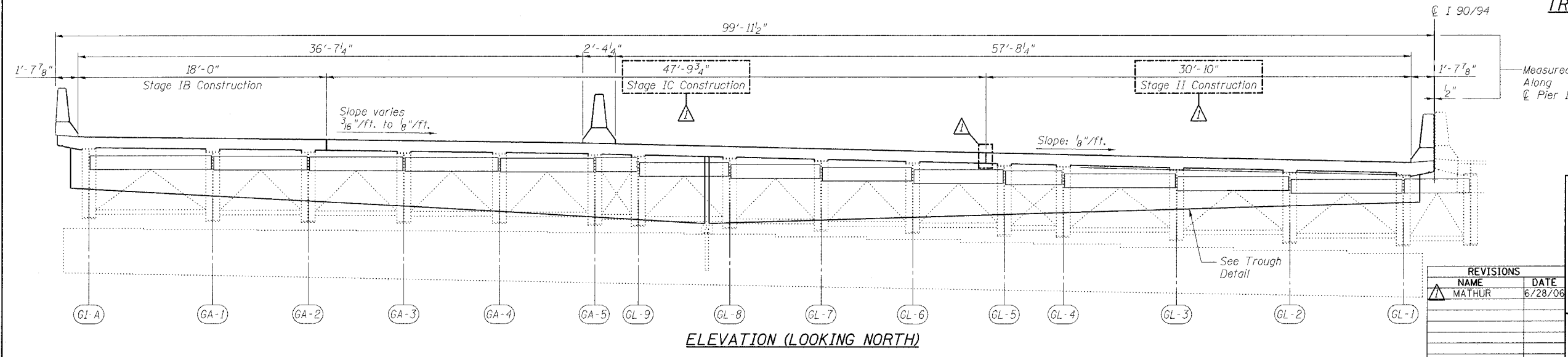
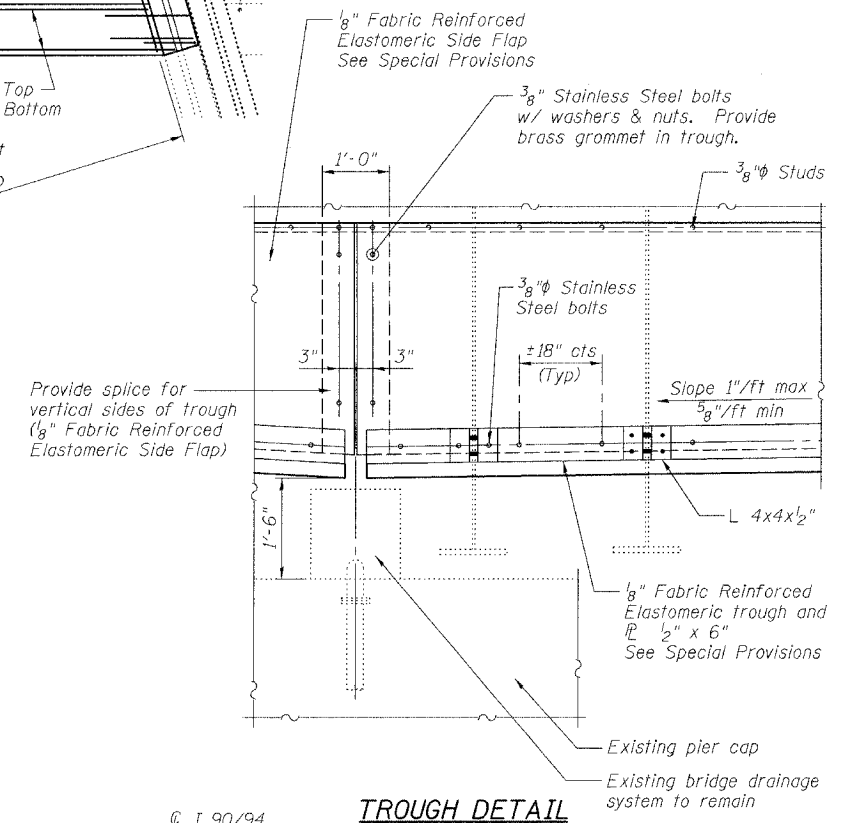
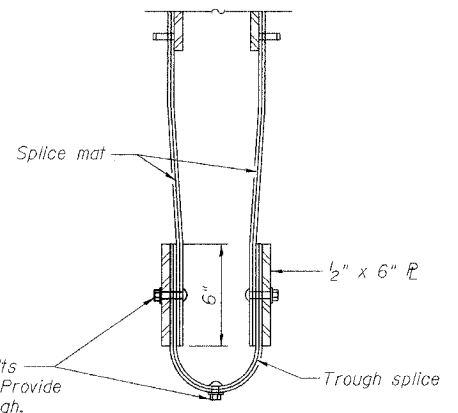
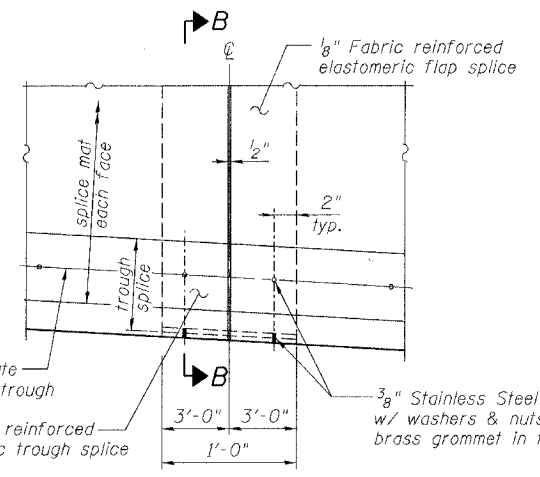
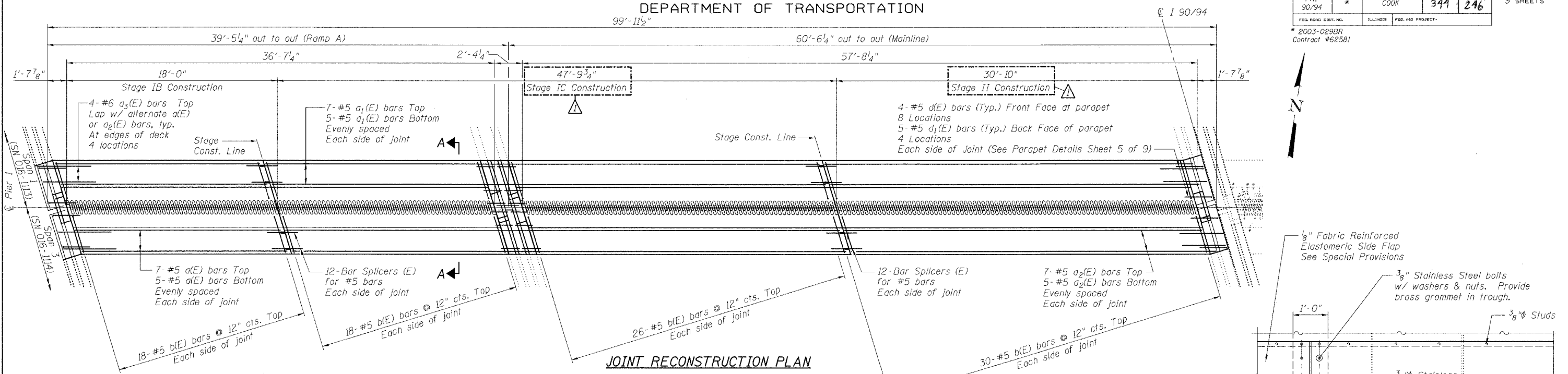
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PROJECT 04286-W01
5/11/06-MML

GREENE & BRADFORD, INC.
OF SPRINGFIELD
CONSULTING ENGINEERS
3800 CENTRAL EXPRESSWAY
SPRINGFIELD, ILLINOIS 62777
PROFESSIONAL ENGINEERS, ARCHITECTS, PLANNERS
AND INTERIORS
ILLINOIS LICENSE NO. 021-0000001
I-001-0000001-0000001

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PLOT TIME = 9:41:41 AM
OPERATOR = michelel

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAI 90/94	SECTION *	COUNTY COOK	SHEET 344	SHEET 246	SHEET NO. 3 9 SHEETS
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- Notes:
1. For Parapet Details and Superstructure Bill of Material, see Sheet 5 of 9.
 2. For Section A-A, see Sheet 4 of 9.
 3. Deck cross slopes shown are at right angles to C/Roadway.

ILLINOIS DEPARTMENT OF TRANSPORTATION
PIER 1 JOINT DETAILS
F.A.I. ROUTE 90/94 SOUTHBOUND (DAN RYAN EXPRESSWAY)
OVER SOUTH BRANCH - CHICAGO RIVER
COOK COUNTY
S.N. 016-1113 - PIER 1

REVISIONS	
NAME	DATE
MATHUR	6/28/06

SCALE: VERT. 1"=4'-0"
HORIZ. 1"=40'-0"
DATE: 4/7/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: MATHUR

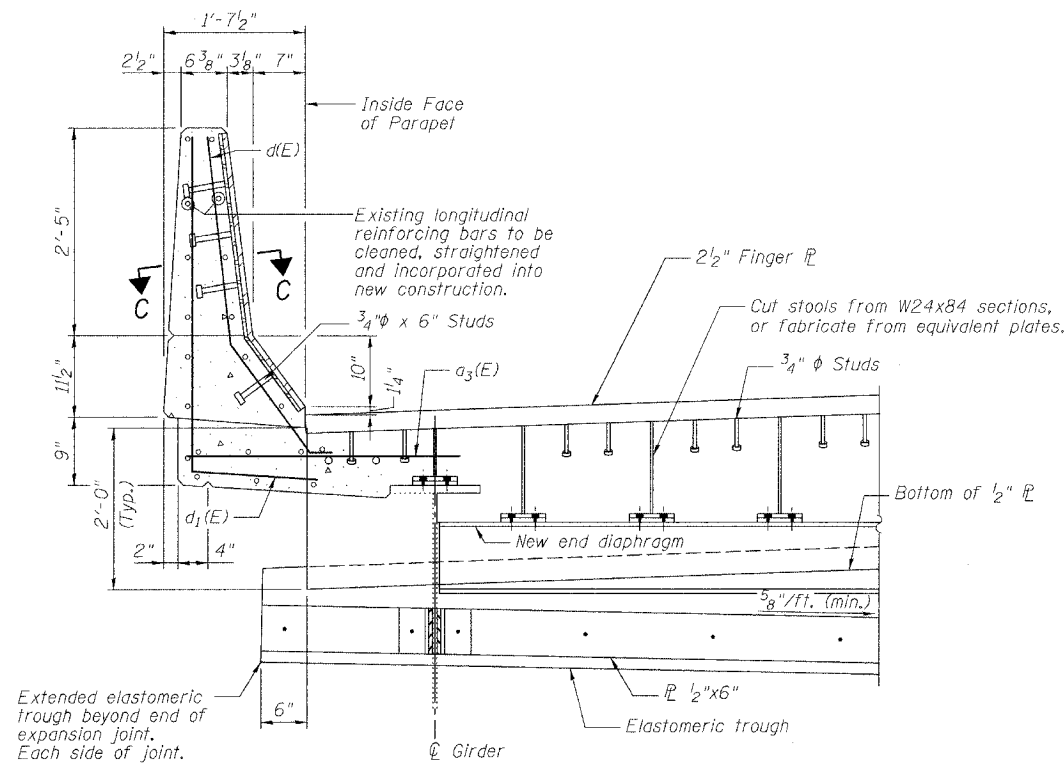
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PROJECT 04286-W01
5/11/06-MML

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OPERATOR = mitchell

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

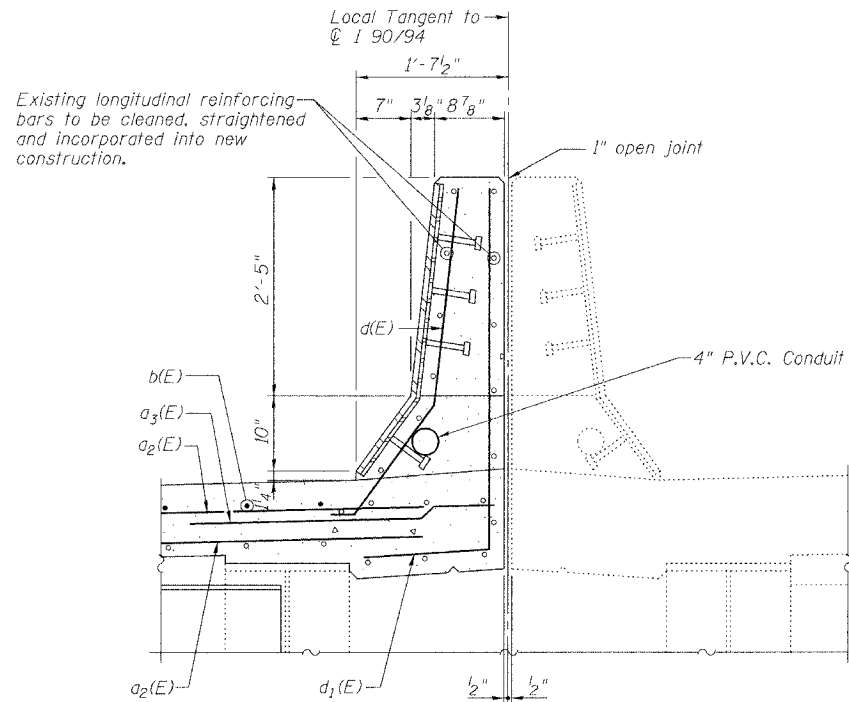
ROUTE NO.	SECTION	COUNTY	DISTRICT	SHEET NO.
FA1 90/94	*	COOK	399	248
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
* 2003-029BR Contract #62581				

SHEET NO. 5
9 SHEETS



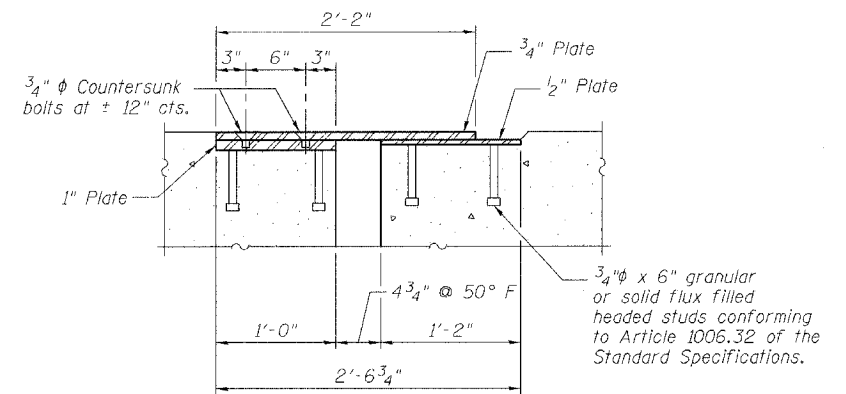
SECTION B-B

(For location of Section B-B, See Sheet 3 of 9)

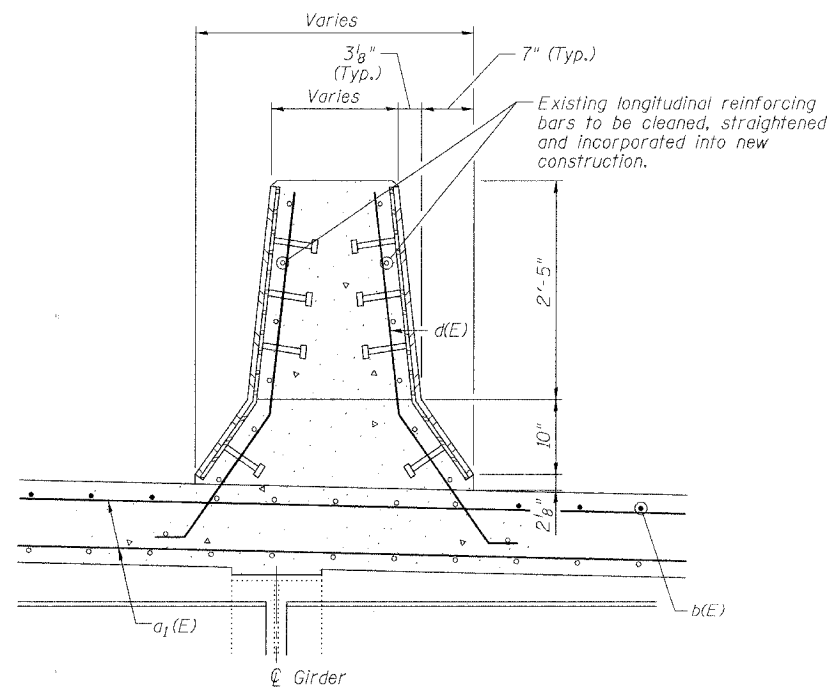


DETAIL AT MEDIAN PARAPET

(Looking North)

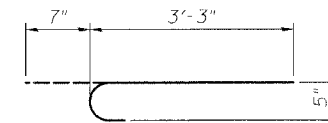


SECTION C-C

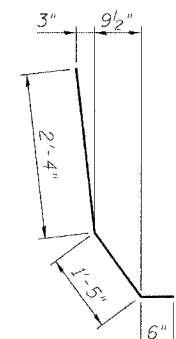


**DETAIL AT EXISTING S.B. FAI 90/94
& RAMP A PARAPET**

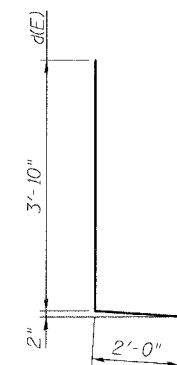
(Dimensions at Rt. L's)
(Looking North)



BAR b(E)



BAR d(E)



BAR d1(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	24	#5	18'-6"	—
a1(E)	24	#5	47'-5"	—
a2(E)	24	#5	31'-5"	—
a3(E)	16	#6	4'-6"	—
b(E)	184	#5	3'-10"	—
d(E)	32	#5	4'-3"	—
d1(E)	20	#5	5'-10"	—
Reinforcement Bars, Epoxy Coated			Pound	3540
Concrete Superstructure			Cu. Yd.	26.3
Concrete Removal			Cu. Yd.	22.1
Bar Splicers			Each	48
Mechanical Splice			Each	184

Reinforcing bars designated (E) shall be epoxy coated.

ILLINOIS DEPARTMENT OF TRANSPORTATION
PARAPET DETAILS
F.A.I. ROUTE 90/94 SOUTHBOUND (DAN RYAN EXPRESSWAY)
OVER SOUTH BRANCH - CHICAGO RIVER
COOK COUNTY
S.N. 016-1113 - PIER 1

REVISIONS	
NAME	DATE
MATHUR	6/28/06

SCALE: VERT. _____
HORIZ. _____
DATE: 4/7/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: MATHUR

GREENE & BRADFORD, INC.
OF SPRINGFIELD
CONSULTING ENGINEERS
PROFESSIONAL ENGINEERS
ILLINOIS LICENSE NO. 04286-01
1015 E. STATE ST., SPRINGFIELD, IL 62761
TEL: 217-244-1111, FAX: 217-244-1112

COMPUTER FILE NO.
04286-W01-SB-PD
PROJECT 04286-W01
5/11/06-MML

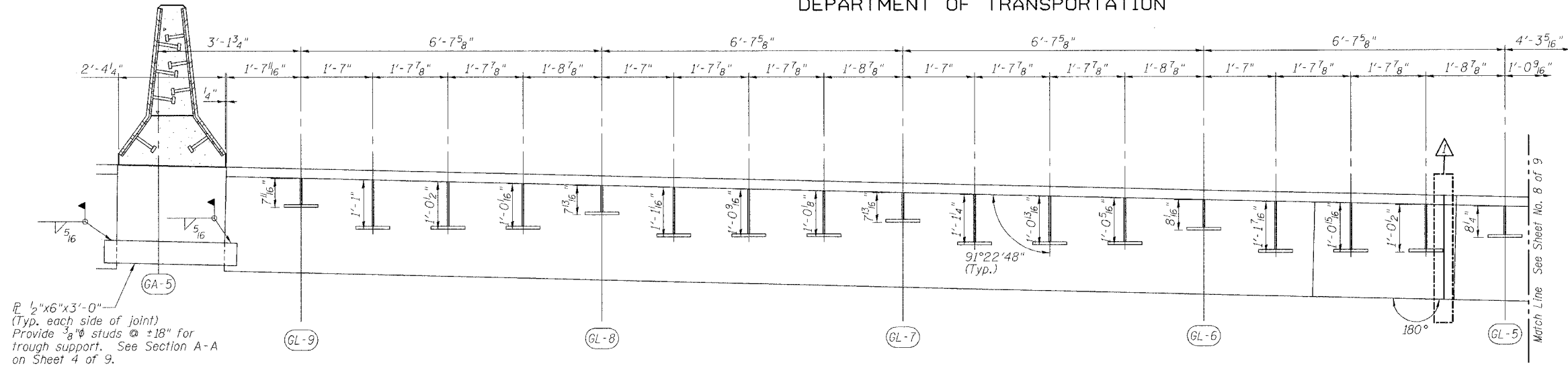
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

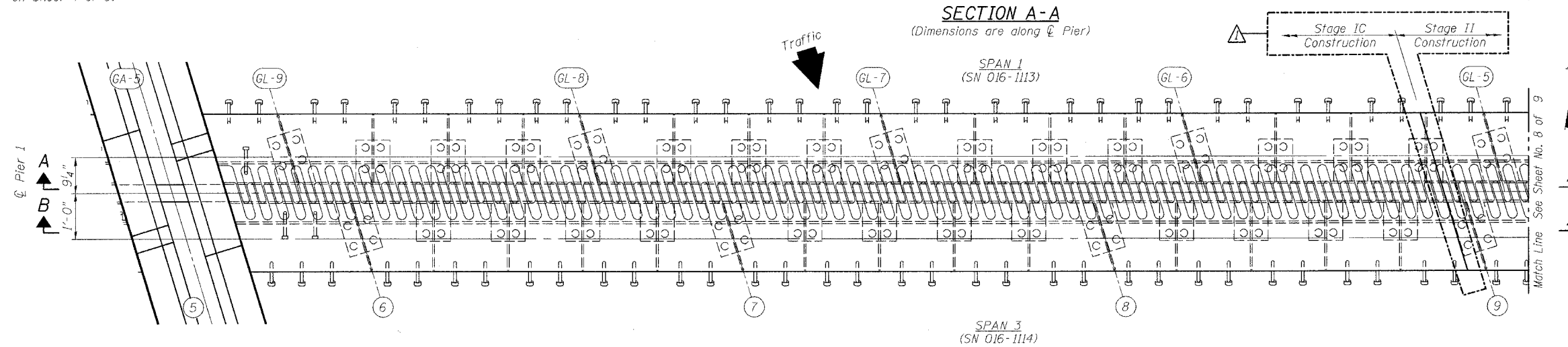
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FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 7
9 SHEETS

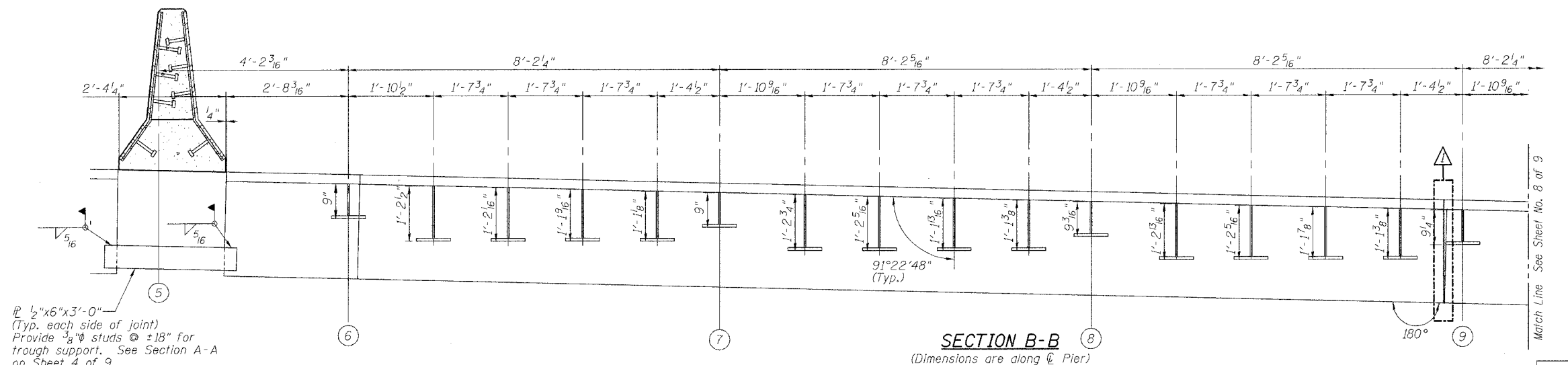
* 2003-029BR
Contract #62581



SECTION A-A
(Dimensions are along \bar{C} Pier)



PLAN OF FINGER PLATE AT PIER 1 (SOUTHBOUND)



SECTION B-B
(Dimensions are along \bar{C} Pier)

REVISIONS	
NAME	DATE
MATHUR	6/28/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
FINGER PLATE PLAN AND ELEVATION
F.A.I. ROUTE 90/94 SOUTHBOUND (DAN RYAN EXPRESSWAY)
OVER SOUTH BRANCH - CHICAGO RIVER
COOK COUNTY
S.N. 016-1113 - PIER 1

SCALE: VERT. _____
HORIZ. _____
DATE: 4/7/05

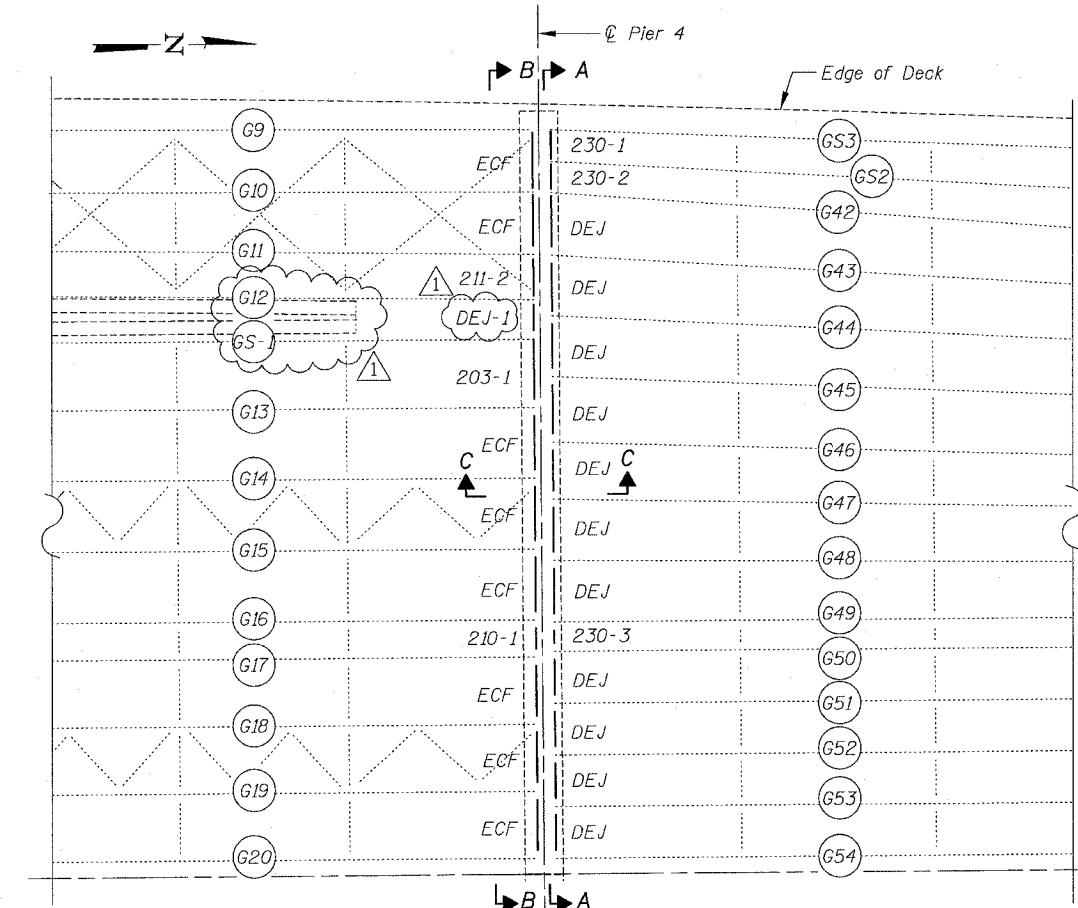
DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: MATHUR

GREENE & BRADFORD, INC.
CONSULTING ENGINEERS
OF SPRINGFIELD
1000 SOUTH BRANCH ROAD
SPRINGFIELD, ILLINOIS 62761
PROFESSIONAL ENGINEER LICENSE NO. 04286-01
REGISTERED PROFESSIONAL ENGINEER
5/11/06-MML

COMPUTER FILE NO.
04286-W01-SB-PE2
PROJECT 04286-W01
5/11/06-MML

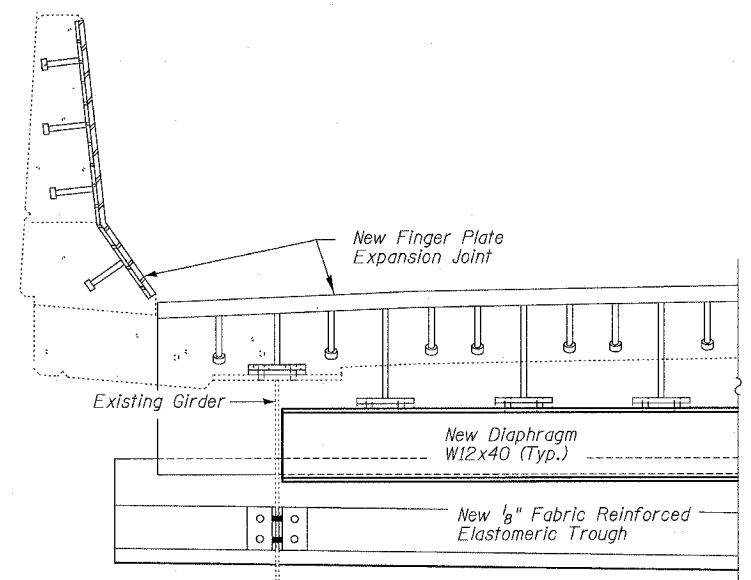
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PLOT SCALE = 1/4" = 1' IN. DRW = XES-BB50.ENG_BRIDGE.dwt
PLOT DATE = 6/29/2006
PLOT TIME = 9:39:45 AM
OPERATOR = michaell

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
84/90	2003-029I	COOK	344	261
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62581				

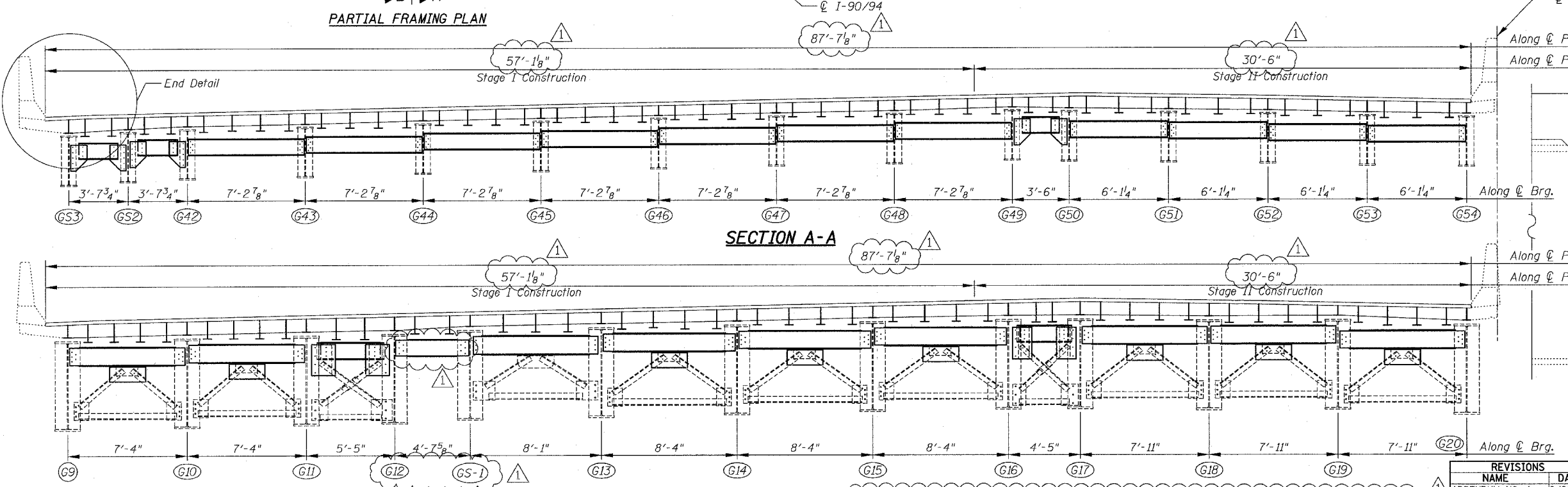


DIAPHRAGM REPLACEMENT NOTES

- Existing structural steel shall be cleaned and painted in accordance with the Special Provision for Cleaning and Painting Contact Surface Areas of Existing Steel Structures.
- All new diaphragms shall be level, and all cross frame and diaphragm details shown are looking toward \odot Pier, unless otherwise noted.
- All new fasteners shall be $\frac{3}{4}$ " ϕ H.S. bolts with minimum edge distance of $1\frac{1}{2}$ ", unless otherwise noted.
- Contractor shall set the finger plate joints in place in the field and make all necessary adjustments to establish line and grade for the joints and then field drill $\frac{1}{8}$ " ϕ holes in new diaphragms to match stools and shims. Field drilling and removal and resetting of joints to accomplish field drilling, if necessary, will be included in the cost of Furnishing and Erecting Structural Steel.
- Existing cross frames welded to the gusset plates to be replaced shall be temporarily disconnected by removing welds and grinding smooth, and reattached by bolting.
- Holes in new diaphragms or connection plates shall be field drilled $\frac{1}{8}$ " ϕ unless otherwise noted, to match holes in existing members. Select connections may require the contractor to field drill, new $\frac{1}{8}$ " ϕ holes unless otherwise noted, through both existing and new members. Cost of all field drilling required to replace diaphragms and associated members will be included with Furnishing and Erecting Structural Steel.
- Field cutting shall use the air-arc method. Flame cutting will not be permitted within 2" of girder web or flange. Grinding shall be done parallel to the longitudinal beam direction. Cost of field cutting, grinding shall be included with Structural Steel Removal.
- All diaphragm replacements shall be coordinated with stage construction for Finger Plate Expansion Joints.
- Cost of removal and disposal of existing steel shall be included in the cost of Structural Steel Removal.
- Cross Frame designations reference original shop drawings.
- All plate dimensions refer to Width x Height x Thickness.

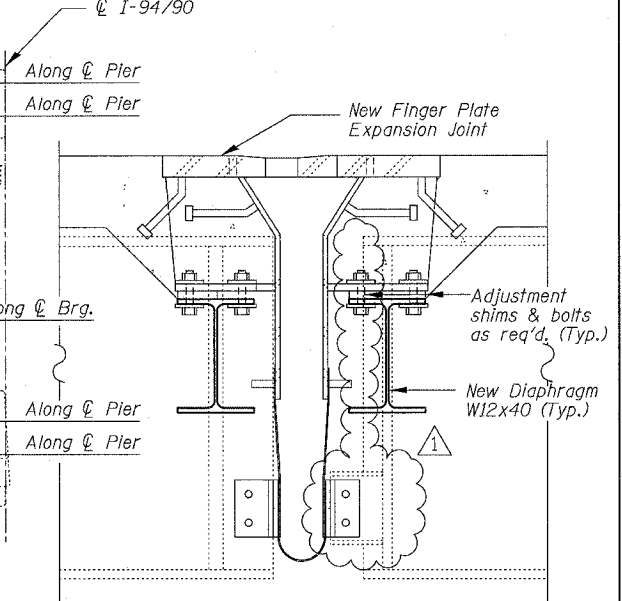


END DETAIL



SECTION A-A

SECTION B-B



SECTION C-C

- New bent plates shall be bent in shop with angles measured in field.
- All diaphragms including the one right below the construction joint shall be removed and replaced at the specified stage. The removal shall not include the existing stools beyond the removal line at that stage. These stools, however, shall be disconnected from the existing diaphragm for the removal, and temporarily tight-fit (shimmed) to the new diaphragm. No drilling, bolting or welding is allowed for such a temporary connection to the new diaphragm.

REVISIONS	DATE
NAME	DATE
ADDENDUM NO. 1	6/29/06

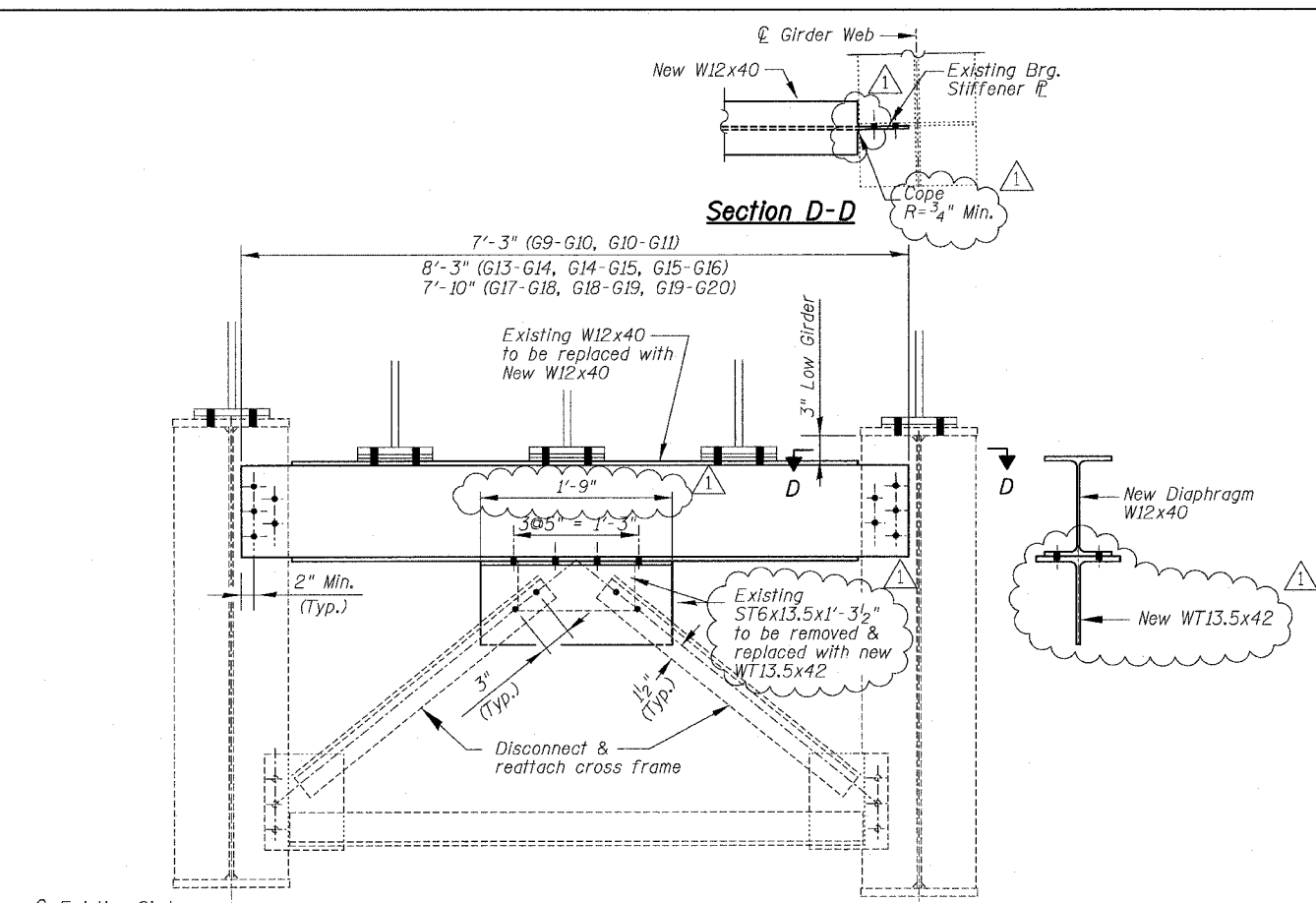
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 SB DAN RYAN ELEVATED BRIDGE
 REPAIR FROM 15TH TO 28TH STREETS
 DIAPHRAGM REPLACEMENT
 PIER 4, SN 016-1110
 SCALE: NTS
 DATE: 5/25/2006
 DRAWN BY: MTR
 CHECKED BY: BLU

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
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F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029I	COOK	344	262
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62581				

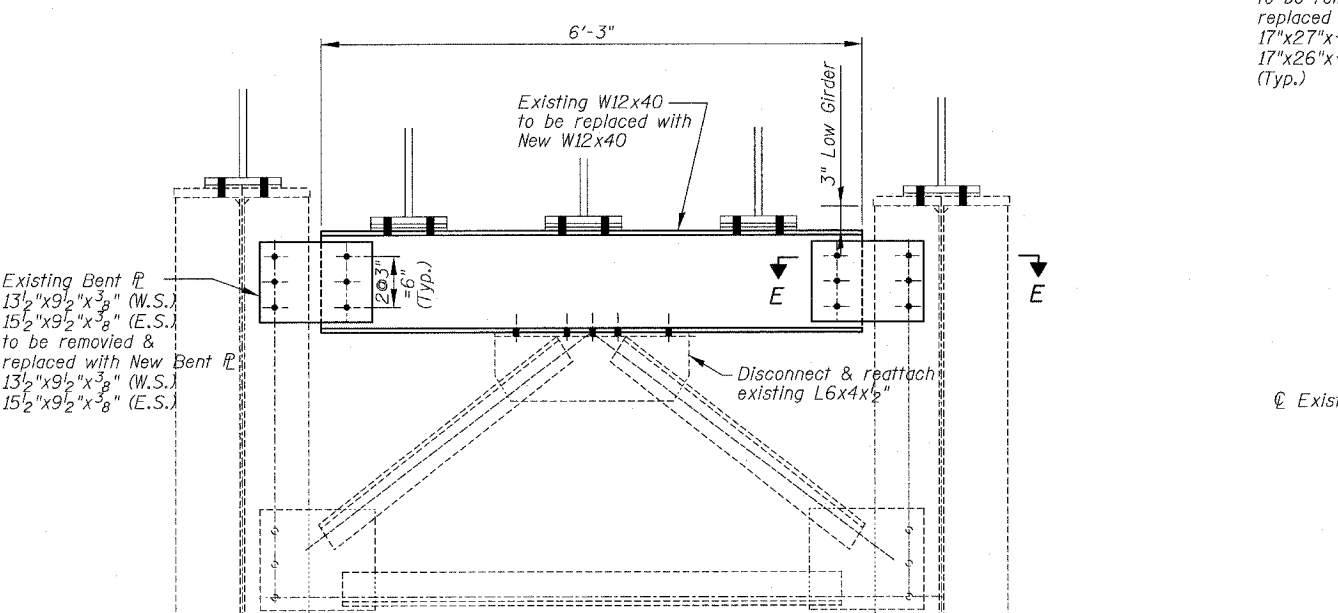
NOTES:

1. Use 7/8" H.S. bolts for all cross frame/diaphragm connections at this pier location (excluding stool connections).
2. Field drill 15/16" holes for 7/8" bolts. Use 2" min. edge distance for all 7/8" bolts unless otherwise noted.
3. Calculated weight of Structural Steel used for the Item "Furnishing & Erecting Structural Steel" = 8,100 Lbs.
4. E.S. denotes East Side, W.S. indicates West Side.
5. Dimensions shown to be field verified as indicated in Structural General Notes. Cost included in Field Measurements (see Special Provisions for details).



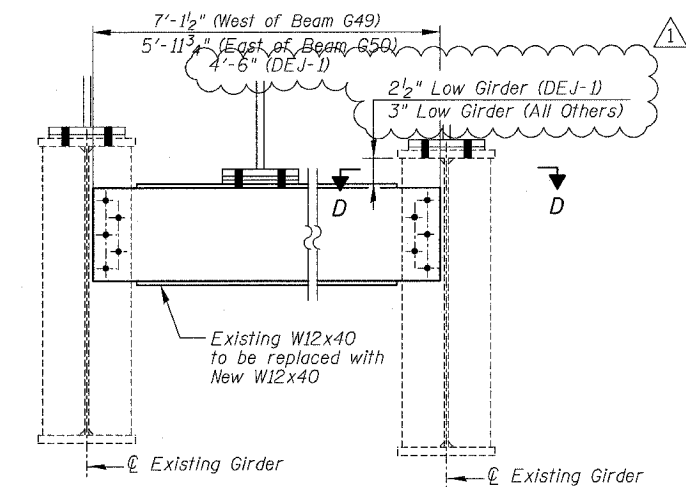
CROSS FRAME DETAIL

S.N. 016-1110
ECF 8 REQ'D



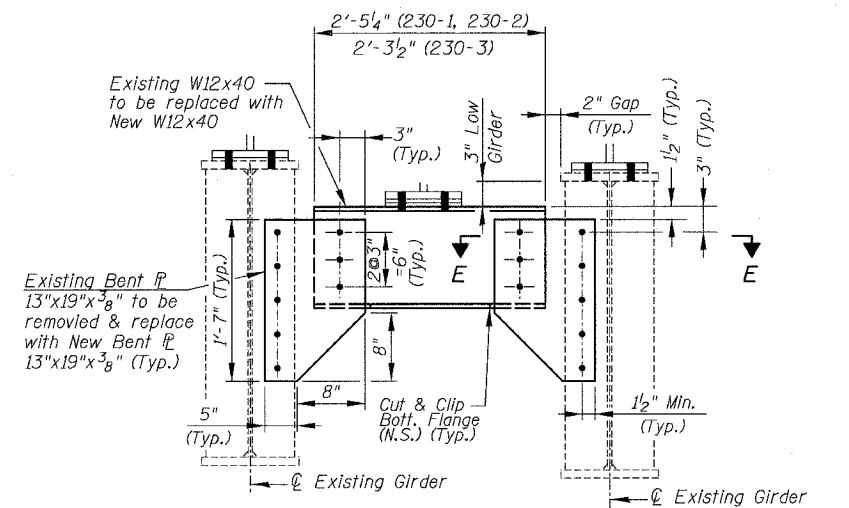
BILL OF MATERIAL

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	Lum Sum	0.03
Structural Steel Removal	Pound	7,380



DIAPHRAGM DETAIL

S.N. 016-1110 (DEJ)
DEJ 11 REQ'D
DEJ-1 1 REQ'D



DIAPHRAGM DETAIL

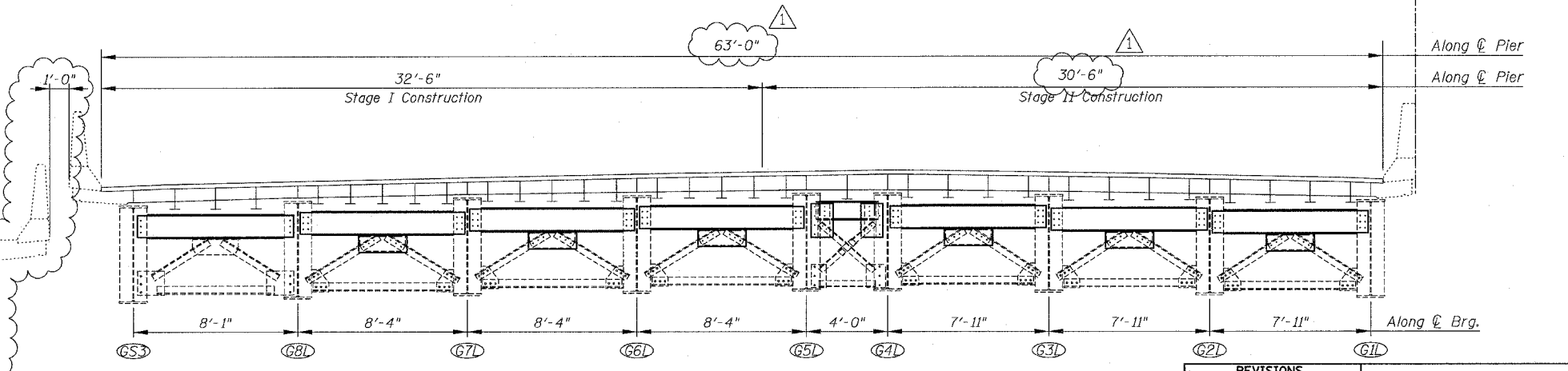
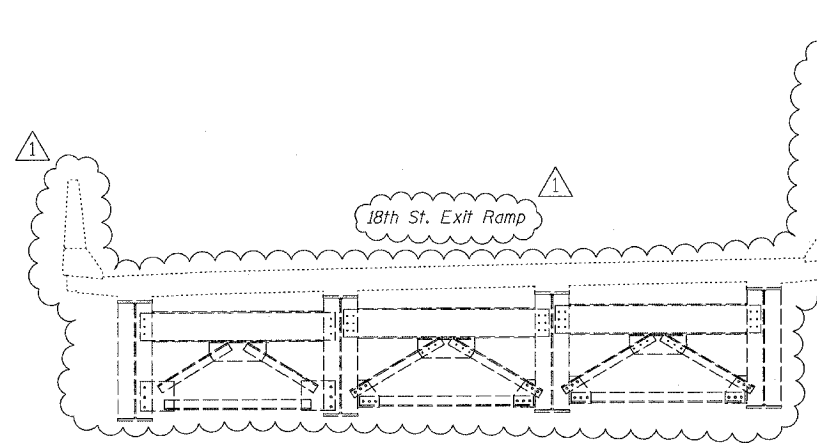
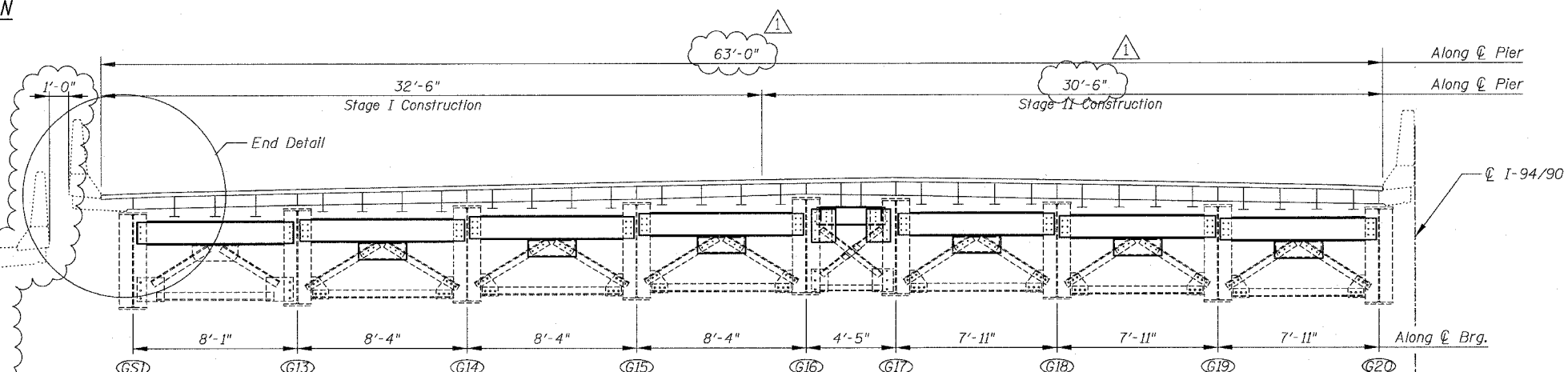
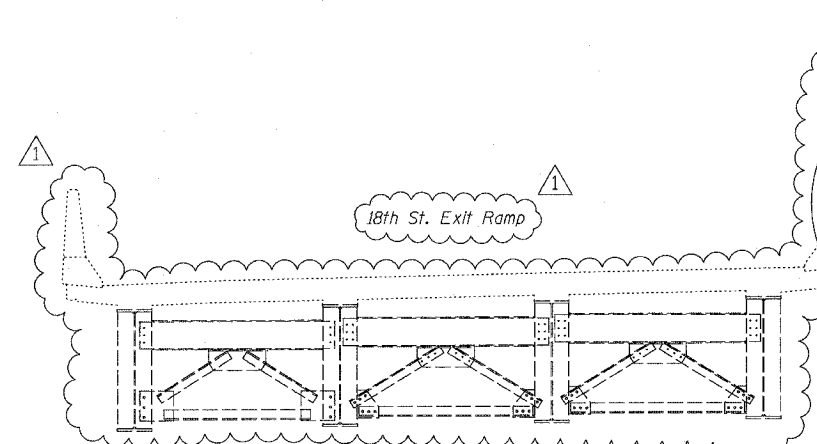
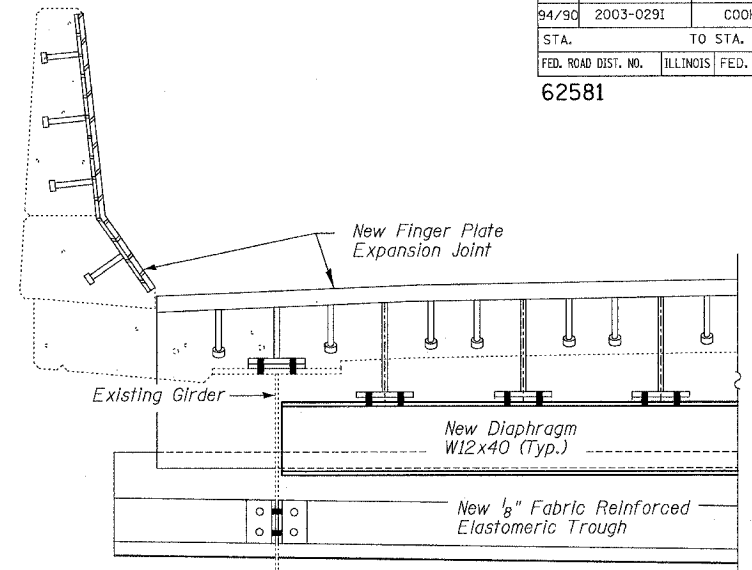
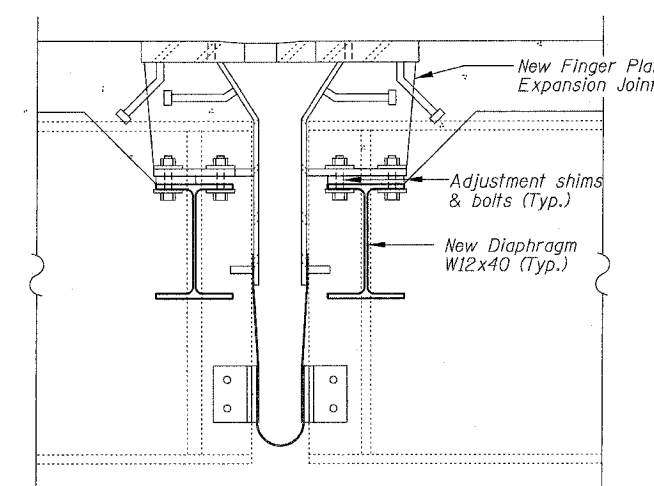
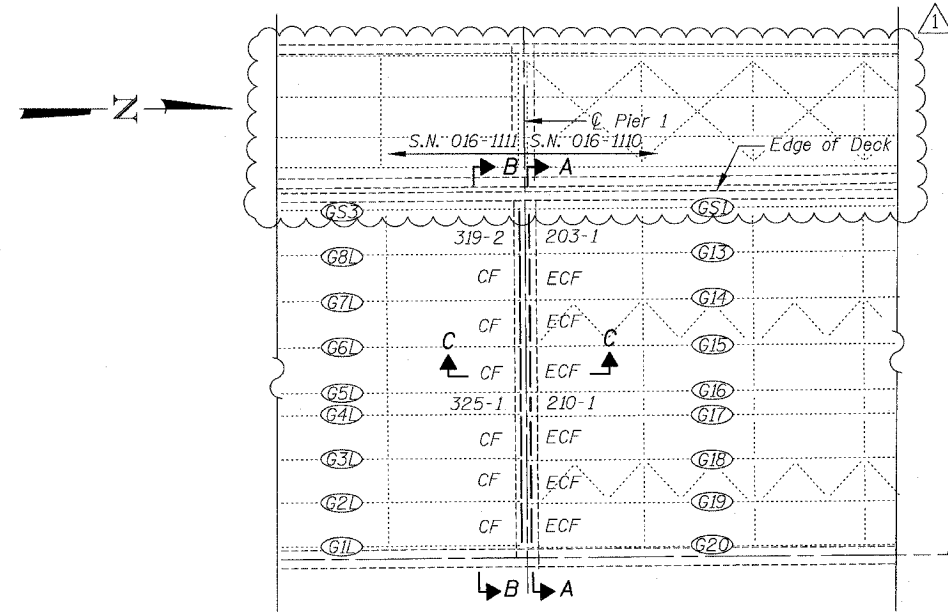
S.N. 016-1110
230-1 1 REQ'D
230-2 1 REQ'D
230-3 1 REQ'D

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REVISIONS	NAME	DATE
1	ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
DIAPHRAGM REPLACEMENT
PIER 4, SN 016-1110
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: MTR
CHECKED BY: BLU

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	263
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
62581				



REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 SB DAN RYAN ELEVATED BRIDGE
 REPAIR FROM 15TH TO 28TH STREETS
 DIAPHRAGM REPLACEMENT
 PIER 1, SN 016-1110

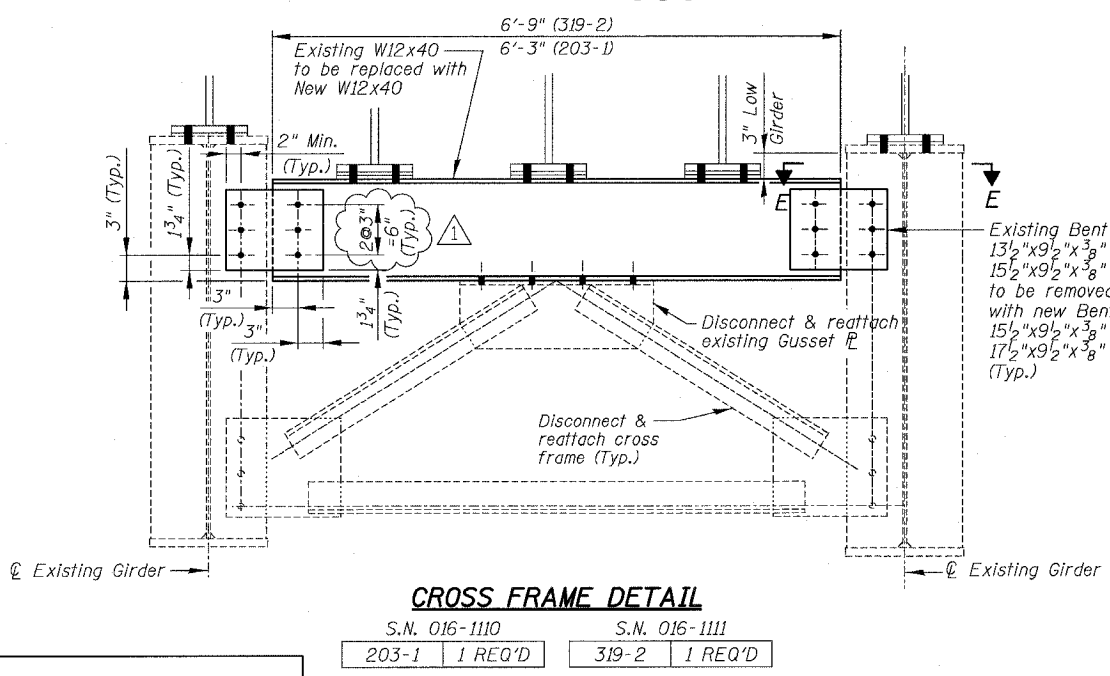
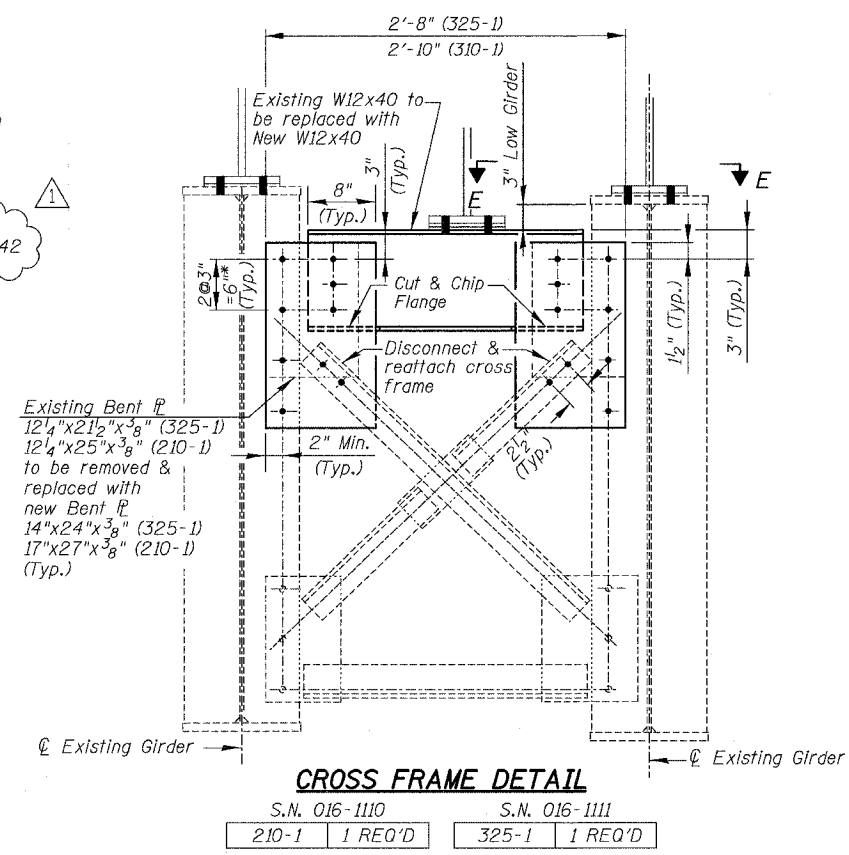
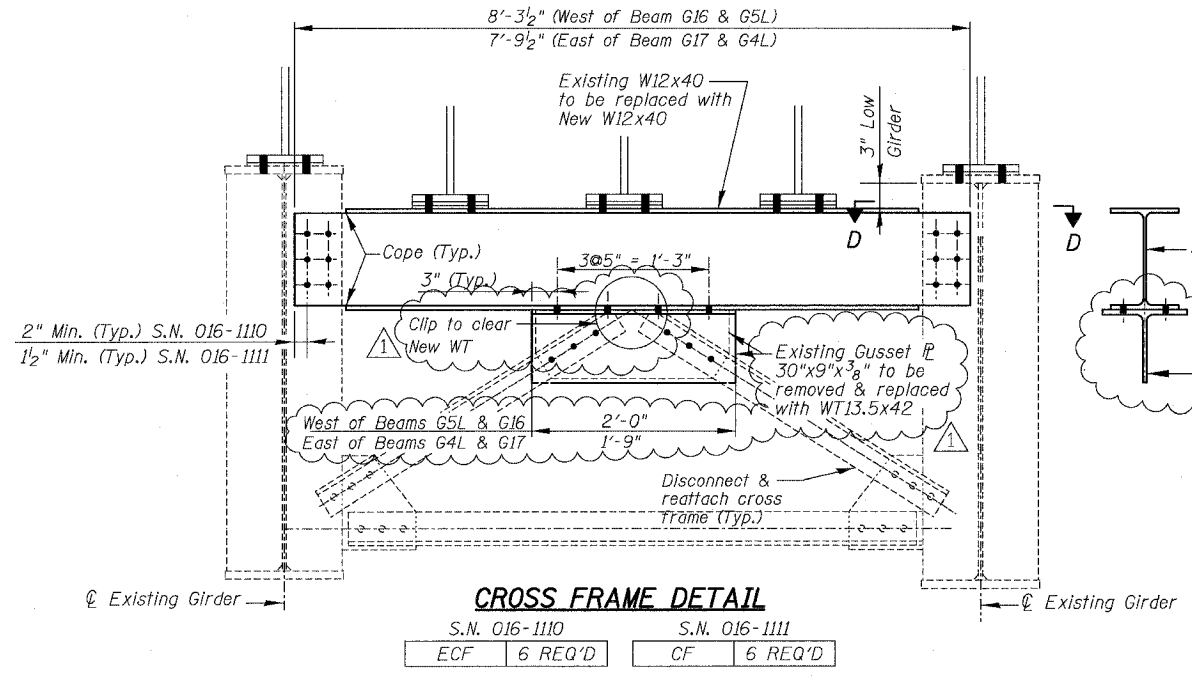
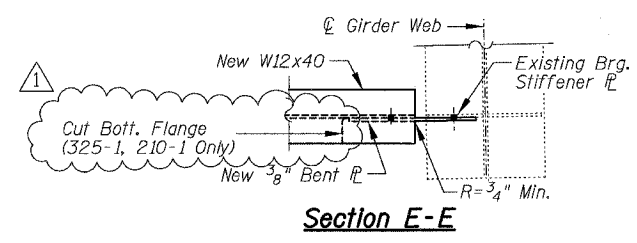
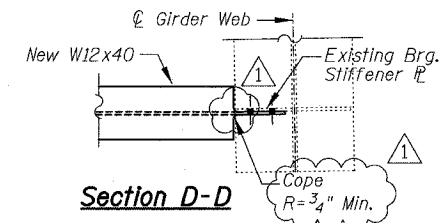
SCALE: NTS
 DATE: 5/25/2006

DRAWN BY: BDC
 CHECKED BY: IYL

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I:\660\94\90\BRIDGE\2\AS\1\1110\660_21_016-1110-FR-12.dwg
 6/29/2006 4:05:22 PM

- NOTES:
1. Use $7/8"$ H.S. bolts for all cross frame/diaphragm connections at this pier location (excluding stool connections).
 2. Field drill $15/16"$ holes for $7/8"$ bolts. Use 2" min. edge distance for all $7/8"$ bolts unless otherwise noted.
 3. Calculated weight of Structural Steel used for the item "Furnishing & Erecting Structural Steel" = 6,370 Lbs, and itemized as follows:
S.N. 016-1110 = 3,180 Lbs
S.N. 016-1111 = 3,190 Lbs
 4. Calculated weight of Structural Steel used for the item "Structural Steel Removal" = 5,490 Lbs, and itemized as follows:
S.N. 016-1110 = 2,680 Lbs
S.N. 016-1111 = 2,810 Lbs
 5. Dimensions shown to be field verified as indicated in Structural General Notes. Cost included in Field Measurements (see Special Provisions for details)



BILL OF MATERIAL

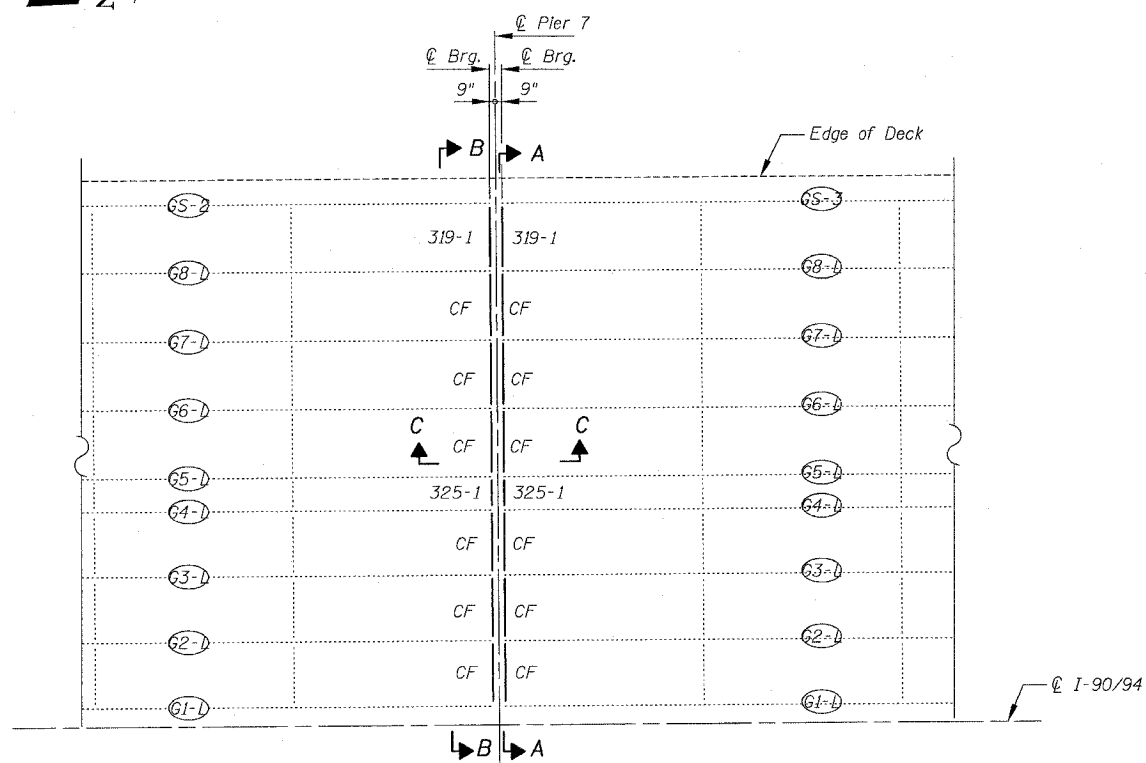
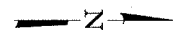
Item	Unit	Quantity
Furnishing & Erecting Structural Steel	Lum Sum	0.03
Structural Steel Removal	Pound	5,490

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. 94/90 (DAN RYAN EXPRESSWAY) SB DAN RYAN ELEVATED BRIDGE REPAIR FROM 15TH TO 28TH STREETS DIAPHRAGM REPLACEMENT PIER 1, SN 016-1110
NAME	DATE	
ADDENDUM NO. 1	6/29/06	SCALE: NTS DATE: 5/25/2006 DRAWN BY: BDC CHECKED BY: IYL

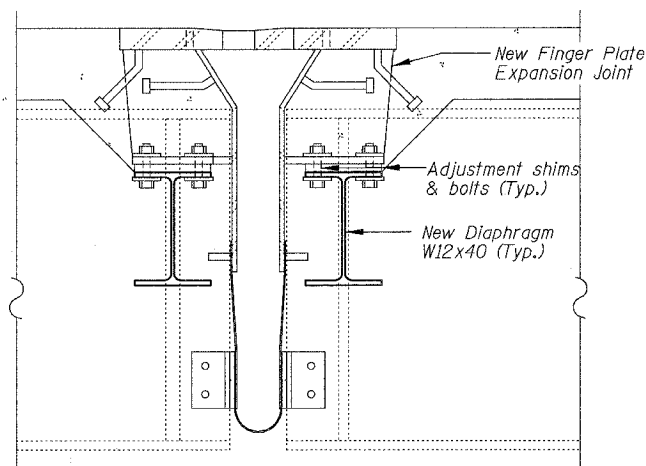
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4/05/06 PM 4/05/06

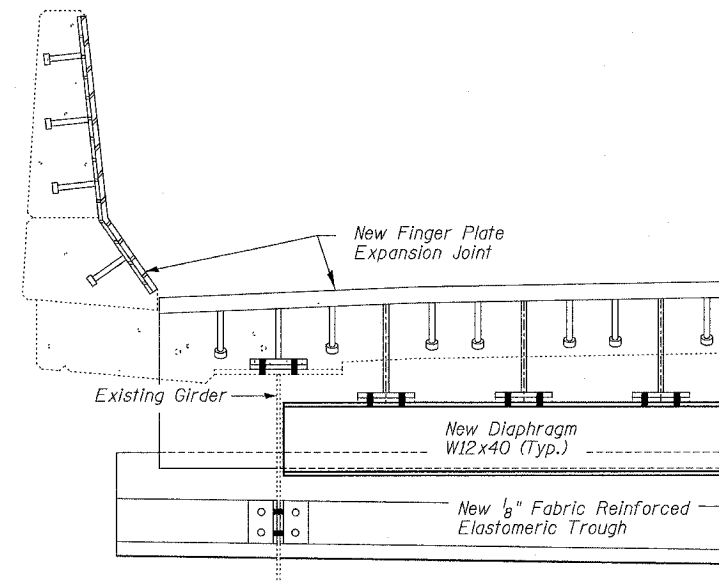
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	265
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				



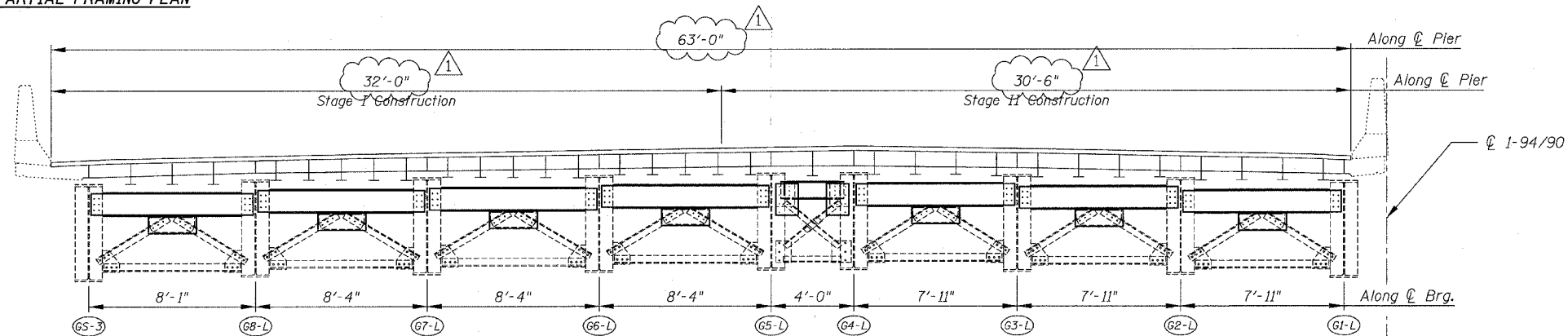
PARTIAL FRAMING PLAN



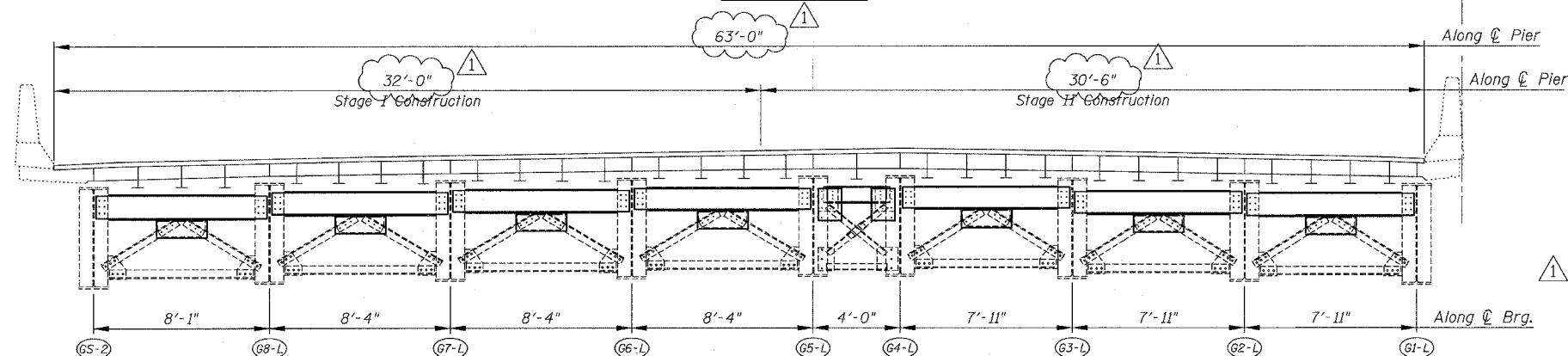
SECTION C-C



END DETAIL



SECTION A-A



SECTION B-B

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REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
DIAPHRAGM REPLACEMENT
PIER 7, SN 016-1111

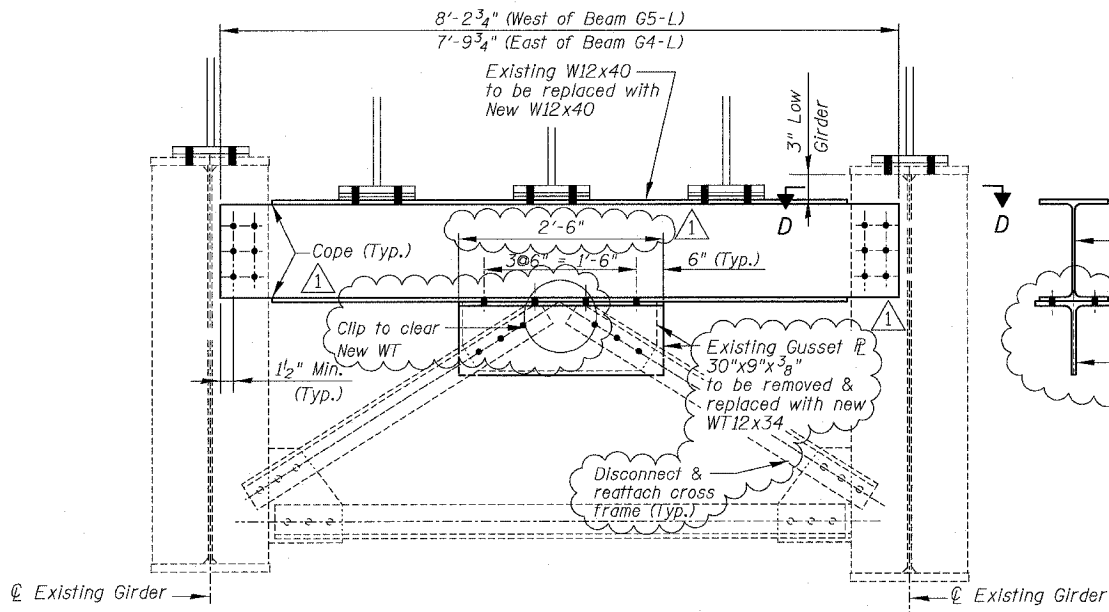
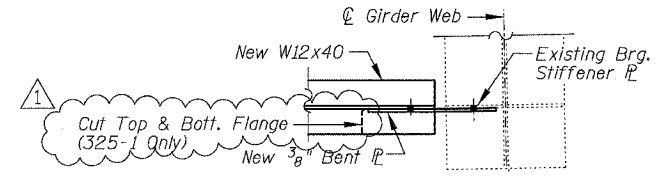
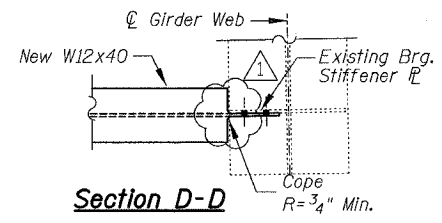
SCALE: NTS
DATE: 5/25/2006

DRAWN BY: BDC
CHECKED BY: IYL

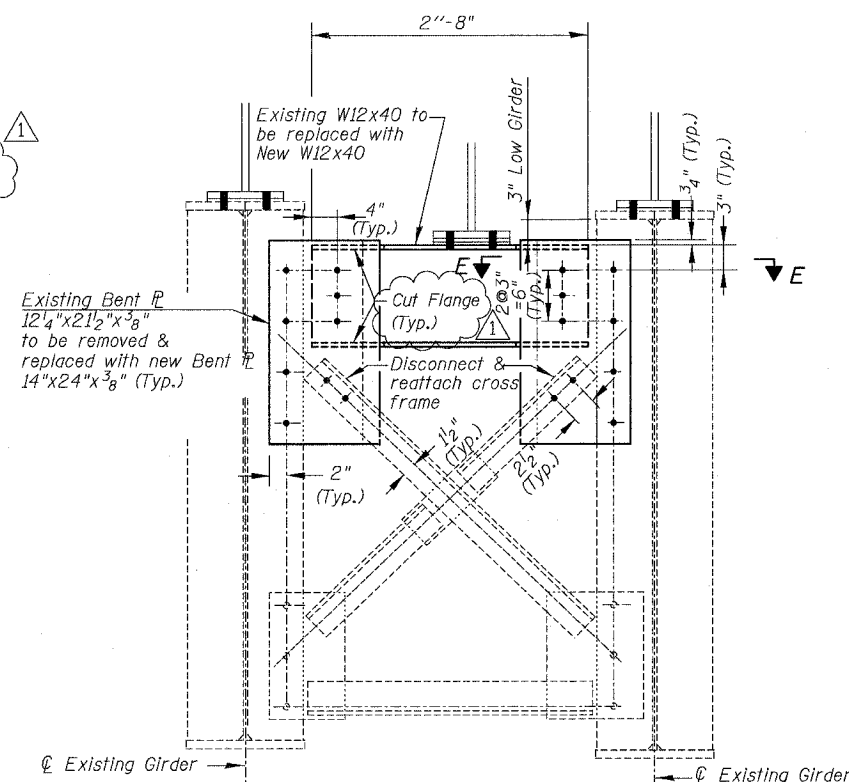
46630 7/4

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-029I	COOK	344	266
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62581

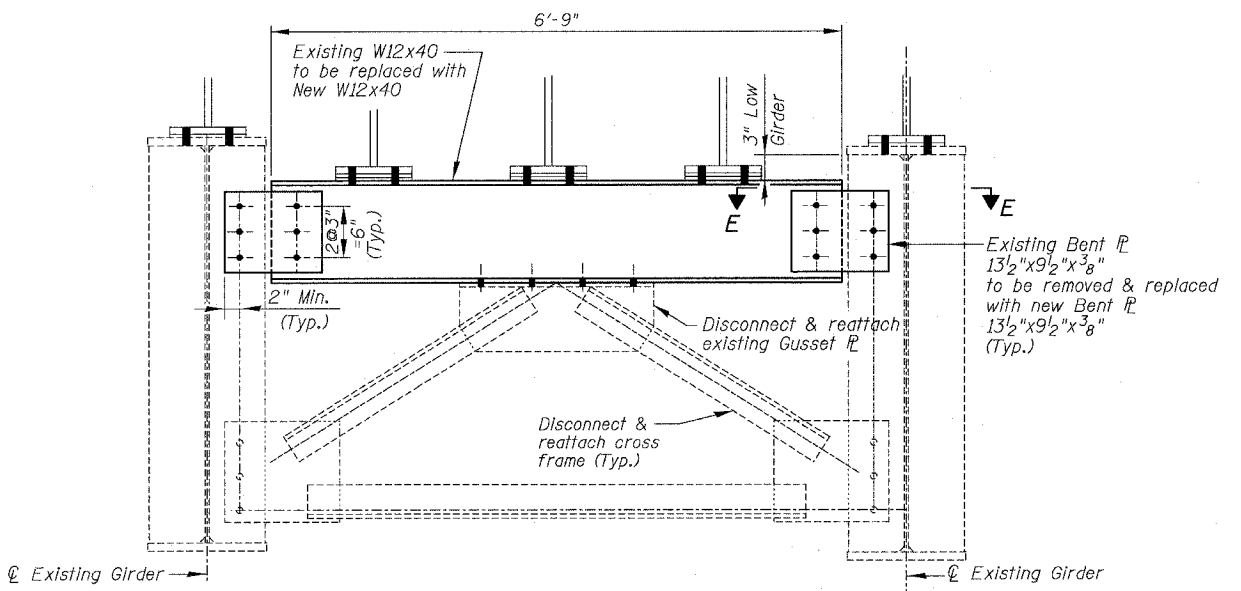


S.N. 016-1111
CF 12 REQ'D



S.N. 016-1111
325-1 2 REQ'D

- NOTES:
1. Use 7/8"φ H.S. bolts for all cross frame/diaphragm connections at this pier location (excluding stool connections).
 2. Field drill 15/16"φ holes for 7/8"φ bolts. Use 2" min. edge distance for all 7/8"φ bolts unless otherwise noted.
 3. Calculated weight of Structural Steel used for the Item "Furnishing & Erecting Structural Steel" = 6,420 Lbs.
 4. Dimensions shown to be field verified as indicated in Structural General Notes. Cost included in Field Measurements (see Special Provisions for details).



S.N. 016-1111
319-1 2 REQ'D

BILL OF MATERIAL

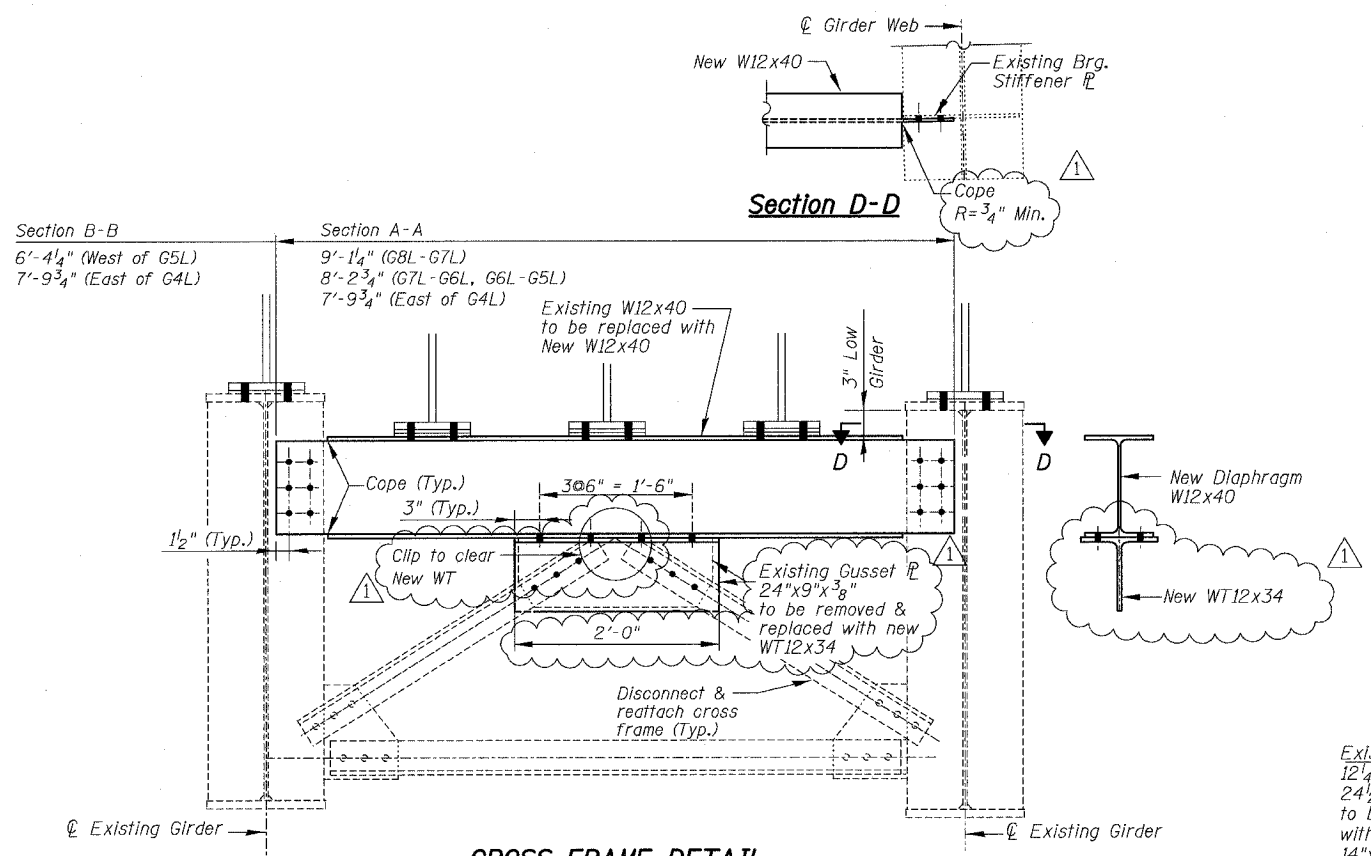
Item	Unit	Quantity
Furnishing & Erecting Structural Steel	Lum Sum	0.03
Structural Steel Removal	Pound	5,640

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REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/08

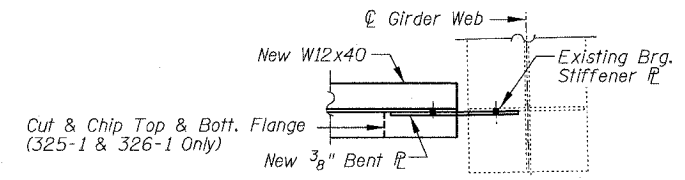
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
DIAPHRAGM REPLACEMENT
PIER 7, SN 016-1111
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: IYL

I-55/94/90 BRIDGE SHEETS 660-21 016-1111 P. 1406
4-06-08 PM
6/29/2006

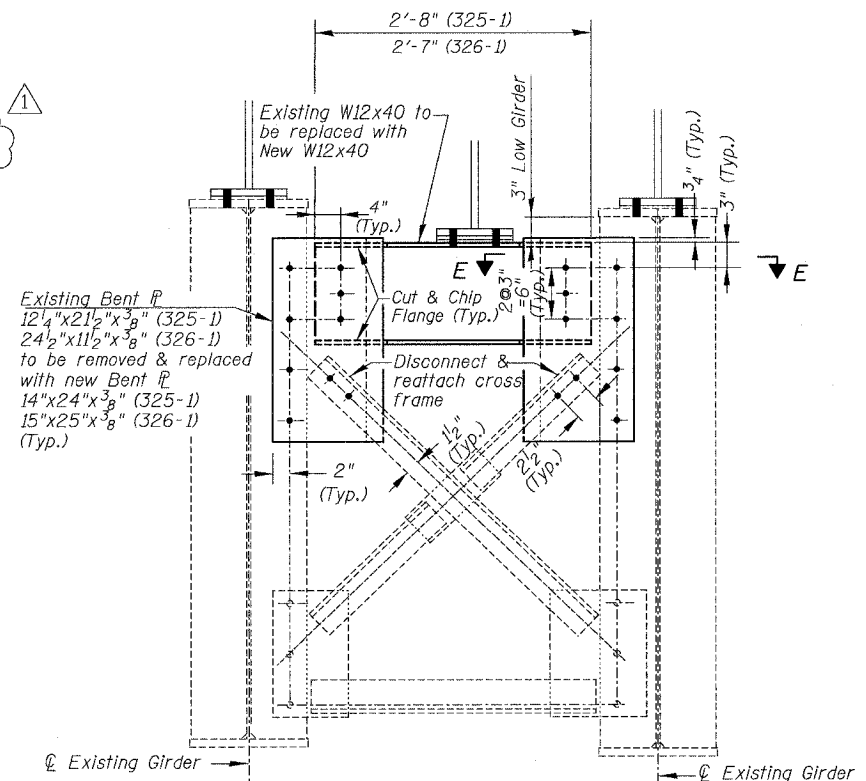


CROSS FRAME DETAIL

S.N. 016-1111	
CF	13 REQ'D

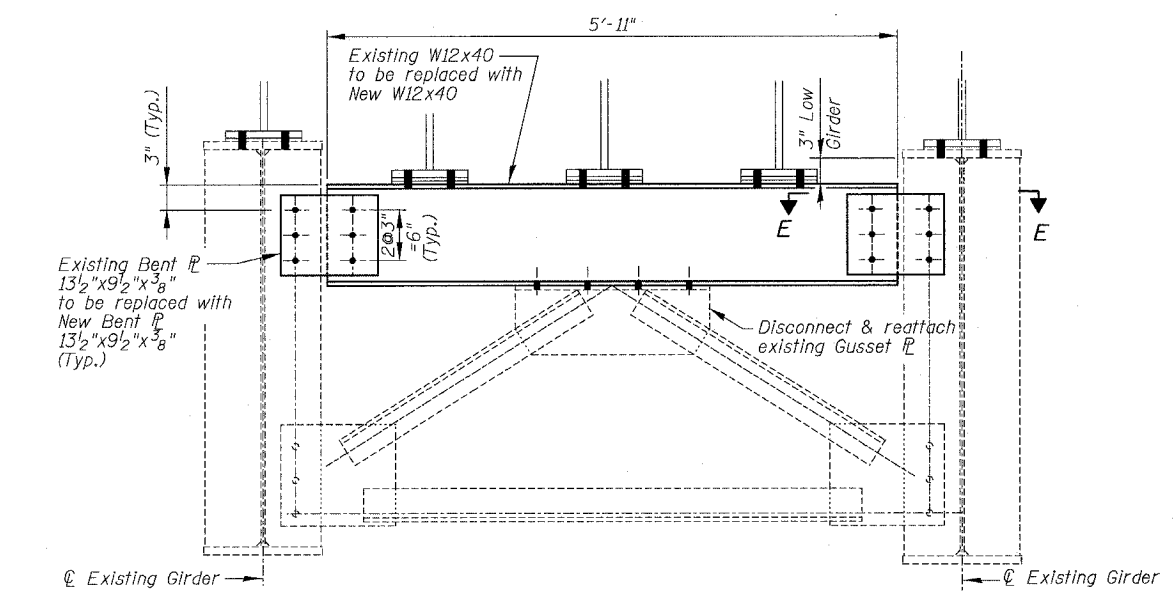


Section E-E



CROSS FRAME DETAIL

S.N. 016-1111	
325-1	1 REQ'D
326-1	1 REQ'D



CROSS FRAME DETAIL

S.N. 016-1111	
320-1	1 REQ'D
321-1	1 REQ'D

- NOTES:**
- Use 7/8" H.S. bolts for all cross frame/diaphragm connections at this pier location (excluding stool connections).
 - Field drill 5/16" holes for 7/8" bolts. Use 2" min. edge distance for all 7/8" bolts unless otherwise noted.
 - Calculated weight of Structural Steel used for the item "Furnishing & Erecting Structural Steel" = 6,270 Lbs.
 - Dimensions shown to be field verified as indicated in Structural General Notes. Cost included in Field Measurements (see Special Provisions for details).

BILL OF MATERIAL

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	Lum Sum	0.03
Structural Steel Removal	Pound	5,580

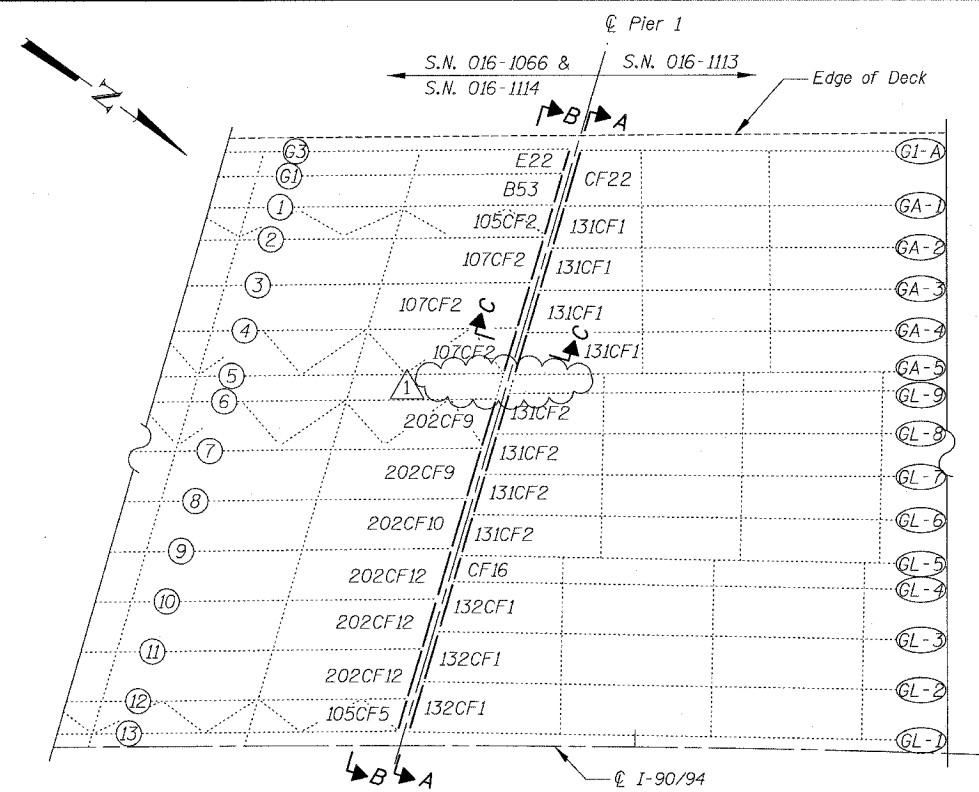
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REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

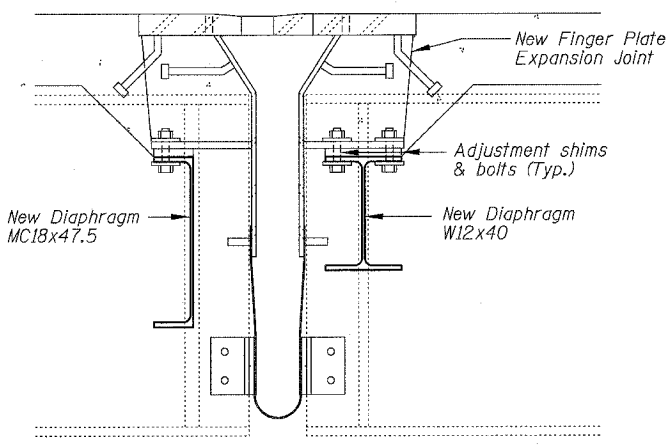
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
DIAPHRAGM REPLACEMENT
PIER 2, SN 016-1111
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: IYL

4-2004-04 6/25/2006

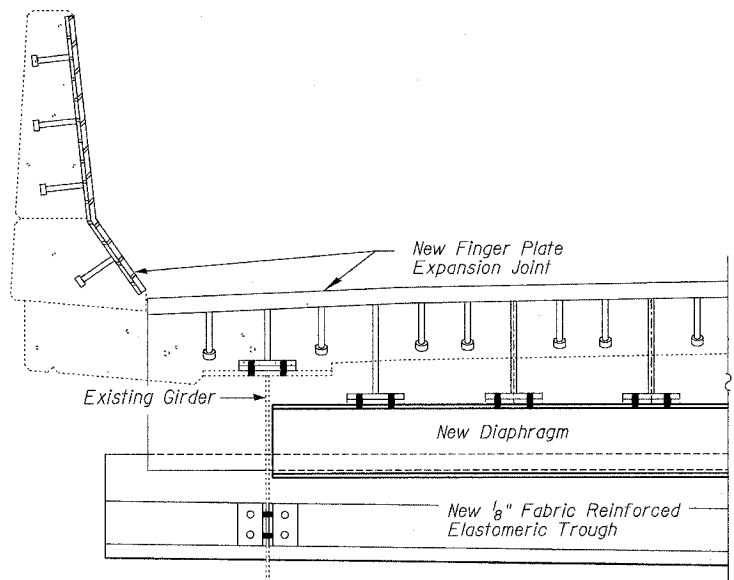
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	269
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62581				



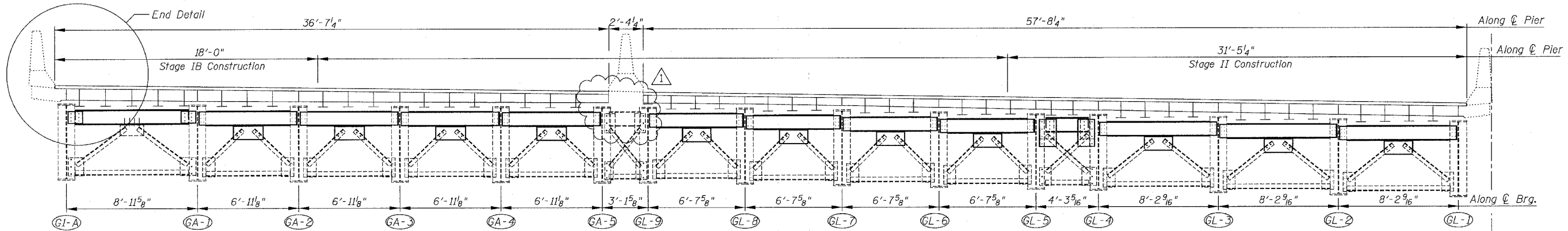
PARTIAL FRAMING PLAN



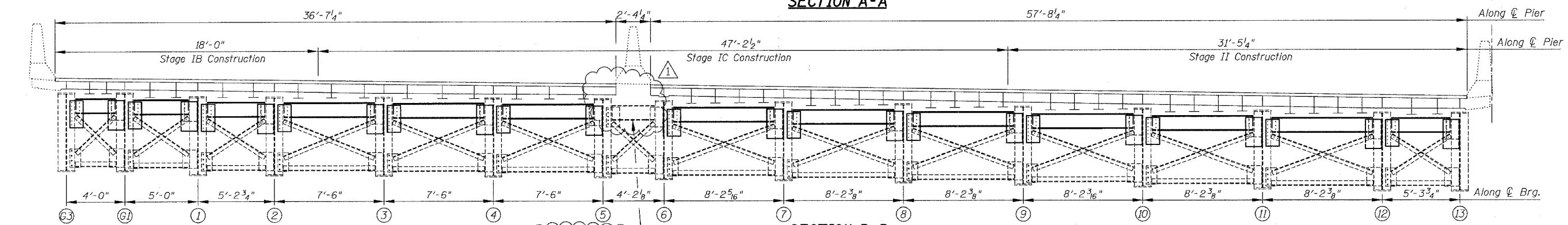
SECTION C-C



END DETAIL



SECTION A-A



SECTION B-B

Existing Diaphragm to remain in place (Typ.)

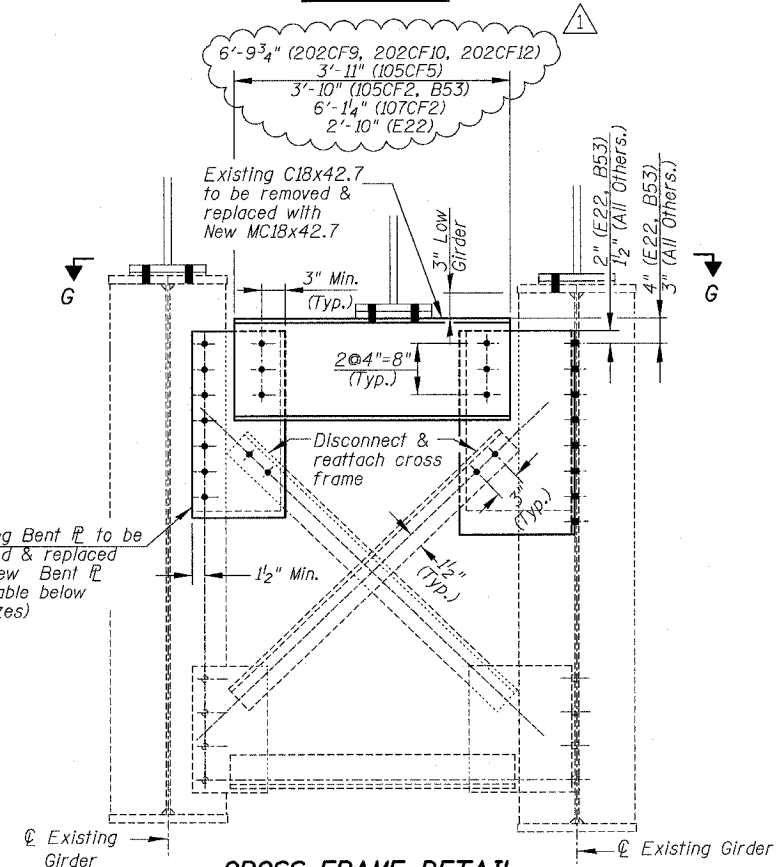
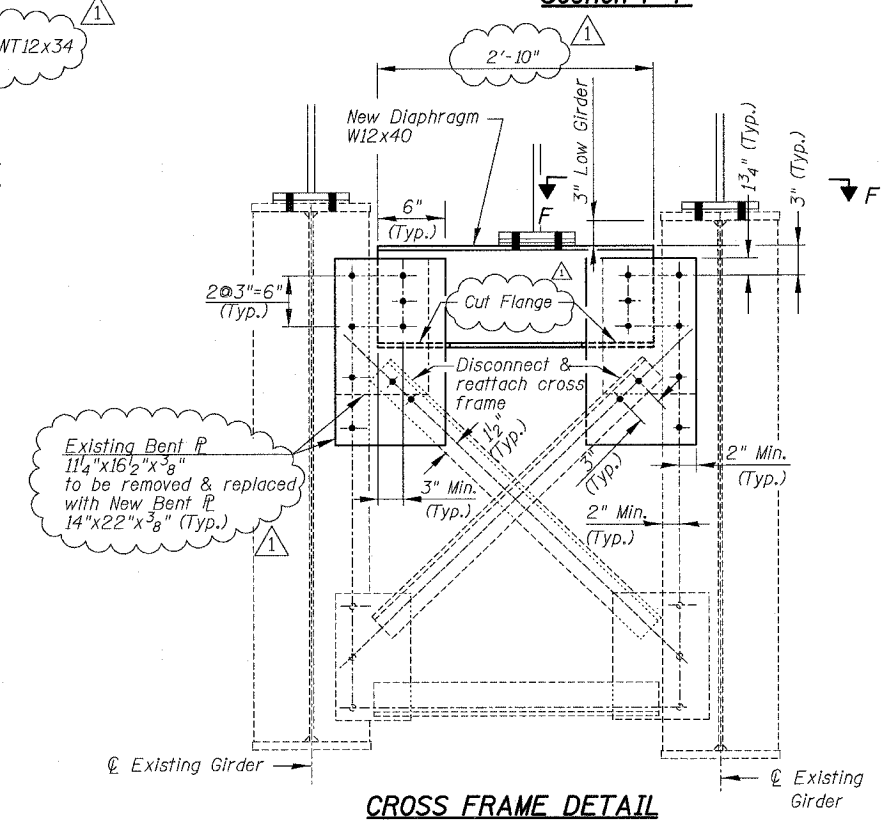
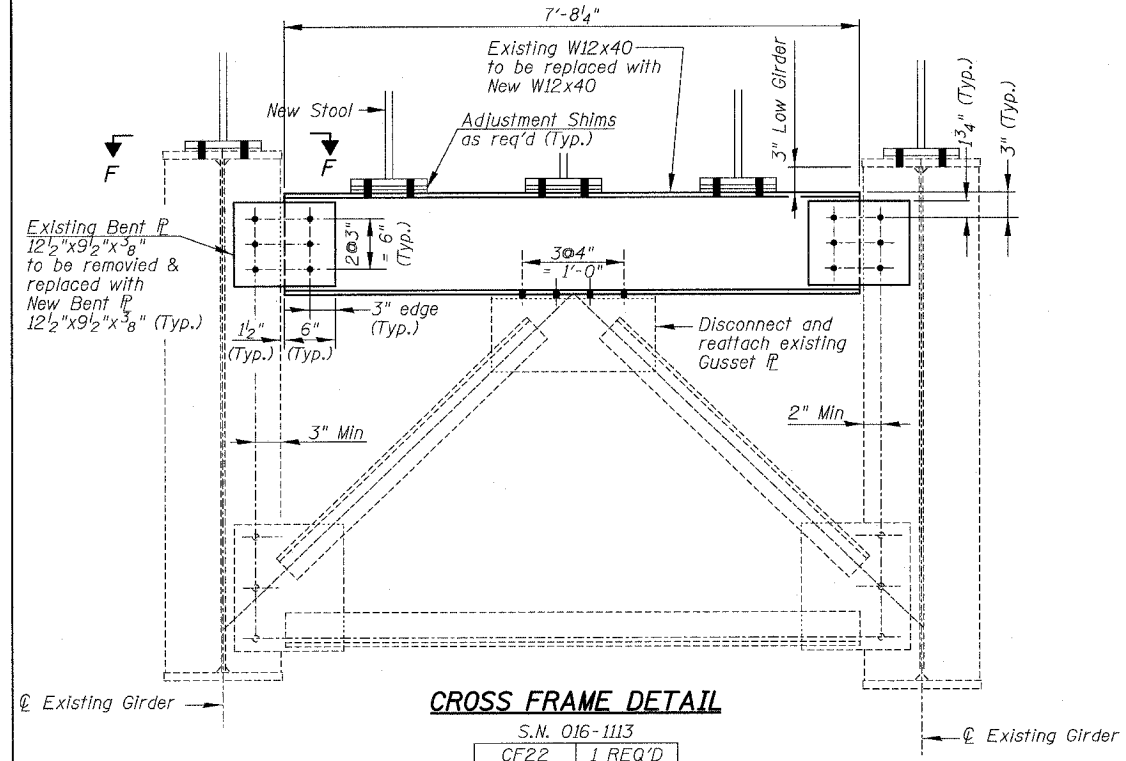
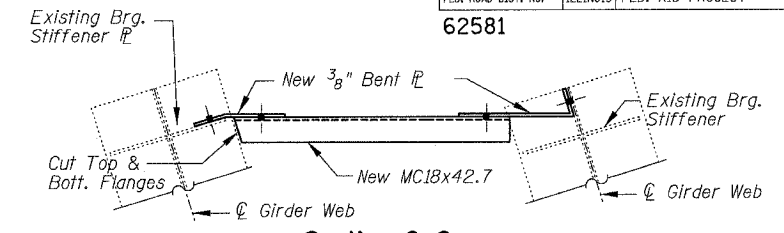
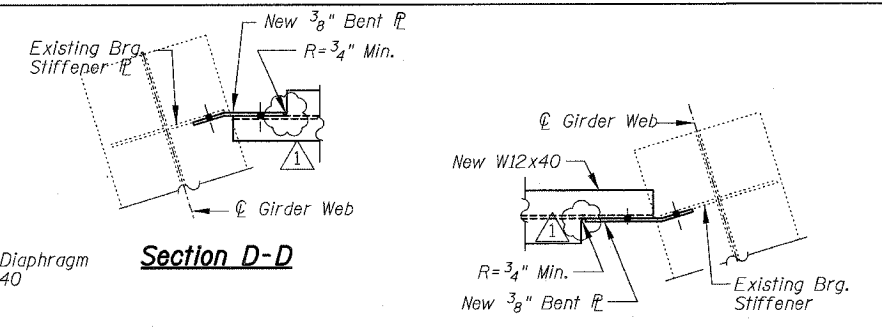
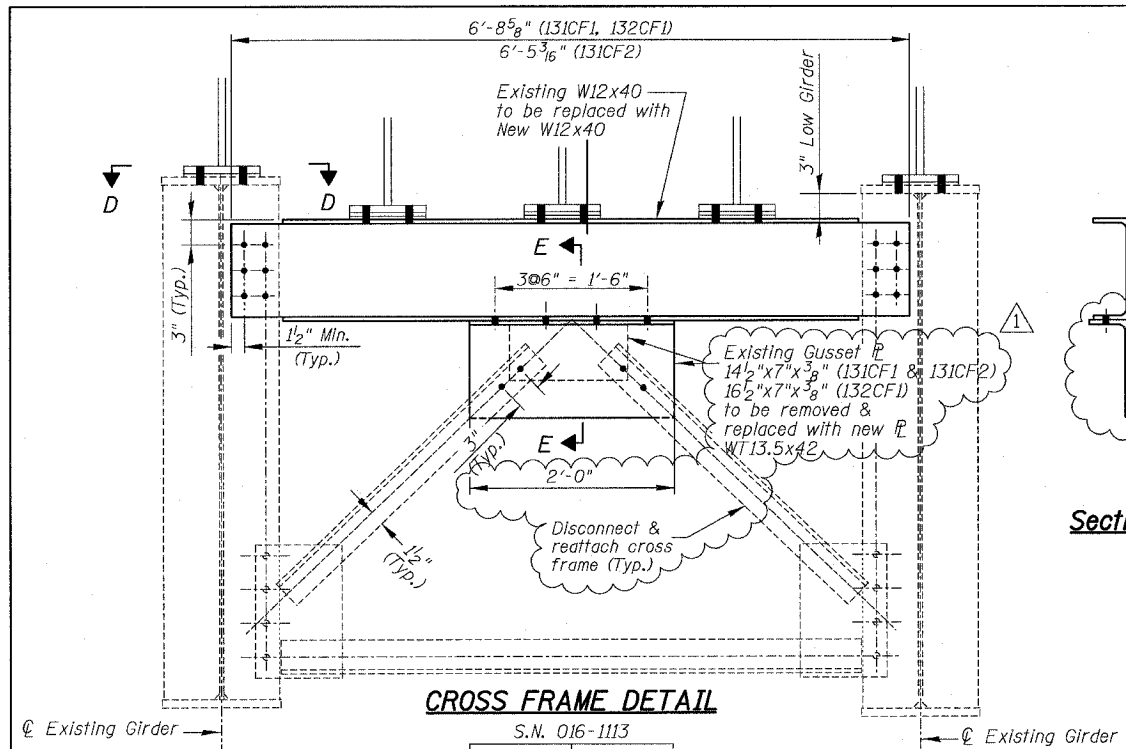
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REVISIONS	NAME	DATE
1	ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
DIAPHRAGM REPLACEMENT
PIER 1, SN 016-1113
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: IYL

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62581



BILL OF MATERIAL

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	Lum Sum	0.04
Structural Steel Removal	Pound	8,280

REVISIONS

NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
DIAPHRAGM REPLACEMENT DETAILS
PIER 1, SN 016-1113

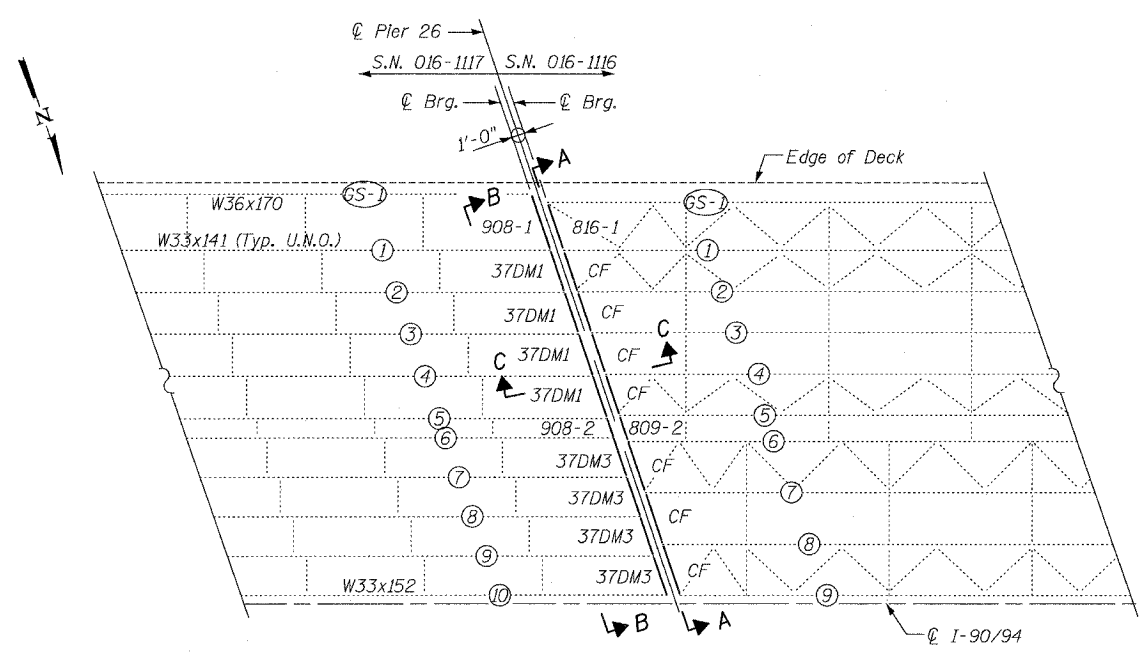
SCALE: NTS
DATE: 5/25/2006

DRAWN BY: BDC
CHECKED BY: TYL

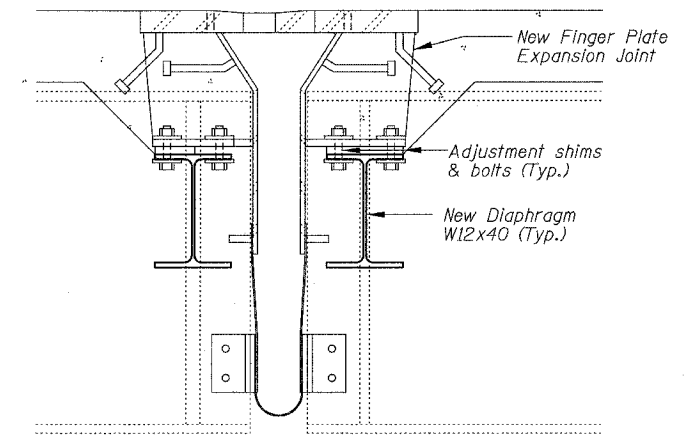
- NOTES:**
- Calculated weight of Structural Steel used for the item "Furnishing & Erecting Structural Steel" = 9,830 Lbs. and itemized as follows:
S.N. 016-1113 = 4,790 Lbs
S.N. 016-1066 = 2,200 Lbs
S.N. 016-1114 = 2,840 Lbs
 - Calculated weight of Structural Steel used for the item "Structural Steel Removal" = 8,280 Lbs. and itemized as follows:
S.N. 016-1113 = 3,880 Lbs
S.N. 016-1066 = 1,810 Lbs
S.N. 016-1114 = 2,590 Lbs
 - E.S. denotes East Side. W.S. indicates West Side.
 - Dimensions shown to be field verified as indicated in Structural General Notes. Cost included in Field Measurements (see Special Provisions for details).

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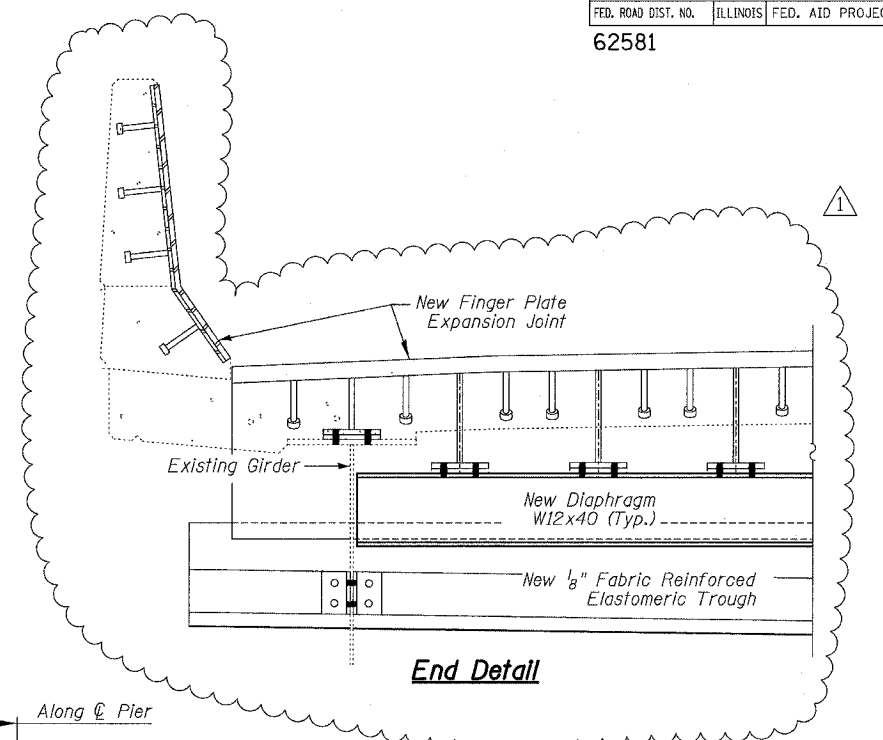
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.		FED. ROAD DIST. NO.	
	ILLINOIS		FED. AID PROJECT	
62581				



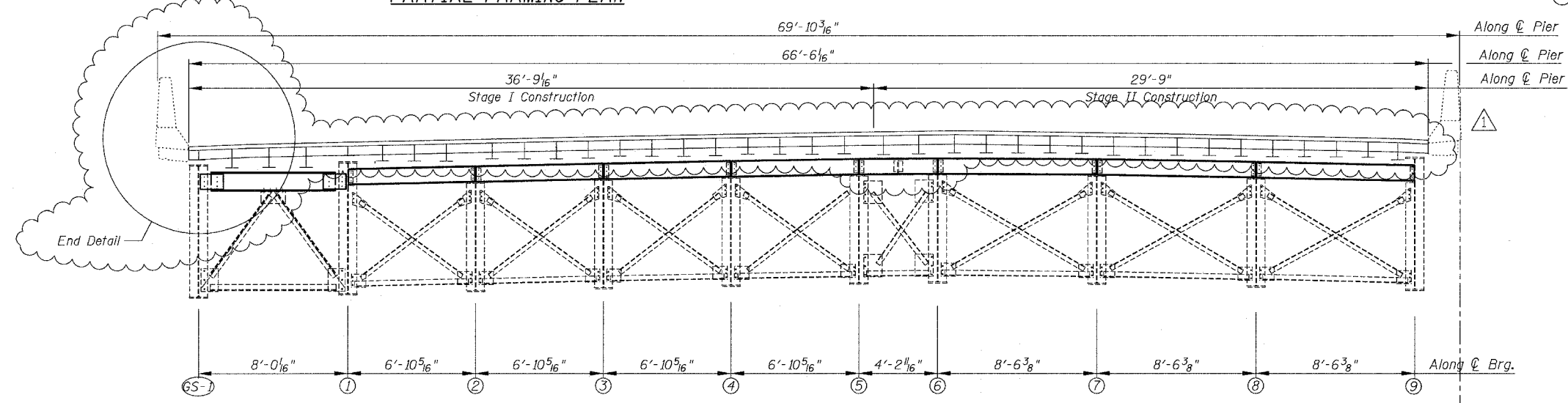
PARTIAL FRAMING PLAN



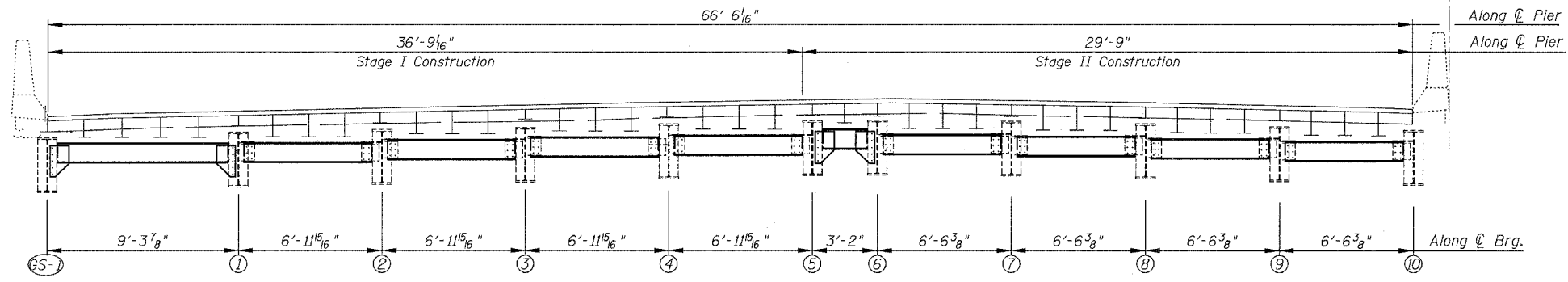
SECTION C-C



End Detail



SECTION A-A



SECTION B-B

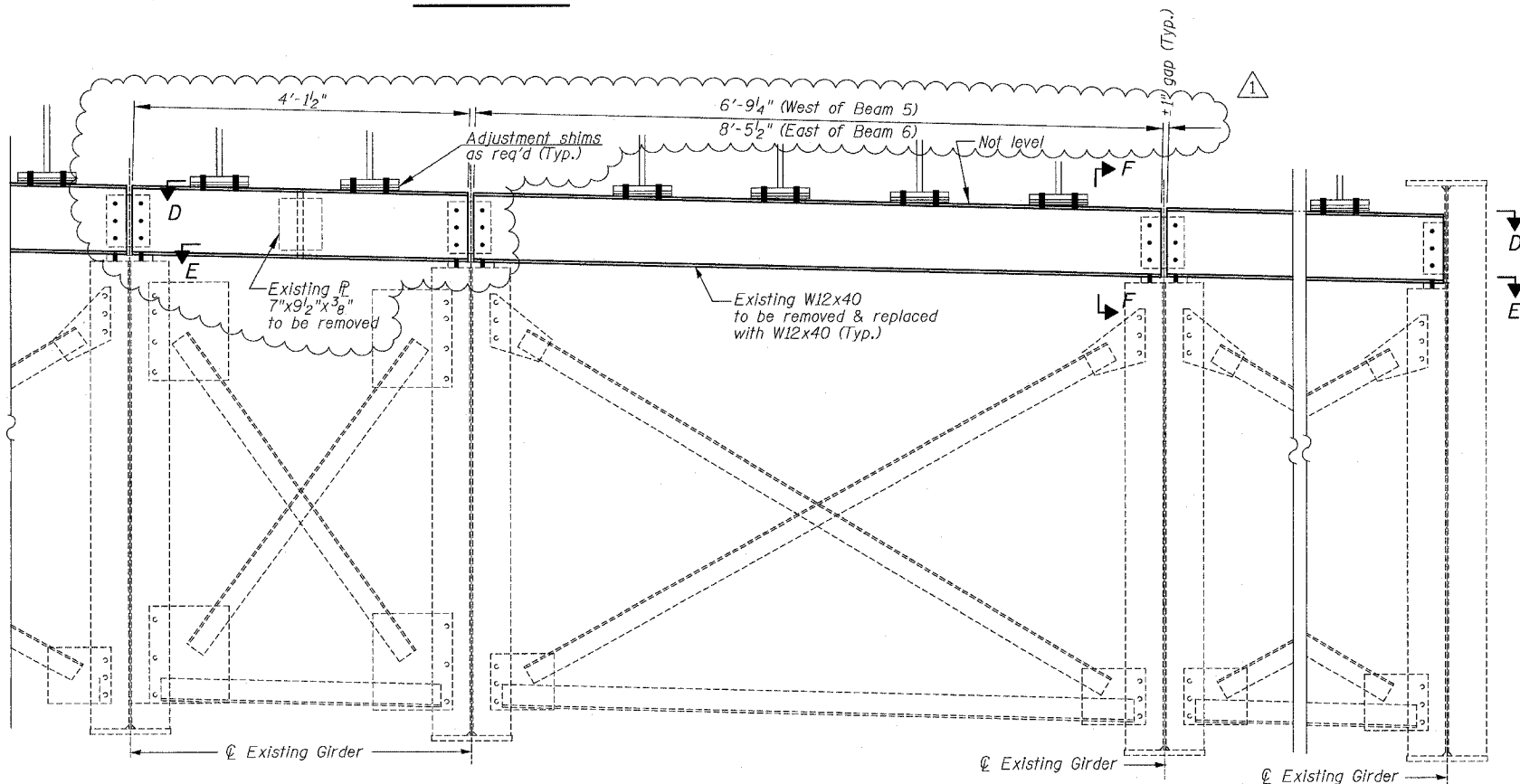
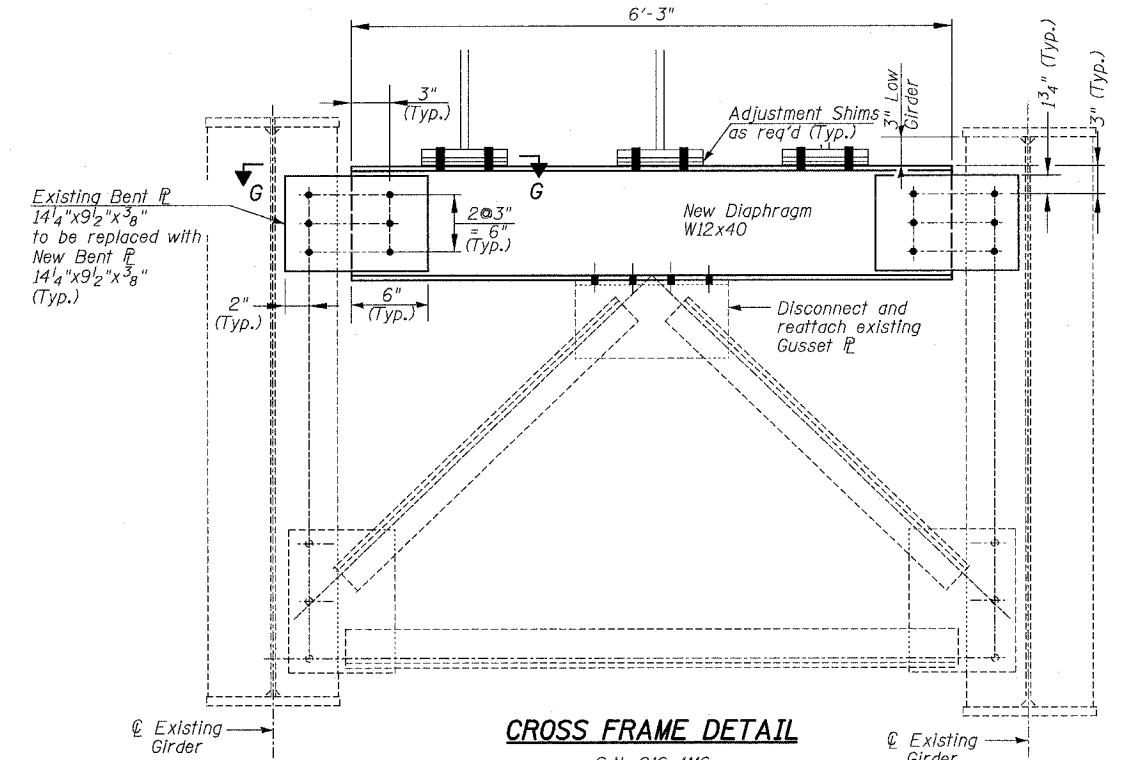
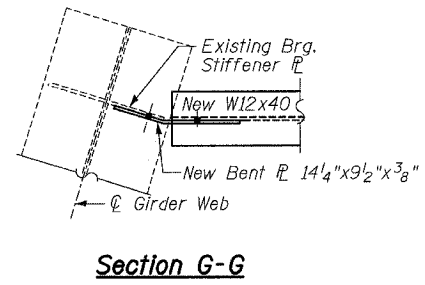
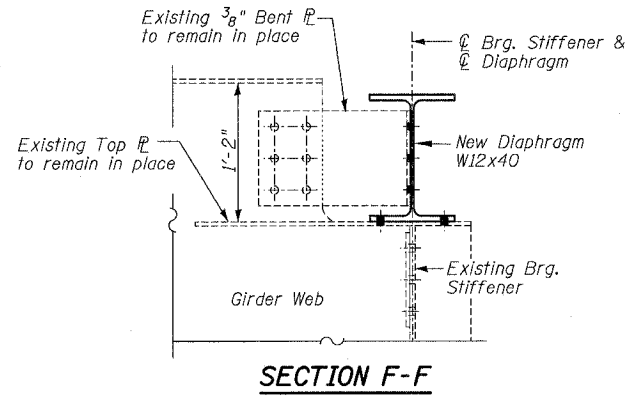
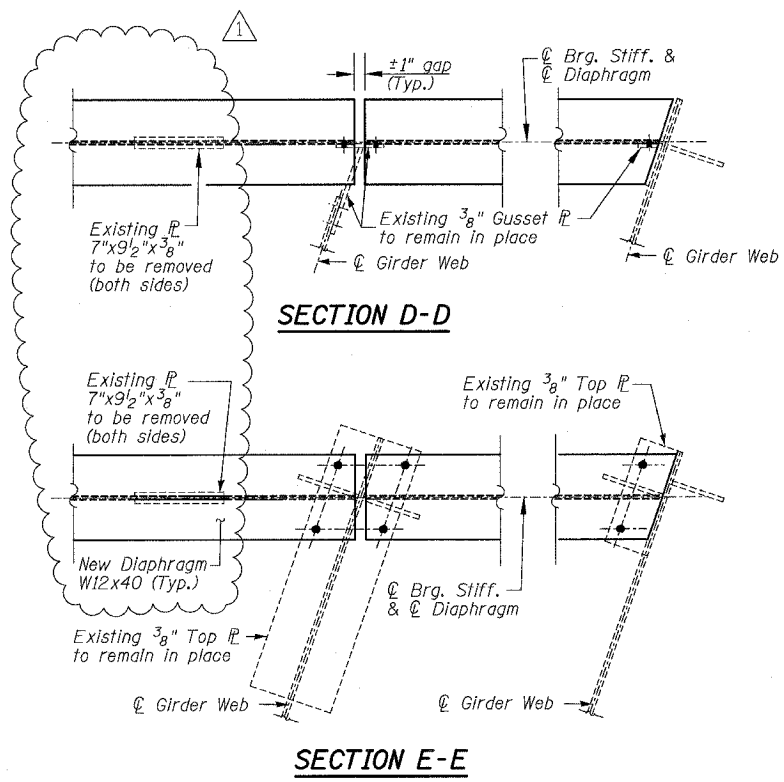
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REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
DIAPHRAGM REPLACEMENT
PIER 26, SN 016-1117

SCALE: NTS
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: IYL

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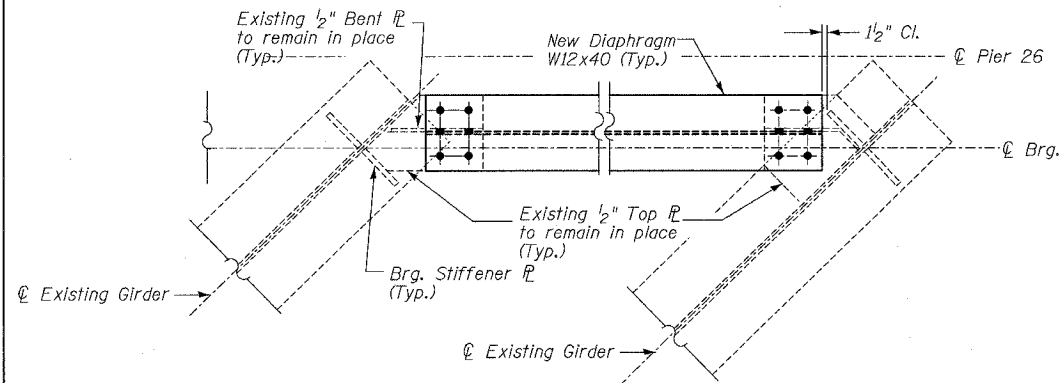
CROSS FRAME DETAIL
 S.N. 016-1116
 CF 7 REQ'D
 809-2 1 REQ'D

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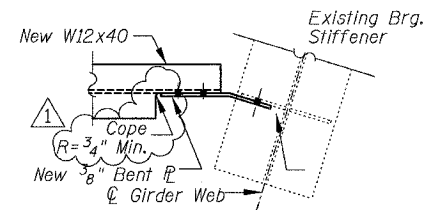
REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 SB DAN RYAN ELEVATED BRIDGE
 REPAIR FROM 15TH TO 28TH STREETS
 DIAPHRAGM REPLACEMENT DETAILS
 PIER 26, SN 016-1117
 SCALE: NTS
 DATE: 5/25/2006
 DRAWN BY: BDC
 CHECKED BY: IYL

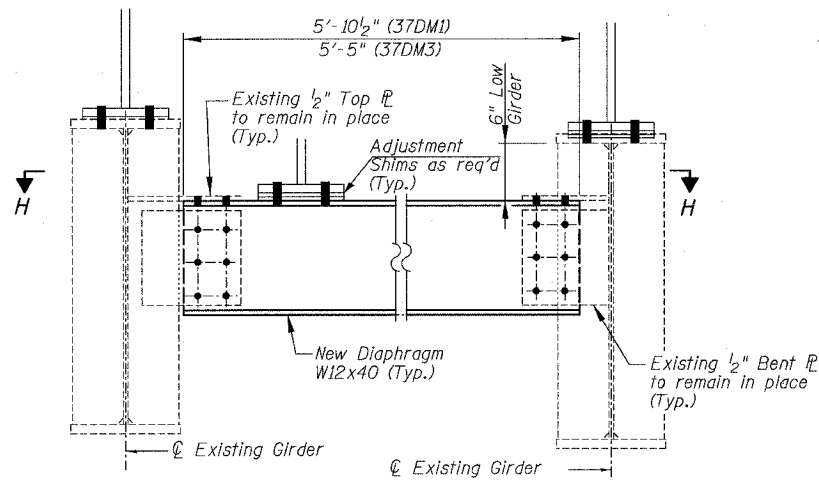
ILLINOIS DEPARTMENT OF TRANSPORTATION SHEETS 660-21-016-117-PP-11a-01
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SECTION H-H



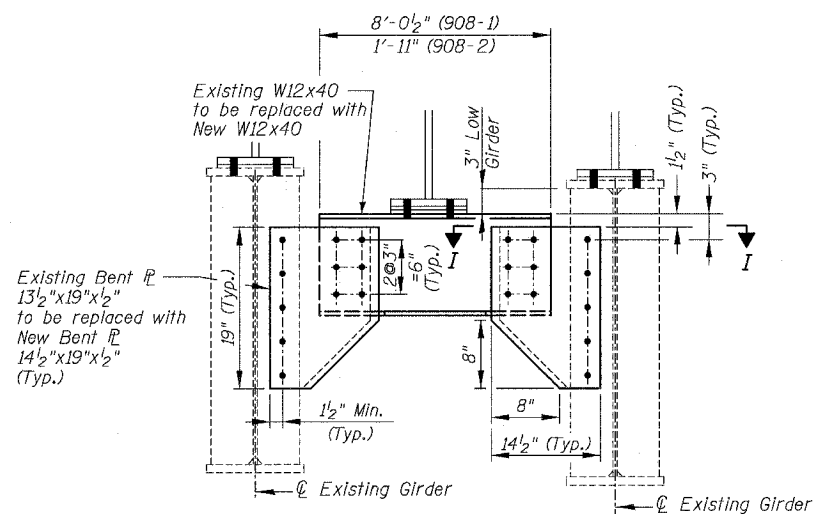
Section I-I



CROSS FRAME DETAIL

S.N. 016-1117

37DM1	4 REQ'D
37DM3	4 REQ'D



DIAPHRAGM DETAIL

S.N. 016-1117

908-1	1 REQ'D
908-2	1 REQ'D

NOTES:

1. Calculated weight of Structural Steel used for the item "Furnishing & Erecting Structural Steel" = 5,440 Lbs. and itemized as follows:
S.N. 016-1116 = 2,800 Lbs
S.N. 016-1117 = 2,640 Lbs
2. Calculated weight of Structural Steel used for the item "Structural Steel Removal" = 5,450 Lbs. and itemized as follows:
S.N. 016-1116 = 2,820 Lbs
S.N. 016-1117 = 2,630 Lbs
3. Dimensions shown to be field verified as indicated in Structural General Notes. Cost included in Field Measurements (see Special Provisions for details).

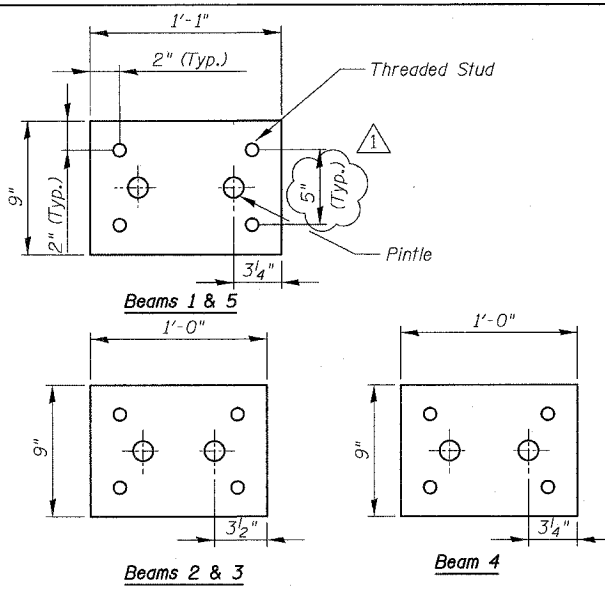
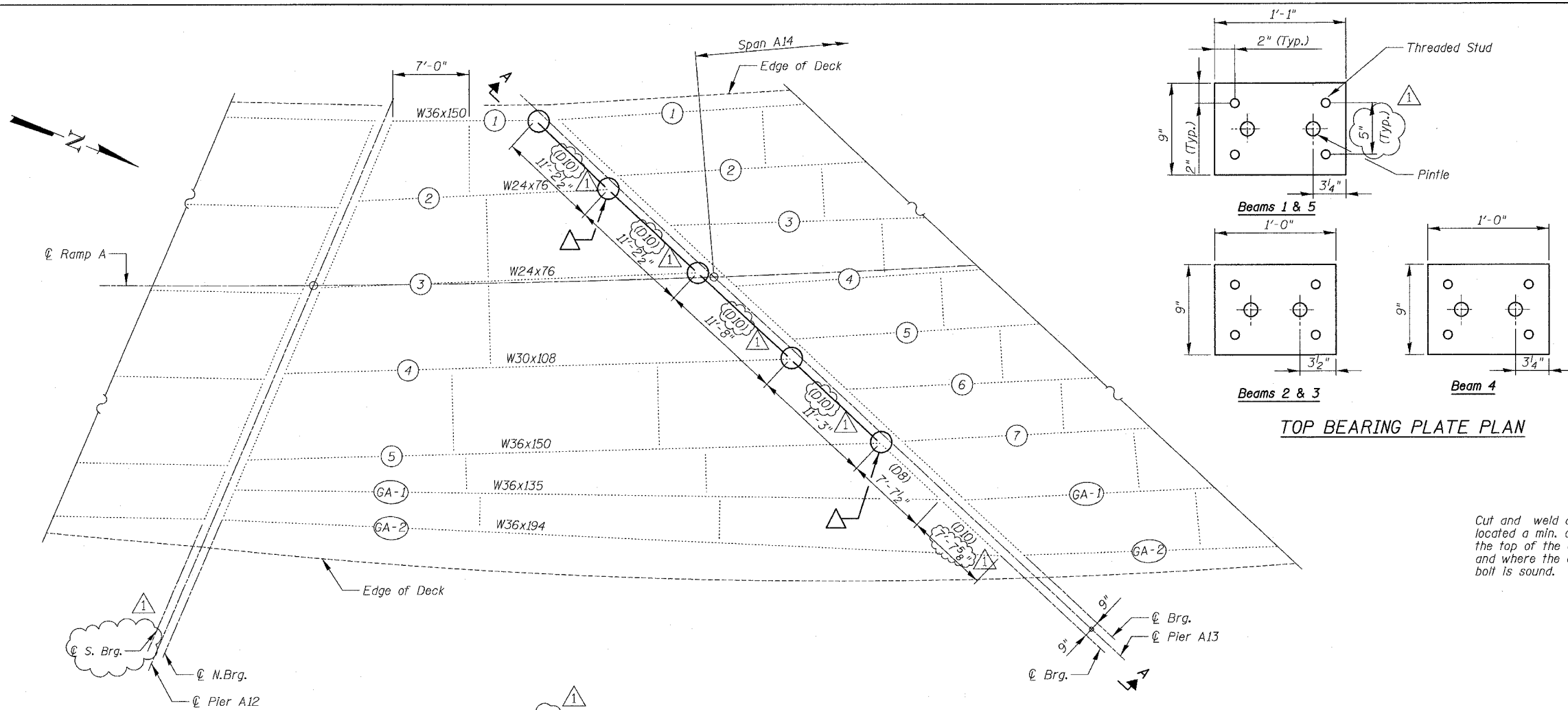
BILL OF MATERIAL

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	Lum Sum	0.02
Structural Steel Removal	Pound	5,580

REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

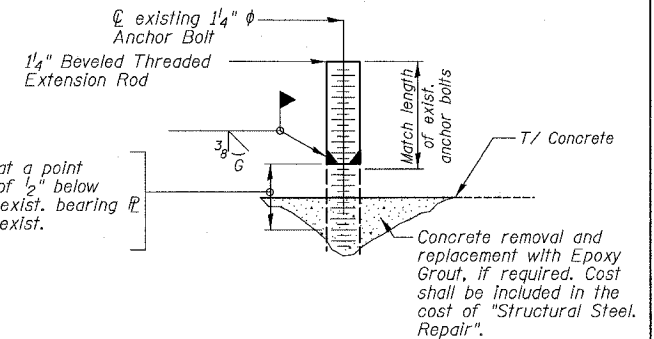
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 SB DAN RYAN ELEVATED BRIDGE
 REPAIR FROM 15TH TO 28TH STREETS
 DIAPHRAGM REPLACEMENT DETAILS
 PIER 26, SN 016-1117

SCALE: NTS
 DATE: 5/25/2006
 DRAWN BY: BDC
 CHECKED BY: IYL



TOP BEARING PLATE PLAN

- NOTES:**
- See Partial Deck Plans for Joint Replacement Details.
 - The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal and at other locations as required in order to maintain the existing deck profile. The support and/or shoring systems shall be approved by the Engineer. Such approval will not relieve the Contractor of responsibility for the safety of the structure.
 - See Sheets 274 & 276 for view A-A.

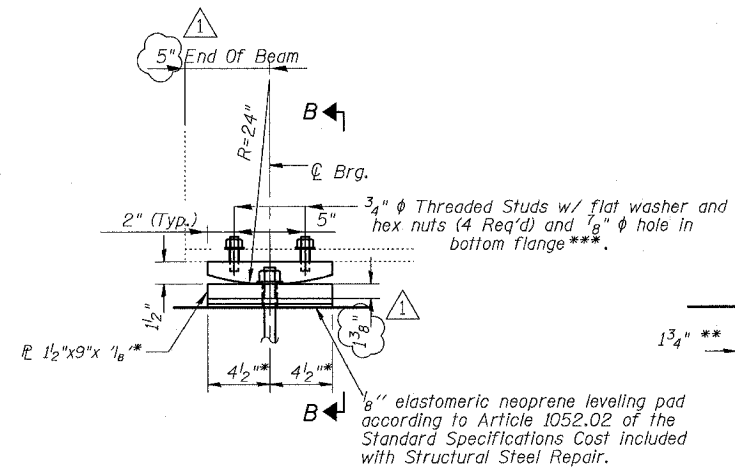


ANCHOR BOLT EXTENSION DETAIL

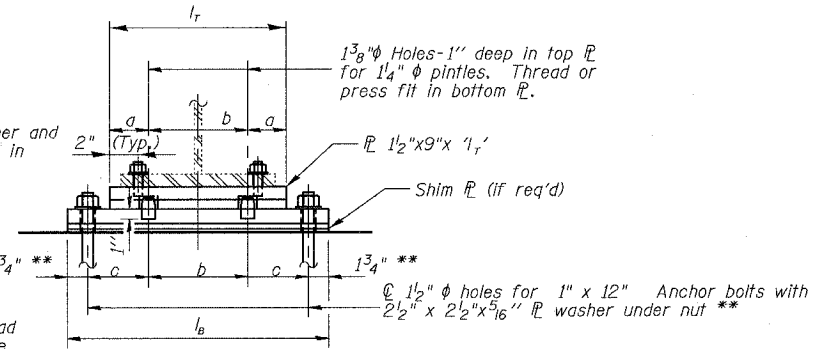
The furnishing and installation of required Anchor Bolt Extensions shall be included in the cost of "Structural Steel Repair".

PROPOSED FIXED BEARING TABLE

Beam No.	l_b	l_r	a	b	c	Req'd.
1	26"	13"	3 1/4"	6 1/2"	8"	1
2	22"	12"	3 1/2"	5"	6 3/4"	1
3	17 1/2"	12"	3 1/2"	5"	4 1/4"	1
4	23 1/2"	12"	3 1/4"	5 1/2"	9"	1
5	20 1/2"	13"	3 1/4"	6 1/2"	5 1/4"	1



ELEVATION



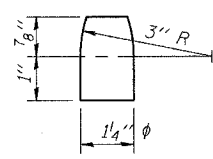
SECTION B-B

PROPOSED FIXED BEARING

*Bm 5: Bottom flange shall be 9 1/2" wide. Provide 1 1/2" of shim fl's (at least 2-1/8" fl) for bearing height adjustment. Cost included with Structural Steel Repair.

**Bm 3: Existing 1/4" anchor bolts shall be extended. See Detail

*** Field Drill hole in existing beams, cost included with Structural Steel Repair.



PINTLE

LEGEND:

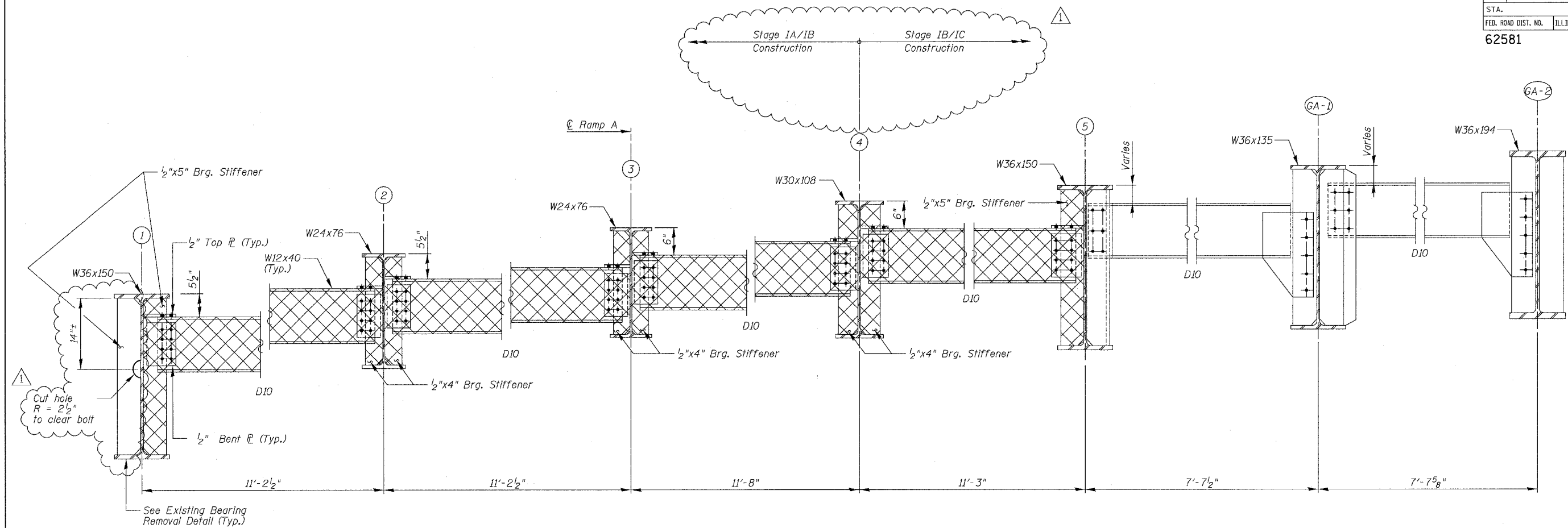
- Steel Diaphragms to be replaced
- Remove & Replace Exist. Steel Bearing
- Concrete Pedestal Work
- (D10) Exist. Diaphragm Designation

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
PIER A 13 SN 016-1067
STEEL REPAIR PLAN
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: IYL

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EXISTING ELEVATION- VIEW A-A
(Show South Bearing Line)

LEGEND:

- Structural Steel Removal
- Jack and Remove Existing Bearings

EXISTING BEARING ASSEMBLY

SUPPORT REACTIONS & MINIMUM JACKING CAPACITY

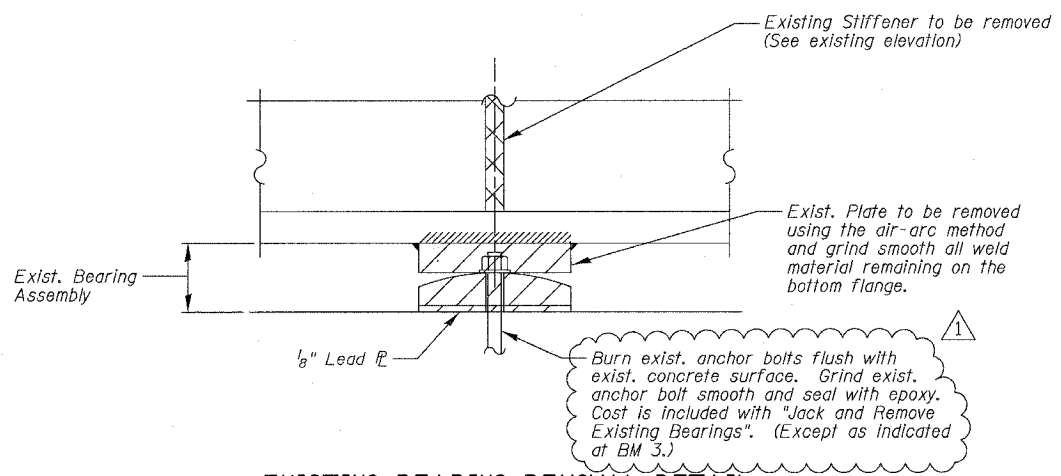
S/N	Girder	DL + 1/2(LL+I)	Min. Jack. Capacity (k)
016-1067 (Pier A13)	1	26	30
	2	67	70
	3	95*	125
	4	95	95
	5	78	80

BEAM	HEIGHT*
1	3 1/4"
2	3"
3	3"
4	3"
5	1 1/2"

* Includes 1/8" lead flange

- NOTES:**
- The quantity of "Jack and Remove Existing Bearings" includes the jacking and removal of the existing fixed bearings at beams 1 to 5.
 - See Sheet 275 for bearing seat work at beams 2 and 5.

*Reaction shown for DL+(LL+I).



EXISTING BEARING REMOVAL DETAIL

BILL OF MATERIAL

Item	Unit	Total
Structural Steel Removal	Pound	2,210
Jack and Remove Existing Bearings	Each	5
Temporary Shoring and Cribbing	Each	5

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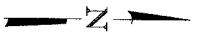
REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
PIER A13 SN 016-1067
STEEL REMOVAL DETAILS
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: IYL

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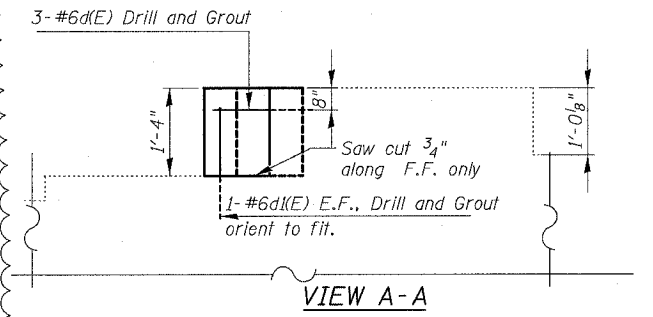
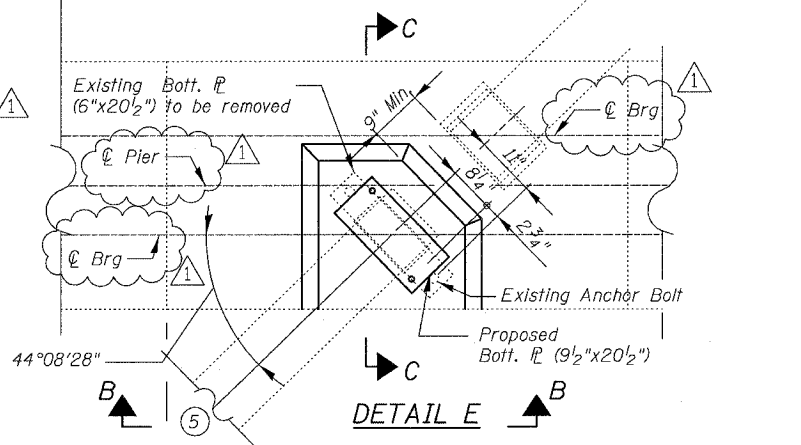
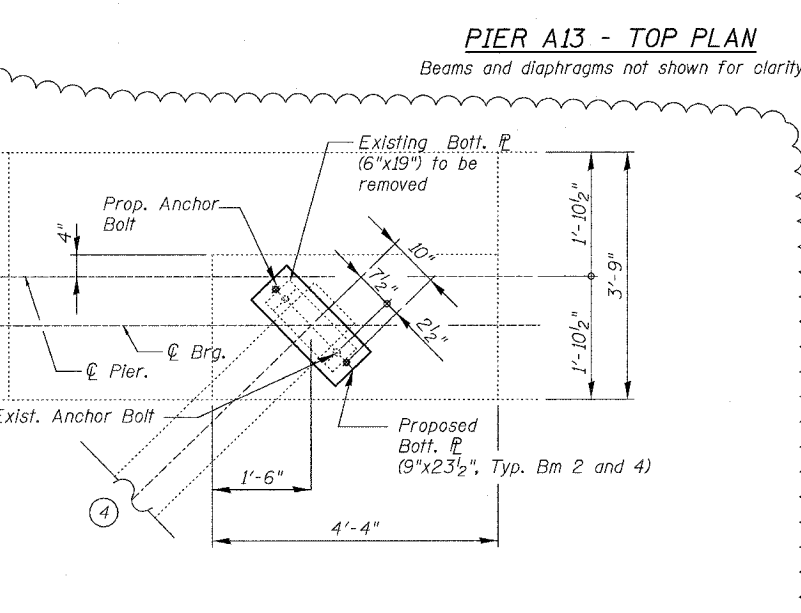
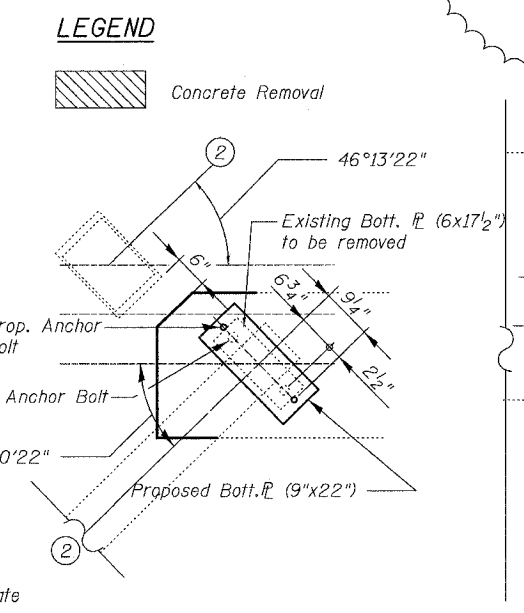
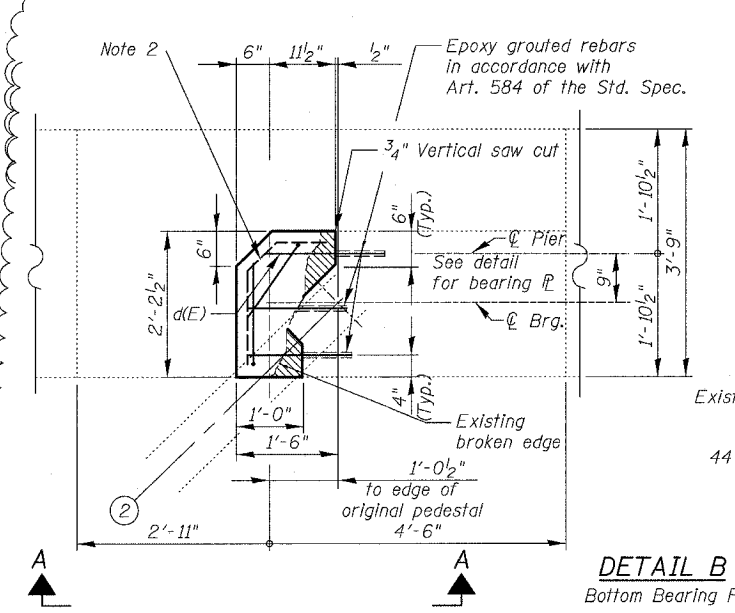
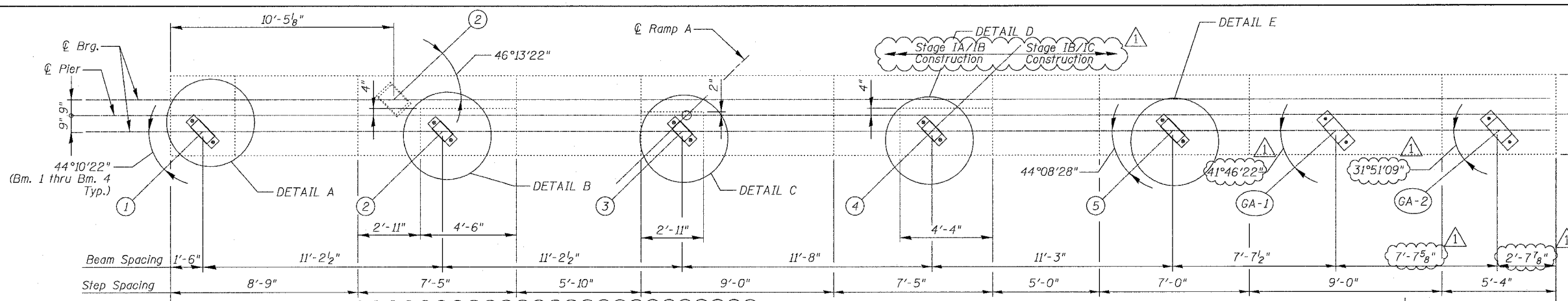
F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	2003-0291	COOK	344	275
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62581

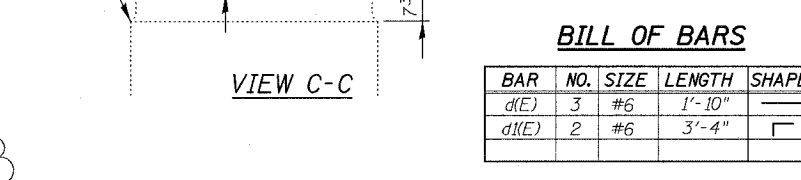
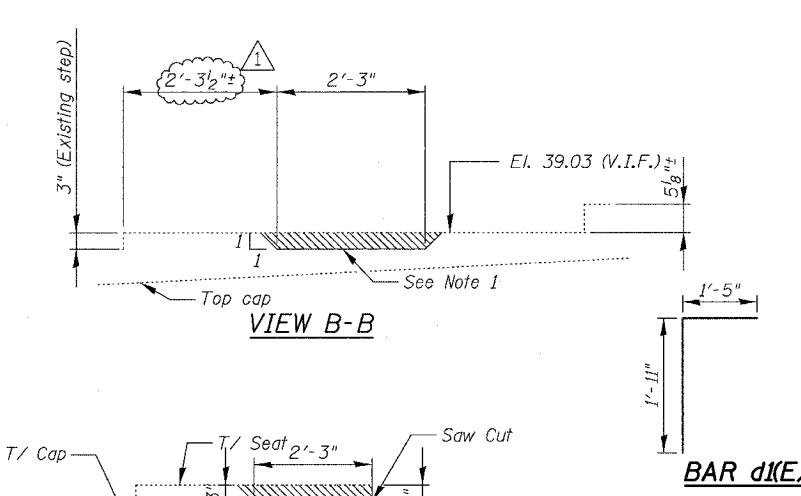
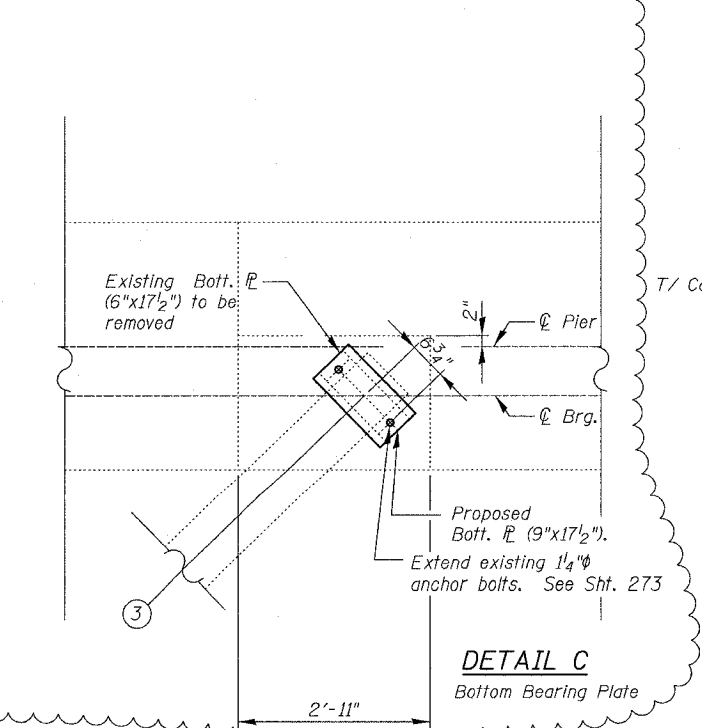
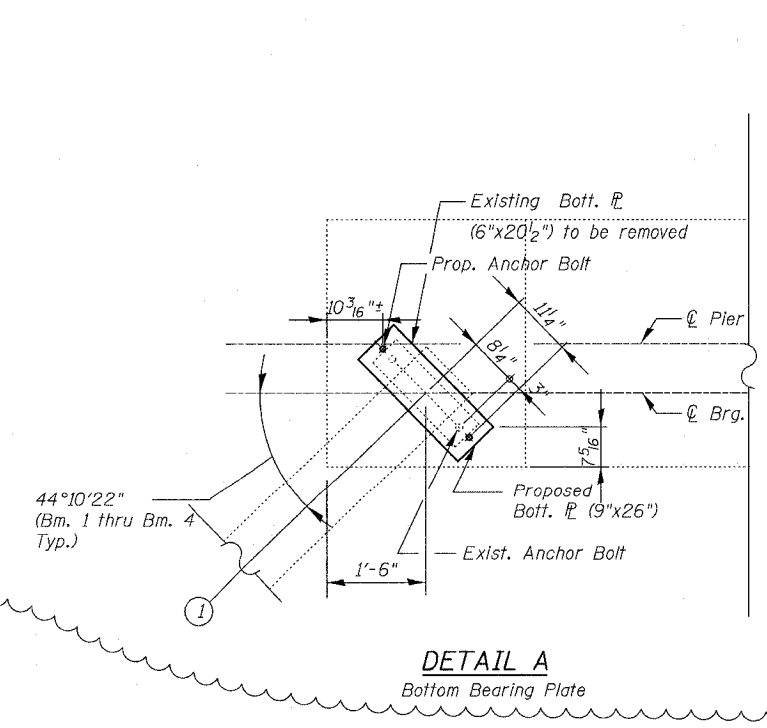


BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	1.1
Concrete Superstructure	Cu. Yd.	0.2
Reinforcement Bars, Epoxy Coated.	Pound	20



- Notes:
1. Remove 3" of existing seat concrete as shown. Saw cut front face. Remove concrete to within 1/2"± of that indicated and finish remaining removal by grinding to obtain a level bearing surface.
 2. Provide 6x6-W4.0xW4.0 W.W.F. along side and top faces with 2" cover bend and form to concrete shape as required. Cost included with Reinforcement Bars, Epoxy Coated.
 3. Saw cuts are included with Concrete Removal.



BILL OF BARS

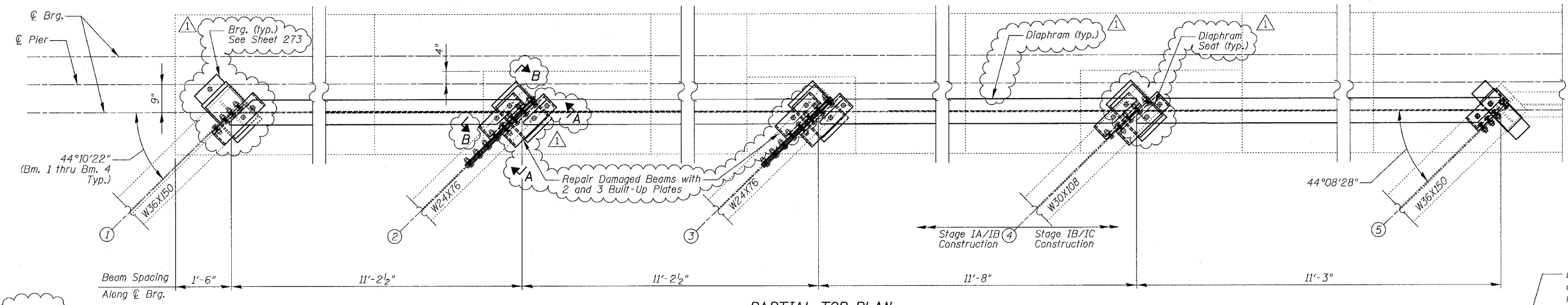
BAR NO.	SIZE	LENGTH	SHAPE
d(E)	#6	1'-10"	□
d(I(E))	#6	3'-4"	□

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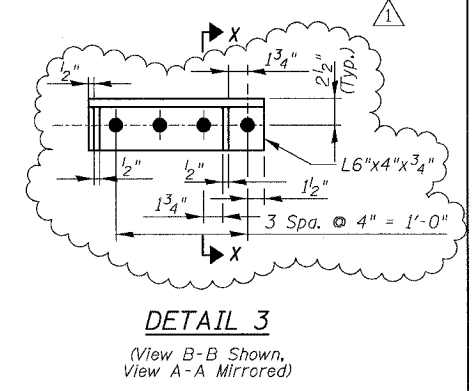
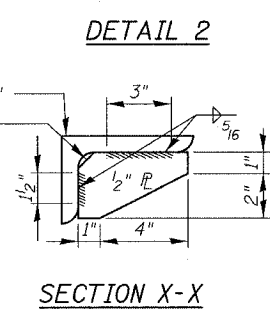
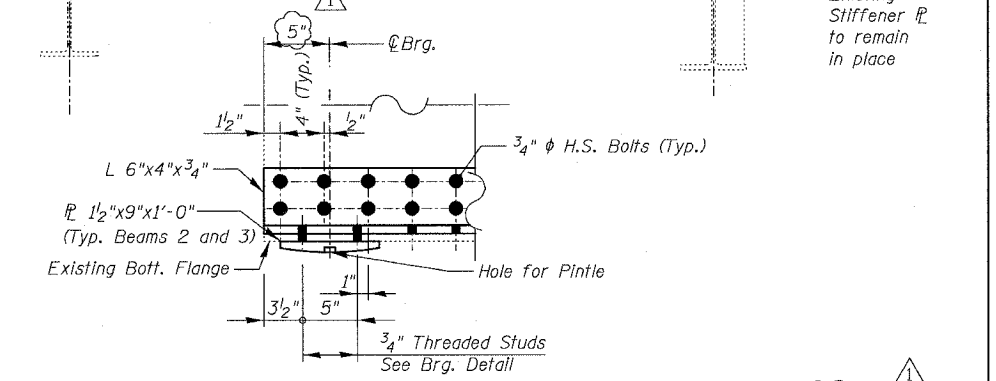
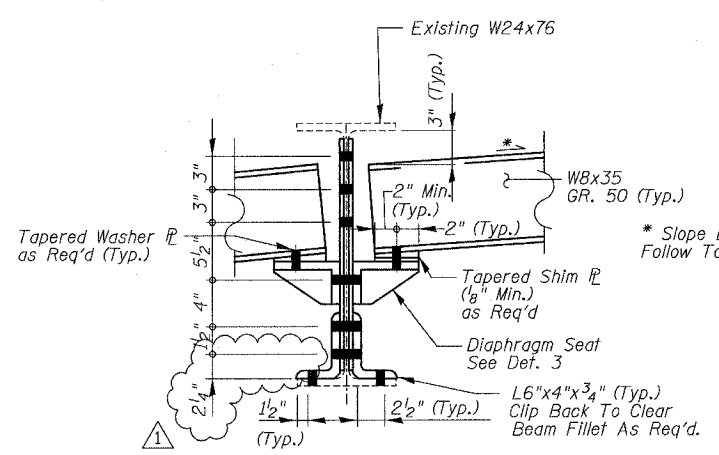
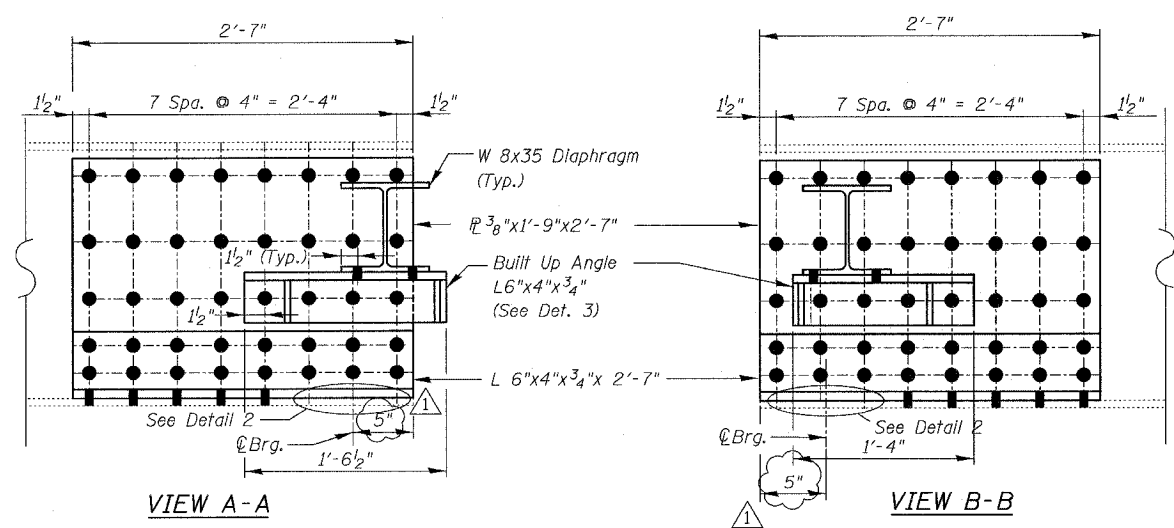
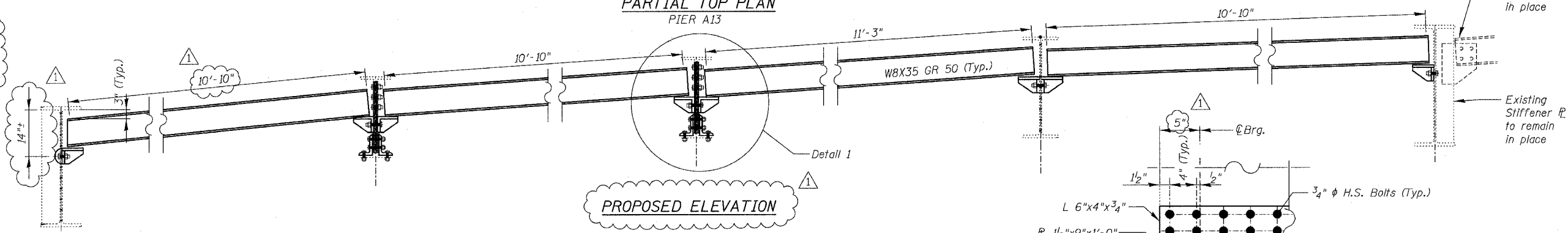
REVISIONS		DATE
NAME	DATE	
ADDENDUM NO. 1	6/29/06	

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
PIER A13, SN 016-1067
BEARING AND PEDESTAL DETAILS
SCALE: NTS
DATE: 5/25/2006
DRAWN BY: BDC
CHECKED BY: IYL

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- NOTES**
- All new fasteners shall be $\frac{3}{4}$ " ϕ H.S. bolts with minimum edge distance of $1\frac{1}{2}$ ", unless otherwise noted.
 - Field drill all bolt holes $\frac{1}{16}$ " ϕ . Cost included with Structural Steel Repair.



BILL OF MATERIAL

Item	Unit	Total
Structural Steel Repair	Pound	3,955

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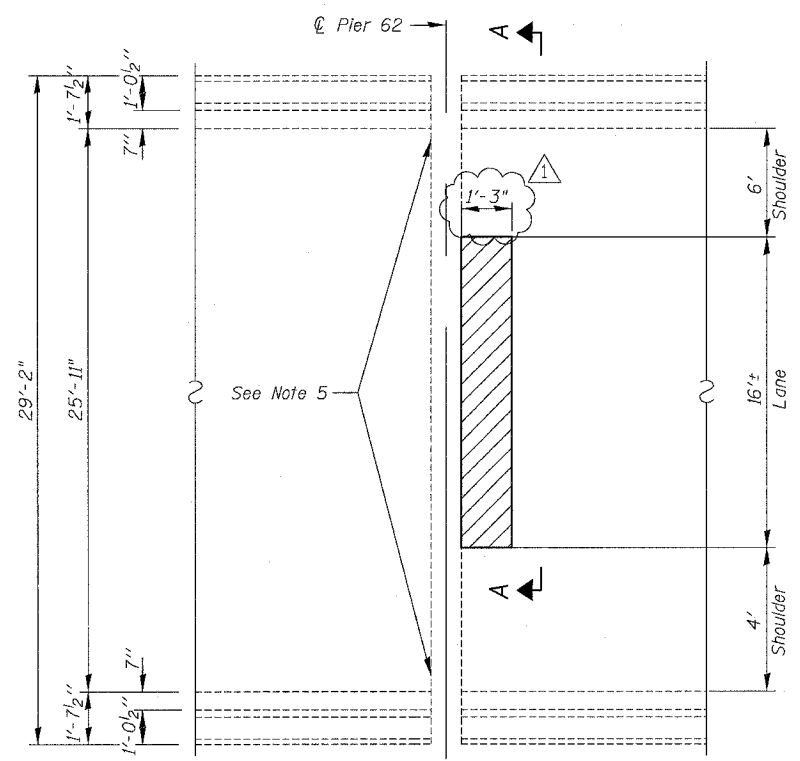
REVISIONS

NAME	DATE
ADDENDUM NO. 1	6/29/06

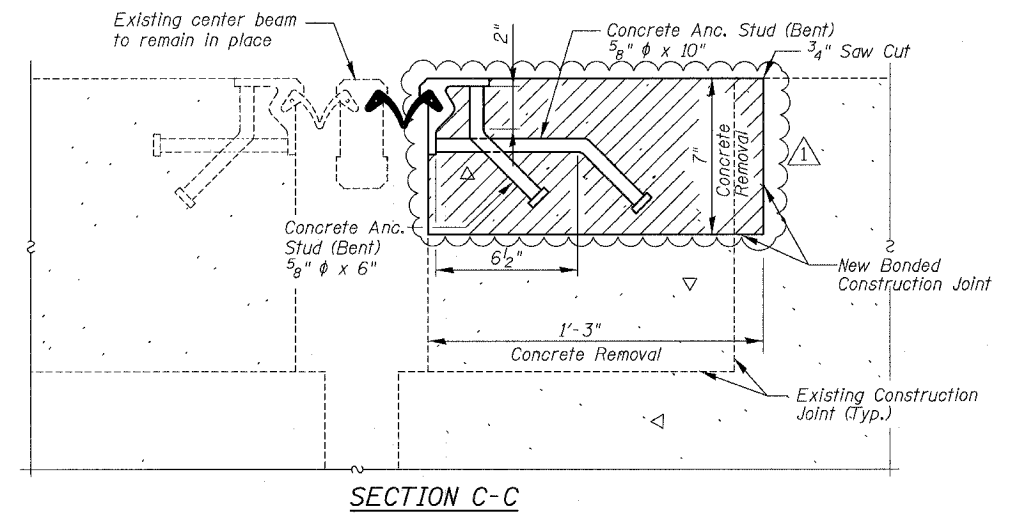
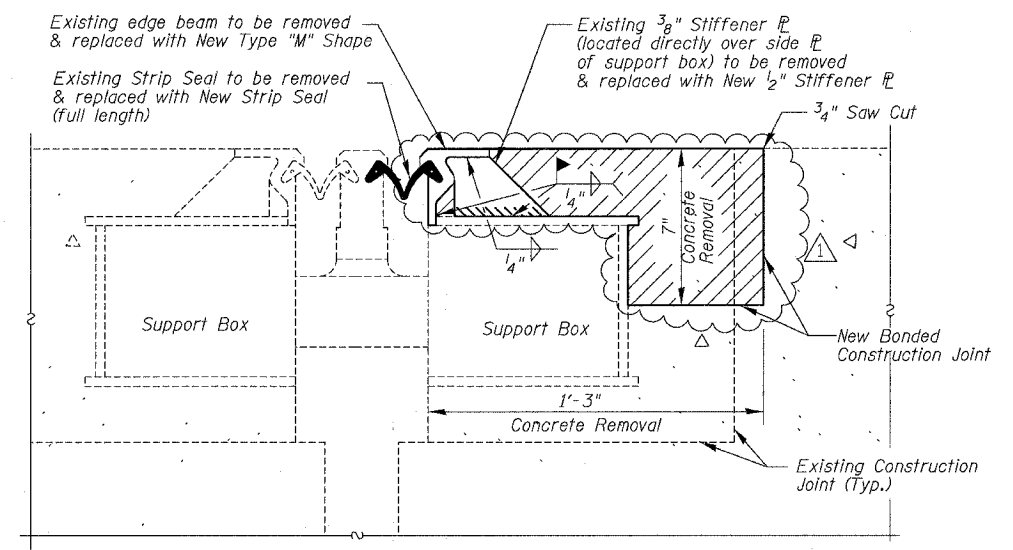
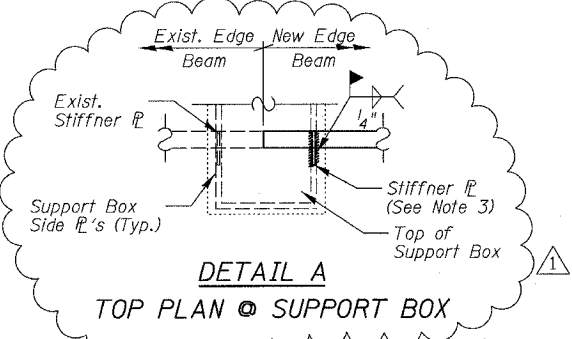
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
PIER A13, SN 016-1067
DIAPHRAGM/BEAM REPAIR DETAILS

SCALE: NTS
DATE: 5/25/2006

DRAWN BY: BDC
CHECKED BY: IYL

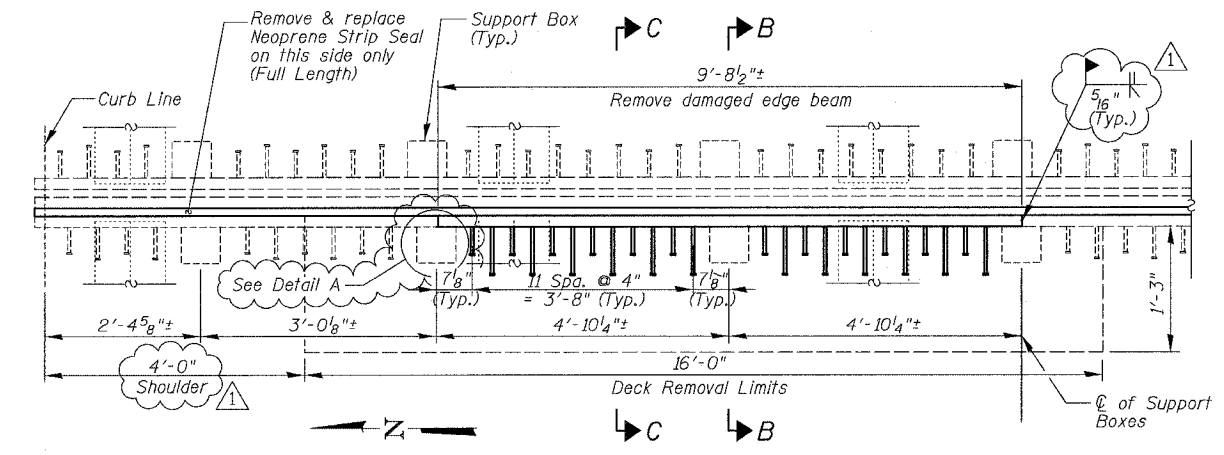


PARTIAL DECK PLAN - PIER 62

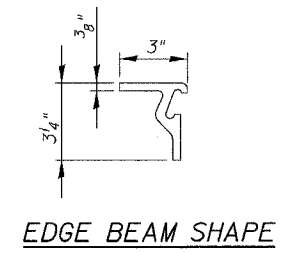
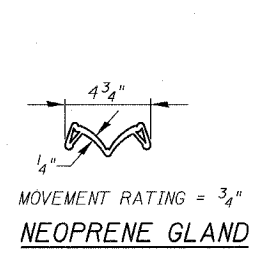


MODULAR EXPANSION JOINT REPAIR NOTES

1. Support box, upper and lower bearings (inside support box) shall be examined to ensure they are not damaged and in the as-installed condition prior to repair.
2. The damaged edge beam and stiffener plates shall be removed by field cutting, removing welds and grinding smooth. Field cutting shall use either the air-arc method or saw cutting, no flame cutting will be allowed. All remaining welds or surfaces shall be ground smooth after removal. Grinding shall be done parallel to longitudinal direction of support boxes.
3. New stiffener plates will be located as close as practical to the side plates of the support boxes. Extreme care shall be exercised in all field welding operations not to induce excess heat into the urethane bearings inside support boxes. The bearings are flammable. Any damage to support boxes or components inside shall be repaired as directed by the Engineer at no additional cost to the Department.
4. Cost of removal and disposal of existing steel and strip seal shall be included in the cost of "Modular Expansion Joint Repair".
5. Existing junction plates at parapet shall be removed and reattached as required to install new strip seal. Cost included in "Modular Expansion Joint Repair".
6. Spalled or unsound concrete beyond the specified removal dimensions, if any, shall be incorporated into the removal limits as directed by the Engineer and the cost included with Concrete Removal and Concrete Superstructures. Groove new concrete as directed by the Engineer.
7. Existing deck rebars within the removal area, if any, shall remain in place. Bend conflicting rebars as directed by Field Engineer. Rebars damaged during concrete removal shall be replaced at no cost to the Department.
8. Contractor shall place formwork so that no concrete flows into boxes and joint gap opening.
9. Contractor shall field verify all relevant dimensions prior to ordering or fabricating materials. See Special Provision for Field Measurements.
10. All concrete Anchor Studs bent at 45°. Saw cut around entire perimeter of removal area. Cost of saw cut included with Concrete Removal.
11. Shop drawings of the original joint are available, see Special Provision for Examination of Existing Plans.
12. Field touch-up of shop and painted areas shall be required after field welding and grinding, as directed by the Engineer. Cost of touch-up shall be included with Modular Expansion Joint Repair.

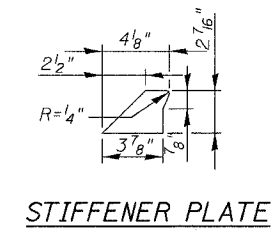
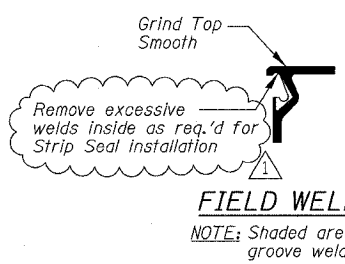


SECTION A-A



BILL OF MATERIAL

ITEM	UNIT	QTY.
Concrete Removal	Cu. Yd.	1
Concrete Superstructures	Cu. Yd.	0.4
Modular Expansion Joint Repair	L. Sum	1



BOWMAN, BARRETT & ASSOCIATES INC.
CONSULTING ENGINEERS
Chicago, Illinois
312.228.0100
www.bbandainc.com

REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
MODULAR EXPANSION JOINT REPAIR
SN 016-1046

SCALE: NTS
DATE: 5/25/2006

DRAWN BY: BDC
CHECKED BY: IYL

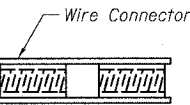
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The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



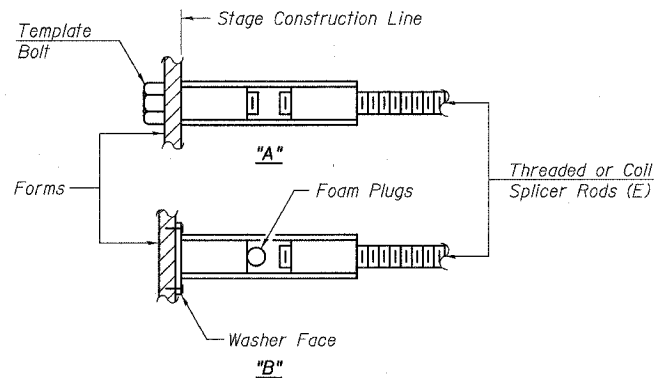
**** ONE PIECE**



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

NOTES

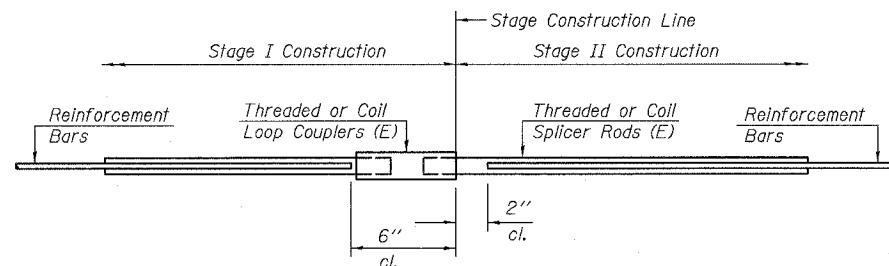
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A_f$
 (Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{s,allow} \times A_f$
 (Tension in kips)

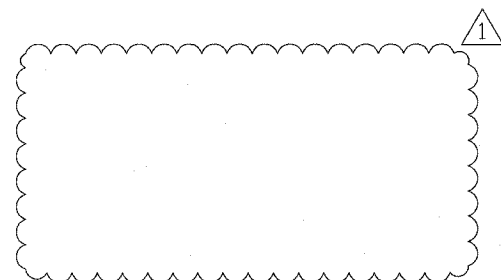
Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s,allow}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_f = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



STANDARD



BAR SPLICER ASSEMBLIES

BAR SIZE	TOTAL NO. ASSEMBL. REQ'D	LOCATION						
		016-1117	016-1115	016-1062	016-1113	016-1112	016-0137	016-1067
#5	1,218	155	295	36	193	377	86	76
#6	59				5	5	16	33
#7	79						16	63
TOTAL	1,356	155	295	36	198	382	118	172

REVISIONS	
NAME	DATE
ADDENDUM NO. 1	6/29/06

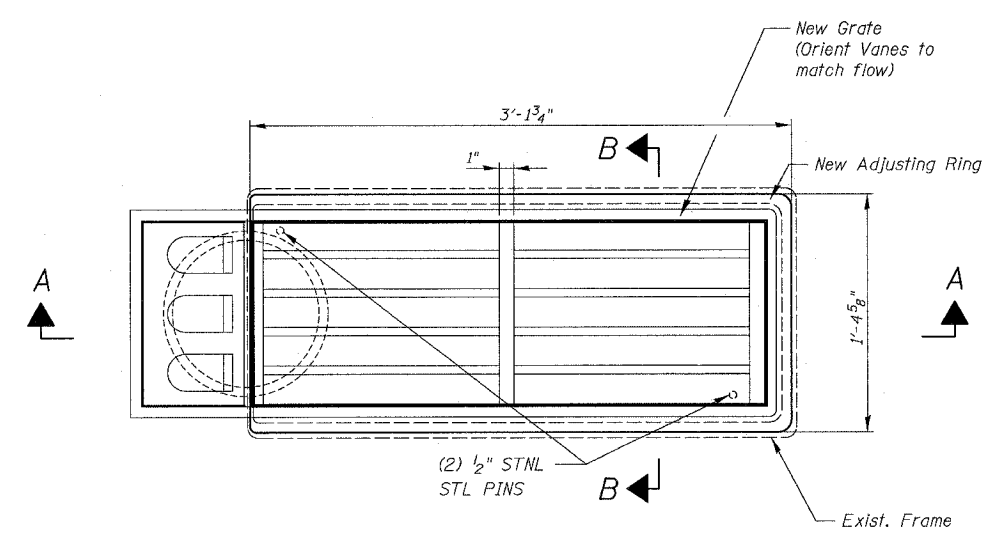
ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 SB DAN RYAN ELEVATED BRIDGE
 REPAIR FROM 15TH TO 28TH STREETS
 BAR SPLICER ASSEMBLY DETAILS

SCALE: NTS
 DATE: 5/25/2006
 DRAWN BY: LM
 CHECKED BY: BLJ

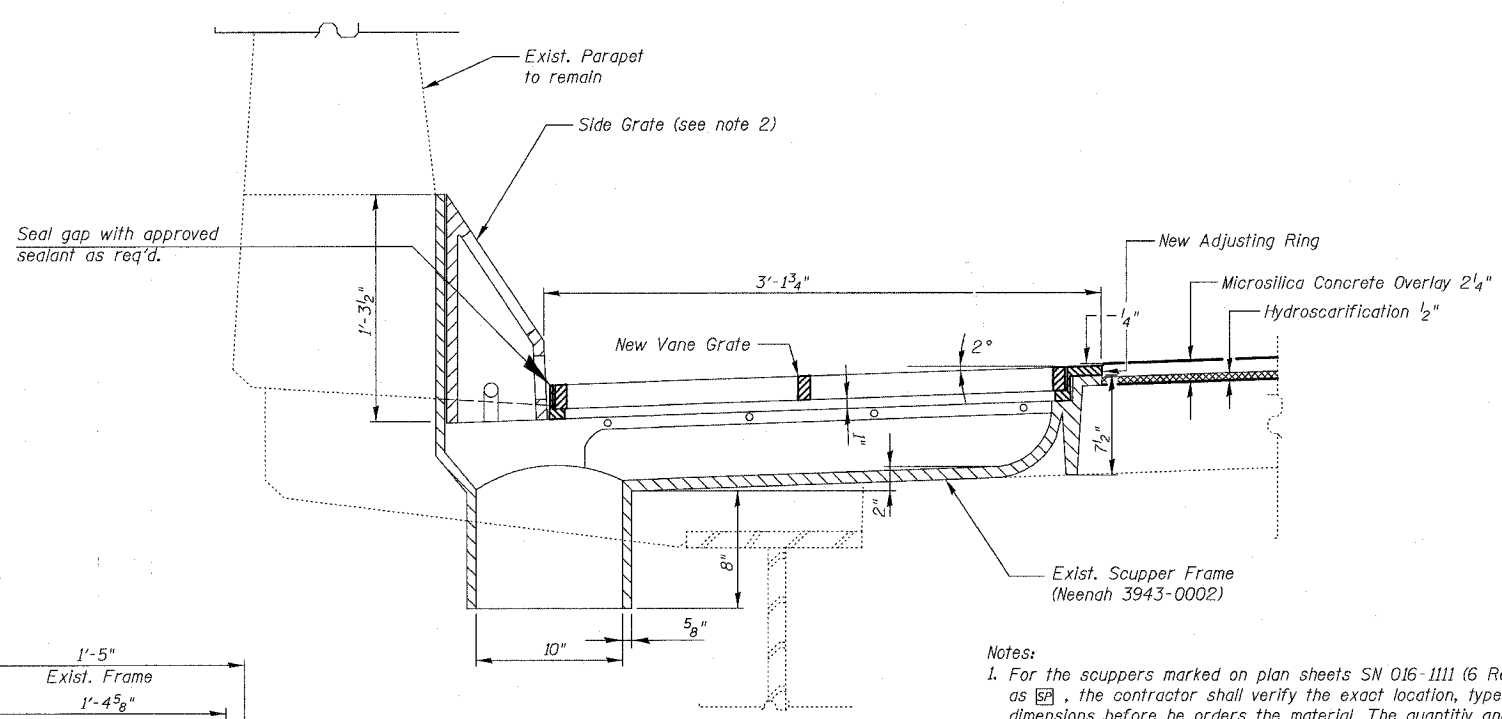
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BILL OF MATERIAL

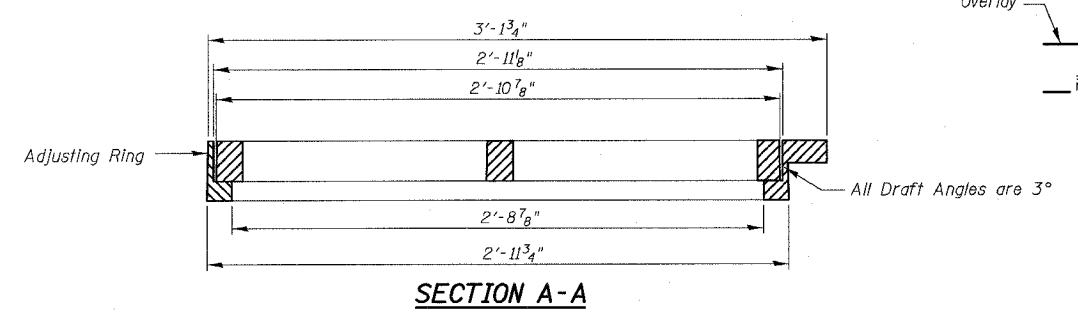
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ADJUSTING DRAINAGE SCUPPERS, TYPE A	EACH	120	-	1	-	28	4	1	1	-	-	12	20	11	11	21
ADJUSTING DRAINAGE SCUPPERS, TYPE B	EACH	72	17	-	8	12	-	-	1	11	10	10	-	3	-	-
ADJUSTING DRAINAGE SCUPPERS, TYPE C	EACH	94	14	13	8	5	-	3	-	1	-	6	23	8	8	-



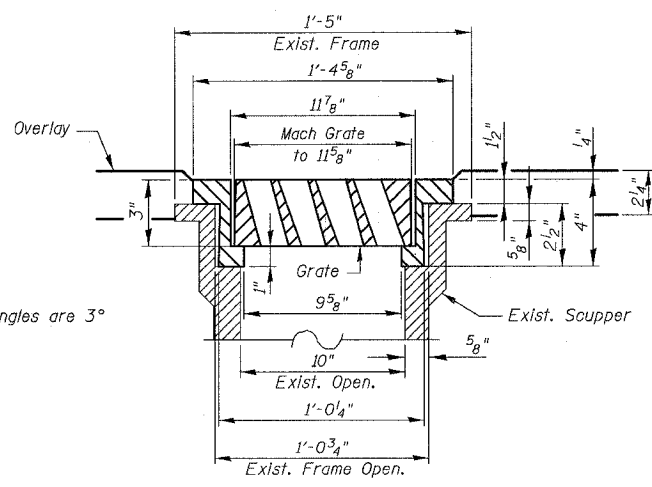
PLAN TYPE C SCUPPER



SECTION THRU TYPE C SCUPPER



SECTION A-A



SECTION B-B

- Notes:
1. For the scuppers marked on plan sheets SN 016-1111 (6 Req'd) as **EA**, the contractor shall verify the exact location, type and dimensions before he orders the material. The quantity and pay item is included in "Adjust Drainage Scuppers, Type A".
 2. For scupper locations, see Partial Deck Plan Sheets.
 3. A paint stripe shall be applied over the existing stripe to the face of the Concrete Barrier Wall at all drainage scupper locations. The stripe shall be 4" wide x 12" long and extend vertically at 90 degrees from the top edge of the barrier. The paint color shall be specified by the Engineer. Cost of the stripe is to be included in "Adjusting Drainage Scuppers" of the type specified.

DRAINAGE SCUPPER DETAILS - TYPE C
Vane Grate 3943-0002 machined to fit

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ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
SB DAN RYAN ELEVATED BRIDGE
REPAIR FROM 15TH TO 28TH STREETS
ADJUSTING DRAINAGE SCUPPER
DETAILS

SCALE: N/A
DATE: 5/25/2006

DRAWN BY: BDC
CHECKED BY: BLJ

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