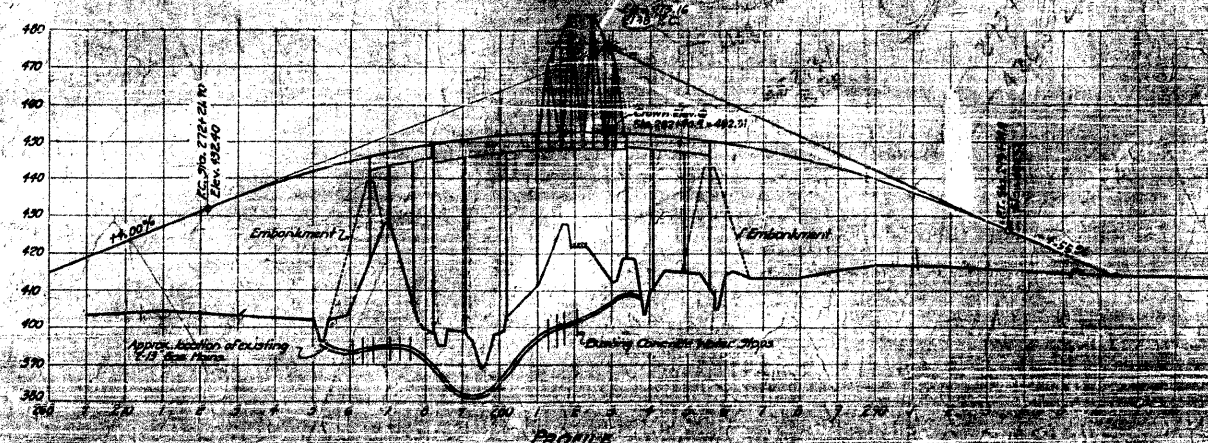
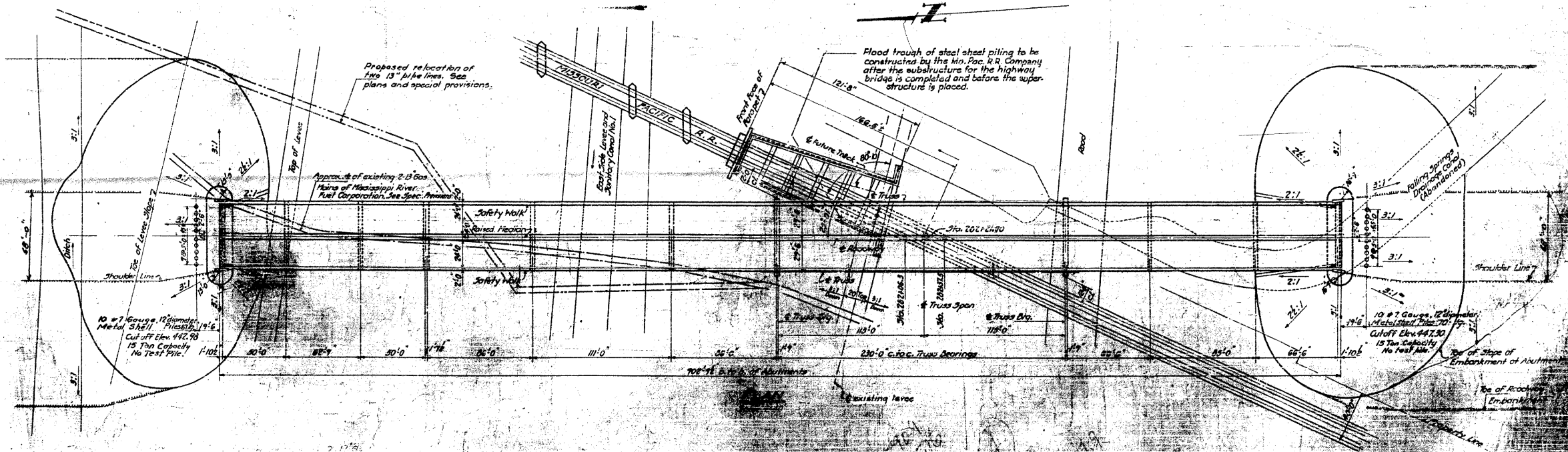
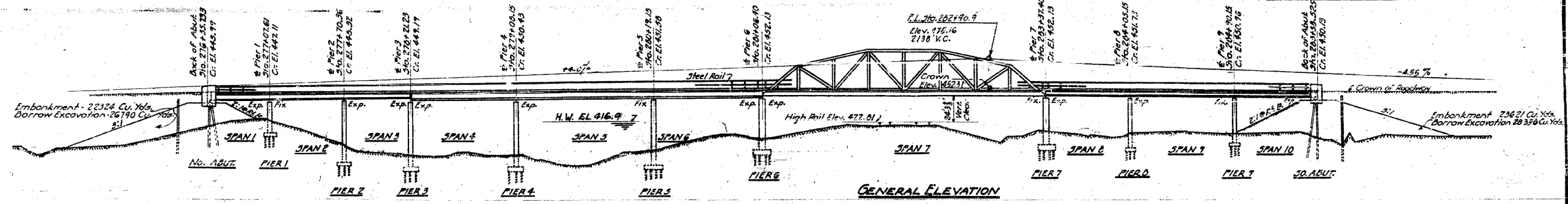


D.M. 1. Top of End of Abut. R. 2. Bridge 50' Ls.
 J.C. 240' E3 Elev. 421.25
 D.M. 1. E. W. Root 10' Down 115' N. Sta. 275+00 Elev. 402.67
 B.M. 1. N.E. W. Root 16' E. m. as U. Sta. 206+78 Elev. 416.20
 No Existing Structure

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS
 DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVBR	ST. CLAIR	259	101

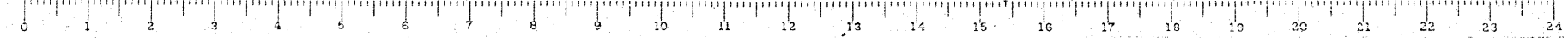
SHEET NO. 1
30 SHEETS



BASIS OF DESIGN

Span	12' Metal Shell Piles (Max. Capacity)	48 Tons
Abutment	14' Metal Shell Piles (Max. Capacity)	35 Tons

COMPUTED	W. J. Cobby	EXAMINED	B-10 12.54
CHECKED	W. H. Sommer	DESIGNED	W. B. Hanson
DRAWN	W. J. W. Miller	CHECKED	E. J. ...
CHECKED	W. H. ...	APPROVED	R. H. ...
SPECIAL ASSEMBLED			
CHECKED			

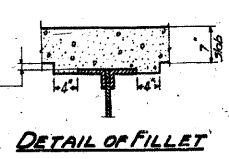
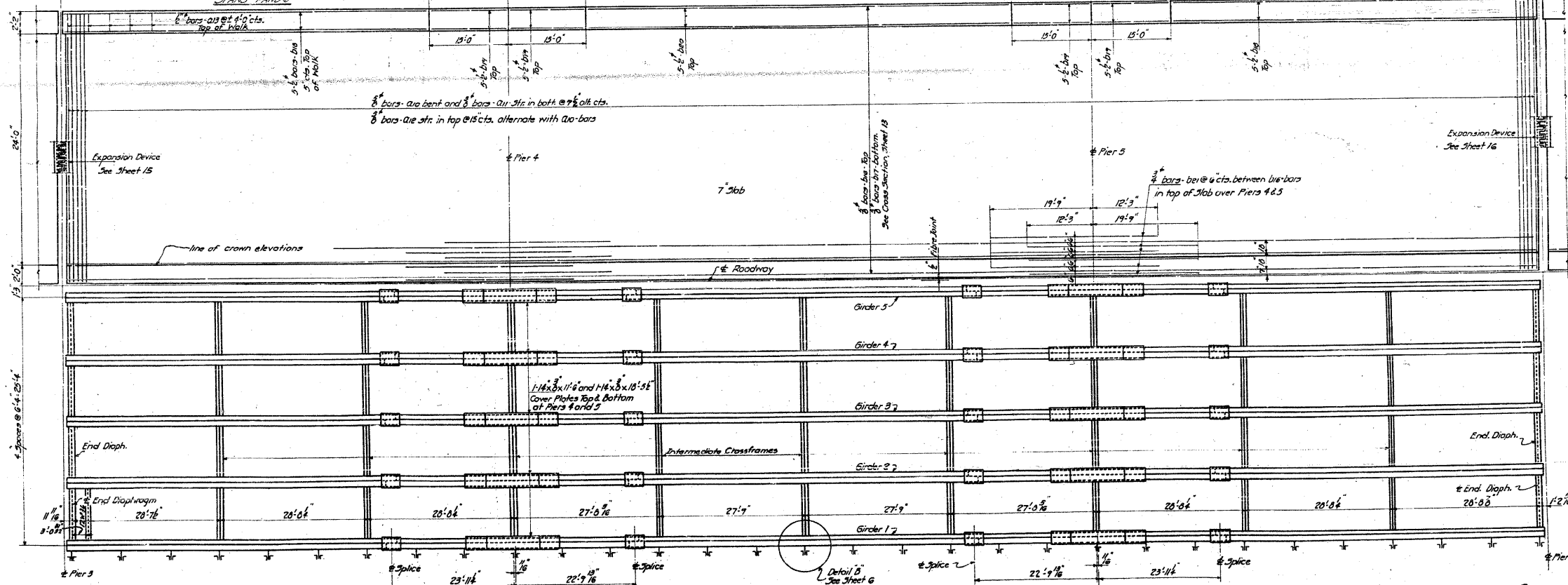
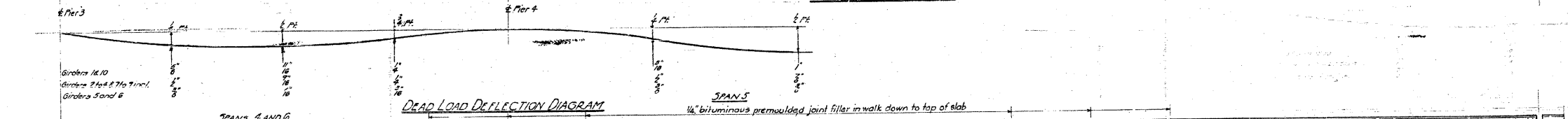
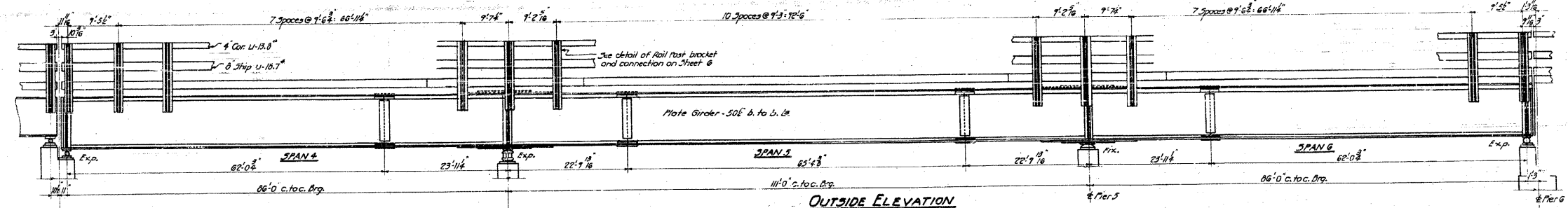


FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

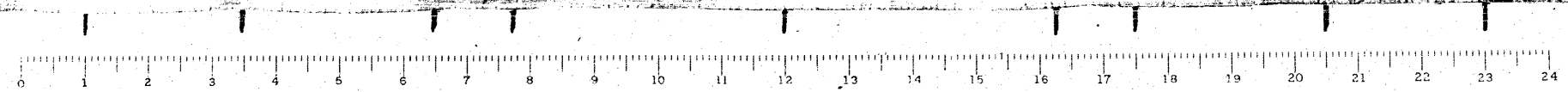
ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	64-1VBR	St. Clair	30	4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 4
30 SHEETS



STANDARD	COMPUTED <i>W.F. Willey</i>	EXAMINED <i>8-10 1951</i>
	CHECKED <i>W.F. Sommer</i>	
	DRAWN <i>W.F.W. Miller</i>	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
	CHECKED <i>W.F.W.</i>	PASSED <i>[Signature]</i>
SPECIAL	ASSEMBLED	APPROVED <i>[Signature]</i>
	CHECKED	

SPANS 4-5&6
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO
F.A. ROUTE 4 - SEC. 64-1VBR DEF.
ST. CLAIR COUNTY

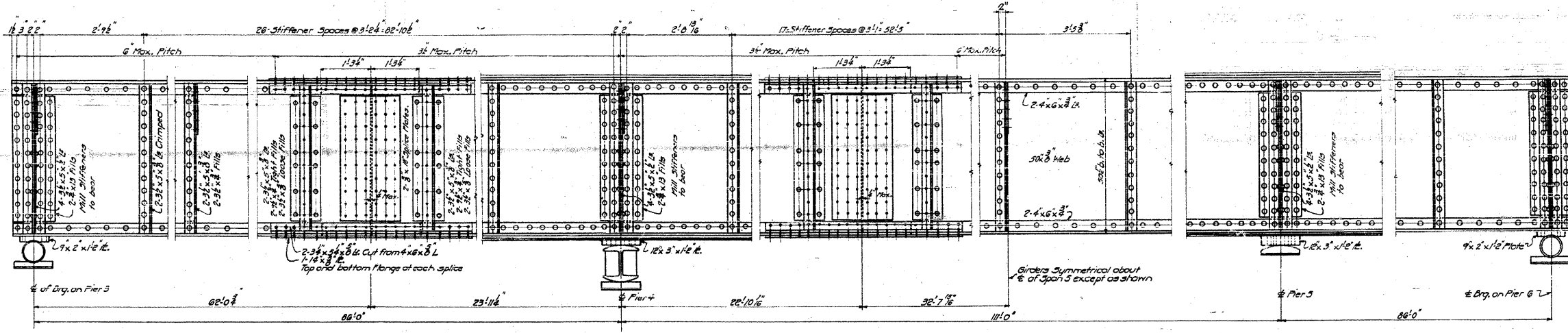
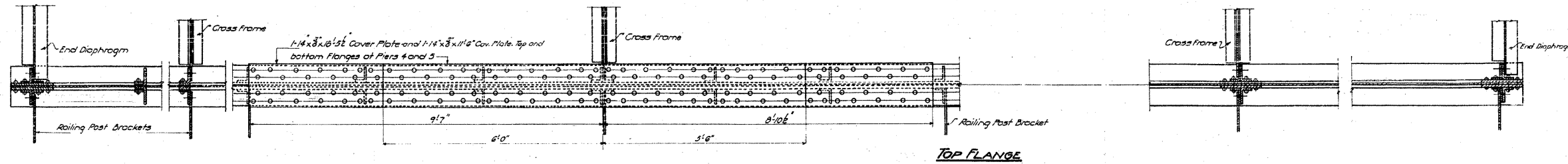


FOR INFORMATION ONLY

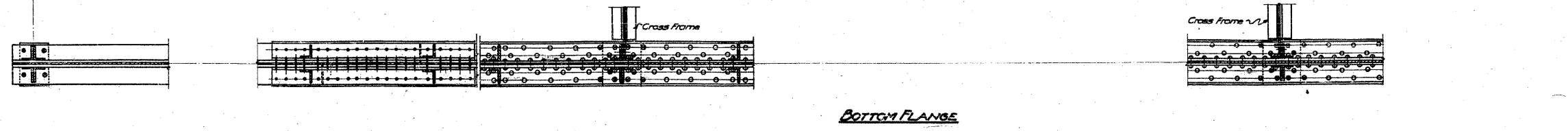
CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

APP. INCH	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEETS
4	64-IVBR	ST. CLAIR	13	7	20
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



OUTSIDE ELEVATION OF GIRDER I
Other Girders Similar
Longitudinal dimensions shown are horizontal distances



STANDARD	COMPUTED	W. J. Wilby	EXAMINED	B-10	12-54	
	CHECKED	W. M. Bommer		PASSED	W. B. Hanson	
	DRAWN	W. J. W.			ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES	
	CHECKED	M. Miller			APPROVED	
SPECIAL	ASSEMBLED		APPROVED	R. R. Bantelmeier		
	CHECKED			CHIEF ENGINEER		

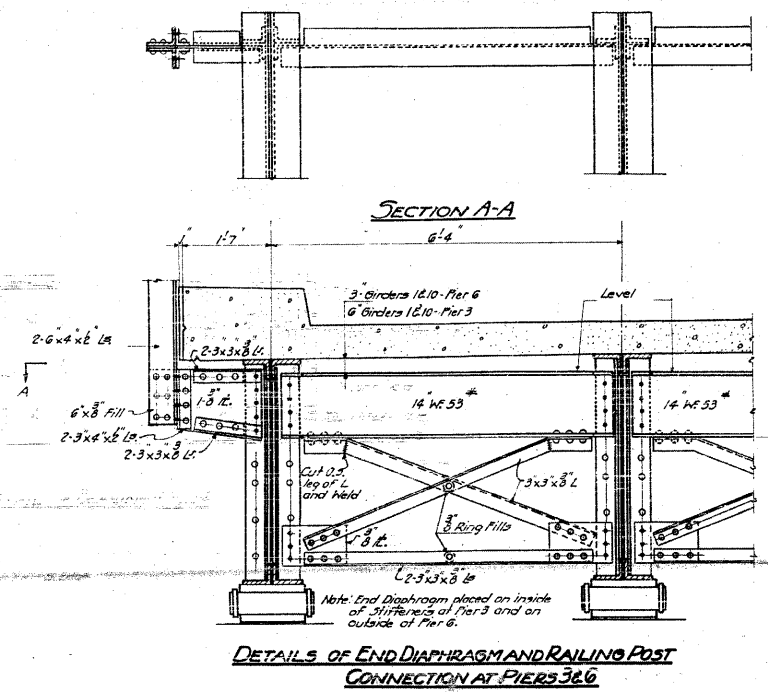
PLATE GIRDER SPANS 4-5&6
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPQ
F.A. ROUTE 4 - SEC. 64-IV.E.F.
ST. CLAIR COUNTY

FOR INFORMATION ONLY

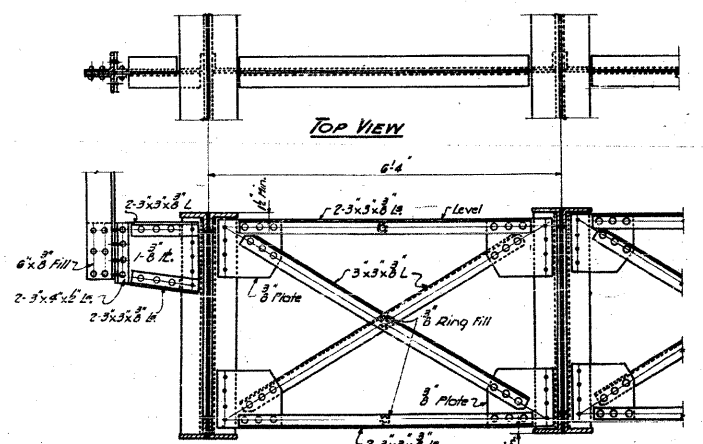
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STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

FORM NO. 100	ISSUED	TOTAL SHEETS	SHEET NO.	PROJECT NO.
4	6-1-57	36	20	30 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	OR AID PROJECT		



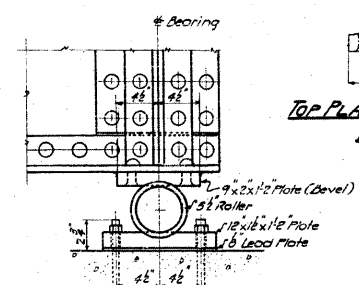
DETAILS OF END DIAPHRAGM AND RAILING POST CONNECTION AT PIERS 3 & 6



DETAILS OF CROSS FRAME AND RAILING POST CONNECTION AT INTERMEDIATE CROSS FRAMES

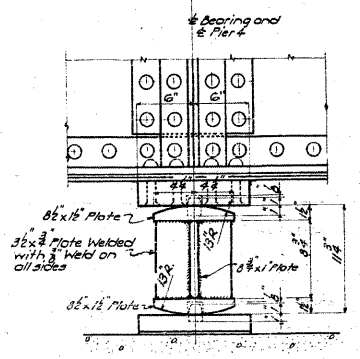
All other railing post connections in spans 4-3&6 are similar to those shown above.

COMPUTED	W. F. Wilby	EXAMINED	B-10 1954
CHECKED	R. L. Bonner	DESIGNED BY	W. E. Hanson
DRAWN	W. F. Wilby	ENGINEER OF BRIDGE AND TRUSS STRUCTURES	
CHECKED	W. F. Wilby	PASSED	[Signature]
ASSEMBLED		APPROVED	R. L. Bartholomew
CHECKED			

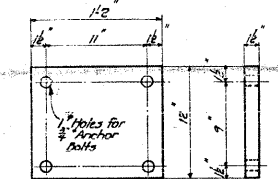


TOP PLATE-SOUTH BEARING PIER 6

DETAIL OF NORTH BEARING PIER 6



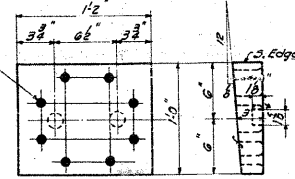
DETAIL OF BEARING PIER 4



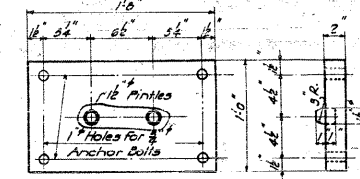
BOTTOM PLATE-PIER 6

ROLLERS-PIER 6

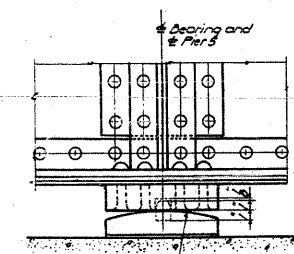
Rollers may be built as shown or milled from the solid. If milled from the solid, the end projections may be omitted.



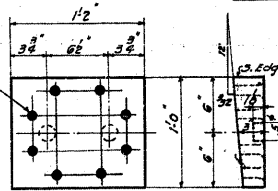
TOP PLATE-PIER 4



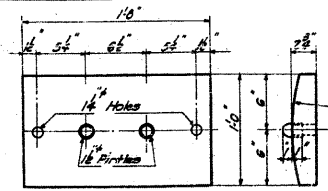
BOTTOM PLATE-PIER 4



DETAIL OF BEARING PIER 5



TOP PLATE-PIER 5

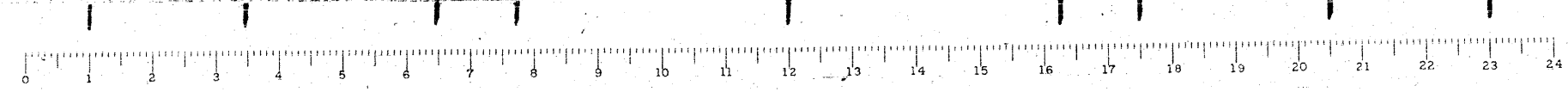


BOTTOM PLATE-PIER 5

For Bearing Details at Pier 3 See Sheet 15
For Section of Pier 6 See Sheet 16
For details of Handrail Posts and Railing See Sheet 14

DETAILS-SPANS 4-5&6
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO

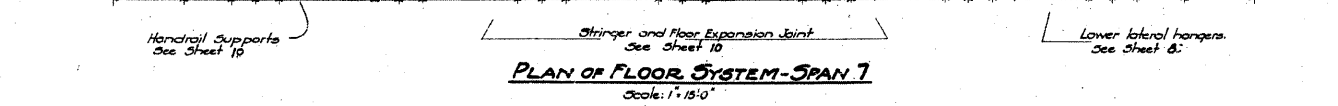
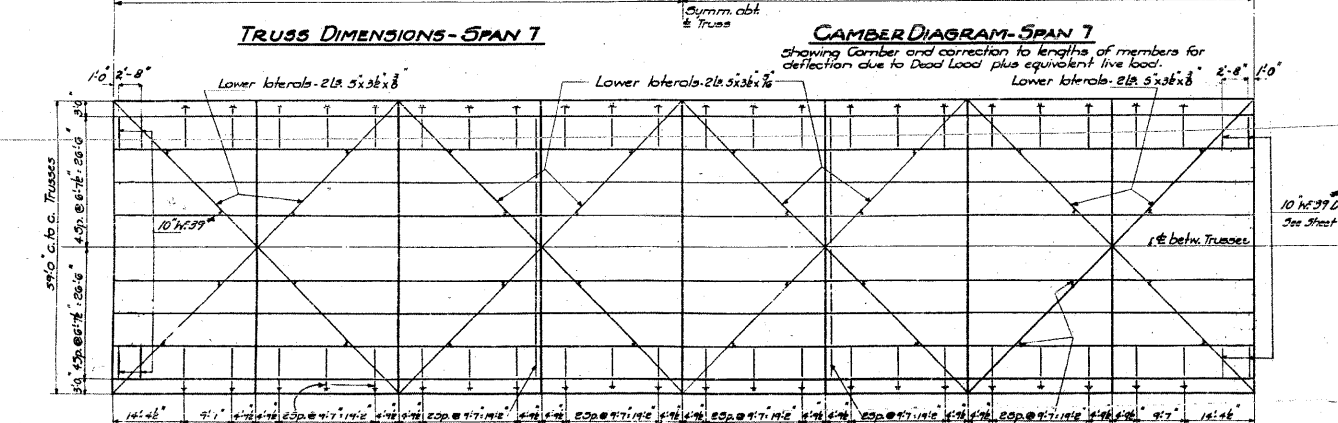
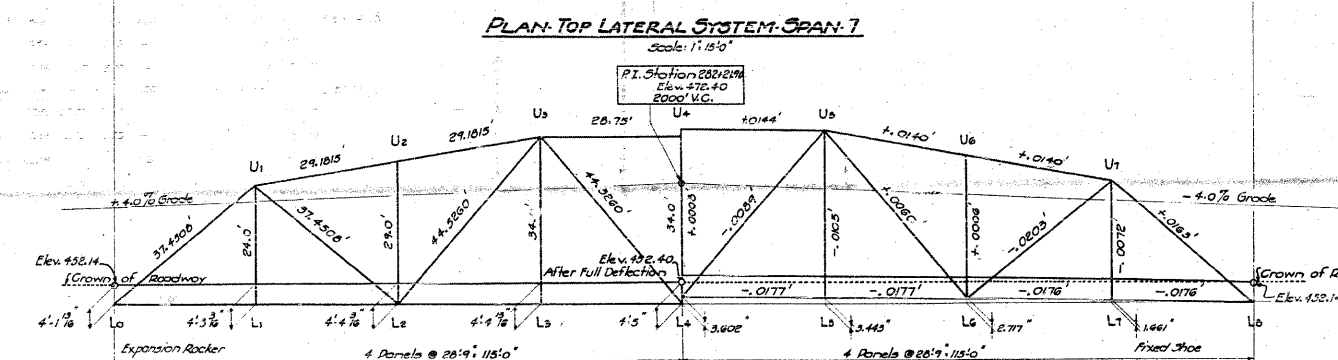
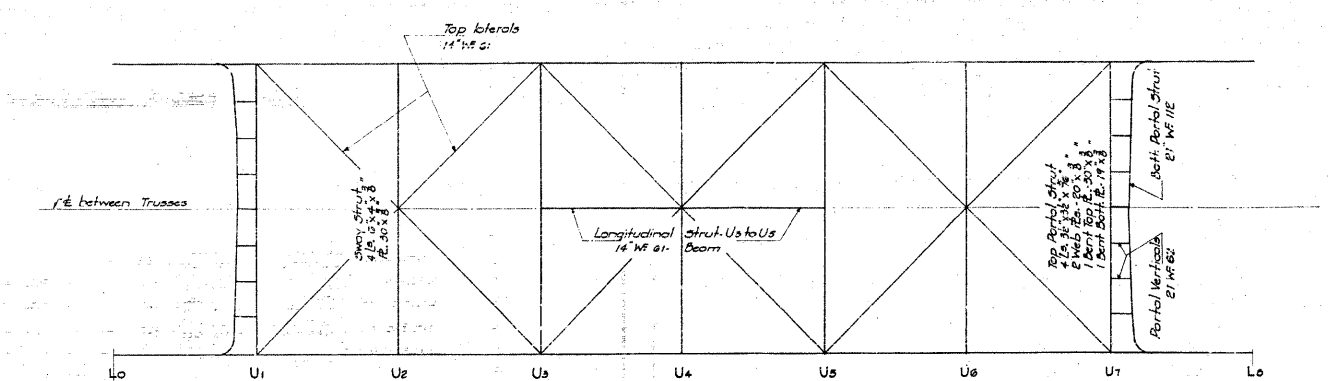
F.A. ROUTE 4 - SEC. 64-1-VB&F
ST. CLAIR COUNTY



FOR INFORMATION ONLY

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (ORIGINAL PLANS)	SCALE: SHEET NO. OF SHEETS STA. TO STA.	F.A.P. R.T.E. 312	SECTION 64-1VBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 106	CONTRACT NO. 76882	ILLINOIS FED. AID PROJECT
...\\106-D876882-exist-bridge-plans-06.dgn	PLOT SCALE = 40.000000' / 1"	DRAWN -	REVISED -										
	PLOT DATE = 9/5/2010	CHECKED -	REVISED -										
CB JOB NO 09021		DATE - / /	REVISED -										

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STRESSES AND SECTIONS IN MAIN TRUSSES - SPAN 7

Member	Stresses				Length c. to c. ft.	Radius of Gyration in.	I	Allowable Unit Stresses	Area	Unit Stresses	Section	Material
	D.L.	L.L.	Impact	Total								
L ₁ -L ₂	1312	1186	128	1274	57.5000	-	-	24.00	39.90	35.75	20.26	14 WF 136
L ₂ -L ₃	1775	1611	140	1607	57.5000	-	-	24.00	58.73	51.98	21.10	14 WF 136
L ₃ -L ₄	1775	1611	140	1607	57.5000	-	-	24.00	58.73	51.98	21.10	14 WF 136
L ₄ -L ₅	1512	1416	128	1424	57.5000	-	-	24.00	39.90	35.75	20.26	14 WF 136
L ₅ -L ₆	-667	-264	-37	-968	57.5000	8.61	32.20	-	15.75	61.19	-	15-82
U ₁ -U ₂	-237	-263	-36	-536	58.3630	8.61	40.61	-	19.24	61.19	-	17.05
U ₂ -U ₃	-827	-300	-42	-1169	57.5000	8.61	40.60	-	19.23	66.19	-	17.66
U ₃ -U ₄	-237	-263	-36	-536	58.3630	8.61	40.61	-	19.24	61.19	-	17.05
U ₄ -U ₅	-667	-264	-37	-968	57.5000	8.61	32.20	-	15.75	61.19	-	15-82
U ₅ -U ₆	1278	1134	123	1525	57.5000	-	-	24.00	39.90	35.75	20.27	14 WF 70
L ₂ -U ₂	-78	-84	-16	-178	44.2560	4.90	10.90	-	12.03	19.14	-	9.20
U ₂ -L ₂	110	119	19	148	44.2560	-	-	10.00	12.94	15.37	12.36	14 WF 61
L ₃ -U ₃	110	119	19	148	44.2560	-	-	10.00	12.94	15.37	12.36	14 WF 61
U ₃ -L ₃	-78	-84	-16	-178	44.2560	4.90	10.90	-	12.03	19.14	-	9.20
L ₄ -U ₄	1278	1134	123	1525	57.5000	-	-	24.00	39.90	35.75	20.27	14 WF 70
U ₄ -L ₄	110	119	19	148	44.2560	-	-	10.00	12.94	15.37	12.36	14 WF 61
U ₅ -L ₅	-14	0	0	-14	29.0000	3.00	11.60	-	11.64	22.94	-	0.61
L ₅ -U ₅	103	106	124	233	56.0000	-	-	10.00	15.59	12.96	15.29	14 WF 53
L ₆ -L ₅	-15	0	0	-15	36.0000	3.00	13.60	-	13.76	22.94	-	0.63

* Partial effect caused by 30' Wind to be combined with D.L. only

STRESSES AND SECTIONS IN FLOOR SYSTEM

Member	Shear				Moment				Section	Material
	D.L.	L.L.	Impact	Total	D.L.	L.L.	Impact	Total		
Curb Stringer	11.88	11.24	3.66	26.78	85.48	72.92	23.71	182.11	21 WF 60	⊙
Interior Stringer	8.71	26.91	6.79	42.41	62.61	135.16	50.96	248.73	21 WF 60	⊙
End Stringer	10.72	18.16	3.71	26.59	77.00	117.64	38.32	232.96	21 WF 60	⊙
Floorbeam @ L ₁ or L ₆	33.10	63.81	17.48	114.39	175.72	1021.19	303.37	2166.28	4 WF 60 x 8 1/2	⊙
Jacking Fl. Bm. @ L ₁ or L ₆	434.57	-	-	434.57	1316.41	-	-	1316.41	Web Pl. 40x8	⊙
Fl. Bm. @ L ₁ -L ₂ or L ₅ -L ₆	74.78	63.81	17.48	114.39	175.72	1021.19	303.37	2166.28	4 WF 60 x 8 1/2	⊙
Floorbeam @ L ₂ or L ₅	47.47	63.81	17.48	114.39	175.72	1021.19	303.37	2166.28	4 WF 60 x 8 1/2	⊙

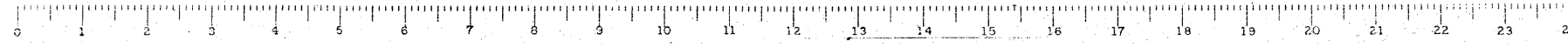
BILL OF MATERIAL - SPAN 7

Bar	No.	Size	Length
a	504	3/4"	32'-0"
a1	502	3/4"	29'-9"
a2	502	3/4"	30'-0"
a3	118	1/2"	14'-0"
b	768	5/8"	30'-6"
b1	328	5/8"	30'-3"
b2	80	1/2"	30'-3"
b3	420	3/8"	14'-0"
c1e	52	3/4"	3'-0"
u4	230	1/2"	4'-5"
x2	132	3/8"	3'-6"
Class X Concrete - Cu. Yds.			311.4
Reinforcement Bars - Lbs.			76,000
Structural Steel - Carbon - Lbs.			323,670
Structural Steel - A-242 - Lbs.			507,800

**SPAN 7
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUFO
FA. ROUTE 4 - SEC 64-1VBR D.E.F.
ST. CLAIR COUNTY**

COMPUTED *W.G. Hanson*
CHECKED *W.G. Hanson*
DRAWN *W.G. Hanson*
CHECKED *W.G. Hanson*
SPECIAL ASSEMBLED
CHECKED

EXAMINED *W.G. Hanson*
8-10-1954
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED
APPROVED *W.G. Hanson*
CHIEF ENGINEER



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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-1VBR	St. Clair	259	108

PROJECT: ST. CLAIR COUNTY
SHEET NO. 8
20 SHEETS

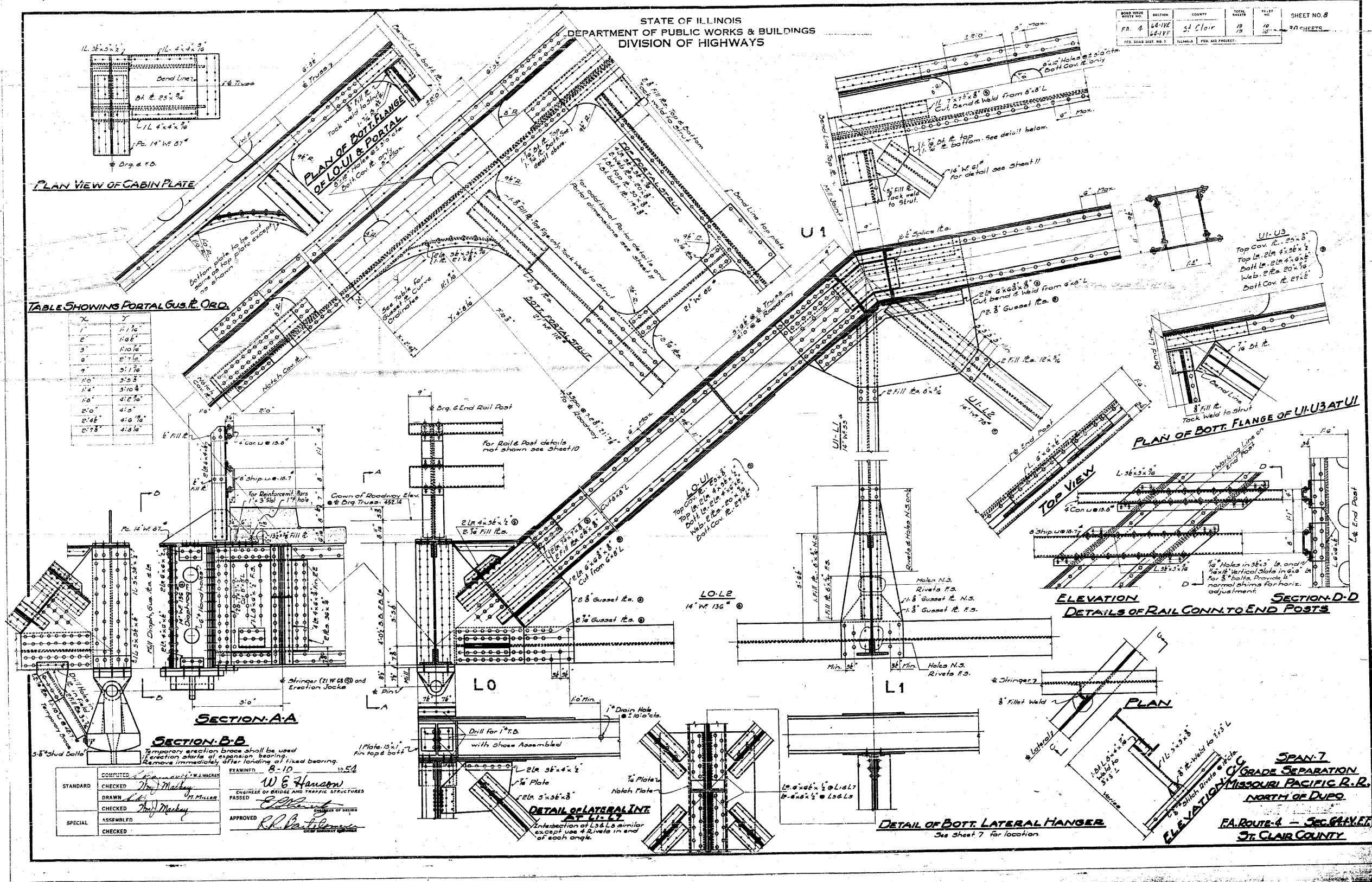


TABLE SHOWING PORTAL GUSSET ORD.

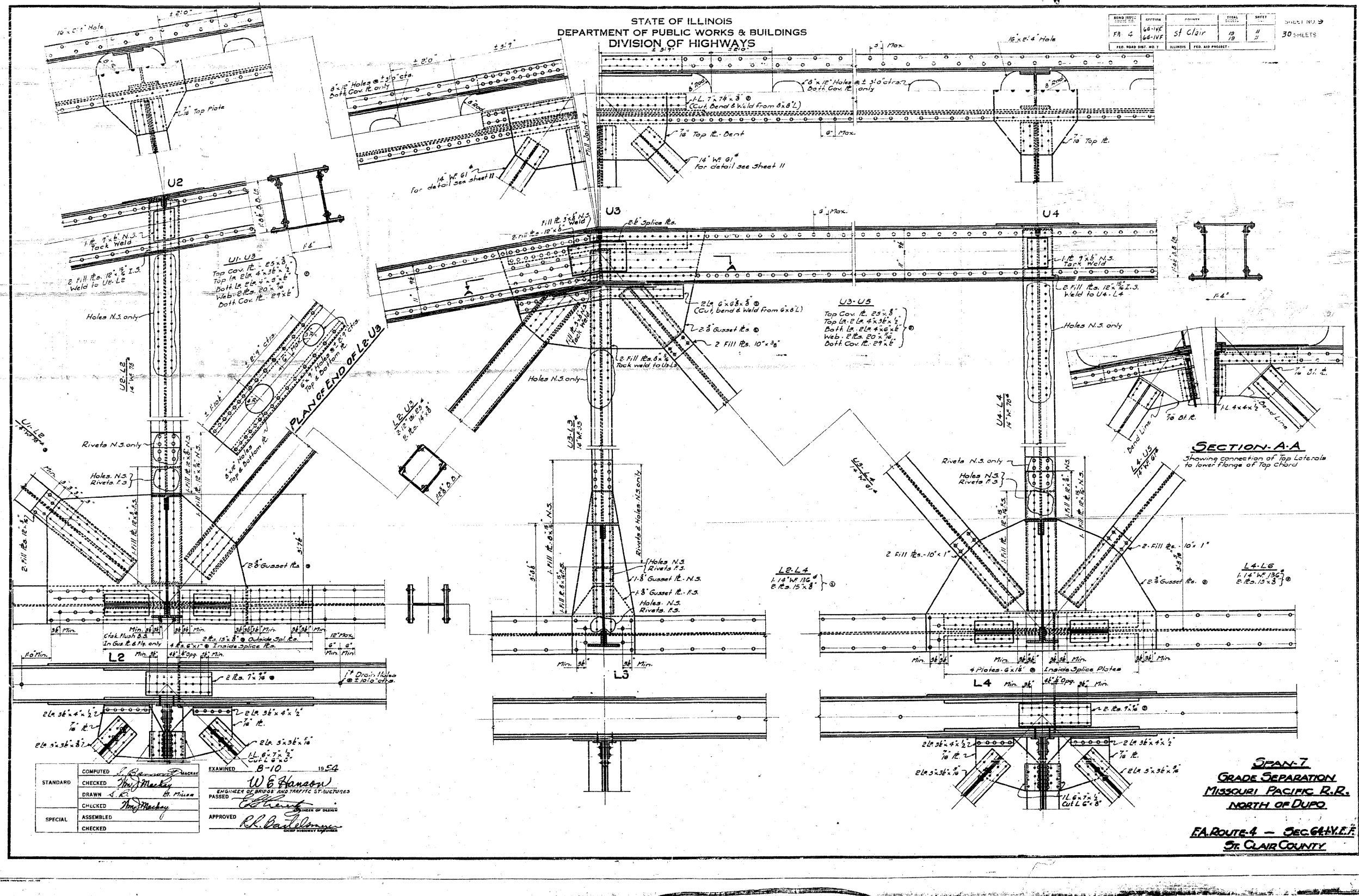
X	Y
1	4' 1 1/2"
2	1' 0 1/2"
3	1' 10 1/2"
4	2' 7 1/2"
5	3' 4 1/2"
6	4' 1 1/2"
7	4' 8 1/2"
8	5' 5 1/2"
9	6' 2 1/2"
10	6' 9 1/2"
11	7' 6 1/2"
12	8' 3 1/2"
13	9' 0 1/2"
14	9' 7 1/2"
15	10' 4 1/2"
16	11' 1 1/2"
17	11' 8 1/2"
18	12' 5 1/2"
19	13' 2 1/2"
20	13' 9 1/2"
21	14' 6 1/2"
22	15' 3 1/2"
23	16' 0 1/2"
24	16' 7 1/2"
25	17' 4 1/2"
26	18' 1 1/2"
27	18' 8 1/2"
28	19' 5 1/2"
29	20' 2 1/2"
30	20' 9 1/2"
31	21' 6 1/2"
32	22' 3 1/2"
33	23' 0 1/2"
34	23' 7 1/2"
35	24' 4 1/2"
36	25' 1 1/2"
37	25' 8 1/2"
38	26' 5 1/2"
39	27' 2 1/2"
40	27' 9 1/2"
41	28' 6 1/2"
42	29' 3 1/2"
43	30' 0 1/2"
44	30' 7 1/2"
45	31' 4 1/2"
46	32' 1 1/2"
47	32' 8 1/2"
48	33' 5 1/2"
49	34' 2 1/2"
50	34' 9 1/2"
51	35' 6 1/2"
52	36' 3 1/2"
53	37' 0 1/2"
54	37' 7 1/2"
55	38' 4 1/2"
56	39' 1 1/2"
57	39' 8 1/2"
58	40' 5 1/2"
59	41' 2 1/2"
60	41' 9 1/2"
61	42' 6 1/2"
62	43' 3 1/2"
63	44' 0 1/2"
64	44' 7 1/2"
65	45' 4 1/2"
66	46' 1 1/2"
67	46' 8 1/2"
68	47' 5 1/2"
69	48' 2 1/2"
70	48' 9 1/2"
71	49' 6 1/2"
72	50' 3 1/2"
73	51' 0 1/2"
74	51' 7 1/2"
75	52' 4 1/2"
76	53' 1 1/2"
77	53' 8 1/2"
78	54' 5 1/2"
79	55' 2 1/2"
80	55' 9 1/2"
81	56' 6 1/2"
82	57' 3 1/2"
83	58' 0 1/2"
84	58' 7 1/2"
85	59' 4 1/2"
86	60' 1 1/2"
87	60' 8 1/2"
88	61' 5 1/2"
89	62' 2 1/2"
90	62' 9 1/2"
91	63' 6 1/2"
92	64' 3 1/2"
93	65' 0 1/2"
94	65' 7 1/2"
95	66' 4 1/2"
96	67' 1 1/2"
97	67' 8 1/2"
98	68' 5 1/2"
99	69' 2 1/2"
100	69' 9 1/2"

STANDARD	COMPUTED	W. E. Hanson
CHECKED	DRAWN	W. E. Hanson
CHECKED	ASSEMBLED	W. E. Hanson
CHECKED	APPROVED	R. R. Patterson

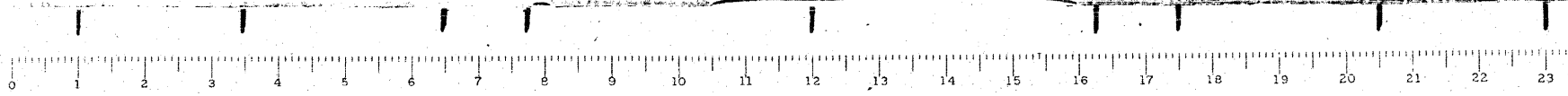
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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	64-IVR	SHEET	19	OF	30
PROJECT	St. Clair	DATE	11/11	BY	W.H.
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

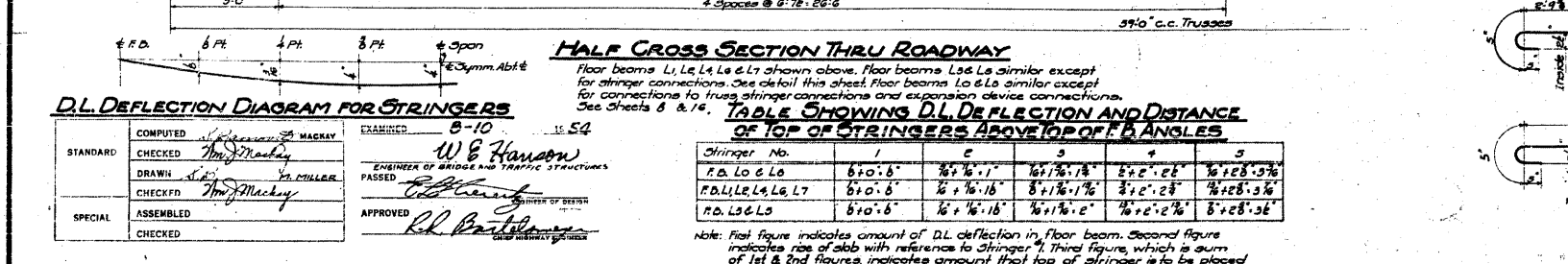
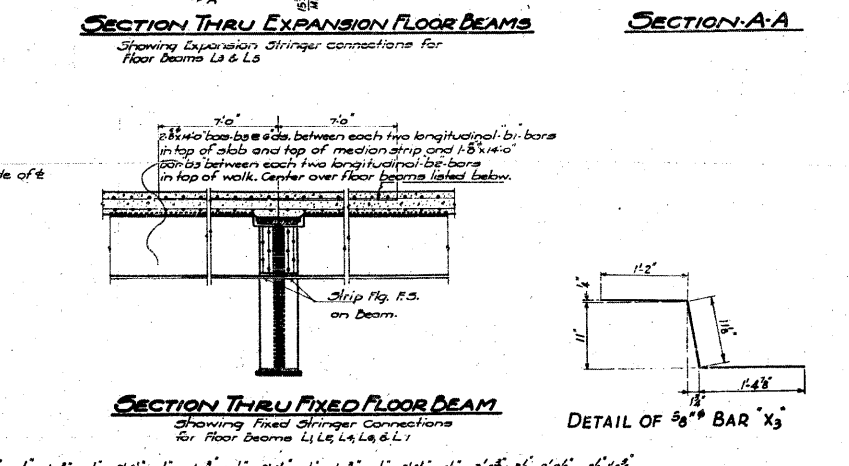
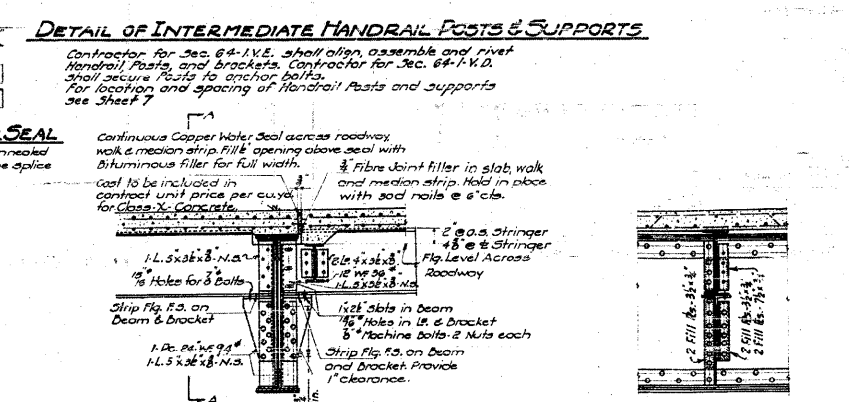
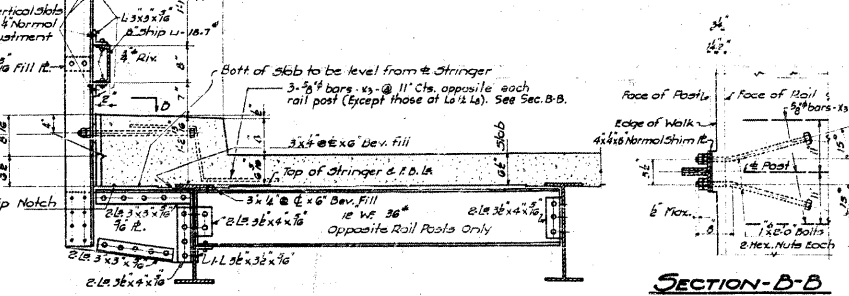
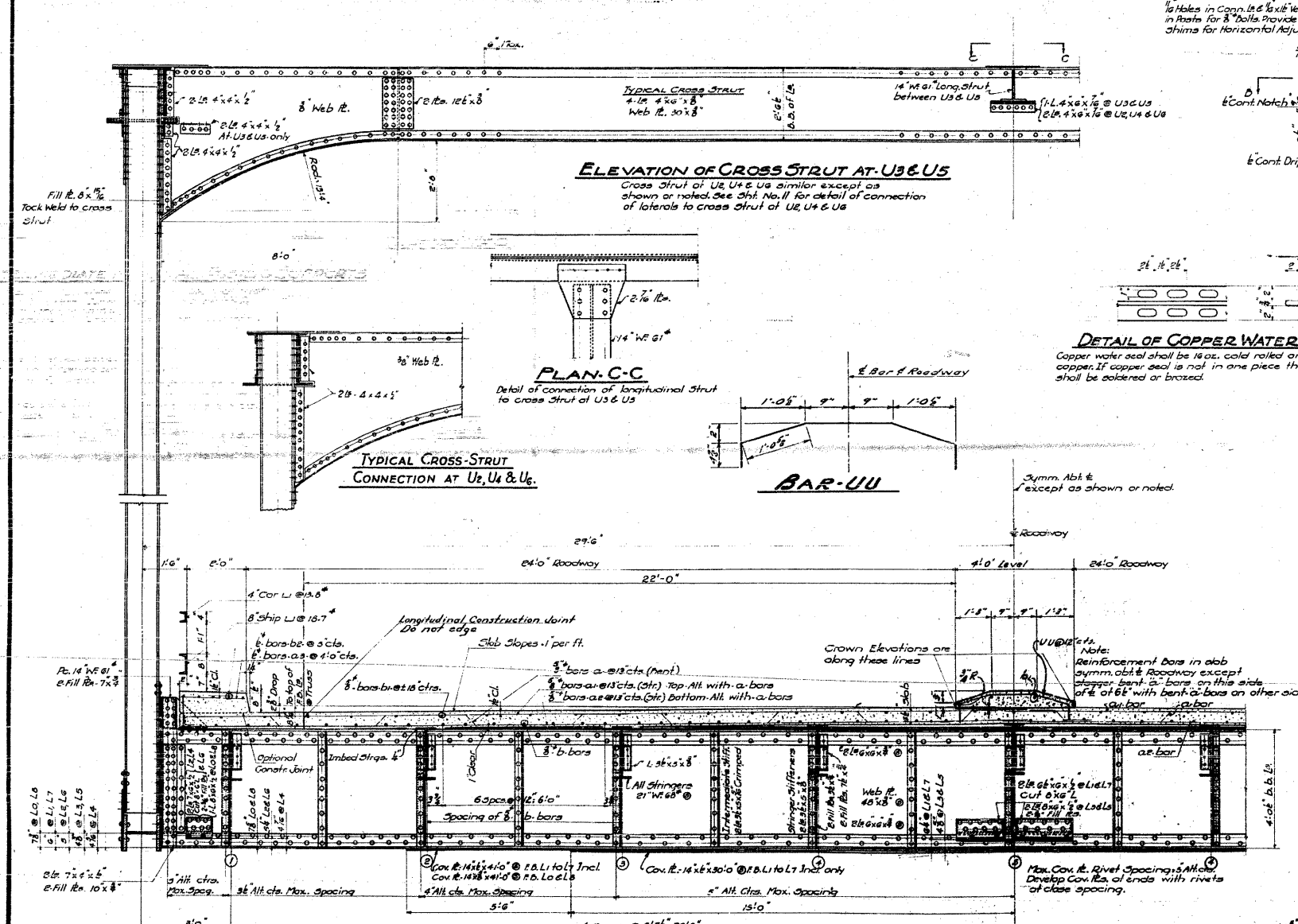


STANDARD	COMPUTED	EXAMINED	1954
	CHECKED	W.E. Hanson	
	DRAWN	R.L. DeLorenzo	
SPECIAL	CHECKED	R.L. DeLorenzo	
	ASSEMBLED		
	CHECKED		



FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (ORIGINAL PLANS)	SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...109-D876882-exist-bridge-plans-09.dgn		DRAWN -	REVISED -									312	64-IVBR	ST. CLAIR	259	109
PLOT SCALE = 40.000000' / IN.		CHECKED -	REVISED -									CONTRACT NO. 76882				
CB JOB NO 09021	PLOT DATE = 8/5/2010	DATE - / /	REVISED -	ILLINOIS FED. AID PROJECT												

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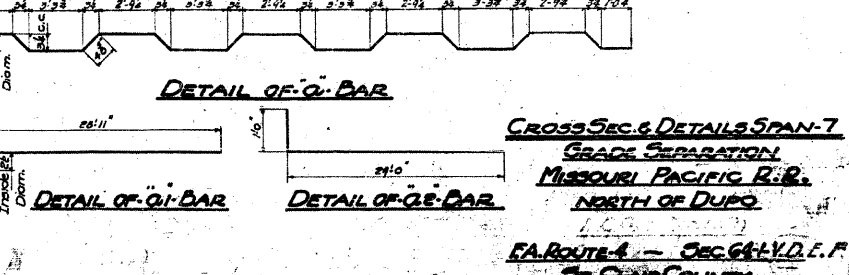
D.L. DEFLECTION DIAGRAM FOR STRINGERS

STANDARD	COMPUTED	W. E. Hanson	EXAMINED	W. E. Hanson
CHECKED	THOMAS MUCKEY	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES	PASSED	THOMAS MUCKEY
DRAWN	THOMAS MUCKEY	BY COLLIER		
CHECKED	THOMAS MUCKEY			
SPECIAL	ASSEMBLED	THOMAS MUCKEY	APPROVED	R. L. BARTLEMAN
CHECKED				

TABLE SHOWING D.L. DEFLECTION AND DISTANCE OF TOP OF STRINGERS ABOVE TOP OF F.B. ANGLES

Stringer No.	1	2	3	4	5
F.D. L0 & L6	6'0" .6"	7'4" .1"	10'17" .1"	8'4" .2"	7'0" .9"
F.D. L1, L4, L6, L7	6'0" .6"	7'4" .1"	8'17" .1"	8'4" .2"	7'0" .9"
F.D. L3 & L5	6'0" .6"	7'4" .1"	7'11" .2"	7'0" .2"	8'28" .5"

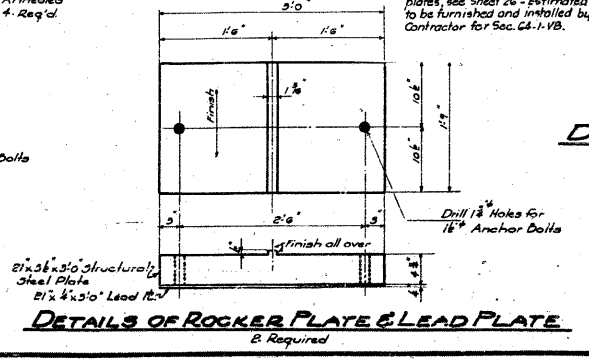
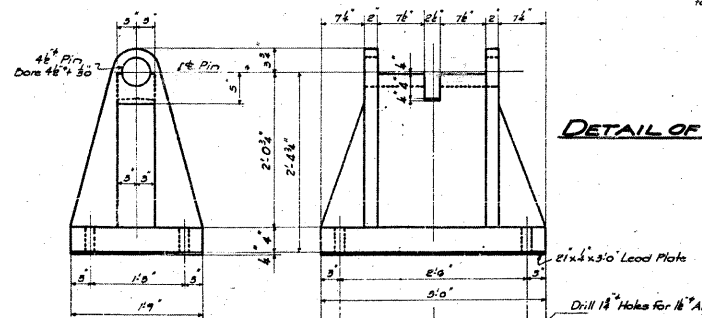
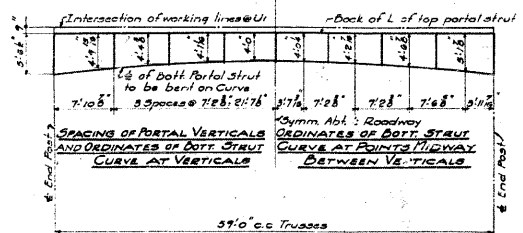
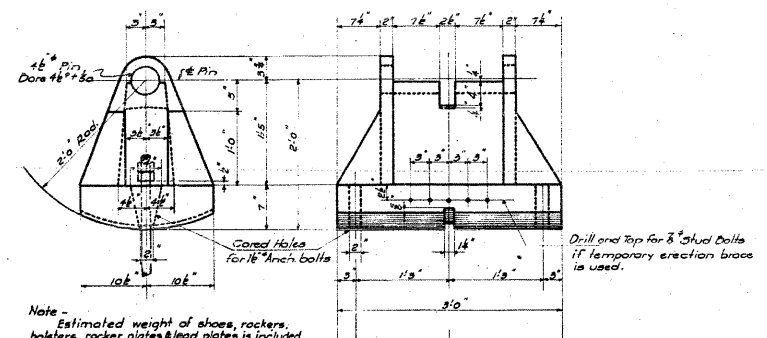
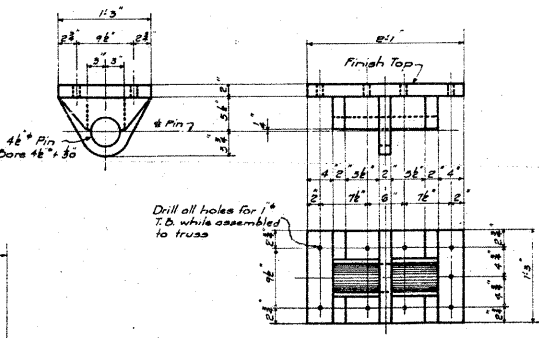
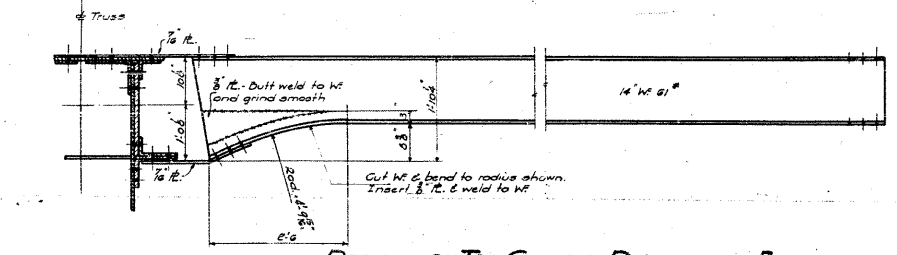
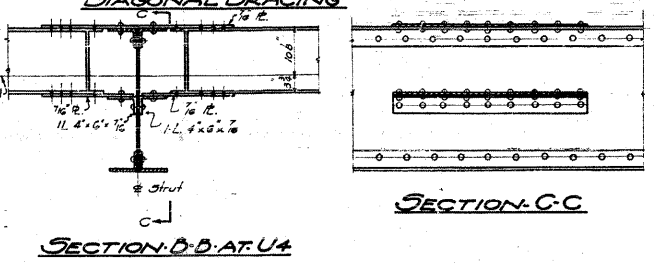
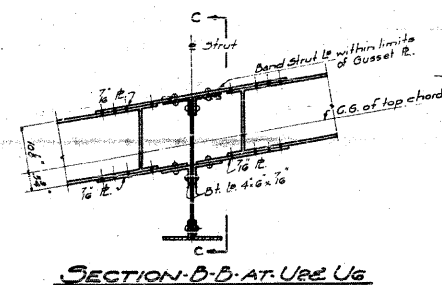
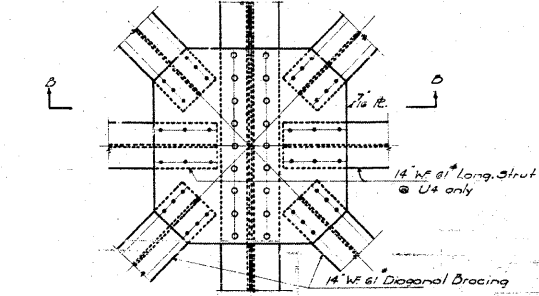
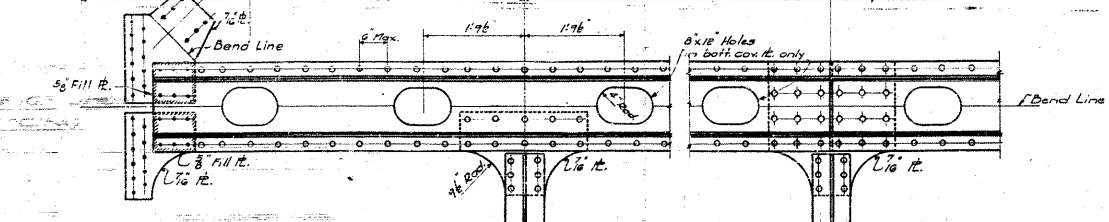
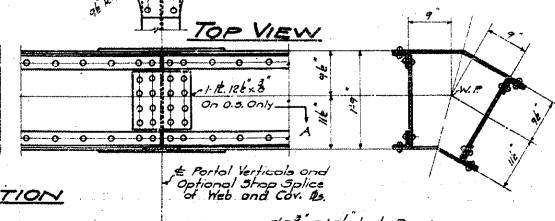
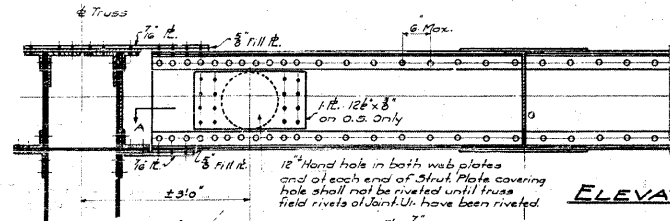
Note: First figure indicates amount of D.L. deflection in floor beam. Second figure indicates rise of slab with reference to Stringer. Third figure, which is sum of 1st & 2nd figures, indicates amount that top of stringer is to be placed above top of floor beam angles.



FOR INFORMATION ONLY

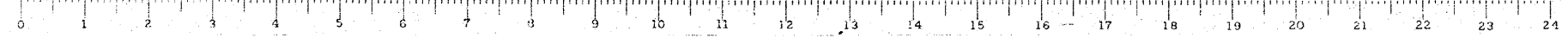
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- LAND SURVEYORS -
Design Firm License No. 184-002703

TOP PORTAL STRUT
4 L₂ 3" x 3" x 1/2"
2 Web Pls. 20" x 3"
1 Pt. Top plate 20" x 3"
1 Pt. Bot. plate 19" x 3"



COMPUTED	EXAMINED	8-10	1954
CHECKED	W. B. Hanson		
DRAWN			
CHECKED			
SPECIAL	APPROVED		

**DETAILS - SPAN 7
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO
FA. ROUTE 4 - SEC 64-1-VB.E.F.
ST. CLAIR COUNTY**

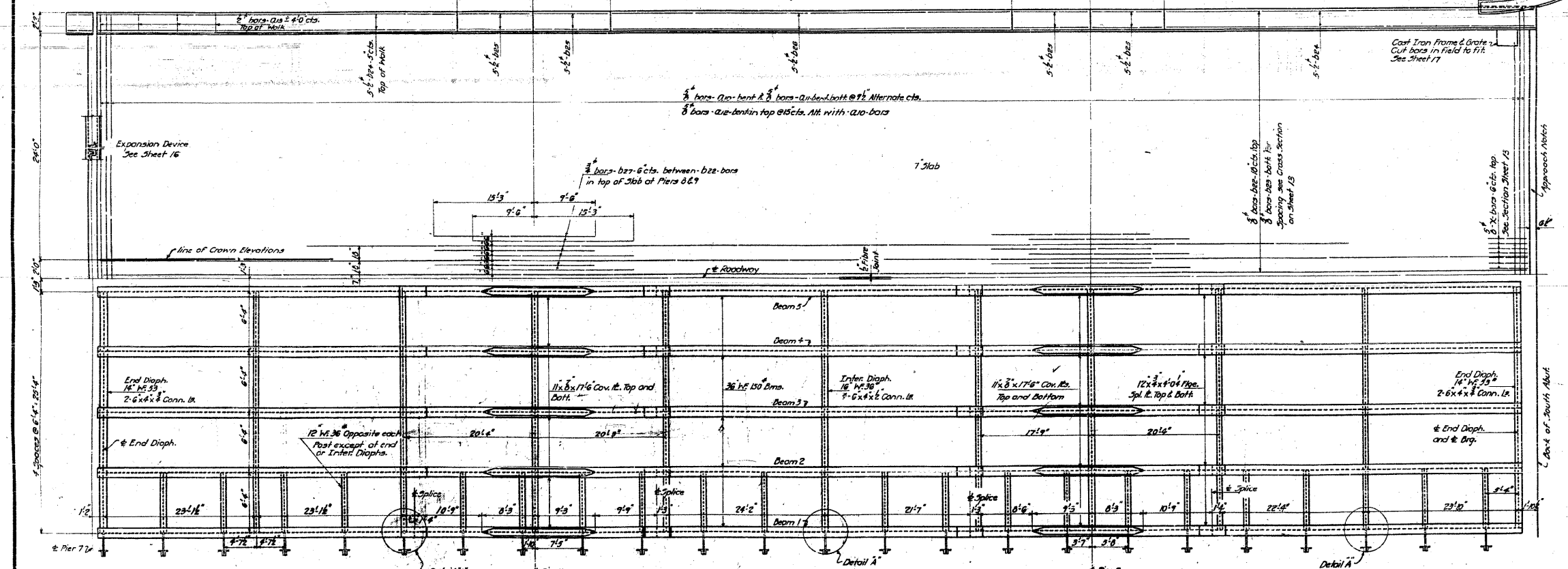
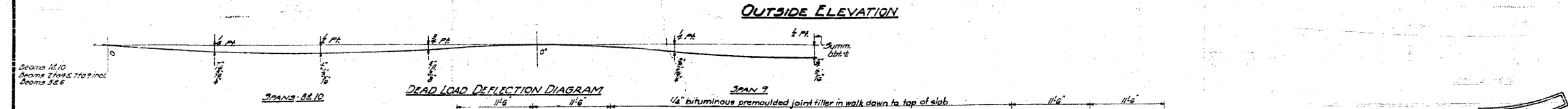
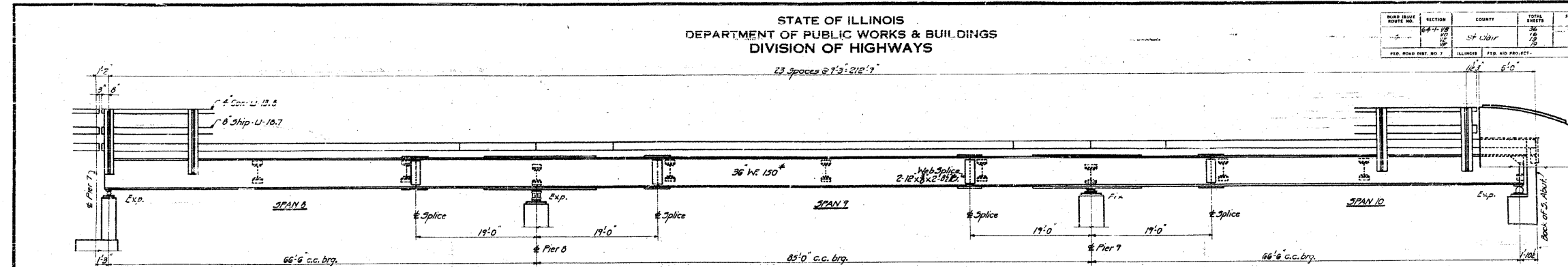


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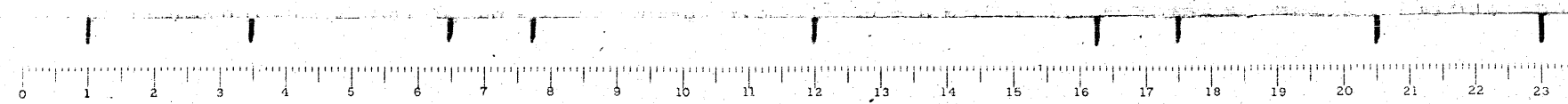
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROAD DISTRICT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVBR	64-IVBR	ST. CLAIR	259	112
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



STANDARD	COMPUTED <i>W.F. Wilby</i>	EXAMINED <i>W.E. Hanson</i>
	CHECKED <i>W.N. Sommer</i>	ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
	DRAWN <i>W.F. Wilby</i> <i>M. Miller</i>	PASSED <i>[Signature]</i>
	CHECKED <i>W.V.B.</i>	APPROVED <i>R.H. Bartleson</i>
SPECIAL	ASSEMBLED	
	CHECKED	

SPANS 8-9-10
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPE
I.A. ROUTE 4 - SEC. 64-IVBR
ST. CLAIR COUNTY



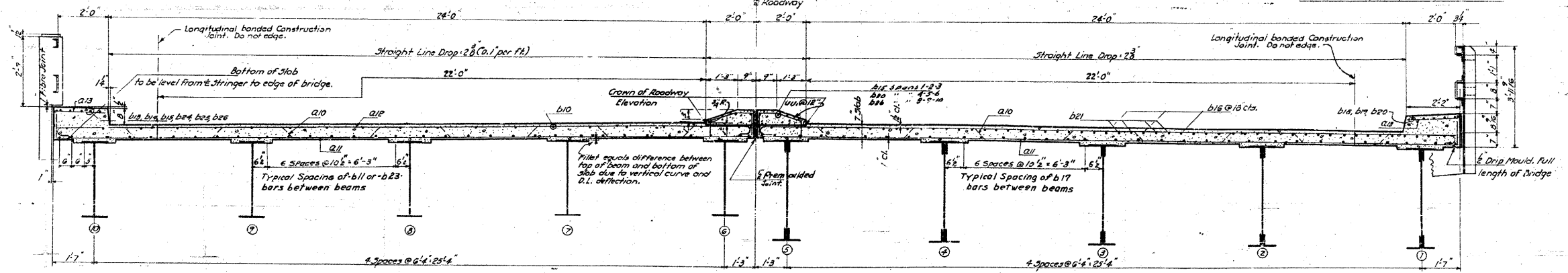
FOR INFORMATION ONLY

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PLOT SCALE = 40,000,000 / IN.	PLOT DATE = 8/5/2018	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 76882	
		CHECKED -	REVISED -						ILLINOIS FED. AID PROJECT	
		DATE - / /	REVISED -							

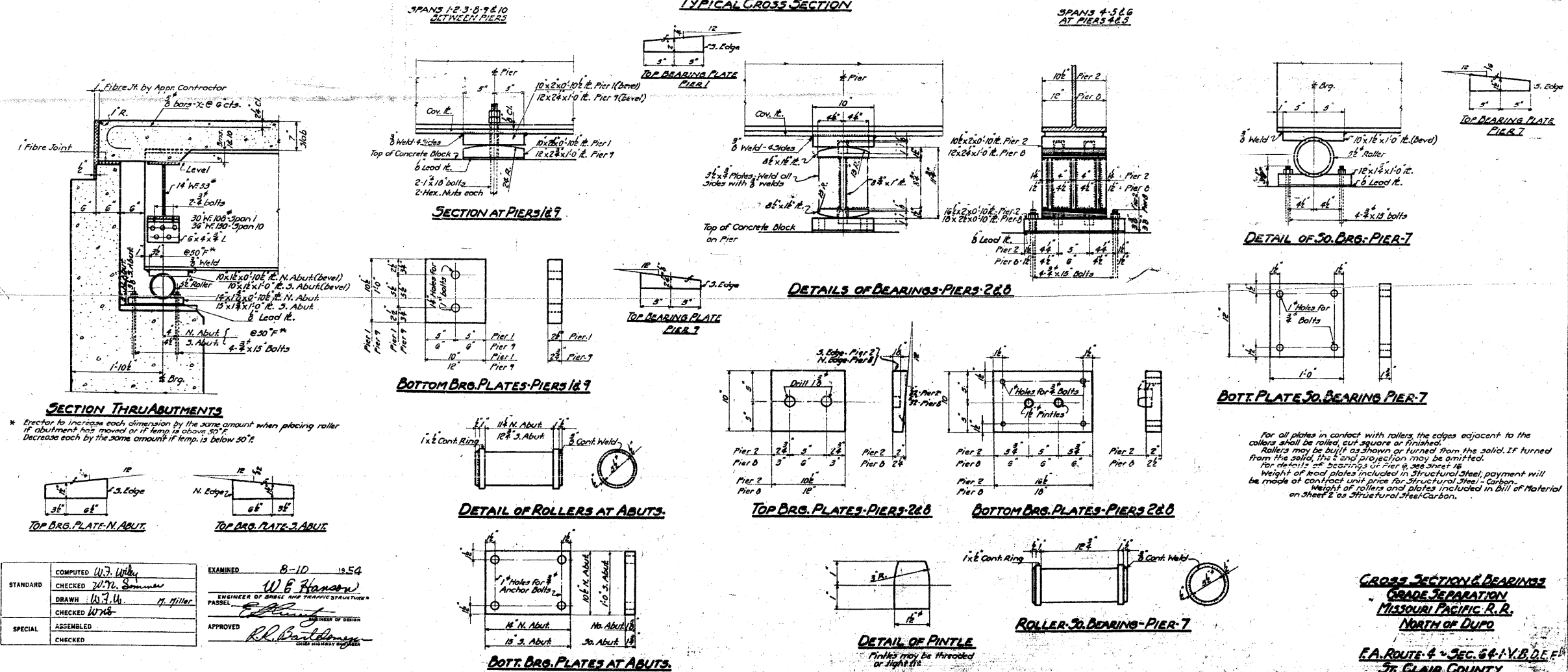
CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROAD DISTRICT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	64-IVBR	St. Clair	259	113
30 SHEETS				

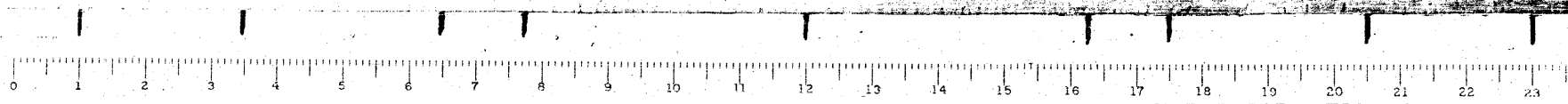


TYPICAL CROSS SECTION



STANDARD	COMPUTED	W.F. Wilby	EXAMINED	8-10 1954
CHECKED	W.F. Sommer		W.E. Hanson	
DRAWN	W.F. U.	M. Miller	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES	
CHECKED	W.F. U.		PASSEL	
SPECIAL	ASSEMBLED		APPROVED	
	CHECKED		R.H. Carlstrom	

CROSS SECTION & BEARINGS
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO
E.A. ROUTE 4 - SEC. 64-1-V.B.D.E.F.
ST. CLAIR COUNTY



FOR INFORMATION ONLY

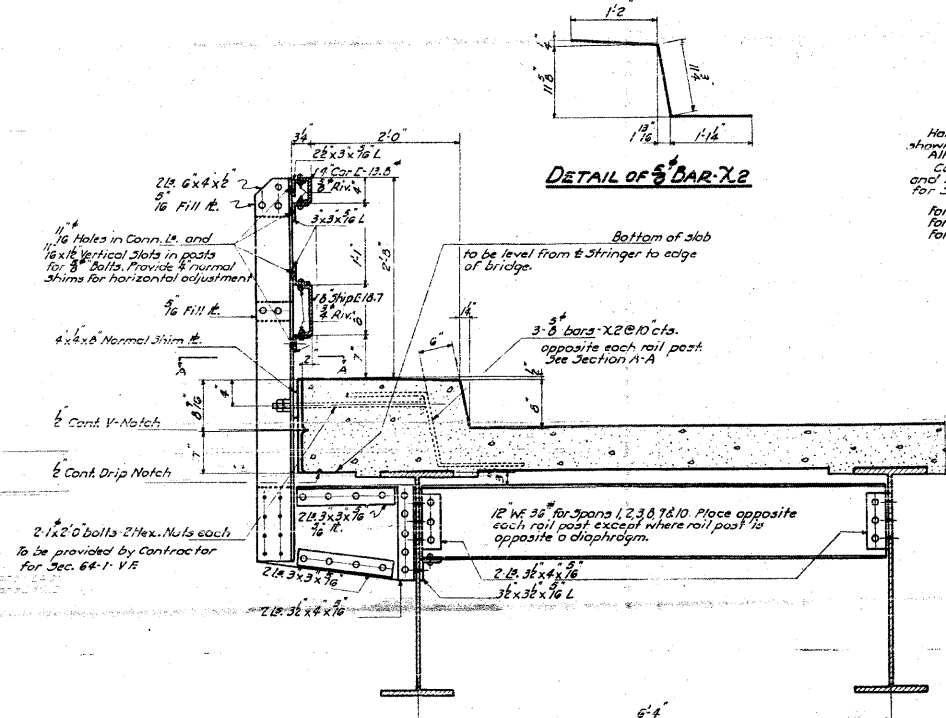
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	PLOT DATE = 8/5/2018	DATE	REVISED			CONTRACT NO. 76882				

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Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	NO.	TOTAL SHEETS	SHEET NO.	SHEET NO.
64-1VBR	16	16	11	11
ST. CLAIR	16	16	16	16

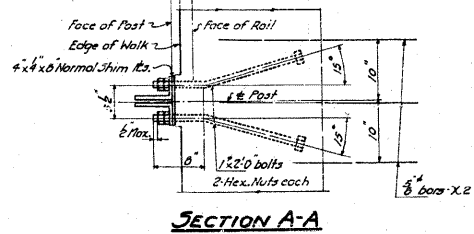
SHEET NO. 14
30 SHEETS



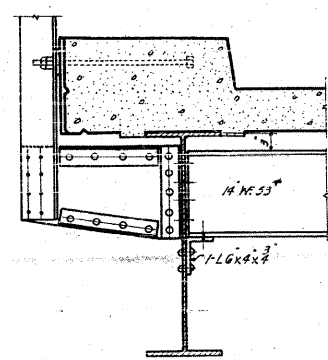
TYPICAL HANDRAIL POST AND CONNECTION FOR SPANS 1, 2, 3, 8, 9 & 10

For Spans 4, 5 & 6 Handrail Post the same. See Sheet 6 for details of connection.

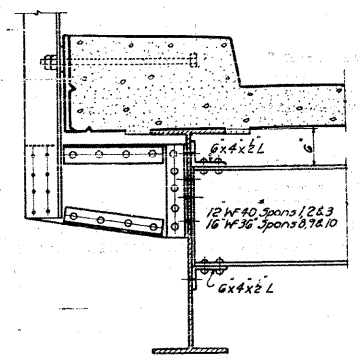
NOTE
Handrail Posts shall be fabricated so that the rail dimensions shown can be maintained at all posts.
All Posts shall be truly vertical.
Contractor for Sec. 64-1V.E. shall align, assemble and rivet Handrail Posts and brackets. Contractor for Sec. 64-1V.D. shall secure posts to anchor bolts.
For location and spacing of Handrail Posts, see Sheets 3 & 2.12.
For detail of end diaphragm of Pier 7, see Sheet 16.
For detail of end diaphragm of Pier 3, see Sheet 15.



SECTION A-A

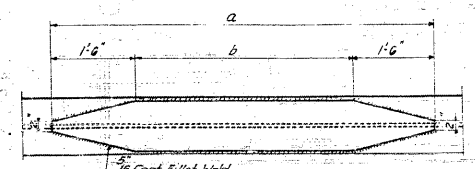


CONNECTION AT END DIAPHRAGMS SPAN 3 AT PIER 3 AND SPAN 8 AT PIER 7



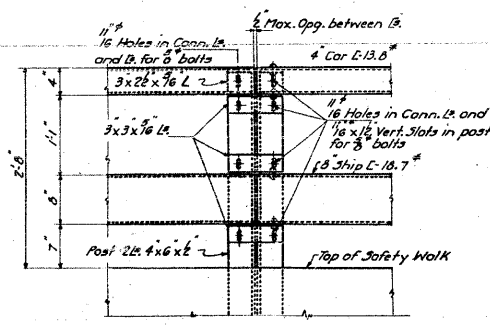
DETAIL A CONNECTION AT INTERMEDIATE DIAPHRAGMS

All Points noted Detail A on Plans For Spans 1, 2, 3, 8, 9 & 10

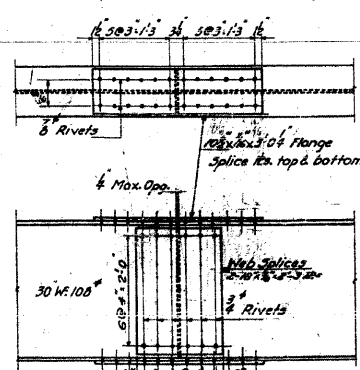


Pier No.	Width	Thickness	a	b
1, 2, 3	7'6"	3/8"	13'9"	10'9"
8, 9, 10	11'	3/8"	17'6"	14'6"

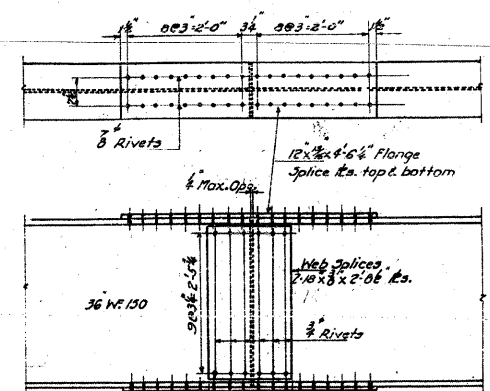
DETAIL OF COVER PLATES
Spans 1, 2, 3, 8, 9 & 10



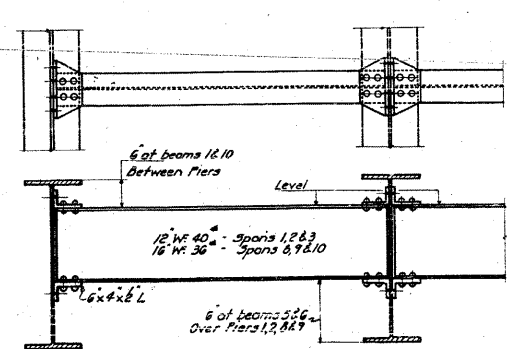
ROADWAY FACE ELEVATION OF RAIL SHOWING SPlicing OF CHANNELS



BEAM SPLICES FOR SPANS 2 & 3



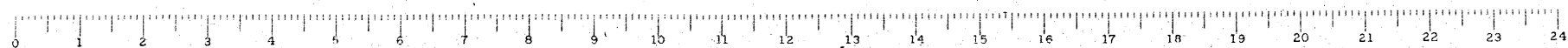
BEAM SPLICES FOR SPANS 8, 9 & 10



DETAILS OF INTERMEDIATE DIAPHRAGMS
For I-beam Spans

STANDARD	COMPUTED	W. J. Wiley	EXAMINED	8-10 1954
	CHECKED	W. V. Sommer		
	DRAWN	W. J. Wiley	ENGINEER OF BRIDGE AND HIGHWAY STRUCTURES	
	CHECKED	W. J. Wiley	PASSED	
SPECIAL	ASSEMBLED		APPROVED	
	CHECKED			

DECK DETAILS
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO
E.A. ROUTE 4 - SEC. 64-1V.D.E.1
ST. CLAIR COUNTY



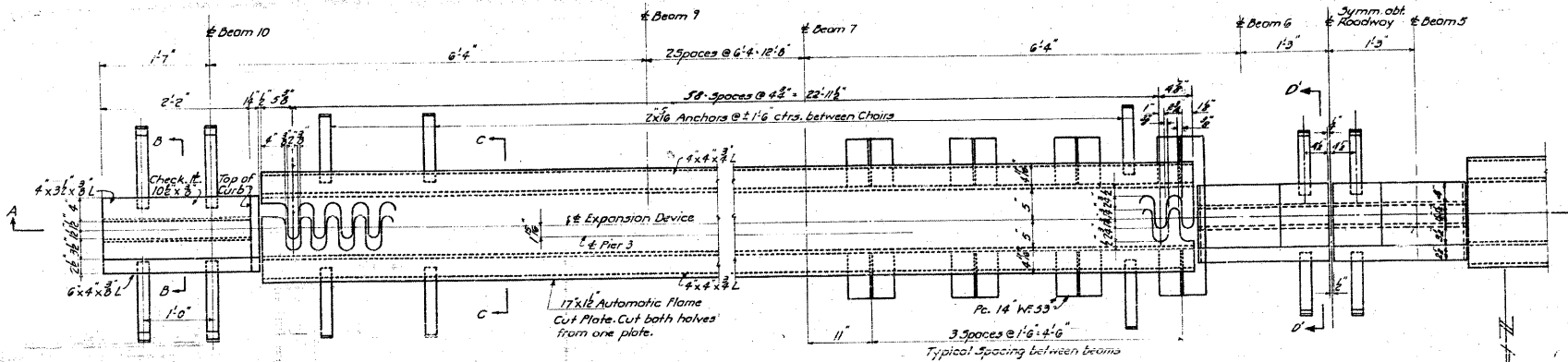
FOR INFORMATION ONLY

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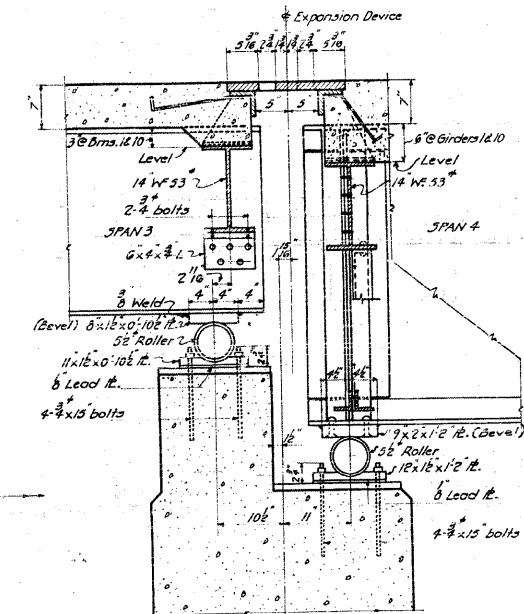
CB Coombe-Bloxdorf P.C.
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- LAND SURVEYERS-
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

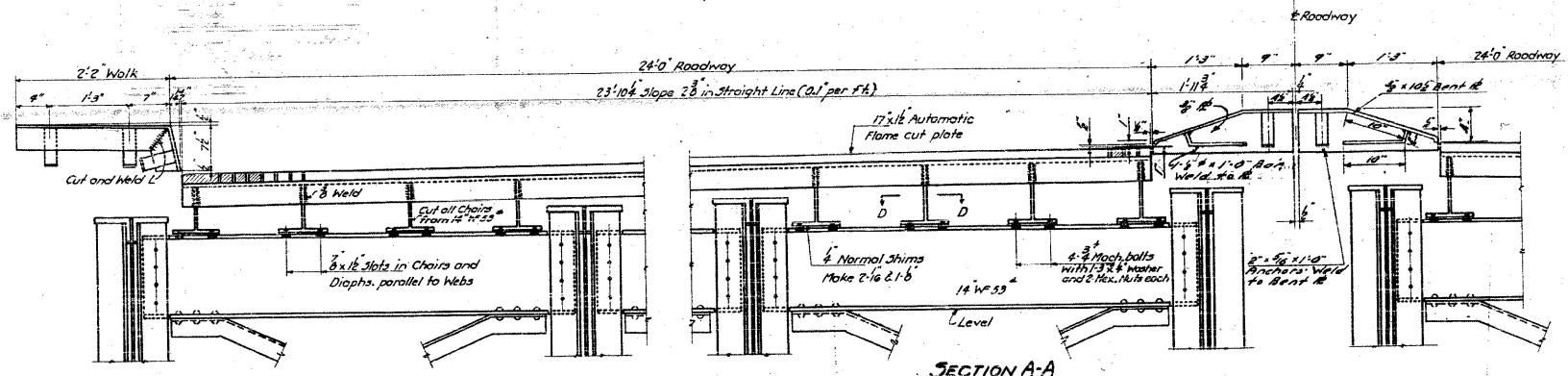
ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVBR	St. Clair	St. Clair	259	115
30 SHEETS				



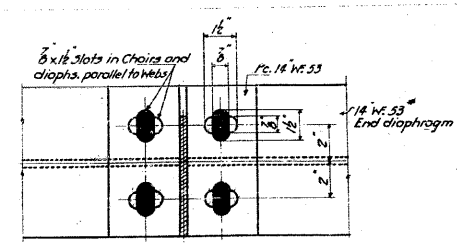
PLAN OF EXPANSION DEVICE-PIER 3
Openings between expansion plates are shown for a normal temperature of 50°F.



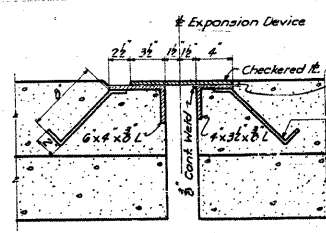
SECTION AT PIER 3



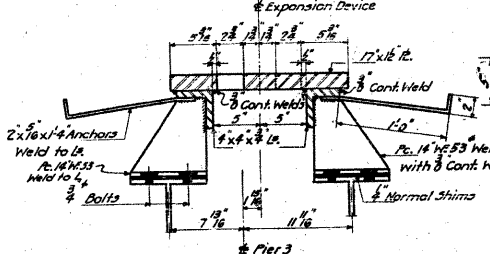
SECTION A-A



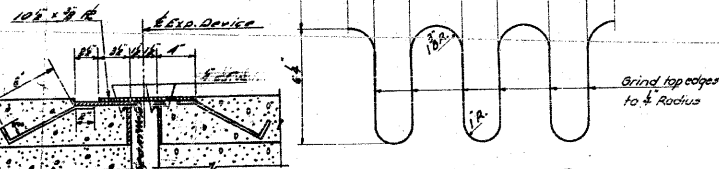
SECTION D-D



SECTION B-B



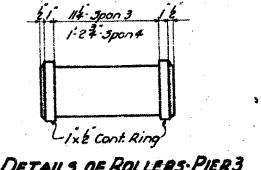
SECTION C-C



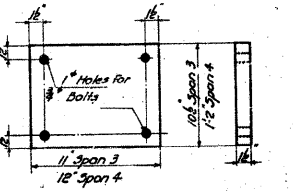
DETAIL OF EXPANSION PLATE

COMPUTED	W. F. Wible
CHECKED	W. M. Ziemer
DRAWN	W. J. W.
CHECKED	W. J. W.
ASSEMBLED	
CHECKED	

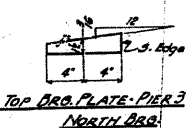
EXAMINED	B-10	12-54
DRAWN	W. E. Hanson	
PASSED		
APPROVED	R. R. Benthley	



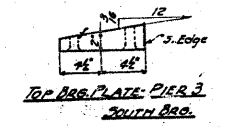
DETAILS OF ROLLERS-PIER 3



BOTTOM BRG. PLATES-PIER 3



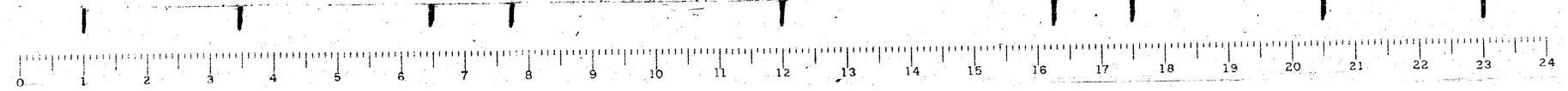
TOP BRG. PLATE-PIER 3 NORTH BRG.



TOP BRG. PLATE-PIER 3 SOUTH BRG.

Expansion devices shall be inspected in the shop in their assembled position before painting. Estimated weight of expansion device of Pier 3 included in Bill of Material on Sheet 2 as Structural Steel Carbon 4940 lbs.

EXPANSION DEVICE-PIER 3
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO
E.A. ROUTE 4 - SEC. 64 - N.D.E.F.
ST. CLAIR COUNTY



FOR INFORMATION ONLY

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -
...\\115-0876882-exist-bridge-plans-15.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 082-0030 PLANS
(ORIGINAL PLANS)

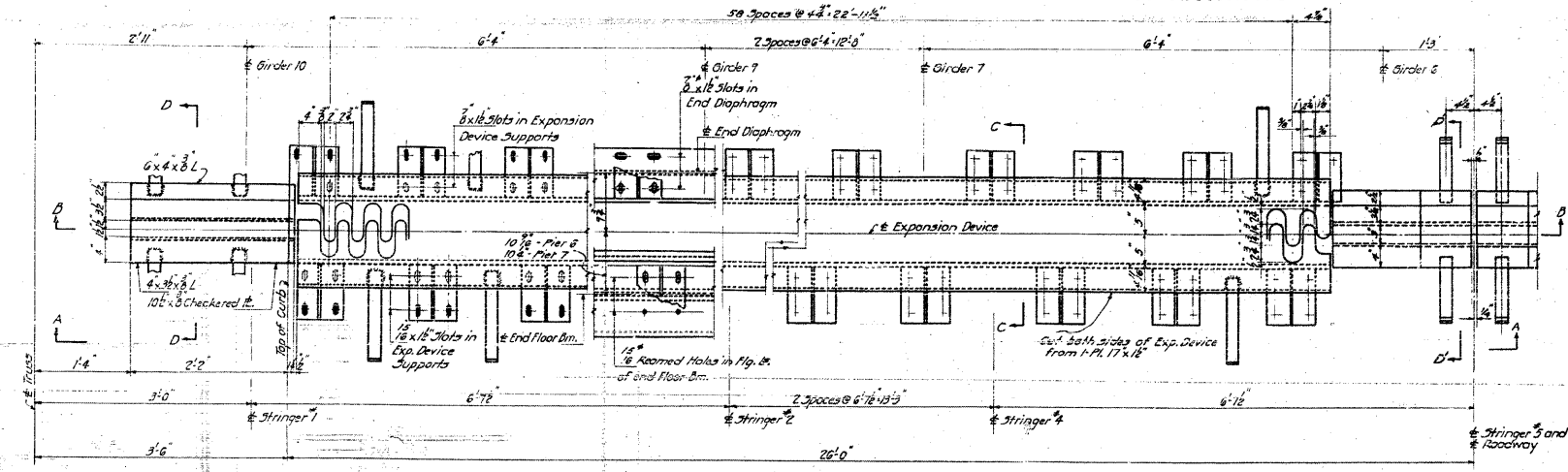
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.
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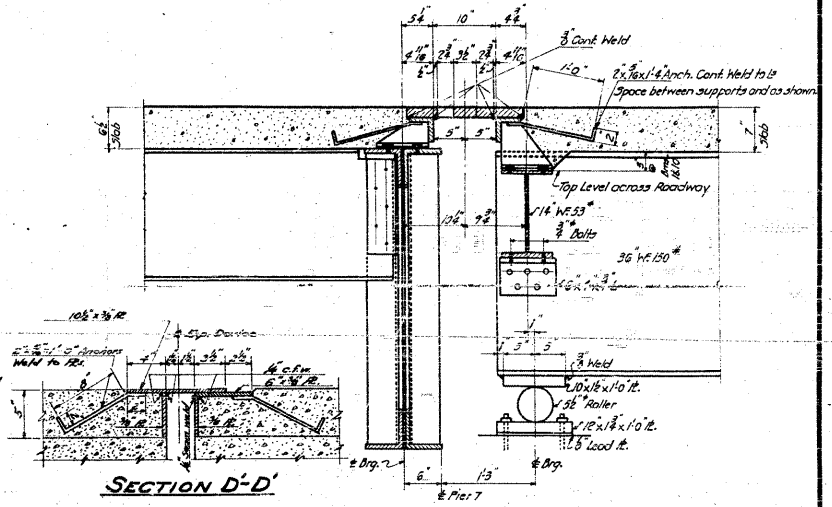
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 76882				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

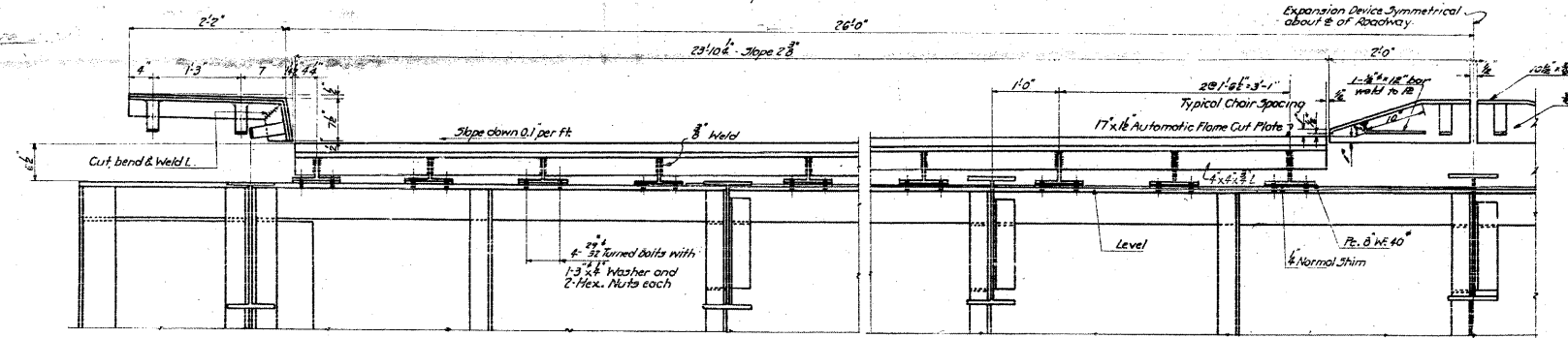
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4	64-IVBR	ST. CLAIR	15	16
SHEET NO. 16 30 SHEETS				



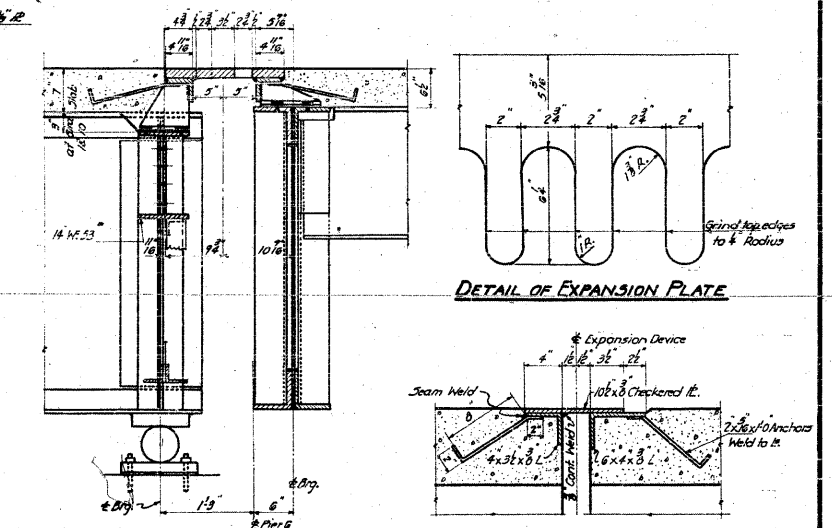
PLAN OF EXPANSION DEVICE AT PIER 6
Expansion Device of Pier 7 Similar



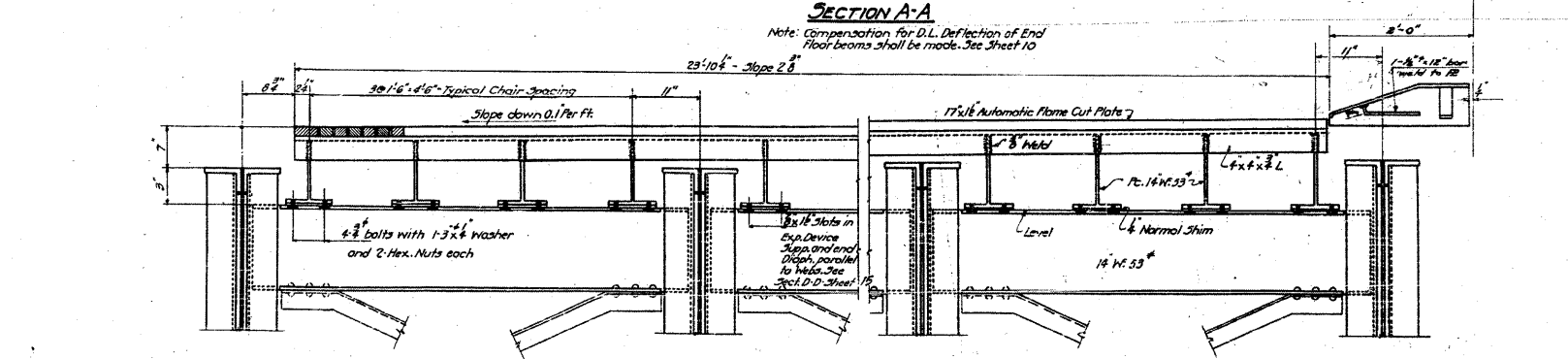
SECTION D-D
SECTION C-C AT PIER 7



SECTION A-A
Note: Compensation for D.L. Deflection of End Floor Beams shall be made. See Sheet 10



SECTION C-C AT PIER 6
Details not shown are same as of Pier 7

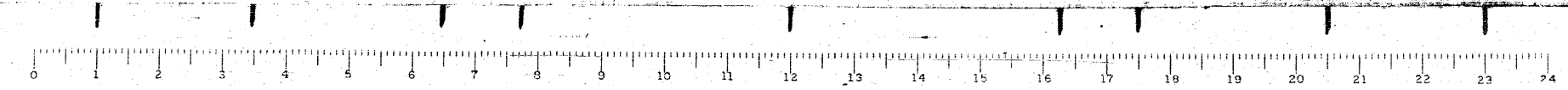


PART SECTION B-B
Exp. Device of Pier 6 Shown. Device of Pier 7 Similar

Estimated weight of Expansion Devices Pier 6 & 7 included in Bill of Material Sheet 2. Structural Steel Carbon 17,010 lbs.

COMPUTED	W. J. Miller	EXAMINED	B-10 1954
CHECKED	W. M. Sommer	ENGINEER OF BRIDGE AND TRUSS STRUCTURES	W. E. Hanson
DRAWN	W. J. Miller	PASSED	[Signature]
CHECKED	W. J. Miller	APPROVED	R. R. [Signature]
ASSEMBLED			
CHECKED			

EXPANSION DEVICES - PIERS 6 & 7
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO
F.A. ROUTE 4 - SEC. 64 NW 1/4 E.
ST. CLAIR COUNTY



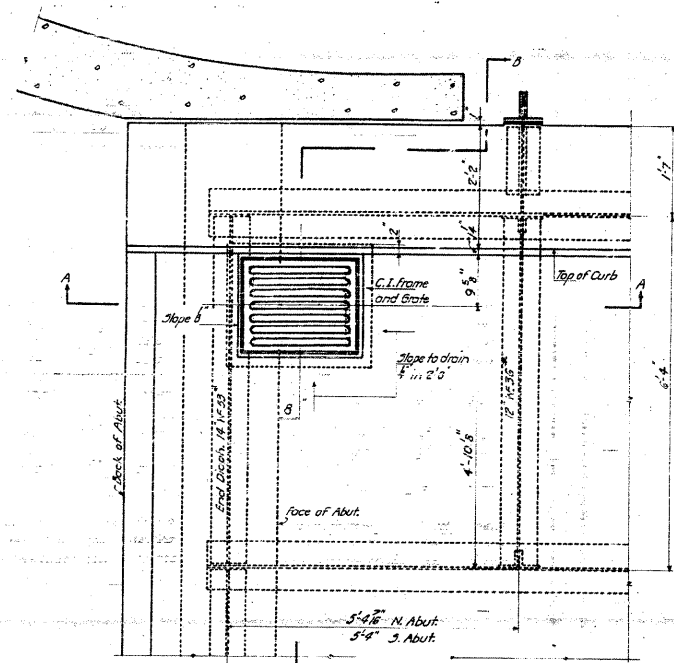
FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

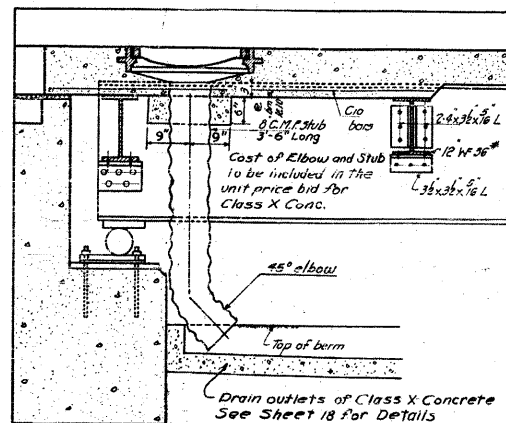
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PLOT SCALE = 40,000,000 / IN.	PLOT DATE = 8/5/2010	DRAWN -	REVISED -			CONTRACT NO. 76882							
		CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT							
		DATE - / /	REVISED -										

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROAD NAME	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 17
64-IVBR	17	St. Clair	16	14	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			30 SHEETS



PLAN OF DECK DRAINS AT ABUTMENTS



SECTION A-A

BILL OF MATERIAL
SPANS 1-2&3

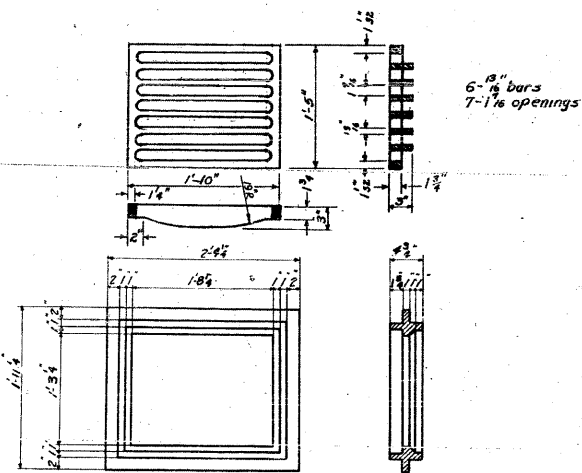
BAR	NO.	SIZE	LENGTH
Q10	360	5"	30'6"
Q11	358	5"	29'0"
Q12	320	5"	28'6"
Q13	84	5"	2'0"
b10	170	5"	34'6"
b11	220	5"	34'6"
b12	142	5"	18'7"
b13	40	5"	22'3"
b14	40	5"	8'3"
b15	48	5"	23'6"
U10	22	5"	6'3"
X	112	5"	4'9"
X2	106	5"	3'3"
U11	320	5"	2'9"
Class X Concrete		Cu. Yd.	229.0
Reinforcement Bars		Lbs.	48870
Structural Steel Carbon		Lbs.	76110

BILL OF MATERIAL
SPANS 4-5&6

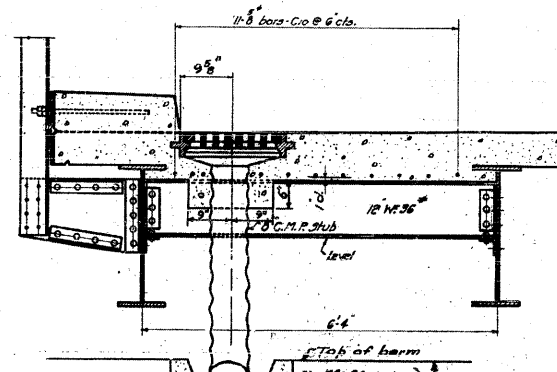
BAR	NO.	SIZE	LENGTH
Q10	418	5"	30'6"
Q11	416	5"	29'0"
Q12	274	5"	28'6"
Q13	174	5"	2'0"
b10	304	5"	37'0"
b11	672	5"	37'0"
b12	60	5"	22'3"
b13	40	5"	14'3"
b14	74	5"	23'0"
b15	144	5"	22'0"
U11	570	5"	2'9"
C13	22	5"	3'6"
X2	106	5"	3'3"
U11	470	5"	2'9"
Class X Concrete		Cu. Yd.	394.9
Reinforcement Bars		Lbs.	62820
Structural Steel Carbon		Lbs.	74670

BILL OF MATERIAL
SPANS 8-9&10

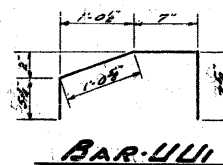
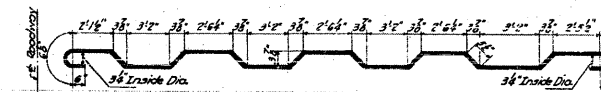
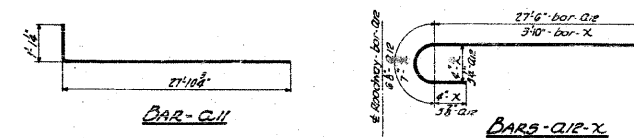
BAR	NO.	SIZE	LENGTH
Q10	220	5"	30'6"
Q11	470	5"	29'0"
Q12	170	5"	28'6"
Q13	112	5"	2'0"
b22	228	5"	35'0"
b23	304	5"	35'0"
b24	40	5"	27'0"
b25	40	5"	11'3"
b26	48	5"	31'9"
b27	144	5"	24'9"
C10	22	5"	6'3"
X	112	5"	4'9"
X2	144	5"	3'3"
U11	470	5"	2'9"
Class X Concrete		Cu. Yd.	306.2
Reinforcement Bars		Lbs.	64670
Structural Steel Carbon		Lbs.	47200



DETAIL OF C.I. FRAME & GRATE
10 Ang'.

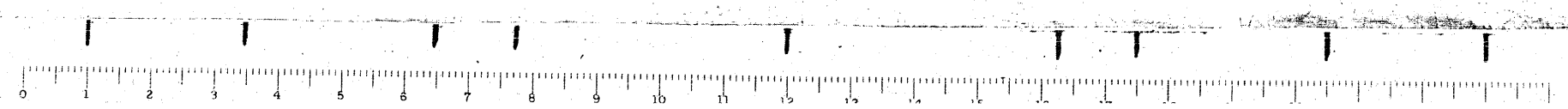


SECTION B-B



DECK DETAILS
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO
I.A. ROUTE 4 - SEC. 64 - I.V.D.E.P.
ST. CLAIR COUNTY

COMPUTED	W. F. W.	EXAMINED	B-10 1954
CHECKED	W. F. W.	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES	W. E. Hanson
DRAWN	W. F. W.	PASSED	[Signature]
CHECKED	W. F. W.	APPROVED	R. K. [Signature]
SPECIAL	ASSEMBLED		
	CHECKED		

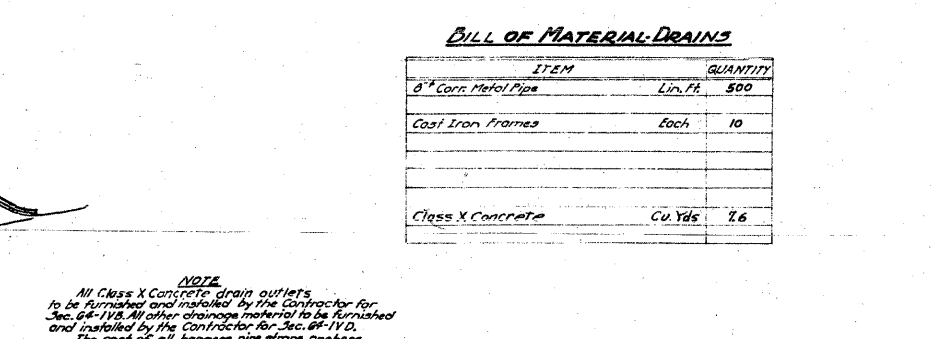
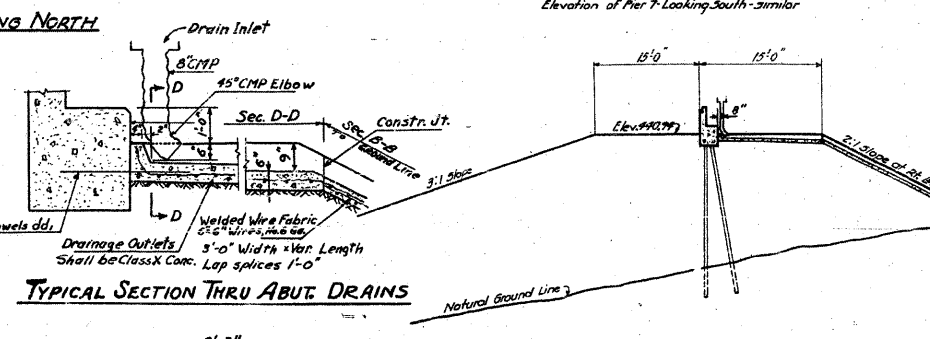
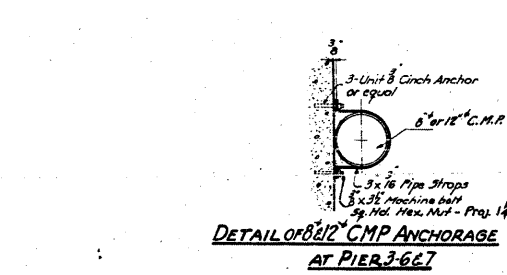
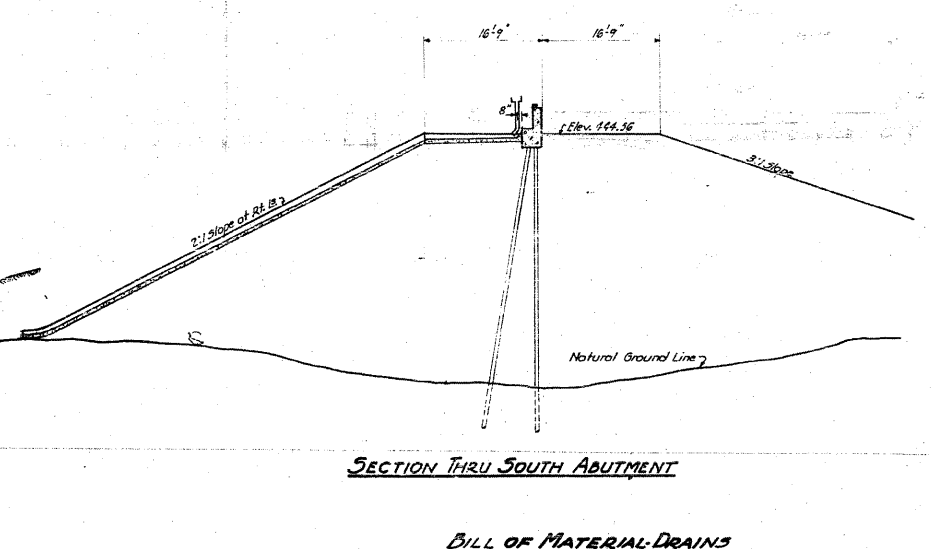
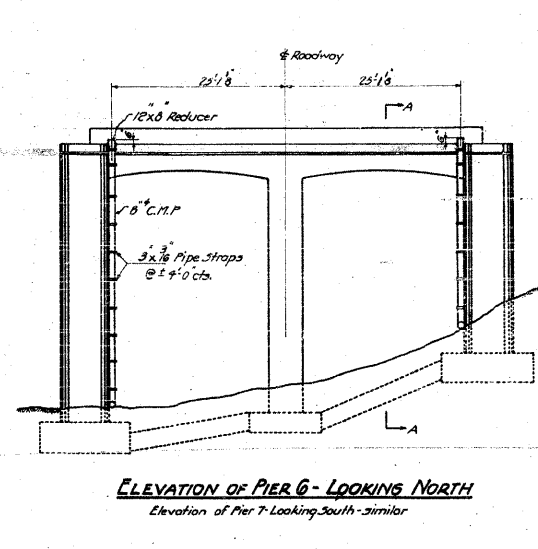
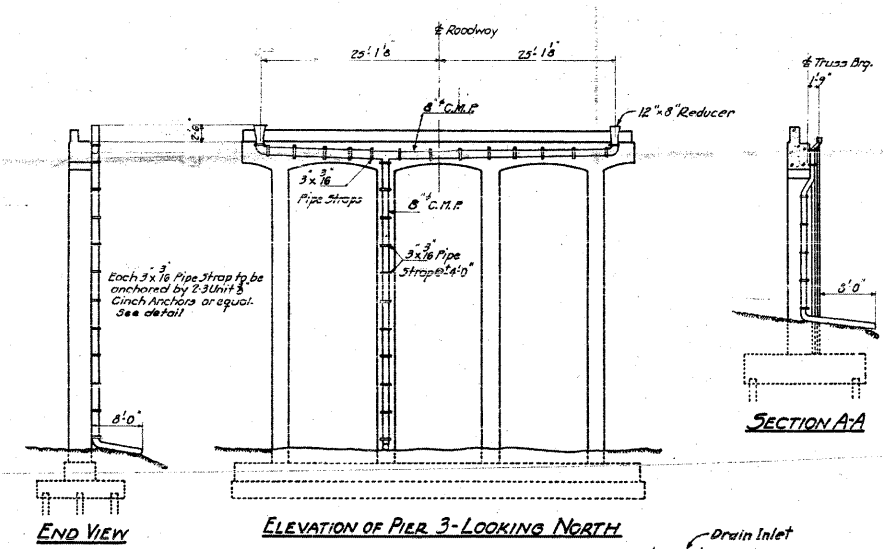
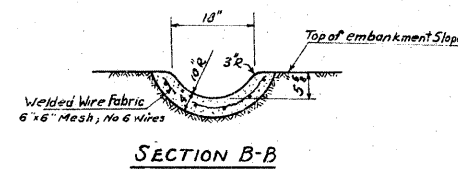
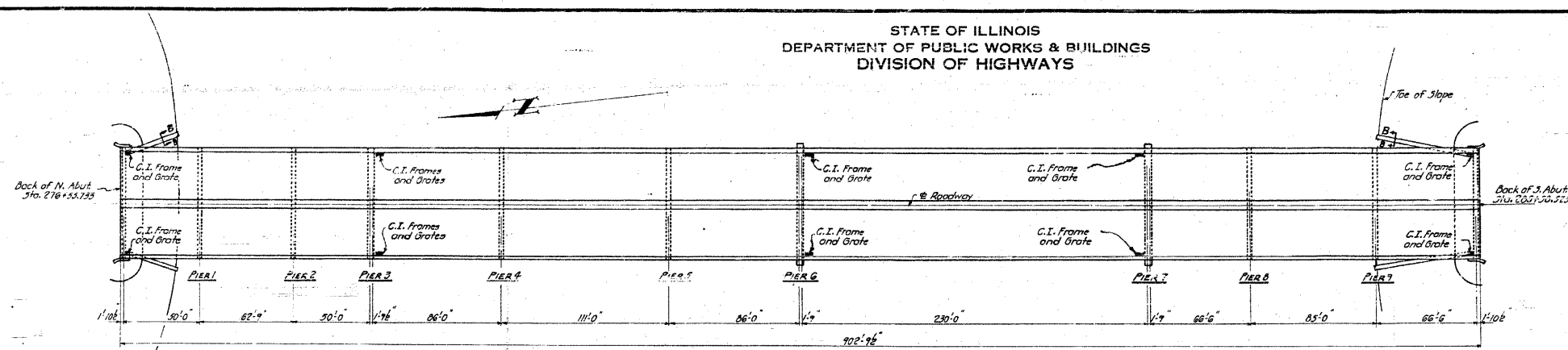


FOR INFORMATION ONLY

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- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROAD DISTRICT	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	64-IVBR-102	St. Clair	26	25
SHEET NO. 18 30 SHEETS				



BILL OF MATERIAL-DRAINS

ITEM	QUANTITY
8" Corrn Metal Pipe	Lin. Ft. 500
Cast Iron Frames	Each 10
Class X Concrete	Cu. Yds 7.6

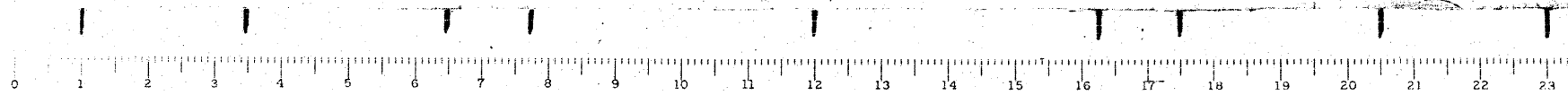
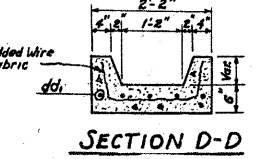
NOTE:
All Class X Concrete drain outlets to be furnished and installed by the Contractor for Sec. 64-IVB. All other drainage material to be furnished and installed by the Contractor for Sec. 64-IV D. The cost of all hangers, pipe straps, anchors, blocks, reducers and admission to be included in the cost of corrugated metal pipe. The cost of all 8" C.M.P. shall be included in the cost of Class X Concrete - Sec. 64-IV D. The cost of welded wire fabric shall be included in the unit price bid for Class X Concrete.

**DECK DRAINAGE
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUFO**

**F.A. ROUTE 4 - SEC. 64-IVBD
ST. CLAIR COUNTY**

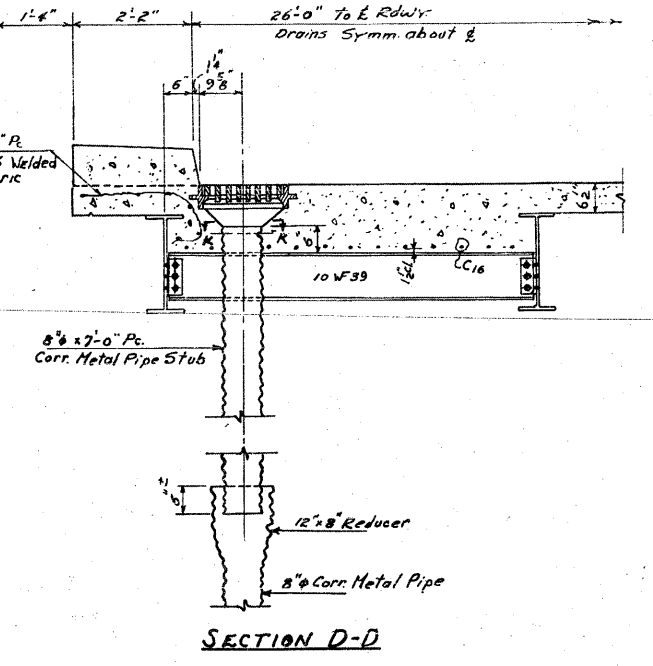
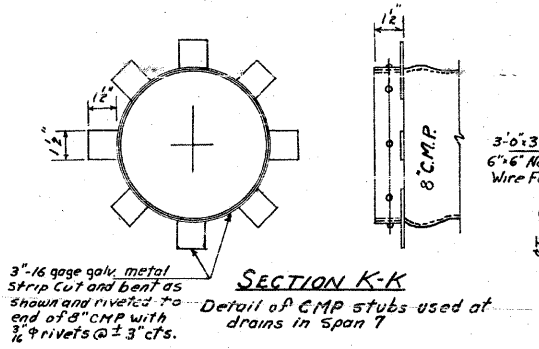
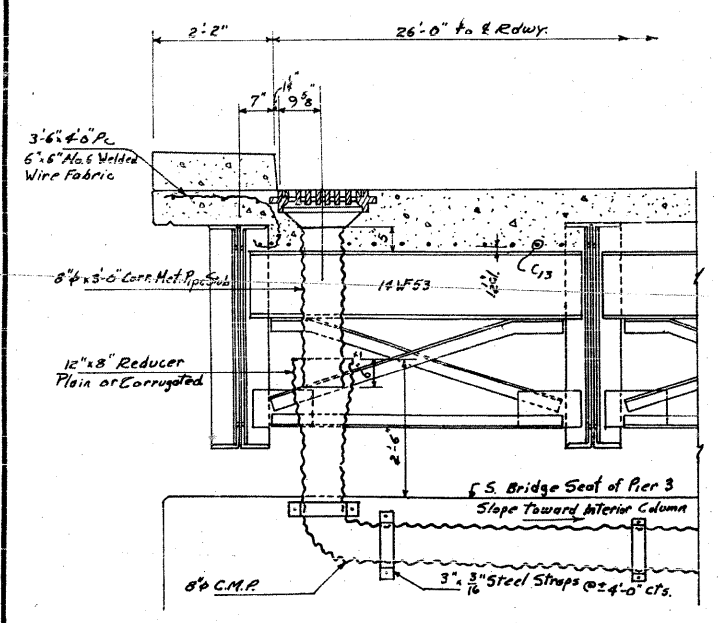
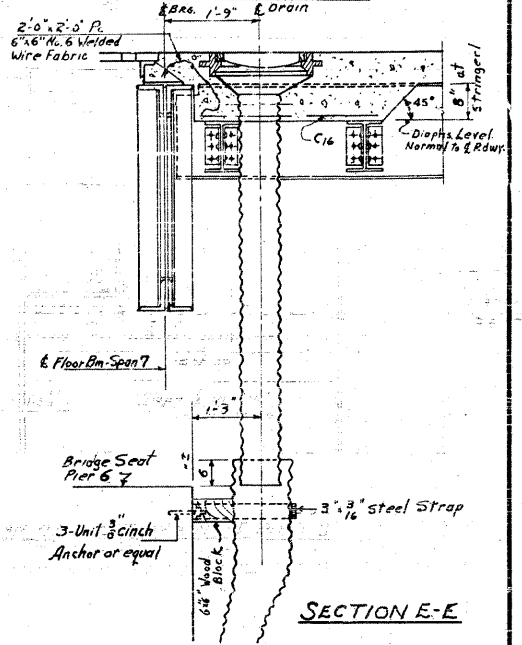
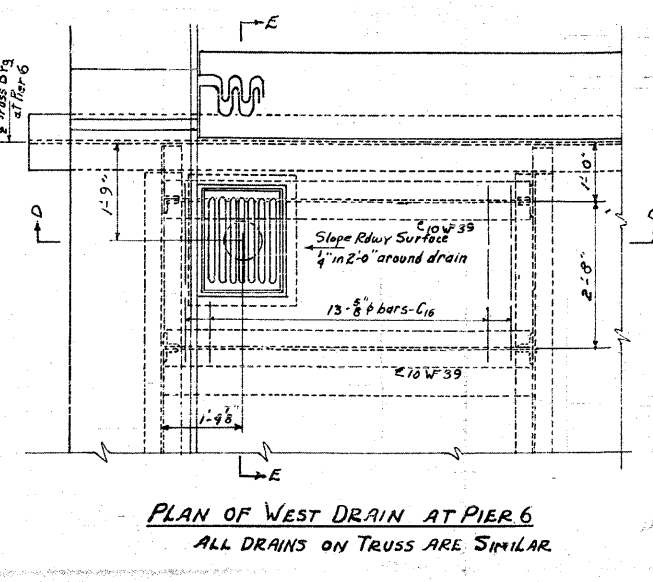
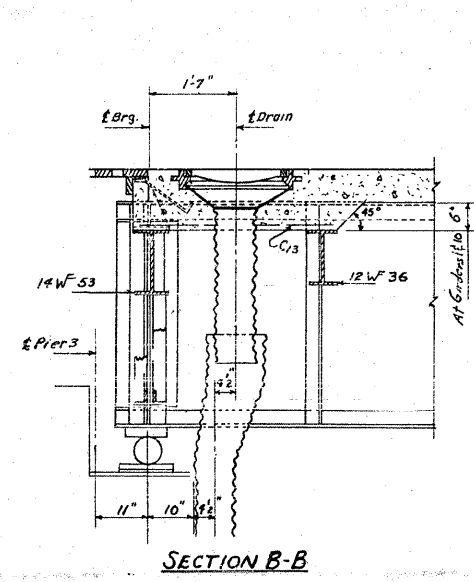
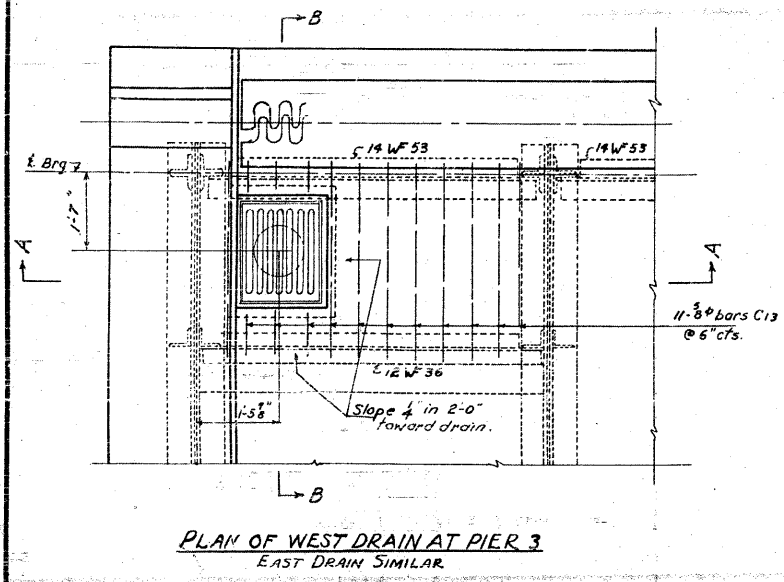
STANDARD	COMPUTED <i>W.F. Wilson</i>
	CHECKED <i>W.H. Sommer</i>
	DRAWN <i>W.F.W. Miller</i>
	CHECKED <i>W.F.W.</i>
SPECIAL	ASSEMBLED
	CHECKED

EXAMINED *B-10 10-50*
W.E. Hanson
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED *[Signature]*
APPROVED *[Signature]*
CHIEF ENGINEER



STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

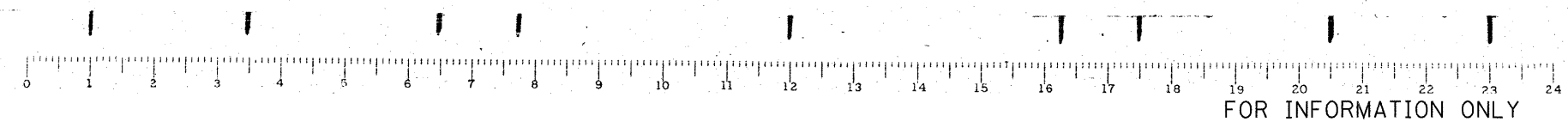
WORK SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		St. Clair	255	119
SHEET NO. 19				
30 SHEETS				
FED. ROAD DIST. NO. 1				
ILLINOIS				
FED. AID PROJECT				



COST OF 8" C.M.P. STUBS TO BE INCLUDED IN UNIT PRICE BID FOR CLASS X CONCRETE.
COST OF REDUCERS TO BE INCLUDED IN THE UNIT PRICE BID FOR 8" C.M.P.
CUT ALL REINFORCEMENT BARS IN THE FIELD TO FIT AROUND DRAIN OPENINGS.
THE COST OF WELDED WIRE FABRIC SHALL BE INCLUDED IN THE UNIT PRICE BID PER CU. YD. FOR CLASS X CONCRETE FOR SEC. 64-1VD.
FOR DETAILS OF FRAME AND GRATES SEE SHEET 17.
FOR LOCATION OF DRAINS ON PIERS SEE SHEET 18.

COMPUTED	W. P. Sommer	EXAMINED	B-10 1954
CHECKED	A. J. Harris	ENGINEER OF PUBLIC WORKS & BUILDINGS	W. E. Hanson
DRAWN	WOLB T.D.B.	PASSED	[Signature]
CHECKED	A. J. H.	APPROVED	[Signature]
ASSEMBLED			
SPECIAL			
CHECKED			

DRAINAGE DETAILS
MISSOURI PACIFIC R.R.
NORTH OF DUPO
F.A. ROUTE 4 ~ SEC. 64-1VD
ST. CLAIR COUNTY



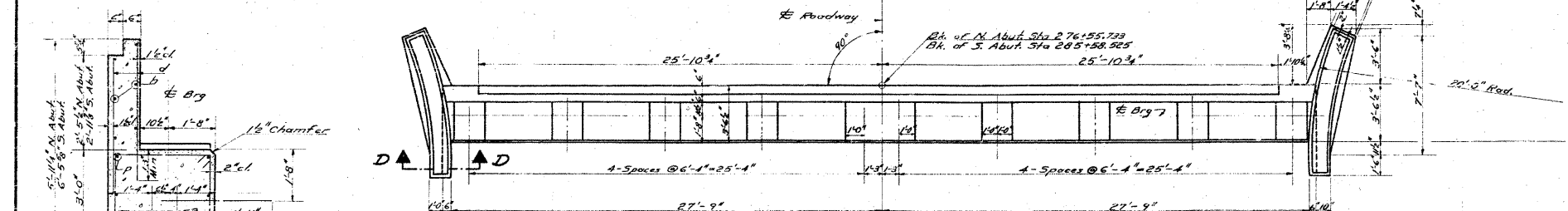
FILE NAME =	USER NAME = CFC..	DESIGNED -	REVISED -	STATE OF ILLINOIS	SN 082-0030 PLANS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
... \119-D876882-exist-bridge-plans-19.dgn		DRAWN -	REVISED -	DEPARTMENT OF TRANSPORTATION	(ORIGINAL PLANS)	312	64-IVBR	ST. CLAIR	255	119
PLOT SCALE = 40.000000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76882				
PLOT DATE = 8/5/2010		DATE - / /	REVISED -			ILLINOIS FED. AID PROJECT				
CB JOB NO 09021					SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

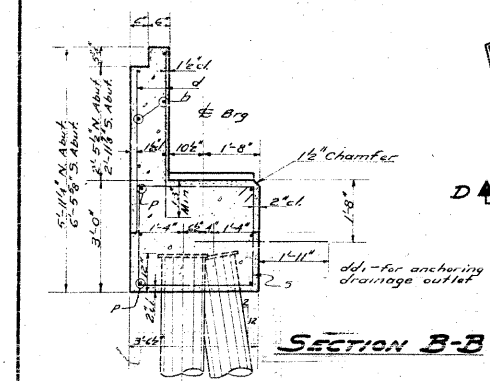
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 4	64-1-1B	St. Clair	36	26
FED. ROAD DIST. NO. 1			ILLINOIS	FED. AID PROJECT

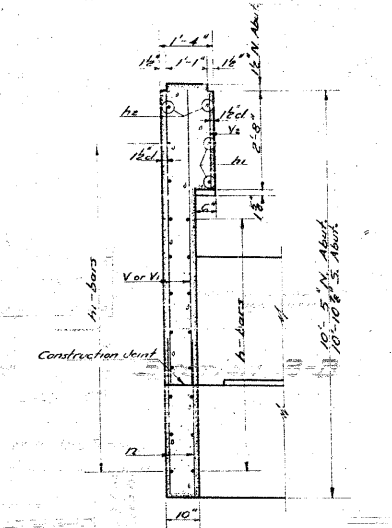
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30 SHEETS



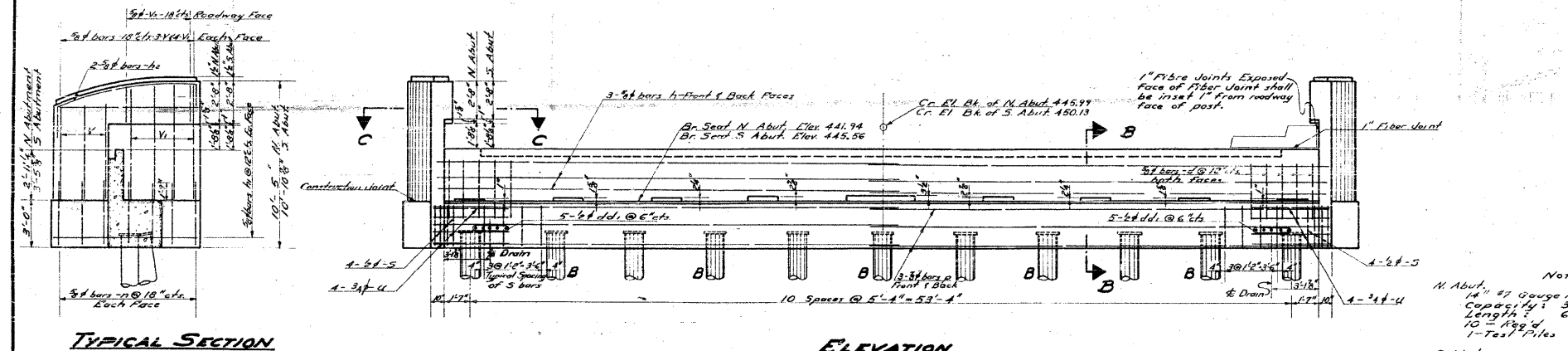
PLAN VIEW



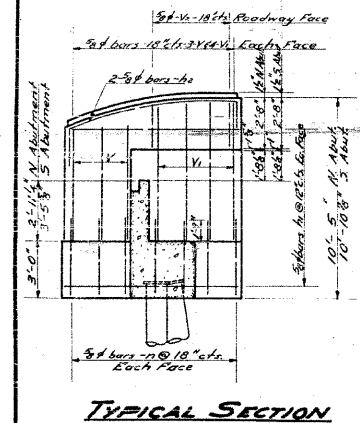
SECTION B-B



SECTION D-D



ELEVATION



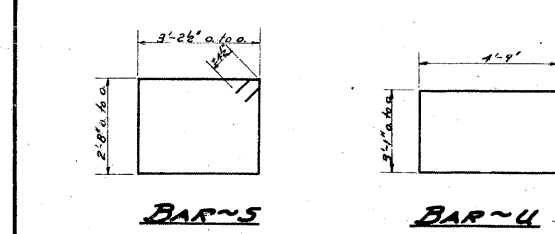
TYPICAL SECTION

BILL OF MATERIAL - 2 ABUTS.

BAR	NO.	SIZE	LENGTH	SHAPE
h	24	3/8"	29'-6"	
h1	72	3/8"	9'-0"	
h2	8	3/8"	12'-0"	
V	24	3/8"	6'-0"	
V1	32	3/8"	7'-0"	
V2	16	3/8"	2'-9"	
d	228	3/8"	4'-9"	
dd1	20	3/8"	3'-9"	
P	24	3/8"	29'-9"	
u	16	3/8"	12'-7"	
n	56	3/8"	4'-6"	
s	96	1/2"	12'-6"	

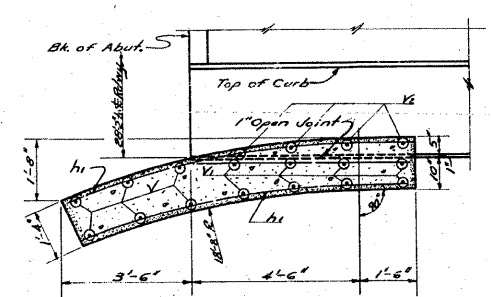
Note:
N. Abut. 14" #7 Gauge Metal Shell Pile Capacity 35,700 Length 65'-0" 10- Reg'd 1- Test Piles
S. Abut. 14" #7 Gauge Metal Shell Pile Capacity 35,700 Length 65'-0" 10- Reg'd 1- Test Piles

Note: Piles marked "B" shall be driven to batter as shown in Sec. D-D

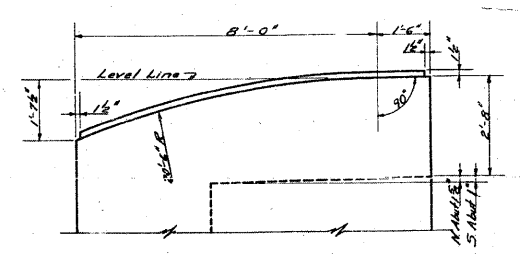


BAR~S

BAR~U



SECTION C-C



ELEVATION OF END POST

Class X Concrete Cu Yds 72.7
Reinforcement Bars Lbs. 5880
14" Metal Shell Piles Lin Ft. 1300
14" Metal Shell Test Piles Ea. 2
Class A Excavation for Structures Cu Yds. 75.0

ABUTMENTS

GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUFO

F.A. Rt. 4 SECTION 64-1-1B
ST. CLAIR COUNTY

DESIGNED	Faigul M. Schill	EXAMINED	W. E. Hanson
CHECKED	W. H. Sommer	PASSED	[Signature]
DRAWN	C. M. A. R.V. Griffin	APPROVED	[Signature]
CHECKED	[Signature]		

B-10 1954

ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

CHIEF ENGINEER OF THE

STATE HIGHWAY DEPARTMENT

CHIEF HIGHWAY ENGINEER

CHIEF HIGHWAY ENGINEER

CHIEF HIGHWAY ENGINEER

CHIEF HIGHWAY ENGINEER

CHIEF HIGHWAY ENGINEER

CHIEF HIGHWAY ENGINEER

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CHIEF HIGHWAY ENGINEER

CHIEF HIGHWAY ENGINEER

CHIEF HIGHWAY ENGINEER

CHIEF HIGHWAY ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 082-0030 PLANS
(ORIGINAL PLANS)

SCALE: SHEET NO. OF SHEETS STA. TO STA.

Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-1-1B	ST. CLAIR	259	120
				CONTRACT NO. 76882
ILLINOIS FED. AID PROJECT				

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PLOT DATE = 8/5/2018
CB JOB NO 09821

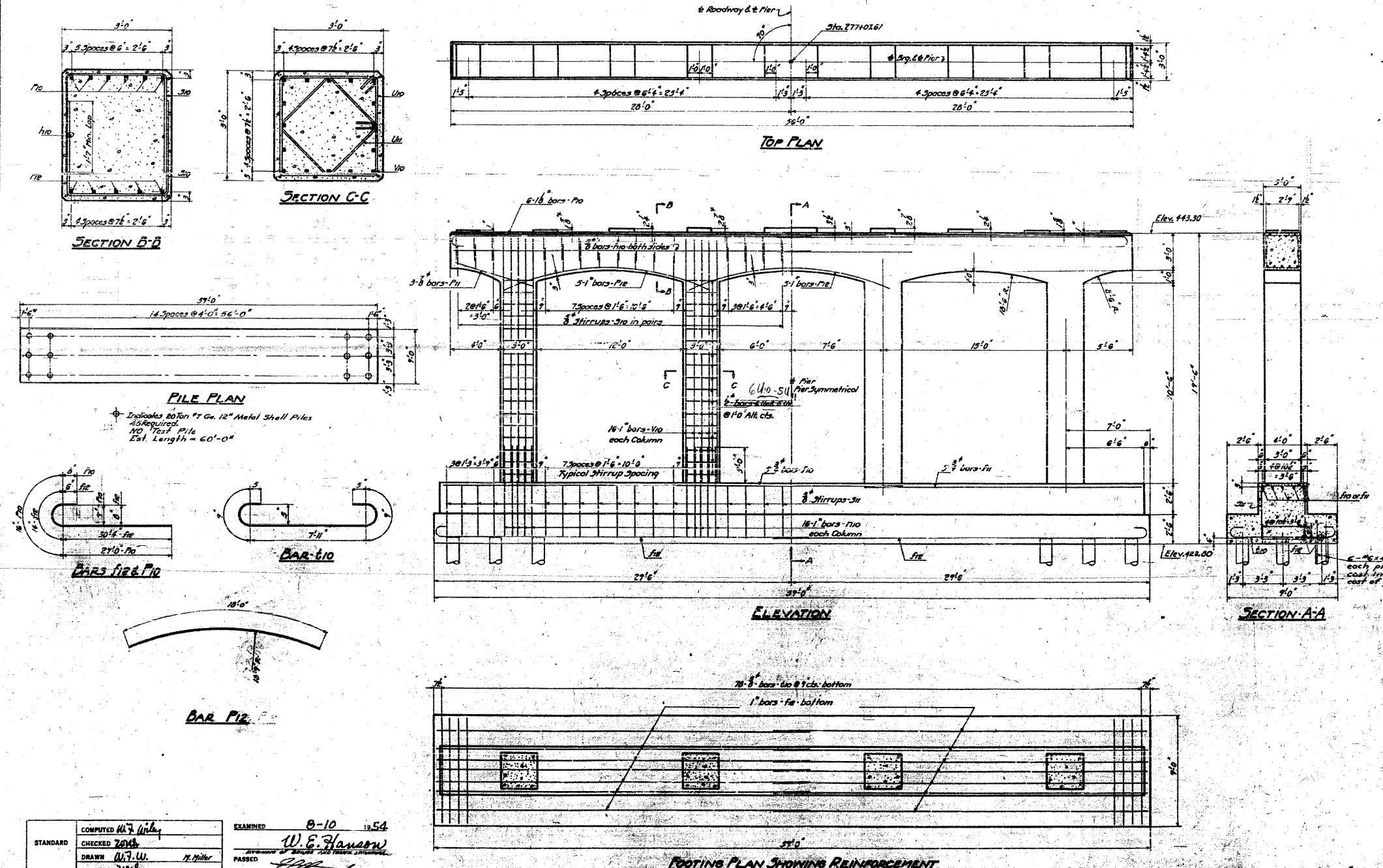
DESIGNED -
DRAWN -
CHECKED -
DATE - / /

REVISED -
REVISED -
REVISED -
REVISED -

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-IVBR	ST. CLAIR	259	121
SHEET NO. 21 90 SHEETS				



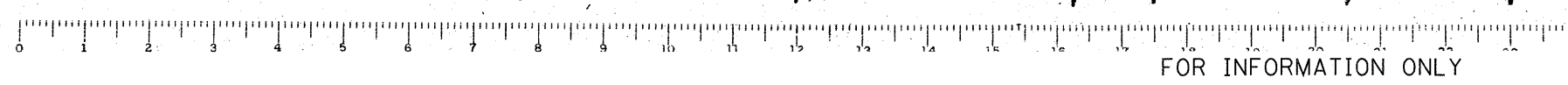
BILL OF MATERIAL

BAR NO.	NO.	SIZE	LENGTH
510	5	3"	37'-3"
511	5	3"	22'-3"
512	14	1"	32'-0"
513	4	3"	25'-6"
514	64	1"	7'-6"
515	12	18"	31'-0"
516	6	3"	7'-0"
517	15	1"	18'-0"
518	60	3"	7'-6"
519	32	3"	17'-0"
520	78	3"	10'-3"
521	24	3"	11'-6"
522	20	3"	8'-6"
523	64	1"	14'-0"

Class X Concrete Cu Yds 105.8
Reinforcement Bars Lbs. 11,540
12" Metal Shell Piles Lin. Ft. 2700
Class A Exc. for Struc. Cu Yds 120

STANDARD	COMPUTED <i>W. E. Hanson</i>	EXAMINED	0-10 1954
	CHECKED <i>W. E. Hanson</i>		
	DRAWN <i>W. E. Hanson</i>		
	CHECKED <i>W. E. Hanson</i>		
SPECIAL	ASSEMBLED	APPROVED	<i>R. L. ...</i>
	CHECKED		

PIER 1
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUKE
EAST OF ...
ST. CLAIR COUNTY

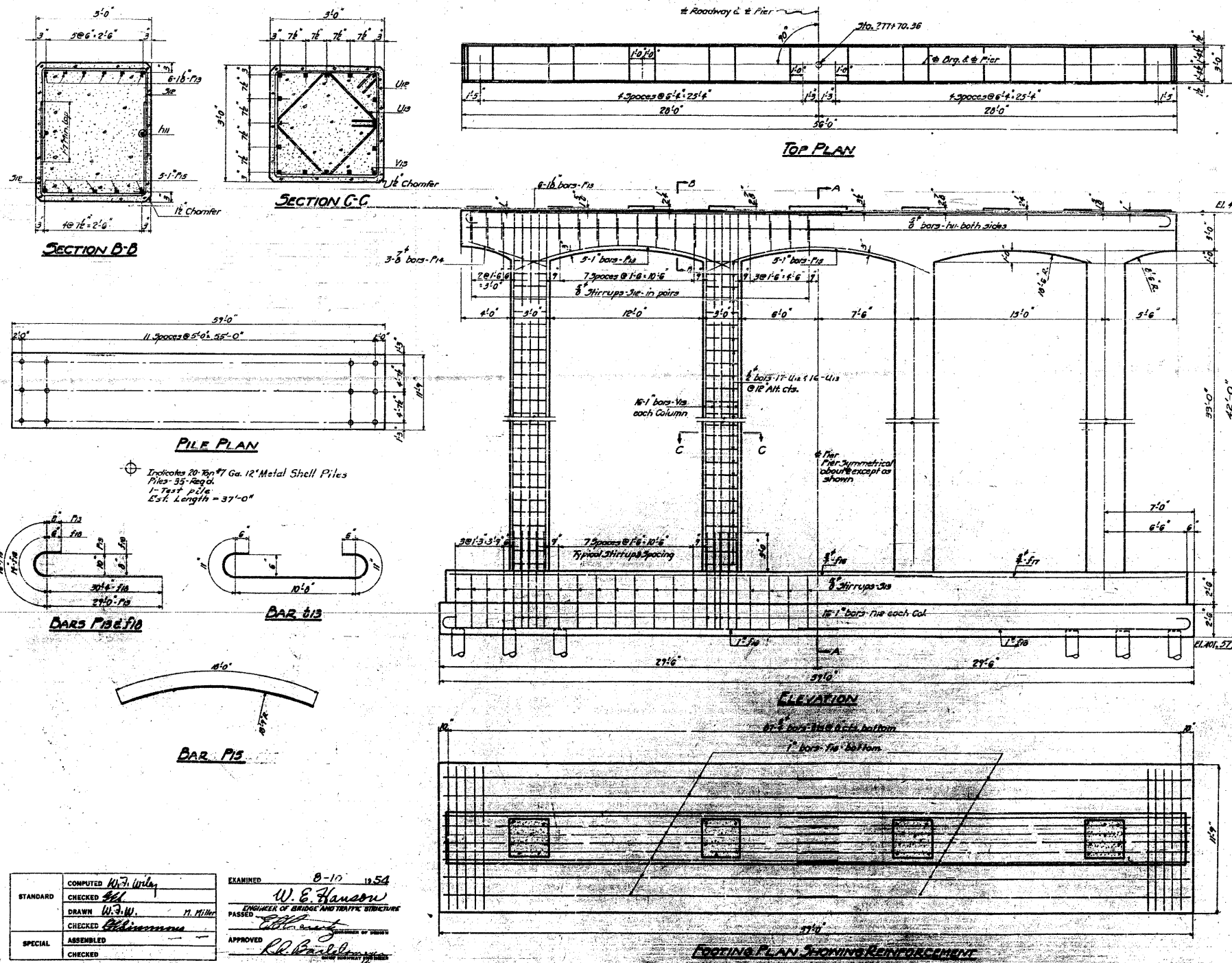


FOR INFORMATION ONLY

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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

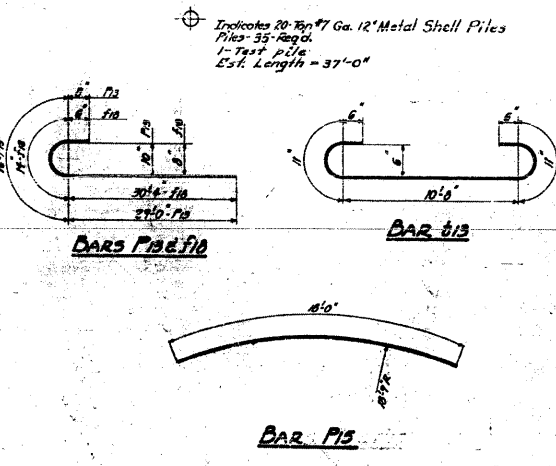
ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVBR	St. Clair	36	28	22
SOSHEETS				



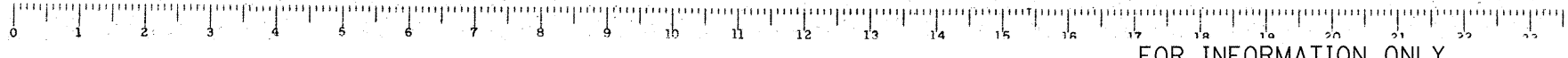
BILL OF MATERIAL

BAR NUMBER	SIZE	LENGTH
P1a	6	37'-9"
P1b	6	22'-9"
P1c	20	32'-0"
P1d	4	28'-6"
P1e	6#	7'-6"
P1f	2	3'-0"
P1g	6	7'-0"
P1h	13	18'-0"
S1e	30	7'-6"
S1a	32	17'-0"
S1b	87	13'-6"
U1e	6#	11'-6"
U1b	6#	8'-6"
V1a	6#	26'-6"

Class X Concrete Cu Yds. 131.0
Reinforcement Bars Lbs. 18,670
12" Metal Shell Piles Lin. Ft. 12,325
12" Metal Shell Test Piles Each 1
Class A Exc. for Struc. Cu Yds. 185



COMPUTED	W. J. Wiley	EXAMINED	8-17-1954
CHECKED	W. E. Hanson	PASSED	W. E. Hanson
DRAWN	W. J. Wiley	APPROVED	R. R. Baughman
CHECKED	W. J. Wiley		
SPECIAL			
ASSEMBLED			
CHECKER			

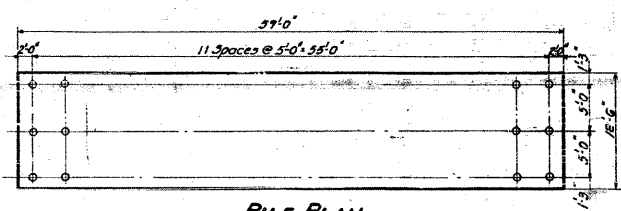
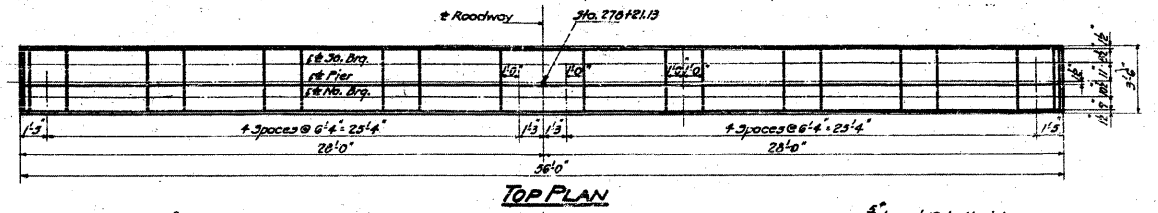
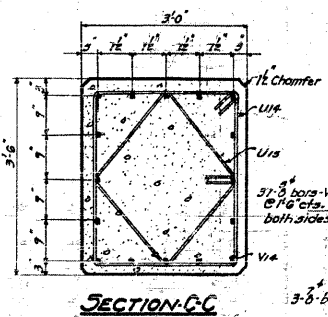
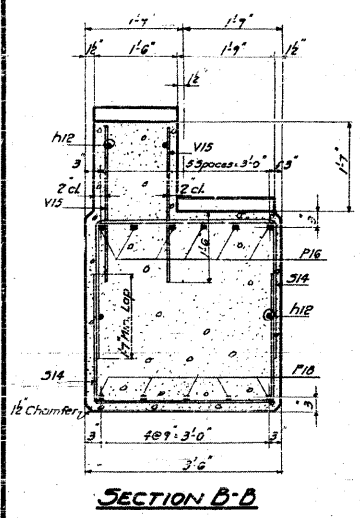


FOR INFORMATION ONLY

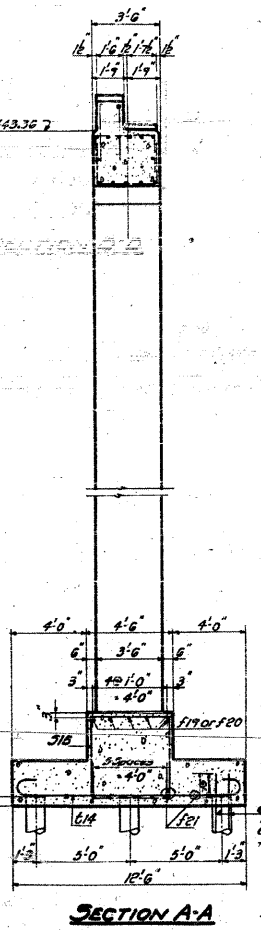
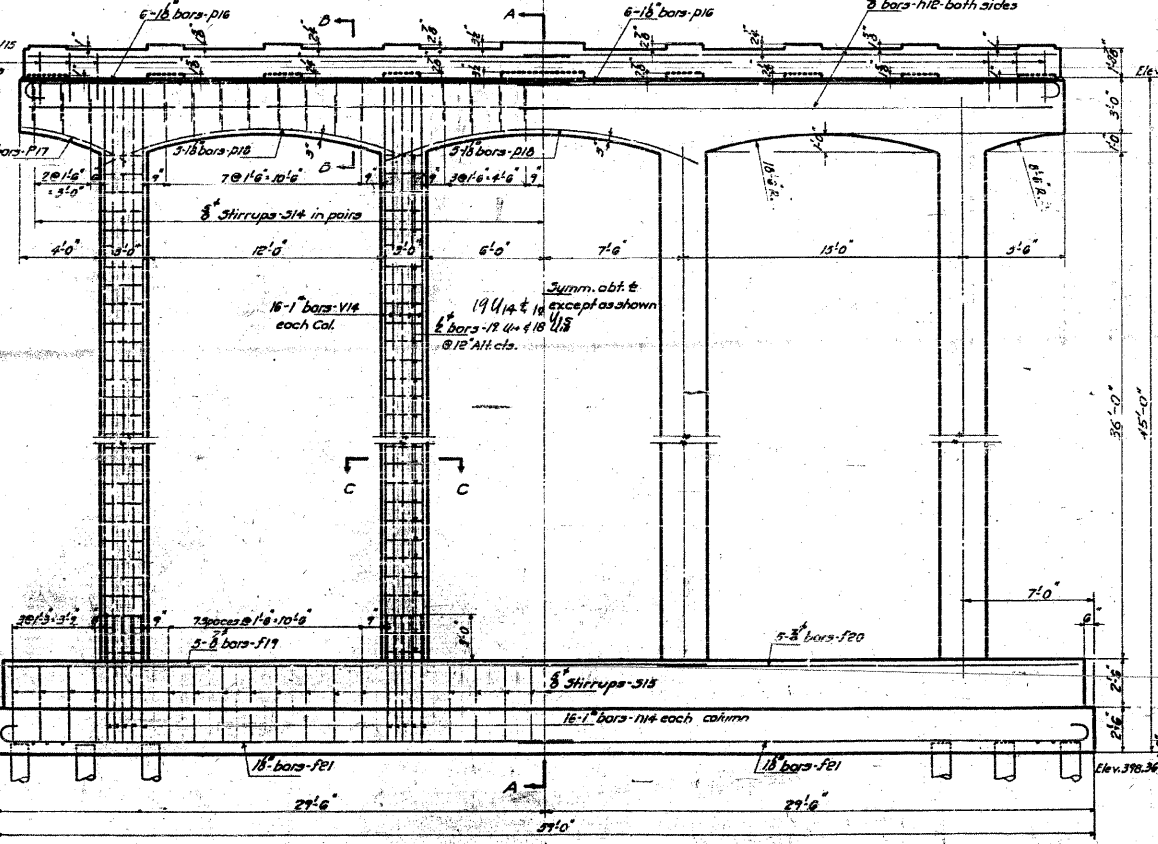
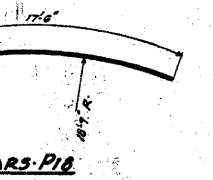
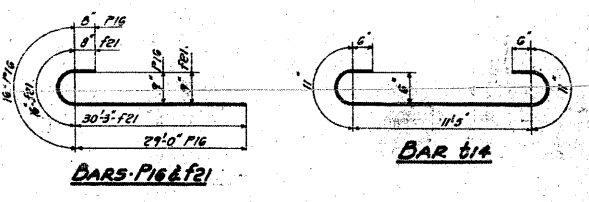
CB Coombe-Bloxdorf P.C.
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- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVBR	St. Clair	29	29
SHEET NO. 29			
30 SHEETS			



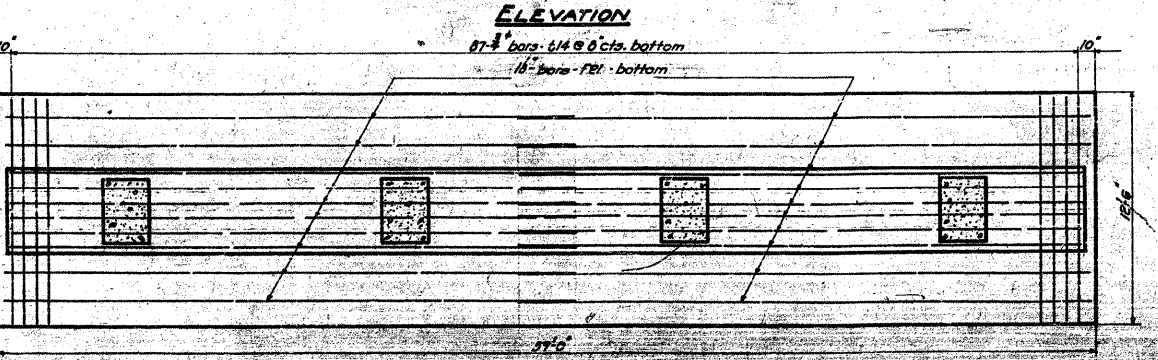
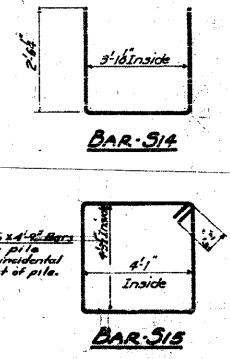
Indicates 24-ton 47 cu. ft. 12" Metal Shell Piles
piles 36' Reg'd.
No - Test Piles
Est. Length 34'-0"



BILL OF MATERIAL

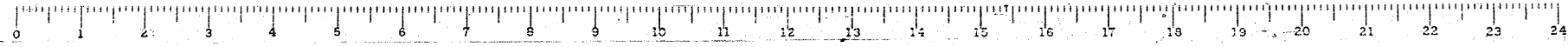
BAR	NO.	SIZE	LENGTH
F17	5	3"	37'-6"
F20	5	3"	22'-6"
F21	20	18"	32'-3"
H12	3	3"	20'-6"
P16	6	1"	7'-6"
P17	12	16"	31'-0"
P18	6	8"	6'-6"
P18	15	18"	17'-6"
S14	60	3"	6'-3"
S18	32	3"	16'-0"
S14	87	3"	14'-3"
U14	76	2"	12'-6"
U15	72	2"	7'-0"
V14	56	1"	39'-6"
V15	74	3"	3'-0"

Class-X Concrete Cu. Yds. 178.8
Reinforcement Bars Lbs. 21,110
12" Metal Shell Piles Lin. Ft. 1224
Class A Exc. for Structures Cu. Yds. 145



COMPUTED	W. E. Hanson	EXAMINED	W. E. Hanson
CHECKED	W. F. W.	PASSED	W. E. Hanson
DRAWN	W. F. W.	APPROVED	W. E. Hanson
CHECKED	W. F. W.		
ASSEMBLED			
CHECKED			

PIER 3
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPO
EA. ROUTE 4 - 7th ELEV
ST. CLAIR COUNTY



FOR INFORMATION ONLY

FILE NAME = ...N123-DB76882-exist-bridge-plans-23.dgn
PLOT SCALE = 48.000000 / IN.
PLOT DATE = 8/5/2018

USER NAME = CFC...
DESIGNED -
DRAWN -
CHECKED -
DATE - / /

REVISOR -
REVISIONS -
REVISOR -
REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 082-0030 PLANS
(ORIGINAL PLANS)

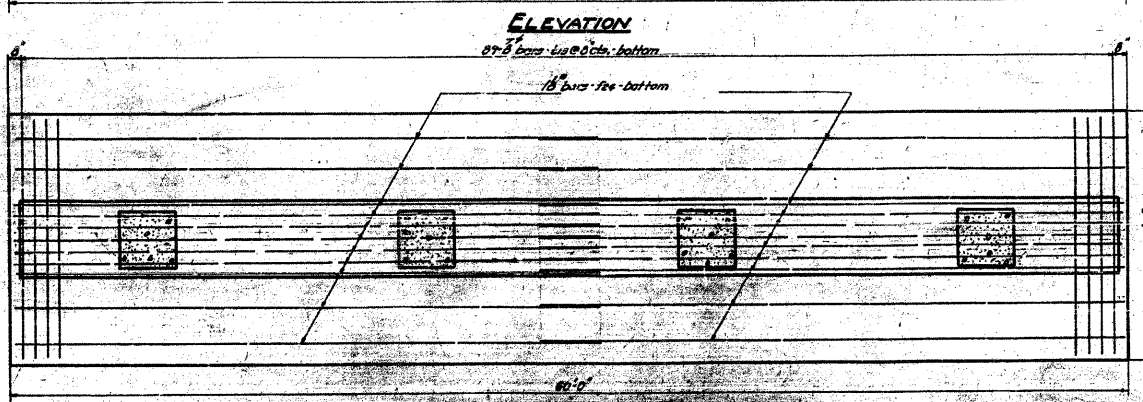
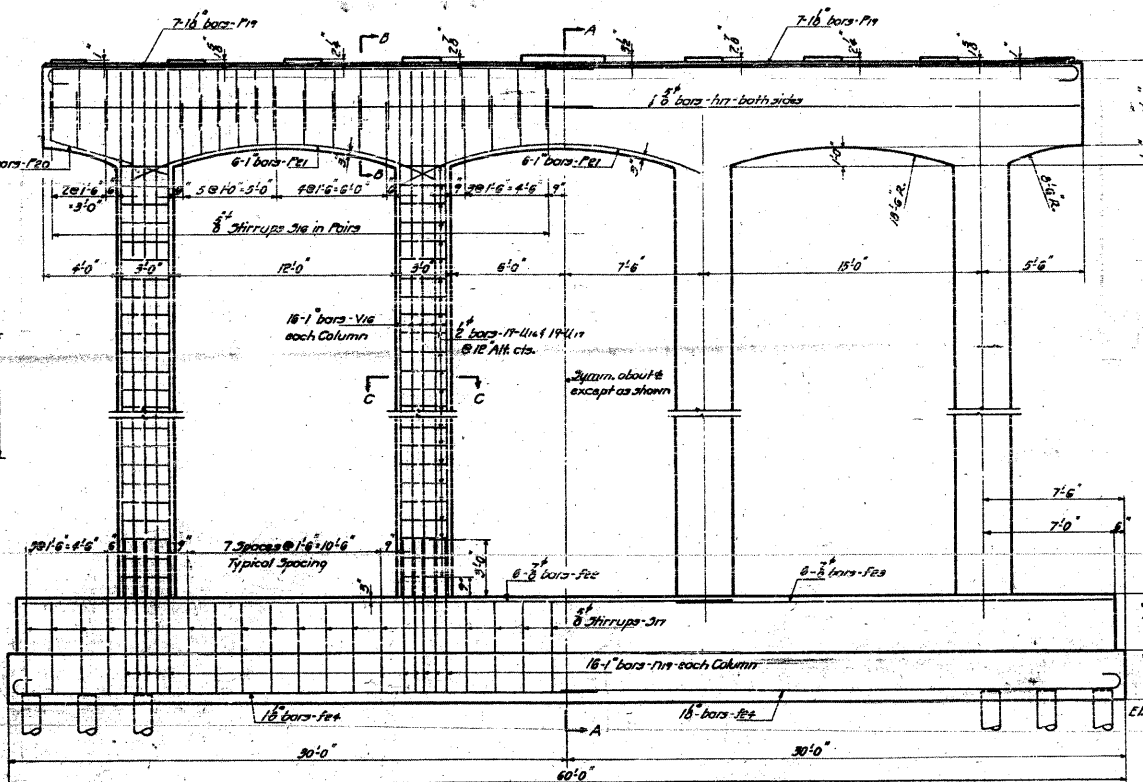
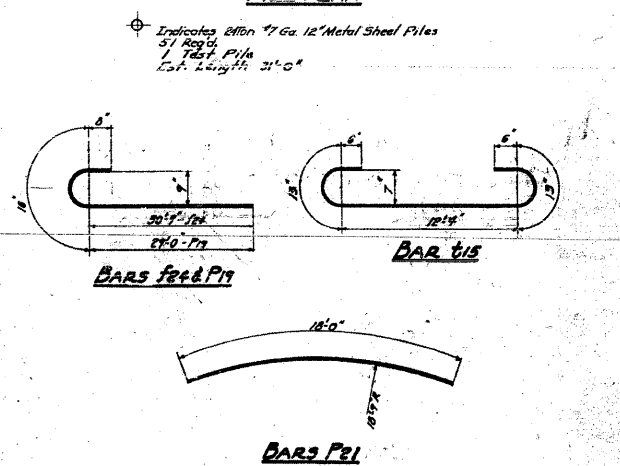
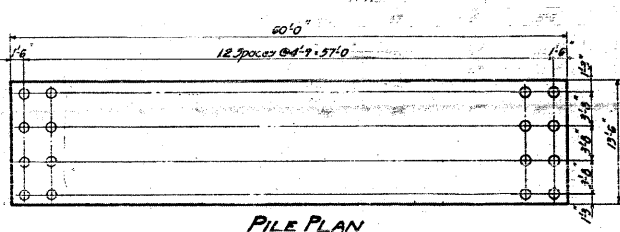
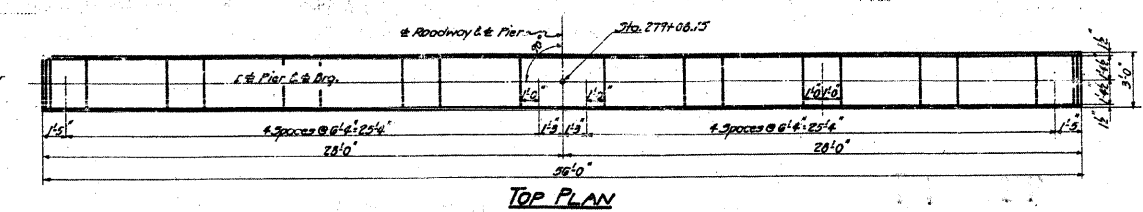
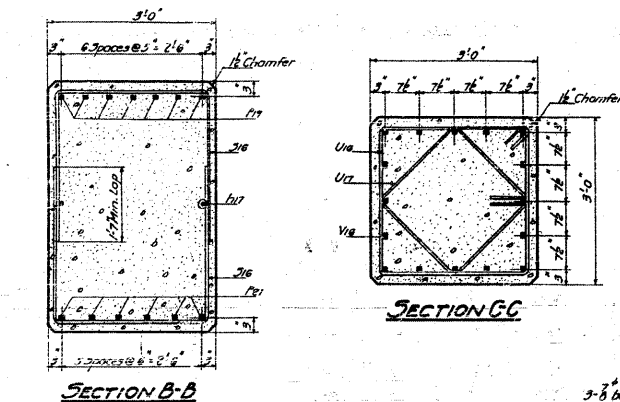
SCALE: SHEET NO. OF SHEETS STA. TO STA.

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- STRUCTURAL ENGINEERS -
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-IVBR	ST. CLAIR	259	123
				CONTRACT NO. 76882
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

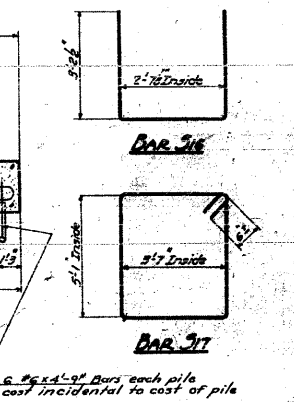
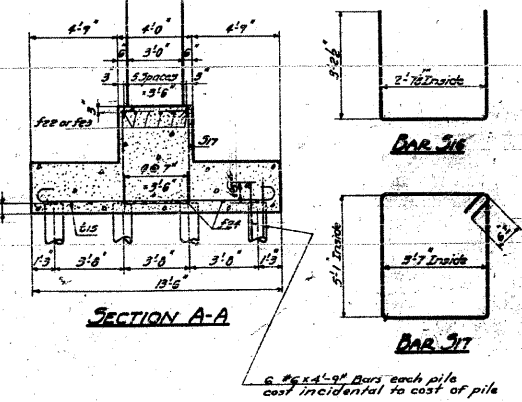
BOOK SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
4	64-1VBR	ST. CLAIR	36	30	30 SHEETS
FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT	



BILL OF MATERIAL

BAR NO.	NO.	SIZE	LENGTH
FE2	6	3"	36'-0"
FE3	6	3"	23'-0"
FE4	22	18"	32'-0"
FE5	4	3"	20'-0"
FE6	64	1"	8'-0"
FE7	14	18"	34'-0"
FE8	6	3"	6'-0"
FE9	10	1"	18'-0"
FE10	60	3"	7'-0"
FE11	32	3"	18'-0"
FE12	37	3"	15'-0"
FE13	76	3"	11'-0"
FE14	76	3"	8'-0"
FE15	64	1"	42'-0"

Class-X Concrete Cu Yds 189.0
Reinforcement Bars Lbs. 23,150
12" Metal Shell Piles Lin. Ft. 1581
12" Metal Shell Test Piles Each 1
Class A Exc. for Str. Cu Yds 270



COMPUTED	W.F. Uebay	EXAMINED	B-10 1954
CHECKED	W.F. Uebay	DESIGNED BY	W. E. Hanson
DRAWN	W.F. Uebay	ENGINEER OF BRIDGE AND TRUSS STRUCTURE	
CHECKED	W.F. Uebay	PASSED	
ASSEMBLED		APPROVED	
CHECKED			

PIERS
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUPE



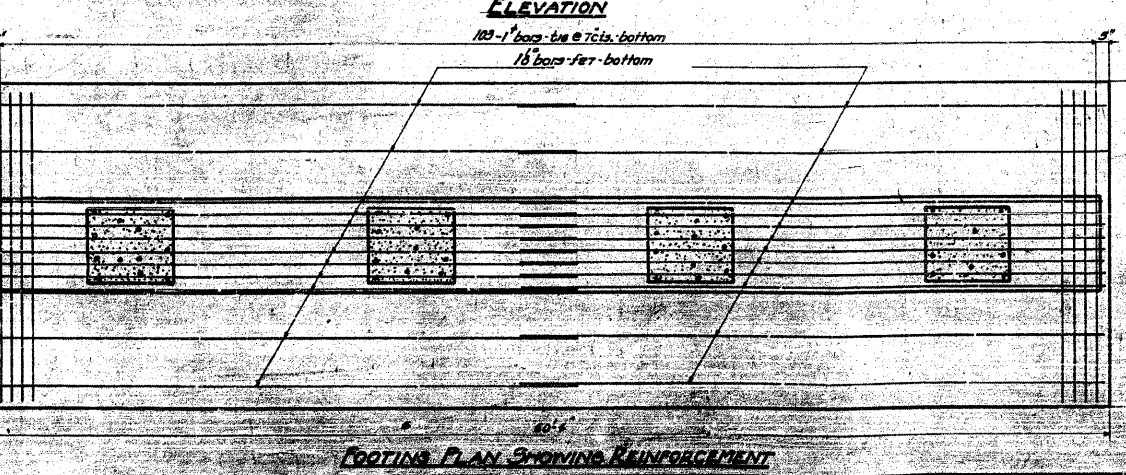
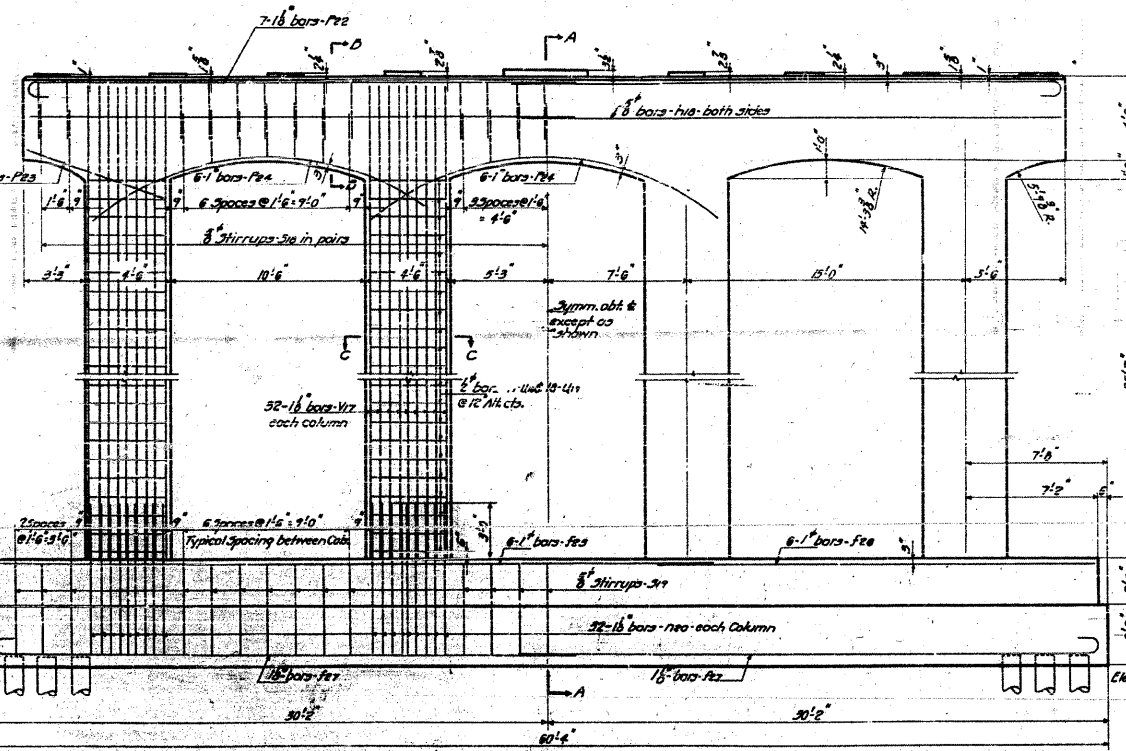
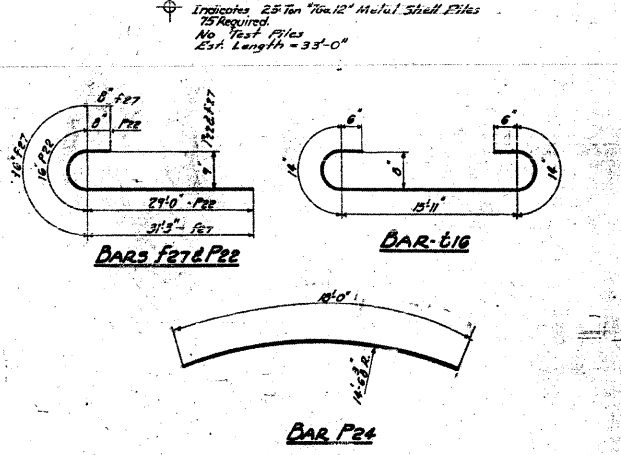
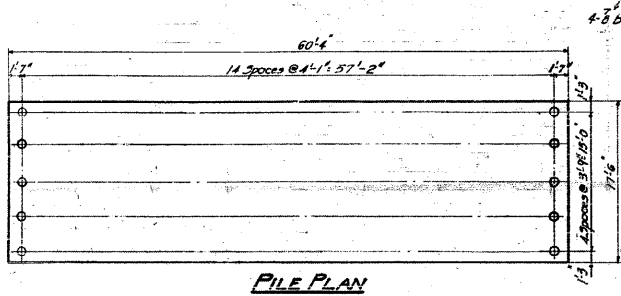
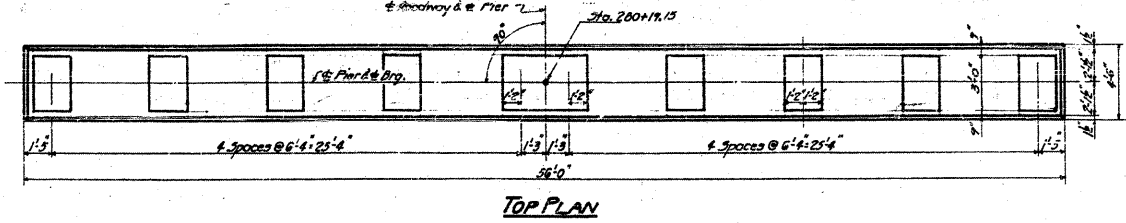
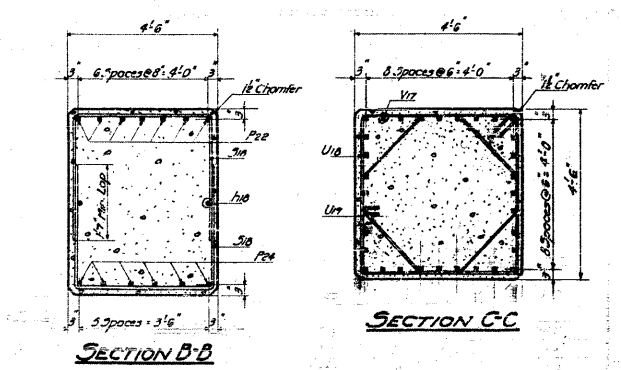
FOR INFORMATION ONLY

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- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVBR	64-IVBR	ST. CLAIR	259	125
FED. AID PROJECT				

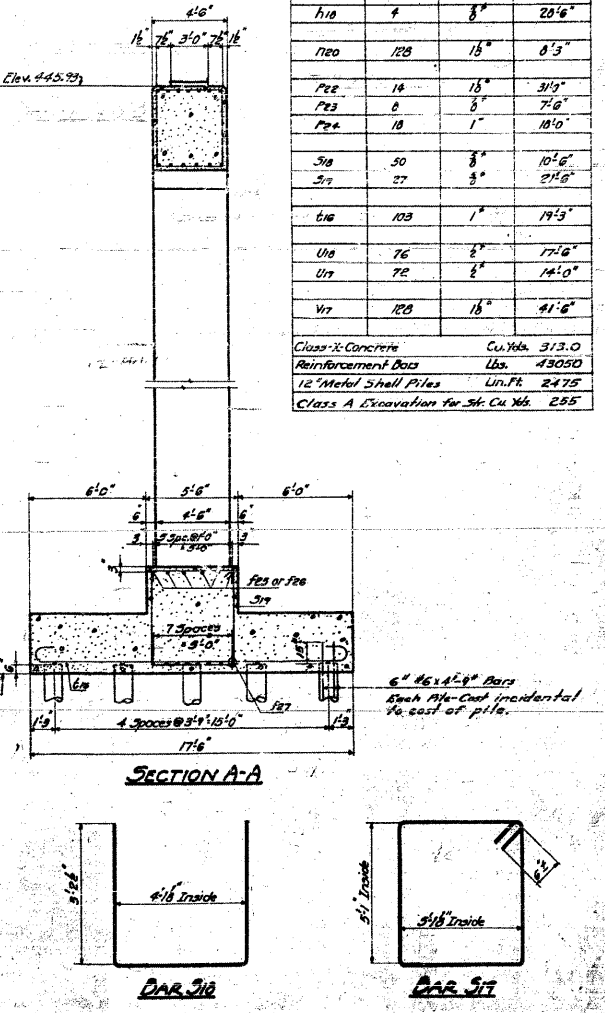
SHEET NO. 25
30 SWELTS



BILL OF MATERIAL

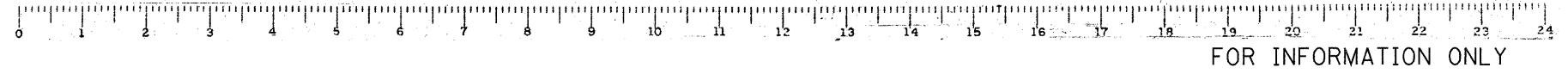
BAR NO.	NO.	SIZE	LENGTH
F22	6	1"	30'-0"
F20	6	1"	25'-6"
F27	24	1/8"	33'-0"
F10	4	3/8"	20'-6"
F20	120	1/8"	0'-3"
F22	14	1/8"	31'-0"
F23	8	3/8"	7'-0"
F24	18	1"	18'-0"
F10	50	3/8"	10'-6"
F17	27	3/8"	21'-6"
F16	103	1"	19'-3"
U10	76	3/8"	17'-0"
U17	72	3/8"	14'-0"
V17	120	1/8"	41'-6"

Class X Concrete Cu. Yds. 313.0
Reinforcement Bars Lbs. 43050
12" Metal Shell Piles Lin. Ft. 2475
Class A Excavation for Str. Cu. Yds. 255



STANDARD	COMPUTED <i>W.F. Miller</i>	EXAMINED <i>W.E. Hanson</i>
	CHECKED <i>W.F. Miller</i>	PASSED <i>W.E. Hanson</i>
	DRAWN <i>W.F. Miller</i>	APPROVED <i>R.D. Brantley</i>
SPECIAL	CHECKED	

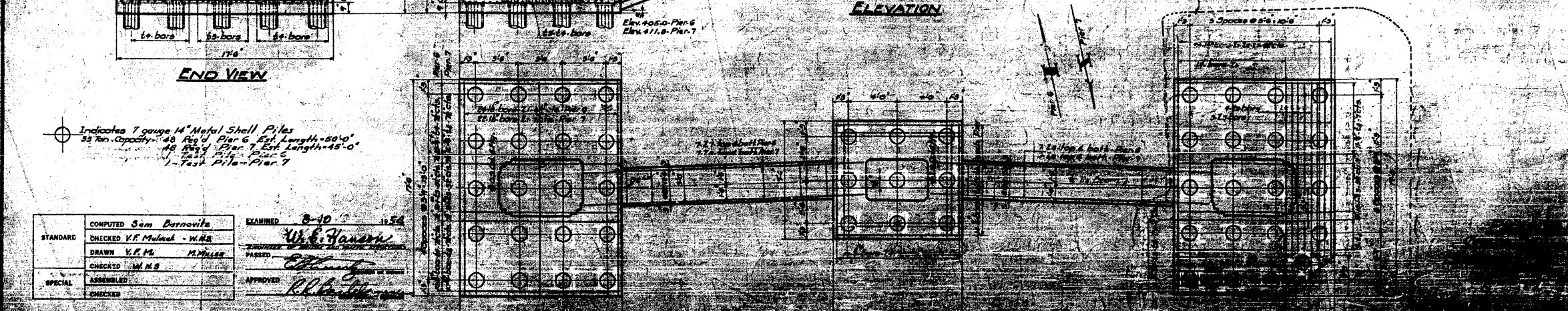
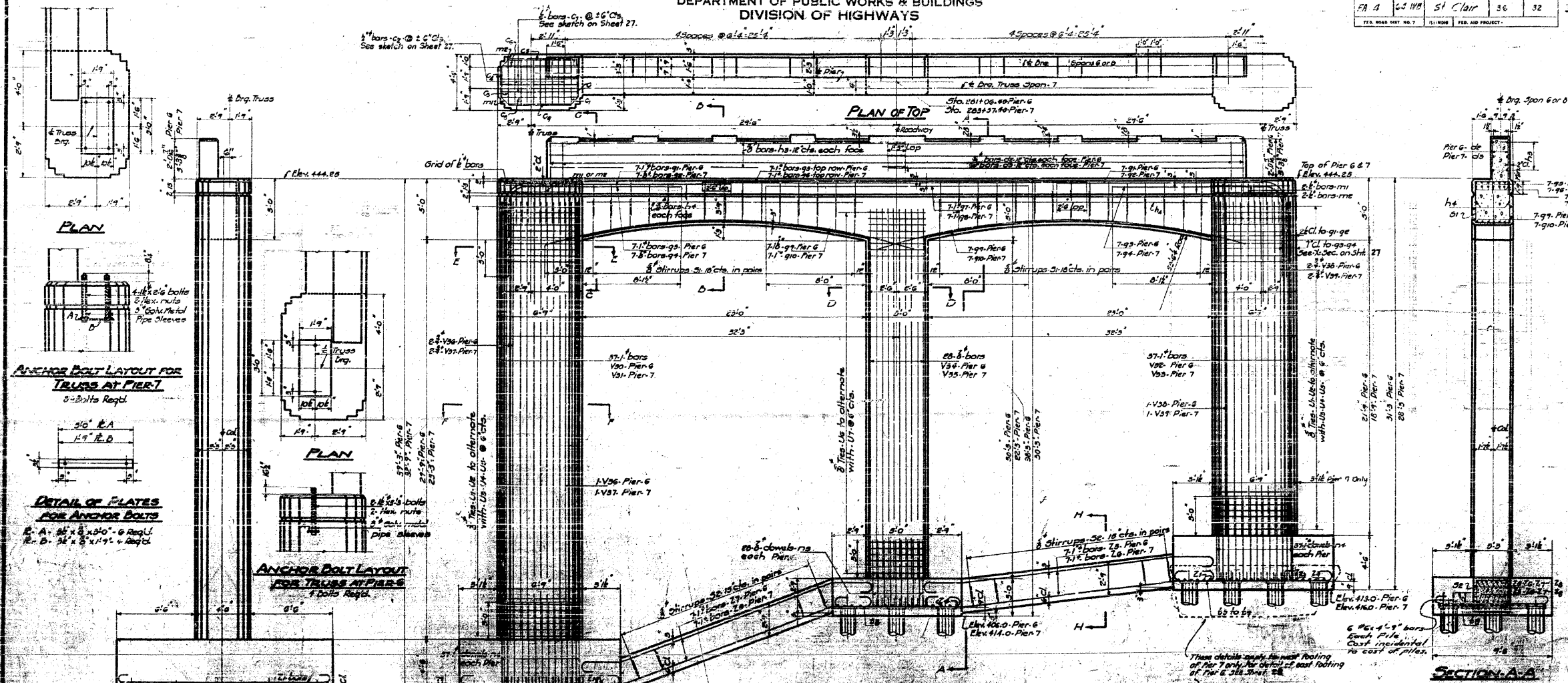
PIER 3
GRADE SEPARATION
MISSOURI PACIFIC R.R.
NORTH OF DUKE
ST. CLAIR COUNTY



CB Coombe-Bloxdorf P.C.
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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
64-IVBR	St. Clair	36	32	30 SHEETS



COMPUTED	Sam Darnovits	EXAMINED	8-10-54
CHECKED	V.F. Mulick - W.M.S.	DRAWN	V.F. Mulick
CHECKED	W.M.S.	APPROVED	R.B. [Signature]

Indicates 7 gauge 14" Metal Shell Piles
32 Ton Capacity - 48' High Pier 6 Est. Length - 50'-0"
48' High Pier 7 Est. Length - 45'-0"
1-Test Pile - Pier 7



FOR INFORMATION ONLY

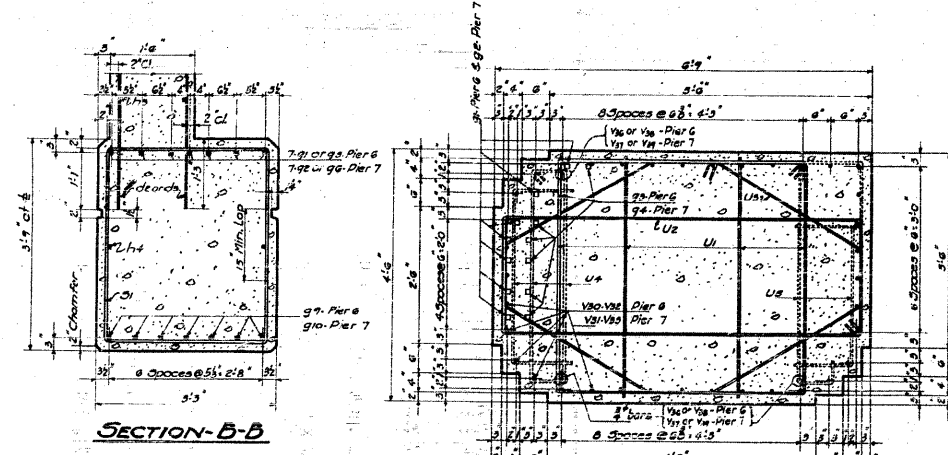
CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS	SN 082-0030 PLANS	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...N126-DB76882-exist-bridge-plans-26.dgn		DRAWN -	REVISED -	DEPARTMENT OF TRANSPORTATION	(ORIGINAL PLANS)	312	64-IVBR	ST. CLAIR	259	126
CB JOB NO 09021	PLOT SCALE = 40.000000' / IN.	CHECKED -	REVISED -		SCALE:	SHEET NO. OF SHEETS STA.		TO STA.		
	PLOT DATE = 8/5/2010	DATE - / /	REVISED -					ILLINOIS FED. AID PROJECT		

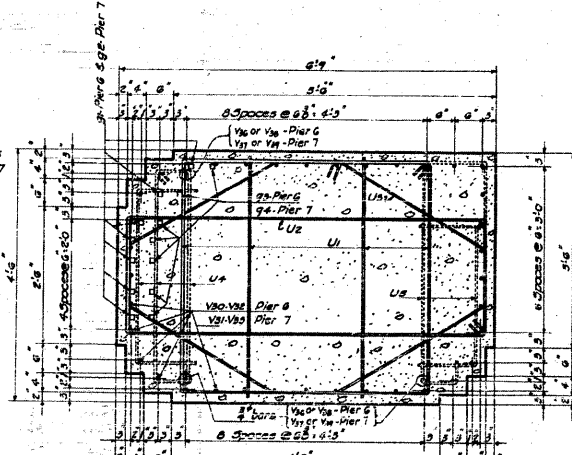
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA 4	64-IVB	ST. CLAIR	36	27

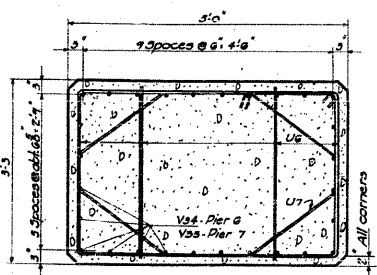
ILLINOIS FED. AID PROJECT



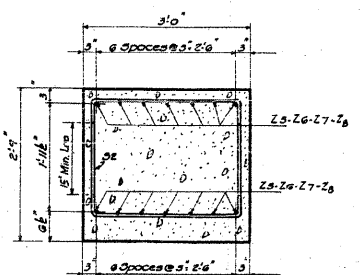
SECTION-B-B



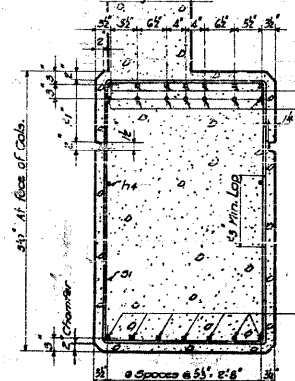
SECTION-E-E



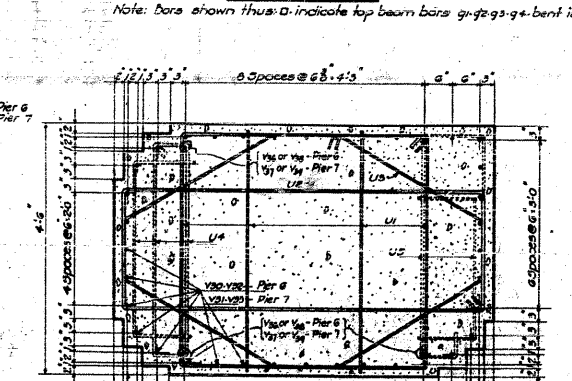
SECTION-D-D



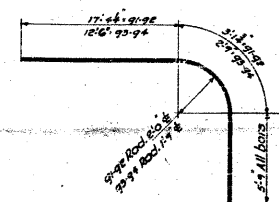
SECTION-H-H



SECTION-C-C

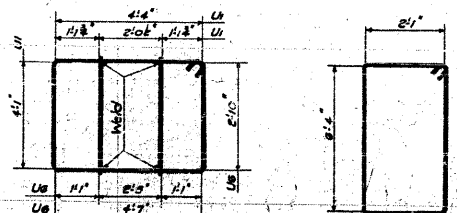


SECTION-F-F



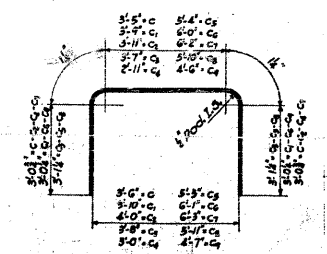
BARS-99-910

BARS-91-23-4

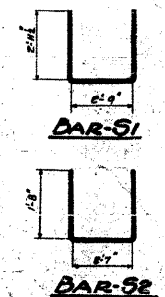


BARS-U1-U5

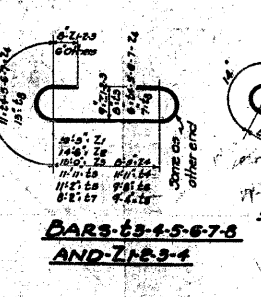
BAR-U6



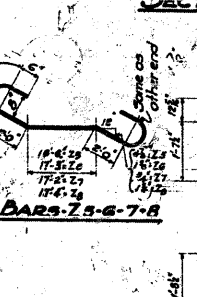
BARS-C TO C9 INCL.



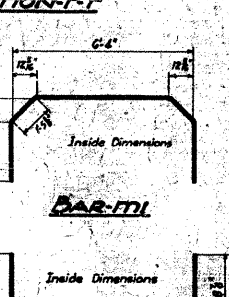
BAR-S1



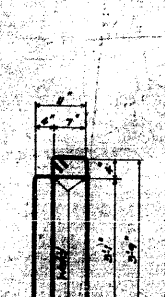
BARS-63-4-5-6-7-8 AND-71-83-4



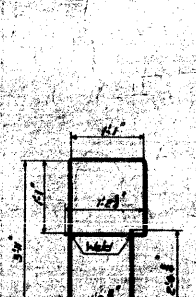
BARS-75-6-7-8



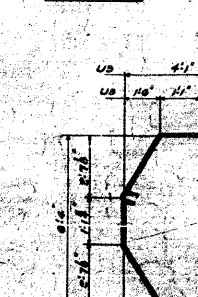
BAR-M1



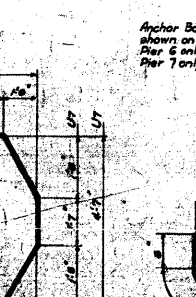
BAR-M2



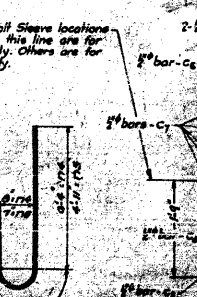
BAR-U1



BAR-U2



BAR-U3



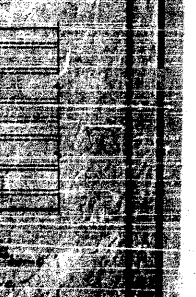
BAR-U4



BAR-U5



BAR-U6



BAR-U7

Class X Concrete Reinforcement Bars

14" Metal Shell Test Piles

Class A Excavation for Abutment

Class X Concrete Reinforcement Bars

Pier-6 211.8 Cu. Yds. 200.7 Cu. Yds.

Pier-7 211.8 Cu. Yds. 200.7 Cu. Yds.

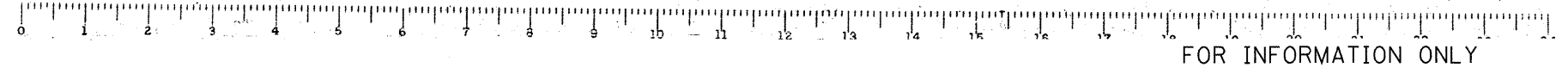
Anchor Bolt Steels locations shown on this line are for Pier 6 only. Others are for Pier 7 only.

Sketch showing location of T & C bars.

BILL OF MATERIAL-PIERS 6&7

BAR NO.	SIZE	LENGTH	BAR NO.	SIZE	LENGTH
23	1"	13'9"	222	3"	1'9"
24	3/8"	14'9"	223	5"	1'9"
25	2"	14'0"	224	10"	1'9"
26	2"	12'6"	225	4"	1'9"
27	2"	11'0"	226	4"	1'9"
28	3/4"	12'6"	227	5"	1'9"
C	4"	9'9"	U1	107	8'
C1	4"	10'0"	U6	107	8'
C2	3/2"	10'0"	U3	103	8'
C3	4"	10'0"	U4	103	8'
C4	4"	9'9"	U9	103	8'
C5	4"	11'9"	U8	58	8'
C6	11/4"	9'9"	U7	56	8'
C7	14	1"	V50	57	1"
C8	14	6"	V51	57	1"
C9	14	1"	V32	57	1"
C10	14	6"	V33	57	1"
C11	7	1"	V34	20	8"
C12	7	1"	V35	20	8"
C13	7	1"	V36	3	8"
C14	7	1"	V37	3	8"
C15	14	18"	V38	3	8"
C16	14	1"	V39	3	8"
C17	24	8"	Z1	63	18"
C18	8	3"	Z2	4	18"
C19	8	6"	Z3	3	18"
C20	8	6"	Z4	34	18"
C21	146	1"	Z5	14	1"
C22	58	8"	Z6	14	1"
C23	180	8"	Z7	14	1"
C24	112	8"	Z8	14	1"
C25	4	2"	Z9	16	22'3"
C26	20	4"	Z10	5	14'9"
C27	4	2"	Z11	5	17'0"
C28	4	2"	Z12	6	14'6"
C29	2	1"	Z13	8	11'9"
C30	2	1"	Z14	8	11'9"

COMPUTED	Sam Bernavite	EXAMINED	8-10 1954
CHECKED	V.F. Mulcock-W.N.R.	DESIGNED BY	W.E. Hansen
DRAWN	V.F.M.	PASSED	[Signature]
CHECKED	W.H.S.	APPROVED	[Signature]
SPECIAL			



FOR INFORMATION ONLY

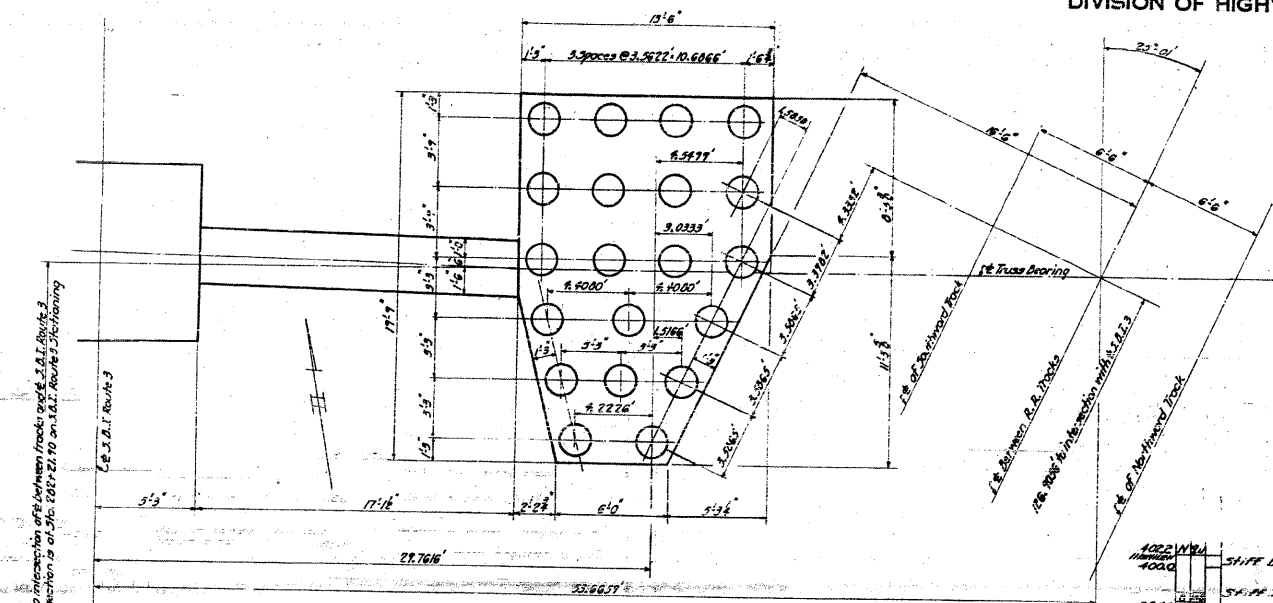
CB Coombe-Bloxdorf P.C.
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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME = ... \127-DB76882-exist-bridge-plans-27.dgn	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (ORIGINAL PLANS)	F.A.P. RTE. 312	SECTION 64-IVBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 127
PLOT SCALE = 40.000000' / IN.	PLOT DATE = 8/5/2010	CHECKED -	REVISED -	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 76882 ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

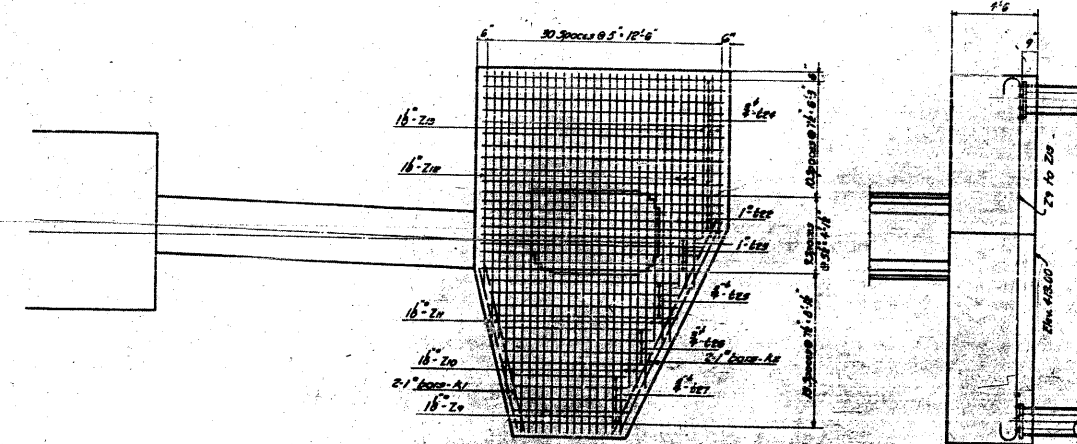
ROAD DIST. DIST. NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
4	64-IVB	ST. Clair	56	55

SHEET NO. 28
30 SHEETS



PLAN OF EAST FOOTING OF PIER 6 SHOWING LOCATION OF PILES

○ Indicates 33 Ton capacity #7 Gal. 14" metal Shell Piles - Est. Length = 50'-0"



PLAN OF EAST FOOTING OF PIER 6 SHOWING REINFORCEMENT IN BOTTOM

BORING DATA

Station	Soil Description	Depth (ft)	Soil Description	Depth (ft)	Soil Description	Depth (ft)
416.0	Stiff brown clay	410.0	Stiff yellow silty clay	405.0	Loose brown sandy silt	400.0
405.0	Medium brown sandy silty clay	400.0	Loose brown silty sand	395.0	Very stiff mottled gray and brown clay	390.0
395.0	Stiff black silty clay	390.0	Very stiff mottled gray and brown clay	385.0	Medium brown very fine angular sand, Occasional thin clay lenses	380.0
390.0	Stiff mottled clay	385.0	Stiff mottled gray and brown clay	380.0	Medium gray uniform angular very fine sand, Slightly silty	375.0
385.0	Very loose fine gray silty sand	380.0	Medium mottled clay	375.0	Very loose brown silty sand	370.0
380.0	Medium fine gray silty sand	375.0	Very loose gray skeletal sandy silt	370.0	Loose coarse angular sand	365.0
375.0	Very dense very fine uniform gray sand	365.0	Dense very fine gray uniform sand	360.0	Medium blue silt	355.0
370.0	Medium fine gray silty sand, Occasional gravel lenses	360.0	Very dense very fine uniform gray sand	355.0	Medium blue sandy silt	350.0
365.0	Medium well graded angular gray sand	350.0	Medium slightly clayey gray sand silt	345.0	Medium very fine gray angular sand	340.0
360.0	Medium slightly clayey gray sand silt	340.0	Dense very fine uniform gray sand	335.0	Loose fine gray sand	330.0
355.0	Medium coarse angular gray sand	335.0	Very fine uniform gray sand	330.0	Dense fine gray sand, Very dense angular fine gray sand	325.0
350.0	Very dense dark gray very fine sand	330.0	Dense very fine gray sand and small gravel	325.0	Medium gray silty very fine sand	320.0
345.0		325.0		320.0	Medium gray uniform angular coarse sand	315.0
340.0		320.0		315.0	Dense fine gray sand	310.0
335.0		315.0		310.0		305.0
330.0		310.0		305.0		300.0
325.0		305.0		300.0		295.0
320.0		300.0		295.0		290.0
315.0		295.0		290.0		285.0
310.0		290.0		285.0		280.0
305.0		285.0		280.0		275.0
300.0		280.0		275.0		270.0
295.0		275.0		270.0		265.0
290.0		270.0		265.0		260.0
285.0		265.0		260.0		255.0
280.0		260.0		255.0		250.0
275.0		255.0		250.0		245.0
270.0		250.0		245.0		240.0
265.0		245.0		240.0		235.0
260.0		240.0		235.0		230.0
255.0		235.0		230.0		225.0
250.0		230.0		225.0		220.0
245.0		225.0		220.0		215.0
240.0		220.0		215.0		210.0
235.0		215.0		210.0		205.0
230.0		210.0		205.0		200.0
225.0		205.0		200.0		195.0
220.0		200.0		195.0		190.0
215.0		195.0		190.0		185.0
210.0		190.0		185.0		180.0
205.0		185.0		180.0		175.0
200.0		180.0		175.0		170.0
195.0		175.0		170.0		165.0
190.0		170.0		165.0		160.0
185.0		165.0		160.0		155.0
180.0		160.0		155.0		150.0
175.0		155.0		150.0		145.0
170.0		150.0		145.0		140.0
165.0		145.0		140.0		135.0
160.0		140.0		135.0		130.0
155.0		135.0		130.0		125.0
150.0		130.0		125.0		120.0
145.0		125.0		120.0		115.0
140.0		120.0		115.0		110.0
135.0		115.0		110.0		105.0
130.0		110.0		105.0		100.0
125.0		105.0		100.0		95.0
120.0		100.0		95.0		90.0
115.0		95.0		90.0		85.0
110.0		90.0		85.0		80.0
105.0		85.0		80.0		75.0
100.0		80.0		75.0		70.0
95.0		75.0		70.0		65.0
90.0		70.0		65.0		60.0
85.0		65.0		60.0		55.0
80.0		60.0		55.0		50.0
75.0		55.0		50.0		45.0
70.0		50.0		45.0		40.0
65.0		45.0		40.0		35.0
60.0		40.0		35.0		30.0
55.0		35.0		30.0		25.0
50.0		30.0		25.0		20.0
45.0		25.0		20.0		15.0
40.0		20.0		15.0		10.0
35.0		15.0		10.0		5.0
30.0		10.0		5.0		0.0
25.0		5.0		0.0		
20.0		0.0				

Note:
Borings from logs made in 1954
N = No of Blows per Ft.
qu = Unconfined Compressive strength Tons per Sq. Ft.

BAR	SIZE	LENGTH	A	B	C	L
1#	#8	12'-0"	6"	12"	6"	12'-0"
2#	#8	12'-0"	6"	12"	6"	12'-0"
3#	#8	12'-0"	6"	12"	6"	12'-0"
4#	#8	12'-0"	6"	12"	6"	12'-0"
5#	#8	12'-0"	6"	12"	6"	12'-0"
6#	#8	12'-0"	6"	12"	6"	12'-0"
7#	#8	12'-0"	6"	12"	6"	12'-0"
8#	#8	12'-0"	6"	12"	6"	12'-0"
9#	#8	12'-0"	6"	12"	6"	12'-0"
10#	#8	12'-0"	6"	12"	6"	12'-0"
11#	#8	12'-0"	6"	12"	6"	12'-0"
12#	#8	12'-0"	6"	12"	6"	12'-0"
13#	#8	12'-0"	6"	12"	6"	12'-0"
14#	#8	12'-0"	6"	12"	6"	12'-0"
15#	#8	12'-0"	6"	12"	6"	12'-0"
16#	#8	12'-0"	6"	12"	6"	12'-0"
17#	#8	12'-0"	6"	12"	6"	12'-0"
18#	#8	12'-0"	6"	12"	6"	12'-0"
19#	#8	12'-0"	6"	12"	6"	12'-0"
20#	#8	12'-0"	6"	12"	6"	12'-0"

COMPUTED	W.J. Wilby	EXAMINED	8-10 1954
CHECKED	W.A. Sommer	DRAWN BY	W.E. Hanson
DRAWN	W.J. Wilby	PASSED	[Signature]
CHECKED	W.A. Sommer	APPROVED	[Signature]
ASSEMBLED			
CHECKED			



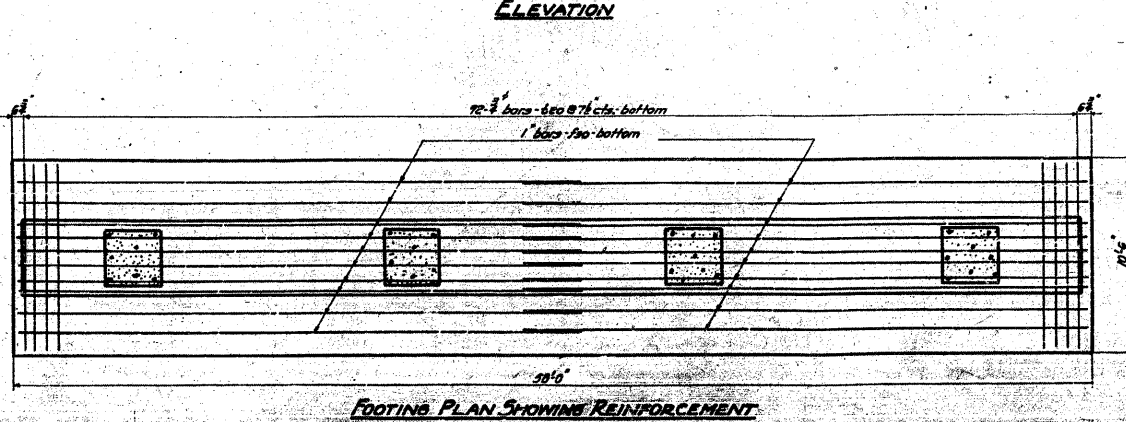
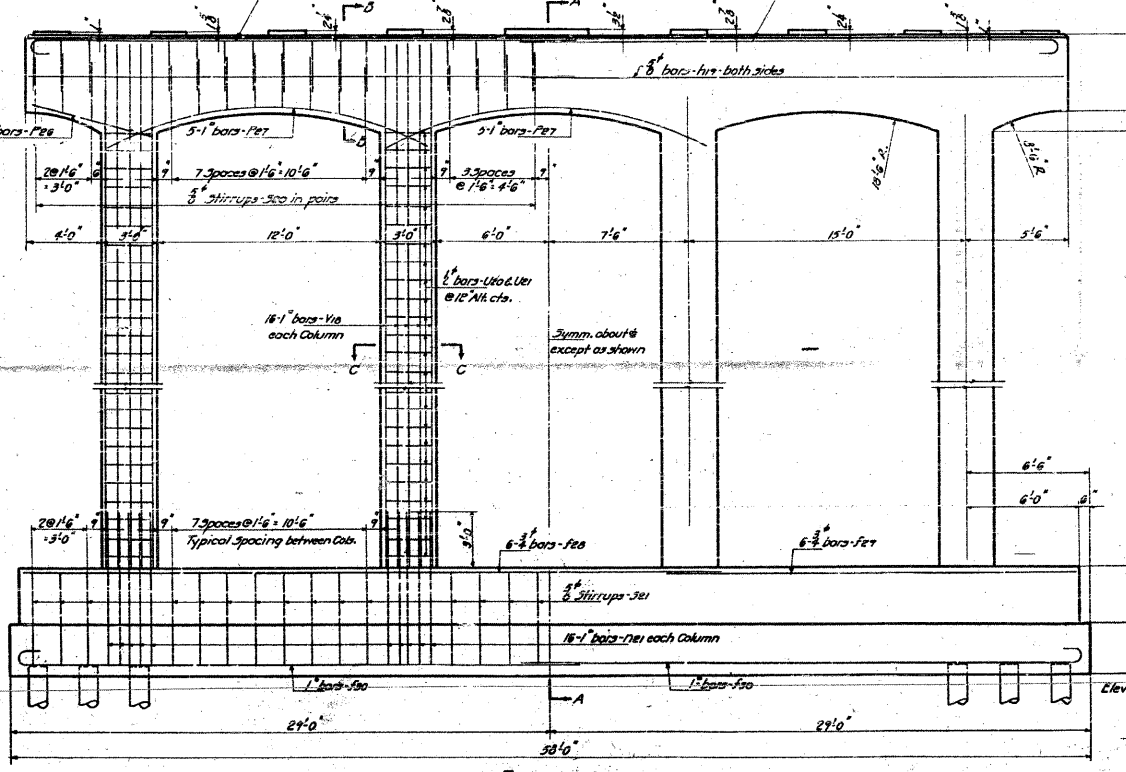
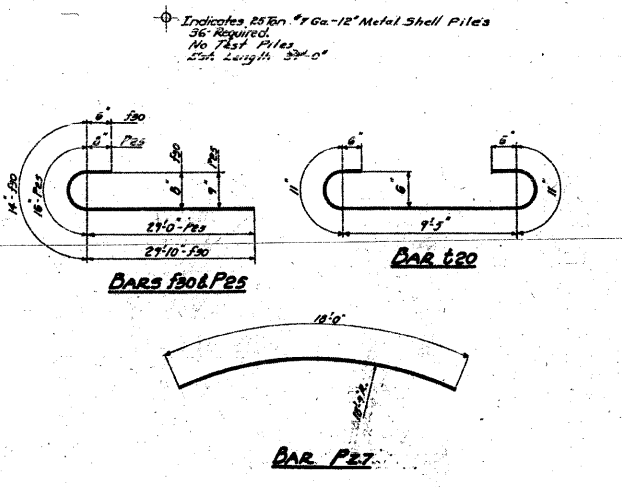
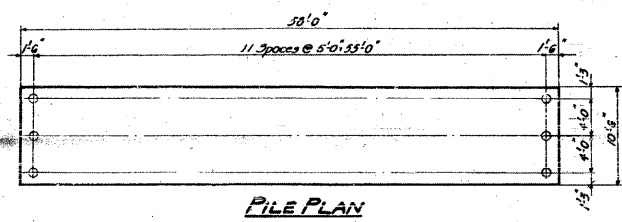
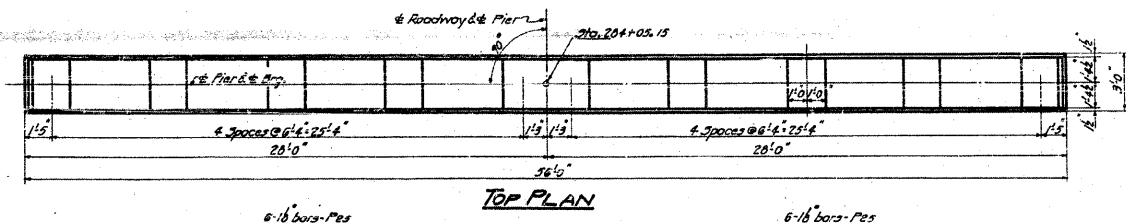
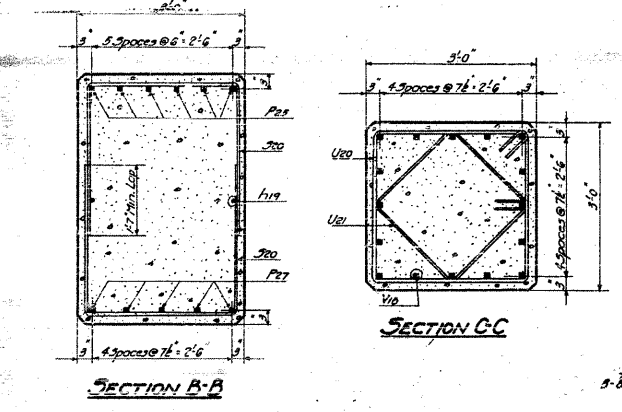
DETAIL PIER 6
GRADE SEPARATION
MASSIVE CONCRETE
FOOTING

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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

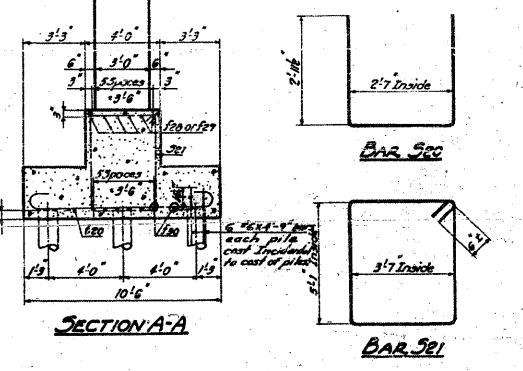
BOOK SHEET	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
4	64-1VB	St. Clair	36	35	30 SHEETS
ILLINOIS FED. AID PROJECT					



BILL OF MATERIAL

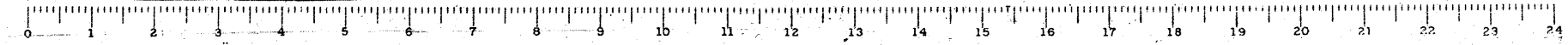
BAR	NUMBER	SIZE	LENGTH
F30	6	3"	37'0"
P25	6	3"	22'0"
F30	20	1"	31'6"
F19	4	3/8"	20'6"
P21	64	1"	0'3"
P25	12	1 1/2"	31'0"
P26	6	3/4"	6'6"
P27	15	1"	10'0"
F30	60	3/4"	8'6"
P21	30	3/4"	18'6"
t20	22	3/4"	10'3"
U20	60	1/2"	11'6"
U21	64	1/2"	8'6"
V10	64	1"	36'9"

Class-X Concrete Cu. Yds. 157.7
Reinforcement Bars Lbs. 18670
1/2" Metal Shell Piles Lin. Ft. 1224
Class A Etc. for Str. Cu. Yds. 230



STANDARD	COMPUTED W. J. W. 10/54	EXAMINED B-10 10/54
	CHECKED W. E. Hanam	W. E. Hanam
	DRAWN W. J. W. M. Miller	
	CHECKED J. K. W.	
SPECIAL	ASSEMBLED	APPROVED R. L. B.
	CHECKED	

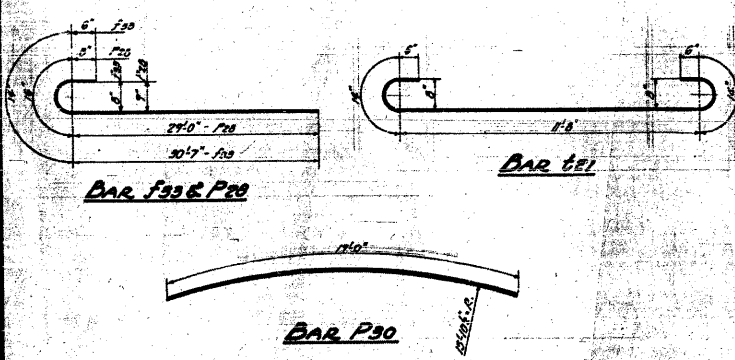
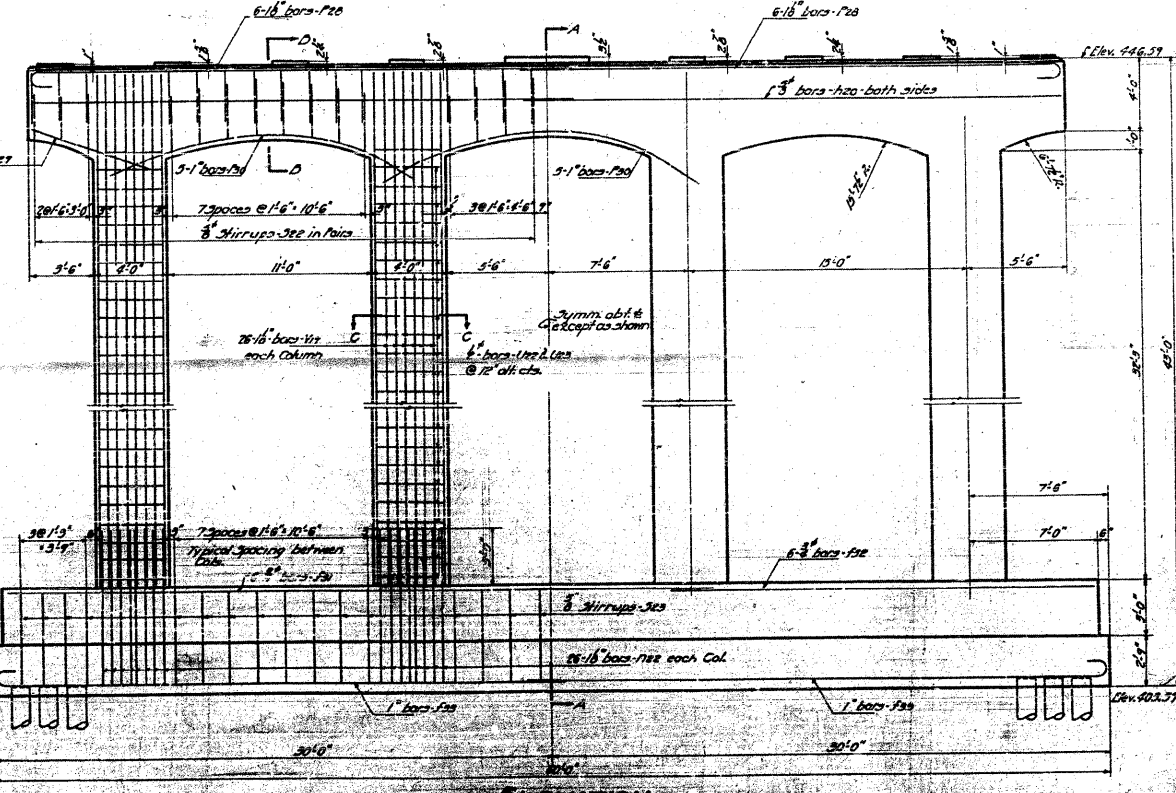
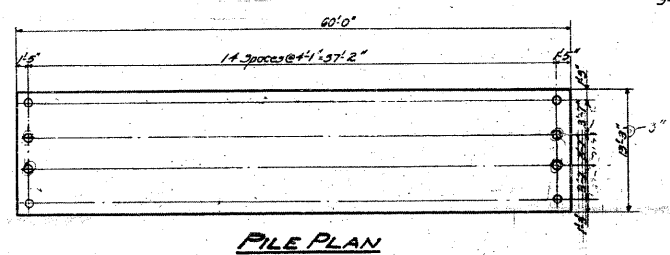
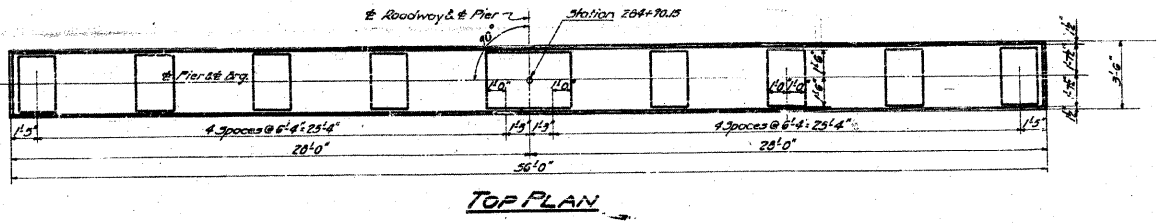
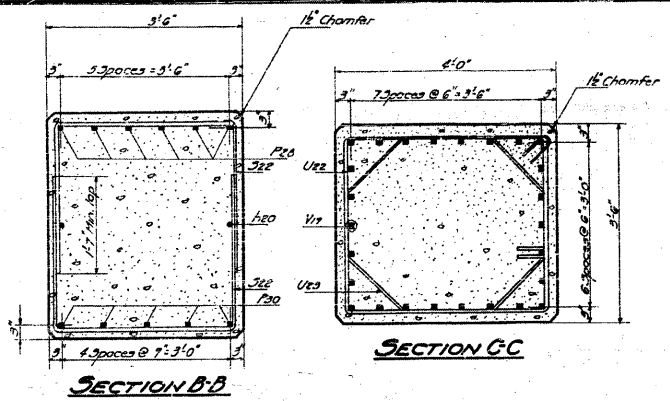
FIG. 8
GRADE SEPARATION
MISSOURI PACIFIC R. R.
NORTH OF DUPO
E.A. ROUTE 1 - Jct. 661VA
ST. CLAIR COUNTY



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STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVB	ST. Clair	36	36
SHEET NO. 30			
30 SHEETS			



BILL OF MATERIAL

BAR NUMBER	SIZE	LENGTH
F21	3"	30'-0"
F22	3"	23'-0"
F23	1"	32'-3"
F20	3"	20'-6"
F24	10#	16"
F25	10#	16"
F26	12#	18"
F27	6#	7'-0"
F28	15#	19'-0"
F29	60#	3"
F30	32#	3"
G21	80#	1"
U22	60#	2"
U23	64#	2"
V1	104#	18"

Class X Concrete Cu. Yds. 209.2
Reinforcement Bars Lbs. 314.00
12" Metal Shell Piles Lin. Ft. 1770
12" Metal Shell Test Pile Each 1
Class A Exc. for 51# Cu. Yds. 400

COMPUTED	W. J. Kelly	EXAMINED	B-10 1054
CHECKED	R. H. Sommer	W. E. Hanson	ENGINEER OF BRIDGE AND TRUSS STRUCTURES
DRAWN	J. R. Kelly	APPROVED	R. H. Sommer
CHECKED	H. J. Kelly	APPROVED	R. H. Sommer
SPECIAL		APPROVED	R. H. Sommer
CHECKED			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 082-0030 PLANS
(ORIGINAL PLANS)

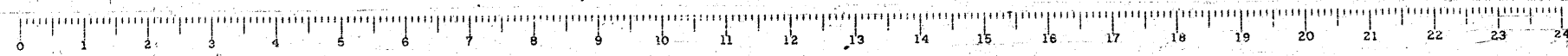
CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC..
...\\130-D876882-exist-bridge-plans-30.dgn	
PLOT SCALE = 40.000000' / IN.	
PLOT DATE = 8/5/2018	

DESIGNED -	REVISOR -
DRAWN -	REVISION -
CHECKED -	REVISION -
DATE - / /	REVISION -

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-IVBR	ST. CLAIR	259	130
CONTRACT NO. 76882				
ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

Bench Mark: #1 checked in S.E. corner of bridge 26' Lt. of Sta. 285+58 @ F.A. Rt. 14.
Elevation 450.52.

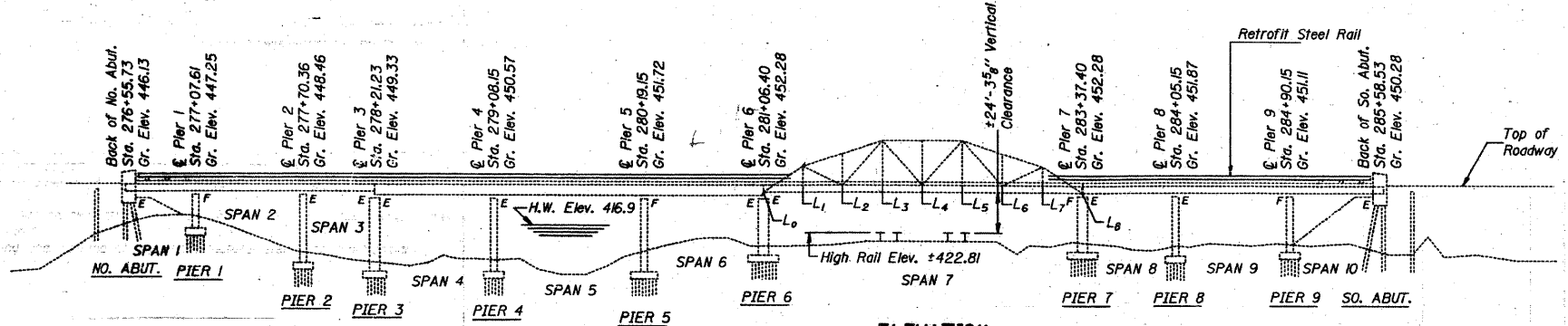
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
082-0030	ST. CLAIR	23	5

Existing Structure: #082-0030 Built 1954 as F.A. Rt. 4 Sec. 4-1-VB,D,E & F Sta. 281+07.13 902'-9 1/2" long x 56'-4" out to out. The Existing Structure consists of one 3 span continuous WF Beam Unit, one 3 span continuous G. Girder Unit, one 8 panel truss and one 3 span continuous WF Beam Unit. The existing substructure consists of pile bent abutments with 4 column piers for approaches and 3 column piers for truss. The existing concrete deck on the truss span shall be replaced and the existing deck on the approach spans shall be repaired by partial removal and PDC Overlay. New expansion joints shall be installed and new retrofit rail shall be installed utilizing stage construction to maintain two-way traffic at all times.

GENERAL NOTES

All new structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. Expansion joint angles and attached bars shall be shop painted with one coat of red lead primer and a final coat of aluminum paint.
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.
Plan dimensions and details relative to existing structure 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 bid for the work.
Field welding of construction accessories will not be permitted to any part of the truss, the bottom flanges and webs of floor beams and stringers. Field welding in other areas will be permitted only when approved by the Engineer.
Fasteners shall be high strength bolts. Bolts 3/4", open holes 1/8", unless otherwise noted.
For cleaning and painting of existing structural steel, see the Special Provisions.

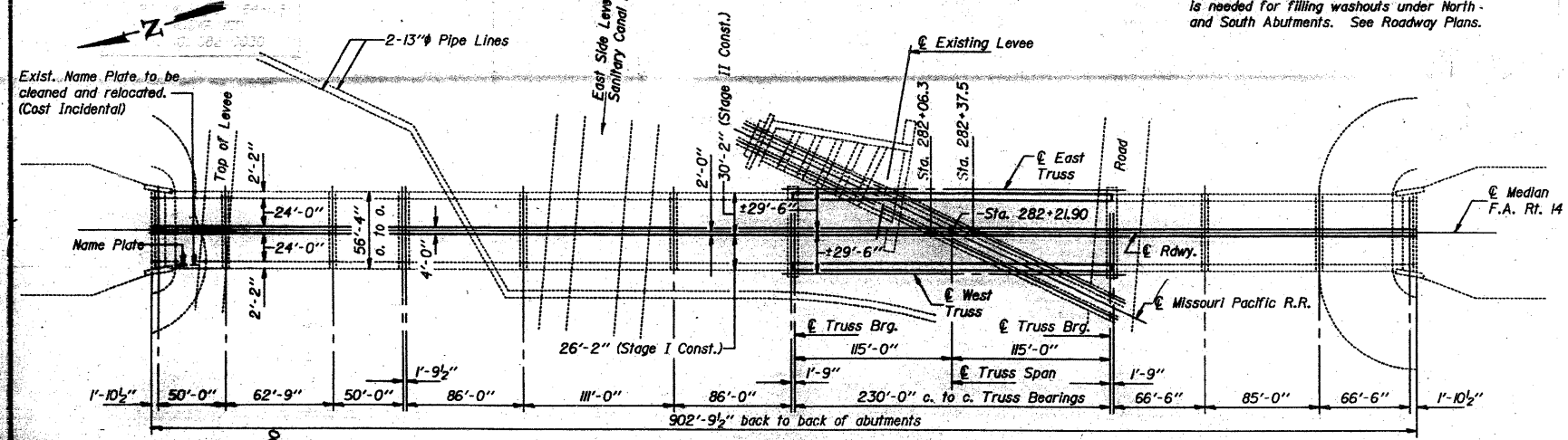


ELEVATION

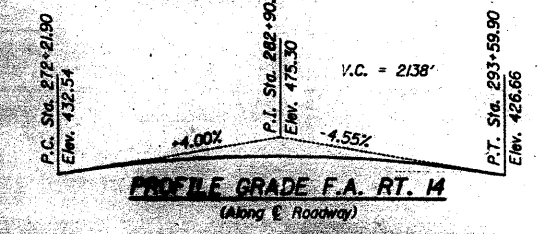
Note: About 30 cubic yards of embankment is needed for filling washouts under North and South Abutments. See Roadway Plans.

STATION 281+07.13
REBUILT 1983 BY
STATE OF ILLINOIS
F.A. RT. 14 SEC. 64-1VB1
LOADING H20
STR. NO. 082-0030

NAME PLATE
(See Std. 2113)



PLAN

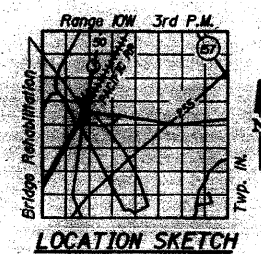


PROFILE GRADE F.A. RT. 14
(Along E. Roadway)

DESIGN STRESSES

FIELD UNITS
f'c = 3500 psi
fy = 60000 psi (Reinforcement)
fs = 20000 psi (AASHTO M183 Structural Steel)
LOADING HS20
(New Construction)
Design Specifications: AASHTO 1983

DESIGNED: [Signature]
CHECKED: [Signature]
DATE: 8/5/2018



LOCATION SKETCH

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Concrete Deck	L. Sum	1		1
Concrete Removal	Cu. Yd.	101.9	8.4	110.3
Protective Coat	Sq. Yd.	1483		1483
Class X Concrete	Cu. Yd.	451.9	8.4	460.3
Structural Steel	Lbs.	9150		9150
Cleaning and Painting Steel Bridge	L. Sum	1		1
Reinforcement Bars	Lbs.	15260		15260
Reinforcement Bars (Epoxy Coated)	Lbs.	88280		88280
Name Plates	Each	1		1
Deck Drains to be Adjusted	Each	10		10
Bituminous Concrete Surface Removal	Sq. Yd.	3513		3513
Steel-Rail Retrofit	Lin. Ft.	1807		1807
Temporary Bridge Rail	Lin. Ft.	903		903
Concrete Bridge Deck Scarification	Sq. Yd.	3513		3513
Jack and Reposition Bearings	Each	10		10
Plasticized Grout Deck Concrete Overlay	Sq. Yd.	3513		3513
Deck Slab Repair-Full Depth	Sq. Yd.	173		173
Repair Concrete Structures	Sq. Ft.		165	165
Neoprene Expansion Joint 2"	Lin. Ft.	58		58
Neoprene Expansion Joint 4"	Lin. Ft.	16		16
Bridge Slab Repair-Partial Depth	Sq. Ft.	675		675
Handrail Removal	Lin. Ft.	1782		1782
Preformed Joint Seal 2 1/2"	Lin. Ft.	16		16
Temporary Support System	L. Sum	1		1
Deck Slab Repair-Partial Depth	Sq. Yd.	100		100

GENERAL PLAN
OVER PRAIRIE DUPONT CANAL
& MO PAC RAILROAD
F.A. RT. 14 (ILL. RT. 3) SEC. 64-1VB1
ST. CLAIR COUNTY
STA. 281+07.13

Revised 4-5-85 DAB

FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

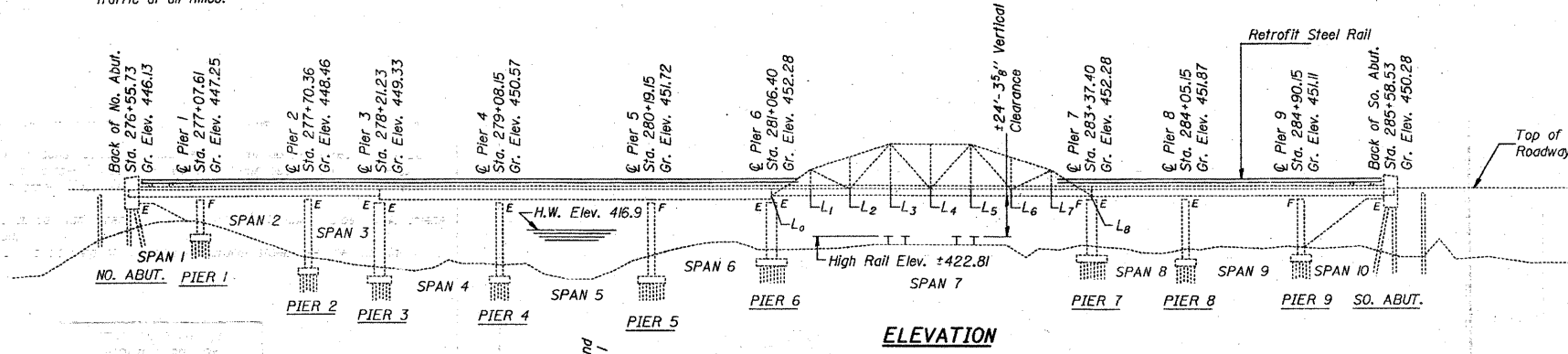
PROJECT NO.	SECTION	COUNTY	SHEET	SHEET NO.
082-0030	64-IVBR	ST. CLAIR	23	52
				18 SHEETS

Bench Mark: #1 chiseled a In S.E. corner of bridge 26' Lt. of Sta. 285+58 @ F.A. Rt. 14.
Elevation 450.52.

Existing Structure: #082-0030 Built 1954 as F.A. Rt. 4 Sec. 4-1-VB,D,E & F Sta. 281+07.13
902'-9 1/2" long x 56'-4" out to out. The Existing Structure consists of one 3 span
continuous WF Beam Unit, one 3 span continuous G Girder Unit, one 8 panel truss and
one 3 span continuous WF Beam Unit. The existing substructure consists of pile bent
abutments with 4 column piers for approaches and 3 column piers for truss. The existing
concrete deck on the truss span shall be replaced and the existing deck on the approach
spans shall be repaired by partial removal and PDC Overlay. New expansion joints shall be
installed and new retrofit rail shall be installed utilizing stage construction to maintain two-way
traffic at all times.

GENERAL NOTES

All new structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. Expansion joint angles and attached bars shall be shop painted with one coat of red lead primer and a final coat of aluminum paint.
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.
Plan dimensions and details relative to existing structure 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 bid for the work.
Field welding of construction accessories will not be permitted to any part of the truss, the bottom flanges and webs of floor beams and stringers. Field welding in other areas will be permitted only when approved by the Engineer.
Fasteners shall be high strength bolts. Bolts 3/4", open holes 5/16", unless otherwise noted.
For cleaning and painting of existing structural steel, see the Special Provisions.



ELEVATION

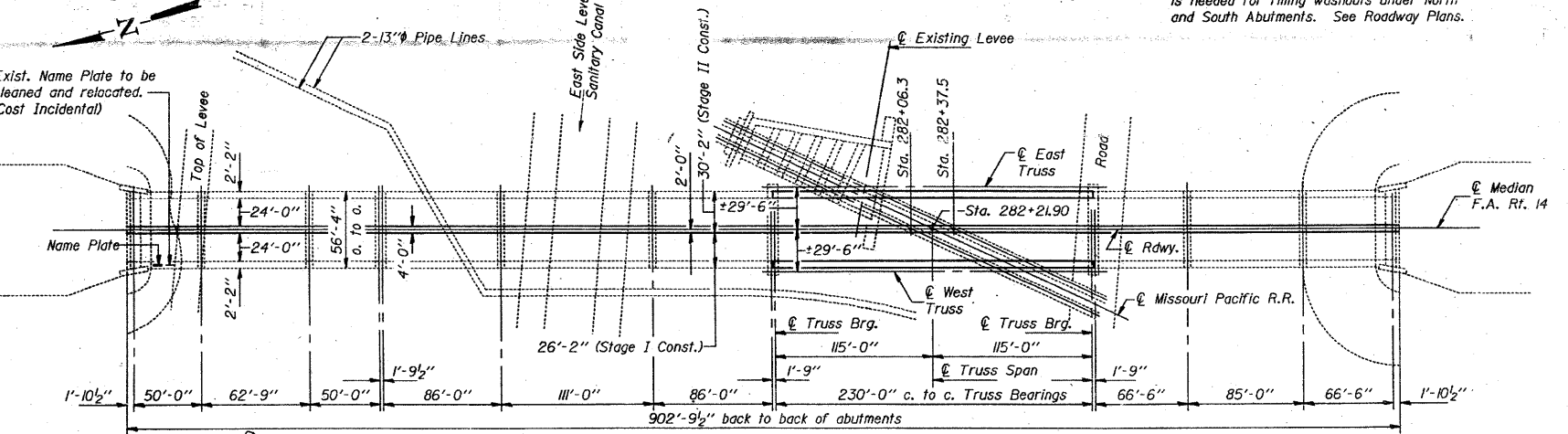
Note: About 30 cubic yards of embankment is needed for filling washouts under North and South Abutments. See Roadway Plans.

STATION 281+07.13
REBUILT 198 BY
STATE OF ILLINOIS
F.A. RT. 14 SEC. 64-IVB1
LOADING H20
STR. NO. 082-0030

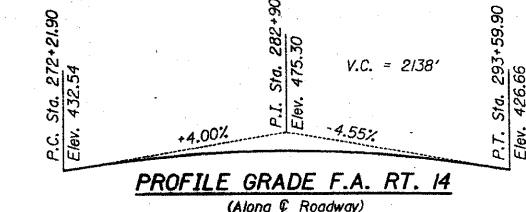
NAME PLATE
(See Std. 2113)

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Concrete Deck	L. Sum	1		1
Concrete Removal	Cu. Yd.	101.9	(9.7)	(111.6)
Protective Coat	Sq. Yd.	1483		1483
Class X Concrete	Cu. Yd.	451.9	(9.7)	(461.6)
Structural Steel	Lbs.	9150		9150
Cleaning and Painting Steel Bridge	L. Sum	1		1
Reinforcement Bars	Lbs.	15260	(280)	(15540)
Reinforcement Bars (Epoxy Coated)	Lbs.	(101,792)		(101,792)
Name Plates	Each	1		1
Deck Drains to be Adjusted	Each	10		10
Bituminous Concrete Surface Removal	Sq. Yd.	3513		3513
Steel Rail Retrofit	Lin. Ft.	1807		1807
Temporary Bridge Rail	Lin. Ft.	903		903
Concrete Bridge Deck Scarification	Sq. Yd.	3513		3513
Jack and Reposition Bearings	Each	10		10
Plasticized Bridge Deck Concrete Overlay	Sq. Yd.	3513		3513
Deck Slab Repair-Full Depth	Sq. Yd.	173		173
Repair Concrete Structures	SQ.FT.		165	165
Neoprene Expansion Joint 2"	Lin. Ft.	58		58
Neoprene Expansion Joint 4"	Lin. Ft.	(117)		(117)
Bridge Sidewalk-Partial Depth	Sq. Ft.	675		675
Handrail Removal	Lin. Ft.	1782		1782
Preformed Joint Seal 2 1/2"	Lin. Ft.	(117)		(117)
Temporary Support System	L. Sum	1		1
Deck Slab Repair-Partial Depth	Sq. Yd.	100		100
Jack and Reposition Bearings	Each	10		10



PLAN



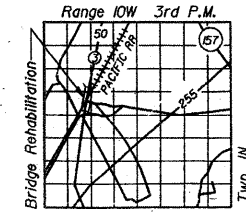
PROFILE GRADE F.A. RT. 14
(Along @ Roadway)

DESIGN STRESSES

FIELD UNITS
f'c = 3500 psi
fy = 60000 psi (Reinforcement)
fs = 20000 psi (AASHTO M183 Structural Steel)

LOADING HS20

(New Construction)
Design Specifications: AASHTO 1983



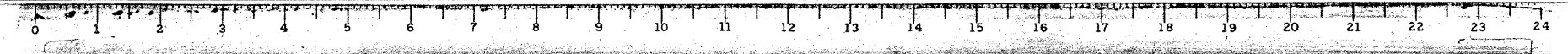
LOCATION SKETCH

GENERAL PLAN
OVER PRAIRIE DUPONT CANAL
@ MO PAC RAILROAD
F.A. RT. 14 (ILL. RT. 3) SEC. 64-IVB1
ST. CLAIR COUNTY
STA. 281+07.13

DESIGNED: *James J. Robinson*
CHECKED: *David Dreyfus*
DRAWN: *R. Doty*
CHECKED: *D.G.*

EXAMINED: *James J. Robinson*
FEBRUARY 4, 1985
APPROVED: *James J. Robinson*
DIRECTOR OF HIGHWAYS

Revised 4-5-85 D.A.B.



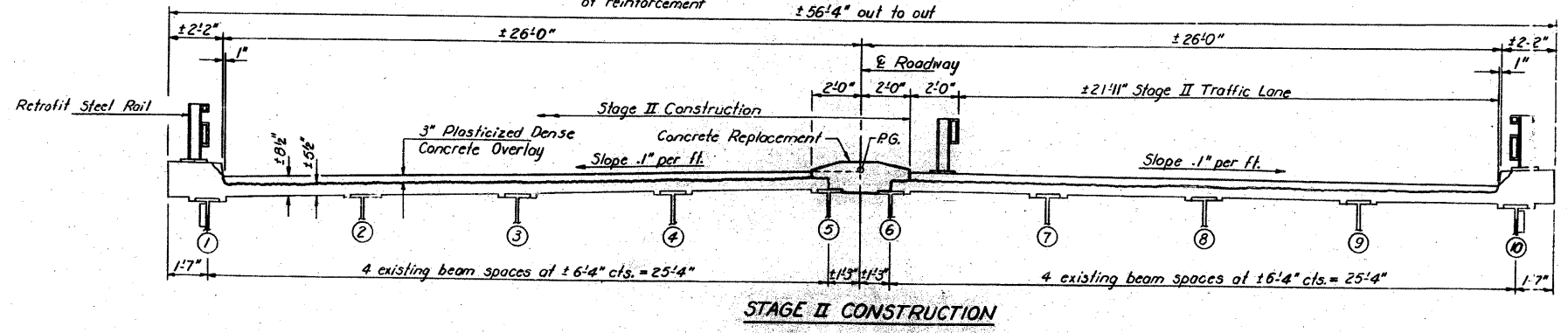
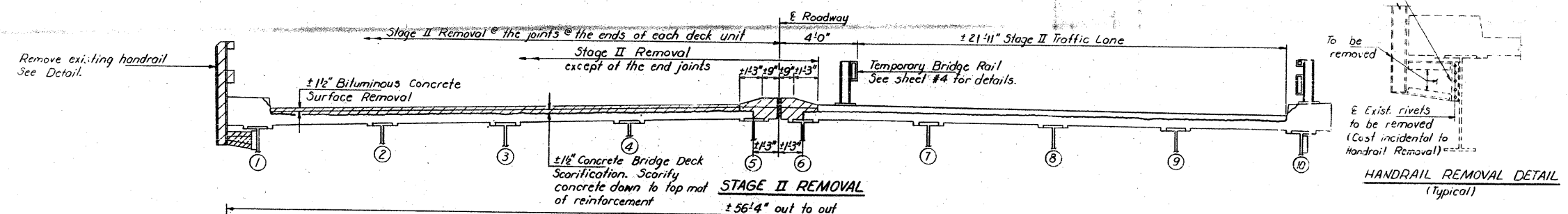
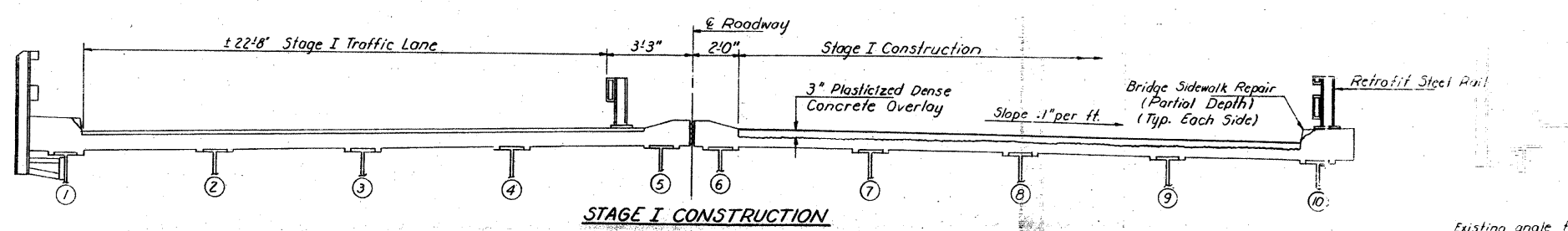
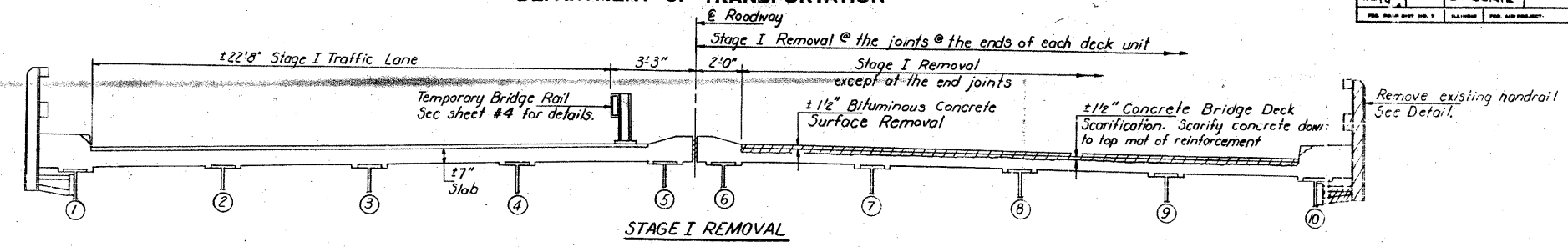
FOR INFORMATION ONLY

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE: SHEET NO. OF SHEETS STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 40.000000' / IN.		CHECKED -	REVISED -				CONTRACT NO. 76882				
PLOT DATE = 8/5/2010		DATE - / /	REVISED -				ILLINOIS FED. AID PROJECT				

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-1VBR	ST. CLAIR	25	6	18 SHEETS



Notes: All cross sections are looking South.
Hatched areas indicate removal areas.
For notes on Bridge Sidewalk Repair see sheet #3.
For deck patching locations see sheets #9, #10 & #11.
For Retrofit Steel Rail details see sheet #17. For spacing see sheet #9.

STAGE CONSTRUCTION DETAILS
SPANS 1 THRU 6 AND 8 THRU 10
FA. RT. 14 SEC. 64-1VBR
ST. CLAIR COUNTY
STA. 281+07.13

DESIGNED	Feb 4 1995
CHECKED	
DRAWN	
CHECKED	

FOR INFORMATION ONLY

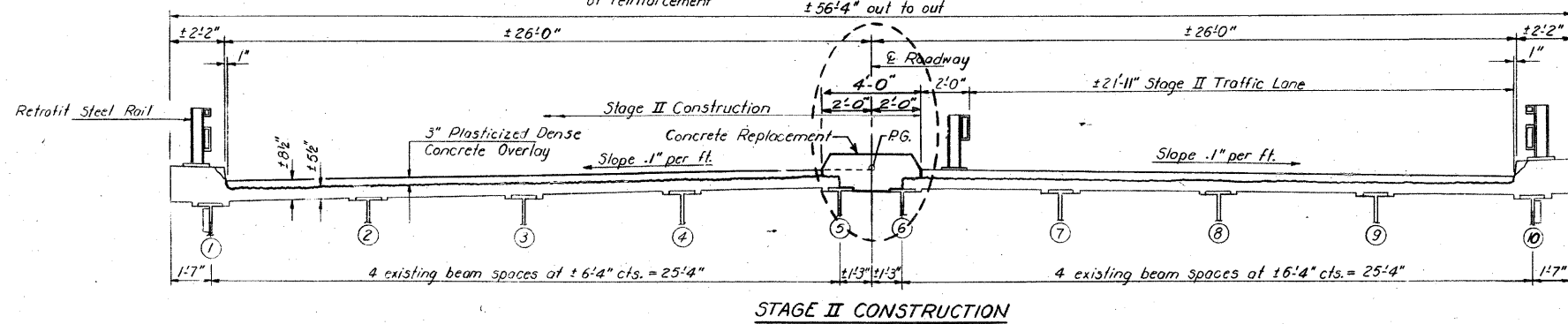
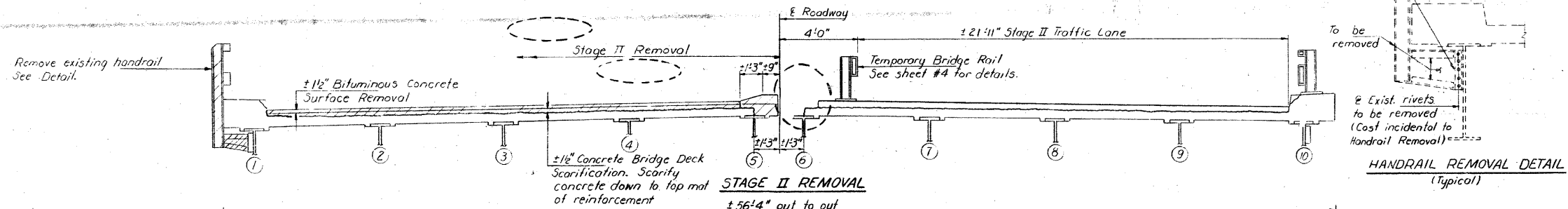
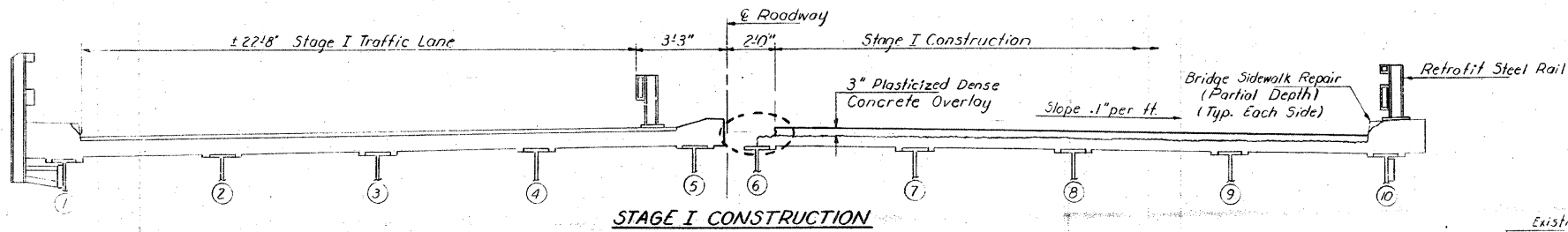
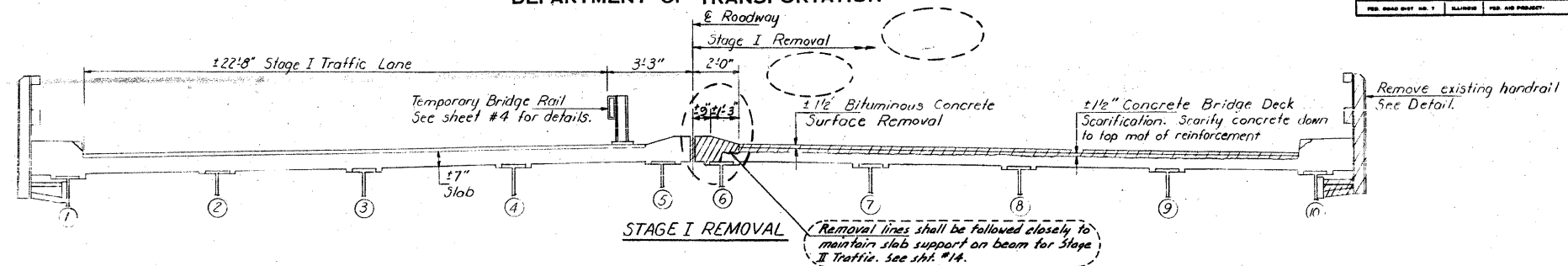
CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CB JOB NO 09021	PLOT DATE = 8/5/2010	CHECKED -	REVISED -					CONTRACT NO. 76882				
		DATE - / /	REVISED -					ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 14	64-1VBR	ST. CLAIR	23	6a
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SHEET NO. 20
18 SHEETS



Notes: All cross sections are looking South.
Hatched areas indicate removal areas.
For notes on Bridge Sidewalk Repair see sheet #9.
For deck patching locations see sheets #9, #10 & #11.
For Retrofit Steel Rail details see sheet #17. For spacing see sheet #9.

STAGE CONSTRUCTION DETAILS
SPANS 1 THRU 6 AND 8 THRU 10
EA. RT. 14 SEC. 64-1VBR
ST. CLAIR COUNTY
STA. 281+07.13

AS REVISED 3-28-86 R.E.A.

DESIGNED	<i>James J. Blum</i>	EXAMINED	<i>James J. Blum</i>	DATE	Feb. 4, 1985
CHECKED	<i>David Meyers</i>	PASSED	<i>James J. Blum</i>		
DRAWN	R. Doty	APPROVED	<i>James J. Blum</i>		
CHECKED	DG				



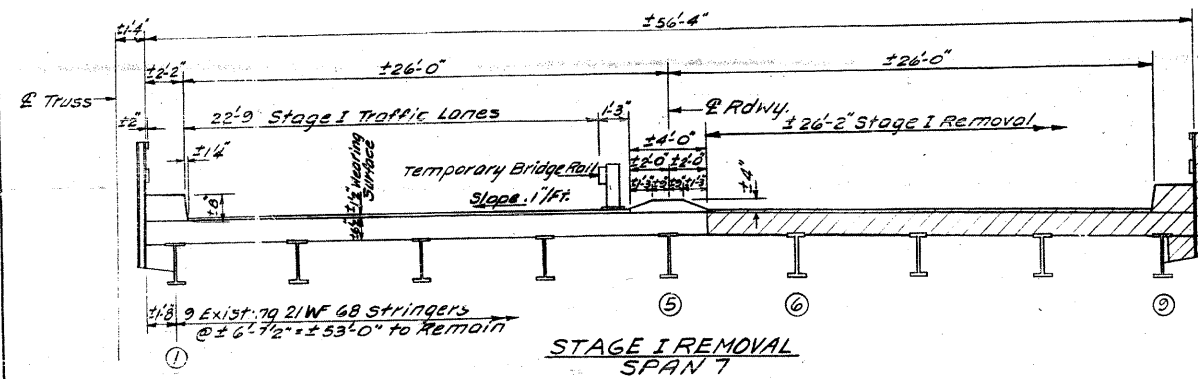
FOR INFORMATION ONLY

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		DATE - / /	REVISED -					ILLINOIS FED. AID PROJECT				

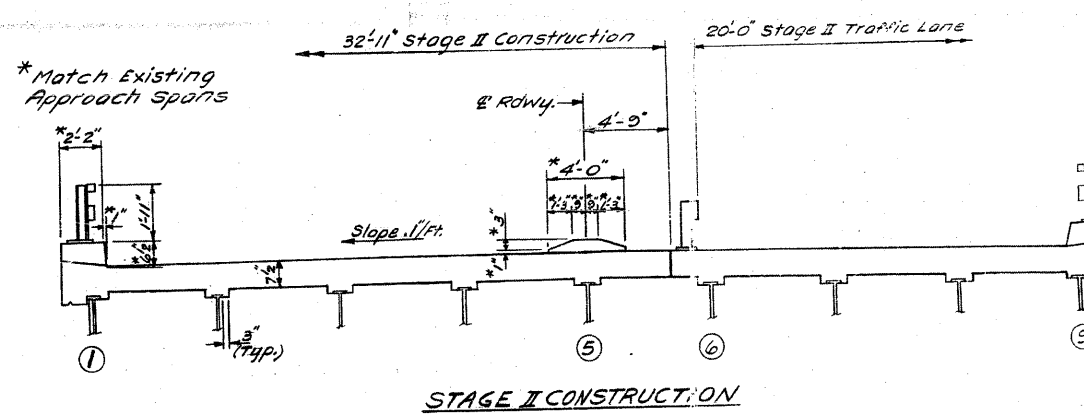
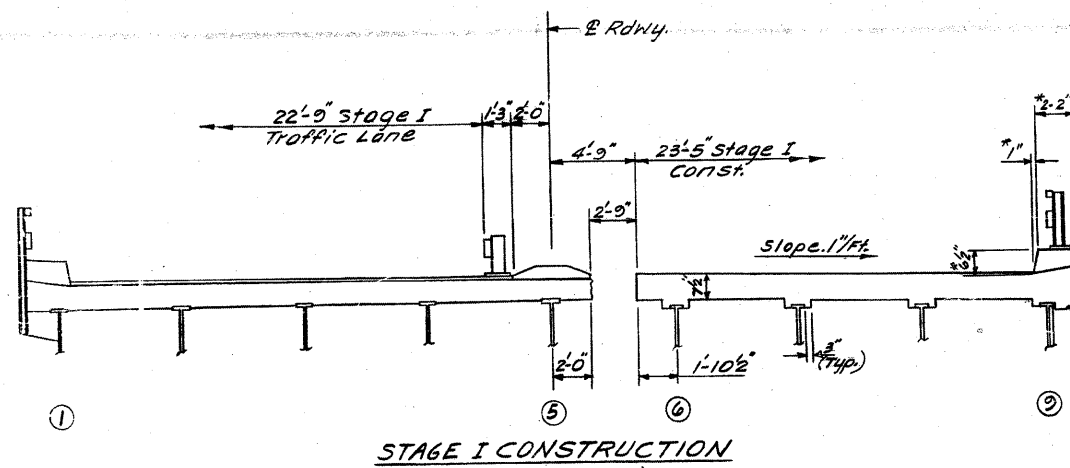
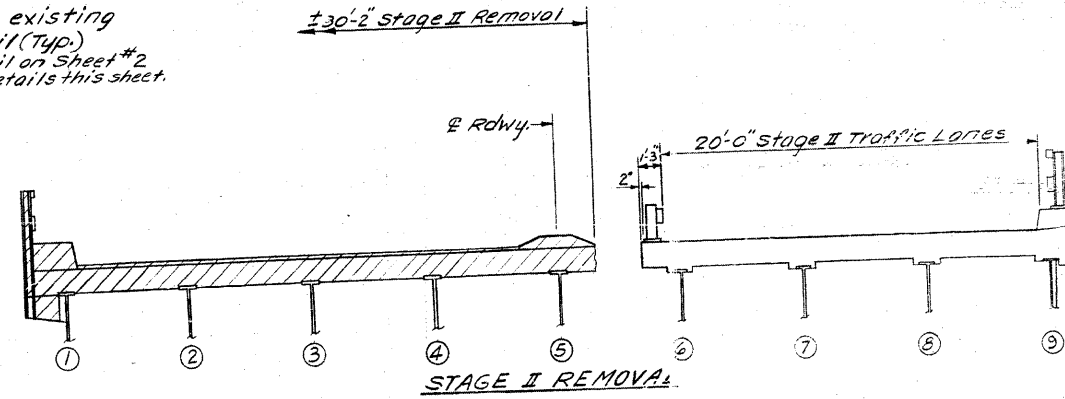
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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVBR	ST. CLAIR	23	7
SHEET NO. 3 18 SHEETS			



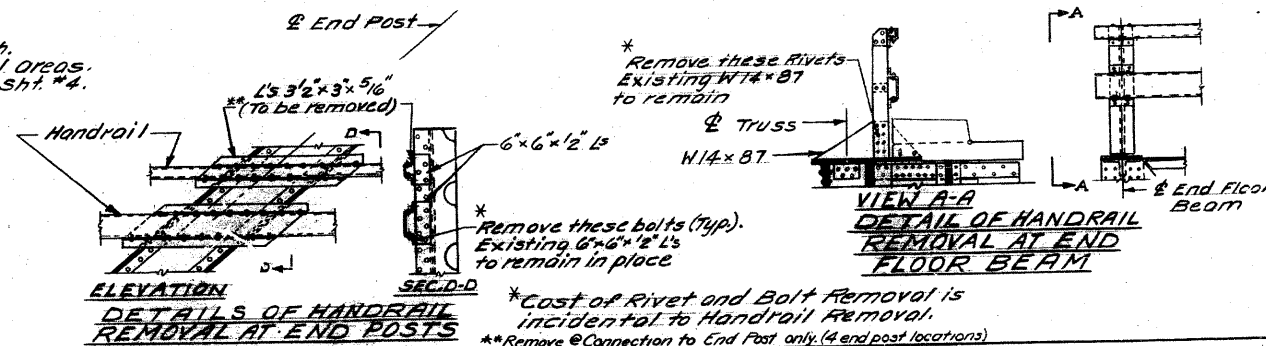
Remove existing Handrail (Typ.)
See detail on Sheet #2
Also see details this sheet.



All cross sections are looking South.
Hatched Portions indicate Removal Areas.
For Temporary Bridge Rail details, see Sht. #4.

DESIGNED *Ramin Belar*
CHECKED *Daniel Kuffel*
DRAWN *LH*
CHECKED *DG*

EXAMINED *James J. [Signature]*
PAVED *James J. [Signature]*
APPROVED *James J. [Signature]*
DIRECTOR OF HIGHWAYS



STAGE CONSTRUCTION DETAILS
SPAN 7
FA. RTE. 14 SEC. 64-IVB1
ST. CLAIR COUNTY
STA. 281 + 07.13

FOR INFORMATION ONLY

FILE NAME =	USER NAME = CFC..	DESIGNED -	REVISED -
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CB JOB NO 09021	PLOT DATE = 8/5/2010	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 082-0030 PLANS
(REHABILITATION PLANS)

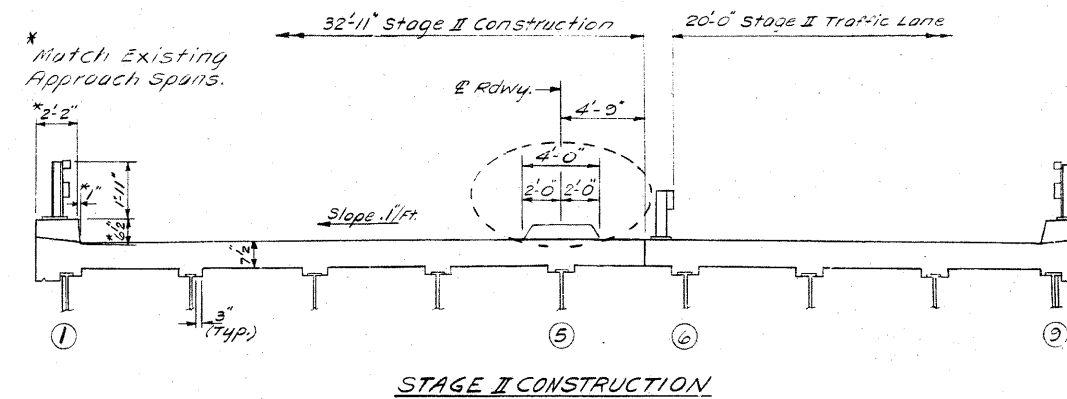
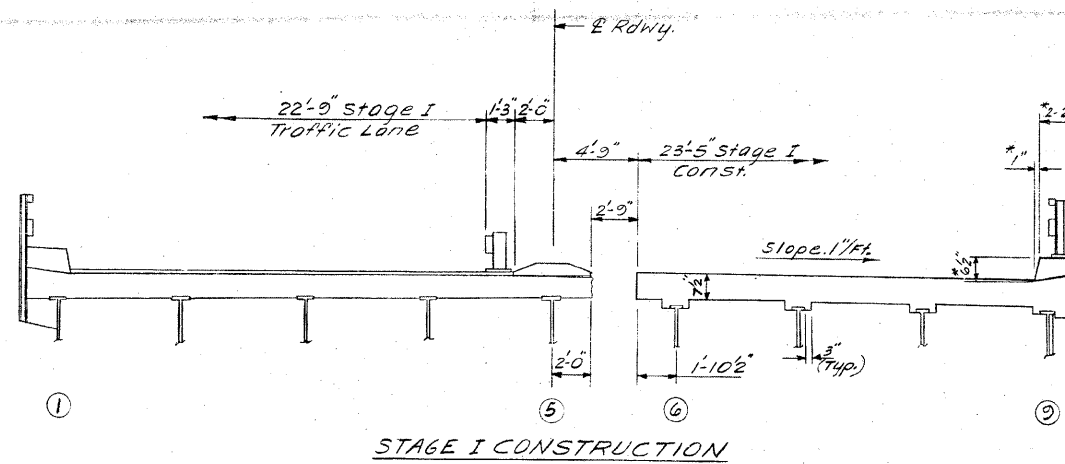
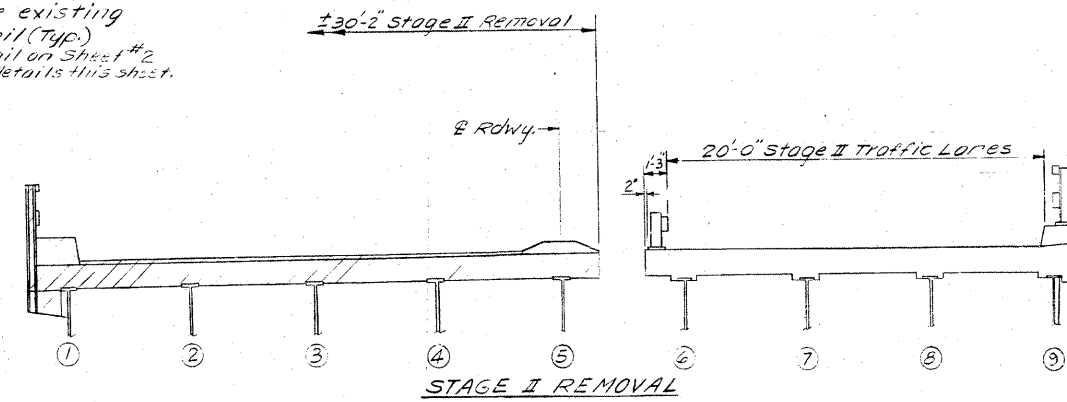
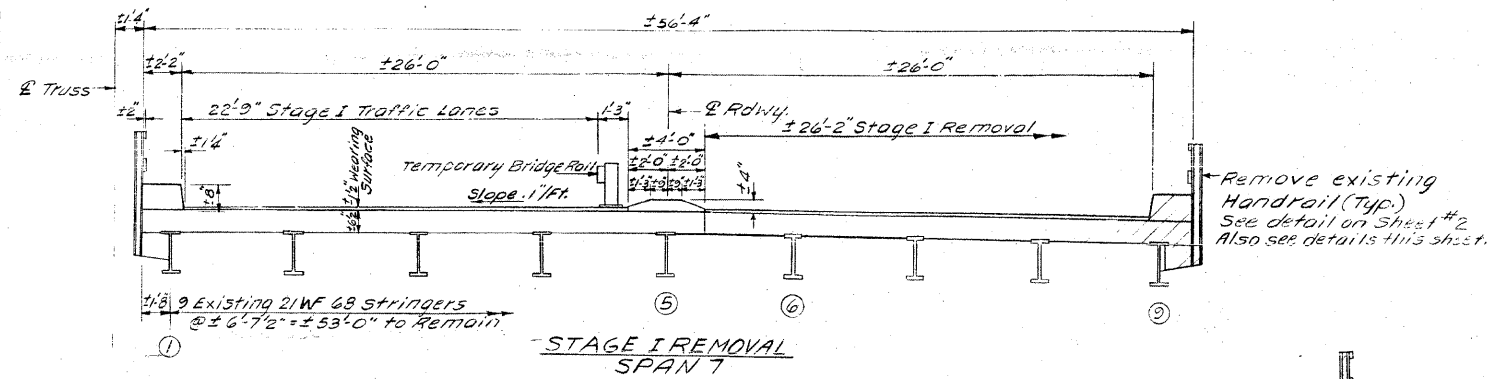
SCALE: SHEET NO. OF SHEETS STA. TO STA.

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-IVBR	ST. CLAIR	259	135
CONTRACT NO. 76882				
ILLINOIS FED. AID PROJECT				

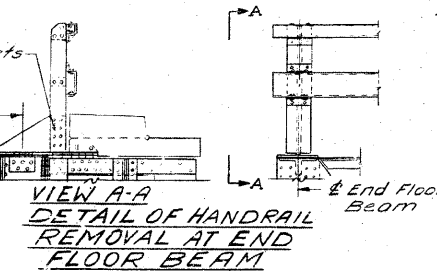
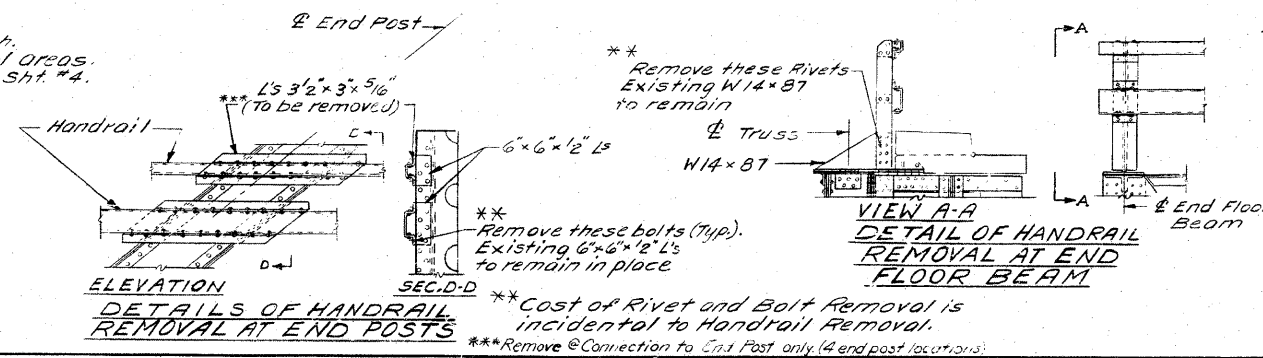
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
14	64-IVBR	ST. CLAIR	23	7a
SHEET NO. 30				
18 SHEETS				

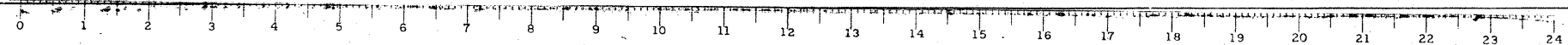


All cross sections are looking South.
Hatched Portions indicate Removal Areas.
For Temporary Bridge Rail details, see Sht. #4.

DESIGNED	Feb. 4 1985
CHECKED	
DRAWN	
CHECKED	



STAGE CONSTRUCTION DETAILS
SPAN 7
FA. RTE. 14 SEC. 64-IVB1
ST. CLAIR COUNTY
STA. 281 + 07.13
AS REVISED 2-28-86 D.E.A.

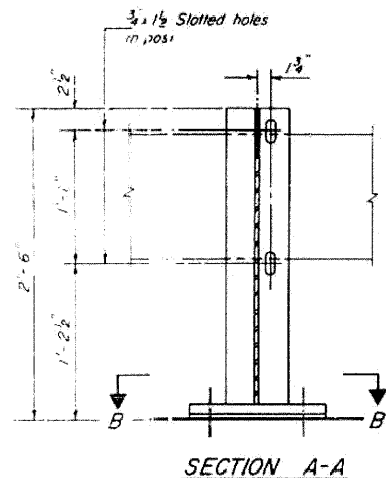


FOR INFORMATION ONLY

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	Coombe-Bloxdorf P.C. - CIVIL ENGINEERS- - STRUCTURAL ENGINEERS- - LAND SURVEYORS- Design Firm License No. 184-002703				
...136-0876882-exist-bridge-repair-plans-06.dgn		DRAWN -	REVISED -					F.A.P. RTE. 312	SECTION 64-IVBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 136
PLOT SCALE = 40,000,000 / IN.		CHECKED -	REVISED -					CONTRACT NO. 76882				
PLOT DATE = 8/5/2010		DATE - / /	REVISED -					ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-1VBR	ST. CLAIR	23	5	18 SHEETS

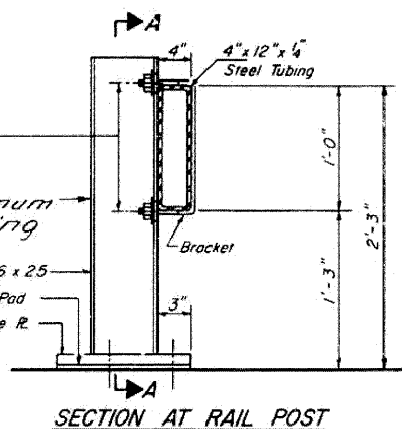


2-5/8 H.S. Studs with nut and flat hardened washer

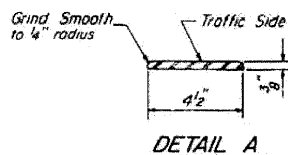
10'-9" Maximum Post Spacing

SECTION A-A

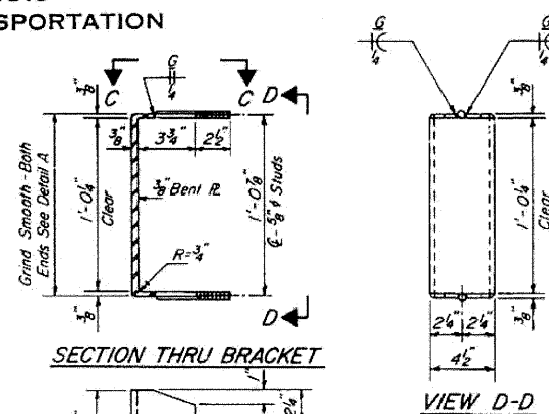
ALTERNATE I



SECTION AT RAIL POST

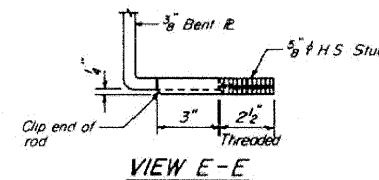


DETAIL A

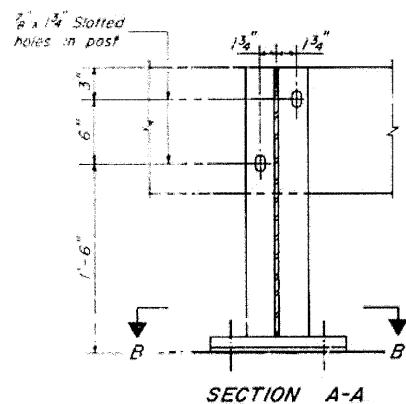


SECTION THRU BRACKET

VIEW D-D

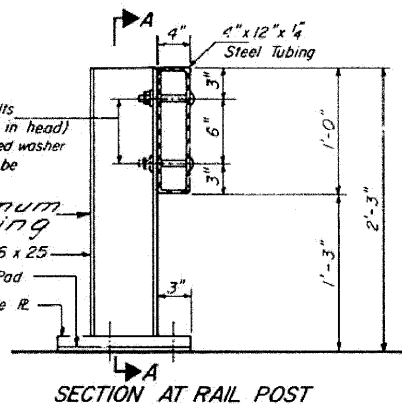


VIEW E-E



SECTION A-A

ALTERNATE II



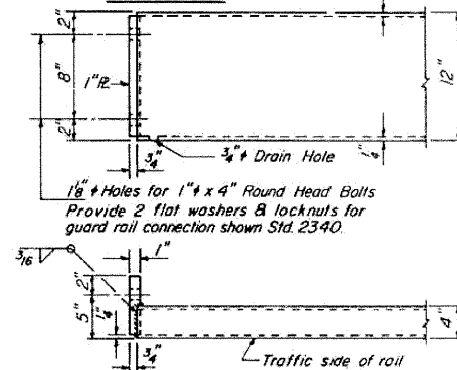
SECTION AT RAIL POST

2-3/4 x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat hardened washer
7/8" holes in tubing may be drilled in the field

10'-9" Maximum Post Spacing

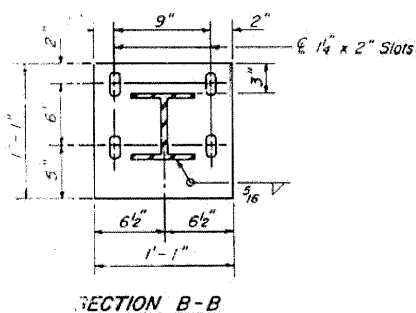
Grind Smooth Both Ends Top & Bottom See Detail A

VIEW C-C

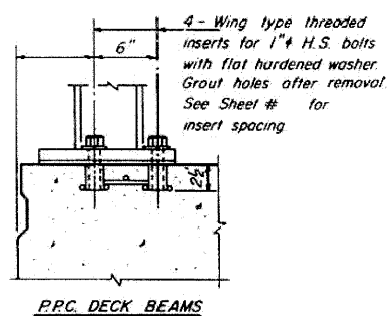


END OF RAIL DETAILS

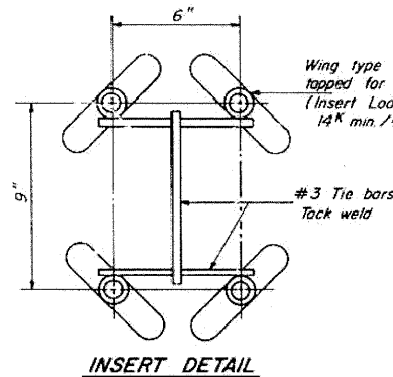
NOTES
Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B Structural Steel Tubing.
All other steel shapes and plates shall conform to the requirements of AASHTO M-183 except posts and brackets shall conform to AASHTO M 223 Grade 50.
Bolts, cap screws, and nuts shall conform to the requirement of ASTM designation A-307 except for high strength bolts, threaded rods, studs, nuts and washers noted which shall conform to AASHTO M-164.
The bridge rail shall receive one shop coat of a steel prime paint.
The 1" high strength bolts or threaded rods used to connect the railposts shall be tightened in accordance with Article 50704(g)(3) of the Standard Specification.
See Special Provisions for Temporary Bridge Rail.
The contact surfaces between post flange, rail and inside face of bracket for Alternate J shall be free of all lubricants.
The nut for 5/8" high strength studs used in Alternate I to connect bracket to post shall be tightened to a snug fit and given an additional one half turn.



SECTION B-B



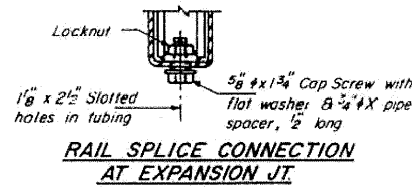
P.P.C. DECK BEAMS



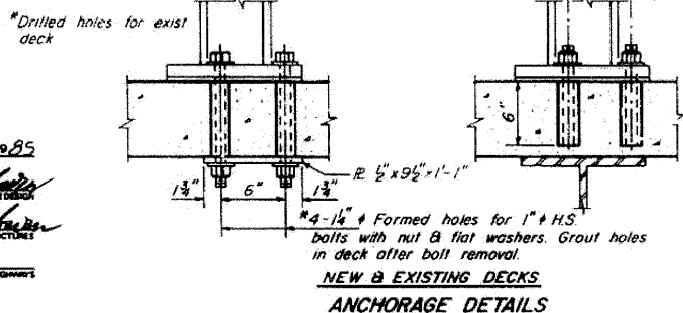
INSERT DETAIL

Wing type threaded inserts tapped for 1" H.S. bolts (Insert Load Capacity = 14K min./bolt)

#3 Tie bars Tack weld

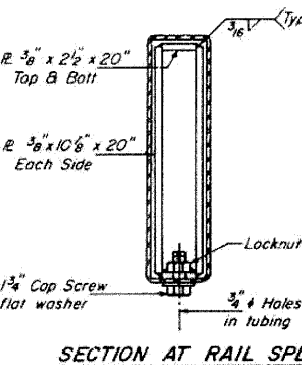


RAIL SPLICE CONNECTION AT EXPANSION JT.

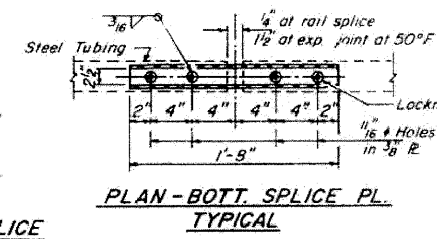


NEW & EXISTING DECKS ANCHORAGE DETAILS

*Drill 4-1 1/4" holes for 1" threaded rods with hex nut & flat washer. Epoxy grout rods. See Special Provisions



SECTION AT RAIL SPLICE



PLAN - BOTT. SPLICE PL. TYPICAL

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Bridge Rail	Lin Ft	903

TEMPORARY BRIDGE RAIL

DESIGNED	EXAMINED	1985
CHECKED	PASSED	
DRAWN	APPROVED	
CHECKED		

D-25 C.L. 82

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -
...137-0876882-exist-bridge-repair-plans-97.dgn		DRAWN -	REVISED -
	PLOT SCALE = 40,000,000 / 1 IN.	CHECKED -	REVISED -
	PLOT DATE = 8/5/2010	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 082-0030 PLANS
(REHABILITATION PLANS)

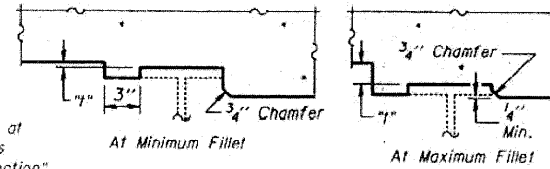
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-1VBR	ST. CLAIR	259	137
				CONTRACT NO. 76882
ILLINOIS FED. AID PROJECT				

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PROJECT NO.	SECTION	SHEET NO.	TOTAL SHEETS
1138-0876882-exist-bridge-repair-plans	64-IVBR	23	9

SHEET NO. 5
18 SHEETS

To determine "f": Elevations of the top flanges of the stringers shall be taken at intervals shown below and as specified in Note 1 on sheet #8. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "f" above top flange of stringers. For fillet details at floor beams see sheet #13.

FILLET HEIGHTS

STRINGER #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "f" in Inches
PANEL POINT L0	28106.900	-26.500	452.058	452.062	451.419	3/16
A	28116.900	-26.500	452.102	452.148	451.467	7/16
B	28126.900	-26.500	452.142	452.209	451.556	5/16
PANEL POINT L1	28135.650	-26.500	452.174	452.245	451.619	0
C	28145.650	-26.500	452.207	452.310	451.669	1/4
D	28155.650	-26.500	452.235	452.350	451.710	3/16
PANEL POINT L2	28164.400	-26.500	452.257	452.368	451.753	-1/8
E	28174.400	-26.500	452.278	452.417	451.792	1/8
F	28184.400	-26.500	452.295	452.442	451.812	1/16
PANEL POINT L3	28193.150	-26.500	452.307	452.447	451.841	-1/4
G	28203.150	-26.500	452.317	452.477	451.866	1/16
H	28213.150	-26.500	452.322	452.483	451.853	1/16
PANEL POINT L4	28221.900	-26.500	452.324	452.470	451.862	-3/16
I	28231.900	-26.500	452.322	452.444	451.853	1/16
J	28241.900	-26.500	452.316	452.474	451.865	1/16
PANEL POINT L5	28250.650	-26.500	452.308	452.448	451.841	-1/4
K	28260.650	-26.500	452.294	452.442	451.809	1/16
L	28270.650	-26.500	452.277	452.413	451.778	1/8
PANEL POINT L6	28275.400	-26.500	452.258	452.365	451.753	-1/8
M	28284.400	-26.500	452.233	452.348	451.705	3/16
N	28294.400	-26.500	452.204	452.304	451.658	1/4
PANEL POINT L7	28308.150	-26.500	452.176	452.267	451.619	0
U	28318.150	-26.500	452.140	452.206	451.548	3/8
P	28328.150	-26.500	452.099	452.140	451.479	7/16
PANEL POINT L8	28336.900	-26.500	452.060	452.064	451.419	1/4

STRINGER #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "f" in Inches
PANEL POINT L0	28106.900	-19.875	452.114	452.127	451.483	1/4
A	28116.900	-19.875	452.158	452.213	451.551	7/16
B	28126.900	-19.875	452.198	452.275	451.621	3/8
PANEL POINT L1	28135.650	-19.875	452.229	452.311	451.683	0
C	28145.650	-19.875	452.262	452.375	451.727	1/4
D	28155.650	-19.875	452.291	452.415	451.772	1/4
PANEL POINT L2	28164.400	-19.875	452.312	452.431	451.814	-1/8
E	28174.400	-19.875	452.333	452.474	451.842	1/8
F	28184.400	-19.875	452.351	452.505	451.871	1/8
PANEL POINT L3	28193.150	-19.875	452.362	452.508	451.900	-3/16
G	28203.150	-19.875	452.372	452.538	451.905	1/16
H	28213.150	-19.875	452.377	452.542	451.912	1/16
PANEL POINT L4	28221.900	-19.875	452.379	452.531	451.921	-3/16
I	28231.900	-19.875	452.377	452.545	451.912	1/16
J	28241.900	-19.875	452.371	452.535	451.903	1/16
PANEL POINT L5	28250.650	-19.875	452.363	452.504	451.900	-3/16
K	28260.650	-19.875	452.349	452.504	451.888	1/8
L	28270.650	-19.875	452.332	452.478	451.838	1/8
PANEL POINT L6	28275.400	-19.875	452.313	452.432	451.844	-1/16
M	28284.400	-19.875	452.284	452.413	451.767	1/4
N	28294.400	-19.875	452.260	452.370	451.721	3/16
PANEL POINT L7	28308.150	-19.875	452.231	452.313	451.683	1/16
O	28318.150	-19.875	452.195	452.271	451.612	7/16
P	28328.150	-19.875	452.154	452.204	451.572	7/16
PANEL POINT L8	28336.900	-19.875	452.116	452.124	451.483	1/4

STRINGER #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "f" in Inches
PANEL POINT L0	28106.900	-13.250	452.165	452.185	451.541	1/4
A	28116.900	-13.250	452.213	452.274	451.607	1/2
B	28126.900	-13.250	452.253	452.337	451.642	1/2
PANEL POINT L1	28135.650	-13.250	452.285	452.373	451.738	1/2
C	28145.650	-13.250	452.317	452.435	451.780	3/8
D	28155.650	-13.250	452.346	452.475	451.825	3/16
PANEL POINT L2	28164.400	-13.250	452.366	452.441	451.867	0
E	28174.400	-13.250	452.384	452.538	451.894	1/4
F	28184.400	-13.250	452.400	452.562	451.922	3/16
PANEL POINT L3	28193.150	-13.250	452.417	452.565	451.951	-1/8
G	28203.150	-13.250	452.427	452.594	451.956	3/16
H	28213.150	-13.250	452.433	452.601	451.962	3/16
PANEL POINT L4	28221.900	-13.250	452.434	452.597	451.971	-1/8
I	28231.900	-13.250	452.432	452.651	451.962	3/16
J	28241.900	-13.250	452.426	452.592	451.954	3/16
PANEL POINT L5	28250.650	-13.250	452.418	452.566	451.941	-1/2
K	28260.650	-13.250	452.405	452.562	451.920	3/16
L	28270.650	-13.250	452.387	452.534	451.890	1/4
PANEL POINT L6	28275.400	-13.250	452.364	452.492	451.867	0
M	28284.400	-13.250	452.344	452.473	451.820	3/16
N	28294.400	-13.250	452.315	452.430	451.774	3/8
PANEL POINT L7	28308.150	-13.250	452.286	452.374	451.738	1/2
O	28318.150	-13.250	452.250	452.332	451.667	1/2
P	28328.150	-13.250	452.210	452.267	451.548	1/2
PANEL POINT L8	28336.900	-13.250	452.171	452.191	451.541	3/16

STRINGER #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "f" in Inches
PANEL POINT L0	28106.900	-6.625	452.224	452.247	451.600	1/4
A	28116.900	-6.625	452.268	452.332	451.666	1/2
B	28126.900	-6.625	452.300	452.394	451.733	7/16
PANEL POINT L1	28135.650	-6.625	452.340	452.430	451.755	1/8
C	28145.650	-6.625	452.373	452.492	451.837	3/8
D	28155.650	-6.625	452.401	452.529	451.880	3/16
PANEL POINT L2	28164.400	-6.625	452.423	452.545	451.921	0
E	28174.400	-6.625	452.444	452.592	451.947	1/4
F	28184.400	-6.625	452.461	452.615	451.991	0
PANEL POINT L3	28193.150	-6.625	452.473	452.617	452.002	-1/8
G	28203.150	-6.625	452.482	452.646	452.007	3/16
H	28213.150	-6.625	452.488	452.652	452.013	3/16
PANEL POINT L4	28221.900	-6.625	452.489	452.638	452.023	-1/8
I	28231.900	-6.625	452.488	452.654	452.014	3/16
J	28241.900	-6.625	452.482	452.644	452.005	3/16
PANEL POINT L5	28250.650	-6.625	452.473	452.617	452.004	-1/8
K	28260.650	-6.625	452.460	452.614	451.973	3/16
L	28270.650	-6.625	452.442	452.587	451.943	1/4
PANEL POINT L6	28275.400	-6.625	452.424	452.546	451.921	0
M	28284.400	-6.625	452.399	452.528	451.875	3/16
N	28294.400	-6.625	452.370	452.486	451.831	3/8
PANEL POINT L7	28308.150	-6.625	452.342	452.432	451.795	1/8
O	28318.150	-6.625	452.305	452.390	451.726	7/16
P	28328.150	-6.625	452.265	452.325	451.657	1/2
PANEL POINT L8	28336.900	-6.625	452.226	452.249	451.600	3/16

Note: For Elevations Location Plan and Dead Load Deflection Diagrams see sheet #8.

TOP OF SLAB ELEVATIONS
F.A.

DESIGNED *James Balkin*
CHECKED *K.R. Ghanta*
DRAWN *R. Doty*
CHECKED *K.R. Ghanta*

EXAMINED *James T. Robinson*
PASSED *James T. Robinson*
APPROVED *James T. Robinson*
DIRECTOR OF HIGHWAYS

E-S 1-6-82

FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...1138-0876882-exist-bridge-repair-plans	28.dgn	DRAWN -	REVISED -			312	64-IVBR	ST. CLAIR	259	138
PLOT SCALE = 40.000000' / IN.	CHECKED -	REVISED -	SCALE:			SHEET NO.	OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT
PLOT DATE = 8/5/2010	DATE - / /	REVISED -								

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	COUNTY	SHEET	NO.	SHEET NO. 6
114	41VBR	ST. CLAIR	25	10	18 SHEETS
FED. ROAD DIST. NO. 7		ALTERN. FEDERAL PROJECT			

STRINGER #5 AND C ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "H" in Inches
PANEL POINT L0	28106.900	0.0	452.279	452.303	451.652	7/16
A	28116.900	0.0	452.323	452.387	451.717	7/16
B	28126.900	0.0	452.363	452.447	451.782	1/2
PANEL POINT L1	28135.650	0.0	452.395	452.482	451.843	3/16
C	28145.650	0.0	452.428	452.543	451.883	7/16
U	28155.650	0.0	452.456	452.579	451.925	1/8
PANEL POINT L2	28164.400	0.0	452.478	452.594	451.966	1/16
L	28174.400	0.0	452.499	452.640	451.991	7/16
F	28184.400	0.0	452.516	452.663	452.017	1/4
PANEL POINT L3	28193.150	0.0	452.528	452.664	452.045	-1/16
U	28203.150	0.0	452.537	452.693	452.050	1/4
H	28213.150	0.0	452.543	452.699	452.055	1/4
PANEL POINT L4	28221.900	0.0	452.545	452.688	452.065	-1/16
I	28231.900	0.0	452.543	452.700	452.074	0
J	28241.900	0.0	452.537	452.691	452.040	3/16
PANEL POINT L5	28250.650	0.0	452.528	452.664	452.077	-1/16
K	28260.650	0.0	452.515	452.642	452.017	1/4
L	28270.650	0.0	452.496	452.616	451.988	7/16
PANEL POINT L6	28279.400	0.0	452.479	452.595	451.966	1/16
M	28289.400	0.0	452.454	452.578	451.921	3/8
N	28299.400	0.0	452.425	452.537	451.878	7/16
PANEL POINT L7	28308.150	0.0	452.397	452.484	451.843	3/16
O	28318.150	0.0	452.360	452.443	451.775	1/2
P	28328.150	0.0	452.323	452.380	451.708	7/16
PANEL POINT L8	28336.900	0.0	452.281	452.305	451.652	7/16

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
PANEL POINT L0	28106.900	4.750	452.240	452.250
A	28116.900	4.750	452.284	452.335
E	28126.900	4.750	452.324	452.391
PANEL POINT L1	28135.650	4.750	452.356	452.421
C	28145.650	4.750	452.388	452.480
D	28155.650	4.750	452.417	452.516
PANEL POINT L2	28164.400	4.750	452.438	452.527
E	28174.400	4.750	452.460	452.571
F	28184.400	4.750	452.477	452.595
PANEL POINT L3	28193.150	4.750	452.488	452.595
G	28203.150	4.750	452.498	452.624
H	28213.150	4.750	452.503	452.629
PANEL POINT L4	28221.900	4.750	452.505	452.616
I	28231.900	4.750	452.503	452.630
J	28241.900	4.750	452.497	452.621
PANEL POINT L5	28250.650	4.750	452.489	452.596
K	28260.650	4.750	452.475	452.594
L	28270.650	4.750	452.453	452.565
PANEL POINT L6	28279.400	4.750	452.446	452.524
M	28289.400	4.750	452.415	452.514
N	28299.400	4.750	452.386	452.475
PANEL POINT L7	28308.150	4.750	452.357	452.422
C	28318.150	4.750	452.321	452.387
P	28328.150	4.750	452.280	452.327
PANEL POINT L8	28336.900	4.750	452.242	452.258

STRINGER #6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "H" in Inches
PANEL POINT L0	28106.900	6.625	452.224	452.240	451.593	1/4
A	28116.900	6.625	452.268	452.320	451.654	1/2
B	28126.900	6.625	452.308	452.376	451.715	7/16
PANEL POINT L1	28135.650	6.625	452.340	452.407	451.771	1/8
C	28145.650	6.625	452.373	452.466	451.817	3/8
D	28155.650	6.625	452.401	452.501	451.859	7/16
PANEL POINT L2	28164.400	6.625	452.423	452.515	451.880	0
E	28174.400	6.625	452.444	452.566	451.916	1/4
F	28184.400	6.625	452.461	452.582	451.939	0
PANEL POINT L3	28193.150	6.625	452.473	452.587	451.968	-1/8
G	28203.150	6.625	452.482	452.611	451.971	1/16
H	28213.150	6.625	452.488	452.617	451.979	3/16
PANEL POINT L4	28221.900	6.625	452.489	452.607	451.987	-1/8
I	28231.900	6.625	452.488	452.610	451.979	3/16
J	28241.900	6.625	452.482	452.604	451.971	3/16
PANEL POINT L5	28250.650	6.625	452.473	452.592	451.968	-1/8
K	28260.650	6.625	452.460	452.591	451.939	3/16
L	28270.650	6.625	452.447	452.556	451.912	3/16
PANEL POINT L6	28279.400	6.625	452.424	452.510	451.890	0
M	28289.400	6.625	452.395	452.500	451.848	5/16
N	28299.400	6.625	452.370	452.461	451.806	3/8
PANEL POINT L7	28308.150	6.625	452.342	452.409	451.772	1/2
C	28318.150	6.625	452.305	452.372	451.708	7/16
P	28328.150	6.625	452.265	452.313	451.645	1/2
PANEL POINT L8	28336.900	6.625	452.226	452.242	451.593	7/16

Note: For Elevations Location Plan and Dead Load Deflection Diagrams see sheet #8.

DESIGNED *[Signature]*
CHECKED *K.R. Ghanta*
DRAWN *R. Doty*
CHECKED *K.R. Ghanta*

EXAMINED *[Signature]*
PASSED *[Signature]*
APPROVED *[Signature]*

Feb 4 1982

TOP OF SLAB ELEVATIONS
F.A

FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...139-0876882-exist-bridge-repair-plans-09.dgn		DRAWN -	REVISED -			312	64-1VBR	ST. CLAIR	259	139
PLOT SCALE = 40.000000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76882				
PLOT DATE = 8/5/2018		DATE - / /	REVISED -			ILLINOIS FED. AID PROJECT				
CB JOB NO 09021				SCALE:	SHEET NO. OF SHEETS STA. TO STA.					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
25	64-IVBR	ST. CLAIR	25	11
FED. ROAD DIST. NO. 7		F.L. PROJ. NO. 082-0030		SHEET NO. 7
				18 SHEETS

STRINGER #7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "I" in Inches
PANEL POINT L0	28106.900	13.250	452.169	452.183	451.535	1/4
A	28116.900	13.250	452.283	452.261	451.597	1/2
B	28126.900	13.250	452.223	452.321	451.676	1/4
PANEL POINT L1	28135.650	13.250	452.285	452.391	451.717	1/8
C	28145.650	13.250	452.317	452.412	451.758	3/8
D	28155.650	13.250	452.366	452.444	451.801	5/16
PANEL POINT L2	28164.400	13.250	452.388	452.463	451.839	0
E	28174.400	13.250	452.389	452.509	451.865	1/4
F	28184.400	13.250	452.406	452.532	451.892	3/16
PANEL POINT L3	28193.150	13.250	452.417	452.532	451.918	-1/8
G	28203.150	13.250	452.427	452.562	451.923	3/16
H	28213.150	13.250	452.433	452.568	451.930	3/16
PANEL POINT L4	28221.900	13.250	452.434	452.554	451.938	-1/8
I	28231.900	13.250	452.432	452.568	451.930	3/16
J	28241.900	13.250	452.426	452.555	451.922	1/8
PANEL POINT L5	28250.650	13.250	452.438	452.533	451.918	-1/8
K	28260.650	13.250	452.403	452.531	451.900	3/16
L	28270.650	13.250	452.387	452.505	451.862	3/16
PANEL POINT L6	28279.400	13.250	452.389	452.484	451.839	0
M	28289.400	13.250	452.364	452.448	451.796	5/16
N	28299.400	13.250	452.315	452.408	451.752	3/8
PANEL POINT L7	28308.150	13.250	452.286	452.354	451.717	1/8
O	28318.150	13.250	452.250	452.317	451.652	1/2
P	28328.150	13.250	452.210	452.257	451.588	1/2
PANEL POINT L8	28336.900	13.250	452.171	452.185	451.535	5/16

STRINGER #8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "I" in Inches
PANEL POINT L0	28106.900	19.875	452.114	452.123	451.479	1/4
A	28116.900	19.875	452.138	452.205	451.543	1/16
B	28126.900	17.875	452.198	452.263	451.608	3/8
PANEL POINT L1	28135.650	19.875	452.229	452.294	451.666	1/16
C	28145.650	19.875	452.262	452.356	451.708	1/4
D	28155.650	19.875	452.291	452.394	451.751	3/16
PANEL POINT L2	28164.400	19.875	452.312	452.408	451.791	-1/8
E	28174.400	15.875	452.333	452.455	451.817	1/8
F	28184.400	19.375	452.351	452.479	451.845	1/8
PANEL POINT L3	28193.150	15.875	452.362	452.480	451.872	-3/16
G	28203.150	15.875	452.372	452.510	451.877	1/16
H	28213.150	19.875	452.377	452.515	451.884	1/16
PANEL POINT L4	28221.900	15.875	452.379	452.502	451.892	-3/16
I	28231.900	15.875	452.377	452.516	451.884	1/16
J	28241.900	19.875	452.371	452.507	451.876	1/16
PANEL POINT L5	28250.650	15.875	452.363	452.481	451.872	-3/16
K	28260.650	19.875	452.349	452.477	451.841	1/8
L	28270.650	19.875	452.332	452.451	451.814	1/8
PANEL POINT L6	28279.400	15.875	452.313	452.409	451.791	-1/16
M	28289.400	15.875	452.285	452.392	451.746	1/4
N	28299.400	19.875	452.260	452.351	451.702	5/16
PANEL POINT L7	28308.150	15.875	452.231	452.296	451.666	1/16
O	28318.150	19.875	452.195	452.255	451.600	1/16
P	28328.150	19.875	452.154	452.197	451.534	1/16
PANEL POINT L8	28336.900	15.875	452.116	452.125	451.479	1/4

STRINGER #9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Top of Stringer Elevations	Fillet Height "I" in Inches
PANEL POINT L0	28106.900	26.500	452.058	452.061	451.418	3/16
A	28116.900	26.500	452.102	452.143	451.482	1/16
B	28126.900	26.500	452.142	452.200	451.548	5/16
PANEL POINT L1	28135.650	26.500	452.174	452.233	451.607	3/16
C	28145.650	26.500	452.207	452.266	451.650	1/4
D	28155.650	26.500	452.235	452.334	451.695	3/16
PANEL POINT L2	28164.400	26.500	452.257	452.345	451.734	-1/8
E	28174.400	26.500	452.276	452.397	451.761	1/2
F	28184.400	26.500	452.295	452.421	451.790	1/16
PANEL POINT L3	28193.150	26.500	452.307	452.424	451.818	-1/4
G	28203.150	26.500	452.317	452.453	451.823	1/16
H	28213.150	26.500	452.322	452.454	451.830	1/16
PANEL POINT L4	28221.900	26.500	452.324	452.446	451.838	-3/16
I	28231.900	26.500	452.322	452.460	451.830	1/16
J	28241.900	26.500	452.316	452.454	451.821	1/16
PANEL POINT L5	28250.650	26.500	452.304	452.425	451.818	-3/16
K	28260.650	26.500	452.294	452.420	451.787	1/8
L	28270.650	26.500	452.277	452.393	451.756	1/8
PANEL POINT L6	28279.400	26.500	452.258	452.350	451.734	-1/8
M	28289.400	26.500	452.233	452.332	451.684	1/4
N	28299.400	26.500	452.204	452.290	451.634	1/4
PANEL POINT L7	28308.150	26.500	452.176	452.235	451.607	1/16
O	28318.150	26.500	452.146	452.194	451.559	1/4
P	28328.150	26.500	452.094	452.136	451.474	1/16
PANEL POINT L8	28336.900	26.500	452.063	452.063	451.414	1/4

Note: For Elevations Location Plan and Dead Load Deflection Diagrams see sheet #8.

DESIGNED <i>R. Doherty</i>	EXAMINED <i>James J. Blox</i>
CHECKED <i>K.R. Ghanta</i>	PASSED <i>James J. Blox</i>
DRAWN <i>R. Doherty</i>	APPROVED <i>James J. Blox</i>
CHECKED <i>K.R. Ghanta</i>	

TOP OF SLAB ELEVATIONS
E-I

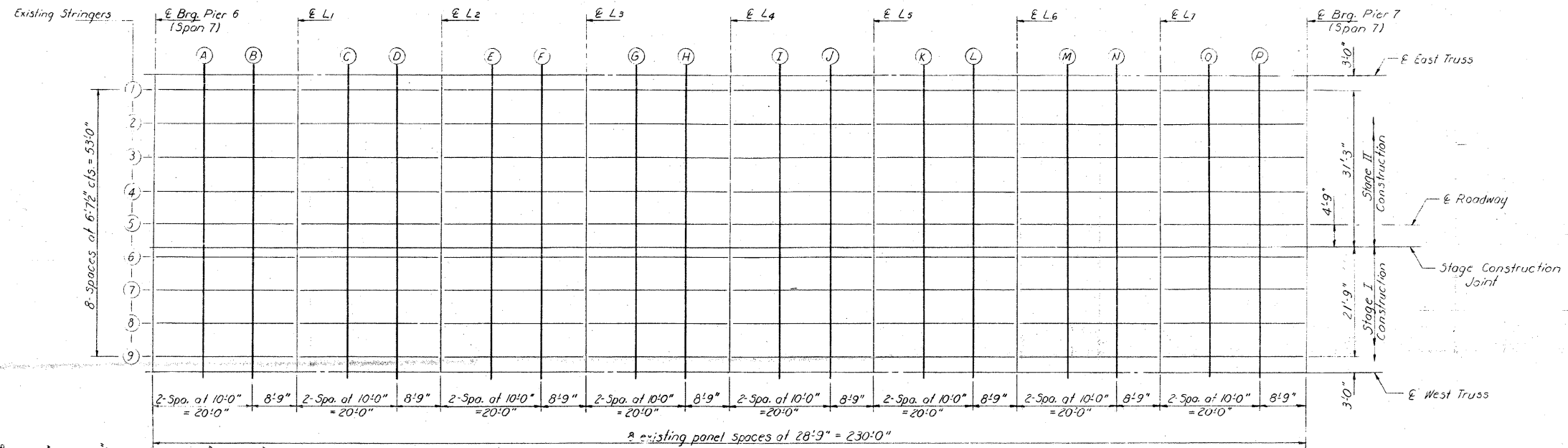
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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

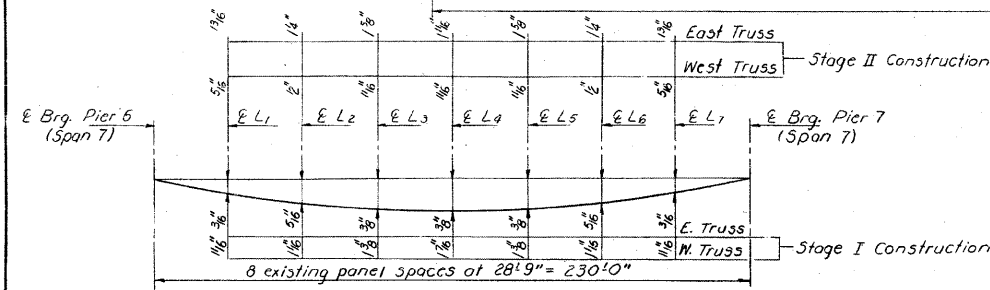
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PLOT SCALE = 40.000000' / 1"	CHECKED -	REVISED -	SCALE:			SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				
PLOT DATE = 8/5/2010	DATE - / /	REVISED -										
CB JOB NO 09821												

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 18 SHEETS
A.A. 14	64-IVBR	ST. CLAIR	73	17	
FOR ROAD DIST. NO. 7		MAINTENANCE		FOR AID PROJECT	

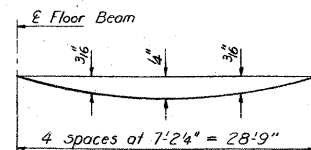


ELEVATIONS LOCATION PLAN
(SPAN 7)

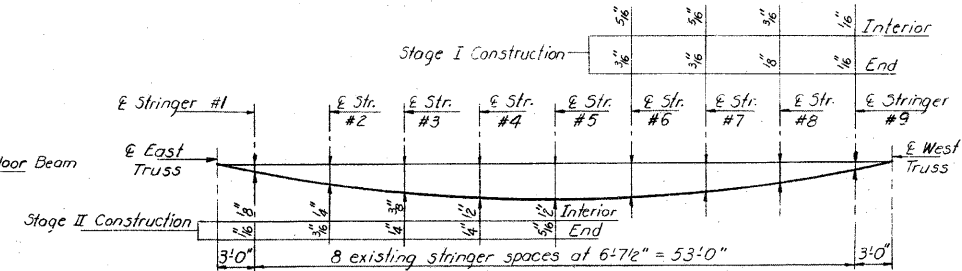


DEAD LOAD DEFLECTION DIAGRAM FOR TRUSS

(Includes weight of concrete only)
Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets #5, #6 & #7.



DEAD LOAD DEFLECTION DIAGRAM FOR STRINGERS
(Includes weight of concrete only)
(See Note)



DEAD LOAD DEFLECTION DIAGRAM FOR FLOOR BEAMS

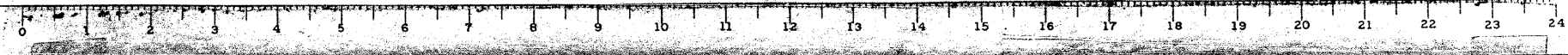
(Includes weight of concrete only)
(See Note)

Note 1: The top of stringer elevations at various stages of construction are estimated from the information given in existing plans and are subject to variations. The contractor shall assess the accuracy of these by taking elevations at representative locations when there is no live load in Span 7 and verify the fillet heights before proceeding with setting up of forms.

TOP OF SLAB ELEVATIONS DETAILS

SPAN 7
F.A. RT. 14 SEC. 64-IVB1
ST. CLAIR COUNTY
STA. 281+07.13

DESIGNED	<i>R. Doty</i>	EXAMINED	<i>James J. [Signature]</i>
CHECKED	<i>David [Signature]</i>	PAID	<i>James J. [Signature]</i>
DRAWN	R. Doty	APPROVED	<i>James J. [Signature]</i>
CHECKED	D.G.	DIRECTOR OF HIGHWAYS	



FOR INFORMATION ONLY

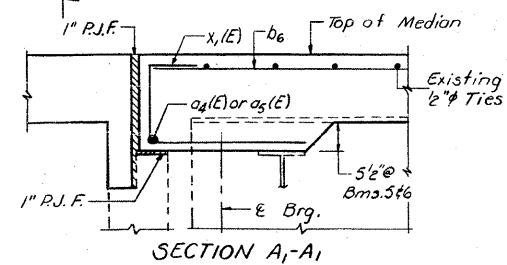
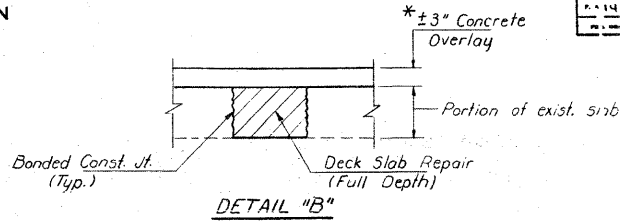
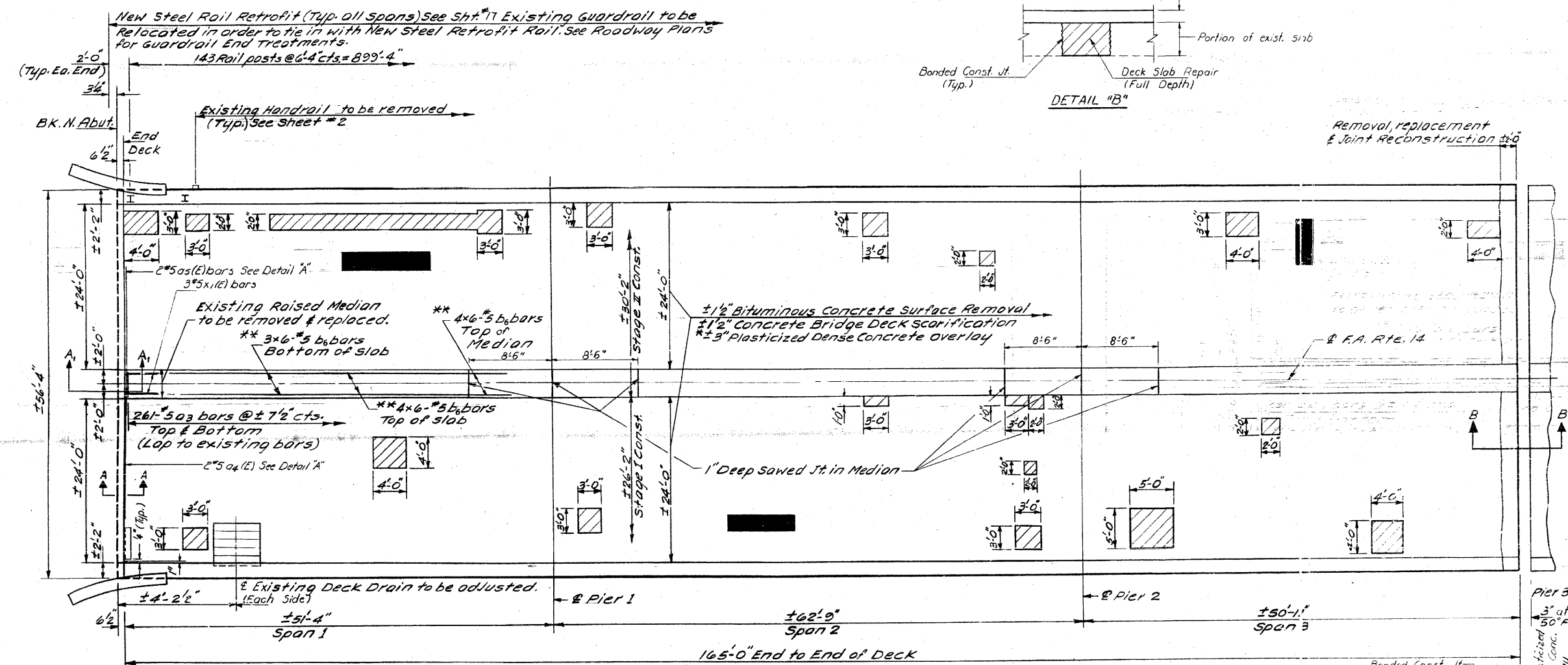
CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC..	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 40.000000' / IN.		CHECKED -	REVISED -					CONTRACT NO. 76882				
PLOT DATE = 8/5/2010		DATE - / /	REVISED -					ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

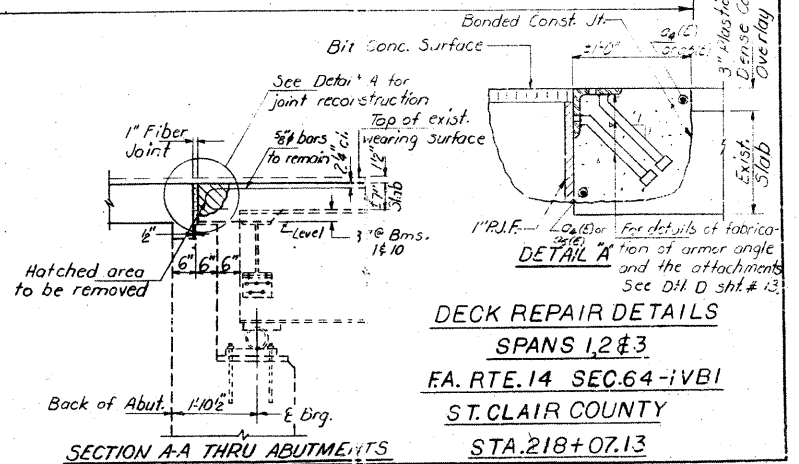
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVBR	ST. CLAIR	23	13

SHEET NO. 9
18 SHEETS



Shaded areas represent Deck Slab Repair - Partial Depth. Actual areas and locations to be determined in the field by the Engineer.
Hatched areas indicate Full Depth Deck Repairs. Areas and locations are approximate, actual areas and locations to be verified in the field by the Engineer.
* Plasticized Dense Concrete Overlay shall not be applied until Deck Slab Repairs are completed and the end joints are reconstructed. See Detail B.

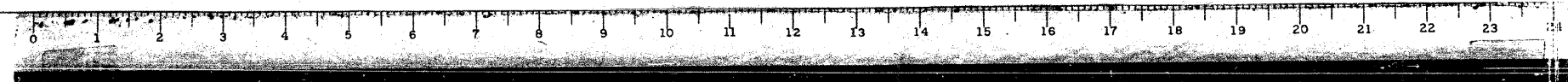
For Cross section see Sheet # 2.
For Sections B-B, C-C, & Bill of Material see sheet # 14.
Bars indicated thus 3x20-5 etc. indicates 3 lines of bars with 20 lengths per line.
Min lap for #5 bars shall be 1'-8\"/>



DESIGNED *David Reiter*
CHECKED *David Reiter*
DRAWN *LH*
CHECKED *DG*

EXAMINED *James J. Reiter*
APPROVED *James J. Reiter*
ENGINEER OF BRIDGES AND STRUCTURES
DIRECTOR OF HIGHWAYS

DECK REPAIR DETAILS
SPANS 1, 2 & 3
F.A. RTE. 14 SEC. 64-IVB1
ST. CLAIR COUNTY
STA. 218+07.13



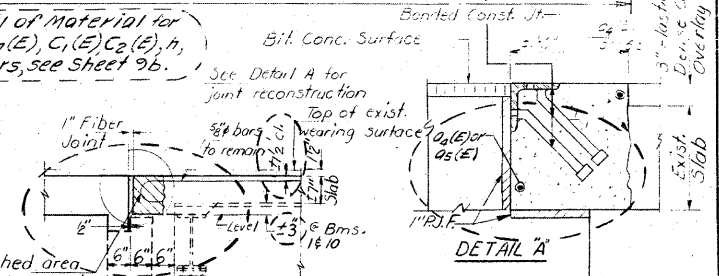
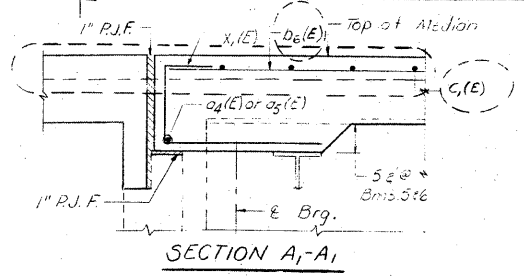
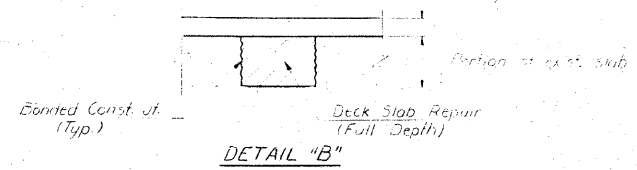
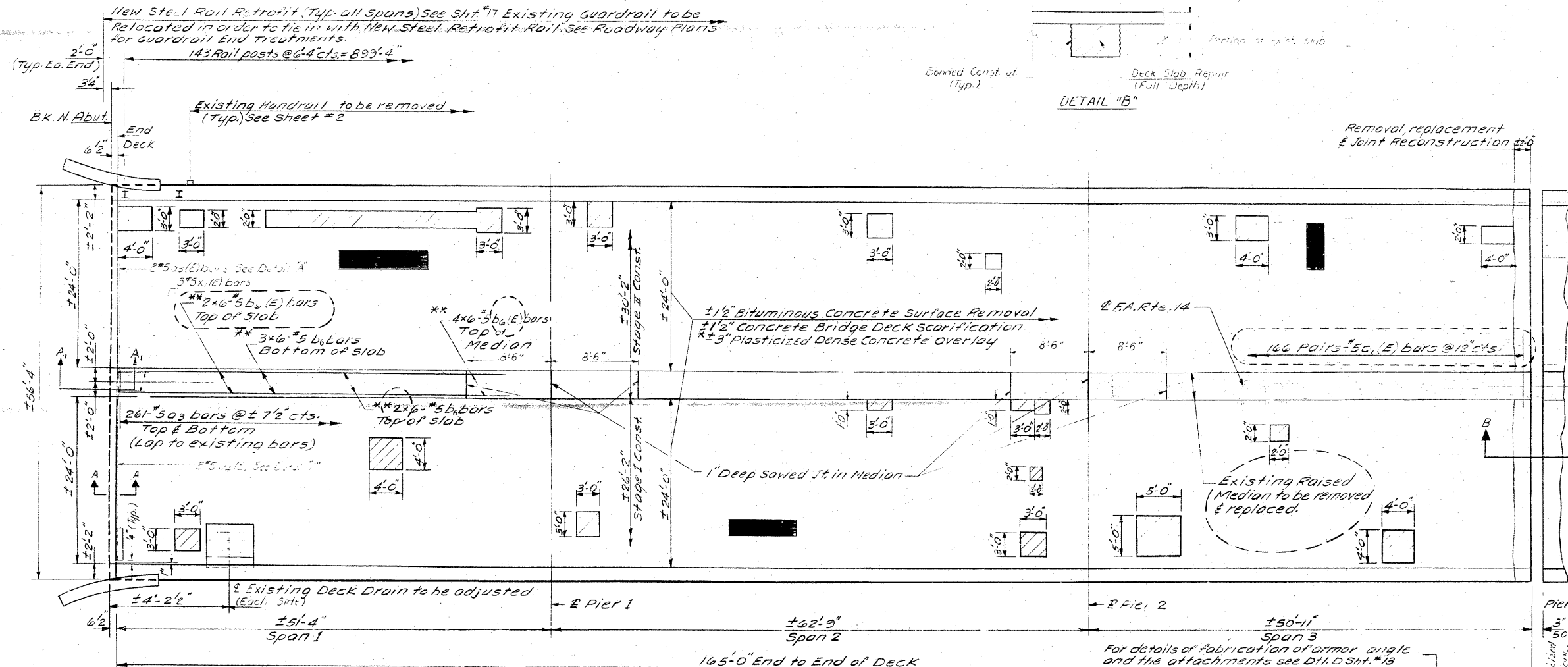
FOR INFORMATION ONLY

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CB JOB NO 09021	PLOT SCALE = 40.000000' / IN.	DRAWN -	REVISIONS -	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 76882 ILLINOIS FED. AID PROJECT				

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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 14	IVBR	ST. CLAIR	25	13a
SHEET NO. 94 15 SHEETS				



Shaded areas represent Deck Slab Repair - Partial Depth. Actual areas and locations to be determined in the field by the Engineer.
Hatched areas indicate Full Depth Deck Repairs. Areas and locations are approximate, actual areas and locations to be verified in the field by the Engineer.
* Plasticized Dense Concrete Overlay shall not be applied until Deck Slab Repairs are completed and the end joints are reconstructed. See Detail B.

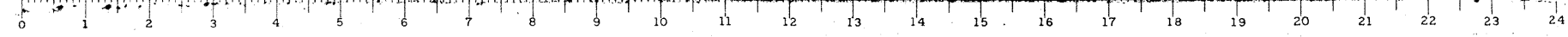
For Cross section see sheet #2.
For Sections B-B, C-C, & Bill of Material see sheet #14.
Bars indicated thus 3x20-#5 etc. indicates 3 lines of bars with 20 lengths per line.
Min lap for #5 bars shall be 1'-8" unless otherwise noted
** For Placement Details, see Median Replacement Details sheet #14.
For Joint Removal Details see sheet #10
For Joint Reconstruction Details, see sheet #14
For Deck Drain Adjustment Details, see sheet #10
Approximately 675 Sq. Ft. of Bridge Sidewalk Repair (Partial Depth) is included. Actual areas and locations to be determined in the field by the Engineer.

For Bill of Material for b₆(E), b₇(E), C₁(E), C₂(E), h₁ & V bars, see sheet #6.

For North Abut. Repair Details see sheet #6.

DESIGNED	EXAMINED
CHECKED	APPROVED
DRAWN	APPROVED
CHECKED	APPROVED

DECK REPAIR DETAILS
SPANS 1, 2 & 3
FA. RTE. 14 SEC. 64-IVB1
ST. CLAIR COUNTY
STA. 218+07.13
AS R.



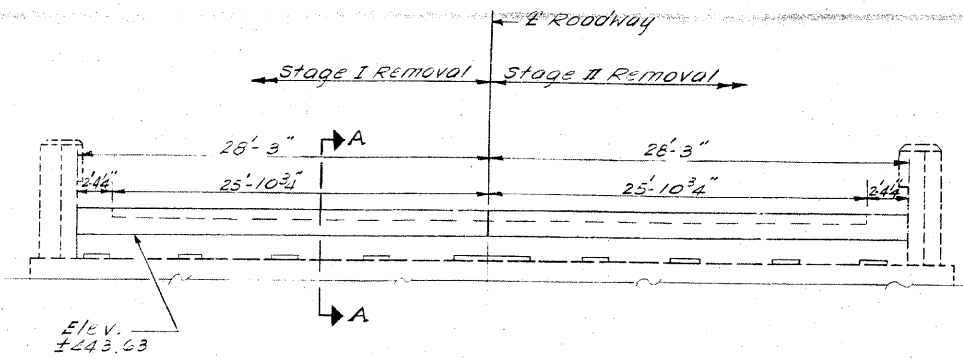
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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

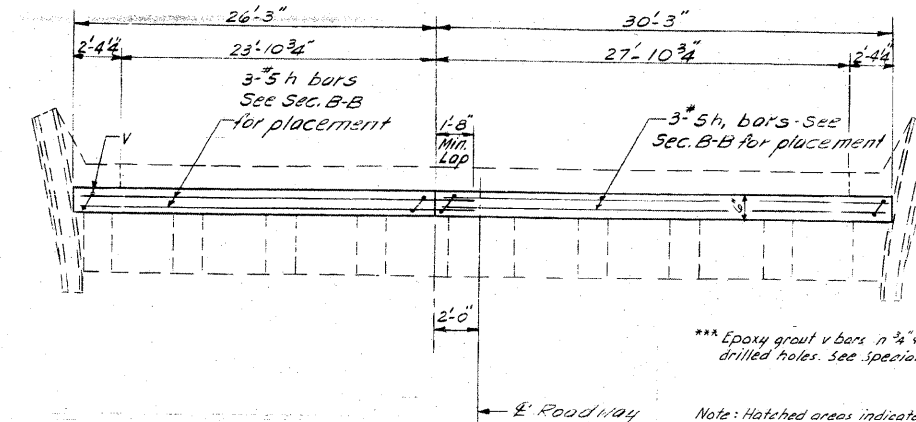
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

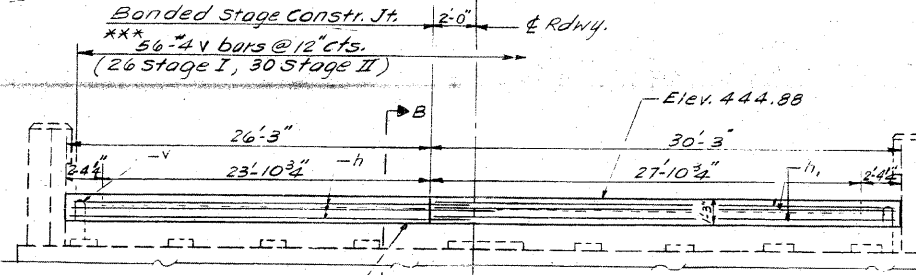
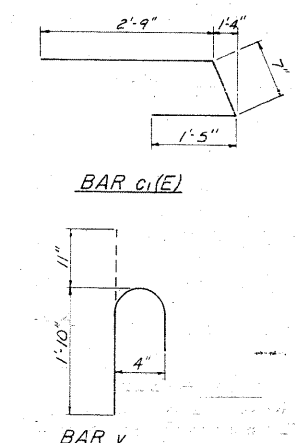
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64-1VBR	St. Clair	23	136	18
SHEET NO. 96				
18 SHEETS				



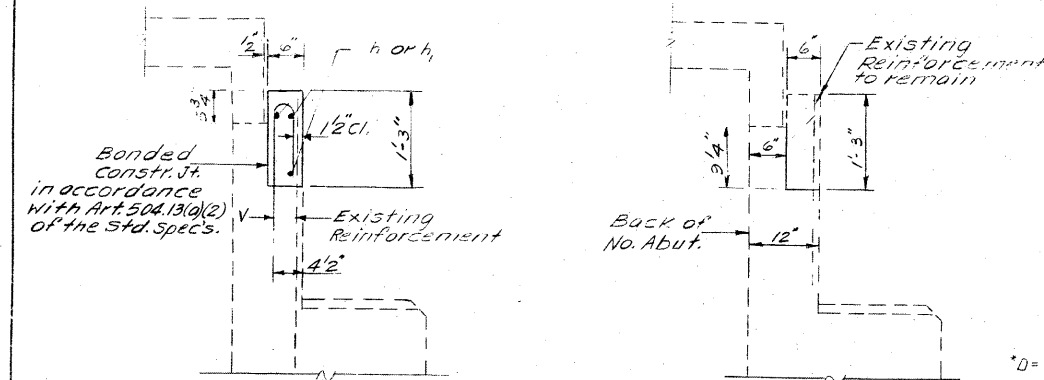
ELEVATION
Looking North
Concrete Removal Details



PLAN



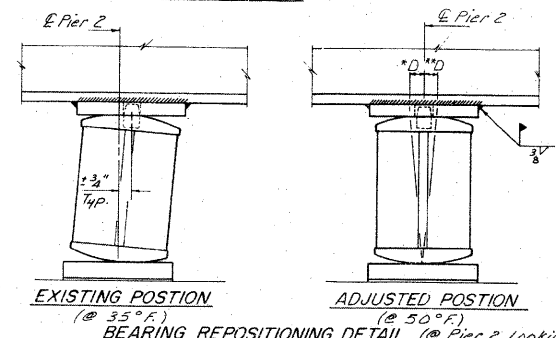
ELEVATION
(Looking North)



SECTION B-B

SECTION A-A

*D = 6"/100ft. of expansion for every 15° below the normal temperature of 50.
**D = 6"/100ft. of expansion for every 15° above the normal temperature of 50.



REPOSITIONING EXISTING BEARINGS
(10 Req'd.)

- The Contractor shall submit for approval by the Engineer, plans for jacking prior to commencing any work at the bearings. The dead load reaction per bearing at Pier #2 is 83 kips. The minimum jack capacity for each bearing shall be 60 Tons.
- Only one bearing at a time shall be repositioned.
- Jacking shall be limited to a maximum of 6" lift.
- The welds on the existing top plate shall be removed by Arc Gouging and/or grinding. Care shall be taken to avoid damage to the bottom flange of the beam and the top plate. Any unavoidable gouges in the flange shall be ground smooth.
- Adjust the rocker and top plate as shown.
- Lower jacks to allow contact between the bottom flange and the top plate.
- Field weld the top plate as detailed.
- Lower jacks to fully load the bearing.
- All work at bearings shall be included in "Jack and Reposition Bearings".

BILL OF MATERIAL

BO#	No.	Size	Length	Shape
b6(E)	84	#5	20'-0"	—
b7(E)	92	#5	30'-0"	—
C1(E)	1342	#5	4'-9"	—
C2(E)	233	#5	5'-11"	—
h	3	#5	27'-0"	—
h1	3	#5	30'-0"	—
v	56	#4	2'-0"	—
Concrete Removal Cu/Yds. 1.3				
Reinf. Bars (Sub) Lbs. 280				
Reinf. Bars (Super) (Epoxy Coated) Lbs. 13510				
Class X Concrete Cu/Yds. 1.3				

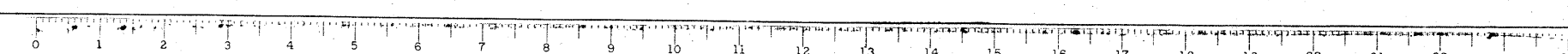
SUBSTRUCTURE REPAIR DETAILS

E.A. RTE. 14 SEC. 64-1VBR
ST. CLAIR COUNTY
STA. 281+07.13

DESIGNED *David J. Kasper*
CHECKED *Ralph Anderson*
DRAWN *L.H.*
CHECKED *R.E.A.*

EXAMINED *James J. Kasper*
PASSED *James J. Kasper*
APPROVED *James J. Kasper*
DIRECTOR OF HIGHWAYS

April 4 1986



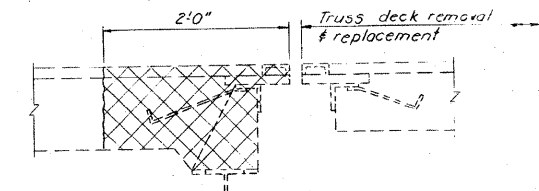
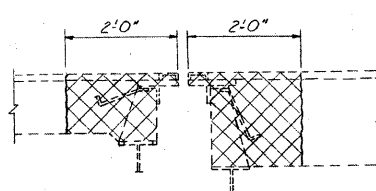
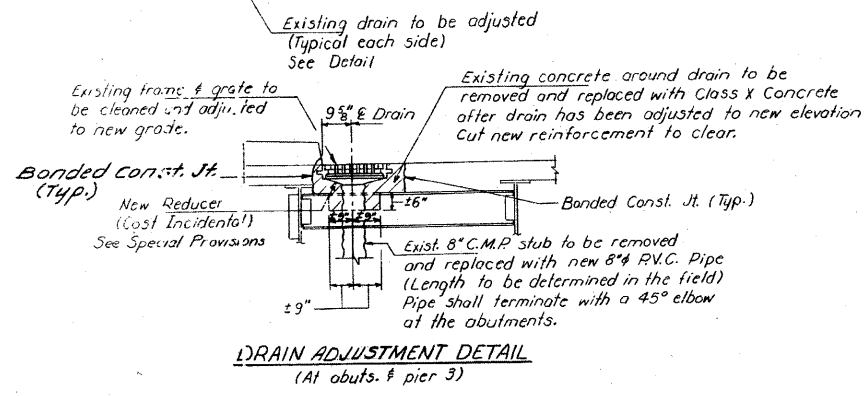
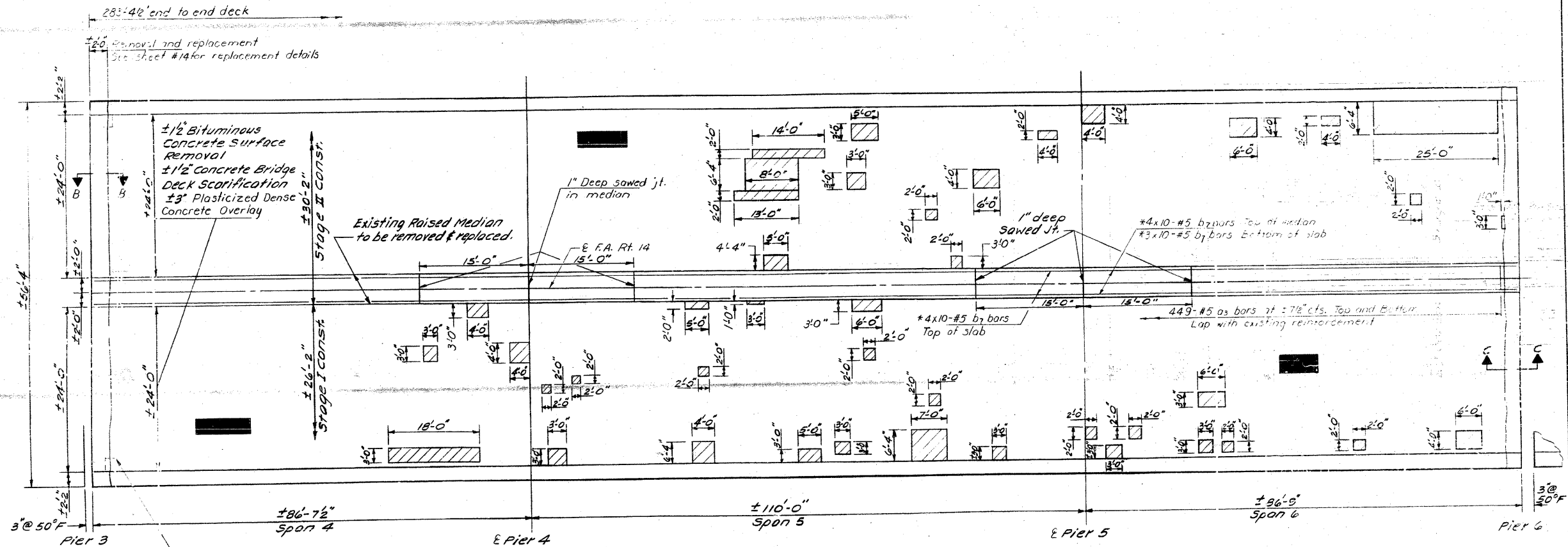
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- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE: 1" = 10'	SHEET NO. OF SHEETS	STA. TO STA.	F.A.P. RTE. 312	SECTION 64-1VBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 144
...144-0876882-exist-bridge-repair-plans-4.dgn	PLOT SCALE = 40,0000000 / 1 IN.	DRAWN -	REVISED -						CONTRACT NO. 76882				
CB JOB NO 09021	PLOT DATE = 8/5/2010	CHECKED -	REVISED -						ILLINOIS FED. AID PROJECT				
		DATE - / /	REVISED -										

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. / TOTAL SHEETS
114	64-1VBR	ST. CLAIR	23	14	13 SHEETS
DESIGNED BY	DRAWN BY	CHECKED BY	DATE	PROJECT	



Note: Removal of existing expansion devices above the diaphragms is incidental to "Concrete Removal."

* For placement see median replacement details on sheet #14.

For notes see sheet #9.

DECK REPAIR DETAILS
SPANS 4, 5 & 6
E.A. RTE. 14 SEC. 64-1VBR
ST. CLAIR COUNTY
STA. 218+07.13

DESIGNED: *James F. Blodgett*
CHECKED: *David G. Goff*
DRAWN: LH
CHECKED: DG

Feb. 4 1985
EXAMINED: *James F. Blodgett*
APPROVED: *James F. Blodgett*

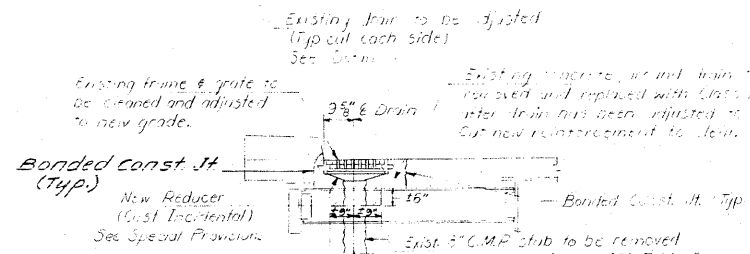
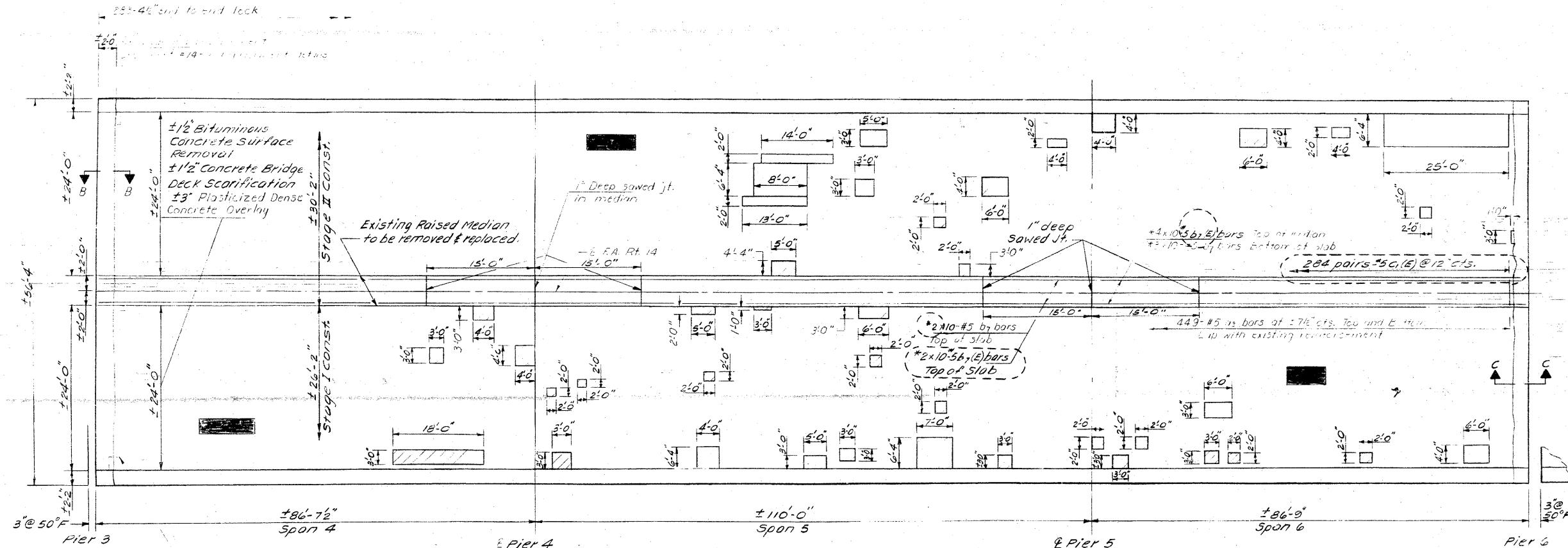
FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

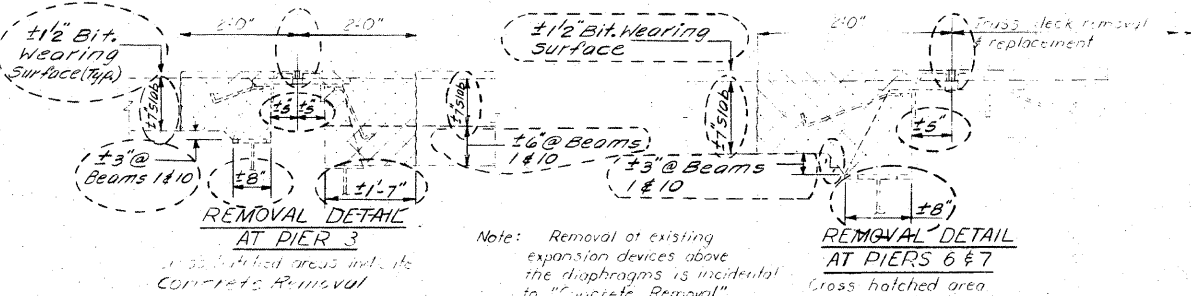
FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 40,000,000 / 1 IN.		CHECKED -	REVISED -					CONTRACT NO. 76882				
PLOT DATE = 8/5/2010		DATE - / /	REVISED -					ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
14	64-IVBR	ST. CLAIR	23	14A
SHEET NO. 100				
15 SHEETS				



DRAIN ADJUSTMENT DETAIL
(At abutts. & pier 3)



DECK REPAIR DETAILS
SPANS 4, 5 & 6
E.A. RTE. 14 SEC. 64-IVBR
ST. CLAIR COUNTY
STA. 218+07.13
AS REVISED 3-28-86 R.E.A.

DESIGNED	James J. Babin
CHECKED	James J. Babin
DRAWN	LH
CHECKED	DLG

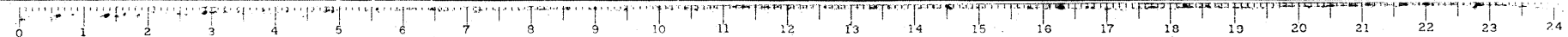
Feb. 4 1985

EXAMINED

PASSED

APPROVED

DIRECTOR OF HIGHWAYS



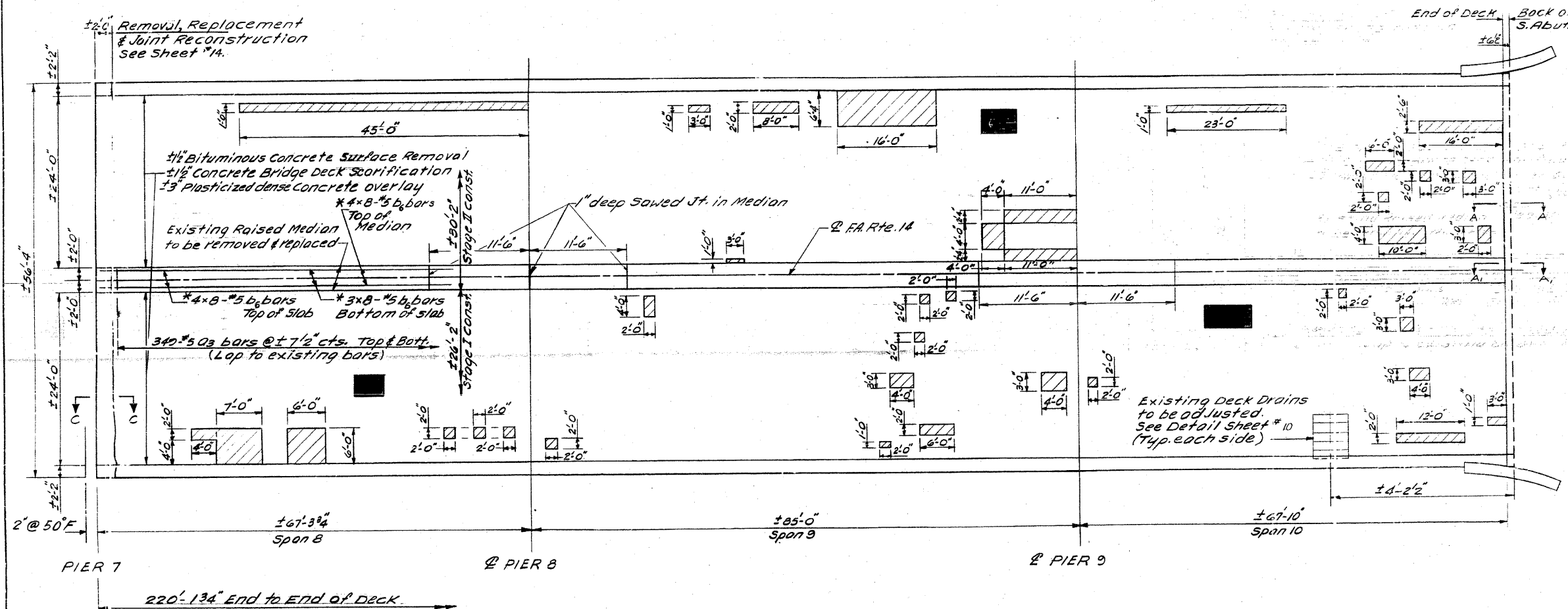
FOR INFORMATION ONLY

FILE NAME =	USER NAME = CFC..	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
... \146-D876882-exist-bridge-repair-plans	6.dgn	DRAWN -	REVISED -					312	64-IVBR	ST. CLAIR	259	146
PLOT SCALE = 40,000,000 ' / IN.		CHECKED -	REVISED -					CONTRACT NO. 76882				
PLOT DATE = 8/5/2010		DATE - / /	REVISED -					ILLINOIS FED. AID PROJECT				

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
14	64-IVB1	ST. CLAIR	259	147
SHEET NO. 11 18 SHEETS				



* For Placement, see Median Replacement Details, sheet #14.

For Sections A-A, A₁-A₁, and notes see sheet #9

DESIGNED *David Balise*
CHECKED *David Balise*
DRAWN *LH*
CHECKED *DG*

EXAMINED *James J. [Signature]*
APPROVED *James J. [Signature]*
DIRECTOR OF HIGHWAYS

Feb. 4, 1985

DECK REPAIR DETAILS
SPANS 8, 9 & 10
FA. RTE. 14 SEC. 64-IVB1
ST. CLAIR COUNTY
STA. 218+07.13



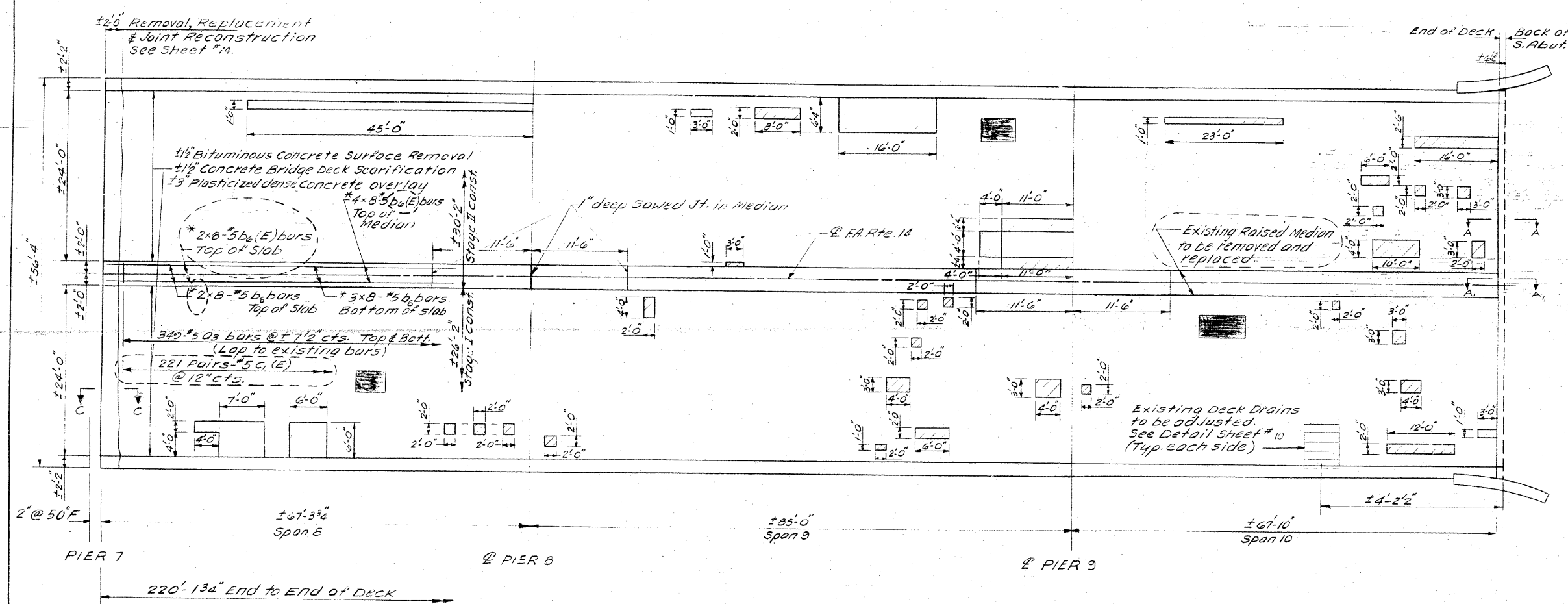
FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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CB JOB NO 09021	PLOT DATE = 8/5/2010	CHECKED -	REVISED -			CONTRACT NO. 76882					
		DATE - / /	REVISED -			ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-IVB1	ST. CLAIR	23	5A	18 SHEETS



* For Placement, see Median Replacement Details sheet #14.

For Sections A-A, A1-A1, and notes see sheet #3

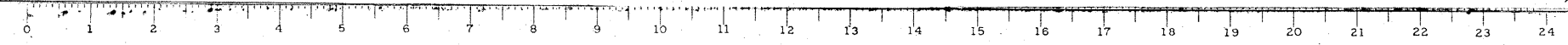
DESIGNED *James J. Heston*
 CHECKED *Lois M. Heston*
 DRAWN *LH*
 CHECKED *DC*

EXAMINED *James J. Heston*
 PROJECTED *James J. Heston*
 APPROVED *James J. Heston*
 DIRECTOR OF HIGHWAYS

Feb 4 1985

DECK REPAIR DETAILS
 SPANS 8, 9 & 10
 F.A. RTE. 14 SEC. 64-IVB1
 ST. CLAIR COUNTY
 STA. 218+07.13

AS REVISL



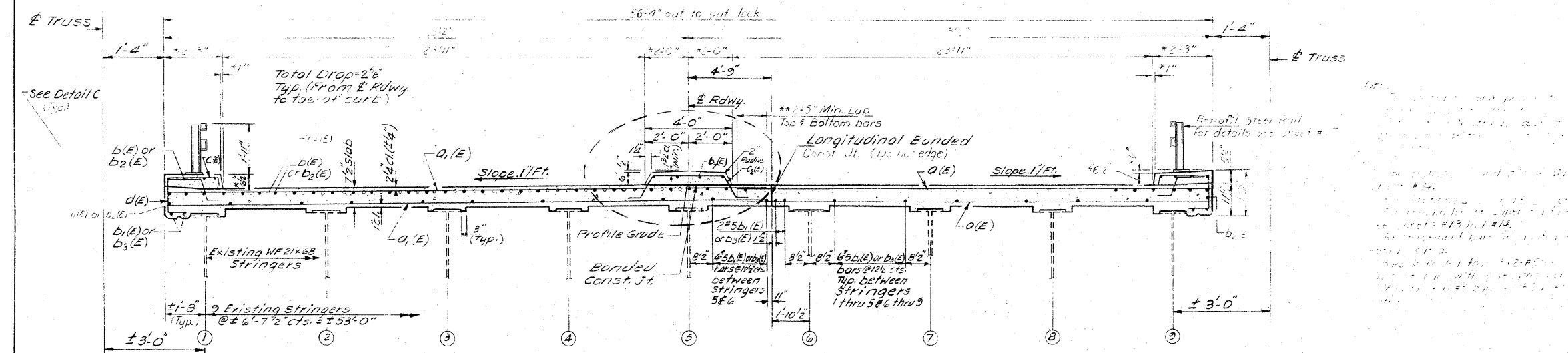
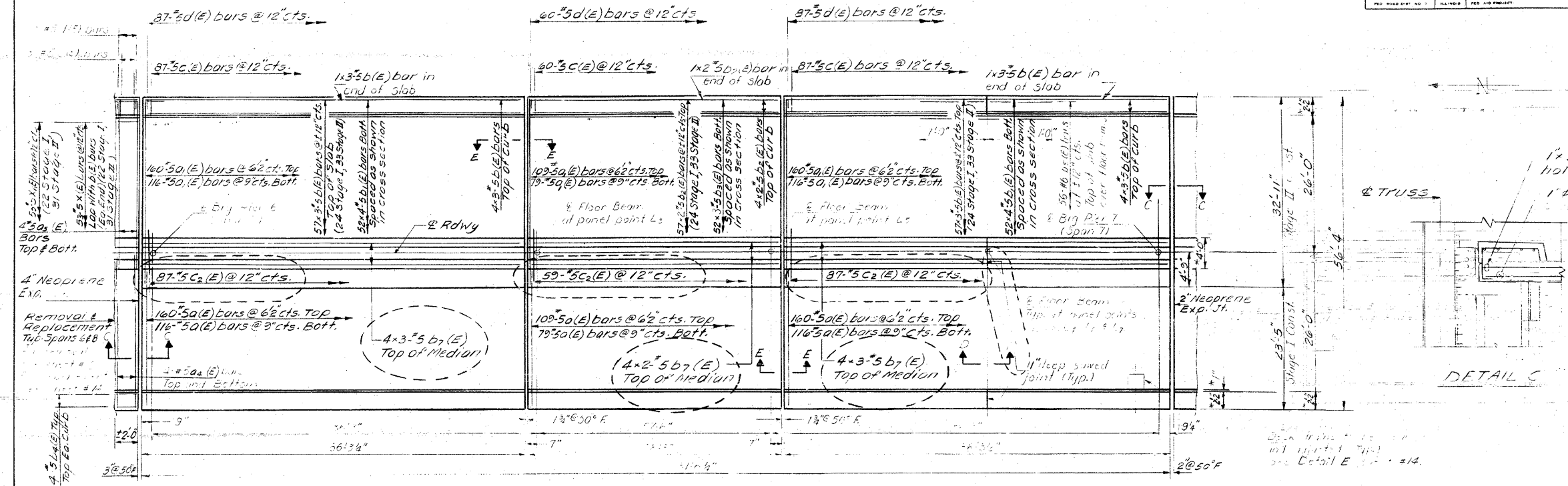
FOR INFORMATION ONLY

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 - LAND SURVEYORS -
 Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
...148-0876882-exist-bridge-repair-plans	8.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	312	64-IVBR	ST. CLAIR	259	148
	PLOT SCALE = 40,000,000 / IN.	CHECKED -	REVISED -		CONTRACT NO. 76882										
CB JOB NO 09021	PLOT DATE = 8/5/2010	DATE - / /	REVISED -		ILLINOIS FED. AID PROJECT										

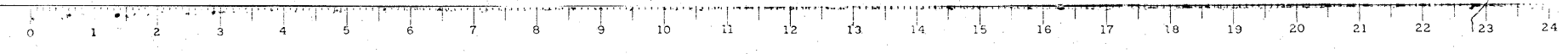
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-1VBR	ST. CLAIR	23	150	13



DESIGNED	Feb 4, 1987
CHECKED	James J. Rayburn
DRAWN	L.H.
CHECKED	J.C.

SUPERSTRUCTURE
SPAN 7
FA.RTE.14 SEC.64-1VBR
ST. CLAIR COUNTY
STA.281+07.13



FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REVISED NO.	SECTION	SHEET	TOTAL SHEETS	SHEET NO.
1	64-1VBR	ST. CLAIR	259	151
SHEET NO. 13 18 SHEETS				

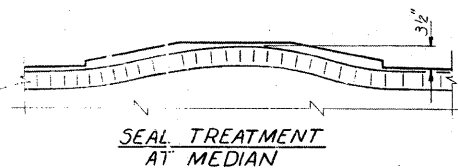
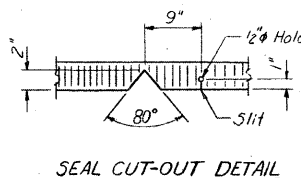
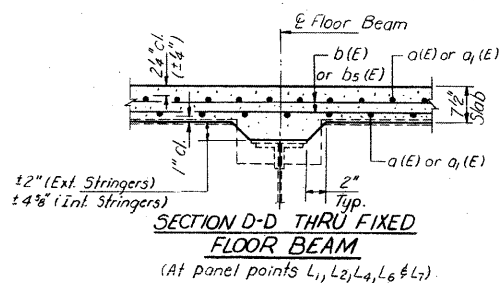
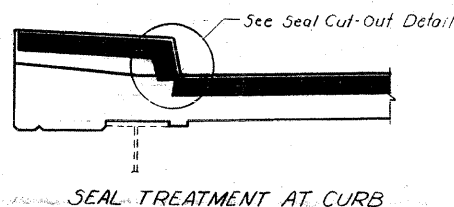
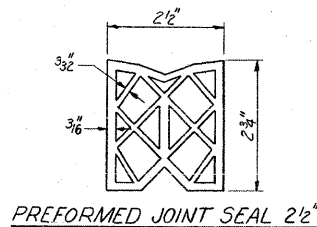
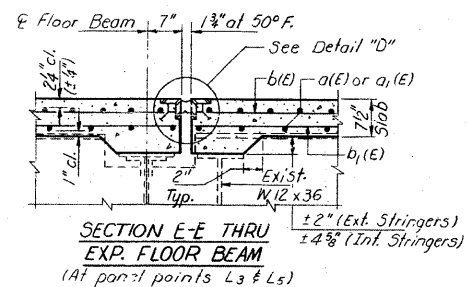
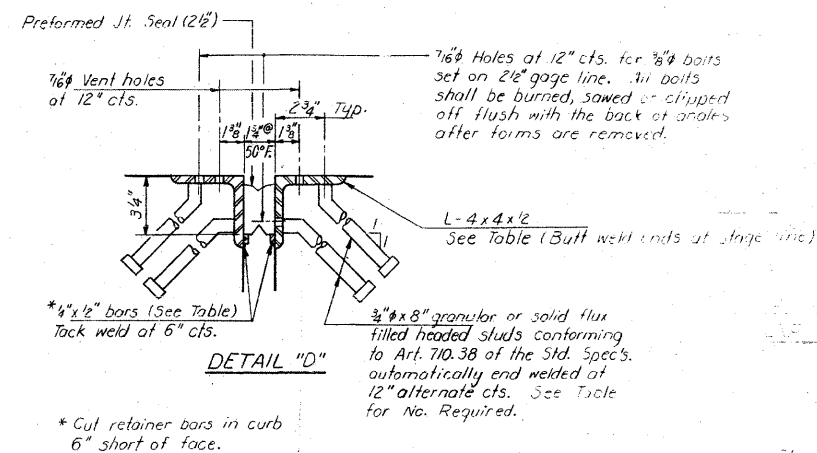


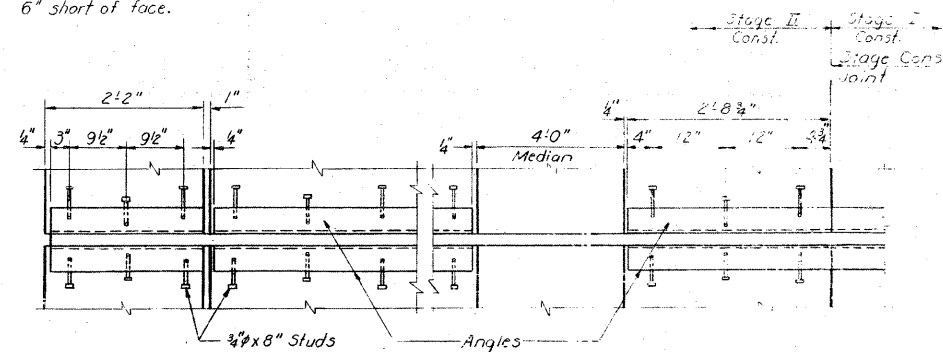
TABLE OF ANGLE AND BAR LENGTHS & NO. STUDS

Location	Stage I			Stage II (No. Bd. Lanes)			Stage II (So. Bd. Lanes)		
	Angle	Bars	No. Studs	Angle	Bars	No. Studs	Angle	Bars	No. Studs
Rdwy. (Sp. 11/10)	23°10'2"	48	48	23°10'2"	48	48			
Curbs	** 2°13'3"	** 17 3/4"	18	** 2°13'3"	** 17 3/4"	18			
Rdwy. (Span 7)	21°13'4"	21°13'4"	84	23°10'2"	23°10'2"	96	2°13'3"	2°13'3"	12

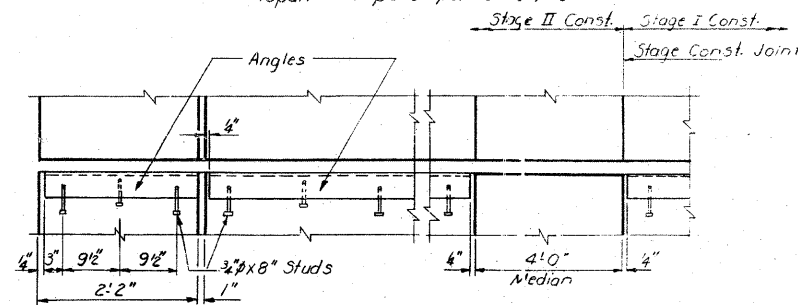
** Typical All.
*** Span 7 Only.



* Cut retainer bars in curb 6" short of face.



PLAN-EXPANSION JOINT
(Span 7 at panel points L₃ & L₅)

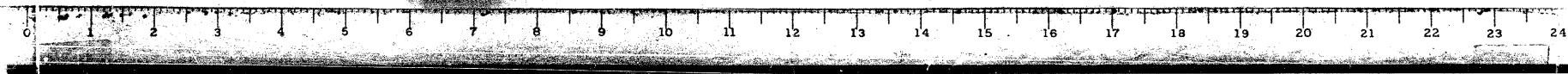


PLAN-RETAINER ANGLE
(In end of slab at abutments)

SUPERSTRUCTURE DETAILS
F.A. RT. 14 SEC. 64-1VBR
ST. CLAIR COUNTY
STA. 281+07.13

DESIGNED: *James Z. Robinson*
CHECKED: *James Z. Robinson*
DRAWN: *R. Doly*
CHECKED: *D.G.*

Feb. 4 1987
EXAMINED: *James Z. Robinson*
APPROVED: *James Z. Robinson*
DIRECTOR OF HIGHWAYS



FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
114	64-IVBR	ST. CLAIR	23	17a
SHEET NO. 130 18 SHEETS				

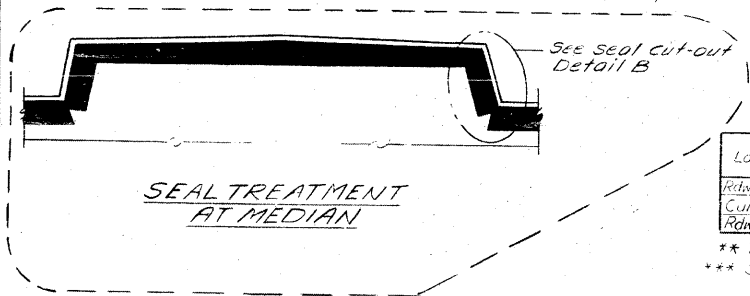
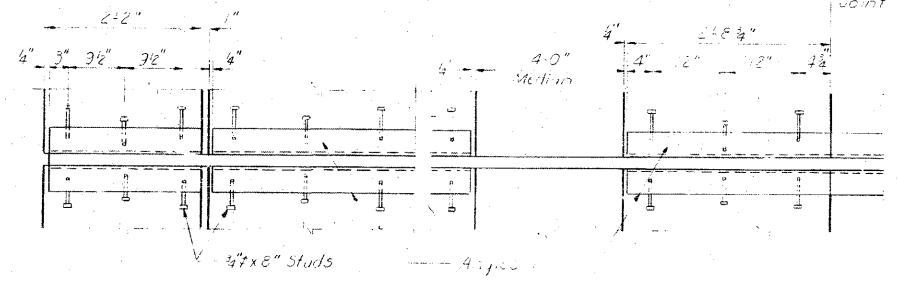
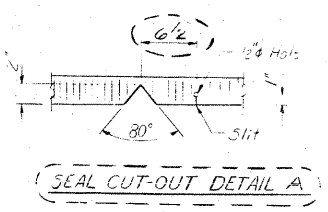
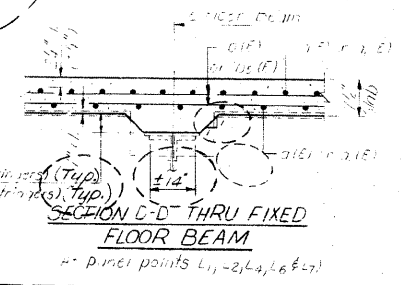
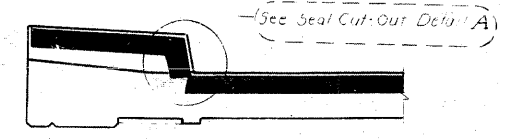
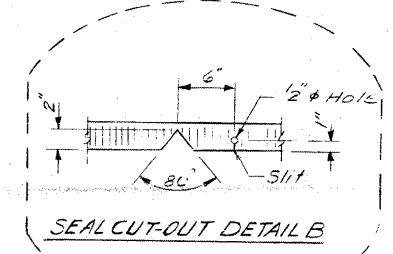
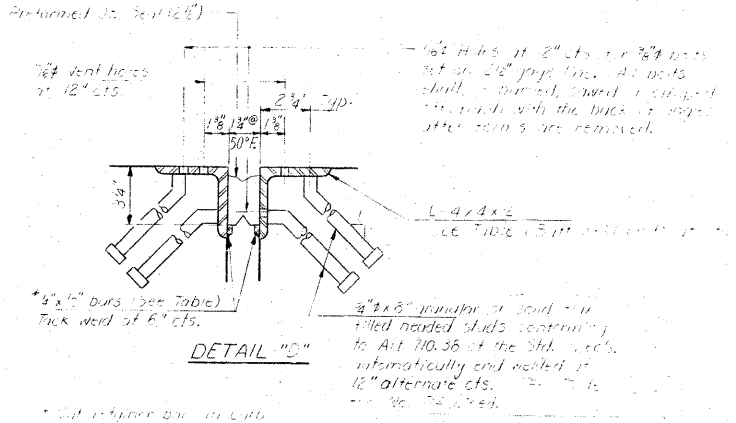
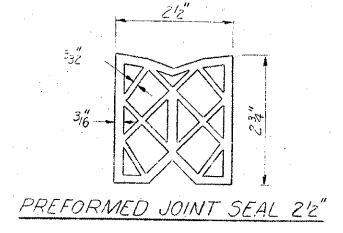
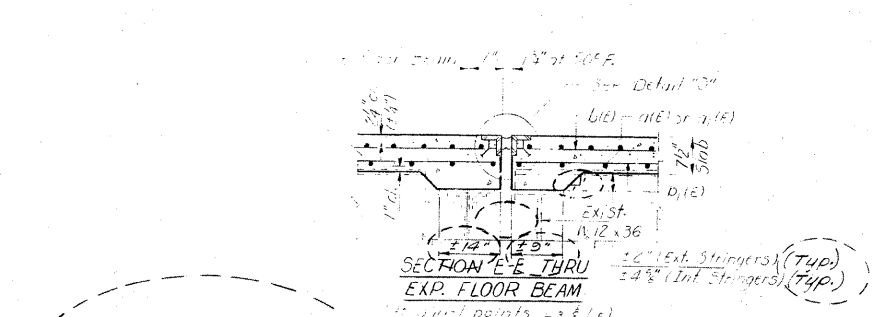
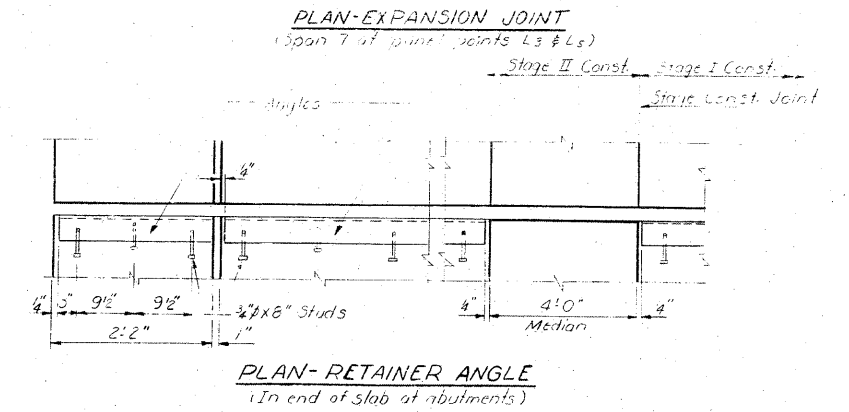


TABLE OF ANGLE AND BAR LENGTHS & NO. STUDS

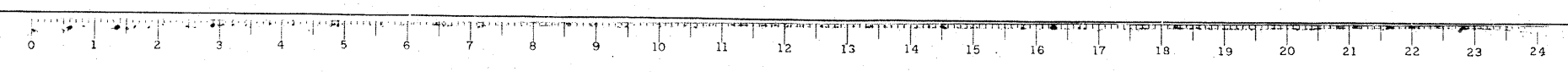
Location	Angle	Stage II (No. Bd. Lanes)	
		Bars	No. Studs
Rdwy. (Spn. 11)	23°10'	48	48
Curbs	**21°13'	18	**17
Rdwy. (Spn. 7)	21°13'	84	23°10' 23°10' 96 2'8 3/4" 2'8 3/4" 12

** Typical All
*** Span 7 Only.



DESIGNED: *[Signature]*
 CHECKED: *[Signature]*
 DRAWN: R. Doly
 CHECKED: D.G.

EXAMINED: *[Signature]*
 PASSED: *[Signature]*
 APPROVED: *[Signature]*
 DIRECTOR OF HIGHWAYS



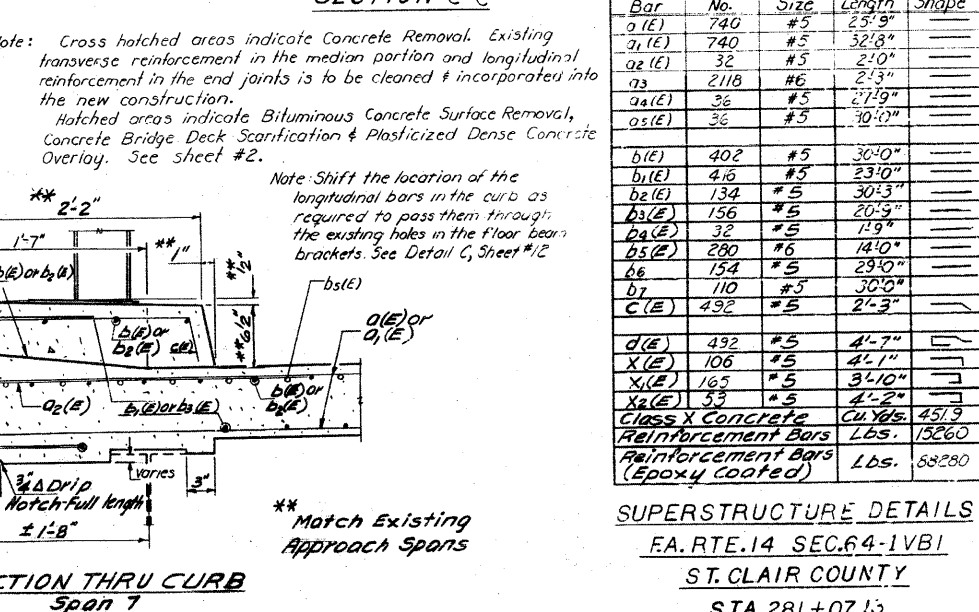
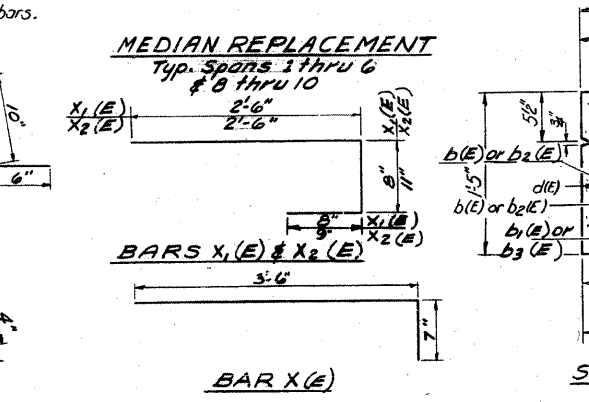
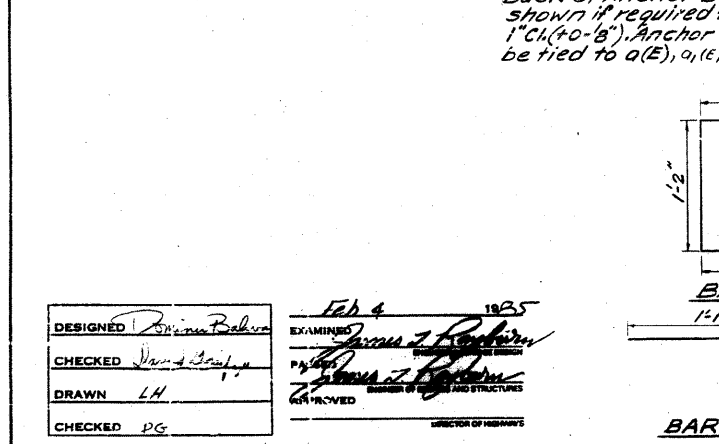
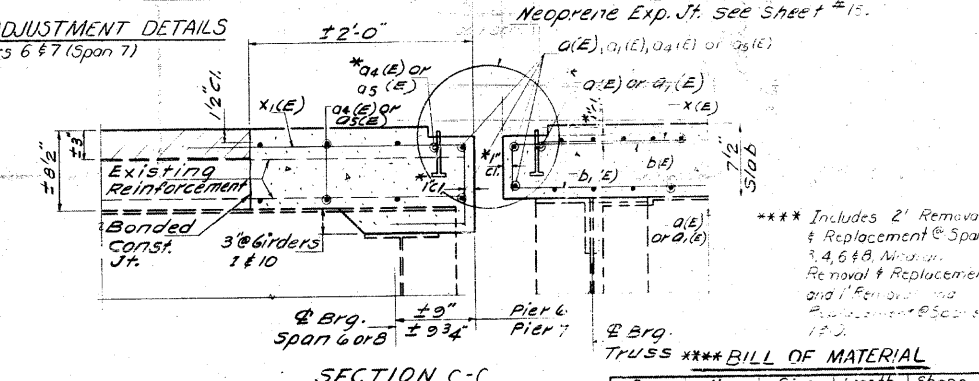
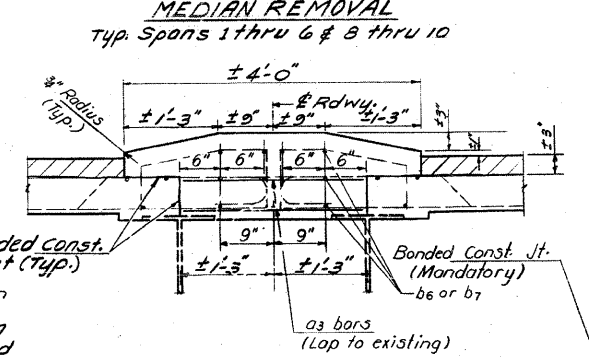
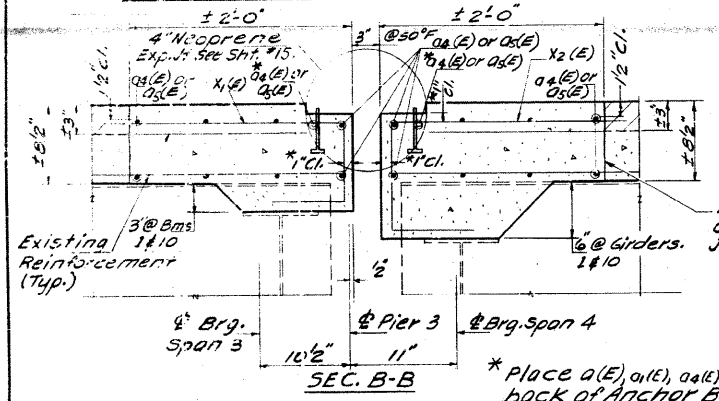
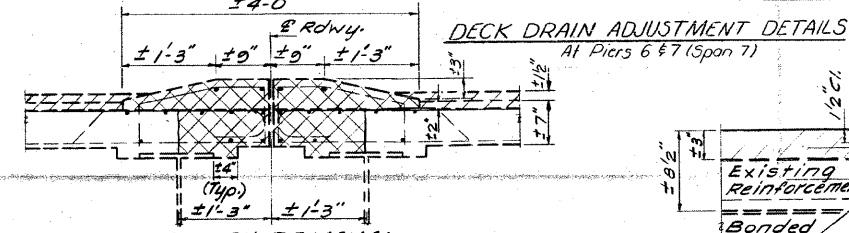
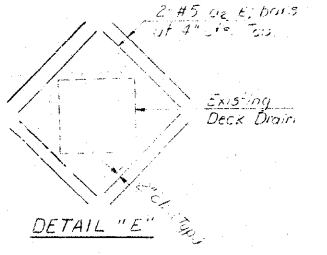
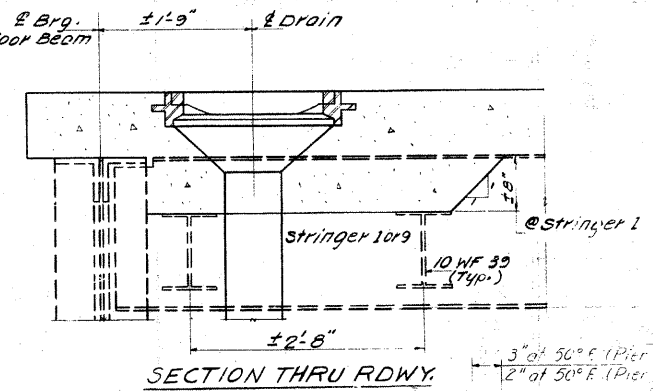
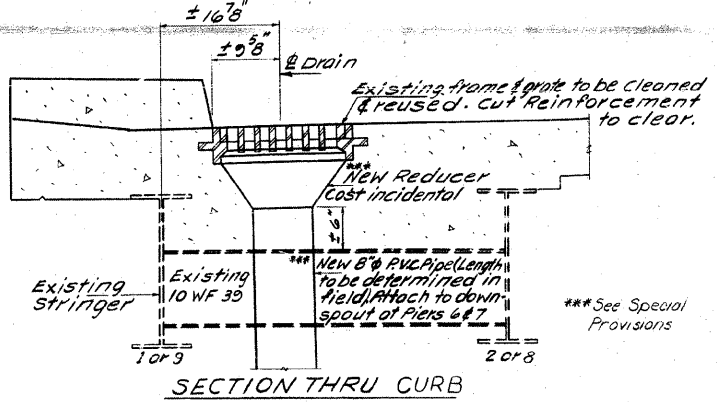
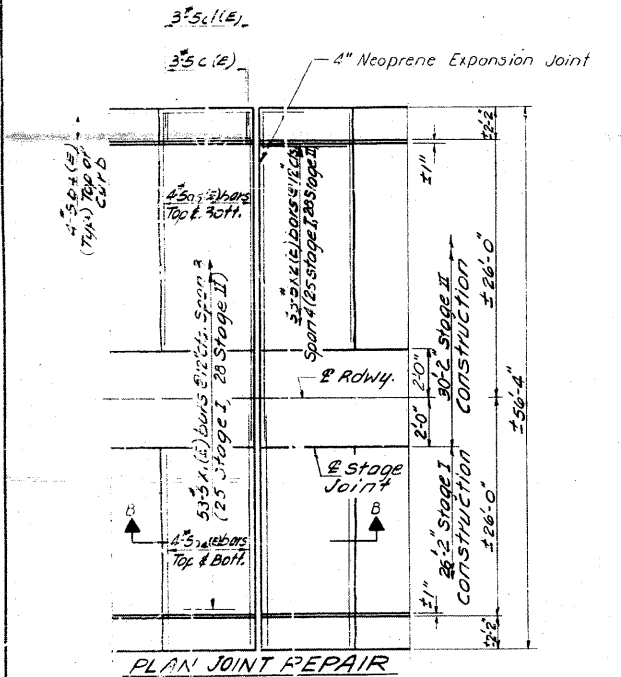
FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
 - CIVIL ENGINEERS -
 - STRUCTURAL ENGINEERS -
 - LAND SURVEYORS -
 Design Firm License No. 184-002703

FILE NAME = ...152-0876882-exist-bridge-repair-plans-22.dgn	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	F.A.P. RTE. 312	SECTION 64-IVBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 152		
PLOT SCALE = 40.000000' / 1"	PLOT DATE = 8/5/2010	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 76882				
CB JOB NO 09021		CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						
		DATE - / /	REVISED -									

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64-1VBR	ST. CLAIR	25	18
SHEET NO. 14			18 SHEETS



*** Includes 2' Removal & Replacement @ Spans 3, 4, 6 & 8. Includes Removal & Replacement and Reinforcement @ Spans 1 & 2.

*** BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	740	#5	23'9"	
a1(E)	740	#5	32'3"	
a2(E)	32	#5	2'10"	
a3	211B	#6	2'3"	
a4(E)	36	#5	2'19"	
a5(E)	36	#5	10'11"	
b(E)	402	#5	30'10"	
b1(E)	416	#5	23'10"	
b2(E)	134	#5	30'3"	
b3(E)	156	#5	20'9"	
b4(E)	32	#5	1'9"	
b5(E)	280	#6	14'0"	
b6	154	#5	29'10"	
b7	110	#5	30'10"	
C(E)	432	#5	2'3"	
d(E)	492	#5	4'7"	
X(E)	106	#5	4'11"	
X1(E)	165	#5	3'10"	
X2(E)	53	#5	4'2"	
Class X Concrete Cu. Yds.				451.9
Reinforcement Bars Lbs.				15260
Reinforcement Bars (Epoxy Coated) Lbs.				58280

SUPERSTRUCTURE DETAILS
FA. RTE. 14 SEC. 64-1VBR
ST. CLAIR COUNTY
STA. 281+07.13

DESIGNED: *James J. Robinson*
CHECKED: *James J. Robinson*
DRAWN: LH
CHECKED: PG

EXAMINED: *James J. Robinson*
DATE: Feb 4, 1985

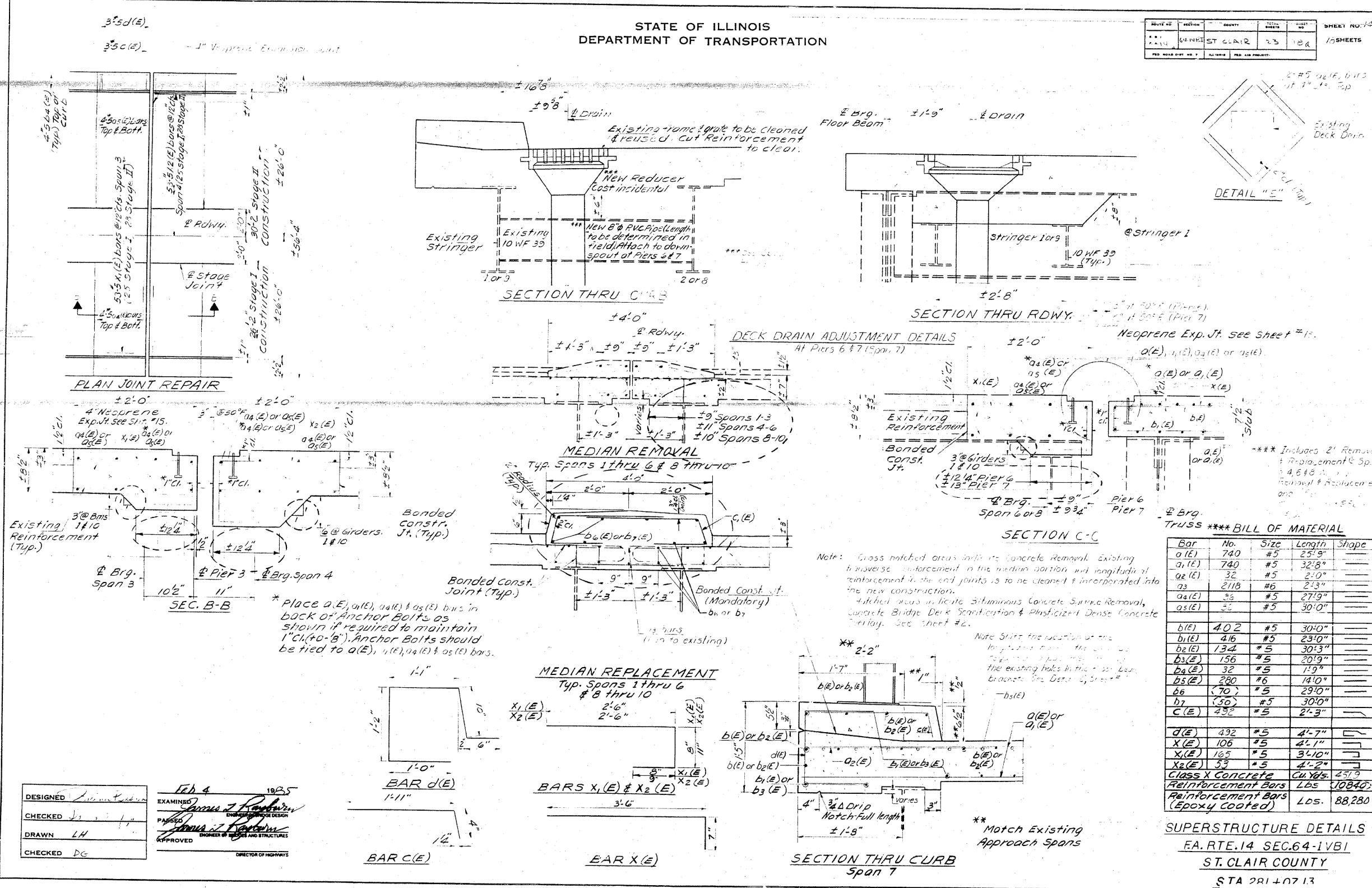


FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-IVBR	ST. CLAIR	259	154
SHEET NO. 149				
105 SHEETS				



DESIGNED: [Signature]
CHECKED: [Signature]
DRAWN: LH
CHECKED: DG

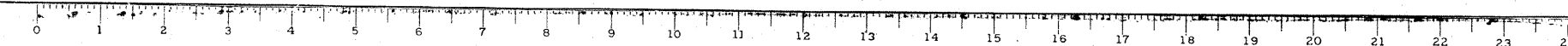
EXAMINED: [Signature]
APPROVED: [Signature]
DIRECTOR OF HIGHWAYS

Feb 4 1985

*** BILL OF MATERIAL ***

Bar	No.	Size	Length	Shape
a1(E)	740	#5	25'-9"	
a1(E)	740	#5	32'-8"	
a2(E)	32	#5	2'-0"	
a3	2118	#6	2'-3"	
a4(E)	32	#5	27'-9"	
a5(E)	32	#5	30'-0"	
b1(E)	402	#5	30'-0"	
b1(E)	416	#5	23'-0"	
b2(E)	134	#5	30'-3"	
b3(E)	156	#5	20'-9"	
b4(E)	32	#5	1'-9"	
b5(E)	280	#6	14'-0"	
b6	70	#5	29'-0"	
b7	150	#5	30'-0"	
C(E)	492	#5	2'-3"	
d(E)	492	#5	4'-7"	
X(E)	106	#5	4'-1"	
X1(E)	165	#5	3'-10"	
X2(E)	53	#5	4'-2"	
Class X Concrete		Cu Yds.	457.9	
Reinforcement Bars		Lbs.	10840	
Reinforcement Bars (Epoxy Coated)		Lbs.	88280	

SUPERSTRUCTURE DETAILS
FA. RTE. 14 SEC. 64-1VBI
ST. CLAIR COUNTY
STA 281+07.13
AS



FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME = ...154-0876882-exist-bridge-repair-plans-24.dgn	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	F.A.P. RTE. 312	SECTION 64-IVBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 154	
PLOT SCALE = 40.000000' / IN.	PLOT DATE = 8/5/2018	DRAWN -	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				
DATE - / /	DATE - / /	CHECKED -	REVISED -								

DATE	NO.	BY	REVISED	SHEET NO.
11/14	14	WINST. CLAIR	23	19
				18 SHEETS

Joint Size	"C" at 50°F (D)	"C" at 50°F
2"	2"	1 1/2" Min.
2 1/2"	2 1/2"	2 1/2" Min.
4"	3"	1 1/2" Min.

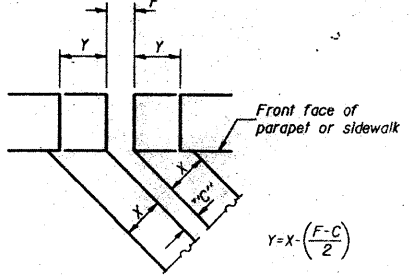
INSTALLATION NOTES

1. Install sponge mandrels in positions shown to form flap convolution.
2. Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
3. Install continuous seal in roadway.
4. Install anchor blocks as indicated.

NOTE A: Maximum spacing of anchor bolts shall be 12" centers.

SKEW LIMITATIONS

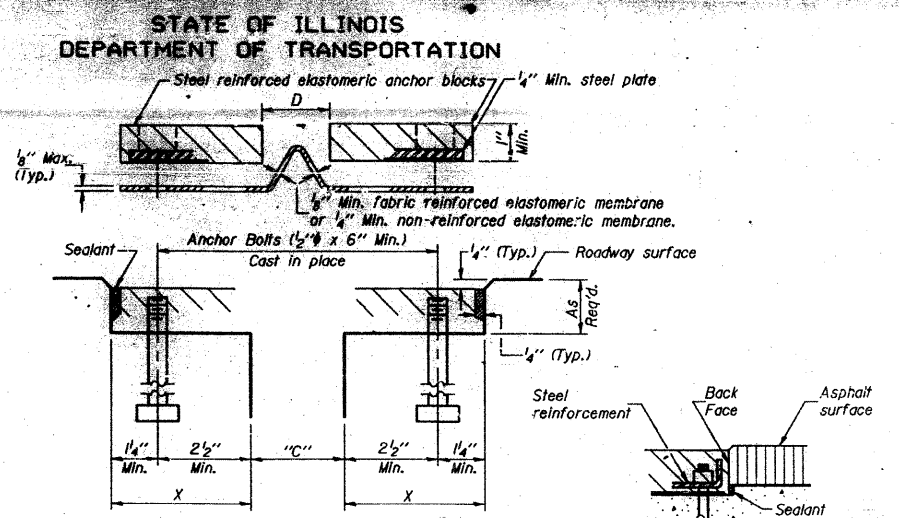
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skew. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at 12" cts.



$$Y = X \cdot \left(\frac{F-C}{2} \right)$$

For dimension "F" see sheet #12.

FORMING BLOCKOUT SKETCH

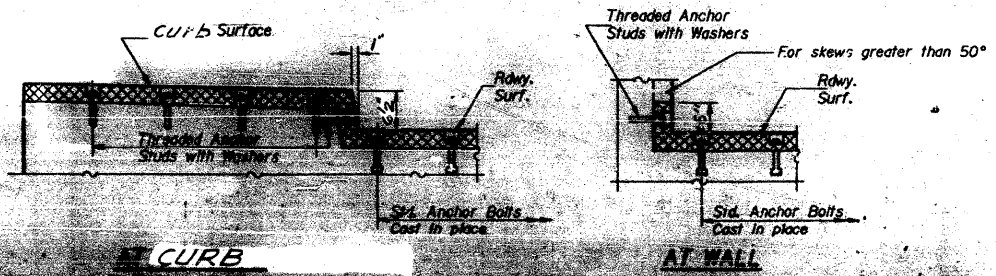
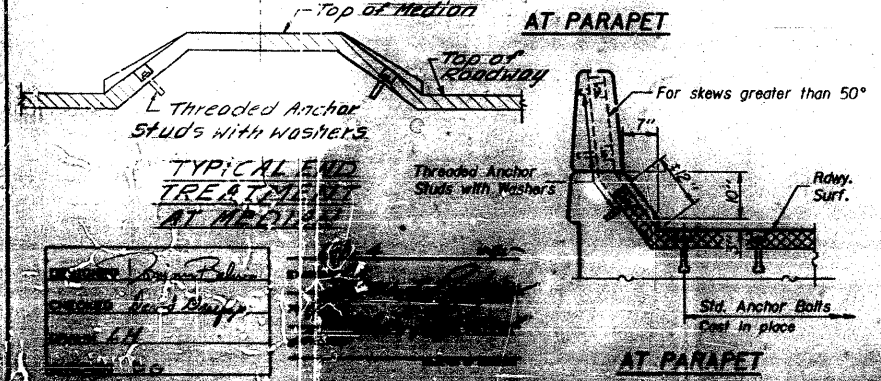
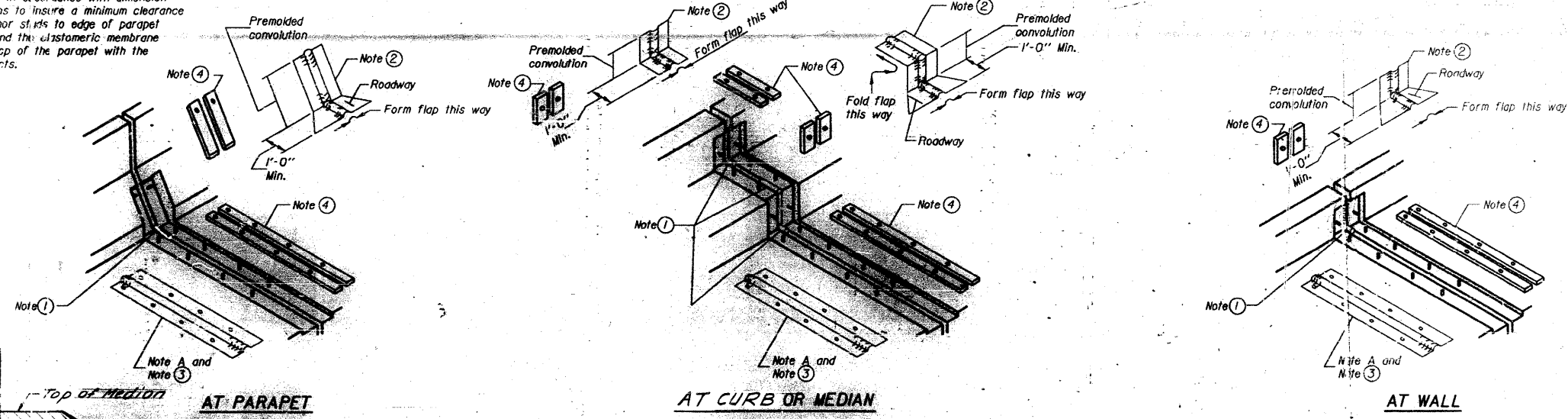


CROSS SECTION

ANCHOR BLOCK REINFORCEMENT WITH ASPHALT SURFACE

GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions. The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure. The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete breakout. The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed. Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F. The parapet and curb flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.



CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS
For 2", 2 1/2" and 4" Movement
EA. RTE. 14 SEC. 64-1VB1
ST. CLAIR COUNTY
STA. 218+07.13

FOR INFORMATION ONLY

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	SCALE: SHEET NO. OF SHEETS STA. TO STA.	F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
...1155-0876882-exist-bridge-repair-plans-25.dgn	PLOT SCALE = 40,000,000 // IN.	DRAWN -	REVISED -				312	64-1VBR	ST. CLAIR	259	155
PLOT DATE = 8/5/2010	DATE - / /	CHECKED -	REVISED -				CONTRACT NO. 76882				
CB JOB NO 09021		REVISOR -	REVISED -				ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
14	64-1VBR	ST. CLAIR	25	156
SHEET NO. 156				

Joint Size	1/2"	2"	4"
2"	2"	2"	2"
2 1/2"	2 1/2"	3 1/2"	3 1/2"
4"	3"	2 1/2"	2 1/2"

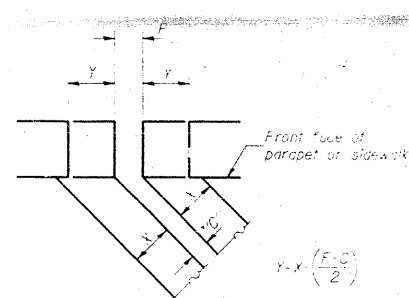
INSTALLATION NOTES

1. Install sponge mastic into position against form flap convolution.
2. Install parapet or sidewalk form with roadway top to fit before applying sealant.
3. Install continuous seal in roadway.
4. Install anchor bolts as indicated.

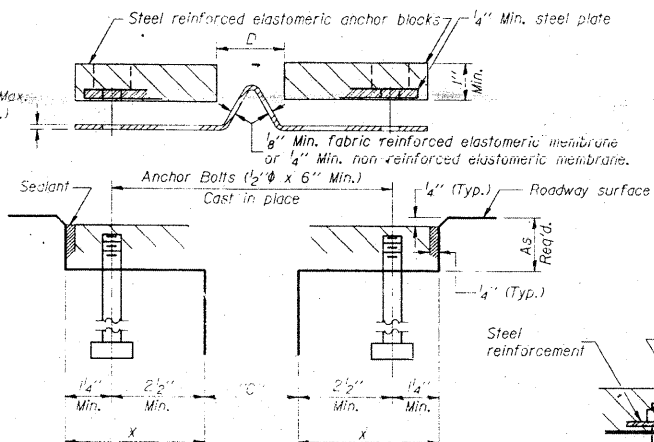
NOTE A: Maximum spacing of anchor bolts shall be 2' centers.

SKEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skew. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimensions 'D', might require modifications to insure a full seal at the opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at 12" c/c's.

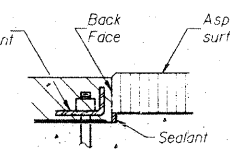


FORMING BLOCKOUT SKETCH



CROSS SECTION

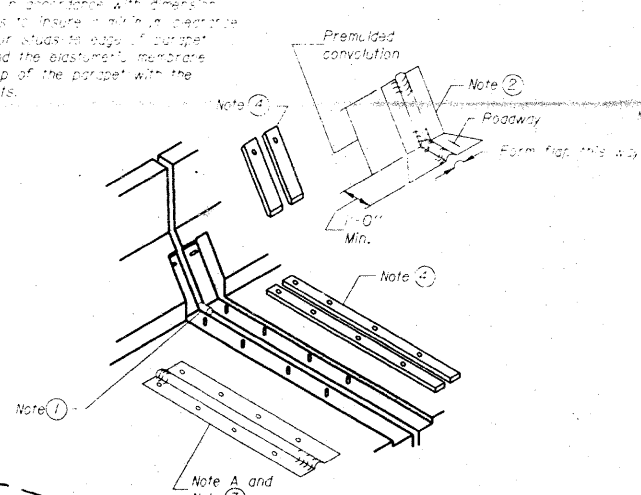
ANCHOR BLOCK REINFORCEMENT WITH ASPHALT SURFACE



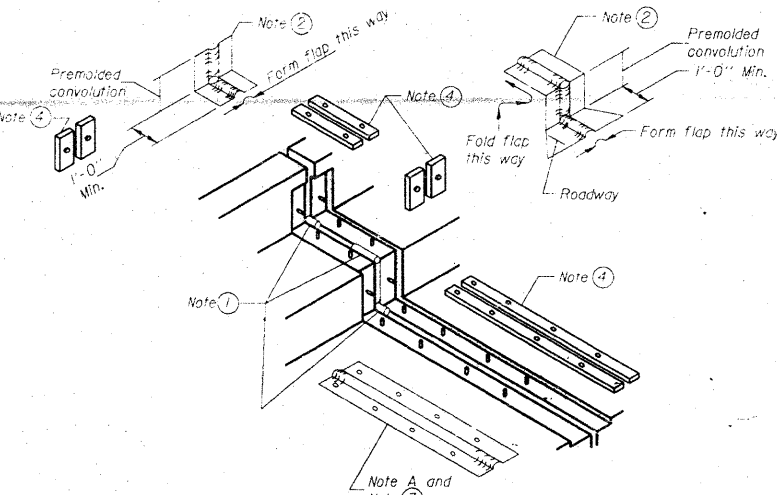
GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions.
The elastomeric membrane shall be pre-molded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.
The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.
The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.
Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.
The parapet and curb flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.

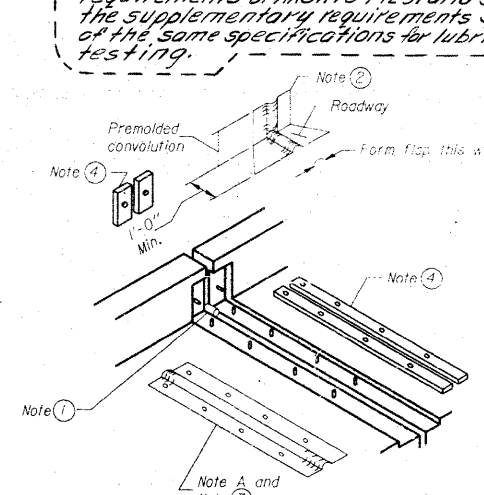
Anchor bolts, washers and nuts, to be plated against corrosion in accordance with the special provisions, shall be zinc-coated by the mechanical plating method conforming to ASTM B695, Class 50, zinc-coated nuts shall be tapered oversize in accordance with the requirements of AASHTO M291 and shall meet the supplementary requirements S1.1 thru S12.1 of the same specifications for lubricant and testing.



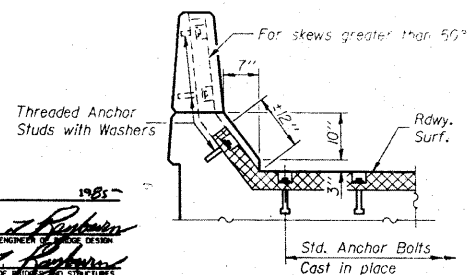
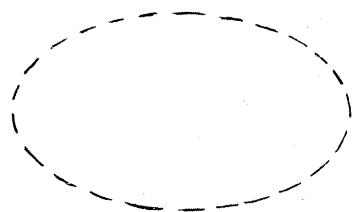
AT PARAPET



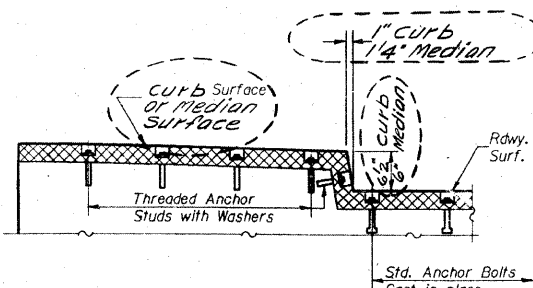
AT CURB OR MEDIAN



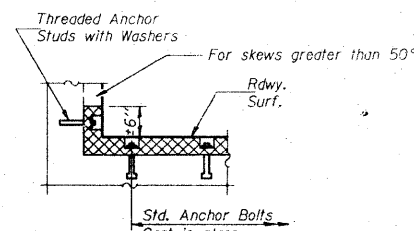
AT WALL



AT PARAPET



**AT CURB OR MEDIAN
TYPICAL END TREATMENTS**



AT WALL

**CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS**
For 2", 2 1/2" and 4" Movement
FA. RTE. 14 SEC. 64-1VBI
ST. CLAIR COUNTY
STA. 218+07.13

AS REVISED 3-28-86 R.E.A.

DESIGNED: Jim P. ...
CHECKED: ...
DRAWN: LH
CHECKED: DG
EJ-CS 12-1-83

EXAMINER: James J. ...
PASSED: ...
APPROVED: ...
DIRECTOR OF HIGHWAYS



FOR INFORMATION ONLY

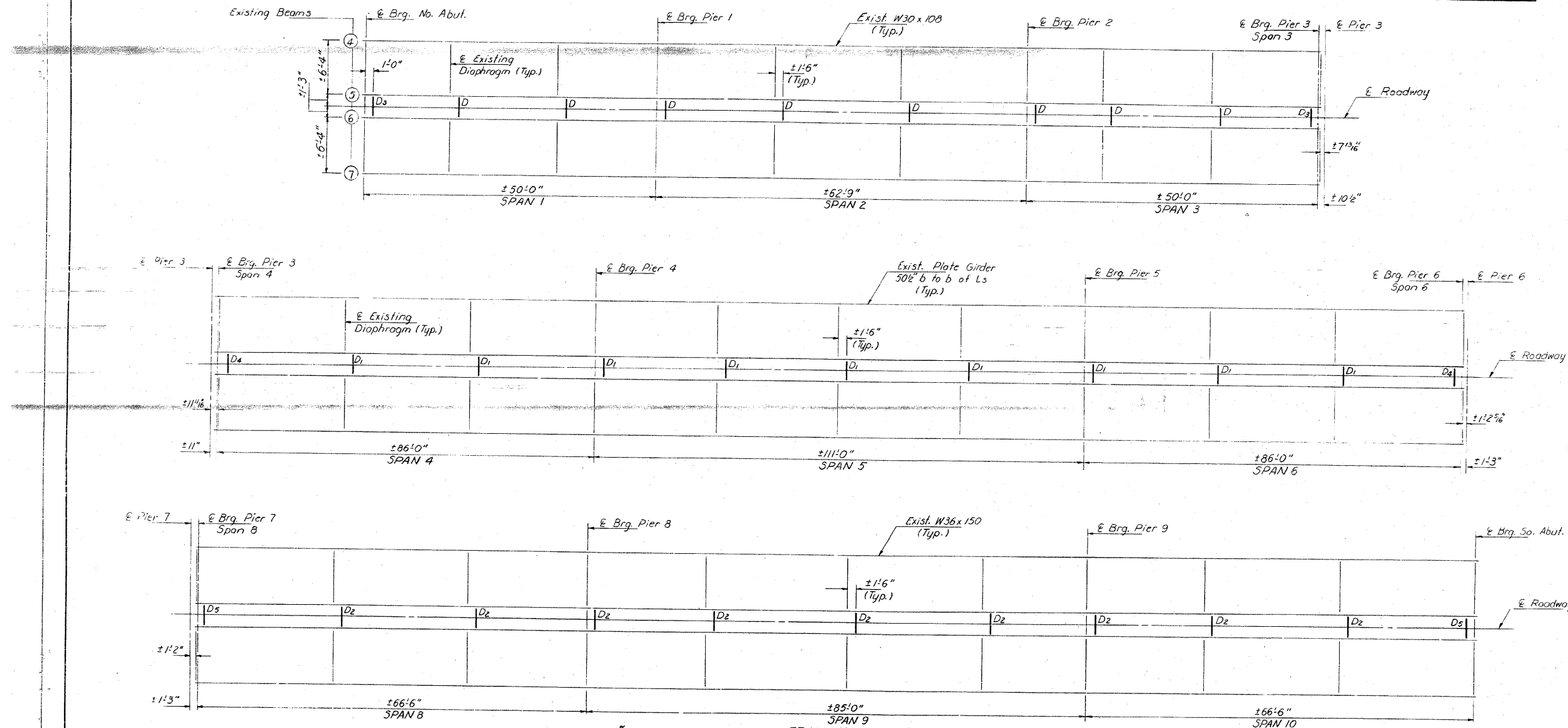
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CB JOB NO 09021	PLOT DATE = 8/5/2010	CHECKED -	REVISED -						
		DATE - / /	REVISED -						

CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-1VBR	ST. CLAIR	259	156
CONTRACT NO. 76882				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
14	64-IVBR	ST. CLAIR	259	157
SHEET NO. 16				
18 SHEETS				

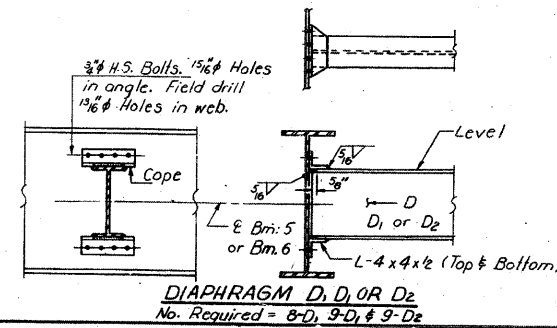


FRAMING PLAN

DESIGNED: *James Balcer*
CHECKED: *David Dwyer*
DRAWN: *R. Doty*
CHECKED: *D.G.*

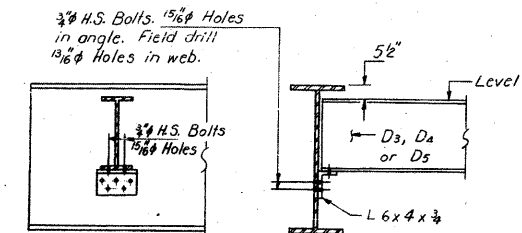
EXAMINED: *James J. Rappan*
APPROVED: *James J. Rappan*
DIRECTOR OF HIGHWAYS

Feb. 4 1981



Note: Hardened washers shall be required over all 1 5/8" holes.

D or D₃ = W10 x 26
D₁ or D₄ = W8 x 35
D₂ or D₅ = W12 x 35



STRUCTURAL STEEL DETAILS
SPANS 1 THRU 6 AND 8 THRU 10
F.A. RT. 14 SEC. 64-IVBI
ST. CLAIR COUNTY
STA. 281+07.13

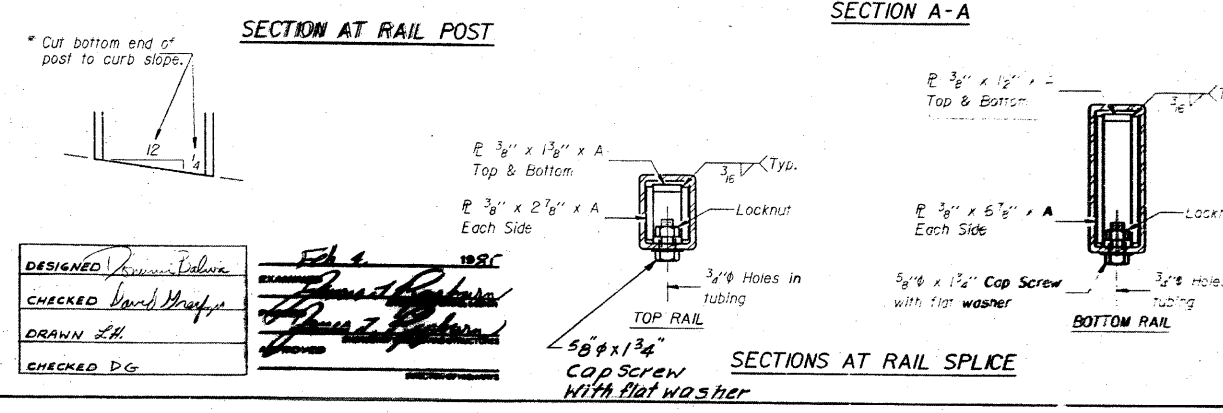
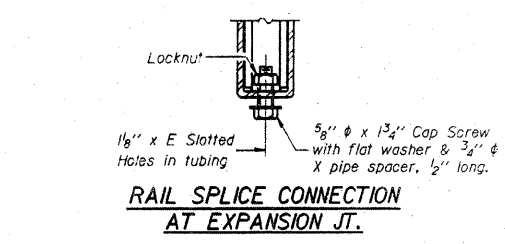
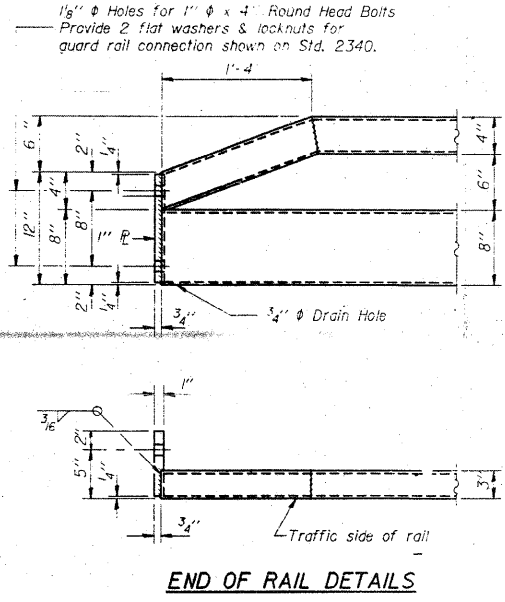
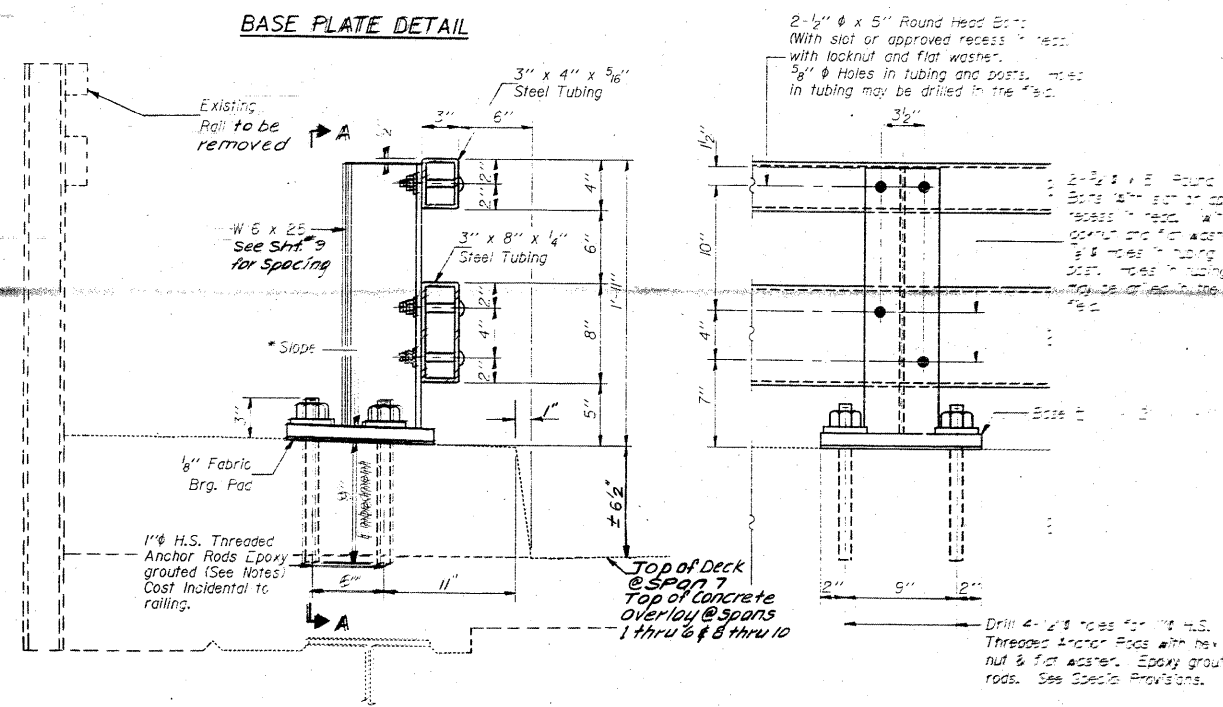
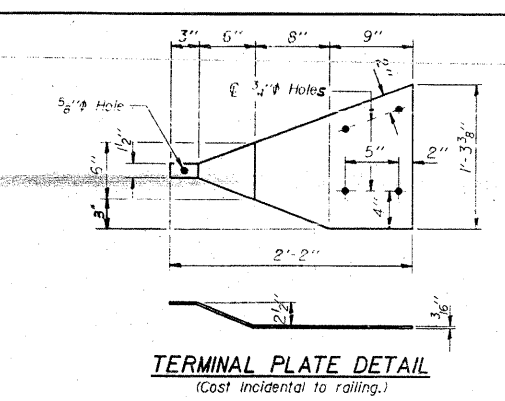
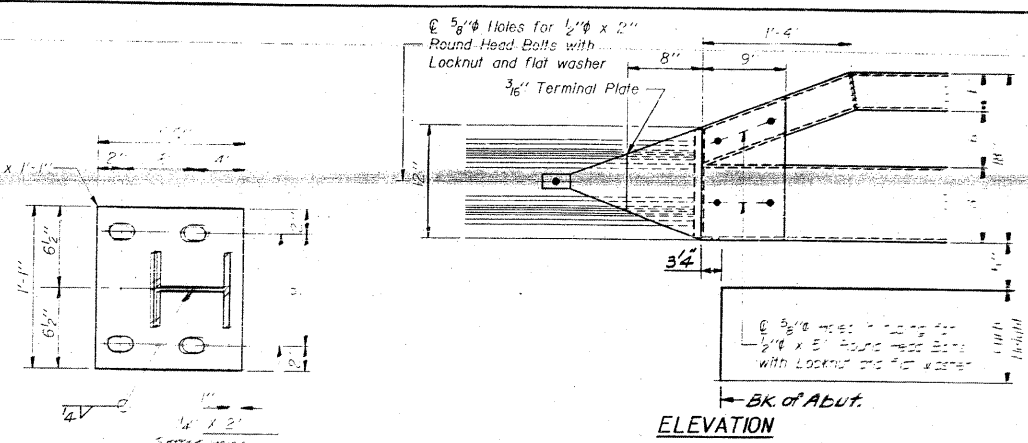
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- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME = ...157-0876882-exist-bridge-repair-plans-27.dgn	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (REHABILITATION PLANS)	F.A.P. RTE. 312	SECTION 64-IVBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 157		
PLOT SCALE = 40,000,000 / 1 IN.	DATE - / /	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 76882				
PLOT DATE = 8/5/2010	DATE - / /	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT						
CB JOB NO 09021	DATE - / /	CHECKED -	REVISED -									

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500, Grade B, Structural Steel Tubing.
 All other steel shapes and plates shall conform to the requirements of AASHTO M-183 except posts shall conform to AASHTO M-223, Grade 50.
 Bolts, cap screws and nuts shall conform to the requirements of ASTM designation A-307 except that threaded rods, nuts and washers shall conform to AASHTO M-164.
 All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with AASHTO M-232.
 All posts, railing, rail splices and anchor rods shall be galvanized after shop fabrication in accordance with AASHTO M-111 and ASTM A-385. Galvanized rail shall not be painted.
 Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lined foot for STEEL RAIL RETROFIT.
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
 STEEL RAIL RETROFIT expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
 Provide one 1/2" and two 1/4" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
 Expansion joint width shall be "D" at 50° F and shall be adjusted for other temperatures according to Article 503.07(c) of the Standard Specifications.
 The Contractor shall load test 5% of the 1" diameter threaded anchor rods in the presence of the Engineer. The equipment and method used shall meet the approval of the Engineer. Pull out load shall be 16,500 lbs. per rod after epoxy has set. For each anchor that fails the test, two (2) more anchors, selected by the Engineer, shall be tested. Each anchor that fails shall be reset in epoxy and retested until it passes the test. (See Bridge Special Provision for Epoxy Grouting of Anchor Rods and Bolts.)
 Nuts for 1" threaded rods connecting the base plate to the concrete shall be tightened to a snug fit and given an additional 1/2 turn.



BILL OF MATERIAL

Item	Unit	Quantity
Steel Rail Retrofit	Lin. Ft.	1807

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 1/2"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

STEEL RAIL RETROFIT
 FA. RTE. 14 SEC. 64 1VBI
 ST. CLAIR COUNTY
 STA. 281+07.13

DESIGNED: *Ramon Balboa*
 CHECKED: *David Drapala*
 DRAWN: *L.H.*
 CHECKED: *D.G.*

Feb 4 2010
[Signatures]

FOR INFORMATION ONLY

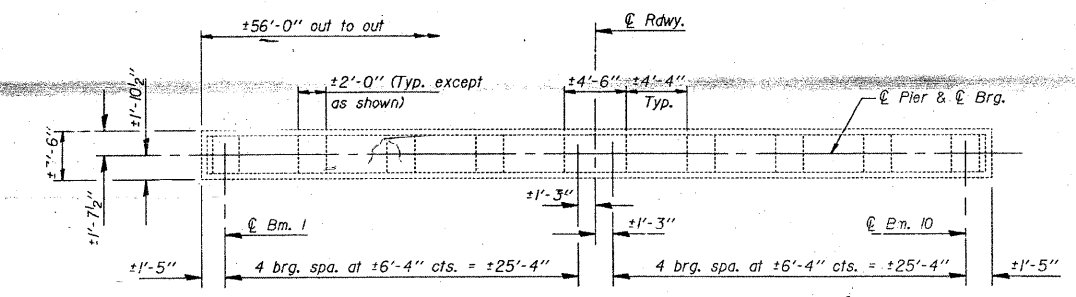
CB Coombe-Bloxdorf P.C.
 - CIVIL ENGINEERS -
 - STRUCTURAL ENGINEERS -
 - LAND SURVEYORS -
 Design Firm License No. 184-002703

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PLOT SCALE = 40.000000' / IN.	CHECKED -	REVISED -	SCALE:			SHEET NO. OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 8/5/2010	DATE - / /	REVISED -								
CB JOB NO 09021										

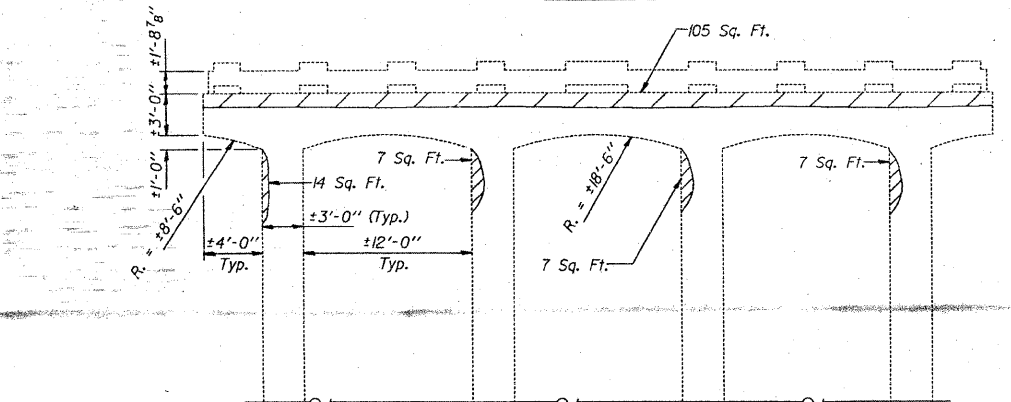
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
64-IVBR	ST. CLAIR	23	22	18 SHEETS

EXISTING
11 3-DNB

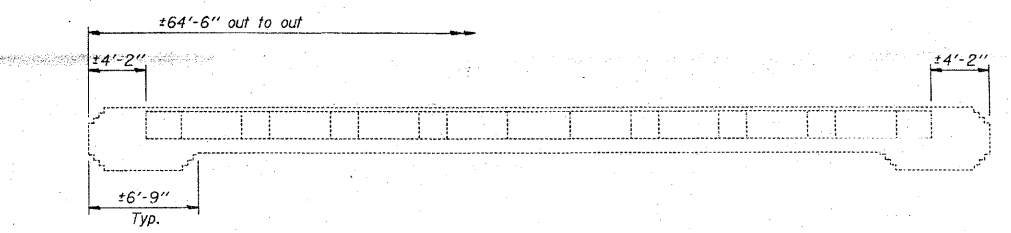


TOP PLAN

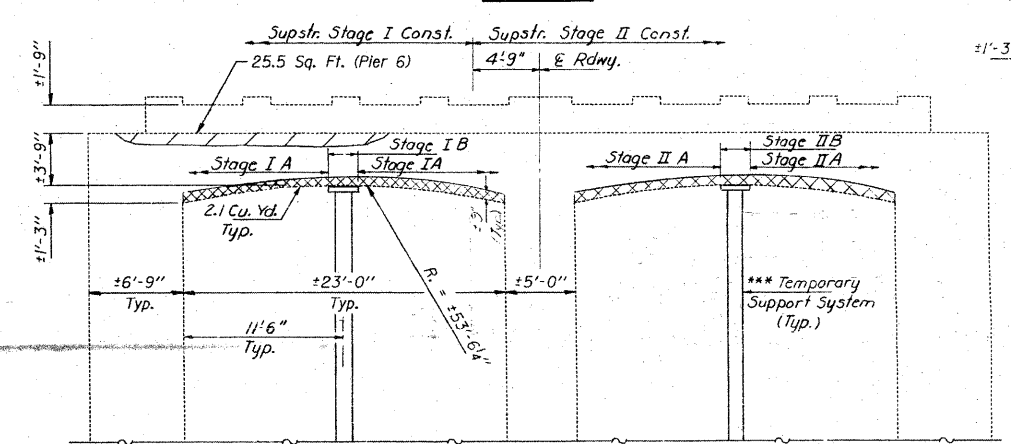


ELEVATION-PIER 3
(Looking North)

END VIEW



TOP PLAN



ELEVATION-PIER 6 & PIER 7
(Looking North)

END VIEW

Note: Remove ±9" of deteriorated concrete from bottom of caps at Piers 6 and 7. Clean exposed reinforcement bars and pour new Class X Concrete. Stage IA and IB are to be done during superstructure Stage I Construction. IA to be done first and IB to be done second. Stage IIA and IIB are to be done during superstructure Stage II Construction. IIA to be done first and IIB to be done second.

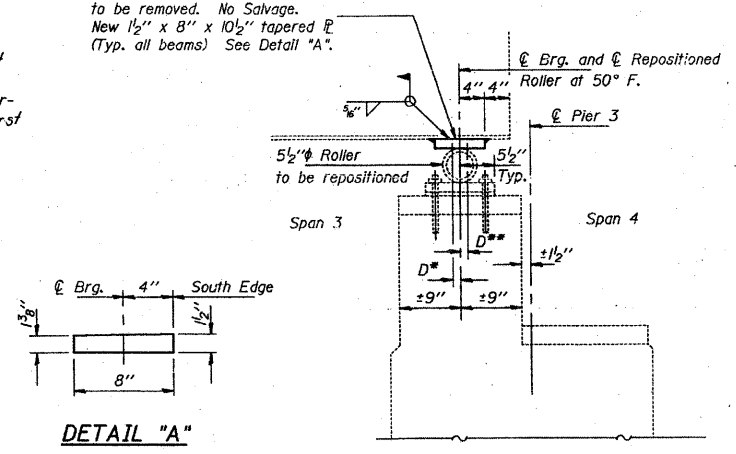
*** To be in place prior to undertaking any concrete removal. The Temporary Support System shall be designed by the Contractor and the drawings submitted to the Engineer for approval. The Contractor may submit an alternate procedure to provide temporary support for the pier caps.

Temporary Support System shall be removed prior to Stage IB & Stage IIB Construction.

DESIGNED: *R. Doty*
CHECKED: *R. Doty*
DRAWN: *R. Doty*
CHECKED: *D.C.*

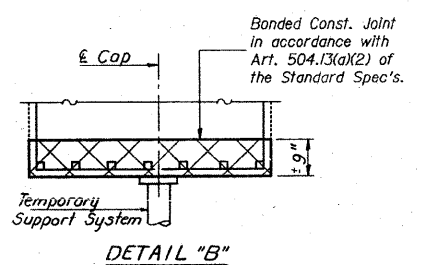
APPROVED: *James J. Johnson*
DIRECTOR OF HIGHWAYS

Existing 1 1/2" x 8" x 10 1/2" plate to be removed. No Salvage. New 1 1/2" x 8" x 10 1/2" tapered plate (Typ. all beams) See Detail "A".



SECTION THRU PIER 3
(Showing bearing plate removal and replacement in Span 3)

Repair Concrete Structures
Concrete Removal



DETAIL "B"

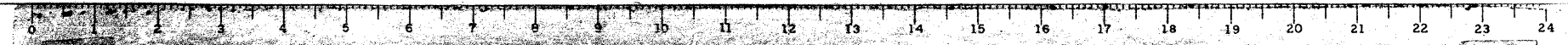
Notes on Repositioning of Rollers:
D* (Side of brg. toward fixed brg.)
D* = 1/8" per 100' of expansion for every 15° fall below the normal temperature of 50° F.
D** (Side of brg. away from fixed brg.)
D** = 1/8" per 100' of expansion for every 15° rise above the normal temperature of 50° F.

Notes:
Procedure for Repositioning Bearings:
1. Apply jacking force to raise the beam ends to a maximum of 1/8". @ reaction per beam = 18.5K.
2. Remove existing top bearing plate.
3. Reposition roller and rotate 90°.
4. Install new top bearing plate and center over bottom bearing plate.
5. Remove jacking force.
Note: Bearings are to be repositioned prior to longitudinal joint reconstruction. See sheet #2 for staging.

BILL OF MATERIAL

Item	Unit	Total
Repair Concrete Structures	Sq. Ft.	165
Jack and Reposition Bearings	Each	10
Structural Steel	Lbs.	360
Class X Concrete	Cu. Yd.	8.4
Concrete Removal	Cu. Yd.	8.4
Temporary Support System	L. Sums	1

PIER REPAIR DETAILS
F.A. RT. 14 SEC. 64-NB1
ST. CLAIR COUNTY
STA. 281+07.13



FOR INFORMATION ONLY

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- LAND SURVEYORS -
Design Firm License No. 184-002703

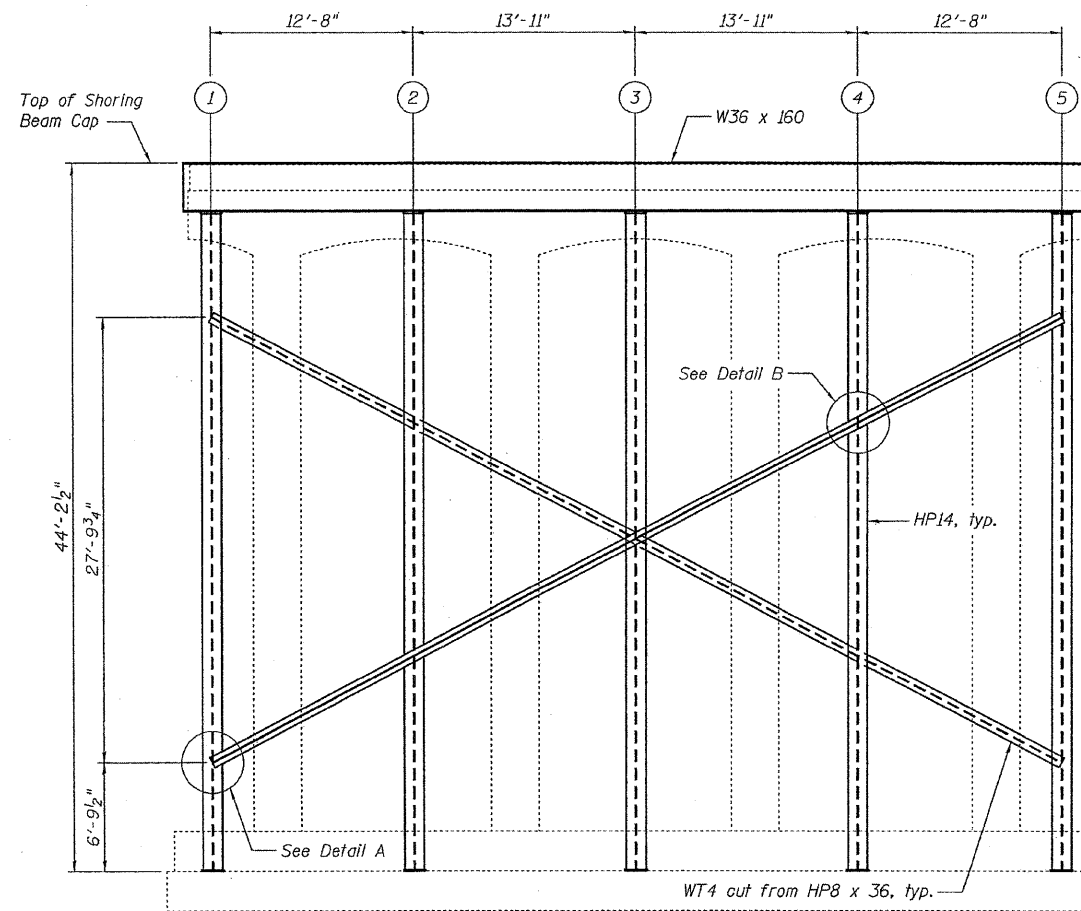
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	64-IVBI	ST. CLAIR	259	160
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract #

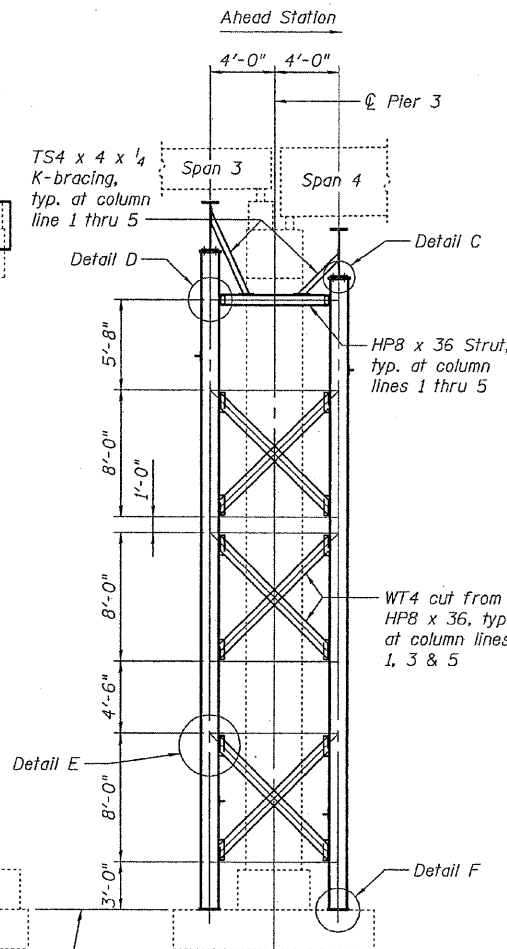
Existing superstructure not shown.

Existing superstructure not shown.

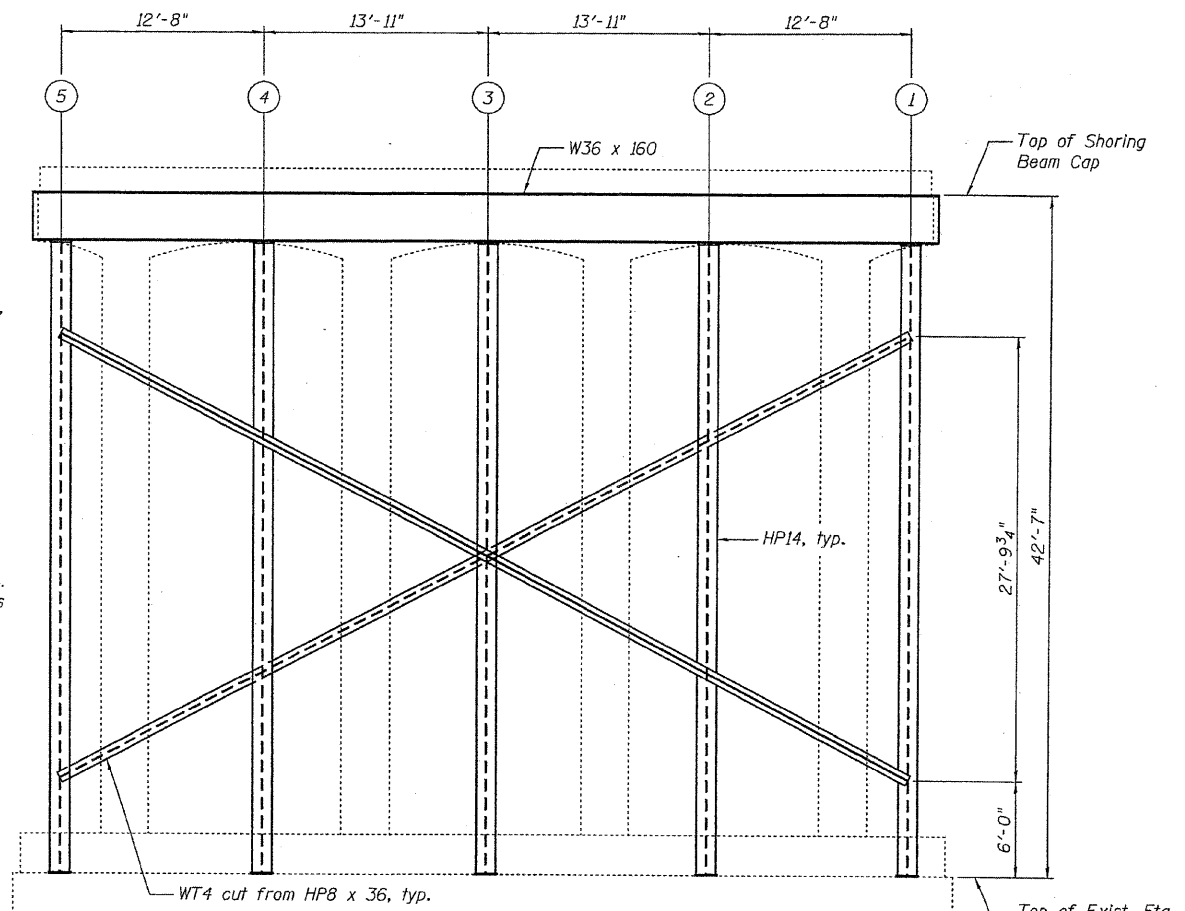


NORTH FACE OF PIER 3

Looking Ahead Station

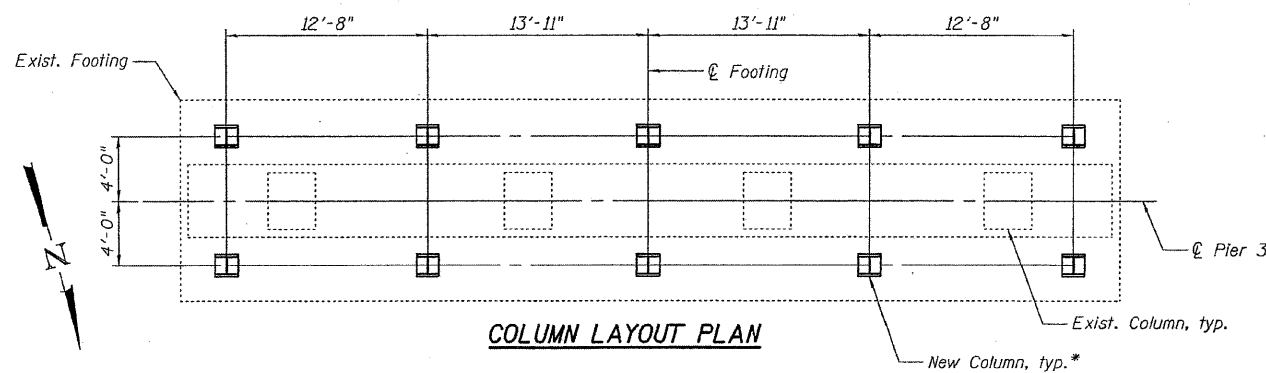


END VIEW



SOUTH FACE OF PIER 3

Looking Back Station



COLUMN LAYOUT PLAN

Note:
See sheet 2 of 2 for details A, B, C, D, E and F.
See sheet 2 of 2 for K-bracing details.

THE SHORING TOWER COLUMNS AND DETAILS ASSUME AN 8 1/2" GAP BETWEEN TOP OF SHORING CAP AND BOTTOM OF ROADWAY GIRDERS. ADJUSTMENTS MAY BE NEEDED IF BEARING DEPTH (ROLLER, SOLE PLATE AND BASE PLATE) IS DIFFERENT FROM ABOVE.

GENERAL NOTES

All structural metalwork for shoring towers shall conform to the requirements of ASTM A36 or ASTM A709, Grade 36 or better.
High strength bolts shall conform to the requirements of ASTM A325.
Column anchor bolts shall comply with the requirements of ASTM F1554.

PIER 3 SHORING DETAILS - 1
IL. ROUTE 3 OVER DUPONT CANAL AND RAILROAD
F.A. ROUTE 14 - SECTION 64-IVBI

DESIGNED	MEL
CHECKED	RLM
DRAWN	PRC
CHECKED	MEL

EXAMINED	200
PASSED	ENGINEER OF BRIDGE DESIGN
	ENGINEER OF BRIDGES AND STRUCTURES



* Remove ground cover to expose the top of footing across the entire width. Power wash to provide a clean surface. Grind footing concrete at column base locations to provide a smooth and level surface.

FOR INFORMATION ONLY

FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -
...\\160-0876882-exist-bridge-shoring-plans	01.dgn	DRAWN -	REVISED -
	PLOT SCALE = 40.000000' / IN.	CHECKED -	REVISED -
CB JOB NO 09021	PLOT DATE = 8/5/2010	DATE - / /	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SN 082-0030 PLANS
(SHORING TOWER PLANS)

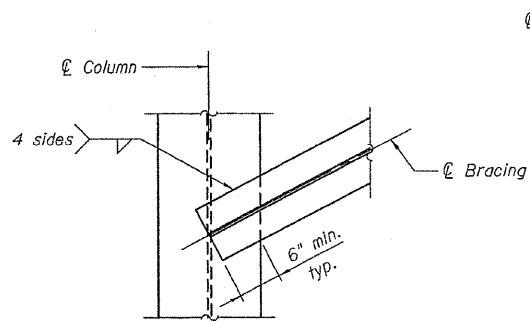
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
312	64-IVBR	ST. CLAIR	259	160
				CONTRACT NO. 76882
ILLINOIS FED. AID PROJECT				

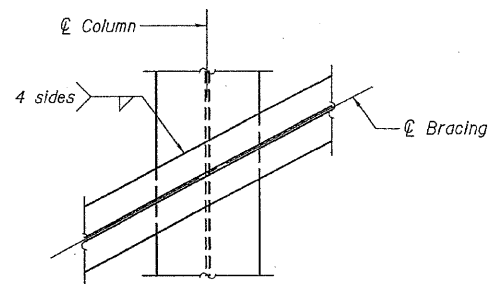
Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

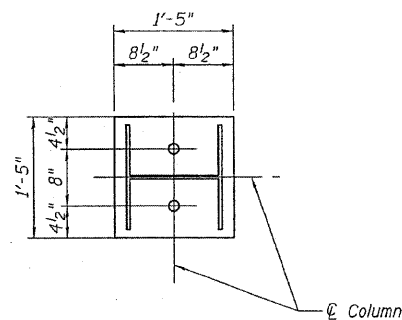
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	64-IVBI	ST. CLAIR		2
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
Contract #				



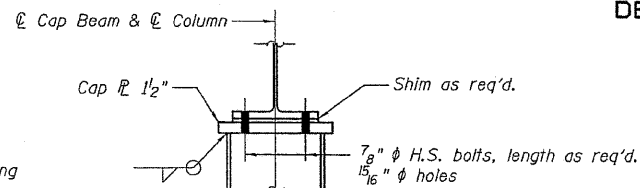
DETAIL A



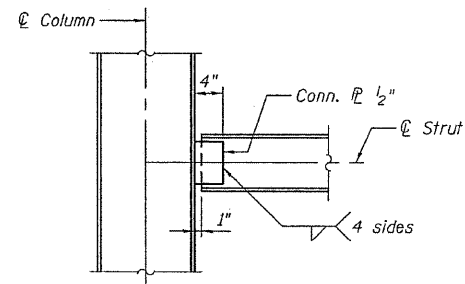
DETAIL B



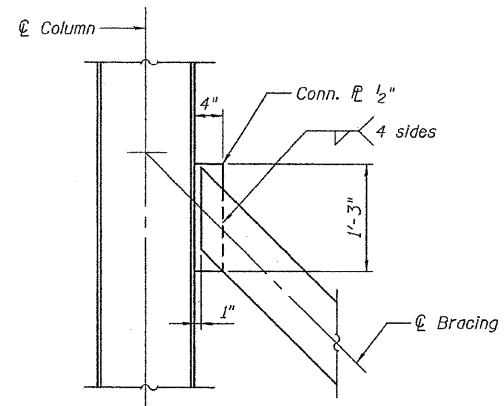
PLAN OF BASE PLATE



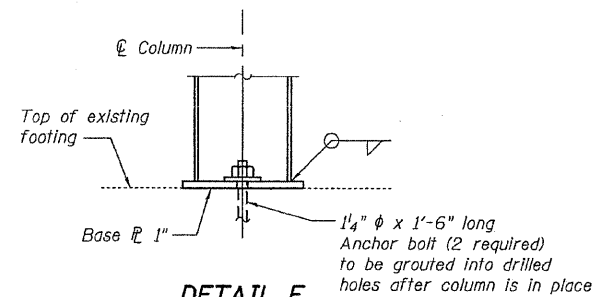
DETAIL C



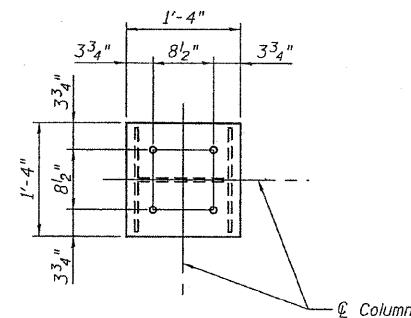
DETAIL D



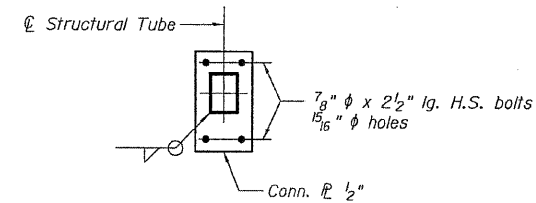
DETAIL E



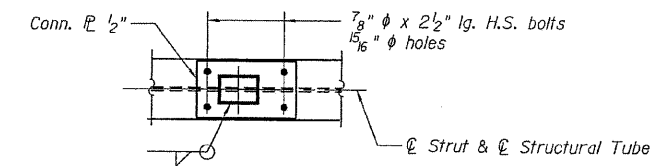
DETAIL F



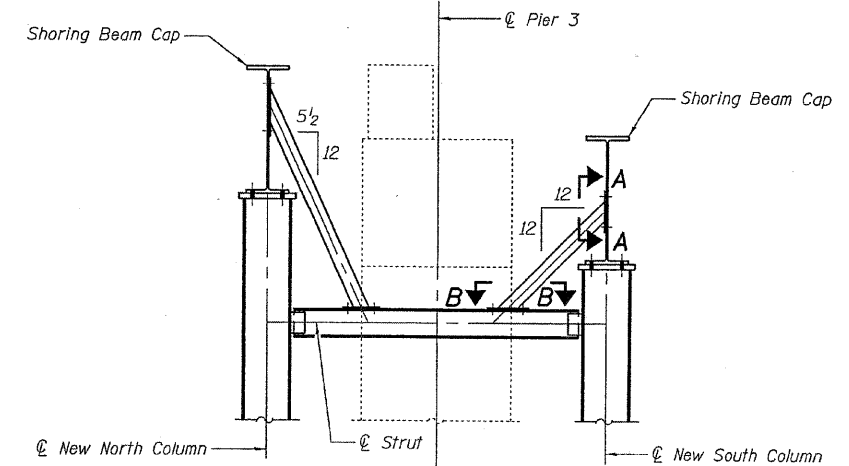
PLAN OF CAP PLATE



SECTION A-A



SECTION B-B



K-BRACE DETAIL

DESIGNED	MEL
CHECKED	RLM
DRAWN	PRC
CHECKED	MEL

EXAMINED	200
PASSED	ENGINEER OF BRIDGE DESIGN
	ENGINEER OF BRIDGES AND STRUCTURES



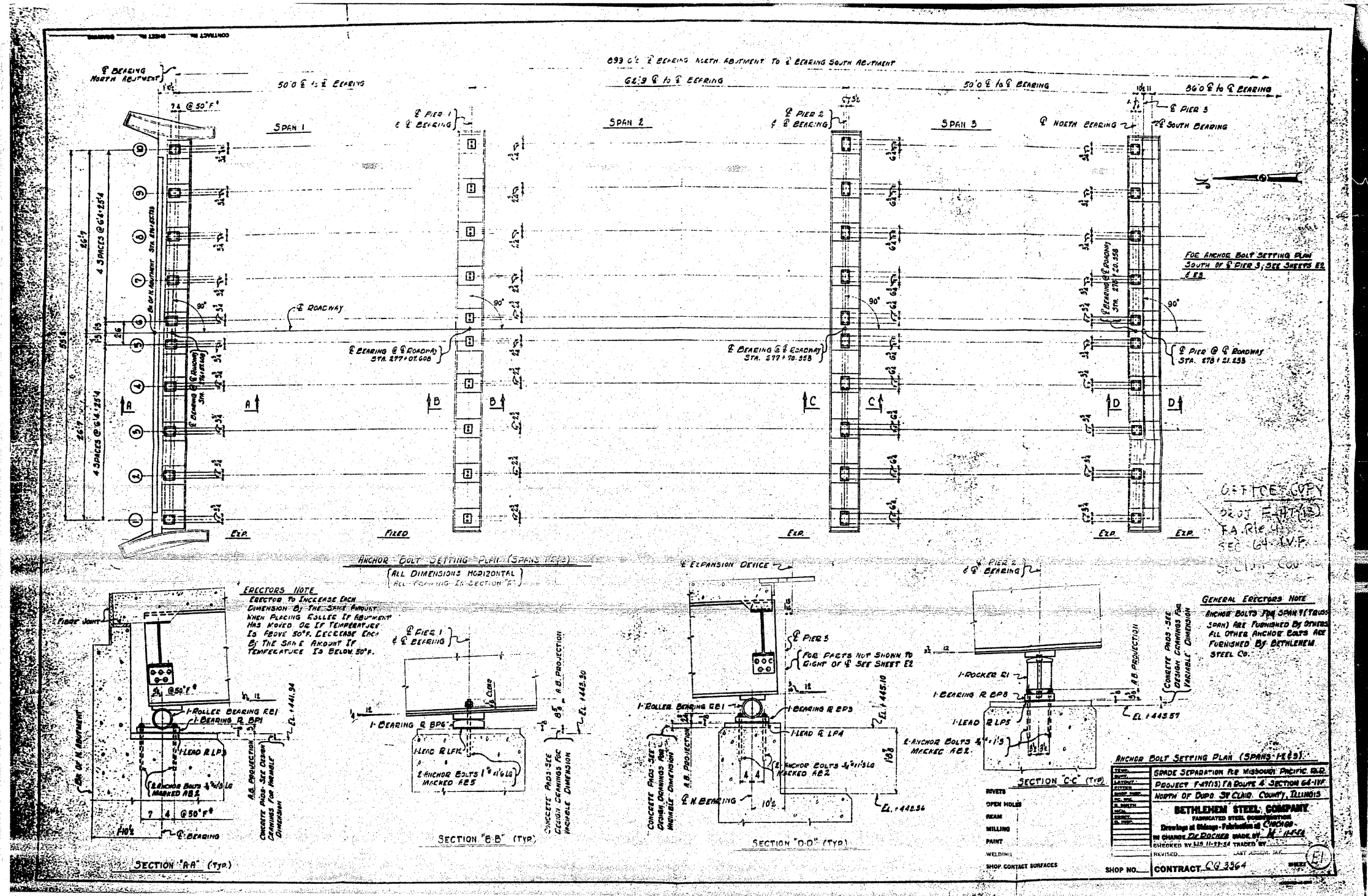
PIER 3 SHORING DETAILS - 2
IL. ROUTE 3 OVER DUPONT CANAL
AND RAILROAD
F.A. ROUTE 14 - SECTION 64-IVBI

FOR INFORMATION ONLY

S

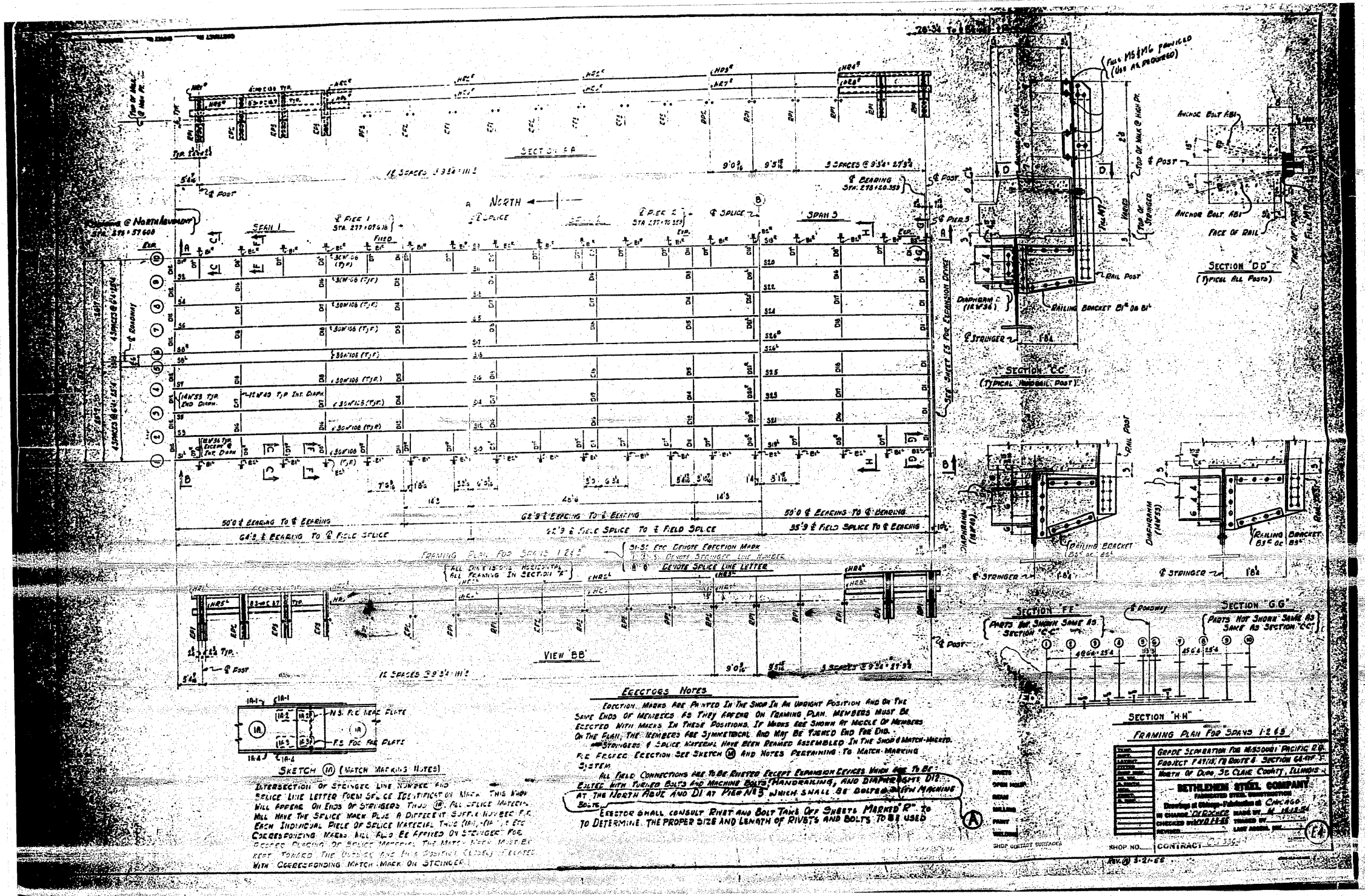
CB Coombe-Bloxdorf P.C.
- CIVIL ENGINEERS -
- STRUCTURAL ENGINEERS -
- LAND SURVEYORS -
Design Firm License No. 184-002703

FILE NAME = ...161-0876882-exist-bridge-shoring-plans	USER NAME = CFC...	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SN 082-0030 PLANS (SHORING TOWER PLANS)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CB JOB NO 09021	PLOT SCALE = 40,000,000 / IN.	DRAWN -	REVISED -			312	64-IVBR	ST. CLAIR	259	161
	PLOT DATE = 8/5/2010	CHECKED -	REVISED -			CONTRACT NO. 76882				
		DATE - / /	REVISED -			ILLINOIS FED. AID PROJECT				



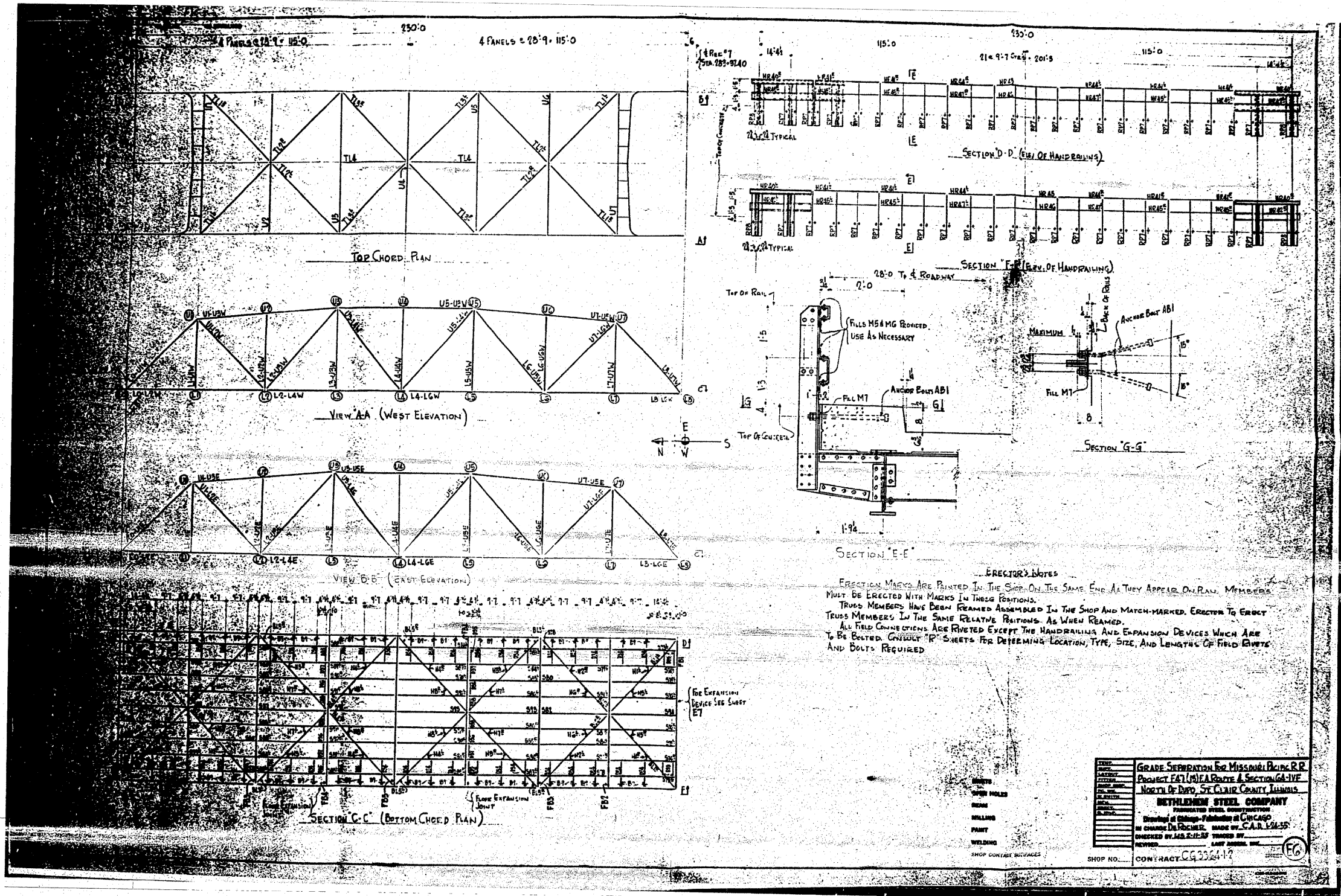
FOR INFORMATION ONLY

FILE NAME =	USER NAME = tharpr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS	F.A.P. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\pwidot\tharpr1\dms71738\0875	82-sht-fab-plans.dgn	DRAWN -	REVISED -			312	64-1VBR	ST. CLAIR	259	162
	PLOT SCALE = 58.0000' / IN.	CHECKED -	REVISED -			SCALE: N/A	SHEET NO. OF 67 SHEETS	STA.	TO STA.	CONTRACT NO. 76882
	PLOT DATE = 5/17/2010	DATE -	REVISED -							ILLINOIS FED. AID PROJECT



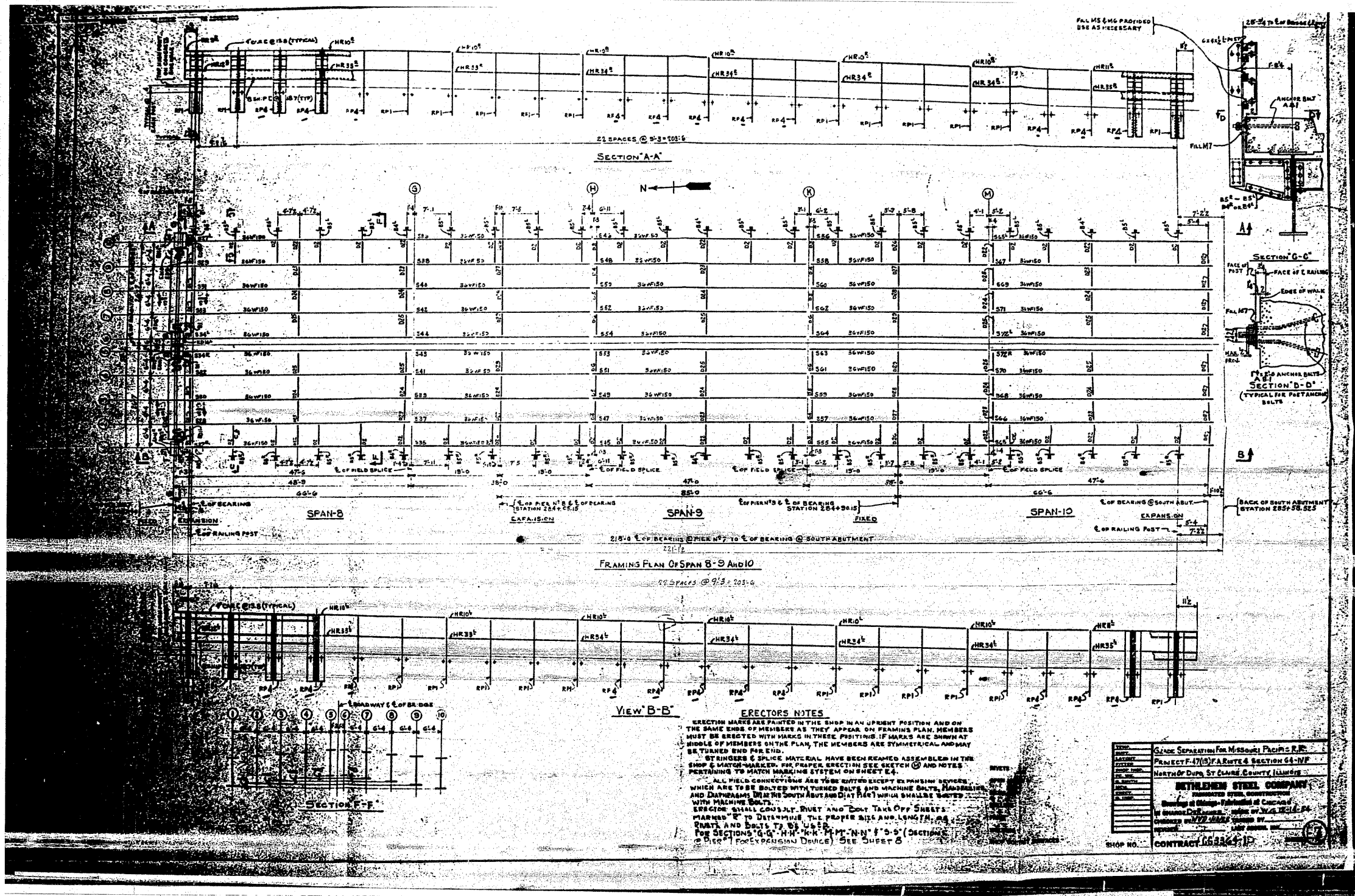
FOR INFORMATION ONLY

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ct:\pw_work\pwwid\tharpr1\dms71738\0878682-sht-fab-plans.dgn		DRAWN -	REVISED -		SCALE: N/A	SHEET NO. OF 67 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				
PLOT SCALE = 5/8"=1'-0"		CHECKED -	REVISED -									
PLOT DATE = 5/17/2010		DATE -	REVISED -									



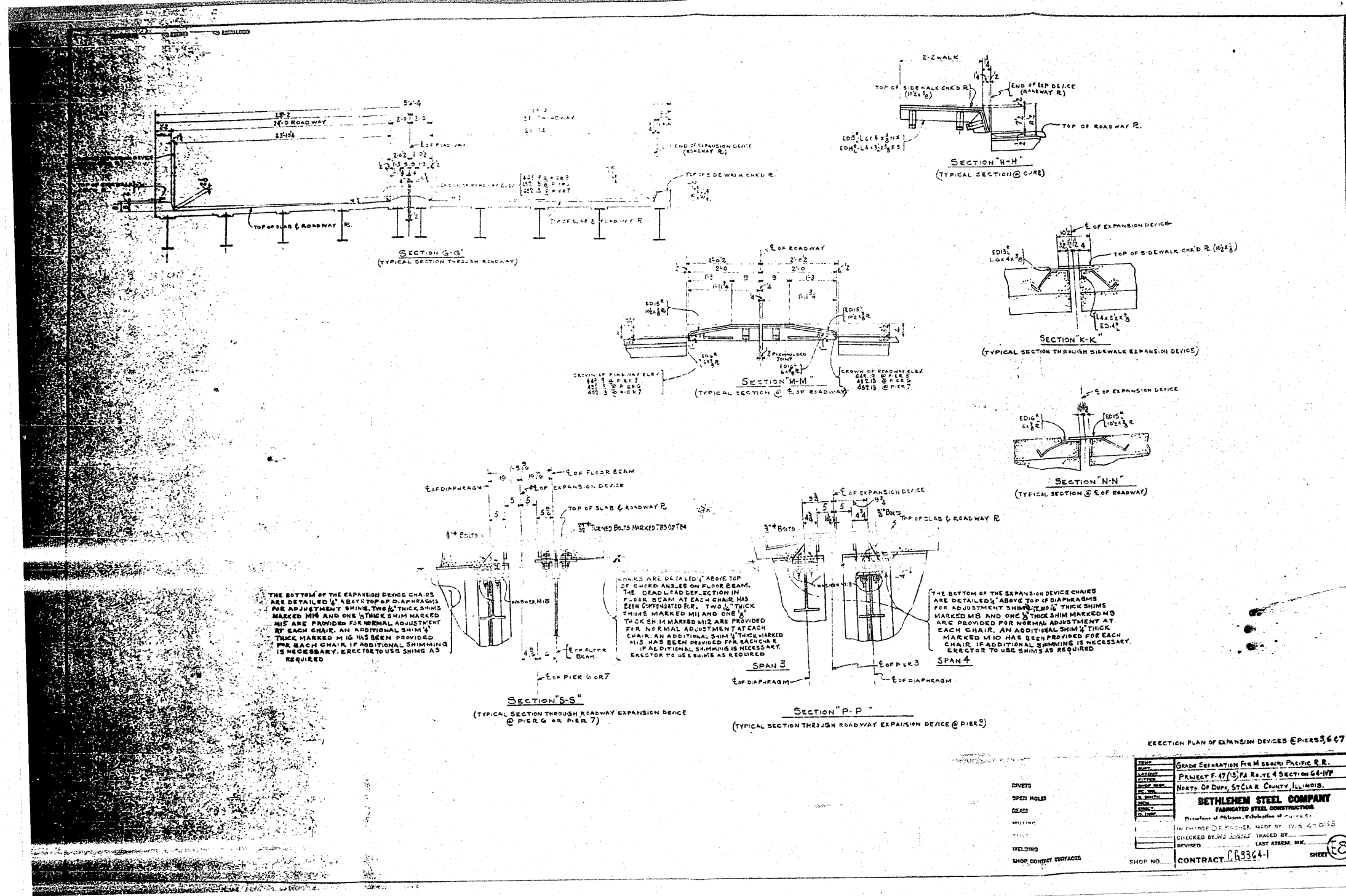
FOR INFORMATION ONLY

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m:\pwwork\pwsdot\tharp1\dms71738\10876892-sht-fab-plans.dgn		DRAWN -	REVISED -			312	64-1VBR	ST. CLAIR	259	167	
PLOT SCALE = 58.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76882					
PLOT DATE = 5/17/2010		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



FOR INFORMATION ONLY

FILE NAME =	USER NAME = tharp1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca:\pwwork\pwwork\tharp1\dms71738\087682-sht-feb-plans.dgn	PLOT SCALE = 5/8"=1'-0"	DRAWN -	REVISED -			312	64-1VBR	ST. CLAIR	259	168	
PLOT DATE = 5/17/2010	CHECKED -	REVISED -	DATE -			CONTRACT NO. 76882					
	DATE -	REVISED -				ILLINOIS FED. AID PROJECT					
						SCALE: N/A	SHEET NO. OF 67 SHEETS	STA.	TO STA.		

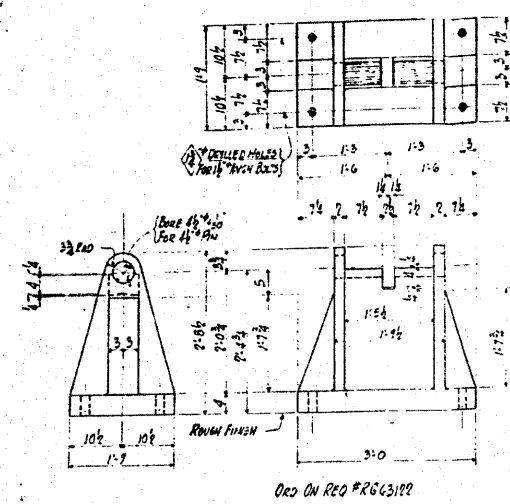


ERECTION PLAN OF EXPANSION DEVICES @ PIERS 3, 6 & 7

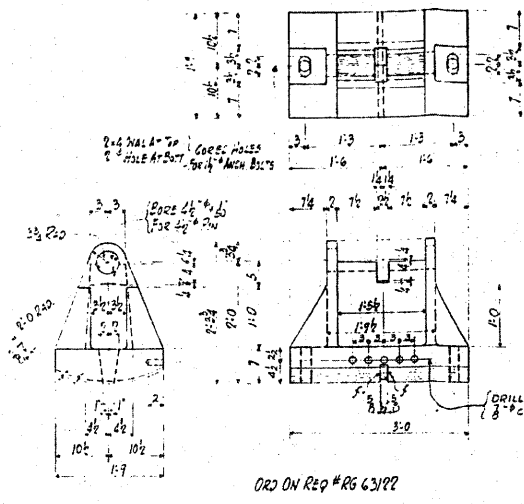
DATE	GRADE SEPARATION FOR MISSOURI PACIFIC R.R.
DRAWN	PROJECT F. 47(15) RA RAY 4 SECTION 64-NP
CHECKED	NORTH OF DUPE, ST. CLAIR COUNTY, ILLINOIS.
SCALE	BETHLEHEM STEEL COMPANY
BY	FABRICATED STEEL CONSTRUCTION
REVISION	IN ACCORDANCE WITH THE SPECIFICATIONS OF THE PROJECT
REVISION	CHECKED BY: W.S. SINGEL, TRACED BY: J.C. C-0-0-15
REVISION	REVISION: LAST ASSEMBLY, ILL.
SHOP NO.	CONTRACT: 68364-1 SHEET: 18

FOR INFORMATION ONLY

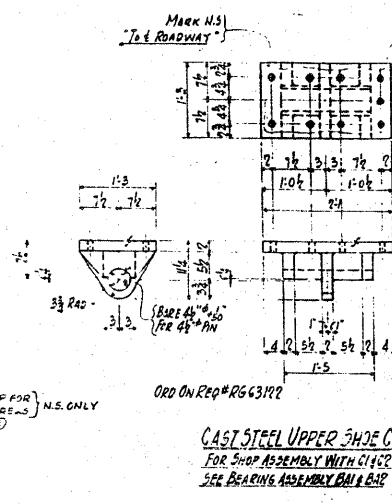
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c:\pw_work\pwscot\tharpr1\dms71738\087682-sht-fab-plans.dgn	82-sht-fab-plans.dgn	DRAWN -	REVISED -			312	64-IVBR	ST. CLAIR	259	169	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 76882					
PLOT DATE = 5/17/2010		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE: N/A	SHEET NO. OF 67 SHEETS	STA. TO STA.				



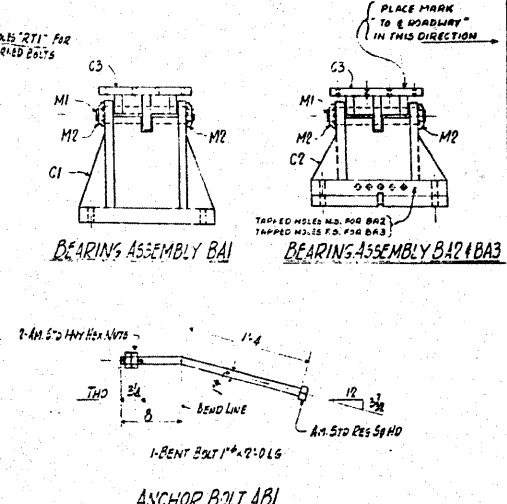
CAST STEEL BOLSTER C1
FOR SHOP ASSEMBLY WITH C3
SEE BEARING ASSEMBLY BAI



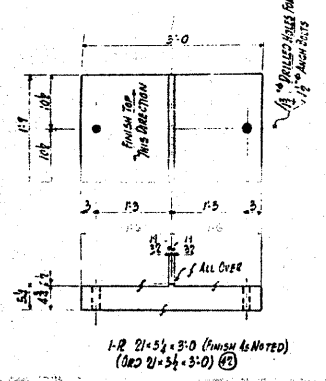
CAST STEEL ROCKER C2
FOR SHOP ASSEMBLY WITH C3
SEE BEARING ASSEMBLY BAI



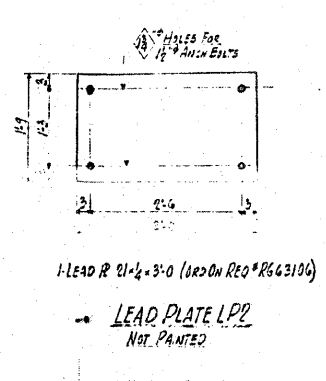
CAST STEEL UPPER SHOE C3
FOR SHOP ASSEMBLY WITH C1 & C2
SEE BEARING ASSEMBLY BAI & B1P



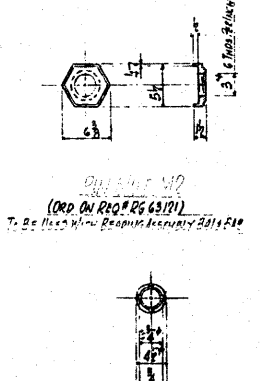
ANCHOR BOLT AB1
NOT PAINTED



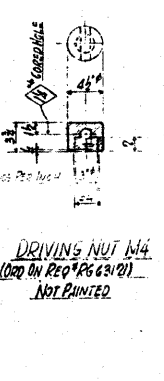
ROCKER PLATE RPI



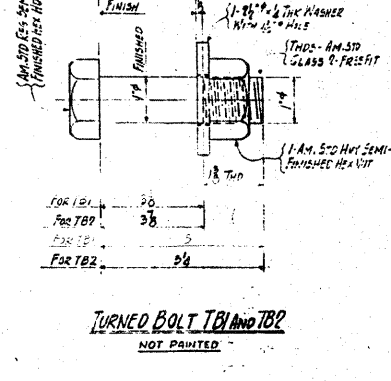
LEAD PLATE LPP
NOT PAINTED



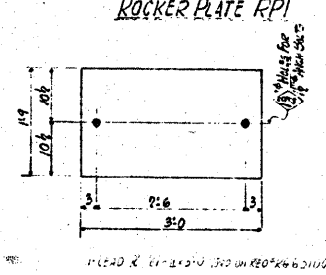
PILOT NUT M3
(ORD ON REQ #RG63191)
NOT PAINTED



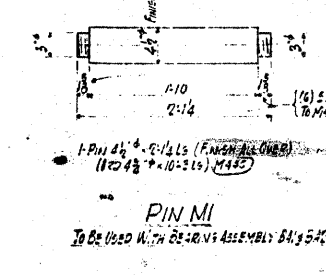
DRIVING NUT M4
(ORD ON REQ #RG63191)
NOT PAINTED



TURNED BOLT TB1 AND TB2
NOT PAINTED



LEAD PLATE LPI
NOT PAINTED



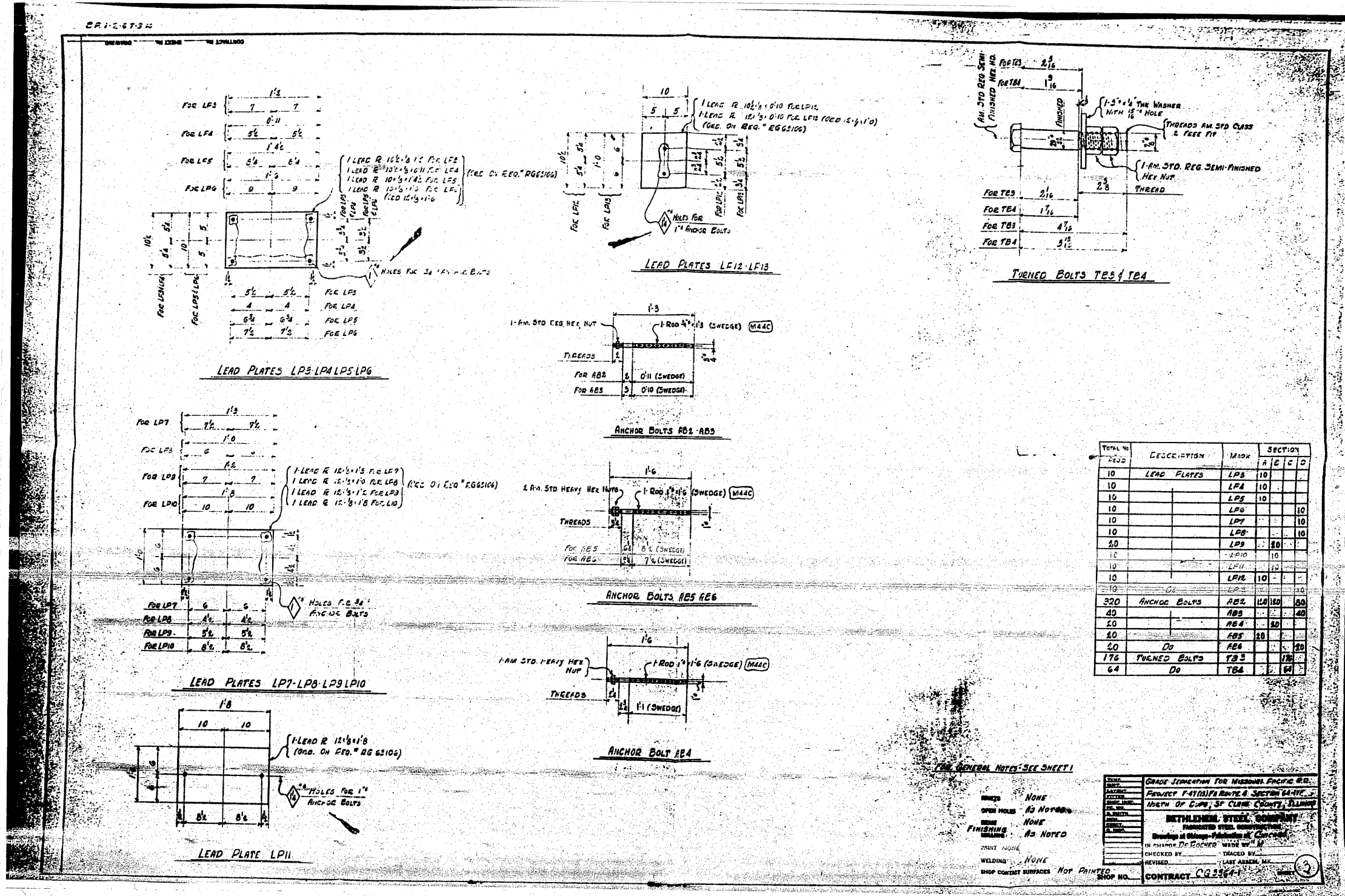
PIN MI
TO BE USED WITH BEARING ASSEMBLY BAI & B1P

GENERAL NOTES
MATERIAL SPEC: STRUCTURAL STEEL ASTM A7
CASTINGS A.S.T.M. A27 GRADE 65-55 FULL ANNEAL
LEAD PLATES - COMMERCIAL - STANDARD
WORKMANSHIP SPEC: ILLINOIS STATE HIGHWAY DEPT
SHOP INSPECTION: NOTIFY STATE OF ILLINOIS DIVISION OF HIGHWAYS
FINISHING & DRILLING: ALL FINISHING & DRILLING OF CASTINGS TO BE DONE BY BETHLEHEM STEEL CO.
PAINTING: ALL FINISHED SURFACES FOR & INCLUDING PINS SHALL BE OILED WITH ANTI-RUST COMPOUND OR LACQUER. ALL OTHER SURFACES SHALL BE GIVEN ONE COAT OF RED LEAD PAINT PER SPEC. UNLESS NOTED OTHERWISE. THREADS ON PINS & NUTS SHALL NOT BE PAINTED.

TOTAL REQD	DESCRIPTION	MARK	SECTION
			A B C D
1	BEARING ASSEMBLY BAI	BAI	1
ONE	BEARING ASSEMBLY BAI2	BAI2	1
2	PACKED PLATE RPI	RPI	2
2	LEAD PLATE LPP	LPP	2
ONE	PILOT NUT M3	M3	1
ONE	DRIVING NUT M4	M4	1
20	TURNED BOLT TB1	TB1	20
8	TURNED BOLT TB2	TB2	8
300	ANCHOR BOLT AB1	AB1	70 178 80 70
ONE	BEARING ASSEMBLY BAI3	BAI3	1

DESIGN	GRADE SEPARATION FOR MISSOURI PACIFIC R.R.
PROJECT	PROJECT F-11031A ROUTE 4 SECTION 64-1V
LOCATION	NORTH OF DPO, ST. CLAIR COUNTY, ILLINOIS
DATE	
BY	BETHLEHEM STEEL COMPANY
CHECKED	FABRICATED STEEL CONSTRUCTION
IN CHARGE	Drawings of Chicago - Fabrication at CHICAGO
REVISION	IN CHARGE DR. PRITCHER MADE BY J.P.
DATE	
WELDING	WELDING NONE
SHOP CONTACT SURFACES	SHOP CONTACT SURFACES NOT PAINTED
CONTRACT	CONTRACT C63364-1

FOR INFORMATION ONLY



TOTAL QTY	DESCRIPTION	MARK	SECTION
10	LEAD PLATES	LP3	10
10		LP4	10
10		LP5	10
10		LP6	10
10		LP7	10
10		LP8	10
20		LP9	20
10		LP10	10
10		LP11	10
10		LP12	10
10		LP13	10
320	ANCHOR BOLTS	AB2	110 110 100
40		AB3	40
20		AB4	20
20		AB5	20
20		AB6	20
176	TURNED BOLTS	TB3	176
64		TB4	64

DATE	DESCRIPTION	BY	APP'D
	GRADE SPECIFICATION FOR MISSOURI PACIFIC R.O.		
	PROJECT #417417A) IN ROUTE 6 SECTION 64-1VBR		
	SECTION 64-1VBR		
	WEST OF EMB, ST. CLAIR COUNTY, ILLINOIS		
	BETHLEHEM STEEL COMPANY		
	MANUFACTURED STEEL CONSTRUCTION		
	DESIGNED BY Chicago-Philadelphia Co. CONTRACT		
	IN CHARGE: D.S. ECKHART, CHICAGO		
	CHECKED BY: _____ TRACED BY: _____		
	REVISED: _____ LAST ASSEMB. BY: _____		
	SHOP NO. _____ CONTRACT: CG 2564-1		

THE GENERAL NOTES SEE SHEET 1

FINISHES: NONE

OPEN HOLES: AS NOTED

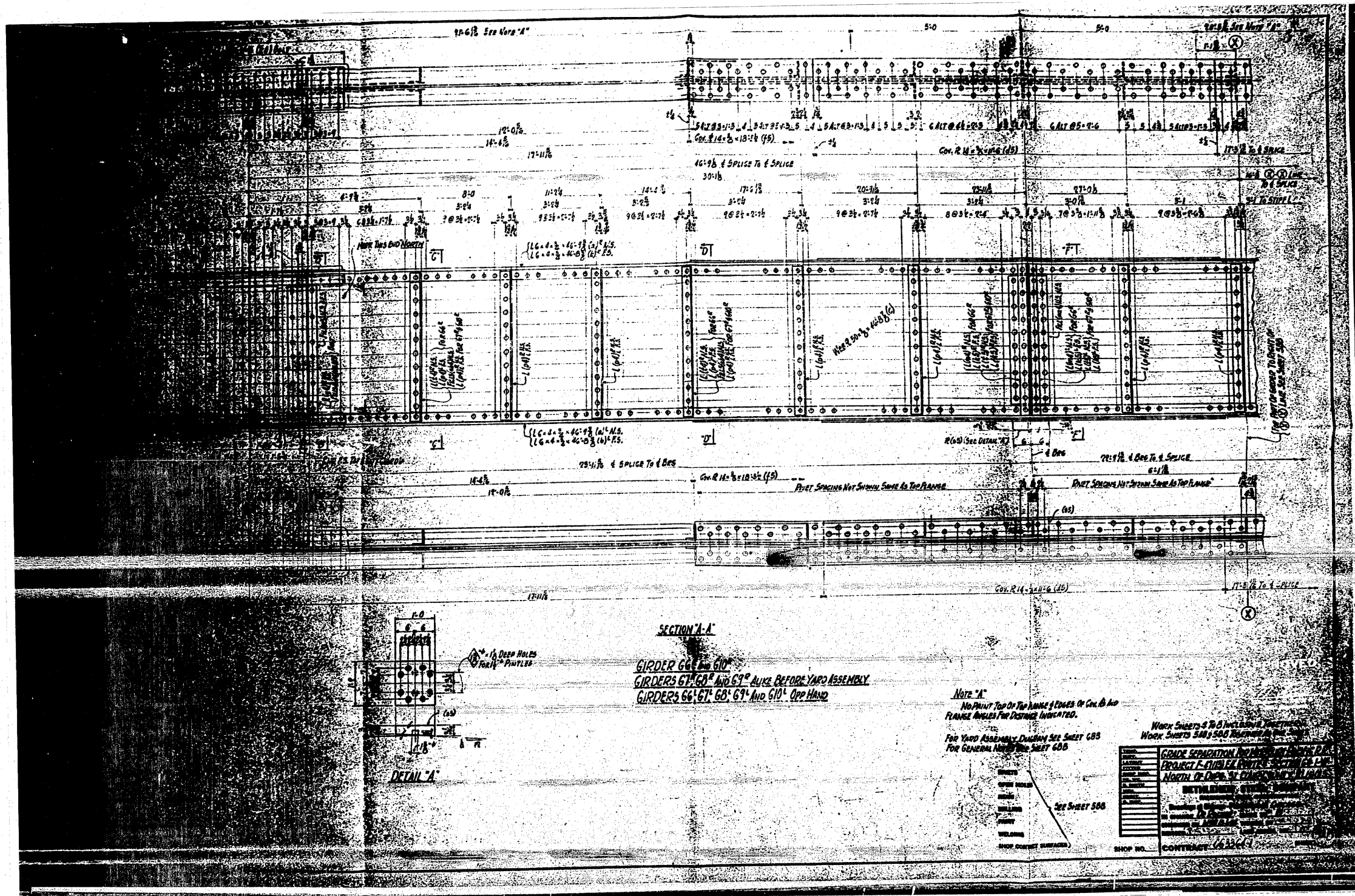
PAINT: NONE

FINISHING: AS NOTED

WELDING: NONE

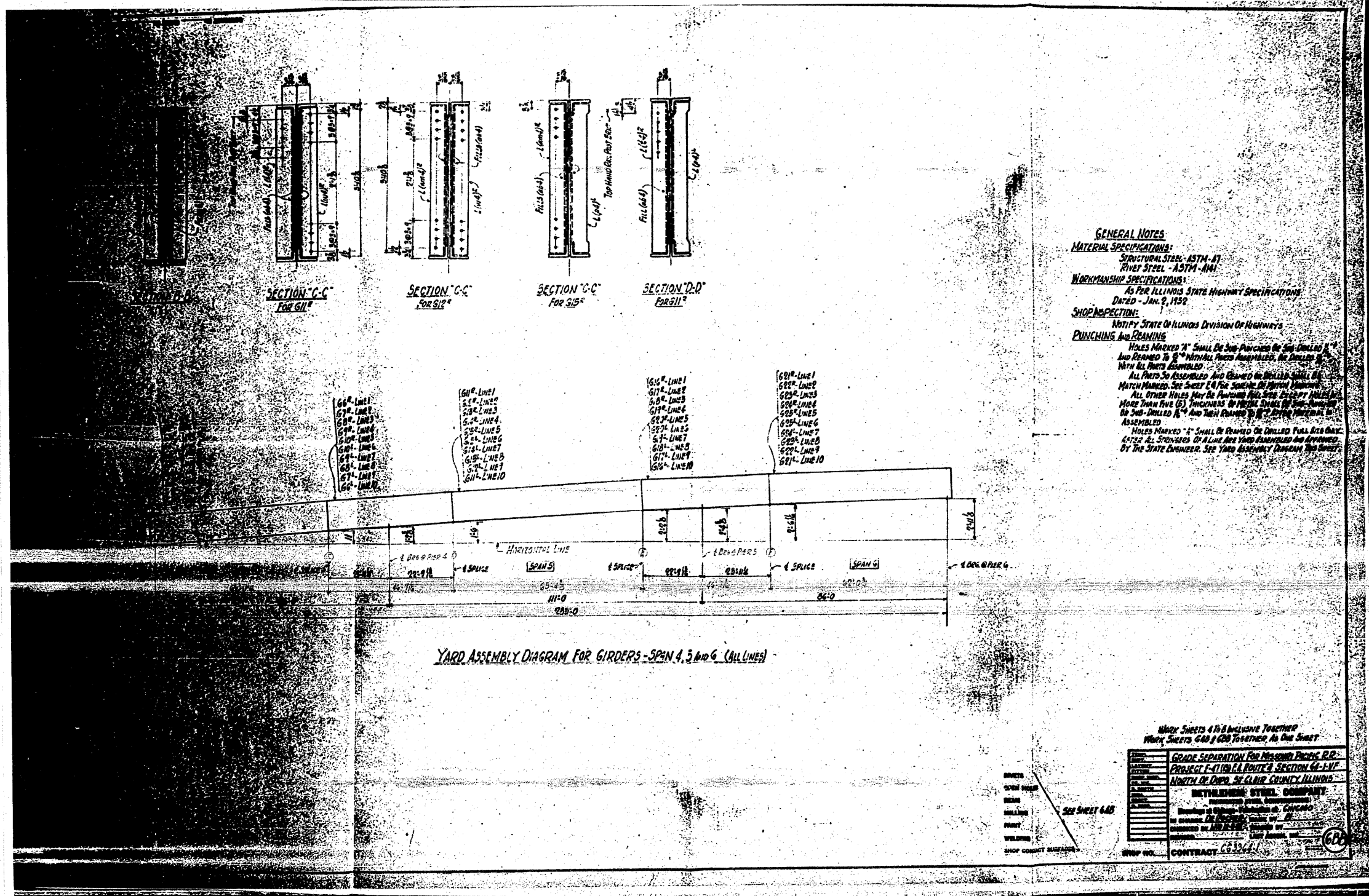
SHOP CONTACT SURFACES: NOT PRINTED

FOR INFORMATION ONLY



FOR INFORMATION ONLY

FILE NAME =	USER NAME = tharp1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS			F.A.P. RTE. 312	SECTION 64-1VBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 175			
CONTRACT NO. 663661	PROJECT I-GIRDER BRIDGE SECTION 64-1VBR NORTH OF D.C. ST. CLAIR COUNTY, ILLINOIS	DRAWN -	REVISED -					SCALE: N/A	SHEET NO. OF 67 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				
PLOT SCALE = 5/8" = 1' IN.	CHECKED -	REVISED -	DATE -												
PLOT DATE = 5/17/2010	DATE -	REVISED -													



GENERAL NOTES:
MATERIAL SPECIFICATIONS:
 STRUCTURAL STEEL - ASTM-A7
 RIVET STEEL - ASTM-A441
WORKMANSHIP SPECIFICATIONS:
 AS PER ILLINOIS STATE HIGHWAY SPECIFICATIONS
 DATED - JAN. 9, 1952
SHOP INSPECTION:
 NOTIFY STATE OF ILLINOIS DIVISION OF HIGHWAYS
PUNCHING AND BEAMING:
 HOLES MARKED "A" SHALL BE SUB-PUNCHED OR SUB-DILLED &
 REAMER TO 1/8" WITH ALL PARTS ASSEMBLED, OR DILLED &
 WITH ALL PARTS ASSEMBLED.
 ALL PARTS TO BE ASSEMBLED AND BEAMING OR DILLED SHALL BE
 MATCH MARKED. SEE SHEET 64 FOR SYMBOLS OF MATCH MARKING.
 ALL OTHER HOLES MAY BE PUNCHED OR SUB-DILLED EXCEPT HOLES
 MORE THAN FIVE (5) THICKNESS OF PLATE SHALL BE SUB-PUNCHED
 OR SUB-DILLED 1/8" AND THEN REAMER TO 1/8" AFTER PARTIAL
 ASSEMBLY.
 HOLES MARKED "A" SHALL BE PUNCHED OR DILLED FULL SIZE ONLY.
 60'-LINE 1 TO 69'-LINE 10 OF A LINE ARE YARD ASSEMBLED AND APPROVED
 BY THE STATE ENGINEER. SEE YARD ASSEMBLY DIAGRAM AND SHEET

Make Sheets 4 to 8 Inclusive Together
 Make Sheets 60 & 60B Together As One Sheet

GRADE SEPARATION FOR MISSOURI PACIFIC R.R.
PROJECT - 410th & ROUTE 2 SECTION 64-1-V
NORTH OF OMAHA, ST. CLAIR COUNTY, ILLINOIS

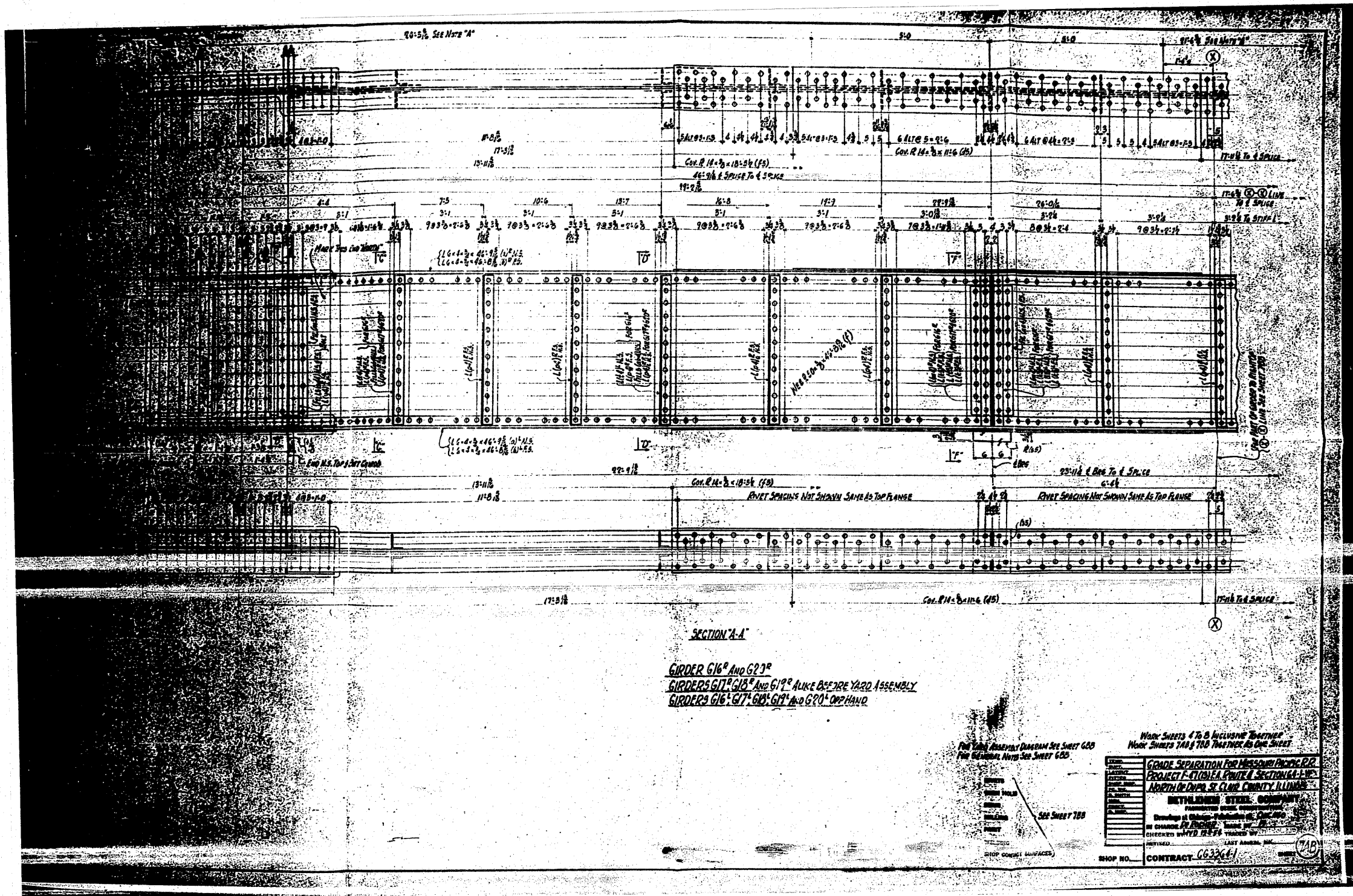
DEVELOPER: STEEL COMPANY

DESIGNED BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 PLOTTED BY: [Signature]

CONTRACT NO. 66334-1

FOR INFORMATION ONLY

FILE NAME =	USER NAME = thpr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwwork\pilot\thpr1\dms71738\087682-sht-fab-plens.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -					312	64-1VBR	ST. CLAIR	259	178
PLOT DATE = 5/17/2010	DATE -	CHECKED -	REVISED -					CONTRACT NO. 76882				
								ILLINOIS FED. AID PROJECT				
				SCALE: N/A	SHEET NO. OF 67 SHEETS	STA.	TO STA.					



SECTION A-A
 GIRDER G16 AND G20
 GIRDERS G17, G18 AND G19 ALIKE BEFORE YARD ASSEMBLY
 GIRDERS G16, G17, G18, G19 AND G20 OFF HAND

WORK SHEETS 4 TO 8 INCLUSIVE TOGETHER
 WORK SHEETS 7A & 7B TOGETHER AS ONE SHEET

FOR YARD ASSEMBLY DIAGRAM SEE SHEET G03
 FOR GENERAL NOTES SEE SHEET G05

SEE SHEET 708

SHOP CONGR. SURFACES

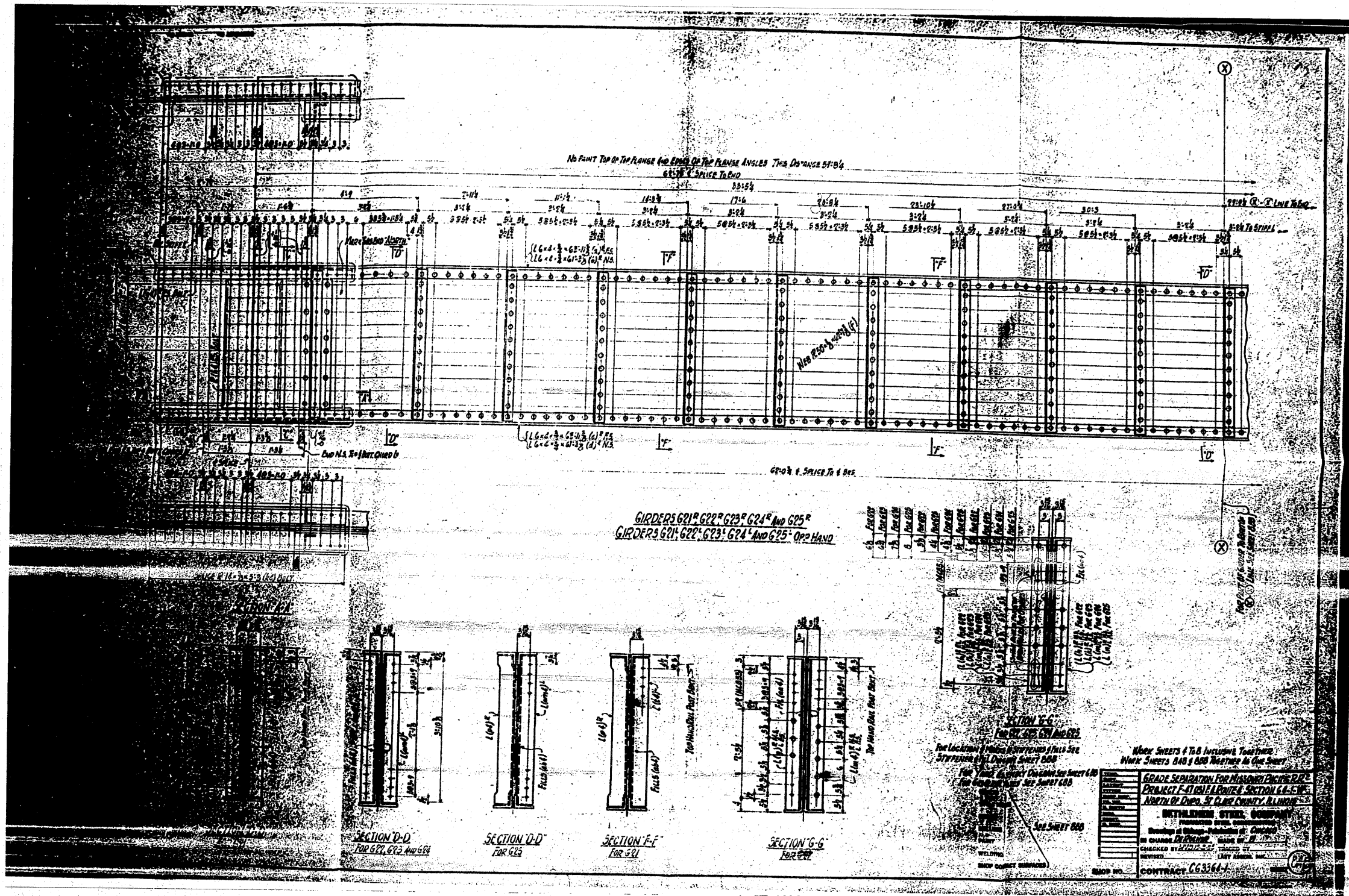
CONTRACT 663364

MEYERLING STEEL COMPANY
 FORT MONROE, MISSOURI

DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]

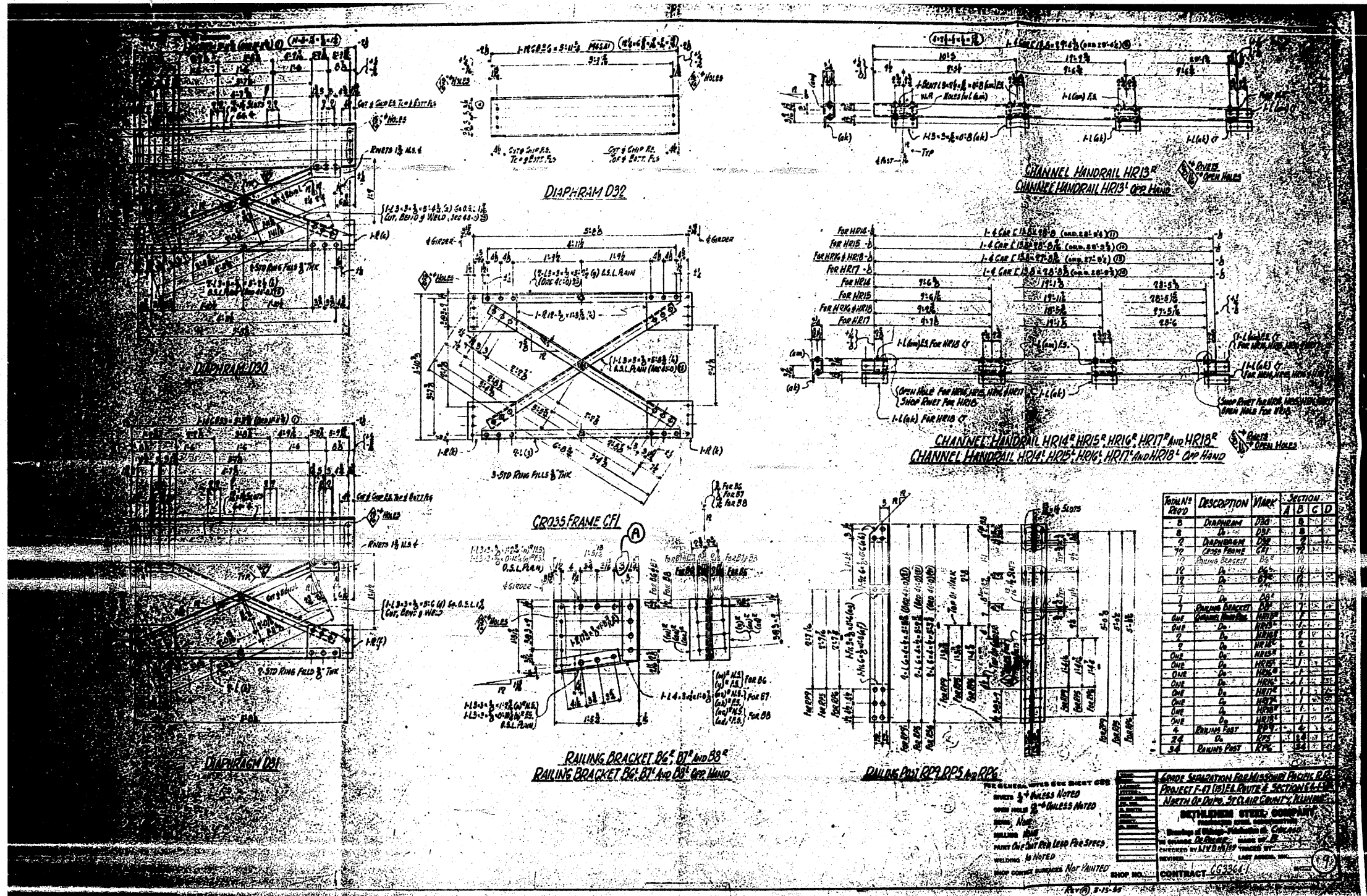
FOR INFORMATION ONLY

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cd:\pwork\pwork\tharp1\dms71738\087682-sh-fab-plans.dgn		DRAWN -	REVISED -		SCALE: N/A	SHEET NO.	OF 67 SHEETS	STA.	TO STA.	312	64-1VBR	ST. CLAIR	259 179
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -										CONTRACT NO. 76882
PLOT DATE = 5/17/2010		DATE -	REVISED -										ILLINOIS FED. AID PROJECT



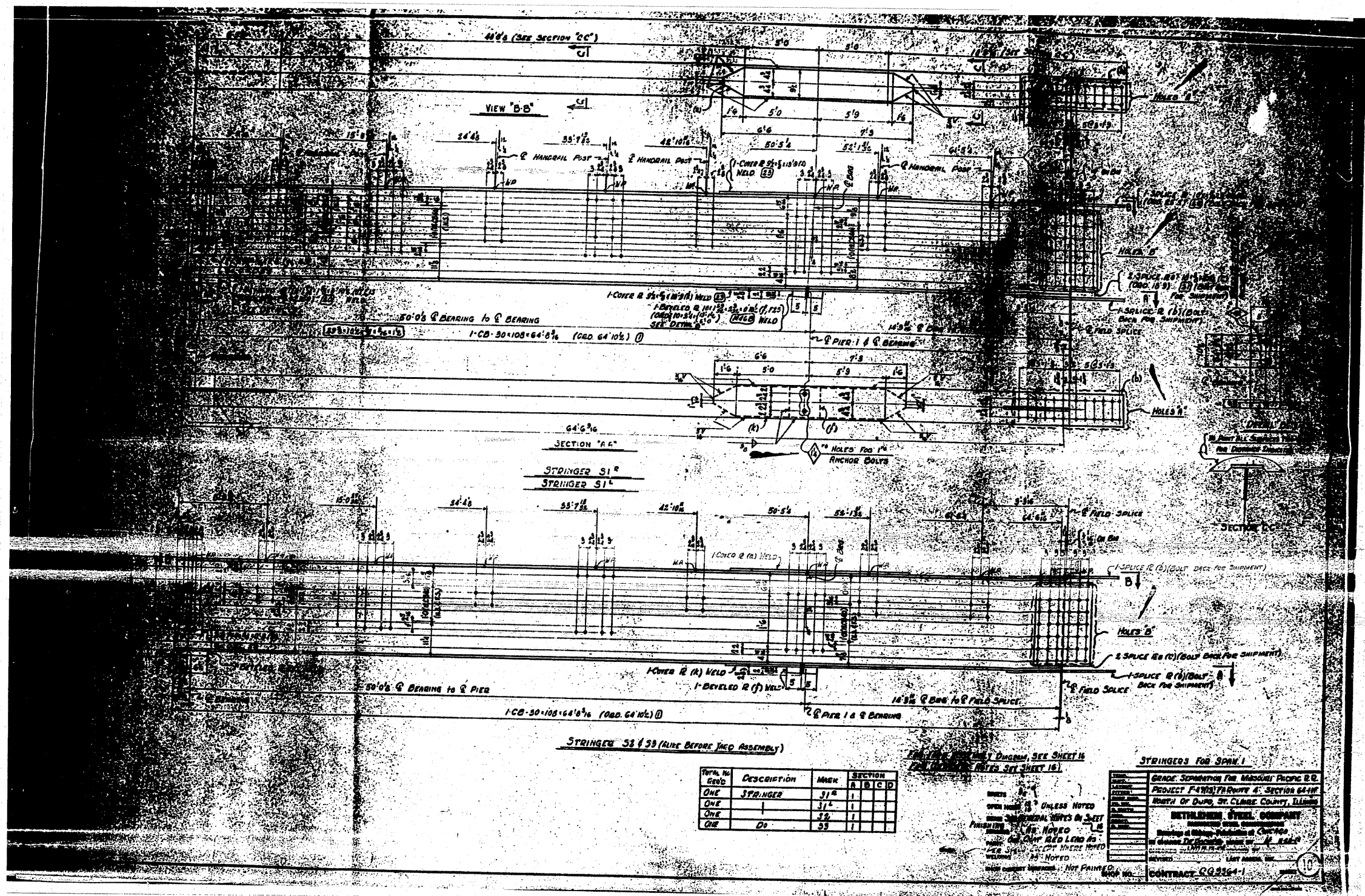
FOR INFORMATION ONLY

FILE NAME =	USER NAME = tharpr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
82-shr-fab-plans.dgn		DRAWN -	REVISED -			312	64-1VBR	ST. CLAIR	259	181	
PLOT SCALE = 5/8"=1'-0"		CHECKED -	REVISED -			CONTRACT NO. 76882					
PLOT DATE = 5/17/2010		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE: N/A	SHEET NO.	OF 67 SHEETS	STA.	TO STA.		



FOR INFORMATION ONLY

FILE NAME =	USER NAME = tharp1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
or:\pwork\pwork\tharp1\dms71738\087682-sht-fab-plans.dgn		DRAWN -	REVISED -			312	64-IVBR	ST. CLAIR	259	183	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			SCALE: N/A		SHEET NO. OF 67 SHEETS		STA. TO STA.	
PLOT DATE = 5/17/2018		DATE -	REVISED -			CONTRACT NO. 76882					
						ILLINOIS FED. AID PROJECT					



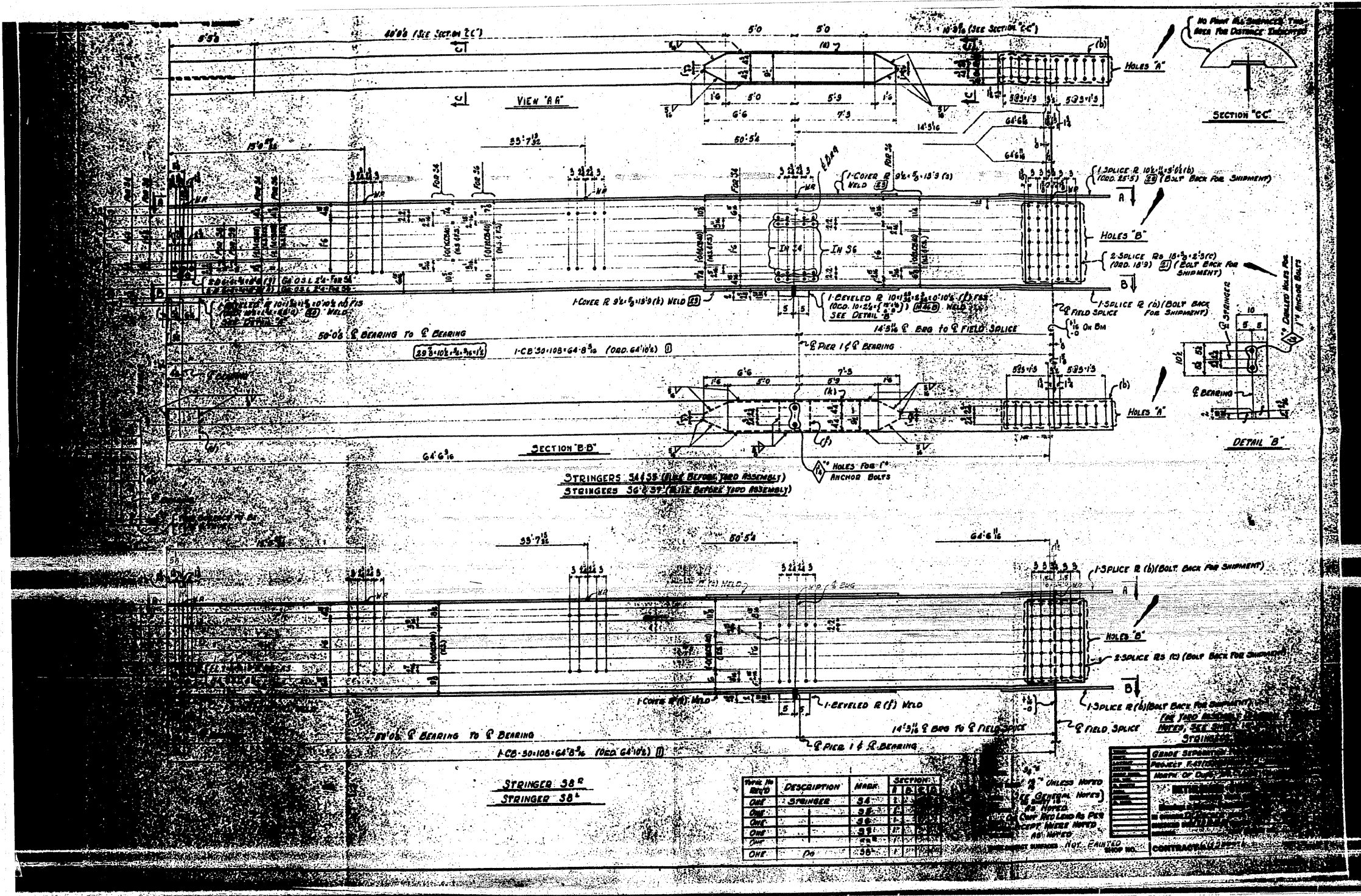
FORM NO	DESCRIPTION	AMOUNT	SECTION
6202			A B C D
ONE	STRINGER	31"	
ONE		31"	
ONE		32"	
ONE	DR	53	

UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
 ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
 UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.

STRINGERS FOR SPAN 1
 GRADE SEPARATION FOR MISSOURI PACIFIC R.R.
 PROJECT FAYAT/FRUIT 4: SECTION 64-1V
 NORTH OF DUQU, ST. CLAIR COUNTY, ILLINOIS
BETHLEHEM STEEL COMPANY
 CONTRACT 20254-1

FOR INFORMATION ONLY

FILE NAME =	USER NAME = tharp1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwwork\pwwork\tharp1\dms71738\087682-shf-fab-plans.dgn		DRAWN -	REVISED -			312	64-1VBR	ST. CLAIR	259	184
PLOT SCALE = 50.0000 / IN.		CHECKED -	REVISED -			CONTRACT NO. 76882				
PLOT DATE = 5/17/2018		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				



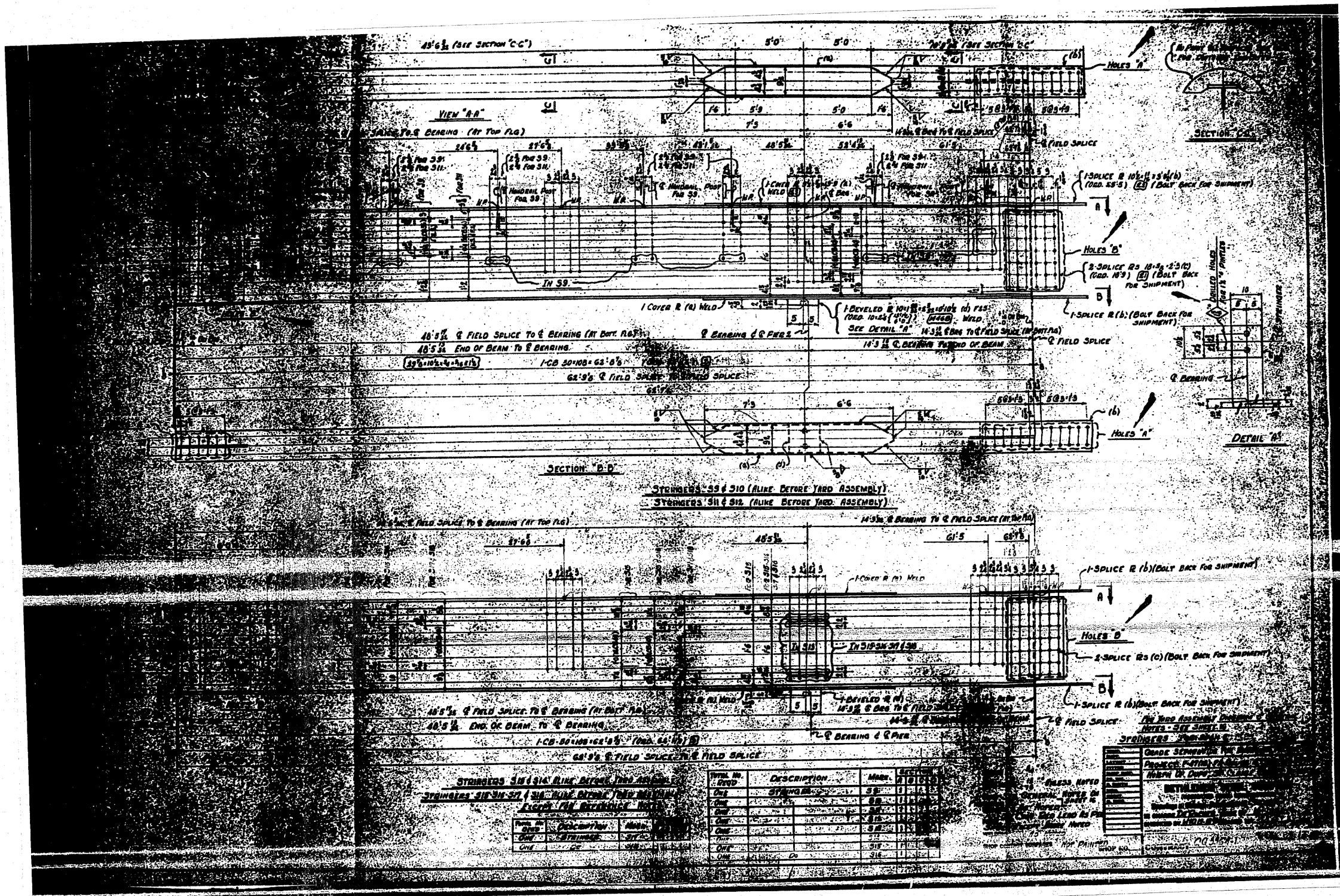
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STEEL SHOP DRAWINGS

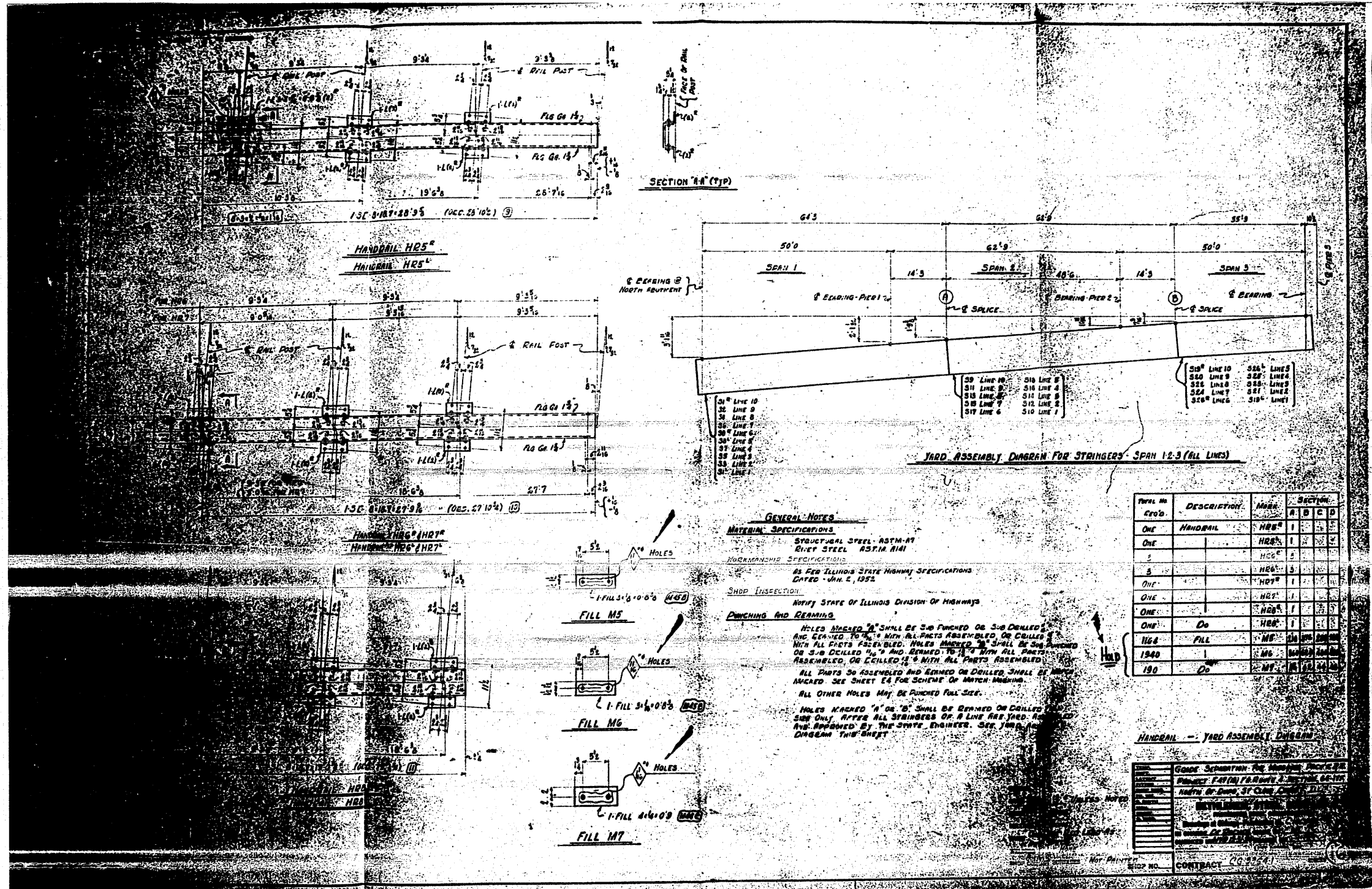
QTY	DESCRIPTION	MARK	SECTION
ONE	STRINGER	56	1
ONE		56	1
ONE		56	1
ONE		56	1
ONE		56	1
ONE		56	1

FOR INFORMATION ONLY

FILE NAME =	USER NAME = tharp-1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS	SCALE: N/A	SHEET NO. OF 67 SHEETS	STA. TO STA.	F.A.P. RTE. 312	SECTION 64-1VBR	COUNTY ST. CLAIR	TOTAL SHEETS 259	SHEET NO. 185
ct:\pwork\p\dot\tharp-1\dms71738\106768	82-sh-fab-plans.dgn	DRAWN -	REVISED -						ILLINOIS FED. AID PROJECT				
PLOT SCALE = 50.0000 "/td> <td>CHECKED -</td> <td>REVISED -</td> <td>CONTRACT NO. 76882</td>	CHECKED -	REVISED -	CONTRACT NO. 76882										
PLOT DATE = 5/17/2010	DATE -	REVISED -											



FOR INFORMATION ONLY



GENERAL NOTES

MATERIAL SPECIFICATIONS
 STRUCTURAL STEEL - ASTM-A7
 RIVER STEEL - ASTM-A141
 WOODMANSHIP SPECIFICATIONS

AS PER ILLINOIS STATE HIGHWAY SPECIFICATIONS
 DATED - JAN. 2, 1952
 SHOP INSPECTION

NOTICE STATE OF ILLINOIS DIVISION OF HIGHWAYS

PUNCHING AND BEARING

HOLES MARKED 'A' SHALL BE 3/8 PUNCHED OR 3/8 DRILLED AND CLEANED TO 1/8" WITH ALL PARTS ASSEMBLED OR COLLER WITH ALL PARTS ASSEMBLED. HOLES MARKED 'B' SHALL BE 3/8 PUNCHED OR 3/8 DRILLED 1/8" AND BEARINGS TO 1/8" WITH ALL PARTS ASSEMBLED OR COLLER 1/8" WITH ALL PARTS ASSEMBLED.
 ALL PARTS SO ASSEMBLED AND BEARINGS OR DRILLED SHALL BE MARKED. SEE SHEET 14 FOR SCHEMATIC OF MATCH MARKING.
 ALL OTHER HOLES MAY BE PUNCHED FULL SIZE.

HOLES MARKED 'A' OR 'B' SHALL BE BEARINGS OR COLLERED SIDE ONLY AFTER ALL STRINGERS OF A LINE ARE YARD ASSEMBLED AND APPROVED BY THE STATE ENGINEER. SEE YARD ASSEMBLY DIAGRAM THIS SHEET.

PART NO.	DESCRIPTION	MATERIAL	SECTION			
			A	B	C	D
ONE	HANDBAIL	HR25	1	2	3	4
ONE		HR27	1	2	3	4
ONE		HR25	5	6	7	8
ONE		HR27	1	2	3	4
ONE		HR25	1	2	3	4
ONE	DO	HR25	7	8	9	10
116	FILL	MS	11	12	13	14
194		MS	15	16	17	18
190	DO	MS	19	20	21	22

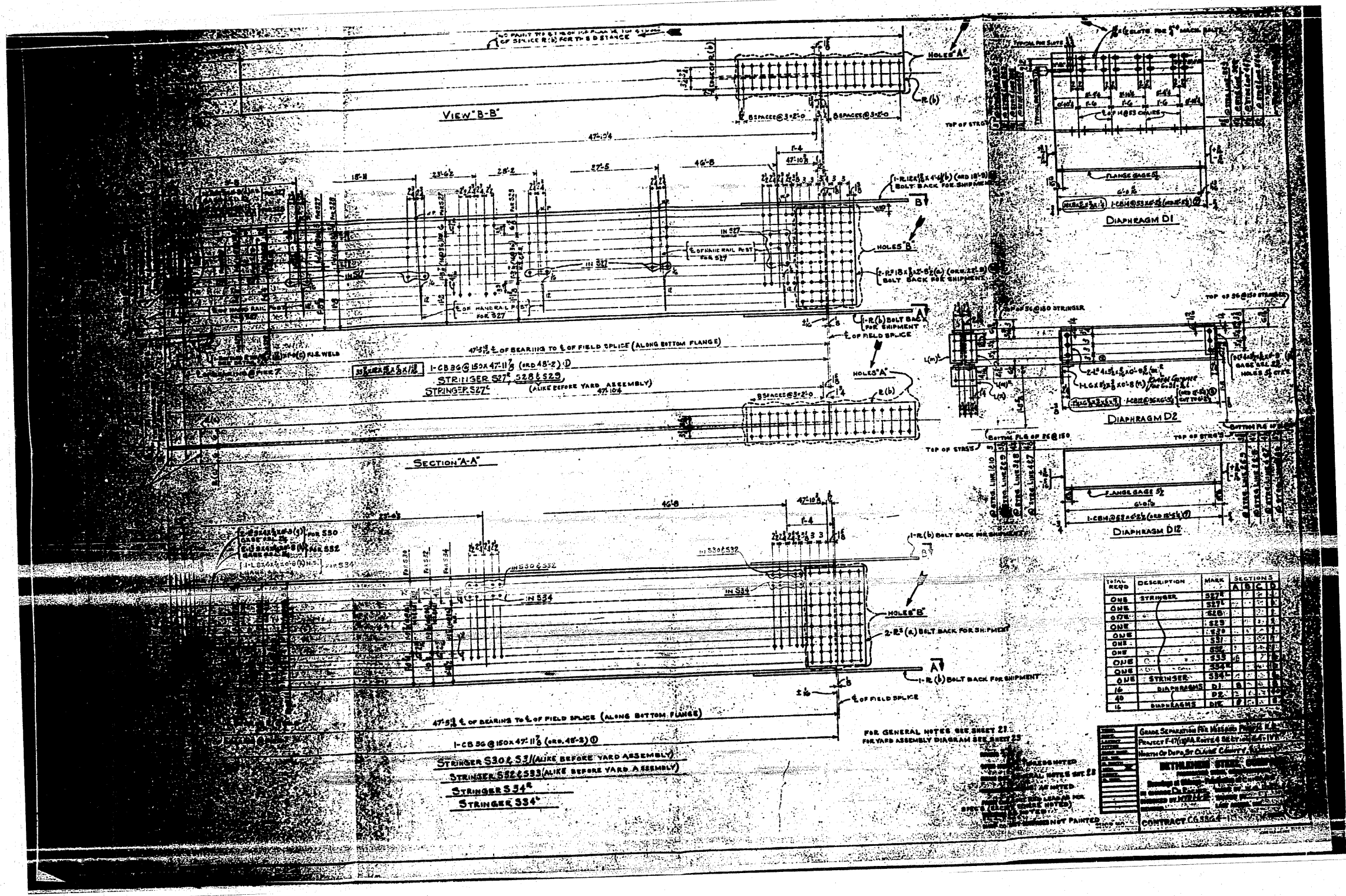
HANDBAIL - YARD ASSEMBLY DIAGRAM

GRADE SEPARATION FOR HANDBAIL PROJECT
 PROJECT FAY (M) (A) ROUTE 2, SECTION 64-1VBR
 NORTH OF DUNE ST. CURVE 211

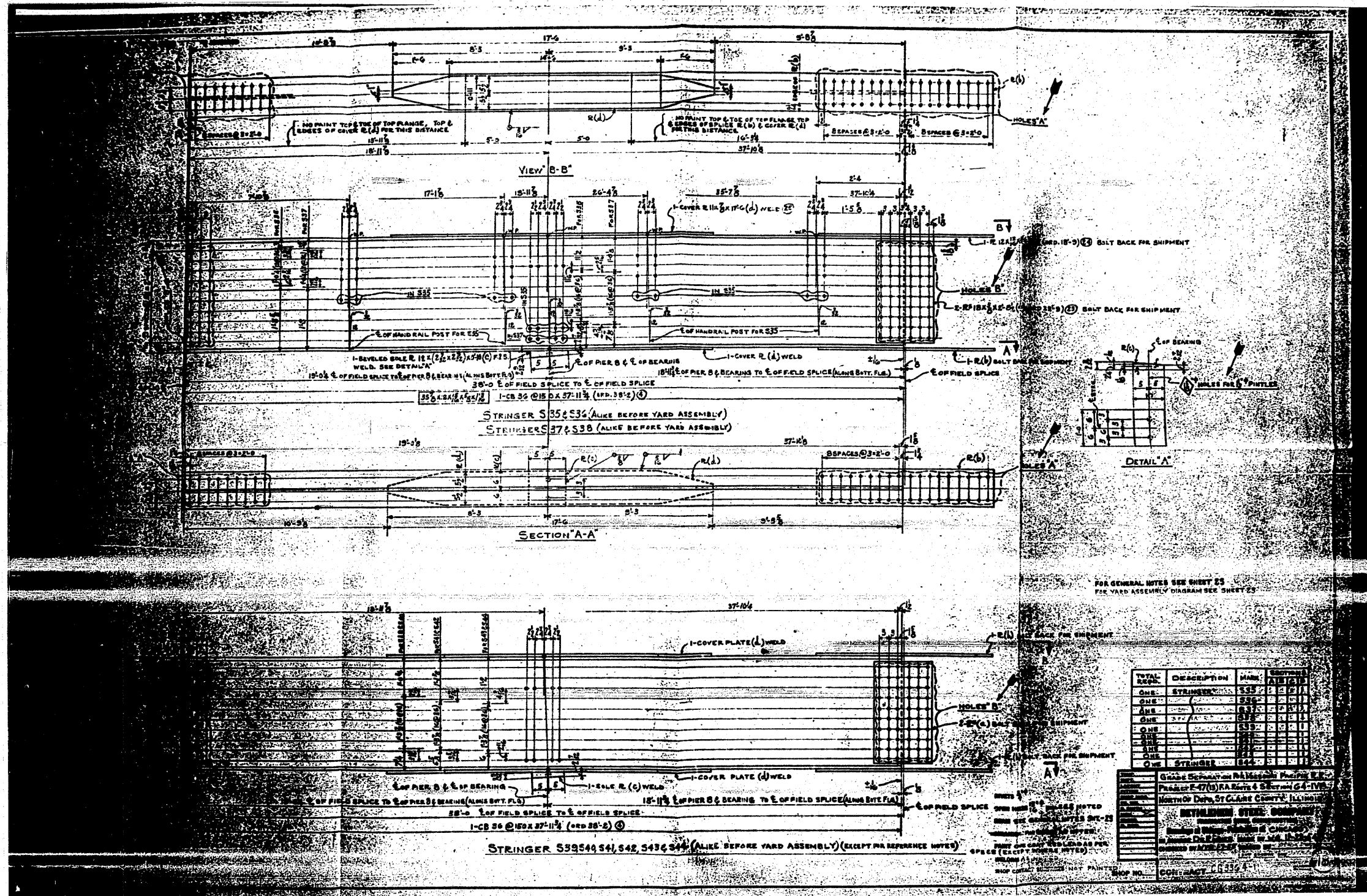
REVISIONS:
 NO. 1 - REVISED DRAWING
 NO. 2 - REVISED DRAWING
 NO. 3 - REVISED DRAWING
 NO. 4 - REVISED DRAWING

CONTRACT NO. 76882

FOR INFORMATION ONLY



FOR INFORMATION ONLY

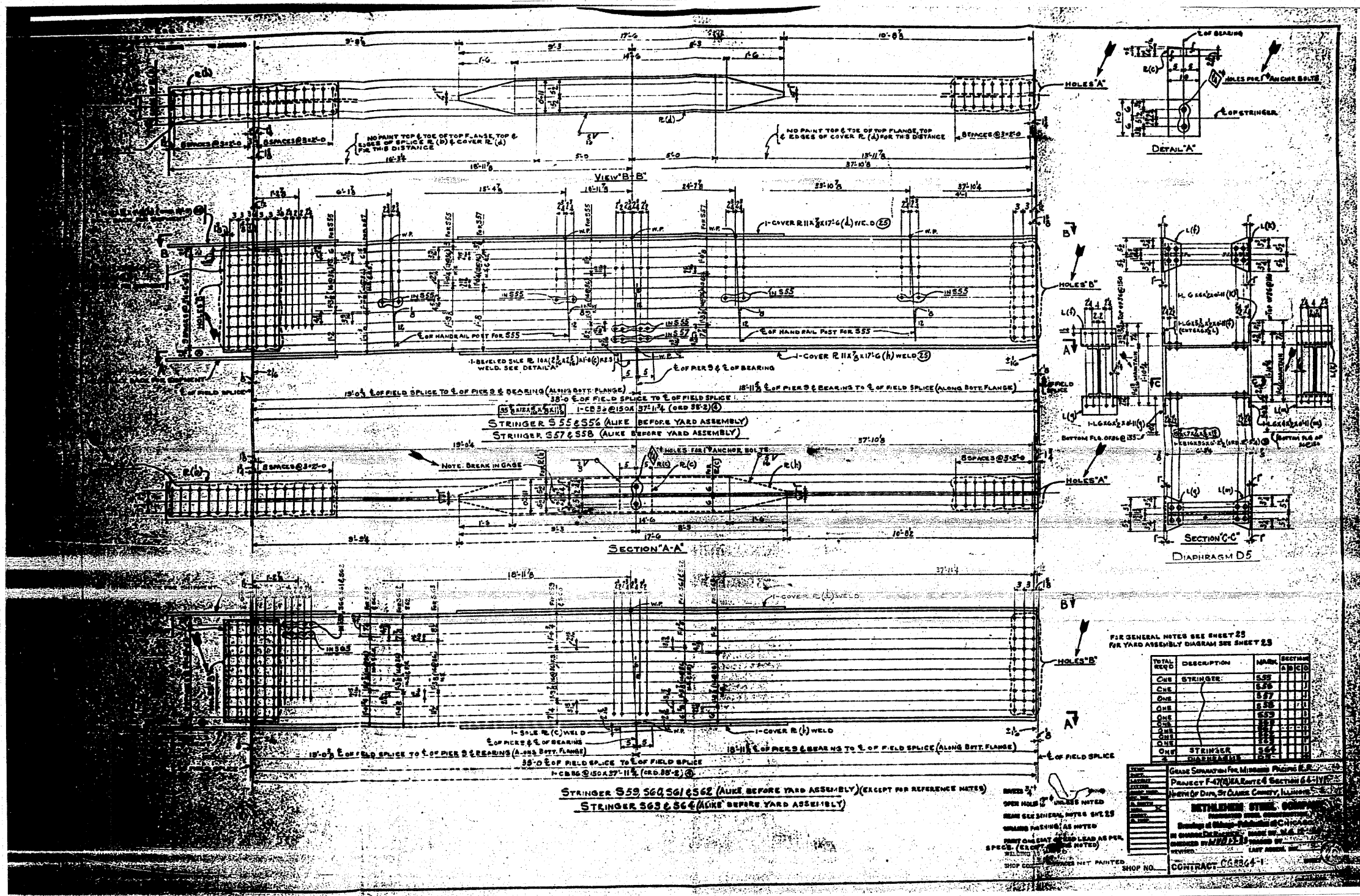


TOTAL	DESCRIPTION	QTY	UNIT
ONE	STRINGER S35	1	LF
ONE	STRINGER S36	1	LF
ONE	STRINGER S37	1	LF
ONE	STRINGER S38	1	LF
ONE	STRINGER S39	1	LF
ONE	STRINGER S40	1	LF
ONE	STRINGER S41	1	LF
ONE	STRINGER S42	1	LF
ONE	STRINGER S43	1	LF
ONE	STRINGER S44	1	LF
ONE	STRINGER S45	1	LF
ONE	STRINGER S46	1	LF
ONE	STRINGER S47	1	LF
ONE	STRINGER S48	1	LF
ONE	STRINGER S49	1	LF
ONE	STRINGER S50	1	LF
ONE	STRINGER S51	1	LF
ONE	STRINGER S52	1	LF
ONE	STRINGER S53	1	LF
ONE	STRINGER S54	1	LF
ONE	STRINGER S55	1	LF
ONE	STRINGER S56	1	LF
ONE	STRINGER S57	1	LF
ONE	STRINGER S58	1	LF
ONE	STRINGER S59	1	LF
ONE	STRINGER S60	1	LF
ONE	STRINGER S61	1	LF
ONE	STRINGER S62	1	LF
ONE	STRINGER S63	1	LF
ONE	STRINGER S64	1	LF
ONE	STRINGER S65	1	LF
ONE	STRINGER S66	1	LF
ONE	STRINGER S67	1	LF
ONE	STRINGER S68	1	LF
ONE	STRINGER S69	1	LF
ONE	STRINGER S70	1	LF
ONE	STRINGER S71	1	LF
ONE	STRINGER S72	1	LF
ONE	STRINGER S73	1	LF
ONE	STRINGER S74	1	LF
ONE	STRINGER S75	1	LF
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ONE	STRINGER S89	1	LF
ONE	STRINGER S90	1	LF
ONE	STRINGER S91	1	LF
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ONE	STRINGER S93	1	LF
ONE	STRINGER S94	1	LF
ONE	STRINGER S95	1	LF
ONE	STRINGER S96	1	LF
ONE	STRINGER S97	1	LF
ONE	STRINGER S98	1	LF
ONE	STRINGER S99	1	LF
ONE	STRINGER S100	1	LF

Grade Separation at Interstate 55 and I-55
 Project F-77(0) RA 6-10 & 6-11
 North of Dan, St. Clair County, Illinois
 METALWORKING STEEL COMPANY
 1000 S. Main Street
 St. Louis, Missouri 63103
 PHONE: 314-241-1100
 FAX: 314-241-1101
 SHOP NO. 1000
 CONTRACT NO. 76882

FOR INFORMATION ONLY

FILE NAME =	USER NAME = thpr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
os\pw_work\pwidth\thpr1\dms71738\0876	02-sht-fab-plens.dgn	DRAWN -	REVISED -					312	64-IVBR	ST. CLAIR	259	192
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -					CONTRACT NO. 76882				
	PLOT DATE = 5/17/2010	DATE -	REVISED -					ILLINOIS FED. AID PROJECT				
								SCALE: N/A	SHEET NO.	OF 67 SHEETS	STA.	TO STA.

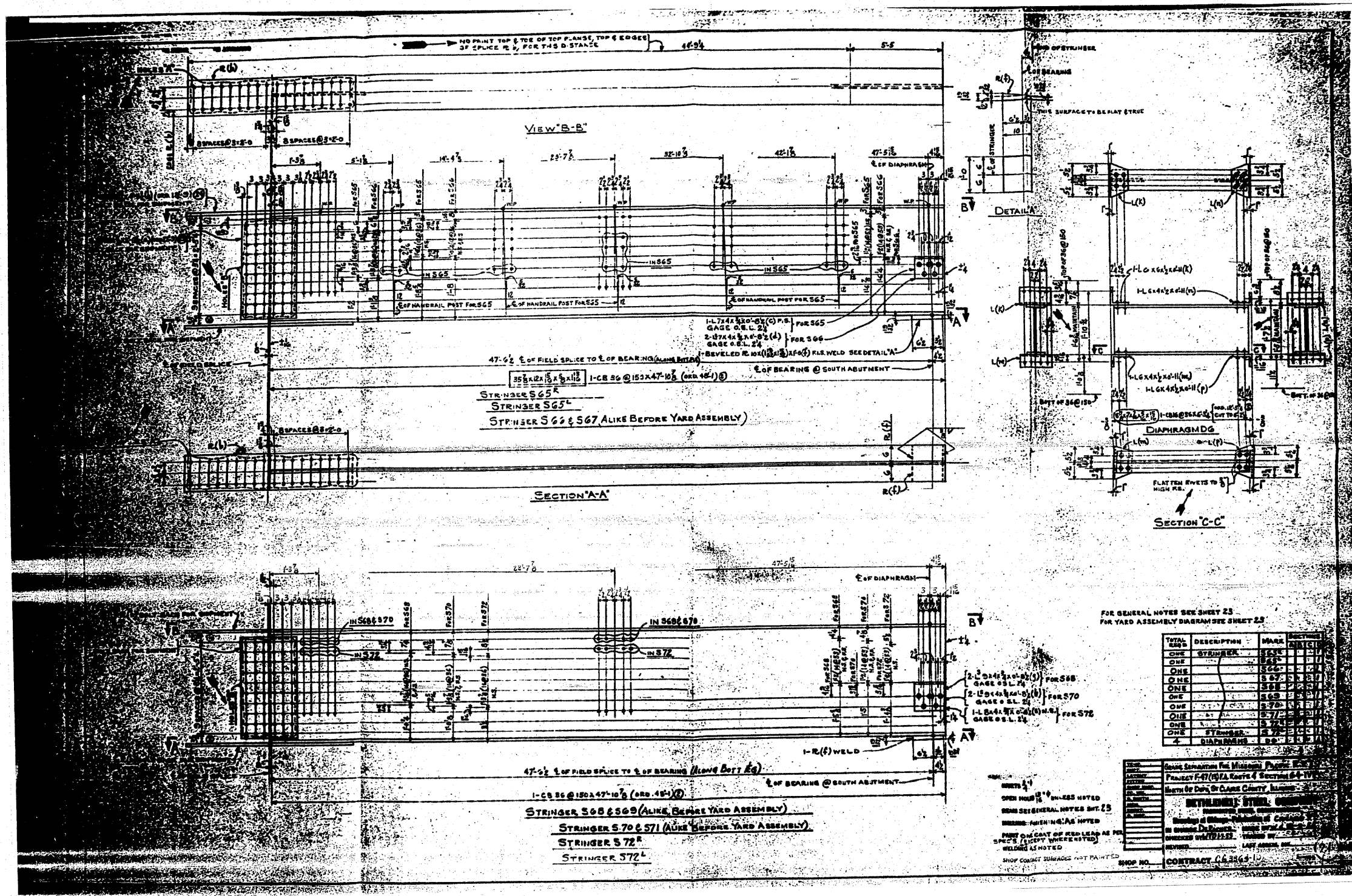


FOR GENERAL NOTES SEE SHEET 25
FOR YARD ASSEMBLY DIAGRAM SEE SHEET 25

TOTAL REQD	DESCRIPTION	MARK	SECTION
ONE	STRINGER	S55	(1)
ONE		S56	(1)
ONE		S57	(1)
ONE		S58	(1)
ONE		S59	(1)
ONE		S60	(1)
ONE		S61	(1)
ONE		S62	(1)
ONE	STRINGER	S63	(1)
ONE	DIAPHRAGM	D5	(1)

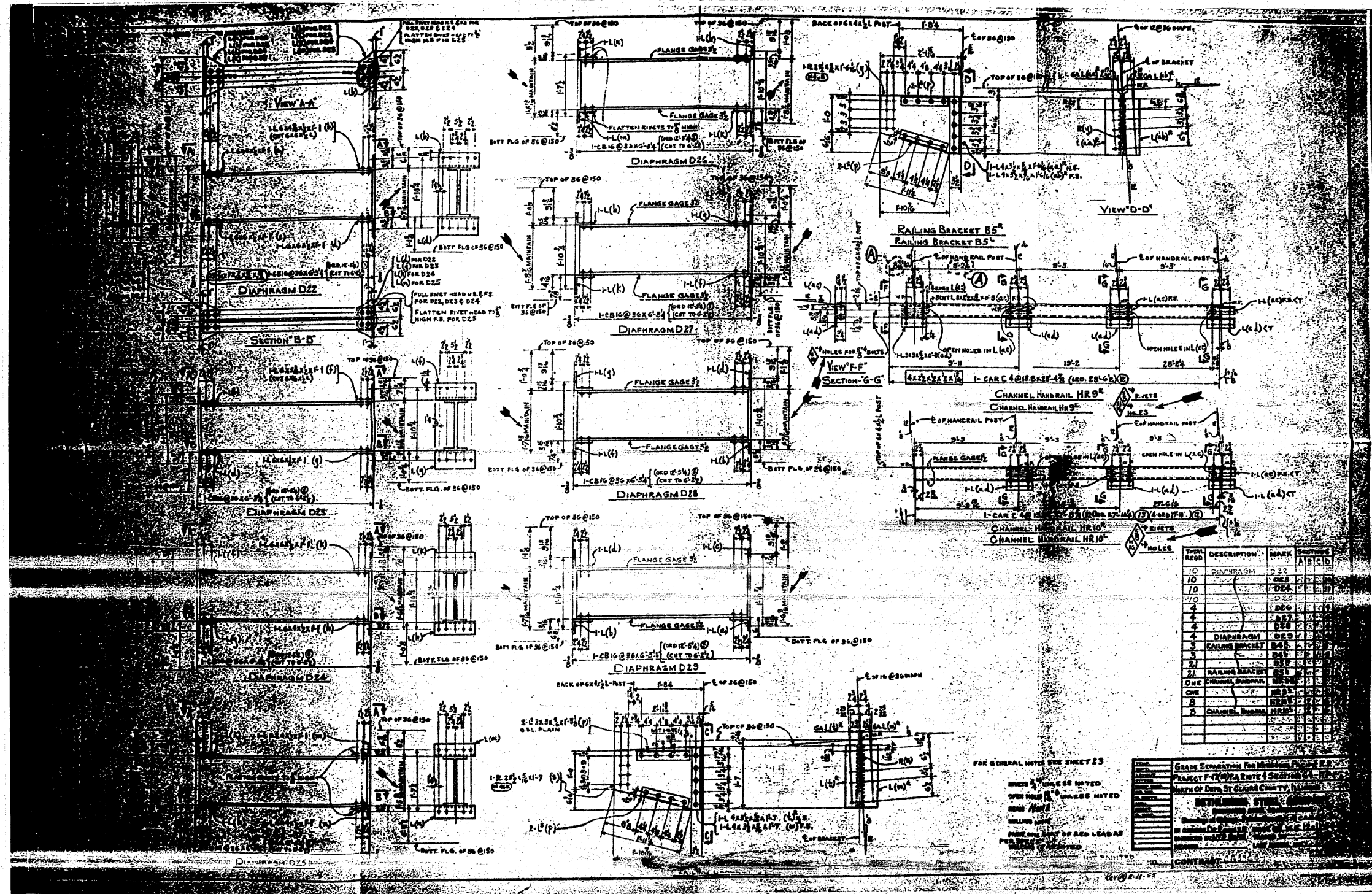
DATE: 5/17/2012
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 PROJECT: F-470 I-55/US 41
 CONTRACT NO. 76882

FOR INFORMATION ONLY

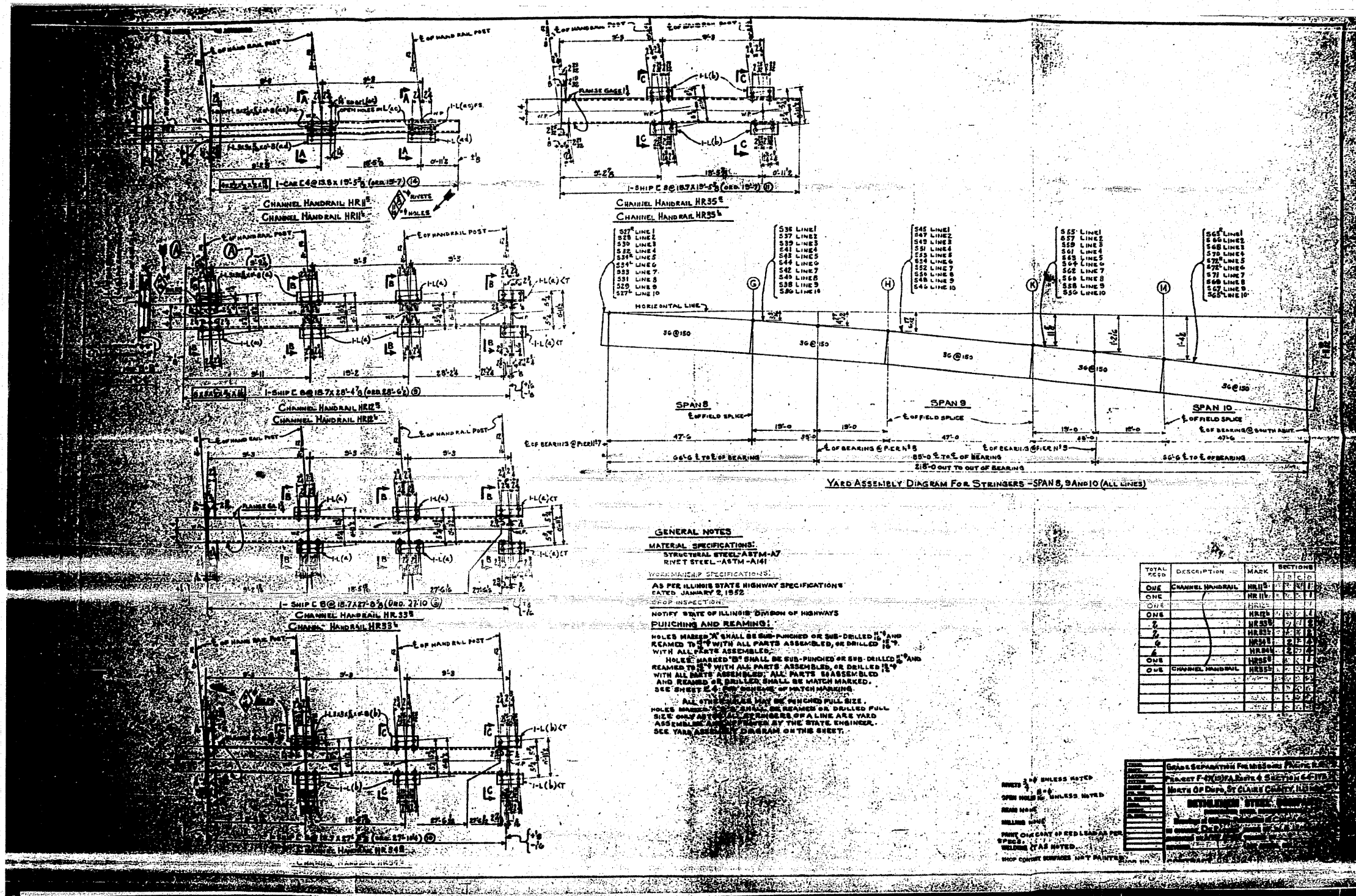


FOR INFORMATION ONLY

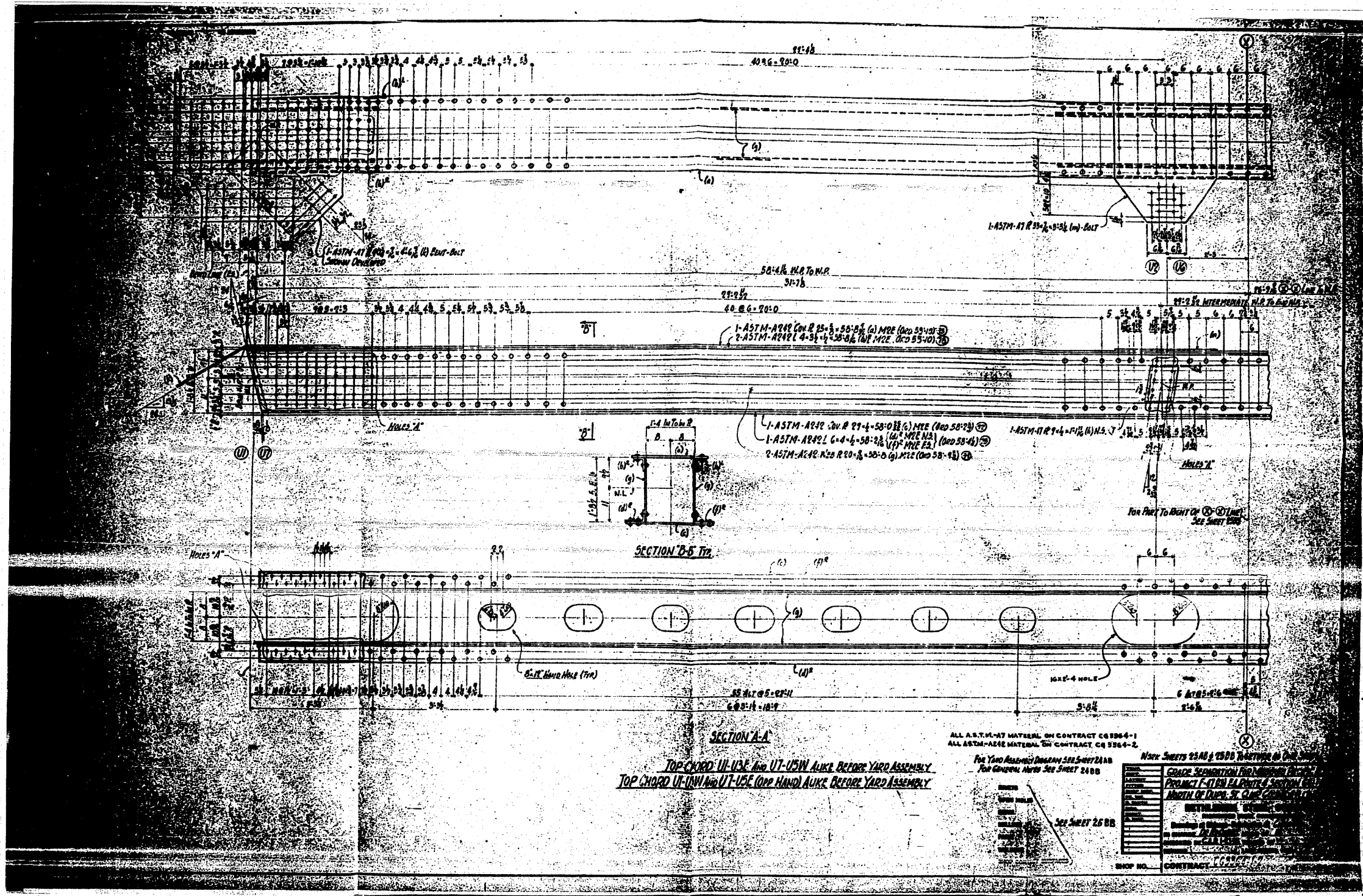
FILE NAME =	USER NAME = tharpri	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw\work\p\idoc\tharpri\dms71738\087682-sht-fab-plans.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -			312	64-1VBR	ST. CLAIR	259	195
PLOT DATE = 5/17/2010	DATE -	CHECKED -	REVISED -			CONTRACT NO. 76882			ILLINOIS FED. AID PROJECT	
		DATE -	REVISED -			SCALE: N/A	SHEET NO. OF 67 SHEETS	STA. TO STA.		



FOR INFORMATION ONLY



FOR INFORMATION ONLY



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FILE NAME =	USER NAME = tharp1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL SHOP DRAWINGS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
62-sht-fab-plens.dgn	PLOT SCALE = 5/8" = 1' IN.	DRAWN -	REVISED -		SCALE: N/A	SHEET NO. OF 67 SHEETS	STA.	TO STA.	312	64-1VBR	ST. CLAIR	259	200
	PLOT DATE = 5/17/2010	CHECKED -	REVISED -									CONTRACT NO. 76882	
		DATE -	REVISED -									ILLINOIS FED. AID PROJECT	